CHAPTER -1

INTRODUCTION

1.1 Background of the Study

Nepal is a mountainous country. There are many famous snow-capped peaks like Sagarmatha, Annapurna, Ganesh in Nepal. Many tourists from local and foreign countries come to scale these famous mountains for both entertainment and popularity .they also love to trek in traditional villages and hills. Considering this fact , many manufacturers produce all necessary equipments needed for trekking and mountaining. Their products ranges from down-jackets, pant, down, fleece cap to sleeping bag, wallet rucksack, handbag, carry mat and various others. As a tourism industry is one of the major sources of foreign currency, trekking business is also greatly associated in earning money.

Trekking agents started up as a business many years ago in Nepal. But the trend of trekking business usually move up and down due to various reasons like poor infrastructure ,political disturbance, poor economic conditions and various other.

1.2 An Introduction of Mountain Sportswear Industries

In 1978, Ang Maya Sherpa started a small trekking business known as " Mountain Sportswear Industries". This industry produce all necessary equipments needed for trekking and mountaineering. They are as follows:

ITEMS TYPES	COST (NRS)

1.Jacket Lhotse	950
2.Jackets Wild Country	1150
3.Jacket Life	1450
4.Jacket Alpinist	1050
5.Pullover Pata	750
6.Jacket Buckle	550
7.Jacket Solu	1050
8.Jacket Attached	1550
9.Jacket Summit Town	2500
10.Jacket (Reversible Down)	1550
11.Jacket Amercian Fleece	650
12.Pant Alpine	750
13.Pant Snow Fleece	450
14.Pant Pumori Fleece	560
15.Pant GT Fleece	850
16.Sleeping Bag Solo Climb	4700
17.Compact	770
18.Rucksack K2 Net	1540
19.Backpack 3 in 1	1950

20.Rucksack MS	700
21.Daypack MS	525
22.Rucksack Liberty	1000
23.Daypack Enti Gravity	900
24.Daypack Ellie	900
25.Wallet Bag	550
26.Bike Bag	335
27.Wallet Bag Net	252
28.Hand Bag Travel	400
29.Hand Bag Ordinary	335
30.Rucksack 3 Pockets	700
31.Tent Sonow House	400
32.Vest Amadablam	550
33.Poolover Snow	1100
34.Vest Down	3500
35.Sleeping Bag MT.Sports	1400
36.Sleeping Bag K2	400

Both the factory and two shops including store house are situated at Thamel, Kathmandu. The total area of the industry is nearly four ropanis. Their clients are both locals as well as foreign tourists. It supplies trekking and mountaineering wears according to demand i.e. maximum satisfactions to the consumers.

The company, in its top most level, has six members in Board of Directors (BOD) . Senior management committee is the second in hierarchy. The GM works as chief executive of the company who is also a member of BOD.

The operati ng revenue of the company increased from about Rs. 720 crores in the fiscal year 2005/06 to Rs.1,300 crores in the fiscal year 2006/07. Financial and economic sustainability of the company could be easily judged as "comfortable" due to the fact that net profit available for appropriation has increased from Rs 300 crores in the fiscal year 2005/06 to about Rs 600 crores in the year 2006/07.

A clear sign of tougher competitive environment is emerging. In order to diffuse the possible challenges and harness the opportunities, MSI need to keep a close eyes on this changing condition of environment and manufactured a durable equipments capable to serve and satisfy ever increasing expectation of its customers through a balance of "quantitative expansion, quality enhancement" and price comfort ability for all the services it offer. To achieve MSI sustained business growth it must realize that the coming years are extremely crucial and of great significance in shaping up the organizations future.

1.3 Statement of the problems

Different research studies on the financial performance and the profit planning of mountain sportswear industries have pointed out the inefficiency of the company management in utilization of its current assets. The last five years balance sheet shows that the huge amount of cash and bank balance lying idle. The cash and bank balance for the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 in thousands of rupees are 8,242,139, 10,097,738, 11,788,687, 9,574,501 and 12,021,624 respectively. Volume of sundry debtors seems to be very large and the studies also have pointed out the problem of its outstanding debt collection. Sundry debtors for the fiscal 2004/05 in thousand of Nepalese rupees was 2,468,080, it increased to 3,030,277 for the fiscal year 2005/06 and the highest sundry debtors is for the fiscal year 2008/09 that is 3,099,496.

Working Capital management was not found to have followed uniform policy on net working capital. Almost all of them have suggested the MSI management to estimate immediate required funds and either invest the excess fund in marketable securities or use that fund in refunding debt. They have suggested utilizing its own internal fund rather than accepting high interest bearing loans for capital investment, since the rate of earning in liquid fund is less than the interest it pays for the loan amount.

The studies have shown that the liquidity position of the company is quite high as it keeps capacity to pay off whole debt at once. The question arises here, ' Does a company engaged in public utility service need so high position of liquidity?'

“In contrast, public utilities have very limited need for working capital and to invest abundantly in fixed assets. Their working capital requirement are nominal because they may have only cash sales. Thus no fund was tied up in debtors and stocks” (I.M Pandey, 1999: 817). If so, why MSI keeps so high liquidity position? Thus the problem towards which this study is directed is to assess the size; liquidity; efficiency and profitability of working capital in MSI.

Talking the above problem under consideration, some research questions are raised as follows:

- Are the size, liquidity, efficiency and profitability of working capital in MSI is adequate or not?
- Is restructuring of capital needed in the context of the internal financing?
- How the sources of funds are created and mobilized?
- Did the huge amount of cash and bank balance may cause to lose its profitability?
- Can MSI make better utilization of excess cash amount by investing in marketable securities?
- Is severe efforts needed to collect the outstanding bills immediately?

1.4 Objectives of the Study

The objectives are to gain an insight into the management of working capital in MSI. More specifically, the following general objectives can be outlined:

- To examine and critically analyze the working capital management of MSI.
- To examine liquidity position and profitability position of MSI.
- To assess the size and growth of working capital and
- To recommend viable suggestions to cope up with working capital management shortcomings in MSI.

1.5 Signification of the Study

Working Capital is regarded as the life blood for any organization because it is needed for sustaining the enterprise in day to day operation. If the business cannot maintain a satisfactory level of working capital, it is likely to become insolvent and may even push into bankruptcy. So the goal of working capital management is to manage the firm's current assets and current liabilities in such a way that a satisfactory level of working capital is maintained. "Survey indicates that the largest portion of most financial managers' time is devoted to the day to day internal operation of the firm which falls under the heading of working capital management" (I.M. Pandey, 1999: 817).

Working capital is a firm's investment in short term assets working capital management involved a large portion of the firm's total assets as more than half topical firm's total investment in current assets. Working capital is the most crucial area in organization management because many instances have shown that regardless of excellent production and wide fixed assets management, management has lost the control of its firm because liquidity crises resulted in takeover by creditors, forced merger or bankruptcy. So to inquire into the efficient of current assets management and its association with their financial performance of manufacturing enterprises in Nepal, in the present context the study is timely relevant.

Besides, it will be helpful to the management of organization to determine appropriate working capital policy. And it is also useful to the controlling ministries for formulating appropriate economic policy for the organization. The study will helpful to carry out further research study in this field. Hence, these studies will diagnosis the relationship of working capital management to the efficiency of the organization as a whole. It will also be useful for the new management to improve the efficiency as well as the profitability with proper management of working capital and its components. The study has multidimensional significance which can be divided into four points.

i. Its significance to the shareholders: The study might be helpful to aware the shareholders regarding the working capital management. Every shareholder has aim to wealth maximization with profit maximization. This study has the analysis of profitability and liquidity. The results can motive the shareholders to invest in high profitability business organization.

ii. Its significance to the management: The success or failure of a business organization depends on its strategy, which depends upon working capital. Working capital is the lifeblood of any organization. Adequate and inadequate working capital may harm for company. After this study management can balance and co-ordinate the different functional areas with compare to each other.

iii. Its significance to the policymakers: Policy maker depend upon the financial data and analysis. This study also analysis the financial data and give recommendations. So, the study will be helpful to policy maker while formulating the policy regarding companies.

iv. Its significance to the outsiders: Among outsiders, mainly the customers, financing agencies, stock exchange creditors and stock traders are interested in the performance of manufacturing companies. After this study they can identify which is better.

1.6 Limitation of the Study

i. This study is mainly based on balance sheet and income statement maintained by the company and published in annual reports, where the various types of information were given in condensed form.

ii. The study covers the information of only past five years data from 2004/05 to 2008/09.

iii. This study will only concern with the Working Capital factors.

iv. This study and its result will depend on the availability and reliability of the data.

1.7 Organization of the Study

This study is about the Working Capital Management of Mountain Sportswear Industries. This study was divided into main five chapters. They are as follows:

Chapter- I: Introduction

The first chapter is introductory chapter; it contained general background of the study, size of the study, statement of the problem, objectives of the study, significance of the study and limitation of study.

Chapter- II: Review of Literature

The second chapter dealt with the review of literature broadly divided into many parts, which included published books, article, reports, dissertation and journal related to the topic of the study.

Chapter- III: Research Methodology

The third chapter deals with the research methodology, which consists of research design, population and sampling, sources of data and information along with different analytical tools that have been applied in the study.

Chapter- IV: Data Presentation and Analysis

The fourth chapter presents the main aspects of the study. It dealt with systematic presentation and analysis of data where various financial and statistical tools and technique were used to analyze and interpret data. It also included the main findings based upon analysis.

Chapter- V: Summary, Conclusion and Recommendations

Finally, in the fifth chapter whole study was summarized. Conclusion of the whole study and supply of some valuable recommendation for the improvement were done.

Bibliography and other appendixes used in statistical result were attached at the end of the study.

CHAPTER - II

REVIEW OF LITERATURE

The study about Mountain Sportswear Industries has been streamlined to some extend in the first chapter regarding growth, objectives, statement of problem and working capital practices in general. The main objective of this chapter is to clarify the need of the study rationally and systematically. Moreover, in order to make the study more comprehensive it is important to go through relevant literature. This chapter covers the following aspects:

- Conceptual framework
- Concept of Working Capital
- Classification of Working Capital
- Need and Importance of Working Capital
- Working Capital Policy
- Financing of Working Capital
- Working Capital Cash Conversion Cycle
- Determinants of Working Capital
- Review of different studies

2.1 Conceptual Framework

The term “Working Capital Management” is concerned only with the management of current assets and current liabilities of the organization which is necessary for day to day operation. Every company has variable and permanent working capital. Hence, the success and failure of any organization depend on it. So far as the management of working capital in Nepalese organization, concerned a number of studies have been undertaken by different management experts and students of MBS/MBA.

Working capital is the amount of fund that is needed to finance the current assets of the firm. Since the current assets are normally converted into cash within one year. Working capital helps revolving within one year or less through different current assets. Once the fund is converted into current assets, it is constantly converted into cash and cash outflow in exchange for other current assets (Weston, 1981:137). Working capital is a furnish investment in short term assets (Poudel, Gautam, Dhahal, Rana, 2062: 322). Working capital is a firm’s investment in short term assets, cash, short term securities, account receivables and inventories (Weston, 1984:266). Working capital involves deciding upon the account and composition of current assets and to finance these assets. The decision involves trade of between risk and profitability (Kuchhal, 1988:156).

The goal of working capital management is to manage the current assets and liabilities of the firm to keep at satisfactory level. It helps the organization to operate day to day transaction and operation without any interruption. If the firm cannot maintain the satisfactory level of working capital, it is likely to become insolvent and may even be forced into bankruptcy.

2.2 Concept of Working Capital

Working capital is a controlling nerve of every business organization because no organization can run smoothly without the proper control upon it. Thus, it plays the crucial role in the success and failure of the organization. As the management of current assets and current liabilities of the business organization is necessary for day-to-day operations, it plays the key role in the success and failure of the organization in the short run as well as in the long run also.

Every organization needs various types of assets in order to carry out its function without any interruption. They are fixed and current assets. Some fixed assets have physical existences and are required to produce goods and services over long period. These types of fixed assets are called tangible fixed assets. It includes land, building, plant, machinery, furniture, and so on. But some other fixed assets do not generate goods and services directly. However, it reflects the right of the firm. It is called intangible fixed assets. It represents patents, copyrights, trademarks, and goodwill. Both types of fixed assets are written off over a period of time.

Current assets are those resources of the firm, which are either held in the form of cash or expect to be converted into cash within operating cycle of the business. It includes, cash, marketable securities, account receivables, stock of raw materials, work-in-progress, and finished goods. Among these, some assets are required to meet the need of regular production and some for day-to-day expenses and short-term obligations.

Current liabilities are those claims of outsiders, which are expecting to be matured with in an accounting year. It includes; creditors, bills payable and outstanding expenses.

There are two concepts of working capital: Gross Concept and Net Concept. According to gross concept, working capital refers to the capital invested in current assets of a firm. It focuses only the optimum investment in the current assets and financing of current assets. (Khan and

Jain: 1996:604).It includes cash, short-term securities, inventory and account receivable. The level of current assets should be adequate. The level of current assets must be fluctuating with the changing business activity. Thus his concept can help earning more profit through maximum utilization of current assets. This concept is called quantitative concept.

In the view SC Kuchhal: there are two concepts of thoughts on working capital. One school of thought says that working capital is meant for the current assets only. Another school of thought argued that working capital is the excess of current assets over current liabilities. In other words, it is that portion of current asserts financed with long term funds. It is the liquidity position of the firm and suggests extending which working needs to be financed by permanent source of funds. It is very successful for comparing the performance of different firms as a measuring of liquidity, but it is quite useful for internal control. This concept helps to compare the liquidity of the same firm under a particular time period.

The first school of thought under the sponsorship of mead, baker, malts and field, relates with gross working capital and the second school of thought under the leadership of Lincoln, Doris, Stevens and Sailors relates with net working capital. The gross working capital refers to the firms' investment in current assets which includes to the management of cash, inventories and account receivable of the firm while, net working capital refers to difference between current assets and current liabilities.

There are specially two concepts of working capital: Gross concept and net concept. The gross working capital simply called as working capital refers to the firm's investment on current assets. Current assets are those assets which can be converted in to cash with in an accounting year and includes cash, short term securities, debtors, bill receivable, stock, inventories and pre-paid expenses. The term net working capital refers to the differences between current assets and current liabilities. Current liabilities are those claims of outsiders which can expected to mature for payment with in an accounting year and includes creditors, bills payable, Bank overdraft and outstanding expenses or accrued income. Net working capital can be negative or positive. A negative net working capital occurs when current liabilities are in excess of current assets (Pandey, 1992: 800).

The management of working capital plays a vital role run any public enterprises successfully. It focuses on the routine administration of current assets and current liabilities. Therefore working capital management in public enterprises is very important mainly for four reasons. Firstly, public enterprises must need to determine the adequacy of investment in current assets otherwise it could seriously erode their liquidity base.

- Secondly, they must select the type of current assets, suitable for investment so as to raise their operational efficiency.
- Thirdly they are required to ascertain the turnover of current assets, which determine profitability of the concerns.
- Lastly, they must find out the appropriate source of funds to finance current assets (Agrawal, 1996:8).

Weston and Brigham have given some theoretical insights into working capital management after their various research studies on it. The best conceptual findings of their study provide sound knowledge and guidance for the further study on the field of management of working capital in any firm. At the beginning, they explain the importance of working capital, the use of short term versus long-term debt, relationship between current assets to fixed assets. The components of working capital they have dealt with current assets which are cash, marketable securities, receivable and inventory. For the efficient management of cash, they have explained the different cash management model. They have also explained the major sources and form of short-term financing. Such as trade credit, loan from commercial banks and commercial paper.

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

From the management point of view, gross working capital deals with the problem of managing individual current assets in the day-to-day operation. But having along run view of working capital, we have to concentrate on the net value of current assets, i.e. the operation of current assets, which is constant in short run analysis and decision making but variable and manageable in long run operation. The net concepts of

working capital helps the management to look for permanent source for it's financing since working capital under this approach does not increase with increase in short term borrowing.

According to N.P. Agrawal, "Working capital consists broadly at the portion of the assets of the business used in or related to current operation and represented at any one time of the operating cycle by such items as account receivables, inventories of raw materials, stores, work-in-progress and finished goods, bill receivables and cash. Assets of this type are relatively temporary nature, since the invested names are normally capable of being recovered or of being change in form within a short period of time and the time element of ultimate recovery depend on the manufacturing cycle as well as sales and collection cycle".

According to KV Smith, "Working capital management is usually described as involving the administration of these assets namely cash, marketable securities, receivable and inventories and of current liabilities". It means the working capital management is concerned with the problems that arise in attempting to manage the assets, current liabilities and the inter-relationship that exist between them".

Working capital management is the process of planning and controlling the level and mix of the current assets of the firm as well as financing these assets. Specially, working capital management requires financial manager to decide what quantities of cash, other liquid assets account receivables and inventory of the firm should hold at any point of time. In addition, financial managers must decide how the current assets are to be financed according to need of the firm.

2.3 Classification of Working Capital

Working capital can be classified into two parts: Permanent (Fixed) working capital and temporary (Fluctuating) working capital. These two types of working capital are necessary for continuous production and sales.

(i) Permanent (Fixed) Working Capital

Permanent working capital refers to that level of current assets, which is required on a continuous basis over the entire year. A manufacturing concern cannot operate regular production and sales functions in the absence of this portion of working capital. Therefore, a manufacturing concern holds certain minimum amount of working capital to ensure uninterrupted reduction and sales function. This portion of working capital is directly related to the firm's expansion of operation capacity. This minimum working capital of a firm has to provide out of long – term sources are such as,

- Issue of share
- Issue of debenture
- Retention in various forms (i.e., plugging back of profits, general reserves etc.)

(ii) Variable (Fluctuating) Working Capital

Variable working capital represents the portion of working capital, which is required over permanent working capital. Therefore, this portion of working capital depends upon the nature of firm's production, relation between labor and management. The firm's, which are seasonal in character in their business, need a large amount of capital for holding inventory during the peak period. But, as soon as the peak period is over, their working capital becomes low. Therefore, firm's having seasonality in their business find it convenient to meet their working capital requirements by resorting to short – term sources, such as:

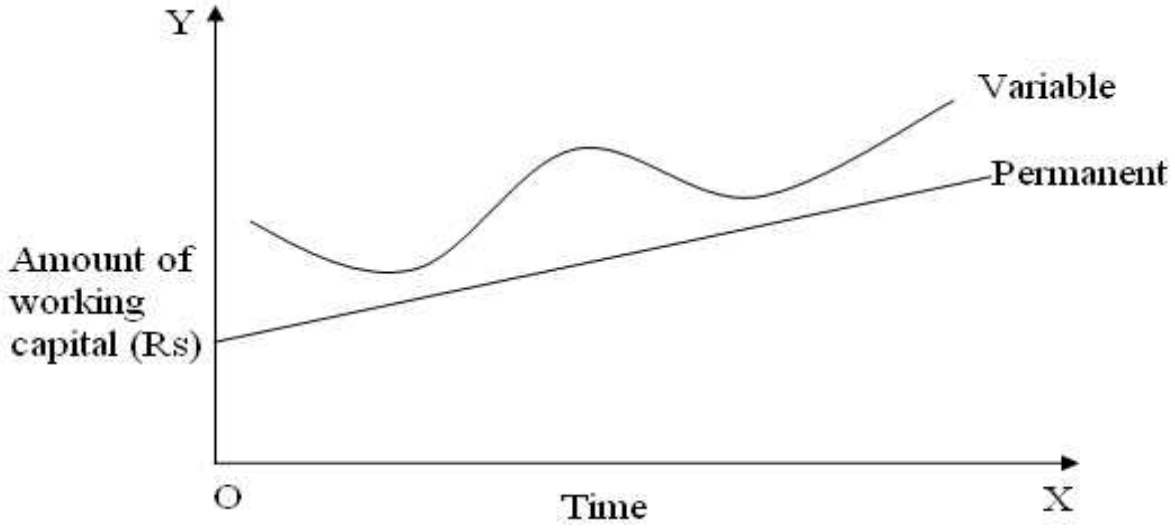
- Bank loan
- Public deposits
- Trade credit and other payables

- Provision for taxation
- Depreciation provision etc.

Fig No. 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 the other competitors in the cutthroat of the market.

Figure 2.1

Type of Working Capital



2.4 Need and Importance of Working Capital

Most of firms aim at maximizing the 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 needs to hold the working capital components cash receivable, inventory etc. therefore every firm needs working capital to meet the following motives:

(i) The Transaction Motive

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

(ii) The Precautionary Motive

Precautionary motive is the need to hold cash and inventories to guard against the risk of unpredictable change in demand and supply forces and other factors such as strike, failure of important customer, unexpected show down in collection of account 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.

(iii) The Speculative Motive

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

- Opportunities of profit making investment.
- An opportunity of purchase raw materials at a reduced price on payment of immediate cash.
- To speculate on interest rate.
- To make purchase at favorable price etc.

Thus the firms need the working capital to meet the speculative motive.

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 programmed is, in other words, necessary for earning profit by any business enterprise. However, a sale does not covert into cash instantly; there is invariably a time log between the sales of good and receipt of cash. There is therefore, a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient

working capital is necessary to sustain sales activity. Technically, this is referred to as the operating or cash cycle. The operating cycle is the time duration required to convert sales, after the conversion of resources into inventories, into cash (Pandey, 1999:810).

Some of the more significant reasons why working capital management is important are as follows:

1. The size and volatility of working capital make it major managerial concern managers spend much of their time on the day to day activities that revolve around working capital management.
2. The relationship between sales growth and working capital is both close and direct. As sales increase, firm must increase inventory and accounts payable. Increase sales generate a higher level of account receivable. So working capital must be managed as firms increase or decrease their scale of operation and sales. At the same time, some of the current liabilities especially account payable; tend to increase and decrease spontaneously. This spontaneously short term financing (due to use of trade credit) must be kept in mind as we consider both the CA and then financing (by both current and long term sources).
3. WC has direct relationship with the inflows and outflows of cash. WCM ensures the right timing and right amount of cash inflows and outflows. This makes the firm able to meet the obligation in right time and there will not be idle cash in hand. This is done by calculating inventory conversion period, receivables collection period and payable deferred period.
4. Size of CAs and CLs, in most of the manufacturing firms CA comprise of about 50% of the total assets. Similarly, CL supply 30% of total finance of the firm in general. WCM is very important because it helps to manage each of the CAs and CLs properly.

2.5 Working Capital Policy

Working capital policy refers to the firm's basic policies regarding (i) target levels for each category of current assets and (ii) how current assets will be finished. So, of all, in working capital management, 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 finance mangers 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.

2.5.1 Current Assets Investments 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 and Mean & Moderate.

(i) 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, and 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 with lower risk.

(ii) Lean and Mean Policy

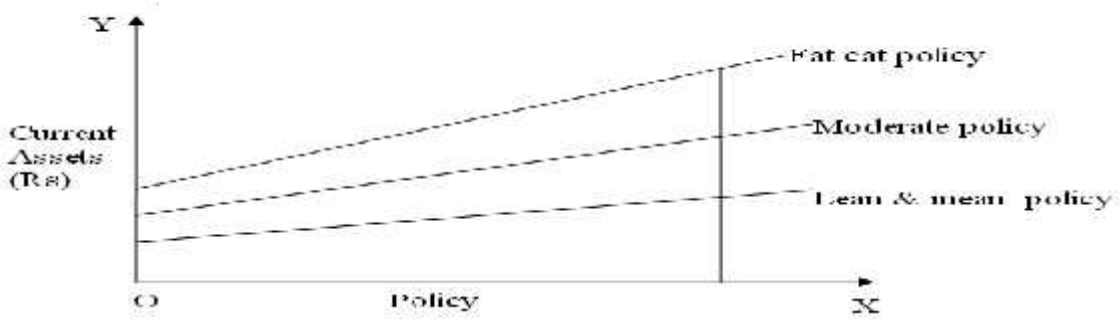
In lean and mean policy, a firm holds the minimum amount of cash, marketable securities, inventory and receivable to support a given level of sales. This policy trends to reduce the inventory and receivable conversion cycle. Under this policy, firm follows a light credit policy and bears the risk of losing sales.

(iii) Moderate Policy

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

Figure 2.2

Alternative Current Assets Investment Policy



Source: Brigham and Houston, 2001: 697

2.5.2 Current Assets Financing Policy

It is the manner in which the permanent and temporary current assets are finance. 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 types of policies.

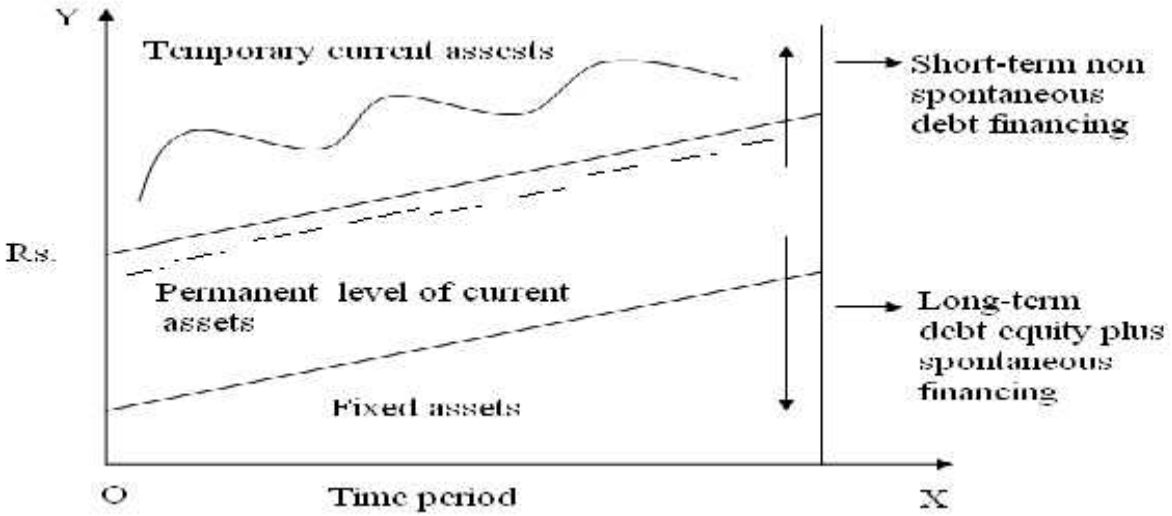
(i) Aggressive Policy

In an aggressive policy, the firm finances a part of its permanent current assets with short- term financing and rest with financing. In other words, the firm finances not only temporary current assets but also a part of the permanent current assets with short-term financing. Fig No. 3 shows that short-term financing finances 50 percent of the permanent current assets. In general, interest rate increases with time i.e. shorter the times lower the interest rate. It is because lenders are risk adverse and risk generally increases with the length of leading period.

Thus, under normal the firm borrows on a short term 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 interest expenses will fluctuate widely. And also it may be difficult for the firm to raise the funds during the stringent credit periods. In conclusion, there is higher risk, higher return and low liquidity position under this policy.

Figure 2.3

Aggressive Financing Policy



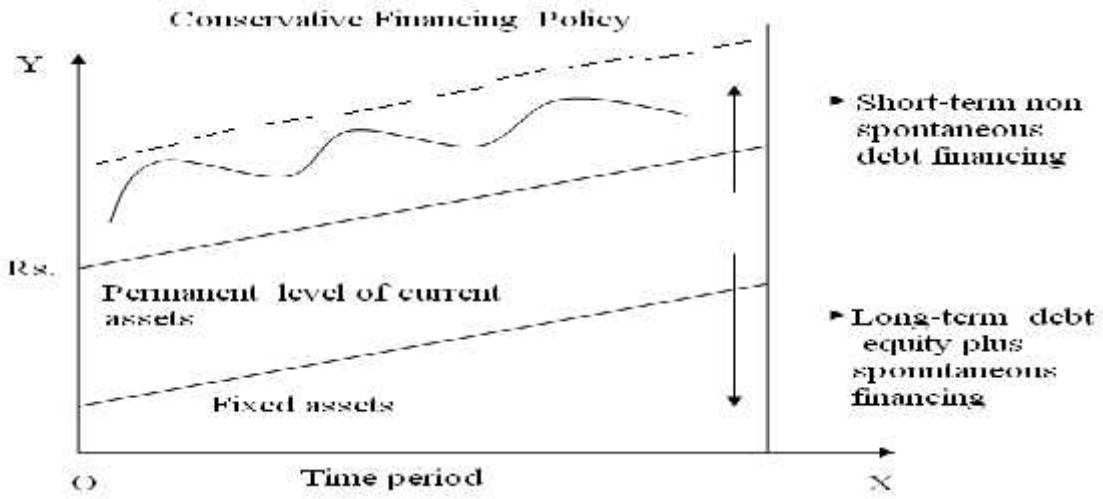
Source: Weston and Brigham, 2001: 748

(ii) Conservative Policy

In conservative policy, the firm uses to finance not only fixed and permanent current assets, but also 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 risk adverse management follows this policy.

Figure 2.4

Conservative Financing Policy

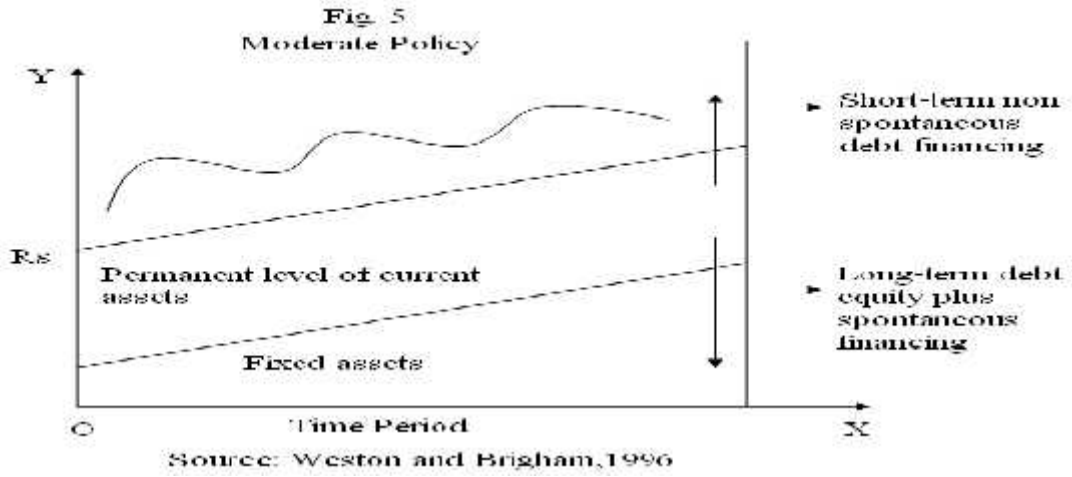


Source: Brigham and Houston,2001:748

(iii) 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 No. 5 shows temporary working capital is financed by short term financing and long term by long term financing. Thus, no working capital is financed by long term funds. Hence, net working capital is zero under this policy.

Figure 2.5



Moderate Policy

2.6 Financing of Working Capital

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 is to be financed. Financing of any assets is concerned with two major factors: cost and risk. Therefore, the financial manager 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.

(i) Long – term financing

(ii) Short – term financing

(iii) Spontaneous financing

(i) Long – Term Financing

Long – term financing has high liquidity and low profitability. Ordinary share, debenture, preference share, retained earnings and long – term debt from financial institution are the major source of long – term financing.

(ii) Short – Term Financing

Firm must arrange short –term credit in advance. The sources of short term financing of working capital are trade credit and bank borrowing.

- Trade credit: It refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms have not to pay cash immediately for the purchase is called trade credit. It is mostly and informal arrangement and is granted on an open account basis. Another form of trade credit is a bill payable. It depends upon the term of trade credit.
- Bank credit: Bank credit is the primary institutional sources for working capital financing. For the purpose of bank credit, amount of working capital requirement has to be estimate by borrows and banks are approached with the necessary supporting data. After available of this data, bank determines the maximum credit based on the margin requirement of the security. The types of loan provide by commercial banks are loan arrangement. Overdraft arrangement, commercial papers etc.

(iii) Spontaneous Financing

Spontaneous financing arises firm the normal operation of the firms. The two major sources of such financing are trade credit (i.e. creditor and bill payable) and accruals. Whether trade credit is free cost or not, actually depends upon the terms of trade credit.

Financial manager of the firm would like to finance its working capital with spontaneous source as much as possible. In practical aspect, the real choice of current assets financing is either short – term or long – term sources. Thus, the financial manager concentrates his power in short – term versus financing. Hence, the financing of working capital depends upon the working capital policy, which is perfectly dominated by management attitude towards the risk and return.

2.7 Cash Conversion Cycle

Cash conversion cycle, which nets out the three periods: inventory conversion period, receivable period, payable deferral period equals the length of time between inventory convert into cash, the firm's actual and expenditures to pay for productive resources (materials and labor) and the cash receipts from the sale of products (that is, the length of time between paying for labor and materials and collecting on receivables). Cash conversion cycle is the length of time between the firm's payment for its purchases and labor and its own collection of payment from the customers. A cash conversion cycle refers to the period between the payments to its creditors and receipts from its suppliers (Poudel and Dahal, 2062:329). The cash conversion cycle thus equals the average length of time a rupee is tied up in current assets.

Cash conversion cycle is calculated by deducting the average payable deferral period and average receivable period. So, it can be calculated through the following equation.

Cash Conversion Cycle (CCC) = Inventory Conversion Period (ICP) + Receivable Conversion Period (RCP) - Payables Deferral Period (PDF)

⁾ Inventory Conversion Period (ICP)

Inventory conversion period refers to the average length of time required to convert raw materials into finished goods and then to sell those finished goods. The inventory may remain in the form of raw materials or semi-finished goods or finished goods during the inventory

conversion period. The inventory conversion period can be calculated with the help of following equation:

$$\text{Inventory Conversion Period} = \frac{\text{Days in Year}}{\text{Cost of Goods Sold/ Average Inventory}}$$

- **Receivable Conversion Period (RCP)**

Receivable conversion period refers to the average length of time required to convert the firm's receivables into cash. It is known as average collection period.

Receivable conversion period can be calculated from the following equation:

$$\text{Receivable Conversion Period} = \frac{\text{Days in Year}}{\text{Net Credit Sales/Average Receivable}}$$

- **Payable Deferral Period (PDF)**

It is defined as the average length of time between the purchase of raw material and labor and the payment of cash for them. It shows the average length of time required to make the cash payment of credit payment of credit purchase and outstanding wages. Generally, it is 30 days long. It can be calculated using the following equation.

$$\text{Payable Deferral Period} = \frac{\text{Payable} \times 360}{\text{Purchase}}$$

2.8 Determinants of Working Capital

The efficient working capital management is an important aspect of overall financial management. Thus, a firm plans its operations with adequate working capital requirement or it should have neither too excess nor too inadequate working capital. But there are no sets of rules or formula to determine the working capital requirements of the firm. It's because of a large number of factors that influence the working capital requirement of the firm. A number of factors affects different firm in different ways. Internal policies and environmental changes also affect the working capital. Generally, the following factors affect the working capital requirements of the firms:

- **Nature and Size of Business**

The working capital requirements of firm are basically related to size and nature of the business. If the size of the firm is bigger, then it requires more working capital. While small firm needs less working capital. Trading and financial firms require larger amount of working capital relatively to public utilities.

- **Manufacturing Cycle**

Working capital requirements of enterprises 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 manufacturing cycle, working capital requirement larger and vice – versa.

- **Production Policy**

Working capital requirement is also determined by its production policy. If a firm produces seasonal goods, then it production and sales volume fluctuates with different seasons. This type of fluctuation production policy affects the working capital policy of the firm.

- **Credit Policy**

Credit policy also affects the working capital of a firm. Working capital requirement depends on term of sales. Different term may be

followed to 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 credit policy, it requires less working capital.

- **Availability of Credit**

Availability of credit facility is another factor that affects the working capital requirements. If the creditors benefit open-minded credit terms, then the firm will need less working capital. 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.

- **Growth and Expansion**

Growth and expansion also affect the working capital requirement of a firm. However, it is difficult to exactly 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 these static ones.

- **Price Level Change**

Price level change also affects the working capital requirement of a firm generally, a firm requires maintaining the higher amount of working capital it the price level raises. 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 differ from firm to firm depending on the nature and other relevant consideration of the operation of the concerned firm.

- **Operating Efficient**

Operating efficient is also important factor, which influences the working capital requirement 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 efficient then it needs lesser amount of working capital and vice – versa.

- **Profit Margin**

The level of profit margin differs firm to firm. It depends upon the nature and quality of product, 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. Profit is sources of working capital, because it contributes towards the working capital as a pool by generating more internal funds.

- **Level of Taxes**

The level of taxes also influences working capital requirement. The amount of taxes to be paid in advance is determined by the prevailing tax regulation. 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 foe tax amount is one of the important aspects of working capital planning. If tax liability increases, it needs to increase the working capital.

Besides these factors the Working Capital also determines by the following factors:

- Technological Developments
- Transportation and communication facilities
- Companies' dividend policy etc.

2.9 Review of Related Studies

2.9.1 Review of Journals

It is not possible to estimate working capital needs accurately the firm must decide about level of current assets to be carried. The current

assets holding of the firm will depend upon working capital policy. It may follow a conservative or aggressive policy. This policy has different risk return implication (Van Horne, 1970:71-88). The financial manager should determine the optimum level of current assets, so that the wealth of shareholders will be maximized. In fact optimum level of each type of current assets should be fixed (Walker, 1964:21-35). To find out corporate bankruptcy, Zeta model was developed by Altman and others (Edward, Altman, Haldmand and Narayan, 1997: 29-54).

The authors extended the 2 score model to include among other things. The capitalization of leases, and they updated its application. A sample of 53 bankrupt firms and 58 non bankrupt firms were employed. Manufacturing and for the first time in any study retailing companies were included on the thesis of discriminatory ability, 27 original variables were reduced to 7, the retained earnings to total assets ratio, the current ratio, the company equity to total capital ratios and size of total assets using the linear discriminate model, the authors were successful classification ranges from 96 percent 1 year before failure to of percentage 5 year before to failure, a better performance then the 2 score mode, both quadratic and linear models were tested, wit linear function winning out.

2.9.2 Review of Articles

In this section the review of journal/ articles, various published articles by different management expert relating to Working Capital Management were made.

In this regards, Monohar K. Shrestha, in an articles has considered ten selected PEs and studied the working capital management in those PEs. He has focused on the liquidity, turnover and profitability position of those enterprises. In this analysis he found that four PES had maintained adequate liquidity position. Two had excessive and the remaining four had failed to maintain desirable liquidity position. On the turnover side, two PES had negative working capital, four adequate turnovers, one had high turnover and remaining three had not satisfactory turnover on net working capital. He had also found that out of ten PEs six Public Enterprises were operating at losses while only four were getting some percentage of profits. With reference to those finding he had bought certain policy issues such a lack of suitable financial planning, negligence of working capital management, deviation between liquidity and turnover and return on net working capital. To the end he had

made some suggestive measures to overcome from the above policy issues, identification of needs funds, regular checks of accounts, development of management information system, positive attitude towards risk and profit and determination of right combination of short-term and long term sources of funds to finance working capital needs (Shrestha, 1982: 83).

During the analysis he observed some problem like the lack of far sighted liquidity adjustment strategy in most of the PEs no guiding criteria to ascertain the satisfactory malignances of acid-test ratio and working capital needs large blocking of capital in inventories and low capacity utilization. All these were due to efficient management of working capital in that PEs.

The next article relating to working capital management published by K. Acharya, he has described the two major problems operational problems and organizational problems regarding the working capital management in Nepalese PEs. The operational problem he listed in the first part is: increase of current liabilities than current assets, not allowing the current ratio relation 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, absent to apathetic management information system, break even analysis, funds flow analysis and ratio analysis were either undone or ineffective for performance evaluation. Finally monitoring of the proper functioning of working capital management had never been considered as 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 under utilization of capacity.

To make an efficient use of funds for minimizing the risk of the loss to attain profit objectives, he has made some suggestion. The PEs should avoid the system of crisis decision which prevailed frequently in their operation, avoid fictitious holding of assets, the finance staff should be acquainted with the modern scientific tools for the presentation analysis of data and lastly. He has suggested optimizing its level of investment at a point of time. The management of an enterprise desires neither over nor under investment in working capital because both of these

situation will erode the efficiency of the concern.

An article relating to working capital is by R.S. Pradhan. He studied on "The Demand for Working Capital by Nepalese Corporations." For the analysis nine manufacturing public corporations were selected with the 12 years data from 1973-1984. For the analysis the regression equation has been adopted. From the study he concluded that: The earlier studies concerning the demand for cash and inventories by business firms did not report unanimous findings. A lot of controversies exits with respect to the presence of economics of scale, rate of capital cost, and capacity utilization rates, and the speed with which actual cash and inventories are adjusted rates to describe cash and inventories respectively. The pooled regression result shows the presence of economics of scale with respect to the demand for working capital and its various components. The regression results, suggests strongly that the demand for working capital and its components is a function of both sales and their capital costs. The estimated results shows that the inclusion of capacity utilization variable in the modern seems to have contributed to the demand functions of cash and net working capital only. The effects of capacity utilization on the demand for inventories, receivables and gross working capital are doubtful.

The specific objectives undertaken in his study area are:

1) To conduct risk analysis of liquidity of working capital position.
2) To access the short term financial liquidity position of the enterprises.
3) To access the structure and utilization of WC.
4) To estimate the transaction demand function of WC and its various components (Pradhan, 1986: 10).

His study has mentioned the following findings:

1. It has showed a poor liquidity portion of most of the enterprises. This poor liquidity position has been noticed as the enterprises here either negative cash follows or negative earnings before tax or they have excessive current debts which cannot be paid within a year.

2. It has found that most of the selected enterprises have been activating a tradeoff between risk and return.
3. The Nepalese manufacturing PEs have an average half of their total assets in the form of current asset of all the different components of CAs, the share of inventories in total assets, and an average is largest followed by receivable, and cash in most of the selected enterprise.
4. The economic scale has been highest for inventories followed by cash and gross WC receivable and net WC.
5. This regression results also shows that the level of WC and its components and enterprises desire to hold depends not only a sales but on holding costs also.

His study is concerned with inter relationship that exists between managing CAs and CLs. This study manages to focus on net working capital concept. The study has employed ratio analysis, discriminates analysis and economic model for the analysis. This study does not cover all the PEs in manufacturing sectors. Each selected enterprises does not represent the entire industry which it falls. The manufacturing PEs selected for the study differs in its working and nature. This study period covers ten years period for 1973 to 1982. He has mentioned only finding and conclusion in his study but not recommended suggestions to solve the finding problems.

A study was conducted by the management consultant and company on the performance of PEs of Nepal in the study: it was conducted that the assets management in general and current asset management in particular was the weakest point in Nepal.

Prof. Radhe Shyam Pradhan and Kundan Datta Koirala jointly have conducted a study on working capital management in Nepalese Corporation (Pradhan and Koirala, 1982). They have focused on evaluation of the working capital position of selected manufacturing and non manufacturing Corporation of Nepal. They have sampled five manufacturing and six non-manufacturing public enterprises. This study is concentrated in the size of investment, trend of investment and need to control the investment in current assets, significance of current assets management. Major findings of this study are as follows:

1. Investment in total assets had declined over the period of time in both manufacturing and Non-manufacturing Corporation.

2. Management of working capital was more different than that of fixed capital. They found the high level of inventory in manufacturing ones.
3. Inventory management was a great significance in manufacturing-corporation and management of cash and receivables was a great significance in non-manufacturing corporations.

2.9.3 Review of Thesis

A number of studies have been done by students of MBS, relating to working capital management in Nepal. This section is focused to review some of those dissertations.

Prem Kumar Shrestha (1994) has study on "Working Capital Management of Bhrikuti Paper Mills Limited". He used ratio analysis as a tools analysis the working capital management of mills. From the analysis he found that the cash and bank balance holds the largest portion followed by inventory and receivables respectively. He also found that the current assets level with total assets is in increasing trend. The credit and collection policy of BPML was not sound during the study period. So, the receivables were increasing year after year. The decreasing and fluctuating trend of various turnovers indicates that current assets are not properly utilized in BPML. He also concluded that though BPML was earning profit, its profitability position was not encouraging one because of its return on total assets was not high enough.

The various turnover ratio of his analysis indicates the increasing and fluctuating trend. Gross working capital, Net working capital turnover is in decreasing trend in the study period. He has mentioned the receivable turnover. Besides this condition, there is no consistency in inventory turnover but it does not fluctuate largely. Liquidity position of the company shows increasing trend. Net working capital of the company is found positive and increasing year after year. The current ratio is also increasing during study period. He has analyzed the profitability position from various angles. Gross profit margin and Net profit margin are found in increasing trend in the first three year of the study period

and then decreasing in subsequent year and increasing in next year. He has also defined that company has earning profit but it is not enough to return on total assets.

Naresh Kunwar (2000) has carried out a research on "A Study on Working Capital Management of Pharmaceutical Industry of Nepal with special reference to Royal Drugs Limited". His main objects of the study were to analyze empirical testing affective working capital of RDL as well as to know whether adequacy of working capital depends upon the nature of financing current assets or not. He analyzed six years published data of RDL from 2049/50 to 2054/55 and used statistical and financial tools that help to achieve there objectives.

He has found that long-term sources are used more than short-term sources in its total amount of working capital. It has followed conservative working capital policy. The major components of current assets in RDL are cash and bank balance, receivable, inventory. Among these current assets, inventory holds largest portion of CAs and cash holds smallest portion of CAs. The overall proportion of current assets on total assets and current assets to net fixed assets are found in increasing trend in the study period. The calculation of cash and bank balance with respect to current assets and total assets shows decreasing trend inventory and receivable position of RDL was fluctuating during the study period. This is due to the fluctuation in sales volume of the company. He has found that company cannot efficiently utilize current assets because it can't create sales as investment in CAs. The average collection period of RDL was found 57 days, which indicates inefficient management of receivable collection policy. The average inventory holding period was found 8 month, which increased liquidity capacity. He has analyzed liquidity position and found satisfactory that means the company has enough current assets to meet obligation of current liabilities.

He has measured the profitability position by analyzing various angles and found loss during his first four-year study period and showed operational inefficiency of the company. Further, he has found negative ratio of the return on total assets and return on net worth. He has mentioned that the overall return position is negative and is not in favorable condition because of inefficient utilization of current assets, total assets and shareholder's wealth.

Om Bikram Gurung (2002) has done the research on the title "A study on Working Capital Management of Nepal Lever Limited ". His main objectives of this study are to analyze liquidity composition of working capital, assets utilization and profitability position of Nepal lever limited as well as to examine the relationship between liquidity and profitability of Nepal lever limited. He analyzed five year published data of Nepal lever limited from the fiscal year 2053.54 to 2057/58 and used statistical and financial tools to analyze the secondary data to achieve set objectives.

He has found that major components of current assets are inventories, receivables, prepaid expenses and advanced. Among these inventory holds major portion of current assets. He has mentioned that all the components of current assets are fluctuating during observed period. It indicates that the company has not had clear vision about the investment policy. Similarly, the current ratio contains high amount of inventory and receivable but they don't show any significant relationship between current assets and current liabilities. The liquidity position of the NL Ltd. has been analyzed by calculating current ratio and quick ratio. It is below the standard value. So, it indicates that the company has preferred short term financing rather than long-term financing. It applies moderate policy. Inventory turnover and receivable turnover isn't found at satisfactory level. It was fluctuating during the study period. It can be concluded that the company has high risk. Even though the profitability position of the company is in increasing trend.

Ram Babu Ghimire (2002) has carried out “A study on Working Capital Management of selected Manufacturing Companies Listed in Nepal Stock Exchange Limited”. He has used data from 1997-2001. he has selected Nepal Lever Limited (NL), Bottler Nepal, (Balaju)(BNK), Bottler Nepal (Terai)(BNT), Arun Vanaspati Udghyog (AVU), Jyoti Spinning Mills (JSM), Raghupati Jute Mills(RJM), Nepal Lube oil(NL). He ahs used ratio analysis, working capital approached, cash conversion cycle, du-pont analysis, correlation coefficient, and simple regression analysis as per tools.

The findings of this study were as follows:

1. Most of the selected manufacturing companies have followed a moderate working capital policy.

2. NLO, BNK, BNT, RJM and NL have followed the Moderate approach where as other two companies such as JSM and AVU have followed the aggressive working capital policy.
3. Risk and return trade off is not matched in Nepalese manufacturing companies.
4. Out of seven companies only two companies have higher conversion period than average. NLO has highest & JSM has lowest conversion period.
5. He has found that Nepalese manufacturing company has inefficiency, Missing working capital policy, less encouraging attitude towards the working capital, high levels cost, excessive borrowing weak liquidity position, managerial ineffectiveness, high conversion cycle.
6. He has also found that Nepalese manufacturing company in present context are facing certain policy issues, like deficient financial planning, neglect of working capital management, deviation between liquidity and turnover etc.

Dikpal Subedi (2003) has done a research on "A Working Capital Management Manufacturing Companies Listed in NEPSE". His objectives of the study are to examine working capital management of the Nepalese manufacturing companies, to study te impact of working capital of profitability, to analyze the current assets and current liabilities policy of manufacturing companies and to examine the relationship between liquidity and profitability of manufacturing companies. He analyzes five years data from 1997 to 2001. He used statistical and financial tools to achieve these objectives.

His analysis shows that the management has not seriously examined the working capital policy so that most of the manufacturing companies are following aggressive policy but opposite impact in revenue. The theory of high risk and high return is not applied here. By taking high risk company has negative return. Similarly, liquidity, profitability and turnover position are found unfavorable. The study shows that Arun Vanaspati Udhyog limited and Nepal lube Oil limited are following aggressive policy where as Bottlers Nepal Limited, Jyoti Spinning Mills Limited and Nepal Lever Limited are following conservative policy.

The overall cash conversion cycle is 114.40 days. Three companies such as Arun Vanaspati Udhyog Limited, Bottlers Nepal Limited and Nepal Lever Limited have very less conversion period then overall average cash conversion period. Whereas Nepal Lube Oil Limited has

much higher than overall average. Higher and lower cash conversion period is not good for the companies. Such volatile cash conversion period shows that there is no consistent working capital policy in Nepalese manufacturing company.

The liquidity position of Nepalese manufacturing companies is not similar among different companies. The liquidity position of Nepal Lube Oil Limited is good. The current ratio of Bottlers Nepal lever, Arun Vanaspati Udhyog and Jyoti Spinning Mills Ltd. has lower than standard ratios.

Rojina Shrestha (2003) has carried out her research on "A study on Working Capital Management with respect to National Trading Limited and Salt Trading Limited". Her main objectives of the study are to present overall picture of working capital of National Trading Limited and Salt Trading Limited, to examine the relationship between liquidity and profitability and to know whether the companies have maintained optimum level of working capital or not. She has analyzed 11 years data from the fiscal year 2047 to 2057 and used financial tools and statistical tools to achieve these objectives.

Her analysis shows that the various profitability ratios, it can be conclude that there is operating inefficiency in both sample companies and overall return position of the company is also not in favorable condition because of inefficient utilization of current assets, total assets and shareholders wealth. The outcome of cash conversion cycle of these companies are not in satisfied condition for long run because analysis shows that there is long payable deferral period, short inventory collection period and short receivable conversion period in both companies which is favorable only for short run and it will cause negative impact from its trade creditors in upcoming days of the companies. This study shows that the receivable portion of National Trading Limited are found in decreasing trend except the fiscal year 2050 and the receivable portion of Salt Trading Corporation Limited is fluctuating year after year. These both trading companies follow aggressive financing policy which comprises higher risk and higher return and low liquidity position are not in condition of following the policy (Shrestha, 2003).

Mukti Nath Lohani (2004) has done a research on "A study on Working Capital Management of Nepal Lube Oil Limited". His main objectives of study are to analyze the structure of the different components of working capital of Nepal Lube Oil Ltd, to analyze composition

of working capital liquidity ratio, profitability ratio and turnover ratio of the company and to evaluate the financial performance and to examine the relationship between the various components of working capital and overall profitability and their impact.

He analyzes five years published data of Nepal Lube Oil Ltd. from 2055/056 to 2059/060 and used statistical and financial tools to achieve these all objectives.

After analyzing the data, Mr. Lohani found that current assets to fixed assets were increasing. Current assets to fixed assets ratios are in increasing trend. It means that Nepal Lube Oil Ltd has applied aggressive current assets policy. Furthermore; he has calculated liquidity position, turnover position, conversion cycle and profitability position for financial performance analysis. Annual current ratios are higher than standard, which might cause to decrease profitability. Quick ratios are also higher than standard which might cause to decrease profitability. The receivable turnover ratios showed that the company had better management in 2059/060 because there is higher the sales and lesser the debtors. The annual cash conversion cycle are said to be more fluctuating. The company had poor cash management in 2057/058 having highest conversion cycle. There is low degree of positive correlation between sales and current assets. That can be concluded that increase in sales may increase in current assets and vice-versa.

Sheela Yadav (2006) has conducted the research on "A study on Working Capital Management of listed Hotels in Nepal Stock Exchange". She has used financial as well as statistical tools to analyze the financial data of 2000 to 2005.She has also used primary and secondary sources of data. The main objective of this study is to appraise the working capital management of listed hotels and to find out the relationship between the different variables of working capital .The major findings of her study are:

- Yak & Yeti, Oriental and Soaltee Crown Plaza are suffering from excess of current assets over the current liabilities.
- Oriental has good inventory management in comparison to both hotels.
- Yak & Yeti has followed conservative financing policy where as Soaltee and Oriental has followed aggressive financing policy.
- The liquidity and profitability position of all selected hotels is satisfactory.

- Oriental has able to collect debt on time rest two has difficulty to collect their debt on time.
- Receivable and inventory conversion period are relatively short than the payable deferral period it indicates they have got long credit period from its creditors.
- The relationship between current assets and current liability, current assets and net working capital, net profit and net working capital are found negative and receivables and net sales are positive of all selected hotels.
- From the primary information, it has also found that Oriental and Yak &Yeti are not implying any credit standard policy and credit payable policy.
- In the view of Oriental and Yak & Yeti good financing planning is important to make better working capital management system.

She has taken only three hotels out of four hotels listed in Nepal Stock Exchange. Although she has used questionnaire method to collect the primary information about related field, which one is not able to collect more information from listed hotels because it is only distributed in only two hotels, Yak &Yeti and Oriental. If she has directly collect primary information from the related respondent not from the Human Resources Department then her study would be far better than others.

Bhupendra Pandey (2007) has done the research on the title "A study on Working Capital Management in Hotel Industry with reference to Hotel Radisson, Hotel Soaltee and Hotel Hyatt". His main objectives of this study are to analyze composition of working capital, liquidity and profitability position of Hotel Radisson, Hotel Soaltee and Hotel Hyatt as well as to examine the relationship between sales and different variables of working capital position. He analyzed five year published data of selected hotels from the fiscal year 2057/58 to 2061/62 and used statistical and financial tools to analyze the secondary data to achieve set objectives.

He has found that major components of Current Assets are Inventories, Debtors, Cash & Bank Balance (CB Balance) and Loans, Advances and Deposit (LAD). Among these, Hotel Soaltee has held high portion of working capital in its daily operation of business. He has mentioned that investing in FA doesn’t seem good practice due to requirement of high fund. Hotel Soaltee has maintained high portion of current assets in terms of sales the other two hotels have low ratio. Debtor turnover ratio and Cash & Bank turnover ratio of Hotel Soaltee is quite higher

than the rest of the two hotels. Similarly, Hotel Radisson has followed highly aggressive financing policy and used short term fund in permanent working capital as well as fixed assets. At last, Hotel Hyatt has given high priority in liquid assets rather than no liquid assets due to the hotel held high amount of debtors in composition of current assets. The turnover ratio and loan, advances and deposit turnover ratio of Hotel Hyatt is greater in comparison to Hotel Radisson and Hotel Soaltee. The cash conversion cycle of Hotel Soaltee seemed favorable as compared to other hotels due to its conversion period within the time period of 365days.

He found that the poor liquidity position of all three hotels because they can't meet the current obligation in very short period. The gross profit margin of the Hotel Soaltee was in decreasing trend where as the Hotel Hyatt was in increasing trend. The average return on total assets and return on capital employed of Hotel Radisson was higher in comparison to other two hotels.

Since the all hotels have negative working capital, it indicates that all the hotels have higher portion of current liabilities as compare to current assets which means all the hotels kept high amount of loan in capital structure. None of the hotels have solid view on the management of working capital due to highly depend upon short term loan. Current assets ratio as well as quick assets ratio of the selected hotel was below the standard level, which show the inability position to meet the current obligation. The turnover of Hotel Soaltee was higher in comparison to other two hotels. The performance of the hotels are highly depends upon the location and political condition of the country. Among various industries, hotels sectors are mainly victimized by the Moist Insurgency and bad political situation of the country.

Sarita Marahatta (2008) has conducted the research on "A study on Working Capital Management of Agriculture Development Bank Limited". She has used financial as well as statistical tools to analyze the financial data of2060/061 to2064/065. She has also used primary and secondary sources of data. The main objective of this study is to appraise the working capital management of agriculture development bank limited and to find out the relationship between the different variables of working capital. The major findings of this study of ADBL during the five years study period are summarized below:

- The major components of current assets of this bank are cash and bank balance, loan and advances and government securities. In the study period, the proportion of cash and bank balance, loan and advances and government securities to total current assets on average are 7.88%, 65.85% and 8.04% respectively. The trend value of cash and bank balance is 0.3245. Similarly, the trend value of loan and advances is 26.21. But, the trend value of government securities is higher than cash and bank balance and loan and advances, which are 32.89.
- The average net working capital of this bank is 0.2865. All of the net working capital is positive in the study period. Positive net working capital indicates the sufficient amount of net working capital and negative net working capital indicates the insufficient amount of net working capital. The net working capital ranges from 9126.19 million to 30094.69 million. The CV of ADBL is 0.085.
- The liquidity position of the bank is analyzed with the current ratio, quick ratio and cash balance to deposit ratio. The current ratio of ADBL is ranges from 1.52 to 8.19. Likewise, the average current ratio is 3.99.This shows the liquidity position or short term solvency during the study period. Although higher liquidity means lower risk as well as lower profit in general, it does not necessarily mean lower profit in case of every bank.
- Fixed deposit to total deposit ratios are increasing in the study period. The average ratio of fixed deposit to total deposit ratios is 0.374.The ratio ranges from 0.366 to 0.386. Therefore, it concluded that more long term and costly sources of funds and risk depends upon the ratio.
- Saving deposit to total deposit ratios fluctuating during the study period. It is ranges from 0.534 to 0.559. The average ratio is 0.547. High ratio indicates more short –term and less costly sources of funds. Similarly, the low ratio indicates long-term and costly sources of funds.
- The turnover positions have fluctuated .The average value of loan and advance to total deposit ratio, loan and fixed deposit ratio and loan and advances to saving deposit ratio are 1.029, 2.75 and 1.883 respectively. From the analysis, every bank is better investment efficiency on loan and advances in higher turnover ratio.

- The profitability position of ADBL is analyzed from different ways. The average value of interest earned to total assets ratios and net profit to total deposit ratios are 0.124 and -0.051 respectively. When, these ratios are high, then more efficiently using its total assets to earn interest income.
- The trend value of interest earned to total assets ratio are increasing. Although the net profit to total assets ratios and net profit to total deposit ratios are more fluctuating in the study period. It shows that the bank is not able to efficiently using its working funds of assets to earn higher rate of profit during the study period.
- Cost of services to total assets ratio is both increasing and decreasing order. The average ratio of cost of services to total assets is 0.072. Similarly, the range of cost of services to total assets is 0.053 to 0.095 in the analysis period. Therefore, it is found that profitability position of ADBL is better .It would be better to increase the cost of services of ADBL.
- While analyzing the correlation coefficient, loan and advances and total deposits of this bank are insignificantly correlated. The value of r of ADBL is 0.8109 in loan and advances and total deposits. The positive value of r shows the positive relationship between loan and advances and total deposits. It shows that the bank utilizes its total deposit on loan and advances effectively. Correlation between investment on government securities and total deposits of ADBL is significant.
- Coefficient of correlation between cash and bank balance and current liabilities of this bank shows that there is no significant relationship between these two variables. The value of r is -0.7484. It shows that the holding of cash and bank balance is not related with current liabilities. Coefficient of correlation between loan and advances and net profit is 0.7743. It shows that there is no significant relationship between loan and advances and net profit. It shows that the change on loan and advances does not change the amount of profit significantly. It may be due to the higher amount of costly funds and other higher costs.

2.10 Research Gap

The above mentioned studies in the context of Nepalese manufacturing companies were done in the last few years in respect to WCM. Many

changes have taken place in and outside Nepal after these studies. Nepal also has followed the policy of liberalization, privatization and globalization. Many more companies have also come up after these studies.

A very few studies have been performed on the financial performance of NT but no one has studied typically on its WCM. Different researcher have written their desertions on its WCM; however almost all of them are related to the manufacturing sector and do not addresses the real situation of service sector public enterprises like MSI. It is thus clear that no full-fledged academic research study on WCM in NT has been carried out. The present study, therefore, bridge this ling felt gap in the field of research. This is only a beginning and it could be further developed through continued research in this field.

CHAPTER - III

RESEARCH METHODOLOGY

This chapter consists of the methodology of studying working capital management of Mountain Sportswear Industries. The proper analysis of this study can be meaningful only on the right choice of research tools. Hence, the focus has been made on research design, nature and sources of data, sample and population, data processing procedure and tools analysis.

3.1 Research Design

Research design is a plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances (Kothari, 1984:43). A research design is the management of condition for collection analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Claire Seltiz and others, 1962: 50).

Research design is highlighted for ascertaining the basic objectives of the study. Research design includes definite procedures and techniques which guide in sufficient way for analyzing and evaluating the study. This study is carried out by using both quantitative and qualitative analysis methods. Mostly the secondary data has been used for analysis, but the discussion and personal interview with the concerned employees of Mountain sportswear Industries are also used for qualitative analysis. Hence, research design or undertaking this study is based on descriptive and analytical method. Attempts have been made to explore working capital management of Mountain Sportswear Industries.

3.2 Nature and Sources of Data

Secondary data have been used to fulfill the objectives of this study. Some primary data are also collected through questionnaire in Mountain Sportswear Industries . The secondary sources of data include the annual reports of MSI, booklets, similar previous dissertations and other publications. Data requisition slip from MSI and supplementary questionnaire is also given in the appendix.

3.3 Data Processing

The balance sheet, income statement and profit & loss a/c of the company for the five fiscal years period from 2004/05 to 2008/09 are collected for the convenience of the study. Then all the raw data are processed and presented in tabular form with the help of simple arithmetic rules. Entire raw data are converted into approximate and condensed in the form of consolidated balance sheet and income statement. Most of the data have been compiled in one form and processed and interpreted as per the need of the study. The secondary types of data are presented for the analytical purpose after the tabulation of the data. These types of data processing will help to present the clear situation of WC in NT.

3.4 Population and Sample

This research work was related with the analysis of working capital management of public enterprises in Nepal. So, the total present number of public enterprises in Nepal was the population of this study. However, due to various constraints of mine like time, resource, etc., selected only one representative public enterprise for my research work and the representative public enterprise was Mountain Sportswear Industries .This study covered five years period in NT from the fiscal year 2004/05 to 2008/09.

3.5 Tools for Analysis

The data collected from various sources were managed, analyzed and presented in proper tables and formats and were interpreted and explained wherever necessary. Financial and statistical tools were used to analyze the collected data.

3.6 Financial Tools

Financial tools are defined as the systematic use of ratio to interpret the financial statement so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. Management may have different types of weakness that can be found from ratio analysis. So, the organizations use an analytical tool to know about its own situation and take suitable and corrective actions to relieve from arising problems.

"The most useful tools of financial analysis are ratio analysis. In order to bargain more effectively for outside funds, the management of a firm should be interested in all aspects of financial analysis that outside supplier of capital use it in evaluating the firm" (Van Horn, 2000:205). With the help of financial ratio analysis, we can understand the financial condition and performance of the firm and they would obtain from analysis of the financial data alone. There are following selected financial ratios, which can be analyzed to determine the financial position of an organization.

a) Liquidity Ratio

Liquidity ratio is employed to measure the company's ability to meet short-term obligations. These ratios provide insight into the present cash solvency in the event of adverse financial condition. This ratio is used to measure the company's short-term obligations with short-term

resources available at a given point of time.

$$\text{Liquid Ratio} = \frac{\text{Total Liquid Assets}}{\text{Total Current liabilities}}$$

b) Current Ratio

This ratio measures the short-term solvency, i.e. its ability to meet short-term obligation. As a measure of creditors versus current assets, it indicates each rupee of current assets available by dividing current assets by current liabilities.

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

ii) Quick Ratio

Quick Ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid assets. Other assets, which are considered to be relatively liquid and included in quick assets, are book debts and marketable securities. This quick ratio can be found out by dividing the total of quick assets by total current liabilities.

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

iii) Cash to Current Assets Ratio

This ratio is employed to measure whether total cash balance is sufficient to cover its current assets. It is calculated by dividing total cash

balance by current assets.

$$\text{Cash Balance to Current Assets Ratio} = \frac{\text{Cash Balance}}{\text{Current Assets}}$$

c) Turnover Ratio

In a business concern, through these ratios, it is known whether the funds employed have been used effectively in the business activities or not. The following are the ratio employed to analyze the activeness of the concerned company:

i) Inventory Turnover Ratio

Inventory turnover ratio shows the efficiency of the business concern in an inventory management. It established the relationship between cost of goods sold during the given period and average amount of inventory and lower stock ratio suggests that management should manage its inventory properly. It is calculated as follows:

$$\text{Inventory Turnover Ratio} = \frac{\text{Sales}}{\text{Inventory}}$$

ii) Debtors / Receivables Turnover Ratio:

Although there is no measurement, higher turnover of current assets is always desirable as it indicates the maximum utilization of current

assets during the year. Therefore, lower ratio indicates greater volume of working capital and vice versa.

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

iii) Cash Turnover Ratio

Cash turnover ratio shows the number of times the average cash balance is turned over during the year. It measures the speed with which cash moves through the organization operations. The ratio is computed by dividing sales by cash and bank balance.

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

iv) Net Working Capital Turnover Ratio

The ratio shows the number of times the working capital turned over during the year. The higher ratio indicates the utilization of the working capital and vice versa. The ratios can be defined as,

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

Where,

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

d) Profitability Position

Profitability measures the efficiency of the organization; profitability of the firm can be measured by its profitability ratio. So, it plays significant role in any organization. Generally, the profitability positions of the companies are analyzed with the help of following ratios.

i) Net Profit Margin Ratio

The ratio measures the relationship between net profit and sales of the company. It measures the overall profitability or company's ability to earn net profit. It is computed as net profit by sales.

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

ii) Operating Ratio

The overall ratio is an important ratio, which is calculated to ascertain the relationship between operating expenses and volume of sales. The ratio is computed as follows:

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

Operating Expenses = Administrative Expenses + Selling & Distribution Expenses + Financial Expenses

Higher ratio indicates the lower efficiency of the company and vice versa. Higher operating ratio means small amount of operating income to meet interest and dividends. So, it is not seems to be favorable for company while there is higher rate of operating ratio.

iii) Return on Total Assets Ratio

Return on total assets ratio measures the profitability of the company by established relationship between net profit after taxes and total assets. It also helps to understand the utilization of assets of the company. The ratio is computed as follows:

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

iv) Return on Net Worth Ratio

The ratio indicates the return to the shareholders. It shows whether the firm has earned satisfactory return for its shareholders or not. Higher return on net worth ratio indicates higher return to the shareholders and vice-versa. The ratio is computed as follows:

$$\text{Return on Net Worth Ratio} = \frac{\text{Net Profit After tax}}{\text{Net Worth}} \times 100$$

v) Return on Working Capital / Return on Current Assets Ratio

The ratio measures the profitability position of the company with respect to current assets. Higher ratio indicates higher utilization of current assets to earn profit and vice-versa. The ratio is computed by dividing net profit after tax by current assets or working capital.

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

e) Working Capital Cash Flow Cycle

The continuous flow from cash to supplier, to inventory, to account receivable and back into cash is known as working capital cash flow cycle. It continuously repeats. The cycle demonstrates the conversion of raw materials and labor to cash. Hence this concept is also called cash conversion cycle model.

Cash conversion cycle model has been applied to more complex business and it is useful when analyzing the effectiveness of a firm's working capital management. There are following four factors of cash conversion cycle model.

i. Inventory Conversion Period (ICP)

The length of time required converting raw material into finished goods and then to sell these goods can be defined as inventory conversion period. This period indicates its product. Inventory turnover is calculated by dividing the cost of goods sold by average inventory. It can be said as time required for conversion inventory into cash. It can be calculated as follows:

$$\text{Inventory Conversion Period} = \frac{360\ \text{Day}}{\text{Inventory Tumover}}$$

$$\text{Inventory Turnover} = \frac{\text{Costofgood Sold}}{\text{Averageinv Entory}}$$

ii. Receivable Conversion Period (RCP)

Receivable conversion period indicates the number of day's debtor's turnover into cash. It analyses to determine collection of debtors and also efficiency of collection effects. It is one of the important financial tools for the measurement of cash conversion cycle. Generally, the longer the collection period, the more efficient is the management of credit receivable collection period. It is also known as average collection period or day's sales outstanding (DSO). RCP can be calculated as follows:

$$\text{Receivable Conversion Period} = \frac{\text{Sales}}{\text{Receivables turnover}}$$

$$\text{Sales Receivable Turnover} = \frac{\text{Sales}}{\text{Debtors}}$$

iii. Payable Deferral Period (PDP)

Time required purchasing raw material and labor and the payment of cash for them is called payable deferral period. It indicates the speed of creditor payable conversion period is favorable for the creditor too much higher period also can hamper the credit worthiness of the company. The payable deferral period can be calculated using following formula:

$$\text{Payable Deferral Period} = \frac{\text{Account Payable}}{\text{Purchase Per day}}$$

iv. Cash Conversion Cycle (CCC)

Cash conversion cycle is an important financial tool and also a quick and convenient way to analyze the ongoing liquidity of the firm over time. It generally measures the length of time that funds tied up in working capital. Cash conversion cycle can be calculated by using following formula:

Cash Conversion Cycle (CCC) = Inventory Conversion Period (ICP) +Receivable Conversion Period – Payable Deferral Period (PDF)

As we know that inventory and receivables are cash inflow of business and PDP is cash outflow of business. So for the calculation of conversion cycle RCP and ICP should be added and PDP should be deducted.

3.7 Statistical Tools used

The research hold varies statistical tools, which are defined as follows:

i. Mean

The most popular and widely used measure of representing the entire data by one value is known as average or mean. The value is obtained by adding together all the items and by dividing this total by the number of items. It represents the entire data, which lies almost between the two extremes. Mean can be calculated as;

$$\text{Mean} = \frac{\sum X}{n}$$

ii. Standard Deviation (S.D)

The standard deviation is an important and widely used measure of dispersion. The measurement of the scatters of the mass of figures in a series about in average is known as dispersion. The standard deviation (SD) is an absolute measurement of dispersion in which the drawbacks present in other measures of dispersion are removed. The high amount of dispersion reflects high standard deviation. The small standard deviation means the high degree of homogeneity of the observations. It is calculated for selected dependent and independent variables specified. It is the positive square root of the arithmetic mean of the standard deviation from arithmetic mean. It is usually denoted by (small sigma).

$$SD(\sigma) = \sqrt{\frac{\sum(X - X)}{n}}$$

iii. Coefficient of Variation

The coefficient of variation reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviations known as coefficient of variation. The coefficient of dispersion based on standard deviation multiplied by 100 is known as the CV. It is used for comparing variability of two distributions; the CV is defined as,

$$CV = \frac{\sigma}{\bar{X}} \mid 100$$

Greater the CV, the more variable or conversely less consistent, less uniform, less stainable and homogenous than the consistent more uniform, more stable and homogenous. This nature of CV uses that actual size of working capital.

iii. Simple Correlation Coefficient

The relationship between two variables (one dependent and one independent) is called simple correlation. The most important method of measuring the correlation between the two variables is "Karl Pearson's coefficient of Correlation". This method of measuring correlation is also called "Pearsonian coefficient of Correlation". This is the mathematical method of measuring the degree of association between the two variables.

Correlation analysis is the statistical tools that we can use to describe the degree to which one variable is linear related to another. Coefficient of correlation is the measurement of the degree of relationship between two casually related sets of figure whether positive or negative. Its values lie somewhere ranging between - 1 to +1. If the both variables are constantly changing in the similar direction, the value of coefficient will be –1, two variables take place in opposite defection. The correlation is said to be perfect negative. In this study, simple correlation is use to examine the relationship of different factors with working capital and other variable.

Coefficient of Correlation (r) = $\frac{\text{Co-Varianceof } X\&Y}{\sigma_X \ \sigma_Y}$

Where,

Cov (X,Y) = Covariance of X and Y

σx = Standard deviation of X

σy = Standard deviation of Y

v. Probable Error (PE)

Probable error of the correlation coefficient denoted by PE is measure of testing reliability of the calculated value of 'r'

$$P.E. = 0.6745\frac{1\,Zr^2}{\sqrt{n}}$$

a) If r<6PE, it is not significant. So there is no evidence of correlation.

b) If r>6PE, it is highly significant.

The PE of correlation coefficient may be used to determine the limits within the population correlation lies limits for population correlation coefficient are r ± PE. If the correlation (r) is greater than 6 times of PE ratio the observed value of r is said to be significant. Otherwise nothing can be concluded with certainly. But if the calculated (r) is less than the PE (r) correlation is not at all significant.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

This chapter presents the calculation of different ratios and their application on analysis of WCM. The ratio will help us to find the objectives of the study and give valuable suggestion to the particular organization for the improvement in further transaction.

4.1 Analysis of Working Capital Position

There are various types of current assets that have been used in an organization. Some of them have held high amount of current assets and some of them have occupied low amount. It is affected by the nature of business and attitude of the management towards risk. The company which has risk adverse management system maintains the high liquid assets in total working capital and vice-verse. The organization that aims to maximize return on investment, the company should earn sufficient return from its operation which depends upon the volume of productions and sales. It should hold optimum current assets in order to meet increasing sales level. The excess and low working capital affects on profitability and liquidity position of the manufacturing companies. Therefore, the effective composition of the current assets has the greater impact on the whole working capital management as well as the success and failure of the organization.

To operate a business, different kinds of assets are needed. For the day-to-day business operation, the different types of current assets are required. The main component the following ratios and tools has been calculated to analyze the working capital position of Mountain

Sportswear Industries. The major currents assets of MSI are cash and bank balance, loan and advances, sundry debtors and stores & Spares. Miscellaneous current assets are also a component of current assets. Interest accrued on investment and unexpired L/C & Advances are included in miscellaneous current assets. The ratio will be calculated to study the working capital position of MSI.

The following table shows the amount of cash and bank balance, inter-branch balance, loan and advance, sundry debtors, stores & Spares and miscellaneous the current assets of MSI of the study period.

Table 4.1

Current Assets Composition of MSI

(Rs. In thousand)

	Stores & Spare	**Sundry Debtors**	**Loans & Advance**	**Cash & Bank Balance**	**Miscellaneous**	**Total Current Assets**
2004/05	483,231	2,468,080	389,209	8,248,426	3,747,680	15,336,626
2005/06	400,784	3,030,277	394,753	10,116,463	4,481,870	18,424,147
2006/07	301,309	2,610,352	401,648	11,797,087	5,815,243	20,925,639
2007/08	309,857	2,825,943	505,656	9,584,469	7372,428	20,598,353
2008/09	329,315	3,099,496	601,027	12,028,795	6,467,889	22,526,522

Source: Annual Report of MSI, 2009

Table 4.1, represents that the composition of current assets of MSI. Cash & Bank balance is rapidly increased over the study period.

Similarly, Loan & Advance also increased. Sundry debtors were not in consistency. Store & spares decreased in the fiscal year 2006/07 and thereafter increased, miscellaneous increased from the fiscal year 2004/05 and decreased in the fiscal Year 2008/09.This result shows that the total current assets rapidly increased during the study period.

Table 4.2

Percentage of Current Assets to Total Current Assets

Fiscal Year	Stores & Spare	Sundry Debtors	Loans & Advance	Cash & Bank Balance	Miscellaneous	Total
2004/05	3.15	16.10	2.54	53.76	24.45	100
2005/06	2.18	16.45	2.14	54.91	24.33	100
2006/07	1.44	12.47	1.92	56.38	27.79	100
2007/08	1.50	13.72	2.46	46.53	35.79	100
2008/09	1.46	13.76	2.67	53.40	28.71	100

Source: Table 4.1

Figure 4.1

Percentage of Current Assets

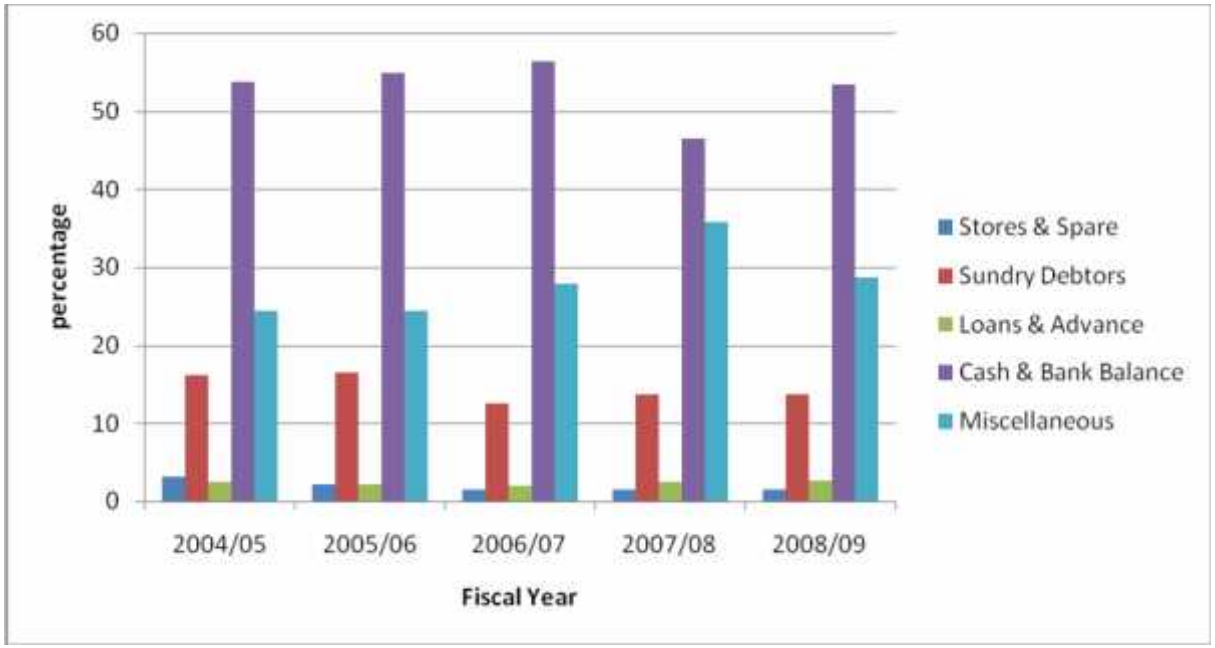


Figure 4.1 presents that the currents assets in percentage of MSI for the five fiscal year. In comparison to other current assets, cash & bank balance was higher. The lowest current asset was store & spare. This result shows that the current assets is in good position.

4.1.1 Gross Working Capital or Current Assets to Total Assets Ratio

This ratio can be analyzed to study the position of working capital of the company. It expresses the gross working capital portion that is held in total assets. In other words, it shows how much percentage of total assets has been invested on gross working capital of the company. It can be calculated by current assets divided by total assets which have been shown in the table below:

Table 4.3

Gross Working Capital

or

Current Assets to Total Assets Ratio

(Rs. in thousand**)**

Fiscal year	**Current Assets**	**Total Assets**	**Ratio (%)**
2004/05	15,336,626	25,281,824	60.66
2005/06	18,424,147	29,892,993	61.63
2006/07	20,925,639	32,652,787	64.09
2007/08	20,598,353	35,572,772	57.90
2008/09	22,526,522	39,351,406	57.24

Total	97,811,287	162,751,782	301.52
Mean	19,562,257.4	32,550,356.4	60.30
S.D.			2.51
C.V.			4.16%

Source: Appendix-1

Table 4.3 shows that the current assets with respect to total assets ratio are not consistent over the study period. The current assets and total assets were in increasing trend in every fiscal year. The current assets to total assets ratio increased to the fiscal year 2006/07 thereafter it was in decreasing trend. The highest ratio was 60.66% in the fiscal year 2004/05, which assets are Rs.15,336,626 thousand and Rs.25,281,824 thousand respectively and the lowest ratio was 57.24% in fiscal year 2008/09, which current assets and total assets are Rs.97,811,287 thousand and Rs.162,751,782 thousand respectively. The standard deviation and coefficient of covariance was 2.51 and 4.16 % respectively. This result shows that the Current Assets to total assets Ratio of MSI is not consistent over the study period.

Figure 4.2

Gross Working Capital

or

Current Assets to Total Assets Ratio

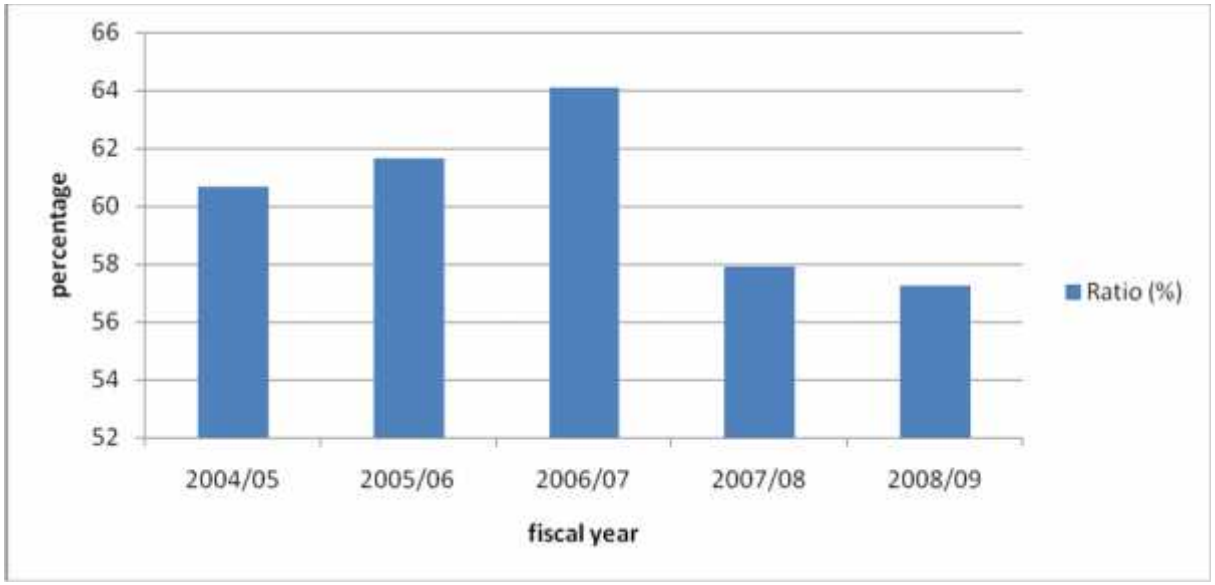


Figure 4.2 presents that the Current Assets to total assets Ratio of MSI which is not consistent over the study period.

4.1.2 Net Working Capital with respect to Total Assets Ratio

The major objective of this ratio is to examine the portion of net working capital on total assets, which has been invested to run the business smoothly. It is calculated as NWC divided by TA shown in following table.

Table 4.4

Net Working Capital to Total Assets Ratio

(Rs. in thousand**)**

Fiscal year	**Net Working Capital**	**Total Assets**	**Ratio (%)**
2004/05	12,393,250	25,281,824	49.02
2005/06	14,748,735	29,892,993	49.34
2006/07	16,835,286	32,652,787	51.56
2007/08	16,739,869	35,572,772	47.06
2008/09	18,050,769	39,351,406	45.87
Total	78,767,909	162,751,782	242.85
Mean	15,753,581.8	32,550,356.4	48.57
S.D.			1.96
C.V.			4.04%

Source: Appendix-2

Table 4.4 shows that the net working capital to total assets ratio of MSI are not stable over the study period. The net working capital and total assets are in increasing trend in every fiscal year. The net working capital to total assets ratio increased to the fiscal year 2006/07 and thereafter it was in decreasing trend. The highest ratio was 51.56% in the fiscal year 2006/07, which net working capital and total assets are Rs.16,835,286 thousand and Rs.32,652,787 thousand respectively and the lowest ratio was 45.87% in fiscal year 2008/09, net working capital and total assets are Rs.18,050,769 thousand and Rs. 39,351,406 thousand respectively. The standard deviation and coefficient of covariance was 1.96 and 4.04 % respectively. This result shows that the ratios are not consistent during the study period.

Figure 4.3

Net Working Capital to Total Assets Ratio

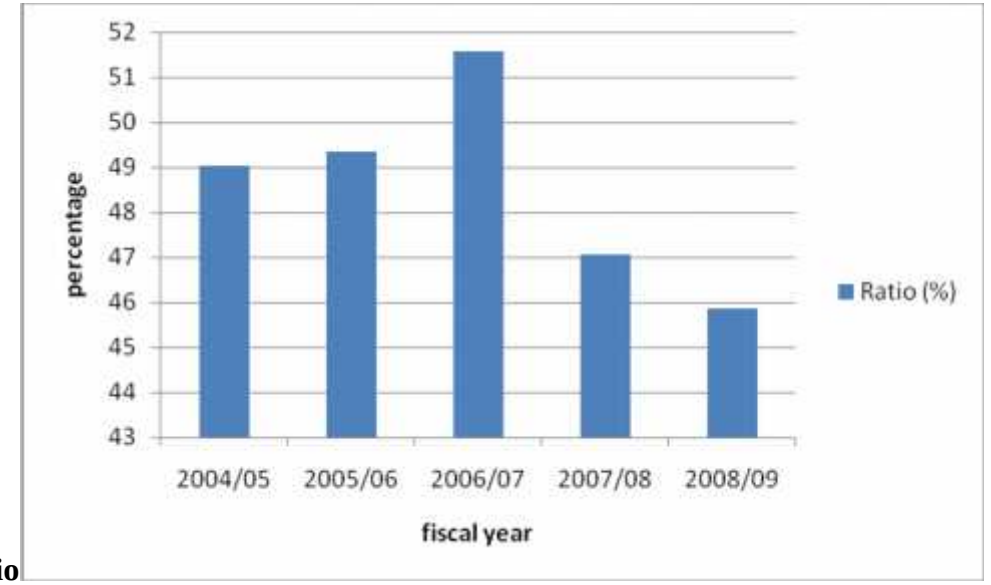


Figure 4.3 presents that the net working capital to total assets Ratio of MSI. The highest ratio was in the fiscal year 2006/07. Overall the ratios are not consistent during the study period.

4.1.3 Calculation of Net Working Capital with respect to FA Ratio

This ratio finds the financing policy of the company. It measures how much net working capital has been invested with respect to fixed assets. Net working capital is difference between CA and CL. This ratio can be calculated as NWC divided by FA as shown in the table.

Table 4.5

Net Working Capital to Fixed Assets Ratio

(Rs. in thousand**)**

Fiscal year	**Net Working Capital**	**Fixed Assets**	**Ratio (%)**
2004/05	12,393,250	6,840,397	181.18
2005/06	14,748,735	7,607,614	193.87
2006/07	16,835,286	7,664,206	219.66
2007/08	16,739,869	9,040,917	185.16
2008/09	18,050,769	10,088,427	178.93
Total	78,767,909	33,642,168	958.80

Mean	15,753,581.8	6,728,433.6	191.76
S.D.			6.64
C.V.			3.46%

Source: Appendix-3

Table 4.5 shows that the net working capitals to fixed asset ratio are not stable over the study period. The net working capital and fixed assets are in increasing trend in every fiscal year. The net working capital to fixed assets ratio increased to the fiscal year 2006/07 and thereafter it was in decreasing trend. The highest ratio was 185.16% in the fiscal year 2006/07, which net working capital and fixed assets are Rs.16,835,286 thousand and Rs.7,664,206 thousand respectively and the lowest ratio was 178.93% in fiscal year 2008/09, net working capital and fixed assets are Rs. 18,050,769 thousand and Rs. 10,088,427 thousand respectively. The standard deviation and coefficient of covariance was 6.64 and3.46 % respectively. This result shows that the overall ratios are not consistent during the study period.

Figure 4.4

Net Working Capital to Fixed Assets Ratio

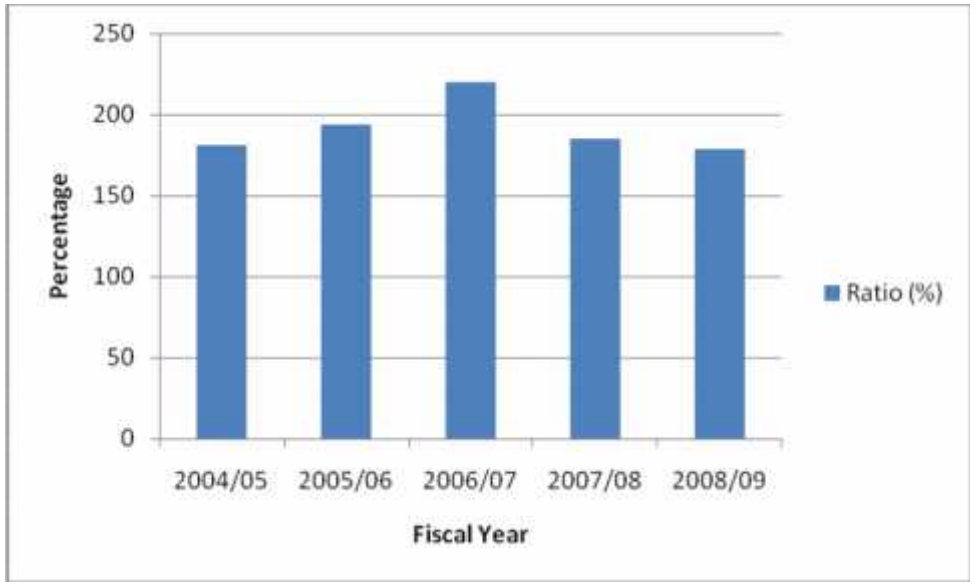


Figure 4.4 shows that the net working capital to fixed assets Ratio of MSI. The highest ratio was in the fiscal year 2006/07. Overall the ratios are not consistent during the study period.

4.1.4 Calculation of Cash & Bank Balance with respect to Current Assets Ratio

This ratio helps to know the position of cash and bank balance that has been used in the organization. It is calculated as cash and bank balance divided by current assets shown as table below.

Table 4.6

Cash & Bank Balance to Current Assets Ratio

(Rs. in thousand**)**

Fiscal year	**Cash & Bank Bal.**	**Current Assets**	**Ratio (%)**
2004/05	8,248,426	15,336,626	53.78
2005/06	10,116,463	18,424,147	54.91
2006/07	11,797,087	20,925,639	56.38
2007/08	9,584,469	20,598,353	46.53
2008/09	12,028,795	22,526,522	53.40
Total	51,775,240	97,811,287	265.00
Mean	10,355,048	19,562,257.4	53.00
S.D.			3.40

C.V.	6.42%

Source: Appendix-4

Table 4.6 shows that the cash & bank balance ratios are not stable over the study period. The cash & bank balance increased every fiscal year except the fiscal year 2007/08. Similarly, current assets also increased every fiscal year of the study period. The highest ratio was 56.38% in the fiscal year 2006/07, which cash & bank balance and current assets are Rs.11,797,087 thousand and Rs.20,925,639 thousand respectively and the lowest ratio of was 46.53% in fiscal year 2007/08, which cash & bank balance and current assets are Rs.9,584,469 thousand and Rs.20,598,353 thousand respectively. The standard deviation and coefficient of variance was 3.40 and 6.42% respectively. This shows that the cash & bank balance to current assets ratio was not consistent.

Figure 4.5

Cash & Bank Balance to CA Ratio

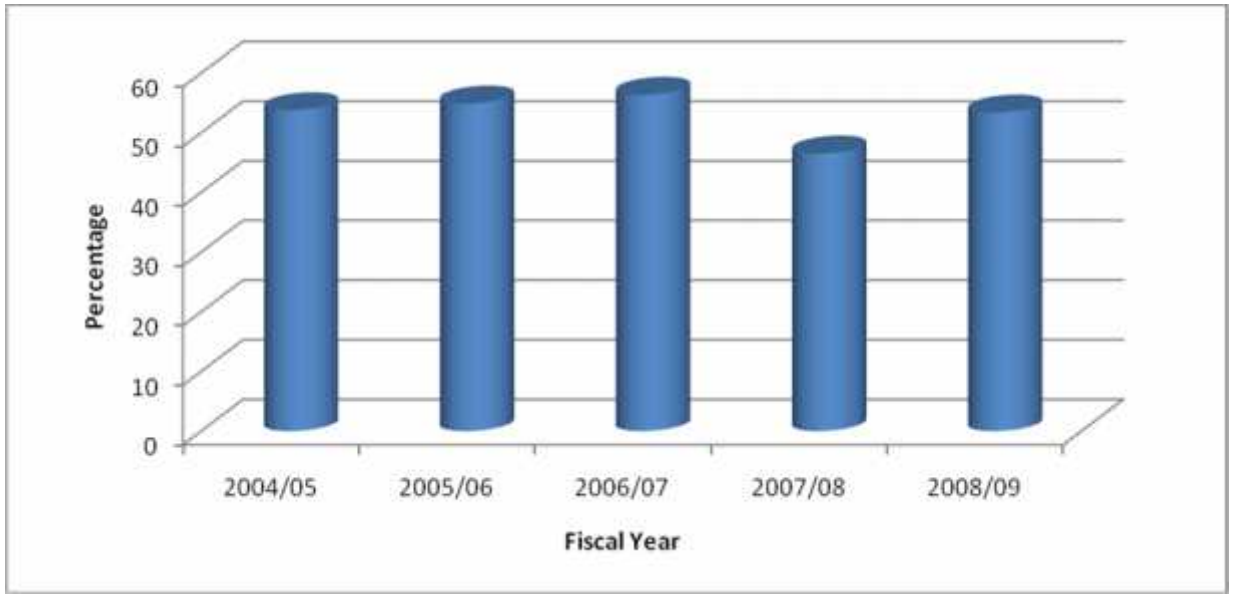


Figure 4.5 presents that the Cash & Bank Balance to Current Assets Ratio of MSI. Cash & Bank Balance and current assets are rapidly increased over the study period but cash & bank balance to current assets ratio was not consistent.

4.1.5 Calculation of Debtor with respect to Current Assets Ratio

Debtor is one of the major components of working capital. It indicates the debtor portion that is occupied in current assets. It is calculated as debtor divided by current assets shown in table below.

Table 4.7

Debtors to Current Assets Ratio

(Rs. in thousand**)**

Fiscal year	**Debtors**	**Current Assets**	**Ratio (%)**
2004/05	2,468,080	15,336,626	16.09
2005/06	3,030,277	18,424,147	16.45
2006/07	2,610,352	20,925,639	12.47
2007/08	2,825,943	20,598,353	13.72
2008/09	3,099,496	22,526,522	13.76
Total	14,034,148	97,811,287	72.49
Mean	2,806,829.6	19,562,257.4	14.50
S.D.			1.52
C.V.			10.48%

Source: Appendix-5

Table 4.7 shows that the calculation of debtor to current assets ratio. The debtors increased every fiscal year except the fiscal year 2006/07and 2007/08. But the current assets increased every fiscal year of the study period. The highest debtors to current assets ratio was 16.45% in the fiscal year 2005/06, which debtor and current assets are Rs.3,030,277 thousand and Rs.18,424,147 thousand respectively and the lowest ratio of was 12.47% in fiscal year 2006/07, which debtors and current assets are Rs.2,610,352 thousand and Rs. 20,925,639 thousand respectively. The standard deviation and coefficient of variance was 1.52 and10.48 % respectively. This shows that the overall ratios are not consistent during the study period.

Figure 4.6

Debtors to Current Assets Ratio

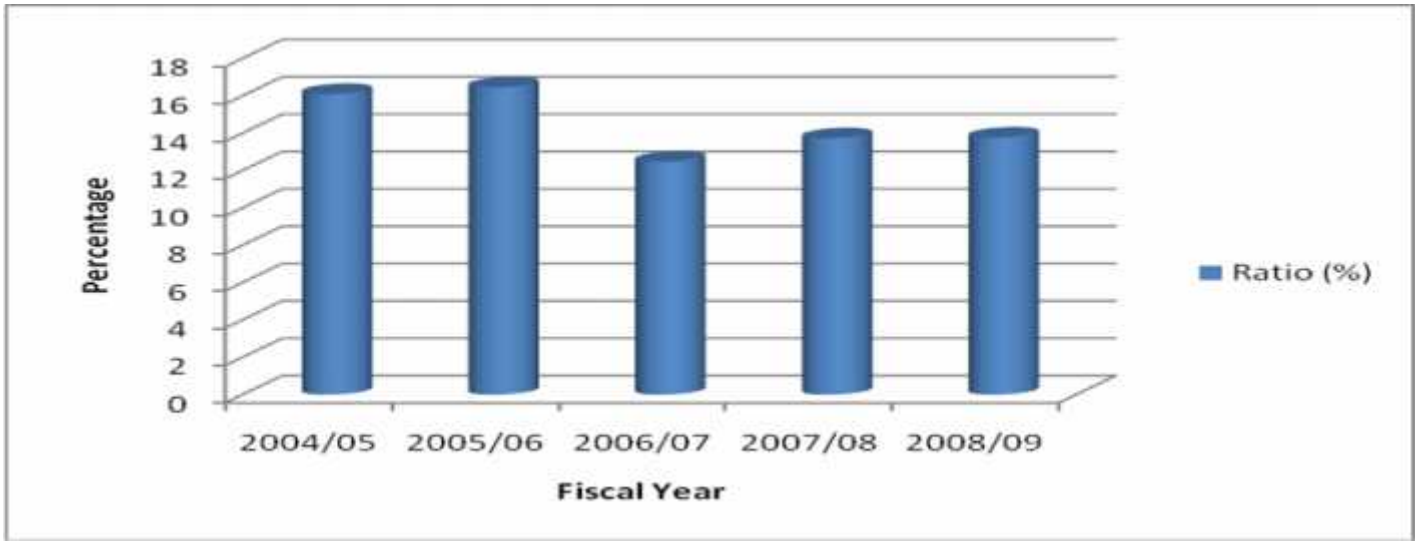


Figure 4.6 shows that the debtors to current assets Ratio of MSI. The lowest ratio was in the fiscal year 2006/07. Overall the ratios are not consistent during the study period.

4.1.6 Calculation of Inventory with respect to CA Ratio

Inventory is one of major components of CA. This ratio will help to find proportion of inventory with respect to current assets. It can be calculated as inventory divided by current assets which can be shown as.

Table 4.8

Inventory to Current Assets Ratio

(Rs. in thousand**)**

Fiscal year	**Closing Inventory**	**Current Assets**	**Ratio (%)**
2004/05	483,231	15,336,626	3.15
2005/06	400,784	18,424,147	2.18
2006/07	301,309	20,925,639	1.44
2007/08	309,857	20,598,353	1.50
2008/09	329,315	22,526,522	1.46
Total	1,824,496	97,811,287	9.73
Mean	364,899.2	19,562,257.4	1.95
S.D.			0.66
C.V.			33.85%

Source: Appendix-6

Table 4.8 shows that the calculation of inventory to current assets ratio. The inventory of MSI was not stable during the study period. But the current assets increased every fiscal year of the study period. The highest inventory to current assets ratio was 3.15 % in the fiscal year 2004/05, which inventory and current assets are Rs. 483,231 thousand and Rs.15,336,626. thousand respectively and the lowest ratio of was 1.44 % in fiscal year 2006/07, which inventory and current assets are Rs. 301,309 thousand and Rs. 20,925,639 thousand respectively. The standard deviation and coefficient of variance was 0.66 and 33.85 % respectively. This shows that the overall ratios are decreasing trend during the study period.

Figure 4.7

Inventory to Current Assets Ratio

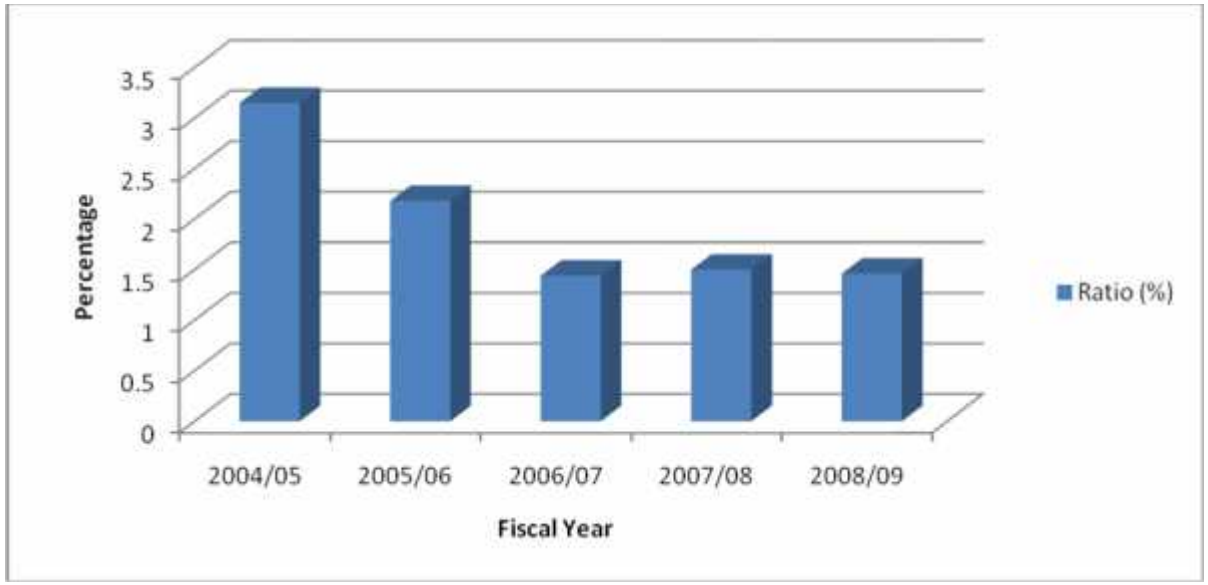


Figure 4.7 shows that the inventory to current assets Ratio of MSI. The highest ratio was in the fiscal year 2004/05. Overall the ratios are decreasing trend during the study period.

4.2 Analysis of Liquidity Position

Liquidity of any business organization is directly related with working capital or current assets and current liabilities of the organization. In other words, one of the main objectives of working capital management is keeping sound liquidity position.MSI is a different organization, which is engaged in mobilization of funds. So without sound liquidity position,MSI is not able to operate its function. To measure the MSI's solvency position or ability to meet its short-term obligation, various liquidity ratios are calculated and to know the trend of liquidity, trend analysis of major ratio have been considered.

4.2.1 Calculation of Current Ratio

This ratio indicates the current short-term solvency position of MSI. Higher current ratio indicates better liquidity position. In other words, current ratio represents a margin of safety, i.e. a 'cushion' of protection for creditors and the highest the current ratio, greater the margin of

safety, large the amount of current assets in relation to current liabilities, more the organizations ability to meet its current obligations. It is calculated as current assets by current liabilities.

The following table shows the current ratio to compare the working capital management of MSI.

Table 4.9

Current Ratio

(Rs in thousand**)**

Fiscal year	**Current Assets**	**Current liabilities**	**Ratio (Times)**
2004/05	15,336,626	2,943,376	5.21
2005/06	18,424,147	3,675,412	5.01
2006/07	20,925,639	4,090,353	5.11
2007/08	20,598,353	3,858,484	5.34
2008/09	22,526,522	4,475,753	5.03
Total	97,811,287	19,043,378	25.70
Mean	19,562,257.4	3,808,675.6	5.14

S.D.	0.12
C.V.	2.33%

Source: Appendix-7

Table 4.9, shows that the current assets of MSI increased every fiscal year of study period. Similarly, current liabilities also increased every fiscal year except in the fiscal year 2007/08. Current ratios are not consistent during the study period. The highest current ratio was 5.34 times in the fiscal year 2007/08, which current assets and current liabilities are Rs.20,598,353 thousand and Rs.3,858,484 thousand respectively and the lowest current ratio was 5.01 times in fiscal year 2005/06, the standard current ratio is 2:1, but the MSI current ratio is greater than the standard ratio. The standard deviation and coefficient of variance was 0.12 and 2.33% respectively. This shows that the current assets ratio of MSI was not consistent during the study period.

Figure 4.8

Current Ratio

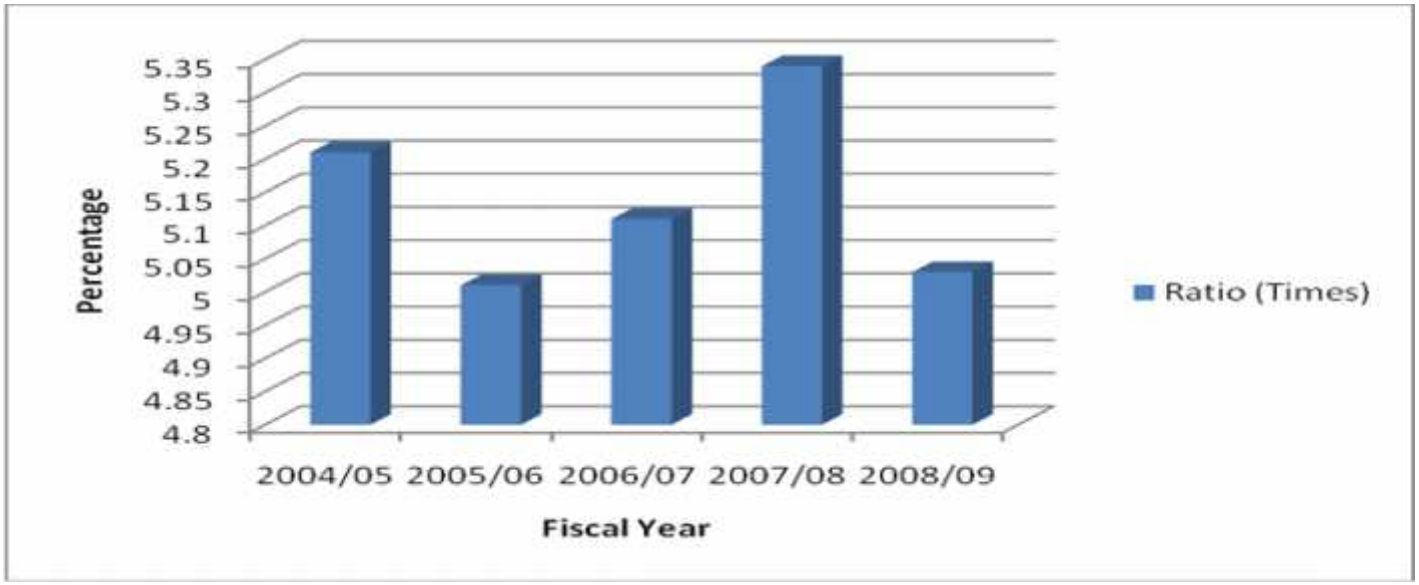


Figure 4.8 represents that the current ratio of MSI. Current assets ratio of MSI was not consistent during the study period.

4.2.2 Calculation of Quick Ratio

Quick ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of original value. Cash is a most liquid asset. Quick asset is equals to total current assets without Stores & Spares. This quick ratio is calculated as dividing the total of quick assets by total current liabilities.

For this study, except the stores & spares of total current assets are quick assets. The following table shows the quick ratio of MSI.

Table 4.10

Quick Ratio

(Rs in thousand**)**

Fiscal year	**Quick Assets**	**Current liabilities**	**Ratio (Times)**
2004/05	14,853,395	2,943,376	5.05
2005/06	18,023,363	3,675,412	4.90
2006/07	20,624,330	4,090,353	5.04
2007/08	20,288,496	3,858,484	5.26
2008/09	22,197,207	4,475,753	4.96
Total	95,986,791	19,043,378	25.21
Mean	19,197,358.2	3,808,675.6	5.042
S.D.			0.12
C.V.			2.38%

Source: Appendix-8

Table 4.10 depicts that the quick ratios are not consistent over the study period. The quick assets of MSI increased every fiscal year of study period. Similarly, current liabilities also increased every fiscal year except the fiscal year 2007/08. The highest quick ratio was 5.26 times in the fiscal year 2007/08, which quick assets and current liabilities are Rs.20,288,496 thousand and Rs.3,858,484 thousand respectively and the lowest current ratio of MSI was 4.90 times in fiscal year 2005/06, which quick assets and current liabilities are Rs.18,023,363 thousand and Rs.3,675,412 thousand respectively. The standard quick ratio is 1:1, but the MSI ratio is higher then the standard ratio. The standard deviation and coefficient of variance was 0.12 and 2.38% respectively. This shows that the quick assets and current liabilities rapidly increased over the study period but quick ratio was not stable.

Figure 4.9

Quick Ratio

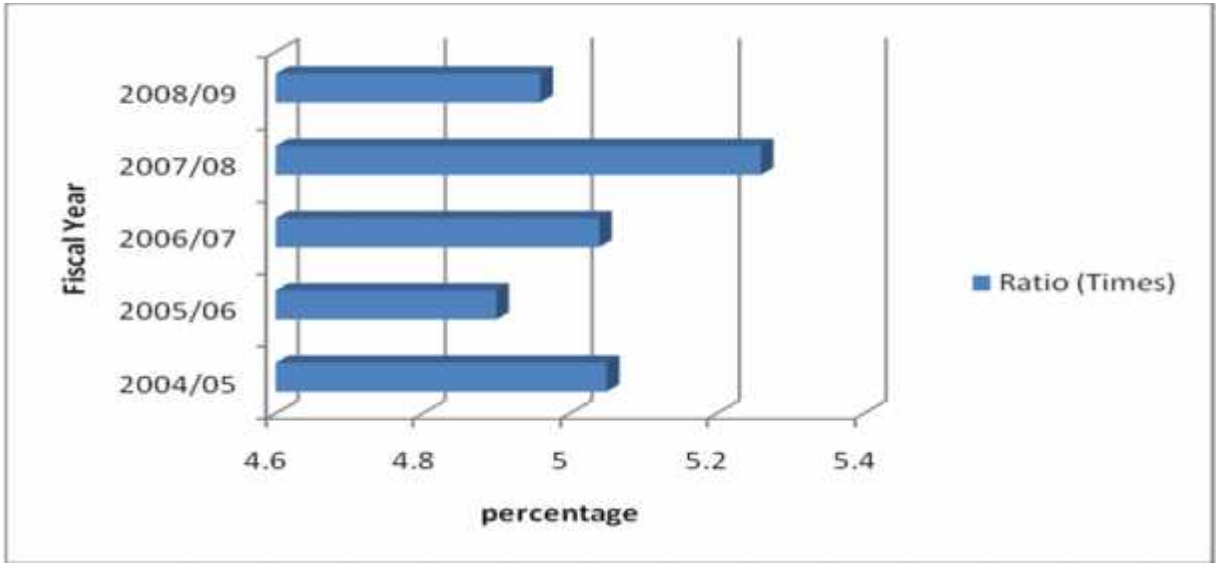


Figure 4.9 represents that the quick assets and current liabilities with quick ratio of MSI. Quick assets and current liabilities rapidly increased over the study period but quick ratio was not stable.

4.3 Analysis of Turnover Position

Activity ratios are used to evaluate the efficiency with which the organization manages and utilizes its assets. These ratios are also employed

to evaluate the speed with which assets are being converted and turnover. These ratios moreover, help in measuring the organizations ability to utilize their available resources.

4.3.1 Calculation of Inventory Turnover Ratio

This ratio indicates how effectively the organization manages inventory and the efficiency of the firm in selling its product. Inventory turnover ratio is defined as the cost of goods sold or sales dividing by inventories.

Inventory turnover ratio shows how rapidly the inventory is turning into receivable through sales. Generally, a high inventory turnover is the indicative of good inventory management. A low inventory turnover implies excessive inventory level then warranted by production and sales activities or a slow moving or obsolete inventory.

Table 4.11

Inventory Turnover Ratio

(Rs in thousand**)**

Fiscal year	**Net sales**	**Closing inventory**	**Ratio (Times)**
2004/05	6,159,520	483,231	12.75
2005/06	7,208,087	400,784	17.98
2006/07	6,070,423	301,309	20.15

2007/08	8,584,144	309,857	27.70
2008/09	10,413,655	329,315	31.62
Total	38,435,829	1,824,496	110.2
Mean	7,687,165.8	364,899.2	22.04
S.D.			6.78
C.V.			30.76%

Source: Appendix-9

Table 4.11 shows that the inventory turnover ratios of MSI are always in increasing trend over the study period. The net sales increased every fiscal year but in the fiscal year 2006/07 net sales decreased. Closing inventory increased only on the fiscal year 2008/09, thereafter continuously decreased over the study period. The highest inventory turnover ratio was 31.62 times in the fiscal year 2008/09, which net sales and closing inventories are Rs.10,413,655 thousand and Rs.329,315 thousand respectively and the lowest inventory turnover ratio was 12.75 times in fiscal year 2004/05, which net sales and closing inventories are Rs.6,159,520 thousand and Rs.483,231 thousand respectively. The standard deviation and coefficient of variance was 6.78 and 30.76% respectively. This shows that the Inventory ratio is rapidly increased over the study period.

Figure 4.10

Inventory Turnover Ratio

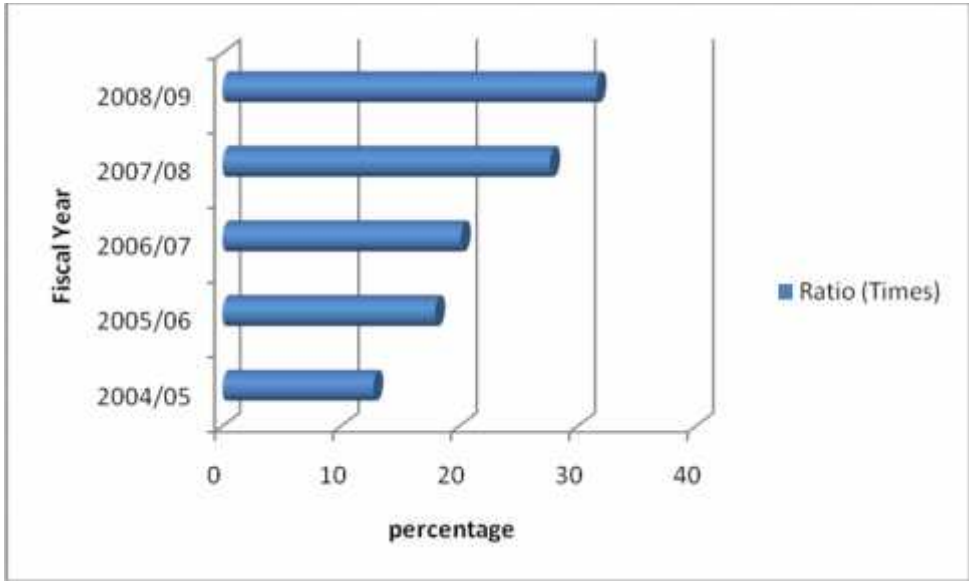


Figure 4.10 represents that net sales and inventory with inventory turnover ratio. Net sales are increased except the fiscal year 2006/07 but inventory are increased only fiscal year 2000/01 thereafter decreased in the study period. Inventory ratio is rapidly increased over the study period.

4.3.2 Calculation of Debtors/ Receivables Turnover Ratio

Debtors / Receivables turnover ratio indicates the speed with which receivable are being converted into sales. This turnover ratio is calculated as net sales by debtors.

The table below shows the net sales to debtors / receivables ratio. This ratio analyzes the capacity of MSI management in utilization of fund in current assets.

Table 4.12

Debtors/Receivable Turnover Ratio

(Rs in thousand**)**

Fiscal year	**Net sales**	**Debtors**	**Ratio (Times)**
2004/05	6,159,520	2,468,080	2.50
2005/06	7,208,087	3,030,277	2.38
2006/07	6,070,423	2,610,352	2.34

2007/08	8,584,144	2,825,943	3.03
2008/09	10,413,655	3,099,496	3.35
Total	38,435,829	14,034,148	13.60
Mean	7,687,165.8	2,806,829.6	2.72
S.D.			0.40
C.V.			14.71%

Source: Appendix-10

Table 4.12 shows that the debtors/receivable turnover ratio was in increasing trend over the study period. The net sales of MSI increased every fiscal year but fiscal year 2006/07 net sales decreased. Debtors of MSI are not stable over the study period. The highest debtors turnover ratio was 3.35 times in the fiscal year 2008/09, which net sales and debtors are Rs.10,413,655 thousand and Rs.3,099,496 thousand respectively and the lowest debtors turnover ratio was 2.34 times in fiscal year 2006/07, which net sales and debtors are Rs.6,070,423 thousand and Rs.2,610,352 thousand respectively. The standard deviation and coefficient of variance was 0.40 and 14.71% respectively. This shows that the debtors/receivable turnover ratio was in increasing trend over the study period.

figure 4.11

Debtors/Receivable Turnover Ratio

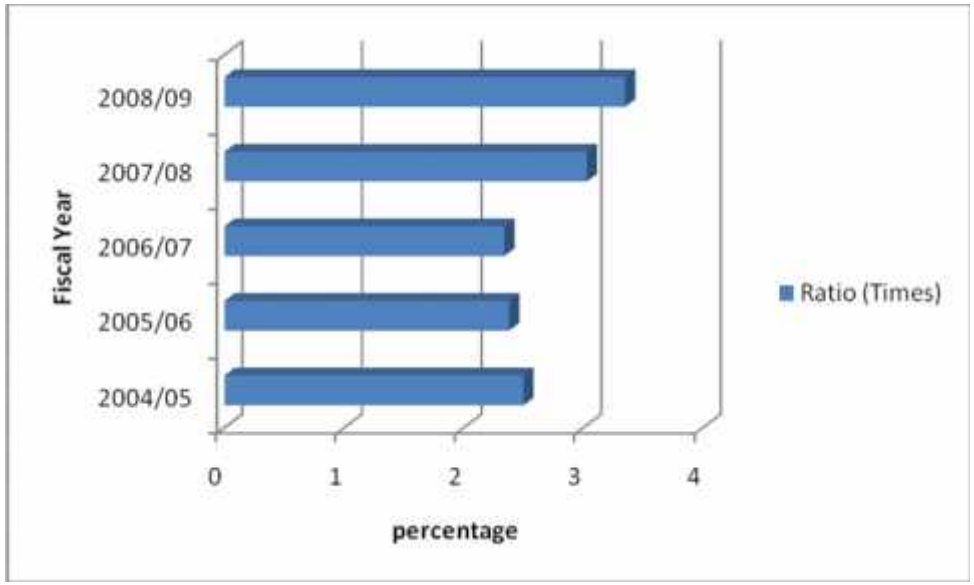


Figure 4.11 shows that net sales and debtors with debtor turnover ratio of MSI. Net sales increased except the fiscal year 2006/07 but debtors are not consistent over the study period. Debtor turnover ratio increased after the fiscal year 20004/05.

4.3.3 Calculation of Current Assets Turnover Ratio

The amount of working capital is affected by sales policy. If the credit sales are increased more working capital will be required to meet the daily requirement.

The current assets turnover ratio indicates the adequacy of sales in relation to the investment in current assets. Generally a high current assets turnover ratio indicates efficient utilization of current assets. The current assets turnover ratio is calculated by dividing net sales by current assets.

The current assets turnover position of the MSI during the period of the study is tabulated as below:

Table 4.13

Current Assets Turnover Ratio

(Rs in thousand**)**

Fiscal year	**Net sales**	**Current Assets**	**Ratio (Times)**
2004/05	6,159,520	15,336,626	0.40
2005/06	7,208,087	18,424,147	0.39
2006/07	6,070,423	20,925,639	0.29
2007/08	8,584,144	20,598,353	0.42
2008/09	10,413,655	22,526,522	0.46

Total	38,435,829	97,811,287	1.96
Mean	7,687,165.8	19,562,257.4	0.39
S.D.			0.056
C.V.			14.45%

Source: Appendix-11

Table 4.13 shows that current assets turnover ratio increase and thereafter decrease to the fiscal year 2006/07 and increase from fiscal year 2007/08 to fiscal year 2008/09. The highest current assets turnover ratio of MSI is 0.46 times in the fiscal year 2008/09, which net sales and current assets are Rs.10,413,655 thousand and Rs.22,526,522 thousand respectively and the lowest current assets turnover ratio of MSI was 0.29 times in fiscal year 2006/07, which net sales and current assets are Rs.6,070,423 thousand and Rs.20,925,639 thousand respectively. The standard deviation and coefficient of variance with respect to current assets turnover ratio are 0.056 and 14.45 % respectively. This shows that the current assets turnover ratio is rapidly decreased till fiscal year 2006/07 than after increased in the fiscal 2008/09 over the study period.

Figure 4.12

Current Assets Turnover Ratio

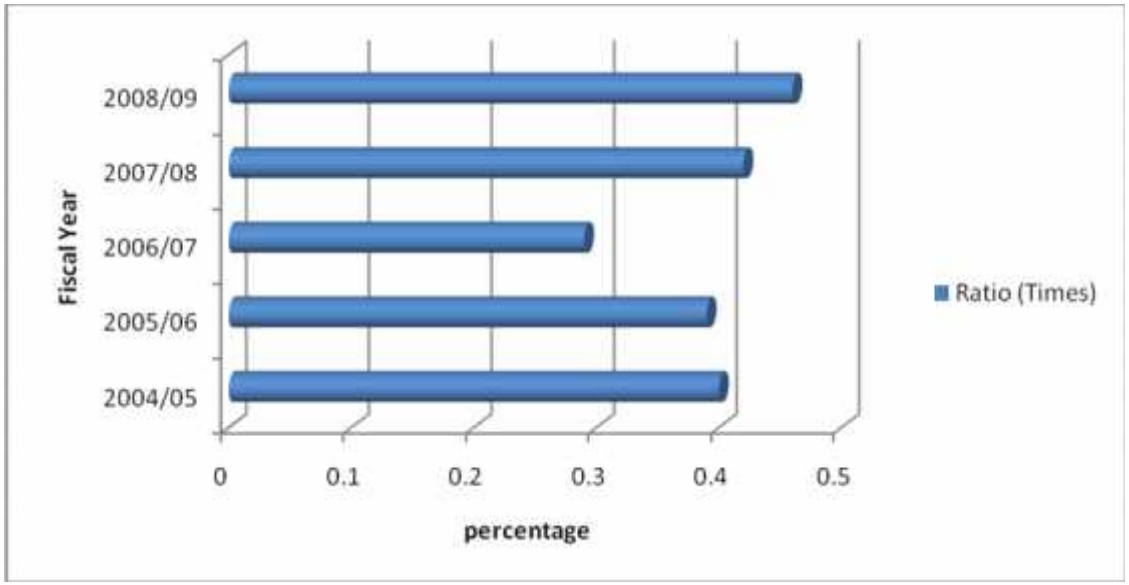


Figure 4.12 represents that net sales and current assets with current assets turnover ratio of MSI. Net sales are increased except the fiscal year 2006/07 but current assets are rapidly increased in the study period. Current assets turnover ratio is rapidly decreased till fiscal year 2006/07 than after increases up to 0.46 times in the fiscal 2008/09 over the study period.

4.3.4 Calculation of Cash Turnover Ratio

Cash turnover ratio indicates the efficiency of management in application of cash. It is one of the main parts of current assets which have greatest value to meet the current obligations occurred in the business. Without adequate cash, business is not possible, but the excess unnecessary holding cost. So the company should try to maintain the adequate amount of cash fund, keeping in mind the risk-return trade off. The cash turnover ratio is calculated as net sales by cash & bank balances.

Table 4.14

Cash Turnover Ratio

(Rs in thousand**)**

Fiscal year	**Net sales**	**Cash & Bank Bal.**	**Ratio (Times)**
2004/05	6,159,520	8,248,426	0.75
2005/06	7,208,087	10,116,463	0.71
2006/07	6,070,423	11,797,087	0.51
2007/08	8,584,144	9,584,469	0.89
2008/09	10,413,655	12,028,795	0.87
Total	38,435,829	51,775,240	3.73
Mean	7,687,165.8	10,355,048	0.746
S.D.			0.14
C.V.			18.29%

Source: Appendix-12

Table 4.14 shows that the cash turnover ratios of MSI are not consistent over the study period. The net sales of MSI increased every fiscal year except the fiscal year 2006/07. Cash & bank balance of MSI increased every fiscal year except the fiscal year 2007/08. The highest cash turnover ratio was 0.89 times in the fiscal year 2007/08, which net sales and cash & bank balance are Rs.8,584,144 thousand and Rs 9,584,469 thousand respectively and the lowest cash turnover ratio was 0.51 times in fiscal year 2006/07, which net sales and cash & bank balance are Rs.6,070,423 thousand and Rs.11,797,087 thousand respectively. The standard deviation and coefficient of variance with respect to cash turnover ratio are 0.14 and 18.29 % respectively. This shows that the cash turnover ratios of MSI are not consistent over the study period.

Figure 4.13

Cash Turnover Ratio

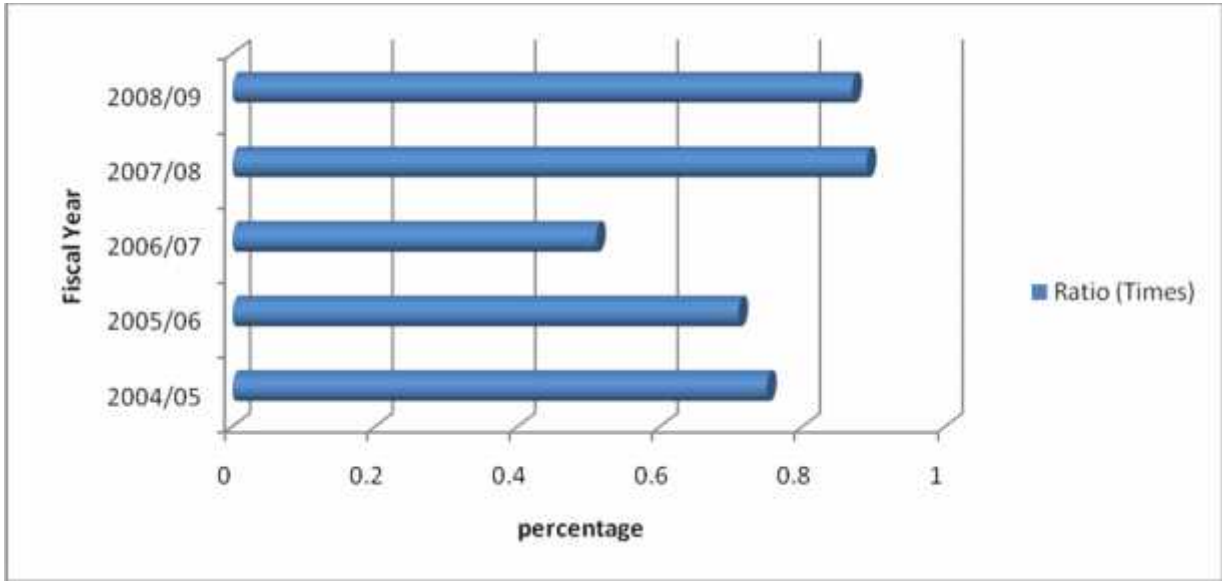


Figure 4.13 shows that net sales and cash & bank balance with cash turnover ratio of MSI. Net sales are increased except the fiscal year 2006/07 but cash & bank balance are rapidly increased over the study period. Cash turnover ratio of the MSI decreased from the fiscal year 2004/05 to the fiscal year 2006/07 and after increased from fiscal year 2007/08.

4.3.5 Net Working Capital Turnover Ratio

Net working capital is the difference between current assets and current liabilities. This ratio explains the net working capital has been utilized to general sales in an organization. The size of working capital depends up on production cycle and business cycle.

This indicates the velocity of the utilization of working management. This ratio measures the efficiency with which the working capital is being used by MSI. It is calculate as net sales by net working capital.

Table 4.15

Net Working Capital Turnover Ratio

(Rs in thousand**)**

Fiscal year	**Net sales**	**Net working Capital**	**Ratio (Times)**
2004/05	6,159,520	12,393,250	0.50
2005/06	7,208,087	14,748,735	0.49
2006/07	6,070,423	16,835,286	0.36
2007/08	8,584,144	16,739,869	0.51

2008/09	10,413,655	18,050,769	0.58
Total	38,435,829	78,767,909	2.44
Mean	7,687,165.8	15,753,581.8	0.488
S.D.			0.071
C.V.			14.63%

Source: Appendix-13

Table 4.15 shows that the net working capital turnovers are not stable over the study period. Net sales increased every fiscal year over the study period. Similarly, net working capitals of MSI are increasing trend. The highest net working capital turnover ratio was 0.58 times in the fiscal year 2008/09, which net sales and net working capital are Rs.10,413,655 thousand and Rs.18,050,769 thousand respectively and the lowest net working capital turnover ratio was 0.36 times in fiscal year 2006/07, which net sales and net working capital are Rs.6,070,423 thousand and Rs.16,835,286 thousand respectively. The standard deviation and coefficient of variance with respect to net working capital turnover ratio are 0.071 and 14.63 % respectively. This shows that the net working capital turnovers are not stable over the study period.

Figure 4.14

Net Working Capital Turnover Ratio

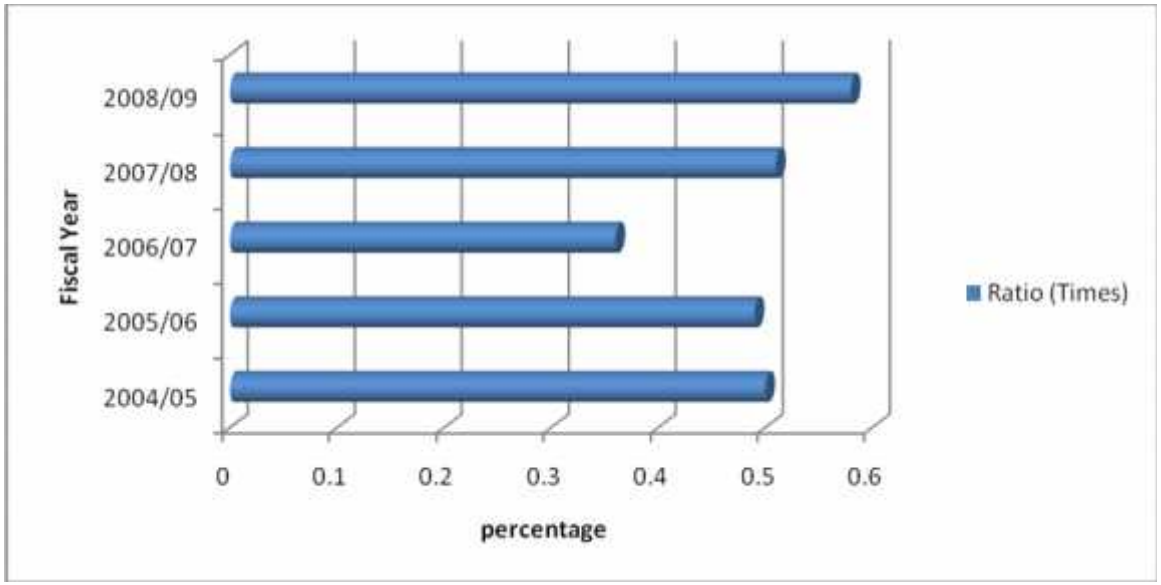


Figure 4.14 represents that net sales and net working capital with net working capital turnover ratio of MSI. Net sales are increased except the fiscal year 2006/07 but net working capitals are rapidly increased over the study period. Net working capital turnover ratio is increased just the fiscal year 2000/01 thereafter decreased over the study period till fiscal year 2006/07 and after the fiscal year 2006/07 net working capital turnover ratio increases till fiscal year 2008/09.

4.4 Profitability Position

Generally, profit is the difference between total revenue and total expenses over a period of time. Profitability measures efficiency and the search for it provides an incentive to achieve efficiency. Profitability ratios are those ratios which indicate degree of success in achieving desired profit level. Profit is an important factor that determines the firms' expansion and diversification. A required level of profit is necessary for the firms' growth and survives in the competitive environment. Various ratios can be developed upon the profit under different circumstances. These different ratios are called profitability ratios, which are required to support the purpose of the study.

4.4.1 Calculation of Net Profit Margin

Net profit margin is the relation between net profit after taxes and net sales. It indicates management efficiency in controlling the manufacturing and administrative cost of the products. The net profit margin reflects how much amount of net profit has been earned in the sales of one rupee. A high result is favorable and otherwise vice-versa. High result insures adequate return to the owner. Net profit margin is as net profit after taxes by net sales multiply hundred.

Table 4.16

Net Profit Margin Ratio

(Rs in thousand**)**

Fiscal year	**Net profit after taxes**	**Net sales**	**Ratio (Times)**
2004/05	2,467,930	6,159,520	40.07

2005/06	3,087,782	7,208,087	42.84
2006/07	2,247,301	6,070,423	37.02
2007/08	3,542,461	8,584,144	41.27
2008/09	4,936,647	10,413,655	47.41
Total	16,282,121	38,435,829	208.61
Mean	3,256,424.2	7,687,165.8	41.72
S.D.			3.42
C.V.			8.21%

Source: Appendix-14

Table 4.16 depicts that net profit margin ratios are not consistent over the study period. Net profit after taxes of MSI continuously increased except the fiscal year 2006/07. Similarly, net sales increased every fiscal year except the fiscal year 2006/07. The highest net profit margin ratio was 47.41% in the fiscal year 2008/09 which net profit after taxes and net sales are Rs.4,936,647 thousand and Rs.10,413,655 thousand respectively and the lowest net profit margin ratio of MSI was 37.02% in fiscal year 2006/07, which net profit after taxes and net sales are Rs.2,247,301 thousand and Rs.6,070,423 thousand respectively. The standard deviation and coefficient of variance with respect to net profit margin ratio are 3.42 and 8.21% respectively.This shows that the net profit margin ratios are not consistent over the study period.

Figure 4.15

Net Profit Margin

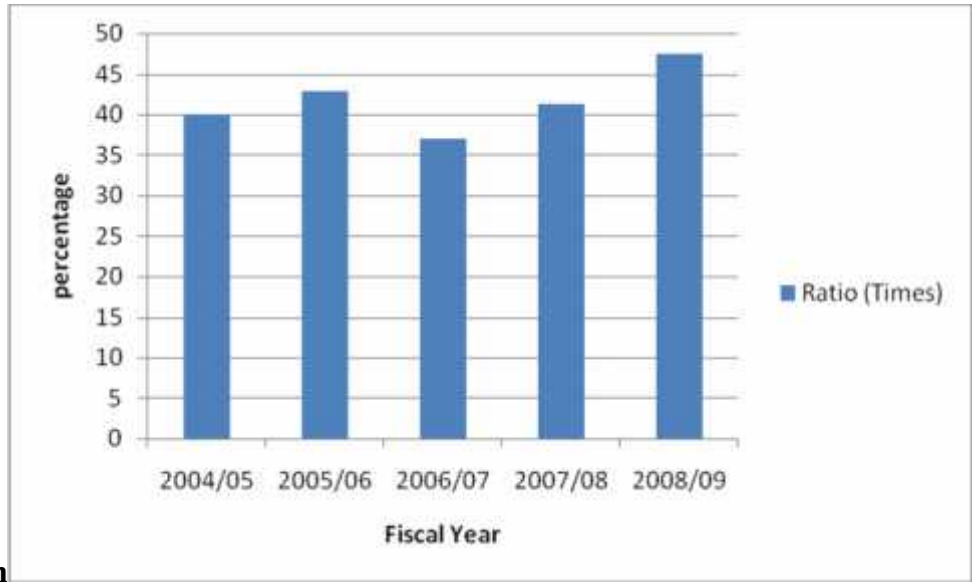


Figure 4.15 represents that net profit margin ratio of MSI. Net profit and net sales increased except the fiscal year 2006/07.

4.4.2 Calculation of Operating Ratio

The operating ratio is computed by dividing all operating expenses by net sales. The operating ratio is an important ratio that explains the change in the net profit margin ratio. A higher operating ratio is unfavorable since it will leave a small amount of operating income to meet interest as dividend. Operating ratio is calculated as operating expense by net sales multiply by hundred.

Table 4.17

Operating Ratio

(Rs in thousand**)**

Fiscal year	**Operating expenses**	**Net sales**	**Ratio (Times)**
2004/05	3,235,929	6,159,520	52.54
2005/06	3,576,165	7,208,087	49.61
2006/07	3,308,767	6,070,423	54.51
2007/08	4,272,768	8,584,144	49.78
2008/09	4,215,188	10,413,655	40.48
Total	18,608,817	38,435,829	246.92
Mean	3,721,763.4	7,687,165.8	49.38
S.D.			4.82
C.V.			9.75%

Source: Appendix-15

Table 4.17 shows that operating ratios are not consistent over the study period. Operating expenses of MSI are not stable over the study period. Similarly, Net sales increased every fiscal year except the fiscal year 2006/07. The highest operating ratio was 54.51% in the fiscal

year 2006/07, which operating expenses and net sales are Rs.3,308,767 thousand and Rs.6,070,423 thousand respectively and the lowest operating ratio was 40.48 % in fiscal year 2008/09, which operating expenses and net sales are Rs.4,215,188 thousand and Rs.10,413,655 thousand respectively. The standard deviation and coefficient of variance with respect to operating ratio are 4.82 and 9.75% respectively. This result shows that the Operating ratio of MSI was not stable over the study period

Figure 4.16

Operating Ratio

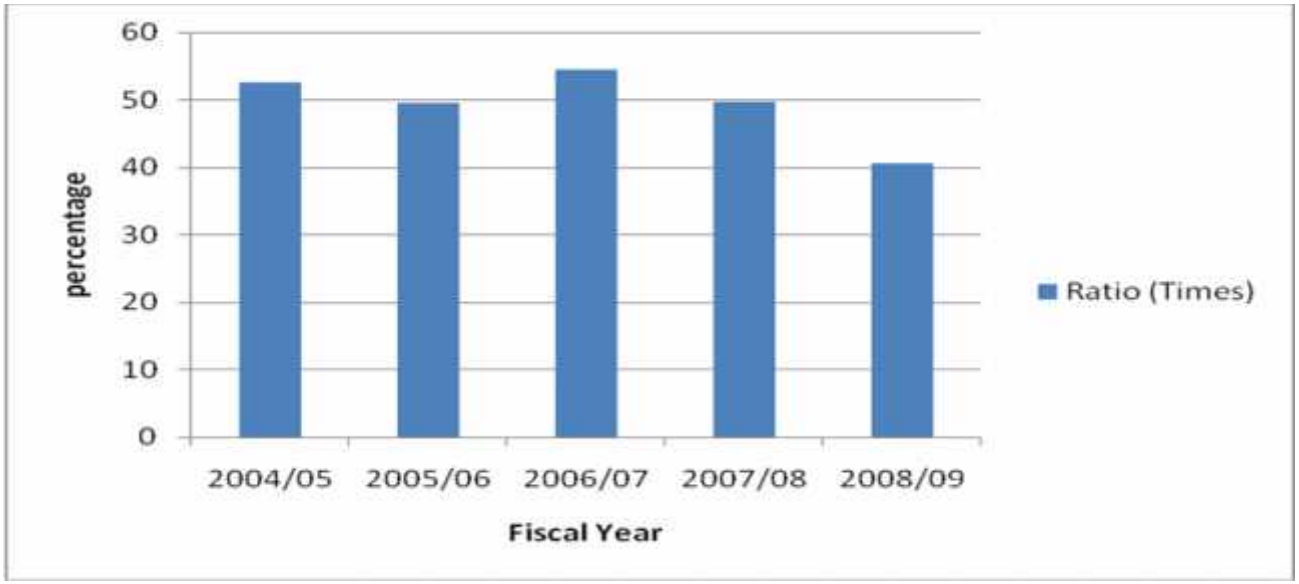


Figure 4.16 presents that operating expenses and net sales with operating ratio of MSI. Operating expenses and net sales increased till the fiscal year 2005/06 and then decreased. Operating ratio of MSI was not stable over the study period.

4.4.3 Calculation of Return on Total Assets

This ratio is useful in measuring the profitability of all financial resource invested in the firm's assets. The return on assets or profit to assets ratio is calculated by dividing the amount of net profit after taxes by the amount of total assets employed. The return on total assets is calculated as net profit after taxes by total assets multiply by hundred.

Table 4.18

Return on Total Assets

(Rs. in thousand**)**

Fiscal year	**Net profit after taxes**	**Total Assets**	**Ratio (Times)**
2004/05	2,467,930	25,281,824	9.76
2005/06	3,087,782	29,892,993	10.34
2006/07	2,247,301	32,652,787	6.88
2007/08	3,542,461	35,572,772	9.96
2008/09	4,936,647	39,351,406	12.55
Total	16,282,121	162,751,782	49.49
Mean	3,256,424.2	32,550,356.4	9.89
S.D.			1.81
C.V.			18.35%

Source: Appendix-16

Table 4.18 represents that return on total assets ratio are not consistent over the study period. Net profit after taxes continuously increased except fiscal year 2006/07. Similarly, total assets continuously increased every fiscal year of the study period. The highest return on total assets of MSI was 12.55 % in the fiscal year 2008/09, which net profit after taxes and total assets are Rs 4,936,647 thousand and Rs.39,351,406 thousand respectively and the lowest return on total assets was 6.88% in fiscal year 2006/07, which net profit after taxes and total assets are Rs.2,247,301 thousand and Rs.3,265,2787 thousand respectively. The standard deviation and coefficient of variance with respect to return on total assets are 1.81and 18.35 % respectively. This result shows that the return on total assets ratio are not consistent over the study period.

Figure 4.17

Return on Total Assets

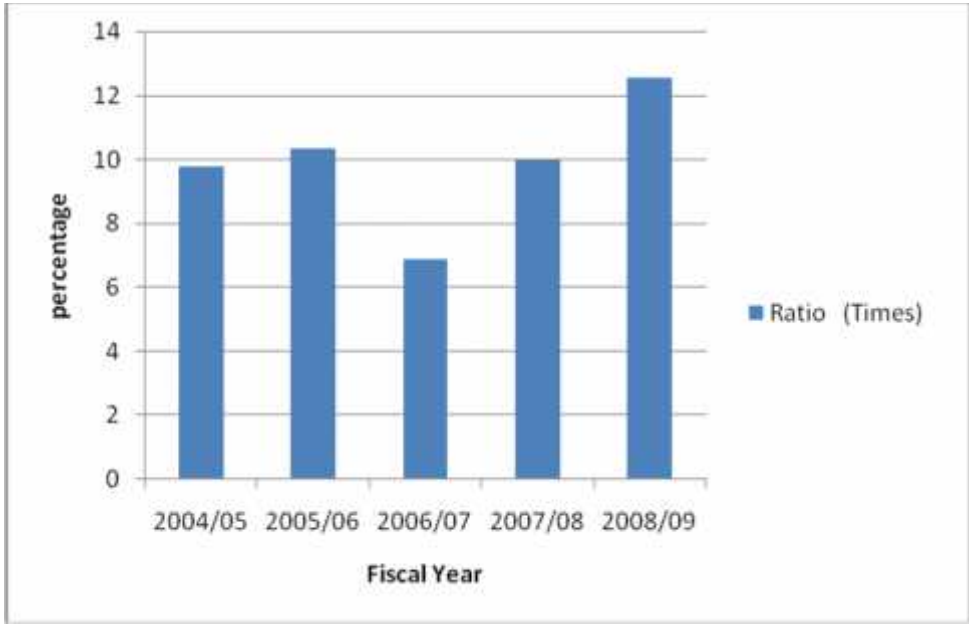


Figure 4.17 shows that net profit Vs total assets and return on total assets of MSI. Net profits increased except the fiscal year 2006/07 but total assets rapidly increased over the study period.

4.4.4 Calculation of Return on Net Worth

The return on net worth ratio is measure of profitability of the firm in respect of the utilization of net worth. It is calculated by dividing net profit after taxes by net worth. The net worth includes total equity capital and total reserve & surplus. It reflects whether the corporation has earned a satisfactory return for its equity-holders or not. So, higher ratio is favorable of the stockholders. The return on net worth is calculated as net profit after taxes by net worth multiply by hundred.

Table 4.19

Return on Net Worth

(Rs. in thousand**)**

Fiscal year	**Net profit after taxes**	**Net worth**	**Ratio (Times)**
2004/05	2,467,930	16,927,414	14.58
2005/06	3,087,782	19,521,866	15.82
2006/07	2,247,301	20,757,100	10.83

2007/08	3,542,461	20,825,855	17.01
2008/09	4,936,647	23,686,027	20.84
Total	16,282,121	101,718,262	79.08
Mean	3,256,424.2	20,343,652.4	15.81
S.D.			3.257
C.V.			20.596%

Source: Appendix-17

Table 4.19 shows that return on net worth are not stable during the study period. Net profit after taxes continuously increased except the fiscal year 2006/07. But net worth of MSI is rapidly increased every fiscal year. The highest return on net worth was 20.84 % in the fiscal year 20005/06, which net profit after taxes and net worth are Rs.4,936,647 thousand and Rs. 23,686,027 thousand respectively and the lowest return on net worth was 10.83% in fiscal year 2006/07, which net profit after taxes and net worth are Rs.2,247,301 thousand and Rs. 20,757,100 thousand respectively. The standard deviation and coefficient of variance with respect to return on net worth are 3.257 and 20.596 % respectively. This result shows that the return on net worth are not stable during the study period.

Figure 4.18

Return on Net Worth

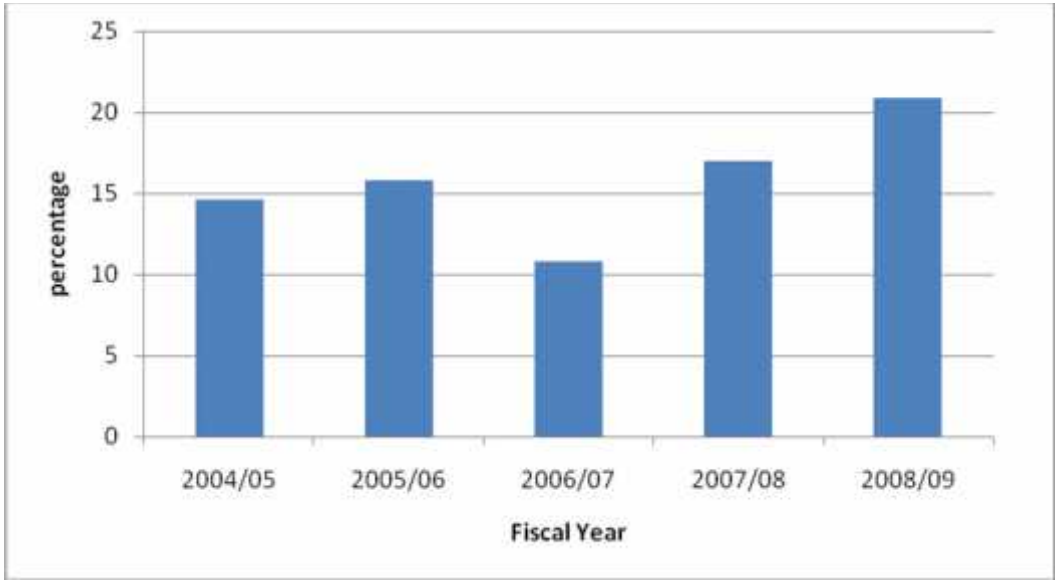


Figure 4.18 represents that the return on net worth of MSI. Net profits are increased except the fiscal year 2006/07 but net worth is speedily increased over the study period.

4.4.5 Calculation of Return on Working Capital

Return on net working capital measures the profitability and also indicates the efficiency of working capital of MSI. It indicates how MSI has used its available resources. The return on net worth is calculated as net profit after taxes by working capital multiply by hundred.

Table 4.20

Return on Working Capital

(Rs in thousand**)**

Fiscal year	**Net profit after taxes**	**Working capital**	**Ratio (Times)**
2004/05	2,467,930	12,393,250	19.91
2005/06	3,087,782	14,748,735	20.94
2006/07	2,247,301	16,835,286	13.35
2007/08	3,542,461	16,739,869	21.16
2008/09	4,936,647	18,050,769	27.35
Total	16,282,121	78,767,909	102.71
Mean	3,256,424.2	15,753,581.8	20.54
S.D.			4.45
C.V.			21.76%

Source: Appendix-18

Table 4.20 shows that return on working capital is not consistent over the study period. Net profit after taxes is continuously increased except the fiscal year 2006/07 but working capital rapidly increased every fiscal year. The highest return on working capital was 27.35% in the fiscal year 2008/09, which net profit after taxes and working capital are Rs. 4,936,647 thousand and Rs. 18,050,769 thousand respectively and the lowest return on working capital was 13.35% in fiscal year 2006/07, which net profit after taxes and working capital are Rs.2,247,301 thousand and Rs.16,835,286 thousand respectively. The standard deviation and coefficient of variance with respect to return on working capital are 4.45 and 21.76% respectively. This result shows that the return on working capital is not consistent over the study period.

Figure 4.19

Return on Working Capital

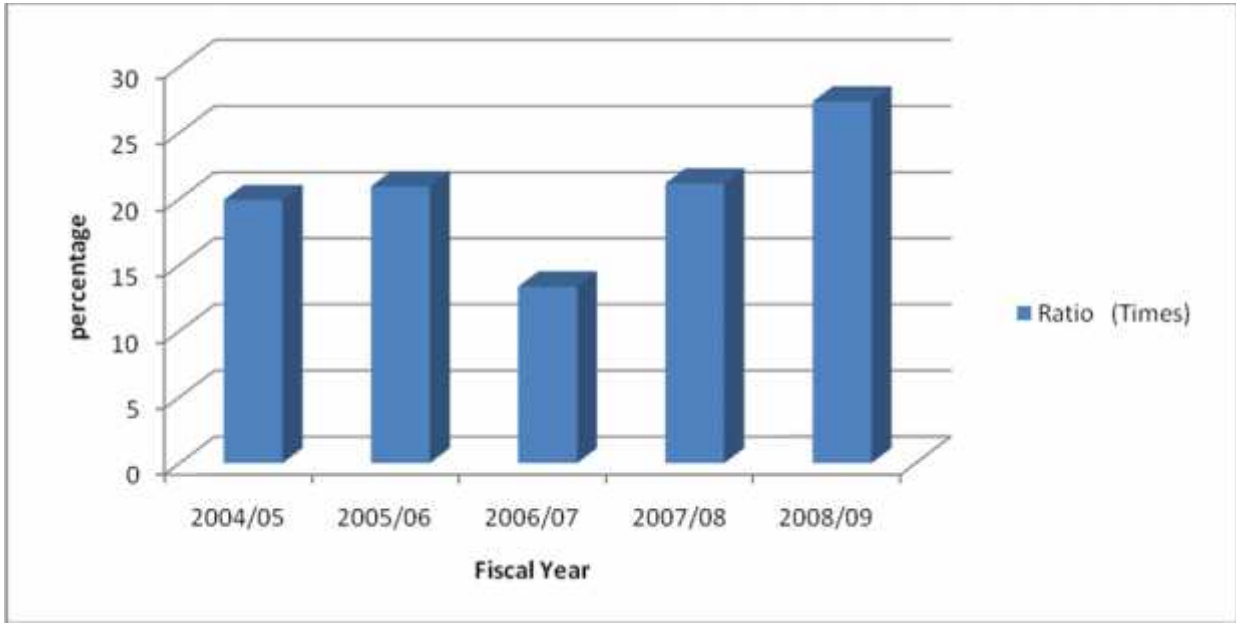


Figure 4.19 represents that the return on working capital. Net working capital is in increasing trend during the study period. Return on working capital is in increasing trend except the fiscal year 2006/07.

4.5 Analysis of Different Ratios

i. Analysis of Liquidity Ratio

Liquidity ratio measures the short term solvency position of the organization. It plays a vital role in the organization. Liquidity position shows the ability of the organization to pay its current obligation i.e. it determines the short-term solvency position of any organization.

Table 4.21

Liquidity Ratio

Fiscal year	Current Ratio (times)	Quick Ratio (times)	Cash & Bank Bal. to Current Assets Ratio (%)
2004/05	5.21	5.05	53.78
2005/06	5.01	4.9	54.91
2006/07	5.12	5.04	56.38
2007/08	5.34	5.26	46.63
2008/09	5.03	4.96	53.40
Average	5.142	5.042	53.02

ii. Analysis of Turnover Ratio

Table 4.22

Turnover Ratio

Fiscal year	Inventory Turnover	Debtors Turnover	Current Assets turnover	Ratio in % Cash Turnover
2004/05	12.75	2.50	0.40	0.75
2005/06	17.98	2.38	0.39	0.71
2006/07	20.15	2.33	0.29	0.51
2007/08	27.70	3.04	0.42	0.89
2008/09	31.62	3.36	0.46	0.87
Average	22.04	2.722	0.392	0.746

Table 4.23

Profitability Ratio

Fiscal year	Net Profit Margin	Operating Ratio	Return on Total Assets	Return on Net Worth	Return on Working Capital
2004/05	40.07	52.54	9.76	14.58	0.50
2005/06	42.84	49.61	10.34	15.82	0.49
2006/07	37.02	54.51	6.88	10.83	0.36
2007/08	41.27	49.78	9.96	17.01	0.51
2008/09	47.41	40.48	12.55	20.84	0.58
Average	41.722	49.384	9.898	15.816	0.488

4.6 Analysis of Working Capital Cash Flow Cycle

Working capital management originated with the old Yankee peddler, who would borrow to buy inventory, sell the inventory to pay the bank loan, and then repeat the cycle. Cash conversion cycle model has been applied to more complex business and it is useful when analyzing the

effectiveness of a firm's working capital management. There are following four factors of cash conversion cycle model.

i. Inventory Conversion Period (ICP)
ii. Receivable Conversion Period (RCP)
iii. Payable Deferred Period (PDP)
iv. Cash Conversion Cycle (CCC)

4.6.1 Inventory Conversion Period (ICP)

The inventory conversion period is the average length of time required to convert material into finished goods and then to sell those goods. The inventory turnover shows how rapidly the inventory is turning into receivable through sales. The short period indicates fast conversion of inventory to sale and the long period indicates slow conversion period. Inventory conversion period is calculated by dividing days in year by inventory turnover ratio.

Table 4.24

Inventory Conversion Period (ICP)

Fiscal year	Days in year	Inventory turnover	ICP (days)
2004/05	365	12.73	28.67
2005/06	365	17.98	20.30
2006/07	365	20.15	18.11

2007/08	365	27.70	13.18
2008/09	365	31.62	11.54
Total			91.80
Mean			18.36
S.D.			6
C.V.			32.68%

Source: Appendix-19

Table 4.25 shows that the inventory conversion period of the five fiscal year of MSI. The inventory turnover increased in every fiscal year of the study period. The inventory conversion period was in decreasing trend over the study period. The highest inventory conversion period was 28.67 days in the fiscal year 2004/05 and the lowest receivable conversion period was 11.54 days in the fiscal year 2008/09. The decreasing trend of ICP shows that the inventories rapidly convert into sales. The standard deviation and coefficient of variance with respect to inventory conversion period are days 6 and 32.68 % respectively. This result shows that the ICP was in decreasing trend.

Figure 4.20

Inventory Conversion Period (ICP)

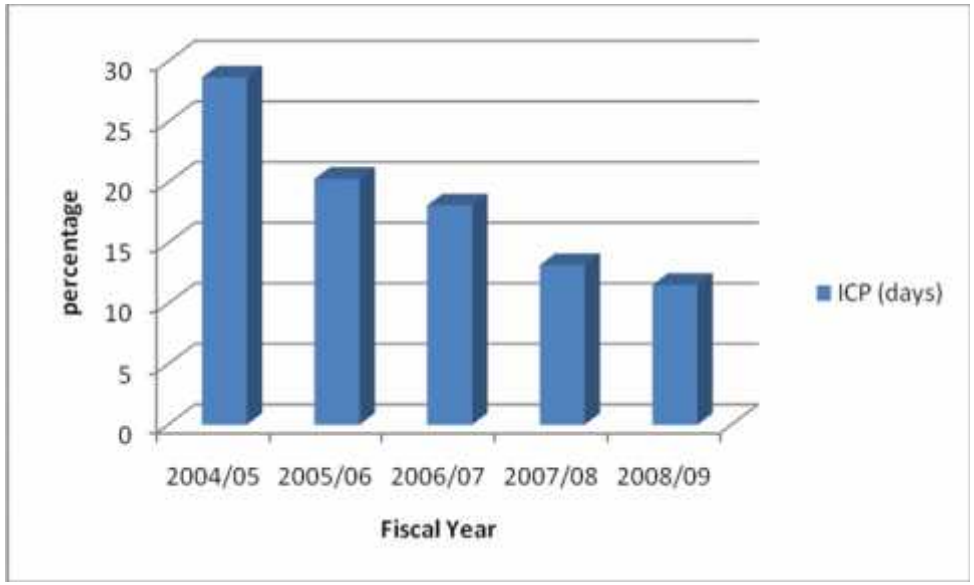


Figure 4.20 presents the inventory conversion period of MSI. It shows that the ICP was in decreasing trend.

4.6.2 Receivable Conversion Period (RCP)

The receivable conversion period is the average length of time required to convert the firm's receivable into cash. High periods indicate slow collection of receivable and low collection period indicates fast conversion of receivable. RCP can determine the credit policy of the

company. Long collection period refers liberal credit policy and the short period refers the strict credit policy. It is also called day's sale outstanding (DSO) and it is calculated by dividing days in year by receivable turnover ratio.

Table 4.25

Receivable Conversion Period (RCP)

Fiscal year	**Days in year**	**Receivable Turnover**	**RCP (days)**
2004/05		2.50	146.00
2005/06	365	2.38	153.36
2006/07	365	2.33	156.65
2007/08	365	3.04	120.07
2008/09	365	3.36	108.63
Total			684.71
Mean			136.942
S.D.			19
C.V.			13.87%

Source: Appendix-20

Table 4.25 shows that the receivable conversion period of the five fiscal year of MSI. The receivable conversion period was not consistent over the study period. The highest receivable conversion period was 156.65 days in the fiscal year 2006/07 and the lowest receivable conversion period was 108.63 days in the fiscal year 2008/09. The decreasing trend of RCP indicates that MSI is able to collect its debts in short period. The standard deviation and coefficient of variance with respect to receivable conversion period are 19 days and 13.87 % respectively. This result shows that the receivable turnover decreased in every fiscal year of the study period.

Figure 4.21

Receivable Conversion Period (RCP)

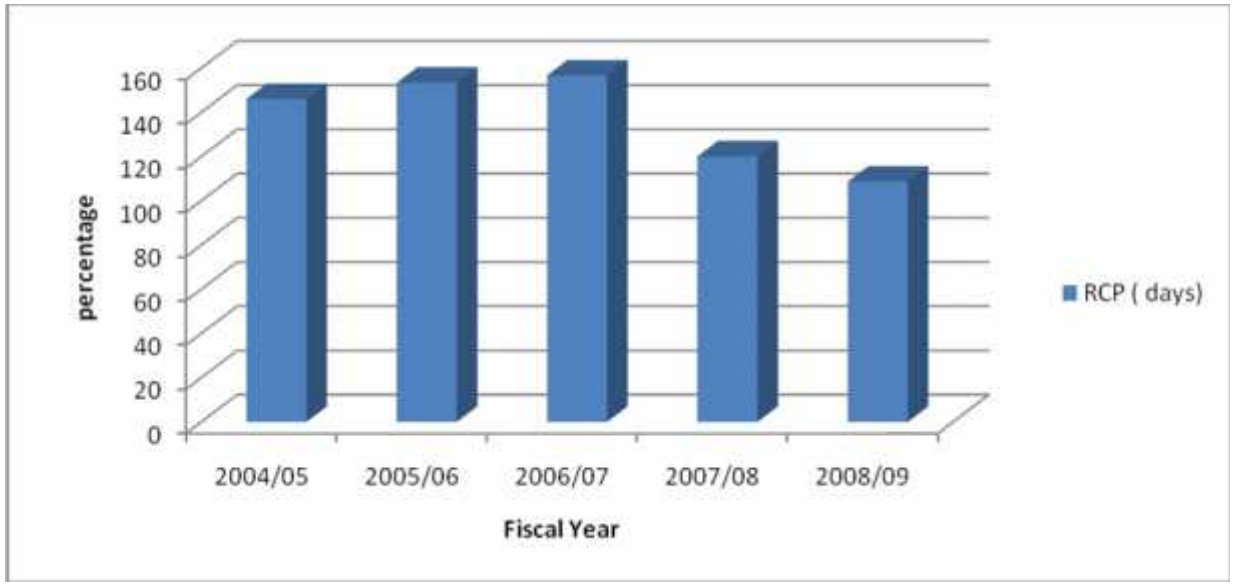


Figure 4.21 presents that the receivable conversion period was not consistent during the study period. The lowest conversion period was in the fiscal year 2008/09.

4.6.3 Payable Deferred Period (PDP)

Payable deferred period measures the period of payment terms to the trade creditor of the company. The long period indicated that the company has got long credit from its creditor and the short period indicates short credit period. It can be calculated as days in a year divided by creditor payable shown as table below.

Table 4.26

Payable Deferred Period (PDP)

Fiscal year	**Days in year**	**Creditor Payable**	**PDP (days)**
2004/05	365	11.66	31.30
2005/06	365	5.76	63.37
2006/07	365	8.09	45.12
2007/08	365	11.34	32.19
2008/09	365	12.91	28.27
Total		49.76	200.25
Mean		9.952	40.05
S.D.			13

C.V.	32.46%

Source: Appendix-21

Table 4.26 shows that the payable deferred period of the five fiscal year of MSI. The creditor payable was not consistent during the study period. The highest payable deferred period was 63.37 days in the fiscal year 2005/06 and the lowest payable deferred period was 28.27 days in the fiscal year 2008/09. The decreasing trend of PDP shows that MSI reduced its payment period from 31.30 to 28.27 days over the study period. The standard deviation and coefficient of variance with respect to payable deferred period are 13 days and 32.46 % respectively. This result shows that the the payable deferred period was not stable over the study period.

Figure 4.22

Payable Deferred Period (PDP)

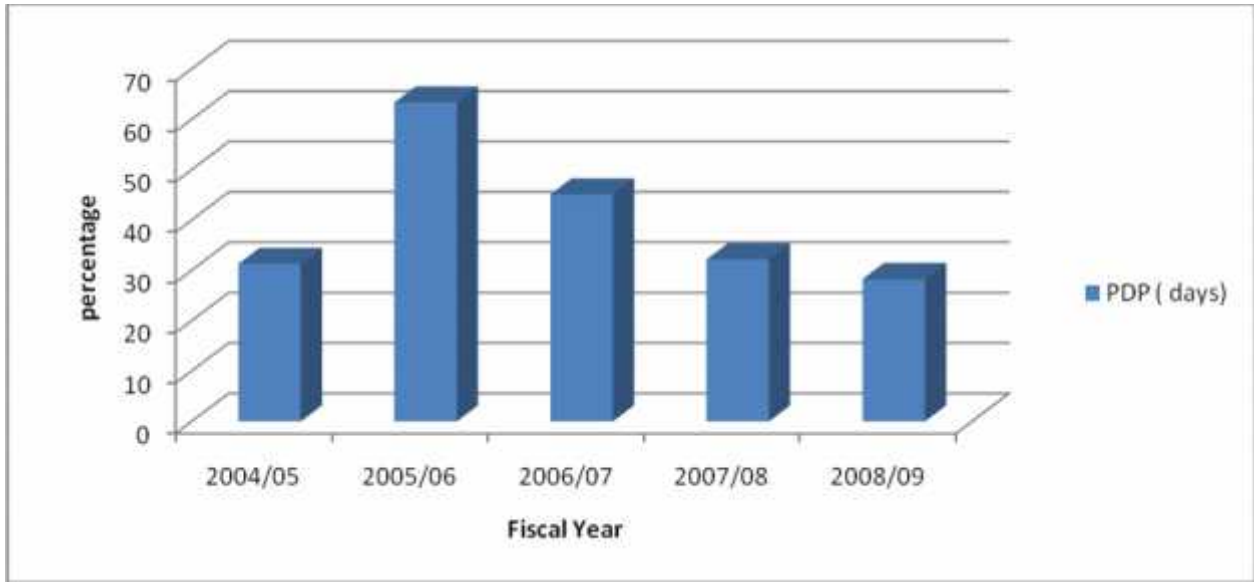


Figure 4.22 percents that the payable deferred period of MSI. It was not consistent during the study period. Lowest payable deferred period was in the fiscal year 2008/09.

4.6.4 Calculation of Cash Conversion Cycle (CCC)

It refers the cash inflow and outflow of the company. ICP and RCP are cash inflow and PDF is cash outflow. The CCC is calculated as summation of ICP and RCP and deduct of PDP. The long CCC indicates slow production and slow collection of debtor and taking short credit period and vice versa. The calculation of CCC is shown in the following table.

Table 4.27

Cash Conversion Cycle (CCC)

Fiscal Year	**CCC (days)**
2004/05	143.37
2005/06	131.83
2006/07	129.64
2007/08	101.06
2008/09	91.90
Total	597.81
Mean	119.56
S.D.	20
C.V.	16.73%

Source: Appendix-22, 23

Table 4.27 shows that the cash conversion cycle of MSI for the five fiscal year of the study period. The highest cash conversion cycle was 143.37 days in the fiscal year 2004/05 and the lowest CCC was 91.90 days in the fiscal year 2008/09. The decreasing trend of CCC of MSI shows that there was high speed of sales, high speed of collection and takes short period of credit. The standard deviation and coefficient of variance with respect to CCC are 20 days and 16.73 % respectively. This shows that the cash conversion cycle of the MSI was in decreasing trend over the study period.

Figure 4.23

Cash Conversion Cycle (CCC)

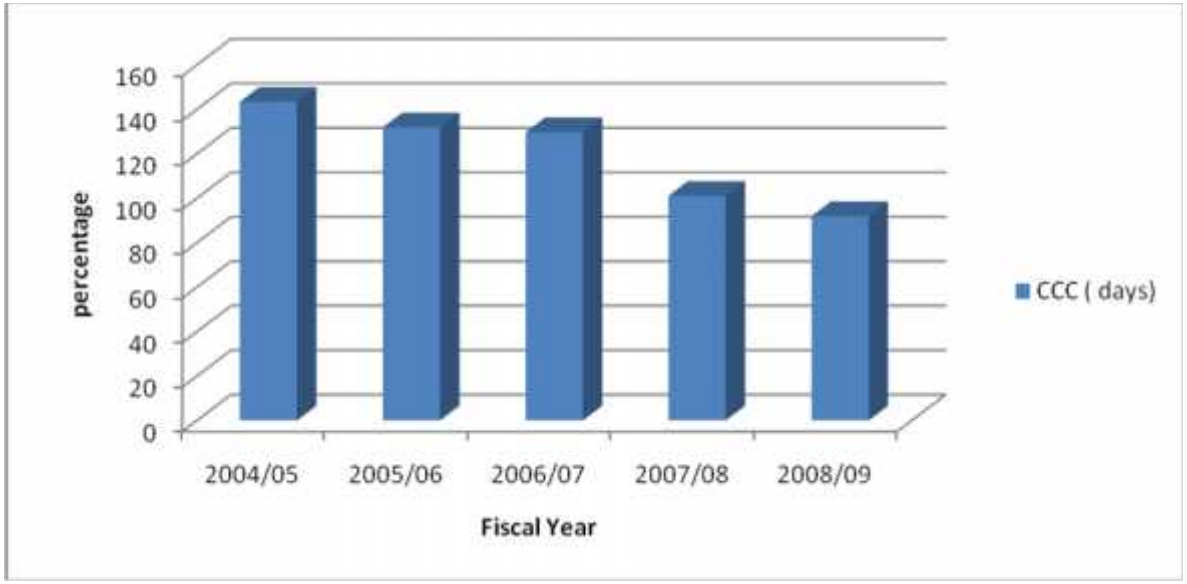


Figure 4.23 presents the cash conversion cycle for the five fiscal year of MSI. It was in decreasing trend during the study period.

4.7 Statistical Tools

The financial performance of an organization is directly related to their ability to manage working capital management efficiently and effectively. The use of financial tools has already given an adequate trust showing the analysis of various variables to determine the working capital management. But to make the analysis more rigorous and weighty certain statistical tools have been used to see the relationship between variables provide meaningful implication or not.

Following statistical tools are used to see the relationship between the variables.

1. Correlation Analysis

Correlation is measured as the relationship between one dependent variable and one independent variable. It is useful tools in many ways such as,

- To determine whether the relationship exists or not
- Whether the relationship is significant or not
- Establish cause and effect relation if any

To find out the relationship between current assets and total assets, sales and net profit, current assets and current liabilities, sales and debtors and sales and inventory following correlation are calculated.

i. Relationship between Current Assets and Current Liabilities

Table 4.28

Relationship between Current Assets and Current Liabilities

Correlation of coefficient (r)	Relationship	r^2	P.E. Ratio	6 PE	Significant
0.9846	Positive	0.9694	0.0104	0.0624	Significant

Source: Appendix-24

The correlation between current assets and current liabilities of MSI was 0.9846 that is positive relation between them because the value of r is greater than 0 (i.e. 0.9846>0). The table depicts that the coefficient of correlation value is more than 6 P.E. the relationship current assets and current liabilities is significant.

ii. Relationship between Sales and Net ProfitTable 4.29

Relationship between Sales and Net Profit

Correlation of coefficient (r)	Relationship	r^2	P.E. Ratio	6 PE	Significant
0.9899	Positive	0.9799	0.0069	0.0412	Significant

Source: Appendix-25

The correlation between sales and net profit of MSI was 0.9899 that is positive relation between them because the value of r is greater than 0 (i.e. 0.9899>0). The table depicts that the coefficient of correlation value is more than 6 P.E. the relationship sales and net profit is significant.

iii. Relationship between Total Assets and Current Assets

Table 4.30

Relationship between Total Assets and Current Assets

Correlation of coefficient (r)	Relationship	r^2	P.E. Ratio	6 PE	Significant/ Insignificant
0.9571	Positive	0.9160	0.0287	0.1722	Significant

Source: Appendix-26

The correlation total assets and current assets of MSI was 0.9571 that is positive relation between them because the value of r is greater than 0 (i.e. 0.9571>0). The table depicts that the coefficient of correlation value is more than 6 P.E. the relationship total assets and current assets is significant.

iv. Relationship between Sales and Debtors

Table 4.31

Relationship between Sales and Debtors

Correlation of coefficient (r)	Relationship	r^2	P.E. Ratio	6 PE	Significant/ Insignificant
0.7692	Positive	0.5917	0.1396	0.8376	Insignificant

Source: Appendix-27

The correlation sales and debtors of MSI was 0.7692 that is positive relation between them because the value of r is greater than 0 (i.e. 0.7692>0). The table depicts that the coefficient of correlation value is less than 6 P.E. the relationship total assets and current assets is insignificant.

v. Relationship between Sales and Inventory

Table 4.32

Relationship between Sales and Inventory

Correlation of coefficient (r)	Relationship	r^2	P.E. Ratio	6 PE	Significant
0.2161	Positive	0.0467	0.3259	1.9556	Insignificant

Source: Appendix-28

The correlation sales and inventory of MSI was 0.2161 that is positive relation between them because the value of r is greater than 0 (i.e. 0.2161>0). The table depicts that the coefficient of correlation value is less than 6 P.E. the relationship sales and inventory is insignificant.

4.8 Major Findings

i. Structure of Working Capital

This section has dealt with the structure or composition of working capital and approximate ratio of cash, inventory and receivables of MSI. The observation of the cash and bank to current assets ratio shows that the major portion of current assets is held by cash and bank in MSI since the average ratio of cash and bank to current assets is calculated as 53.00%. Since this ratio is too high, it can be stated that the company is facing situations of excess cash and bank balance held idle which is unfavorable for a company. Inventory is another element of working capital which is only stores and spare parts and held a nominal part of current assets since the average inventory turnover ratio is 22.04. This

indicates that there is no considerable amount tied up in inventory in MSI. Another important element is Account Receivables which represents sundry debtors plus interest accrued on investment. The volume of receivables is fluctuating over the study period.

ii. Efficiency of Working Capital Management

The efficiency of management of working capital is measured through the turnover ratios since the volume of sales in any business organization not only affects the size of working capital but also clearly reflects the efficiency with which assets are managed. The receivables turnover ratios are moderately fluctuating and vary from the lowest 2.34 times and the highest 3.35 times. Likewise, the cash turnover ratio has are moderately fluctuating and vary the lowest 0.51times to 0.89 times during the study period since the rate of increase in the sales volume is lower than that of cash& bank balance. In the three years, cash & bank balance are exceeding net sales by a significant amount. Hence the result is dissatisfactory. The average net working capital turnover is 0.488 times. Since the ratio has decreased from 0.58 times to 0.36 times during the study period, we can say that the company is not utilizing its net working capital effectively. The amount of working capital is exceeding net sales every year. Hence from the analysis, it is revealed that MSI has kept excess amount of working capital in comparison to sales which can be considered as the sign of efficient working capital management.

iii. Liquidity Position

Overall, the liquidity position of the firm has been found satisfactory. The current ratio varies from 5.01 times to 5.34 times with a throughout the study period which are however satisfactory compared to the conventional ideal ratio 2:1. Average ratio is 5.14 times and overall, it coincides with the conventionally accepted ratio 2:1. The average quick ratio is 5.042 times which were significantly higher than the standard

quick ratio 1:1. Hence it can be said that the company is holding more than enough cash balance or liquid assets to meet their current payment which indicates mismanagement of liquid assets since and optimum liquidity is the necessity of a firm. There is inverse relation between profitability and liquidity since there is negative correlation between liquidity and profitability.

vi. Profitability of Working Capital

Return on total assets is positive and not stable but it has highest 12.55 time to 6.88 times over the five year study period. Average return on total assets is 9.90%. The volume of net profit after tax has increased every year but the return on total assets has fluctuating each year, which signifies that the profitability is not sufficient with compared to the increment in investment in total assets. It clarifies the less effectiveness of utilization of total assets. Another ratio to measure profitability is return on net working capital. From the study, it is found that the return on working capital is continues increased except 2006/07, over the five years. The ratio varies from 13.35 to 27.35 %.From the study; it is found that MSI has been utilizing its working effectively since the return on working capital is in increasing trend. Both NPAT and investment are increasing every year and the earning power of capital employed is increasing as well.

4.9 Major findings of Statistical Analysis

1. The analysis shows that the correlation coefficient between current assets and current liabilities is fairly positive. There is significant relationship between current assets and current liabilities. There is low degree of positive correlation.

2. Correlation between sales and net profit is fairly positive. There is significant relationship between sales and net profit. It shows significantly low degree of positive correlation.

3. Similarly, correlation between total assets and current assets shows positive relationship between them. It shows that the relationship between total assets and current assets is significant. It shows the relatively moderate level of positive correlation.

4. In some way, correlation between sales and debtors is positive and the correlation coefficient shows the insignificant relationship because the 6 P.E is greater than the correlation value.

5. At last, the correlation between sales and inventory is positive. The correlation coefficient shows the insignificant relationship because the correlation value is less than 6 P.E. There is low degree of correlation in sale and inventory.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

As stated earlier, working capital management refers to the management of cash, receivables, inventory, and other factors of working capital. The main concern of this study was a very sensitive area of financial management i.e. working capital management of MSI. Likewise, as stated in the introduction section of this study, the specific objectives of this study are:

- To examine and critically analyze the working capital management of MSI.
- To examine liquidity position and profitability position of MSI.
- To assess the size and growth of working capital, and
- To recommend viable suggestions to cope up with working capital management shortcomings in MSI.

For the purpose of the study, the necessary data on working capital and other related variables were collected form secondary sources. The balance sheet and income statement for the period 20001/02 to 2008/09 was taken from annual report of MSI, 2007. Various important financial and statistical tools and techniques were applied to analyze the available data. After the tabulation of available data in a systematic manner, various important financial and statistical tools and techniques were applied in order to accomplish the objective of the study.

The size and structure of working capital is analyzed by comparing current assets and its components with different related variables. Activity and profitability ratios were calculated to evaluate the efficient of working capital. Liquidity position was assessed by calculating different

liquidity ratios like current ratio, quick ratio etc. the growth trend of working capital and its related variables were studied in trend analysis. An analysis of sources and used of fund was carried out in order to get better insight into the acquisition and application of fund. More than 50% of total assets were held in the form of current assets. The large portion of current assets was being unproductive by lying in absolute liquid from i.e. cash and bank since half of the current assets was in the form of cash and bank. More than one fifth of current assets were in the form of account receivables. Most of the components of working capital were found to be in increasing trend. The company collected fund mainly from its operation. A large portion of fund was kept in liquid form and some of them were used to purchase fixed assets and to pay long term loan.

Hence, an effort has been made in this chapter to present major findings of the study. Thereafter, in the same pattern, recommendations have been stated. Likewise, conclusions have been drawn at the end of the chapter.

5.2 Conclusion

Conclusively, it can be stated that the overall financial management of MSI is quite satisfactory during the study period since it has sound liquidity position and positive growing profitability. Most of the variables or working capital is in increasing trend and the company is operating with good profit. After a long analysis process, it is concluded that the overall financial management of MSI was quite satisfactory during the five years study period. There was sufficient amount of current assets to meet the current obligations of the company which obviously is a sign of good liquidity position. The company had invested its considerable amount in current assets by increasing the investment on every fiscal year. Relatively large amount of current assets was held to support given level of sales. The firm had sufficient amount of working capital. Beside this, the researcher has also indicated some critical aspects of working capital management and has supplemented precise suggestions and recommendation too. The company had more resources available to increase the sales volume as per the demand of the market. The largest portion of current assets was being unproductive by lying in absolute liquid from which is the

indication of inefficiency of management in using its assets in productive payment of current liabilities. A significant amount of receivables was tied up which resulted unnecessary amount held up of working capital. Likewise, a significant amount of current assets was covered by miscellaneous current assets. All the variables of working capital as well as volume of sales were in increasing trend and the company was operating with attractive profit. Being a public utility service provider, MSI larger volume of working capital, which indicates excess liquidity position. The company is facing serious problem on outstanding debt collection. So far as cash management and receivable management is concerned, the recommendations suggested above could, to a greater extent, uplift MSI cash and receivables management situations.

5.3 Recommendations

Following viable suggestions have been recommended to improve the efficiency of working capital management in MSI:

1. Maintain Optimum Current Assets Variables and Current Liabilities Every Year

Study showed that besides cash and bank, other variable of current assets and current liabilities also fluctuate moderately. Optimization of this variable is therefore recommended which would maintain a sound liquidity. MSI, being a service-oriented organization, does not need so higher liquidity position. Thus it is recommended to stabilize its current ratio near 2:1. It is better for MSI to invest such excess amount of current assets in fixed assets to increase its capacity rather than tying up large amount in current assets.

2. Determine Optimum Level of Cash Balance to Hold Every Year Applying Cash Management Techniques

The study also revealed that the large portion of current assets is being unproductive by lying in absolute liquid form in MSI. This indicates the inefficiency of management of cash. The major portion of current assets is held by cash. Therefore, it is recommended to determine the

optimum level of cash and bank balance to hold each year. It should invest its excess cash and cash equivalents in short term investments which would earn a return till the funds can be utilized in the firm.

3. Forecast Current Assets and Current Liabilities Variables with reference to change in Sales and Profit

One of the shortcomings of MSI is that the variables of current assets and current liabilities held under different headings are rather a haphazard guesswork, without any consideration on its impact on sales and profit of the organization. For instance, the current assets turnover ratio is in decline trend since the growth of net sales every year is very low in comparison to current assets which imply very low utilization of current assets. Hence, the suggestion is to plan current assets and current liabilities variables with respect to change in sales and profit.

4. Collected Debts in Time

The study revealed the fact that MSI fails to collect debt in time. Among the total receivables of MSI, the largest portion is held by sundry debtors which is nothing other than due amount on sale of service. Therefore, the recommendation is to collect debts in time to enhance liquidity position,

5. Use Extensively Financial and Statistical Tools as per required

Extensive knowledge and use of financial tools can enhance the situation of the organization. Likewise, use of statistical tools for forecasting purpose may be used wherever applicable.

6. **The Financial Experts should assess the Financial Performance Timely in Order to Evaluate the Financial Strengths and Weaknesses**

In order to maximize the sales and minimize the operating cost, long/mid planning and control system of account should be prepared and it can utilize its full installed capacity of fixed assets which also helps to improve the turnover position. It is recommended to carry out periodic research work on marked possibility, consumer's capacity, and service reliability.

7. **Maintain Optimum Level of Working Capital**

From the analysis, it is revealed that MSI has kept excess amount of working capital in comparison to sales since the amount of working capital is exceeding net sales every year. This cannot be considered as the sign of efficient working capital management. Hence it is recommended to MSI to maintain optimum level of working capital.

8. **Manage Optimum Liquidity in the Firm**

The study revealed that the MSI holding more enough liquid assets to meet their current payment which indicates mismanagement of liquid assets since an optimum liquidity is the necessity of a firm. There is inverse relation between profitability and liquidity since there is negative correlation between liquidity and profitability. Hence, it is recommended MSI to maintain optimum liquid assets.

Gurung, Om Bikram, **A Study on Working Capital Management of Nepal Lever Limited (NLL Ltd.)** (2005). An Unpublished Master Degree Thesis, Kathmandu, Shanker Dev Campus, T.U.

Kunwar, Naresh, **A study on Working Capital Management of Pharmaceutical Industry of Nepal with special reference to Royal Drugs Ltd.** (2007). An Unpublished Master Degree Thesis, Kathmandu, Patan Multiple Campus, T.U.

Lohani, Mukti Nath, **A Study on Working Capital Management of Nepal Lube Oil Ltd.** (2006). An Unpublished Master Degree Thesis, Kathmandu: Shanker Dev Campus,
T. U.

Marahatta, Sarita, ***A study on Working Capital Management of listed hotels in Nepal Stock Exchange,*** (2008). An Unpublished Master Degree Thesis, Kathmandu: Padma Kanya Campus, T.U.

Pandey, Bhupendra, **A study on Working Capital Management in Hotel Industry with reference to Hotel Radisson, Hotel Soaltee and Hotel Hyatt** (2007). An Unpublished Master Degree Thesis, Kathmandu: Patan Multiple Campus, T.U.

Shrestha Prem Kumar, **Working Capital Management of Bhirkuti Paper Mills Ltd** (2008). An Unpublished Master Degree Thesis, Kathmandu: Patan Multiple Campus, T.U.

Shrestha, Rojina, **A study on Working Capital Management with respect to National Trading Limited and Salt Trading Corporation Limited** (2007) . An Unpublished Master Degree Thesis, Kathmandu, Shanker Dev Campus, T.U.

Subedi, Dikpal**, A study on Working Capital Management of Manufacturing Companies Listed in NEPSE** (2006) . An Unpublished Master Degree Thesis, Kathmandu, Shanker Dev Campus, T.U.

Yadav, Sheela, **A study on Working Capital Management of listed Hotels in Nepal Stock Exchange (**2006) . An Unpublished Master Degree Thesis, Kathmandu, Patan Multiple Campus, T.U.

BIBLIOGRAPHY

Books

Brigham, Eugene F. and Houston, Joel F**., Fundamentals of Financial Management** (2001), New Delhi, Harcourt Asia Collage Publishers.

Gitman, Lawrence, **Principles of Managerial Finance** (1988), New York, Harper and Row Publishers Inc.

Gupta, S. C, **Statistical Methods** (1992), New Delhi, S. Chand Publishers.

Gupta, S.C, **Fundamentals of Statistics** (1992), New Delhi, Himalayan Publishing House.

Hampton, John J., **Financial Decision Making** (1986), New Delhi, Prentice Hall India.

Howard, Leslie R., **Working Capital : Its Management and Control** (1971), London, Mac Donald and Evans Ltd.

Jain S. P & Narang, K.L., **Financial Management Accounting** (1989), New Delhi, Kalyani Publishers.

Joshi, Shyam **, Economic Policy Analysis** (2001), Kathmandu, Taleju Prakashan.

Khan, M.Y. and Jain P.K., **Financial Management: Text and Problem** (1992), New Delhi, Tata McGraw Hill Publishing Company Ltd.

Khan , M.Y., and Jain, P.K. **Financial Management: Text and Problem** (1992), New Delhi, Tata McGraw Hill Publishing Company Ltd.

Kothari, C.R., **Quantitative Techniques and Analysis** (1994), New Delhi, Vikash Publishing House.

Kuchhal, S.C., **Financial Management: An Analytical and Conceptual Approach** (1988), Allahabad, Chaitanya Publishing House.

Pandey, I.M., **Financial Management** (1992), New Delhi, Vikash Publishing House Pvt. Ltd.

Pandey, I.M. **Financial Management** (1992), New Delhi, Vikash Publishing House Pvt. Ltd.

Pradhan, Radhe Shyam, **Management of Working Capital** (1986), New Delhi, National Book Organization.

Shrestha, Sunity & Silwal, Dhurba Pd., **Statistical Methods in Management** (2002), Kathmandu, Taleju Parkashan.

Singh, Hriday Bir, **Banking and Insurance** (2009), Kathmandu, Asia Publication.

Srivastava, R.M., **Financial Decision Making: Test Problem and Cases** (1991), New Delhi, Prentice Hall of India Pvt. Ltd.

Srivastava, R.M., **Financial Decision Making: Test Problem and Cases** (1984), New Delhi, Sterling Publishers Pvt. Ltd.

Van Horne, James C., **Financial Management & Policy** (1994), New Delhi, Prentice Hall of India.

Van Horne, James C., **Financial Management & Policy** (1994), New Delhi, Prentice Hall of India.

Weston J. Fred & Brigham F. Eugene, **Managerial Finance** (1991), Tokyo, Holf Sundass.

Weston J. Fred, Besley Scott & Brigham F. Eugene, **Essentials of Managerial Finance** (1996), The Dryden Press: Fort Worth.

Weston U. Fred & Copeland Thomas E., **Managerial Finance** (1992), New York, Dryden Press.

Wolf Howard K. & Pant Prem R., **Social Science and Thesis Writing** (1999), Kathmandu, Sewa Printing Press.