

CHAPTER- I

INTRODUCTION

1.1 BACKGROUND OF THE STUDY:-

Nepal is an agro-based, land-locked and least developed country which is situated between the large economic and different political view country of India and China.

Agriculture sector plays a vital role in Nepalese economy. More than 80% of economically active population is engaged in agriculture for their livelihood. But the agricultural contribution to the total domestic product is only nearly about 42 percent. Because of the poor contribution of agriculture sector to the gross domestic product, per-capita income of Nepalese people is only us \$220 equivalent per year. Nepal's per-capita income is one of the lowest in the world. In fact Nepal is the ninth poorest country in the world. In this background agriculture is still the backbones of Nepalese economy. Thus economic development is not possible without agricultural prosperity.

But the agriculture sector alone cannot offer a satisfactory standard of living to the growing population nor can it provide jobs to the expanding labour forces. Therefore pressure of the excess agrarian population and the rising needs and aspiration for the people have forced Nepal to shift its development programs toward industrialization.

Mainly in Nepal Jute Industries are firstly established in a largest scale in the country as Biratnagar Jute Mills Ltd. and Shree Raghupati Jute Mills Ltd. Other private sector Jute Industries are also established after democracy.

Agro-based Industries play vital role for development of a Country. Jute is the main and a leading agricultural cash crop in Nepal. Instead of this, there are some cash crops like oil, sugarcane, tobacco and woods etc. By the crop nation can also earn a lot of foreign currency through foreign trade. Jute contributes about 33% of total export and about 56742 hectares land is cultivated. A annual production of Jute is almost 40,000 Ton and its annual revenue from export market is almost Rs. 900 millions.

The Jute Industry, which is an agro-based export promoting Industry in Nepal is Pioneer, in the field of its organized industry. The history of this Industry started with the establishment of Biratnagar Jute Mills in 1993 B.S. Afterwards, many other Jute mills were gradually established. At present the Jute Industry in Nepal consists of eight units. The units constituting the industry are Bitatnagar Jute Mills, Shree Raghupati Jute Mills, C.M. Jute Mills, Baba Jute Mills, Hansrai Hulasehand Jute Mills, Shankar Jute Mills, Swastik Jute Mills and

Nepal Jute Mills. The first two are large scale units while the rest are small ones. The second oldest and largest units is the Raghupati Jute Mills which is the only semi-government Jute Mill, which was established in 2003 B.S. (1946 A.D.) with an authorized capital of Rs. 16 million and Paid-up Capital of Rs. 13 million. The mill started commercial production lately in 2011 B.S. Its production capacity is 6571 metric tones per annum. It is situated near Jogbani on the side of Indo-Nepal Boarder at Rami Biratnagar Sub-metropolitan city ward no. 22 of Morang district which is six kilometer far from Biratnagar Center. The location is best suited for mill in view of Transportation and communication facilities availability of cheap and skilled labour nearness to raw-materials, market accessibility and on. As for the market accessibility, it is not only the nearest place to the main market (ie Indian) but also linked to the Indian Railway being the cheapest means of Transport.

The shares of RJM were over subscribed as the investors in the country were very enthusiastic by achievement of the Jute Mill (ie. SRJM). The majority of shares were held by the Indian Promoters and the rest were allotted to the Nepal Government and Common People. The representative of the Nepalese shareholders had no executive authority and even what ever they had were not exercised as they were mostly big people from Kathmandu who seldom visited the Mill. The government was silent spectator. Naturally the managing agents dominated the whole shows.

The RJM showed highly undesirable operating results breaking the enthusiasm in Investors aroused by the first Jute Mill. There were two main reasons for such results. First, the mill started commercial production after eight years from the date of its establishment and, secondly, there were serious and repeated bungling on the part of the management. Obviously the government of Nepal had no other option except to take the management under its own control by purchasing the majority share of the managing agents. Then in 2016 B.S. all the shares of the managing agent were acquired by the government and the working results of the mill proved satisfactory. But only after a few years its performance again went into a decline. Eventually in 2051 B.S. It was closed owing to labor negligence, feeble management and other operating problems. After two years of its closure, it was privatized in 2053 B.S. The Arihant multifibers of Golcha organization purchased 65% of the shares while 33.62% of the shares were held by the government and the rest 1.38% by the common people. Ever since the privatization, its performance has been towards improvement.

At present the SRJM has an authorized capital of Rs. 45,00,00000 divided into 45,00,000 shares of Rs.100 each and paid-up capital of Rs.18,06,96000. The Mill provided direct employment to 2600 persons but depends heavily on imported raw-materials from India and Bangladesh due to substantial decrease in Jute Cultivation in the country and availability of only

25% of the raw-materials requirement. It produces varieties of Fabrics, Jute Carpets, Hessians wave's sacks and Yarns and supplies them into India. As 95% of finished products are exported to India from where the required raw-materials is imported. It finds it difficult to face the market competition which the Indian Jute product due to increased costs and prices of its products. Further the demand for Jute products, in the internal market is decreasing due to an increasing shift to polythene products. Under the circumstance, even a slight negligence on the part of management may endanger its survival and growth. This necessitates a periodical appraisal of the performance of management to pin point the areas of weakness and take corrective measures immediately. The management has various functional areas as production, marketing, finance, personnel and so on. Though each of these areas needs to be evaluated periodically, the top priority should be accorded to the financial one. The present study looks into the working capital management which is one of most important aspects of the financial management of the Mill.

. Its survival and growth largely depend on smooth and economical operation for which the adequate working capital is a must. It is because even the fate of large investment in its fixed assets is often determined by a relatively small amount of the working capital represented by current assets. As the working capital has strong bearing on financial performance and position of the industry, the periodical appraisal of its working capital position is absolutely essential. Such an appraisal of working capital position also reflects on the performance of working capital management of the industry concerning with the management of all aspects of the current assets and current liabilities. However, the present study attempts to appraise the performance of working capital management of Jute industries in Nepal with special reference to Raghupati Jute Mills.

1.2 NEED OR SIGNIFICANCE OF THE STUDY:-

The SRJM is the only one semi-government Jute mill in the country. This mill adequately supports the Jute Cultivation in neighboring districts (Monang, Sunsari, Jhapa, Saptari, Siraha and Udaypur) by making full use of locally available raw Jute in the manufacture of Jute products. It provides direct employment to 2600 persons and contributes significantly to the tax revenue as well as country's balance of payment situation by earning convertible foreign currency. In order to take the full advantage, its successful operation which depends largely upon proper management is a continuous performance appraisal for finding out the areas of weakness and taking immediate corrective actions. Hence, it is essential to ensure better working of established industries." For successful operation business enterprises do and co-ordinate various types of activities like marketing, finance, production, distribution and so on.

Out of the various functional areas of management of the industry, the financial is a key one. As the working capital management is one of the most important aspects of the financial management, the need and importance of this study cannot be over emphasized.

In particular, the study makes an evaluation of the short term financial position of Shree Raghupati Jute mills and indicates whether or not it is able to meet its current obligations as and when they fall due for payment. Such identification assumes utmost importance to the short-term creditors and management for taking proper decisions.

Similarly, the study also measures the efficiency in use of current assets of the factory and indicates whether or no the investment in current assets has been utilized efficiently. Such an indication is of great significance to the management and investors for making suitable decisions. Likewise, the study also analyses the sources and uses of funds of the factory to obtain an insight into the changes that have taken place in its financial position during the period of analysis. Such an insight is very helpful to the management and credit grantors for taking relevant decisions.

1.3 STATEMENT OF PROBLEM:-

Nepal is least developed and landlocked country, located between the two big countries the people Republic of China and India. Basically, it is a agricultural country. Therefore most part of the Nepalese economy is based on agriculture. As most of the agricultural product is raw material for industry, most of the industries in Nepal are agro-based. One of them is Jute industry. Jute industry plays a significant role for the economic development of the nation. It provides bulk of employment opportunities as well as increases the gross domestic product by utilizing own resources. Every business enterprises is established for earning profit. To meet this objective successful operation is required. The financial position of the business concern is affected by several factors (i.e. economic, social and financial). Financial statements of SRJM reveals that SRJM is a financially sound business but the analysis of statements clarifies that profit stated in P/L account is over stated. There are several factors which may affect profit but are not adjusted in P/L account. SRJM is also bearing high administration cost, interest expenses and other expenses which directly effect on total profitability of the mill. Over staffing also increases the expenses. Jute industries have passed their more than 70 years of operation in Nepal. But despite such long experience it takes on an average 130 workers to produce one ton jute products against 50 to 55 according to Indian standard, which also increases the cost. Inventory management is also not scientific and systematic. As jute is seasonal agricultural product, mill has to keep it very long time in store. Which not only increases the cost but decrease quality also? On the other hand it may cause heavy wastage. The excessive level of inventory has consumed more funds of the mill which can not be used for any other purpose and which compel to take loan from the bank and other parties for general purpose. In particular, the efforts have been concentrated on finding out the answers to the following questions:-

- (a) What are the major factors determining the working capital condition of the factory?
- (b) What are the major components of current assets of the factory?
- (c) What is the size of investment in each type of current assets of the factory?
- (d) Is there an adequate investment in each type of current assets of the factory?

- (e) Is there an efficient utilization of investment in current assets of the factory?
- (f) What are the sources of financing of current assets of the factory?
- (g) What are the effects of working capital on profitability of the factory?

1.4 OBJECTIVES OF THE STUDY:-

The main objective of this study is to evaluate the performance of management of working Capital of SRJM. In particular, it aims at:-

- (a) To assess the working capital condition of the factory.
- (b) To Measure the efficiency of management in utilization of inventory.
- (c) To appraise the efficiency of management in utilization of account receivables.
- (d) To Measure the efficiency of management in the use of cash.
- (e) To evaluate the financing pattern of working capital of the factory.
- (f) To examine the effects of working capital on profitability of the factory.
- (g) To Present and analyzing the sources and uses of funds of the factory ; and
- (h) To suggest remedial measures wherever found necessary.

1.6 LIMITATIONS OF THE STUDY:-

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

- (a) The Jute industry in Nepal presently consists of eight units. The evaluation of the performance of the industry as well as the individual units has been more useful for all practical purposes. But the present study has been confined to the SRJM only due to the unavailability of relevant data and information pertaining to other units.
- (b) Although, the overall performance of management of SRJM needs to be evaluated, the study in view of time, cost and academic level has been restricted to the performance of Working capital management.
- (c) The study has made generalization about the performance of working capital management of the factory on the basis of data covered by the period of study from 2053/54 to 2062/63 only.
- (d) It would be much better to compare the actual ratios of the factory with those of the industry to which it belongs. But because of the non- availability of required data such comparison has been made with absolute and historical standards for drawing inferences.
- (e) The reliability of findings of the study largely depends upon the correctness of the data and information made available by the factory.

Chapter- II

Review of Literature:-

In the previous chapter, a general introduction of the Jute industry in Nepal was given. This chapter reviews the available literature on the subject concerned. It is subdivided into three sections. The first section deals with the conceptual framework of working capital management. The second section reviews the relevant articles and studies while the related theses submitted for University degrees, are reviewed in the third section.

2.1 Conceptual Framework:-

In this section an attempt has been made to form a sound theoretical background for the study. It covers meaning and concept of working capital, classification of working capital, need for working capital, working capital policy, financing of working capital, determinants of working capital, and techniques of working capital analysis.

2.1.1 Meaning and concept of Working Capital:-

Business firms need various types of assets in order to carry out its operation. Some assets are required to meet the needs of regular productions and some others are required especially to meet day to day expenses and short term obligations. The assets such as cash, marketable securities, accounts receivables and inventories, which are known as current assets, are required to be maintained at certain level depending upon the volume of production and sales.

Working capital is a furnish investment in short term assets.¹ Working capital is a firm's investment in short term assets-cash, short term securities, account receivable and inventories.²

The cash and marketable securities are respectively considered as purely liquid and near liquid assets where as the accounts receivable and inventories are not. However they can be liquidated as and when necessary within a period of less than one year. In short, WC is the source of financing current assets and it includes short as well as long term financing.³

Working capital management is concerned with the problem that arises in the management of the current assets and current liabilities. It affects the overall functional areas of the firm. Thus, the success or failure of any firm virtually depends upon the efficiency of working capital management. It is the

lifeblood and controlling nerve center for any type of business organization because without the proper control upon it no business organization can run smoothly. As, it is the management of current assets and current liabilities; it plays the crucial role in success and failure of an organization as it deals with that part of assets, which are transformed from one form to another form during the course of manufacturing cycle.

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1. J. Fred Weston. ***Managerial Finance*** (Illinois: The Dryden press Hinsdale. 1981) pg.137
 2. J.F.Weston and E.F. Brigham. ***Managerial Finance*** (Illinois: The Dryden press. 1984) pg.266
 3. Surendra Pradhan, ***Basis of Financial Management***, 2nd edition (kathmandu: Educational Enterprises Pvt. Ltd.,2000) pg. 139

Therefore, the role of working capital management is more significant for every business organization irrespective of their nature. There are two concepts of working capital i.e. Gross concept and net concept.

a) **Gross Concept:** - It refers to the firm's investment in current assets i.e. cash, marketable securities inventory and accounts receivable.

b) **Net Concept:-** It can be defined in two ways,

- (i) Most common definition of the working capital is the difference between current assets and current liabilities.
- (ii) The alternative definition is that portion of a firm's current assets which is financed with long term funds.⁴

According to the net concept, Working capital refers to the difference between current assets and current liabilities. In other words, it is the part of current assets financed with long term funds. It focuses on the liquidity position of the firm and suggests extending which working capital need to be financed by permanent sources of funds. It is not very useful to compare the performance of different firms as a measure of liquidity, but it is quite useful for internal control. This concept helps to compare the liquidity of the same firm over a time.⁵

According to the gross concept, we refer to the capital invested in current assets of a firm. It focuses only the optimum investment on current assets and financing of current assets.⁶ It includes cash, short term securities, inventory and accounts receivables. The level of current assets may be fluctuating with the changing business activity. Thus, this concept can help earning more profit through maximum utilization of current assets. This concept is called quantitative concept.

WC management is the effective lifeblood of any business. Hence the management of working capital plays a vital role for existence of any public enterprises successfully. It is the center of the routine day-to-day administration of current assets and current liabilities. Therefore WC management in public enterprises is very important mainly for four reasons.

Firstly, public enterprises must 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 sources of funds to finance the current assets.

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4. L.J. Gitman, ***Principles of Managerial Finance***, 5th edition (New York: Harper Collins Publishers, 1988) pg. 473
 5. Khan and Jain, ***Financial Management: Text and problems***, 3rd edition (New Delhi, TATA MCGRAW HILL, 1999) pg. 604
 6. Radhe Shyam Pradhan, ***Management of Working Capital*** (New Delhi, National Book Organization, 1986) pg. 119

Proper management of working capital must ensure adequate amount of working capital as per working capital as per need of business firms. It should be in good health and efficiently circulated. To have adequate, healthy and efficient circulation of working capital, it is necessary that working capital be properly determined and allocated to its various segments, efficiently controlled and regularly reviewed. In the opinion of well-known Indian professor I.M. Pandey, there are specially two concepts of working capital i.e. gross concept and net concept. The term 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. Net working capital arises when current assets exceed current liabilities. A negative WC occurs when current liabilities are in excess of current assets⁷.

2.1.2 Classification of Working Capital:-

Working capital can be classified into two categories:-

- i. Permanent or fixed working capital
- ii. Variable or temporary or fluctuating working capital.

i. Permanent Working Capital:-

It refers to that level of current assets which is required on a continuous basis over the entire year. A manufacturing concern cannot operate regular production and sales functions in the absence of this portion of working capital.

Therefore, a manufacturing concern holds certain minimum amount of working capital to ensure uninterrupted production and sales functions. This portion of working capital is directly related to the firm's expansion of operation capacity.⁸

ii. Variable Working Capital:-

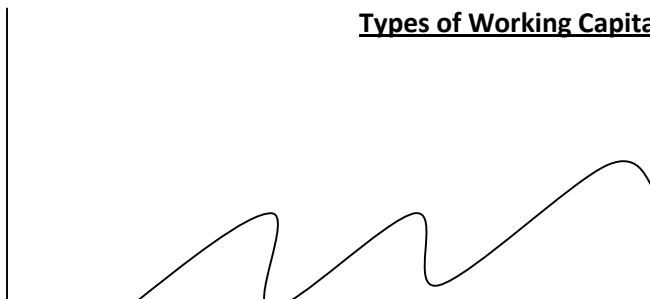
It refers to that portion of working capital, which is required over permanent working capital. Therefore, this portion of working capital depends upon the nature of firm's production; relation between labour and management. Fig.1 shows clearly about this portion of working capital. If a firm has sound management of this portion of working capital it can easily win other competitors in the cutthroat of the market.

7. I.M Pandey, ***Financial management***

8. R.M. Srivastav, ***Financial Decision Making: Text, problems and cases.***(New Delhi Sterling publishers Pvt. Ltd, 1984) pg.48

Fig. 1

Types of Working Capital



Variable Working Capital

Permanent Working Capital

Time period

Adopted From:- I.M. Pandey , *Financial Management*, pg. 808

2.1.3 Need For Working Capital:-

The management of working capital has been regarded as one of the conditioning factors in the decision making issue. It is no doubt, very difficult to point out as to how much working capital is needed by a particular company, but it is very essential to analyze and find out the solution to make an efficient use of funds for minimizing the risk of loss to attain profit objectives. Thus goes the importance of working capital in operating life of a company. A successful business keeps its working capital moving rapidly. Thus it is also a lead circulating capital or a moving capital. The transmutation of a company's working capital into income and profits and back into working capital is one of the most dynamic and vital aspects of business operation. And only this movement of current assets keeps the business alive. A fully equipped factory without the supply of materials to process and without cash to pay bills and a

store without stock to sell is of no use. These circumstances emphasize the importance of working capital in a business firm.⁹

The need for working capital or current assets cannot be overemphasized. The objective of financial decision-making is to maximize the shareholder's wealth. To achieve this, it is necessary to generate sufficient profits. The extent to which profit can be earned will naturally depend upon the magnitude of the sales among other things. A successful sales programmer is in

other words, necessary for earning profit by any business extremes. However, sale does not convert into cash instantly; there is invariably a time lag between the sales of goods and receipt of cash.

9. Hiramani Ghimire, *"Working Capital position a Arinata Multi-Fibres Ltd."*
(Unpublished Master Degree thesis, post graduate, Biratnagar Campus T.U.2002) pg. 20

There is, therefore, a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital is necessary to sustain sale activity. Technically, this is referred to as the operating or cash cycle. The operating cycle can be said to be at the near of the need for working capital. "Operating cycle is the time duration required to convert sales, after the conversion of resources into inventories into cash."¹⁰

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

- A) THE TRANSACTION MOTIVE:-** According to transaction motive, a firm holds cash and inventories to facilitate smooth production and sales operation in regular. Thus, the firm needs the working capital to meet the transaction motive.

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

- C) THE SPECULATIVE MOTIVE:-** Speculative motive refers to the desire of a firm to take advantages of following opportunities:-

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

Thus, the firms need the working capital to meet the above four motives.

2.1.4 **WORKING CAPITAL POLICY:-**

A firm's net working capital position is not only important as an index of liquidity but it is also used as a measure of the firm's risk. Risk, in this regard, means chances of the firm being unable to meet its obligations on due date.¹¹ Working capital management involves deciding upon the amount and composition of current assets and how to finance these assets.

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

10. I.M. Pandey. Pg.731

11. I.M. Pandey. Pg.738

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

Working capital policy refers to the firm's basic policies regarding target level of each category of current asset and how current assets will be financed.¹² So, first of all, the firm has to determine how much funds should be invested in working capital in gross concept. Every firm can adopt different financing policy according to the financial manager's attitude towards the risk return trade off. One of the most important decisions of final manager is how much current liabilities should be used to finance current assets. Every firm has to find out the different sources of funds for working capital.

2.1.4.1 **CURRENT ASSETS INVESTMENT POLICY:-**

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried to support the given level of sales. There are three alternative current assets investment policies- fat cat, lean & moderate.¹³

A) FAT CAT POLICY:- This is known as relaxed current assets investment policy. In this policy, the firm holds relatively large amount of cash, marketable securities, inventory and receivable to support a given level of sales. This policy creates longer inventory and cash conversion cycles. It also creates the longer receivable collection period due to the liberal credit policy. Thus, this policy provides the lowest expected return on investment.

B) LEAN AND MEAN POLICY:- In lean & mean policy, a firm holds the minimum amount of cash, marketable securities, inventory and receivable to support a given level of sales. This policy tends to reduce the inventory and receivable conversion cycle. Under this policy firm allows a tight credit policy and bears the risk of losing sales.

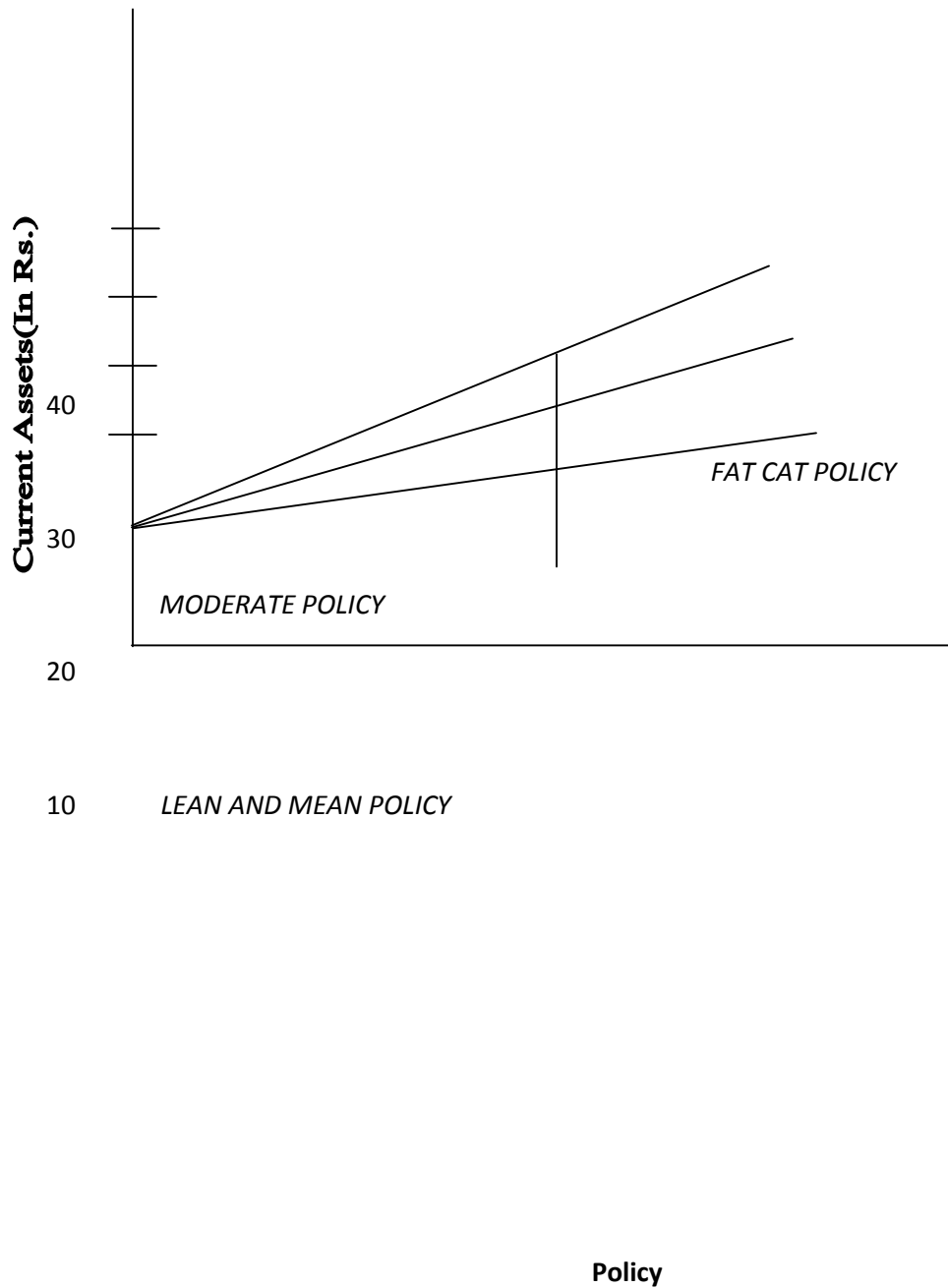
C) MODERATE POLICY:- In moderate policy, a firm holds the amount of current assets in between the relaxed and restrictive policies. Both risk and return are moderate in this policy.

12. J. Fred Weston, Scott Besley and Engence F. Bringham, *Essentials of Managerial Finance*. 11th edition (The dreyden press, 1996) pg. 333

13. Weston, Besley and Bringham, pg. 334

Fig. 2

Alternative Current Assets Investment Policy



Adopted From: Weston, Besley & Brigham, *Essentials of Managerial Finance*, pg. 345

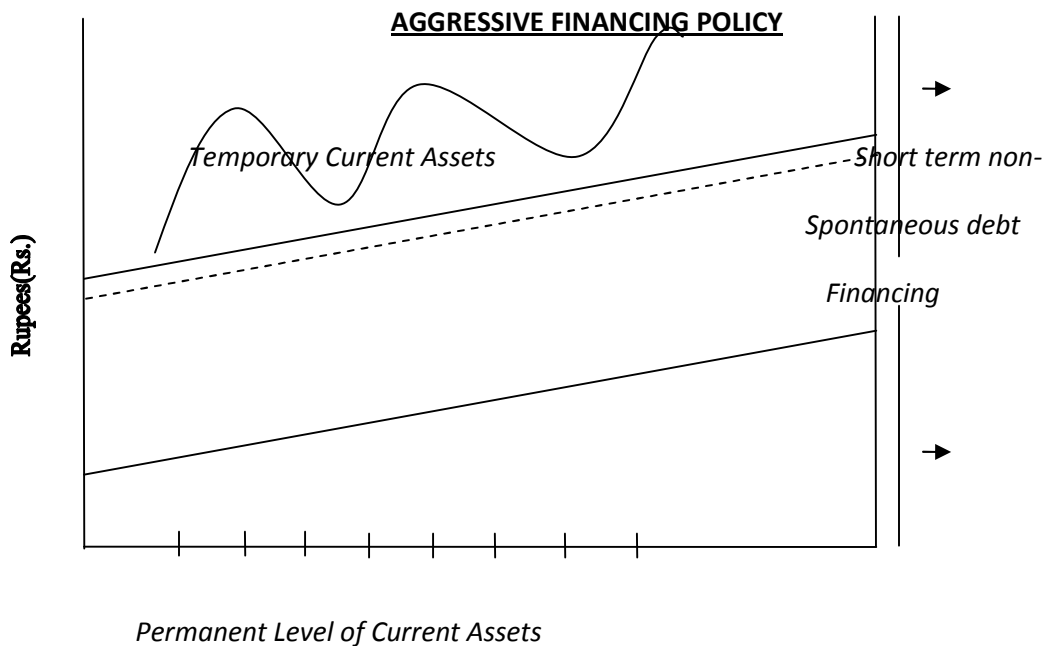
2.1.4.2 CURRENT ASSETS FINANCING POLICY:-

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

A) AGGRESSIVE POLICY:- In an aggressive policy, the firm finances a part of its permanent current assets with short term financing and rest with long term financing. In other words, the firm finances not only temporary current assets but also a part of permanent current assets with short term financing. Fig. 3 shows that short term financing finance 50% of the permanent current assets.

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

Fig. 3



Long term debt

Equity plus

Spontaneous

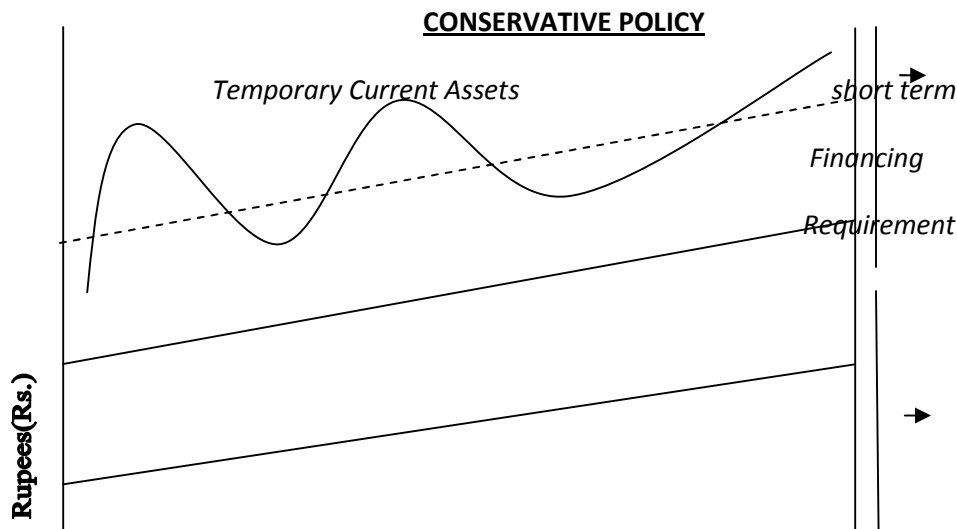
Financing

1 2 3 4 5 6 7 8
Time period

Adopted from: Weston, Besley and Brigham, *Essentials of Management Finance*, pg. 347

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

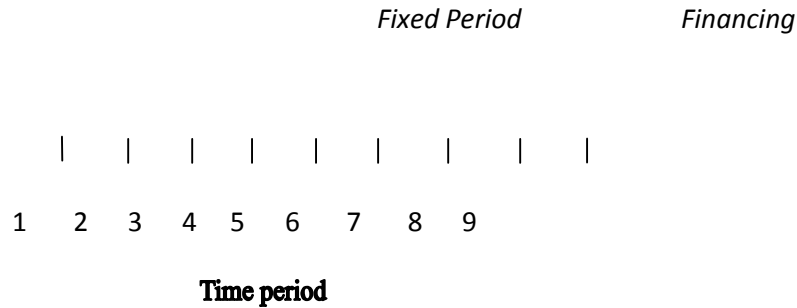
Fig. 4



Permanent Level of Current Assets

Debt plus equity

Plus spontaneous

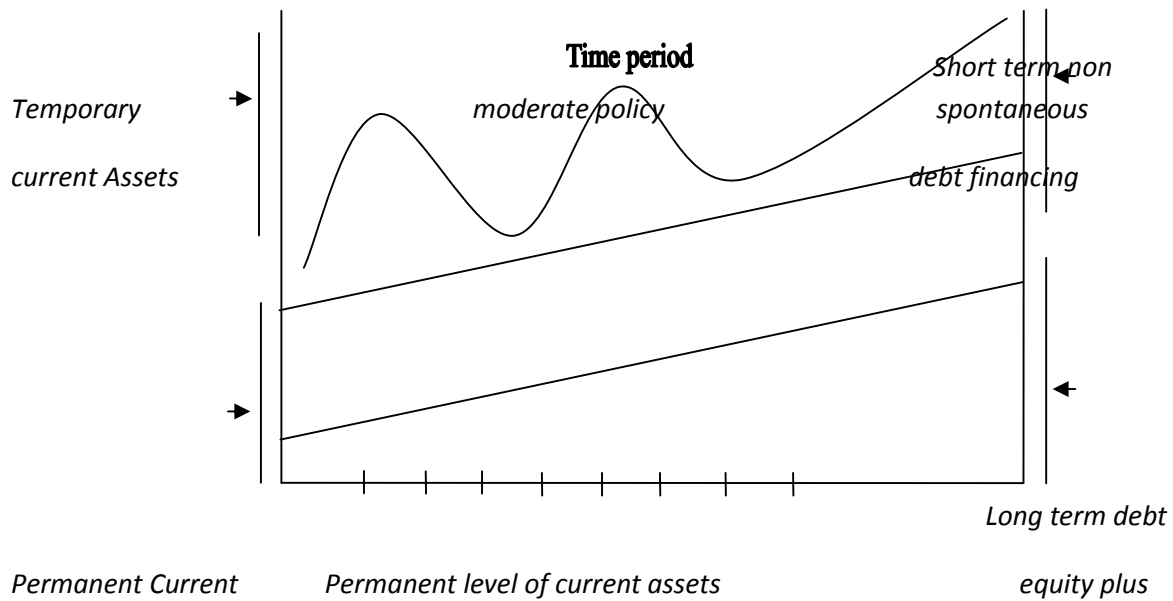


Adopted from: Weston, Besley and Brigham, *Essentials of Management Finance* (pg. 347)

C) MODERATE POLICY:- In this policy the firm finances the permanent current assets with long term financing and temporary with short term financing. It lies in between the aggressive and conservative policies. It leads to neither high nor low level of current assets and current liabilities. Fig. 5 shows temporary working capital is financed by short term financing and long term financing. Thus work capital is zero under this policy.

Fig. 5

MODERATE POLICY



Assets

Spontaneous

Current

Fixed period

Liabilities

1 2 3 4 5 6 7 8

Adopted from: Weston, Besley and Brigham, Essentials of management finance (pg. 347)

2.1.5 FINANCING OF WORKING CAPITAL:-

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

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

B) SHORT TERM FINANCING:- A firm must arrange its short-term credit in advance. The sources of short-term financing of working capital are trade credit and bank borrowing.

I) Trade Credit:- It refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms have not to pay cash immediate for the purchase is called trade credit. It is mostly an informal arrangement and is granted on an open account basis. Another form of trade credit is bills payable. It depends upon the term of trade credit.¹⁴

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

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

C. SPONTANEOUS FINANCING:- Spontaneous financing arises from the normal operating of the firms. The two major sources of such financing are trade credit (i.e. credit and bills payable) and accruals. Whether trade credit is free of cost or not actually depends upon the terms of trade credit.¹⁵

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

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

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

“With a hedging approach short- term or seasonal variations in current assets would be financed with short- term debt; the permanent component of current assets and all fixed assets would be financed with long term debt or with equity. With a hedging approach to finance the borrowing and payment schedule for short – term financing current assets less spontaneous financing.”¹⁶

Here, as the level of permanent current assets increases, the long term financing level also increases similarly, as the level of temporary or variable current assets increases, the level or

14. James C. Van Horne, ***Financial Management and Policy*** (New Delhi: Prentice Hall of India Pvt.

Ltd. 1994) pg. 471

15. Surendra Pradhan. Pg. 147

16. James C. Van Horne and J.M. Wachowics, ***Fundamentals of Financial Management***, 10th edition (New Delhi: Prentice Hall of India Pvt. Ltd., Thirteenth printing 2000) pg. 209

Short-term financing also increases. However, due to the uncertainty of expected lives of assets exact matching is not always possible.

- ii) **Conservative Approach:-** The financing policy of firm is said to be conservative when it depends more on long term funds for financing needs under a conservative plan the firm finances its permanent assets and also part of temporary current assets, with long term finance. In the periods when the firm has no need for temporary current assets the idle long term funds can be invested in the tradable securities to conserve liquidity.¹⁷

This approach raise heavily on long term financing, as a result firm has possibility of financing, the problems of shortage of funds. In conservative approach, permanent capital is used to finance all permanent assets requirements or also to meet some or all of the seasonal demands.¹⁸

- iii) **Aggressive Approach: -** A firm can follow aggressive policy in financing its assets under an aggressive policy; the firm finances a part of its permanent current assets with short- term financing. The relatively more use of short- term financing makes the firm more risky.¹⁹

The greater the portion of the permanent assets need financed with short- term debt, the more aggressive the financing is said to be.²⁰

2.1.6 DETERMINANTS OF WORKINGS CAPITAL:-

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

- i) **Nature and size of business:-** The working capital requirement of a firm depends upon the nature and size of business. If the size of the firm is bigger, then it requires more working capital, while small firm require larger amount of working capital relatively to public utilities.

- ii) **Manufacturing Cycle:-** Working capital requirement of an enterprise is also influenced by the manufacturing or production cycle. It refers to the time involved to make the finished goods from the raw materials. During the process of manufacturing cycle funds are tied- up. The longer the manufacturing cycle the larger will be working capital requirement and vice-versa.

17. I.M. Pandey. Pg. 750

18. Weston and Brigham, ***Essentials of Managerial Finance***, 11th edition (New York, the Dryden Press, 1996) pg. 348

19. I.M. Pandey pg. 751

20. Van Horne and Wachowicz pg. 212

- iii) **Production Policy:-** Working capital requirement is also determined by its production policy. If a firm produces seasonal goods, then its production and sales volume fluctuate with different seasons. This policy of fluctuating policy affects the working capital policy of the firm.

- iv) **Credit policy:-** Credit policy also affects the working capital requirement depends on terms of sales. Different terms may be followed by different customers according to their credit worthiness. If the firm follows the liberal credit policy, then it requires more working capital. Conversely, if a firm follows the stringent policy, it requires less working capital.

- v) **Availability of Credit:-** Availability of credit facilities is another factor that affects the working capital requirement. If the creditors avail a liberal credit terms, then the firm will need less working capital and vice versa. In other words, the firm can get credit facility easily on favorable conditions. Thus, it requires less working capital to run the firm otherwise more working capital is required to operate the firm smoothly.

- vi) **Growth and expansion:-** Growth and expansion also affect the working capital requirement of firm. However, it is difficult to precisely determine the relationship between the growth and expansion of the firm and working capital needs. But the other things being the same growing firm needs more working capital than those static ones.

- vii) **Price level change:-** Price level changes also affect the working capital requirement of a firm. Generally, a firm requires maintaining the higher amount of working capital if the price level rises. Because the same level of current assets needs more funds due to the increasing price. In conclusion, the implications of changing price level on working capital position will vary from firm to firm depending on the nature and other relevant consideration of the operation of the concerned firms.

vii) Operating efficiency:- Operating efficiency is also important factor, influences the working capital requirements of the firm. It refers to the efficient utilization of available resources at minimum cost. Thus, financial manager can contribute to strong working capital position through operating efficiency. If a firm has strong operating efficiency then it needs lesser amount of working capital and vice versa.

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

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

2.1.7 TECHNIQUES OF WORKING CAPITAL ANALYSIS:-

There are various techniques of working capital analysis. They are as follows:

2.1.7.1 RATIO ANALYSIS:-

Ratio analysis has been the major tool used in the interpretation and evaluation of financial statements.²¹ The literature on financial statement analysis has discussed continuously the use of ratio analysis. Besides this, the accounting and finance text books which can be expected to report the more important analysis techniques in chapters on external analysis of financial statements also emphasize the use of ratio analysis.²²

Ratio analysis is the principal technique used in judging the condition portrayed by the financial statements. By using this technique, the analysis can judge the financial growth and development and the present condition of a business enterprise.²³

A ratio is simply one number expressed in terms of another. It is found by dividing one number, the base into the other. A percentage is also a kind of ratio in which the base is taken as equaling 100 and the quotient is expressed as per hundred of the base.²⁴

Ratios are simply a means of highlighting in arithmetical terms the relationship between figures drawn from financial statement.²⁵ In the words of J. Batty the term 'accounting ratios' is used to describe significant relationship which exist between figures shown on a balance sheet, in a profit and loss account, in budgetary organization.²⁶

The technique of ratio analysis is getting wider acceptance in accounting and mathematical world. In this regard Mr. Herfert states that the ratio analysis provides guides and clues especially in spotting trends towards better or poor performance, and in finding out significant deviation from any average or relatively applicable standard.²⁷

There are two schemes of expressing relationship in ratios. The first one is the 'phrase method', such as, two for one and the second one is the 'percentage method', such as, 200 percent etc. the percentage scheme has the advantage of greater precision because it may develop facts which will be easily remembered.²⁸

21. Baruch Lev. ***Op.Cit.*** , pg. 11

22. Melvin C.O. conner, "***On usefulness of Financial Ratios,***" ***Accounting Review***, Vol. XL VIII, No. 2, April 1973, pg. 339

23. N.P. Agrawal, ***Op.Cit.***, pg. 9

24. Rober N. Anthony, ***Management Accounting, Text & Cases***, Richard D. Irwin., Inc., Homewood Illionis, 1964, pg. 297

25. Hunt, Williams and Donaldson, ***Op.Cit.***, pg. 141.

26. J. Batty, ***Management Accountancy***, Maddonald and Evans Ltd., London, 1963, pg. 374

27. Erich A. Helfert, ***Techniques of Financial Analysis***, Richard D. Irwin, Inc., Homewood, Illionis. 1957, pg. 57.

28. N.P. Agrawal, ***Op.Cit.***, pg. 10

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

In fact the ratios tend to give simply an indication which assists considerably in appraisal of the financial position and operations of the organization.²⁹ Ratios by themselves are not conclusions. Therefore it should always be kept in mind that ratios are only guides in analysis of financial

statements and not conclusive ends in themselves.³⁰ Further, if ratio is to be important, it must also aid the analyst in making his immediate decision.³¹

Financial ratios may be classified by the source of data as follows;³²

1. Balance sheet Ratios.
2. Income statement ratios.
3. Fund statement ratios.
4. Mixed ratios.

The above classification seems to be rather crude because it leads one to think that analysis of the income statement or the balance sheet can be attempted in isolation.³³

FUNCTIONAL CLASSIFICATION / CLASSIFICATION ACCORDING TO TESTS:-

This classification is based on certain tests, which the ratios are intended to serve. It can also be classified according to the different economic aspects of the firm's operations:³⁴

According to this classification, the various ratios have grouped as follows:-

(a) Liquidity ratio:-

These ratios measure the liquid position of a business enterprise and thereby indicate whether or not the enterprise is able to meet its current obligations as and when they fall due for payment. The main liquid ratios are:

- i) Current ratio
- ii) Liquid (Acid Test/ Quick) Ratio
- iii) Absolute Liquidity Ratio
- iv) Debtors Turnover Ratio
- v) Creditors Turnover Ratio
- vi) Inventory Turnover Ratio

29. Narold Bierman, *Financial Accounting Theory*, The MacMillian Company, New York, 1965, pg. 225

30. S. Winton Korn & Thomas Boyd, *Accounting for Management Planning & Decision Making*, John

Widely & Sons, Inc., New York, 1969, pg. 143

31. *ibid*, pg. 173

32. Maruch Lev, *Op.Cit.*, pp. 11-12

33. N.L. Hingorani and A.R. Ramanathan, *Management Accounting*, Sultanchand & Sons, Delhi, 1973, pg. 92

34. Baruch Lev., *Op.Cit.*, pg. 12

(b) Leverage and Long-term Solvency Ratio:-

These ratios measure the long-term financial position of a business enterprise and indicate the contribution of financing by owners as compared to financing by outsiders. The main leverage and long-term solvency ratios are:

- i) Debt-equity Ratio
- ii) Debt to Total Capital Ratio
- iii) Interest Coverage Ratio
- iv) Cash Flow Debt Service Ratio
- v) Capital Gearing.

(c) Activity Ratio:-

These ratios measure the efficiency with which the resources of a business enterprise have been employed and thus indicate the speed with which key assets are being turned over into sales. The main activity ratios are:

- i) Inventory Turnover Ratio
- ii) Debtors Turnover Ratio
- iii) Fixed Assets Turnover Ratio
- iv) Total Assets Turnover Ratio
- v) Working Capital Turnover Ratio
- vi) Payable Turnover Ratio
- vii) Capital employed Turnover Ratio

(d) Profitability Ratios:-

These ratios measure the performance and effectiveness of a business enterprise. The main profitability ratios are:

- (I) In relation to investments:

- (i) Return on Investment
- (ii) Return on Capital Employed
- (iii) Return on Equity Capital
- (iv) Return on Total Resources
- (v) Earning per Share
- (vi) Price-Earning Ratio

(II) In relation to sales:

- i) Gross profit Ratio
- ii) Operating Ratio
- iii) Operating Profit Ratio
- iv) Net Profit Ratio
- v) Expense Ratio

This classification is virtually oriented to the needs of owners, investors and leaders.

Naturally, some ratios are more important than others though the conclusions derived from them may have to be read together for getting an idea about the financial position of the firm. This basis of classification of ratios has been recommended by the British Institute of Management for inter-firm comparisons and following categories of ratios have been suggested by the institute.³⁵

- (a) Primary Ratios: - As the principal motivating force for any commercial undertaking is profit, success is measured by the size of profit in relation to capital employed and this has been termed as 'primary ratio'.
- (b) Secondary Ratios:- This basis of classification being primarily from the point of view of inter-firm comparisons. If the earning power of a unit as depicted by the primary ratio does not at least equal that of other similar concerns, there are probably some factors or combinations of factors, which does not permit a business to be operated efficiently. Such factors may be isolated by means of other types of ratios, referred to as 'secondary ratios' which are further divided into following sub classes:

- (i) Supporting Ratios.
- (ii) General Explanatory Ratios.
- (iii) Specific Explanatory Ratios.

In fact there are various items appearing at profit and loss account and balance sheet. The scope for comparing one item with another is enormous and so it is important to be selective. This limits the calculations and makes the presentations of selected ratios simple and readily understandable.

No decision maker wants a jungle of figures and so the ratios chosen should be the key ones, logically grouped. The ratios have logically been classified into three main groups³⁶

- (i) Operating Ratios, which are concerned with how the company is trading, and take no account of the company is financed.
- (ii) Financial ratios, which measure the financial structure of the company and show how it relates to the trading activities.
- (iii) Investment ratios, which relate to the number of ordinary shares and their market price to the profits, dividends, and assets of the company.

Almost every ratio is useful but no ratio alone can satisfy the needs of all the parties and so the selection of a ratio depends upon the needs of the party for which analysis is being undertaken.

35. Man Mohan & S. N. Goyal, *Principles of Management Accounting*, Sahitya Bhawan, Agra, 1982, pg. 385-86

36. Geoffery Holmes & Alan sugden, *Interpreting Company Reports and Accounts*, wood Lead – Feulkner, Cambridge, 1979, pg. 166

ANALYSIS OF SHORT-TERM FINANCIAL POSITION (LIQUIDITY)

Liquidity means ability of a business enterprise to pay its current obligations as and when they fall due for payment. Thus liquidity ratios intend to derive a picture of the capacity of a firm to meet its short-term obligations out of its short-term resources. In recent time, a core of liquidity ratios have emerged, which when viewed in their totality and with respect to risk, is expected to yield a rough approximation of the capacity of business to pay its current liabilities as and when they fall due for payment.³⁷

The working capital ratio, which reflects the relation of current assets to current debts, is indicative of the degree of safety with which short-term credit may be extended. Even if a little shrinkage in current assets takes place, this will not too greatly jeopardize the interest of the current creditors.³⁸ Hence, the short-term creditors (Whether present or potential) of a business enterprise are mainly concerned with the working capital ratio in order to justify the granting of loans.

CURRENT RATIO:-

Current ratio is used as an index of liquidity by creditors and other interested individuals or associations.³⁹ Current ratio, also called working capital ratio, reflects the relation of current assets of the firm to its current liabilities. It is the most widely used of all devices.⁴⁰

Formulation:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

American institute of certified public accounts defines current assets as cash and other assets reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of business and which involve a circulation of assets with the current assets group.⁴¹

The current liabilities include sundry creditors, bills payable, outstanding and accrued expenses, income tax payable.⁴² For the purpose of measuring the liquidity, the long-term debt maturing during current accounting year should also be included.

37. Man Mohan & S.N. Goyal, *Op.Cit.*, pg. 384

38. H.A. Finney & H.E. Miller, *Principles of Accounting*, Prentice- Hall, Inc., New York, 1954, pg. 172

39. A.W. Willsmone, *Accounting for Management Control*, Pitman publishing press, Great Britain, 1971, pg. 94

40. Man Mohan & S.N. Goyal, *Op.Cit.*, pg. 387

41. Arthur W. Holmes, *Elementary Accounting*, Richard D. Irwin, Inc. Home wood Illinois, 1962, pg. 388

42. Man Mohan & S.N. Goyal, *Op.Cit.*, pg. 388

According to Mr. Sharma, all the liabilities, which have to be met during the course of the financial year, should be kept under the heading 'current liabilities' and all the assets which can be realized in cash during the course of financial year in order to meet the current liabilities, should be kept under the heading 'current assets'. Thus if a long-term loan is to be repaid within the financial year, it should be taken as current liability. Under the heading of current assets stores and spare

parts and loose tools are being shown, but these would not be converted into cash and as such would not be available for meeting the current liabilities.⁴³

In the word of Mr. Sharma “an examination of the current ratio of a company on the basis of the facts available on the face of the balance sheet is like an attempt to walk on eggs.⁴⁴ It is because the major purpose of calculating the current ratio is to test the liquidity position of the company. It should always be considered that the current assets are used to meet current liabilities. The current ratio of a healthy company should be more than one.

After a detailed study and research, it was found that the current ratio would differ from business to business and from industry to industry. Thus, over the years the practical standard of the ratio of current assets to current liabilities has come to be recognized as ‘two for one’ for industrial and commercial business concerns.⁴⁵ After all, one cannot be dogmatic about the maintenance of the current ratio because there could be circumstances which could give strength to the credit worthiness of the company in spite of fact that the current ratio is less than two for one.

Any considered shifts from the relatively more current assets to the relatively less current assets materially affect the ability of a company to pay its current debts promptly. So it is desirable to break down the working capital in a manner (finished goods, goods in process, materials) which shows whether the current liabilities can be paid from the cash on hand or whether their payment requires all of the cash and part of the proceeds of finished goods and so on.⁴⁶

Inventories constitute a major portion of current assets, which are relatively much less current than cash and receivables. Inventories include materials, work in process and then involve the uncertain factor of the market ability.⁴⁷ Because of these reasons, many analysts recommended ‘acid test ratio’ or ‘quick current ratio’ in addition to current ratio for the test of liquidity. In the word of Bhandari & Kulshrestha ‘if the executive is anxious to know whether the business is in a sufficiently liquid position he will find the answer by studying the current ratio and the quick ratio for the period.⁴⁸

43. Lajpatrai Sharma, “ Liquidity of public sector”, *Journal of the Institute of the Chartered Accountants of India*, Vo. XV, part IX, March 1967, pg 560

44. *Ibid*, pg 561

45. *Ibid*, pg 559

46. H.A. Finney & H.E. Miller, *Principles of Accounting*, Bhandice- hall Inc, Eaglewood, cliffs, Jersey, 1965, pg. 417

47. *ibid*, pg 172

48. Dr. S.K.R. Bhandari & H.J. Kulshrestha, Essay in Accounting, Sahitya Bhawan, Agra, 1964, pg. 72

The quick ratio of quick assets –cash, marketable securities held as temporary investment and receivables –to current liabilities. It includes or near cash, or soon cash assets that will be available in the immediate future for payment of its short-term obligation ⁴⁹ thus quick assets reflect the relationship between quick assets and current liabilities for the justification of liquidity.

Acid test ratio or quick ratio can be calculated by any of the following ways: ⁵⁰

$$\text{Acid Test Ratio or Quick Ratio} = \frac{\text{Liquid or Quick Assets}}{\text{Liquid or Quick Liabilities}}$$

This shows the relation of quick assets to quick liabilities. But if one is interested to find out the relation of quick assets to current liabilities then the formula is:

$$\text{Acid Test Ratio} = \frac{\text{Liquid or Quick Assets}}{\text{Current Liabilities}}$$

In the early years, the quick ratio of one to one was popular. It was considered as a dividing line between a satisfactory and an unsatisfactory short-term position. But the current tendency is to de-emphasize any given ratio for business as a whole and to ask instead what the typical quick ratio is for a specific trade or industry.⁵¹ In the absence of comparative data, an acid test ratio of one to one may be considered satisfactory because other things remaining the same, one rupee of assets is sufficient to discharge one rupee of liability.

There are two main defects of quick ratio. First, it tells how much current assets are available to pay current liabilities but it does not tell how soon the current assets will be available or how soon the current liabilities will have to be paid.⁵² Thus, whether there is balanced condition between current assets and current liabilities of the company cannot be judged only through the current ratio

and the acid test ratio and in isolation of other factors. The ability of current and quick ratio to indicate short term debt paying ability depends on how rapidly inventory and receivables can be converted eventually into cash. As a result, the two supplementary ratios should be completed, i.e., turnover of receivables and inventory.⁵³

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

49. Johan W. Coughlan, ***Guide to contemporary Theory of Accounts***, Prentice Hall, Inc, Engle Wood, Cliffs, N.J. 1968, pg. 77

50. Man Mohan & S.N. Goyal, ***Op. Cit.***, pg. 391

51. John W. Coughlan, ***Op. Cit.***, pg79

52. ***Ibid***, pg.80

53. Earl A. Spiller, ***Financial Accounting***, Richard D. Irwin, Inc, Home Wood, Illinois, 1966 pg. 418-19

- a) **Short term Creditors:-** The creditors in the short run – like suppliers of materials, goods and bankers – can determine the firm’s ability to meet its current liabilities with the help of liquidity ratios and current ratio.
- b) **Long term Creditors:-** The creditors in the long run – like debenture holders and other lending financial institutions – can determine the firm’s long- term financial and ultimately survival strength with the help of financial solvency ratios such as Debt Equity Ratio, Debt to Capital Ratio, etc.

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

- a) **Management:** The management has an important job of managing the different resources available with the enterprise efficiently and effectively. They can determine the operational efficiency with which the firm is utilizing its various assets in initiating sales with the help of activity ratio like, Stock Turnover Ratio, Capital Employed Turnover Ratio, Assets Turnover Ratio etc. Besides this, the management can carry out comparative analysis and form meaningful judgment about the performance by comparing the actual ratios with the standard ratios, ratios of the previous period ratios of the industry it belongs and national average.)
- b) **Investors:** The investors can determine the extent of profitability, its earning capacity and the capacity to pay dividends so that they can form judgment whether to hold, sell or purchase the shares and the prospective investor can decide whether or not to buy

the shares.

LIMITATION OF RATIO ANALYSIS:-

1. Ignores qualitative aspects:- Although qualitative factors may be more important than the quantitative factors, the ratio analysis ignores the qualitative aspect as it is basically a quantitative analysis, For example, while deciding whether to sell goods to a customers on credit or not, the ratio analysis relies on the financial statements submitted by him and his character or intension to pay will not form part of the analysis which, in fact could be the most important factor.
2. False Results:- The quality of the ratio depends upon the quality of the accounts on the basis of which these are established. The ratios can only be accurate, if the books of accounts are correctly drawn up. This is because the ratios are based on the information provided by the financial statement. For example, if the closing stock is over-valued, both the financial position and profitability will be shown better than what they actually are.
3. Absence of Universal Standard:- No fixed standards can be laid down for ideal ratios. There cannot be a single standard ratio, which can indicate the true performance of the business at all times and in all circumstances. Every firm has to work in different situations and circumstances. For example, current ratio is generally considered to be ideal if current assets are twice of the current liabilities. However, in case of those concerns, which have adequate arrangements with their bankers for providing funds when they require, it may be perfectly ideal if current assets are equal to or slightly more than current liabilities.
4. Ignores price-level changes:- The comparability of ratios suffers, if the prices of the commodities in two different years are not the same. In reality, prices do not remain the same and ratio analysis does not have an in-built mechanism to adjust the changing prices. A ratio can be accurately interpreted only if the effect of change in prices, which may have taken place, is adjusted in the figures used in the ratio.
5. Historical Analysis:- Ratios are only indicators, they cannot be taken as final regarding good or bad financial position of the business, are historical in nature unless the ratio analysis is based on the projected financial statements prepaid to plan the future.
6. Ratios alone are not adequate:- Ratios are only indicators, they cannot be taken as final regarding good or bad financial position of the business. No ratio may be regarded as good or bad, it may be an indication that a firm is weak or strong, but it must never be taken as proof of either one.

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

2.1.7.2 CASH CONVERSION CYCLE:-

A cash conversion cycle reflects the net time interval in days between actual cash expenditures of the firm on productivity resources and ultimate recovery of cash.

The following figures shows the cash conversion cycle for a firm.

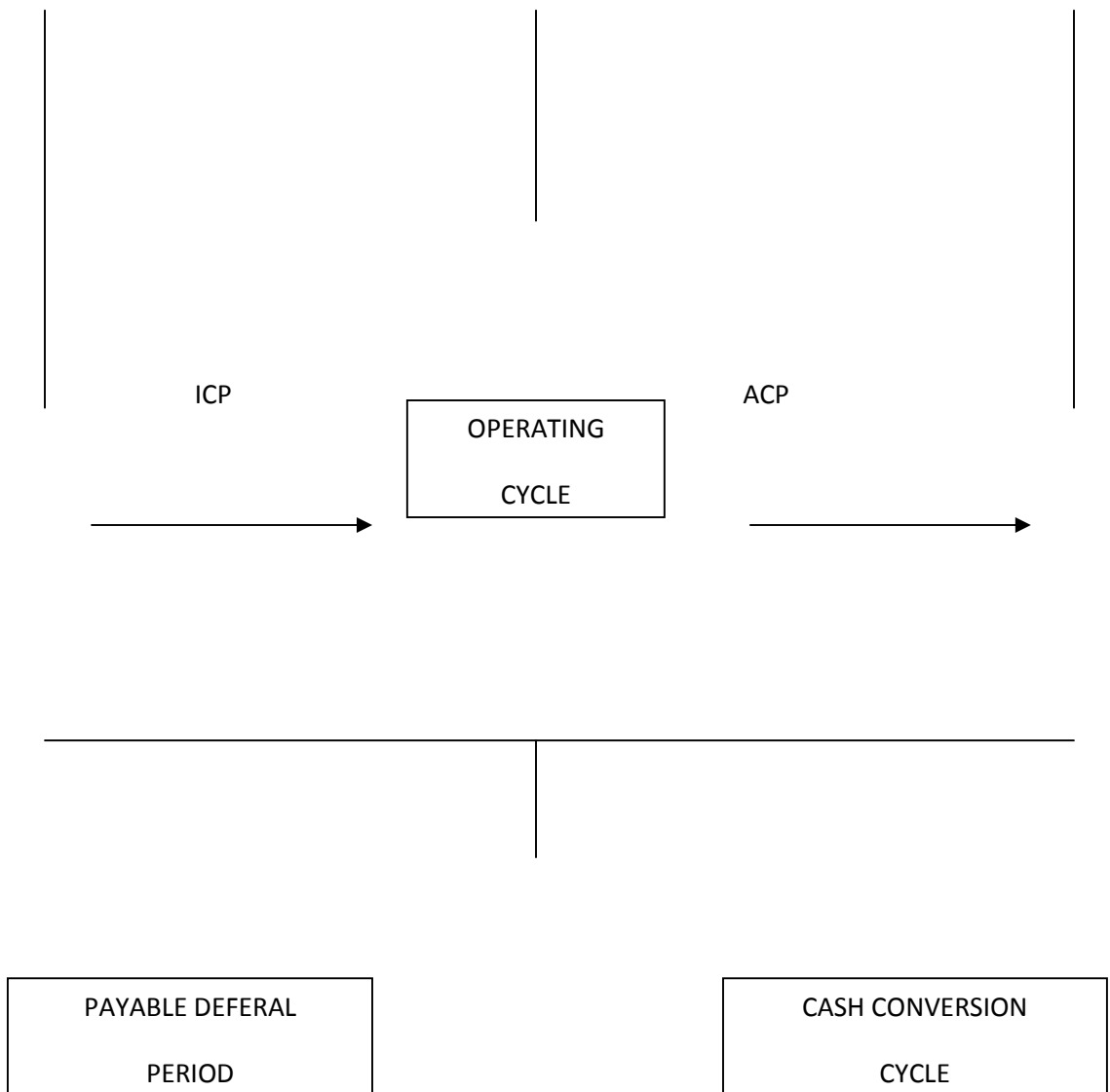
Fig. 6

OPERATING CYCLE OF MANUFACTURING FIRM

PURCHASE MADE

SALES ON CREDIT

SALES ON CREDIT



As shown in above, once the purchase of raw material is made, the inventory conversion period determines the numbers of days it takes to produce and sell the product. The average collection

period determines the average number of days it takes to collect credit sales. The operating cycle which measures the numbers of days from purchase as to when cash is received.

$$\text{Operating cycle (OC)} = \text{ICP} - \text{ACP}$$

Because the raw materials typically are not paid for immediately we must also determine how long the firm defers its payment. The difference between the operating cycle and the deferral period is the cash conversion cycle.

$$\text{Cash conversion cycle} = \text{Operating cycle} - \text{Payable deferral period}$$

The cash conversion cycle is a quick and convenient way to analyze the outgoing liquidity of the firm over time. We see that the cash conversion cycle approach may pick up information by other liquidity measures. The cycle shows how much of time need to collect cash.

a) Inventory conversion cycle (ICP):-

ICP refers to the average length of time required to convert raw materials into finished goods and then to sell those finished goods. The longer the inventory period, the larger will be the fund tied-up in inventories and vice-versa. Therefore, the firms want to minimize the inventory period as far as possible. The ICP can be calculated as:-

$$\text{Inventory turnover ratio} = \frac{\text{Cost of goods Sold}}{\text{Average inventory}} = \text{times}$$

$$\text{ICP} = \frac{\text{Days in a year (365 days)}}{\text{Inventory turnover ratio}} = \text{days}$$

$$\text{ICP} = \frac{\text{Average Inventory}}{\text{Inventory turnover ratio}} \times \text{Days in a year (365 days)} = \text{days}$$

Cost of goods Sold

b) Receivable Conversion Period (RCP):-

Receivable conversion period indicates the number of day's debtor's turnover into cash. Its analysis determines the collectibles of debtors and thus, the efficiency of collection effect in ascertaining the firm's comparative strength and advantage relative to its credit policy. Receivable turnover can be calculated by dividing total sales of the year ended balance of debtor and receivable conversion period is calculated by dividing the number of days in a year (i.e. 365 days) by receivable turnover.

$$\text{Receivable turnover ratio} = \frac{\text{Net Sales}}{\text{Average debtors}} = \text{times.}$$

$$\text{RCP} = \frac{\text{Days in a year (365 days)}}{\text{Receivable turnover ratio}} = \text{days}$$

$$\text{RCP} = \frac{\text{Average debtors}}{\text{Net Sales}} \times \text{Days in a year (365 days)} = \text{days.}$$

c) Payable Conversion Period (PCP):-

Payable conversion period indicates the number of day's creditor's turnover each year. It is calculated by dividing the sum of account payable and outstanding expenses by the sum of cost of goods sold and general expenses and multiplies by the number of days in a year. (365 days)

Cost of goods sold

Payable turnover ratio = ----- = times.

Average Creditors

Days in a year (365 days)

PCP = ----- = days.

Payable turnover ratio

Average Creditors

PCP = ----- X Days in a year (365 days) = days.

Cost of goods Sold

2.1.7.3 TREND ANALYSIS:-

The trend analysis is the study of changes of the data shown in financial statements over a period of time. It involves the computations of percentage relationship that each statement item bears to the same item in the base year. The earliest year involved in comparison is generally taken as the base year is not a normal year, any other year involved in comparison may be taken as the base year.

In the computation of trend percentage (or trend ratios), the first step is to take up necessary items for a number of years from the statements. It is so because the trend ratios are generally not computed for each and every item of the statements. The second step is to take every item of base year statement as 100. The third and last step is to compute trend ratios by dividing each item of remaining statements with the corresponding item of base year statement. Thus, the method of computation of trend ratios is the same as that of index numbers.

As a matter of fact, the trend ratios may be thought as index numbers showing relative changes if financial data over a period of time. Khan & Jain state "Trend ratios indicate the direction of change in the performance- Improvement, deterioration or constancy over the year.⁵⁴". Thus, trend analysis is a dynamic method of analysis. It enables an analyst to see the future of a concern in its right perspective by making an indication in which it (concern) is going. I.M.Pandey mentions, "The trend analysis of ratio adds considerable significance to the financial analysis because it studies ratios of several years and isolates the exceptional instances occurring in one or two periods.⁵⁵

2.1.7.4 FUNDS FLOW ANALYSIS:-

The term “FUNDS FLOW” statement consists of two terms: ‘Funds’ and ‘Flow’. The term ‘Funds’ refers to all pecuniary resources that can be measured in terms of money. It may be interpreted as cash or working capital or all financial resources. Net working capital is concerned with the differences between total current assets and total current liabilities.

The term ‘Flow’ refers to the movement of funds during a period of time. The procurement of funds, during the particular period of time is called inflow of funds and the uses of funds for the particular period of time is called out flow of funds. So, movement of funds is concerned with the inflow and outflow of funds.

54. Khan, M.Y. and Jain, P.K., '**Financial Management**', Tata Mc Graw Hill Publishing Co., New Delhi, 1989, Pg.81.

55. Pandey, I.M., '**Financial Management**,' Vikas Publishing house Pvt.Ltd., New Delhi, 1989, Pg. 532

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

According to Smith & Brown, “A funds flow statement is prepared in summary form to indicate changes occurring in items of condition between two different balance sheet dates.”

According to Foulke, “A statement of sources and application of funds is a technical device designed to analyze the changes in the financial position of business enterprise between two dates.”

According to P. Chandra, “The funds flow statement, also called the statement of changes in financial position, shows the sources and uses of funds during a given accounting period. This statement, drawing on the information contained in the balance sheet and the profit & loss account, provides insights into the movement of funds and helps in understanding the changes in the structure of assets, liabilities, and owner’s equity.”

On the basis of above definitions it can be said that the comparative study of two balance sheets

of a concern prepared for two different years for knowing the financial activities of a company is known as funds flow statement. The main purpose of funds flow analysis is to acquire the clear, information about the financial transactions that brings change in the resources of a company. It reflects the management's efforts in generating funds from various sources and the uses to which they are put for generating income without sacrificing the financial health of the entity. Therefore, this statement is of great importance to both creditors and owners as it enables them to obtain information concerning financing and investing activities of a business enterprise and the consequent changes in its financial position for a period. The genesis of the funds flow statement is the limited role performed by the financial statements in providing the details about the funds the business received from each source and the amount of funds used for each purpose throughout the year. A funds flow statement will help the management in allocating the scarce resources for meeting the productive requirements of the business. The uses of funds should be planned in such a manner that the available resources are put to the best use. The allocation should ensure that the business is in a position to make payment of interest and loan installments as per the agreed schedule. It is a test of effectiveness with which the working capital is used by the management during a particular period. The adequacy or inadequacy of working capital will guide the management to take possible steps for effective use of surplus working capital or make arrangements in cash of inadequacy of working capital.

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

SOURCES OF WORKING CAPITAL:-

- a) Funds from Operations: - The major source of working capital is the funds from operation, which refer to those funds which are generated by carrying out the central operations of a business.
- b) Proceeds from the sale of non-current assets: - Sale of non-current assets tantamount to conversion of a non-current assets to a current asset and is a source of fund regardless of the fact whether the asset is sold for a gain or loss.
- c) Long-term Borrowing:- Long-term borrowing, such as issue of debentures and convertible bonds, results in the increase of current asset (cash) and therefore an increase in the working capital. In case of short-term borrowing, the increases of current assets are offset by an increase in the

current liability and therefore result in no change in working capital.

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

- e) Non-operating Income:- Incomes like dividends, interest received from operations outside the framework of the central operation of a business results in an inflow of current assets and, therefore, to be shown as a source.

APPLICATIONS OF WORKING CAPITAL:-

Purchase of fixed Assets: - The purchase of long-term assets, such as plant and equipment, either reduces current assets and or increases current liabilities. Consequently, the working capital is reduced.

- (a) Redemption or payment of long-term debt: Repayment of a short-term debt is not considered as the uses of fund, since both current assets and current liabilities are reduced by the same amount. But the payment of a long-term debt results in the reduction of a current asset and, is therefore, use of fund.

- (b) Redemption of preference shares or Investment made: When cash is paid to redeem preference shares or to purchase securities as investment, working capital is reduced and therefore is use of fund.

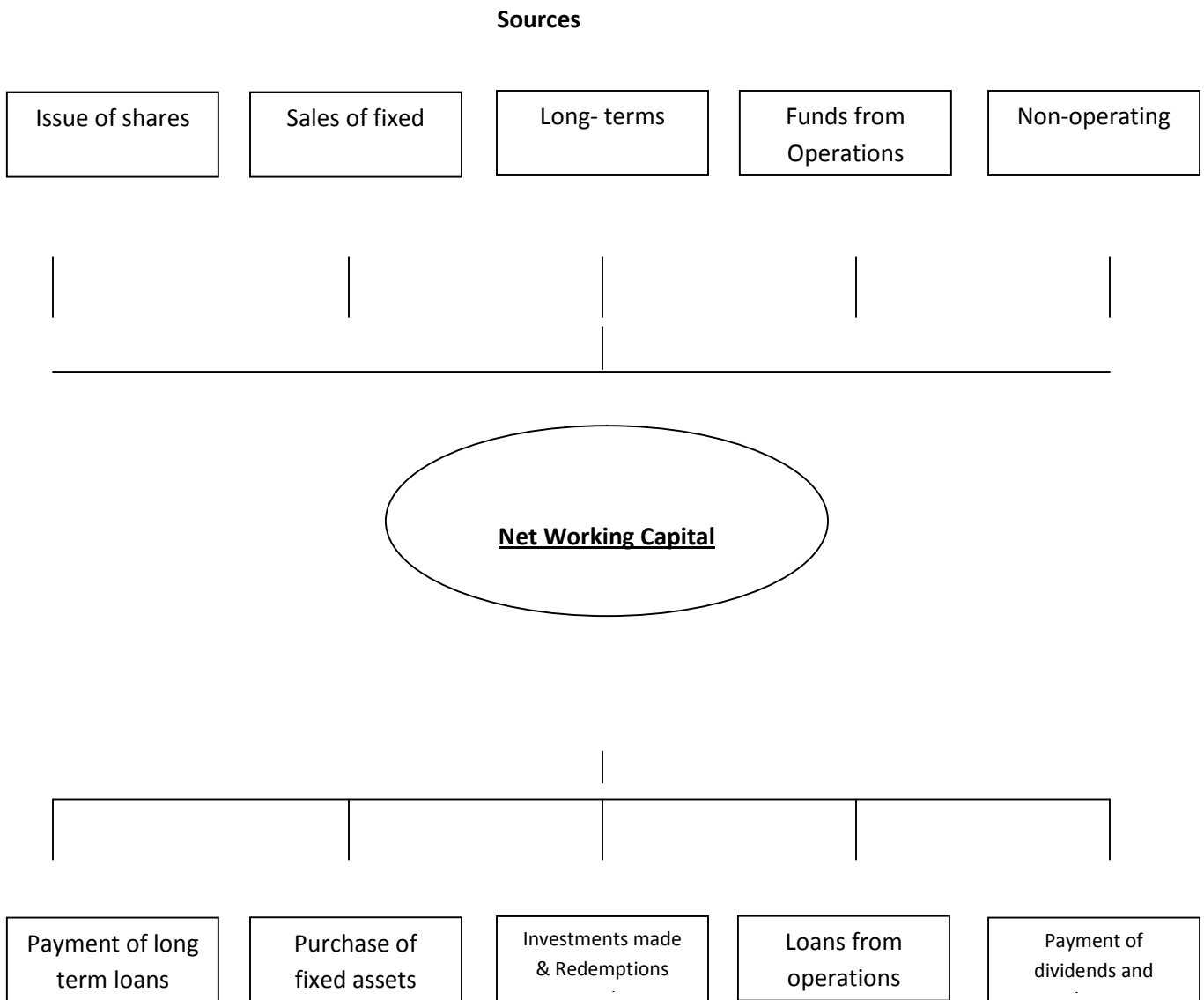
- (c) Loss from Operations: Any loss from the operation results in more outflow of funds as compared to inflow of funds and is, therefore, use of funds.

(d) Payment of dividend, tax etc: Any dividend or tax paid in cash results in outflow of current assets, therefore, an application of funds.

The sources and applications of funds are diagrammatically depicted in the following figure:

Fig. 7

Sources and Applications of Funds



Applications

2.2 REVIEW OF JOURNAL / ARTICLES & RELATED STUDIES:-

In this section, an endeavor has been made to review the articles on working capital of Nepalese Public Enterprises by different management experts with a view to forming an empirical background for the study. The articles reviewed are as follows.

Dr. Manohar K. Shrestha has conducted an empirical observation of twelve selected PEs⁵⁶. In his article, he has described the conceptual ingredients concerning the working capital and types of working capital. From the analysis, he found that the liquidity position of the selected PEs differ widely in view of the differences in their nature of business. There were also above normal acid test ratios. While analyzing, the turnover of those selected PEs showed wide deviation. Based on the sales volume, four out of seven PEs, had normal inventory turnover, the other three had not been satisfactorily maintained and in some of them, inventory was found to have exceeded sales. The collection period relating to the selected

56. Dr. Manohar K. Shrestha. "Working capital Management in selected PEs."

PEs exhibited marked difference ranging from 32 days to 755 days. The profitability position analyzed through return on net working capital was positive for 8 PEs, negative for 2 PEs and the rest 2 PEs had not any return since they were in establishment phase.

Pradhan and Koirala had jointly conducted a study on "Working capital Management in Nepalese Corporations."⁵⁷ They had focused on evaluation of working capital of working capital of selected manufacturing and non-manufacturing corporations of Nepal. They had sampled five manufacturing and six non-manufacturing public enterprises. This study was concentrated in the size of investment in current assets, significance of current assets management. The major findings of the study were as follows:-

- i) Investment on total assets had declined over period of time in both manufacturing corporations. However, the manufacturing corporations (MPES) had consistently more investment in cash and receivable as composed to non-manufacturing corporations.
- ii) Inventory management was of great significance in manufacturing corporations and the management of cash and receivable was of great significance in non-manufacturing corporations.
- iii) Management of working capital was more difficult than that of fixed capital.
- iv) The major motive for holding cash in Nepalese corporations was to provide a reserve for routine net cash outflows of cash to keep on the production process.

Another article composed by prof. Manohar K. Shrestha has considered ten PEs and studied their working capital management.⁵⁸ He has focused on the working capital liquidity, turnover and profitability position of those enterprises. In this analysis, he found four PEs having excessive and the rest four PEs failing to maintain desirable liquidity position. On the turnover side, 2 PEs had negative working capital turnover, four had adequate turnover on net working capital.

He has also found that out of ten PEs, six were operating in losses while only four were getting some percent of profit. With the reference to his findings, he has brought certain policy issues such as lack of suitable financial planning, negligence of working capital management, deviation between liquidity and turnover of assets and in ability to show the positive relationship turnover and return on net working capital. In the end, he had made some suggestive measures to overcome the above policy issues i.e. identification of needed funds, regular checks of accounts, development of management information system, positive attitude towards risk & profit and determination of right combination of short-term sources of funds to finance working capital needs.

57. Radhe Shyam Pradhan and Kundan Dutta Koirala, "**Aspects of management in Nepalese Corporations,**" (Institute of Management T.U. Kirtipur, July 1982)

58. Dr. Manohar K. Shrestha "**Working Capital Management in PEs: A study on Financial results and constant.**" ISSDOC, VOL. 8 No. 1, 4 July 82- June 83.

Dr. K. Acharya has published another article relating to working capital management. He has described the two major problems operational problems and organizational problems regarding the working capital management in Nepalese PEs.⁵⁹

The operational problems he found are increase of current liabilities than current assets, not allowing the current ratio 2:1 and slow turnover of inventory. Similarly, change in working capital in relation to fixed capital had very low impacts over the profitability thin transmutation of capital employed to sales, absence, of apathetic management information system, break-even analysis, funds flow analysis and ratio analysis were ineffective for performance evaluation. Finally, monitoring of the paper functioning of working capital management has never been considered a managerial job.

In the second part, he has listed the organizational problems in the PEs. In most of the PEs there is lack of regular internal and external audit system as well as evaluation of financial results. Similarly, very few PEs have been able to present their capital requirement. Functioning of finance department is not satisfactory and some PEs are even facing the underutilization of capacity.

R.S. Pradhan has prepared another article relating to working capital management. He has studied on "The demand for working capital by Nepalese corporations."⁶⁰ For the analysis, he has selected nine manufacturing public corporations with the 12 years data from 1973-1984. Regression equation has been adopted for the analysis. From the study, he has concluded that the earlier studies concerning about the demand for cash and inventories by business firm did not report unanimous findings.

A lot of controversies exist with respect to the presence of economies of scale, roles of capital lost, capacity utilization rates and the speed with which actual cash and inventories are adjusted to describe cash and inventories respectively. The pooled regression result shows the presence of economies of scale with respect to the demand for working capital and its various components. The regression results suggest strongly that the demand for working capital and its components is function of both sales and their capital cost.

The estimated results show that the inclusion of capacity utilization variable in model seems to have contributed to the demand function of cash and net working capital only. The effects of capacity utilization on the demand for inventories, receivable and gross working capital is doubtful.

REVIEW OF THESIS:- The study of working capital management of public enterprises in Nepal is not entirely a new effort. Various studies on working capital management of Nepal have been made by different experts and students of MBS/ MBA. Some of them are reviewed in this section.

59. Dr. K. Acharya, "Problems and Impediments in the Management of Working Capital in Nepalese Enterprises" ISDOC Vol – 10 No. 3, Jan – Mar, 1985

60. Dr. R.S. Pradhan "The Demand For working capital by Nepalese Corporation." The Nepalese Management reviews, Vol-8, No.1,1988

Bikram Gurung (056/057) had carried out a study on working capital management of Nepal Lever Limited.⁶¹ This study has covered the span of Five Years (053/54 to 057/58). The objectives of the study were to analysis the liquidity, composition of WC, assets utilization and profitability of NL Ltd., to examine the relationship between liquidity and profitability of NL Ltd. and know whether the NL Ltd. has maintained optimum level of WC or not. In his study, the methodologies used are ratio analysis, test of hypothesis and correlation analysis. And the major findings of his study were as given below:-

- i) The major components of current assets in NL Ltd. are inventories, receivable, prepaid expenses and advance. Among these inventory has held the major portion of current assets. It was found that out of total current assets, inventory held the largest portion followed by miscellaneous current assets, sundry debtors, cash and bank balance respectively.
- ii) The current ratio of the company ranged in between 0.86 to 1.73 during the study period in fluctuating trend. The company was unable to maintain its current ratio of 2:1 in average of the study period.
- iii) The proportion of current assets to sales varied from 19.77% to 36.83% during the study period i.e. the current assets investment policy of NL Ltd. has been shifting towards the moderate policy.
- iv) Sundry creditors held the major portion of liabilities in NL Ltd. The average percentages of sundry creditors, short term loan and miscellaneous were 48.30% , 17.34% and 34.37% respectively.
- v) Profitability is one of the measures of overall efficiency of the management. The profitability of NL Ltd. was in increasing trend except in 2055/56. It was the highest in 057/58 and least in 053/054 and been suggested by Mr. Gurung that NL Ltd. should set the standard for the ratio of current assets to fixed assets. It has no clear vision about the management of current assets to fixed assets.

Thus, NL Ltd. should have the proper plan to improve its profitability in future. It is also recommended that the volume of sales should be increased and the proportion of current assets should be maintained according to its sales volume.

Bhagwan Aryal has carried out a comparative study on "Working Capital Management Of Hetauda and Balaju Textile Limited."⁶² The objectives of this study were to analyze the liquidity,

solvency, utilization, profitability position and overall comparison of working capital management of both textile companies. He had used ratio analysis and t-test for the analysis. The findings of the study were as follows:-

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61. Bikram Gurung, “*A study on working capital management of Nepal lever Ltd.*” (Unpublished masters Degree Thesis, Shankar Dev Campus, KTM)
62. Bhagwan Aryal, “*An analysis of working capital management with special reference to Hetauda Textile and Balaju Textile*” (Unpublished masters degree thesis, Shankar Dev Campus, T.U. 1995)
-) The liquidity position of Hetauda Textile Limited was better than that of Balaju Textile Limited. But both of the companies have not followed a proper working capital policy.
 -) Total assets turnover of both companies was not satisfactory and there was not significant difference of total assets turnover.
 -) Cash balance maintained by Balaju Textile Ltd. was better than that of Hetauda Textile.
 -) Solvency position of Hetauda Textile was better than that of Balaju Textile.
 -) Profitability position of Hetauda Textile was better than that of Balaju Textile, however, both companies have not a good profitability position during the study period.

Another study related to working capital management had been carried out by Ram Prasad Sharma on working capital management of selected manufacturing companies.⁶³ He had selected sixteen companies, which are listed in Nepal stock exchange (1981-1996). He focused on empirical testing of the variable affecting in Nepalese manufacturing companies based on the variable such as ; Current assets, Current liabilities, Sales, Net profit and Total assets. He used financial and statistical tools such as; Ratio analysis, Cash conversion cycle, Co-efficient of correlation, Probable error and Simple regression model. He found that many companies followed conservative policy. He recommended that they followed the quarterly working capital plan, used effective working capital policy some may improve their liquidity position and must minimize the operating cost.

A study conducted from Mr. Anil Agrawal on “a study on working capital management in Nepal

Cigarette Factory on special of JCF.”⁶⁴ The general objective of this study is to evaluate working capital on different concept. This is studied about the working capital policy used by JCF and financial position, Current Assets, Current liabilities and other terms has better in the firm. Lastly, Mr. Rajeshwar Yadav study on “ Working Capital Management of Shree Raghupati Jute Mills Ltd.”⁶⁵ The general objective of this study is to evaluate working capital Policy and financial position.

63. Yam Prasad Sharma, “*A study on working capital management of skated manufacturing companies.*” Master degree thesis, T.U.1999

64. Mr.Anil Agrawal, “*A study on working capital management of JCF.*” A unpublished master’ s level dissertation.

65. Mr.Rajeshwar Yadav, “ A study on wordking capital Management of SRJM.” A unpublished master’ s level dissertation.

CHAPTER- III

“Research Methodology”

3.1 INTRODUCTION

Research methodology is a sequential procedures and methods to achieve the objectives of the study. A sound research study needs to follow a proper methodology in order to achieve predetermined objectives. The methodology adopted in this study for the fulfillment of the stated objectives consists of research design, nature & sources of data, collection of data, data processing and tools for analysis of data.

3.2 RESEARCH DESIGN

Research design is the plan, structure and strategy of investigation conceived to obtain answer to research questions and to control variance. It includes important procedures and techniques for guiding, analyzing and evaluating the study. Analytical as well as descriptive approaches have been followed in the present study.

3.3 POPULATION AND SAMPLE

An opinion with respect to the performance of working capital management of SRJM can be obtained very well by analyzing its financial statements. It has altogether 40 financial statements which are considered as the population in this study. As it would be time consuming costly and difficult to analyze and study the whole population, the purposive samples selected for the study are only 10(i.e., from f/y 2052/53 to 2061/62).

3.4 NATURE AND SOURCES OF DATA

The study is based mainly on secondary data. The data for evaluating the performance of working capital management of SRJM has been obtained directly from the registered head office of the factory. Again, the information has also been obtained from the unpublished official records of the factory and the office of the registrar of company, the reports of the controller and Auditor General of Nepal, and the previous studies related to this aspect. Also the relevant information has been sought from the key personnel of the factory.

3.5 DATA PROCESSING

Though the existing formats of income statements and balance sheets of SRJM contain the basic data required for the study, they are clumsy and as such require a lot of adjustments for a purposeful analysis. Hence, the income statements and balance sheets obtained from the factory have been reworked and presented in a condensed form. The figures taken from the income statements and balance sheets have been rounded off up to two decimal places in thousand of rupees with a view to facilitating their analysis. The data contained in the condensed income statements and balance sheets have finally been arranged in different tables needed for the fulfillment of stated objectives.

3.6 TOOLS FOR ANALYSIS OF DATA

The financial techniques like ratio analysis, trend analysis, and funds flow analysis and cash conversion cycle form the main tools for the purpose of analyzing financial facts in the present study. In addition, the statistical tools like percentage, average, standard deviation, correlation, regression and index number have also been applied to make the analysis more systematic,

scientific and useful. Also, graphs have been constructed to give a much more vivid picture of the trends and relationships of the financial facts under consideration.

3.7 ORGANIZATION OF THE STUDY

The entire study has been divided into five major chapters. The first chapter gives a general introduction of the subject matter covering background of the study, need and significance of the study, statement of problem, objective of the study and limitations of the study. In the second chapter the pertinent literature and studies have been reviewed making logical and meaningful groupings into conceptual framework and review of journals and previous studies. The third chapter furnishes the research methodology encompassing research design, population and sample, nature and sources of data, data processing, tools for analysis of data and organization of the study. In the fourth chapter, the relevant data have been presented in the form of tables and graphs and analyzed with the help of financial and statistical tools for drawing interferences. The fifth chapter accommodates summary, conclusions and suggestions for ameliorating the working capital position of the factory.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS:-

Management of working capital, a crucial aspect of financial management determines to a large extent the success or failure of an enterprise. Most of the enterprises, often are suffering from different problems, such as, shortage of funds, irregular cash flow, piling up of inventory, blocking of funds in receivables for long period due to lack of proper management of funds. A firm can choose appropriate combination of working capital only after systematic analysis of its different aspects. The analysis of working capital enables management to detect trends and take corrective steps whenever necessary. Considering the above facts and realities, an attempt has been made in the present study to analyze and interpret the available empirical data in relation to various aspects of working capital management of SRJM:

4.1 PRESENTATION AND ANALYSIS OF DATA:-

In this chapter, the effort has been made to analyze the working capital management of SRJM, which is the main objective of the study. This chapter will present the analysis of various components of working capital of SRJM, which includes size, structure and utilization of current assets, liquidity and profitability position, relation between current assets and total assets as well as fixed assets, sources and application of fund and management of current assets. The

major variables for this study are current assets, current liabilities, quick assets, sales, and cost of sales, long term debt, and total assets and shareholders fund. Simply presenting the variable is not sufficient and for this financial tools and statistical tools are to be employed to measure the working capital management of SRJM for the purpose of analysis. First the researcher has dealt about the working capital policy followed by SRJM, then the financial ratios and finally cash conversion cycle, funds flow analysis. Besides this, trend analysis correlation co-efficient, mean standard deviation, probable error and simple linear regression analysis are used for this analysis.

CURRENT RATIO

The current ratio, also known as working capital ratio, matches the current assets to current liabilities of a firm. The current assets refer to those assets which can be realized in cash during the course of financial year, such as cash in hand, cash at bank, marketable securities (Short-term), short-term investment, bills receivable, sundry debtors, inventories of raw materials, semi finished goods and finished goods and prepaid expenses. The current liabilities allude to those liabilities which have to be met during the course of financial year, such as outstanding expenses, bills payable, sundry creditors, short-term advances, income tax payable, dividend payable, bank overdraft, long term debt maturing in current year and contingent liabilities by way of discounted bills receivable and guarantees. The ratio of current assets to current liabilities is computed as follows:-

CURRENT ASSETS

$$\text{CURRENT RATIO} = \frac{\text{CURRENT ASSETS}}{\text{CURRENT LIABILITIES}}$$

CURRENT LIABILITIES

This ratio examines the liquidity position of a firm. The liquidity means the ability of a firm to meet its current obligations as and when they fall due for payment. A relatively high current ratio indicates that the liquidity position of the firm is good and the firm is able to pay its obligations on demand. On the other hand, a relatively low ratio indicates that the liquidity position of the firm is not good and as such the firm will find it difficult to pay its maturing obligations. Therefore, the present and prospective creditors of a firm always prefer a very high current ratio. But a very low current ratio is undesirable from the point of view of the firm itself as it reflects bad financial planning or presence of idle assets or overcapitalization. In fact, there should be neither a very high nor a very low current ratio, conventionally, a current ratio of 2:1 (Current assets twice the Current liabilities) is considered to be a satisfactory current ratio for a commercial or industrial undertaking.

The current ratio of Shree Raghupati Jute Mills has been presented in Table 4.1, along with the standard deviation and Co-efficient of standard deviation in current assets and current liabilities and the Co-efficient of Correlation between current assets and current liabilities.

Table 4.1

Current ratio of SRJM (2053/54 to 2062/63)

Rs. (In "000")

Year	Current Assets	Current Liabilities	Current ratio(times)
2053/54	34246	20384	1.68
2054/55	42566	11969	3.56
2055/56	68766	30271	2.27
2056/57	60256	33592	1.79
2057/58	59980	38046	1.58
2058/59	80510	58041	1.38
2059/60	76410	44742	1.71
2060/61	80125	59075	1.35
2061/62	100553	67362	1.49
2062/63	105100	69241	1.52

Sources: Annual reports of SRJM from the years 2053/54 to 2062/63

- (A) Standard Deviation of Current assets = 22.71
Standard Deviation of Current Liabilities = 19.77
- (B) Co-efficient of Standard Deviation of Current assets = 0.32
Co- efficient of Standard Deviation of Current Liabilities = 0.46
- (C) Co-efficient of Correlation between Current assets and
Current Liabilities = 0.94

The absolute amounts of both current assets and current liabilities of the factory during the period of study from 2053/54 to 2062/63, as shown in table- 4.1, recorded indefinite trends. The linear co-efficient of correlation between current assets and current liabilities comes to 0.94 which shows that the two variables have high degree of positive correlation and suggested that the factory has followed fairly uniform policy to finance current assets and current liabilities. The standard deviation in current assets and current liabilities are Rs.22.71 thousands and Rs.19.77 thousands respectively while the co-efficient of standard deviations for current assets and current liabilities are 0.32 and 0.46 respectively. The greater Co-efficient of Standard deviation for current liabilities shows that the current liabilities show that the factory varied more than its current assets.

The current ratio of the factory marked highest trend in the 2nd year, But from other years , the current ratio is in declining stage with increasing form comparison in remaining years. The current ratio of year 2054/55 to 2062/63, is declining stage. It shows the current ratio in present time is not maintaining the standard ratio. Hence, the short-term financial condition or liquidity position of the factory was satisfactory but it became seriously weak in the 2058/59 and 2060/61.

QUICK RATIO

As a more penetrating or refined measure of liquidity, quick or acid test ratio expresses the relationship between quick or liquid assets and current liabilities. The quick assets refer to those assets, which can be converted into cash within a month, or quickly which include current assets less stock (Inventory) and prepaid expenses. Stock or inventories and prepaid expenses are excluded from the list of current assets to determine quick or liquid assets. It is so because organization might hold large quantity of raw materials stock, which must be used in production to create finished goods. Similarly prepaid expenses are not available to pay the debt, so it is also excluded from the list of liquid assets. The liquid assets comprises cash in hand, cash at bank, sundry debtors, bills receivable, marketable securities, short term investment, short term loans and advances, accrued income etc. The ratio of quick assets to current liabilities as follows:

QUICK OR LIQUID ASSETS

QUICK RATIO = -----

CURRENT LIABILITIES

This ratio measures the short-term liquidity of the firm but it emphasizes the instant debt paying capacity of the firm. Liquidity refers to the ability of a concern to meet its current obligations as and when these became due. The short-term obligations are met by realizing amount from current assets. It also examines the ability of the firm to pay off its current obligations without relying on the sales and collection of inventories. Generally Quick Ratio of 1:1 or equal portion of liquid assets and current liability is considered to represent measure of satisfactory liquidity position of the organizations. Excessive as well as short quick ratio serves against the interest of organization. It is considered that if the quick assets are equal to current liabilities, then the firm may be able to meet its short-term obligations without any financial difficulties to it. A high quick ratio indicates that the liquidity position of the firm is good and the firm is able to pay its obligations on demand on the other hand a low quick ratio represents that the firm's liquidity position is not good.

The quick ratio of Shree Raghupati Jute Mills has been presented in Table 4.2, along with the standard deviation and co-efficient of standard deviation in quick assets and current liabilities and the co-efficient of correlation between current assets and current liabilities.

Table- 4.2

Quick Ratio of SRJM (2053/54 to 2062/63)

Rs. (In '000')

Year	Quick Assets	Current Liabilities	Ratio (in times)
2053/54	6337	20384	0.31
2054/55	14843	11969	1.24
2055/56	15818	30271	0.52
2056/57	27446	33592	0.82
2057/58	19352	38046	0.51
2058/59	26986	58041	0.46
2059/60	12992	44742	0.29
2060/61	18745	59075	0.32
2061/62	34073	67362	0.51
2062/63	36656	69241	0.53

Source: Annual reports of SRJM from the year 2053/54 to 2062/63.

(A) Standard Deviation of
Quick Assets = 9.68

Current liabilities = 19.77

(B) Co-efficient of standard deviation, of
Quick Assets = 0.45

Current liabilities = 0.46

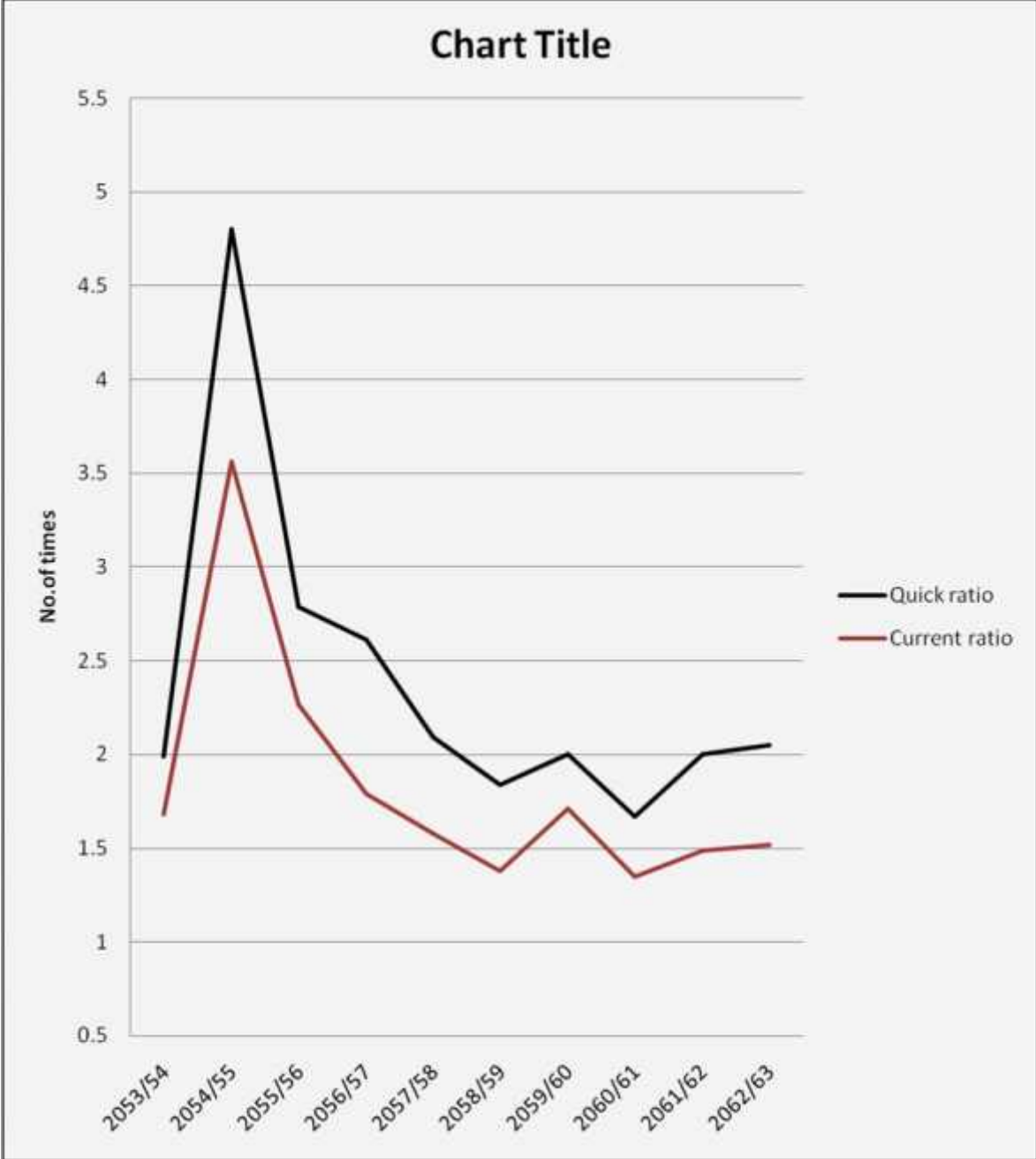
(C) Co-efficient of correlation between quick assets and Current

Liabilities = 0.86

The absolute amounts of quick assets and current liabilities of the factory, as indicated in Table 4.2 registered indefinite trends during the period of study from 2053/54 to 2062/63. The linear co-efficient of correlation between quick assets and current liabilities comes to 0.86 which indicates that the two variables have moderate degree of positive correlation and suggests that the factory has followed uniform policy of financing quick assets and current liabilities. The standard deviations in quick assets and current liabilities are Rs. 9.68 thousands and Rs. 19.77 thousands, respectively whereas the co-efficient of standard deviations for quick assets and current liabilities are 0.45 and 0.46 respectively. The co-efficient of standard deviations of quick assets and current liabilities are less variance indicating that better in future years also.

The quick ratio in 2054/55 is excess ie. 1.24. It is more than standard ratio 1:1. This is not better position because excessive liquid assets indicate years are in declining stage than standard ratio. On fourth years, the quick ratio is declining trend indicated the change of quick ratio is comparable change of quick assets less than the change of current liabilities. In year of study lower quick ratios due to as a decrease in liquid assets accompanied by a lower relative decrease in current liabilities. Obviously, it was always less than the standard ratio of 1:1 during last nine years of study. Hence, the liquid financial position of the Mill was serious.

Fig. 8
Liquidity Position of SRJM
(For 2053/54 to 2062/63)



Years

INVENTORY TURNOVER RATIO:

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

Cost of Goods sold

Inventory Turnover Ratio = -----

Average Inventory

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

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

The Inventory Turnover ratio of SRJM has been presented in Table-4.3 for the financial year 2053/54 to 2062/63.

Table - 4.3

Inventory Turnover Ratio of SRJM (2053/534 to 2062/63)

Rs. (in '000')

Year	Cost of sales	Average Inventory	Ratio(in times)
2053/54	69410	15734	4.41
2054/55	135828	26987	5.03
2055/56	163749	32421	5.05
2056/57	229319	34897	6.57
2057/58	253565	35161	7.21
2058/59	384524	43311	8.88
2059/60	315169	51248	6.15
2060/61	331406	54499	6.08
2061/62	428979	56563	7.58

2062/63	437812	59493	7.36
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Source: Annual Report of SRJM from the years 2053/54 to 2062/63

During the period of study, the ratio of Average inventory to cost of sales fluctuated from 4.41 times in year 2053/54 to 7.36 times in the year 2062/63. During this period, the cost of sales to average inventory low increasing and decreasing times because inventory has not been managed efficiently. It was always below the generally accepted ratio of times during the period of analysis. The maximum times of inventory turnover ratio is 8.88 times in the year of 2058/59.

DEBTOR/ RECEIVABLE TURNOVER RATIO:

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

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

For the purpose of calculating debtors turnover ratio in SRJM only those debtors at the end of each fiscal year have been included which arise from the regular sale of the factory. Reserve for bad and doubtful debts has not been deducted from the total amount of trade debtors in order to avoid the impression that a larger amount of debtors have been collected. The turnover of debtors can be increased by allowing less credit period to debtors. i.e., making collection within a short period. The effective credit administration results in higher turnover of debtors, which is good enough for the short-term creditors of the factory. For higher profitability a high turnover of inventory should be accompanied by prompt collection of debtors, which in turn serves the purpose of long-term creditors of the factory.

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

The debtors turnover ratio shows the relationship between net credit sales and average debtors to evaluate the efficiency with which the debtors are managed. It indicates the number of times the debtors rotate in a year.

The following table shows debtors turnover ratio in SRJM from 2053/54 to 2062/63.

Table – 4.4
Debtors Turnover Ratio of SRJM (2053/54 to 2062/63)

Rs. (In '000')

Year	Sales	Debtors	D.T.R (in times)	Average Collection Period(ACP) (in days)
2053/54	81189	5608	14.58	25
2054/55	161690	12949	12.49	29
2055/56	198574	15343	12.94	28
2056/57	269822	27291	9.89	36
2057/58	295057	18773	15.72	23
2058/59	422386	23121	18.27	20

2059/60	366663	12182	30.10	12
2060/61	382384	17727	21.57	17
2061/62	482443	32917	14.66	25
2062/6	487703	35452	13.77	26

Source: Annual Reports of SRJM from the years 2053/54 to 2062/63

The debtors' turnover ratio of the factory as indicated in table 4.4, marked a fluctuating trend in the period of study. It varied from 9.89 times in the 2056/57 to 30.10 times in 2059/60 recording a range in study period. In 2053/54 to year 2056/57, the debtors turnover ratio is declining stage due to slight increase in sales in comparison to the higher increase in debtors. After the years 2056/57, the debtors' turnover ratio is increasing trend in year 2057/58 to 2059/60 and then after year 2060/61 to year 2062/63, the debtors turnover ratio is declining stage. Likewise the average collection period also recorded fluctuating trend varying from 12 days in 2059/60 to 36 days in 2056/57. It always exceeded the time period of seven days allowed for debt. Collection period. The foregoing analysis indicates that the receivable has not been managed efficiently.

CASH TURNOVER RATIO:

Cash is the most important current assets for the operations of the factory because it is, on the one hand, the basic input needed to keep the factory running on a continuous basis while on the other hand it is also the ultimate output expected to be realized by selling the product manufactured by it. The factory needs cash not only to purchase raw materials and to pay wages but also for payments of dividend, interest, taxes and countless other purposes. If it maintains a small cash balance, its liquidity position becomes weak and suffers from a scarcity of cash to make payments. On the other hand, if it maintains a high level of cash balance, it will have a sound liquidity position but forgone the opportunities to earn interest. Thus, the cash position of the factory is at optimum level to make payments due in the time. The test of liquidity of the factory is really the availability of cash to meet its obligations when they become due. In order to find out the cash position of the factory, the ratio of total cash and bank balance to sales has been calculated and analyzed in this study.

The cash turnover ratio shows the relationship between sales and cash and bank balance to evaluate the efficiency with which the available cash is utilized in the factory. It also

shows that whether the available cash is properly managed or not for the smooth operation of the factory. It can be computed by net sales to cash and bank balance.

Net Sales

Cash Turnover Ratio = -----

Cash and Bank Balance

The following table shows the ratio of net sales to cash & bank balance of SRJM during the period of study from 2053/54 to 2062/63.

Table – 4.5

“Cash Turnover Ratio” of SRJM (2053/54 to 2062/63)

Rs. (In ‘000)

year	Sales	Cash & Bank	Turnover(in times)
2053/54	81189	183	443.66
2054/55	161690	202	800.44
2055/56	198574	475	418.05
2056/57	269822	155	1740.79
2057/58	295057	578	510.48
2058/59	422386	3864	109.3
2059/60	366663	810	452.67

2060/61	382384	1018	375.62
2061/62	482443	1156	417.34
2062/6	487703	1204	405.07

Source: Annual reports of SRJM from the years 2053/54 to 2062/63

The cash turnover ratio of the factory marketed a fluctuating trend during the period of study. It varied from 109.30 times in year 2058/59, recording a range of 1740.79 times in year 2056/57 recording a range at high. In the year, 2056/57 it decreases from 510.48 times to remaining years as series due to slight increase in net sales having a larger increase in the cash and bank balance. From the year 2056/57, 2054/55 and 2057/58 are cash turnover ratio having increasing trend. Considering these facts, it may be inferred that the cash has not been managed efficiently.

ANALYSIS OF CASH CONVERSION CYCLE:

A cash conversion cycle reflects the net time interval in days between actual cash expenditures of the firm on productive resources and the ultimate recovery of cash. The cash conversion cycle (net operating cycle) represents the net time gap between investment of cash and its recovery of sales revenue. It is the net time interval between cash collections from sale of product and cash payments for resources acquired by the firm.

In a manufacturing firm, the operating cycle for element of cost, say direct material, starts with the purchase of materials. Materials are not consumed immediately. There involves raw materials conversion period (RMCP). Once materials are issued to production, it again involves time gap between issue of materials and production of finished product. This time gap is called as work in progress conversion period (WIPCP). Industries produce the output in the expectation of demand or for the purpose of assembly. Till the demand for finished product materializes; the product would remain in the store. This period is termed as finished goods

conversion period (FGCP). The enterprise due to competitive reason and other reasons extend credit facilities to customers. This time gap between sale and realization of cash is known as average or receivable conversion period (ACP). Business enterprises receive credit in the purchase of raw materials from the suppliers. This period is called as payment deferral period (PDP). This payment deferral period reduces the length of operating cycle of business firm.

Now, the length of operating cycle of manufacturing firm can be calculated with the help of following formulae:-

$$\text{Operating cycle} = \text{RMCP} + \text{WIPCP} + \text{FGCP} + \text{ACP}$$

(Gross Operating Cycle)

$$\text{Cash Conversion Cycle} = \text{Operating cycle} - \text{PDP}$$

(Net Operating Cycle)

$$\text{Cash Conversion Cycle} = \text{Inventory Conversion Period} + \frac{\text{Receivable Conversion Period} - \text{Payment deferral Period}}$$

[*Source: Management Accounting, Ravi M. Kishore, pg no. 17.7*]

To analyze the cash conversion cycle, first of all, the researcher has analyses the Inventory conversion period, receivable conversion period and payment conversion period then after the analysis of cash conversion period is made.

It is the task of finance manager to manage the operating cycle effectively and efficiently. The length of operating cycle is the indicator of operating management performance. The cash conversion cycle represents the time interval for which the firm has to negotiate for

working capital from its bankers. It enables to determine accurately the amount of working capital needed for the continuous operation of its activities. The operating cycle calls for proper monitoring of external environment of the business. Changes in government policies like taxation, import restrictions, credit policy of central bank, price trend, technological advancement etc. has their own impact on the length of operating cycle.

Table – 4.6

Cash Conversion Cycle of SRJM (2053/54 to 2062/63)

(In days)

Year	Inventory Conversion Period(ICP)	Receivable Conversion Period(RCP)	Payable Deferral Period(PDP)	Cash Conversion Cycle(CCC)
2053/54	82	25	100	7
2054/55	72	29	37	64
2055/56	71	28	80	19
2056/57	55	36	26	65
2057/58	50	23	28	45
2058/59	41	20	30	31
2059/60	59	12	42	29
2060/61	59	17	50	26
2061/62	48	25	32	41
2062/63	49	26	40	35

Source: Annual reports of SRJS from the years 2053/54 to 2062/63

(a) Inventory Conversion Period:

Inventory Conversion Period indicates the efficiency of the firm in selling its product. It is calculated dividing the number of days in a year by inventory turnover. Inventory conversion period which shows how long the raw materials convert into finished goods and how much rapidly the inventory is turned into receivable through sales.

Table 4.6 shows the Inventory conversion period of Shree Raghupati Jute Mills for the study period from 2053/54 to 2062/63. The Inventory conversion period of the factory, as indicated in table 4.6 marked fluctuating trend during the period of study. It varied from 82 days in 2053/54 to 41 days in recording range.

(b) Receivable Conversion Period:

Receivable conversion period indicates the number of days debtors turnover into cash. It analyses collectibility of debtors and thus, the efficiency of collection effects and analysis ascertaining of the firm's corporate strength and advantage relative to its credit policy. It is one of the important financial tools for the measurement of cash conversion cycle. Generally, longer the collection period, the inefficient in the credit management and vice-versa. Receivable conversion period is calculated dividing the number of days in year (i.e. 365) by receivable turnover.

Table 4.6 shows the receivable Conversion Period to Shree Raghupati Jute Mills for the study period from 2053/54 to 2062/63. The Receivable Conversion Period of the factory, as indicated in table 4.6 marked a fluctuating trend during the period of study. It varied from 82 days in 2053/54 to 41 days in recording range.

(c) Payable deferral/ conversion period:

Payable conversion period indicates the number of days of creditors turnover each in a year. It is an important financial tools of analysis which indicates the speed of creditors payable. A high payable conversion period is favorable for the company but too much higher period hampers the credit worthiness of the factory. A lower payable conversion period shows the firm repayment capacity and it increases the credit worthiness of the factory. It is calculated by dividing the sum of account payable and outstanding expenses by the sum of cost of sales and multiplies by the number of days in a year (i.e.365).

Table 4.6 shows the Payable Conversion Period of Shree Raghupati Jute Mills for the study period from 2053/54 to 2062/63. The Payable Conversion Period of the Factory, as indicated in table 4.6 marked a increasing trend in 100 days of year 2053/54 and then after it decreases with fluctuating trend. It increased because in cost of sales accompanied by lower relative decreases in account payable.

(d) Cash conversion cycle:

Cash conversion cycle is an important financial tool which shows how many times it takes to convert the receivable into cash, inventory turnover into cash and how much time it takes to repay its obligation. The cash conversion cycle is quick and convenient way to analyze the on going liquidity of the firm overtime. Although it does not show how risky the cash flows are, it does not focus on our main concern cash flows. It is calculated by deducting the payable conversion period from the sum total of inventory conversion period and receivable conversion period.

Table 4.6 shows the cash conversion cycle period of SRJM for the study period from 2053/54 to 2062/63. The cash conversion period of the factory, as indicated in table 4.6 marked a fluctuating trend during 2053/54 to 2062/63. It varied from 7 days in 2053/54 to 65 days in 2056/57 with a recording range of 58 days. During the year 2054/55, it is decreased trend to remaining years due to continuous decrease in inventory conversion period and receivable conversion period and increase in payable conversion period. It also increases in year 2054/55 and 2056/57 due to continues increase in inventory conversion period and receivable conversion period and decrease in payable deferral period followed by inventory conversion period always longer than payable deferral period with a few expectations. These facts enable one to reach at a conclusion that there is an excessive investment in the inventory causing a delay in the payment of account payable. This is not only increases the inventory carrying cost but also threatens the credit worthiness of the factory.

WORKING CAPITAL TURNOVER:

With an increase in sales volume, the investment in inventories and receivables also increases requiring a larger amount of net working capital. This makes it obvious that there is a close relationship between net sales and net working capital. The relationship between the two variables reflects the extent to which the business is operating on a small or a large amount of net working capital in relation to sales.

The working capital turnover establishes the relationship between net sales and net working capital. It is computed as follows:-

$$\text{Working Capital Turnover} = \frac{\text{Net sales}}{\text{Net working capital}}$$

The turnover of working capital (or ratio of net sales to net working capital) shows the number of times the net working capital is turned over in the course of an accounting year. It is used to test the efficiency with which the net working capital is being used by a firm. A high ratio indicates an efficient utilization of net working capital where as a low ratio is an indication of an inefficient utilization. A high ratio may be the result of favorable turnover of inventories and receivables while a low ratio may be the result of an excess of net working capital, a slow turnover of inventories and receivables, or a large cash balance and investment of working capital in the form of temporary investments. There is no absolute standard for this ratio and so comparisons should be made with the ratios of past years and with similar ratios for the industry to make interpretation on relative terms. In general, a high working capital turnover is better than a low turnover, but a very high turnover of net working capital may not necessarily always imply a favorable position. It is because a very high turnover may also be the result of an inadequacy of net working capital.

The ratio of net sales to net working capital also gives an indication as to the situation of overtrading. The overtrading means a situation in which a company does more business than its finances allow. This situation occurs when the firm expands its scale of operations without an adequate background of liquid capital. On the other hand a low ratio may indicate a situation of under trading. The under trading may be the result of the fact that more funds are invested in a business that can be used to reasonable advantage.

The working capital turnover ratio of SRJM has been presented in table 4.7 for the financial year 2053/54 to 2062/63

Table – 4.7
Working Capital Turnover Ratio of SRJM
(2053/54 to 2062/63)

Year	Sales (net)	Working capital	Turnover (in times)
2053/54	81189	13862	5.86
2054/55	161690	30597	5.28
2055/56	198574	38495	5.16
2056/57	269822	26664	10.12
2057/58	295057	21934	13.45
2058/59	422386	22469	18.80
2059/60	366663	31668	11.58
2060/61	382384	21050	18.17
2061/62	482443	33191	14.54
2062/63	487703	35859	13.60

Source: Annual reports of SRJM from the years 2053/54 to 2062/63

Table 4.7 shows that the working capital turnover ratio of SRJM recorded upward tendency on 2058/59 and 2060/61 and an indefinite tendency during the remaining years of study. It varied from 2055/56 as 5.16 times and recording highest range to 2058/59 as 18.80 with difference of 13.64 times. From year 2053/54 to 2056/57, it seems to decreasing trend and from the year 2057/58 to 2060/61, it seems to increasing fluctuating trend and remaining years the working capital turnover ratio is fluctuating trend. It improved or increasing trend resulting from a decrease in net sales at a lower rate than a decrease in net working capital. It decreased because of a decrease in net sales as against an increase in working capital.

FUNDED DEBT TO NET WORKING CAPITAL RATIO

This ratio establishes the relationship between funded debt and net working capital. The funded debt refers to long term liability which comprises all debts the maturity of which are more than one year distant from the date of balance sheet. The net working is the excess of current assets over current liabilities. It represents the amount of current assets that has been supplied by the long term creditors and shareholders. The ratio of funded debt to net working capital is computed as follows:

Funded Debt

Funded debt to Net Working Capital Ratio = -----

Net Working Capital

This ratio indicates the extent to which the net working capital is financed by long term-borrowed funds. The general principle for a sound financial condition is that the funded debt of a business enterprise should not exceed the net working capital. Thus, a ratio of 100 percent may be considered to be satisfactory. But in case the funded debt exceeds the net working capital, it implies that the firm has financed a part of fixed assets out of long term-borrowed funds. And if the funded debt is below the net working capital requirement is met out of the shareholders funds.

Table 4.8 shows the ratio of funded debt to net working capital of SRJM for all period covered by the study.

Table – 4.8

Funded Debt to Net Working Capital Ratio of SRJM

(2053/54 to 2062/63)

Rs.(in '000)

Year	Funded Debt	Net Working Capital	Ratio (in times)
2053/54	45410	13862	3.27

2054/55	76002	30597	2.48
2055/56	88158	38495	2.29
2056/57	82941	26664	3.11
2057/58	82752	21934	3.77
2058/59	76949	22469	3.42
2059/60	76622	31668	2.42
2060/61	59209	21050	2.81
2061/62	63833	33191	1.92
2062/63	72333	35859	2.02

Source: Annual reports of SRJM from the years 2053/54 to 2062/63

The funded debt to Net Working Capital ratio of the factory, as indicated in Table 4.8 marked an increasing trend during the first six years and a decreasing trend during the remaining years of study. It varied from 3.77 times in year 2057/58 to 1.92 times in year 2061/62 with a difference range of 1.85 times. During the first six years it continuously increased due to an increase in the funded debt accompanied by a decrease in the net working capital. Similarly, in the remaining years, it decreases due to a continuous decrease in the funded debt accompanied by an increase in net working capital. During the period of analysis, it was always less than the standard norm (100%), which indicates that a part of the net working capital requirement was met out of the shareholders' funds. Thus, the practice of financing working capital of the factory is sound.

RATIO OF NET PROFIT TO NET WORKING CAPITAL

Ratio of net profit to net working capital shows the quantitative relationship between net profit and net working capital. This ratio examines the effects of working capital on profitability. It can be calculated in the following ways:-

$$\text{Return on Working Capital} = \frac{\text{Net profit}}{\text{Net Working Capital}} \times 100$$

Table – 4.9.1
Ratio of Net Profit to Net Working Capital
(2053/54 to 2062/63)

Year	Working Capital(X)	Net Profit (Y)	Ratio (%)
2053/54	13862	(3940)	(2.84)
2054/55	30597	372	1.22
2055/56	38495	447	1.16
2056/57	26664	454	1.70
2057/58	21934	943	4.30
2058/59	22469	5334	23.74
2059/60	31668	4752	14.97
2060/61	21050	7180	34.11

2061/62	33191	5013	15.10
2062/63	35859	1326	3.70

Source: annual reports of SRJM from the years 2053/54 to 2062/63

Co-efficient of Correlation

between net WC & net profit (r) = 0.14

Probable Error (P.Er.) = 0.16

6 P.E.(r) = 0.94

Regression Equation of Y on X is

[Y= 0.55+0.06 X]

Regression Equation of X on Y is

[X= 26.7+0.36Y]

Table 4.9.1 shows the ratio of net profit to net working capital of SRJM for the study period from 2053/54 to 2062/63. The ratio of net profit of net working capital of the factory as indicated in table 4.9.1, marked a fluctuating trend during the period of study. During, the first year and remaining years of study, there are negative and positive ratios respectively. The co-efficient of correlation between net working capital and net profit is 0.14 which shows the positive relation position. The probable error (P.E.) is 0.16. it seems to be the value of r is not all significant. On the regression equation of Y on X and X on Y shows the relationship between X and Y ie. Working capital and net profit.

REGRESSION ANALYSIS:

The literal meaning of the word 'Regression' is stepping or returning back to the average value. The term was first developed by Sir Francis Galton in 1877. The regression is the statistical tool with the help of which we can estimate the unknown value of one variable from the known value of other variable. The variable whose value is given is called independent variable. Hence, regression determines the average probable change in one variable based on a certain amount of change in another.

If the curve obtained by plotting the two variables X and Y on graph is a straight line, then it is called the regression line and the relationship is linear. And algebraic expression of the regression line is called the regression equations. There are two regression equations which are as follows:-

(a) Regression Equation of Y on X is: - $Y = a + bx$

(b) Regression Equation of X on Y is: - $X = a + by$

Table – 4.9.2

Regression Equation between Net Profit & Net Working Capital

(2053/54 to 2062/63)

Regression Equation of	Regression Equation	Value of a (constant)	Regression Co-efficient (b)
Y (net profit) on X (WC)	$Y = 0.55 + 0.06X$	0.55	0.06
X (net WC) on Y (net profit)	$X = 26.7 + 0.36y$	26.7	0.36

Table 4.9.2 shows the regression equations between net profit & net WC in SRJM. The regression equation of net profit(Y) on net WC(X) is

$Y = 0.55 + 0.06X$. The positive 'b' i.e. 0.06 indicates that one thousand increase in net working capital leads to decrease in net profit by 0.06 thousands. Similarly, regression equation of net working capital (X) on net profit (Y) is, $X = 26.7 + 0.36Y$. The regression co-efficient (b) between net WC and net profit is 0.36 which indicates that one thousand increase in net profit leads to decrease in net WC by 0.36 thousand.

CHAPTER – V

Summary, Conclusions and Recommendation

Nepal is an agro-based, land-locked and least developed country which is situated between the large economic and different political view country of India and China.

Agriculture sector plays a vital role in Nepalese economy. More than 80% of economically active population is engaged in agriculture for their livelihood. But the agricultural contribution to the total domestic product is only nearly about 42 percent. Because of the poor contribution of agriculture sector to the gross domestic product, per-capita income of Nepalese people is only us \$220 equivalent per year. Nepal's per-capita income is one of the lowest in the world. In fact Nepal is the ninth poorest country in the world. In this background agriculture is still the backbones of Nepalese economy. Thus economic development is not possible without agricultural prosperity.

But the agriculture sector alone cannot offer a satisfactory standard of living to the growing population nor can it provide jobs to the expanding labour forces. Therefore pressure of the excess agrarian population and the rising needs and aspiration for the people have forced Nepal to shift its development programs toward industrialization.

Mainly in Nepal Jute Industries are firstly established in a largest scale in the country as Biratnagar Jute Mills Ltd. and Shree Raghupati Jute Mills Ltd. Other private sector Jute Industries are also established after democracy.

Agro-based Industries play vital role for development of a Country. Jute is the main and a leading agricultural cash crop in Nepal. Instead of this, there are some cash crops like oil, sugarcane, tobacco and woods etc. By the crop nation can also earn a lot of foreign currency through foreign trade. Jute contributes about 33% of total export and about 56742 hectares land is cultivated. A annual production of Jute is almost 40,000 Ton and its annual revenue from export market is almost Rs. 900 millions.

The Jute Industry, which is an agro-based export promoting Industry in Nepal is Pioneer, in the field of its organized industry. The history of this Industry started with the establishment of Biratnagar Jute Mills in 1993 B.S. Afterwards, many other Jute mills were gradually established. At present the Jute Industry in Nepal consists of eight units. The units constituting the industry are Bitatnagar Jute Mills, Shree Raghupati Jute Mills, C.M. Jute Mills, Baba Jute Mills, Hansrai Hulasehand Jute Mills, Shankar Jute Mills, Swastik Jute Mills and Nepal Jute Mills. The first two are large scale units while the rest are small

ones. The second oldest and largest units is the Raghupati Jute Mills which is the only semi-government Jute Mill, which was established in 2003 B.S. (1946 A.D.) with an authorized capital of Rs. 16 million and Paid-up Capital of Rs. 13 million. The mill started commercial production lately in 2011 B.S. Its production capacity is 6571 metric tones per annum. It is situated near Jogbani on the side of Indo-Nepal Boarder at Rami Biratnagar Sub-metropolitan city ward no. 22 of Morang district which is six kilometer far from Biratnagar Center. The location is best suited for mill in view of Transportation and communication facilities availability of cheap and skilled labour nearness to raw-materials, market accessibility and on. As for the market accessibility, it is not only the nearest place to the main market (ie Indian) but also linked to the Indian Railway being the cheapest means of Transport.

The shares of RJM were over subscribed as the investors in the country were very enthusiastic by achievement of the Jute Mill (ie. SRJM). The majority of shares were held by the Indian Promoters and the rest were allotted to the Nepal Government and Common People. The representative of the Nepalese shareholders had no executive authority and even what ever they had were not exercised as they were mostly big people from Kathmandu who seldom visited the Mill. The government was silent spectator. Naturally the managing agents dominated the whole shows.

The RJM showed highly undesirable operating results breaking the enthusiasm in Investors aroused by the first Jute Mill. There were two main reasons for such results. First, the mill started commercial production after eight years from the date of its establishment and, secondly, there were serious and repeated bungling on the part of the management. Obviously the government of Nepal had no other option except to take the management under its own control by purchasing the majority share of the managing agents. Then in 2016 B.S. all the shares of the managing agent were acquired by the government and the working results of the mill proved satisfactory. But only after a few years its performance again went into a decline. Eventually in 2051 B.S. It was closed owing to labor negligence, feeble management and other operating problems. After two years of its closure, it was privatized in 2053 B.S. The Arihant multifibers of Golcha organization purchased 65% of the shares while 33.62% of the shares were held by the government and the rest 1.38% by the common people. Ever since the privatization, its performance has been towards improvement.

The study covers a period of 10 years (from F/Y 2053/54 to 2062/63) and is based mainly on secondary data. The data required for the study have been obtained from reliable sources. Such data after proper recasting and condensation have been arranged in different tables needed for the fulfillment of stated objectives. In order to analyze the data, the financial techniques like ratio analysis, trend analysis, funds flow analysis, and cash conversion cycle have been applied. In addition, the statistical tools like percentage, average, range, standard deviation, correlation, regression and index number have also been used for making the analysis more systematic, scientific and useful. Both analytical and descriptive approaches have been followed to make the study more revealing.

The entire study has been divided into five major chapters. The first chapter gives a general introduction of the subject matter while in the second chapter the pertinent literature and studies have

been reviewed making logical and meaningful groupings. The third chapter devises the research methodology adopted in carrying out the study whereas in the fourth chapter the relevant data have been presented and analyzed with the help of financial and statistical tools. The fifth and last chapter gives summary, conclusions and recommendation for ameliorating the working capital of the factory concerned.

In the light of foregoing discussion and conclusions some glaring recommendation may be offered as follows:

1. SRJM should boost up the sales volume by improving the quality of Jutes, reducing the prices reasonably, providing due credit facilities to the retailers and making proper advertisement.
2. The target sales and production volumes of the factory should be determined after a careful survey of the market. If there are negative deviations in actual sales and production volumes from the targeted ones, the causes of such deviations should be sought for and necessary remedial measures should be taken immediately.
3. The optimum level of raw materials required for the target production should be determined in advance and maintained accordingly for ensuring economical and smooth running of production activities.
4. The factory needs a suitable cost system for controlling the operating cost and thereby providing a reasonable return on working capital employed.
5. The owner's funds need to be injected into the factory to replenish the erosion of funds caused by frequent losses in past years. The use of owner's funds to meet working capital requirement would not only strengthen the liquidity but also enhance the profitability of the factory.

6. In order to reduce the unit operation cost and increase the rate of return on working capital employed, the factory needs to harness full installed capacity.

As the study has been undertaken with some specific objectives, it does not claim to have looked into all the problems that face the factory management. However, it has at least covered the working capital management, which is one of the vital aspects of the financial management. But due to various constraints inter-firm comparative study could not be pursued even on this aspect. All these aspects call for an in depth probe for ameliorating the performance of the factory.