Chapter-One

1. Introduction

1.1 Background of the Study

All the countries in the world either developed or under developed have accepted the existence of industries for the socio-economic development either they are manufacturing and trading. In this age, role of industrial sector plays vital role. Available resources should be optimally utilized as well as proper study; right evaluation and favorable environment are the essences of industrial development. Manufacturing industries are the backbone of the economy that touches overall sectors of the country. A country cannot be developed itself without development of industrial sectors. It largely depends on quantity, quality and productivity of manufacturing sectors. The growth of industrial sector remains struggling in Nepal despite of the availability of resources. It is all because of improper mobilization, failure investment policy and geographical obstacle etc.

Industrialization is the major instrument of progress, modernization and social development of Nepal. The economy of Nepal is based on Agriculture, the industrial development is important for economic prosperity because it helps the country in the various ways; it contributes to National Income, provide employment, lessens the dependence of imports and promotes exports.

After Nepal's Government started planned economic development effort to obtain rapid economic growth. Then the development of modern industries in the public sector started with planned economic development and various manufacturing companies have been established and developed through government efforts. At present 10^{th} plan is running but due to poor performance negative return, lack of efficiency, inefficient in management, government has emphasized on privatization, so that public enterprises could be competitive, efficient and profitable. By the help of private companies, the government will reduce investment in public sector, which are incurring continuously at loss. More enterprises are in the pipeline for privatization in the government policy and programs. So, industrialization in Nepal has arisen with the evolution of Public Enterprises.

The term of PE has two directions namely 'public' and 'enterprise'. The term public considered as 'public ownership' implies that major decision would rest on distinctive social criteria to the exclusion of any personnel interest. Similarly, the surplus would not accrue to private group or individuals and it involves social accountability. Likewise, the term 'Enterprises' as business enterprises implies that the government expects a return on the capital invested in public enterprises and the goods and services are made available for a price, which may be adjusted from time to time to cover the cost of inputs. The business character is more likely to be found in the area of economic activity such as industrial, trading, services, social, utilities, financial etc.

"Public enterprises is an institution operating a services of an economic or social character on behalf of the government, but as independent legal entity, largely autonomous in its management through responsible to the public, through government and parliament and subject to some direction by the government, equipped on the other hand with independent and separate funds of its own legal and commercial attributer of a commercial enterprise."- **Fried man**

1.1.1 Public Enterprises in Nepal

Public enterprise is a recent phenomenon in Nepal, Nepal is primarily an agricultural country and public sector enterprise has occupied a dominant role in the economy. Public enterprises constitute a large and rapidly growing sector of the economy in the majorities of countries in the world today, including Nepal.

Public enterprises are established for rapid socio-economic development of the country. Public enterprises in Nepal constitute a vital instrument for socio-economic development. It enjoys a strategic and crucial position in our mixed economy. They have been established in many sectors for the overall development of the country with different goals and objectives. Public enterprises can be classified as follows:

a) Manufacturing enterprises
b) Commercial enterprises
c) Financial enterprises
d) Public enterprises engaged in social services
e) Development or services enterprises

Role and objectives of public enterprises in Nepalese economy:

- To substitute the rate of economic growth
- Development of infrastructure
- Success of economic planning
- Regional and balanced development
- Supply of essential commodities
- Contribute to essential commodities
- Generate employment opportunities
- Development of big industries
- Attaining social justice and social welfare
- Saving foreign exchange
- Strengthening economic stability
- Maintaining economic stability
- Acting as model entrepreneur
- Initiate research and development activities
- Provision of public utilities

The history of development of Industries begins after democracy of 2007 B.S. During Rana regime only handful of enterprises existed and they are Biratnagar Jute mills, Nepal Bank Ltd., Juddha Match Factory and Morang Cotton Mill. Realizing the need of industrialization after the establishment of democracy at 2007 B.S., government established 'Udyog parisad' to encourage industrialization and started getting regular attention of the government under the Fifth Year 'Development Plans'. After some years, it changed its name into 'Cottage and Village Industry Department' and hence, began the development of industries. As a result, Nepal witnessed the development of quite a large number of manufacturing industries in public sector particularly in the areas like sugar, leather, paper, cigarettes, bricks & tiles, agricultural tools and textiles with the financial and technical assistance of the USSR, China and India. This process continued until the end of the sixth Five-year plan (2039-044). Those establishments helped to facilitate industrialization in Nepal to some extent.

In B.S. 2048, the democratic government of Nepal adopted the policy of economic liberalization and embarked upon a bold program of privatization on the pressure of

donor, especially World Bank, US aid, United Nations development program had extended. Its association to the government for formulating privatization strategy the government started the process of privation of the privatization act came in to force. After the mid of 1980, Government changed industrial and economic development policy from close market to open market economy and liberalized economy. As a result, 16 public enterprises were privatized under in different modalities and in different phases.[1] Some of them are Vrikuti Pulp and Paper Nepal Ltd, Hari Siddhi Brick and Tiles, Bansbari Chhala Jutta Udhyog, Raghupati Jute Mills, Lumbini Sugar Mill etc among which two are liquidated. Now many enterprises are under the process of privatization. At present, there are 38 Public Enterprises in different sectors in Nepal and some of them are not in operation due to various reasons such as Birgunj Sugar Mills, Birgunj, Himal Cement, Chovar etc. Nepal encourages foreign investment in the country and many multinational companies entered in different sectors like manufacturing banking and other service sectors.

Realizing the importance of industrialization in the country H. M. G. of Nepal has given due emphasis to the industrial sector. The Economic Survey Report (1990/91) focus that "The emphasis on industrialization for the creation of enough job opportunities for the people and for the people and for raising their economic levels through a sizeable increase in GDP appears quite relevant, at a time, when the growth of population of the country is pushing the rural economy down to the subsistence level."[2]

Development plans of Nepal are prioritizing the development of industries in both public and private sectors. Government impressed to private sector to contribute in industrial development and declare the partner relationship between public and private sector. With the beginning of Seventh Plan (2045-049 B.S.), Government took policy to privatize the public owned industries and declared that the government's role as a facilitator not the owner.

After the government policy was changed to open market economy, individuals also started to found manufacturing industries based on iron, and steel, textiles and agro based companies. Such industries were mostly owned by family owned enterprises such as the

[1]K.C, Fatta Bahadur, "**Economic Review"**, March 1999 Occasional Paper-11, NRB, P-I5

[2] Source: (Ministry of Finance- Economic Survey Report, 1990/91 Kathamandu)

Golchha organization, the Chaudhary Group, the Panchakanya Group, the Kediyas, the Dugars, and the Jyoti Group etc.

1.1.2 Brief Introduction of Hulas Steel Industries Ltd.

Hulas Steel Ind. Ltd. is a steel products manufacturing company, which was incorporated and established in 14th Ashwin, 2038 B.S. (1981) as Pvt. Ltd. Company under the company act 2021 at Pipra Simara- V.D.C.-3, Bara District. It is the Joint Venture Company of Golchha Organization Group of Nepal and COM Craft ltd of Singapore.

At the time of establishment, the company's authorized capital is Rs. 51.11 million and issued capital Rs. 12.1 million. Later, the company was converted into Limited company in 22nd Ashad, 2063 B.S. with an authorized capital 1,510 million divided into 15.1 million shares @ Rs. 100 each, issued capital Rs. 1010 million and paid up capital Rs. 188.472 million.

The Board of Directors (BOD) is the top most part of this company. The BOD consists of members who represent shareholders. The General Manager (GM) is the executive head who, provides major decision and execute day-to-day management and smooth operation of programs of the company with the supports of divisional Vice- Presidents and Managers.

Hulas Steel Ind. Ltd. has been manufacturing different varieties of steel made products during its 25 years period. The company has divided into 5 divisions for production purpose and they are:

a. Sheets division:

The company had started its production with Sheet Division of different kinds of sheets from 2040 B.S. with technical assistance from M/s Yodoguwa Steel works of Japan. Since inception, all product lines of the division have commanded the highest market share; "Hulas Gurans" brand now has enviable brand equity. The products are well known with customers for their excellent quality and value for money. The company's philosophy of "Advance Technology" prompted investment in a new state of the art continuous Galvanized Line (CGL) plant in 1995(2052 B.S.) and has been manufacturing color coated corrugated and plain sheets since 1989(2046 B.S.) the production of this

division are Galvanized Corrugated Iron Sheet, Galvanized plain Iron Sheet, Color Corrugated Iron Sheet, Color Plain Iron Sheet,

b. Tube Division:

This division is formally known as Himali Hipco Pipe, was established in 2040 B.S. the company has obtained NS (Nepal Standard) certification for its Galvanized Iron Pipe production. The Hipco brand pipes are well accepted as on of the best quality pipes available in the market. The production of this division are Hipco GI pipes (17.2 mm OD to 100 mm NB), Black pipes (17.2 mm OD to 200 mm NB), Sections (square and rectangular), Z- Purlin, slotted and casing pipes etc.

c. Pipe-fittings Division:

These kinds of products are used in water supply, Air supply, Gas supply in domestic and industrial purposes. Generally, the products of this division are available in three qualities of categories:

1. Heavy
2. Medium
3. Lights

The products are available in all above qualities categories of Elbow, Socket, Tee, Cross Tee, Union, Nipples, and Plug etc

d. Structure & Poles Division:

This division is well known in Nepalese as well as foreign markets. The productions of this division are Towers, Bridges, Roofing accessories, Iron Wires, Angles, and Poles etc

e. Cold Rolling Mill Division:

This division is established in 2064 B.S. and started to produce just from this fiscal year. The products produced from this division are supplied to sheet, tube and structure and pole division as raw material for them such as different size of slits with different thickness as per order and requirement.

1.1.3 Quality Control

The company requires some of the steel-based raw materials and chemicals for its production, which are imported mainly from India as well as other third countries. For quality control, testing and inspection process of company include both incoming of raw

materials and systematic inspection at every manufacturing stage as well as finished products, it has set up its own well-equipped laboratory and expert technicians. Through a series of chemical and mechanical tests, the quality of finished products is ensured to meet required standards.

At present (2064/65), there is a team of Human Resource strength, all together 720 persons are involved in HSIL at different levels. Out of them 187 are in Administration, 65 are Technical and 480 are Laborers.

The organizational structure of the company is given in appendix.

Some of the major steel industries in Nepal producing Iron Sheets, Iron Pipes and G.I. Fittings are as follows:

- Hulas Steel Ind. Ltd.
- Jagadamba Steel Ind. Ltd.
- Bhagawati Steel Ind. Ltd.
- Aarati Strips Ind. Ltd.
- Apollo Steels
- Rajesh Metal and Crafts, etc

1.1.4 Aims and objective of Hulas Steel Ind. Ltd

- To produce and distribute of quality steel products in reasonable fair price to the public in a way that will lead the country towards self-sufficiency in essential steel materials
- To produce new varieties of products as per the market demand and deliver them in time
- To replace foreign steel products by promoting the self produced products such as GPI Sheet, GCI Sheet, CCI Sheet, low cost housing materials, Expanded metal, screw socketed steel and caging pipe, hollo structural sections, furniture and welded structures, stand poles, ms-wire, black pipe, gas pipe, GI pipe for water supply and other purposes with nominal bore 4” to 8”, suspension bridge, and other parts, different kinds of pipes fittings items, Zink chloride welded H. Vim, coil coating paints, sutter profile, cruss arms, cold rolling sheets
- To help the other social industries by using their products

- To pay more amount in National Economy by selling of goods in large volume

1.2 Focus of the study

Working capital means sum of all current assets minus current liabilities used in the business for day-to-day operation. Current assets deal with those kinds of assets, which can be converted into cash and nearly cash within a financial year such as amount invested in inventory, sundry debtors, bills receivable, marketable securities, bank balance, and cash in hand and other short-term investment. Current liabilities deal with those kinds of liabilities, which can be settled/ matured within a financial year includes sundry creditors, bank overdrafts, bills payables, outstanding expenses and other short-term loans. Effective handling of working capital ensures business firms to the success as well as high profitability and failure planning of working capital ensures company suffering from low profitability.

It needs to maintain liquidity to purchase raw materials and pay expenses such as wages, salaries, other manufacturing, administrative and selling expenses and taxes. There is hardly a matching between cash inflows and outflows. Cash is also held to meet future exigencies. Stocks of raw material, work in progress and finished goods are kept to ensure smooth production, sales and to guard against non-availability or meet the demand of customers on continuous basis and sudden demand from some customers. Book debts are created because goods are sold on credit for marketing and competitive reasons. Therefore, every firm makes adequate investment in inventories and book debts for a smooth as well as continuous production and sales.

So the study is focused on analysis of how is HSIL maintaining its current assets and current liabilities therefore the company is able to exist in profitable condition. The study also attempts to point out some of reasonable matters that might be cause of reduction on profitable situation.

1.2.1 Working Capital Practices

Working capital management practices in Nepalese manufacturing enterprises provide totally a different picture. The past trend of many manufacturing companies had given emphasis in fixed asset. Therefore, they are facing financial problem all the time. The

government policy to concentrate more in fixed assets has overlooked the financing of working capital. So in order to create the culture of risk bearing ability through commercial prudence and professionalism, the aspect of working capital should be treated in the same way as fixed capital. While deciding the structure of the manufacturing companies, recently short-term financial decision has never received much attention in the literature of finance. Because of earlier emphasis of financial management was more long-term financial decision, which led to growth and development of many useful theories concerning these decisions as compared to short-term financial decision.[3]

Working capital is lifeblood of enterprises. The inefficient management of working capital will lead to loss of profits in the short-run, but it will lead to down fall of the enterprises in the long- run. A deeper understanding of the importance of working capital and its satisfactory provision can lead to not only material saving as well as economic use of capital but can also assert in furthering the ultimate aim of business.[4]

So maintaining the optimal level of working capital is the crux problem as it is strongly related to the trade off between risk and return. The aspect of determining appropriate proportion of working capital in the structure of total assets comes under the preview of working capital policy. The unnecessary blocking of working capital, administrative negligence in day-to-day operation and serious liquidity problem are the main causes to failure the manufacturing companies of Nepal. Most of Nepalese manufacturing companies are operating in loss though they are following aggressive approach of working capital management.

In most Nepalese enterprises, the management of working capital has been misunderstood as the "Management of Money" and the managers are found over conscious about the working of money rather than its efficient utilization.[5] At the same time they never think of the source of working capital and usually depend on Government for some of Enterprises have used depreciation fund and utilized surpluses to overcome the scarcity of working capital.

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[3] Pradhan, Radhe Shyam, **"Management of Working Capital"** (New Delhi, National Book Organization, 1986)
[4] Lesli, R Howard, **"Working Capital, its management and control"** (London, McDonald and Evans Ltd, 1971)
[5] Dr.Acharya K., **"The Management of WC in the PES of Nepal"** (Nepalese Dev. Studies, 1988)

1.3 Statement of Problem

Working capital is the management of all current assets and all current liabilities used in the business. It plays vital role in the manufacturing company as well as trading company for smooth production and market operation.

The large holing of current assets consumes more funds, which cannot be used for other purpose and thus involve high opportunity cost but strengthens firm's liquidity position, reduces risk and overall profitability, as idle investment earns nothing. Where as inadequate investment in current assets looses some profitable opportunities and can threaten solvency of the firm because of its inability to meet some obligation that to be matured in short period as well, should bear bad image in market. Both excessive and inadequate level of working capital is not desirable because excessive carrying costs and the risk of liquidity. Inadequate level of working capital obstructs the flow of production as well as market operation. So the both situation should be avoided by maintaining optimum level of working capital.

Fixed assets and current assets depend upon expected sales but it is only current assets, which can be adjusted with sales fluctuation in the short run. Investment in current assets should be just adequate, neither more nor less to the needs of business firm. it should be realized that the working capital needs of the firm nay be fluctuating with changing business activity or for any other reasons, arrangement should made quickly. Similarly, if suddenly some surplus funds arise, they should not be allowed to remain idle, but should be invested in short-term securities.

For the success of an industry, working capital management takes important role because the cost of working capital directly related with the profitability of industry. In Nepal, it is found that least attention has been given to this important segment. Working capital management in Nepal is probably the weakest aspect of manufacturing companies. It is not in common practice in Nepalese industries for controlling physical as well as financial dimension of working capital.

Hulas Steel Ind. Ltd. is a manufacturing company, so the company may suffer from working capital management problems. Therefore, this study aims to present and analyze the working capital position and shows out the problems facing by this Company by analyzing the following queries:

- What are the major components of Current Assets of the Company?
- Is the company adopting appropriate working capital financing and investing policy? (Appropriate proportion of long term and short term funds to finance on current assets.)
- What are the sources of financing of Current Assets of the Company?
- Is working capital position of HSIL effective?
- Is this company's investment in current assets appropriate to its total assets?
- Is there proper investment in each type of working capital?
- Is there proper liquidity position?
- Is company utilizing its working capital at optimum level?
- What are the effects of Working Capital on profitability of the Company?

1.4 Objectives of the Study

Working capital is one of the most important determinants of the smooth operation of an organization. The need of working capital should be managed in such a way that the business firm should bear neither excess nor shortage of cash, because both excess and shortage of working capital are harmful for business. In any business firm, the major portion of the total fund is invested in working capital so the firm give more emphasize on management of working capital. So, this study attempts to raise the importance of management of working capital.

The basic objective of the study is to analyze and evaluate the working capital position of Hulas Steel Ind. Ltd. The followings are the specific objectives, which the study wants:

1. **General Objectives:**
   - To fulfill the partial fulfillment of the requirement of Masters of Business Studies
   - To spread the knowledge of student and make acquainted with real business environment.
2. **Specific Objectives:**
   - To study and present the working capital position, liquidity position and system followed by Hulas Steel Ind. Ltd.

- To analyze the level of inventories, receivable, cash, other advances, creditors, overdrafts, other outstanding etc maintained by Hulas Steel Ind. Ltd. at different time period.
- To study the relationship between sales and debtors, purchase and creditors and other variables of working capital
- To present the role and important of working capital in manufacturing industries
- To provide appropriate suggestions and recommendations to improve the management in matter of working capital in HSIL

1.5 Need / Significance of the Study

Working capital management is a major function of any business firm. Organizations cannot be successfully operated without effective handling of working capital in manufacturing and trading organization as well thus to achieve its goals. Effective handling of working capital helps the organization reduce its operation costs.

We can notice that most of business firms invest huge amount of their capital in current assets but systematic and scientific management system of current assets is rarely found. As a result, the firm has to bear inadequate holding cost of current assets and face sometime over costs (under utilization) and sometime unable to meet even short needs situation and misses excellent opportunities. Both of such situations are harmful to the firm.

It is all known that investment in working capital is significant; Enterprises are severely affected by the poor working capital management system. So, Hulas Steel Industries Ltd is selected for the study topic. The study is centered on analysis of the system followed and situation faced by Hulas Steel Industries ltd. in current assets and current liabilities management as well as to provide valuable some facts that the company might give more emphasis.

The present study focuses on the Working Capital Management of the HSIL. This Study will be significant in the following ways:

- A large proportion of the financial manager's time is allocated to Working Capital Management.
- More than half of the total assets are typically invested in Current assets.

- The relation between increment in sales and investment in Current Assets.
- Investment in Fixed assets may be reduced by resting or leasing, but in inventories and receivable is usually unavoidable.

1.6 Limitations of the Study

The study is simply concerned with the management of current assets and current liabilities (Working Capital Management) of Hulas Steel Industries Limited and has been conducted for the partial fulfillment of the requirement for the degree of Master's of Business Studies. It may not be reliable and valid for other area of study as it is prepared purely for academic purpose. This study is not an exception of the universality of limitation. Each research study has its own limitation; the study will have following limitations:

- This study will be concerned only with the working capital management function of the HSIL and ignores other managerial functions.
- Basically that of financial statement provided by the HSIL are used in analysis, hence they are secondary in nature. Some how the researcher has tried to analyze the primary data as received form direct interview with related personnel of HSIL.
- The study period is limited for only five fiscal years from 2059/60 to 2063/64 B.S.
- The study will be highly dependent in the data given by the concern persons of the HSIL.
- The study focuses mainly on Financial and statistical tools are embodied for analyzing the Working Capital management of HSIL.
- The method, theories, standards employed in the study will have its own limitation and assumptions.

1.7 Organization of Study (Chapter Scheme)

This study has been organized in to five chapters, which are as follows.

The first chapter: Introduction

It includes general background of the study, introduction of Hulas Steel Ind. Ltd., statement of problems, objectives of the study, need of the study, limitation of study and organization of the overall study.

The second chapter: Review of Literature

Deals with "Review of literature" and has been divided in to two parts. The first part is concerned with reviews the concept and theory of working capital management frame work from various books journals articles. The second part reviews previous related studies and will be reviewed the thesis related to working capital management.

The third chapter: Research Methodology

Deals with "Research methodology" and consists of introduction, research design, nature and source of data, data collecting method and analytical techniques employed.

The forth chapter: Presentation and Analysis of Data

It is the main part of this study and deals with the presentation and analysis of data through the way of designed methodology and interpreted by the help of available data, various tools and techniques. The major findings of the data analysis are also presented in this chapter.

The fifth chapter: Summery, Conclusion and Recommendations

It includes summary, conclusion and recommendations of the study that have been presented.

Chapter-Two

2. Review of literature

2.1. Introduction

Review of literature refers to the reviewing of the past studies in the concerned field. Such studies could be thesis/dissertation that are written earlier, books, articles, journals and any sort of other publication concerning the subject matter, which were written prior by a person or an organization. The purpose of this literature review is to be acquainted with what has been accomplished in the concerned subject matter and what is yet to be accomplished. In other words, it helps to find what actually is to be studied and foretells worthiness of the study being undertaken.

A number of studies have been carried out from different management experts, professionals, authors, and students of different levels of Maser Degree. The purpose of this chapter is to review the available literature on working capital position and management on the context of the Nepalese Industries including available information of Hulas Steel Ind. Ltd. A short description of literature referred in the study is given below that support to make the study purposeful.

2.2 Review of Text Books

2.2.1 Meaning and Concept of Working Capital

In any business organization, working capital is just like lifeblood in human body and works as a central nerve of a living organization. For the successful day-to-day operation, management of current assets and current liabilities of business organization is highly essential. It is very detrimental on the success and failure of organization.

Business organization needs various types of assets in order to carry out its operation. Some assets are required to meet the needs of regular production and some others are required especially to meet day-to-day expenses and short-term obligation.

The cash and marketable securities are respectively considered purely liquid and near liquid assets, whereas account receivables and inventories are not. However, they can be liquidated as and when necessary within a period of less than one year. In a like manner,

the current liabilities comprising sundry debtors, trade creditors, accounts payable, short-term bank loan and outstanding expenses etc. must be paid within one year as they become due.

Working capital management is not only concerned with the management of total current assets and the excess of current assets over current liabilities but it is concerned with all kinds of problems that arise in attempting to manage the current assets, current liabilities and the interrelationships that exist between them.[6] The meaning of the term 'working capital' should not be allowed to limit either the gross or the net concept of working capital only. It is true that very often-working capital is interpreted as circulating capital as it keeps on circulating in the course of business transactions. The circulating capital is highly a descriptive and meaningful term. Working capital is constantly flowing and changing its form as the enterprise accomplishes its objectives and performs its operations. In a broader sense, both fixed and current assets circulate but the current assets have a much greater velocity or turnover rate.[7] Current assets are assets like cash, stock, debtors or short-term investments, which are either readily available cash or are convertible into cash within a short time relatively during the normal course of business. Current liabilities on the other hand are liabilities, which will fall due for payment within a relatively shorter period. Such periods vary from one month to twelve months. Instances are creditors, provisions for taxation and dividend claims.

Different elements of working capital may be summarized as:

1. Cash on hand and in the bank
2. Easily convertible securities held for short terms
3. Raw material stocks
4. Finished goods stocks
5. Sundry Work in progress stocks
6. Debtors

The study of gross and net concept of working capital in Nepalese public enterprises assumes greater significance. It is not known what the position of investment in gross and

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[6] Smith, Keith V., **" An Overview of Working Capital Management,"** (New York, West Publishing Company, 1975) P-4

[7] Schultz, Raymond G. & Schultz Robert E., **"Basic Financial Management"** (Syracuse University, International Text Book Company, 1972) P-111

net working capital including their components in these enterprises and whether there has been any significant changes taking place in their size and structure over a period of time.

Gross concept

Gross concept in working capital means the firm's investment in current assets. Current assets are the assets, which can be converted into cash within an accounting year (operating cycle), and include cash, short-term securities, debtors, (accounts receivable or book debts) bills receivable and stock (inventory). **Adam smith** called **"circulating capital**" for current assets. In the word of Adam smith, "the goods of the merchant yield him no revenue in profit till he sells them for money and the money yields him a little till it is again exchanged for goods. His capital is continuously going from him in once shape and returning him in another and its only by means of such circulation's or successive exchange that can yield very him any profit. Such capital therefore may properly be called circulating capital"[8]**. R.S Pradhan and K.D Koirala** express their view about gross concept of working capital "if all the expenses needed to run the day to day operation of business such as amount to be invested in the form of cash, finished goods, receivables etc. are put together, it is called working capital. This working capital and total current assets are synonymous".[9]

Net Concept

According to net concept, net working capital refers to the difference between current assets and current liabilities. Current assets and current liabilities both play a vital role in operation cycle of business, so all the current liabilities must be considered rather than current assets alone. Since working capital is current assets, it includes all those assets, which in the normal course of business return to the firm, as cash with in a short period. Ordinary investments, which may be readily converted into cash upon need, are also current assets. The current liabilities include those debts that mature within a year. If public enterprises fail to consider current liabilities, the management of working capital gives misleading results.

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[8] Smith, Adam, "**The Wealth of Nations"**, Modern lib. Inc., New York, 1973 P(262-283)

[9] Pradhan, R. S. & Koirala, K. D. **"Some reflections on Working Capital management in Nepalese Corporation management Dynamics**", Vol. 3 No. 1

The view of net working capital is supported by distinguished authorities like **Lincon, Davis and Gitman**. They have defined net working capital as that portion of firm's current assets which is financed with long-term fund. The concept of net working capital considers both current assets and current liabilities. As against the current assets, the company in turn has current liabilities like credit facilities through its accounts payable or sundry creditors.

As expressed by American Institute of Certified Public Accountants U.S.A., working capital sometimes called net working capital, is represented by the excess of current assets over current liabilities and identifies the relatively liquid position of total enterprise capital which constitutes a margin suffers for maturing obligations within the ordinary operation cycle of the business. Net working capital indicates the liquidity position of the business and shows the ability to pay its creditors.

Dr. Radhe Shyam Pradhan has published a book on management of working capital in Nepalese Public Enterprises. In this study, he has dealt with various issues for example type of working capital policy followed by those Public Enterprises liquidity position, structures of working capital, utilization, demand, components with change in volume of sales in these Public Enterprises. He revealed that most of the selected enterprises achieved a tradeoff between risk and return, thereby following neither an aggressive nor a conservative approach. Almost all the selected Public Enterprises had a positive net working capital and much of the growth in net working capital might, however, be attributed to inflation as the growth in net working capital at deflated prices has been much lower. In most of Nepalese Public Enterprises the liquidity measure should a poor liquidity position. It has been noticed that the enterprises had either negative cash flows or earning before tax or they had excessive net current debts, which could not be paid within a year. [10]

Proper management of Working Capital must ensure adequate amount of working Capital as per need of business firms. It should be in good health and efficiently circulated. To have adequate, healthy and efficient circulation of Working Capital, it is necessary that Working Capital must be properly determined and allocated to its various segments,

[10] Pradhan, Dr. Radhe Shyam, **"Management of WC"**, New Delhi, National Book Organization, 1986

effectively controlled and regularly reviewed. In the opinion of well-known Indian professor **I.M. Pandey**, there are specially two concepts of Working Capital i.e. Gross Concept and Net Concept. The term **Gross Working Capital** simply called as working capital; refer to the firm's investment in current assets. Currents assets are the assets, which can be converted in to cash within an accounting year (or operating cycle) and include cash, short-term securities, debtors, bills receivables and stock (Inventory).

The term **Net Working Capital** refers to the difference between current assets and current liabilities. Current liabilities are those claims of outsiders, which are expected to mature for payment within an accounting year and include creditors, bills payable and outstanding expenses. Net Working Capital can be positive or negative. A positive net working capital will arise when current assets exceed current liabilities. A negative net working capital occurs when current liabilities are in excess of current assets.

The two concept of working capital- Gross and Net- are not exclusive, rather they have equal significance from management viewpoint. The gross working capital concept focuses attention on two aspects of current assets management: a) Optimum investment in current assets and b) financing of current assets.

The Net Working Capital, being the difference between current assets and current liabilities, is a qualitative concept. It emphasizes on a) Liquidity position of firm and b) Suggests some extent to which working capital needs may be financed by permanent sources of funds.

It may be emphasized that both gross and net concepts of working capital are equally important of r the efficient management of working capital. There is no precise way to determine the exact amount of gross or net working capital for any firm. The data and problems of each company should be analyzed to determine the amount of working capital. There is no specific rule as to how current assets should be financed. It is not feasible in practice to finance current assets by shout-term sources only. Keeping in view the constraints of the individual company, a judicious mix of long-term finances should be invested in current assets. Since current assets involve cost of funds, they should be put to productive use.[11]

[11] Pandey I.M., Financial Management, Vikash Publishing House P. Ltd. Page- 325

Jemes C. Van Horne emphasizing liquid assets as important component of working capital says:

"The term liquid assets are used to describe money and asset that are readily convertible into money. Different assets may be said to exhibit different degrees of liquidity. Money itself by definition the most liquid of assets, other assets have varying degree of liquidity, depending on the ease with which they can be turned into cash. For assets other than money, liquidity has two dimensions; (1) The time necessary to convert the assets into money, and (2) The degree of certainty associated wit the conversion ratio or price realized for the assets."[12]

In this way, he focuses in time and certainty factors of liquidity of current assets. In the consecutive chapters, he describes other components of working capital such as cash and marketable securities, accounts receivable and inventories, short-term financing, secured loans and term financing.

J. Fred Weston and F. Bugene Brigham have given the concept of working capital as: The term working capital originated at a time when most industries were closely related to agriculture, processors would buy crops in the fall, process them, sell the finished product and end up just before the next harvest with relatively low inventories. Bank loan with maximum maturities of one year were used to finance both the purchase and the processing cost and these loans were retired with process form the sale of the finished products.[13]

Dr. R. S. Pradhan and Dr. K. D. Koirala jointly prepared a research study on the "aspect of Working Capital Management in Nepalese Corporations" during 031/32 to 035/36. They found that investment of current assets had declined over the period in both manufacturing and non-manufacturing corporations. The major motive for holding cash in Nepalese Corporations was to provide a reserve for routine outflows of cash and for holding inventories was to facilitate smooth operation production and sales. The inventory in manufacturing corporations and cash and receivables in non-manufacturing enterprises were more problematic to manage.

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[12] Van Horne, James C., 'Financial Management and Policy', New Delhi, Prentice Hall of India P. Ltd. Page-343

[13] Weston, J. Fred, and Brigham, F. Bugene, – "Managerial Finance"- Illinois, The Dryden Press; page-267

With reference to the above problems and findings, they recommended that the need to control investment in working capital as a whole for manufacturing corporations as the average proportion of working capital to sales increased over time. Since the manufacturing and non-manufacturing corporations had trying to control investment in receivable, the focus of the attention should be derived to control of investment in cash and inventory. However, manufacturing corporations should pay attention to control the investment in inventory. They concluded that the investments in current assets had declined over the period in both type of corporations. Due to more liberal and less consistent credit policies; the Manufacturing Public Enterprises had consistently more investment in cash and receivables as compared to non-manufacturing corporations. Inventory management is of great importance to manufacturing enterprises and the cash and receivable to non-manufacturing enterprises.

Mr. N.K. Agrawal, Working capital management is the just like the lifeblood in human beings on any business firms. Hence, the management of working capital plays a vital role for successful existence of enterprises. It is the center on the routine of day-to-day administration of current assets and current liabilities. Therefore, working capital management in public enterprises is very important mainly for four reasons. Firstly, public enterprises must need to determine the adequacy of investment in current assets otherwise; it could seriously erode their liquidity base. Secondly, they must select the type of current assets, suitable for investment to raise their operational efficiency. Thirdly, they are required to ascertain the turnover of current assets, which determine the profitability of the concerns. Lastly, they must find out the appropriate resources of funds to finance the current assets.

Proper management of working capital must ensure adequate amount of working capital as per the need of business firms. It should be in good health and circulated. To have adequate healthy and efficient circulation of working capital it is necessary that working capital be properly determined an allocated to its various segments, effectively controlled and regularly reviewed.

2.2.2 Requirement of Working Capital

There is a difference between current and fixed assets in terms of their liquidity. Affirm requires many years to recover the initial investment in fixed assets such as plant and machinery or land and buildings. On the contrary, investment in current assets is turned over many times in a year. Investment in current assets such as inventories and book debts (Accounts receivable) is realized during the firm's operating cycle, which is usually less than a year. The most of manufacturing firm involves following cash conversion cycle:

Inventory Conversion Period (ICP) is the length of time required to convert inputs (Resources) into output (Finished goods)

$$\textbf{ICP=}\frac{\text{Current Assets}}{\text{Fixed Assets}} \mid 100 \text{ or } \frac{360}{\text{Inventory Turnover Ratio}} \textit{days}$$

Receivable Conversion Period (RCP) is the length of time required to collect outstanding amount from customers.

$$\textbf{RCP=}\ \frac{\text{Receivables} \mid 360}{\text{Net Credit Sales}} \textit{days} \text{ or } \frac{360}{\text{Receivable Turnover Ratio}} \textit{days}$$

Payable Deferral Period (PDP) is the length of time taken by company for able to defer payments on various credit purchases of venders.

$$\textbf{PDP=}\ \frac{\text{Creditors} \mid 360}{\text{Net Credit Purchase}} \textit{days}$$

If the Depreciation is excluded from expenses, the total of **ICP** and **RCP** minus **PDP** is referred as Cash Conversion Cycle (**CCC**), such as

CCC = **ICP+RCP-PDP (Days)**

Requirement of Working Capital = CCC x working capital needed per day

The Cash Conversion Cycle can be shown in a figure:

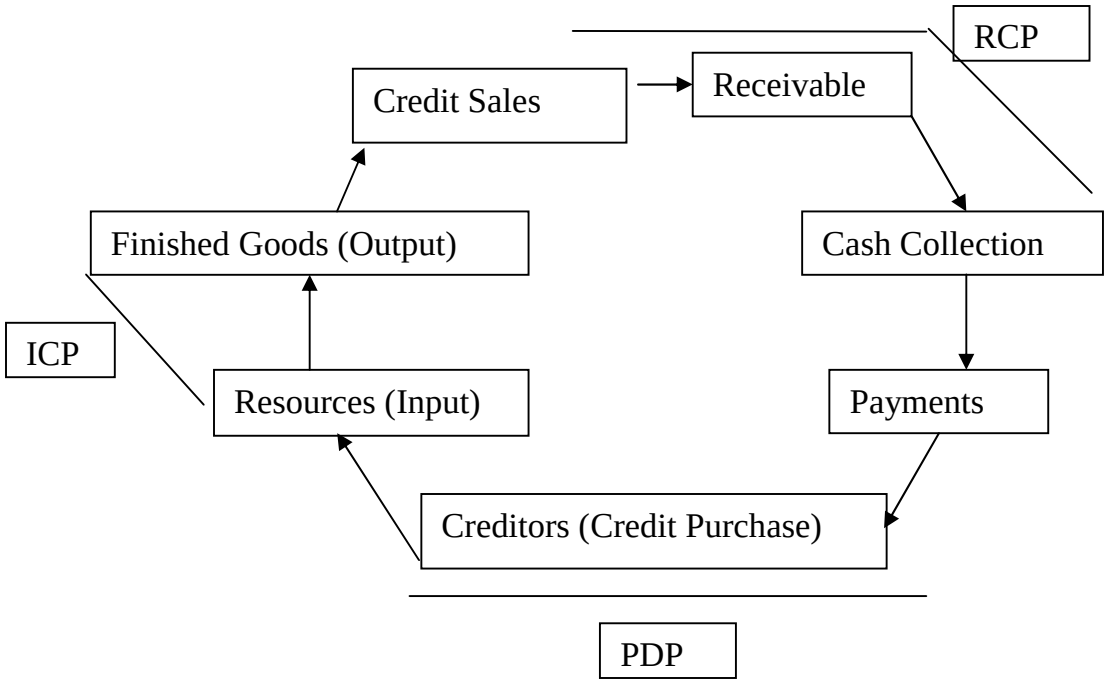

Figure: 1- Cash Conversion Cycle

2.2.3 Cost Trade-off

Different way of looking into the risk return trade- off is in terms of the cost of operating a particular level of current assets. There are two types of costs involved: the cost of liquidity and the costs of Illiquidity. If the firm's level of current assets is very high, its return on assets will be low, as funds tied up in idle cash and earn nothing and high levels of debtors reduce profitability. Thus, the cost of liquidity (though low rates of return) increases with the level of current assets.

The cost of Illiquidity is the cost of holding insufficient current assets. The firm will not be in a position to honor its obligations if it carries too little cash. This may force the firm to borrow at high rates of interest. This will also adversely affect the credit worthiness of the firm and it will face difficulties in obtaining funds in future. All this may force the firm into insolvency. Similarly, the low level of stocks will result in loss of sales and customers may shift to competitors. In addition, low level of book debts may be due to tight credit policy, which would impair sales further. Thus, the low level of current assets involves costs, which increase as this level falls.

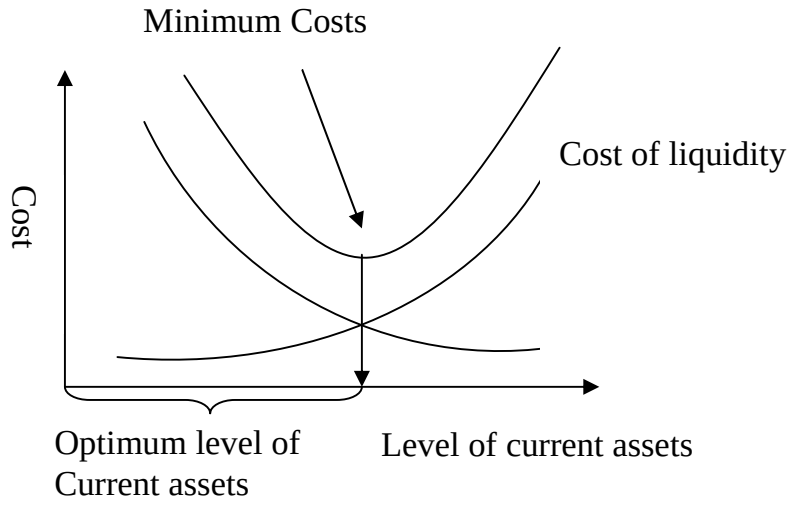

Figure: 2

Cost Trade-Off

In determining the optimum level of current assets, the firm should balance the profitability-solvency tangle by minimizing total costs (cost of liquidity and Illiquidity), this is given in figure that high level of current assets increases cost of liquidity while cost of Illiquidity decreases and vice-versa. The firm should maintain its current assets at that level where the sum of these two costs in minimized. The minimum cost point indicates the optimum level of current assets in figure-2.

2.2.4 Liquidity versus Profitability (Risk and Return)

Almost all financial decisions involve some sort of risk return trade off but this is more so in the case of working capital decisions. To take an example, the lower the cash balances held on hand, the higher would be the expected return, but at the same time, the enterprise will have to assume the greater risk of running out of cash. The higher return is due to the less money tied up in non-income earning assets and the higher risk is due to the possibility of shortage of cash in the event of urgency. Thus, a low liquidity is associated with high rates of return. However, it does not mean that low liquidity is in the best interest of shareholders. No doubt, profitability has to do with the overall goal of shareholders' wealth, but liquidity has to do with ensuring that the enterprise is able to

satisfy all its current financial obligations.[14] The firm would make just enough investment in current assets if it was possible to estimate working capital needs exactly. Under perfect certainty, current assets holdings would be at minimum levels. A larger investment in current assets under uncertainty would mean a low rate of return on investment for the firm, as excess investment in current assets would not earn enough return. A smaller investment in current assets, on the other hand, would mean interrupted production and sales, because of frequent stock-outs and inability to pay to creditors in time due to restrictive policy. As it is not possible to estimate working capital needs accurately, the firm must decide about levels of current assets to be carried. The current assets holdings of the firm will depend upon its working capital policy. The company may follow either conservative or aggressive policy. It does not mean that larger the working capital, the better it is. Regarding the size of working capital to be held in the business, there is likely to be some position or range of positions that is best. If the investment in fixed assets is held constant, then the benefits resulting from an additional increase in working capital will be subject to diminishing returns. If the objective of working capital management is to maintain high liquidity in the business, it means a reduced return to shareholders and a lower risk of becoming technically insolvent. Similarly, if the objective is to maintain low liquidity, it means an increased return but a high risk of becoming technically insolvent. All working capital policies ranging from low to high liquidity policies but are not equally favorable. The extremely high and low liquidity policies are not at all favorable as the required rate of return or cost of capital is higher than the expected rate of return. Hence, only those liquidity policies are favorable where the expected rate of return is higher than the required rate of return or cost of capital. These policies have different risk and return implications.

2.2.5 Need for working capital

The management of working capital has been regarded as one of the conditioning factors in the decision making issue. It is no doubt, very difficult to point out as to how much working capital is needed by a particular company, but it is very essential to analyze and find out the solution to make an efficient use of funds for minimizing the risk of loss to

[14] Smith, Keith V., op. cit., P-12

attain profit objectives. Thus goes the importance of working capital in operating life of a company. A successful business keeps its working capital moving rapidly. Thus it is also a lead circulating capital or a moving capital. The transmutation of a company's working capital into income and profits and back into working capital is one of the most dynamic and vital aspects of business operation. And only this movement of current assets keeps the business alive. A fully equipped factory without the supply of materials to process and without cash to pay bills and store without stock to sell is of no use. These circumstances emphasize the importance of working capital in a business firm.

The need for working capital or current assets cannot be overemphasized. The objective of financial decision making is to maximize the shareholder's wealth. To achieve this, it is necessary to generate sufficient profits. The extent to which profit can be earned will naturally depend upon the magnitude of the sales among other things. A successful sales program is in other words, necessary form earning profit by any business extremes. However, sales do not convert into cash instantly; there is invariably a time lag between the sales of goods and receipt of cash.

There is, therefore, a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital is necessary to sustain sale activity. Technically, this is referred to as the operating or cash cycle. The operating cycle can be said to be at the near of the need for working capital. Operating cycle is the time duration required to convert sales, after the conversion of resources into inventories into cash.

Most of the firms' aim is maximizing to wealth of shareholders. The firm should earn sufficient return from its operation. The extent to which profit can be earned naturally depends upon the magnitude of sale among the other things. For constant operation of the business, every firm need to hold the working capital components like cash, receivable, inventories etc. therefore, every firm needs working capital to meet the following motives:

The transactional motive

According to transaction motive, a firm holds cash and inventories to facilitate smooth production and sales operation in regular. Thus, the firm needs the working capital to meet the transaction motive.

The precautionary motive

Precautionary motive is the need to hold cash and inventories to guard against the risk of unpredictable change in demand and supply forces and supply forces and other factors such as strike, failure of important customer, unexpected slow down in collection of accounts receivable, cancellation of some order for goods and some other unexpected emergency. Thus, the firm needs the working capital to meet any contingencies in future.

The speculative motive

Speculative motive refers to the desire of a firm to take to take advantages of following opportunities:

- Opportunities of profit making investment
- Opportunities of purchasing raw materials at a reduced price on payment of immediate cash
- Speculate on interest rate and
- Make purchases at favorable price etc.

Thus the firm need the working capital to meet the above three motives.

2.2.6 Working Capital Policies

A firm's net working capital position is not only important as an index of liquidity but it is also used as measure of the firm's risk. Risk, in this regard, means changes chances of the firm being unable to meet its obligations on due date (Pandey, 1989:738). Working capital management involves deciding upon the amount and composition of current assets and how to finance these assets.

These decisions involve trade of between risk and profitability. The greater the relative proportion of liquid assets, the lesser the profitability as well as the risk of running out of cash all other things being equal. The longer the composite maturity schedule of securities used to finance the firm, the lesser the risk of cash insolvency all other things being equal.

Again the profits of the firm are likely to be less. Resolution of the trade off between risk and profitability with respect to these depends upon the risk preferences of management.

Working capital policy refers to the firm's basic policies reading target level of each category of current assets and how current assets will be financed (Weston, 1996 page

333). So, first of all, the firm has to determine how much funds should be invested in working capital in gross concept. Every firm can adopt different financing policy according to the financial manager's attitude towards the risk return trade off. One of the most important decisions of final manager is how much current liabilities should be used to finance current assets. Every firm has to find out the different sources of funds for working capital.

2.2.6.1 Current Assets Investment Policy

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried to support the given level of sales. There are three alternative current assets investment policies Fat Cat, Loan and Mean and Moderate Policy (Weston et. all, 1996 page 334).

- **Fat Cat Policy**

  This is known as Relaxed Current Assets Investment Policy. In this policy, the firm holds relatively large amount of cash, marketable securities, inventory and receivable to support a given level of sales. This policy creates longer inventory and cash conversion cycles. It also creates the longer receivable collection period due to the liberal credit policy. Thus, this policy provides the lowest expected return on investment.

- **Lean and Mean Policy**

  This is also known as Restricted Current Assets Investment Policy. In lean and mean policy, a firm holds the minimum amount of cash, marketable securities, inventory and receivable to support a given of sales. This policy tends to reduce the inventory and receivable conversion cycle. Under this policy firm allows a tight credit policy and bears the risk of losing sales.

- **Moderate Policy**

  In moderate policy, a firm holds the amount of current assets in between the relaxed and restrictive policies. Both risk and return are moderate in this policy.

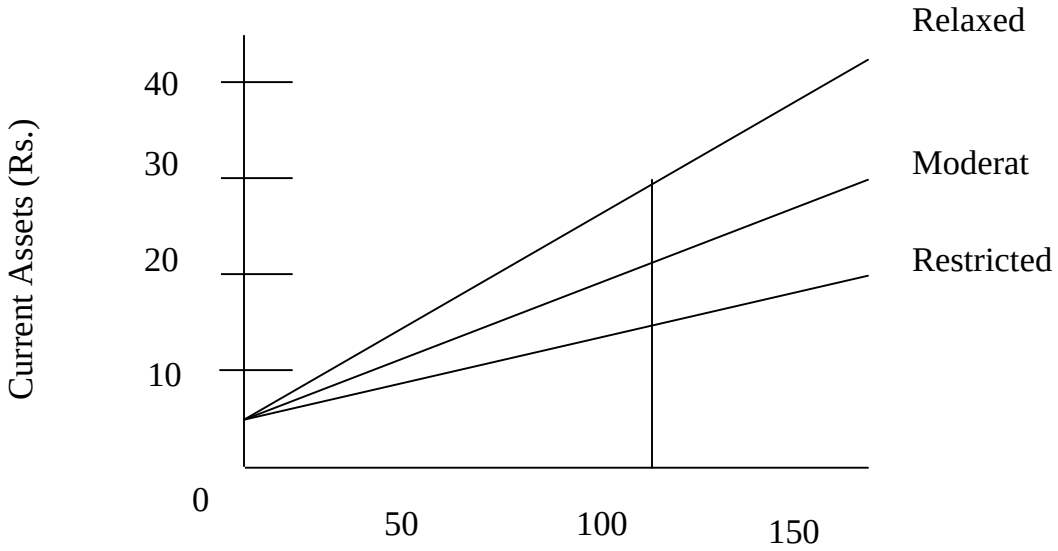

Figure-3

Alternative Current Assets Investment Policies (in thousand Rs)

The above figure shows that level of current assets as per different policies used to support sales of Rs 110.

Policies	**Current Assets to support given level of sales Rs 110**
Relaxed	Rs 30
Moderate	Rs 20
Restricted	Rs 13

(Source: Weston, Besley & Brigham, Essentials of Managerial Finance, p-345)

2.2.6.2 Current Assets Financing Policy

It is the manners in which the permanent and temporary current assets are financed; current assets are financed with funds raised from different sources. But cost and risk affect the financing of any assets. Thus, current assets financing policy should clearly outline the sources of financing. There are three variants aggressive, conservative and matching policies of current assets financing.

⁾ Aggressive Policy

In as aggressive policy, the firm finances a part of its permanent current assets with short term financing and rest with long term financing. In other words, the firm finances not only temporary current assets but also a part of permanent current assets with short term financing. Figure 4 shows that short term financing finance 50% of the permanent current assets.

In general, interest rate increases with time i.e. shorter the time, lower the interest rate. It is because lenders are risk adverse and risk generally increases with the length of lending period. Thus, under financing rater than long term financing on the other side, if the firm finances its permanent current assets by short term finance, then it runs the risk of renewing the borrowing again. This continued financing exposes the firm to certain risk. It is because, in future the expenses will fluctuate wide and also, it may be difficult for the firm to raise the fund during the stringent periods. In conclusion, there is higher risk, higher return and low liquidity position under this policy.

Aggressive Financing Policy

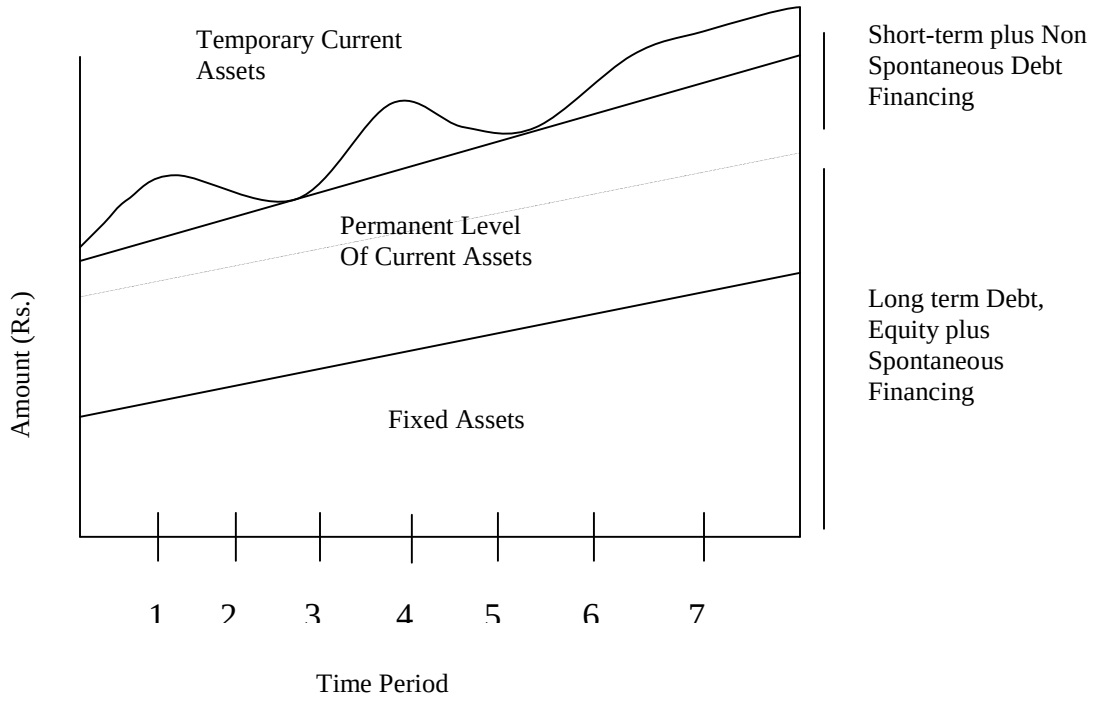

Figure-4

(Source: Weston, Besley and Brigham, Essentials of Management Finance (p-347)

- **Conservative Policy**

In this policy, the firm uses long term financing to finance not only fixed assets and permanent assets but also a part of the temporary current assets. This policy leads to high level of current assets, with long conversion cycle low level of current liabilities and higher interest cost. The risk and return are lower that of aggressive policy and liquidity position is higher that that of aggressive one. The risk adverse management follows this policy:

Conservative Financing Policy

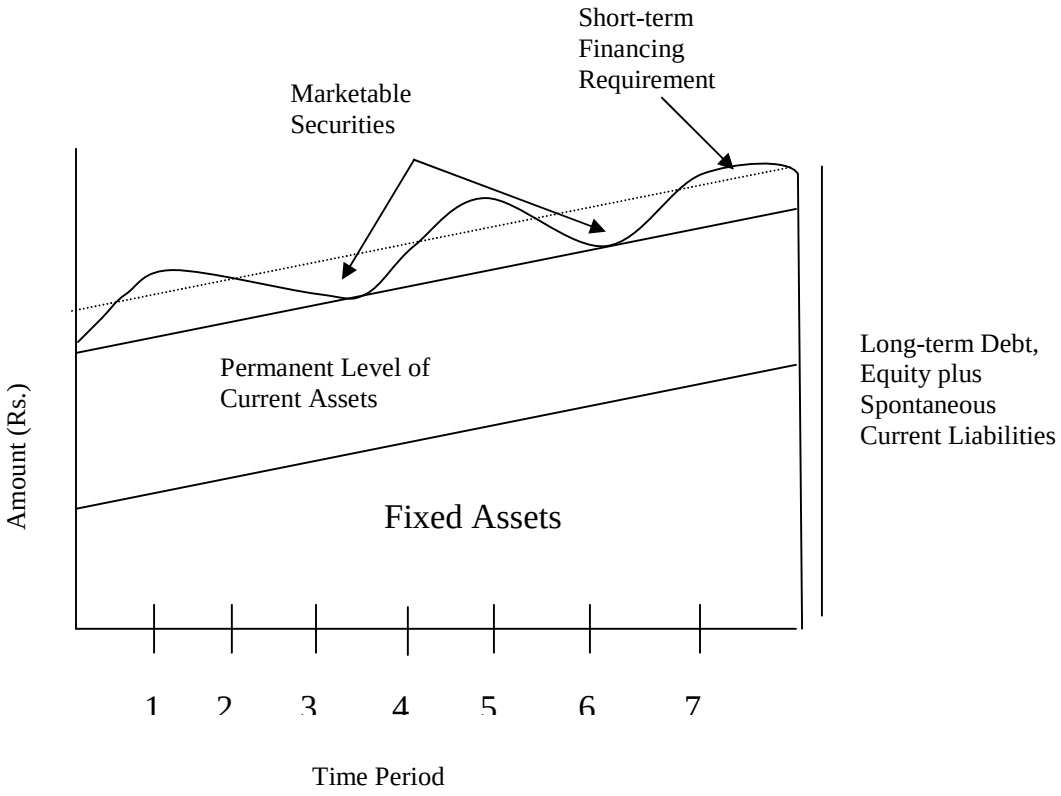

Figure-5

(Source: Weston, Besley and Brigham, Essentials of Management finance (p-347)

- **Moderate Policy**

In this policy the firm finances the permanent current assets with long term financing and temporary with short term financing. It lies in between the aggressive and conservative policies. It leads to neither high nor low level of current assets and current liabilities. Figure-6 shows temporary working capital is

financed by short term financing and long term by long-term financing. Thus working capital is zero under this policy.

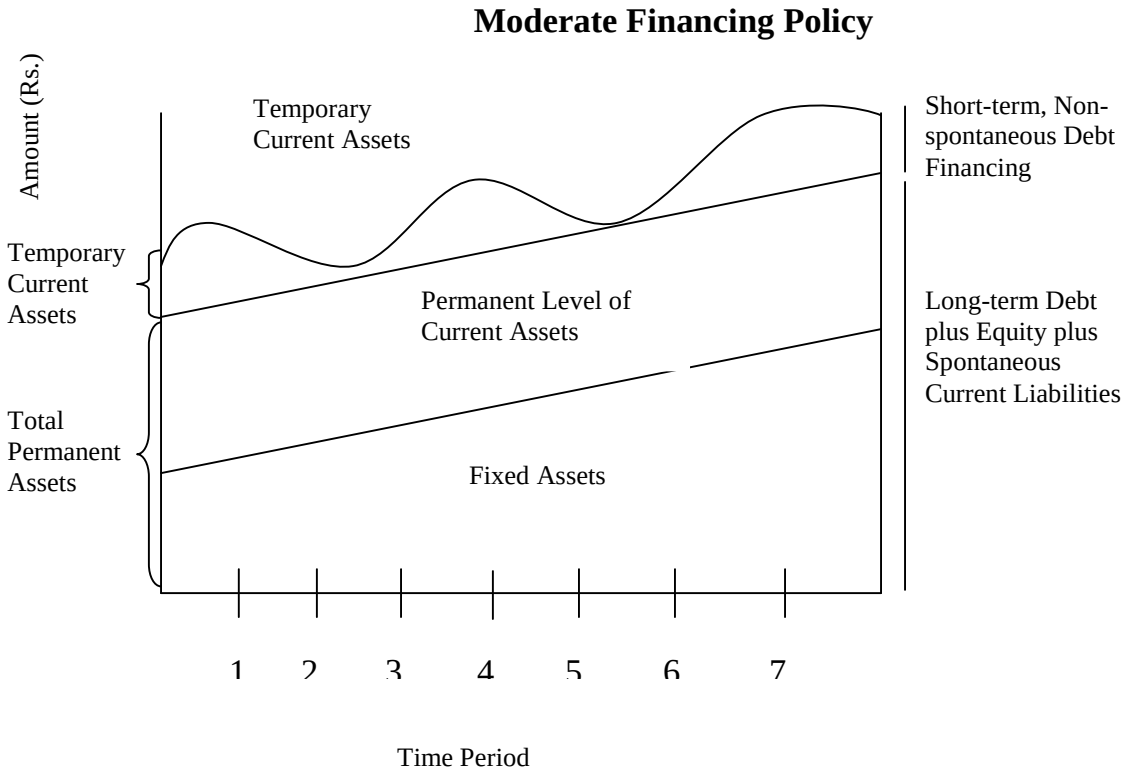

Figure-6

(Source: Weston, Besley and Brigham, Essentials of Management finance (p-347).

2.2.7 Determining the Financing Mix

A study of determining the financing mix also gives an idea of risk-return tradeoff to be achieved in working capital management. Deciding how current liabilities should be used to finance current assets is one of the most important decisions concerning working capital management. It is necessary to understand here that short-term funds are not available to finance fixed assets, for short-term lenders generally do not lend funds for financing long-term assets. The problem is therefore whether to limit the use of long-term funds to finance long-term assets only or they should be used also to finance current assets in addition to long-term assets. Determining an appropriate financing mix is again a matter of risk return tradeoff. A number of financing mixes is available to a financial manager ranging from low- liquidity high- profitability policies to high- liquidity low-

profitability policies and his job is to pick the one that properly balances profitability and liquidity. Out of them, three approaches to financing mixes of different extremes are described in the following ways:

Approach 1: Aggressive approach

The first approach refers to the aggressive financing mix, which is quite risky leading to high profitability and low liquidity. The approach would be to finance seasonal requirements of funds by short-term sources and permanent requirement by long term sources under this approach, the risk of technical insolvency would be high as the net working capital is a lower level. The profitability in this approach would be high as the cost of fund is low.

Approach 2: Conservative approach

The second approach refers to a financing mix, which is less risky leading to low profitability and high liquidity. The approach would be to finance all funds required from long-term funds. The risk is considered low here because even if the total requirement of funds actually turns out to be more, the enterprise can expect to meet it from short-term sources easily as it has been not using them.

Approach 3: Moderate approach

This third approach refers to a financing mix, which is neither too risky nor least risky. It lies in between a low liquidity high profitability case and a high liquidity low profitability case. In other words, this approach aims at achieving a trade off between profitability and liquidity. The actual trade off in real life would however, depend upon management's capability to take risk.

From the above discussion it is clear that higher the liquidity, lower the risk leading to lower profitability and vice-versa. Working capital management, therefore ultimately aims at achieving some sort of a risk-return tradeoff. Moreover, this kind of tradeoff would fundamentally be a matter of management's attitude towards risk.

2.2.8 Financing Working Capital

The firm's working capital assets policy is never set in vacuum; it is always established in conjunction with the firm's working capital financing policy. Every manufacturing concern or industry requires additional assets whether they are in stables or growing conditions the most important function of financial manager is to determine the level of working capital and to decide how it to be financed. Financing of any assets is concerned with two major factors-cost and risk. Therefore, the financial management must determine an appropriate financing mix or decide how current liabilities should be used to finance current assets.

However, a number of financing mixes are available to the financial manager. He can resort generally three kinds of financing:

- **Long Term Financing**

  Long-term financing has high quality and low profitability. Ordinary share, debenture, preference share, debenture preference share, retained earning and long term debts of financial institution are major sources of long term financing.

- **Short Term Financing**

  A firm must arrange its short-term credit in advance. The sources of short-term financing of working capital are trade credit and bank borrowing.

  - Trade Credit

    It refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms have not to pay cash immediate for the purchase is called Trade Credit. It is mostly an informal arrangement and is granted on an open account basis. Another form of trade credit is bills payable. It depends upon the term of trade credit. (Van Horne, 1994, P-471)

  - Bank Credit

    Bank credit is the primary institution sources for working capital financing. For the purpose of bank credit, amount of working capital requirement has to be estimated by the borrowers and banks are approached with the necessary supporting data.

After availability of this data, bank determines the maximum credit based on the margin requirement of the security. The types of loan provided by commercial banks are loan arrangement overdraft arrangement, commercial papers etc.

- **Spontaneous Financing**

  Spontaneous financing arises from the normal operating of the firms. The two major sources of such financing are trade credit (i.e. credit and bills payable) and accruals. Whether trade credit is free of cost or not actually depends upon the terms of trade credit. (Pradhan, 2000, page-147)

  Financing manager of the firm would like to finance its working capital with spontaneous sources as much as possible. In practice, the real choice of current assets financing is either short-term or long term sources. Hence, the financing of working capital depends upon the working capital policy, which is perfectly dominated by management attitude towards the risk return.

  There are three basic approaches for determining an appropriate working capital financing mix.

) Matching Approach

It is also known as Heading Approach. If the firm attempts to match assets and liability maturities, the working capital financing policy is termed as moderate (maturity matching of self liquidity) policy. Hedging approaching is a method of financing where each asset would be offset with a financing instrument of the same approximate maturity.

With the matching approach, long-term financing will be used to finance fixed assets and permanent component of current assets as well as short-term financing is used to finance temporary or variable current assets or seasonal variations in current assets. The firm's fixed assets and permanent current assets are financed with long-term funds and as the level of these assets increases, the long-term financing level increases. The temporary or variable Current Assets are financed with short-term funds and as their level increases, the level of short-term financing increases. Under matching plan, no short-term financing will be used if the firm has a fixed Current Assets need only. However, due to the uncertainty of expected lives of assets exact matching is not always possible. With a

hedging approach to finance the borrowing and payment schedule for short-term financing current assets less spontaneous financing. (Van Horn & Wachowics, 2000, page-209)

- **Conservative Approach**

The financing policy of firm is said to be conservative when it depends more on long term funds for financing needs. Under a conservative plan, the firm finances its permanent assets and a part of temporary current assets with long-term financing. In the period when the firm has no need for temporary current assets, the idle long-term funds can be invested in the tradable securities to conserve liquidity. The conservative plan relies heavily on long-term financing and therefore, the firm has less risk of facing the problem of shortage of funds (Pandey, 1989, page-570).

This approach heavily rises on long term financing. Permanent capital is used to finance all permanent assets requirements or also to meet some or all of the seasonal demands (Weston & Brigham, 1996, page-348)

- **Aggressive Approach**

An aggressive policy is said to be followed when it used more short-term financing than warranted by the matching plan. Under an aggressive policy, the firm finances a part of its permanent Current Assets with short-term financing. The relatively more use of short term financing makes the firm more risky (Pandey, 1989, page-751).

2.2.9 Adequacy and In-adequacy of working capital

The firm should maintain a sound working capital position. It should have adequate working capital to run its business operations. Both excessive as well as inadequate working capital positions are dangerous from the firm's point of view. Excessive working capital means idle funds, which earn no profits for the firm. Paucity of working capital not only impairs firm's profitability but also results in production interruptions and inefficiencies. The dangers of excessive working capital are as follows:

- It results in unnecessary accumulation of inventories. Thus, chances of inventory mishandling, waste, theft and losses increase.

- It is an indication of defective credit polity and slack collection period. Consequently, higher incidence of bad debts results, which adversely affects profits.
- Excessive working capital makes management complacent, which degenerates into managerial inefficiency.
- Tendencies of accumulating inventories are to make speculative profits grow. This may tend to make dividend policy liberal and difficult to cop with in future when the firm is unable to make speculative profits.

In-adequacy of working capital is also bad and has the following dangers:

- It becomes difficult for the firm to undertake profitable projects by non-availability of working capital funds.
- It becomes difficult to implement operating plans and achieve the firms profit target.
- Operating inefficiencies creep in when it becomes difficult even to meet day-to-day commitments.
- Fixed assets are not efficiently utilized for the lack of working capital funds. Thus, the firm's profitability would deteriorate.
- Lack of working capital funds renders the firm unable to avail attractive credit opportunities etc.
- The firm loses its reputation when it is not in position to honor its short-term obligations. As a result, the firm faces tight credit term.

Therefore, Tightened management should maintain a right amount of working capital on continuous basis.

2.2.10 Determinants of Working Capital

There are no set rules or formulae to determine the working capital requirement of the firm. The importance of efficient working capital management is am aspect of overall financial management. Thus a firm plans its operations with adequate Working Capital requirement or it should have neither too excess nor too inadequate working capital. A number of factors affect different firm in different ways. Internal policies and

environment changes also affect the working capital. Manufacturing and trading enterprises need different volume of Working Capital as compared to public utility enterprises but quantitative amounts of Working Capital need to such enterprises can hardly be set due to the following environment that affects Working Capital needs of particular enterprises:

a) Nature and size of business

The working capital requirement of a firm depends upon the nature and size of business. Manufacturing or trading and small or large business firm vary on requirement of working capital. Trading and small business needs less WC and vice-versa.

b) Manufacturing cycle

It refers to the time involved to make the finished goods form the raw materials. It has a great impact on the Working Capital needs because the shorter the manufacturing periods and efficiency in production, the lesser the need of Working Capital to finance in Working Capital and longer the production cycle the funds are tied-up.

c) Business fluctuation

Business fluctuation also affects the requirement of working capital. The situation whether an enterprise is operating in the boom or recession and depression period also determines the Working Capital needs of the enterprises.

d) Production Policy

The production policy adopted by the firm also affects its working capital requirement. The policy whether to follow uniform and level production plan or varying production plan determines the Working Capital needs of the individual enterprise. Naturally, a firm following uniform production policy requires higher amount of WC and vice versa.

e) Credit policy and availability of credit

Credit policy and availability of credit is another important factor that affects the working capital requirement. If funds are readily and easily available from banks with favorable conditions and the creditors provide a liberal credit terms or credit

facilities as well as the firm follows conservative sales policy then such firm needs lesser amount of Working Capital and vice versa.

f) Growth and expansion activities

The volume of assets or sales as well as expansion activities of the enterprises has direct bearing upon the needs of Working Capital. However, it is difficult to precisely determine the relationship between the growth and expansion of the firm needs and working capital requirement. The trend of growth is higher as well as increasing expansion activities, the higher the need of Working Capital and vice-versa.

g) Turnover of circulating capital

Turnover and circulating capital also affect the requirement of working capital. How frequently and rapidly the working assets are converted into cash also determines the need of Working Capital and such turnover is determined by demand and sales policy of the particular enterprise.

h) Competitive Conditions

It is also an important determinant that plays the vital role for determining the requirement of working capital. An enterprise dominating in the market without having keen competition may be in a favorable situation for keeping less amount of WC.

i) Price Levels Change

Price level changes also affect the requirement of working capital of a firm.. Generally, rising price levels will require a firm to maintain higher amount of Working Capital due to same level of current assets will need more investment when price increases. In conclusion, the implications of changing price level on working capital position will vary firm to firm depending on the nature and other relevant consideration of the operation of the concerned firms.

j) Operating Efficiency

It is also the important factor, influences the working capital requirements of the firm. It refers to eh efficient utilization of available resources at minimum cost. Thus, financial can contribute to strong working capital poison through operating

efficiency. If a firm has strong and higher the operating efficiency lower will be Working Capital requirement and vice versa.

K) **Profit Margin**

The level of profit margin differs on firm to firm. It depends upon the nature land quality of products, marketing management and monopoly power in the market. If the firm deals with the high quality product and has a sound marketing management and enjoyed the monopoly power in the market then it earns quite high profit and vice-versa. Profit is the source of working capital because it contributes towards the working capital as a pool by generating more internal funds.

L) Level of Taxes

The level of taxes also influences working capital requirement of a firm. The amount of taxes to be paid in advances is determined by the prevailing tax regulations. But the firm's profit is not constant, or can not be predetermined. Tax liability in a sense of short term liquidity is payable in cash. Therefore, the provision for tax amount is one of the important aspects of working capital planning. If tax liability increases, it needs to increase the working capital and vice-versa.

A number of studies have been carried out concerning working capital management on different natures of manufacturing enterprises of Nepal. Some of the views and findings made by some students and professionals have been reviewed in this section. The dissertations are related to public and Pvt. Ltd. enterprises, I believe, those findings relevant in the study.

2.2.11 Sources and applications of Working Capital

Generally, the sources of Working Capital are as follows:

a) Funds from operations

The major source of working capital is the funds form operation, which refer to those funds which are generated by carrying out the central operations of a business.

b) Proceeds form the sale of non-current assets

Sale of non-current assets tantamount to conversion of non-current assets to current assets and is a source of fund regardless of the fact whether the assets is sold for a gain or loss.

c) Long-term borrowing

Long-term borrowing such as issue of debentures and convertible bonds results in the increase of current assets (cash) and therefore an increase in the working capital. In case of short-term borrowing, the increase of current assets is offset by an increase in the current liability and therefore results in no change in working capital.

d) Issue of shares for cash

Issue of shares results in an inflow of current assets and is, therefore, a source. In the case of sole proprietorship and partnership concerns additional capital introduced is a source of funds.

e) Non-operating income

Incomes like dividends, interest received form operations outside the framework of the central operation of a business results in an inflow of current assets and, therefore, to be shown as a source.

Application of Working Capital

The Working Capital can be used in the following activities:

a) Purchase of fixed assets

The purchase of long-term assets, such as plant & equipment, land & building either reduces current assets and or increase current liabilities. Consequently, the working capital is reduced.

b) Redemption or payment of long –term debt

Repayment of shot-term debt is not considered as the uses of funds, since both current assets and current liabilities are reduced by the same amount. But the payment of a long-term results in the reduction of a current assets and, is therefore, use of fund.

c) Redemption of preference share or investment made

When cash is paid to redeem preference shares or to purchase securities as investment, working capital is reduced and therefore is use of fund.

d) Loss from operations

Any loss from the operation results in more outflows of funds as compared to inflow of funds and is, therefore use of funds.

e) Payment of dividend, tax etc

Any dividend or tax amount paid in cash results outflows of current assets, therefore, an application of funds.

Sources and Application of Funds

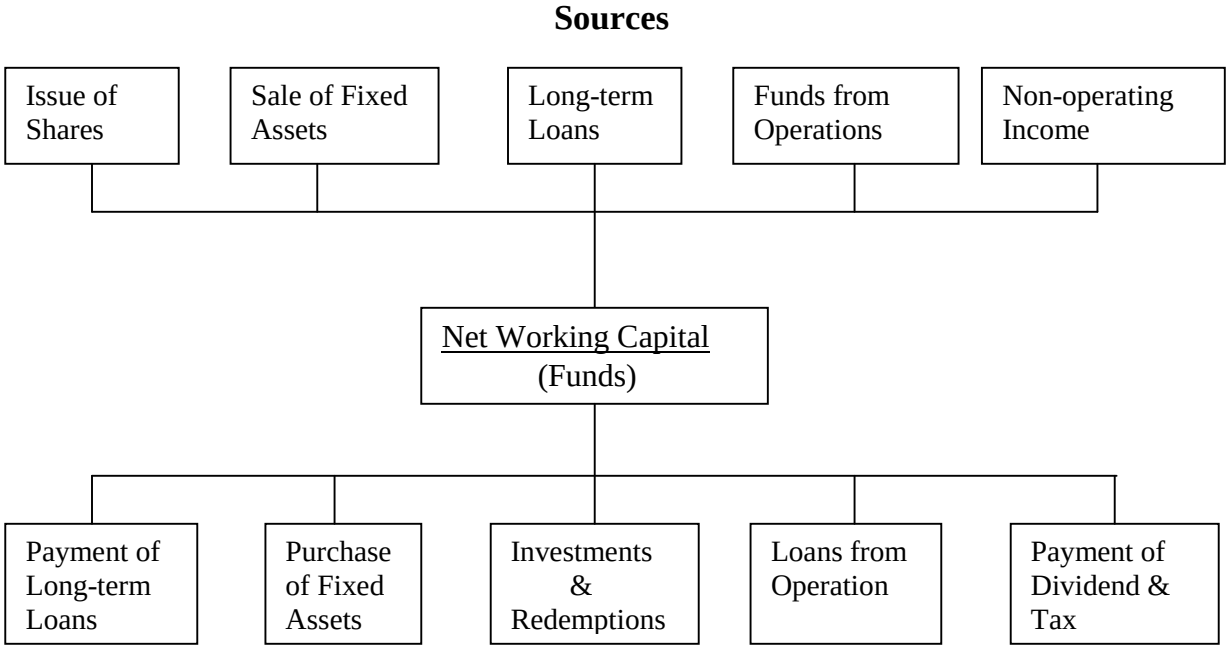

Figure-7

(Sources: Weston, Besley and Brigham, Essentials of Management Finance, page-347)

2.2.12 Classification of Working Capital

Working Capital can be classified into two categories:

- Permanent or Fixed Working Capital
- Variable or Temporary or Fluctuating Working Capital

Permanent Working Capital refers to that level of Current Assets which is required on a continuous basis over the entire year. A manufacturing concern cannot operate regular production and sales functions in the absence of this portion of Working Capital. Therefore, a manufacturing concern holds certain minimum amount of Working Capital to ensure uninterrupted production and sales function. This portion of working Capital is directly related to the firm's expansion of operation capacity. (Srivastav, 1984, page-484)

Variable Working Capital refers to that portion of Working Capital, which is required over permanent Working Capital. Therefore, this portion of Working Capital depends upon the nature of firm's production; relation between labor and management. If a firm has sound management of this portion of working capital it can easily win other competitors in the cut-throat of the market.

2.3 Review of Journals/Articles

Articles, journals and bulletins are of great significance of thesis writing, so various published articles by different management experts and journals/bulletins relating to working capital have been considered.

With reference to this, **Dr. Manohar K. Shrestha**, in an article, has considered 10 Selected Public Enterprises and studied the working capital management in that Public Enterprises. He has focused on the liquidity, turnover and profitability position of those enterprises. In this analysis, he found that four Public Enterprises had excessive and the remaining four had failed to maintain desirable liquidity position. On the turnover side, two Public Enterprises had negative working capital turnover, four had adequate turnover, one had high turnover and the remaining three had not satisfactory net working capital. Six Public Enterprises were in losses out of ten Public Enterprises. Dr. Shrestha had brought certain policy issues such as lack of suitable financial planning, negligence of working capital management, deviation between liquidity and turnover of assets and inability to show positive relationship between turnover and return on networking capital. At the end, he had made some suggestive measures to overcome from the above policy issues, viz. identification of needed funds, development of management information system, positive attitude towards risk and profit and determination of right

combination of short term and long-term sources of funds to finance working capital needs.

Another article by **Dr. K. Acharya**[15] focused on working capital management of Nepal Tea Development Corporation (NTDC) for eight years from 1975/76 to 1982/83 A.D. In the study, he found that the net working capital of NTDC was negative due to increase in current liabilities. Inventory held the largest portion and it was accumulating in the corporation. The size of receivables of NTDC had also been increasing trend where as cash balance held by the corporation was insufficient to meet the routine work of the corporation. At the same time, the liquidity position was very poor since current assets were less than the current liabilities. The turnover of inventory, receivables and current assets were below average. The break-even analysis revealed that the NTDC had been selling mostly below the break-even point. Even variable cost was higher than selling price. Dr. Acharya gave some suggestions regarding this were: proper planning of production and sales, new credit policy, action against the delinquent dealers, obtaining loans from any individual or financing institutions.

A comparative study of **"problems in management of WC in Nepalese enterprise"** has been conducted by Acharya states that of Nepalese enterprises the management of money and managers are found over conscious about receiving of money rather than its efficient utilization. Thus, the existing problems in the finance are mostly directed towards the management of WC rather than in any area. In his number of studies it has been repeatedly found that the gross inefficiency in the operation of public enterprises. He has stressed on high cost of production, which have left these PES in less secured position. Thus, he further added the cost of reduction is the only possible measure for smooth operation and long- term existence of the public enterprises in Nepal. The cost reduction program is highly associated with the optimization of working capital. He has focused some operational and organizational problems of Nepalese Public Enterprises not to follow traditional norm 2:1 between their current assets and current liabilities, low rate of inventory turnover, change in WC in relation to fixed capital has very low impacts over the profitability and not following conventional rule of debt to equity as 1:1, then transmutation of capital employed into sales management information, ineffective use of

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15 Acharya, Dr. K.**, "The management of working capital in the PEs of Nepal**", Nepalese Developments Studies, 1988

performance evaluation tools and techniques and WC management has never been considered a managerial job.

Similarly, he has suggested that Public Enterprises finance staff must be acquainted with the modern scientific tools used for the presentation and analysis of data. He further suggests avoiding the system of crisis decision, which prevailed frequently in their operation. They have to follow system and method for decision- making. Lastly, he has given emphasis to optimize the level of investment at a point of time. Neither excess nor lower investment of WC is desired by the management of enterprises. Both of these situations will erode the efficiency of the concern. This study is descriptive in nature. He has not used any data and research tools. The study has covered Nepalese PES (but not mentioned the name of PES). Each selected enterprise does not represent the entire industry in which it fails.

Dr. Radhe S. Pradhan[16] in his study aims at examining the various aspects of management of WC is selected manufacturing PES of Nepal. The specific objectives undertaken in his study are -

1. To conduct risk return analysis of liquidity of working capital position.
2. To assess the short- term financial liquidity position of the enterprises.
3. To assess the structure and utilization of WC
4. To estimate the transactions demand function of working capital.

His study has mentioned the following findings:

a) It has found that most of the selected enterprises have been activating a trade-off between risks and return there by following neither an aggressive nor a conservative approach.
b) It has showed a poor liquidity of most of the enterprises. This poor liquidity position has been noticed as the enterprises have either negative cash flows or negative earnings before tax or they have excessive net current debts, which cannot be paid within a year.

[16] Pradhan, Dr. Radhe Shyam. **"Management of Working Capital"** (New Delhi, National Book Organization), 1986

c) The Nepalese manufacturing PES has on an average half of their total assets in the form of current assets. Of all the different components of current assets, the share of inventories in total assets, on an average, is largest followed by receivables and cash in most of the selected enterprises?
d) The economies of scale have been highest for inventories followed by cash and gross WC, receivables and net WC.
e) The regressions results also show that the level of WC and its components and enterprises desires to hold depend not on a sale but on holding cost also.

His study is concerned with interrelationships that exist between managing current assets and current liabilities. The study manages to focus on net working capital concept. The study has employed ratio analysis, discriminate analysis and econometric models for its analysis. This study does not cover all the PES in manufacturing sector. Each selected enterprises does not represent the entire industry in which it fails. The manufacturing PES selected for the study differs in its working and nature. The study period covers ten years period from 1973 to 1982. He has mentioned only findings and conclusion in his study but not recommended any suggestions to solve the finding problems.

These studies show that WC management is the weakest or neglected part of financial management in most of the Public Enterprises in Nepal. It seems that Nepalese firms are following conservative approach in financing as well as in investing working capital.

The study of **Smith** relate to profitability versus liquidity tradeoff in working capital management. The study suggests that parallel monthly forecasts of liquidity and profitability can be useful in evaluating tradeoff between these two goals. Besides, such forecasts can also be useful in estimating the impact of certain working capital policies on those goals, and in reflecting the uncertainty of the future. The study illustrated the suggested procedures with a scenario of Smith Products, a wholesale firm. The study, however, did not employ any kind of new methodology. It can be viewed simply as further elaboration and illustration of procedures suggested by other studies concerning working capital management.

The study by Smith discussed individual and collective effects of accounts receivable, inventories, accounts payable, and other accruals on profitability and liquidity. Based on

the several assumptions made, the study mainly observed as follows for the Smith Products:

1. A tightened inventory policy reduces necessary borrowing to a lower level than does faster collection of receivables or slower payments of current liabilities.
2. Profitability increases only slightly, a result only of lower interest expenses from lower levels of needed borrowing.
3. The necessary borrowing can be reduced if receivables, payables and inventory policies are tightened.

The finding of current assets also involves a tradeoff between risk and return. A firm can choose from short or long-term sources of finance. If the firm uses more of short-term funds for financing both current and fixed assets, its financing policy is considered aggressive and risky. Its financing policy will be considered conservative if it makes relatively more use of long-term funds in financing its assets. A balanced approach is to finance permanent current assets by long- term sources and temporary current assets by short- term sources of finance.

2.4 Review of Dissertations

Besides review of available books and research studies, a number of studies have been made by students of MBS & MBA relating to working capital management in different Public Enterprises of Nepal. This section, hence will review some of those dissertations.

Mr. Munish Lamichhane

A study "An Evaluation of Working Capital on Shree Bhrikuti Pulp and Paper Nepal Ltd" at 2006 taking 5 year duration for the evaluation from 58/59 to 62/63.

He has recommended to improve the liquidity position of the company that investment on cash and bank is too low followed by level of inventory and receivable as a result current assets is lower than current liabilities in some of the years. It was found that the investment in working capital was in negative and gradually improving to the end of the study period. The level of current assets with respect to total assets is in decreasing trends. The credit and collection policies were not sound during the study period. The fluctuating turnover ratio has indicated the inappropriate utilization of current assets. He

concluded that company was finally suffering from losses every year that Return on Assets was in negative in most of the study period. From these findings, Mr. Lamichhane suggested that the company should have proper planning to estimate cash receipt and payments and should follow as definite credit and collection policies. The management should be more conscious in the debt portion to maintain it as a proper level to reduce the high possibility of risk.

The company should give due attention to the minimization of administrative and non-operating expenses such as interest and depreciation. However, he has missed to use an important tool i.e. Correlation Coefficient in order to test the significance and relationship between the components of working capital.[17]

Ghimire (2003) has conducted research on "Working Capital Management of Selected Manufacturing Companies Listed on Nepal Stock Exchange Limited". This study has analyzed seven selected manufacturing companies. The objective of the study ware to analyze the Working Capital practices, variable affecting management, determined the issue and gaps in working capital Management of listed manufacturing companies.

The major findings of this study are as follows:

- Most of the selected manufacturing companies have followed a moderate working capital policy.
- The companies having average negative net working capital have followed aggressive approach of working capital policy. Yet there is negative return as well as negative turnover on net working capital. it means that risk return trade off is not matched in Nepalese manufacturing companies.
- The ratio of cash to current assets is widely varied among the manufacturing companies during the study period from 1997 to 2001. Maximum holding ratio of cash to current assets is 0.089 of BNT and minimum holding ratio is 0.005 of JSM.
- The overall average of inventory conversion period is 68 days, out of seven companies, four companies have higher conversion period than average and three

[17] Mr. Lamichhane, Munish, “An evaluation of Working Capital on Shree Bhrikuti Pulp and Paper Nepal Ltd., Pokhara University, 2006

have lower. The highest conversion period is 140 days of NLOL and lowest is 21 days of NL Ltd.

- The Co-relation Co-efficient between current assets and current liabilities is highly positive. Similarly, current assets and sales, sales receivable, sales and inventory, net profit to net working capital and operating cycle to cash conversion cycle are also positively correlated.

Shrestha (2002) has conducted the research on "A study on Working Capital Management with respect to National Trading Ltd and Salt Trading Corporation Ltd." Her basic objective of the study is to evaluate the relationship between selected variables regarding working capital and to examine the management of working capital in NTL and STCL. The major findings of the Study as follows:

- The analysis shows that the correlation coefficient between current assets and current liabilities is fairly positive in both companies. There is significant relationship between current assets and current liabilities.
- Correlation between current assets and sales of NTL and STCL -0.015 and 0.76 respectively which indicates NTL has insignificant relationship and STCL has significant relationship. So there is no correlation in NTL.
- Similarly, correlation between sales and receivable shows NTL has negative coefficient of correlation and insignificant relationship but STCL has positive correlation and significant relationship. The analysis shows that STCL has relatively high degree of coefficient.
- In the same way, correlation between sales and inventory also shows NTL has negative coefficient of correlation and insignificant relationship and STCL has relatively high degree of positive coefficient of correlation and significant relationship.
- Correlation between Net Profit and Net Working Capital is negative in both cases with insignificant relationship because the correlation of coefficient of both NTL and STCL are less than 6 PEs. This implies that Net Profit and Net Working Capital are not correlated.

Mr. Narayan Prasad Bhandari

The study "Working Capital Management in Nepalese Manufacturing Enterprises" A Case Study Of Hulas Steel Ind. Pvt. Ltd." has been carried out at 2006 A.D. by taking five years data from 2057/58 to 2061/62. He has emphasized on working capital management is the integral part of the company. The company cannot avoid an optimum level of working capital for its successful operation.

The study has focused on analysis of level of investment and utilization of current assets. The major findings of his study are as follows:

- It shows the proportion of current assets with respect to total assets and net fixed assets is high. High portion of current assets is due to the higher amount of investment in inventory and receivables as well as balance of bank. The proportion of working capital to sales is an average of 1.71 times, which means it takes about 213 days to turn its working capital into sales and the negative correlation between working capital and sales indicates that working capital is not being utilized properly.
- The receivable turnover ratio of the company is 7.11 times and receivable collection period is about 51 days, which cannot be taken as favorable.
- The positive and significant relationship between CA and CL shows healthy liquidity but negative and insignificant relationship between QA and CL shows weak condition to meet immediate obligations. The ratios of the company indicates the strong liquidity position due to enough investment in inventory and receivable but some how risky in case of liquid assets i.e. cash and bank due to its decreasing trends.
- High level of investment in Inventories and Receivable as well un-utilization of those assets has influenced the profitability.

By the analysis of return on assets and return on net worth, the company has well possibility of improve profitability by reducing huge level of inventory and setting effective credit policy though scientific inventory and receivable control techniques.[18]

[18] Mr. Bhandari, Narayan Prasad, "Working Capital Management in Nepalese Manufacturing Enterprises" A Case Study Of Hulas Steel Ind. Pvt. Ltd." T.U., 2006

The above review of Literature form various books and case studies related to working capital management in different firms and institution shows that one of the major problem in Nepalese manufacturing industries due to unhealthy and unsound situation and improper planning of working capital management. We know, it is just like main root of a tree that success and failure of any enterprises is dependent upon the efficient and effective management of working capital. In this study, an attempt has been made to analyze the efficiency and effectiveness of working capital management of Hulas Steel Ind. Ltd. Even a study has already carried out on management of working capital of this company, some important issues are not included in the study even they might influence the company's working capital activities such as working capital investment and financing policies, risk and return analysis, cost trade-off, credit, cash, inventory management policies etc.

Mr. Bhandari has analyzed just based on available data from 2057/58 to 2061/62 on 2006 A.D. Hence, this study attempts to analyze the working capital management of Hulas Steel Ind. Pvt. Ltd by taking five-year data from 2059/60 to 2063/64 and estimated values of fiscal year 2064/65 and other available information for observation with the help of Research Methodology.

Chapter-III

3. Research Methodology

3.1 Introduction

Research is a process for acquiring new knowledge on a specific task force. It involves systematic, careful inquiry, continuous efforts to discover new information or verify existing knowledge for some specific purpose.

Research methodology describes the scientific and systematic procedure applied in entire study for solving the given problem or for spreading some knowledge. The research essentially requires the various steps to be adopted by a researcher in studying a problem with certain objectives. So a research methodology should be carried out with the pre-mentioned objective of the study. It is a sequential procedure and methods to be adopted in a sequential method to be adopted in a scientific research study.

This research study attempts to analyze relationship between the variables of Working Capital. So the chapter involves the entire research methodology followed, used and adopted in this study. It basically highlights on Research Design, Nature and Sources of Data, Procedures employed for collection and arrangement of data with the help of various analytical statistical tools, financial and non-financial subject matters. The research methodology, which will be followed to achieve the basic objectives of this research work, is as stated below:

3.2 Research Design

Research Design focuses to the way of ascertaining the basic objectives of the Study. It highlights the process of ascertaining the basic objectives of the study. It is a conceptual structure which involves the framework for adequate tests of the relations among variables. It includes definite procedures and techniques, which guide to the way for analyzing evaluating the study. "Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure." This study attempts to compare and establish

relationship between two or more variables of working capital of HSIL with in a certain criteria that guides to achieve the pre- stated objective.

The Design applied in this study is based on descriptive as well as analytical. This study is an examination and evaluation of working capital management practice in the operation of Hulas Steel Ind. Ltd. The information and data are presented in an analytical method. Five-year data of HSIL are collected and analyzed by using various statistical tools to provide analytical insights and to achieve prescribed results. But the qualitative aspect of the research, such as effectiveness of working capital management, view of personnel of the enterprise and theoretical dimensions are explained in words whenever necessary.

3.3 Nature and source of data

The data used in this study are basically secondary in nature. However, the ideas and information about policy and system employed in the company are collected through personal interviews and discussion with the financial and accounting officers as required of the study. So, the sources of data for the study are primary as well as secondary. Primary data are collected through conducting interviews with the officials of company and the secondary data are collected through:

- Annual reports and financial statement (Income Statement and Balance Sheet) of the company
- Auditors reports and conclusions
- Studying and analyzing available unpublished records of the company.
- Studying published and unpublished official's records, Booklets and brochures of the company
- Reports and data available from planning
- Unpublished findings and dissertations of the students, other news papers, articles, and documents

3.4 Populations and Sample

There are 63 public manufacturing enterprises in Nepal, out of them Hulas Steel Ind. Ltd. is one of them. Therefore, the existing number of public manufacturing enterprises in

Nepal refers to the population and Hulas Steel Ind. Ltd. is the sample. Similarly, all the employees of Hulas Steel Ind. Ltd. are the population. Out of them, only 5% to 7% employees are taken as a sample.

3.5 Procedures of Analysis

To achieve the pre-determined objective of the study, some of the secondary data are used which include audited Financial Statement (The balance sheets, income statements and profit and loss accounts) of the Hulas Steel Ind. Ltd. for 5 years period from 2059/60 to 2063/64 are collected for the convenience of the study. Then all the raw data (information and ideas) are properly arranged, synthesized, tabulated, processed and presented in tabular form in accordance with the requirement of the study with the help of simple arithmetic rules. Most of the data have been compiled in one form, processed, and interpreted as per the need of the study. The secondary type of data is presented for the analytical purpose after the tabulation of the data.

3.6 Tools for Analysis of Data

To achieve the objectives of the study, various financial and statistical tools have been used in this study. For analyzing the data, different items from the balance sheet and other statements are tabulated. Simple analytical statistical tools such as Karl Pearson's coefficient of correlation are adopted in this study. The ratio analysis is the major tools for analysis of the study. They establish the quantitative relationship between two variables of the financial statements. Following are the brief introduction of the financial and statistical tools used in this study:

3.6.1 Financial analysis

3.6.1.1 Ratio Analysis

Ratio analysis is the major and widely used tool in the interpretation and evaluation for the financial statement. It is defined as the systematic use of ratio to interpret the financial statement so that the strength and weaknesses of the firm as well as its historical performance and current financial condition can be determined. The literature on

financial statement analysis has discussed continuously the use of ratio analysis. Besides this, the accounting and finance text books which can be expected to report the more important analysis techniques in chapters on external analysis of financial statements also emphasize the use of ratio analysis (Connor, 1973, page-339).

An arithmetical relationship between two figures is known as ratio. It is computed by dividing one item of relationship with the other. Ratio simply means one number expressed in terms of another. It is the relationship between financial variables contained in the financial statements (i.e. balance sheet, profit and loss account and income statements). It helps the related parties to spot out the financial strength and weaknesses of the firm.

Importance of Ratio analysis

Ratio Analysis is the most vital tool of financial analysis. The various groups of users of financial statement having different interests are engaged in analyzing the financial information. The importance of ratio analysis can be summarized for the various groups interested as under:

a) **Short-term Creditors**

   The creditors in the short run like suppliers of materials, goods and bankers can determine the firm's ability to meet current liabilities with the help of liquidity ratios and current ratio.

b) **Long-term Creditors**

   The creditors in the long run like debenture holders and other lending financial institutions can determine the firm's long-term financial and ultimately survival strength with the help of financial solvency ratios such as Debt Equity Ratio, Debt to capital Ratio etc.

   The long term creditors will seek answers to the following queries: 1) what are the various sources of long term finances employed by an enterprise? 2) Is there any risk to the solvency of the firm due to the employment of excessive long term debts? 3) Will the enterprise be able to repay the principal as well as the interest thereon?

c) Management

The management has an important job of managing the different resources available with the enterprise efficiently and effectively. They can determine the operational efficiency with which the firm is utilizing its various assets in initiating sales with the help of activity ratio like, stock turnover ratio, capital employed turnover ratio, assets turnover ratio etc. besides this, the management can carry out comparative analysis and form meaningful judgment about the performance by comparing the actual ratios with the standard ratios, ratios of the previous period ratios of the industry it belongs and national average.

d) Investors

The investors can determine the extent of profitability, its earning capacity and the capacity to pay dividends so that they cash form judgments whether to hold, sell or purchase the shares and the prospective investor can decide whether or not to buy the shares.

Limitation of Ratio Analysis

a) Ignores Qualitative Aspects

Although qualitative factors may be more important than the quantitative factors, the ratio analysis ignores the qualitative aspects as it is basically a quantitative analysis, for example, while deciding whether to sell goods to a customers on credit or not, the ratio analysis relies on the financial statements submitted by him and his character or intention to pay will not form part of the analysis which, in fact could be the most important factor.

b) False Result

The quality of the ratio depends upon the quality of he accounts on the basis of which there are established. The ratios can only be accurate, if the books of accounts are correctly drawn up. This is because the ratios are based on the information provided by the financial statement. For example, if the closing stock is over valued, both the financial position and profitability will be shown better than what they actually are.

c) Absence of Universal Standard

No fixed standards can be laid down for ideal ratios. There cannot be a single standard ratio, which can indicate the true performance of the business at all times and in all circumstances. For example, current ratio is generally considered to be ideal if current assets are twice of the current liabilities. However, in case of those concerns which have adequate arrangements with their bankers for providing funds when they require, it may be perfectly ideal if current assets are equal to or slightly more than current liabilities.

d) Ignores Price-Level Changes

The comparability of ratios suffers, if the prices of the commodities in two different years are not the same. In reality, prices do not remain the same and ratio analysis does not have an in built mechanism to adjust the changing prices. A ratio can be accurately interpreted only if the effect of change in prices, which may have taken place, is adjusted in the figures used in the ratio.

e) Historical Analysis

Ratios are only indicators, they can not be taken as final regarding good or bad financial position of the business, are historical in nature unless the ratio analysis is based on the projected financial statements prepaid to plan the future.

f) Ratios Alone Are Not Adequate

Ratios are only indicators, they can not be taken as final regarded as good or bad, it may be an indication that a firm is weak or strong, but it must never be taken as proof of either one.

It may, therefore, be concluded that ratio analysis, if done mechanically, is not only misleading but also dangerous. It is indeed a double-edged sword which requires a great deal of understanding and sensitivity of the management process rater than mechanical skill.

Similarly, ratio analysis is also very helpful for decision making on any financial activity. The different kinds of ratios calculated are as follows:

3.6.1.2 Composition of Working Capital

The composition of working capital is analyzed though following ratios:

1. **Current Assets to Total Assets (CATA)**

The ratio of current assets to total assts indicates that percentage of the company's total assets invested in the form of current assets. It is calculated **as:**

$$\text{Current Assets to Total Assets} = \frac{\text{Current Assets}}{\text{Total Assets}} \times 100\ \%$$

2. **Current Assets to Fixed Assets (CAFA)**

This ratio shows the relation ship between the current assets and fixed assets. It is calculated as:

$$\text{Current Assets to Fixed Assets} = \frac{\text{Current Assets}}{\text{Fixed Assets}} \times 100\ \%$$

3. **Cash and Bank to Current Assets (CBCA)**

This ratio shows the relationship between cash and bank to level of current assets. It also indicates the percentage of current assets invested in form of cash and bank. The working capital directly affected by the level of cash and bank balance. As the ratio decreases causes increase in efficiency and sound management of cash and bank and vice-versa. It is calculated as:

$$\text{Cash and Bank to Current Assets} = \frac{\text{Cash and Bank}}{\text{Current Assets}} \times 100\ \%$$

4. **Cash and Bank to Total Assets (CBTA)**

This ratio shows the percentage of total assets invested in for m of cash and bank. As the ratio increases causes decrease in profitability and risk of company and increase in working capital and vice-versa.

$$\text{Cash and Bank to Total Assets} = \frac{\text{Cash and Bank}}{\text{Total Assets}} \times 100\ \%$$

5. **Inventories to Total Assets (ITA)**

This ratio indicates the percentage of total asset invested in form of inventory. Inventory is major part of current assets so the ratio affects the level of working capital. The increase in the ratio also indicates the liberal inventory or blocking of materials in stock. It is calculated as:

$$\text{Inventories to Total Assets} = \frac{\text{Inventory}}{\text{Total Assets}} \times 100\ \%$$

6. Inventories to Current assets (ICA)

This ratio shows percentage of current assets in the form of inventory. Inventory affects the working capital directly so increase in this ratio indicates increase in working capital volume and the company is following liberal inventory policy. If the ratio is small the firm has lower volume of working capital. It is calculated as:

$$\text{Inventories to Current assets} = \frac{\text{Inventory}}{\text{Current Assets}} \times 100\%$$

7. Receivable to Total Assets (RTA)

This ratio shows percentage of total assets invested in form of receivable. Increase in this ratio indicates the company is following liberal credit policy. This ratio also affects the working capital since receivable is also the part of current assets. It is calculated as:

$$\text{Receivable to Total Assets} = \frac{\text{Receivables}}{\text{Total Assets}} \times 100\%$$

8. Receivable to Current Assets (RCA)

This ratio shows the portion of current assets invested in form of receivable. It is calculated as:

$$\text{Receivable to Current Assets} = \frac{\text{Receivables}}{\text{Current Assets}} \times 100\%$$

3.6.1.3 Turnover Analysis

Turnover analysis measures the effectiveness with which a firm uses its available resources in form of inventories. By calculating following ratios, the firm's efficiency is analyzed:

1. Current Assets Turnover (CAT)

This ratio shows the numbers of times of the current assets are turned over during the year. It is computed by dividing sales by current assets.

As the ratio increases indicates the well utilization of current assets and optimum volume of working capital and low ratio indicates the company has greater volume of working capital and un-utilization of current assets. It is calculated as:

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

2. Net Working Capital Turnover (NWCT)

This ratio shows the relationship between sales and net working capital. It is computed by dividing sales by net working capital i.e. current assets minus current liabilities:

Higher ratio shows the well utilization and management of net working capital and vice-versa. It is calculated as:

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

Where, Net Working Capital = Total Current Assets – Total Current Liabilities

3. **Cash Turnover (CT)**

This ratio shows the relation between sales and cash. It is calculated by dividing sales by cash balance. It measures the numbers of cash moves in operation during the period. It indicates the numbers of times the average cash balance turned over during the year. It is calculated as:

$$\text{Cash Turnover} = \frac{\text{Sales}}{\text{Cash Balance}}$$

4. Receivables Turnover (RT)

This ratio establishes a relationship between credit sales and receivables. It is computed dividing net credit sales by average receivables to determine the efficiency with which the debtors are managed. It is calculated as:

$$\text{Receivable Turnover Ratio} = \frac{\text{Net Credit Sales}}{\text{Receivables}}$$

It indicates the number of times the receivables are turned over during the year and efficiency of the investment in receivables as well staffs entrusted with the collection of book debts. It provides the general measurement of productivity of the receivable investment. The higher ratio indicates improving the management of receivables or debts are being collected more promptly and vice-versa.

For the computation of this ratio there is a ratio called receivable (Average) Collection Period RCP, which indicates the number of days within which in average the receivable amount should be collected. It is computed by dividing 360 days by Receivable Turnover Ratio or as:

$$\text{Receivable Turnover Ratio} = \frac{\text{Receivables} \mid 360}{\text{Net Credit Sales}} \textit{ days} \text{ or } \frac{360 \text{ days}}{\text{Receivable Turnover Ratio}}$$

5. **Inventory turnover (IT)**

This ratio establishes the relationship between sales and inventory used in the firm. It is computed dividing sales by cost of goods sold or inventory to measure the ability of firm to utilize the inventory. It indicates the speed with which the inventory is converted into sales. It is calculated as:

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

Generally, a high turnover ratio indicates either the same volume of sales has been maintained with lower investment in inventory or the volume of sales has increased without any increase in the amount of stock (effective inventory management system) and vice-versa.

3.6.1.4 Profitability Position Analysis

The objective of the any business firm is to earn maximum profit. Profitability is an indication of the efficiency with which the operations of the firm are carried on. Profitability measures the overall effectiveness of management as shown by returns generated on sales and investment. The position of the profitability of the company is analyzed with of following ratios:

1. **Gross profit Margin (GPM)**

This ratio establishes a relationship between gross profit and sales. It is computed dividing gross profit by net sales, to determine the efficiency with which purchase or production operations are carried out. It is calculated as:

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Net Sales}} \mid 100\,\%$$

The higher ratio indicates the better efficiency of the production or purchase operation and vice-versa.

2. **Net Profit Margin** (NPM)

This ratio establishes a relationship between net profits to net sales; it is computed dividing net profit by net sales to determine the overall operational efficiency of the management. It is calculated as:

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Net Sales}} \mid 100\,\%$$

It indicates the net margin earned on sales of a rupee. Higher the ratio, the more efficient is the operation of the management.

3. Operating Expenses Ratio (OR)

This ratio establishes a relationship between total operating expenses and sales. It is computed dividing total operating expenses by sales. It is an important ratio that explains the changes in the Gross Profit and Net Profit Margin ratio. It is calculated by:

$$\text{Operating Expenses Turnover Ratio} = \frac{\text{Total Operating Expenses}}{\text{Net Sales}} \times 100\%$$

Higher ratio indicates higher operating costs and lower efficiency of the management means small amount of operating income to meet non-operating expenses (Interest and Dividend)

4. Return On Assets (ROA)

This ratio studies a relationship between net profit and total assets. It is computed dividing net profit after tax by total assets to determine how efficiently the total assets have been used by the management. It is calculated by:

$$\text{Return on Assets} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}} \times 100\,\%$$

It indicates the firm's ability of generating profit on total assets. It measures profitability on all financial resources invested in the firm's assets. Higher the ratio, the more efficient is the operation system of the management and vice-versa.

5. Return On Net Worth (RONW)

This ratio measures a relationship between net profit after tax and Net Worth, it is computed dividing net profit after tax by net worth (shareholder's Fund), to determine how efficiently the funds supplied by shareholders have been used. It is calculated by:

$$\text{Return on Net Worth} = \frac{\text{Net Profit After Tax}}{\text{Share Holder's Fund (Net Worth)}} \times 100\,\%$$

It indicates the return to the shareholders that how well the firm has used the resource of owners. It judges whether the firm has earned satisfactory return for its owners or not. Higher the ratio shows the more efficient the management (higher return to shareholders) and utilization of shareholder's fund.

6. **Return On Current Assets (ROCA)**

This ratio measures a relationship between Net Profit after Tax and Current Assets. It is computed dividing Net Profit after Tax by Current Assets to determine the profit with respect to Current Assets. It is calculated as:

$$\text{Return on Current Assets} = \frac{\text{Net Profit After Tax}}{\text{Current Assets}} \times 100\,\%$$

Higher ratio indicates higher utilization of current assets as well as higher return with respect to current assets and vice-versa.

3.6.1.5 Liquidity position

This is the most important ratio, which indicates whether the firm would be in a position to meet short-term obligations in time. These ratios show the short-term solvency of the firm. The liquidity position of HSIL is analyzed by computing following two ratios:

This ratio establishes a relationship between current assets and current liabilities. A relatively high value of current ratio is considered as an indication that the firm is liquid and has the ability to pay its bills. As a conventional rule, a current ratio of 2:1 or more is considered satisfactory. It is calculated by dividing current assets by current liabilities.

1. **Current Ratio (CR)**

This ratio establishes a ratio between Current Assets and Current Liabilities. It is computed dividing Current Assets by Current Liabilities to measure the short-term safety margin available for current obligations. A relatively high value of current ratio is considered as an indication that the firm is liquid and has the ability to pay its bills. As a conventional rule, a current ratio of 2:1 or more is considered satisfactory. It is calculated as:

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

It indicates the availability of rupees of current assets for every rupee of current liabilities. Higher the ratio means greater the margin of safety for meeting short-term obligations and vice-versa.

2. Quick (Liquid) Ratio (QR)

This ratio establishes a relationship between liquid assets and current liabilities. It is computed dividing quick assets by current liabilities. It measures the ability to convert its current assets into cash or its equivalent at a short time so as to meet its immediate current liabilities. It is calculated as:

$$\text{Quick Ratio} = \frac{\text{Quick Asset}}{\text{Current Liabilities}}$$

It indicates the availability of a rupee of liquid asset for every rupee of current liabilities. Higher the ratio means greater the margin of safety for current liabilities and vice-versa. Generally, a liquid ratio of 1:1 is considered to be satisfactory ratio and higher the better.

3. Absolute Liquid Ratio (ALR)

Although Current Assets like Receivables Marketable Securities etc. can be changed into cash as required, it takes a time and cost to be changed. It means it is not absolute liquid. The absolute liquidity ratio measures the liquidity of a firm in Absolute term. It is calculated as:

$$\text{Absolute Liquid Ratio} = \frac{\text{Cash}}{\text{Current Liabilities}}$$

3.6.2 Statistical Analysis

The help of statistical tool is essential to measure the relationship of two or more variable. In this study, the following statistical tools are used:

3.6.2.1 Standard deviation (S.D)

Standard Deviation is the most popular and most useful measures of dispersion and gives uniform, correct and stable result. The chief characteristic of Standard Deviation is based on mean. Mean doesn't give the clear picture about two distributions with same average because scatter ness may differ in those distributions. Therefore a Standard Deviation is superior to the Mean Deviation, Quartile Deviation and Range because it is used for further mathematical treatment. It is the positive square root of average sum of squares of deviation of observation from the Arithmetic Mean of the distribution. The formula of Standard Deviation is as follow:

Standard Deviation (∃) = $\sqrt{\frac{\int X - \bar{X} \text{Å}2}{N}}$

3.6.2.2 Co-efficient of Variation (CV)

Standard Deviation is the absolute measure of dispersion. The relative measure of dispersion based on the standard deviation is known as the co-efficient of Standard Deviation. The percentage of measure of Co-efficient of Standard Deviation is called Co-efficient Variation. It is calculated as:

$$CV = \frac{\pm}{\bar{X}} * 100\%$$

3.6.2.3 Correlation Coefficient (r)

Correlation Coefficient is defined as the association between the dependent variable and independent variable. It is a method of determining the relationship between these two variables. If the two variables are so related the change in the value of independent variable causes the change in value of dependent variable them it is said to have correlation coefficient.

"Correlation is the statistical tools that we use to describe the degree to which one variable is linearly related to another." The coefficient of correlation measures the degree of relationship between two sets of sigma. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always between -1 and +1. When r = +1, it means there is perfect relationship between two variables and vice versa. When r = 0, it means there is no relationship between two variables. It is calculated as:

Correlation Coefficient (r)

$$= \frac{dxdy - \frac{dx \quad dy}{N}}{\sqrt{dx2\,Z\frac{\int dx\text{Å}2}{N} \qquad dy2\,Z\frac{\int dy\text{Å}2}{N}}} \text{ or, } \frac{dx.dy}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$$

Where,

x = the first variable

y = the next variable

N =No. of years (Observation period)

dx =deviation from mean of the First Variable

dy =deviation from mean of the Next Variable

Interpretation:

For the purpose of decision-making, interpretation is based on following term:

1. When r = +1, there is perfect positive correlation.
2. When r = -1, there is perfect negative correlation.
3. When r = 0, there is no correlation i.e. no relationship between variables
4. When 'r' lies between 0.7 - 0.999 or (-0.7 to -0.999), there is a high degree of positive or (negative) correlation.
5. When 'r' lies between 0.5 - 0.699 or (-0.5 to -0.699), there is moderate degree of positive or (negative) correlation.
6. When 'r' is less than 0.5, there is low degree of correlation.

3.6.2.4 Probable Error (P.E.)

The Probable error is measured for testing the reliability of an observed value of correlation coefficient r. After computing the value of correlation coefficient, P.E. (r) is computed to find the extent to which it is dependable. It is calculated by:

$$PE = \frac{0.6745(1-r2)}{\sqrt{N}}$$

Probable Error is used to interpret whether the calculated value of r is significant of not.

1. If r < PE, is insignificant i.e. there is no evidence of Correlation.
2. If r > PE, is significant
3. If PE < r < 6PE, nothing can be concluded with certainty and correlation is not at all significant.

Chapter-IV

4. Presentations and Analysis of Data

4.1 Introduction

The previous chapter mainly emphasized the research methodology to be followed to carry out the study. This chapter sheds light on the presentation and analysis part of the collected data in detail.

As the main objective of the study is to analyze the working capital management of Hulas Steel Ind. Ltd., the necessary financial facts and figures as well as descriptive information are gathered through the financial statement. The major variables for the study are cash, receivables and inventories. Current assets turnover position, profitability position and liquidity position have been analyzed. All these are in detail and presented in tabular form below:

4.2 Position of Current Assets and Current Liabilities

Current assets are those assets, which are required to run day-to-day business activities of its requirement, as per the nature and size of the organization. A firm needs cash to purchase raw materials, pay expenses. This is because of not perfect matching between cash inflow and outflow. The stocks of raw materials are kept in order to ensure smooth productions and to protect the risk of non-availability of raw materials. To meet this obligation also cash is needed. Any business organization aims to maximize return on shareholders investment. In order to accomplish this objective the business organization should earn sufficient return for its operations. Earning a steady amount of profit requires successful sales. As the sales do not converted into cash instantly, the extra amount of working capital is needed. The major components of current assets are cash, receivables, inventories etc. Hence, the proper management of these current assets is necessary to achieve the principle objective of any business organization, to earn maximum profit and ultimately to maximize shareholders wealth.

The following table-1 presents the level of Total Current Assets.

Table No.-1

Hulas Steel Industries Ltd.

Total Current Assets

(Rs. in million)

Particulars	**2059/60**	**2060/61**	**2061/62**	**2062/63**	**2063/64**
Inventories	593.91	662.78	1,022.80	742.57	891.48
Sundry Debtors	240.89	280.79	266.76	260.41	307.05
Cash and Bank Balances	7.57	6.61	14.31	7.03	30.87
Other Current Assets	13.77	13.41	12.20	12.07	11.40
Loans and Advances	173.03	64.37	92.98	92.62	173.79
Total Current Assets	**1,029.18**	**1,027.96**	**1,409.05**	**1,114.70**	**1,414.58**

Note: Other Current Asses include Provident Fund, Gratuity Fund, Fixed Deposits, Investment in Government Securities, and Deposits in Medical Benefit Accounts. Similarly, loans and advances include L/C Deposits, Prepaid Expenses, advances to the staffs, Interest Receivables, Advance taxes and Special fees, Duty Drawback Claims, Advances to the Transporters and other Deposits.

The above figures also can be shown in a diagram, which is as follows.

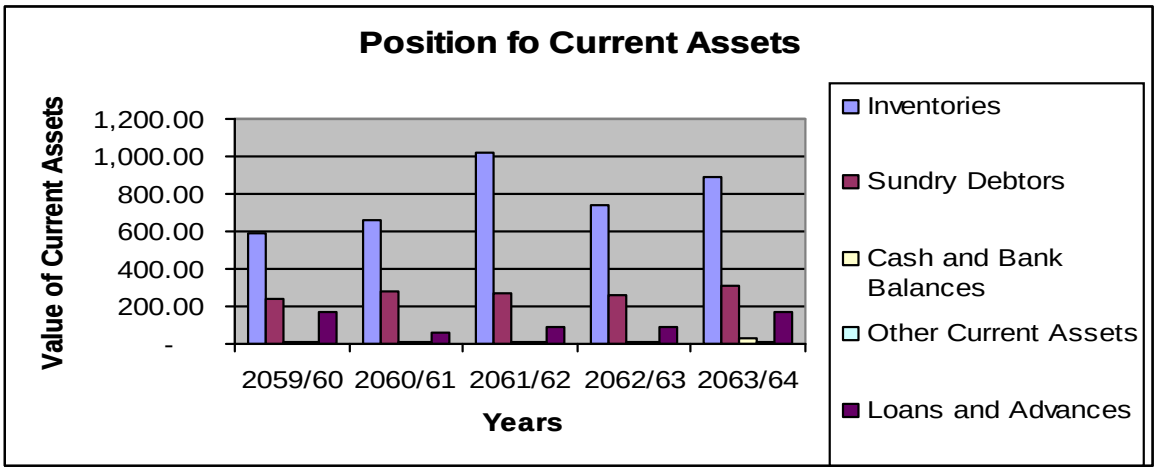

Chart No.-1

The above table represents the overall Current Assets position and shows the investment pattern in Current Assets of Hulas Steel Ind. Ltd. The pattern shows fluctuating but has increased in most of the F/Y. It further indicates that major portion of Gross working

capital is invested in Inventories and then Debtors. Cash and bank balances, other Current Assets and Loan and advances occupy successively lower portion of investment in Current assets.

The following table-2 presents the level of Total Current Liabilities.

Table No.-2

Hulas Steel Industries Ltd.

Total Current Liabilities

(Rs. in million)

Particulars	**2059/60**	**2060/61**	**2061/62**	**2062/63**	**2063/64**
Current Liabilities	719.97	754.88	1,028.01	924.19	1,207.48
Provisions	106.06	20.09	20.30	14.05	14.05
Total Current Liabilities	**826.03**	**774.97**	**1,048.31**	**938.24**	**1,221.53**

Note: Current Liabilities include Short-Term Loans, Sundry Creditors, L/C Payable, Dealership Deposits, Expenses Payable, TDS Payable, Dividend payables and Other Provisions. Similarly, Provisions includes provision for Bonus, Housing, Tax, Depreciation, Employees Provident Fund and Other Provisions.

The above table presents the Total Current Liabilities of Hulas Steel Ind. Ltd. The pattern of Current Liabilities is fluctuating but increasing every year during the study period.

The following table-3 presents the level of Net Current Assets.

Table No.-3

Hulas Steel Industries Ltd.

Net Current Assets

(Rs. in million)

Particulars	**2059/60**	**2060/61**	**2061/62**	**2062/63**	**2063/64**
Total Current Assets (a)	1,029.18	1,027.96	1,409.05	1,114.70	1,414.58
Total Current Liabilities (b)	826.03	774.97	1,048.31	938.24	1,221.53
Net Current Assets (a-b)	**203.15**	**252.99**	**360.74**	**176.46**	**193.04**

The above table-3 presents the Net Working Capital position and Net Investment trend in Current Assets of Hulas Steel Ind. Ltd. The table shows that investment in Net Working Capital trend is increasing to F/Y 061/62 but Decreased in F/Y 062/63 by Rs.184.28 Million and again increased in F/Y 063/64 by Rs. 16.58 Million.

The above figures in Table-3 also can be shown in a diagram, which is as follows.

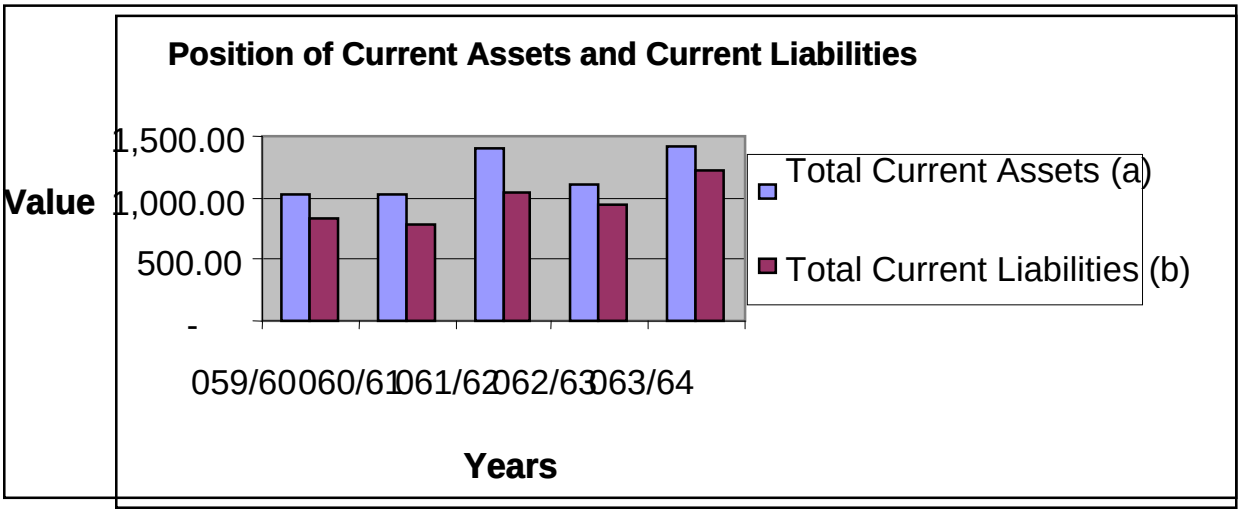

Chart No.-2

4.3 Composition of Working Capital

The composition of working capital is analyzed with the help of ratios between various components of Working Capital, which are as follows:

4.3.1 Percentage of Current Assets to Total Asses

Mostly, most of the part of the Total Asses is invested in Current Assets in most of the firms so it is in integral part of overall firm and has greater impact to maximization of owners' investment.

The following table-4 presents the proportion of Current Assets to Total Assets.

Table No.-4

Hulas Steel Industries Ltd.

Percentage of Current Assets to Total Assets

(Rs. in million)

Particulars	Current Assets	Total Assets	Ratio %	% Change
2059/60	1,029.18	1,581.50	65.08	-
2060/61	1,027.96	1,602.39	64.15	(0.92)
2061/62	1,409.05	1,961.13	71.85	7.70
2062/63	1,114.70	1,670.55	66.73	(5.12)

2063/64	1,414.58	2,402.33	58.88	(7.84)
Total	5,995.47	9,217.89	65.04	-
Average	**1,199.09**	**1,843.58**	**65.04**	**(1.24)**

The above figures also can be shown in a diagram, which is as follows.

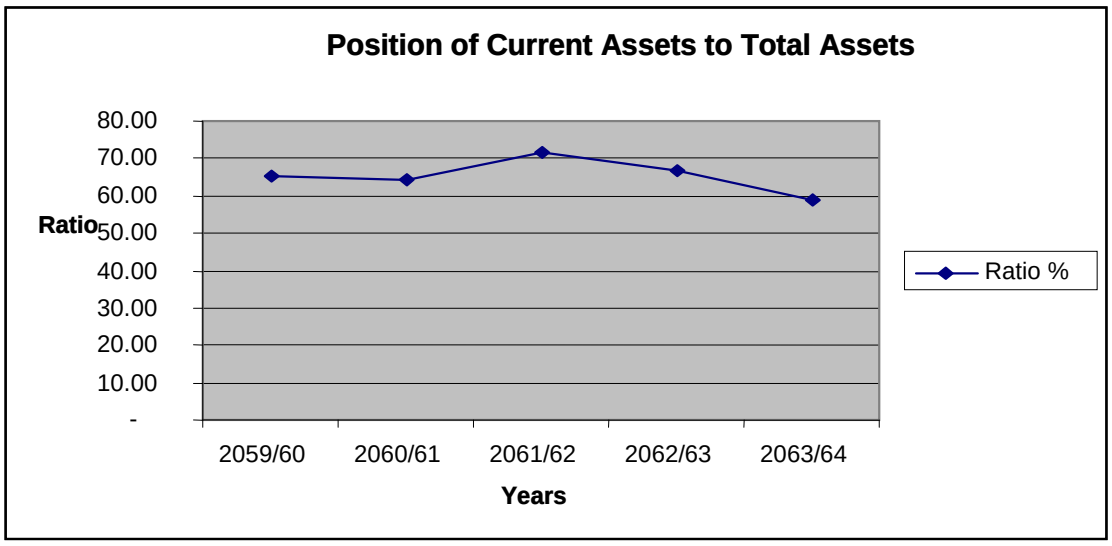

Chart No.-3

The ratios in the above table shows the portion of Total Assets invested in form of Current Assets for the last five years of Hulas Steel Ind. Ltd. The ratios of investment in Current Asses to Total Asses are fluctuating. In F/Y 2059/60, the volume of Current Assets is Rs 1029.18 million and 65.08% of its Total Assets. It decreased by 0.92% in F/Y 2060/61 and increased by 7.70% in F/Y 2061/62. The ratio again decreased by 5.12% in F/Y 2062/63 and further decreased by 7.84% in F/Y 2063/64. The ratio of Current Assets in F/Y 2061/62 is the highest occupying 71.85% of its Total Assets. This increase is mainly caused by holing higher amount of inventories and receivables. The average contribution of Currents Assets to Total Assets is 65.04% and average decreasing trend is about 1.24%.

In order to test the significance, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-1 and result is as under.

Correlation Coefficient (r) = 0.9

Probable Error (PE) = 0.06

The above figure shows that Correlation Coefficient in between Current Assets and Total Assets during the study period is 0.9, i.e. there is high degree of positive correlation and r is more than six times of PE or ≤ 0.5 hence, the relationship is considered significant.

4.3.2 Percentage of Current Assets to Fixed Assets

The proportion of Current Assets to Fixed Assets helps to evaluate the relationship between the investment in Current Assets and Fixed Assets.

The following table-5 presents the proportion of Current Assets to Fixed Assets.

Table No.-5

Hulas Steel Industries Ltd.

Percentage of Current Assets to Fixed Assets

(Rs. in million)

Years	Current Assets	Net Fixed Assets	Ratio %	% Change
2059/60	1,029.18	552.32	186.34	-
2060/61	1,027.96	574.43	178.95	(7.38)
2061/62	1,409.05	552.09	255.22	76.27
2062/63	1,114.70	555.85	200.54	(54.68)
2063/64	1,414.58	987.75	143.21	(57.33)
Total	5,995.47	3,222.43	-	-
Average	**1,199.09**	**644.49**	**186.05**	**(8.63)**

Note: Net Fixed Assets include gross value of Fixed Assets after deducting depreciation, Capital work-in-progress and Long-term investment in form of Equity Shares in Subsidiary Companies and in Government Securities.

The above figures also can be shown in a diagram, which is as follows.

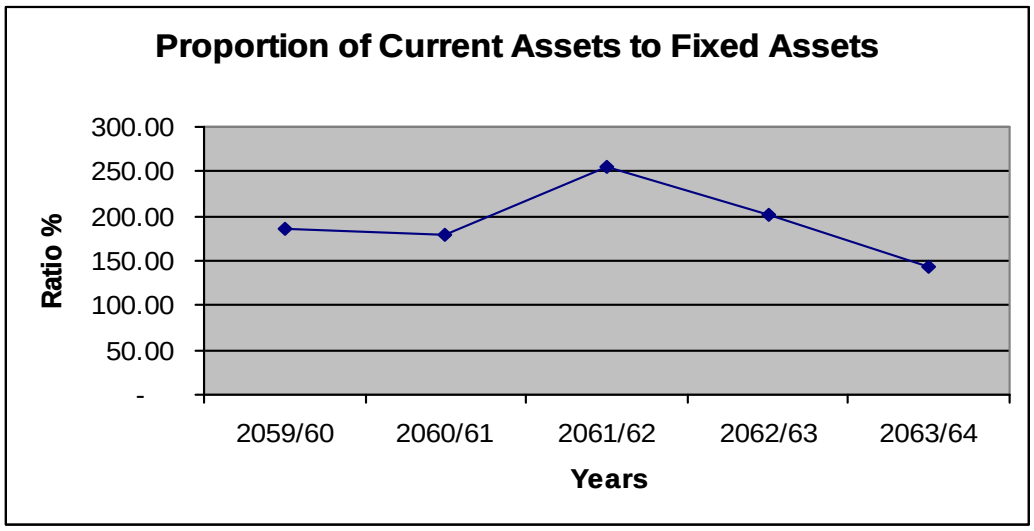

Chart No.-4

The above table shows the fluctuating proportion of Current Assets to Fixed Assets during the study period. In the F/Y 2059/60, the ratio is 186.34% where as it is slightly decreased by 7.38% in F/Y 2060/61. In F/Y 2061/62, the ratio is suddenly increased by 76.27% to 255.22, which is the highest ratio during the period and decreased by 54.68% in F/Y 2062/63. After then, the ratio is again decreased by 57.33% in F/Y 2063/64. The average investment in Current assets to Fixed Assets is 186.05% and average decreasing ratio is 8.63%. The overall ratios show that investment in Current Assets in comparison with its Fixed Assets tends to be unstable and fluctuating.

In order to evaluate the relationship between Current Assets and Fixed Assets of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-2 and the result is as under:

Correlation Coefficient (r) = 0.59

Probable Error (PE) = 0.20

The above figures show that Correlation Coefficient between Current Assets and Fixed Assets is 0.59 i.e. higher than $\frac{1}{2}$ 0.5, so there is moderate degree of positive correlation but less than six times of its PE, the relationship is not considered significant.

4.3.3 Percentage of Cash and Bank Balance to Current Assets

Cash and Bank balances are the liquid form of assets and very important component of Working Capital. Every business firm should hold cash with a view to perform day-to-

day activities, to meet immediate payments and for precautionary as well as speculative motives.

The following table-6 presents the proportion of Cash and Bank Balance to Current Assets.

Table No.-6

Hulas Steel Industries Ltd.

Percentage of Cash and Bank Balance to Current Assets

(Rs. in million)

Years	Cash & Bank	Current Assets	Ratio%	% Change
2059/60	7.57	1,029.18	0.74	-
2060/61	6.61	1,027.96	0.64	(0.09)
2061/62	14.31	1,409.05	1.02	0.37
2062/63	7.03	1,114.70	0.63	(0.39)
2063/64	30.87	1,414.58	2.18	1.55
Total	66.40	5,995.47	-	-
Average	**13.28**	**1,199.09**	**1.11**	**0.29**

The above figures also can be shown in a diagram, which is as follows.

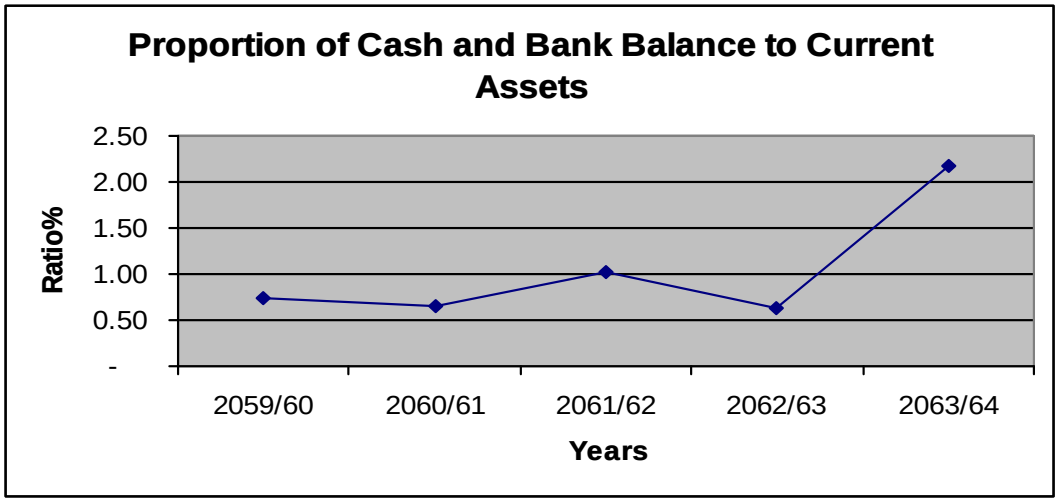

Chart No.-5

The above table shows the proportion of Cash and Bank Balance with respect to investment in Current Assets. The ratios show that investment in Cash and Bank Balance are fluctuating during the study period. The Cash and Bank Balance held by the HSIL is Rs. 7.57 Million in F/Y 2059/60 and it is 0.74% of its Current Assets. The ratio slightly

decreased by 0.09% in F/Y 2060/61 and increased by 0.37% in F/Y 2061/62. Furthermore, the ratio decreased by 0.39% in F/Y 2062/63 and again increased by 1.55% in F/Y 2063/64.

The table indicated that the Cash and Bank Balance held by the company in F/Y 2063/64 is Rs. 30.87 Million, which is the highest balance during the study period and Rs. 7.03 Million is the lowest balance in F/Y 2062/63. The average ratio of Cash and Bank Balance to Current Assets is 1.11%. As the ratio of holding Cash and Bank Balance is dispersed from the average holding, it indicates there are weak points in cash management system. It is an indicator of sound management of Working Capital. In order to evaluate the relationship between Cash and Bank Balance and Current Assets of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-3 and the result is as under:

Correlation Coefficient (r) = 0.82

Probable Error (PE) = 0.10

The above figures show that Correlation Coefficient between Cash Balance and Current Assets is 0.82 i.e. higher than $\frac{1}{2}$ 0.5, so, there is high degree of positive correlation and higher than six times of its PE, so, the relationship is considered significant.

4.3.4 Proportion of Cash and Bank Balance to Total Assets

The Proportion of Cash and Bank Balance to Total Assets is analyzed to assess the investment in cash with respect of Total Assets. It helps to identify the risk. The high ratio decreases the risk and provides more Working Capital but holding of excess Cash balance would affect the profitability because idle cash earns nothing.

The following table-7 presents the proportion of Cash and Bank Balance to Total Assets.

Table No.-7

Hulas Steel Industries Ltd.

Percentage of Cash and Bank Balance to Total Assets

(Rs. in million)

Years	Cash & Bank	Total Assets	Ratio %	% Change
2059/60	7.57	1,581.50	0.48	-
2060/61	6.61	1,602.39	0.41	(0.07)
2061/62	14.31	1,961.13	0.73	0.32
2062/63	7.03	1,670.55	0.42	(0.31)
2063/64	30.87	2,402.33	1.29	0.86
Total	66.40	9,217.89	-	-
Average	**13.28**	**1,843.58**	**0.72**	**0.81**

The above figures also can be shown in a diagram, which is as follows.

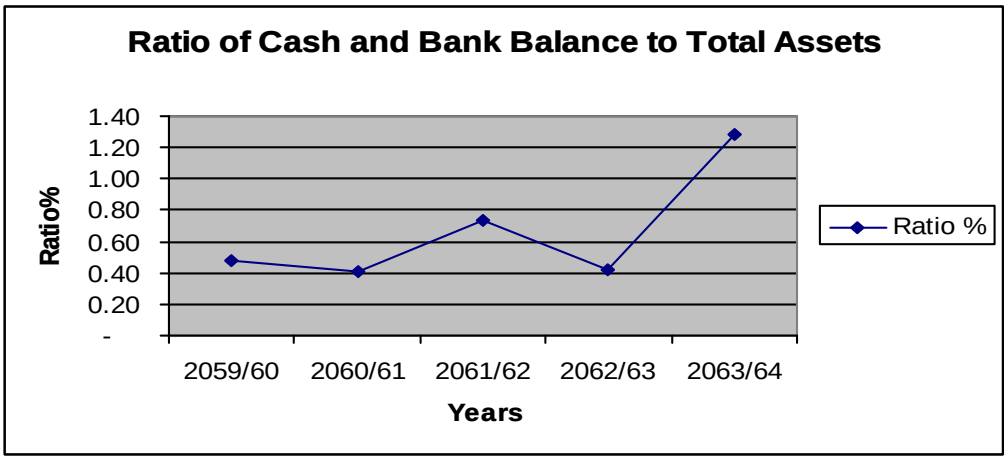

Chart No.-6

The above table shows the proportion of amount invested in Cash and Bank Balance with respect to Total Assets of HSIL during the study period. The ratios are found fluctuating, however, in F/Y 2063/64, it is suddenly increased. The ratio is 0.48% in F/Y 2059/60 and decreased by 0.07% in F/Y 2060/61 and increased slightly by 0.32% in F/Y 2061/62. Then after, it is again decreased by 0.31% in F/ Y 2062/63 and increased by 0.86% in F/Y 2063/64. In Average, overall holding of Cash and Bank Balance of the company is less than one i.e. 0.72% of its Total Assets.

4.3.5 Proportion of Inventory to Current Assets

Inventory is one of the important components of Current Assets. For the manufacturing company like HSIL, inventory of raw materials, auxiliary materials, work-in-progress and spare parts are important. The shortage of any kinds of inventory results irregular production, high manufacturing costs etc. In the other hand, excess inventory causes unnecessary holding of working capital, which earning nothing. So, the level of inventory holding should be optimum so that it arises to neither excess nor shortage of inventory problem.

The following table-8 presents the proportion of Inventory to Current Assets.

Table No.-8

Hulas Steel Industries Ltd.

Percentage of Inventory to Current Assets

(Rs. in million)

Years	Inventory	Total Current Assets	Ratio %	% Change
2059/60	593.91	1,029.18	57.71	-
2060/61	662.78	1,027.96	64.48	6.77
2061/62	1,022.80	1,409.05	72.59	8.11
2062/63	742.57	1,114.70	66.62	(5.97)
2063/64	891.48	1,414.58	63.02	(3.60)
Total	3,913.55	5,995.47	-	-
Average	**782.71**	**1,199.09**	**65.28**	**1.06**

The above figures also can be shown in a diagram, which is as follows.

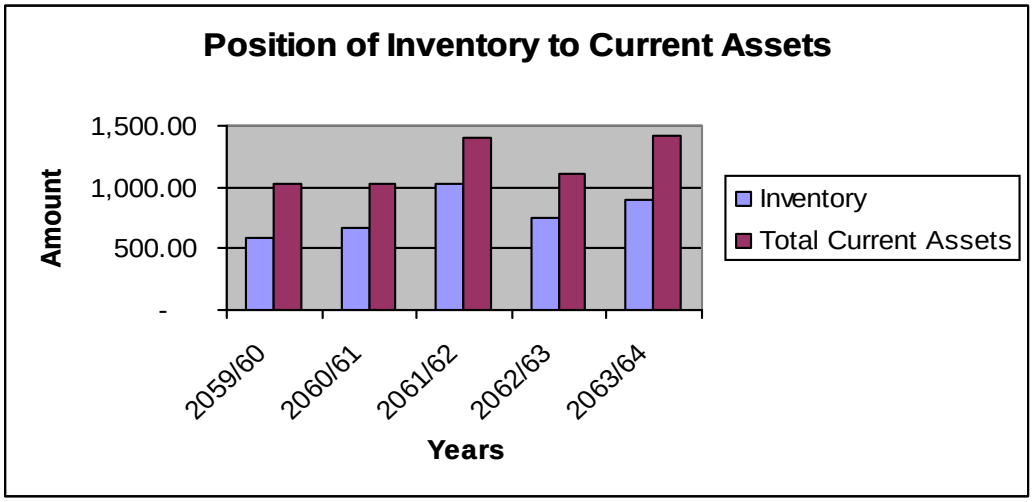

Chart No.-7

The above figures in the table show the proportion of Inventories to its Current Assets. In F/Y 2059/60, the ratio is 57.71%. Then, it is found increased by 6.77% in F/Y 2060/61 and further increased by 8.11% in F/Y 2061/62. Then after, the ratios of Inventory to Current Assets tend to be decreasing in consecutive Fiscal Years. The ratios are decreased by 5.97% in F/Y 2062/63 and 3.60% in F/Y 2063/64. The lowest ratio of inventory to Current Assets is found in F/Y 2059/60 where as the highest ratio is found in F/Y 2061/62. The average ratio of Inventory to Current Assets is 65.28%, which shows that huge level of capital, a major portion of Current Assets, is invested in form of Inventory every year, by HSIL and investment pattern in Inventory is increasing by 1.06% during study period.

In order to evaluate the relationship between Inventory and Current Assets of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-4 and the result is as under:

Correlation Coefficient (r) = 0.95

Probable Error (PE) = 0.03

The above figures show that Correlation Coefficient between Inventory and Current Assets is 0.95 i.e. higher than $\frac{1}{2}$ 0.5, so, there is high degree of positive correlation and calculated value of r is higher than six times of its PE, so, the relationship is considered significant.

4.3.6 **Proportion of Inventory to Total Assets**

The following table-9 presents the proportion of Inventory to Total Assets.

Table No.-9

Hulas Steel Industries Ltd.

Percentage of Inventory to Total Assets

(Rs. in million)

Years	Inventory	Total Assets	Ratio %	% Change
2059/60	593.91	1,581.50	37.55	-
2060/61	662.78	1,602.39	41.36	3.81
2061/62	1,022.80	1,961.13	52.15	10.79
2062/63	742.57	1,670.55	44.45	(7.70)

2063/64	891.48	2,402.33	37.11	(7.34)
Total	3,913.55	9,217.89	-	-
Average	**782.71**	**1,843.58**	**42.46**	**0.09**

The above figures also can be shown in a diagram, which is as follows.

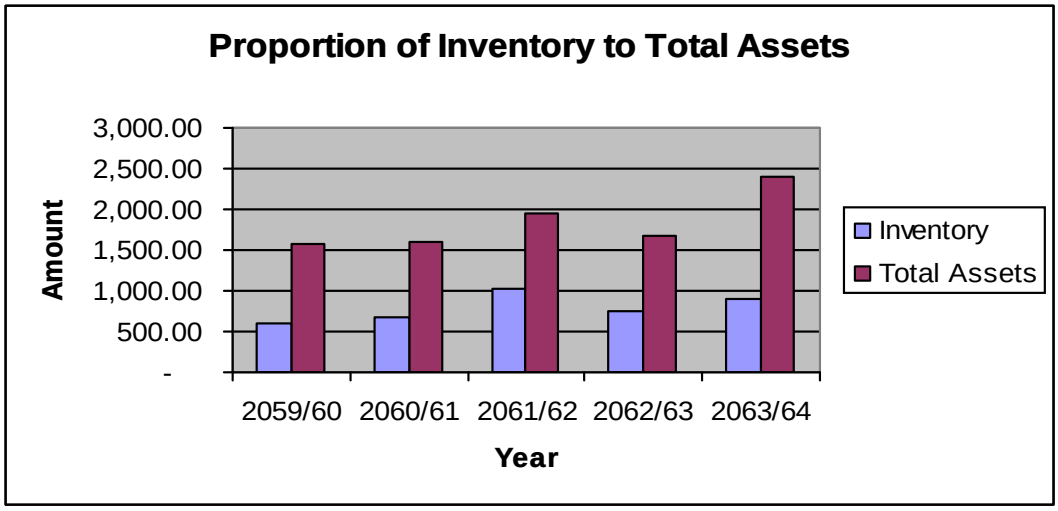

Chart No.-8

The above table shows that the investment in Inventory with respect to Total Assets is increased to the Mid F/Y and again decreased in the same trend. The value of Inventory is Rs. 593.91 Million, which is 37.55% of Total Assets in F/Y 2059/60; it is increased and reached to 41.36% in F/Y 2060/61 and further increased and reached to 52.15%. After then, it is decreased to 44.45% and 37.11% respectively in F/y 2062/63 and F/Y 2063/64. In average, investment in inventory to Total Assets is 42.46% and the investment trend is increasing by 0.09%.

4.3.7 Proportion of Receivables to Current Assets

A credit sale plays an important role in this throat-cut competition of market situation. We must sell in credit because our competitors sell on credit is applied, now days. It is necessary that the management should adopt credit sales policy to increase the sales volume. The company cannot earn desired profit and maximize the shareholder's wealth without increasing sales volume. So, credit sales is necessary that the company should formulate the provision regarding the credit standard, maturity, terms and condition etc in order to avoid the problem of deficiency of receivable amount, which is a part of Working Capital. The degree of Receivable should be optimum to avoid the problem of

working capital shortages. Higher degree of receivables cause undesired holding of Working Capital and low degree might bring negative results in sales.

The following table-10 presents the proportion of Receivable to Current Assets.

Table No.-10

Hulas Steel Industries Ltd.

Percentage of Receivable to Current Assets

(Rs. in million)

Years	Receivables	Current Assets	Ratio %	% Change
2059/60	240.89	1,029.18	23.41	-
2060/61	280.79	1,027.96	27.32	3.91
2061/62	266.76	1,409.05	18.93	(8.38)
2062/63	260.41	1,114.70	23.36	4.43
2063/64	307.05	1,414.58	21.71	(1.66)
Total	1,355.90	5,995.47	-	-
Average	**271.18**	**1,199.09**	**22.62**	**0.34**

The above figures also can be shown in a diagram, which is as follows.

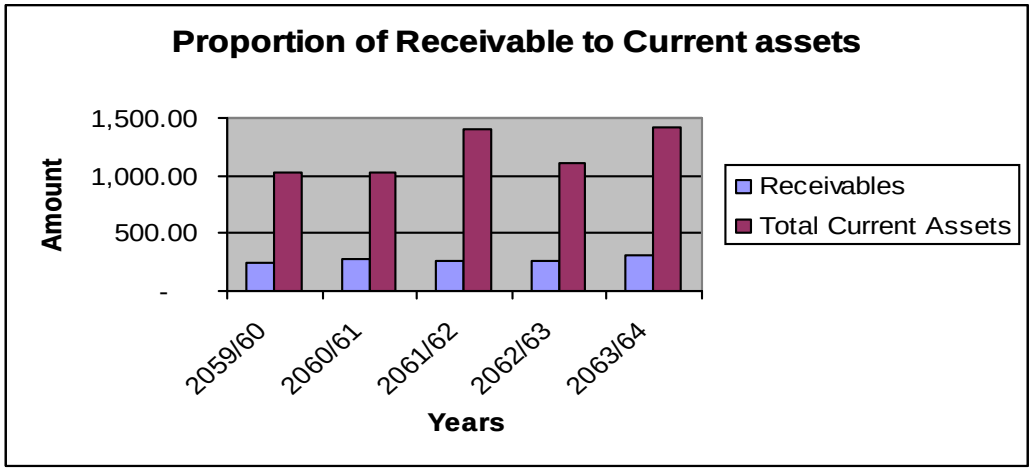

Chart No.-9

The above table shows that the Receivables ratio to Current Assets is the highest in F/Y 2060/61, which is 27.32% and lowest in F/Y2061/62, which is 18.93. The fluctuating trend of receivables in different years indicates that the company has adopted the credit policy according to the market situation. The average investment ratio of Receivable to

Current Assets is 22.62% and Average Collection Period is 60 days, show the company is liberal in some extent in its credit policy.

In order to evaluate the relationship between Receivables and Current Assets of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-5 and the result is as under:

Correlation Coefficient (r) = 0.58

Probable Error (PE) = 0.20

The above figures show that Correlation Coefficient between Receivable and Current Assets is 0.58 i.e. higher than $\frac{1}{2}$ 0.5, so, there is moderate degree of positive correlation but calculated value of r is lower than six times of its PE, so, the relationship is not considered significant.

4.3.8 Proportion of Receivables to Total Assets

The following table-11 presents the proportion of Receivable to Total Assets.

Table No.-11

Hulas Steel Industries Ltd.

Percentage of Receivable to Total Assets

(Rs. in million)

Years	Receivables	Total Assets	Ratio %	% Change
2059/60	240.89	1,581.50	15.23	-
2060/61	280.79	1,602.39	17.52	2.29
2061/62	266.76	1,961.13	13.60	(3.92)
2062/63	260.41	1,670.55	15.59	1.99
2063/64	307.05	2,402.33	12.78	(2.81)
Total	1,355.90	9,217.89	-	-
Average	**271.18**	**1,843.58**	**14.71**	**(0.49)**

The above figures also can be shown in a diagram, which is as follows.

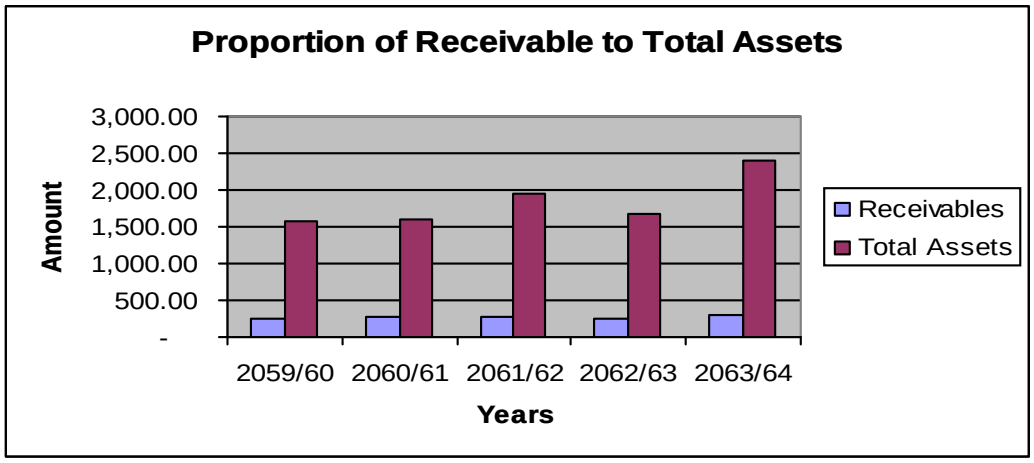

Chart No.-10

The above table shows the portion of Receivables with respect to Total Assets. The ratio is the highest in F/Y 2060/61, which is 17.52% and lowest in F/Y206/64, which is 12.78. The fluctuating decreasing trend of receivables to Total Assets in different years indicates that the company has adopted the credit policy according to the market situation even amount invested in Receivables is increasing due to highly investment in other assets than in Receivables. The average investment ratio of Receivable to Total Assets is 14.71%.

4.4 Turnover Position

The company's turnover position is calculated by analyzing Current Assets, Net Working Capital, Cash, Receivables and Inventory through the relationship with sales. The analysis of turnover ratio helps to identify how many times the components of Working Capital are turned in terms of Sales. A sale comprises of only the sales of finished goods and does not include resalable sales, other income and sales of assets.

4.4.1 Total Current assets Turnover or Gross Working Capital Turnover

A sale is the most important activity for manufacturing enterprises like HSIL. Sales are the major determinants of survival and growth of the company. Availability of resources and market demands are the factors depending on which the company determines its sales policy. The sales policy directly affects the production policy and the production policy affects the financial policy i.e. the requirement of Total Assets and Working Capital to

run the company as per its stated plan. Therefore, there should always e co-ordination in between sales policy, production policy and financial policy.

Increase of sales certainly demands increase in productions that require more input (raw materials). Adequate amount of Working Capital is required to keep the high level of Input. Hence, sales policy affects the amount of Working Capital as well.

The table-12 presents the Total Current assets Turnover or Gross Working Capital Turnover during the study period of HSIL, which is as follows:

Table No.-12

Hulas Steel Industries Ltd.

Current assets Turnover or Gross Working Capital Turnover

(Rs. in million)

Years	Sales	Current Assets	Ratio (Times)	Change
2059/60	1,781.87	1,029.18	1.73	-
2060/61	1,843.41	1,027.96	1.79	0.06
2061/62	1,711.30	1,409.05	1.21	(0.58)
2062/63	1,902.63	1,114.70	1.71	0.49
2063/64	2,147.26	1,414.58	1.52	(0.19)
Total	9,386.47	5,995.47	-	-
Average	**1,877.29**	**1,199.09**	**1.57**	**0.04**

The above figures also can be shown in a diagram, which is as follows.

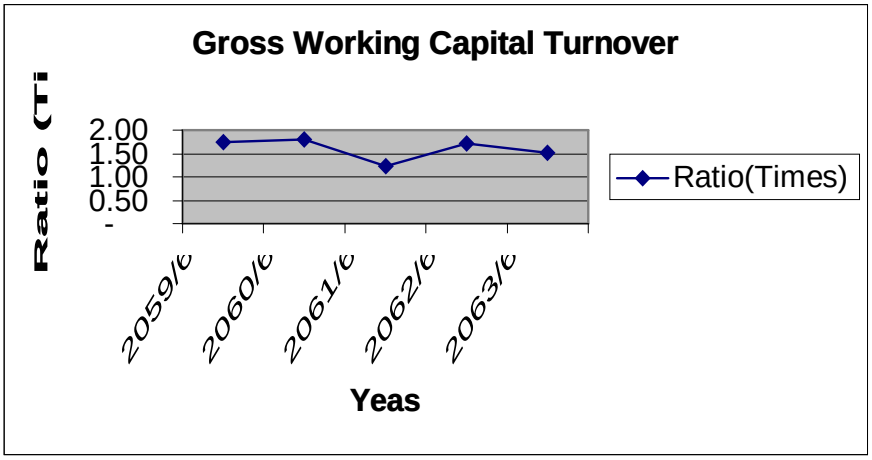

Chart No.-11

The above table indicates that the sales are 1.73 times of Current Assets in F/Y 2059/60 with sales value Rs. 1781.87 million and Current Assets Rs.1029.18 million. The

turnover ratio is increased to 1.79 times due to increase in sales and decrease in Current Assets in some extent in F/Y 2060/61 but the ratio is decreased to 1.21 times causes decrease in Sales and drastic increase in Inventory, a major part of Current Assets. The turnover ratio is increased to 1.93 times since increase in Sales and consecutive decrease in Current Assets in F/Y 2062/63 moreover; Sales value is the highest in this year with value of Rs.2147.26 million. In the F/Y 2063/64, the turnover ratio is again decreased to 1.35 times due to decrease in Sales and increase in Current Assets. In average, the Current Assets turnover position of the HSIL is 1.57 times during the study period.

In order to evaluate the relationship between Current Assets and Sales of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-6 and the result is as under:

Correlation Coefficient (r) = 0.33

Probable Error (PE) = 0.27

The above figures show that Correlation Coefficient between Current Assets and Sales is 0.23 i.e. lower than $\frac{1}{2}$ 0.5, so, there is low degree of positive correlation and calculated value of r is also lower than six times of its PE, so, the relationship is not considered significant.

4.4.2 Net Working Capital Turnover

Net Working capital is the excess amount of Current Asserts over Current Liabilities. In other words, Net Working Capital is the amount f Net Current Assets, which is presented in Table-3. It is the margin of safety maintained by the company. In manufacturing companies, the size of working capital depends upon the production cycle and business cycle, it is comparatively more in manufacturing enterprises than trading, and services oriented organizations.

The Net Working Capital position maintained by HSIL and its turnover ratio is given in the following Table-13.

Table No.-13

Hulas Steel Industries Ltd.

Net Working Capital Turnover

(Rs. in million)

Years	Sales	Net Working Capital	Ratio (Times)	Change
2059/60	1,781.87	203.15	8.77	-
2060/61	1,843.41	252.99	7.29	(1.48)
2061/62	1,711.30	360.74	4.74	(2.54)
2062/63	1,902.63	176.46	10.78	6.04
2063/64	2,147.26	193.04	11.12	0.34
Total	9,386.47	1,186.38	-	-
Average	**1,877.29**	**237.28**	**7.91**	**0.47**

The above figures also can be shown in a diagram, which is as follows.

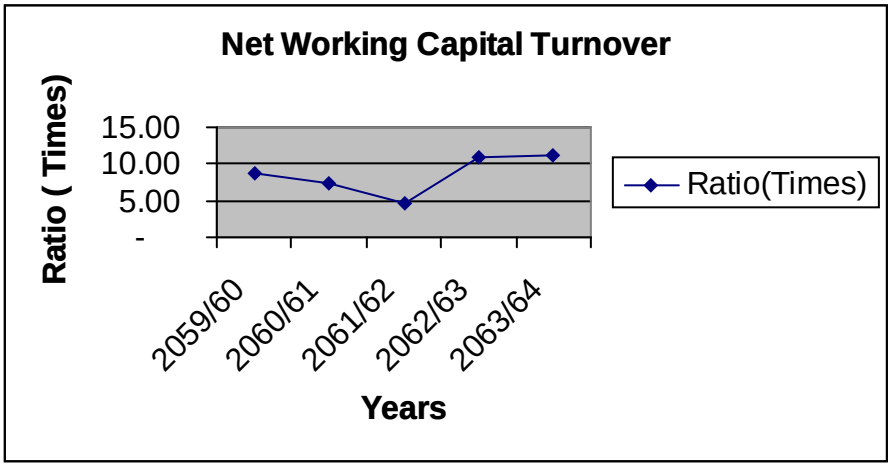

Chart No.-12

The above table represents that the Net Working Capital Turnover Ratio during the study period. The ratio is 8.77 times with Sales value Rs. 1781.87 million and Net Working Capital is Rs. 203.15 million in F/Y 2059/60. The ratios are fluctuating over the period. The highest ratio is 12.17 in F/Y 2062/63 due to the highest Sales value Rs.2147.26 million and the lowest Net Working Capital Rs. 176.46 million. In this year, the level of Inventory is decreased causes decrease in Net Current Assets. All the changes of Net working Capital Turnover Ratio are due to the fluctuation in Sales activities. The Average Net Working Capital Turnover Ratio is 7.91 times during the study period.

In order to evaluate the relationship between Net Current Assets and Sales of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-7 and the result is as under:

Correlation Coefficient (r) = (0.63)

Probable Error (PE) = 0.18

The above figures show that Correlation Coefficient between Net Current Assets and Sales is (0.63) i.e. lower than its PE or ≤ 0.5, so, there is moderate degree of negative correlation and calculated value of r is also lower than six times of its PE, so, the relationship is not considered significant.

4.4.3 Cash Turnover Ratio

Cash is one of the major parts of Working Capital, which is required to meet the current obligations that arise in the business. Cash turnover measures the relationship between level of cash and volume of sales over a period of time, the greater the sales volume, the better would be the cash turnover. It should be just adeqate to run business and excess cash has no meaning as it earns nothing.

The Cash Turnover position maintained by HSIL and its turnover ratio is given in the following Table-14.

Table No.-14

Hulas Steel Industries Ltd.

Cash Turnover Ratio

(Rs. in million)

Years	Sales	Cash and Bank	Ratio (Times)	Change
2059/60	1,781.87	7.57	235.39	-
2060/61	1,843.41	6.61	278.68	43.30
2061/62	1,711.30	14.31	119.57	(159.11)
2062/63	1,902.63	7.03	270.72	151.15
2063/64	2,147.26	30.87	69.55	(201.17)
Total	9,386.47	66.40	-	-
Average	**1,877.29**	**13.28**	**141.37**	**33.17**

The above figures also can be shown in a diagram, which is as follows.

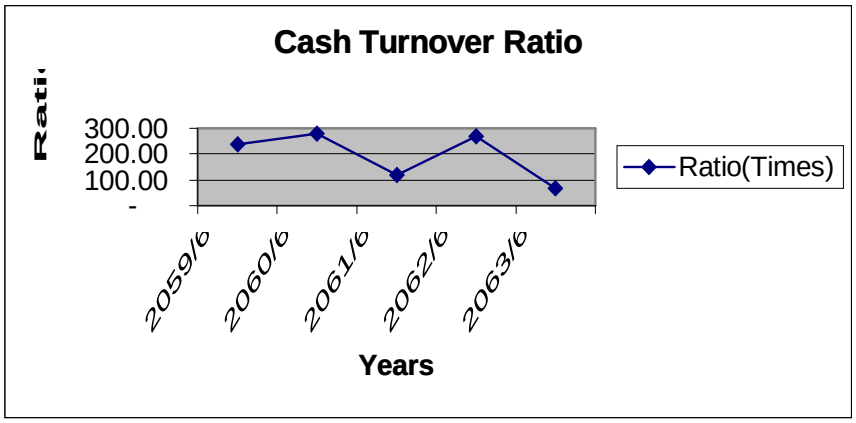

Chart No.-13

The above table shows that Cash Turnover Ratio of HSIL is fluctuating over the study period. The ratio is 235.39 times in F/Y 2059/60 with Sales value of Rs. 1781.87 million and cash balance of Rs. 7.57 million and it is increased to 278.68 times in F/Y 2060/61. However, in F/Y 2061/62, the ratio is drastically decreased due to increase in Cash Balance. The Sales Value is increased and Cash Balance is decreased in F/Y 2062/63 and the ratio is reached to the highest level i.e. 305.53 times. The Cash Turnover Ratio is the lowest in F/Y 2063/64 i.e. 61.63 times and it is due to more cash balance comparatively low level of Sales Volume. The average turnover position of the company is 141.37 times and an average Cash Conversion Cycle of the HSIL is calculated as:

= 365/ Average Cash Turnover Ratio

= 365/ 141.37

= 2.58 days i.e. 3 days

The company is able to maintain Cash Conversion Cycle of 3 days i.e. the company is able to convert its Sales in 3 days. It can be judged as good performance.

4.4.4 Receivable Turnover Ratio

Business activities of an enterprise increase when sales volume increases. Sales volume increases when firm is able to offer better options of sales to its customers. Various tools can e used to attract the customers. Credit facility is on of the most popular tool to increase the sales volume. When products are sold on credit, the value of the products becomes receivable to eh firm. Therefore, the receivables are one of the major components of Working Capital.

The following table-15 shows the receivable Turnover Ratio of HSIL and Average Collection Period (ACP) of its customers.

Table No.-15

Hulas Steel Industries Ltd.

Receivable Turnover Ratio

(Rs. in million)

Years	Sales	Receivables	Ratio (Times)	Change
2059/60	1,781.87	240.89	7.40	-
2060/61	1,843.41	280.79	6.57	(0.83)
2061/62	1,711.30	266.76	6.42	(0.15)
2062/63	1,902.63	260.41	7.31	0.89
2063/64	2,147.26	307.05	6.99	(0.31)
Total	9,386.47	1,355.90	-	-
Average	1,877.29	271.18	**6.92**	**(0.08)**

The above figures also can be shown in a diagram, which is as follows.

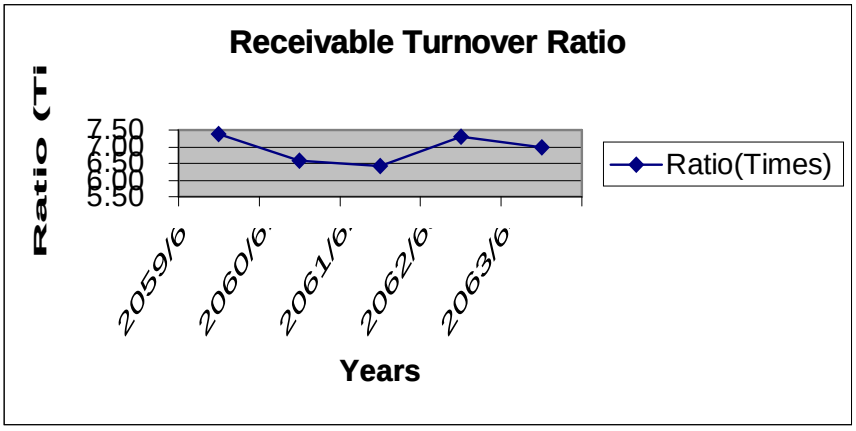

Chart-14

The above table shows the receivable turnover ratio and average collection period during the study period. Generally, Receivable Turnover Ratio is found in decreasing trend. In the F/Y 2059/60, the ratio is 7.40 times with Sales Value Rs. 1781.87 million and Receivable Rs. 240.89 million and found decreased to 6.57 times in F/Y 2060/61. In the F/Y 2061/62, the ratio is further decreased to 6.42 times and found increased to 8.25 times, which is the highest, in F/Y 2062/63 caused by drastic increase in Sales Value. However, the ratio is decreased to 6.20 times, which is the lowest ratio, in F/Y 2063/64

because of lower volume of sales and proportionately increases in volume of receivables. Finally, the Average Receivable Turnover Ratio is 6.92 times.

The Average Collection Period of Credit Sales has been found fluctuating over the period caused by change in volume of sales and receivable in different years. In an average, the collection period of the HSIL is 52.73 i.e. 53 days. Higher turnover ratios indicate shorter collection period. In conclusion, the company is able to collect its credit sales in short period if the company is able to maintain higher turnover ratio.

In order to evaluate the relationship between Receivable and Sales of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-8 and the result is as under:

Correlation Coefficient (r) = 0.77

Probable Error (PE) = 0.12

The above figures show that Correlation Coefficient between Receivables and Sales is 0.08 i.e. lower than $\frac{1}{2}$ 0.5, so, there is high degree of positive correlation and calculated value of r is lower than six times of its PE, so, the relationship is considered to be significance.

4.4.5 Inventory Turnover Ratio

Inventory is the major and important component of Working Capital, which should be maintained effectively and efficiently. Inventory comprises of stock of raw materials. Soothe stock of raw material should be dept to meet the requirement of optimum production level so that the company can met its production and sales target. Level of Inventory, production and sales are interrelated.

The following table-16 shows the inventory turnover ratio of HSIL during the study Period.

Table No.-16

Hulas Steel Industries Ltd.

Inventory Turnover Ratio

(Rs. in million)

Years	Sales	Inventory	Ratio (Times)	Change
2059/60	1,781.87	593.91	3.00	-
2060/61	1,843.41	662.78	2.78	(0.22)
2061/62	1,711.30	1,022.80	1.67	(1.11)
2062/63	1,902.63	742.57	2.56	0.89
2063/64	2,147.26	891.48	2.41	(0.15)
Total	9,386.47	3,913.55	-	-
Average	**1,877.29**	**782.71**	**2.40**	**0.12**

The above figures also can be shown in a diagram, which is as follows.

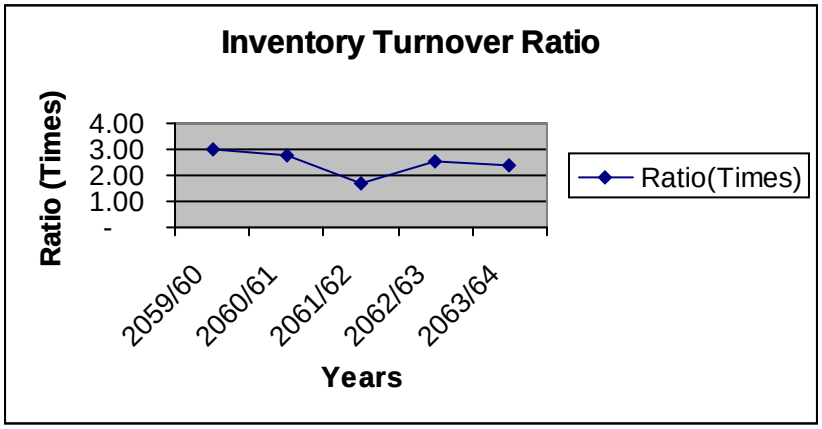

Chart-15

The above table shows the Inventory Turnover Ratio or number or times Inventory replaced during the particular year. The ratio 3 times is the highest in F/Y 2059/60 and the company kept the stock for 121.66 days. The ratio is decreased to 2.78 times and 1.67 times in F/Y 2060/61 and 2061/62 respectively due to proportionate increase in inventory level. The ratio is the lowest in the same year and kept the stock for 218.15 days, which is the longest Inventory Conversion Period for the study period. In F/Y 2062/63, ratio is improved to 2.89 times due to increase in sales value, which is the largest value of sales over the period and 2.13 times in F/Y 2063/64. The average Inventory Turnover Ratio of the HSIL is 2.40 times and Inventory Conversion Period is 152.18 days.

In order to evaluate the relationship between Inventory and Sales of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-9 and the result is as under:

Correlation Coefficient (r) = 0.09

Probable Error (PE) = 0.30

The above figures show that Correlation Coefficient between Inventory and Sales is 0.09 i.e. lower than $\frac{1}{2}$ 0.5, so, there is low degree of positive correlation and calculated value of r is lower than six times of its PE, so, the relationship is not considered significant.

4.5 Liquidity Position

Liquidity position shows ability to pay the bills. Liquidity fulfills the current need of money. The most important objective of adopting appropriate and optimum liquidity is to enable the company to meet current or short-term obligations when they become due for payment. Liquidity is a pre-requisite for the avoidance of technical insolvency and ultimately for the survival of the company. Here, liquidity ratios are observed to the ability to meet short-term obligations of HSIL. Current Ratio and Quick Ratio are observed for these purposes:

4.5.1 Current Ratio

The current ratio shows the ability for payment of current debt from current assets. It measures the liquidity position of the company. "The ratio must be regarded as a crude measure of liquidity however, because it does not take into account the liquidity of the individual components of the Current Assets."[19] It is the simple relationship of current assets to current liabilities. As a conventional rule, a current ratio of 2:1 of more is considered satisfactory. The higher the current ratio means greater the margin of safety and the larger the amount of current assets in relation to current liabilities, the more the firm's ability to meet its obligations and strong working capital position.

The table-17 presents the Current Ratio during the study period of HSIL, which is as follows:

[19] Van Horne, James.C., "Financial Management and Policy", Prentic Hall of India, New Delhi; P-695

Table No.-17

Hulas Steel Industries Ltd.

Current Ratio

Rs. in million)

Years	Current Assets	Current Liabilities	Ratio (Times)	Change
2059/60	1,029.18	826.03	1.25	-
2060/61	1,027.96	774.97	1.33	0.08
2061/62	1,409.05	1,048.31	1.34	0.02
2062/63	1,114.70	938.24	1.19	(0.16)
2063/64	1,414.58	1,221.53	1.16	(0.03)
Total	5,995.47	4,809.09	-	-
Average	**1,199.09**	**961.82**	**1.25**	**(0.02)**

The above figures also can be shown in a diagram, which is as follows.

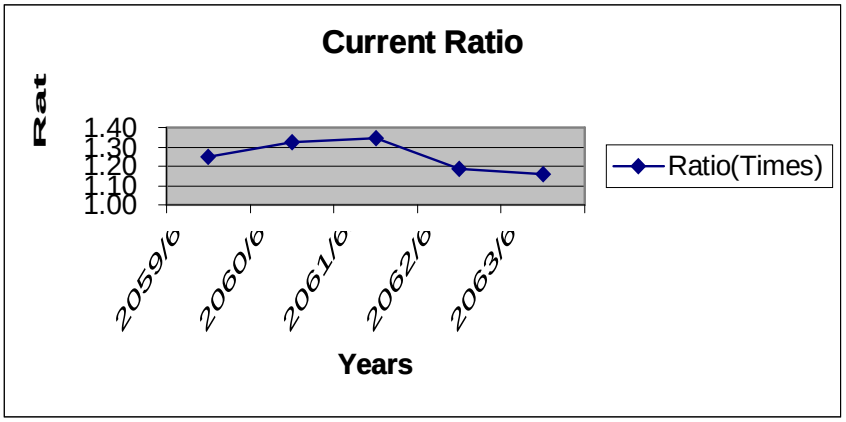

Chart-16

The above table shows that the highest ratio is 1.34 times in F/Y 2061/62 and the lowest ratio is 1.16 times in F/Y 2063/64; however, ratios are fluctuating in decreasing trend. In F/Y 2060/61, ratio is slightly increased and decreasing in the consequent years. The average Current Ratio is 1.25:1 indicates that the ratios are less than standard, so firm's solvency position is considered to be not satisfactory.

In order to evaluate the relationship between Current Assets and Current Liabilities of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-10 and the result is as under:

Correlation Coefficient (r) = 0.93

Probable Error (PE) = 0.04

The above figures show that Correlation Coefficient between Current Assets and Current Liabilities is 0.93 i.e. higher than $\frac{1}{2}$ 0.5, so, there is high degree of positive correlation and calculated value of r is higher than six times of its PE, so, the relationship is considered significant.

4.5.2 Acid Test/Quick Ratio

Quick ratio or Acid test ratio is the relationship between quick assets and current liabilities. It is the measurement of company's ability to convert its current assets, quickly into cash in order to meet its immediate liabilities. It mainly concentrates mainly on cash, marketable securities and receivables in relation to current obligations and thus provides more reliable measure of liquidity than the current ratio does. Higher current ratio may not e regarded better because holding of more amount of inventories ma bring shortage of cash and the company ma hindered of paying current obligations. This ratio should be greater than one for the sound liquidity position of the company.

The table-18 presents the Quick Ratio during the study period of HSIL, which is as follows:

Table No.-18

Hulas Steel Industries Ltd.

Quick Ratio

(Rs. in million)

Years	Quick Assets	Current Liabilities	Ratio (Times)	Change
2059/60	435.27	826.03	0.53	-
2060/61	365.18	774.97	0.47	(0.06)
2061/62	386.24	1,048.31	0.37	(0.10)
2062/63	372.13	938.24	0.40	0.03
2063/64	523.10	1,221.53	0.43	0.03
Total	2,081.92	4,809.09	-	-
Average	**416.38**	**961.82**	**0.43**	**(0.02)**

The above figures also can be shown in a diagram, which is as follows.

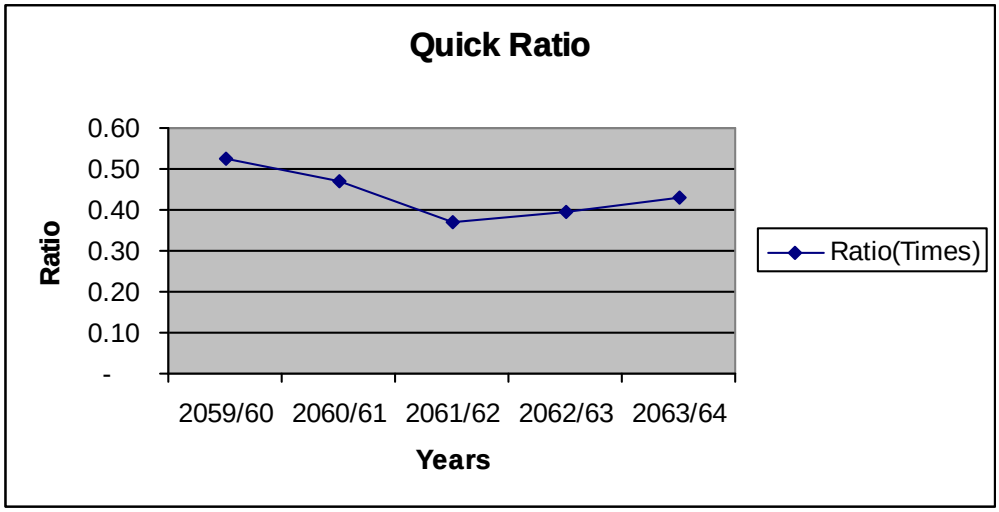

Chart-17

The above table shows the solvency position of HSIL. The Quick Ratio is considered perfect when Quick Assets equals to Current Liabilities i.e. quick ratio of 1:1. Thus higher is the ratio; the better is the bill paying capacity. The ratio indicates that Quick Ratio of the company is not favorable in any of the study period because ratios are lower than one. In F/Y 2059/60, the ratio is 0.53:1 and it is decreasing year after year. Such decreasing trend suggests that the industry ability to meet immediate payments is weakening. The average Quick Ratio of the study period is 0.43:1. So the Quick Ratio of the company may not be considered favorable. This is all owing to the holding of more amounts of Inventories. Hence, the company should reconsider on this matter.

In order to evaluate the relationship between Quick Assets and Current Liabilities of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-11 and the result is as under:

Correlation Coefficient (r) = 0.70

Probable Error (PE) = 0.15

The above figures show that Correlation Coefficient between Quick Assets and Current Liabilities is 0.70 i.e. higher than $\frac{1}{2}$ 0.5, so, there is high degree of positive correlation and calculated value of r is lower than six times of its PE, so, the relationship is not considered significant.

4.6 Profitability Position

Earning profit or maximizing the return on investment is one major objective of the establishment a business firm. Profit is the indicator of efficient operation of the company, In order to measure the profitability position of the HSIL. The profitability position of a firm can be measured b analyzing the profitability ratios. There are two kinds of Profitability ratios in relation to its sales and investment. These ratios together indicate the firm's efficiency of the operation. Profitability position can be analyzed by computing following different ratios:

4.6.1 Gross Profit Margin

Gross Profit Margin Ratio indicates the efficiency of operations of management as well as how products are priced is analyzed. Higher the ratio considered the better efficiency of the management and vice-versa.

The table-19 presents the Gross Profit Margin during the study period of HSIL, which is as follows:

Table No.-19

Hulas Steel Industries Ltd.

Gross Profit Margin

(Rs. in million)

Years	Gross Profit	Sales	Ratio %	Change %
2059/60	256.44	1,781.87	14.39	-
2060/61	247.09	1,843.41	13.40	(0.99)
2061/62	247.23	1,711.30	14.45	1.04
2062/63	182.48	1,902.63	9.59	(4.86)
2063/64	301.32	2,147.26	14.03	4.44
Total	1,234.56	9,386.47	-	-
Average	**246.91**	**1,877.29**	**13.15**	**(0.07)**

Note: Sales include total income of the company and Gross Profit is calculated by deducting cost of goods sold form the Total Income.

The above figures also can be shown in a diagram, which is as follows.

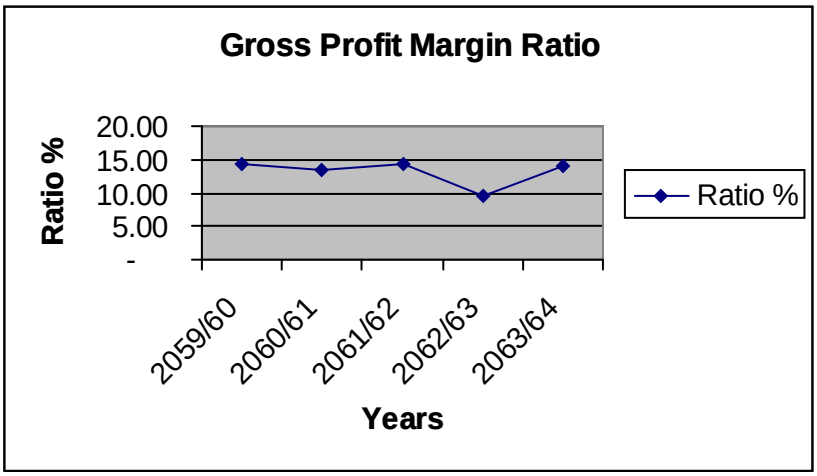

Chart-18

The above table shows the Gross Profit Margin trend of HSIL over the study period. The company is found most efficient in the F/Y 2061/62, when it is able to obtain the highest margin i.e. 14.45% and the lowest margin is 9.59% in F/Y 2063/64. The average Gross Profit Margin of the company is 13.15%, which can be considered as satisfactory not well.

In order to evaluate the relationship between Gross Profit and Sales of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-12 and the result is as under:

Correlation Coefficient (r) = 0.43

Probable Error (PE) = 0.25

The above figures show that Correlation Coefficient between Gross Profit and Sales is 0.43 i.e. lower than $\frac{1}{2}$ 0.5 so, there is low degree of positive correlation and calculated value of r is lower than six times of its PE, so, the relationship is not considered significant.

4.6.2 Net Profit Margin

Net Profit is obtained by deducting Operating and Administrative expenses and Income tax from Gross Profit. Net Profit Margin is the ratio relationship on Net Profit after Tax to Sales. The Ratio indicates the relative efficiency f the firm after taking account of all expenses and income taxes. Operating expenses and tax rates affect the Net Profit Margin of the company.

The table-20 presents the Net Profit Margin during the study period of HSIL, which is as follows:

Table No.-20

Hulas Steel Industries Ltd.

Net Profit Margin

(Rs. in million)

Years	Net Profit	Sales	Ratio %	% Change
2059/60	25.29	1,781.87	1.42	-
2060/61	11.79	1,843.41	0.64	(0.78)
2061/62	14.64	1,711.30	0.86	0.22
2062/63	(56.01)	1,902.63	(2.94)	(3.80)
2063/64	59.64	2,147.26	2.78	5.72
Total	55.35	9,386.47	-	-
Average	**11.07**	**1,877.29**	0.59	**(0.27)**

The above figures also can be shown in a diagram, which is as follows.

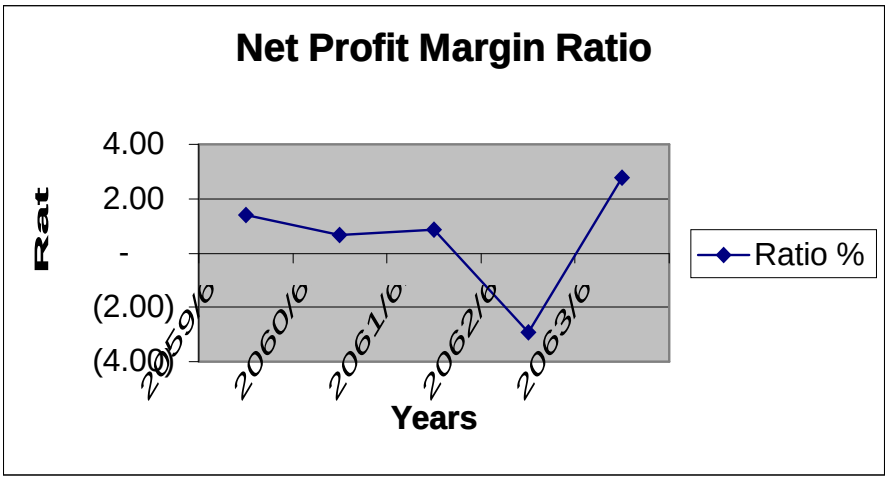

Chart-19

The above table shows that fluctuating Net Profit Margin during the study period. In F/Y 2059/60, the margin ratio is 1.42% with Sales Value Rs.1781.87 million and Net Profit Rs. 25.29 million, which is decreased by 0.78 % in F/Y 2060/61 and increased by 0.22% in F/Y 2061/62. The ratio is further decreased by 3.80% in F/Y 2062/63 but found drastic change in Net Profit in F/Y 063/64. The Profit Margin increased by 5.72% due to emphasis on utilization of Working Capital and Operating Costs. The average change in Net Profit margin is in decreasing trend by 0.27% over the period.

In order to evaluate the relationship between Net Profit and Sales of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-13 and the result is as under:

Correlation Coefficient (r) = 0.34

Probable Error (PE) = 0.27

The above figures show that Correlation Coefficient between Net Profit and Sales is 0.34 i.e. lower than $\frac{1}{2}$ 0.5 so, there is low degree of positive correlation and calculated value of r is lower than six times of its PE, so, the relationship is not considered significant.

4.6.3 Operating Expenses Turnover Ratio

Operating Expenses are important factors for affecting Gross Profit and Net Profit Margin. Operating ratio helps as to gain considerable insight into the operations of the firm. It measures the efficiency of the firm as regards to minimizing costs. Operating Ratio thus is an indicator of operational efficiency. The higher the Operating Turnover Ratio, the better is the efficiency and vice-versa. Minimum operation costs result into the higher level of Gross Profit and the Net Profit Margin.

The table-21 presents the Operating during the study period of HSIL, which is as follows:

Table No.-21

Hulas Steel Industries Ltd.

Operating Expenses Ratio

(Rs. in million)

Years	Operating Expenses	Net Sales	Ratio %	Change %
2059/60	1,654.08	1,781.87	92.83	-
2060/61	1,724.46	1,843.41	93.55	0.72
2061/62	1,595.90	1,711.30	93.26	(0.29)
2062/63	1,858.99	1,902.63	97.71	4.45
2063/64	2,012.96	2,147.26	93.75	(3.96)
Total	8,846.39	9,386.47	-	-
Average	**1,769.28**	**1,877.29**	**94.25**	**0.18**

Note: Operating Expenses include cost of goods sold and other operating indirect expenses.

The above figures also can be shown in a diagram, which is as follows.

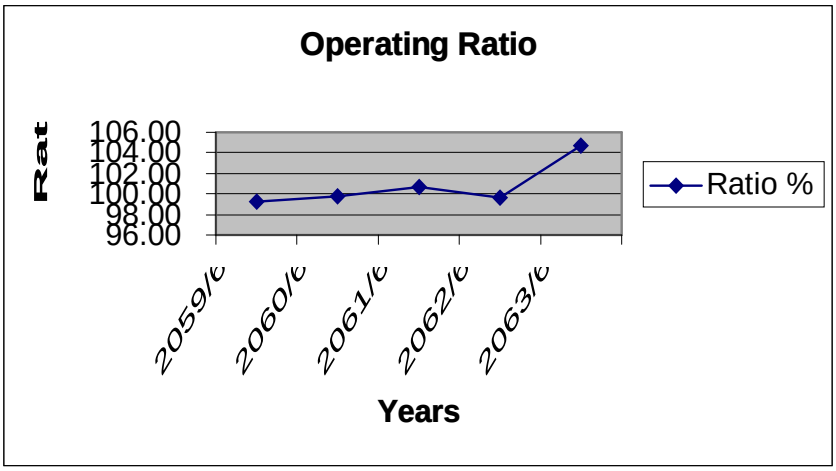

Chart-20

The above table represents that the Operating Expenses ratio with respect to Sales Value during the study period, which is in fluctuating and increasing trend. The ratio is 92.83% in F/Y 2059/60 with Total Operating Expenses Rs.1654.08 and Sales Value Rs. 1781.87, which is increased by 0.72% in F/Y 2060/61and decreased by 0.29% in F/Y2061/62. The ratio again increased by 4.45% in F/Y 2062/63, so the net profit is in negative form and decreased again by 3.96% in F/Y 2063/64 as a result Net Profit Margin is in positive form. The average increase in Operating Costs is 0.18% over the period.

In order to evaluate the relationship between Gross Profit and Sales of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-14 and the result is as under:

Correlation Coefficient (r) =0.98

Probable Error (PE) = 0.01

The above figures show that Correlation Coefficient between Operating Expenses and Sales is 0.98 i.e. higher than and $\frac{1}{2}$ 0.5, so, there is high degree of positive correlation and calculated value of r is higher than six times of its PE, so, the relationship is considered to be significance.

4.6.4 Return on Total Assets

It measures the percentage of Return on Total Assets employed for every business activity of the company. It gives an insight into the profit earning efficiency of the company with respect to the Total Assets used. So it is the tool to measure the efficiency of assets that are utilized by the company to earn profit.

The table-22 presents the Operating during the study period of HSIL, which is as follows:

Table No.-22

Hulas Steel Industries Ltd.

Return on Total Assets

(Rs. in million)

Years	Net Profit	Total Assets	Ratio %	% Change
2059/60	25.29	1,581.50	1.60	-
2060/61	11.79	1,602.39	0.74	(0.86)
2061/62	14.64	1,961.13	0.75	0.01
2062/63	(56.01)	1,670.55	(3.35)	(4.10)
2063/64	59.64	2,402.33	2.48	5.84
Total	55.35	9,217.89	-	-
Average	**11.07**	**1,843.58**	**0.60**	**(0.18)**

The above figures also can be shown in a diagram, which is as follows.

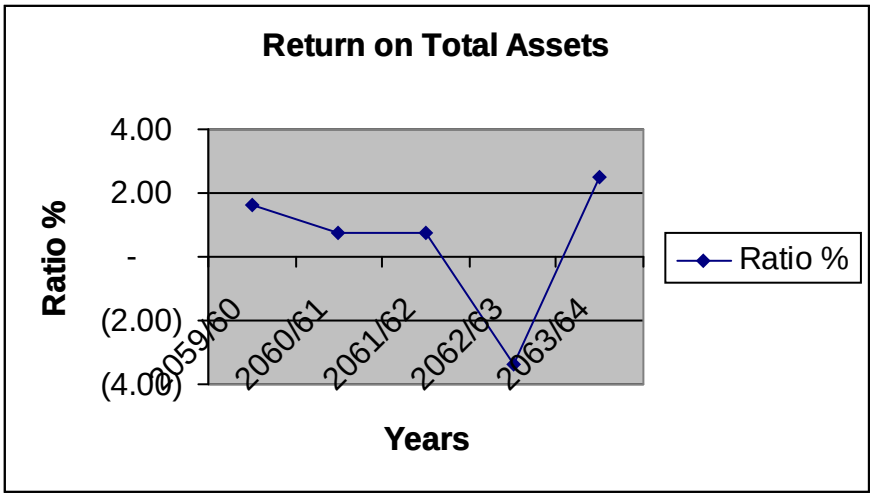

Chart-21

The above table shows that the return on its total assets during study period. The ratio is 1.60% in F/Y 059/60 where the company has employed Rs. 1581.50 millions in Total Assets. The ratio is decreased by 0.86% in F/Y 060/61 even the company has employed high amount in Total Assets i.e. 1602.39 millions but Net Profit decreased due to increase in cost of goods sold and interest. The ratio is in negative i.e. (3.35) in F/Y 062/63 since Net Profit is in negative i.e. (56.01) millions due to proportionate increase in cost of

goods sold than that of sales, interest cost, and indirect expenses. In F/Y 063/64, the ratio is heavily increased by 5.84% though the company has employed high amount in Total Assets i.e. 2402.33 millions. The Net Profit is 59.64 millions which is due to increase in sales and reduction in cost of goods sold and interest cost. Decreasing tendency of return on total assets is mainly because of the decreasing amount of Net Profit after Tax. The highest return is found in the F/Y 063/64 and the lowest return in F/Y 2062/63 i.e. 2.48% and (3.35%) respectably with average return 0.60%. the higher ratio is favorable and lower is unfavorable.

In order to evaluate the relationship between Net Profit after Tax and Total Assets of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-15 and the result is as under:

Correlation Coefficient (r) =0.60

Probable Error (PE) = 0.19

The above figures show that Correlation Coefficient between Net Profit after Tax and Total Assets is 0.60 i.e. higher than and ≤ 0.5, so, there is moderate degree of positive correlation and calculated value of r is not higher than six times of its PE, so, the relationship is not considered to be significance.

4.6.5 Return on Net Worth

This is the percentage relationship between Net Profit after Tax (NPAT) and the investments of owners as capital. However, net worth includes owner's share capital, share application money and reserves and surplus. The conclusion drawn on the basis of profitability ratio and operating ratio may not give true result because they give profit in terms of sales and total assets only. So return on net worth is necessary to study to gain an insight into the efficiency of owner's investment. It measures the rate of return on owner's capital employment in the business.

The following Table-23 shows the rate of return on net worth of Hulas Steel Ind. Ltd. during the period of study.

Table No.-23

Hulas Steel Industries Ltd.

Return on Net Worth

(Rs. in million)

Years	Net Profit	Net Worth	Ratio %	% Change
2059/60	25.29	508.10	4.98	-
2060/61	11.79	516.63	2.28	(2.70)
2061/62	14.64	531.49	2.75	0.47
2062/63	(56.01)	516.48	(10.84)	(13.60)
2063/64	59.64	647.43	9.21	20.06
Total	55.35	2,720.13	-	-
Average	**11.07**	**544.03**	**2.03**	**0.85**

The above figures also can be shown in a diagram, which is as follows.

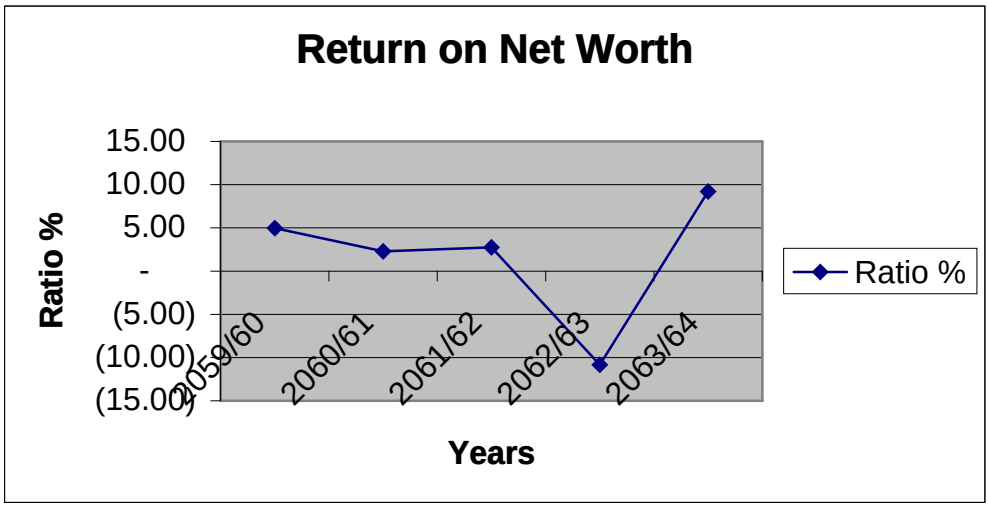

Chart-22

The above table shows that the rate of return on net worth during the study period. In the F/Y 059/60, the ratio is 4.98% with Net worth Value Rs 508.10 millions but the ratio is decreased by 2.70% in F/Y 060/61 and slightly increased by 0.47% in F/Y 061/62. Furthermore, the ratio is greatly decreased by 13.60% in F/Y 062/63, i.e. the rate of return is -10.84%, which is the lowest rate of return during the study period, which shows the inefficiency of the company. Finally, there is drastic change in the ratio, is increased by 20.06%, i.e. the ratio is 9.21%, which is the highest rate of return of the study period. The company is able to earn more profit in comparison to previous year which shows the

efficient employment of capital. In an average, the industry is able to maintain 2.03% of rate of return on net worth.

In order to evaluate the relationship between Net Profit after Tax and Net worth of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-15 and the result is as under:

Correlation Coefficient (r) =0.64

Probable Error (PE) = 0.18

The above figures show that Correlation Coefficient between Net Profit after Tax and Net worth is 0.64 i.e. higher than and $\frac{1}{2}$ 0.5, so, there is moderate degree of positive correlation and calculated value of r is not higher than six times of its PE, so, the relationship is not considered to be significance.

4.6.6 Return on Gross Working Capital

This is the simple relationship of Net Profit after Tax in relation to current assets employed by the company. It measures the profit with respect to its working capital i.e. total current assets. It helps to give an insight into how effectively and efficiently the current assets are employed to earn the profit. So, the higher is the ratio of return, the better is the efficiency of the working capital and vice-versa.

The table-24 presents the relationship in between Net Profit after tax and Total Current Assets of HSIL during the study period.

Table No.-24

Hulas Steel Industries Ltd.

Return on Gross Working Capital

(Rs. in million)

Years	Net Profit	Gross Working Capital	Ratio %	% Change
2059/60	25.29	1,029.18	2.46	-
2060/61	11.79	1,027.96	1.15	(1.31)
2061/62	14.64	1,409.05	1.04	(0.11)
2062/63	(56.01)	1,114.70	(5.02)	(6.06)
2063/64	59.64	1,414.58	4.22	9.24
Total	55.35	5,995.47	-	-
Average	**11.07**	**1,199.09**	**0.92**	**0.35**

The above figures also can be shown in a diagram, which is as follows.

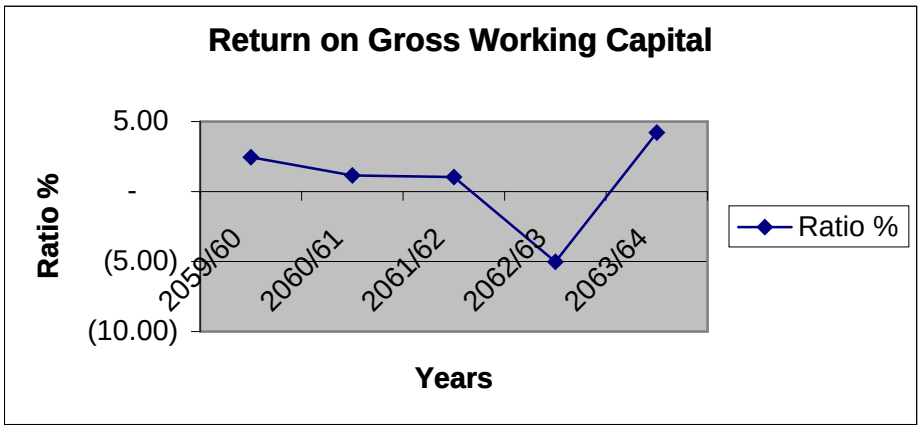

Chart-23

The above table shows the percentage return on gross working capital employed by HSIL. The company is able to earn 2.46% in F/Y 059/60 with Rs.1029.18 current Assets. It is decreased to 1.15% in F/Y 060/61 and again to 1.04 in F/Y 061/62. then it is furthermore decreased by 6.06%, i.e. the ratio is -5.02%, which is the lowest rate of return and the rate of ratio is drastically increased to 4.22% in F/Y 063/64, which is the highest rate of ratio during the study period. The average rate of return on gross working capital is 0.92% with increasing trend of 0.35%.

In order to evaluate the relationship between Net Profit after Tax and Total Current Assets of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-17 and the result is as under:

Correlation Coefficient (r) =0.43

Probable Error (PE) = 0.25

The above figures show that Correlation Coefficient between Net Profit after Tax and Total Current Assets is 0.43 i.e. lower than and $\{ 0.5$, so, there is low degree of positive correlation and calculated value of r is not higher than six times of its PE, so, the relationship is not considered to be significance.

4.6.7 Return on Net Current Assets

This is the relationship between Net Profit after Tax in relation to Net Current Assets employed by the company. It also measures the efficiency and effectiveness of company through profit in respect to Net Working Capital and how current assets and current

liabilities are managed. Higher the rate of return, the better is the performance of the company and vice-versa.

The table-25 presents the relationship in between Net Profit after tax and Net Current Assets of HSIL during the study period.

Table No.-25

Hulas Steel Industries Ltd.

Return on Net Working Capital

(Rs. in million)

Years	Net Profit	Net Working Capital	Ratio %	% Change
2059/60	25.29	203.15	12.45	-
2060/61	11.79	252.99	4.66	(7.79)
2061/62	14.64	360.74	4.06	(0.60)
2062/63	(56.01)	176.46	(31.74)	(35.80)
2063/64	59.64	193.04	30.89	62.64
Total	55.35	1,186.38	-	-
Average	**11.07**	**237.28**	**4.67**	**3.69**

The above figures also can be shown in a diagram, which is as follows.

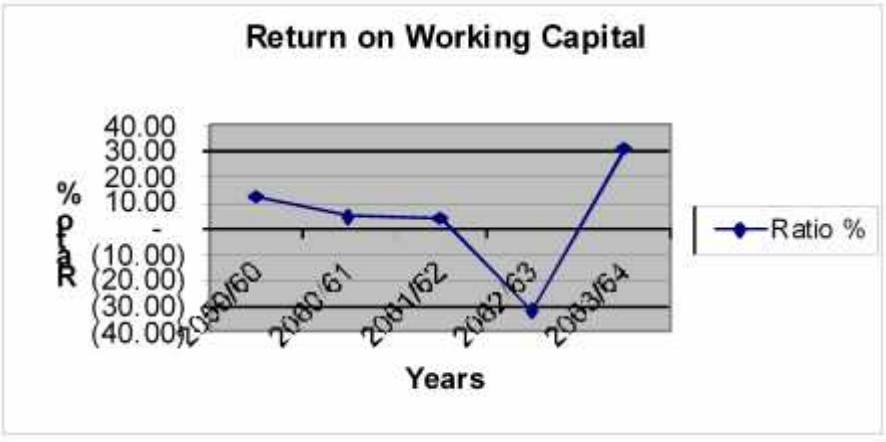

Chart-24

The above table shows the relationship between Net Profit after Tax and Net Current Assets employed by the company. The ratio is 12.45% in F/Y 059/60 with Rs. 203.15 millions Net Current Assets and decreased to 4.66% in F/Y 060/61 and again decreased to 4.06% in F/Y 061/62. Furthermore, the rate of return is drastically decreased by 35.80

%, i.e. the rate of return is -31.74, which is the lowest return of the company and finally the return is later improved, increased by 62.64%, i.e. the ratio is 30.89%, which is the highest rate of return of the company during the study period.

In order to evaluate the relationship between Net Profit after Tax and Net Current Assets of HSIL, Karl Pearson's Correlation Coefficient (r) is calculated in Appendix-17 and the result is as under:

Correlation Coefficient (r) =0.15

Probable Error (PE) = 0.29

The above figures show that Correlation Coefficient between Net Profit after Tax and Net Current Assets is 0.15 i.e. lower than and ≤ 0.5, so, there is low degree of positive correlation and calculated value of r is not higher than six times of its PE, so, the relationship is not considered to be significance.

4.7 Coefficient of Correlation Analysis(r)

In this analysis, Karl Pearson's co-efficient of correlation has been used to find out the relationship between variables, which is a widely used mathematical method of Correlation Coefficient between two variables. Correlation analysis describes the positive and negative relationship between variables. It helps to determine whether there is:

- A positive or negative relationship exists
- The relationship is significant or insignificant and
- Establish cause and effect relation if any

The statistical tool, correlation analysis is preferred in this study to identify the relationship between variables, whether the relationship is significant or not.

4.**8 Major Findings**

The major findings of this study during the Five Years period in HSIL from the above data presentation and analysis are summarized below:

1. The major components of Current Assets in HSIL are Inventories, Sundry Debtors, Cash and Bank Balance, Loans and Advances and other Current Assets. The average percentages of theses assets are 64.88%, 22.62, 1.11%, 9.95% and

1.05% respectively. So it is found, Inventories hold the largest as well as major portion of the Current Assets followed by the Sundry Debtors, Loan and Advances, Other Current Assets and Cash and Bank Balances respectively.

The level of Net Current Assets is also fluctuating during the study period. It is increasing up to F/Y 2061/62 and then decreasing. The highest level of Net Current Assets in F/Y 2061/62 and the lowest value in F/Y 2062/63 are 360.74 millions and 176.46 millions.

2. The proportion of Current Assets on Total Assets is fluctuating during the period of study. The largest ratio is 71.85% and the lowest ratio is 58.88%. The average ratio of holding Current Assets with respect to Total Assets is 65.04%, which indicates that the investment in Current Assets is considerably high.

3. Cash and bank balances hold small part of Current Assets that average holding is 1.11% with respect to Current Assets and 0.72% with respect to Total Assets. It is found that the trend is fluctuating year by year. These kinds of fluctuation in Cash and Bank balances are due to optimization in Cash Management as well as investment of cash in Loans and advances, Provident Fund, Gratuity Account etc.

4. Inventory holds the larges portion with respect to Current Assets. The percentage of holding is ranging from 72.59 % to 57.71% in fluctuating trend with an average holding 65.28%. Similarly, the ratio of inventory with respect to Total Assets is also in fluctuating trend with average holding of 42.46% during the period of study. The fluctuation of the level of investment in Inventories is due to change in the level of Sales volume followed by different sales policies.

5. The receivable position with respect to Current Assets in HSIL is fluctuating with average holding of 22.62% during the study period. Similarly the position of receivables to Total Assets is also fluctuating with average holding of 14.71%. So, the fluctuation in investment amount of Receivable is due to change in Sales volume and Credit policy adopted by the company.

6. Loans and Advances include Customs duty, Prepaid Expenses, Short-term Advances, and Interest Receivables etc, occupy the third position with respect to Current Assets. The average holding proportion is 10.05% of Current Assets. The turnover position of HSIL is found fluctuating during five years period.

7. The Gross Working Capital Turnover is ranging from 1.79 times to 1.21 times with an average of 1.57 times. Similarly, the Net Working Capital Turnover is ranging from 111.12 times to 4.74 times in fluctuating trend with an average of 7.91 times.

8. The cash turnover ratio is ranging from 278.68 times to 69.55 times with various fluctuations with an average 141.37 times. The company has been able to maintain its cash conversion cycle of about 2.58 i.e. 3 days. It indicates that the company is able to maintain a satisfactory matching of sales and cash and bank balance.

   Receivable Turnover Ratio is found fluctuated during the five year period. The ratio found 7.40 times, which is the highest, in F/Y 2059/60 caused by low level of receivables amount and the lowest ratio is 6.42 times in F/Y 2061/62 because of proportionate increase in Credit Sales than the volume of receivables. However, the Average Receivable Turnover Ratio is 6.92 times. The Average Collection Period of Credit Sales has been found fluctuating over the period caused by change in volume of sales and receivable in different years. Receivable collection period is ranging form 56.12 days to 48.67 days with an average, the collection period of the HSIL is 52.07 i.e. 52 days shows poor management of Receivable. Higher turnover ratio indicates shorter collection period.

   The inventory turnover position of the HSIL is fluctuated but in increasing trend ranging from 3.0 times to 1.67 times with an average of 2.40 times and average Inventory Conversion Period is 150.91 i.e. 151 days. It indicates management of Inventories is satisfactory in some extent.

9. The liquidity position of the company is analyzed with the help of Current ratio and Quick Ratio. The Current Ratio of the company is ranging from 1.34 times to 1.16 in a fluctuating trend with an average of 1.25 times. It indicates poor liquidity position of the company. And Quick Ratio of the company is ranging from 0.53 times to 0.37 times with an average of 0.43 times, shows the company is not able to maintain its Quick Ratio. It indicates unfavorable liquidity position of the HSIL.

10. Profitability measures the efficiency of performance of a business firm. The profitability position of HSIL is analyzed from the angles of Gross Profit and Net profit Margin. The gross profit margin ranging from 14.45% to 9.59% with an average of 13.15%. In the other hand, the Net Profit margin is found in decreasing trend which ranges from2.78% to -2.94% with an average of 0.59%. It shows that HSIL is not so efficient in maintaining profitability.

    Operating expenses ratio is also analyzed to measure the profitability position of any company. So it is also applied in context of HSIL. The operating ratio is found ranging from 97.71% to 92.83% with an average of 94.25%. The wide difference between gross profit margin and net profit margin for the corresponding years and also the considerably high level of operating ratio indicates not so better operating efficiency of HSIL.

    The return on Total Assets of HSIL is in fluctuating trend which ranges from-3.35% to 2.48% with an average return of 0.60%. The lowest return is in F/Y 062/63 due to negative Net Profit and the highest return in F/Y 063/64 due to drastic increment in Net Profit after Tax.

    The return on Net Worth is in also fluctuating trend with 0.85% positive change, which ranges from -10.84% and 9.21% with an average of 2.03%. it can be analyzed that both return of total assets and return on net worth can not be considered favorable.

    The return on gross working capital and net working capital both are fluctuating with positive change of 0.35% and 3.69% respectably. The rate of return on total current assets ranges from -5.02% to 4.22% with an average return of 0.92% and

rate of return on net current assets ranges from -31.74% to 30.89% with an average return of 4.67%. The result shows that the return on both gross working capital and net working capital may not be judged as satisfactory return.

11. It is found that out of total financing, more amount is financed form long term sources of fund i.e. share capital and reserves and surplus and less amount is financed from short term sources of fund i.e. loans against government securities, bank loan against fixed assets, current assets and cash as well as credit loan from bank. The fixed assets, permanent current assets and some portion of temporary current assets are financed from long term fund and other remaining portion of temporary current assets are financed by short-term sources of fund.

Chapter-V

5. Summery of Findings, Conclusions and Recommendations

5.1 Summery

The introductory chapter of this study presents the brief introduction of the study, industrialization and its role in Nepal, its importance in Nepal and Nepalese industrial enterprises and the brief introduction of Hulas Steel Industries Limited. The theoretical concept of Working Capital, role and its importance in manufacturing company like HSIL are also included in this chapter. The statement of problem of this study in light of HSIL, objective of the study and limitation within which the study is circled are also the basic parts of the first chapter. Lastly the organization of the study is prepared according to the chapters that are planned for the study report. The second chapter i.e. review of literatures gives the basic concept of working capital, where different views of various different authors are reviewed, then the journals and articles which are available, published by different management experts, are also reviewed in order to fulfill the basic need of study. Further the available dissertations in the context of management of working capital from different researchers are also reviewed. Main findings and conclusions, tools used for analysis and recommendations are included from the dissertations of the researchers. The review of literatures tries to find out the gap and this study tires to fulfill this gap to some extent.

The basic objective of this study is to examine the management of working capital in Hulas Steel Ind. Ltd. to fulfill this objective and other specific objectives stated in chapter one, an appropriate research methodology has been developed which includes the ratio analysis as a financial tools and correlation coefficient as a statistical tools. The major ratio analysis consists of the composition of Working Capital position, turnover position, liquidity position and profitability position. Chapter four includes various ratios under the main ratios of working capital position, turnover position and profitability position. Karl Pearson's Correlation Coefficient (r) is calculated in appendices in order to test the relationship in between the various components of working capital as well as P.E. is

calculated to find out the significance of their relationship and the results are analyzed in this chapter.

The necessary data are derived from the balance sheet and profit and loss a/c of HSIL for the period of five years form F/Y 2059/60 to F/Y 2063/64. These data are presented, tabulated and analyzed in chapter four with the help of methodology described in chapter three. Finally, in chapter five, an attempt has been made to present summery of findings, conclusions and some suggestions for HSIL as recommendations.

5.2 Conclusions

From the above major findings the following conclusions are drawn:

A. Major finding of working capital position

The proportion of current assets with respect to total assets and net assets shows that there is high investment in current assets. Higher portion of investment in current assets implies that greater amount of working capital causes decrease in profitability. The investment made in Current Assets of HSIL is high due to the higher amount investment in inventories and sundry debtors (receivable), which is clearly shown by table presented in previous chapter. It can be concluded that there is high degree of positive correlation between investment in Current Assets and Total Assets, could have adverse effects in wealth maximization goal of HSIL in long-run.

Cash Management of HSIL is considered to be sound as the cash and cash balance with respect to Current Assets and Total Assets are in increasing trend as per data presentation. Furthermore, the company has invested its cash in short-term securities. Since, the company's Cash Conversion Cycle in an average only 3 days, it can generate cash with in a very short period of time, which can be judged as good performance.

Inventory should be managed in such a way that there should be neither excess causing unnecessary working capital blockage nor shortage resulting irregular manufacturing process and break-downs. So, inventory should be kept in optimum level. So far HSIL is concerned, has kept higher proportion of inventories.

Inventories cover higher level of investment with respect current assets and total assets. Inventories has large tie up of funds in it. It affects the liquidity due to high carrying cost, since inventories it self is the least liquid current assets. Furthermore, there is high degree of correlation between inventories and current assets. It can be concluded that there is not so sound inventory management policy in HSIL.

Receivables are the outcome of credit sales and receivables are inevitable in today's competitive business world. They constitute the integral part of assets of the company. Receivables are occupying the large portion with respect to current assets and total assets of HSIL. Further, its average collection period is ranging from 49 days to 56 days with an average of 52 days, which can not be judged as favorable collection period, since there is moderate degree of correlation with insignificant relationship between receivables and current assets. It shows that there is unnecessary tie-up of working capital.

B. Major findings of Turnover Position

Sales measure the performance and efficiency of any business. Working capital is the life blood of sales. So, working capital should be managed in such a way that it generates maximum turnover. The proportion of working capital with respect to sales in HSIL is an average of 1.57 times with decreasing trend during the study period and the company is able to turn its working capital into sales once in 229 days. Furthermore, there is low degree of positive correlation and relationship is not considered to be significant show un-utilization of working capital properly.

Business enterprise must provide credit facilities to compete and expand sales, which is unavoidable, but it should be managed well that cost of receivable would not be higher than rate of return there on. The average receivable turnover ratio in this company is 6.92 times during the study period which means credit collection period is 52 days in an average. Furthermore, there is high degree of positive correlation between receivable and sales. It would be better for the company to reduce the receivable collection period.

Similarly, inventories play the major role in the manufacturing organization.

The inventory turn over ratio is 2.40 times in an average during the study period, which shows that inventory conversion period is 152 days, which is considered that there is not efficient inventory management system. The insignificant and low degree of positive correlation between inventories and sales indicate the result is not in favor i.e. the company is not as much as efficient in turning its inventories into sales.

C. Major findings of Liquidity Position

The current ratio of HSIL is 1.25 times in an average, but the ratio is in decreasing trend. Inventories and receivables are the major parts of current assets. The significant and high degree of positive correlation between current assets and current liabilities shows there is fine liquidity position but bearing some how risk by the company.

However, the quick ratio of HSIL is 0.43 times in an average, which is lower than 1 times shows weak position to face immediate current obligations. The insignificant and high degree of positive correlation between quick assets and current liabilities indicates that the company is not able to adopt better liquidity management system.

D. Findings of Profitability

An average gross profit and net profit margin ratio of HSIL is 13.15% and 0.59% during the study period with decreasing trends. The insignificant and low degree of positive correlation between gross profit and sales and net profit and sales show poor efficiency of the management towards the margin of safety and profitability. Since the increasing trend of operating expenses ratio with an average 94.25% indicates the company is either unable to control expenses or increase volume of production and sales revenues.

The return on total assets, net worth and current assets are 0.60%, 2.03% and 0.92% respectively in an average during the study period. The ratios show that HSIL is not in well profitable position. It can be said that the company is just

surviving. The company is somehow failure to utilize its current assets. The over investment in inventories and receivables is the main cause for reducing profitability. The excess of cash should be invested in low risky and short-term securities and special bonds as equity shares in other subsidiary companies to earn further returns as interests and dividends.

F. Findings of Statistical Data

The major findings of statistical analysis are presented below:

Table No. 26

List of Statistical Findings

S. N.	Variables	Correlation Coefficient (r)	Probable Error (P.E.)	Remarks
1	Current assets and Total Assets	0.90	0.06	Statistically significant, high degree of positive correlation between variables
2	Current assets and Fixed Assets	0.59	0.20	Statistically insignificant, but positive correlation between the variables
3	Cash & Bank and Current Assets	0.82	0.10	Statistically significant, positive correlation between the variables
4	Inventory and Current Assets	0.95	0.03	Statistically significant, high degree of positive correlation between the variables
5	Receivables and Current Assets	0.58	0.20	Statistically insignificant, but positive correlation between the variables
6	Current Assets and Sales	0.33	0.27	Statistically insignificant, negative correlation between the variables
7	Net Working Capital and Sales	-0.63	0.18	Statistically insignificant, moderate degree of negative correlation between the variables

8	Receivable and Sales	0.77	0.12	Statistically significant, high degree of positive correlation between the variables
9	Inventory and Sales	0.09	0.30	Statistically insignificant, but low degree of positive correlation between the variables
10	Current Assets and Current Liabilities	0.93	0.04	Statistically significant, high degree of positive correlation between the variables
11	Quick Assets and Current Liabilities	0.70	0.15	Statistically insignificant, but high degree of positive correlation between the variables
12	Gross Profit and Sales	0.43	0.25	Statistically insignificant, but low degree of positive correlation between the variables
13	Net Profit and Sales	0.34	0.27	Statistically insignificant and low degree of positive correlation between the variables
14	Operating Expenses and Sales	0.98	0.01	Statistically significant and high degree of positive correlation between the variables
15	Net Profit and Total Assets	0.60	0.19	Statistically insignificant and moderate degree of positive correlation between variables
16	Net Profit and Net Worth	0.64	0.18	Statistically insignificant and moderate degree of positive correlation between variables
17	Net Profit and Current Assets	0.43	0.25	Statistically insignificant and low degree of positive correlation between variables

Recommendations

1. It is found that inventories furthermore, raw materials, work-in-progress, finished goods, stores and machinery spares are the major parts of current assets i.e. hold 65% of current assets. Therefore, the company should focus its efforts either to reduce the huge level of its inventories or to utilize them in the optimum way that cost of holding could be brought up to minimum level. The company should further adjust its inventory to production as well as production to sales. The company should maintain its level of production and sales as per budgetary methods considering its market situation and level of competition. HSIL should go with effective sales plan which help for immediate marketability and it certainly decreases the problem of over stocking. Similarly, none performing and absolute items of assets should be discarded to avoid unnecessary blockage of inventory. The management of the company must give attention towards capacity utilization, carrying costs, ordering costs and lead time for effective inventory management.

2. It is also advised to the management to implement effective inventory control techniques in order to control cost as per their volume and importance. Statistical, financial and accounting tools such as inventory ratio, economic order quantity, raw material budget, production budget, sales budget etc. should be used for determining the current and future requirements of raw materials and finished goods. Such analysis helps to maintain better inventory position in the company. Furthermore, the company can use either restricted or moderate investment policy to less the level of inventory but care should be given to the present scenario of the country and its constraints.

3. Receivables also cover the second largest position of current assets i.e. holds 22.62%. Although credit sales are inevitable in this competitive global business, the management adopting liberal credit policy so that result is not favorable i.e. sales is not as much as increased than that of credit sales. It can be seen, the company may not have any specific policy to control the credit limits and any certain criteria to

increase cash sales. Similarly certain target should be set for credit policy to avoid unnecessary growth on volume of receivables.

4. The credit collection period of HSIL is 52 days shows the company is liberal in credit sales, which is not considered as favorable. As increase in credit involves chance of increase in bad debts, which is an additional cost for the company. So, it is suggested to the management of company to adopt an attractive package to collect its credits and bring down credit days to 30 days. Restricted working capital policy should be adopted to control credit limits focusing on brand image of the product and considering pace of sales in the market.

5. The portion of current assets on its total assets is 65.04%, which is considered to be high and unutilized in optimum ways. The rate of return on current assets is consequently lower i.e. 0.92%. It is recommended that the company should follow effective working capital investment policy (current assets policy) as per the market demand and pace of competition. Not only relaxed and restricted is always better but also Moderate as well as Matching Working Capital Policy should be adopted to improve its profitability in the long-term.

6. There is another important affecting factor, which is directly involved to reduce profitability. The operating expenses ratio is 94.25%, which is very weak point in HSIL. It seems that the company is ignoring the increasing trend of operating expenses ratio. The major components of operating costs are works overheads, administrative overheads, selling and distributions overheads and other indirect expenses. The company should maintain either production & sales as increase in operating expenses or control its expenses in reasonable ways. It is recommended to the company to operate in such a way that it can have lesser operating cost which maximizes its profitability and share holders' return.

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Appendices

Appendix-1

Calculation of Karl Pearson's Correlation Coefficient (r) in order to test the significant of the relationship between Current Assets (CA) and Total Assets (TA) is as follows:

(In Rs. Million)

Year	X	Y	dx = X- $\bar{X}$	dx^2	dy = Y- $\bar{Y}$	dy^2	dx.dy
2059/60	1029.18	1581.50	-169.91	28870.73	-262.08	68687.89	44531.67
2060/61	1027.96	1602.39	-171.13	29286.03	-241.19	58173.31	41275.48
2061/62	1409.05	1961.13	209.95	44080.48	117.55	13818.73	24680.68
2062/63	1114.70	1670.55	-84.39	7121.97	-173.03	29938.11	14602.00
2063/64	1414.58	2402.33	215.48	46423.25	558.75	312199.81	120401.22
	X = 66.40	Y = 5995.47	dx X0	dx^2 X 155792.47	dy X0	dy^2 X 482817.85	$dxdy$ X 245491.05

Mean ($\bar{X}$) = $\frac{X}{n} = \frac{66.40}{5} = 13.28$

Mean ($\bar{Y}$) = $\frac{Y}{n} = \frac{5995.47}{5} = 1199.09$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{245491.05}{\sqrt{155792.47}\sqrt{482817.85}}$

$= 0.90$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.80)}{\sqrt{5}}$

$= 0.06$

Appendix-2

Calculation of Karl Pearson's Correlation Coefficient (r) in order to test the significant of the relationship between Current Assets (CA) and Fixed Assets (FA) is as follows:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	1129.18	552.32	-169.91	28870.73	-92.17	8495.28	15660.94
2060/61	1027.96	574.43	-171.13	29286.03	-70.06	4908.38	11989.45
2061/62	1409.05	552.09	209.95	44080.48	-92.40	8537.84	-19399.80
2062/63	1114.70	555.85	-84.39	7121.97	-88.63	7856.09	7480.03
2063/64	1414.58	987.75	215.48	46433.25	343.26	117830.63	73967.96
	X = 5995.47	Y = 3222.43	dx X0	dx^2 X 155792.47	dy X 0	dy^2 X 147628.22	$dxdy$ X 89698.58

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{5995.47}{5} = 1199.09$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{3222.43}{5} = 644.49$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$

$= \frac{89698.58}{\sqrt{792.47}\sqrt{147628.22}}$

$= 0.59$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.35)}{\sqrt{5}}$

$= 0.20$

Appendix-3

Calculation of Karl Pearson's Correlation Coefficient (r) in order to test the significant of the relationship between Cash and Bank Balance (CBB) and Current Assets (TA) is as follows:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	5.57	1029.18	-5.71	32.60	-169.91	28870.73	970.08
2060/61	6.61	1027.96	-6.66	44.42	-171.13	29286.03	1140.51
2061/62	14.31	1409.05	1.03	1.07	209.95	44080.48	216.78
2062/63	7.03	1114.70	-6.25	39.08	-84.39	7121.97	527.56
2063/64	30.87	1414.58	17.59	309.50	215.48	46433.25	3790.91
	X = 66.40	Y = 5995.47	dx X0	dx^2 X 426.65	dy X0	dy^2 X 155792.47	$dxdy$ X 6645.84

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{66.40}{5} = 13.28$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{5995.47}{5} = 1199.09$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$

$= \frac{6645.84}{\sqrt{426.65}\sqrt{155792.47}}$

$= 0.82$

Probable Error (PE) = $\frac{0.6745(1-\text{r2})}{\sqrt{\text{N}}}$

$= \frac{0.6745(1-0.66)}{\sqrt{5}}$

$= 0.10$

Appendix-4

Calculation of Karl Pearson's Correlation Coefficient (r) in order to test the significant of the relationship between Inventory (I) and Current Assets (CA) is as follows:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	593.91	1029.18	-188.80	35643.88	-169.91	28870.73	32079.04
2060/61	662.78	1027.96	-119.93	14382.79	-171.13	29286.03	20523.52
2061/62	1022.80	1409.05	240.09	57645.44	209.95	44080.48	50408.72
2062/63	742.57	1114.70	40.14	1610.89	-84.39	71.21.97	3387.17
2063/64	891.48	1414.58	108.77	11629.90	215.48	46433.25	23437.17
	X = 3913.55	Y = 5995.47	dx X0	dx^2 X 121112.89	dy X0	dy^2 X 155792.47	$dxdy$ X 129835.58

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{3913.55}{5} = 782.71$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{5995.47}{5} = 1199.09$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$

$= \frac{129835.58}{\sqrt{121112.89}\sqrt{155792.47}}$

$= 0.95$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.89)}{\sqrt{5}}$

$= 0.03$

Appendix-5

Calculation of Karl Pearson's Correlation Coefficient (r) in order to test the significant of the relationship between Receivable and Current Assets (CA) is as follows:

(In Rs. Million)

Year	X	Y	dx = X- $\bar{X}$	dx^2	dy = Y- $\bar{Y}$	dy^2	dx.dy
2059/60	240.89	1029.18	-30.29	917.38	-169.91	28870.73	5146.41
2060/61	280.79	1027.96	9.61	92.37	-171.13	29286.03	-1644.69
2061/62	266.76	1409.05	-4.42	19.56	209.95	44080.48	-928.46
2062/63	260.41	1114.70	-10.77	115.95	-84.39	7121.97	908.73
2063/64	307.05	1414.58	35.87	1286.50	215.48	46433.25	7728.95
	X = 1355.90	Y = 5995.47	dx X0	dx^2 X 2431.76	dy X0	dy^2 X 155792.47	$dxdy$ X 11210.94

Mean ($\bar{X}$) = $\frac{X}{n} = \frac{1355.90}{5} = 271.18$

Mean ($\bar{Y}$) = $\frac{Y}{n} = \frac{5995.47}{5} = 1199.09$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$

$= \frac{11210.94}{\sqrt{2431.76}\sqrt{155792.47}}$

$= 0.58$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.33)}{\sqrt{5}}$

$= 0.20$

Appendix-6

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Total Current Assets (CA) and Sales:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	1781.87	1029.18	-95.42	9105.64	-169.91	28870.73	16213.78
2060/61	1843.41	1027.96	-33.88	1148.09	-171.13	29286.03	5798.54
2061/62	1711.30	1409.05	-165.99	27553.84	209.95	44080.48	-34850.92
2062/63	2147.26	1114.70	269.96	72880.83	-84.39	7121.97	-22782.78
2063/64	1902.63	1414.58	25.34	641.91	215.48	46433.25	5459.49
	X = 9386.47	Y = 5995.47	dx X0	dx^2 X 111330.31	dy X0	dy^2 X 155792.47	$dxdy$ X -30161.89

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{9386.47}{5} = 1877.29$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{5995.47}{5} = 1199.09$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{\text{Z}30161.89}{\sqrt{111330.31}\sqrt{155792.47}}$

$= -0.23$

Probable Error (PE) = $\frac{0.6745(1-\text{r}2)}{\sqrt{\text{N}}}$

$= \frac{0.6745(1-0.05)}{\sqrt{5}}$

$= 0.29$

Appendix-7

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Net Current Assets (NCA) and Sales

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	1781.87	203.15	-95.42	9105.64	-34.12	1164.30	3256.03
2060/61	1843.41	252.99	-33.88	1148.09	15.71	246.87	-532.38
2061/62	1711.30	360.74	-165.99	27553.84	123.46	15242.57	-20493.69
2062/63	2147.26	176.46	269.96	72880.83	-60.82	3698.79	-16418.62
2063/64	1902.63	193.04	25.34	641.91	-44.23	1956.57	-1120.69
	X = 9386.47	Y = 1186.38	dx X0	dx^2 X 111330.31	dy X0	dy^2 X 22309.11	$dxdy$ X -35309.35

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{9386.47}{5} = 1877.29$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{1186.38}{5} = 237.28$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{\text{Z}35309.35}{\sqrt{111330.13}\sqrt{22309.11}}$

$= -0.71$

Probable Error (PE) = $\frac{0.6745(1-\text{r}2)}{\sqrt{\text{N}}}$

$= \frac{0.6745(1-0.50)}{\sqrt{5}}$

$= 0.15$

Appendix-8

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Receivable and Sales

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	1781.87	240.89	-95.42	9105.64	-30.29	917.38	2890.22
2060/61	1843.41	280.79	-33.88	1148.09	9.61	92.37	-325.64
2061/62	1711.30	266.76	-165.99	27553.84	-4.42	19.56	734.06
2062/63	2147.26	260.41	269.96	72880.83	-10.77	115.95	-2906.98
2063/64	1902.63	307.05	25.34	641.91	35.67	1286.50	908.75
	X = 9386.47	Y = 1355.90	dx X0	dx^2 X 111330.31	dy X0	dy^2 X 2431.76	$dxdy$ X 1300.40

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{9386.47}{5} = 1877.29$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{1355.90}{5} = 271.18$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{1300.40}{\sqrt{111330.31}\sqrt{2431.76}}$

$= 0.08$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.01)}{\sqrt{5}}$

$= 0.30$

Appendix-9

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Inventory and Sales:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	1781.87	593.91	-95.42	9105.64	-188.80	35643.88	18015.56
2060/61	1843.41	662.78	-33.88	1148.09	-119.93	14382.79	4063.59
2061/62	1711.30	1022.80	-165.99	27553.84	240.09	57645.44	-39854.15
2062/63	2147.26	742.57	269.96	72880.83	-40.14	1610.89	-10835.26
2063/64	1902.63	891.48	25.34	641.91	108.77	11829.90	2755.68
	X = 9386.47	Y = 3913.55	dx X0	dx^2 X 111330.31	dy X0	dy^2 X 121112.89	$dxdy$ X -25854.58

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{9386.47}{5} = 1877.29$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{3913.55}{5} = 782.71$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{\text{Z}25854.58}{\sqrt{111330.31}\sqrt{121112.89}}$

$= -0.22$

Probable Error (PE) = $\frac{0.6745(1-\text{r}2)}{\sqrt{\text{N}}}$

$= \frac{0.6745(1-0.05)}{\sqrt{5}}$

$= 0.29$

Appendix-10

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Current Assets(CA) and Current Liabilities (CL):

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	1029.18	826.03	-169.91	28870.73	-135.79	18439.47	23072.95
2060/61	1027.96	774.97	-171.13	29286.03	-186.84	34910.52	31974.84
2061/62	1409.05	1048.31	209.95	44080.48	86.49	7480.89	18159.45
2062/63	1114.70	938.24	-84.39	7121.97	-23.57	555.74	1989.46
2063/64	1414.58	1221.53	215.48	46433.25	259.72	67452.88	55964.78
	X = 5995.47	Y = 4809.09	dx X0	dx^2 X 15792.47	dy X0	dy^2 X 128839.59	$dxdy$ X 131161.48

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{5995.47}{5} = 1199.09$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{4809.09}{5} = 961.82$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{131161.48}{\sqrt{15792.47}\sqrt{18839.59}}$

$= 0.93$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.86)}{\sqrt{5}}$

$= 0.04$

Appendix-11

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Quick Assets(QA) and Current Liabilities (CL):

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	435.27	826.03	18.88	356.53	-13579	18439.47	-2564.02
2060/61	365.18	774.97	-51.20	2621.78	-186.84	34910.52	9567.02
2061/62	386.24	1048.31	-30.14	908.49	86.49	7480.99	-2606.99
2062/63	372.13	938.24	-44.26	1958.59	-23.57	555.74	1043.29
2063/64	523.10	1221.53	106.72	11388.82	259.72	67452.88	27716.58
	X = 2081.92	Y = 4809.09	dx X0	dx^2 X 17234.21	dy X0	dy^2 X 128839.59	$dxdy$ X 33155.88

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{2081.92}{5} = 416.38$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{4809.09}{5} = 961.82$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{33155.88}{\sqrt{17234.21}\sqrt{128839.59}}$

$= 0.70$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.50)}{\sqrt{5}}$

$= 0.15$

Appendix-12

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Gross Profit and Sales:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	256.44	1781.87	9.53	90.77	-95.42	9105.64	-909.15
2060/61	247.09	1843.41	0.18	0.03	-33.88	1148.09	-6.02
2061/62	247.23	1711.30	0.32	0.10	-165.99	27553.84	-52.71
2062/63	301.32	2147.28	54.41	2960.47	269.96	72880.83	14688.83
2063/64	182.48	1902.63	-64.43	4151.59	25.34	641.91	-1632.47
	X = 1234.56	Y = 9386.47	dx X0	dx^2 X 7202.96	dy X0	dy^2 X 111330.31	$dxdy$ X 12088.49

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{1234.56}{5} = 246.91$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{9386.47}{5} = 1877.29$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{12088.49}{\sqrt{7202.96}\sqrt{111330.31}}$

$= 0.43$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.18)}{\sqrt{5}}$

$= 0.25$

Appendix-13

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Net Profit and Sales:

(In Rs. Million)

Year	X	Y	dx = X- $\bar{X}$	dx^2	dy = Y- $\bar{Y}$	dy^2	dx.dy
2059/60	25.29	1781.87	20.67	427.33	-95.42	9105.64	-1972.59
2060/61	11.79	1843.41	7.17	51.44	-33.88	1148.09	-243.01
2061/62	14.64	1711.30	10.02	100.44	-165.99	27553.84	-1663.59
2062/63	27.38	2147.26	22.76	518.11	269.96	72880.83	6144.93
2063/64	-56.01	1902.63	-60.63	3675.75	25.34	641.91	-1536.07
	X = 23.09	Y = 9386.47	dx X0	dx^2 X 4773.07	dy X0	dy^2 X 111330.31	$dxdy$ X 729.67

Mean ($\bar{X}$) = $\frac{X}{n} = \frac{23.09}{5} = 4.62$

Mean ($\bar{Y}$) = $\frac{Y}{n} = \frac{9386.47}{5} = 1877.29$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$

$= \frac{729.67}{\sqrt{4773.07}\sqrt{111330.31}}$

$= 0.03$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.0009)}{\sqrt{5}}$

$= 0.30$

Appendix-14

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Operating Expenses and Sales:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	1768.05	1781.87	-124.28	15446.45	-95.42	9105.64	11859.59
2060/61	1840.06	1843.41	-52.27	2732.54	-33.88	1148.09	1771.22
2061/62	1763.05	1711.30	-169.28	28656.98	-165.99	27553.84	28100.00
2062/63	2138.35	2147.26	246.01	60521.76	269.96	72880.83	66414.43
2063/64	1992.16	1902.63	99.83	9965.93	25.34	641.91	2529.28
	X = 9461.67	Y = 9386.47	dx X0	dx^2 X 1173233.67	dy X0	dy^2 X 111330.31	$dxdy$ X 110674.51

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{9461.67}{5} = 1892.33$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{9386.47}{5} = 1877.29$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$

$= \frac{110674.51}{\sqrt{1173233.67}\sqrt{111330.31}}$

$= 0.97$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.94)}{\sqrt{5}}$

$= 0.02$

Appendix-15

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Net Profit after Tax and Total Assets:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	25.29	1581.50	14.22	202.21	-262.08	68687.89	-3726.83
2060/61	11.79	1602.39	0.72	0.52	241.19	58173.31	-173.66
2061/62	14.64	1961.13	3.57	12.74	117.55	13818.73	419.66
2062/63	-56.01	1670.55	-67.08	4499.73	-173.03	29938.11	11606.61
2063/64	59.64	2402.33	48.57	2359.04	552.75	312199.81	27138.41
	X = 55.35	Y = 9217.89	dx X0	dx^2 X 7202.96	dy X0	dy^2 X 482817.85	$dxdy$ X 35264.19

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{55.35}{5} = 11.07$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{9217.89}{5} = 1843.58$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{35264.19}{\sqrt{7202.96}\sqrt{482817.85}}$

$= 0.60$

Probable Error (PE) = $\frac{0.6745(1-\text{r2})}{\sqrt{\text{N}}}$

$= \frac{0.6745(1-0.36)}{\sqrt{5}}$

$= 0.19$

Appendix-16

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Net Profit after Tax and Net Worth:

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	25.29	508.10	14.22	202.21	-35.93	1290.68	-510.87
2060/61	11.79	516.63	0.72	0.52	-27.40	750.54	-19.73
2061/62	14.64	531.49	3.57	12.74	-12.54	157.15	-44.75
2062/63	-56.01	516.48	-67.08	4499.73	-27.55	758.78	1847.79
2063/64	59.64	647.43	48.57	2359.04	103.40	10692.39	5022.33
	X = 55.35	Y = 2720.13	dx X0	dx^2 X 7074.24	dy X0	dy^2 X 13649.54	$dxdy$ X 6294.77

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{55.35}{5} = 11.07$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{2720.13}{5} = 544.03$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\ \sqrt{\bullet \quad dy\ 2'}}$

$= \frac{6294.77}{\sqrt{7074.24}\sqrt{13649.54}}$

$= 0.64$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.41)}{\sqrt{5}}$

$= 0.18$

Appendix-17

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Net Profit after Tax and Total Current Assets (Gross Working Capital):

(In Rs. Million)

Year	**X**	**Y**	**dx = X-$\overline{X}$**	**dx^2**	**dy = Y-$\overline{Y}$**	**dy^2**	**dx.dy**
2059/60	25.29	1029.18	14.22	202.21	-169.91	28870.77	-2416.18
2060/61	11.79	1027.96	0.72	0.52	-171.13	29286.85	-123.22
2061/62	14.64	1409.05	3.57	12.74	209.96	44081.52	749.54
2062/63	-56.01	1114.70	-67.08	4499.73	-84.39	7122.35	5661.15
2063/64	59.64	1414.58	48.57	2359.04	215.49	46434.22	10466.16
	X = 55.35	Y = 5995.47	dx X0	dx^2 X 7074.24	dy X0	dy^2 X 155795.70	$dxdy$ X 14337.45

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{55.35}{5} = 11.07$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{5995.47}{5} = 1199.09$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{14337.45}{\sqrt{7074.24}\sqrt{155795.70}}$

$= 0.43$

Probable Error (PE) = $\frac{0.6745(1-r2)}{\sqrt{N}}$

$= \frac{0.6745(1-0.19)}{\sqrt{5}}$

$= 0.25$

Appendix-18

Calculation of Correlation Coefficient (r) in order to test the significant of the relationship between Net Profit after Tax and Net Current Assets (Net Working Capital):

(In Rs. Million)

Year	X	Y	dx = X- $\overline{X}$	dx^2	dy = Y- $\overline{Y}$	dy^2	dx.dy
2059/60	25.29	203.15	14.22	202.21	-34.12	1164.30	-485.21
2060/61	11.79	252.99	0.72	0.52	15.71	246.87	11.31
2061/62	14.64	360.74	3.57	12.74	123.46	15242.57	440.76
2062/63	-56.01	176.46	-67.08	4499.73	-60.82	3698.79	4079.65
2063/64	59.64	193.04	48.57	2359.04	-44.23	1956.57	-2148.40
	X = 55.35	Y = 1186.38	dx X0	dx^2 X 7074.24	dy X0	dy^2 X 22309.11	$dxdy$ X 1998.10

Mean ($\overline{X}$) = $\frac{X}{n} = \frac{55.35}{5} = 11.07$

Mean ($\overline{Y}$) = $\frac{Y}{n} = \frac{1186.38}{5} = 237.28$

Karl Pearson's Coefficient of Correlation (r) = $\frac{\text{dx.dy}}{\sqrt{\bullet \quad dx\ 2'}\sqrt{\bullet \quad dy\ 2'}}$

$= \frac{1898.10}{\sqrt{7074.24}\sqrt{22309.11}}$

$= 0.15$

Probable Error (PE) = $\frac{0.6745(1-\text{r2})}{\sqrt{\text{N}}}$

$= \frac{0.6745(1-0.02)}{\sqrt{5}}$

$= 0.29$

Appendix-

Balance Sheet
Hulas Steel Industries Ltd.
Simara, Bara. (Nepal)
For the Five Years Period (2059/60 – 2063/64)

Particulars\Years	**2059/60** Rs.		**2060/61** Rs.		**2061/62** Rs.		**2062/63** Rs.		**2063/64** Rs.	
SOURCES OF FUNDS										
SHAREHOLDERS' FUNDS:										
Share Capital	188.47		188.47		188.47		224.28		224.28	
Share Application Money	2.52		2.52		2.52		7.25		77.89	
Reserves & Surplus	317.11		325.64		340.50		284.95		345.26	
Total Share Holder's Fund (A)		**508.10**		**516.63**		**531.49**		**516.48**		**647.43**
LOAN FUNDS:										
Secured Loans (B)		**251.39**		**312.79**		**383.68**		**218.63**		**537.73**
Total Funds Raised (A+B)		**759.50**		**829.42**		**915.17**		**735.11**		**1185.16**
APPLICATION OF FUNDS										
FIXED ASSETS:										
Gross Block	730.07		761.11		771.26		792.31		1316.33	
Less: Depreciation	417.79		454.37		487.17		517.07		545.17	
Net Block (C)		**312.28**		**306.75**		**284.09**		**275.24**		**771.16**
Capital Work In Progress (D)		**0.27**		**0.41**		**0.29**		**38.54**		**2.33**
INVESTMENTS (E)		**239.77**		**267.27**		**267.71**		**242.07**		**214.26**
CURRENT ASSETS, LOANS & ADVANCES										
Inventories	593.91		662.78		1022.80		742.57		891.48	
Sundry Debtors	240.89		280.79		266.76		260.41		307.05	
Cash and Bank Balances	7.57		6.61		14.31		7.03		30.87	
Other Current Assets	13.77		13.41		12.20		12.07		11.40	
Loans and Advances	173.03		64.37		92.98		92.62		173.79	
Total Current Assets (i)	1029.18		1027.96		1409.05		1114.70		1414.58	
Less : Current Liabilities (ii)	719.97		754.88		1028.01		924.19		1207.48	
Provisions (iii)	106.06		20.09		20.30		14.05		14.05	
Total Liabilities (iv)	826.03									

NET CURRENT ASSETS (F) = (i-iv)	**203.15**	**252.99**	**360.74**	**176.46**	**193.04**
MISCELLANEOUS EXPENDITURE (G)	**4.03**	**2.01**	**2.34**	**2.80**	**4.37**
(to the extent not written off or adjusted)					
Significant Accounting Policies &					
Notes on Accounts (C+D+E+F+G)	**759.50**	**829.42**	**915.17**	**735.11**	**1185.16**

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Appendix-

Profit and Loss Account
Hulas Steel Industries Ltd.
Simara, Bara (Nepal)

For the Five Years Period (2059/60 – 2063/64)

(In Rs. Million)

Particulars / Years	2059/60	2060/61	2061/62	2062/63	2063/64
Sales	1,781.87	1,843.41	1,711.30	1,902.63	2,147.26
Resalable sales	23.02	22.38	29.45	29.35	45.31
Other income	0.50	1.45	1.81	4.31	2.95
Profit/ (loss) on Sale of Assets	(0.08)	0.05	1.36	0.02	0.21
Profit/ (loss) on exchange	-	(0.07)	(0.18)	(0.15)	2.26
Total Incomes	**1,805.31**	**1,867.22**	**1,743.74**	**1,936.15**	**2,197.98**
Less: Cost of goods sold	1,548.87	1,620.13	1,496.51	1,753.67	1,896.66
Gross Profit	**256.44**	**247.09**	**247.23**	**182.48**	**301.32**
Less: Indirect expenses	75.59	71.83	73.18	81.81	92.79
Branch Indirect expenses	29.62	32.50	26.21	23.51	23.51
Profit before Interest & Depreciation	**151.23**	**142.76**	**147.84**	**77.16**	**185.03**
Less, Interest	74.31	77.66	92.74	102.93	96.34
Profit/(Loss) before Depreciation	**76.92**	**65.10**	**55.10**	**(25.77)**	**88.69**
Less: Depreciation	39.66	37.94	34.41	30.24	29.05
Net Operating Profit/(Loss)	**37.26**	**27.16**	**20.69**	**(56.01)**	**59.64**
Less, Provision for housing (5%)	1.86	-	-	-	-
Balance	**35.40**	**27.16**	**20.69**	**(56.01)**	**59.64**
Less, Provision for Bonus (10%)	3.54	2.72	2.07	-	-
Profit before Taxation	**31.86**	**24.44**	**18.62**	**(56.01)**	**59.64**
Less, Provision for tax for the year	6.57	5.15	3.98	-	-
For Earlier years	-	7.50	-	-	-
Net Profit After Taxation	**25.29**	**11.79**	**14.64**	**(56.01)**	**59.64**