A STUDY ON
WORKING CAPITAL MANAGEMENT OF LISTED
MANUFACTURING COMPANIES

A Thesis

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RECOMMENDATION

This is to certify that Mr. Chet Raj Bhandari has completed this thesis entitled. **A Study on Working Capital Management of Listed Manufacturing Companies in Nepal** under my supervision.

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Date:_____   **Chetraj Bhandari**

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CHAPTER - V

SUMMARY OF MAJOR FINDINGS, RECOMMENDATION AND

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Abbreviation

ACP	=	Average Collection Period
AR	=	Annual Report
BN(B)	=	Bottlers Nepal (Balaju)
BN(T)	=	Bottler Nepal (Terai)
CA	=	Current Assets
CCC	=	Cash Conversion Cycle
CL	=	Current Liabilities
CR	=	Current Ratio
CTR	=	Cash Turnover Ratio
DTR	=	Debtors Turnover Ratio
FSLC	=	Financial Statistics of Listed Companies
FY	=	Fiscal Year
ICP	=	Inventory Conversion Period
ITR	=	Inventory Turnover Ratio
JSM	=	Jyoti Spinning Mills Limited
M	=	Million
MFG	=	Manufacturing
NLO	=	Nepal Lube Oil Limited
NPAT	=	Net Profit After Tax
NPM	=	Net Profit Margin
PDP	=	Payable Deferral Period
PE	=	Probable Error
QA	=	Quick Assets
QR	=	Quick Ratio
RCP	=	Receivable Conversion Period
SD	=	Standard Deviation
SP	=	Study Period
TA	=	Total Assets
ULN	=	Unilever Nepal
WC	=	Working Capital

CHAPTER - I
INTRODUCTION

1.1 General Background

In fact there is a huge amount of resources in Nepal but till now it is negligibility used and to reduce those some problems,(i.e. intensifying, political instability, low economic growth rate, unemployment etc.) the available resources should be used effectively. Nepal has mixed economy both private and public sector which are contributing for the development of country. There are manufacturing and non-manufacturing service organization in Nepal. Manufacturing organization playing important role to run and use resource.

Physical or chemical transformation of material or components into new products by power driven machines or hands is a manufacture . Manufacturer also may be public sector or private sector.

Those organizations which are entirely or mainly owned and controlled by government are known as public sector organization. And those organization which are owned and controlled by private sector are known as private sector organization.

It is an important factor for achieving the basic objective of a country's economic and social progress. Industrialization is not only provides good sand services but also creates employment opportunities. It facilitates an effective mobilization of resource of capital and skills which might otherwise remain unutilized. It also acts as a vehicle for fostering innovation and improvement. Industrial development, thus has a multiplier effect an economy (Pant, 2002). Industrialization is the process of manufacturing customers goods and capital goods and of creating social overhead capital in order to provide goods and services to both industrial and business (Jhingen, 2003).

Industrialization is the pre-requisite for economic development as the history of developed country now. For development the share of industrial sector

rise and that agriculture sector decline. This is only positive through out a policy deliberate industrialization (Jhingan, 2003). Industrialization plays a vital role in the process of economic development and it's importance is a means of achieving economic growth and prosperity with in the country. Hence industrialization is universally accepted as a strategy of economic development as well as fundamental goals (Pradhan, 1994).

It is believed that in order to achieve security, stability and high standard of living, the country must be industrialized. The most important for embarking a performance of industrialization is to increase the national income (Baryle, 1969). The industrial sector has failed to contribute enough to the national income and to provide sufficient employment to the labour force (Jhingan 2003). The manufacturing sectors have to face varian presets which have acted constraint in growth of manufacturing industries. Such problems are arise due to landlocked and underdeveloped situation of the country. Lack of trained and skilled manpower, financial resources, inconvenience in transportation and communication networks, not availability of assured energy at a reasonable rate, shortage of capital, small size of the market, unawareness of the industrial potential, higher cost of production, low productivity of inputs, instabilities in government policies etc. (Pradhan, 1984).

The pace of industrialization in Nepal is very low. It is completely new phenomenon. Biratnagar Jute Mill, 1936, marked up beginning of organized manufacturing industry in Nepal. By then Morang Cotton Mills, Raghupati Jute Mills and Juddha Match Factory were established in Biratnagar. On the period of second world war, the promoters of these industries could reap windfall profit with a very short period because of extreme shortage of essential customers goods in the world market. This made the attraction for establishment of new various industries. 63 industries were opened during the period of 10 years (Pant, 2002). After the end of second world war, the Biratnage Jute Mill and Juddha Match

Factory in Biratnagar continued operating successfully. Most of other modern industries either closed down or declined (Agrawal, 2002).

Nepal government is emphasizing the development of both private and public sector industries it its development plains. In every plane the word industrialization has been maintained too frequently. It is stated that private sector hasn't been able to come forward in industrial investment despite the several facilities provided by the government. The policy of government to encourage industrialization in the private sector including financial support with establishing financial institution, tax concession, establishing other infrastructure and so on. But there's also another view in this regard. It is mentioned that, that is not private sector which has not come forehard to stabilize industry, but it is the concerned authorities that didn't allow the private sector an appropriate type of clear policy and practicable programs, best in reality, would be realized. The development planer have felt that lake of industrial development strategy in Nepal has posed a curtail problem in designing an industrial programme which is not most causes has been more listing of projects in the companies development plane (Pradhan, 1984).

In Nepal industrialization is in its initial stage government of Nepal has not provide an suitable environment till now for industries to develop. It's government responsibility to provide suitable environment to the industries to do business without any hindrance. Economic liberalization and privatization, tax rabbits, developing infrastructure and other facilities is the main attraction for new establishment of industries.

1.2   Working Capital Management

Working capital management is the important aspect of the manufacturing companies. Among available opines, proper management of working capital as the best possible option to improve their operational viability. Working capital is the crucial aspect of financial management practice in manufacturing enterprises.

Thus, the success or failure of any business organization is heavily dependent upon efficiency in it's working capital management.

An organization needs not only the fixed capital but also the working capital. To run the day to day operations of business amount invested in the form of raw material, cash, semi-finished goods receivables, etc, put together is called working capital. There are two concept of working capital, gross concept and net concept. Net concept of working capital is the excess of current assets over current liabilities. Gross concept is total current assets. It is particularly useful for new companies in deciding the size of investment in each type of current assets. Inadequate investment in working capital threatens the solvency of the company. Excessive investment affects firms profitability as idle investment yield's nothing. With the increase or decrease in business activities, working capital needs also fluctuate from time to time.

Working capital is sometimes preferred to be called as circulating capital as it kept on circulating in the course of business operating. Business status with cash is converted into inventory after sometime. Inventory, may be inventory of raw material, semi finished goods and finished goods. The inventory is then converted into receivables and receivables into cash again. Thus the cycle become complete. This kinds of cycle keeps an operating in the business. The length of cycle become complete. This kind of cycle keeps on operating in the business. The length of cycle load differ depending upon the nature of business. The cycle would be short one for non manufacturing company to manufacturing form.

Every company has variable working capital and permanent working capital. Certain portion of working capital always remains permanent working capital. Cash receivable and inventory level in the business would never decline to zero. The working capital other than permanent is called variable working capital. It keeps on changing in course of business operation.

An organization needs to determine the size of working capital as accurately as possible neither under investment nor over investment in working

capital is preferred. A firm their fore should pay proper attention to determinants of working capital which differ form organization to organization. Some of the important determinants of working capital are nature and size of business, cost and time involved in manufacturing process, turnover of circulating capital, growth and expansion phase, change in business cycles, terms and conditions of sales and purchase, nature of dividend policy and so on. Coordination between production and distribution, development transport and communication systems etc could also an important role in determining investment I working capital.

Working capital is therefore the size of investment in each type of current assets e.g. cash, receivable and inventory. Decision regarding working capital affects the profitability of the firm, in short run but it affects the very survival in the long run. Faster the turnover of cash in to raw material, raw materials in to semi-finished goods. Semi finished goods in to finished goods, and finished good in to receivable and cash greater would be the efficiency of the firms.

1.3   Statement of the Problems

Nepalese manufacturing companies is using traditional approach in cash management, lacking in a scientific approach in working capital management, lacking in a scientific approach. A more serious aspects of working capital management has been the absence of any formalized system of planning and budgeting. Main objective in managing working capital should be trade of liquidity its profit. Cash conversion cycle of the companies has not found satisfactory. Thus the basic problem of the study is to examine the working capital management system as practices by manufacturing companies.

Working capital is essential for transaction motive to every business organizations. The company needs working capital primarily to pay its obligation. Secondly, the holding of cash to precautionary motive to meet any contingency in future, the holding of cash to speculative motive to a desire, a firm to take advantage of opportunities and lastly it is balanced for compensative motive.

Holding of cash has been found to be unplanned but generally for transaction motive. The strategy on collection and disbursement in Nepalese manufacturing companies has been found in adverse direction have not considerable liquidity position. They are not able to meet current obligation at a stated period of time.

These above observation indicated the poor working capital management in listed manufacturing companies. Thus the study attempts to have insights over the problem of working capital management in listed manufacturing companies. This study deals about one of the managerial task i.e. working capital management of a few listed manufacturing company of Nepal. So that the attempt has been made to identify the answer of following questions as a major problem.

❖ What are the practices used for managing working capital?
❖ What is the liquidity position of the company and are the companies able to maintain appropriate level of liquidity position?
❖ Whether the companies able to trade off liquidity profitability in order to increase profit?
❖ What is the relationship between and among influencing variable of working capital management?
❖ Whether the companies able to collect and to make payment at a considerable time span or not?

1.4   Objective of the Study

The general objective of the study is to examine the management of working capital in listed manufacturing companies. Basic objective of the study are as follows:

❖ To examine and critically analysis the working capital management practices in listed manufacturing companies.
❖ To evaluate the liquidity position of the companies.
❖ To analyze cash conversion cycle of the companies.
❖ To study the relationship of working capital with other influencing aspects of working capital management whether it is significant or not.

❖ To recommend viable suggestions to deal with working capital management on the basis of analysis.

1.5 Significance of Study

The study is significance to different person, groups and organization. It is significant to the management committee of listed manufacturing companies to know the effect of working capital management in their corporation's profit margin. This study is also significant for the students and future researcher who will research about the manufacturing companies. It is also beneficial for the stakeholders of selected companies to take information about the working capital condition of those companies. The study is also useful for the government to regulate manufacturing companies by taking information from their research study. It is also beneficial for different organization related to industrial and commercial sector. By the help of this study such organizations can maintain or improve their rules and regulations for effective business environment.

1.6 Limitation of the Study

The study is focused within the area of working capital management. The limitation of the study are as follows:

❖ The study will focuses only working capital management of five listed manufacturing companies.
❖ Only five years data has been used from 2002 to 2006.
❖ The study will base on secondary data. The result of all analysis will depend upon the B/S and P/L a/c and other reports of the companies. So that the reality of result may be actual or not.
❖ Only financial and statistical tools and techniques have been used for analyzing data.
❖ This study is concerned only limited variables of working capital management.

1.7 Organization of the Study

The whole study of the dissertation will categorize into following different chapter.

Chapter I - Introduction: This chapter includes background of the study, statement of the problems, objectives of the study, significance of the study and limitation of the study.

Chapter II - Review of Literature: This chapter will deal with review of various books, previous study, journal published and unpublished reports, articles and newspaper.

Chapter III - Research Methodology: This chapter deals with introduction research design nature and sources of data collection, data collection technique, data processing procedure and analyzing tools.

Chapter IV - Data Presentation and Analysis: The fourth chapter deals with presentation of related data collected from different sources then analysis them to reach closer to the actual result by using financial and statistical tools and techniques.

Chapter V - Summary, Conclusion and Recommendation: The last chapter provides the summary of major findings, recommendation and conclusion of overall study.

At last an extensive bibliography and appendices are also includes at the end of the part of thesis book.

CHAPTER - II
REVIEW OF LITERATURE

Review of Literature is an essential part of all studies. It is a way to discover what other research in the area of our problem has uncovered. Review of literature refers to the reviewing past studies in the concern subject matters that may be Text Books, Thesis/Dissertations, Articles, Journals, or any Sort publications concerning the organization and related topic.

2.1   Conceptual Framework

2.1.1 Definition of Working Capital Management

Working capital is the amount of funds necessary to cover the cost of operating the enterprises. Working capital is vital for every business organization. Working capital is derived from balance sheet of a company. Every company needs to manage the working capital in a proper way. Working capital is defined as all the short term assets used in daily operations. They consists primarily of cash, marketable securities, account receivable and inventories (John J. Hambton).

Working capital is to consider it as the difference between the book value of the current assets and current liabilities (Hogland). In equation the working capital can be shown as follows:

Working capital = current assets - current liabilities

Working capital may be positive or negative. If working capital is positive, companies financial position can be concluded fine. Working capital is important for the solvency, goodwill easy loan and smooth operation of business.

It is not so simple for the manager to determine the suitable current assts investment policy, maintain proper relation of current assets with fixed and total assets. The minor mistake on decision-making about working capital may be harmful to the organization and finally may create the situation of pushing the organization into liquidation. Therefore, to maintain the good balance of the

working capital, it should be neither excess nor less, just adequate to the need of the business firm. Adequate working capital brings security, confident and continued existence of the business. In other hand, excess investment could affect profitability and inadequate amount of working capital can threaten solvency of the firm (Pandey; 1999:808). So, many authors have compared the working capital as lifeblood and controlling nerve center. Without it, one cannot imagine the future life of any concern. It is said that good working capital management is a component of good financial management and will help to enhance financial performance.

2.1.2 Concept of the Working Capital

There are two concepts of working capital.

a)   Gross Working Capital

b)   Net Working Capital

a)   Gross Working Capital

The term gross working capital is regarded as the firm's total current assets. It focuses only the optimum investment in current assets and financing of current assets (Khan & Jain; 1999). It consists of cash, marketable securities, receivables and inventories. From the management viewpoint, gross working capital deals with the problems of managing individual current assets in the day-to-day operations (Kucchal; 1988). Current assets are the most powerful part of any organization. It can affect the profitability and can create the problem in daily operations. It also enables a firm to plan and control funds to maximize the return on investment (Kulkarni; 1990). This concept is also known as qualitative concept.

In broader sense, management of receivables, inventory, cash is also termed as management of working capital because receivables, inventory and cash are also part of working capital. So management of cash is a part of working capital management.

b)   Net Working Capital

Net working capital commonly defined as the difference between current assets and current liabilities. It focuses the liquidity position of the firm in long run. Net working capital can be positive or negative. Positive net working capital will arise when current assets exceed current liabilities and negative net working capital arises when current liabilities exceed current assets. Positive working capital helps to increase the profit but in reverse negative working capital may harmful to the company. So, net working capital can be more useful for the analysis of the trade-off between profitability and risk (Khan and Jain; 1999). The concept of net working capital is also the equally important in every organization. It enables a firm to determine how much amount is left for operational requirement (Kulkarni; 1990). Net working capital is not very useful for comparing the performance of different firms as a measure of liquidity, but it is quite useful for internal control. It is also known as quantitative concept.

2.1.3 Types of Working Capital Management

There are two types of working capital management.

1.   Permanent Working Capital

Permanent working capital is the minimum amount of current assets required throughout the year to conduct a business on a continuous and uninterrupted basis, even during the dullest season of the year. It will remain permanently in the business and will not be returned until the business is wound up (Khan and Jain; 1999). But it could vary from year to year depending upon the growth of the company and the stage of the business cycle in which it operates (Kulkarni; 1990). Business firm could not be able to survive itself in the competitive market without permanent working capital. For instance, every business enterprises has to maintain a minimum stock of raw materials, work-in progress, finished products, spare parts etc. It always required money for the payment of wages and salaries throughout the year (Kucchal; 1988).

2)   Temporary Working Capital

Temporary working capital is also known as variable, seasonal and fluctuate working capital. It represents the extra working capital, required at certain times during the operation year to meet some special exigency. It may required in seasonal changes of business and certain abnormal conditions like strikes, lockouts, dull market conditions, cut-throat competition etc. Therefore, the firm to meet liquidity requirements that will last only temporarily creates temporary working capital (Kucchal; 1988).

Figure 2.1
Temporary Working Capital

Source: Pandey, Financial Management, 8th edition
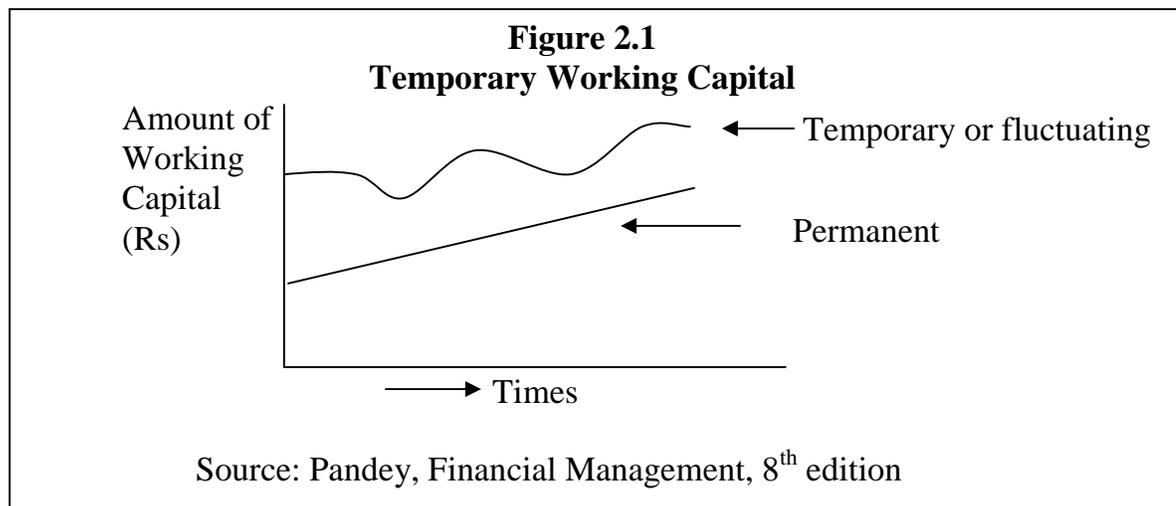
2.1.4 Working Capital Policy

Working capital policy refers to the firms' basic policies relating (1) the target level for each category of current assets and (2) how current assets will be financed (Weston and Brigham; 1987). There are basically two policies in working capital management to examine the above two issues.

1. Current Assets Investment Policy

2. Working Capital Financing Policy

1.   Current Assets Investment Policy

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried out to support the given level of sales. There

are three alternative current assets investment policies relaxed, moderate and restricted. Under each policy, a different amount of working capital is carried to support each level of sales (Weston and Brigham; 1987).

Figure 2.2
Alternative Current Assets Investment Policies

Source: Weston, Besley and Brigham, Essentials of
Managerial Finance; 1996:345
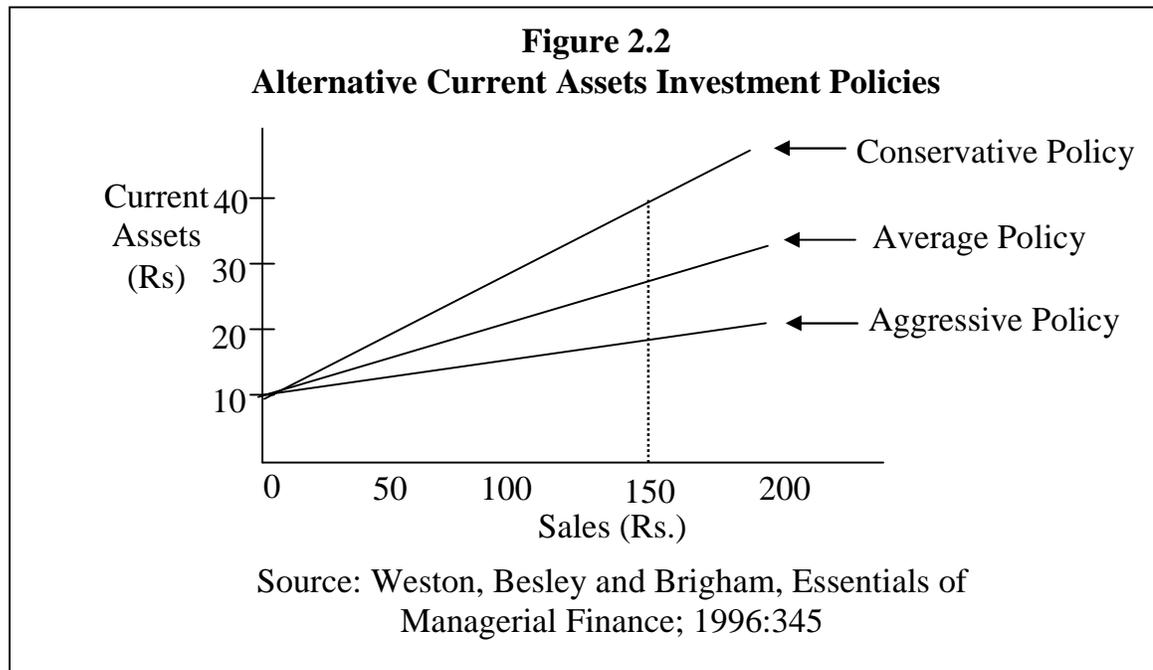
(i)   **Relaxed Current Assets Investment Policy**

In this policy, the firm holds relatively large amount of current assets i.e. cash, marketable securities, inventory and receivable to support the given level of sales. This policy creates the longer receivable collection period due to the liberal credit policy. It also used to create longer inventory and cash conversion cycles. So, the policy provides the lowest expected return on investment with lower risk to the customers.

(ii)   **Moderate Current Assets Investment Policy**

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

(iii)   In restricted policy, firm holds the minimum amount of cash, marketable securities, inventory and receivables to supports the given level of sales. This

policy tends to reduce cash conversion cycle, receivable conversion cycle and inventory conversion cycle. The policy follows a tight credit policy, under which, firm used to bear the great risk to losing sales.

2.   Working Capital Financing Policy

As current assets plays crucial role in any concern, it is must that working capital financing policy should clearly outline the different sources of financing in current assets. The manner in which the permanent and temporary current assets are financed constitutes the firms' working capital financing policy (Weston and Brigham; 1987). There are three working capital financing policies-maturity matching, aggressive and conservative.

(i)   Maturity Matching Policy

Under this policy, the firm uses long term financing to finance permanent current assets and short term financing to finance temporary variable current assets. This situation may not be realized due to the uncertainty about the expected lives of assets. Maturity matching policy lies in between the aggressive and conservative policies. There is neither high nor low level of current assets and current liabilities. So, there will be a low profitability in the company, while under this policy. Therefore, if the firm attempts to match assets and liability maturities, we call this a moderate (maturity matching or self-liquidating) working capital financing policy (Weston and Brigham; 1987).

Figure 2.3
Maturity Matching Policies
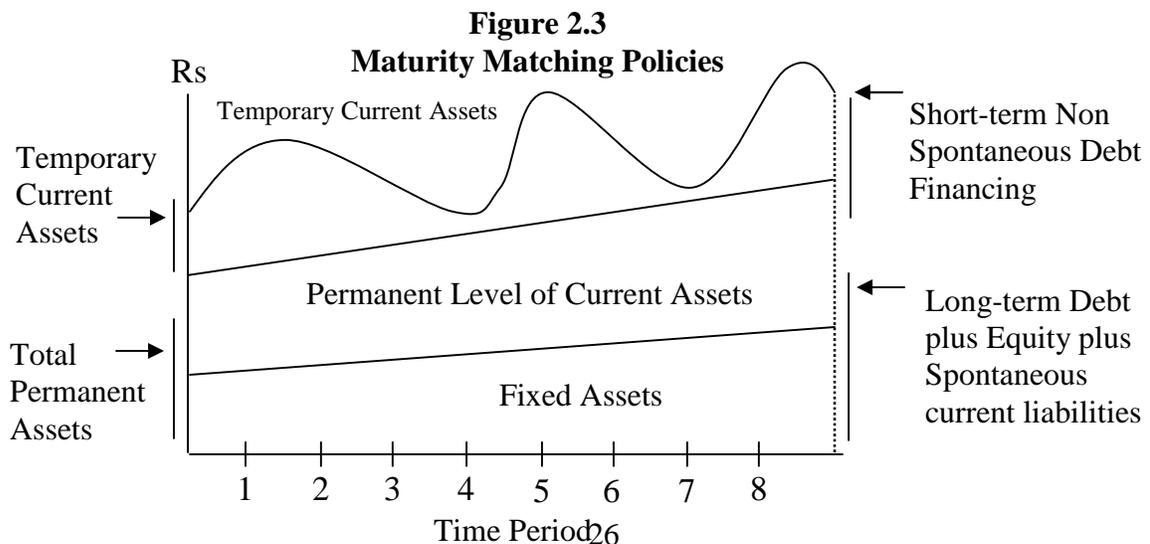
Source: Weston, Besley and Brigham, Essentials of Managerial Finance; 1996:347

(ii)   Aggressive Policy

Under this policy, the firm finances not only in temporary current assets but also finances in a part of the permanent current assets with short term financing and firm may even finance in a part of their fixed assets with long term financing. This policy relies heavily on short term financing, which makes the firm more risky. There will be complicated for the firm to raise the funds during the stringent credit period. Hence, there is higher risk, higher return and low liquidity position under this aggressive policy.

Figure 2.4
Maturity Matching Policies
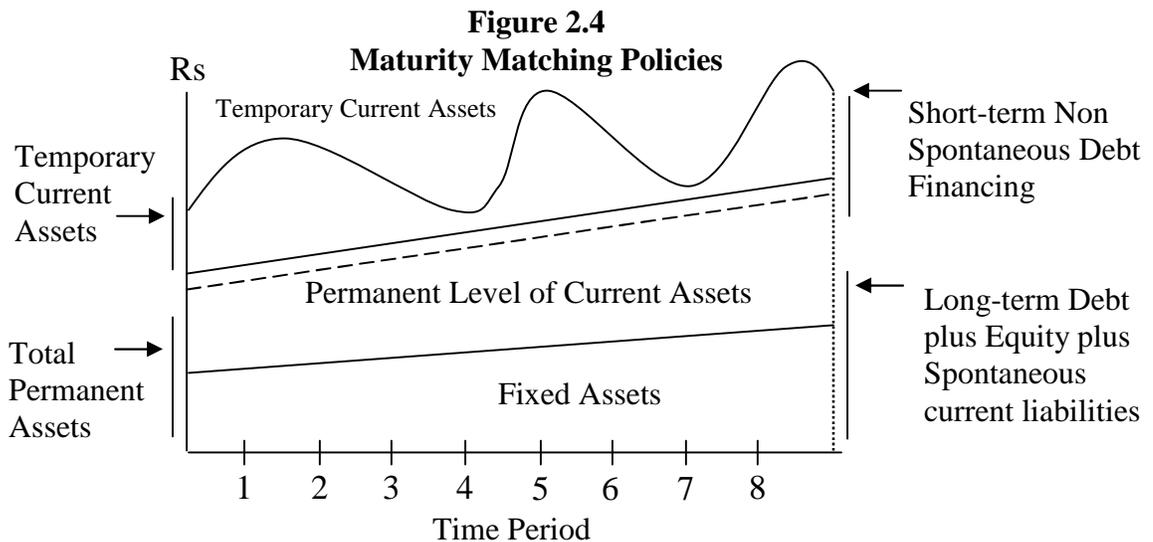
Source: Weston, Besley and Brigham, Essentials of Managerial Finance; 1996:347

(iii)   Conservative Policy

In the conservative policy, firm use long term financing to finance not only in permanent and fixed assets but also finances in a part of temporary current assets with long term financing. Conservative policy also meets some or all of the seasonal demands. It is comparatively less risky and earns lore return. So, this policy is also known as very safe financing policy.

Figure 2.5
Maturity Matching Policies
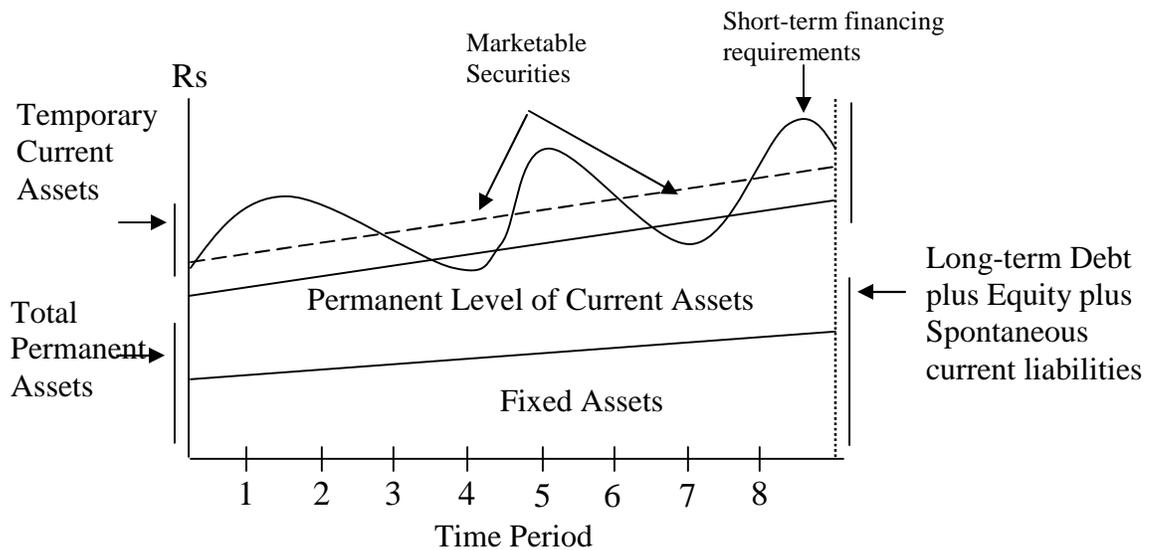
Source: Weston, Besley and Brigham, Essentials of Managerial Finance; 1996:347

2.1.5 Need for Working Capital

The need for working capital to run the day-to-day business activities cannot be overemphasized (Pandey; 1999). It helps to achieve entire goal of the business and maximize the wealth of shareholders. Business firm generally holds cash for these three purposes. They are as follows:

(i)   Transaction Motive

The transaction motive refers to the holding of cash to meet day-to-day routine cash requirement of the business. It helps business to run smoothly and uninterrupted basis.

(ii)   Precautionary Motive

The precautionary motive refers to the holding of cash to meet the random and unforeseen fluctuations in ash flow i.e. unpredictable changes in demand and supply, strikes, failure of important customer, unexpected slow down in collection of account receivable etc.

(iii)   Speculative Motive

The speculative motive refers to the desire of a firm to take advantages of opportunities, which present themselves at unexpected moment for example they

can make purchase at favorable or reduce price on payment of immediate cash, speculate on interest rate etc.

2.1.6 Financing of Working Capital

The most important function of financial manager is to determine the level of working capital and to decide how it is to e financed to meet the organizational goal. Financing of working capital is concerned with two major factors -cost and risk. Therefore, only appropriate financing of working capital may lead the business firm. Firm can adopt different financing policies among them mainly three are given below.

(i) Long Term Financing

The sources of long term financing refer to the ordinary share capital, preference share capital, debentures, and long-term debt from financial institutions and retained earnings. Long term financing will reduce the cost of business. In short, we can say that this long term financing has high liquidity and low profitability.

(ii) Short Term Financing

The sources of short term financing refer to the working capital funds from bank, public deposits, commercial papers etc. The short term financing is obtained for a period less than one year (Pandey; 1999).

(iii) Spontaneous Financing

Spontaneous financing refers to the automatic source of short-term funds arising in the normal course of a business (Pandey; 1999). The two major sources of spontaneous financing are trade credit and outstanding expenses. There is no explicit cost of spontaneous financing. Therefore, the financial manager always would like to finance its working capital with spontaneous sources because the real choice of current assets financing of the manager in reality, is in between short term or long-term sources of finance.

2.1.7 Determinants of Working Capital Requirement

Since, there are no set rules to determine the working capital; the firm itself should manage working capital in proper way by considering the need of business. The total working capital requirement is determined by a wide variety of factors (Khan and Jain; 1999). These factors, sometimes, could affect deferent enterprises differently and they used to vary from time to time. Generally, the following factors affect the working capital requirement of the firm.

(i)   Nature of Business

Working capital requirements of a firm are basically related to the nature of business. Trading and financial firms need large sum of money to be invested in working capital. Inversely, public utilities need limited working capital only for the use of cash sale and supply services. Working capital requires most of the manufacturing concerns to fall between the two extreme requirements of trading firm and public utilities (Pandey; 1999).

(ii)   Production Policies

Production policies are also the factor, which affects in determining the working capital requirement of any firm or organization. For instance, if a fir produces seasonal products, then it will be sold in certain month of the year and which will keep inventories at minimum level, this make working capital increases. In the same way, if the work of business done by automatic, the amount of working capital will be less and if the work of business done manually, the amount of working capital required will be more.

(iii)   Manufacturing Process

The requirement of working capital increases due to the length of their manufacturing process or production cycle in any concern and vice versa.

(iv)   Growths and Expansion of Business

Growth and expansion of business is also another factor, which affects to determine the requirement of working capital. If the firm grows, it has naturally more cost of working capital than those static ones and vice-versa.

(v)   Dividend Policy

Dividend policy also may be the factor affecting working capital requirements. The payment of dividend consumes cash balance, which decreases the working capital. Inversely, if firm does not pay dividend to the shareholders, working capital will be increased.

(vi)   Business Cycle Fluctuation

Naturally the recession period need more working capital than in the period of boom and recovery. So, business cycle fluctuation is another determinant of working capital requirement.

(vii) Credit Policy

If the firm follows liberal credit policy, it has to invest more in working capital. On the other hand, if firm follows the stringent credit policy, it has to invest only fewer amounts in working capital.

(viii) Price Level Change

Price level change is also affects the requirements of working capital. A firm requires maintaining the higher amounts of working capital if the price level rises because it needs more funds due to increase in price and vice versa.

2.1.8. Working Capital Cash Flow Cycle

The continuing flow from cash to supplier, to inventory, to account receivable and back into cash is known as working capital cash flow cycle / operating cycle. It continuously repeats. The cycle demonstrates the conversion of raw materials and labour to cash. Hence, this concept is also called cash conversion cycle model (Weston and Brigham; 1987). 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.

1. **Inventory Conversion Period (ICP)**

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

$$\text{Inventory Conversion Period} = \frac{360}{\text{Inventory Turnover}}$$

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

$$\text{Inventory Conversion Period} = \frac{\text{Inventory} \times \text{Days in Year}}{\text{Sales}}$$

2. **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 the 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. RCP is also known as average collection period or days sales outstanding (DSO). RCP can be calculated as follows:

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

$$\text{Receivable Conversion Period} = \frac{360}{\text{Receivable Turnover}}$$

3. **Payable Deferral Period (PDP)**

Time required to purchase raw material and labour and the payment of cash for them are called payable deferral period. It indicates the speed of creditors payable. A high payable conversion period is favorable for the company but too

much higher period also can hamper the credit worthiness of the company. The payable deferral period can be calculated using following formula.

$$\text{Payable Deferral Period} = \frac{\text{Payable} \times \text{days in Year}}{\text{Purchase}}$$

4.   Cash Conversion Cycle

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 firm has funds ties up in working capital. Cash Conversion Cycle can be calculated by using following formula:

Cash Conversion cycle = Inventory Conversion Period + Receivable Conversion Period - Payable Deferral Period

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

2.2   Review of Books and Journals

1.   Manohar K. Shrestha's Study

Shrestha (1983) had carried out his article on, "Working Capital Management in Public Enterprises: A Study on Financial Results and Constraints." In this article he had considered ten-selected PEs to measure their working capital needs in those PEs. He had mainly focus on the liquidity, turnover and profitability position of that PEs. In the analysis, he had focused that four PEs had maintained adequate liquidity position; two PEs had excessive liquidity position and rest four enterprises had failed to maintain desirable liquidity position. About turnover, two public enterprises (PES) had negative working capital turnover; four had sum to achieve satisfactory turnover of net working capital. He also found that six PEs are operating at losses and four of them are being able to achieve some

percentage of profit. After analyzing these constraints, he had bought certain policy issues. They are as follows:

- There is a lack of suitable financial planning for determining their working capital needs in PEs.
- The managers of PEs were being unable to give attention to working capital management.
- There exists no proper consistency between liquidity position and turnover of assets.
- PEs being unable to show positive relationship between turnover and return on net working capital.

He had made some suggestive measures to overcome from the above policy issues i.e. identification of needed funds, regular checks, 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.

2.   K. Acharya's Study

K. Acharya (1985) has published his article regarding "Problems and impediment in the management of working capital in Nepalese enterprises." It is said in the article that working capital management, especially in public sector, has been as relatively weak area. He has described operational problems and organizational problems as a two major problems faced by the Nepalese PEs regarding the working capital management. In the operational problem he has found the problems as follows:

Increase of current liabilities than current assets, not following the current ratio 2:1, slow inventory turnover in PEs, change in working capital in relation to fixed capital had very low impacts over the profitability, PEs have not followed the conventional proportion of debt and equity as 1:1, very thin transmutation of capital employed into sales, absent or apathetic information management system,

the performance evaluation tools and techniques like Break-Even analysis, Funds flow analysis, Ratio analysis etc were either undone or ineffective in most PEs, monitoring of the proper functioning of working capital management has never been considered a managerial job.

Secondly, in the organizational problems he has found the following listed problems. Lack of regular evaluation of financial results as well as regular internal and external audit system, most of PEs being unable to present their capital requirements with proper justifications, functioning of finance department was not satisfactory, some PEs are facing the problem of under utilization of capacity.

Acharya has made some suggestions and recommendations to overcome the problems and to make an efficient use of funds for minimizing the risk of loss to attain the profit objectives.

- PEs should keep their consumers alive to consumption of their commodity.
- PEs should take care of negatively affecting policies directives from HMG Nepal itself.
- PEs are also suggested to avoid the system of crisis decision, which prevailed frequently in their operations.
- PEs should avoid fictitious holding of assets immediately.
- Finance staff must be acquainted with the modern scientific tools used for the presentation and analysis of data.
- Lastly, he has suggested optimizing its level of investment because both of these situations will erode the efficiency of the concern.

3.   **Radhe Shayam Pradhan**

Radhe Shayam Pradhan (1986) has published a book on "Management of Working Capital", which generally includes short-term borrowing and investment by the selected manufacturing public enterprise (PEs) of Nepal. The research is based on the study of nine manufacturing public enterprises of Nepal for the duration of ten years from 1973 to 1982 A.D. The major objectives of the are to

examine the behaviour and management of working capital in manufacturing PEs of Nepal. He has also dealt with another issues viz. liquidity position, structure of working capital, nature of working capital, utilization and demand for working capital and its various components with changing value of sales in that PEs. The study used a variety of financial ratios to accomplish the objectives. His major findings are as follows:

- In this study, he reveals that most of selected PEs achieved a trade off between risk and return there by following neither an aggressive nr a conservative approach. Almost all the selected enterprises have a positive net working capital.

- The liquidity measures showed a poor liquidity position in majority of public enterprises. It has also been showed that the enterprises have either positive cash flow or negative EBT or they have excessive net current debt. The selected PEs have on an average, 1/2 of the total assets is in the form of current assets.

- The share of inventories is the largest followed by receivable and cash in most. Turnover ratio shows that there has been improvement in utilization in the majority of PEs.

- In this study, he has found out that cash followed by inventories. So the inclusion of capacity utilization I the models did not seem to have contributed much to thedemand function of working capital and its various components. Further more, the regression result also shows that the level of working capital and its components in enterprise desires to hold depend not only on sales but on holding cost too.

4.   Radhe Shyam Pradhan and Kundan Dutta Koirala's Study

Pradhan and Koirala (1983) had jointly published an article on "Some Reflection on Working Capital Management in Nepalese Corporations." The article basically aims to find out the difficulty, importance and problem of current

assets management and also aims to find out the motive for holding cash and inventory. The study uses only primary data to find out the basic constraints and distributed 200 questionnaires. For the purpose of the study, they use both manufacturing public corporations as a sample companies. After analyzing the collected data the major finding of the study were as follows:

- To provide a reserve for routine net outflows of cash is the major motive for holding cash in Nepalese corporations.
- The major reason for holding inventories is to facilitate smooth operationof production and sales.
- The major factor affecting the larger investment in receivable is found to be the liberal credit policy followed by Nepalese corporations. The late paying practice of customers is also responsible for larger investment in receivables. However, corporations are reluctant to take inefficient collection of trade credits as one of the major factors affecting receivables.

2.3   Review of Thesis

So far as the management of working capital in Nepalese manufacturing companies is concerned, different management experts have undertaken a number of studies. In this section, an attempt has been made to review a number of research studies haven been made by students of MBA / MBS relating to working capital management in different manufacturing companies of Nepal.

Arujn Lal Joshi's Study

Arjun Lal Joshi (1986) in his study seeks to have true in sight in to the working capital management of Biratnagar Juite mill. The study concerned with management of current assets and covers five year period (2036/37 to 2040/41). The study has embodied various financial ratios for measuring Biratnagar Jute Mills financial viability. This study based on secondary data and limited to gross concept of working capital.

This study is indicted mis-management of inventory no proper policy cash holding and heavy dependency short term bank credit. He has recommended for effective working capital management of mill by planning realistic turnover target specimen designing effective inventory management programme, following production investment approach preparing effective sales plane and exhaustive market research program using short term bank credit up to certain reasonable limit maintaining optimum cash balance and making proper utilization of accumulated collected debts.

Mr. Rajendra Giri's Study

Mr Rajendra Giri (1985) made his study on working capital management. A case study on Balaju Textile Industry Limited. He observed five years data from 036/37 to 2040/041 for the analysis of working capital.

He used ratio analysis as a tools for this analysis. He conclude that the low utilization of plant capacity and lake of effective management corporation push it to bear loss. He also found that there was no efficient and productive use of working capital. From his finding he recommended that the corporation should make regarded checks to identify both excess and deficit current assets. There should be need to finance current assts from the appropriate combination of short term and long term sources. It should strengthen it's production capacity with the help of sound incentive schemes to workers and preferable wages incentive plan.

Pradeep Kumar Pathak's Study

Pradeep Kumar Pathak (1992) carried out a study a study of working capital management of Nepal Lube oil the topic is 'An evaluation of working capital management of Nepal Lube Oil Ltd." He analyzed the working capital management of Nepal Lube Oil for five years (2043/44-2047/48). He has focused on the working capital management with respect to cash, received and inventory management and relationship between sales and different variable of working

capital. He has used ratio analysis, Karl-persons coefficient of correlation ® and t-test. Major findings of the study were high proportion of current assets, unfavorable liquidity position and very law level of cash. Inventories have occupied the major portion of current assets but share of finished goods stock is very low. Receivable has the second place in current assets and it is continuously growing. Finally the study conduced that this company had adopted the moderate financing policy.

Dhurba Nath Yosi's Study

Dhurbanath Yogi (1999) has carried out another study relating to working capital management the topic of his study is "A study on working capital management of Nepal Lever Ltd. He focused to analyze the liquidity cover positions of working capital utilization and Profitability position of Nepal Lever. The main objective of this study are:

1.   To analyze the current assets policy of Nepal Lever.
2.   To examine the relationship between liquidity and profitability of Nepal Lever.

He used the Ratio Analysis and correlation as financial and statistical tools. Major findings of this study are: All components of Nepal Lever are highly fluctuating during the study period (2051/52-20554/55). Different components of current liabilities are not related to each other. It means that Nepal Lever has not taken seriously about the source of financing. Its current liabilities are grater then current assets during the fiscal year (2051/52-2052-532, 2053-54-2054/55) It has used the long-term financing policy. Nepal Lever has negative net working capital in the first three years period. Current ratio of Nepal Lever is less then one firm and other findings of this study is Nepal lever takes high risk. But correlation coefficient between various liquidity ratio and net profit margin in general is not significant. This implies that there is not trade of between liquidity and

profitability. It is recommended that Nepal Lever should fixed the financing policy and the volume of sales should be increased and the proportion of CAs should be maintained according to it's sales volume. The huge amount of inventory and receivable kept by Nepal Lever should be reduced or the optimal level should be adjusted according to sales and production then for management should improve its marketing policy and should be integrated with credit policy.

Raghu Krishna Shrestha's Study

An study is conducted by Raghu Krishna Shrestha. "An evolution of working capital management of Bottler's Nepal Ltd". He focused his study on the appropriateness of investment in current assets to it's total assets, liquidity position management of working capital needs and utilization of current assets in BNL. From the study we found that proportion of CA's to the assets was increasing years after year and the proportion of inventories was highest followed by receivable and cash respectively. He also found the liquidity position of BNL was very high resoling low profitability and concluded that efficiency of working capital management in BNL was poor. For those problems he suggested paying proper attain to measuring investment in CAS with better utilization rather then increasing further investment. He suggested adopting suitable credit policy and proving discount to accelerate its debt collection period. He also recommended to set minimum target rate of return to minimize the gape of achievement.

Yam Prasad Sharma's Study:

Yam Prasad Sharma (1996) has carried out a study on the topic, "A study on working capital management of selected manufacturing companies". He has elected sixteen companies which are listed in Nepal stock exchange (1981-1996). He focused to analyzed the empirical testing of the variable affecting in Nepalese manufacturing companies based on these variable such as, current assets, current liabilities, sales, net profit, total assets. He used financial and statistical tools such

as: Ratio analysis, cash conversion cycle, coefficient of correlation, probable error and simple regression model. He found that many companies followed conservative policy. He recommended that they followed the quarterly working capital plan some may improve their liquidity position and must minimize the operating cost.

Basudev Giri's Study

Basudev Giri (1996) has carried out a study "working capital managements of Birgunj sugar factory Ltd". He has analyzed the financial statement of the factory for nine years i.e. 2041/42-050-51.He used ratio analysis as a main tool for analyzing working capital management. The objective of the study is to present overall picture of BSFC to analyze the networking capital of BSFL and relationship between current assets and current liabilities, to find out the effect of working capital on profitability and other operation.

During study he found that as a manufacturing public enterprise Birgunj sugar factory Ltd. has followed an approach which is neither aggressive nor conservative, In BSFL inventories, debtors receivable and cash and bank balance hold the largest portion of current assets. The amount of current assets with respect to total assets was in fluctuating trend during the study period.

Inventory is the major component of current assets of the factory and its balances during the study period indicates it has inefficient management in the factory. As regards to the receivables, it is fluctuating years after year. The decreasing and fluctuating trend of various turnover indicate the current assets are not properly utilized in the factory.

The profitability position of BSFL has been analyzed from various angles. The net profit in regards to total assets is not quite satisfactory. The large volume of idles cash balance has contributed for the lower return on working capital.

The above mentioned study in the context of Nepalese manufacturing companies were done in the last decades in respect to working capital

management. Many changes have taken place in and out side of Nepal after 1990 A.D. Therefore Nepal also have followed the policy of liberalization, privatization and globalization. Many more companies have also come up to after 1990. Therefore, it is necessary for brining out a fresh study in working capital management of manufacturing companies whether the findings of above studies are still valid or not. This research study is based on different variables and tools using newly data. The research focused only the working capital of selected companies. No one has analyzed in this way. We use more variable such as cash conversion cycle, receivable conversion cycle, correlation coefficient, regression analysis etc.

CHAPTER - THREE
RESEARCH METHODOLOGY

3.1   Introduction

Research methodology means the methods with which data have been extracted and discussed the tools that have been used in interpretation of such data to fulfill the objectives. More specially, research methodology describes about the research design, the population and the sample, nature and sources of data and tools that will be used to analyze the data.

3.2   Research Design

Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The research study attempts to analyze the working capital management techniques adopted by the manufacturing companies in Nepal. Hence, analytical and descriptive research is applied.

Descriptive research is a fact finding operation searching for adequate information. It is a type of study, which is generally conducted to assess the opinions, behaviours, or characteristics of a given population and to describe the situation and events occurring at present.

Analytical approach is followed to parametric and non parametric test of data. It is the process of micro-analysis and appraisal to the data.

3.3   Population and Sample

There are 25 manufacturing companies which are listed in Nepal Stock Exchange which produces different kinds of goods. Out of the listed companies only five companies are selected as a sample for the study. These companies are

selected because these companies are running in the profit then other companies which are listed in Nepal Stock Exchange. These companies are as below:

1. Unilever Nepal Limited
2. Nepal Lube Oil Ltd.
3. Bottlers Nepal (Terai) Ltd.
4. Bottlers Nepal (Balaju)
5. Jyoti Spinning Mills

3.4   Nature and Sources of Data

The data collected are all secondary. Financial statements such as: balance sheet, profit & loss account, statements of approved budget with expenses of the companies are major source of data.

Main sources of information collections are as follows:

− Annual reports of related companies and security board of Nepal.
− Financial statistics of listed manufacturing companies, published by security board of Nepal.
− Journals, Government and Non-government publication other supportive books and mostly websites of the companies.
− Other related published and unpublished documents.

3.5   Methods of Data Analysis

Financial and statistical tools are used for the analysis of data which is already stated in the limitation of the study. The procedures of analyzing data are described as follows.

3.5.1 Financial Tools for Analysis

The focus of financial analysis is on key figures in the financial statements and the significant relationship that exist between them. The analysis of financial statements is a process o evaluating the relation is between component parts o

financial statements to obtain a better understanding the firm's position and performance. Financial analysis is the process of selection, relation and evaluation.

3.5.1.1   Ration Analysis

3.5.1.1.1.   Liquidity Ratio

Current Ratio

This is the ratio of current assets and current liabilities. This ratio examines the liquidity position of the company. It examines the position of the company as to its holding of current assets against its current liabilities. Higher ratio indicates satisfactory position and vice versa. However, too high ratio is indication of poor cash management indicating high inventory and poor credit management.

The ideal current ratio is 2:1 however for a public enterprise, the ratio tends to be little lower than 2:1, as these enterprises generally require very little current assets. But nevertheless any company should maintain this ratio above 1:1, since ratio lower than this definitely indicates poor liquidity position.

$$\text{Current ratio} = \frac{CurrentAssets}{CurrentLiabilities}$$

Quick Ratio or Acid-Test Ratio

This ratio is also examined the liquidity position of an organization. This ratio is superior than current ratio, for it excludes inventory (which is the least liquid current asset) from the net current assets and compare it with current liabilities. Comparing this ratio with current ratio gives a clearer idea as to if current assets have been tied up in inventory or not. Though current ratio of firm is satisfactory, on the other hand, if Quick ratio is not convincing, the situation suggest currents asset being tied-up in unsaleable inventory. The ideal quick ratio is 1:1

$$\text{Quick Ratio} = \frac{QuickAssets}{CurrentLiabilities}$$

Where,

Quick assets: Current Assets - Inventory

3.5.1.1.2 Turn Over Ratio

Cash Turn-over Ratio

Cash turnover ratio measures the speed with cash move through an company's operation. Cash turnover ratio explains how quickly the cash is received from the sales. Cash turn over ratio is obtained by the following formula.

$$\text{Cash Turnover Ratio} = \frac{Sales}{Cash \text{ in hand} + \text{Bank Balance}}$$

Inventory Turnover Ratio

Analysis of inventory (stock) Turnover Ratio gives idea on how quickly the least liquid, current asset, i.e. inventory is converted into sales. This is yet another method of studying liquidity position of the firm. Following is the formula for calculation of Inventory Turnover Ratio.

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

Debtors/Receivables Turnover Ratio

Receivables turnover ratio shows how quickly receivables or debtors are converted into cash. In other words, the receivables turnover ratio is the test of liquidity of debtors of a firm. It is computed by

$$\text{Receivable Turnover Ratio} = \frac{Sales}{\text{Re}\,ceivable}$$

Average Collection Period/Receivable Collection Period

Symbolically, it is given below.

$$\text{Receivable Collection Period} = \frac{\text{Days in a year}}{\text{Receivable Turnover in time}}$$

The higher turnover ratio and shorter the receivable collection period, the better is trade credit management and the better is the liquidity of the debtors as short collection period and high turnover ratio imply prompt payment on the part of debtors. On the other hand, low turnover ratio and long collection period reflect delayed payment by debtors. In general, therefore, short collection period is preferable.

3.5.1.1.3 Cash and Bank Balance to Other Aspects

Cash & Bank Balance to Current Liabilities

It calculates the cash balance available with the firm in meeting payment of current liabilities. Moderately higher ratio indicates good liquidity. Too high and too low ratio are unfavourable for the firm since too high indicates excess cash balance held idle too low ratio means the firm unable to meet current liabilities. Symbolically,

$$\text{Cash to Current Liabilities} = \frac{\text{Cash} + \text{Bank Balance}}{\text{Current Liabilities}}$$

Cash and Bank Balance to A/C payable

$$\text{Cash to A/C payable} = \frac{Cash + \text{Bank Balance}}{\text{A/C Payment}}$$

Cash and Bank Balance to Total Assets

It indicates the position of cash with relation to total assets. It measures ratio of productive assets with unproductive assets moderately high is the best. Too much high measures the idle cash which is loosing opportunity income and vice versa.

3.5.1.2 Cash Conversion Cycle

It measures the length of time between when the company makes payment and it receive cash. Lower the conversion cycle is preferable.

Mathematically,

Cash Conversion Cycle =   Inventory   Conversion   Period   +   Receivable

Collection Period - Payable Deferral Period

Payable deferral period is calculated by,

$$\frac{\text{A/C Payable}}{\text{Cost of Good Sold}} \times \text{days in year}$$

Higher the payable deferral period is preferred but credit rating of the companies towards suppliers must be maintained.

3.5.2 Statistical Tools

3.5.2.1 Correlation with Variable (s)

Correlation describes the degree to which one variable is linearly related to another. Cause is not identified by the study of correlation but it explains the relationship between two or more variables.

Symbolically,

$$\text{Correlation (r)} = \frac{\sum uv}{\sum u^2 \cdot \sum v^2}$$

Where,

r = Karl Pearson's Coefficient of Correlation between x and y.

u = X - $\overline{X}$

v = Y - $\overline{Y}$

X and Y are variables.

$$\text{Probable Error} = 0.6745 \times \frac{1 - r^2}{\sqrt{N}}$$

Where,

N = No. of period, the sample is taken out.

r^2 = Coefficient of determination

If 'r' is less than probable error, there is no evidence of correlation, i.e. the value of 'r' is not at all significant.

If the value of 'r' is more than six time of probable error from the coefficient of correlation we get respectively the upper and lower limits within which coefficient of correlation in the population can be expected to lie.

Symbolically,

$$... = r \pm PE$$

Where $...$ = Correlation in the population.

3.5.2.2 Standard Deviation

The standard deviation measures the absolute variability of a distribution. The greater the amount of dispersion or variability, greater the standard deviation, for the greater will be magnitude of deviation of the value from the mean. A small standard deviation means a high degree of uniformity of the observation homogeneously of a series.

Symbolically,

$$\text{Standard Deviation} = \sqrt{\frac{\sum u^2}{N}} \, or \sqrt{\frac{\sum v^2}{N}}$$

3.5.2.3 Regression Analysis and Regression Line

In regression analysis the nature of relationship between two variables is established and the unknown variable is established on the basis of other known variable. Thus the regression analysis is the statistical method for determining the nature of relationship that exists among two are more variables and then using that relationship between the two variables, the value is the more accurate. The unknown variable is called dependent variable and the known variable is called independent variable.

Symbolically,

Regression line of 'x' variable (x) on 'y' variable (y) in given by

$$X - \overline{X} = r \frac{\dagger x}{\dagger y} (Y - \overline{Y})$$

Where,

$\overline{X}$ = Mean of 'x' variable

$\overline{Y}$ = Mean of 'y' variable

$\dagger x$ = Standard deviation of 'x' variable

$\dagger y$ = Standard deviation of 'y' variable

We can say, $r \dfrac{\dagger x}{\dagger y}$ regression coefficient of 'x' and 'y'. It measures the

change in 'x' corresponding to a unit change in 'y'.

3.5.2.4 Multiple Regression Analysis

It is a statistical technique for investigating the relationship between one dependent variable and a set of two or more independent variables. The multiple regression analysis represents the extension of two-variable regression analysis. IT is definitely superior to simple regression analysis as it is more close to reality. The multiple regression equation in symbol is,

$$y = a + b_1 x_1 + b_2 x_2$$

Where,

y = dependent variable

x_1 & x_2 = independent variable

a = value of 'y' when x_1 & $x_2 = 0$

b_1 = partial regression coefficient of y_1 on x_1 when x_2 is constant (amount
   of change in y, per unit change in x_1, holding x_2 constant)

Coefficient of Multiple Determination for Multiple Regression

Symbolically,

$$R y.x_1.x_2 = \frac{a \sum y + b_1 \sum yx_1 + b_2 \sum yx_2 - Ny^{-2}}{\sum y^2 - Ny^{-2}}$$

The calculated value indicates that two independent variables x_1 & x_2 explain the total variation in dependent variable 'y'. If we want to the accuracy of estimate still further, we may add more independent variable in regression model. Table 4.5

BN (B) has highest C.V. of 104.10% it implies that the cash to total assets ratio of BN(B) is more fluctuated during study period. ULN has lowest C.V. of 42%, it means that the ratio of this company is less fluctuated. NLO, BN(T) and JSM has C.V. of 43.10%, 49.00% and 53.30% that means the cash to total assts ratio of these companies more fluctuated because it is far away from industrial C.V.

Observing the C.V. of different period 2005-06 has highest C.V. of 255.70%, that means the cash to total assets turnover is more fluctuated during this period. Lowest C.V. of 98.10% at 2001-02 that means the cash to total assets turnover ratio is less fluctuated during this period because it is less then average C.V.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

This chapter is the main part of the study. The aforesaid objectives, in this chapter the collected data have been analyzed using financial and statistical tools. The basic objective of this study as stated in chapter one is to have true insight into working capital management on listed Nepalese manufacturing companies.

To fulfill the study the working capital management practices in listed manufacturing companies, the necessary information and data were collected through audited financial statements and annual reports of the companies.

4.1   Analysis of Cash and Bank Balance

Every successful business organization keeps optimum level of cash. Total cash balance refers to the cash in hand, cash at bank and cash in transit.

In this section, the researcher has tried to find out the level of cash in Nepalese manufacturing companies. Below is the table which presents the level of cash in sampled manufacturing companies, and the average, during the study period.

Table No. 4.1

Level of Cash and Bank Balance in Selected Manufacturing Companies

(in million)

Name of Company	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
Nepal Lube Oil	1.32	2.30	.70	2.91	3.18	2.08	1.05	50.50
Unilever Nepal	62.33	317.40	391.53	413.31	242.67	285.45	141.63	49.60
Bottlers Nepal (B)	29.46	5.34	13.76	1.92	35.93	17.68	14.89	84.20
Bottlers Nepal (T)	46.02	22.17	49.48	14.26	21.47	30.68	15.94	52.00
Jyoti Spinning Mills	9.30	2.07	9.13	5.29	3.54	5.87	3.26	55.50
Average	29.69	69.86	92.92	87.54	61.36	68.27	22.4	32.90
S.D.	25.26	138.63	167.97	16.49	102.28			
C.V.	85.10	198.40	180.80	18.80	166.70			

Source: (A.R of company and FSLC)

Average cash balance held by Nepalese manufacturing companies (selected) has been observed to be 29.69 M in 2001-02, 69.86 M in 2002-03, 92.92 M in 2003-04, 87.54 M in 2004-05 and 61.36 M in 2005-06. The cash balance of the companies varied widely in all year of study period. The holding of cash position was highest for Unilever Nepal (ULN) in 2001-02 (62.33M) and lowest in Nepal Lube Oil (NLO) in same period by 1.32 M. Similarly it was highest in ULN (317.4 M) and lowest for JSM (2.07 M) in 2002-03. However, 2003-04, the cash balance was highest for ULN by (391.53 M) and lowest for NLO by (.70 M). Likewise, it was highest for ULN (413.31 M) and lowest for BN (T) (1.92 M) and in 2005-06 it was again highest for ULN (242.67 M) and lowest for NLO (3.18 M).

Above table presents that, the average cash balance of individual companies over the study period were 2.08 M for NLO, 285.45 M for ULN, 17.68 M for BN (B), 30.68 M for BN (T) and 5.87 M for JSM, whereas overall industry average during the period of study was 68.27 M. It was presented highest for ULN (285.45 M) and then the lowest was presented for NLO (2.08 M).

Individual company's cash balance has been observed in a wide variation in different period of study. The cash balance was highest in 2005-06 (3.18 M) and lowest ion 2003-04 (.7 M) for NLO. Likewise, it was highest in 2004-05 (413.31 M) and lowest in 2001-02 (62.33 M). Similarly it was highest in 2003-04 (49.48 M) and lowest in 2004-05 (14.26 M) for BN (T) and for BN (B) it was highest in 2005-06 (35.93) and lowest in 2004-05 (1.92 M). And it was highest in 2001-02 (9.30 M) and lowest in 2002-03 (2.07 M) for JSM.

Unilever Nepal and Bottlers Nepal (Terai) have shown the upper level of cash balance in the majority of study period. Nepal Lube oil and Jyoti spinning Mills have shown the lower level of cash balance in the majority of study period.

Observing the C.V. of different companies BN(B) has highest C.V. of 84.20%. It means that the cash and bank balance of BN(B) is fluctuating more during the study period. VLN has lowest C.V. of 49.60%, that means the cash and

bank balance of ULN is less fluctuating. NLO, BN(T) and JSM has C.V. of 50.50%, 52.20%, 55.50%. The C.V. of this company is more the industrial C.V. That means the cash and bank balance of these companies is fluctuating more during the study period.

4.1.1 Analysis of Change in Cash Balance in Listed Companies

Table No. 4.2

Cash Balance of Manufacturing Companies during the Period of Study

Year	Cash Balance (in million)	Change
2001-02	29.69	-
2002-03	69.86	135.30%
2003-04	92.92	33.01%
2004-05	87.54	-6.15%
2005-06	61.36	-29.91%

Source: Table 4.1 (Taking previous year as a base)

Above table shows the increasing and decreasing trend of average cash balance of selected manufacturing companies during the study period. The holding of cash at first has been seen in increasing trend by 135.30% in 2002-03 and by 33.01% in 2003-04. It has been seen in decreasing by trend by 6.15% in 2004-05. Likewise, it has been seen in decreasing trend by 29.91% in 2005-06.

Table No. 4.3

Cash Balance of Individual Companies in Overall Period of Study

NOC	Cash (Average) (In million)	% Deviation with overall average
NLO	2.08	-96.95%
ULN	285.45	318.12%
BN (B)	17.68	-74.10%
BN (T)	30.68	-55.06%
JSM	5.87	-91.40%

Average		

Source: Table 4.1

Above table shows the deviation of cash balances in individual companies over the study period. Unilever Nepal has shown highest positive deviation i.e. 318.12% and Nepal Lube Oil has shown the highest negative deviation i.e. 96.95% which was compared by overall industry average i.e. 68.27 M.

The observation explains that Unilever Nepal have contributed for increment of overall cash balance for companies in study period.

4.1.2 Graphical Presentation of Cash Balance in Manufacturing Companies

Figure No. 4.1

Bar Diagram for Cash Balance of Manufacturing Company's during Study Period

Chart showing Amount in Million by Year:
- 2001-02: approximately 31
- 2002-03: approximately 71
- 2003-04: approximately 94
- 20041-05: approximately 89
- 2005-06: approximately 63

Y-axis: Amount in Million (0 to 100)
X-axis: Year
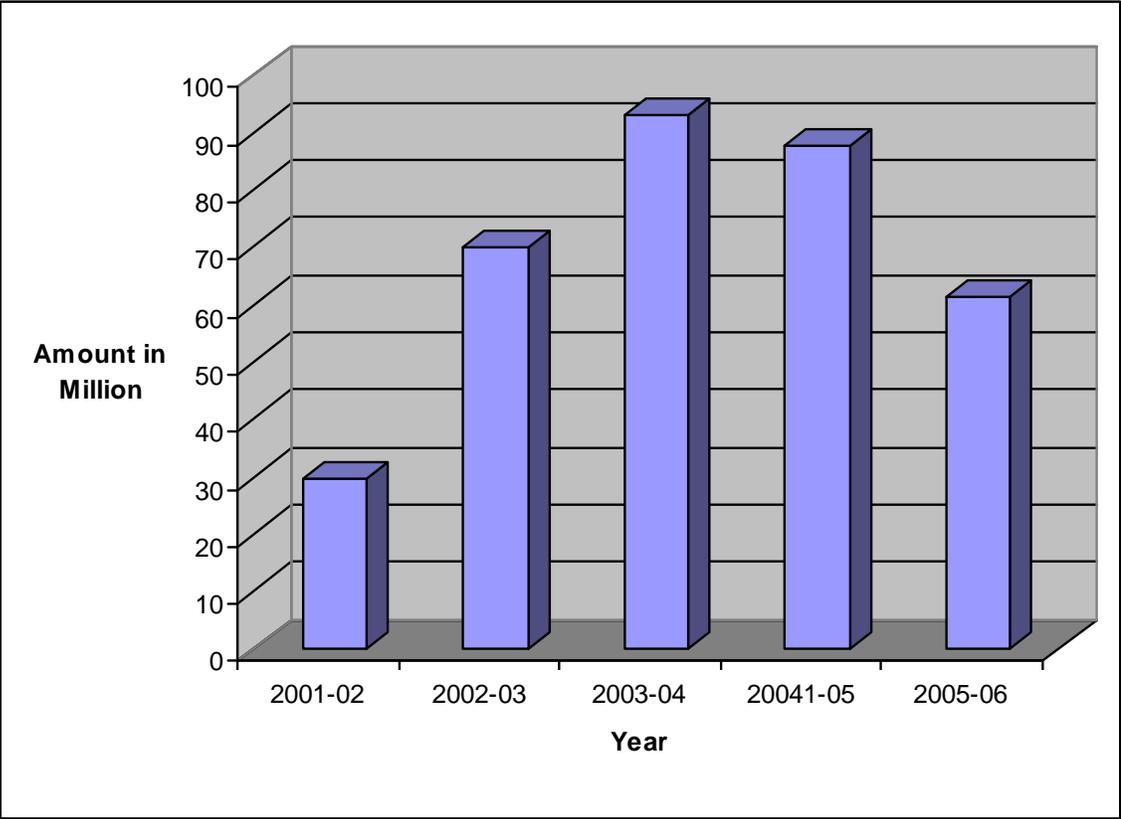
Bar Diagram for Cash Balance of Individual Companies Over the Period
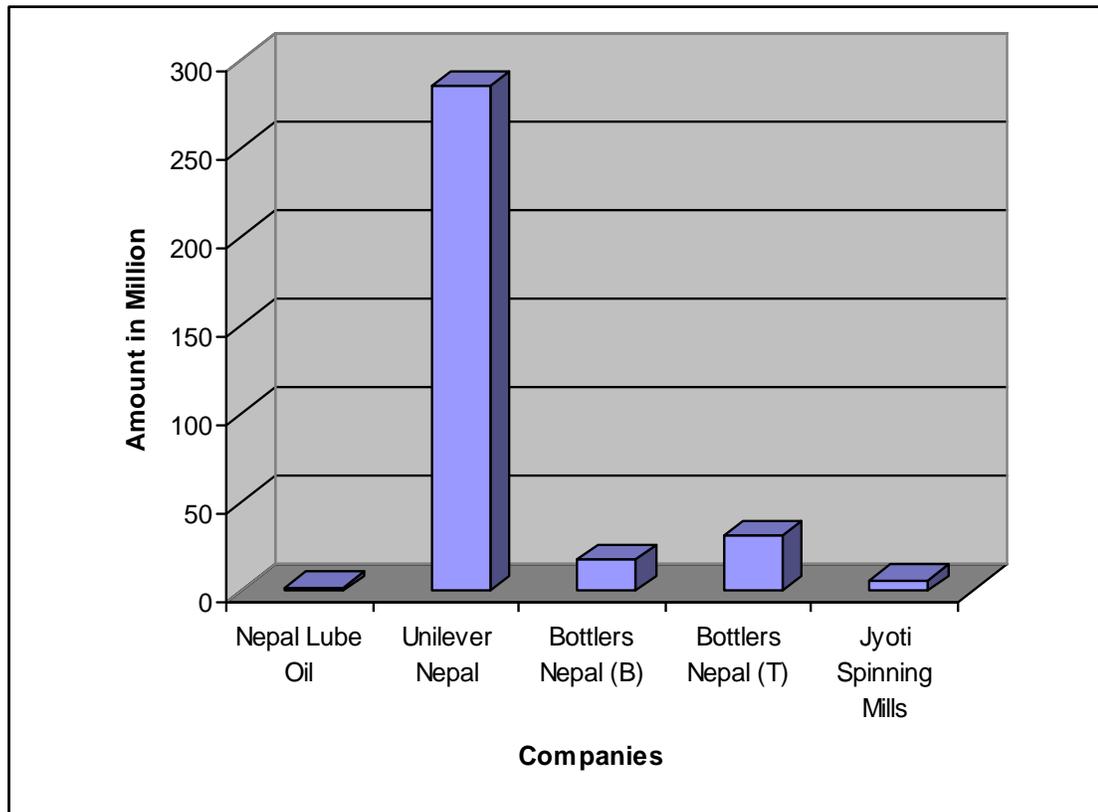
The strong position of cash has been observed in year 2003-04 and weak position has been observed in year 2001-02.

Similarly ULN has the strongest position of cash and NLO has a lowest position of cash in overall study period. Whole of these figures has shown that the manufacturing companies (selected) has not adopted any definite policy of cash management while in some year it has negligible cash balance, in other years it has excessive maintenance of cash balance. Moreover the companies have not planned cash inflow and outflow forecasts. It is a important for the companies to keep careful watch over the cash management to determine how cash throw-offs become available and also to investigate the opportunities for the use of cash.

4.2 Cash and Sales

4.2.1 Analysis of Cash Turnover Ratio

Every business organization should keep optimum level of cash to meet its current obligation in course of daily business transaction. The cash turnover ratio explains how quickly cash is received from the sales; in other words, it measures the speed with which cash more through an enterprise's operation higher ratio represents sound liquidity and vice-versa. However, too high ratio indicates excess cash balance being held idle.

Table No. 4.4

Cash Turnover Ratio of Selected Manufacturing Companies

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	103.03	51.80	121.01	40.69	46.78	72.66	36.70	50.50
ULN	19.83	3.92	3.89	3.58	6.06	7.46	6.98	93.60
BN (B)	18.18	114.17	45.93	320.18	17.31	103.15	127.57	123.70
BN (T)	10.03	19.64	8.73	28.14	16.49	16.61	7.87	47.40
JSM	69.54	350.26	78.75	161.69	206.46	173.34	114.30	65.90
Average	44.12	107.96	51.66	110.86	58.62	74.64	32.16	43.10
S.D.	40.44	141.89	49.25	131.98	84.02	67.89		
C.V.	91.70	131.40	95.30	119.10	143.30	91.00		

Source: Cash and Sales, from AR and FSLC.

There is a high fluctuations in cash turnover ratio of manufacturing companies. The fluctuation of cash turnover ratio is the indication of no definite policy on holding cash balance in relation to sales volume, is applied by listed manufacturing companies of Nepal. The average cash turnover ratio of Nepalese manufacturing companies have been observed to be 44.12 in 2001-02, 107.96 M in 2002-03, 51.66 in 2003-04, 110.86 in 2004-05 and 58.62 in 2005-06, where as the overall industry average over the study period was 74.64. Cash turnover ratio varied widely across the companies in all the year of study period. The ratio was

highest for NLO (103.03) and lowest for ULN (3.92) in 2002-03, highest for NLO (121.01) and lowest for ULN (3.89 M) in 2003-04, highest for BN (B) (320.18) and lowest for ULN (3.58) in 2004-05, and the highest for JSM (206.46) and lowest for ULN (6.06) in 2005-06.

Above table shows that same company's cash turnover ratio, in different period has been observed in fluctuated trend. The average cash turnover ratio of individual company over the period has been observed by 72.66 M for NLO, 7.46 for ULN, 103.15 for BN (B), 16.61 for BN (T), 17.34 for JSM and overall industry average was 74.64 M. The highest observation was 121.01 in 2003-04 and lowest was 40.69 in 2004-05 for NLO, highest was 19.83 in 2001-02 and lowest was 3.58 in 2004-05 for ULN, highest was 320.18 in 2004-05 and lowest was 17.31 in 2005-06 for BN (B) highest was 28.14 in 2004-05 and lowest 8.73 in 2003-04 for BN (T) and the highest was 350.26 in 2002-03 and lowest was 69.54 in 2001-02 for JSM.

As a fact the higher turnover ratio of cash indicates the sound liquidity position of the company and vice-versa. But too much ratio indicates the excess cash balance being held idle. The fluctuating of this ratio interprets that the cash management practices of the companies has not done by any definite policy and any planned approach.

Observing the C.V. of manufactory companies BN(B) has highest C.V. of 123.70% that means the cash turnover of BN(B) is more fluctuated. BN(T) has lowest C.V. of 41.40% which is near about industrial C.V., It means that the turnover of this company is less fluctuated then others, NLO, ULN and JSM has C.V. of 50.50%, 93.60% and 65.90% respectively. It means that the cash turnover of these companies is fluctuated during this study period.

Observing the C.V. of different period. Period 2005-06 has highest C.V. of 143.30% which is more the average C.V. It means that the turnover ratio during this period is fluctuated more. The lowest C.V. at 2001-02 of 91.70% it means that the cash turnover of this period is less fluctuated during this period.

4.2.2 Analysis the relation between Cash (x) and Sales (y)

To analyze the relationship between cash (x) and sales (y), Karl Pearson's correlation coefficient has been determined. The Karl Pearson's correlation coefficient (r) helps to identify the degree of relationship between and among variables. The calculated correlation between 'x' and 'y' has been observed to be 0.853. Generally, it indicates the highly positive relationship between cash and sales. To make confirm, whether it is real or not for overall listed manufacturing companies in Nepal, it is compared with probable error and 6 x PE. r = .853 >PE = 0.822 < r = 0.853 > 6PE = .4930 indicates that the correlation coefficient is practically certain i.e. the value of r is highly significant. It is said that it is sure that of increment of one many increase in other.

The regression equation of cash (y) as sales (x) has been obtained to be y = .57x - 303.19. The regression coefficient, .57, interprets that 1 million changes in x may occur changes in y to be .57 million which is significant relationship of cash on sales. Similarly, the regression equation of sales (x) on cash (y) has been derived to be x = 1.27 y + 566.70. The regression coefficient, 1.27, explain there occurs 1.27 M change in sales if cash is changed by 1 million in same direction. It also shows there is a significant relationship between cash and sales. (for detail calculation see Appendix 'J')

4.3 Analysis of cash to Total Assets Ratio

Investment in money assets differs not only from the industry to another but it also varies from one company to another with in the same company thus making cash management task is more difficult. The cash management is of great significant in the form of cash by Nepalese manufacturing companies is not negligible.

Table No. : 4.5

Cash to Total Assets Ratio in Manufacturing Companies (In Percentage)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	1.18	1.60	0.61	2.29	1.98	1.53	0.66	43.10
ULN	10.91	40.44	41.66	37.61	25.09	31.14	13.08	42.00
BN (B)	2.84	0.51	1.55	0.20	5.78	2.18	2.27	104.10
BN (T)	6.69	3.33	8.64	2.30	5.13	5.22	2.56	49.00
JSM	1.18	0.27	1.20	0.71	0.49	0.77	0.41	53.30
Average	4.56	9.23	10.73	8.62	7.69	8.17	2.3	28.20
S.D.	4.20	17.49	17.60	16.23	19.97	10.69		
C.V.	92.10	189.50	164.00	188.30	259.70	130.90		

Source : Cash and TA from AR and FSCL.

The average investment in cash by Nepalese manufacturing companies has been observed to be 4.56% in 2001-02, 9.23% in 2002-03, 10.73% in 2003-04, 8.62% in 2004-05 and 7.69% in 2005-06, whereas overall industrial average cash to total assets ratio was 8.17 percent.

The ratio of cash to total assets varied widely across the manufacturing companies in all year of study period. The ratio was highest for ULN (10.91%) and lowest for JSM and NLO (1.18%) in 2001-02, highest for ULN (40.44%) and lowest for JSM (.27%) in 2002-03, highest for ULN (41.66%) and lowest for NLO (.61%) in 2003-04, highest for ULN (37.61%) and lowest for BN (B) (.20%) in 2004-05 and highest for ULN (25.09%) and lowest for JSM (.49%) in 2005-06.

According to above table individual company's cash to total assets ratio ha been observed in widely fluctuation trend in different study period. The highest ratio was 2.29 percent in 2004-05 and lowest was (.61%) in 2003-04 for NLO, highest was 41.66% in 2003-04 and lowest was 10.91% in 2001-02 for ULN, highest was 5.78% in 2005-06 and lowest was .20% in 2004-05 for BN (B),

highest was 8.64% in 2003-04 and lowest was 2.30% in 2004-05 for BN (T) and highest was 1.20% in 2003-04 and lowest was .27% in 2002-03 for JSM.

The average cash to total assets ratio of the individual companies over the study period has been observed by 1.53% for NLO, 31.14% for ULN, 2.18% for BN (B), 5.22% for BN (T) and .77% for JSM. Whereas overall industry average cash to total assets ratio was 8.17%.

Since about (4-6) percent of total assets to be invested in the form of cash, cash management is a great significant. The strong variation in cash to total assets ratio explains that the companies have not been adopted specific policy for investment of cash in total assets. The cash management practices are not of great significant in Nepalese manufacturing companies.

Observing the C.V. of different companies BM (B) has highest C.V. of 104.10% it means that the investment of BN(B) is more fluctuated during the study period and lowest of ULN has 42%. Which means its yearly cash investment is less fluctuated than others. Other companies like NLO, B N (T) JSM has C.V. of 43.10%, 49.00% and 53.30% respectively. All companies has high CV in comparison with overall industrial C.V. so. The investment of companies is fluctuated more during the study period.

Among the different period the highest C.V. of 259.70% at 2005-06 that means the cash investment of different companies is more fluctuated during this period of time and lowest C.V. of 92.10% at 2001-02 it means that the investment of different companies during this period is not so fluctuated.

4.3.1 Graphical Presentation of Cash to Total Assets Ratio

Figure No. 4.3

Cash to Total Assets Ratio of the Manufacturing Companies during Study Period
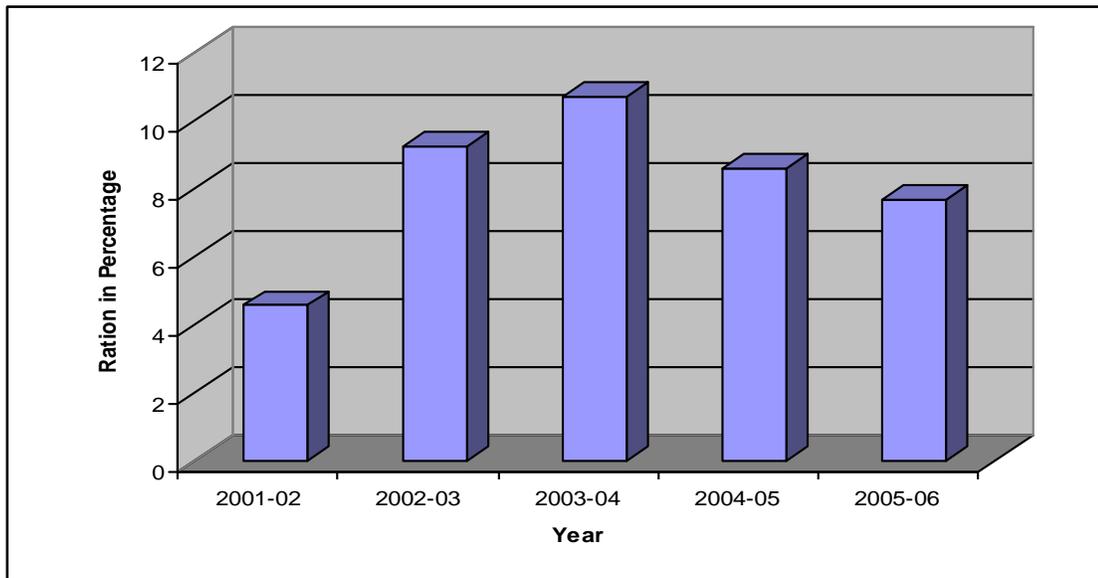
Figure No. 4.4

Cash to Total Assets Ratio of Individual Companies Over the Study Period
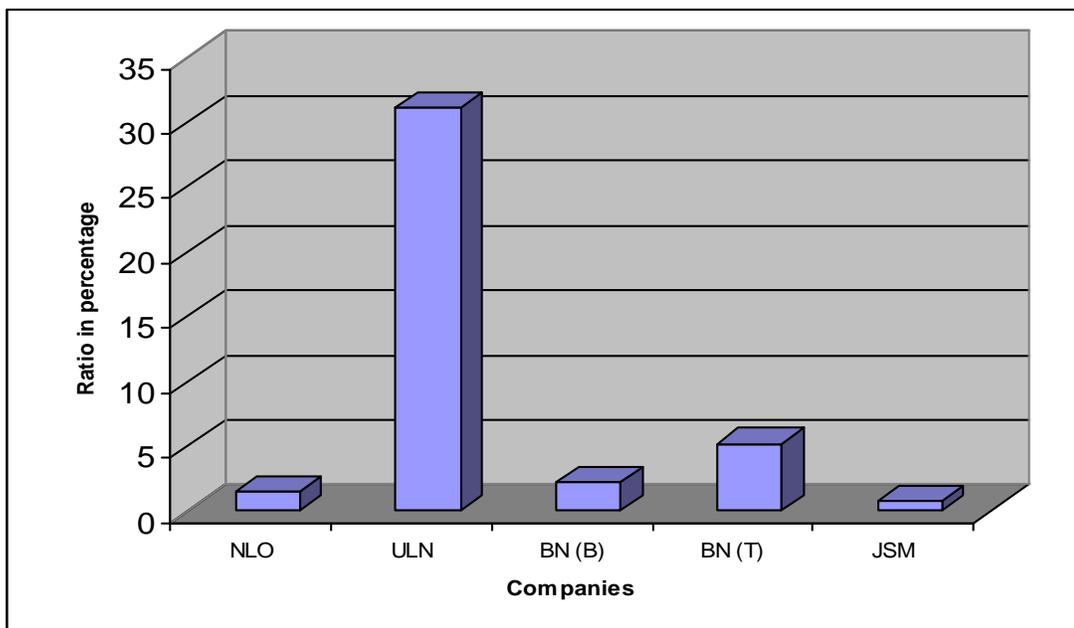
4.4 Cash and Bank Balance and Current Assets

4.4.1 Analysis of Cash and Bank Balance to Current Assets Ratio

Cash is essential for every business organization. Cash is the most liquid asset and as such more the amount of cash balance in a company, more liquid the company in meeting the current obligation. However, having a excess cash signifies cash balance being held idle without any motive. The stable pattern of cash and current assets ratio for different year indicate that the company has been following systematic policy regarding how much cash balance to hold at the end of fiscal year.

Table No. 4.6

Cash to Current Assets Ratio of Selected Manufacturing Companies (in %)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	1.37	2.45	0.73	2.64	2.19	1.88	0.80	42.60
ULN	15.62	53.81	54.06	46.37	32.72	40.52	16.39	40.50
BN (B)	5.82	0.98	3.07	0.35	8.24	3.69	3.32	90.00
BN (T)	8.20	4.38	11.17	2.98	9.54	7.25	3.47	47.90
JSM	3.87	0.78	3.28	1.82	1.27	2.20	1.32	60.00
Average	6.98	12.48	14.46	10.83	10.79	11.11	2.75	24.80
S.D.	5.44	23.15	22.48	19.89	12.79	16.58		
C.V.	78.00	185.50	155.30	183.70	118.50	149.20		

Source: Cash and CA from AR and FSLC.

The average cash to current assets ratio been observed in selected manufacturing companies in study period to be 6.98 percent in 2001-02, 12.48 percent in 2002-03, 14.46 percent in 2003-04, 10.83 percent in 2004-05 and 10.79 percent in 2005-06 whereas the total company average over the study period was 11.11 percent. The ratio varied widely across the companies in all period of study. The highest ratio was 15.62% for ULN and lowest ratio was 1.37% for NLO in 2001-02, similarly, the highest ratio was 53.81% for ULN and lowest was .78%

for JSM in 2002-03, highest was 54.06% for ULN and lowest was .73% for NLO in 2003-04, highest was 46.37% for ULN and lowest was .35% for BN (b) in 2004-05 and the highest was 32.72% for ULN and lowest was 1.27% for JSM in 2005-06.

As observing this ratios of individual companies over the period of study, the average cash to current assets ratio has been found to be 1.88 percent for NLO, 40.52 percent for ULN, 3.69 percent for BN (B), 7.25 percent for BN (T) and 2.20 percent for JSM. The ratio varied widely across the year for all companies taken as the sample. The highest ratio was 2.64 percent n 2004-05 and lowest was .73 percent in 2003-04 for NLO, highest was 54.06 percent in 2003-04 and lowest was 15.62 percent in 2001-02 for ULN, highest was 8.24 percent n 2005-06 and lowest .35 percent in 2004-05 for BN (B), highest was 11.17 percent in 2003-04 and lowest was 2.98 percent in 2004j-05 for BN (T) and highest was 3.87 percent in 2001-02 and lowest was .78 percent in 2002-04 for JSM

The overall industry average ratio was 11.11 percent. Each company has a heavy fluctuation in one year to comparing to other year which suggest that the companies haven't been following the definite policy regarding how much cash balance to hold at the end of fiscal year. NLO and JSM have been showing weaker capacity on making payment of short term obligation, being the ratios lesser and ULN and BN (T) have been showing the stronger capacity on making payment of short term obligation, being the ratio greater.

Among these companies BN(B) has highest C.V. of 90% that means it's yearly cash investment is highly fluctuated. NLO has low C.V. of 40.50% that means it's yearly investment is not so fluctuated in comparison with industrial C.V. Other companies like ULN, NBT, JSM has C.V. of 42.60%, 47.90% and 60.00% respectively. Which shows that all companies has high C.V. in comparison with industrial C.V. so the companies yearly investment is highly fluctuated.

The highest C.V. at 2002-03 is 185.50% that means the investment of companies during 2002-03 is highly fluctuated and lowest C.V. is 78% during

2001-02 so that cash invest of companies during 2001-02 is   no so fluctuated in comparison with industrial C.V.

4.4.2 Graphical Presentation of Cash to Current Assets Ratio

Figure No. 4.5

Cash to Current Assets Ratio of Companies during the Study Period
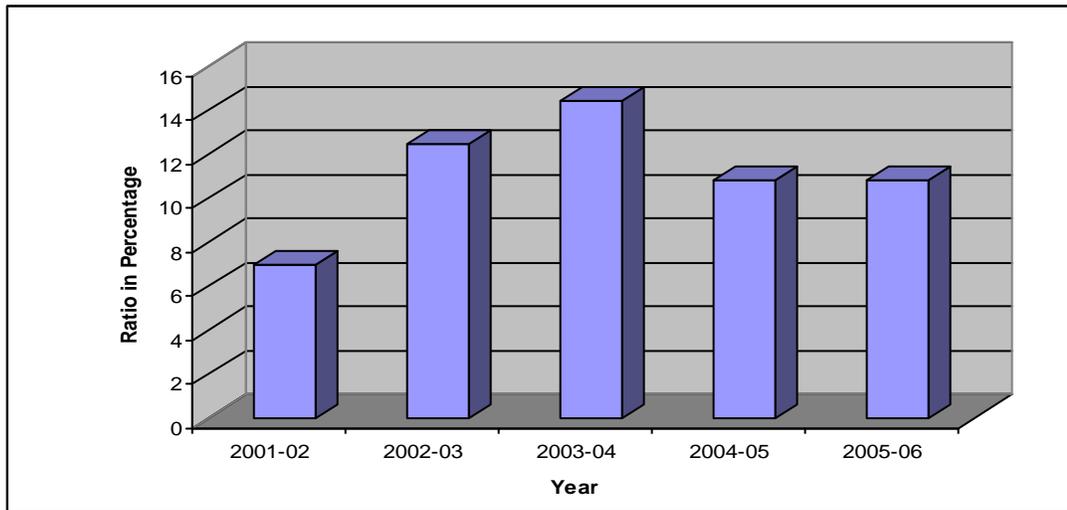
Figure No. 4.6

Cash to Current Assets Ratio of Individual Companies Over the Period of Study
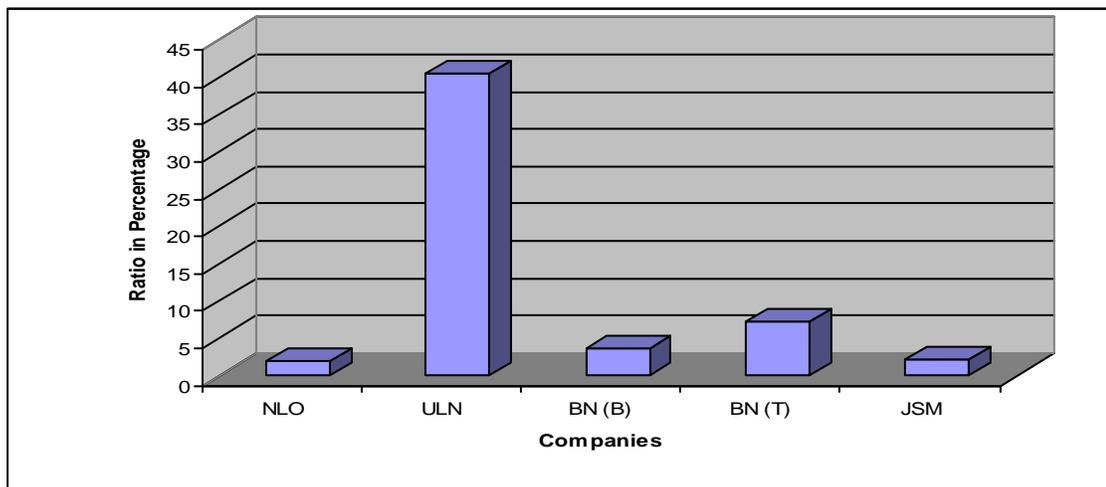
4.4.3 Relationship between Cash and Current Assets

The correlation coefficient between cash (x) and current asset 'CA' s (y) has been obtained to be 7%. This shows the positive relationship between cash and current assets in sampled listed manufacturing companies. But it was found that there is not significant relationship of cash and current assets in other word there is not evidence that cash and CA are correlated PE = .15 < r = .71 < 6 PE = .90, explain that it is not sure that increase in cash results to increase in current assets and vice-versa.

The regression equation of cash (x) on CA (y) has been obtained to be x = .43 y - 101.73. The regression coefficient of cash on CA, .43, explains that 1 million changes in current assets to .43 million change in cash in same direction.

Similarly, the regression equation of CA (y) as cash (x) has been determined to be y = 1.67x + 284.35. The regression coefficient of CA (y) as cash (x), 1.67 explains that 1 million change in cash may occur 1.67 M change in CA in same direction. (for detail calculation see Appendix 'K')

4.5 Cash and Current Liabilities

4.5.1 Analysis of Cash to Current Liabilities Ratio

There are different ways of measuring corporate liquidity. The ratio of cash to current liabilities among the techniques which may used as an index of cash management. This ratio indicates the amount of cash available to pay the current obligation of the organization. Normally a low percentage of cash to current liabilities it means the optimal holding of cash is essential for the company whether it is invested in other current assets in a large amount.

Table no. 4.7

Cash to Current Liabilities Ratio of Selected Manufacturing Companies

(in %)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	3.02	3.96	1.04	3.92	3.33	3.05	1.19	39.00
ULN	33.54	87.95	116.62	111.58	68.68	83.67	33.99	40.60
BN (B)	9.23	2.90	11.74	1.17	17.05	8.42	6.50	77.20
BN (T)	28.35	18.89	46.36	9.45	19.69	24.55	13.90	56.60
JSM	1.71	0.42	1.93	1.54	1.22	1.36	0.58	42.70
Average	15.17	22.82	35.54	25.53	21.99	24.21	7.39	30.50
S.D.	14.79	37.12	48.93	48.21	27.33	34.47		
C.V.	79.50	162.70	137.70	188.80	124.30	142.40		

Source: Cash and CL from AR and FSLC.

The average cash to current liabilities ratio has been observed to be 15.17 percent in 2001-02, 22.82 percent in 2002-03, 35.54 percent in 2003-04, 25.53 percent in 2004-05 and 21.99 percent in 2005-06. Whereas the overall company average cash to current liabilities ratio was 24.21 percent. The ratio of cash to current liabilities varied widely across the company in all year of study period. The highest ratio was 33.54 percent for ULN and lowest was 1.71 percent for JSM in 2001-02, highest was 87.95 percent for ULN and lowest was .42 percent for JSM in 2002-03, highest was 116.62 for ULN and lowest was for 1.04 percent for NLO in 2003-04, highest was 111.58 percent for ULN and lowest was 1.17 percent for BN (B) in 2004-05 and highest was 68.68 percent for ULN and lowest was 1.22 percent for JSM in 2005-06. This reflects that JSM has lowest cash to CL ratio and UN have been observed as highest ratio.

As observing the ratio of individual company in different period of study, the average ratio has been found to be 3.05 percent for NLO, 83.67 percent for ULN, 8.42 percent for BN (B), 24.55 percent for BN (T) and 1.36 percent for

JSM. The study showed that there is not any occurrence of consistency in the ratios in different year of same company also. It was found that, the highest ratio was 3.96 percent in 2002-03 and lowest was 1.04 percent in 2003-04 for NLO, highest was 116.62 percent in 2003-04 and lowest was 33.54 percent in 2001-02 for ULN, highest was 11.74 percent in 2003-04 and lowest was 1.17 percent in 2004-05 for BN (B), highest was 46.36 percent in 2003-04 and lowest was 9.45 percent in 2004-05 for BN (T) and highest was 1.93 percent in 2003-04 and lowest was .42 percent in 2002-03 for JSM.

The ratio was seen in highly fluctuating trend during the study period. It can be said that manufacturing companies has faced cash management problem. The average cash to current asset ratio of the overall company has been observed by 24.21 percent over the study period.

Observing the C.V. of each company BN (B) has highest C.V of 77.20% it means that the cash to current liabilities ratio of the company during the study period is fluctuated more. The lowest C.V. of 39% of NLO that means cash to liabilities ratio is less fluctuated. The C.V. of rest companies like ULN, BN(T), JSM has 40.60, 56.60 and 42.70 respectively. The C.V. of rest companies also sows that the cash to current liabilities ratio of companies is fluctuated more because the C.V. of each company is more then overall industrial C.V. It means that the current liabilities in terms of cash is fluctuated during the study periods observing the C.V. of different period 162.70 at 2002-03 is highest C.V. and 79.50 at 2001-02 is lowest.

4.5.2 A Graphical Presentation

Figure No. 4.7

Cash to Current Liabilities Ratio of Company during the Study Period
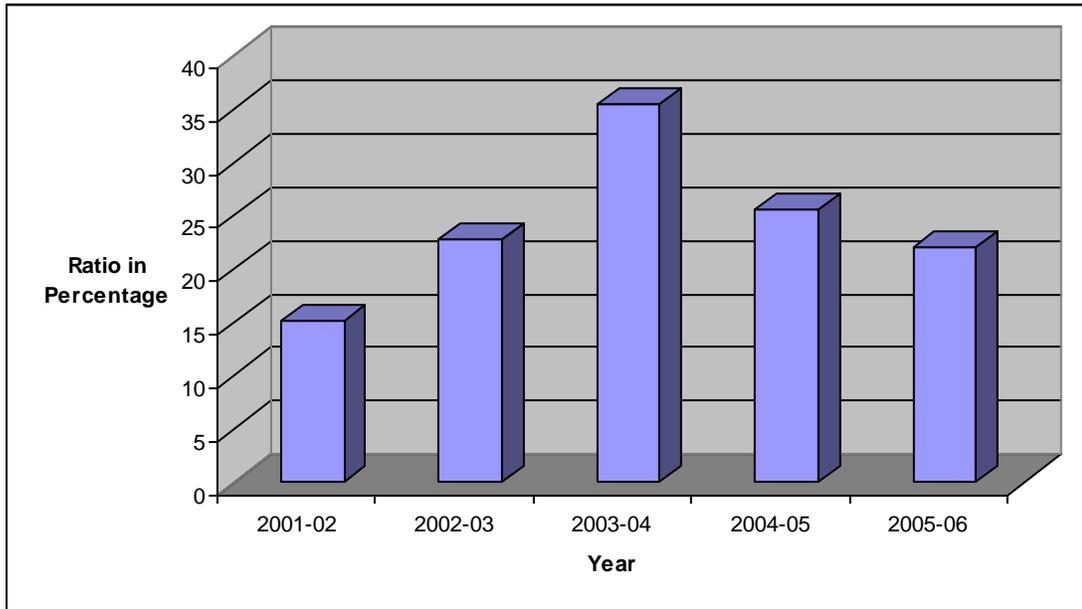
Figure No. 4.8

Cash to Current Liabilities of Individual Company over the Study Period
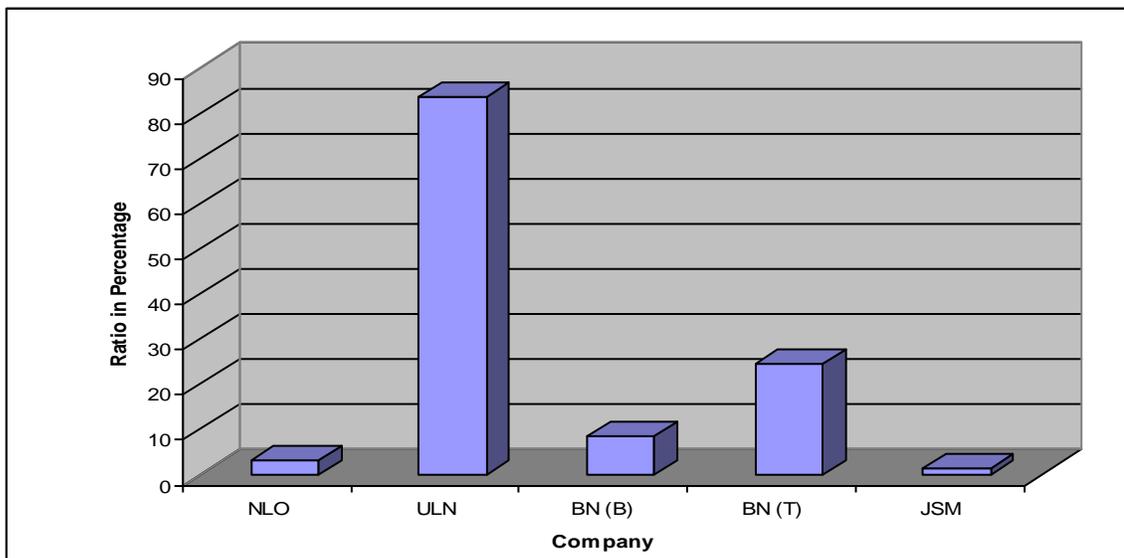
4.5.3. Relationship between Cash and Current Liabilities

The correlation coefficient of cash (x) and CL (y) has been determined to be -.66. It shows the negative relationship between cash (x) and CL (y) in sampled listed manufacturing companies in Nepal $|r| = .66 > PE = .17$ indicates, it may be significant relationship between these variables but $|r| < 6 PE = 1.02$ shows that there is no evidence of correlation between cash and current liabilities. So that it is explained that increase of one cause may not be increase for other. It is the evidence the adequate (consistent) proportion of cash with CL has not been maintained by the manufacturing companies.

The regression line of cash (x) and CL (y) has been determined to be x = -.99y + 296.55. The regression coefficient explains that 1 million increasing in cash decrease (.99 M) in current liabilities.

Similarly, the regression line of CL (y) on cash (x) has been derived to be y = -.44x + 258.88. The regression coefficient explains that 1 million increasing in CL decrease (.44 m) in cash. (for detail Appendix 'M')

4.6 Cash and Quick Assets

4.6.1 Analysis of Cash and Quick Assets

Table No. 4.8

Cash to Quick Assets Ratio of Manufacturing Companies (in %)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	1.71	3.62	1.09	3.95	2.97	2.67	1.22	45.70
ULN	24.47	67.56	72.50	62.47	68.68	59.14	19.71	33.30
BN (B)	9.17	1.68	5.23	0.63	13.87	6.12	5.45	89.10
BN (T)	11.99	5.97	15.07	4.35	18.39	11.15	5.95	53.40
JSM	8.97	1.69	7.36	4.97	3.14	5.23	2.97	56.80
Average	11.26	16.10	20.25	15.27	21.4	16.86	4.08	24.20
S.D.	8.30	28.81	29.65	26.43	27.26	23.83		
C.V.	73.70	179.00	146.40	173.10	127.40	141.30		

Source: CA and CL from AR and FSLC.

The average cash to quick asset ratio in the study period has been 11.26 percent in 2001-02, 16.10 percent in 2002-03, 20.25 percent in 2003-04, 15.27 percent in 2004-05 and 21.4 percent in 2005-06 whereas the overall average was 16.86 percent. The average cash to QA ratio varied in all year of study period. It was highest in 2005-06 (21.4%) and the lowest in 2001-02 (11.26%).

Similarly, the average cash to QA ratio has been observed to be 2.67 percent for NLO, 59.14 percent for ULN, 6.12 percent for BN (B), 11.15 percent for BN (T) and 5.23 percent for JSM. The highest ratio was 59.14 percent for ULN and lowest was 2.67 percent for NLO. It also show there is vast difference in cash management policy of the companies.

Observing the C.V. of different companies BN(B) has highest C.V. of 89.10% that means the yearly cash investment in quick assets of BN (B) is highly fluctuated and lowest C.V. of ULN has 33.30% it is near about industrial C.V. it means that C.V. of ULN is less fluctuated during the study period. Other companies like NLO, BN (T) and JSM has CV of 45.70%, 53.40% and 56.80% respectively. The C.V of rest companies also more then industrial C.V. So it shows that the investment of each companies is also highly fluctuated.

Observing the C.V. of different study period C.V. of 179 at 2002-03 is highest that means the total investment of companies during 2002-03 is highly fluctuated. And lowest C.V. of 73.70% at 2001-02 it is less then overall industrial C.V. so it means that investment during 2001-02 is less fluctuated.

4.6.2 Graphical Presentation

Figure No. 4.9

Cash and Quick Assets Ratio of Company during the Study Period
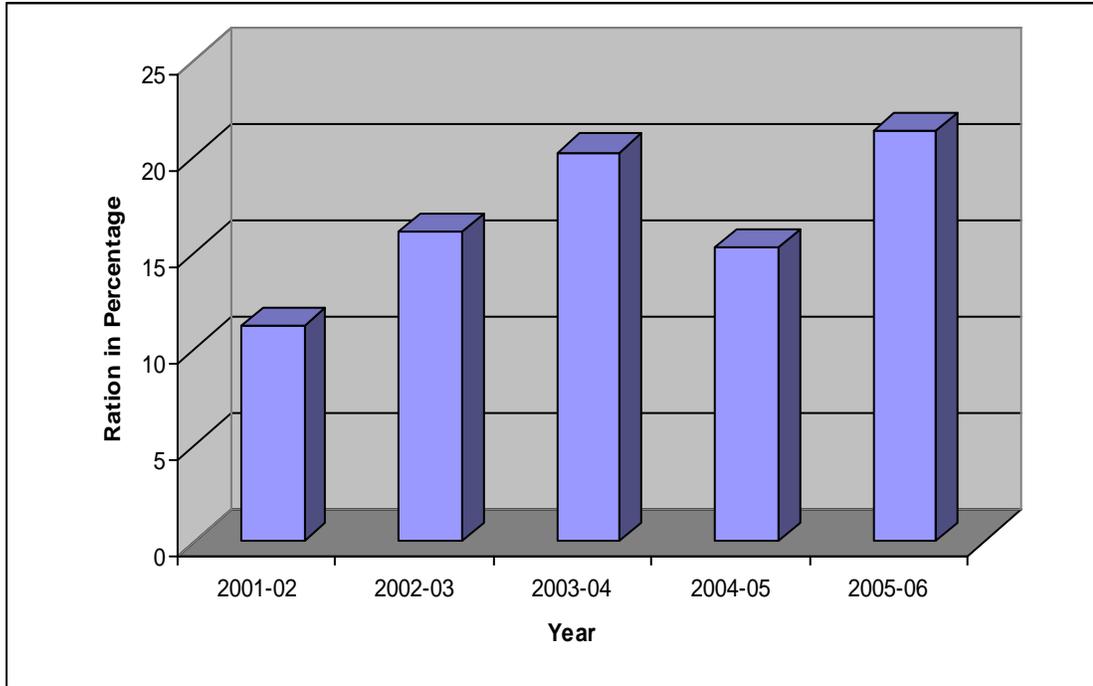
Figure No. 4.10

Cash and Quick Assets Ratio of Individual Company over the Study Period
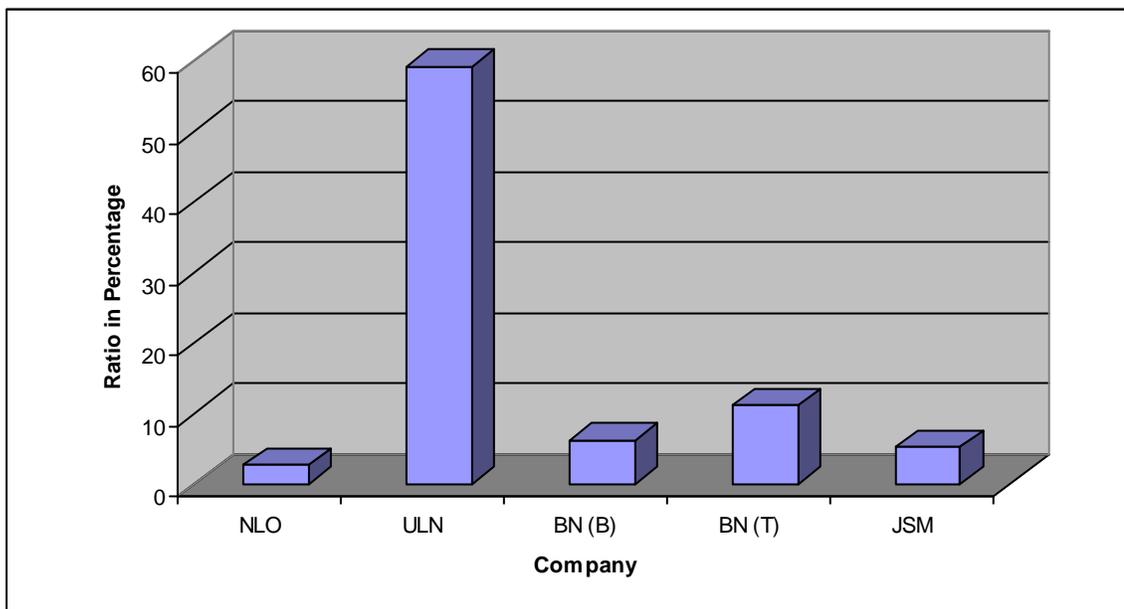
4.6.3 Relationship between Cash and Quick Assets

The correlation coefficient between cash (x) and QA (y) has been .72 i.e r = .72. PE = .145 < r = .72 < 6 PE = .87. Here, PE < r < 6 P.E. So nothing can be concluded. There is no proof of either significant or insignificant relationship between cash and quick assets.

The regression line of cash (x) on QA (y) has determined to be x = 0.57 y - 75.46. The regression coefficient of cash (x) on QA (y), 0.57, explains that there occurs 0.57 m changes in cash if QA is changed by 1m in same direction.

Similarly, the regression of QA (y) as cash (x) has been derived to be y = 0.92x + 191.64. The regression of QA (y) on cash (x), 0.92 explain that there occurs 0.92 m changes in QA, if cash is changed by 1m in same direction (for detail see Appendix L).

4.7 Relationship Between Cash and Net Profit

The correlation coefficient cash (x) and profit (y) has been determined to be 0.83 i.e. r = .83. Generally it shows the positive relationship between profit and cash. PE = .094 < 4 = 0.83 > 6 PE = 0.56. Shows that there is significant relationship between cash and profit. This shows when profit is high cash balance also seemed high.

The regression line of cash (x) on profit (y) has been derived to be, x = 1.49 y + 14.81. The regression coefficient 1.49, indicates the change in profit by 1 m may occur the change in cash by 1.49 M in same direction.

Similarly, the regression line of profit on cash has been obtained to be y = 0.46 x + 4.31. The regression coefficient 0.46, explain, it occurs 0.46 M changes in profit if cash is changed by 1 m (for detail Appendix 'N').

In conclusion, there is significant relationship between cash and profit in listed manufacturing companies.

4.8   Relationship Between Sales (x) and Profit (y) and Regression Equation

The correlation between sales volume and net profit has been obtained to be 0.99 i.e., r = 0.99 > PE = .006 is the symptom of high scale correlation and r > 6 P.E = 0.036 implies that the correlation is significant.

The regression line of sales (x) on profit (y) has been derived to be, x = 2.68 y + 557.57. It means the amount of sales will increase by 2.68 times if profit is increased to be 1 times.

Similarly, the regression line of profit has been determined to y = 0.37x - 205.98. The regression coefficient of profit on sales 0.37 implies that due to increase in sales by 1 times, profit will increase by 0.37 times.

So that it can be said that for increasing the amount sales, net profit would be increased (for detail appendix 'u').

4.9   Relationship of Cash on Receivables and Payables

Simply, it is said the amount of cash will increase if amount of receivable is decrease. Because decrease in receivable means the cash is received or collected. Likewise, the amount of cash will increase if the amount of payable is increased. For the further study of these general concept, regression line of cash on receivable and payable has been derived.

The multiple regression line of cash (y) on receivable (x_1) and payable (x_2) has been obtained to be y = -96.05 + 0.20x_1 + 1.79x_2. The regression coefficient of amount of cash will increase by 0.20 times if receivable is increased by one times (keeping payable constant). Similarly, the regression coefficient of cash (y) on payable (x_2), 1.79 means that amount of cash will increase by 1.79 times if payable is increased to be 1 times (keeping receivable constant).

The multiple correlation coefficient of cash on receivable and payable has been obtained to be Ry. $x_1.x_2$ = 0.260. Then coefficient of multiple determination

$R^2y. x_1.x_2 = 0.068$ which means that total change in the level of cash (x) has been explained by the effect of two independent variables i.e. receivables and payable. And remaining 93.2 percent in due of other factor. It can be said that receivable and payable have contributed as not a major source for generating cash in current trend of manufacturing companies. so there is not a huge impact of receivable and payable on cash. (for detail see appendix 'O').

4.10 Analysis of Liquidity Position of Listed Manufacturing Companies

Liquidity position means the condition company bear current obligation when it becomes due for payment. In other word it is situation of sufficient cash to handle the day to day activities and unpredicted demand Thus in cash management, the study of liquidity position of the companies constitutes an important role. IF a firm is adequately liquid or solvent the short term creditors are interested in such firm and therefore such firms get their short term requirements readily. However, too much solvency or in other words, holding more than enough cash balance to meet its current payments is also an indication of mismanagement of cash because such cash balance remained after meeting payments would remain idle. So an optimum liquidity is the necessity of the firm.

The liquidity ratios measure the ability of the companies to meet their short term obligations and reflect the short term financial strength of an organization.

4.10.1 Current Assets and Current Liabilities
4.10.1.1 Analysis of Current Ratio

There are different method of measuring liquidity. Out of these different method one of the reliable method to examine liquidity position of the companies is by means of current ratio. It is ratio of current assets and current liabilities. The standard current ratio is to be measured by 2:1. However, the depending upon the

nature of the companies, the development of capital market and availability of long term funds to finance current assets, the satisfactory ratio varies.

Table No. 4.9

Current Ratio of Manufacturing Companies

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	2.21	1.63	1.42	1.48	1.52	1.65	0.32	19.40
ULN	2.15	2.34	2.16	2.41	2.10	2.23	0.13	5.80
BN (B)	1.59	2.96	3.82	3.36	2.07	2.76	0.91	33.00
BN (T)	3.46	4.32	4.15	3.18	2.06	3.43	0.90	26.20
JSM	0.44	0.54	0.59	0.85	0.96	0.68	0.21	30.90
Average	1.97	2.36	2.43	2.26	1.74	2.15	0.28	13.00
S.D.	1.09	1.41	1.53	1.08	0.49	1.05		
C.V.	55.30	59.80	63.00	47.80	51.70	48.80		

Source: CA and CL from AR and FSLC

The average current ratio during the study period have been studied by 1.97:1 I 2001-02, 2.36:1 in 2002-03, 2.43:1 in 2003-04, 2.26:1 in 2004-05 and 1:74:1 in 2005-06. Whereas overall average current ratio was 2:15. There was a variance in current ratio in different period. Similarly the average current ratio of individual company over the study period has been observed to be 1.65:1 for NLO, 2.23:1 for ULN, 2.76:1 for BN (B), 3.43:1 for BN (T) and .68:1 for JSM.

The highest ratio was 4.32:1 for BN (T) in 2002-03 and lowest was .44:1 for JSM in 2001-02.

The study showed that ULN, BN (B) and BN (T) had the capability to meet current obligation. BN (T) had kept more than standard ratio which means they had a idle cash. JSM had a weak liquidity position of all the companies.

The result of each period of study showed that listed manufacturing companies either have more cash or less than standard which ensures that the

company does not have any rigid plan to use optimally the cash. Eventhough the overall average current ratio has been shown 2.15:1.

Observing the C.V of different companies BN (B) has highest C.V. of 33.00%, it means that the current ratio of BN (B) is highly fluctuated during the study period. The ULN has lowest C.v. of 5.80% which is near about industrial C.V. it means that current ratio of ULN is not fluctuated more. Similarly C.V. of rest companies like NLO, BN (T), JSM has 19.40%, 26.20% and 30.90% respectively. It shows that the C.V. of rest companies is more then industrial C.V. it means that the current ratio of related companies is fluctuating more during the study period.

4.10.1.2 Relationship between CA and CL

The correlation coefficient of CA (x) and CL (y) has been identified to be -0.30 i.e. | r| = 0.30. It shows negative relationship between CA and CL. But PE = 0.27 < r = 0.30. < 6PE = 1.62 indicates that there is not evidence of correlation between CA and CL. It means nothing can be concluded.

The regression line of CA (x) on CL (y) has been found to be x = -0.75y + 570.15. The regression coefficient -0.75 shows that 1 m increasing in CL may occur 0.75 m decrease in CA.

The regression line of CL (y) on CA (x) has been found to be y = - 0.12 + 276.77. The regression coefficient explains that 1 m in crease in CA may occur 0.12 m decrease in CL. (for detail Appendix 'Q').

4.10.2 Quick Asset and Current Liabilities

4.10.2.1 Analysis of Quick Ratio

Quick ratio means the ratio of Quick asset and Current liabilities. The quick ratio conveys the most precise information liquidity position of a firm, since it excludes the inventory, the least liquid assets from the current assets and compares

it with current liabilities. Quick asset excludes inventor or subtracts inventory from current assets. Inventory is not converted in to cash quickly that's why it is the less liquid because it requires a certain time to get converted into cash. The quick ratio is more reliable measure of liquidity than current ratio. The standard ratio is 1:1 for quick ratio.

Table No. 4.10

Quick Ratio of Manufacturing Companies

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	1.77	1.09	0.95	0.99	1.12	1.18	0.33	28.00
ULN	1.37	1.28	1.61	1.79	1.37	1.48	0.21	14.20
BN (B)	1.01	1.72	2.24	1.87	1.23	1.61	.50	31.10
BN (T)	2.36	3.16	3.08	2.17	1.07	2.37	0.84	35.40
JSM	0.19	0.25	0.26	0.31	0.39	0.28	0.07	25.00
Average	1.34	1.5	1.63	1.43	1.04	1.39	0.22	15.80
S.D.	0.81	1.07	1.10	0.77	0.38	0.75		
C.V.	60.50	71.30	67.50	53.90	36.50	54		

Source: CA Inventories and CL from AR and FSLC

The average quick ratio of the companies during the study period has been observed by 1.34:1 in 2001-02, 1.5:1 in 2002-03, 1.63:1 in 2003-04, 1.43:1 in 2004-05 and 1.04:1 in 2005-06. Whereas the overall company average over the study period was 1.39:1. The liquidity position of the manufacturing companies in each period was more than standard which shows that there was a idle cash. Similarly, the average quick ratio in overall study period for individual company has been studied by 1.18:1 for NLO, 1.48:1 for ULN, 1.61:1 for BN (B), 2.37:1 for BN (T) and 0.28:1 for JSM.

All the companies except JSM shows strong liquidity position. BN (T) had highest ratio (2.37:1). JSM had lowest ratio of (0.28:1) which shows that its liquidity position is weak. JSM were not able to meet current obligation. It may closer to the liquidation.

Above study also shows that BN (T) (2.37:1) quick ratio which is high above the standard ratio. It shows that BN (T) is higher amount of cash in hand and bank which is not satisfaction.

Observing the C.V. of selected manufacturing companies the C.V. of BN(T) is formed 35.40% which is highest. It indicates that the quick ratio of BN (T) is highly fluctuated and ULN has a lowest C.V. of14.20% and it is less then industrial CV. It means that the quick ratio of ULN is it's yearly liquidity ratio is not fluctuated. Rest companies like NLO BN (B) and JSM has C.V. of 28%, 31.10% and 25.00% respectively. The C.V. of those companies are more then industrial C.V. It means that the quick ratios of those companies are highly fluctuated.

Observing the C.V. of different period the highest C.v. is 71.30% during 2002-03 which is more then overall C.V. it means that the quick ratios of different companies are highly fluctuated during this period and lowest C.V. of 36.50%during 2055-06. It shows that the quick ratio of different companies is not so fluctuated during this period.

4.10.3 Relationship between QA and CL

The correlation coefficient between QA and CL has been identified to be -0.09 i.e. |r|= 0.09. PE = 0.30 > |r| = 0.09 < 6 P.E. = 1.8 which shows it is insignificant or there is no evidence of correlation.

The regression line of QA (x) on CL (y) has been obtained to be x = -0.17y + 298.89. The regression coefficient -0.17 explain that if CL is increase by 1m, the QA will decreased by -0.17 m.

The regression line of CL (y) on QA (x) has been derived to be y = -0.05x + 240.94. The regression coefficient -0.05 explain that if QA is increased by 1m, CL will be decreased by .05m. (for detail appendix 'R').

4.11 Analysis of Account Receivable of The Companies

Each and every business organization sells goods and provides service. Business organization may sells in credit or in cash. When the company extends to its customers, book debt are debited, debtors/account receivable are credited. Debtor/account receivable are to be converted into cash over a short period and therefore are included in current assets. The liquidity position of the company depends upon the quality of debtors to a great extents. The increment of account receivable means the decrease the cash position of the company and vice-versa.

Table No. 4.11

Account Receivable of the Companies in Different Period

Year	AR (x) (in million)	$x - \bar{x} = d$	d^2
2001-02	73.89	-8.46	71.57
2002-03	78.57	-3.78	14.29
2003-04	97.65	15.3	234.09
2004-05	101.48	19.13	365.96
2005-06	60.17	-22.18	491.95
Total	$\bar{x} = 82.35$	$\Sigma d = 0.01$	$\Sigma d^2 = 1177.86$

Source: Appendix V, AR and FSLC.

Standard deviation $(\dagger) = \sqrt{\dfrac{1}{N}\left[\Sigma d^2 - \dfrac{(\Sigma d)^2}{N}\right]}$

$$= \sqrt{\dfrac{1}{5}[1177.86 - \dfrac{(0.01)^2}{5}]} = 15.35m$$

Covariance Coefficient (CV) $= \dfrac{\dagger}{\bar{x}} \times 100 = \dfrac{15.35}{82.35} \times 100 = 18.64\%$

Above table and calculation shows that the industrial average account receivable of the companies during the period of study was 82.35 M. The lowest receivable has been observed to be 60.17 M in 2005-06 and it was highest, 101.48

M in 2004-05. Higher receivable explains the inadequate capacity for credit collection, which means the position of cash collection has been decreased. Likewise, the lower the position AR shows the positive situation for credit collection.

The standard deviation i.e. 15.35 M and its covariance coefficient 18.64 percent explain that there occurred high level of fluctuation in receivable. So that the policy of the company about to receivable have not been seen in the consistent level. The increasing trend of account receivable interprets the companies were not able to collect account receivable by the way there would be the possibility of increasing bad debt. However, the company's receivable might be increased due to increment of net sales. The analysis suggests the company to develop proper credit policy for timely collection of receivable so that the company will be able to improve receivable management practices.

Figure No. 4.11

Graphical Presentation of Account Receivable during the Study Period
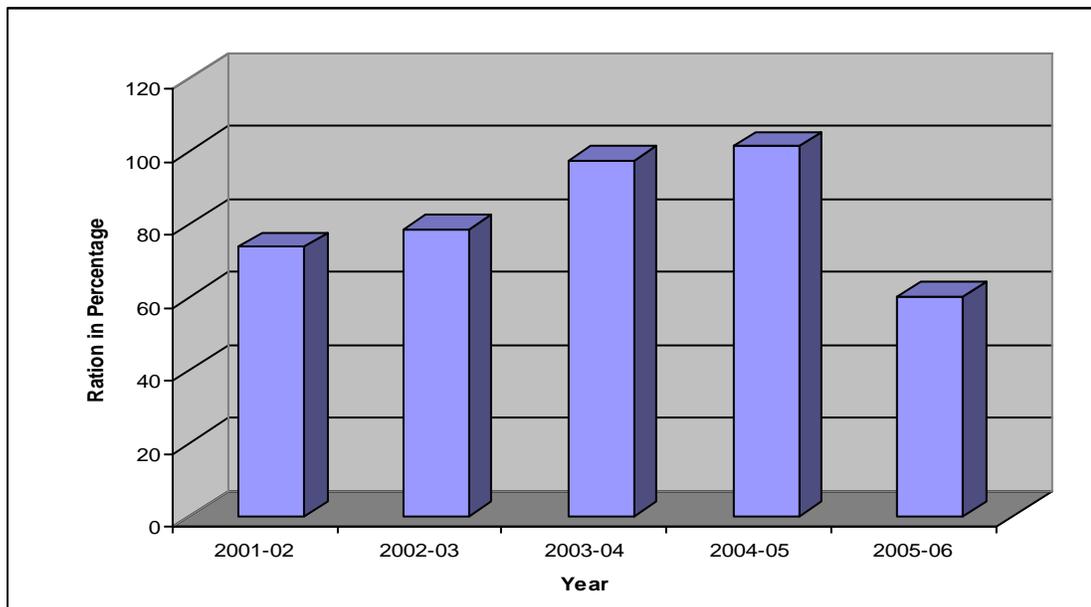
Table No. 4.12

Account Receivable of Individual Company over the Study Period

NOC	AR (Million)	$d = x - \bar{x} \times 100\%$

NLO	65.80	-20.10
ULN	98.01	19.02
BN (B)	94.39	14.62
BN (T)	134.64	63.50
JSM	18.91	-77.04
Average	82.35	-

Source: Appendix V, AR and FSLC

The above table shows that the overall average of account receivable of the companies was 82.35 M. The receivable was varied widely across the company in over the study period. The lowest amount of receivable was 18.91 M for JSM and highest amount of receivable was 134.61 M for BN (T.). It means JSM is not selling on credit too much whereas BN (T) has a lot of debtors.

Figure No. 4.12

Graphical Presentation of the Individual Companies over the Study Period
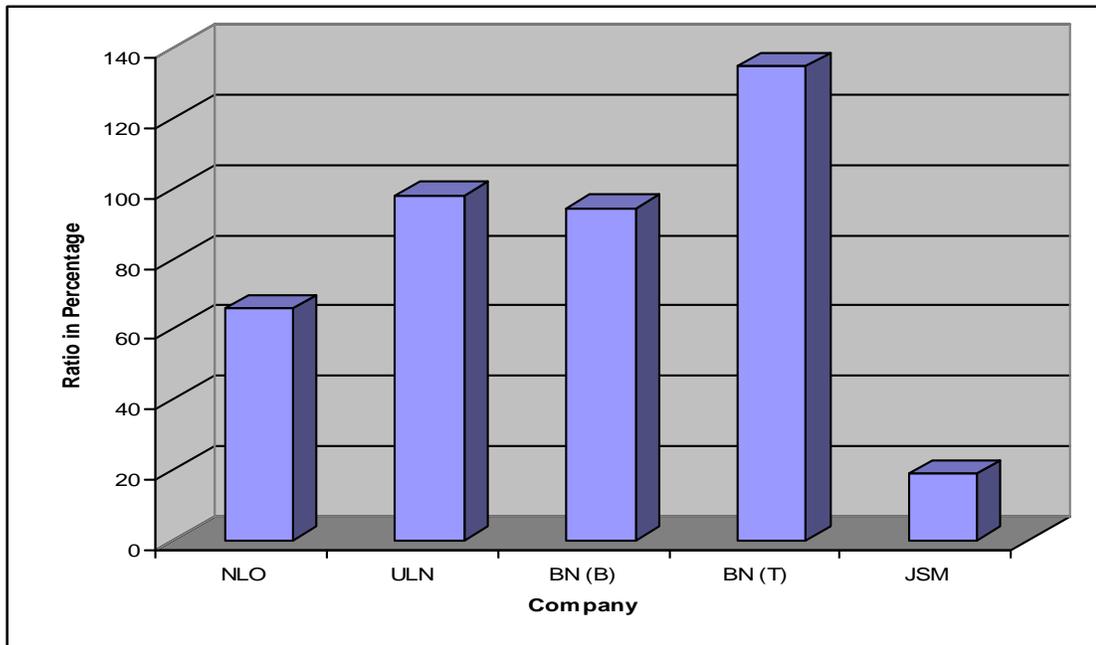
4.11.1 Analysis of Receivable Collection Period

Receivable collection period is determined by the help of receivable turnover ratio. It is the indication of efficiency of trade credit. Receivable collection period is the length of time required to convert the firm's receivable into

cash, that is to collect cash following a sales. Higher the turnover ratio shorter the collection period. The better is the trade credit management and the better is the liquidity of the debtors, on short collection period and high turnover ratio imply prompt payment by debtors. Every business organization likes short collection period.

Table 4.13

Receivable Collection Period (in days)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	182.34	231.25	236.08	186.60	172.38	201.73	29.65	14.70
ULN	9.50	19.00	23.23	38.86	34.35	24.99	11.82	47.30
BN (B)	78.51	52.71	71.71	47.99	37.37	57.66	17.04	29.60
BN (T)	100.11	118.38	154.79	187.17	16.92	115.47	64.45	55.80
JSM	15.55	11.70	14.74	1.08	6.10	9.83	6.14	62.50
Average	77.20	86.61	100.11	92.34	53.42	81.94	17.99	22.00
S.D.	70.65	91.19	94.18	88.08	67.72	78.27		
C.V.	91.50	105.30	94.10	95.40	126.80	95.50		

Source: Sales and Receivable from AR and FSLC

The above table shows the receivable collection period of listed manufacturing companies during the study period. The overall industry average RCP was 82 days. The average RCP in listed manufacturing companies has been observed to be 77 days in 2001-02, 87 days in 2002-03, 100 days in 2003-04, 92 days in 2004-05 and 53 days in 2005-06. The receivable collection period varied widely across the companies in all year of study period. It was highest (182 days) for NLO and lowest (10 days) for ULN, in 2001-02, highest (231 days) for NLO and lowest (12 days) for JSM in 2002-03, highest (236 days) for NLO and lowest (15 days) for JSM in 2003-04, highest (187 days) for BN (T) and lowest (1 days) for JSM in 2004-05, and highest (172 days) for NL and lowest (6 days) for JSM in 2005-06.

Above table shows that there was a wide variation on RCP for individual companies over the study period. The average RCP, over the period of study, for individual companies has been observed to be 202 days for NLO, 25 days for ULN, 58 days for BN (B), 115 days for BN (T) and 10 days for JSM.It shows that

the maximum RCP was 202 days for NLO and minimum RCP was 10 days for JSM.

In 2003-04 the companies and in overall period and NLO separately implied either poor credit selection or inadequate collection effort. The delay in collection of receivable would mean that, a part of interest cost involved in maintaining a higher level of debtors, the liquidity position of the firm would be adversely affected. Moreover, there was the likelihood of large number of account receivables becoming bad debt. Similarly too short period of RCP is not necessarily good. While it is true that it avoids the risk of receivable being bad debts as well as burden of high interest on outstanding debtors, it may have an adverse effect on volume of sales of the firm.

The average collection period of the manufacturing companies has been observed by 82 days i.e. it is not a satisfactory result but if the management follows good credit policy to collect cash it will decreased to a desired level.

JSM has highest C.V. of 62.50% which is far more then industrial C.V. i.e. it's yearly turnover is more fluctuated and NLO has lowest C.V. of 14.70% which is less then industrial C.V. it's receivable collection is not so fluctuated. Other companies, ULN, BN (B), BN (T) ahs C.V. of 47.30%, 29.60% and 55.60% respectively C.V. of these companies are more then industrial C.V. so the receivable collection of these companies also more fluctuated during the study period.

Observing the C.V. of different period highest C.V at 205-065 is 26.80%. It means that receivable collection is fluctuated more during this period and lowest C.V. of 91.50% at 2001-02. Which is less then overall industrial C.V. It means that the collection period is not so fluctuated during this period.

4.12 Analysis of Inventory

Every production company requires stock or inventory. Inventory means the stock of raw material, work in progress and finished goods. A company required a optimum level of inventory for efficient management. The incremental

trend of inventory would be the direct for lowering the cash in for the company and vice-versa. So that level of inventory and its trend must be analyzed for efficiency of cash management.

Table No. 4.14

Inventory of Manufacturing Companies in Study Period

Year	Amount in million (x)	$x - \bar{x} = d$	d^2
2001-02	132.61	-9.57	91.58
2002-03	131.97	-10.21	104.24
2003-04	133.92	-8.26	68.23
2004-05	163.32	21.14	446.89
2005-06	149.08	6.9	47.61
Total	$\bar{x} = 142.18$	$\sum d = 0$	$\sum d^2 = 758.55$

Source: Appendix B, Inventory from AR and FSLC.

$$\text{Standard deviation } (\dagger) = \frac{1}{N}\left[\sum d^2 - \frac{(\sum d)^2}{N}\right]$$

$$= \frac{1}{5}\left[758.55 - \frac{(0)^2}{5}\right] = 12.32M$$

$$\text{Covariance coefficient (CV)} = \frac{\dagger}{\bar{x}} \times 100$$

$$= \frac{12.32}{142.18} \times 100 = 8.67\%$$

The above inventory of manufacturing companies during the study period has been observed to be 132.61M in 201-02, 131.97M in 2002-03, 133.92M in 2003-04, 163.32M in 2004-05 and 149.08M in 2005-06. Whereas overall yearly average inventory was 142.18. The standard deviation is 12.32M and its covariance coefficient 8.67% indicates that the company didn't adopt specific policy toward inventory management. In other word, there was no uniformity of inventory in each period of study.

Figure No. 4.13

Graphical Presentation of Inventory of MFG Companies in the Period of Study
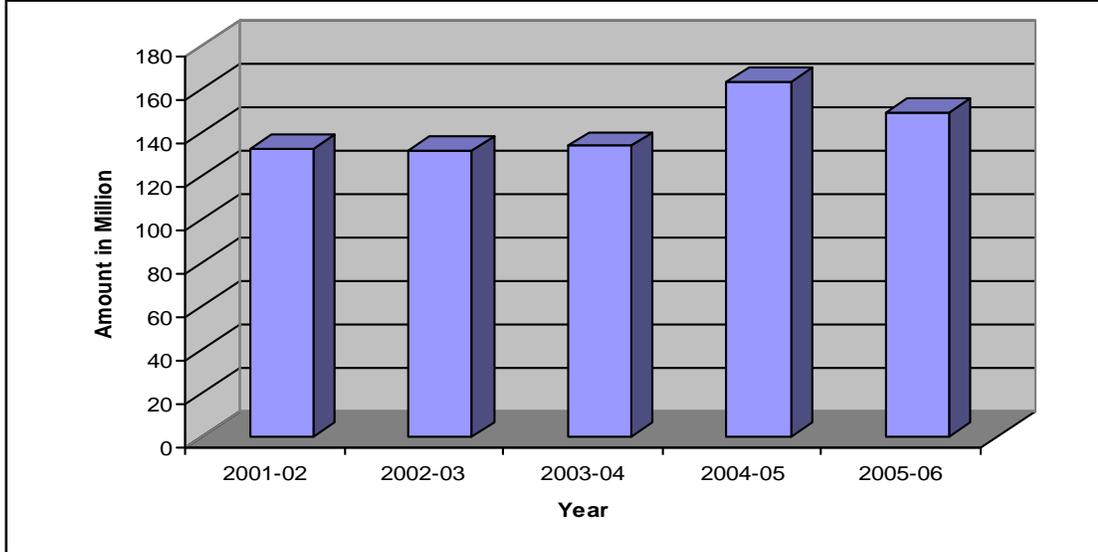
Table no. 4.15

Inventory of Individual Company Over the Study Period

NOC	AR (Million)	$d = x - \bar{x} \times 100\%$
NLO	31.22	-78.04
ULN	188.10	32.29
BN (B)	204.07	43.53
BN (T)	130.82	-0.08
JSM	156.69	10.21
Average	$\bar{x}$ =142.18	-

Source: Appendix B, from AR and FSLC

The above calculation shows that the average inventory level of the companies over the study period. It has been observed by 31.22M for NLO, 188.10M for ULN, 204.07M for BN (B), 130.82M for BN (T) and 156.69M for JSM. Whereas overall average level of inventory has been observed to be 142.18M over the study period.

The observation of BN (B) has been showing 43.53 percent which is the greatest than the average level of overall inventory i.e. (204.07 > 142.18). Similarly BN (T) has been showing 0.08 percent decrease in inventory than the overall average i.e. (31.22 < 142.18). The policy and level of investment in other words the size of the company can effect as the level of the inventory, but not more or less than optimal level of inventory is significant for the company.

Figure No. 4.14

Graphical Presentation of Inventory Level for Individual Companies over Study Period
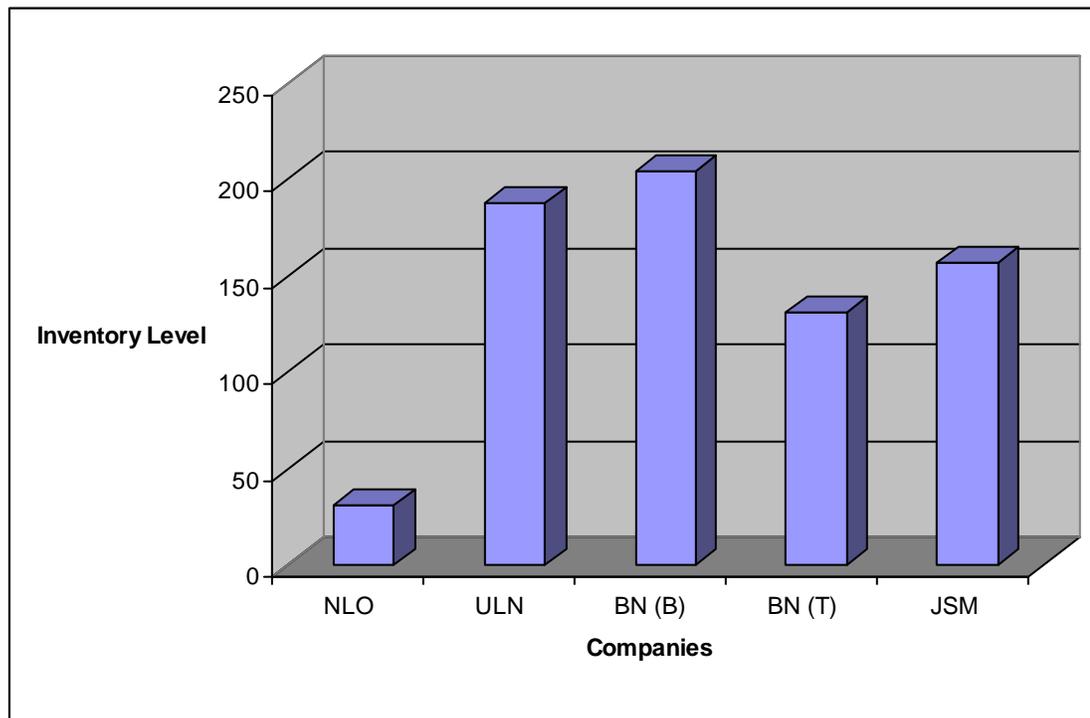
4.12.1 Analysis of Inventory Conversion Period

Inventory conversion period is defined as the length of time required to convert raw material into finished goods and then to sell these goods. The period indicates the efficiency of the firm in selling its product. ICP is calculated by dividing number of year with inventory turnover ratio, where inventory is turning

into receivable and cash through sales. ICP shows how rapidly the inventory is turning into cash and receivable through sales. In general low ICP is better than high ICP. A low ICP implies good inventory management system. Yet a very low ICP may be indicate of under investment in inventory. So that very low level of inventory has serious implications. It will adversely affect the ability to meet customer demand as it may not cope with its requirements. Similarly, very high ICP is also dangerous. It needs a lot of investment without any use.

Table No. 4.16

Inventory Conversion Period of Manufacturing Companies (in days)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	51.72	93.65	136.16	112.18	93.88	97.52	30.96	31.80
ULN	42.60	36.95	44.09	56.60	63.62	48.77	10.97	22.50
BN (B)	126.31	135.80	106.81	146.22	103.86	123.80	18.30	14.80
BN (T)	140.58	112.66	96.57	108.48	111.76	114.01	16.18	14.20
JSM	77.01	71.47	78.44	78.91	82.71	77.71	4.07	5.20
Average	87.64	90.11	92.41	100.48	91.17	92.36	4.86	5.30
S.D.	43.96	38.02	34.16	34.22	18.86	29.99		
C.V.	50.20	42.20	37.00	34.10	20.70	32.50		

Source: Inventory and Sales from AR and FSLC

The above table shows the ICP of selected manufacturing companies. The ICP was widely varied with in and among the companies. The ICP table shows that the highest ICP was 146 days for BN (B) in 2004-05 and lowest was 37 days for ULN in 2002-03. The trend of ICP was fluctuating during the study period. It has seen that only ULN had satisfactory inventory management system because its ICP was 49 days, which is lesser than two months. Others would be suffered by mismanagement of inventory system.

The average ICP during the study period, has been observed by 88 days in 2001-02, 90 days in 2002-03, 92 days in 2003-04, 100 days in 2004-05 and 91 days in 2005-06. Whereas overall industry average ICP was 92 days. Each period of study is not showing satisfactory result. The research identified that Nepalese manufacturing companies are suffering from mismanagement of inventory system. Simply these would be occurrence of over investment in inventory in each period of study.

The overall average ICP was 92 days in overall study period which is the non satisfied result. There would be occurrence of either mismanagement inventory system or over investment in inventories in fact, Nepalese manufacturing companies are running without adopting policy of effective inventory management system.

Analyzing the C.V. of different companies. NLO has highest C.V of 31.80% which is more fare from industrial C.v. It means that inventory conversion is not fluctuated during study period and lowest C.V. of 5.20 has JSM. It is less then industrial C.V. It implies inventory conversion period of JSM is less fluctuated during study period. Other companies like ULN, BN(B), BN(T) has C.V. of 22.50 %, 14.80% and 14.20% respectively. It means that inventory conversion period of these companies is fluctuated more during study period.

Observing the C.V of different period. It shows that period 2001-02 has highest C.V. of 50.20% which is more then industrial C.V. It implies that the inventory conversion is not fluctuated during this period. Lowest C.V at 2005-06 is 20.70%, which is less then industrial C.V. It implies inventory conversion it less fluctuated during this period.

4.13 Analysis of Payable Deferral Period

The length of time for payment of labour and purchases in each period of year is known as payable deferral period. By lengthening the PDP, cash conversion cycle (CCC) is shortened. PDP is the indicator the speed of making

payment of account payable. A high PDP is favourable for the company but too much long period hampers the credit worthiness of the company. However PDP indicates the firms credit payment capacity and it increases credit worthiness. The PDP will increase use to delaying in payment of obligation. The organization should try to maintain optimum payable policy because wrong decision of payment system reduces the profitability and leads to bankruptcy. PDP is calculated by dividing payable with cost of goods sold then again multiplying by days in year (365 days).

Table No. 4.17

Payable Deferral Period of Manufacturing Companies (in days)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	120.12	228.97	251	128.88	87.38	163.27	72.14	44.20
ULN	33.36	104.08	124.05	141.77	134.01	107.45	43.76	40.70
BN (B)	72.40	27.10	53.06	85.84	77.98	63.28	23.57	37.30
BN (T)	102.51	35.55	38.28	97.98	70.78	69.02	31.73	46.00
JSM	5.01	4.21	3.24	3.46	3.16	3.82	0.78	20.40
Average	66.68	79.98	93.93	91.59	74.66	81.37	11.45	14.10
S.D.	47.66	91.23	98.19	54.19	46.96	58.91		
C.V.	71.50	114.10	104.50	59.20	62.90	72.40		

Source: Payable, cost of good sold from AR and FSLC

The average PDP of listed manufacturing companies during the study period ahs been observed to be 67 days in 2001-02, 80 days in 2002-03, 94 days in 2003-04, 92 days in 2004-05 and 75 days in 2005-06, whereas the overall average PDP was 81 days.

Likewise, the average PDP of individual companies within the study period has been observed to be 163 days for NLO, 107 days for ULN, 63 days for BN (B), 69 days for BN (T) and 4 days for JSM. Out of these companies, the PDP was higher for NLO, ULN than the overall average PDP. Other has the lower PDP than

overall average. JSM has the lowest PDP with 4 days. The higher PDP indicates that the firm takes a longtime to pay its obligation. The overall PDP, 81 days is not a satisfactory average for listed manufacturing companies in Nepal.

BN(T) has highest CV of 46% it indicates its yearly different period fluctuation is high. JSM has lowest C.V. of 20.40% that means low fluctuated payable different period and NLO, ULN and BN(B) ahs CV of 44.20%\, 40.70 % and 37.30% respectively. It implies the deferral period of these complies is fluctuated more during study period.

Analyzing the C.V. of different period. Researcher found highest C.V. of 14.10% at 2002-03 that means the payable deferral period of this period is highly fluctuated and period 2004-05 has lowest C.V. of 59.20%that means its payable deferral period is less fluctuated.

4.14 Cash Conversion Cycle

The length of time between when the company makes payments and when it receive cash is called a cash conversion cycle. CCC required three things ICP, RCP and PDP. (i.e. CCC = RCP + ICP - PDP). The CCC net outs three periods i.e. ICP, RCP and PDP, thus equal the length of time between the firm's actual expenditures for productive resource and its own cash receipts from the sale of products. Once the purchase of raw material is made the inventory conversion period determines the average number of days, it takes to produce and sell the product. The average collection period determines the average numbers of days which makes the receivables is collected. Payable deferral period measures the days each period of conversion, the payable of cash is made for labour and suppliers. Hence, CCC is determined by differentiating the operating cycle and payable deferral period. Operating cycle is calculated by totaling the ICP and RCP. The CCC should be shortened as much as possible without hurting the operation. This would improve profit because shorter the CCC, the smaller the need for external financing and thus the lower the cost of such financing so that it

plays the effective role on cash management system. The cash conversion cycle is calculated by reducing payable deferral period with the sum of inventory conversion period and receivable collection period.

Cash Conversion Cycle (Period) of Manufacturing Companies (in days)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	113.94	96.93	121.24	169.9	178.88	136.18	36.12	26.50
ULN	18.74	(48.13)	(56.73)	(46.31)	(36.04)	(33.69)	30.22	-89.70
BN (B)	132.42	161.41	125.46	108.37	63.25	118.18	36.18	30.60
BN (T)	138.18	195.49	216.08	197.67	57.9	161.06	64.65	40.20
JSM	87.55	78.96	89.94	76.53	85.65	83.73	5.73	6.80
Average	98.17	96.93	99.19	101.23	69.93	93.09	13.04	14.00
S.D.	48.60	93.86	99.04	95.45	76.76	76.27		
C.V.	49.50	96.80	99.90	94.30	109.80	81.90		

Source: Table 4.13, 4.16, 4.17: RCP + ICP - PDP

The above table shows that the average CCC of the selected manufacturing during the study period. It has been observed to be 98 days in 2001-02, 97 days in 2002-03, 99 days in 2003-04, 101 days in 2004-05 and 70 days in 2005-06, whereas the overall average CC over the study period was 93 days. In 2005-06, CCC has been observed lesser than overall average. In other period, it was higher than overall average. Similarly, the average CCC of individual companies over the study period has been observed to be 136 days for NLO, 34 days for ULN, 118 days for BN (B), 161 days for BN (T) and 84 days for JSM. The average CCC of ULN seemed to be in negative. The overall CCC 93 days, is too large period of conversion that inventory and receivable is made in form of cash. It is unsatisfactory result for manufacturing companies. Because long CCC affects the firm's liquidity position. Due to the high inventory conversion period the result was seem unsatisfactory. Even though ULN has negative CCC it also does not seem satisfactory.

BN (T) has highest C.V., which is more far from industrial C.V. It implies that the cash conversion cycles of this company is not fluctuated and ULN has

negative C.V. It implies the cash conversion cycle is less fluctuated. JSM has C.V. of 6.80% which is less then industrial C.V. it means that the cash conversion cycle is no more fluctuated and other companies like NLO and BN (B) has C.V. of 26.50% and 30.60% which is more then industrial C.V. It implies the cash conversion period of these companies also more fluctuated during the study period.

Observing the C.V. of different period highest C.V at 2005-06 is 109.60% ,it implies that the cash conversion cycle of this period is more fluctuated. Lowest C.V. of 49.50% at 2001-02 that means it's cash conversion cycle is less fluctuated.

The fluctuation on CCC of manufacturing companies are shown in following bar diagram.

Figure No. 4.15

**Cash Conversion Cycle of Manufacturing Company during the Study Period**
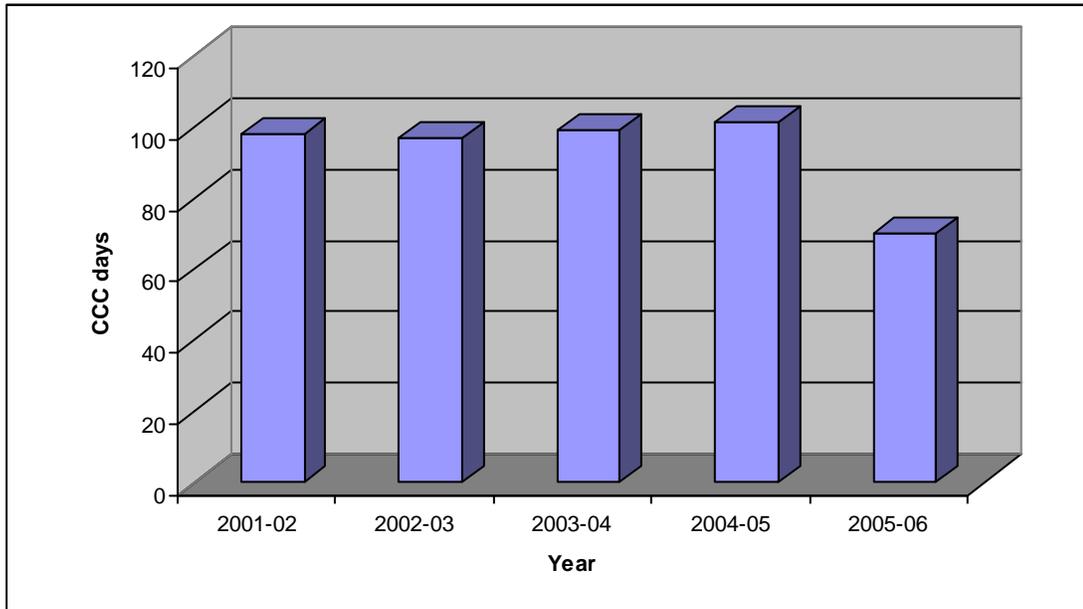
Figure No. 4.16

Cash Conversion Cycle of Individual Company within Study Period
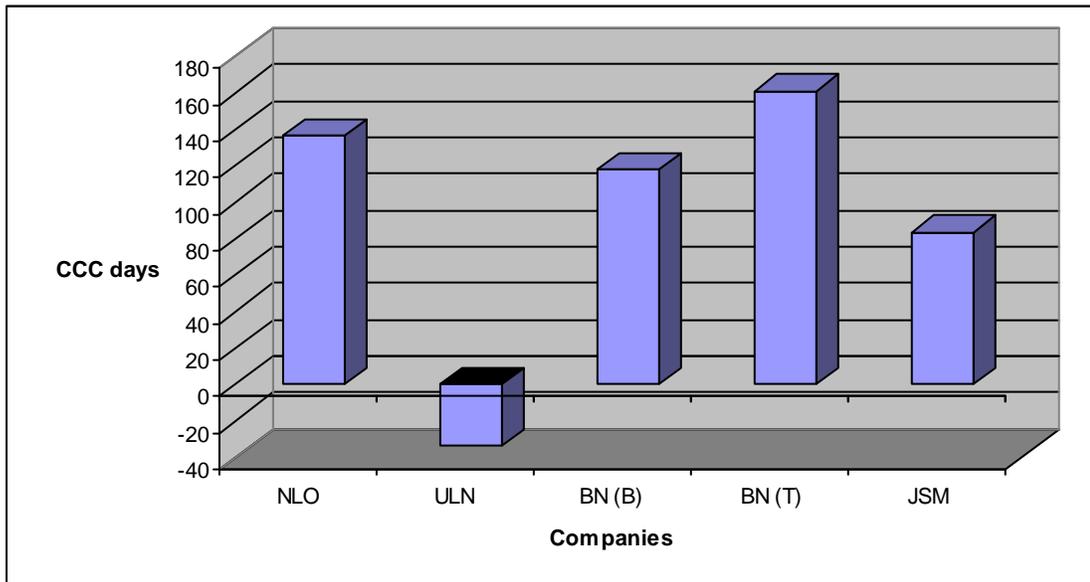
4.15 Profitability Analysis

4.15.1 Analysis of Net Profit

Table No. 4.19

Net Profit of Manufacturing Companies during Study Period (in million)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	6.22	4.24	0.31	3.58	0.17	2.90	2.62	90.30
ULN	42.61	93.17	140.78	189.20	238.2	140.79	77.04	54.70
BN (B)	48.61	19.37	37.80	34.22	24.96	32.99	11.39	34.50
BN (T)	39.14	25.36	19.55	15.63	(26.02)	14.73	24.46	166.10
JSM	(50.28)	(5.30)	8.81	25.37	(40.10)	(12.3)	32.13	261.20
Average	17.26	27.37	41.45	53.6	39.44	35.82	13.93	38.90
S.D.	41.19	38.73	57.27	76.65	113.97	60.97		
C.V.	238.60	141.50	138.20	143	288.70	170.20		

Source: NP from AR and FSLC.

The above table shows that the manufacturing companies were running with profitable condition, during the period of study. Overall average profit during the study was 35.42M which is not a significant profitable condition. The average profit of manufacturing companies during study period has been observed to be 17.26M in 2001-02, 27.37M I 2002-03, 41.45M in 2003-04, 53.6M in 2004-05 and 39.44M in 2005.06. The profit widely varied during the study period.

Similarly, the average profit for individual companies with in the study period has been observed to 2.9 m for NLO, 140.79m for ULN, 32.99 for BN(B), 14.73 m for NC(T) and loss (12.3m) for JSM. Except JSM all other companies shows profit ULN has shown highest profit (140.79m) which is satisfactory. Other also earn profit but not much. It explains that here were major contribution of ULN and BN(B) for maintaining profitable position of selected companies in their overall average.

Observing the C.V. of different companies JSM ahs high C.V. of 26.20% that means the net profit of JSM is so fluctuated during the study period. BN (B) has lowest C.V. of 34.50% which is less then industrial C.V. that means the net profit of BN (T) is less fluctuated. NLO, ULN, BN (T) has C.V. of 9.30%, 54.70% and 166.10% respectively. The C.V. of each company is more then industrial C.V. that means the net profit margin of these companies during study period is fluctuated more.

Observing the C.V. of different period highest C.V. at 2005-06 is 288.70% that means the net profit margin of this period is fluctuated more. Lowest C.V. at 2003-04 is 138.20% that means the net profit margin of this period is less fluctuated.

The fluctuation on net profit is shown in bas diagram also below.

Figure No. 4.17

**Net Profit of Manufacturing Companies during Study Period**
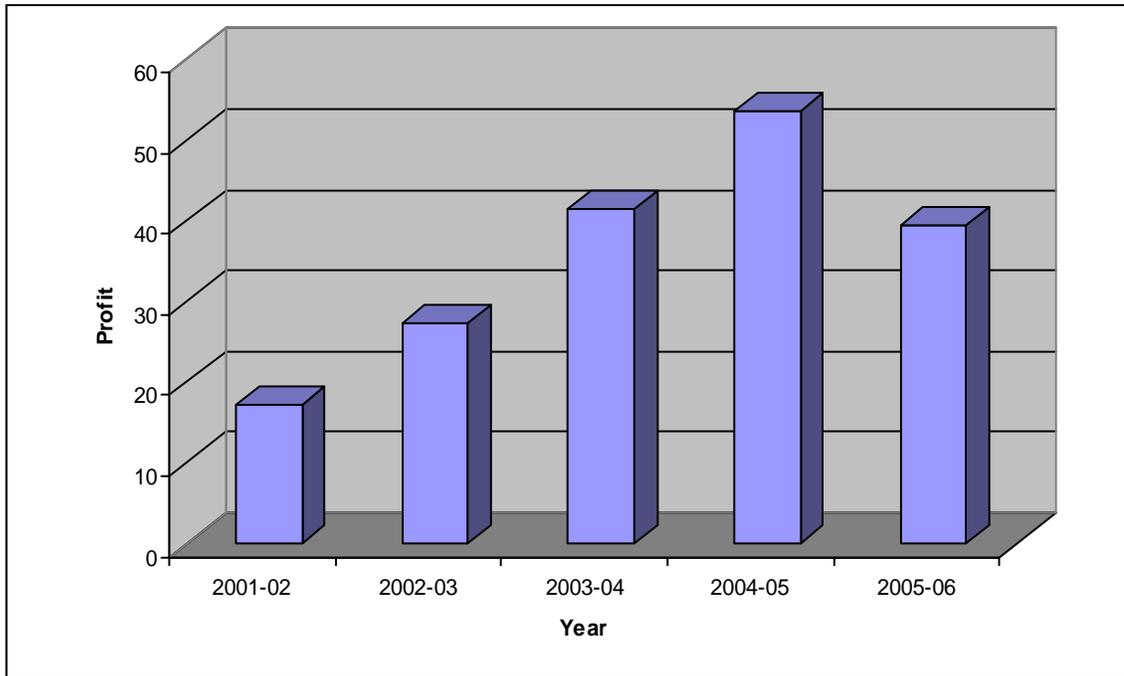
Figure No. 4.18

Profit of Individual Company over the Study Period
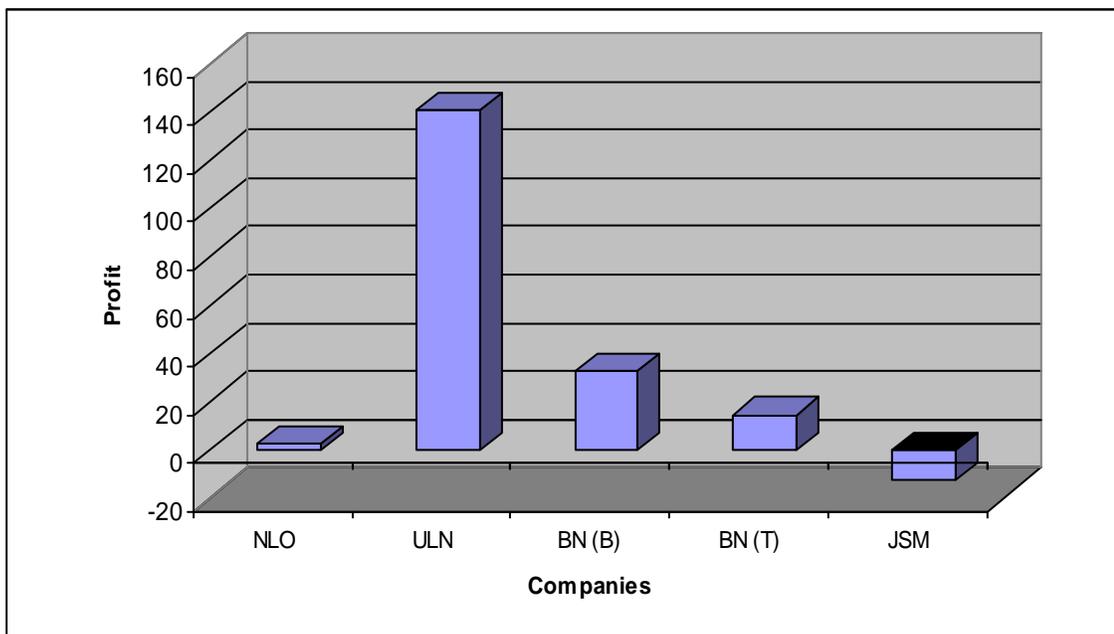
4.15.2 Analysis of Net Profit Margin

Net profit margin is indicative of management's ability to operate the business. Net profit margin is also known as net margin. It measures the relationship between net profit and sales of a firm. The high NPM would ensure adequate return to the owners as well as enable a firm to withstand adverse economic condition when selling prices is declining, cost of production is rising and demand from the product is declining. Low profit margin as a opposite implication.

Table No. 4.20

Net Profit Margin of Manufacturing Companies (in %)

NOC	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
NLO	4.5	3.56	0.37	3.02	0.11	2.32	1.97	84.90
ULN	3.45	7.49	9.23d	12.77	16.21	9.83	4.90	49.90
BN (B)	9.08	3.18	5.98	5.57	7.05	6.17	2.15	34.90
BN (T)	8.48	5.82	4.53	3.89	(7.35)	3.06	6.09	19.00
JSM	(7.77)	(0.73)	1.23	2.97	(5.49)	(1.96)	4.53	-23.10
Average	3.57	3.86	4.27	5.64	2.11	3.89	1.27	32.70
S.D.	6.78	3.10	3.61	4.12	9.67	4.41		
C.V.	189.90	80.30	84.50	73.10	458.30	113.40		

Source: NP and Sales from AR and FSLC.

The average NPM of the companies during the study period has been observed to be 3.57 percent in 2001-02, 3.86 percent in 2003-04, 4.27 percent in 32003-04, 5.64 per cent in 2004-05 and 2.11 percent in 2005-06. Whereas the overall average NPM has seen 3.89 percent. The study of net profit in all year has observed in profitable position but the result of NPM has been showing quite low percent of NPM.

Similarly, the average NPM of individual companies over the study period has been observed to be 2.32 percent for NLO, 9.83. percent for ULN, 6.17

percent for BN(B), 3.06 percent for BN(T) and (1.965 percent for JSM. Except JSM is showing positive profitability (NPM).

The different result between net profit and net profit margin has been found because proportion of the net profit with sales was in a wide fluctuation trend. Researcher said low profit in low sales and high loss in low net sales and its average will result lessen net profit margin. The average NPM, low 3.89 percent is the indicative of inadequate management abilities to operate the company.

Analyzing the C.V of different selected companies BN(T) has highest C.V. of 199% that means the net profit margin of BN(B) is fluctuating more. JSM has negative C.V. of 23.10% that means net profit margin of JSM is not fluctuated. NLO, ULN and BN(B) has C.V. of 84.90%, 49.90%, 34.90% respectively which is more then industrial C.V. That means the net profit margin of these manufacturing companies is fluctuated more during the study period.

Observing the C.V. of different period highest C.V. of 45.30% at 2005-06 that means the net profit margin of this period is fluctuated more. Lowest C.V. of 73.10% at 2004-05 that means net profit of this period is less fluctuated.

4.16 Liquidity and Profitability

Liquidity and Profitability are two very important aspects of business organization. Now bearing in mind conflicting nature of profitability and liquidity, correlation between the two has been analyzed subsequently. In a firm, profitability an liquidity contradicts, and as such the firm should seek for trade off between the two conflicting nature of two could be justified by following example, if a firm holds large current assets so as to become more liquid, the consequence is that the profitability as adversely affected. Since the firm could has invested a large portion of such currant assets, in earning profit: conversely, if a firm doesn't keep enough current assets, and invests its large portion in earning profit, the consequence is that the firm fails to meet to its current obligation i.e. becomes in liquid and invite the risk of bankruptcy.

When liquidity is being maintained, profitability tends to fall down, and vice versa. Therefore every firm should maintain satisfactory level of liquidity and which ultimately helps to earn profit.

4.16.1 Relationship between Liquidity and Profitability

Relationship between CR and NPM

The correlation coefficient between CR (x) and NPM (y) has been observed to 74. It shows the positive relationship between x and y for sampled manufacturing companies. Probable error is .13 r = .74>P.E. = .13 shows there may be positive relationship between profitability and liquidity. But PE = .13< r = .74< 6PE = .78 indicates that there is no evidence of correlation between CR and NPM.

The regression line of CR (x) on NPM (y) has been found to be x = .17y +1.49. The regression coefficient explains that 1 percent increase on NPM may occurs. .17 times increase in CR.

The regression line of NPM (y) o CR (x) has been found to be y = 3.24 x - 3.07. The regression coefficient explains that 1 times increase on CR may occurs 3.24 per cent increase in NPM. (For detail Appendix 'S').

4.16.2 Relationship between Quick Ratio and NPM

The correlation coefficient of QR and NPM has been obtained to be .7 i.e. r = .70. It shows the positive relationship for all listed manufacturing companies. The correlation is found in slight lower positive than the ratio between CR and NPM. It is because the amount of inventory has been reduced to make quick asset from current assets. It shows that increase in current asset being increase in profitability is sampled manufacturing companies.

PE = .15 < r = .70 < 6PE = .92 indicates that there is no evidence of correlation between QA and NPM.

The regression equation of QR (x) on NPM (y) has been divvied to be, x = .12y + 1.87. The regression coefficient of QR as NPM, .12 indicatives that 1 percent increase in NPM may occur .12 times increase in QR and vice - versa.

Similarly, the regression equation of NPM (y) on QR (x) has been obtained to be y = 5.7x 4.03. The regression coefficient of NPM as QR, 5.7 indicates that 1 times increase in QR may occur 5.7 percent increase in NPM. (For detail Appendix 'T')

It shows there exists positive insignificant relation between profitability and liquidity. The company is able to maintain liquidity position. But it does not seem to much.

CHAPTER - V
SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

Working capital is a backbone of every business organization. Working capital management is the management of cash, receivable and inventory. As stated in the introduction section the objectives of the study were to examine and critically analyze the working capital management practices in listed manufacturing companies identify the liquidity position, study the relationship between and among influencing variables for cash management to analysis the cash conversion cycle, then to provide necessary suggestion for improvement of working capital management system in listed manufacturing companies.

Review of related studies has been concerned in second chapter which makes the research fruitful. To make major findings and to reach closer to conclusion explanation of the tools and techniques has been concerned in chapter third then implemented in chapter four.

This study is conducted to obtain these following objectives.

- To examine and critically analysis of the working capital management of practices in listed manufacturing companies.
- To evaluate this liquidity position of the companies.
- To analyze cash conversion cycle of the companies.
- To study the relationship of working capital with other in flashing aspects of working capital management whether it is significant or not.

To fulfill above mentioned objectives financial tools as well a statistical tools are used to find reliable output those are : Ratio analysis correlation, regression and standard deviation.

Hence, the effort has been made in this chapter to present major finding on overall working capital management practices in listed manufacturing companies recommendation and conclusion.

5.1   Summary of Major Findings

Summary of major findings has been presented under following headings, correspondence to study objectives.

5.1.1 Overall Working Capital Management and Relationship

1. Companies listed in Nepal Stock Exchange of Nepal doesn't have any definite policy regarding how much cash balance to hold in each period which shows an inefficient working capital management. Cash and bank balance of listed companies seemed to be highly fluctuated which shows that companies does not any certain policy regarding how much of cash balance to hold each period. The range of cash balance has been found to be -29.91% to 135.30% taking pervious year as a base year. Study shows the average cash balance of 68.27 M over the study period.

2. Manufacturing companies have not been forecasting cash balance taking sales volume into consideration. As a fact the higher cash turnover ration indicates the sound liquidity position of company and vie versa. The average cash turnover ratio was found to be 74.64. However, the cash turnover ratio was highly erratic. The correlation between cash and sales being positive 0.853 and the relation PE > r < 6PE suggested statistically there is a positive and highly significant relation even though, the listed companies have not planned to hold cash specific proportion of sales volume in year of the study.

3. Listed manufacturing companies have failed to maintain adequate proportion of cash on its current assets.

   The average cash to current ratio has been observed to be 6.98%, 12.48%, 14.46%, 10.83%, 10.79% in 2001/02 - 2005/06 gradually. And the overall

average was found to be 11.11%. Only Unilever Nepal has been able to maintain adequate proportion of cash on current assets i.e. 40.52. The correlation coefficient between cash and CA being .71 and PE < r < 6PE suggested statistically inconclusive positive correlation as to significant or not.

4. Companies has a vast difference in maintaining proportion of cash as its quick assets. The overall proportion of cash and QA i.e. 16.86 is fine. But in company wise ratio, only Unilever Nepal has kept good proportion. The correlation coefficient between cash and QA has been .72 which shows positive relation but PE < r < 6PE shows that there is not conclusive proof.

5. Listed manufacturing companies profitability has been found to be small amount of profit. The overall average profit is 35.82 M whereas Jyoti Spinning Mills has negative profit (i.e. loss) and Unilever Nepal has highest profit of 140.79M. But the net profit margin has been found to be 3.89%. It is because low amount of profit was found. The correlation coefficient between cash and profit is .83 which shows the positive relationship between profit and cash.

6. Company has not been precisely meeting their current liabilities payment. The proportion of cash to current liabilities, in over all average, is 24.21% which is god. Cash and bank balance held compared to current liabilities indicates that for some year it was excessively high whereas for some other year it was extremely low. This is yet another implication of mismanagement of cash. However, Bottlers Nepal (Terai) and Nepal Lube Oil has shown sound liquidity position.

7. Companies failed to maintain adequate proportion of cash to total assets. Only Unilever Nepal and Bottlers Nepal (Terai) has great ratio i.e. 31.14% and 5.22% respectively. The strong variation in cash to total assets ratio explains that the companies have not been adopted specific policy for investment of cash in total assets.

8. Relationship of cash on receivable and payable was found to be not very significant level. The multiple correlation coefficient of cash on receivable and

payable has been obtained to be .26. Its coefficient of multiple determination has been obtained to be .068. It means 6.8% of total changes in the value of cash have been explained by the effect of receivable (sundry debtors) and account payable. The regression coefficient of cash on sundry debtors (0.20) means 20% increase in cash, in 100% in crease in receivable, holding payable constant. Similarly the regression coefficient of cash as account payable 1.79 means 1.79 times change in cash, increase 1 times in payable.

9. Listed manufacturing companies collection and disbursement activities has been found unsatisfactory.

    The average collection period and payable deferral period have been found to be 82 days and 81 days respectively. Both are unsatisfactory level. But if the management follows good credit policy to collect cash it will decreased to a desired level.

5.1.2 Liquidity Position and Relationship

1. Overall average current ratios is 2.15: 1 which is fine. But company wise ratio seemed fluctuating. Unilever Nepal, Bottler Nepal (Balaju) and Bottlers Nepal (Terai) has good ratio and Nepal lube oil and syotispinming mill has low ratios. It is said that the some companies were able to meet teir current obligates within the state time whereas other were not able to meet their current obligates within the stated time.

2. Overall average quick ratio is 1.39:1 which is little higher than standard Nepal lube oil, umhever Nepal, Bottlers Nepal (Balaju), Bottlers Nepal (Terai) has ratio above the standard whereas Jyoti spinning ills has below the standard GA shows that except JSM, all companies has higher liquidity position.

3. Liquidity and profitability of listed companies seemed to be positively correlation i.e. correlation coefficient between CR and NPM as been observed .74 > r = .74>PE = .13 indicates that there is no evidence of correlation between CR and NPM.

The correlation coefficient of QR and NPM has been obtained .70 But PE = .15 < r = .7 <6PE = .92 indicates that there is no evidence of correlation between QR and NPM

5.1.3 Cash Conversion Cycle

Listed manufacturing companies are not able to collect cash in considerable time span. The overall average cash conversion cycle has been obtained to be 93 days. It was 98 days, 97 days, 99 days, 101 days and 70 days in 2001/02 - 2005\06 gradually. Unilever Nepal have shown negative level of cash conversion cycle. i.e. (34 days. The higher level of inventory in each of study period affected to make greater the cash conversion cycle.

5.2 Conclusion

Finally, it can be concluded that working capital management system in listed manufacturing companies is found to be not good. Listed company is using traditional way for working capital management without any plan and policy. Small amount of net profit also shows the weak financial position. Listed manufacturing companies didn't have definite policies regarding how much cash balance to be hold for the period. Company didn't forecast the need of cash balance taking into consideration of influencing variables. The proportion of cash has been found to be either high or low than the standard with CA, CL, QA, TA and So on. Cash conversion cycle has been studied in very longer period. The collection and disbursement policy has been found to be adverse direction of principle of cash management, the over investment in inventory has been found. The company has not been able to trade of liquidity and profitability so that the profit was found to be low. Working capital is not seemed to be properly management by the listed company.

Management of working capital is being one of the major element in financial function. It is said that main function of financial manager is to apply

better technique to improve working capital management system in each companies. The different rations are very fluctuating in nature. These ratios are not managed applying definite policies. Companies has poor activity in operating, investing there are any other numerous aspects of finance involved in overall financial performance in addition to this, the overall performance of the firm count for other managerial aspects i.e. marketing management, human resource management, organization structure and so on.

To survive in the competitive business environment, listed manufacturing companies should immediately seek for drastic change in their managerial structure, it may be beneficial to manage the working capital in a systematic and scientific way according to the recommendation given above.

5.3   Recommendation

Management plays great role in every business organization to achieve the goal. Financial efficiency is one of the key elements to be successful for any business enterprise. The major findings of the study show that the listed manufacturing companies are not followed sound working capital management practices. So it needs effective system for financial management to enhance their financial performance. On the basis of the major findings of the study following recommendation are made for better working capital management practices of the company.

a) To operative day to day business activities and earn maximum profit current assets should be properly maintained but it has been observed that there is no concrete current assets management and specific working capital policy in sample companies. So, there should introduce effective inventory control techniques to decrease huge blockage of inventory and credit policy techniques for collection receivable.

b) Maintain Optimum Cash Balance Every Year

Either high or low proportion of cash on (A, QA, CL, sales) receivables and so on was found. The balance held at any time was too very low and very high in other time, without any definite purpose as to why the firm has held excess or deficit balance of cash. For success a firm, holding of optimum cash as per its sales, profits and other influencing variable is recommended.

c) Make Speeding in Collection and Delaying in Payment of Cash

Listed manufacturing companies have been operating without applying principle of cash management. The receivable collection period 82 days which is greater than payable deferral period 81 days.

So that it is recommended that company should operate with adopting the principle of cash management. The companies will able to reduce receivable collection period by changes in (i) credit term (ii) credit standard and (iii) collection policies. The company should extend the account payable as late as possible without damaging its credit standing.

d) Try to Reduce Cash Conversion Cycle

Cash conversion cycle of the companies has been found to be higher i.e. 93 days. Inventory conversion period was also too long. So that the result of cash conversion cycle has been made longer. High level of inventory has affected to make CCC longer. It is recommended that the companies should improve their inventory management system to make preferable length of CCC and effective management of cash.

e) Nepalese Listed Companies has High operating cost which always decreases profit of an organization. Company should make the attention toward increase sales and profitability. Similarly, the sales volume of the companies were not found in satisfactory level. The effort of company, should make for increasing sales volume. It is possible by,

- Providing special cash discount on bulk purchase
- Improving product quality
- Adopting effective credit policy and soon.

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f) Company should invest its surplus in a profitable opportunities. Cash of company should neither more nor less than daily operating purpose and invest remaining cash in profitable sector. Idle cash always decrease profit.

g) Every company's liquidity position is very important. Company should try to maintain considerable liquidity position. Every organization needs considerable liquidation position so that company may be able to meet current obligation.

h) Try to trade off liquidity and profitability in order to increase profit.

    The main objective of managing cash is to trade off liquidity and profit ability in order to increase profit. By maintaining considerable liquidity position the company should try to increase net profit. It is possible by investing the higher position total assets in near cash assets and decreasing most illiquid assets i.e. inventory. So for the company should try to maintain considerable liquidity position than try to increase profitability by improving cash management and other managerial aspects.

i) Company's cash flow statement will be the basis for budgeting cash. Company should prepare cash budget. Cash planning and cash budgeting on a formal basis so as to project cash surplus and cash deficit for a period not exceeding one year and broken up into shorter intervals. Cash budget should be prepared with considering the influencing variables on cash management.

j)   Management is backbone of the company and success and failure of the company depend upon the managerial skills. So company should allocate some money for training of financial employees to produce skilled and experienced man power.

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