## CHAPTER - 1

## INTRODUCTION

### 1.1 Background;

Manufacturing sector plays vital role in the economic development of the country. It is carried by manufacturing industries .Manufacturing industries are the backbone of industrialization. Without maximization of industrialization, the country can not get actual success in overall development. Overall development and economic prosperity of a country largely depends on the quantity, quality and productivity of manufacturing industries like America, Japan and other developed countries got adequate economic prosperity because of the success of the manufacturing industries.

The outbreak of second war gave further importance to the development of manufacturing sector in Europe and America. Due to extreme shortage of essential consumer goods in the world market, promoters of these industries could reap windfall profits within a very short period to fulfill the extreme shortage essential consumer goods in the world market. The developing countries also moved towards the process of industrialization for the sake of import substitution. In the context of Nepal, early industrialization was the result of exogenous forces; industrial units were found in areas, which ensured an abundant supply of raw materials. With the return of business situation to normal after the war, most of these industries mills were liquidated. They could not sustain the post war recessionary effects and much of the foreign capital was withdrawn by them. These short-lived industries were thus wartime babies whose demise caused a big set back to the process of industrialization.

Industrial development in Nepal, however, started getting regular attention of the government under the age of Development Plans after the storing of democracy in 1951 A.D. Several industries were established in the public sector mostly with the financial and technical assistance of the then USSR, China and India. This process continued till the end of the Sixth Plan. As a result Nepal
witnessed the development of quite a large number of manufacturing industries in the public sector, particularly in the areas like; sugar, leather, paper, cigarettes, bricks and tiles, agricultural tools and textiles. Government impressed to private sector to contribute in industrial and economic development. Government declared the partner relationship between public and private sector.

Government took policy to privatize some industries which were related to common consumer needs and suffering from regular and cumulative loss. After mid of 1980s, government changed industrial and economic development policy, Policy was shifted to open market and liberalization economy. As a result, almost public industrial enterprises are privatized in the early 1990s. Many industries are established and operating now. Nepal encourages foreign investors to make investment in country. Many multinational companies entered in different sectors like as; manufacturing banking and other service sectors.

World has got largely change with the due of development of information and technology. Now, Nepal has entered in world Trade Organization (WTO).SAFTA has been made among seven south Asian countries to facilitate trade and industries .Cause of them, Nepal entered in globalization (business) network. Due of entry in WTO and acceptance of globalization, Nepal can get opportunities and has to strongly face threats. To get achievement from them, there are no alternative of too much development of industrial sector.

Working capital is the finance required for meeting current needs of a business concern or industries .lt is a fund required for meeting day to day operational requirements of an enterprises. Capital required in the business for supporting the day to day normal operations is known as working capital. It is calculated through the volume of current assets and current liabilities (Current assets minus current liabilities).The working capital manages current demand and supply of money. Organization can not work without adequate working capital.

As the study attempts focus light on the importance of proper management of working capital and how to manage it in Hulas Steel Industries Pvt. Ltd., a short introduction of the company is given as follows;

Hulas Steel Industries Pvt. Ltd. (HSIPL) was incorporated and established in 2038 B.S. (1981) under the Company Act 2021 B.S. (1964 A.D.). It is the joint venture company of the Golchha Organization Group of Nepal and COM craft Ltd., Singapore. There are two divisions of the company viz. (I) Steel Pipe Division and (ii) Sheet Division. The company setup steel pipe division to manufacture Galvanized and Blank Steel Pipes and Sections (squire and rectangular pipes, cold formed channels, angles and furniture tubes etc.). It started its commercial production since 2039 B.S. early known as Himali Pipeco Pvt. Ltd. The company has obtained Nepal Standard (NS) certification for its Galvanized pipe production. The HIPCO brands of pipes are well accepted as one of the best quality pipes available in the market. HSIPL established its Sheet Division in 1982 A.D. with technical assistance from M/s Yodoguwa Steel Works of Japan. It produces plain and corrugated galvanized sheet zinc coated and color coated. In the beginning it produced only the zinc coated plain and corrugated sheets. Latter the sheet division started manufacturing color coated sheets since 1989 A.D. All product lines of the division have commanded the major market share of Nepal and the brand name of "Hulas Gurans" (Gurans Chhap Karkat Pata).

In addition to the pipes, structural items and galvanized sheets the company manufactures Roofing Accessories such as Fiber Glass Sheet, Crimped Curved Sheet, S-Hook, L-Hook, Self-Tapping Screw, Stitching Screws and Rivets.

Initially HSIPL was established with its authorized capital of Rs.5.11 million. Now the authorized capital of the company has reached to Rs. 700 million dividing 7000000 equity shares of Rs. 100 each. The issued capital is Rs. 300 million and paid-up capital is Rs. 188.472 million. The paid-up capital is divided into 1884720 equity shares of Rs. 100 each. Out of the total equity shares of 1884720 the Golcha Organization and its sister concerns occupy shares and Chanky Dev. Co. Bermuda has owned 942360 ordinary shares.

The Board of Directors (BOD) is the apex body of HSIPL. The board consists of members who represent the shareholders. The General Manager (GM) is the executive head who provides major decisions, executes day-to-day management and smooth operation of program of the company with the support of Divisional Vice Presidents and Managers.

The company has total human resource strength of 570 . The structure of manpower strength is:-

## Administrative <br> 225

Technical ..... 95
Labors $\quad 620$

Total
940

### 1.2 Focus of the Study:

Every organization needs adequate working capital for smooth operation. Working capital plays vital role to manage current demand of money. Manufacturing organizations are highly affected by volume of working capital .Working capital shows liquidity of firm. High liquidity, organization can absorb opportunity but it decreases profitability, Cause of low liquidity, Organization can not fulfill immediate financial need. High and low liquidity each is bad for organization .Managing working capital is challenging job. This study shows working capital position and how to manage it properly in manufacturing industries in the light of Hulas steel Industries Limited.

### 1.3 Statement of the Problem:

Working capital is a circulating capital which is compared as life blood of the living bodies for working organization. Working capital is based on the investment in each type of current assets; each of these current assets should be managed efficiently and effectively. It provides requirement of cash. It does
not affect on profitability of the organization only. It seriously affects the survival of organization. Most organization do not care the sources of working capital. Managers are not conscious about its efficient utilization.

This study is a case study of Hulas Steel Industries Ltd. (HSIL).This study aims to present, analyze the working capital position of Hulas Steel Industries Ltd. In the light of case study of HSIL, It has to determine role of working capital in industrial enterprises.

This study show out the problem facing by HSIL by analyzing the followings:

- Is HSIL's working capital position appropriate?
- Is HSIL's investment in current assets appropriate to its total assets?
- Is there proper investment in each type of working capital?
- Is there the proper liquidity position?


### 1.4 Objectives of the Study:

Working capital plays vital role to operate organization. The success of organization depends on management of it. The excess working capital as well as shortage is both harmful to business. The aspect of working capital concerned with short term financing decision has never received much attention in the literature of finance. Because of the earlier emphasis of financial management was more on long term financial decision which led to the growth and development of many useful theories concerning these decisions as compared to short term financial decisions.

The basis purpose of this study is to evaluate the working capital position of Hulas steel Industries Ltd. The following are specific purpose which study wants to get:

- To present the working capital position \& liquidity composition of Hulas steel Industries Ltd.
- To analyze working capital position, liquidity in different year.
- To study the relationship between sales and debtor, purchase and creditor and other variable related to working capital.
- To analyze the importance of working capital in manufacturing industries.
- To suggest the appropriate management of working capital in organization basically in manufacturing industries.


### 1.5 Limitation of the Study:

This study is concerned to working capital position of Hulas Steel Industries Ltd. It's Balance Sheet, Income Statement, Fund flow statement of five years and related statement are used for this study. This study takes only HSIL Limitation exits every- where and this study is also not an exception of it. The following are main limitations:

- This study will focuses Balance sheet, Income statement and funds flow statement of Five years.
- This study will be related to the time period of five years from fiscal year 2060/061 to 2064/2065.
- This study collects information from final report and other financial statement published by HSIL and Financial staffs.
- This study collects information from other sources as secondary resources if they are important.


### 1.6 Review of Literature:

Working capital is a controlling nerve centre of business because without proper mobilization of working capital, business can't run smoothly. As the management of current assets and current liabilities of the business organization is necessary for day to day operations, it plays the key role in the success and failure of the organization not only in the short run in the long run also. In the concern of the working capital there have been made number of studies from different management experts and students of MBA in various enterprises.

The purpose regarding standing this chapter here in this study is to review the available literature on working capital position and management in the context of the Nepalese enterprises including the available information of Hulas steel industries Ltd.

### 1.7 Research Methodology:

Research is the important element of this study. Research methodology is a scientific and systematic procedure of searching which can solve the stated problem and increase the sum of knowledge. A systematic research study needs to follow a pre-mentioned purpose. Research methodology is a sequential procedure and methods to be adopted in a systematic study. The basic purpose of this study is to evaluate the working capital position of Hulas steel Industries Limited. This chapter focuses the following:

### 1.7.1 Research Design:

Research Design is highlighted for ascertaining the basic objectives of the study. Research design includes definite procedures and techniques which guide to sufficient way for analyzing and evaluating the study. As already mentioned the basic objective of this study is to evaluate the working capital position of Hulas steel Industries Limited .Under which this study will attempts to make comparison and to establish relationship between two or more variables. So the research design of this study will be based on analytical and descriptive study.

For the study of working capital position of HSIL, financial tools as well as statistical tools will be employed to provide analytical insights and to achieve prescribed results.

### 1.7.2 Nature and Sources of Data

The data to be used in this study are basically secondary in nature but the ideas and information will also be collected through personal interview and discussion with the financial and accounting personnel with reference to the research designed.

The secondary data will have been collected from financial statements, reports and official records of HSIL. Reports of auditors and other related records and documents will have been considered.

### 1.7.3 Procedures Employed

To achieve prescribed purpose of the study, the secondary data will be used. The main secondary data are audited balance sheet, Income statement and funds flow statement. All those secondary data and information will properly be arranged and synthesized, tabulated and calculated in accordance with the requirement of the study.

### 1.7.4 Financial and Statistical Tools Used

To obtain the relationship in different variables, the ration analysis and Karl Pearson's Correlation coefficient ( $r$ ) will be used.

These establish the quantitative or numerical relationship between two variables of the financial statements. Various ratios will be employed and grouped for the analysis of composition of working capital, turnover position, liquidity and profitability position.

### 1.8 Organization of the Study

The study has been divided into five chapters. They are related some dimensions of Nepalese manufacturing industries. The titles of each of these chapters are as follows:

Chapter I Introduction
Chapter II Review of literature
Chapter III Research Methodology
Chapter IV Data Presentation
Chapter V Summary, Conclusion and Recommendation

This first chapter 'Introduction' includes background information regarding working capital management. This also deals the objectives of the study, statement of problem, limitation of the study and chapter organization.

Review of literature i.e. Chapter II includes the published and unpublished literature concerned with the study.

The third chapter 'Research Methodology' deals with the methodology used in this study. It includes introduction, research design, nature and sources of data, procedure and statistical tools etc.

Chapter IV 'Presentation and analyzing of data', presents the collected data information and results of the study. It supports to fulfill the objectives of the study by presenting the data and analyzing them with the help of various statistical tools.

Finally, the last chapter i.e., chapter V, presents the summary, conclusion of the study and suggests recommendation to Hulas Steel Industries Ltd. (HSIPL)

Appendices have been included as accordance to the relationship in between variable of working capital and a bibliography has also been given according to the literature reviewed for the study.

## CHAPTER - 2

## REVIEW OF LITERATURE

### 2.1 Theoretical Review:

Working capital works as a central nerve of a living business organization. As the management of current assets and current liabilities of the business organization is necessary for day-to-day operation, it is detrimental to the success and failure of organization. Regarding the working capital management a number of studies have been made from different management experts, authors and students of MBA and MBS. The purpose of this chapter is to review the available literature on working capital position and management in the context of the Nepalese manufacturing enterprises including the available information of HSIPL. A short description of literature referred in the study is given below that support to make the study purposeful.

### 2.2 Review of Related Studies:

"Weston and Brigham"
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 from the sale of the finished products.'

## "Van Horne"

James C. Van Horne emphasizing liquid assets as important component of working capital says:
'The term liquid asset is used to describe money and assets 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 with the conversion ratio or price realized for the asset.'

In this way he focuses on 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 receivables and inventories, short-term financing, secured loans and term financing.

## "I.M. Pandey"

I.M. Pandey has described some conceptual components of working capital management as:
'There are specially two concepts of working capital; Gross Concept and Net Concept. The gross working capital is simply called as working capital, refers to the firm's investment in current assets. Current assets are those assets which can be converted into cash within an accounting year and include cash, short-term securities, debtors, bills receivables, stock (inventory) and prepaid expenses. 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, bank overdraft and outstanding expenses or accrued income. Net working capital can be negative or positive. A positive working capital will rise when current assets exceed current liabilities. A negative working capital occurs when current liabilities are in excess of current assets.'

## "N.K. Agrawal"

Working capital management is the effective lifeblood of any business. Hence the management of working capital plays a vital role for existing of any public enterprises successfully while studies it. It is the center on the routine of day to day administration of current asset 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 so as 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 and allocated to its various segments, effectively controlled and regularly reviewed.

"Dr. R.S. Pradhan"

According to the book published on 'Management of Working Capital in Nepalese Public Enterprises' by Dr. Radhe Shyam Pradhan in the study of management of working capital of nine Nepalese Manufacturing Enterprises. He stated that most of the selected enterprises have been achieving trade off between risk and return thereby following an aggressive not a conservative approach. He further stated that the low level of current and quick ratio need not indicate poor liquidity position. They may still be considered good if the enterprises can generate cash flows sufficient to pay their current debts. Therefore, the liquidity measures that consider cash flows have been employed in the study for all these enterprises for which current liabilities are greater than current assets and quick assets.' 8

## "Dr. R.S. Pradhan and Dr. K.D. Koirala"

They 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 of time 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 of production and sales. The inventory in manufacturing corporations and cash and receivables in non-manufacturing enterprises were more problematic to manage.

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 receivables, the focus of the attention should be derived to control of investment in cash and inventory. But manufacturing corporations should pay attention to control the investment in inventory.

### 2.3 Review of Related Dissertations:

A number of studies have been made concerning working capital management of different manufacturing enterprises of Nepal. Some of the dissertations made by some students have been reviewed in this section. However, the dissertations are related to public enterprises, they may be, I believe, relevant in the study.

## "Mr. Sailesh Man Shrestha"

On his study on 'Working Capital Management of Dairy Development Corporation (DDC) Nepal', which was a case study of the financial statements of five years period from 1986 to 1989, he found that there was high level of investment in each type of current assets of which inventory hold the highest position followed by cash and receivables respectively. DDC had very low level of working capital turnover and high liquidity position. He also found out that the total assets did not depend on current assets and current assets in cash and receivables. The working capital, receivables and inventory were not affected by sales volume, but there was proper relation between current assets and share of inventory on it. He recommended that DDC should determine certain rate of return on its investment, and sales target should be set to overcome the problem of perpetual loss. It should make regular checks to identify both excess and short current assets. The huge amount of inventory kept by DDC should be reduced. Marketing policy should be integrated with credit policy. The DDC should give attention to manpower planning.

## "Mr. Raghu Krishna Shrestha"

On his study "An Evaluation of Working Capital Management of Bottlers Nepal Ltd.(BNL)", has focused on appropriateness of investment in current assets to its total assets, liquidity position and utilization of current assets. He found that the proportion of current assets to total assets was increasing year
after year and the proportion of inventories was the highest followed by receivables and cash respectively. He also found that the liquidity position of BNL was very high resulting low profitability and concluded that efficiency of working capital management in BNL was not so satisfactory. He suggested that paying proper attention to increase investment in current assets with better utilization rather than increasing further investment. He also suggested that adopting suitable credit policy and providing discount to accelerate its debt collection period. He recommended setting minimum target rate of return to minimize the gap of achievement.

## "Mr. Prem Kumar Shrestha"

On " A study of working capital management in Bhrikuti Paper Mills Limited ", Mr. Prem Kumar Shrestha used ratio analysis as a tool for analyzing the working capital and found that the cash and bank balance hold the largest portion followed by inventory and receivables respectively. He also found that the current assets level with respect to total assets had increasing trend. The credit and collection policy was not sound during the study period. So the receivables were increasing. The decreasing and fluctuating turnover indicated the inappropriate utilization of current assets. He concluded that though BPML was earning profit, its profitability position was not encouraging one because its return on total assets was not high enough. From these findings he suggested that the Mill should have proper planning to estimate cash receipts and payments. The mill should adopt a definite credit and collection policies. The management of BPML should have positive attitude towards risk. It should prepare a effective sale plan, adopt an effective inventory management policy. The management should give due attention to the minimization of administrative and operating expenses in the Mill.

Mr. Shrestha, however, has missed to use important tools e.g. correlation
coefficient in order to test the significance and relationship in between the components of working capital. Using merely ratio analysis a tool may be insufficient for the study.

## "Mr. Basudev Giri"

Another study was made by Mr. Basudev Giri on " Working Capital Management in Birgunj Sugar Factory Ltd.(BSFL)" He also used ratio analysis for the purpose of analyzing working capital management. On his study he found that as a manufacturing P.E, BSFL had followed an approach, which was neither aggressive nor conservative. The amount of current assets with respect to total assets was in fluctuating trend during the period of study from 2041/042 to 2050/051. The inventories hold the major part of current assets and indicated the inefficient inventory management. The decreasing and fluctuating trend of various turnover indicated that current assets were not properly utilized in the factory during the period of study. The net profit in regards to total assets was not quite satisfactory. The large volume of idle cash balance contributed for the lower return on working capital. He recommended for the use of proper inventory model. The idle cash balance should be invested in short-term securities which maximize the profit.

## "Mr. Pradeep Kumar Pathak"

Another study related to working capital management has been made by Mr. Pradeep Kumar Pathak on "An Evaluation of Working Capital Management of Nepal Lube Oil Limited (NLO)." He considers the five years data from 2043/044 to 2047/048. He used ratio analysis, correlation coefficient, and test of hypothesis as major tools for the analysis. He found that inventory held the largest portion followed by receivables and cash respectively. Holding excessively high inventory indicated inefficient inventory management. Unfavorable current ratio; working capital was dependent on sales. From these findings he suggested that NLO should identify certain rate of return on its investment to overcome the problem of perpetual loss. Inventory management policy should be adopted to minimize the huge amount of inventory. Certain target should be set for credit policy and avoid unnecessary increase in the volume of receivables. The company should make regular inspection to find out both excess and deficit current assets. It should give attention to manpower planning too.

## "Mr. Keshav Prasad Gadtaula"

A similar study has been made by Mr. Keshav Prasad Gadtaula on "Working Capital Management in Nepal Tea Development Corporation (NTDC)." Based on ten years financial data from 1982/83 to 1991/92. He has used various statistical tools like standard deviation, Coefficient of variation, regression analysis, test of hypothesis, ratio analysis, trend analysis etc. From the analysis he has found that working capital situation of the corporation was neither poor nor sound.

The percentage of current assets was greater in total assets. The level of current assets was dependent on risk, a current asset to sales was not constant and there was slack position of sales with accumulation of inventory. After finding these situations of NTDC, he suggested for the proper inventory policy, promotion of sales, increment in tea plantation area, scientific marketing policy and recommended that there should be sound labor and personnel policy.

## "Mr. J iwan Nath Sapkota"

On his study; A study on working capit6al management in Himal Cement Company Limited (HCCL)' Mr. Sapkota concluded that the inventory, cash and receivables should be managed in optimum level. He took the data of five years from 2044/045 to 2048/049 for the study and only ratio analysis has been used. He suggested that the company should determine certain rate of return on its investment and sales target should be set to overcome the problem of loss, and should maintain proper liquidity position. He has also formed that the absences of proper guidelines for funds, inventory control, control selling process, investment policy current assets and management responsibilities and lack of proper rules and regulations of the government policy.

The above review of literatures from various books and study dissertation related to working capital management shows that one of the major problems in Nepalese manufacturing industries behind unhealthy and unsound situation is the improper management of working capital. Since, success and failure of any enterprises is basically dependent upon the efficient and effective management of working capital, an attempt has been made to analyze the efficiency and effectiveness of working capital management of Hulas Steel Industries (HSIPL).

No any other study has been made for the analysis of working capital management in HSIPL. So far, Hence the study attempts to analyze the working capital management in HSIPL by taking five years data for data and other available information for observation with the help of research methodology.

## CHAPTER - 3

## RESEARCH METHODOLOGY

### 3.1 Introduction:

Research is the important element of this study. Research methodology is a scientific and systematic procedure of searching which can solve the stated problem and increase the sum of knowledge. 17 This research study attempts to analyze relationship between the variable of working capital. So a research methodology should be tuned with the pre-mentioned objective of the study. Research methodology is a sequential procedure and methods to be adopted in a systematic study. 18

The basic purpose of this study is to evaluate the working capital position of HSIPL. So this chapter highlights the entire research methodology used, and adopted in this study. It focuses research design, nature and sources of data, procedures employed to collect and arrangement the data and various financial and statistical tools used.

### 3.2 Research Design:

Research design highlights the way of ascertaining the basic objectives of the study. It includes definite procedures and techniques which guide to the way for analyzing and evaluating the study. This study attempts to make comparison and to establish relationship between two or more variables of working capital of HSIPL that guide to attain the objective already stated. This study is based on analytic and descriptive research design. Five years data of HSIPL are collected and analyzed by using various statistical tools to provide analytical insights and to achieve prescribed results.

### 3.3 Nature and Sources of Data:

The data used in this study are basically secondary in nature. However the ideas and information are also collected through personal interview and discussion with the financial and accounting personnel as required by the study.

The secondary data have been collected from financial statements, auditor's report, official records of HSIPL, booklets and brochures published by the company, unpublished dissertations of the students, other news papers, articles and documents.

To achieve the stated objective of the study the secondary data are used which include audited balance sheet, profit and loss account, income statement and fund flow statement of HSIPL. All these data and information are properly arranged, synthesized, tabulated and calculated in accordance with the requirement of the study.

### 3.4 Data Analysis Tools:

## I. Composition of working capital:

It is studied by analyzing following ratios:

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

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

$$
\text { CATA }=\frac{\text { Current Assets }}{\text { Total Assets }} x 100
$$

As the ratio increases) the risk and profitability of the company would decrease. The low ratio indicates the small amount of working capital.

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

This ratio shows the relationship between the current assets and fixed assets and can be calculated as:

CAFA $=\frac{\text { Current Assets }}{\text { Fixed Assets }} x 100$

If the ratio is large, it indicates the sound working capital

## 3. Ratio of Cash and Bank Balance to Current Assets (CBCA)

It is calculated as:

$$
C B C A=\frac{\text { Cash \& BankBalance }}{\text { Current Assets }} x 100
$$

The small ratio indicates the sound management and large ratio vice-versa. The working capital is directly affected by it.

## 4. Cash \& Bank Balance to Total Assets (CBTA)

This ratio is calculated as under and indicates percentage total assets are invested in cash and Bank balance.

$$
\text { CBTA }=\frac{\text { Cash \& BankBalance }}{\text { Total Assets }} x 100
$$

As the ratio increases the risk and profitability would decrease and if the ratio is greater the working capital would be greater.

## 5. Inventories to Total Assets (ITA)

This ratio can be calculated as:

$$
I T A=\frac{\text { Inventory }}{\text { Total Assets }} x 100
$$

This ratio indicates the percentage of total assets invested in the form of inventories. Inventory is a part of working capital so, if the percentage increased the working capital automatically increased. The increase in the ratio also indicates liberal inventory policy or blocking of materials in stock.
6. Ratio of Inventory to Current Assets (ICA)

This ratio implies the percentage of current assets in the form of inventory and derived as:

$$
I C A=\frac{\text { Inventory }}{\text { Current Assets }} \times 100
$$

The increase in the ratio is an indication of liberal inventory policy followed by company. If the ratio increases or percentage increases means greater part is occupied by inventory. On the other hand, current
assets is termed as working capital, if the ratio is small the firm will have greater volume of working capital.

## 7. Ratio of Receivables to Total Assets (RTA)

This ratio can be calculated as:

$$
\text { RTA }=\frac{\operatorname{Re} \text { ceivable }}{\text { Total Assets }} \times 100
$$

This ratio indicates the percentage of total assets invested in the form of receivables. The increase in the ratio indicates the liberal credit policy followed by the company. The working capital is affected by the ratio because receivables are also a part of working capital, if the ratio increases the working capital also increases.
8. Ratio of Receivables to Current Assets (RCA)

This ratio indicates the share of receivables on current assets and is derived as:

$$
\text { RCA }=\frac{\text { Re ceivable }}{\text { Current Assets }} x 100
$$

The low percentage indicates the greater working capital and vice-versa. If the percentage is greater, the factory is unable to collect receivables promptly.

## II. Turnover Position

By analyzing the various turnover ratios the factory's turnover position can be known. The following ratio has been calculated.

## 1. Current Assets Turnover (CAT)

This ratio indicates the number of times the current assets are turned over during the year. It is computed by dividing sales by current assets. I.e. gross working capital.

$$
\text { CAT }=\frac{\text { Sales }}{\text { Current Assets }}
$$

As the ratio increases, it is utilization of current assets. If the ratio is low, a greater volume of working capital is there. Low ratio indicates greater working capital and high ratio indicates lower working capital.

## 2. New Working Capital Turnover (NWCT)

It is computed by dividing sales by net working capital, i.e., difference of current assets and current liabilities.

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

More ratio shows the utilization of net working capital and less ratio viceversa.

## 3. Cash Turnover (CT)

It is computed by dividing sales by cash balance and measures the speed with which cash moves through an enterprise's operations.

$$
C T=\frac{\text { Sales }}{\text { Cash Balance }}
$$

This ratio shows the number of times the average cash balance turned over during the year.

## 4. Receivables Turnover (RT)

This ratio is computed by dividing sales by the total amount of receivables.

It indicates the number of times the receivables are turned over during the year. It gives the general measure of the productivity of the receivable investment. The higher ratio indicates the higher amount of working capital and lower ratio vice-versa.

For the complimentary of this ratio, there is a ratio called average collection period (ACP) which indicates the number of days it takes on an average to collect account receivables. It is computed by dividing days in a year by receivables turnover.

$$
A C P=\frac{\text { Days In a Year }(365)}{\operatorname{Re} \text { ceivables Turnover }}
$$

## 5. Inventory Turnover (IT)

It is computed by dividing sales by inventory.

$$
I T=\frac{\text { Sales }}{\text { Inventory }}
$$

This ratio shows the number of times inventory is replaced during the year, higher inventory turnover, indicates the good inventory
management and lower turnover suggests the management should manage its inventory properly.

## III. Liquidity Position

It is the most important part for the company. It shows the ability or the company to pay its current obligations. The liquidity positions of NBCL are computed by analyzing current ratio and quick ratio.

## 1. Current Ratio (CR)

This ratio is computed by dividing current assets by current liabilities.

$$
C R=\frac{\text { Current Assets }}{\text { Current Liabilities }}
$$

The higher ratio indicates the position of the company is in liquid and able to pay its bills. Generally the current ratio of $2: 1$ is considered to be satisfactory. More ratios indicated the greater amount working capital and less ratio vice-versa.

## 2. Quick Ratio or Acid-Test Ratio (QR or ATR)

It is computed by dividing the quick assets by current.

$$
Q R \text { or } A T R=\frac{\text { Quick Assets }}{\text { Current Liabilities }}
$$

As the quick assets don't include the amount invested in the inventory it is reliable to measure the company liquidity. Generally the quick ratio of 1: 1 of the company is considered to be sound.

## IV. Profitability Position

The main objective of the company is to earn maximum profit. The position of the profitability of the company is analyzed with the help of following ratios:

## 1. Gross Profit Margin Ratio (GPM)

It is computed by dividing Gross profit by sales. Gross profit is obtained by deducting cost of goods sold from net sales.

$$
G P M=\frac{\text { Gross Pr } o f i t}{\text { Sales }} \times 100
$$

The gross profit margin ratio reflects the efficiency with which company produces each unit of product. The higher percentage indicates the better efficiency of the company.

## 2. Net Profit Margin Ratio (NPM)

Net profit is obtained after deducting operating expenses and income tax from gross profit. It is computed by dividing net profit by sales.

$$
N P M=\frac{\text { Net Pr ofit after tax }}{\text { Sales }} x 100
$$

This ratio is the overall measurement of the company's ability to earn net profit.

## 3. Operating Ratio (OR)

The operating ratio is an important ratio that explains the changes in the net profit margin ratio. This ratio is computed by dividing all operating expenses by sales.

$$
O R=\frac{\text { Cost of Goods Sold }+ \text { Operating Expenses }}{\text { Sales }} \times 100
$$

Higher ratio indicates the lower efficiency of the company and vice-versa. Higher operating ratio means small amount of operating income to meet interest, dividends etc.

## 4. Return on Total Assets (ROA)

This ratio is calculated by dividing net profit after tax by total assets.

$$
R O A=\frac{\text { Net Pr ofit after tax }}{\text { Total Assets }} x 100
$$

The ROA is a useful measure of the profitability of all financial resources invested in the company's assets.

## 5. Return on Net Worth (RNW)

It is computed by dividing net profit after tax by net worth.

$$
R N W=\frac{\text { Net Pr ofit after tax }}{\text { NetWorth }} x 100
$$

It indicates the return to the shareholders how well the firm has used the resources of the owners. It judges whether the firm has earned of satisfactory return for its shareholders or not. Higher ratio gives higher the return to the shareholders and vice-versa.

## 6. Return on Working Capital (RWC)

It is computerized dividing net profit after tax by current assets working capital. It measures the profit with respect to current assets.

$$
R W C=\frac{\text { Net } \operatorname{Pr} \text { ofit after tax }}{\text { Current Assets }} x 100
$$

Higher the ratio higher the utilization of current assets to earn profit and vice-versa

## V. Calculation of Correlation Coefficient (r)

In order to test the significance of the relationship between two variables during the period of the study, Karl Pearson's correlation coefficient (r) is calculated as:

$$
r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}}
$$

Where,
$x=$ the first variable
$y=$ the next variable
$\mathrm{N}=$ No. of Years (Observations)
$\mathrm{dx}=$ deviation from assumed mean of first variable
$d y=$ deviation from assumed mean of next variable

## Probable Error (PE)

$P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$
If ' $r$ ' is less than its PE, it is not at all significant. If $r$ is more than PE, there is correlation. If $r$ is more than 6 times it's PE and greater than $\pm 0.5$, then it is considered significant. The all above ratios and significance test will be done in presentation and analysis of data.

## CHAPTER - 4

## PRESENTATION AND ANALYSIS OF DATA

### 4.1 Data Presentation and Analysis:

This chapter aims to change the unprocessed data to understandable presentation for the achievement of pre-mentioned objectives. In this chapter an attempt has been made to analyze the working capital management in HSIL through the presentation of current assets composition, investment in current assets, relationship between current assets and fixed assets, turnover position, liquidity position and profitability position. Various financial and statistical tools are tabulated and presented for the purpose of data analysis.

### 4.2 Major Finding of the Study: <br> The following financial tools are used as per bellow:

## Position of Current Assets:

It is necessary to be acquainted with the position of current assets because current assets are the basic components of a living business organization which one required to operate day to day business activities. According to gross concept, the total of current assets is known as working capital. Hence, they are the part and parcel of the study. The requirement of working capital varies from organization to organization according to their size, and nature of business activities.

Cash is one of the important components of working capital which is required to purchase raw materials, pay and recurring expenses. Cash may also be held to meet the future expenses. Similarly inventories of raw materials are kept with a view to ensure smooth production and cope with the risk of shortages of raw materials. To meet this obligation also cash is needed.

A business organization, either manufacturing or trading, aims to maximize the value of shareholder's investment. To achieve this aim, the business organization should earn sufficient return from its operations. Earning sufficient and steady amount of profit requires successful sales. So the firm has to invest enough funds in current assets for the successful sales. Since the sales may not convert into instant cash, the firm requires managing extra amount of working capital for the uninterrupted business operations.

It is necessary to make proper analysis of current assets management because efficient management of current assets is an integral part of overall financial management and has greater impact on maximization of owner's capital. Proper analysis of current assets of manufacturing enterprise reflects the nature of performance and operation of its management. So, overall current assets of HSIL are firstly analyzed.

TABLE - 4.1

## HULAS STEEL INDUSTRIES LIMITED CURRENT ASSETS

| Particulars |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 0 6 0 / 6 1}$ | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ |  |
| Cash and Bank Balances | 6.61 | 14.31 | 7.03 | 30.87 | 27.48 |
| Sundry Debtors | 280.80 | 266.76 | 260.41 | 305.37 | 463.56 |
| Inventories | 662.78 | 1022.80 | 742.57 | 925.89 | 1324.02 |
| Other Current Assets | 13.41 | 12.20 | 12.07 | 11.40 | 11.36 |
| Loans and Advances | 64.36 | 92.97 | 92.62 | 120.01 | 192.90 |
| Total | 1027.96 | 1409.04 | 1114.70 | 1393.54 | 2019.32 |

Note: Other Current Assets include Provident Fund, Gratuity Fund, Fixed Deposits, Investment in Government Securities, Deposits in Medical Benefit Account. Similarly loans and advances include L/C Deposits, Prepaid Expenses, Advances to the staff, Interest Receivables, Advance Taxes and Special Fees, Duty Drawback Claims, Advances to the Transporters and other Deposits.

The above Table- 1 represents the overall current assets position and presents the investment pattern in current assets of HSIL. Investment in different current assets seems fluctuating in the five years period. Investment in
inventories has been found the highest share in the overall current assets. Sundry debtors, loans and advances, other current assets, and cash \& bank balances occupy successively lower portion of investment in current assets.

The above Table - 1 presents the gross working capital of HSIL. The company has presented the net working capital in its financial statement. As per the Balance Sheet of HSIL, the net working capital has been presented by subtracting the current liabilities from total current assets. The following Table 2 , illustrates the net current assets of the company.

TABLE - 4.2
HULAS STEEL INDUSTRIES LIMITED NET CURRENT ASSETS

Rs. in Million)

| Particulars | $\mathbf{2 0 6 0 / 6 1}$ | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| (A) Total Current Assets | 1027.96 | 1409.04 | 1114.70 | 1393.54 | 2019.32 |
| (B) Total Current Liabilities | 774.97 | 1048.30 | 938.24 | 1240.25 | 1606.46 |
| Net Current Assets (A-B) | 252.99 | 360.74 | 176.46 | 153.29 | 412.86 |

Note ; Current Liabilities include Short-term loans, Sundry Creditors, L/C Payable, Dealership Deposits, Expenses Payable, TDS Payable, Dividend Payables and Other Provisions.

The above Table - 2 presents the net working capital position and net investment pattern in current assets of HSIL. Investment in net current assets seems fluctuating in different years.

### 4.3 Composition of Working Capital:

The composition of working capital is analyzed by the help of ratios between various components of working capital.

### 4.3.1 Percentage of Current Assets to Total Assets:

Requirement of working capital is determined by the nature and size of business. Current assets are required to meet the working capital needs of day to day business operations. Hence the total of current assets is also called the working capital. A comparison between total assets and current assets is given in the following Table -3 ;

TABLE - 4.3
HULAS STEEL INDUSTRIES LTD.
CURRENT ASSETS TO TOTAL ASSETS
(Rs. in Million)

| Year | Current Assets | Total Assets | Ratio \% | \% changes |
| :---: | ---: | ---: | :---: | :---: |
| $2060 / 61$ | 1027.96 | 1604.40 | 64.07 |  |
| $2061 / 62$ | 1409.04 | 1963.48 | 71.76 | 7.69 |
| $2062 / 63$ | 1114.70 | 1673.35 | 66.61 | $(5.15)$ |
| $2063 / 64$ | 1393.54 | 2399.64 | 58.07 | $(8.54)$ |
| $2064 / 65$ | 2019.32 | 2988.04 | 67.58 | 9.51 |
| Total | 6964.56 | 10628.90 | - | - |
| Average | 1392.91 | 2125.78 | 65.62 | 3.51 |

The ratio shows the proportion of investment in current assets to investment in total assets for the selected five years study period. The ratio of investment in current assets to total assets is increasing year after year, however the ratio of investment tends to be fluctuating. In the fiscal year 2060/61 the volume of current assets is Rs. 1027.96 million and is $64.07 \%$ of its total assets. It has increased by $7.69 \%$ in the fiscal year 2061/62 and decreased by $5.15 \%$ in the fiscal year 2062/63. The percentage of current assets is again decreased by $8.54 \%$ in the FY 2063/64. The percentage of current assets is highest in 2061/62 occupying $71.76 \%$ of its total assets. This increase is mainly owing to the holding of the highest amount of inventories and sundry debtors. The average contribution of current assets to total assets is $65.62 \%$ and its average increasing trend is about $3.51 \%$.

It is important to taste the significance of the relationship between current assets and total assets during the study period. In order to test the significance, Karl Pearson's correlation coefficient ( $r$ ) is calculated in appendix - 1 and the result is as under.

$$
\begin{aligned}
r & =0.9563 \\
P E & =0.0257
\end{aligned}
$$

The above figures show that correlation coefficient in between current assets and total assets during the study period is positive and ' $r$ 'is 0.5 more than six time of PE. Hence the relationship is considered to be 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 table below shows it:

# TABLE - 4.4 <br> HULAS STEEL INDUSTRIES LTD. <br> CURRENT ASSETS TO NET FIXED ASSETS 

(Rs. in Million)

| Year | Current <br> Assets | Net Fixed <br> Assets | Ratio \% | \% changes |
| :---: | ---: | ---: | :---: | :---: |
| $2060 / 61$ | 1027.96 | 574.42 | 178.95 | - |
| $2061 / 62$ | 1409.04 | 552.08 | 255.22 | 76.27 |
| $2062 / 63$ | 1114.70 | 555.85 | 200.54 | $(54.68)$ |
| $2063 / 64$ | 1393.54 | 1001.73 | 139.11 | $(61.43)$ |
| $2064 / 65$ | 2019.32 | 964.08 | 209.45 | 70.34 |
| Total | 6964.56 | 3648.16 | - | - |
| Average | 1392.91 | 729.63 | 190.91 | 30.05 |

Note; Net fixed assets include the net value of fixed assets after deducting depreciation from gross value, Capital work-in-progress and long-term investments in the form of equity shares in subsidiary companies and in government securities.

The ratio indicates the fluctuating proportion of current assets to fixed assets during the study period. In the F/Y 2060/61 the ratio is $178.95 \%$ whereas it is increased by $76.27 \%$ in the $F / Y$ 2061/62. The ratio is decreased by 54.68\% in the F/Y 2062/63, however it is still less than the F/Y 2063/64. It is decreased, again, by $61.43 \%$ in the F/Y 2063/64 and nearly increased by $70.34 \%$ in the F/Y 2064/65. In the F/Y 2061/62 the proportion of current assets is the highest which is $255.22 \%$. The average increasing ratio during the period is $190.91 \%$. The overall ratio shows that the investment in working capital in comparison with its fixed assets tends to be instable and fluctuating. In order to evaluate the relationship between current assets and fixed assets in HSIL during five years, Karl Pearson's correlation coefficient (r) is calculated in appendix - 2 and the result is as follows:

$$
\begin{aligned}
& r=0.69 \\
& P E=0.16
\end{aligned}
$$

The above figure shows that correlation coefficient in between current assets and fixed assets are 0.69 i.e. more than 0.5 and $r$ is not more than 6 times of PE; the relationship is not considered as significant. However the relationship is found positive.

### 4.3.3 Percentage of Cash and Bank Balance to current Assets;

Business organizations hold cash with a view to carry out day to day transactions smoothly. Other reasons may be for precautionary motive and speculative motive. So cash is the most liquid form of assets and is the important component of working capital. The table-5 below shows the proportion of cash and bank balance to current assets.

TABLE - 4.5
HULAS STEEL INDUSTRIES LTD. CASH AND BANK BALANCE TO CURRENT ASSETS

| Year | Cash and <br> Bank | Current <br> Assets | Ratio \% | \% changes |
| :---: | ---: | ---: | :---: | :---: |
| $2060 / 61$ | 6.61 | 1027.96 | 0.64 | - |
| $2061 / 62$ | 14.31 | 1409.04 | 1.01 | 0.37 |
| $2062 / 63$ | 7.03 | 1114.70 | 0.63 | $(0.38)$ |
| $2063 / 64$ | 30.87 | 1393.54 | 2.21 | 1.58 |
| $2064 / 65$ | 27.48 | 2019.32 | 1.36 | $(0.85)$ |
| Total | 86.30 | 6964.56 | - | - |
| Average | 17.26 | 1392.91 | 1.24 | 0.72 |

The above table shows the proportion of cash and bank balance to the investment in current assets. This ratio indicates that the proportion of cash to current assets is the highest in the F/Y 2063/64. The cash held by the company in the F/Y 2063/64 is Rs.30.87 million and it is $2.21 \%$ of its current assets. Similarly the ratio is lowest in the F/Y 2060/61 and it is Rs. 6.61 million, which is only $0.64 \%$ of its corresponding current assets. The proportion of cash held by the company is increasing trend from F/Y 2060/61 and then it is abruptly
increased by $0.37 \%$ in the year 2061/62. The average ratio of cash to current assets is about more than $1 \%$ i.e. $1.24 \%$.

As the ratio of cash and bank balance is around the average holding it indicates moderate efficiency of cash management. It is the indicator of sound management of working capital.

Karl Pearson's correlation coefficient ( $r$ ) is calculated in order to test the significance of relationship in between cash and bank balance and current assets in appendix-3 and the result is as under.

$$
\begin{gathered}
r=0.74 \\
P E=0.14
\end{gathered}
$$

The figures show that there is positive correlation in between cash and bank balance and current assets. Since ( $r$ ) is less than six times of PE, the relation is not considering as 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 out of total assets. It helps to identify the risk. The more ratios decrease the risk and provide more working capital but holding of excess cash would decrease the profitability, because idle cash earns nothing. The table-6 below indicates the percentage of cash and bank balance to total assets.

> TABLE - 4.6
> HULAS STEEL INDUSTRIES LTD. CASH AND BANK BALANCE TO TOTAL ASSETS
(Rs. in Million)

| Year | Cash and <br> Bank | Total Assets | Ratio \% | \% changes |
| :---: | ---: | ---: | :---: | :---: |
| $2060 / 61$ | 6.61 | 1604.40 | 0.41 | - |
| $2061 / 62$ | 14.31 | 1963.48 | 0.73 | 0.32 |
| $2062 / 63$ | 7.03 | 1673.35 | 0.42 | $(0.31)$ |
| $2063 / 64$ | 30.87 | 2399.64 | 1.29 | 0.87 |
| $2064 / 65$ | 27.48 | 2988.04 | 0.92 | $(0.37)$ |
| Total | 86.30 | 10628.90 | - | - |
| Average | 17.26 | 2125.78 | 0.81 | 0.51 |

The above table shows the investment in cash out of its total assets in HSIL during the study period. The ratio is found in decreasing trend; however in the F/Y 2061/62 it is suddenly increased. The ratio is $0.42 \%$ in the F/Y 2062/63 and it is decreased by $0.31 \%$ and $0.37 \%$ in the $F / Y$ 's 2062/63 and 2064/65 respectively. Then it is increased 0.87 in the F/Y 2063/64. The overall cash holding of the company is less than $1 \%$, i.e. $0.81 \%$ of its total assets. This indicates that the company is successful in the efficient management of idle capital and sound working capital management.

### 4.3.5 Proportion of Inventory to Current Assets and Total 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 -process and spare parts are important. The shortage of inventory results irregular production, high manufacturing cost etc. In the other hand excess inventory causes unnecessary holding of working capital which earns nothing. So the level of inventory holding should be optimum so that it arises neither excess or shortage of inventory problem, the ratio calculated in the table7, below represents the proportion of inventory to its current assets and total assets.

TABLE-4.7
HULAS STEEL INDUSTRIES LTD. INVENTORY TO CURRENT ASSETS AND TOTAL ASSETS

| Year | Inventory | Current <br> Assets | Ratio \% | Total <br> Assets | Ratio \% |
| :---: | ---: | ---: | ---: | ---: | :---: |
| $2060 / 61$ | 662.78 | 1027.96 | 64.47 | 1604.40 | 41.31 |
| $2061 / 62$ | 1022.80 | 1409.04 | 72.59 | 1963.48 | 52.09 |
| $2062 / 63$ | 742.57 | 1114.70 | 66.62 | 1673.35 | 44.38 |
| $2063 / 64$ | 925.89 | 1393.54 | 66.44 | 2399.64 | 38.58 |
| $2064 / 65$ | 1324.02 | 2019.32 | 65.57 | 2988.04 | 44.31 |
| Total | 4678.06 | 6964.56 | - | 10628.90 | - |
| Average | 935.61 | 1392.91 | 67.17 | 2125.78 | 44.01 |

The figures in the table above show the proportion of inventories to its corresponding current assets and total assets. In the F/Y 2060/61, the ratios of inventory are $64.47 \%$ and $41.31 \%$ of current assets and total assets respectively. Then it is found to be increased by $8.12 \%$ to its current assets in the F/Y 2061/62. Then after, the ratios of inventory to current assets tend to decrease in the consecutive fiscal years. The ratios are decreasing by $5.97 \%$, $0.18 \%$ and $0.87 \%$ in the fiscal year 2062/63, 2063/64 and 2064/65 respectively. The lowest inventory ratio to current assets is found in the F/Y 2060/61 and highest level is in the F/Y 2061/62 reaching $72.59 \%$ of its current assets. Likewise ratios of inventory to total assets are in the similar tendency to the ratio of inventory to current assets during the study period of five years. The average percentage of inventory to its current assets is found 67.17\% which is significantly large amount of working capital invested in inventory and shows that there is liberal inventory policy of the management. Likewise, the average percentage of inventory to its total assets is $44.01 \%$, which justifies that HSIL has invested huge amount of capital in inventory.

In order to test the relationship in between inventory and current assets in HSIL during the selected period of the study, Karl Pearson's correlation coefficient ( $r$ ) is calculated in Appendix - 5 and the result is as under:

$$
\begin{gathered}
r=0.98 \\
P E=0.01
\end{gathered}
$$

The figure show that there is positive correlation in between inventory and current assets and the calculated value of ' $r$ ' is more than six times greater than PE. Hence the relationship is considered to be significant.

### 4.3.6 Proportion of Receivables to Current Assets and Total Assets;

Receivables mainly comprise of the amount of sundry debtors. A credit sale plays an important role in this cut throat competition of market situation. To increase the sales volume the management is compelled to adopt the policy of credit sales. Without increasing sales volume the company can not earn desired
profit and maximize the shareholder's wealth. For the smooth operation of business activities the company has to make provisions for working capital until the receivables mature. The nature, terms and conditions of credit should be predetermined in order to avoid the problem of deficiency of working capital. Such management is basically termed as receivable management. The degree of receivables should be optimum to avoid the problem of working capital shortages. Higher degree of receivables cause undesired holding of working capital and lower degree may bring negative results in sales level.

The following table - 7 presents the proportion of receivables to current assets and total assets.

## TABLE - 4.8 <br> HULAS STEEL INDUSTRIES LTD. RECEIVABLES TO CURRENT ASSETS AND TOTAL ASSETS

(Rs. in Million)

| Year | Receivables | Current <br> Assets | Ratio \% | Total <br> Assets | Ratio \% |
| :---: | ---: | ---: | :---: | ---: | :---: |
| $2060 / 61$ | 280.79 | 1027.96 | 27.31 | 1604.40 | 17.50 |
| $2061 / 62$ | 266.75 | 1409.04 | 18.93 | 1963.48 | 13.58 |
| $2062 / 63$ | 260.41 | 1114.70 | 23.36 | 1673.35 | 15.56 |
| $2063 / 64$ | 305.37 | 1393.54 | 21.91 | 2399.64 | 12.72 |
| $2064 / 65$ | 463.56 | 2019.32 | 22.96 | 2988.04 | 15.51 |
| Total | 1576.88 | 6964.56 | - | 10628.90 | - |
| Average | 315.38 | 1392.91 | 22.64 | 2125.78 | 14.83 |

The table indicates that the receivables ratio to current assets and total assets are highest in the F/Y 2060/61 which is $27.31 \%$ and $17.50 \%$ respectively. The fluctuating trend of receivables indifferent years indicates that the company has adopted the credit policy according to the situation of market. The company is found to be liberal in its credit policy.

In order to test the significance of the relationship in between receivables and current assets during the period of study, Karl Pearson's correlation coefficient ( $r$ ) is calculated in Appendix - 6, and the result is as below:

$$
\begin{aligned}
\mathrm{r} & =0.91 \\
\mathrm{PE} & =0.05
\end{aligned}
$$

The figures show that there is positive correlation in between receivables and current assets in HSIL during the period of study. Since the calculated value of ' $r$ ' is six times greater than PE. Hence the relationship is considered to be significant.

### 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 Current Assets Turnover or Gross Working Capital Turnover:

A sale is the most important activity for a manufacturing enterprise like HSIL. Sales are the major determinant of survival and growth of the company. Availability of resource and market demand 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. So there should always be co-ordination in between sales policy, production policy and financial policy.
Increase of sales certainly demands increase in production which require more inputs such as raw materials and to keep the stock of materials, adequate amount of working capital is necessary. Hence sales policy affects the amount of working capital as well. If credit sales increase more working capital is require and vice versa. It is now clear that there is proportionate relationship between sales (turnover) and working capital. The table-9 below represents the current assets or gross working capital vital turnover during the study period in HSIL.

TABLE - 4.9
HULAS STEEL INDUSTRIES LTD. CURRENT ASSETS TURNOVER RATIO
(Rs. in Million)

| Year | Sales | Current Assets | Ratio(times) |
| :---: | :---: | :---: | :---: |
| $2060 / 61$ | 1867.22 | 1027.96 | 1.82 |
| $2061 / 62$ | 1743.73 | 1409.04 | 1.24 |
| $2062 / 63$ | 1936.15 | 1114.70 | 1.74 |
| $2063 / 64$ | 2197.99 | 1393.54 | 1.58 |
| $2064 / 65$ | 2993.30 | 2019.32 | 1.48 |
| Total | 10738.39 | 6964.56 | - |
| Average | 2147.68 | 1392.91 | 1.54 |

The above table indicates that the sales are 1.82 times of current assets in the F/Y 2060/61 i.e. current assets are about 2 times turnover the sales in the year. Sale is the highest in the year 2064/65 but the amount of current assts is lowest except for the F/Y 2061/62. Sales are decreased in the next F/Y 2061/62 but Current Sales are increased and the current assets turnover is also the lowest i.e. 1.24 times. The turnover in the fiscal year 2062/63 is found to be decreased to 1.74 times. It is mainly due to increase in current assets financing in comparison to its sales amount than previous year. The company was able make successful turnover in the F/Y 2063/64 by increasing current assets slightly.

The turnover ratio is 1.58 times where the company made sales of Rs. 2197.99 million. In the next year F/Y 2064/65 the turnover is the lowest i.e. 1.48 times though the company has financed the greatest amount in current assets. In an average, the current assets turnover position of the company is 1.54 times during the study period.

In order to test the relationship in between current assets and sales volume of HSIL, Karl Pearson's correlation coefficient ( $r$ ) is calculated in Appendix-7 and the result is as under:

$$
\begin{gathered}
r=0.88 \\
P E=0.07
\end{gathered}
$$

The calculated value of ' $r$ ' shows that there is positive correlation in between sales and current assets. Since the calculated value of ' $r$ ' is six times more than its PE, the relationship is considered to be significant.

### 4.4.2 Net Working Capital Turnover:

Net working capital is the excess amount of current assets over current liabilities. In other words net working capital is the amount of net current assets. Net working capital is presented in Table-2. Net working capital is the margin of safety maintained by the company. In manufacturing enterprises, the size of working capital depends upon the production cycle and business cycle and it is comparatively more in manufacturing enterprises than the trading and service motive organizations. The net working capital position maintained by HSIL and its turnover ratio is given in the Table-10, below:

TABLE - 4.10
HULAS STEEL INDUSTRIES LTD. NET WORKING CAPITALTURNOVER RATIO
(Rs. in Million)

| Year | Sales <br> Rs. | Net Working Capital <br> Rs. | Turnover Ratio <br> (times) |
| :---: | :---: | :---: | :---: |
| $2060 / 61$ | 1867.22 | 252.98 | 7.38 |
| $2061 / 62$ | 1743.73 | 360.73 | 4.83 |
| $2062 / 63$ | 1936.15 | 176.46 | 10.97 |
| $2063 / 64$ | 2197.99 | 153.29 | 14.34 |
| $2064 / 65$ | 2993.30 | 412.86 | 7.25 |
| Total | 10738.39 | 1356.32 | - |
| Average | 2147.68 | 271.26 | 7.92 |

The above table - 10 indicates that the net working capital turnover in the F/Y 2060/61 is 7.38 times and in the F/Y 2061/62 is 4.83 times. In the year 2061/62 sales volume are decreased but net working capital are increased, however, the turnover ratio is lower than that of F/Y 2060/61 because net working capital is extremely higher in proportion to its sales volume. Further in the F/Y 2062/63 the sales volume has slightly increased even the net working capital still has decreased which has caused the increase in turnover ratio to
10.97 times. In the next F/Y 2063/64, the company has improved its sales volume with the slightly decrease in net working capital than in F/Y 2062/63 and the turnover ratio is increased to 14.34 times. In F/Y 2064/65, the net working capital abruptly increased with the highest sales volume. It has resulted in the lower turnover ratio reaching 7.25 times owing to inverse relationship between sales volume and net working capital. The highest turnover is in the F/Y 2063/64 and the lowest is in the F/Y 2061/62. All these changes of net working capital turnover are because of the fluctuating sales activities.

In order to test the significance of relationship in between sales and net working capital of HSIL, Karl Pearson's Correlation Coefficient (r) and Probable Error (PE) are calculated in Appendix - 8 and the result is as under;
$r=0.45$
$P E=0.24$
The calculation indicates that there is positive correlation in between sales and net working capital during the study period. Since the calculated value of ' $r$ 'is not six times greater than its PE, the relationship is not considered to be 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 should be just enough to operate the daily business activities and to meet the current dues. Excess holding of cash is not favorable because idle assets earn nothing. Cash turnover shows how many times the sales are maintained in comparison to its cash and bank balance. The lower is the ratio of cash and sales the better is the cash management and the vice versa. The Table-11 below indicates how better the cash turnover position of HSIL during the study period is. It also shows the cash cover STM cycle of the company as well.

TABLE - 4.11
HULAS STEEL INDUSTRIES LTD. CASH TURNOVER RATIO
(Rs. in Million)

| Year | Sales <br> Rs. | Cash and Bank <br> Rs. | Turnover Ratio <br> (times) |
| :---: | :---: | :---: | :---: |
| $2060 / 61$ | 1867.22 | 6.61 | 282.48 |
| $2061 / 62$ | 1743.73 | 14.31 | 121.85 |
| $2062 / 63$ | 1936.15 | 7.03 | 275.41 |
| $2063 / 64$ | 2197.99 | 30.87 | 71.20 |
| $2064 / 65$ | 2993.30 | 27.48 | 108.93 |
| Total | 10738.39 | 86.30 | - |
| Average | 2147.68 | 17.26 | 124.43 |

The industry's cash turnover ratio seems to be increasing every year up to the F/Y 2060/61. It is due to the decrease of cash and bank balance in comparison to its sales volume, however, sales volume is fluctuating. In the F/Y 2061/62 the sales volume is suddenly decreased than the F/Y2060/61, the cash turnover ratio is low because of high level of cash and bank balance. The sales volume in the F/Y2062/63 and 2063/64 is increasing but cash and bank balance are decreasing in 2062/63. Hence the turnover ratios are considerably higher. The cash turnover ratio is the highest in the F/Y2060/61. Sales volume, cash balance and turnover ratios are quite different in the F/Y2063/64 than that of previous years. Cash turnover ratio is the lowest in the F/Y 2063/64 i.e. 71.20 times and it is due to more cash balance and higher volume of sales. The average turnover position of the industry is 124.43 times. An average cash conversion cycle of the industry is calculated as;

$$
\begin{aligned}
& 365 / \text { Average cash turnover ratio } \\
= & 365 / 124.43 \\
= & 3 \text { days } .
\end{aligned}
$$

The industry is able to maintained cash conversion cycle of 3 days i.e. it is able to convert its sales in 3 days. It can be judged as good performance.

### 4.4.4 Receivables Turnover Position:

Business activities of an enterprise increase when sales volume increases. Sales volume is increased when firm is able to offer better options of sales to its customers. Various tools can be used to attract the customers. Credit facility is one of the most popular tools to increase the sales volume. When products are sold the value of the products becomes receivable to the firm. So receivable is one of the major component of working capital. The ratio between sales and receivable is termed as receivable turnover ratio which is calculated by dividing the volume of sales by the amount of receivables. Similarly average collection period is calculated by dividing the days in a year (365 days) by turnover ratio. The following Table-12 shows the receivable of HSIL and the average collection period (ACP) of its receivables.

TABLE - 4.12
HULAS STEEL INDUSTRIES LTD. RECEIVABLE TURNOVER RATIO
(Rs. in Million)

| Year | Sales <br> Rs. | Receivables <br> Rs. | Turnover <br> Ratio (times) | Average <br> Collection <br> Period (ACP <br> in days) |
| :---: | :---: | :---: | :---: | :---: |
| $2060 / 61$ | 1867.22 | 280.79 | 6.65 | 55 |
| $2061 / 62$ | 1743.73 | 266.75 | 6.54 | 56 |
| $2062 / 63$ | 1936.15 | 260.41 | 7.43 | 49 |
| $2063 / 64$ | 2197.99 | 305.37 | 7.20 | 51 |
| $2064 / 65$ | 2993.30 | 463.56 | 6.46 | 57 |
| Total | 10738.39 | 1576.88 | - | - |
| Average | 2147.68 | 315.38 | 6.81 | 54 |

The above Table-12 shows that the receivable turnover ratio is generally in decreasing trend. In the F/Y 2060/61 it is 6.65 times and found to be decreased by 0.11 times in F/Y 2061/62. In the F/Y 2062/63 the turnover ratio is increased to 7.43 times. It is because of increase in sales and decrease in receivables in comparison to the previous year. The receivable turnover is 7.20 times in the next F/Y 2063/64 and this decreased position has been found due to increase in receivables. Further it has come down to 6.46 i.e. the lowest turnover ratio of the study period, in the F/Y 2064/65 because of higher volume of sales
and proportionately lower volume of receivables. The average receivable turnover in the study period is 6.81 .

The average collection period (ACP) of credit sales has been found more or less similar in the five years period. However it is fluctuating in different years having to the fluctuation of sales volume and the amount of receivables. In an average the collection period is 54 days during the period of observation. The above table indicates that the lower the amount of receivables in proportion to sales higher is the turnover ratio and the vice versa. Similarly higher turnover ratio indicates shorter collection period. In conclusion, the company is able to collect its credit sales in shorter period of time if it is able to maintain higher turnover ratio.

In order to taste the significance of relationship in between receivables and sales of HSIL during the study period, Karl Pearson's correlation coefficient $(r)$ is calculated in Appendix - 9 and the result is as follows;

$$
\begin{aligned}
\mathrm{r} & =0.97 \\
\mathrm{PE} & =0.02
\end{aligned}
$$

As the calculated value of $r$ is 0.97 , there is positive correlation in between sales and receivables. Since the value of PE is six times less than its $r$, the relationship is considered to be significant.

### 4.4.5 Inventory Turnover Position:

Inventory is also one of the significant working capital which should be maintained effectively and efficiently. Inventory, basically, comprises of stock of raw materials. So the stock of raw material should be kept to meet the requirement of optimum production level so that the company can fulfill its production and sales target. Inventory, production and sales are interrelated. The Table - 13 below shows the inventory turnover position of HSIL during the study period.

The proportion shows the number of times inventory is replaced during the particular year. The company is able to make highest ratio in the F/Y 2060/61
which is 2.82 times, in this year the company kept the stock for 129 days (365/2.82). Similarly it is lowest in the F/Y 2061/62 which is 1.70 times. In the year, the industry kept the stock for 215 days (365/1.70). The Table -13 shows that the industry's inventory level is fluctuating in different years. The average inventory turnover maintained by the company is 2.29 times and has kept the inventory for 159 days (365/2.29).

In order to test the significance of relationship in between inventory and sales, Karl Pearson's correlation coefficient $(r)$ is calculated in Appendix - 10 and the result is as under.

TABLE - 4.13
HULAS STEEL INDUSTRIES LTD. INVENTORY TURNOVER RATIO
(Rs. in Million)

| Year | Sales <br> Rs. | Inventory <br> Rs. | Turnover <br> Ratio (times) |
| :---: | :---: | :---: | :---: |
| $2060 / 61$ | 1867.22 | 662.78 | 2.82 |
| $2061 / 62$ | 1743.73 | 1022.80 | 1.70 |
| $2062 / 63$ | 1936.15 | 742.57 | 2.61 |
| $2063 / 64$ | 2197.99 | 925.89 | 2.37 |
| $2064 / 65$ | 2993.30 | 1324.02 | 2.26 |
| Total | 10738.39 | 4678.06 | - |
| Average | 2147.68 | 935.61 | 2.29 |

$$
\begin{array}{r}
r=-0.79 \\
P E=0.11
\end{array}
$$

The above calculation shows that there is negative correlation in between sales and inventory and $r$ is less than its PE. So the relationship in between inventory and sales during the period of study is not significant.

### 4.5 Liquidity Position:

Liquidity position indicates the ability to pay the current liabilities. Since the study is focused on working capital management of the industry, it is appropriate to study the liquidity position of the firm.

Here liquidity ratios are observed to test HSIL's ability to meet short-term obligations. By the judgment of liquidity ratios, much insight can be obtained into the present cash solvency of the company and its ability to remain solvent in the adverse situations. Essentially, short-term obligations are compared with the short-term resources available to meet these obligations. Current Ratio and Quick Ratio are observed for the purpose.

### 4.5.1 Current Ratio:

Current ratio is the simple relationship of current assets and current liabilities. It is supposed that the higher the ratio, the greater the ability of the firm to pay its bills. "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." The current ratios of HSIL for the period of study are calculated in the Table - 14 below:

TABLE - 4.14
HULAS STEEL INDUSTRIES LTD.
CURRENT RATIO
(Rs. in Million)

| Year | Current Assets Rs. | Current Liabilities <br> Rs. | Ratio |
| :---: | :---: | :---: | :---: |
| $2060 / 61$ | 1027.96 | 774.97 | 1.33 |
| $2061 / 62$ | 1409.04 | 1048.30 | 1.34 |
| $2062 / 63$ | 1114.70 | 938.24 | 1.19 |
| $2063 / 64$ | 1393.54 | 1240.25 | 1.12 |
| $2064 / 65$ | 2019.32 | 1606.46 | 1.26 |
| Total | 6964.56 | 5608.22 | - |
| Average | 1392.91 | 1121.64 | 1.24 |

The above table shows that the current ratio of HSIL is the highest in the F/Y 2061/62 which is 1.34: 1. The ratios, however, are decreasing in the consequent years. The ratios in the F/Y's 2062/63, 2063/64 and 2064/65 are 1.19:1, 1.12:1 and 1.26:1 respectively which are lower than the average ratio of the period of study. The current ratio is considered to be perfect when it is 2:1. During the period of study the industry is not able to meet the standard in any fiscal year. Firm's solvency, however, can be considered to be satisfactory.

In order to test the relationship in between current assets and current liabilities, Karl Pearson's correlation co-efficient (r) is calculated in Appendix - 11 and the result is as under;
$r=0.97$
$\mathrm{PE}=0.02$
As the calculated value of correlation coefficient $(r)$ is positive and greater than its PE, there is positive relationship in between current assets and current liabilities. Since ' $r$ ' is six times greater than PE, the relationship is considered to be significant.

### 4.5.2 Quick Ratio or Acid Test Ratio:

This ratio is the same as the current ratio, except that it excludes inventory. In other words, inventories, which are considered as least liquid assets, are subtracted from current assets. Quick ratio or acid test ratio, simply, is the relationship between quick assets and current liabilities. The ratio 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. Since current ratio includes inventories, higher current ratio may not be regarded better because holding of more amount of inventories may bring shortage of cash and the company may hindered of paying current obligations. Hence, the study of quick ratio is more reliable. It can be computed by dividing quick assets by current liabilities. The quick ratio of HSIL during the period of study is given in Table- 15 below:

TABLE - 4.15
HULAS STEEL INDUSTRIES LTD.
QUICK RATIO
(Rs. in Million)

| Year | Quick Assets <br> (Current Assets - Inventories) <br> Rs. | Current Liabilities <br> Rs. | Ratio |
| :--- | :--- | :--- | :--- |
| $2060 / 61$ | 365.18 | 774.97 | 0.47 |
| $2061 / 62$ | 386.24 | 1048.30 | 0.37 |
| $2062 / 63$ | 372.13 | 938.24 | 0.40 |
| $2063 / 64$ | 467.65 | 1240.25 | 0.38 |
| $2064 / 65$ | 695.30 | 1606.46 | 0.43 |
| Total | 2286.50 | 5608.22 | - |
| Average | 457.30 | 1121.64 | 0.40 |

The above table shows the solvency position of HSIL. The quick ratio is considered to be perfect when it is $1: 1$. It is assumed that current liabilities should not exceed quick assets. Thus the higher is the ratio; the better is the bill paying capacity. The table indicates that HSIL's quick ratio is not favorable in any fiscal year and it is decreasing year after year. Such decreasing trend suggests that the industry ability to meet its current obligations is weakening. The average quick ratio of the study period is $0.40: 1$. So the quick ratio of the industry may not be considered favorable. This is all owing to the holding of more amounts of inventories. Hence the firm should rethink in this matter.

In order to test the relationship in between quick assets and current liabilities, Karl Pearson's correlation coefficient (r) is calculated in Appendix 12and the result is as under:

$$
\begin{aligned}
& r=0.95 \\
& P E=0.03
\end{aligned}
$$

As the calculated value of ' $r$ ' is positive, quick assets and current liabilities are negatively related. Since the value of ' $r$ ' is six times greater than its PE, the relationship in between quick assets and current liabilities is considered to be significant.

### 4.6 Profitability Position:

Earning profit or maximizing the return on investment is one of the major objectives behind the establishment of a manufacturing enterprise. An ability to earn maximum profit from the maximum use of available resources by the business organization is termed as profitability. Profitability is the major tools to measure the efficiency of business activities and the search for profitability provides an incentive to achieve efficiency. The profitability position of a firm can be measured by analyzing the profitability ratios. Profitability ratios are, basically, of two types; those showing profitability in relation to its sales, and those showing profitability in relation to investment. These ratios together indicate the firm's efficiency of operation. Here, gross profit margin, net profit margin, operating ratio, return on assets and net worth, return on working capital etc are the observed in relation to HSIL

### 4.6.1 Gross Profit Margin:;

Gross profit is the result of sales minus cost of producing the goods sold. This ratio is the relationship between gross profits to total sales which explains the percentage return of gross profit out of total sales. This ratio indicates the efficiency of operations of management as well as how products are priced. Higher GP margin indicates the better efficiency and the vice versa.

To calculate the GP margin of HSIL total income from sales has been used since the financial statement ( $P \& L A / C$ ) of the industry has obtained gross profit through the sales of commercial goods, resalable sales, profit on sale of assets, other income and profit / loss on exchange. Hence the sales figures for the purpose of profitability differ from that of sales figure used in turnover ratio.

The Table -16 below shows the gross profit margin of HSIL during the period of study.

TABLE - 4.16
HULAS STEEL INDUSTRIES LTD. GROSS PROFIT MARGIN
(Rs. in Million)

| Year | Gross Profit <br> Rs. | Sales <br> Rs. | Ratio <br> $\%$ |
| :--- | :--- | :--- | :--- |
| $2060 / 61$ | 247.09 | 1867.22 | 13.23 |
| $2061 / 62$ | 247.22 | 1743.73 | 14.17 |
| $2062 / 63$ | 182.48 | 1936.15 | 9.42 |
| $2063 / 64$ | 293.98 | 2197.99 | 13.37 |
| $2064 / 65$ | 472.24 | 2993.30 | 15.78 |
| Total | 1443.01 | 10738.39 | - |
| Average | 288.60 | 2147.68 | 13.44 |

(Note: - Sales include total income of the industry and Gross Profits are calculated by deducting cost of goods sold from total income.)

The above table shows the fluctuating gross profit margin. The industry is found to be most efficient in the F/Y 2064/65 when it is able to obtain the highest gross profit margin i.e. $15.78 \%$. In F/Y 2062/63 the gross profit margins are in decreasing trend, however, it seems to be more efficient in the F/Y 2064/65. The average GPM is found $13.44 \%$ which can be considered as satisfactory.

In order to test the relationship in between gross profit and sales during the period of observation, Karl Pearson's correlation co-efficient ( $r$ ) is calculated in Appendix - 13 and the result is as under:
$r=0.94$
$\mathrm{PE}=0.04$
As the calculated value of ' $r$ ' is positive, there is a positive relationship in between gross profit and sales. Since the value of ' $r$ ' is six times more than the value of PE, the relationship that exists between gross profit and sales is considered to be 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. It indicates the relative efficiency of the firm after taking account of all expenses and income taxes. It basically expresses the cost price effectiveness of operation. Operating expenses and tax rates, thus, affect the net profit margin of a business. The Table - 17 given below shows the net profit margin of HSIL during the period of study.

TABLE - 4.17
HULAS STEEL INDUSTRIES LTD. NET PROFIT MARGIN
(Rs. in Million)

| Year | Net Profit after <br> Tax <br> Rs. | Sales <br> Rs. | Ratio <br> $\%$ |
| :--- | :--- | :--- | :---: |
| $2060 / 61$ | 11.80 | 1867.22 | 0.64 |
| $2061 / 62$ | 14.86 | 1743.73 | 0.85 |
| $2062 / 63$ | $(56.01)$ | 1936.15 | $(2.89)$ |
| $2063 / 64$ | 33.88 | 2197.99 | 1.54 |
| $2064 / 65$ | 40.74 | 2993.30 | 1.36 |
| Total | 45.27 | 10738.39 | - |
| Average | 9.05 | 2147.68 | 0.42 |

The above table shows that the net profit margin of the industry is in decreasing trend. It is because of decreasing volume of sales and increasing
price of raw materials, other fixed costs as well as other operating expenses. In the $\mathrm{F} / \mathrm{Y} 2063 / 64$ the industry is able to maintain $1.54 \%$ of net profit margin which is the highest ratio of the study period. It is decreased to $0.64 \%, 0.85 \%$ and (2.89\%) in the fiscal years 2060/61, 2061/62 and 2062/63 respectively. The lowest N P Margin is in the F/Y 2062/63 which mainly because of taxation provisions although the sales volume is comparatively higher than the other years. The industry is able to maintain an average net profit of margin of $0.42 \%$ during the study period.

In order to test the relationship in between net profit and sales during the period of study in HSIL, Karl Pearson's correlation co-efficient ( $r$ ) is calculated in Appendix - 14 and the result is as under;

$$
\begin{aligned}
& R=0.50 \\
& P E=0.22
\end{aligned}
$$

As the calculated value of ' $r$ ' is positive there is positive relationship in between sales and net profit. Since the value of ' $r$ ' is not six times more than its PE, the relationship is not considered as significant.

### 4.6.3 Operating Ratio:

The operating ratio is the relationship between total operating expenses and sales volume. Since operating costs are important factors 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 lower the operating ratio the better is the efficiency and the vice versa. It is so, because minimum operation costs result into the higher level of gross profit and the net profit margin. The Table - 18 below gives an insight into the operating ratio of HSIL during the period of study.

TABLE - 4.18
HULAS STEEL INDUSTRIES LTD. OPERATING RATIO
(Rs. in Million)

| Year | Operating Expenses <br> Rs. | Sales <br> Rs. | Ratio <br> $\%$ |
| :---: | :---: | :---: | :---: |
| $2060 / 61$ | 1840.06 | 1867.22 | 98.54 |
| $2061 / 62$ | 1723.07 | 1743.73 | 98.81 |
| $2062 / 63$ | 1992.16 | 1936.15 | 102.89 |
| $2063 / 64$ | 2152.13 | 2197.99 | 97.91 |
| $2064 / 65$ | 2948.04 | 2993.30 | 98.49 |
| Total | 10655.46 | 10738.39 | - |
| Average | 2131.09 | 2147.68 | 99.23 |

(Note: - Total operating expenses include cost of goods sold and operating expenses.)

The operating ratio of the industry is generally in increasing trend. It shows that the operating efficiency of the firm is weakening. The industry is not able to minimize cost in comparison to its sales. It is mainly, because of decreasing volume of sales and increasing price of raw materials and other operating expenses. The highest operating ratio is in the F/Y 2062/63 which is 102.89\% and the lowest ratio i.e. $97.91 \%$ in the F/Y 2063/64. The average operating ratio is $99.23 \%$ during the period of study.

In order to test the relationship in between total operating cost and sales, Karl Pearson's correlation co-efficient ( $r$ ) is calculated in Appendix - 15 and the result is as below;

$$
\begin{aligned}
& R=1.00 \\
& P E=0.22
\end{aligned}
$$

The calculated value of ' $r$ ' shows that there is positive correlation between sales and total operating cost of HSIL during the study period. Since, the calculated value of ' $r$ ' is not more than six times of its PE, the relationship is not considered to be significant.

### 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 in relation to 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 - 19 below shows the return on total assets employed in HSIL during the study period.

TABLE - 4.19
HULAS STEEL INDUSTRIES LTD. RETURN ON TOTAL ASSETS
(Rs. in Million)

| Year | Net Profit after Tax <br> (NPAT ) <br> Rs. | Total Assets <br> Rs. | Ratio <br> $\%$ |
| :--- | :---: | :---: | :---: |
| $2060 / 61$ | 11.80 | 829.42 | 1.42 |
| $2061 / 62$ | 14.86 | 915.17 | 1.62 |
| $2062 / 63$ | $(56.01)$ | 735.11 | $(7.62)$ |
| $2063 / 64$ | 33.88 | 1159.38 | 2.92 |
| $2064 / 65$ | 40.74 | 1381.58 | 2.95 |
| Total | 45.27 | 5020.66 | - |
| Average | 9.05 | 2510.33 | 0.36 |

The above table shows that the return on its total assets in the F/Y 2060/61 is $1.42 \%$ where the industry has employed Rs. 829.42 million in its total assets. The ratio is heavily increased by $2.95 \%$ in the F/Y 2064/65 though the industry has employed considerably high amount on its total assets i.e. Rs. 1381.58 million. So the highest return is in the F/Y 2064/65. The return on total assets is suddenly decreased by $7.62 \%$ in the F/Y 2062/63. Since the returns are decreased heavily in the fiscal years 2062/63 respectively. Decreasing tendency of return on total assets is mainly because of the decreasing amount of NPAT. The lowest return is found in the F/Y 2060/61 and the average return on total assets is $0.36 \%$. The higher ratio is favorable and lower is unfavorable.

In order to test the relationship in between NPAT and total assets ( TA ) of HSIL, Karl Pearson's correlation co-efficient ( $r$ ) is calculated Appendix - 16 and the result is as under;

$$
\begin{aligned}
& R=0.80 \\
& P E=0.11
\end{aligned}
$$

The calculated value of ' $r$ ' shows that there is positive correlation in between NPAT and total assets. Since the calculated value of ' $r$ ' is six times more than it's PE , the relationship in between them is considered to be significant.

### 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 \& surplus. The conclusion drawn on the basis of profitability ratio and operating ratio may not give true result. So return on investment i.e. 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 - 20 shows the rate of return on net worth of HSIL during the period of study.

TABLE - 4.20
HULAS STEEL INDUSTRIES LTD. RETURN ON NET WORTH
(Rs. in Million)

| Year | Net Profit after Tax <br> (NPAT ) Rs. | Net Worth <br> Rs. | Ratio <br> \% |
| :--- | :--- | :--- | :--- |
| $2060 / 61$ | 11.80 | 516.63 | 2.28 |
| $2061 / 62$ | 14.86 | 531.49 | 2.80 |
| $2062 / 63$ | $(56.01)$ | 516.48 | $(10.84)$ |
| $2063 / 64$ | 33.88 | 621.65 | 5.38 |
| $2064 / 65$ | 40.74 | 575.50 | 7.08 |
| Total | 45.27 | 2761.75 | - |
| Average | 9.05 | 552.35 | 1.64 |

(Note: - Net worth includes share capital, share application money and reserve \& surplus)

The table above shows that the rate of return on net worth in the $\mathrm{F} / \mathrm{Y}$ $2060 / 61$ is $2.28 \%$. In the $\mathrm{F} / \mathrm{Y} 2061 / 62$ it is increased up to $2.80 \%$ which is the highest rate of return of the study period. The industry is able to earn more profit in comparison to previous year which shows the efficient employment of capital. In the F/Y 2062/63, the rate of return is drastically decreased to $10.84 \%$. Though the industry has utilized reserves and surplus, it seems unable to earn profit and shows the inefficiency of the industry. Further in the F/Y 2063/64, the rate of return is increased to $5.38 \%$ which is the second highest rate of the study period. It shows that the industry is unable to earn profit according to the investment of capital. In the F/Y 2064/65, the rate of return is improved which is $7.08 \%$. In an average, the industry is able to maintain $1.64 \%$ of return on net worth.

In order to test the significance of the relationship in between NPAT and net worth of HSIL during the study period, Karl Pearson's correlation co-efficient $(r$ ) is calculated in Appendix - 17 and the result is as under:
$R=-0.65$
$P E=0.17$
The above calculation shows that there is negative co-relation in between NPAT and net worth in HSIL during the study period. Since the calculated value of ' $r$ ' is negative and less than its PE, the relationship is not considered to be significant.

### 4.6.6 Return on Working Capital:;

This is the simple relationship of Net Profit after Tax (NPAT) in relation to current assets employed by the company. It measures the profit with respect to its working capital i.e. 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 the vice versa. The Table -21 presented below shows the relationship in between NPAT and current assets ( working capital ) of HSIL during the period of study.

TABLE - 4. 21
HULAS STEEL INDUSTRIES LTD. RETURN ON WORKING CAPITAL
(Rs. in Million)

| Year | Net Profit after Tax <br> ( NPAT ) <br> Rs. | Current Assets / Working <br> Capital <br> Rs. | Ratio <br> $\%$ |
| :--- | :--- | :--- | :--- |
| $2060 / 61$ | 11.80 | 1027.96 | 1.15 |
| $2061 / 62$ | 14.86 | 1409.04 | 1.05 |
| $2062 / 63$ | $(56.01)$ | 1114.70 | $(5.03)$ |
| $2063 / 64$ | 33.88 | 1393.54 | 2.43 |
| $2064 / 65$ | 40.74 | 2019.32 | 2.02 |
| Total | 45.27 | 6964.56 | - |
| Average | 9.05 | 1392.91 | 0.65 |

The above table shows the percentage return on gross working capital employed by HSIL. The industry is able to earn $1.15 \%$ on its working capital in the F/Y 2060/61. In the F/Y 2063/64 it is increased to $2.43 \%$ which is the highest return of the study period. Then, in the F/Y 2064/65 the return on working capital is decreased to 2.02\%. Further in the F/Y 2060/61 and 2061/62 it is decreasing to $1.15 \%$ and $1.05 \%$ respectively. Such decreasing tendency of return on working capital implies that the company is not able to employ its working capital effectively. In an average, HSIL is able to earn $0.65 \%$ return on its working capital during the study period.

In order to test the significance of relationship that exists in between NPAT and working capital of HSIL, Karl Pearson's correlation co-efficient (r) is calculated in Appendix - 18 and the result is as follows;

$$
\begin{aligned}
& R=-0.62 \\
& P E=0.18
\end{aligned}
$$

## CHAPTER - 5

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## Summary

The Brief introduction of the study, manufacturing industrialization and its role and importance in Nepal. HSILs' contribution towards cheap, quality products and overall picture of HSIL, presented in the introductory setting, this chapter includes the concept of working capital. The second chapter like i.e. 'Reviews of Literature' gives the concept of working capital was different views of different resources scholars. And writers are reviewed. Then the journals of articles published by different management experts who are available are also reviewed. Further more, the available dissertations in contest of working capital management from various researchers are been reviewed .The appropriate research methodology is presented in chapter 3.with the help of methodology described in chapter .the data are presented and analyzed in chapter 4. Now in this chapter an effort has been made to present summary of findings, and give some suggestions for future course of action.
The basic objective of this study is to examine the management of working capital in HSIL. To accomplish the objectives set earlier in first chapter the necessary data as from secondary and primary source are collected from financial statement of the HSIL. Questionnaire, distributed to chief of Accounts \& store departments of HSIL. The secondary data has analyzed through the ratio analysis as a financial tools and correlation coefficient as a statistical tools. The major ratio analysis consists of composition of working capital position, turnover position, liquidity position and profitability position. In order to test the relationship between the various variables of working capital, Karl Pearson's correlation coefficient $(r)$ is calculated and analyzed.
The findings which are revealing through this study are presented in the following section.

## Major finding:

## A. Major findings of financial tools and Working Capital Policy:

1. Study shows that more amounts are financed by long term source of fund and fewer amounts are financed from short term sources of fund. The fixed assets ,permanent current assets and some proportion of temporary current assets are financed from long term fund and other remaining portion are financed from short term sources. So, the company is following conservative working capital policy.
2. The major components of current assets in HSIL are Cash and Bank Balance, Receivables, Inventories, Loan \& Advances etc. During the period of study, the proportions of Cash and Bank Balance, Receivables, Inventories, and Loan \& Advances to current assets on an average are 1.36\%, 22.96\%, 65.57\% and $9.55 \%$ respectively. It is found that inventory holds the largest portion of those current assets.
3. The overall proportion of current assets on total assets are increasing up to Fiscal year 2064/065.It is increased from 58.07 percent to 71.76 percent and in range and fall down to $58.07 \%$ in F/Y 2063/064. The average ratio of current assets to total assets is of $65.62 \%$. The ratio of current assets to net fixed assets is increased from $139.11 \%$ to $255.22 \%$ up to $F / Y 2064 / 065$. but, it is fallen down to $139.11 \%$ in FY 2063/064. Average percent of change in year is $190.91 \%$. It clearly shows that investment in current assets is high with respect to total assets and net fixed assets.
4. Of the current assets, Cash and Bank balance holds the smallest portion in HSIL. It is fallen down in FY 2060/061, as compare i.e. F/Y 2062/063 which again decreasing. In FY in 2061/062, it is found to be increased. The average cash and bank balance in the company with respect to current assets is $1.24 \%$ percent and with respect to total assets is $0.81 \%$. This type of variation is due to company's policy towards the investment in sheets production and processing company.
5. Of the current assets inventory holds the largest portion of HSIL .ranging from $64.47 \%$ to $72.59 \%$ and in future trend with an average of $67.17 \%$. The inventories to total assets ratio in fluctuating with $38.58 \%$ to $52.09 \%$ with in average of $44.01 \%$. These fluctuating of the investment in inventories are due to fluctuating of sales volume.
6. The receivables position with respect to Current Assets and Total Assets in HSIL. In alternative increasing and decreasing trend in FY 2060/061. F/Y up to 2061/062, it is again found to decrease and In F/Y 2061/063, it is increased. Till the end of study period, the position of receivables with Current Assets and Total Assets are $22.64 \%$ and $14.83 \%$ in average. These fluctuations in the position of receivables are affected by fluctuating sales volume of the company.

## B. Turnover position:

The turnover positions of HSIL are not in fluctuating trend. The gross working capital turnover in ranging from 1.24 times to 1.82 times with an average of 1.54 times. The net working capital turnover is ranging from 4.83 times to 14.34 times in an average trend of 7.92 times . The cash turnover is ranging from 71.20 times to 282.48 highly fluctuating times with an average of 124.43 times. The company is not able to make efficient utilization of Current Assets because it can not create sales as investment in Current Assets.

The receivables turnover position in a company is ranging from 6.46 times to 7.43 times, with an average of 6.81 times. This ratio shows how slowly debts are collected. The average ratio 6.81 times indicates longer time lag between credit sale and cash collection. The average collection period ranges from 49 days to 57 days and average collection period of 54 days (about two months) indicates not efficient management of receivable collection policy adopted by company.

The inventory turnover position of HSIL is ranging from 1.70 times to 2.82 times with an average of 2.29 times. The inventory management system of HSIL is not so satisfactory but signifies that inventory does not sell fast and stays on shelf of in warehouses for a long time.

## Finding of Liquidity

The liquidity position of company is analyzed with current ratio and quick ratio. Current Ratio is ranging in between 1.12:1 and 1.34:1. The company has able to maintain it's current ratio of $1.24: 1$ in an average of the study period. The overall current ratio of the company is found to be satisfactory. But there seems, enough current assets to meet obligations of Current Liabilities. Investment in enough current assets is not so good. It is better to decrease in investment in inventory and maintain the ratio $2: 1$ of CA: CL. The company is not making full use of its current borrowing capacity. It signals inventories poor credit management in terms of over extended account receivable.

The quick ratio of the company is also ranging in between $0.37: 1$ to $0.47: 1$ with fluctuating trend. The company has able to maintain it's current ratio of 0.40:1 in an average of the study period. The quick ratio is not favorable to the company. It is not in the ratio of $1: 1$. The Company has not been able to convert Current Assets quickly in cash in order to meet Current Liabilities.

## Findings of profitability

Profitability is the measures of efficiency. It is analyzed from various angles. The gross profit margin and net profit margin of the HSIL show that, HSIL is continuously incurring with normal profit almost all period of the study except FY 2062/063. The incurred loss is an alternative increasing and decreasing trend. The company is able to earn profit in all Fiscal Years. The overall gross profit during the period of study is positive. Net Profit Margin of company indicates return on average is 0.42 during the period of the study. The net profit margin ratio is in negatively increasing trend in FY 2062/063.Then after, it has reduced its loss and then able to earn profit on next FY 2063/064.

The operating ratio ranges from $97.91 \%$ to $102.89 \%$. The negative net profit margin and gross profit margin in high level of operating ratio indicates the operational inefficiency in HSIL. Such high operating ratio shows that only a
relatively small percentage share is available for meeting financial liabilities like interest tax and dividends.

The return on total assets, employed in HSIL is not satisfactory. The return on total ratio is negative with decreasing trend as on F/Y 2062/063.Thenafter, it has utilized it's assets with efficient manner. The company is able to receive return during 2063/064. Average return on total assets is positive. Similarly, return on net worth is also positive almost all period of the study except FY 2062/063.The average return on worth is also positive. Similarly return on employed current assets almost positive in all financial years except F/Y 2062/063. So, overall return position of company is positive i.e. in favorable condition. It is because of efficient utilization of current assets, total assets and shareholders wealth.

## Findings of Statistical data.

Besides the major finding on financial tools, The major findings on statistical tools are presented below.

## Findings of Primary Data

One of the importance aspects of working capital management is to point out, how for working capital is different to manages as compared to fixed capital 65 percent of respondents of HSIL is of the opinion that working capital is more difficult to manage than fixed capital 35 percent of respondents opinion that fixed capital is more difficult to manage than working capital.

So, in HSIL, from opinion, working capital is more difficult to manage than that of fixed capital then next aspect to be.

The next importance aspect to be considered is the reason for the importance of current assets management, so far as importance of current assets management, 82 percent of respondents of HSIL opinion that, a lot of time has taken to it as well as 18 percent respondents opinion that investment in current assets is large and volatile. Among the different types of current assets, it is found that, management of inventories cash and receivables is equally
problematic in nature. The opinion of all respondents shows the equal problem in all respects of current assets. An aspect of primary analysis is major motive for holding cash. The total response from the company is, sufficient cash is required to provide a reserve for net outflow of cash. They do not hold cash for unexpected drain of cash in the events of fire, strikes, machine breakdown.

With respect to receivables management, the major factor affecting the larger investments in receivable is found to be liberal credit policy of HSIL. The major reason for holding inventories is to facilitate smooth operation of products sales, majority of respondents of HSIL preferred for it, not for to take advantage of price increases.

## Recommendation

Based findings of the analysis mentioned above, the researcher has provided some practicable recommendation in the following section.

1. Effective Working capital management: The fluctuation in the current assets holding lead to conclude that HSIL, is not examine its appropriate working capital policy. And due to lack of target for current assets holding in the long run and absence of sources of financing most to HSIL, financial situation is not so sound. So, there must be compulsory formulation of appropriate working capital policy not only conservative. Beside these, there should be policy to prevent the holding of excessive and inadequate current assets of the company. In HSIL, the most important current assets are cash, debtors, receivables and inventory which are given below.
2. Effective management of Cash: The function of investment in money assets is to meet operational requirements in day to day business, to provide a reserve of liquidity for major schedule out flows of cash, to exploit opportunities, to avoid unexpected drains of cash and so on. There are many ways to an effective management of cash in HSIL, minimization of float, better synchronization of cash flows, slowing disbursements etc. If cash appears more than requirement, the company should invest in marketable securities. Here statistical relationship between cash and current assets are not correlated. So, management of cash should be proper.
3. Effective management of Receivable: In HSIL, there is a larger investment receivable so that there should be neither over investment nor lower investment $A / R$. Those policies involving receivable management involves trade off between risk and return. The main determinants of the size of investment are terms of sale, the selection of customers to give credit, efficiency in collecting receivables and so on. One way to control investment in receivable is to find out receivable as percent of sales. The others way are preparing schedule of receivable analysis, credit worthiness of customers, minimizing flout and so on. It adopts a definite credit and collection policies. The credit purchases helps for lowering the
requirements of working capital but in could also have credit sales. The credit sales increase the total sales volume and profit but it also increase collection lost, bad debt losses, administration cost and management should consider the trade off between cost and profit.
4. Effective inventory management: The investment in inventory with respect to Current Assets made by HSIL ranges from $64.47 \%$ to $72.59 \%$. The average investment in inventory with respect to Current Assets is $67.17 \%$ and $44.01 \%$ with respect to total assets. Such highly fluctuated investment in inventory shows that there is no specific policy related with inventory management. Such highly varied amount in inventory shows that they are investing randomly and in adhoc way. The effective management of working capital wholly depends upon proper management of inventory. Because it absorbs higher percentage of current assets. For this, company should make effective sales plan, which helps for immediate marketability and certainly decreases the problem of overstocking. The management must minimize the wastage, scraps; there should be good store keeping system, better material handling system and timely inspection system. Moreover, the analysis is also useful. None moving and obsolete items shows be discarded to avoid unnecessary blockage up of inventory.
5.HSIL must Improve turnover position: It is found that current assets turnover, net working capital is very low, which indicates that utilization of current assets, net working capital in higher level of current assets with unmanaged production and sale have contributed for lower turnover. If the company utilizes the current assets in proper way, the working capital will be lower than turnover of current assets as well as net working capital be higher. In such situation, the company will able to meet the current obligation in maturity date.
The company must speed the circulating the assets to complete its round because it leads to the leaser need of working capital. To increase turnover, utilization of inventories those lying in the store, should be marketed as soon as possible. It should adopt modern inventory system. The proportion of cash budget and monitoring should be again schedule and their quick collection will result higher turnover of assets.
5. Minimize the operating cost: HSIL is incurring continuously income except F/Y 2062/2063 during the period of study. One of the cases is high operating cost of production, financial expenses. The management should give attention towards the purchasing of raw materials, unnecessary expenses, misuse of facilities and heavy expenses on overheads are the major causes for high operating cost.

To overcome such short comings, Management should be stick for the use of facilities, not only these but also right number of workers in right place providing necessary training from time to time also contribute for lower administrative and operating cost. Further, to control, and reduced production cost and high operating expenses, HSIL as far as possible should utilize its full capacity. And also the adoption of standard and marginal cost techniques will also be a good measure in controlling and classifying the costs as well as for identifying the responsibility centers for the losses. The curtailment of cost increases the profit margin.
7.Prepare effective sales plan: Sales directly effect to the need of current assets. As the sales increase, the working capital level will also increase. In the absence of sales forecast, the level of current assets cannot, be forecasted. But for it, market competition and production condition should be also analyzed; HSIL has also appointed different areas of Nepal and India. So, there should be proper cooperation interaction between different sales agents, products, marketing and sales department during the planning of sales. Due to lack of this, HSIL is not able to meet the target sales in previous years of study.
8.Positive attitude towards risk: Since the risk is the opportunity for company to make profit; the management should not consider it as dangerous. It is the ability to manage the current assets properly and efficiently. HSIL is in risk, because of adoption of conservative working capital policy. It is also the one of the causes of incurring loss continuously. When the management properly utilizes the current assets, predicting the further return and timing of cash generation, there will be self generation of funds by which company should not depend upon permanent
financing for the current assets or temporary assets. To develop the managerial ability to task risk, there should be training, participation and management conference, foreign enterprises tours, etc for the managerial level employees.
9.Increase the efficiency of personnel and staff: Skilled and efficient manpower is the basic need of company. Since, the HSIL is manufacturing company, efficient, trained, technical manpower are the key of the company. So, training program should be held for higher and lower level of employees. To make known the technology to the technical person, they should have frequent training program in home country as well as in abroad. Not only the technical personnel, financial managers. A/C officers, inventory controller, Sales officer, and other general employees must give frequent training programs, organized by different association of Nepal. The skilled manpower decreases the operating cost and increases the profitability.

## Conclusion

In conclusion, it can be said safely, that the management of working capital can not be neglected by HSIL. Otherwise, it can seriously erode its financial viability. Thus, managers must understand the factors determining working capital needs. So that such undertaken manufacturing industry of Nepal is also suffering from huge due to poor working capital management and lack of special working capital policy.

The proportion of current assets with respect to total assets and net fixed assets in HSIL shows that current assets absorb higher percentage of those total assets. As the higher ratio indicates the greater amount of Working Capital, the risk and profitability would decrease. It is due to higher proportion of inventory and receivables. There is positive correlation between current assets and total assets as well as statically significant, and there is significant difference between two variables. It could adverse effect in HSIL'S wealth maximization goal in the long run.

The company has cash balance, with respect to current assets and total assets are in increasing decreasing trend. The cash conversion cycle is of 3 days. There is an excess cash balance in FY 2063/064. Since the company has invested its cash in Steel production and processing company.

Inventory management is one of the important parts of manufacturing company. It absorbs higher percentage of total current assets, which means large funds tie-up of in it. So far, as liquidity is concerned to inventory that is a lease liquid current asset in itself. There is the correlation in between current asset and inventory. There is an unsound management of inventory. Receivable constitute an important part of assets of the company. So far as the HSIL'S receivable is concerned. It also occupies larger portion of current assets and total assets, of average $22.64 \%$ and $14.83 \%$ during the study period. The average receivable collection period is long of 54 days about (2months). It concludes liberal credit policy. The working capital should be arranged in a way that it should generate maximum turnover, the proportion of working capital to sales in HSIL is an average during the study period of 0.65 times which is low to able to turn. It is due to inefficiency of inventory conversion receivables, cash collection. It shows less utilization, of Working Capital.

Though the current ratio shows the sound liquidity position HSIL. But acid test ratio shows not so sound management of current assets .lt's because of higher percentage of inventory. There is position correlation as well as statistically significant different between variables. It shows fair liquidity position of the company.

There is the profitability position, of HSIL, during the study period of which is not satisfactory except one fiscal year. The company is incurring loss in F/Y 2062/63. The return on worth, total assets is also negative. It concludes the financial performance of HSIL, is not so satisfaction. It is due to high production cost operating expenses. Most of variables are also positively correlated, with each other, they are statically significant. It means, both variables are moving in same direction. There is no proper utilization of resources available to the firm. It
is still followed conservative Working Capital, which reduces risk but hamper in profitability in long run. So, company can improve its appropriate Working Capital policy which could maximize its profitability.

If HSIL, undertakes measure like, identification of need funds, regular checks, development of MIS positive attitude towards risk, profit determination, right combinations of short term and long term sources and funds to finance, working capital needs, appropriate combination of investment in Current Assets minimization production, operating cost, prepare effective sales plan, improving liquidity, speeds cash conversion, proper inventory techniques, HSIL can over in these problems and improve its financial performance as well as working capital.

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## Appendix

## Appendix-1

Hulas SteeL Industries Ltd.
Current Assets and Total Asstes

| Year | x | Y | dx $=x-\bar{x}$ | $\mathrm{dy}=\mathrm{y}-\overline{\bar{y}}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 1,027.96 | 1,604.40 | (86.74) | (68.95) | 5,980.72 | 7,523.83 | 4,754.10 |
| 2061/062 | 1,409.04 | 1,963.48 | 294.34 | 290.13 | 85,396.86 | 86,636.04 | 84,175.42 |
| 2062/063 | 1,114.70 | 1,673.35 | - | - | - | - |  |
| 2063/064 | 1,393.54 | 2,399.64 | 278.84 | 726.29 | 202,518.70 | 77,751.75 | 527,497.16 |
| 2064/065 | 2,019.32 | 2,988.04 | 904.62 | 1,314.69 | 1,189,294.87 | 818,337.34 | 1,728,409.80 |
| Total | 6,964.56 | 10,628.91 | $\begin{gathered} \sum \mathrm{dx}= \\ 1,391.06 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dy}= \\ 2,262.16 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dxdy}= \\ 1,483,191.16 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dx}^{2}= \\ 990,248.95 \end{gathered}$ | $\begin{gathered} \Sigma d y^{2}= \\ 2,344,836.48 \end{gathered}$ |

Suppose,
X= Current assets
$Y=$ Total assets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{1483191.15-\frac{1391.06 * 2262.16}{5}}{\sqrt{\left(\left(990248.96-\frac{(1391.06)^{2}}{5}\right)\left(2344836.48-\frac{(2262.16)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{1483191.15-629360.05792})}{\sqrt{\left(\left(990248.96-\frac{1935047.9236}{5}\right)\left(2344836.48-\frac{5117367.8656}{5}\right)\right)}} \\
& r=\frac{853831.09}{\sqrt{((990248.96-387009.58)(2344836.48-1023473.58))}}
\end{aligned}
$$

$$
\begin{aligned}
r & =\frac{853831.09}{\sqrt{((603239.38)(1321362.90688))}} \\
r & =\frac{853831.09}{\sqrt{797098140701}} \\
r & =\frac{853831.09}{892803.5286} \\
r & =0.9563
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-0.9563^{2}\right)}{\sqrt{5}}
$$

$$
P E=\frac{0.6745(1-0.91450)}{2.2360}
$$

$$
P E=\frac{0.6745 * 0.08549}{2.2360}
$$

$$
P E=\frac{0.057663}{2.2360}
$$

$$
\text { P.E= } 0.0257
$$

$$
\text { P.E= } 2.57 \%
$$

The above figures show that the correlation coefficient in between current assets and total assets during the study period is positive and " $r$ " is 0.5 more than six times of P.E. So, the relationship is considered to be significant.

## Appendix-2

Hulas SteeL Industries Ltd.
Current Assets and Net Fixed Asstes

| Year | $\mathbf{x}$ | $\mathbf{Y}$ | $\mathbf{d x}=\mathbf{x}-\overline{\mathrm{x}}$ | $\mathbf{d y}=\mathbf{y}-\overline{\mathbf{Y}}$ | $\mathbf{d x d y}$ | $\mathbf{d x}^{\mathbf{2}}$ | $\mathbf{d y}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2060 / 061$ | $1,027.96$ | 574.42 | $(86.74)$ | 18.57 | $(1,610.76)$ | $7,523.83$ | 344.84 |
| $2061 / 062$ | $1,409.04$ | 552.08 | 294.34 | $(3.77)$ | $(1,109.66)$ | $86,636.04$ | 14.21 |
| $\mathbf{2 0 6 2 / 0 6 3}$ | $\mathbf{1 , 1 1 4 . 7 0}$ | 555.85 | - | - | - | - | - |
| $2063 / 064$ | $1,393.54$ | $1,001.73$ | 278.84 | 445.88 | $124,329.18$ | $77,751.75$ | $198,808.97$ |
| $2064 / 065$ | $2,019.32$ | 964.08 | 904.62 | 408.23 | $369,293.02$ | $818,337.34$ | $166,651.73$ |
|  |  |  | $\sum \mathbf{d x}=$ | $\sum \mathbf{d y}=$ | $\sum \mathbf{d x d y}=$ | $\sum \mathbf{d x}^{\mathbf{2}=}$ | $\sum \mathbf{d y}^{\mathbf{2}=}$ |
| Total | $\mathbf{6 , 9 6 4 . 5 6}$ | $\mathbf{3 , 6 4 8 . 1 6}$ | $\mathbf{1 , 3 9 1 . 0 6}$ | $\mathbf{8 6 8 . 9 1}$ | $\mathbf{4 9 0 , 9 0 1 . 7 8}$ | $\mathbf{9 9 0 , 2 4 8 . 9 5}$ | $\mathbf{3 6 5 , 8 1 9 . 7 7}$ |

Suppose,
X = Current Assets
$Y=$ Net Fixed
Assets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{490901.78-\frac{1391.06 * 868.11}{5}}{\sqrt{\left(\left(990248.96-\frac{(1391.06)^{2}}{5}\right)\left(365819.75-\frac{(868.91)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{490901.78-241741.19})}{\sqrt{\left(\left(990248.96-\frac{1935047.9236}{5}\right)\left(365819.77-\frac{755004.59}{5}\right)\right.}} \\
& r=\frac{249160.59}{\sqrt{((990248.96-387009.58)(365819.77-151000.92))}} \\
& r=\frac{249160.59}{\sqrt{((603239.38)(214818.85))}}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{249160.59}{\sqrt{129587171376}} \\
& r=\frac{249160.59}{359982.18} \\
& r=0.69
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-0.69^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.3969)}{2.2360} \\
& P E=\frac{0.6745 * 0.5239}{2.2360} \\
& P E=\frac{0.35337055}{2.2360} \\
& \text { P.E }=0.16
\end{aligned}
$$

The above figures show that the correlation coefficient in between current assets and Net assets is 0.69 i.e. less than 0.5 and "r" is not more than six times of P.E. the relationship is not considered as significant .however the relationship is found positive.

## Appendix-3

Hulas SteeL Industries Ltd.
Cash \& Bank balance and Current Assets

| Year | X | Y | $\mathrm{dx}=\mathrm{x}-\overline{\mathrm{X}}$ | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 6.61 | 1,027.96 | (0.42) | (86.74) | 36.43 | 0.18 | 7,523.83 |
| 2061/062 | 14.31 | 1,409.04 | 7.28 | 294.34 | 2,142.80 | 53.00 | 86,636.04 |
| 2062/063 | 7.03 | 1,114.70 | - | - | - | - | - |
| 2063/064 | 30.87 | 1,393.54 | 23.84 | 278.84 | 6,647.55 | 568.35 | 77,751.75 |
| 2064/065 | 27.48 | 2,019.32 | 20.45 | 904.62 | 18,499.48 | 418.20 | 818,337.34 |
| Total | 86.30 | 6,964.56 | $\sum \mathrm{dx}=$ <br> 51.15 | $\begin{gathered} \Sigma d y= \\ 1,391.06 \end{gathered}$ | $\begin{gathered} \sum d x d y= \\ 27,326.25 \end{gathered}$ | $\begin{array}{r} \Sigma \mathrm{dx}^{2}= \\ 1,039.72 \end{array}$ | $\begin{gathered} \sum d y^{2}= \\ 990,248.95 \end{gathered}$ |

Suppose,
x= Cash and Bank
Balance
$y=$ Current Assets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{27326.24-\frac{51.15 * 1391.06}{5}}{\sqrt{\left(\left(1039.722-\frac{(51.15)^{2}}{5}\right)\left(990248.94-\frac{(1391.06)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{27326.24-14230.54}}{\sqrt{\left(\left(1039.722-\frac{2616.32}{5}\right)\left(990248.94-\frac{1935047.92}{5}\right)\right)}} \\
& r=\frac{\sqrt{\sqrt{((1039.722-523.26)(990248.94-387009.59))}}}{r=\frac{13095.70}{\sqrt{((516.46)(603239.35))}}}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{13095.70}{\sqrt{311548997.43}} \\
& r=\frac{13095.70}{17650.75} \\
& r=0.74
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-0.74^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.5476)}{2.2360} \\
& P E=\frac{0.6745 * 0.4524}{2.2360} \\
& P E=\frac{0.3051438}{2.2360} \\
& P . E=0.14
\end{aligned}
$$

The above figures shows that there is positive correlation in between Cash \& Bank Balance and Current Assets, so " $r$ " is less than six times of PE, the relation is not considering as significant.

## Appendix-4

Hulas SteeL Industries Ltd.
Cash \& Bank Balance and Total assets

| Year | $\mathbf{x}$ | Y | $d x=x-\bar{x}$ | $\mathrm{dy}=\mathrm{y}-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 6.61 | 1604.40 | -0.42 | -68.95 | 28.96 | 0.18 | 4754.10 |
| 2061/062 | 14.31 | 1963.48 | 7.28 | 290.13 | 2112.15 | 53.00 | 84175.42 |
| 2062/063 | 7.03 | 1673.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 30.87 | 2399.64 | 23.84 | 726.29 | 17314.75 | 568.35 | 527497.16 |
| 2064/065 | 27.48 | 2988.04 | 20.45 | 1314.69 | 26885.41 | 418.20 | 1728409.80 |
| Total | 86.30 | 10,628.91 | $\begin{gathered} \sum \mathrm{dx}= \\ 51.15 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dy}= \\ 2,262.16 \end{gathered}$ | $\begin{gathered} \Sigma d x d y= \\ 46,341.27 \end{gathered}$ | $\begin{array}{r} \sum \mathrm{dx}^{2}= \\ 1,039.72 \end{array}$ | $\begin{gathered} \Sigma d y^{2}= \\ 2,344,836.48 \end{gathered}$ |

Suppose,
X= Cash and Bank
Balance
$y=$ Total Assets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{46341.27-\frac{51.15 * 2262.16}{5}}{\sqrt{\left(\left(1039.722-\frac{(51.15)^{2}}{5}\right)\left(2344836.48-\frac{(2262.16)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{46341.27-23141.90}}{\sqrt{\left(\left(1039.722-\frac{2616.32}{5}\right)\left(2344836.48-\frac{5117367.86}{5}\right)\right)}} \\
& r=\frac{\frac{23199.37}{\sqrt{((1039.722-523.26)(2344836.48-1023473.57))}}}{}
\end{aligned}
$$

$$
\begin{aligned}
r & =\frac{23199.37}{\sqrt{((516.46)(1321362.91))}} \\
r & =\frac{23199.37}{\sqrt{682431086.89}} \\
r & =\frac{23199.37}{26123.38} \\
r & =0.89
\end{aligned}
$$

Probable $\operatorname{Error}(\mathrm{P} . \mathrm{E})=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-0.89^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.7921)}{2.2360} \\
& P E=\frac{0.6745 * 0.2079}{2.2360}
\end{aligned}
$$

$$
P E=\frac{0.14022}{2.2360}
$$

$$
P . E=0.06
$$

The above figures shows that there is positive correlation in between Cash \& Bank Balance and Current Assets, so "r" is less than six times of PE, the relation is considering as significant.

## Appendix-5

Hulas SteeL Industries Ltd.
Inventory and Current Assets

| Year | X | Y | dx $=\mathrm{x}-\overline{\mathrm{X}}$ | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 662.78 | 1,027.96 | (79.79) | (86.74) | 6,920.98 | 6,366.44 | 7,523.83 |
| 2061/062 | 1,022.80 | 1,409.04 | 280.23 | 294.34 | 82,482.90 | 78,528.85 | 86,636.04 |
| 2062/063 | 742.57 | 1,114.70 | - | - | - | - | - |
| 2063/064 | 925.89 | 1,393.54 | 183.32 | 278.84 | 51,116.95 | 33,606.22 | 77,751.75 |
| 2064/065 | 1,324.02 | 2,019.32 | 581.45 | 904.62 | 525,991.30 | 338,084.10 | 818,337.34 |
| Total | 4,678.06 | 6,964.56 | $\Sigma \mathrm{dx}=$ <br> 965.21 | $\begin{gathered} \sum \mathrm{dy}= \\ 1,391.06 \end{gathered}$ | $\begin{gathered} \sum d x d y= \\ 666,512.13 \end{gathered}$ | $\begin{gathered} \sum d x^{2}= \\ 456,585.62 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dy}^{2}= \\ 990,248.95 \end{gathered}$ |

Suppose,
X= Inventory
$\mathrm{Y}=$ CurrentAssets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{666512.13-\frac{965.21 * 1391.06}{5}}{\sqrt{\left(\left(456585.61-\frac{(965.21)^{2}}{5}\right)\left(990248.94-\frac{(1391.06)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{666512.13-342665.02})}{\left.\sqrt{\left(( 4 5 6 5 8 5 . 6 1 - \frac { 9 3 1 6 3 0 . 3 4 } { 5 } ) \left(990248.94-\frac{1935047}{} .92\right.\right.} 5\right)} \\
& r=\frac{\sqrt{((456585.61-186326.07)(990248.94-387009.58))}}{\sqrt{((497979.13}}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{397979.13}{\sqrt{((270259.54)(603239.35))}} \\
& r=\frac{397979.13}{\sqrt{1630311906 \quad 67}} \\
& r=\frac{397979.13}{403771.21} \\
& r=0.98
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-0.98^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.9604)}{2.2360} \\
& P E=\frac{0.6745 * 0.0396}{2.2360} \\
& P E=\frac{0.0267}{2.2360}
\end{aligned}
$$

$$
P . E=0.01
$$

The above figures shows that there is positive correlation in between Inventory and Current Assets and the calculated value of " $r$ " is more than six times greater than PE, so the relationship is considering to be significant.

## Appendix-6

Hulas SteeL Industries Ltd.
Receivables and Current Assets

| Year | x | Y | $d x=x-\bar{x}$ | $\mathbf{d y}=\mathbf{y}-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 280.79 | 1027.96 | 20.38 | -86.74 | -1767.76 | 415.34 | 7523.83 |
| 2061/062 | 266.75 | 1409.04 | 6.34 | 294.34 | 1866.12 | 40.20 | 86636.04 |
| 2062/063 | 260.41 | 1114.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 305.37 | 1393.54 | 44.96 | 278.84 | 12536.65 | 2021.40 | 77751.75 |
| 2064/065 | 463.56 | 2019.32 | 203.15 | 904.62 | 183773.55 | 41269.92 | 818337.34 |
| Total | 1,576.88 | 6,964.56 | $\sum d x=$ <br> 274.83 | $\begin{gathered} \Sigma d y= \\ 1,391.06 \end{gathered}$ | $\begin{gathered} \sum d x d y= \\ 196,408.55 \end{gathered}$ | $\begin{array}{r} \Sigma \mathrm{dx}^{2}= \\ 43,746.86 \end{array}$ | $\begin{gathered} \Sigma d y^{2}= \\ 990,248.95 \end{gathered}$ |

Suppose,
x= Receivable
$Y=$ Current Assets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{196408.55-\frac{274.83 * 1391.06}{5}}{\sqrt{\left(\left(43746.85-\frac{(274.83)^{2}}{5}\right)\left(990248.94-\frac{(1391.06)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{196408.55-76461.00}}{\sqrt{\left(\left(43746.85-\frac{15106.30}{}\right)\left(990248.94-\frac{387009.58}{}\right)\right)}} \\
& r=\frac{\sqrt{\sqrt{((43746.85-15106.30)(990248.94-387009.58))}}}{}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{119947.55}{\sqrt{((28640.55)(603239.35))}} \\
& r=\frac{119947.55}{\sqrt{17277106765.60}} \\
& r=\frac{119947.55}{131442.41} \\
& r=0.91
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-0.91^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.8281)}{2.2360} \\
& P E=\frac{0.6745 * 0.1719}{2.2360} \\
& P E=\frac{0.11594655}{2.2360}
\end{aligned}
$$

P.E $=0.05$

The above figures show that there is positive correlation in between receivables and Current Assets in HSIL during the period of study. Since the calculated value of " $r$ " is more than six times greater than PE.

## Appendix-7

Hulas SteeL Industries Ltd.
Sales and Current Assets

| Year | X | Y | dx $=\mathrm{x}-\overline{\mathrm{X}}$ | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 1867.22 | 1027.96 | -68.93 | -86.74 | 5978.99 | 4751.34 | 7523.83 |
| 2061/062 | 1743.73 | 1409.04 | -192.42 | 294.34 | -56636.90 | 37025.46 | 86636.04 |
| 2062/063 | 1936.15 | 1114.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 2197.99 | 1393.54 | 261.84 | 278.84 | 73011.47 | 68560.19 | 77751.75 |
| 2064/065 | 2993.30 | 2019.32 | 1057.15 | 904.62 | 956319.03 | 1117566.12 | 818337.34 |
| Total | 10,738.39 | 6,964.56 | $\begin{gathered} \sum \mathrm{dx}= \\ 1,057.64 \end{gathered}$ | $\begin{gathered} \Sigma \mathrm{dy}= \\ 1,391.06 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dxdy}= \\ 978,672.58 \end{gathered}$ | $\begin{gathered} \Sigma d x^{2}= \\ 1,227,903.11 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 990,248.95 \end{gathered}$ |

Suppose,
x= Sales
$y=$ Current Assets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{978672.58-\frac{1057.64 * 1391.06}{5}}{\sqrt{\left(\left(1227903.10-\frac{(1057.64)^{2}}{5}\right)\left(990248.94-\frac{(1391.06)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{978672.59-294248.14}}{\sqrt{\left(\left(1227903.10-\frac{1118602.36}{5}\right)\left(990248.94-\frac{1935047.92}{5}\right)\right)}} \\
& r=\frac{\sqrt{\sqrt{((1227903.10-223720.47))(990248.94-387069.58))}}}{r=\frac{684424.44}{\sqrt{((1004182.63)(603239.35))}}}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{684424.44}{\sqrt{6057624770 \quad 02}} \\
& r=\frac{684424.44}{778307.44} \\
& r=0.88
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-0.88^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.7744)}{2.2360} \\
& P E=\frac{0.6745 * 0.2256}{2.2360} \\
& P E=\frac{0.1521672}{2.2360}
\end{aligned}
$$

$$
\text { P.E= } 0.07
$$

The above figures show that there is positive correlation in between receivables and Current Assets in HSIL during the period of study. Since the calculated value of " $r$ " is more than six times greater than PE.

## Appendix-8

Hulas SteeL Industries Ltd.
Sales and Net working Capital

| Year | x | Y | dx $=\mathrm{x}-\overline{\mathrm{x}}$ | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 1867.22 | 252.98 | -68.93 | 76.52 | -5274.52 | 4751.34 | 5855.31 |
| 2061/062 | 1743.73 | 360.73 | -192.42 | 184.27 | -35457.23 | 37025.46 | 33955.43 |
| 2062/063 | 1936.15 | 176.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 2197.99 | 153.29 | 261.84 | -23.17 | -6066.83 | 68560.19 | 536.85 |
| 2064/065 | 2993.30 | 412.86 | 1057.15 | 236.40 | 249910.26 | 1117566.12 | 55884.96 |
| Total | 10,738.39 | 1,356.32 | $\begin{gathered} \Sigma d x= \\ 1,057.64 \end{gathered}$ | $\sum d y=$ <br> 474.02 | $\begin{gathered} \sum d x d y= \\ 203,111.67 \end{gathered}$ | $\begin{gathered} \sum d x^{2}= \\ 1,227,903.11 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 96,232.55 \end{gathered}$ |

[^0]
## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{203111.68-\frac{1057.64 * 474.02}{5}}{\sqrt{\left(\left(1227903.10-\frac{(1057.64)^{2}}{5}\right)\left(96232.53-\frac{(474.02)^{2}}{5}\right)\right)}} \\
& r=\frac{203111.68-100268.50}{\left.\sqrt{\left(\left(117254.23-\frac{1118602.37}{5}\right)\left(96232.53-\frac{224694.96}{5}\right)\right.}\right)}
\end{aligned}
$$

$$
r=\frac{102843.18}{\sqrt{((1227903.10-223720.47))(96232.53-44938.99))}}
$$

$$
\begin{aligned}
& r=\frac{102843.18}{\sqrt{((1004182.63)(51293.54))}} \\
& r=\frac{102843.18}{\sqrt{51508081899.20}} \\
& r=\frac{102843.18}{226953.92} \\
& r=0.45
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-(-0.45)^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.2025)}{2.2360} \\
& P E=\frac{0.6745 * 0.7975}{2.2360} \\
& P E=\frac{0.5379}{2.2360}
\end{aligned}
$$

$$
P E=0.24
$$

The above figures indicate that there is negative correlation between sales and net working capital. So the calculated value of " $r$ " is not six times more than its PE. The relationship is not considered to be significant.

## Appendix-9

Hulas SteeL Industries Ltd.
Sales and Receivable Turn Ratio

| Year | x | Y | dx=x-x | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 1867.22 | 280.79 | -68.93 | 20.38 | -1404.79 | 4751.34 | 415.34 |
| 2061/062 | 1743.73 | 266.75 | -192.42 | 6.34 | -1219.94 | 37025.46 | 40.20 |
| 2062/063 | 1936.15 | 260.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 2197.99 | 305.37 | 261.84 | 44.96 | 11772.33 | 68560.19 | 2021.40 |
| 2064/065 | 2993.30 | 463.56 | 1057.15 | 203.15 | 214760.02 | 1117566.12 | 41269.92 |
| Total | 10,738.39 | 1,576.88 | $\begin{gathered} \sum d x= \\ 1,057.64 \end{gathered}$ | $\sum \mathrm{dy}=$ <br> 274.83 | $\begin{gathered} \sum d x d y= \\ 223,907.61 \end{gathered}$ | $\begin{gathered} \sum{d x^{2}}^{2}= \\ 1,227,903.11 \end{gathered}$ | $\begin{array}{r} \Sigma d y^{2}= \\ 43,746.86 \end{array}$ |

Suppose,
x= Sales
$\mathrm{Y}=$ Receivable Turn
Over

According to formula,

$$
\begin{gathered}
r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
r=\frac{223907.62-\frac{1057.64 * 274.83}{5}}{\sqrt{\left(\left(1227903.10-\frac{(1057.64)^{2}}{5}\right)\left(43746.85-\frac{(274.83)^{2}}{5}\right)\right)}} \\
\sqrt{\left(\left(1227903.10-\frac{1118602.37}{5}\right)\left(43746.85-\frac{224694.96}{5}\right)\right)}
\end{gathered}
$$

$$
r=\frac{165773.38}{\sqrt{((1227903.10-223720.47))(43746.85-15106.30))}}
$$

$$
r=\frac{165773.38}{\sqrt{((1004182.63)(28640.54))}}
$$

$$
r=\frac{165773.38}{\sqrt{2876033278 \quad 1.80}}
$$

$$
r=\frac{165773.38}{169588.72}
$$

$$
r=0.97
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-(0.97)^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.9409)}{2.2360} \\
& P E=\frac{0.6745 * 0.0591}{2.2360} \\
& P E=\frac{0.039862}{2.2360} \\
& P . E=0.02
\end{aligned}
$$

As the calculated value of "r" is 0.37 , there is positive correlation in between Sales \& Receivables. So, the value of " $r$ " is more than PE, the relationship is considered to be significant.

## Appendix-10

Hulas SteeL Industries Ltd.
Sales and Inventory

| Year | X | Y | dx $=\mathrm{x}-\overline{\mathrm{x}}$ | $\mathrm{dy}=\mathrm{y}-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 1867.22 | 662.78 | -68.93 | -79.79 | 5499.92 | 4751.34 | 6366.44 |
| 2061/062 | 1743.73 | 1022.80 | -192.42 | 280.23 | -53921.86 | 37025.46 | 78528.85 |
| 2062/063 | 1936.15 | 742.57 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 2197.99 | 925.89 | 261.84 | 183.32 | 48000.51 | 68560.19 | 33606.22 |
| 2064/065 | 2993.30 | 1324.02 | 1057.15 | 581.45 | 614679.87 | 1117566.12 | 338084.10 |
| Total | 10,738.39 | 4,678.06 | $\begin{gathered} \Sigma \mathrm{dx}= \\ 1,057.64 \end{gathered}$ | $\Sigma d y=$ <br> 965.21 | $\begin{gathered} \sum d x d y= \\ 614,258.44 \end{gathered}$ | $\begin{gathered} \sum d x^{2}= \\ 1,227,903.11 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 456,585.62 \end{gathered}$ |

> Suppose,
> X= Sales
> $Y=$ Inventory

## According to formula,

$$
\begin{gathered}
r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
r=\frac{614258.44-\frac{1057.64 * 965.21}{5}}{\sqrt{\left(\left(1227903.10-\frac{(1057.64)^{2}}{5}\right)\left(456585.61-\frac{(965.21)^{2}}{5}\right)\right)}} \\
\sqrt{\sqrt{\left(\left(1227903.10-\frac{1118602223}{}\right)\right.}} \begin{array}{r}
\left.520.47)\left(456585.61-\frac{931630.34}{5}\right)\right) \\
r
\end{array} \\
r \frac{614258.44-204168.94}{\sqrt{((1227903.10-223720.47)(456585.61-186326.07))}}
\end{gathered}
$$

$$
\begin{aligned}
& r=\frac{410089.50}{\sqrt{((10041182.63)(270259.54))}} \\
& r=\frac{410089.50}{\sqrt{271389935659}} \\
& r=\frac{410089.50}{520950.99} \\
& r=0.79
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-(0.79)^{2}\right)}{\sqrt{5}}
$$

$$
P E=\frac{0.6745(1-0.6241)}{2.2360}
$$

$$
P E=\frac{0.6745 * 0.3759}{2.2360}
$$

$$
P E=\frac{0.25354455}{2.2360}
$$

$$
P . E=0.11
$$

As the calculated value of " $r$ " is positive, there is positive relationship in between Sales \& Inventory and " $r$ " is more than its PE, the relationship is not considered as significant.

## Appendix-11

Hulas SteeL Industries Ltd.
Current Assets and Current Liabilities

| Year | x | Y | dx $=x-\bar{x}$ | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 1027.96 | 774.97 | -86.74 | 163.27 | 14162.04 | 7523.83 | 26657.09 |
| 2061/062 | 1409.04 | 1048.30 | 294.34 | 110.06 | 32395.06 | 86636.04 | 12113.20 |
| 2062/063 | 1114.70 | 938.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 1393.54 | 1240.25 | 278.84 | 302.01 | 84212.47 | 77751.75 | 91210.04 |
| 2064/065 | 2019.32 | 1606.46 | 904.62 | 668.22 | 604485.18 | 818337.34 | 446517.97 |
| Total | 6,964.56 | 5,608.22 | $\begin{gathered} \Sigma \mathrm{dx}= \\ 1,391.06 \end{gathered}$ | $\Sigma d y=$ <br> 917.02 | $\begin{gathered} \sum \mathrm{dxdy}= \\ 735,254.75 \end{gathered}$ | $\begin{gathered} \sum d x^{2}= \\ 990,248.95 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 576,498.31 \end{gathered}$ |

Suppose,
x= Sales
$y=$ Current
Liabilities

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right.}} \\
& r=\frac{735254.75-\frac{1391.06 * 917.02}{5}}{\left.\sqrt{\left(\left(990248.94-\frac{(1391.06)^{2}}{5}\right)\left(576498.30-\frac{(917.02)^{2}}{5}\right)\right.}\right)} \\
& r=\frac{\sqrt{\left(\left(990248.94-\frac{1935047.92}{5}\right)\left(576498.30-\frac{840925.68}{5}\right)\right)}}{\sqrt{\left(\left(\sum^{2}\right)\right.}} \\
& r=\frac{\sqrt{((990248.94-387009.58))(576498.30-168185.14))}}{\sqrt{((985254.75-255125.97}}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{480128.78}{\sqrt{((603239.35)(408313.16))}} \\
& r=\frac{480128.78}{\sqrt{246310567599}} \\
& r=\frac{480128.78}{496296.85} \\
& r=0.97
\end{aligned}
$$

Probable $\operatorname{Error}($ P.E $)=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-(0.97)^{2}\right)}{\sqrt{5}}
$$

$$
P E=\frac{0.6745(1-0.9409)}{2.2360}
$$

$$
P E=\frac{0.6745 * 0.0591}{2.2360}
$$

$$
P E=\frac{0.03986}{2.2360}
$$

$$
\text { P.E= } 0.02
$$

Above figures shows that the calculated value of correlation coefficient (r) is positive and greater than its PE, there is positive relationship in between Current Assets and Current Liabilities. So "r" is more than 6 times greater PE, the relationship is considered to be significant.

## Appendix-12

Hulas SteeL Industries Ltd.
Quick Assets and Current Liabilities Ratio

| Year | X | Y | dx $=\mathrm{x}-\overline{\mathrm{x}}$ | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 365.18 | 774.97 | -6.95 | 163.27 | 1134.73 | 48.30 | 26657.09 |
| 2061/062 | 386.24 | 1048.30 | 14.11 | 110.06 | 1552.95 | 199.09 | 12113.20 |
| 2062/063 | 372.13 | 938.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 467.65 | 1240.25 | 95.52 | 302.01 | 28848.00 | 9124.07 | 91210.04 |
| 2064/065 | 695.30 | 1606.46 | 323.17 | 668.22 | 215948.66 | 104438.85 | 446517.97 |
| Total | 2,286.50 | 5,608.22 | $\Sigma d x=$ <br> 425.85 | $\Sigma d y=$ <br> 917.02 | $\begin{gathered} \sum \mathrm{dxdy}= \\ 247,484.33 \end{gathered}$ | $\begin{gathered} \sum d^{2}= \\ 113,810.31 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 576,498.31 \end{gathered}$ |

Suppose,
X= Quick Assets
$Y=$ Current Assets

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{247484.32-\frac{425.85 * 917.02}{5}}{\sqrt{\left(\left(113810.31-\frac{(425.85)^{2}}{5}\right)\left(576498.30-\frac{(917.02)^{2}}{5}\right)\right)}} \\
& r=\frac{\sqrt{247484.32-390512.97}}{\sqrt{\left(\left(113810.31-\frac{181348.22}{5}\right)\left(576498.30-\frac{840925.68}{5}\right)\right.}} \\
& r=\frac{\sqrt{\sqrt{((113810.31-36269.64)(576498.30-168185.14))}}}{\sqrt{((169381.73}}
\end{aligned}
$$

$$
r=\frac{169381.73}{\sqrt{((77540.66)(408313.16))}}
$$

$$
r=\frac{169381.73}{\sqrt{31660872217}}
$$

$$
r=\frac{169381.73}{177935.02}
$$

$$
r=0.95
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-(0.95)^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.9025)}{2.2360} \\
& P E=\frac{0.6745 * 0.0975}{2.2360} \\
& P E=\frac{0.06576375}{2.2360} \\
& P . E=0.03
\end{aligned}
$$

Above figures shows that the calculated value of correlation coefficient ( $r$ ) is positive and greater than its PE, there is positive relationship in between Quick Assets and Current Liabilities. Current Liabilities is considered to be significant.

## Appendix-13

Hulas SteeL Industries Ltd.
Gross Profit and Sales Ratio

| Year | x | Y | $\mathrm{dx}=\mathrm{x}-\overline{\mathrm{x}}$ | $\mathrm{dy}=\mathrm{y}-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 247.09 | 1867.22 | 64.61 | -68.93 | -4453.57 | 4174.45 | 4751.34 |
| 2061/062 | 247.22 | 1743.73 | 64.74 | -192.42 | -12457.27 | 4191.27 | 37025.46 |
| 2062/063 | 182.48 | 1936.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 293.98 | 2197.99 | 111.50 | 261.84 | 29195.16 | 12432.25 | 68560.19 |
| 2064/065 | 472.24 | 2993.30 | 289.76 | 1057.15 | 306319.78 | 83960.86 | 1117566.12 |
| Total | 1,443.01 | 10,738.39 | $\begin{gathered} \Sigma \mathrm{dx}= \\ 530.61 \end{gathered}$ | $\begin{gathered} \Sigma d y= \\ 1,057.64 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dxdy}= \\ 318,604.11 \end{gathered}$ | $\begin{gathered} \sum d x^{2}= \\ 104,758.83 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 1,227,903.11 \end{gathered}$ |

Suppose,
x= Gross Profit
$y=$ Sales

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{318604.11-\frac{530.61 * 1057.64}{5}}{\sqrt{\left(\left(104758.83-\frac{(530.61)^{2}}{5}\right)\left(1227903.31-\frac{(1057.64)^{2}}{5}\right)\right)}} \\
& r=\frac{318604.11-112238.88}{\sqrt{\left(\left(104758.83-\frac{281546.97}{5}\right)\left(1227903.10-\frac{1118602.36}{5}\right)\right)}} \\
& r=\frac{\sqrt{\sqrt{((104758.83-56309.39)(1227903.10-223720.47))}}}{r=\frac{206365.24}{\sqrt{((48449.43)(1004182.63))}}}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{206365.24}{\sqrt{48652076039.40}} \\
& r=\frac{206365.24}{220572.16} \\
& r=0.94
\end{aligned}
$$

Probable Error(P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
\begin{aligned}
& P E=\frac{0.6745\left(1-(0.94)^{2}\right)}{\sqrt{5}} \\
& P E=\frac{0.6745(1-0.8836)}{2.2360} \\
& P E=\frac{0.6745 * 0.1164}{2.2360} \\
& P E=\frac{0.0785118}{2.2360} \\
& P . E=0.04
\end{aligned}
$$

Above figures shows that there is positive correlation between gross profit and sales in HSIL during the period of study .so, the calculated value of correlation coefficient $(r)$ is six times greater than P.E.

## Appendix-14

Hulas SteeL Industries Ltd.
Net profit After Tax and Sales Ratio

| Year | X | Y | $d x=x-\bar{x}$ | $d y=y-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 11.80 | 1867.22 | 67.81 | -68.93 | -4674.14 | 4598.20 | 4751.34 |
| 2061/062 | 14.86 | 1743.73 | 70.87 | -192.42 | -13636.81 | 5022.56 | 37025.46 |
| 2062/063 | -56.01 | 1936.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 33.88 | 2197.99 | 89.89 | 261.84 | 23536.80 | 8080.21 | 68560.19 |
| 2064/065 | 40.74 | 2993.30 | 96.75 | 1057.15 | 102279.26 | 9360.56 | 1117566.12 |
| Total | 45.27 | 10,738.39 | $\Sigma d x=$ <br> 325.32 | $\begin{gathered} \sum d y= \\ 1,057.64 \end{gathered}$ | $\begin{gathered} \sum d x d y= \\ 107,505.11 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dx}^{2}= \\ 27,061.53 \end{gathered}$ | $\begin{gathered} \Sigma d y^{2}= \\ 1,227,903.11 \end{gathered}$ |

Suppose,
X= Net Profit After
Tax
$y=$ Sales

## According to formula,

$$
\begin{gathered}
r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
r=\frac{107505.12-\frac{325.32 * 1057.64}{5}}{\sqrt{\left(\left(27061.53-\frac{(325.32)^{2}}{5}\right)\left(1227903.10-\frac{(1057.64)^{2}}{5}\right)\right)}} \\
r=\frac{107505.12-\frac{344071.44}{5}}{\sqrt{\left(\left(27061.53-\frac{105833.10}{5}\right)\left(1227903.10-\frac{1118602.37}{5}\right)\right)}} \\
\sqrt{((27061.53-21166.62)(1227903.10-223720.47))}
\end{gathered}
$$

$$
\begin{aligned}
r & =\frac{38690.83}{\sqrt{((5894.91)(1004182.63))}} \\
r & =\frac{38690.83}{\sqrt{5919566227.41}} \\
r & =\frac{38690.83}{76938.72} \\
r & =0.50
\end{aligned}
$$

Probable Error (P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-(0.50)^{2}\right)}{\sqrt{2.2360}}
$$

$$
P E=\frac{0.6745(1-0.25)}{2.2360}
$$

$$
P E=\frac{0.6745 * 0.75}{2.2360}
$$

$$
P E=\frac{0.50505}{2.2360}
$$

$$
\text { P.E= } 0.22
$$

The calculated value of $(r)$ is positive, there is positive relationship in between sales \& net profit .since the value of $(r)$ is more than it's P.E, the relationship is considered.

## Appendix-15

Hulas SteeL Industries Ltd.
Operating Expenses and Sales Ratio

| Year | X | Y | $d \mathrm{x}=\mathrm{x}-\overline{\mathrm{x}}$ | $\mathrm{dy}=\mathrm{y}-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 1840.06 | 1867.22 | -152.10 | -68.93 | 10484.25 | 23134.41 | 4751.34 |
| 2061/062 | 1723.07 | 1743.73 | -269.09 | -192.42 | 51778.30 | 72409.43 | 37025.46 |
| 2062/063 | 1992.16 | 1936.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 2152.13 | 2197.99 | 159.97 | 261.84 | 41886.54 | 25590.40 | 68560.19 |
| 2064/065 | 2948.04 | 2993.30 | 955.88 | 1057.15 | 1010508.54 | 913706.57 | 1117566.12 |
| Total | 10,655.46 | 10,738.39 | $\begin{gathered} \sum \mathrm{dx}= \\ 694.66 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dy}= \\ 1,057.64 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dxdy}= \\ 1,114,657.64 \end{gathered}$ | $\begin{gathered} \sum d x^{2}= \\ 1,034,840.81 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dy}^{2}= \\ 1,227,903.11 \end{gathered}$ |

Suppose,
x= Operating
Expenses
$y=$ Sales

## According to formula,

$$
\begin{gathered}
r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
r=\frac{1114657.64-\frac{694.66 * 1057.64}{5}}{\sqrt{\left(\left(1034840.81-\frac{(694.66)^{2}}{5}\right)\left(1227903.10-\frac{(1057.64)^{2}}{5}\right)\right)}} \\
r=\frac{1114657.64-\frac{734359.82}{5}}{\sqrt{((1034840.81-96510.50)(1227903.10-223720.47))}} \\
r=\frac{\left.\left.1034840.81-\frac{482552.51}{5}\right)\left(1227903.10-\frac{1118602.37}{5}\right)\right)}{\sqrt{((938330.31)(1004182.63))}}
\end{gathered}
$$

$$
\begin{aligned}
& r=\frac{967785.68}{\sqrt{942254998504}} \\
& r=\frac{967758.68}{970698.20} \\
& r=1
\end{aligned}
$$

Probable Error (P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-(1)^{2}\right)}{\sqrt{2.2360}}
$$

$$
P E=\frac{0.6745(1-1)}{2.2360}
$$

$$
P E=\frac{0.6745}{2.2360}
$$

$$
P E=\frac{0.6745}{2.2360}
$$

P.E $=0.22$

The calculated value of ( $r$ ) shows that there is positive relationship in between sales \& operating expenses of HSIL during the study period .so, $(r)$ is more than six times greater than it's P.E. , the relationship is considered to be significant.

## Appendix-16

Hulas SteeL Industries Ltd.
Total Assets and Net Profit After Tax Ratio

| Year | X | Y | $d \mathrm{x}=\mathrm{x}-\overline{\mathrm{x}}$ | dy $=\mathbf{y}-\bar{y}$ | dxdy | $\mathrm{dx}^{2}$ | dy ${ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 11.80 | 829.42 | 67.81 | 94.31 | 6395.16 | 4598.20 | 8894.38 |
| 2061/062 | 14.86 | 915.17 | 70.87 | 180.06 | 12760.85 | 5022.56 | 32421.60 |
| 2062/063 | -56.01 | 735.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 33.88 | 1159.38 | 89.89 | 424.27 | 38137.63 | 8080.21 | 180005.03 |
| 2064/065 | 40.74 | 1381.58 | 96.75 | 646.47 | 62545.97 | 9360.56 | 417923.46 |
| Total | 45.27 | 5,020.66 | $\Sigma d x=$ <br> 325.32 | $\begin{gathered} \sum d y= \\ 1,345.11 \end{gathered}$ | $\begin{gathered} \sum d x d y= \\ 119,839.62 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dx}^{2}= \\ 27,061.53 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 639,244.47 \end{gathered}$ |

Suppose,
x= Total assets
$y=$ Net Profit after
Tax

## According to formula,

$$
\begin{gathered}
r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
r=\frac{119839.61-\frac{325.32 * 1345.11}{5}}{\sqrt{\left(\left(27061.53-\frac{(325.32)^{2}}{5}\right)\left(639244.47-\frac{(1345.11)^{2}}{5}\right)\right)}} \\
r=\frac{119839.61-\frac{437591.18}{5}}{\sqrt{\left(\left(27061.53-\frac{105833.10}{5}\right)\left(639244.47-\frac{1809320.91}{5}\right)\right)}} \\
r=\frac{119839.61-87518.24}{\sqrt{((27061.53-21166.62)(639244.47-361864.18))}} \\
r((5894.91)(277380.29))
\end{gathered}
$$

$$
\begin{aligned}
& r=\frac{32321.37}{\sqrt{1635131845.32}} \\
& r=\frac{32321.37}{40436.76} \\
& r=0.80
\end{aligned}
$$

Probable Error (P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-(0.80)^{2}\right)}{\sqrt{2.2360}}
$$

$$
P E=\frac{0.6745(1-0.64)}{2.2360}
$$

$$
P E=\frac{0.6745 * 0.36}{2.2360}
$$

$$
P E=\frac{0.2424}{2.2360}
$$

$$
P . E=0.11
$$

The calculated value of ( $r$ ) shows that there is positive relationship in between NPAT \& Total Assets .so, $(r)$ is more than P.E.the relationship is considered to be significant.

## Appendix-17

## Hulas SteeL Industries Ltd.

Net worth and Net Profit After Tax Ratio

| Year | x | Y | dx $=\mathrm{x}-\overline{\mathrm{x}}$ | $\mathrm{dy}=\mathrm{y}-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 11.80 | 516.63 | 67.81 | 0.15 | 10.17 | 4598.20 | 0.02 |
| 2061/062 | 14.86 | 531.49 | 70.87 | 15.01 | 1063.76 | 5022.56 | 225.30 |
| 2062/063 | -56.01 | 516.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 33.88 | 621.65 | 89.89 | 105.17 | 9453.73 | 8080.21 | 11060.73 |
| 2064/065 | 40.74 | 575.50 | 96.75 | 59.02 | 5710.19 | 9360.56 | 3483.36 |
| Total | 45.27 | 2,761.75 | $\Sigma d x=$ <br> 325.32 | $\Sigma d y=$ <br> 179.35 | $\begin{gathered} \sum \mathrm{dxd} y= \\ 16,237.85 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dx}^{2}= \\ 27,061.53 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 14,769.41 \end{gathered}$ |

Suppose,
X= Net Profit after
Tax
$y=$ Net Worth

## According to formula,

$$
\begin{aligned}
& r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}} \\
& r=\frac{16237.84-\frac{325.32 * 179.35}{5}}{\sqrt{\left(\left(27061.53-\frac{(325.32)^{2}}{5}\right)\left(14769.41-\frac{(179.35)^{2}}{5}\right)\right)}} \\
& r=\frac{16237.84-\frac{58346.14}{5}}{\left.\sqrt{\left(\left(27061.53-\frac{105833.10}{5}\right)\left(14769.41-\frac{32166.42}{5}\right)\right.}\right)} \\
& r=\frac{16237.84-11669.23}{\sqrt{((27061.53-21166.62)(14769.41-6433.28))}}
\end{aligned}
$$

$$
\begin{aligned}
& r=\frac{4568.61}{\sqrt{((5894.91)(8336.12))}} \\
& r=\frac{4568.61}{\sqrt{49140709.57}} \\
& r=\frac{4568.61}{7010.04} \\
& r=0.65
\end{aligned}
$$

Probable Error (P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-(0.65)^{2}\right)}{\sqrt{2.2360}}
$$

$$
P E=\frac{0.6745(1-0.4225)}{2.2360}
$$

$$
P E=\frac{0.6745 * 0.5775}{2.2360}
$$

$$
P E=\frac{0.3888}{2.2360}
$$

$P E=0.17$
The above calculation shows that there is positive correlation in between NPAT \& Net worth in HSIL during the study period. so, the calculated value of (r) is more than it's P.E .the relationship is considered to be significant.

## Appendix-18

Hulas SteeL Industries Ltd.
Net Profit After Tax Ratio and Current Assets

| Year | x | Y | dx $=\mathrm{x}-\overline{\mathrm{x}}$ | dy $=\mathbf{y}-\bar{y}$ | dxdy | dx ${ }^{2}$ | dy ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/061 | 11.80 | 1027.96 | 67.81 | -86.74 | -5881.84 | 4598.20 | 7523.83 |
| 2061/062 | 14.86 | 1409.04 | 70.87 | 294.34 | 20859.88 | 5022.56 | 86636.04 |
| 2062/063 | -56.01 | 1114.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2063/064 | 33.88 | 1393.54 | 89.89 | 278.84 | 25064.93 | 8080.21 | 77751.75 |
| 2064/065 | 40.74 | 2019.32 | 96.75 | 904.62 | 87521.99 | 9360.56 | 818337.34 |
| Total | 45.27 | 6,964.56 | $\Sigma d x=$ <br> 325.32 | $\begin{gathered} \Sigma d y= \\ 1,391.06 \end{gathered}$ | $\begin{gathered} \sum \mathrm{dxdy}= \\ 127,564.95 \end{gathered}$ | $\begin{gathered} \sum d x^{2}= \\ 27,061.53 \end{gathered}$ | $\begin{gathered} \sum d y^{2}= \\ 990,248.95 \end{gathered}$ |

Suppose,
X= Net Profit after
Tax
$Y=$ Current Assets

## According to formula,

$$
r=\frac{\sum d x d y-\frac{\sum d x \sum d y}{N}}{\sqrt{\left(\left(\sum d x^{2}-\frac{\left(\sum d x\right)^{2}}{N}\right)\left(\sum d y^{2}-\frac{\left(\sum d y\right)^{2}}{N}\right)\right)}}
$$

$$
\begin{array}{r}
r=\frac{127564.96-\frac{325.32 * 1391.06}{5}}{\sqrt{\left(\left(27061.53-\frac{(325.32)^{2}}{5}\right)\left(990248.94-\frac{(1391.06)^{2}}{5}\right)\right)}} \\
r=\frac{127564.96-\frac{452539.64}{5}}{\sqrt{\left(\left(27061.53-\frac{105833.10}{5}\right)\left(990248.94-\frac{1935047.92}{5}\right)\right)}}
\end{array}
$$

$$
\begin{aligned}
& r=\frac{127564.96-90507.93}{\sqrt{((27061.53-21166.62)(990248.94-387009.58))}} \\
& r=\frac{37057.03}{\sqrt{((5894.91)(603239.35))}} \\
& r=\frac{37057.03}{\sqrt{3556041676.70}} \\
& r=\frac{37057.03}{59632.55} \\
& r=0.62
\end{aligned}
$$

Probable Error (P.E) $=P E=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{N}}$

$$
P E=\frac{0.6745\left(1-(0.62)^{2}\right)}{\sqrt{2.2360}}
$$

$$
P E=\frac{0.6745(1-0.3844)}{2.2360}
$$

$$
P E=\frac{0.6745 * 0.6156}{2.2360}
$$

$$
P E=\frac{0.41454504}{2.2360}
$$

$$
\mathrm{PE}=0.18
$$

The above calculation shows that there is positive correlation in between NPAT \& Current Assets Net worth in HSIL during the study period. so, the calculated value of $(r)$ is more than it's P.E .the relationship is considered to be significant.

HULAS STEEL INDUSTRIES LIMITED
SIMRA, BARA
BALANCE SHEET AS AT 31 ${ }^{\text {st }}$ ASHADH 2062 Rs.In Million

| PARTICULARS |  | AS AT 31st ASHADH 2062 |  | $\begin{aligned} & \text { AS AT 31st } \\ & \text { ASHADH } 2061 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| SOURCES OF FUNDS |  |  |  |  |
| SHAREHOLDERS' FUND |  | 531.49 |  | 516.63 |
| Share capital | 188.47 |  | 188.47 |  |
| Share Application Money | 2.52 |  | 2.52 |  |
| Reserves \& Surplus | 340.50 |  | 325.64 |  |

## LOAN FUNDS

Secured Loans 383.68
TOTAL
915.17
829.42

## APPLICATION OF FUNDS

## FIXED ASSETS

Gross Block
Less: Depreciation
Net Block
Capital Work in Progress
771.26
487.17
284.09
761.11
454.37
0.29
306.75
0.41

INVESTMENTS
CURRENT ASSETS,LOANS \& ADVANCES

Inventories
Sundry Debtors
Cash and bank Balances
Other Current Assets
Loan and Advances
Less: CURRENT LIABILITIES PROVISIONS
1022.80
267.70
267.26
266.76
662.78
280.80
14.31
6.61
12.20
13.41
92.98
1409.04
1028.00

NET CURRENT ASSETS
360.74
252.99

MISCELLANEOUS EXPENDITURE
2.35
2.02
(to the extent not written off or adjusted)
TOTAL
915.17

## HULAS STEEL INDUSTRIES LIMITED

## SIMRA, BARA

BALANCE SHEET AS AT 32st
ASHADH 2064 Rs.In Million

|  |  | AS AT 32st <br> ASHADH <br> PARTICULARS | AS AT 32st <br> ASHADH <br> 2064 |
| :--- | :--- | :--- | :--- | :--- |

## SOURCES OF FUNDS

SHAREHOLDERS' FUND
Share capital
Share Application Money
Reserves \& Surplus
621.65
224.28
77.89
319.48
319.48

## LOAN FUNDS

Secured Loans
537.73

## TOTAL

## APPLICATION OF FUNDS

## FIXED ASSETS

## Gross Block

1320.91

Less: Depreciation
553.34

Net Block
Capital Work in Progress
INVESTMENTS
CURRENT ASSETS,LOANS \& ADVANCES

Inventories
Sundary Debtors
925.89
742.57

Cash and bank Balances
305.37
260.41

Other Current Assets
30.87
7.03

Loan and Advances
Less: CURRENT LIABILITIES PROVISIONS
11.40
120.02
1393.54
1215.53
24.72

## NET CURRENT ASSETS

MISCELLANEOUS EXPENDITURE
(to the extent not written off or adjusted

HULAS STEEL INDUSTRIES LIMITED
SIMRA, BARA
BALANCE SHEET AS AT 31st ASHADH 2065

## Rs.In Million

|  |  | AS AT 31st <br> ASHADH <br> PARTICULARS |
| :--- | :--- | :--- |

## SOURCES OF FUNDS

| SHAREHOLDERS' FUND |  | 575.50 |
| :--- | ---: | ---: |
| Share capital | 224.28 |  |
| Share Application Money | 77.89 |  |
| Reserves \& Surplus | 273.33 |  |
|  |  |  |

## LOAN FUNDS

Secured Loans ..... 803.38
UnSecured Loans ..... 2.70
TOTAL1381.58
APPLICATION OF FUNDS
FIXED ASSETS
Gross Block ..... 1499.25
Less: Depreciation ..... 701.02
Net Block ..... 798.23
Capital Work in Progress ..... 21.80
INVESTME NTS ..... 144.06
CURRENT ASSETS,LOANS \& ADVANCES
Inventories ..... 1324.02
Sundary Debtors ..... 463.56
Cash and bank Balances ..... 27.48
Other Current Assets ..... 11.36
Loan and Advances192.90
2019.32
Less: CURRENT LIABILITIES ..... 1588.2618.21
NET CURRENT ASSETS ..... 412.86
MISCELLANEOUS EXPENDITURE ..... 4.64(to the extent not written off or adjusted
TOTAL1381.58

HULAS STEEL INDUSTRIES LIMITED
SIMRA, BARA
PROFIT \& LOSS ACCOUNT FOR THE YEAR ENDED 31st
ASHADH2062
Rs.In Million

| PARTICULARS | $\begin{gathered} \text { TOTAL } \\ \text { 31.03.062 } \end{gathered}$ | $\begin{gathered} \text { TOTAL } \\ 31.03 .061 \end{gathered}$ |
| :---: | :---: | :---: |
| INCOME |  |  |
| Sales | 1711.30 | 1843.41 |
| Resalables Sales | 29.45 | 22.38 |
| Other Income | 1.81 | 1.45 |
| Profit/(Loss) on Sale of Assets | 1.36 | 0.05 |
| Profit/(Loss) on Exchange | -0.18 | -0.07 |
| TOTAL | 1743.73 | 1867.22 |
| Less: Cost of Goods Sold | 1496.52 | 1620.13 |
| GROSS PROFIT | 247.22 | 247.09 |
| Less: Indirect Expenses | 73.18 | 71.83 |
| Branch Indirect Expenses | 26.22 | 32.50 |
| Profit before Interest \& Depreciation | 147.83 | 142.76 |
| Less:Interest | 92.74 | 77.66 |
| Profit before Depreciation | 55.09 | 65.10 |
| Less:Depreciation | 34.41 | 37.94 |
| NET OPERATING PROFIT | 20.68 | 27.16 |
| Provision for Bonus (10\% of Taxable Profit) | 1.85 | 2.72 |
| Profit before taxation | 18.83 | 24.45 |
| Taxation provisions/Special fee |  |  |
| for the Year | 3.98 | 5.15 |
| for the earlier Year | 0.00 | 7.50 |
| TOTAL | 3.98 | 12.65 |
| Profit carried to Appropriation Account | 14.86 | 11.80 |
| APPROPRIATION ACCOUNT |  |  |
| Profit/(Loss)brought forward from last year | 43.88 | 35.12 |
| Dividend /Interest on investments | 0.85 | 0.85 |
| TOTAL | 44.73 | 35.97 |
| Profit for the period | 14.86 | 11.80 |
| TOTAL | 59.59 | 47.77 |
| Provision for Doubtful Debts | 0.00 | 3.73 |
| Adjustments relating to Previous years(+-) | 0.65 | 0.17 |
|  | 0.65 | 3.89 |
| Profit Surplus Carried Forward | 58.94 | 43.88 |

HULAS STEEL INDUSTRIES
LIMITED,SIMRA, BARA
PROFIT \& LOSS ACCOUNT FOR THE YEAR ENDED 32st ASHADH2064 Rs.In Million

| PARTICULARS | $\begin{gathered} \text { TOTAL } \\ 32.03 .064 \\ \hline \end{gathered}$ | $\begin{gathered} \text { TOTAL } \\ 32.03 .063 \end{gathered}$ |
| :---: | :---: | :---: |
| INCOME |  |  |
| Sales | 2147.26 | 1902.63 |
| Resalables Sales | 45.31 | 29.35 |
| Other Income | 2.96 | 4.31 |
| Profit/(Loss) on Sale of Assets | 0.21 | 0.02 |
| Profit/(Loss) on Exchange | 2.26 | -0.15 |
| TOTAL | 2197.99 | 1936.15 |
| Less: Cost of Goods Sold | 1904.02 | 1753.67 |
| GROSS PROFIT | 293.98 | 182.48 |
| Less: Indirect Expenses | 91.51 | 81.81 |
| Branch Indirect Expenses | 23.38 | 23.51 |
| Profit before Interest \& Depreciation | 179.09 | 77.16 |
| Less:Interest | 96.03 | 102.93 |
| Profit before Depreciation | 83.06 | -25.77 |
| Less:Depreciation | 37.19 | 30.24 |
| NET OPERATING PROFIT | 45.87 | -56.01 |
| Provision for Bonus (10\% of Taxable Profit) | 2.87 | 0.00 |
| Profit before taxation | 43.00 | -56.01 |
| Taxation provisions/Special fee |  |  |
| for the Year | 0.00 | 0.00 |
| for the earlier Year | 9.11 | 0.00 |
| TOTAL | 9.11 | 0.00 |
| Profit carried to Appropriation Account | 33.88 | -56.01 |
| APPROPRIATION ACCOUNT |  |  |
| Profit/(Loss)brought forward from last year | 3.57 | 58.94 |
| Dividend /Interest on investments | 0.85 | 0.85 |
| TOTAL | 4.42 | 59.79 |
| Profit/(Loss) for the period | 33.89 | -56.01 |
| TOTAL | 38.31 | 3.78 |
| Provision for Doubtful Debts | 0.00 | 0.00 |
| Adjustments relating to Previous years(+-) | 0.01 | 0.20 |
| Transfer to General Reserve | 32.58 | 0.00 |
|  | 32.58 | 0.20 |
| Profit Surplus Carried Forward | 5.73 | 3.57 |

HULAS STEEL INDUSTRIES LIMITED
SIMRA, BARA
PROFIT \& LOSS ACCOUNT FOR THE YEAR ENDED 31st ASHADH2065

Rs.In Million

| PARTICULARS | $\begin{gathered} \text { TOTAL } \\ 32.03 .065 \end{gathered}$ |
| :---: | :---: |
| INCOME |  |
| Sales | 2924.59 |
| Resalables Sales | 62.09 |
| Other Income | 4.85 |
| Profit/(Loss) on Sale of Assets | 1.63 |
| Profit/(Loss) on Exchange | 0.14 |
| TOTAL | 2993.30 |
| Less: Cost of Goods Sold | 2521.06 |
| GROSS PROFIT | 472.24 |
| Less : Indirect Expenses | 117.98 |
| Branch Indirect Expenses | 31.83 |
| Profit before Interest \& Depreciation | 322.44 |
| Less:Interest | 170.81 |
| Profit before Depreciation | 151.63 |
| Less:Depreciation | 106.36 |
| NET OPERATING PROFIT | 45.26 |
| Provision for Bonus (10\% of Taxable Profit) | 4.53 |
| Profit before taxation | 40.74 |
| Taxation provisions/Special fee |  |
| for the Year | 0.00 |
| for the earlier Year | 0.00 |
| TOTAL | 0.00 |
| Profit carried to Appropriation Account | 40.74 |
| APPROPRIATION ACCOUNT |  |
| Profit/(Loss)brought forward from last year | 5.73 |
| Dividend /Interest on investments | 0.00 |
| TOTAL | 5.73 |
| Profit/(Loss) for the period | 40.74 |
| TOTAL | 46.47 |
| Provision for Doubtful Debts | 0.00 |
| Adjustments relating to Previous years(+-) | 0.07 |
| Proposes Dividend | 0.00 |
| Transfer to General Reserve | 0.00 |
|  | 0.07 |
| Profit Surplus Carried Forward | 46.39 |


[^0]:    Suppose, x= Sales
    $y=$ Net Working
    Capital

