

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Working capital is the part of the capital of a company which is employed in its regular or daily operation. Working capital is also known as circulating capital. There are two concepts of working capital: Gross Concept and Net Concept.

Gross working capital, simply called as working capital, refers to firm's investment in current assets. Current assets are those assets which can be converted into cash within an accounting period. (Pandey, 2010; 370)

Working capital management is a process of short term decision making regarding the current assets and liabilities affecting the long term operation of an organization. It is a process of planning and controlling the level and mix of current assets of the firm as well as financing these assets. It includes decisions regarding cash and marketable securities, receivables, inventories and current liabilities with an objective of maximizing the overall value of the firm. Management of working capital in a business enterprise is essential due to different reason, firstly an enterprise must determine the adequacy of investment in current assets other wise it would seriously loosing their liquidity base. Secondly they must select the type of current assets suitable for investment so as to as certain the turnover of current asset that greatly determine the profitability of the enterprise. It is therefore, a recognized fact that any discrepancies arises in management of working capital can lead to adverse effects in business and adversely affects the liquidity, turnover and profitability of the firm.

Thus the present study tries to find out the position of working capital in manufacturing concerns in Nepal. Among them only two organization's are taken as sample for the study which are Hetauda Cement Industry Ltd. and Unilever Nepal Ltd. These two manufacturing company have been practicing in working

capital management in their respective companies. It is better to study comparatively about these companies working capital management.

1.1.1 Introduction of the Organization

Unilever Nepal Ltd.

UNL is a subsidiary company of Hindustan Lever Ltd. The factory is situated as Basamadi VDC of Makawanpur district. UNL was formed as a public limited company in 1993 and production started from December 1994. It was registered under company act 2053. As a growing manufacturing company UNL has new brands and categories in the domestic market and import substitution of foreign goods too.

Despite of the company achieved its market growth of 20% during the study period its working capital position is negative, so the study focus on how can company achieved profit maximization objective the context of negative working capital situation.

Hetauda Cement Industry Ltd.

Hetuada Cement Industries LTD (HCIL), established in BS 2033 Ashwin 13 under Company Act 2021, is an undertaking of HMG/Nepal. It is a largest cement manufacturing company in Nepal. HCIL plant has an annual production capacity of 260000 MT of Cement and was installed with a loan assistance from Asian Development Bank (ADB).

It commenced its commercial production since December 1985. Hetauda Cement Industries Ltd. was established with a loan of Rs. 1,044,823,000. from ADB, Rs. 330,000,000 from Nepal Bank and a share of Government of Nepal of Rs. 206,395,000. HCIL started production in B.S. 2042, Mangsir 26 with 750 Metric tones per day.

1.2 Statement of the Problem

Working capital management has been regarded as one of the conditioning factor of the decision making issues. It is needless to say that it is very difficult to determine as to how much working capital a particular business organization

requires. The organization which is not willing to risks can go far more short term liquidity, which leads the firms into lower profitability. Hence it is very important to analyze and find out problems and its solutions to make efficient use of funds for minimizing the risk of loss to attain wealth maximizing objective.

The success or failure of business organization depends upon the decision making process of an organization. Among them working capital decision is also crucial decision for the organization for its existence.

Working capital of the organization can not be managed in an easy way and it should not be neglected further the manufacturing organization's problem in this regard is more difficult than that of non-mfg organizations. Manufacturing organizations should manage its level of inventories (Raw material, WIP and finished goods) for uninterrupted production process. Any research work tries to get the answer of certain research questions or research problem. This study has following research questions to be answered:

- i. How the working capital is managed in sample organization?
- ii. What are the major factors affecting for managing the working capital in manufacturing organization?
- iii. How far the manufacturing organization determine the financing mix i.e. how current assets will be financed?
- iv. What are the components of working capital which affect the operating income of the organization?
- v. Does the organization properly adopt the working capital management policies and practices?

1.3 Objectives of the Study

The major objective of this study is to evaluate the working capital management of Unilever Nepal Ltd. and Hetauda Cement Industry Ltd. The other objectives of study are to focus on the importance of the proper management of working capital and to make suggestions about how to manage working capital within the organization. The specific objectives are as follows:

- i. To study the management of working capital within the sample organization.
- ii. To assess the factor affecting the working capital management in sample manufacturing organization.
- iii. To find the position of current assets and current liabilities employed by the firm.
- iv. To study the policies of working capital adopted by the organization.
- v. To study the obstacles and problems in making decisions regarding management of working capital and provide solution as far as possible.

1.4 Significance of the Study

Working capital is the size of investment in each type of current assets. Each component of the current assets should be managed efficiently and effectively. It is because decision regarding working capital affects not only the profitability of the long run. The management of working capital should not be neglected by enterprise, other wise they will seriously erode their financial viability. As the manufacturing organization in Nepal which greatly influences the economy of the country. An effective and efficient management of their current assets is needed to better the profitability of the firm.

The study of working capital management is also important at least for four reasons. Firstly, public enterprises must determine the adequacy of investment in current assets otherwise it would seriously erode their liquidity position. Secondly, they must select the type of current assets suitable for investment so as to raise their operative efficiency. Thirdly, they are required to ascertain the turnover of current assets that greatly determine the profitability of public enterprises. Lastly, they must find out the appropriate sources of funds used to finance current assets.

This study is important for owners, creditors and potential investors to make their attitudes on investment. This study will also have significance for

management, policy maker, stockholders of the firms and others those having interest on working capital management decision.

1.5 Limitations of the Study

The study is simply a partial requirement of master of business study program. So, this study has following limitations:

1. The study primarily based on data provided by the organization.
2. The study covers only six fiscal years i.e. 2005/06 to 2010/11.
3. The study only considered working capital management of the organization and it can not assess other financial aspects of the organization.
4. Due to the time and resource limitation the study can not cover all of the areas of working capital like as working capital planning, financing and control of working capital etc.

1.6 Organization of the Study

This study includes five chapters:

Chapter one deals with introduction, background of the study, problem identifications, objectives, significance, limitation and organization of the study.

Chapter two deals with the review of related literature and available studies in the field of working capital.

Chapter three presents the methodology used in this study. It deals with research design, sources of data, data gathering procedures and tools used.

Chapter four fulfills the objectives of the study by presenting the data and analyzing them with the help of various financial and statistical tools followed by methodology.

Chapter five summarized the whole study with conclusions and recommendations. At the end an appendix and bibliography are included.

CHAPTER TWO

REVIEW OF LITERATURE

The main purpose of this chapter is to review the available on working capital management in the context of Nepalese enterprise including the available information of commercial study different magazines, journal, and newspaper, book to collect the information about their subject matter. This process of studying different material, which is concerned with the selected topics of the research, is known as review of literature. Review of literature is useful in research because it provides the insight and general knowledge about the subject matter of research.

2.1 Conceptual Framework

2.1.1 Meaning of Working Capital

Working capital management is the effective life blood of any business. Hence the management of working capital plays a vital role for existing of any public enterprises successfully while studies it. Therefore working capital management in public enterprise is very important mainly for four reasons. Firstly, public enterprise must need to determine the adequacy of investment in current assets otherwise it could seriously erode their liquidity base. Secondly, they can select the type of current assets, suitable for investment so as to raise their operational efficiency. Thirdly they are required to ascertain the turnover of current assets, which determine profitability of the concerns. Lastly, they must find out of the appropriate sources of funds of finance current assets. (*Agrawal, 2011; 256*)

The management of the funds of business can be described as financial management. Financial management is mainly concerned with two aspects. Firstly fixed assets and fixed liabilities, in other words, long-term investment and sources of funds. Secondly, current assets and current liabilities, which are concerned with current uses and sources of funds. Both of these types of funds play a vital role in business finance. Business firms need various types assets in

order to carry out its operation. Some assets are required to meet the needs of regular production and some other are required specially to meet day to day expenses and short-term obligation. The assets such as cash, marketable securities, account receivables and inventories, which are known as current assets, are required to be maintained at a certain level depending upon the volume of production and sales.

Firms needs cash to pay for all their day to day activities. They have to pay wages, pay for raw material pay bills and so on. The money available to them to do this is known as the firm's working capital. The main sources of working capital are the current assets that the firm can use to generate cash. However, the firm also has current liabilities and so these have to be taken account of when working out how much working capital a firm has at its disposal.

Working capital is therefore:

Working Capital = Current Assets - Current Liabilities

Thus working capital is the same as net current assets, and its an important part the top half the farm's balance sheet. It is vital to a business to have sufficient working capital to all its requirements many business have gone under, not because they were unprofitable but, because they suffered from shortages of working capital refers to cash a business requires to day-to-day operation, or more. Specially, for financing the conversion of raw materials into finished goods, which the company sells for payment. Among the most important items of working capital are levels of inventory, accounts receivable and payable. Analysis looks at these items for signs of a company's efficiency and financial strength. The better a company manages its working capital, the less the company needs to borrow. Even companies with cash surplus need to manage working capital to ensure that those surplus are invested in ways that will generate suitable returns. Therefore, the role of working capital management is more significant for ever business organization irrespective of their nature. There have both done a number of studies on working capital management from different experts in various enterprises.

2.1.2 Concept of Working Capital

The term of working capital management is closely related with short-term finance and it is concerned with collection and allocation of the resources. Working capital management is related to the problems that the interrelationships that exist between them. Thus the management of working capital is no longer viewed as an accounting task but as a strategic method for increasing the financial performance of lending organizations. While early initiatives for reducing day's sales outstanding (DSO) have largely focused on post invoice collections and dispute management, today, the ability to drive working capital management through out the entire quote to cash cycle has proven to deliver an exponential effect on DSO and the overall customer experience.

There are two schools of thoughts or concepts regarding the meaning of working capital.

According to one school of thought, working capital is meant for the current assets only.

It is concerns nothing with the liabilities side. According to other school of thoughts working capital is the excess of current assets over current liabilities. The former concept which can be termed as gross concept, is important to newly established companies where liabilities have not been acquired immediately, but the latter are which can be termed as net concept, is important for both newly established and operating concerns where some amount of current liabilities has been maintained for payment of different creditors, income taxes, bills payable, secured and unsecured loan, etc. The term current assets refers to those assets which in the ordinary course of business can be or will be turned into cash within one year without undergoing a diminishing in value and without disrupting the operation of the firm such as cash, marketable securities, accounts receivables which are intended at their inception to be paid in the ordinary course of business such as accounts payable, bank over- draft

and outstanding expenses etc. There are two concept of working capital gross concept and net concept.

2.1.3 Gross Concept

According to gross concept, "Gross working capital invested in total current assets such as cash, marketable securities, receivables and inventories. The concept of gross working capital is important to decide the amount needed for each item of current assets. However, the gross working capital concept does not mention how they are financed. It is also does not indicate the firm's liquidity correctly because it does not compare current assets with the current liabilities of the firm. (Van Horne, 2010; 372)

2.1.4 Net Concept

According to net concept, working capital refers to the difference between current assets and current liabilities. In other words, it is that part of current assets financed with long term funds. It focuses on the liquidity position of the firm and suggests extending which working capital need to be financed by permanent sources of funds. It is nit very useful to compare the performance to different firms as a measure of liquidity but it is quite useful for internal control. This concept helps to compare the liquidity of the same firm over a time. (Khan and Jain; 2009; 604)

The term net working capital refers to the difference between current assets and current liabilities. Current liabilities are those claims of outsiders which are expected to nature for payment within an accounting year, and includes; creditors, bills payable, bank overdrafts and outstanding expenses or accused income. Net working capital arises when current assets exceed current liabilities. A negative we occur when current liabilities are in excels of current assets. (Pandey, 2005; 135)

There are specially two concepts of working capital, gross concept and net concept. The gross working capital simply called as working capital refers to the firm's investment in current assets. Current assets are those assets, which

can be converted into cash within an accounting year and includes cash short-term securities, and debtors, bills receivable, stock and prepaid expenses. (Pandey, 2005; 140)

There are two major concepts of working capital net working capital and gross working capital. When accountants use the term working capital, which is the dollar difference between current assets and current liabilities. This is one measure of the extent to which the firm is protected from liquidity problems. From a management viewpoint, however, it makes little sense to talk about trying to actively manage a net difference is continuously changing.

Finance analysis on the other hand, mean current assets when they speak of working capital. Therefore, their focus is on gross working capital. Since it does make sense for the financial manager to be involved providing the correct amount of current assets for the firms at all times, we will adopt the concept of gross working capital. As the discussion of working capital management unfolds, concern will be to consider the administration of the firm's current assets namely cash marketable securities, receivables and inventory and the financing needed to support current assets. (Van Horne: 2010: 204)

Thus, there are two concepts of working capital gross concept and net concepts. However, the concept of working capital is related not only with gross concepts of WC, but also with organization borrowings. The management of any organization has to pay attention towards the total amount of both current assets as well as borrowings. And along with this, the management has to check where profit earning capacity of the organization is favorable or not because it is higher than the cost of borrowings. In a corporation or any type of firms, the financial manager should pay attention to the aspects of profitability. They should also aim to ensure the liquidity of the firm. Any established business is a concept debtor. It borrows from financial institution. It purchase merchandise on credit. And it has tax obligations to the government or the concerned authorities. Thus in every step of the business or corporation activities, there is an obligation of creditors. So, to satisfy their creditors, the

firm must have that much of liquid cash for making payment of this entire obligation in time. Hence, both concepts of net and gross working capital are necessary for the business finance. Both current assets and current liabilities are two main parts of management of working capital. In working capital management we manage the financial resources needed by a firm and use it in a most profitable field without keeping any idle fund as for as possible.

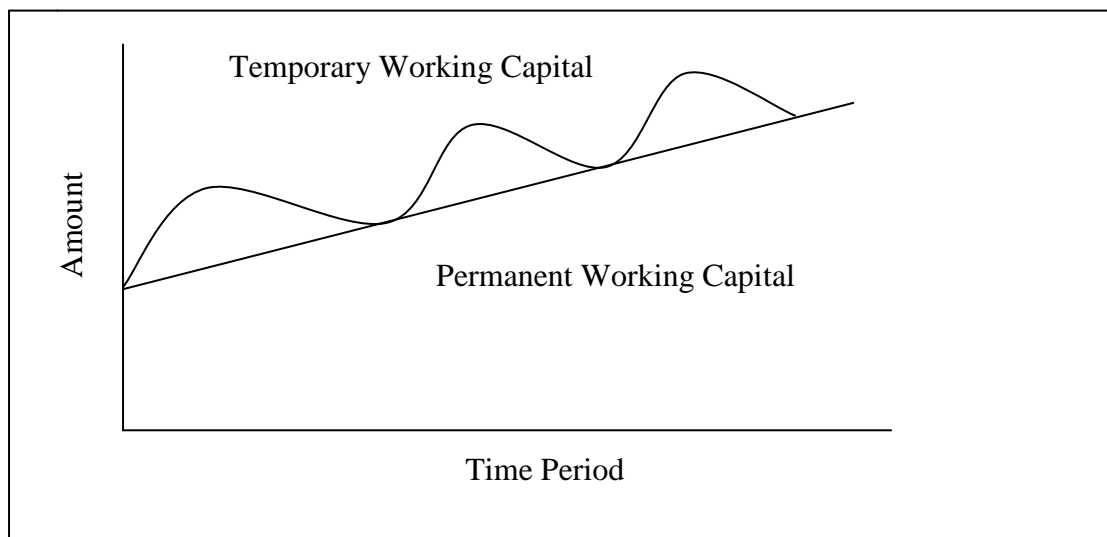
2.2 Classification of Working Capital

Before turning our attention to the way working capital should be financed, we need to take a slight detour and classify working capital can be classified into two types:

- i) Permanent or fixed working capital
- ii) Variable or temporary of fluctuating working capital

A firm's permanent working capital is the amount of current assets required to meet long-term minimum needs. You might call this "bare bones" working capital. Temporary working capital, on the other hand is the investments. Figure in below illustrates the firm's changing needs for working capital over time while highlighting both the temporary and permanent nature of those needs.

Figure No. 2.1
Permanent and temporary working capital



Source: Khan and Jain, 2009: 607

Permanent working capital is similar to the firm's fixed assets in two important respects. First, the amount investment in both of those assets groups in long term. Therefore suppliers of capital to the firm need to realize that he finding needs for current assets is long-term despite the seeming contradiction that the assets being financed are called "current". Second, for a growing firm, the level of permanent working capital needed will increase over time in the same way that a firm's fixed assets will need in increase over fixed assets in one very important respect it is constantly changing. Permanent working capital does not consist of particular current assets staying permanently in place, but is a permanent level of investment in current assets, whose individual item are constantly turning over viewed still another way. Permanent working capital is similar to the level of water that you find in a bay at low tide.

Like permanent working capital, temporary working capital also consists of current assets in a constantly changing from however, since the need for this portion of the firm's total current assets is seasonal,. We may want to consider financing this level of current assets from a source which can itself be seasonal or temporary in nature. (Van Horne; 2010; 205)

Thus the permanent working capital refers to that level of current assets which is required on a continuous basis over the entire year and the temporary working capital represents that portion of working capital which is required over permanent working capital.

2.3 Need of Working Capital

Efficient management of working capital is an integral part of overall financial management and has a bearing on the objective of maximization of the owner's wealth. Sufficient profit is needed to achieve this objective. Profit position of the firm depends upon the amount of sale. In other words a good sales program is needed to gain sufficient profit. But the amounting sales shown in the book can not reflect the real income. Some time lag between sales and cash realization is needed. As the operation cycle in this period can not be stopped, some amount of liquid assets is needed to run the operation without

interruption. That very amount of liquid assets is called working capital. Indeed the concepts of working capital (gross and net) are exclusive rather they are equally significant from the management point of view. However, the firms differ in their requirement of working capital.

The management of working capital has been regarded as one of the conditioning factors in the decision making issue. It is no doubt, very difficult to point out as to how much working capital is needed by a particular company, but it is very essential to analyze and find out the solution to make an efficient use of funds for minimizing the risk of loss to attain profit objectives. Thus goes the importance of working capital on operating life a company. A successful business keeps its working capital moving rapidly; hence it is also a lead circulating capital or a moving capital into income and profits and bank into working capital is one of the most dynamic and vital aspects of business operation. And only this movement of current assets keeps the business alive. A fully equipped factory without the stock to sell is of no use. These circumstances emphasize the importance of working capital on a business firm. (Ghimire; 2002: 73)

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

1) The Transactional Motive:

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

2) The Precautionary Motive:

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

3) The Speculative Motive:

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

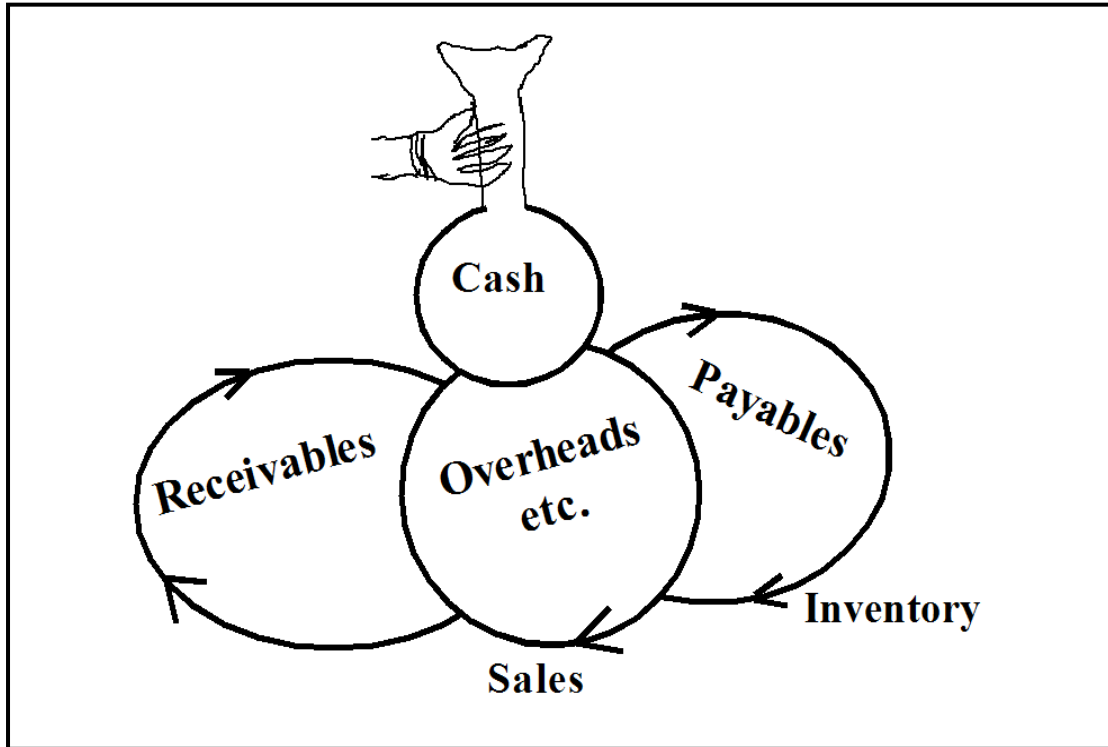
- a. Opportunities of profit making investment.
- b. An opportunity of purchasing raw materials at a reduced price on payment of immediate cash.
- c. To speculate on interest rate and
- d. To make purchasing at favorable price etc. Thus firms need the working capital to meet the speculative motive.

2.4 Working Capital Cycle

Cash flow in a cycle into, around and out of a business. It is the business's life blood and every manager's primary task is to help keep it flowing and to use the cash flow to generate profit. If a business is operating profitably, then it should, in theory, generate cash surpluses. If it does not generate surpluses, the business will eventually run out of cash and expire. The faster a business expands the more cash it will need for working capital and investment. The cheapest and best sources of cash exist as working capital right within business. Good management of working capital will generate cash will help improve profit and reduce risks. Bear in mind that the cost of providing credit to customers and holding stocks can represent a substantial proportion of a firm's total profits.

There are two elements in the business cycle that absorb cash inventory (Stock and work-in-progress) and Receivables (debtors) the main sources of cash are payables (creditors) and equity and loans.

Figure No. 2.2
Working Capital Cycle



Source: Khan and Jain, 2009: 612

Each component of working capital (Namely inventory, receivables and payables) has two dimensions ... TIME..... and MONEY, when it comes to manage working capital- TIME IS MONEY. If you can get money to move faster around the cycle (e.g. collect monies due from debtors more quickly) or reduce the amount of money tied up (e.g. reduce inventory levels relative to sales), the business will generate more cash or it will need to borrow less money to fund working capital. As a consequence, you could reduce the cost of bank interest or you'll have additional; free money available to support additional sales growth or investment. Similarly, if you can get negative improved terms with suppliers e.g. get longer credit or an increased credit limit; you effectively create free finance to help fund future sales.

It can be temporary to pay cash, if available for fixed assets e.g computers, plant, vehicles etc. If you do pay cash, remember that this is now longer available for working capital. Therefore, if cash is tight, consider other ways of financing capital investment loans, equity, leasing etc. Similarly if you dividends or increase drawing, these are cash outflows and, like water flowing downs a plug whole, they remove liquidity from the business.

2.5 Working Capital Policy

Working capital policy involves the adequate level of current assets financing depend the policy of the firm. Policy refers to the firm's appropriate level for current assets and working capital policy involve the adequate level of current assets financing depend on the policy followed by the firm. Working capital involves two basic questions (I) what is the appropriate level for current asset, both in total and by specific amount? (II) How should current asset be financed? Or how current liability will be used to finance current asset? The working capital policy interested to solve the arising questions by the firm. There are two alternative policies (I) current asset investment policies (II) current asset financing policies.

Working capital management has to determine how funds should be invested in working capital in gross concept. Every can adopt different financing policy according to the financial managers attitude towards, the risk return trade off one of the most important decision of finance current assets, any firm has to find out the different sources of funds for working capital. Thus working capital policies regarding to the level of each category of current assets and their financing are discussed in the insuring part of the section.

There are two types of working capital policies which are given below:

1. Current Asset Investment Policy
2. Current Asset Financing Policy

1. Current Assets Investment Policy

Current asset investment policy involves the three alternative policies. The three alternative policies regarding the total amount of current assets carried. Essentially these policies differ in that different amount of current assets are carried to support given level of sales. The three alternative policies are:

- (I) Relaxed Current Asset Investment
- (II) Restricted Current Asset Investment
- (III) Moderate Current asset Investment

A. Relaxed Current Asset Investment Policy

This policy, the firm hold relatively large amount of cash, marketable securities, inventories and receivables to support a given level of sale. This policy creates longer inventory and cash conversion cycle.

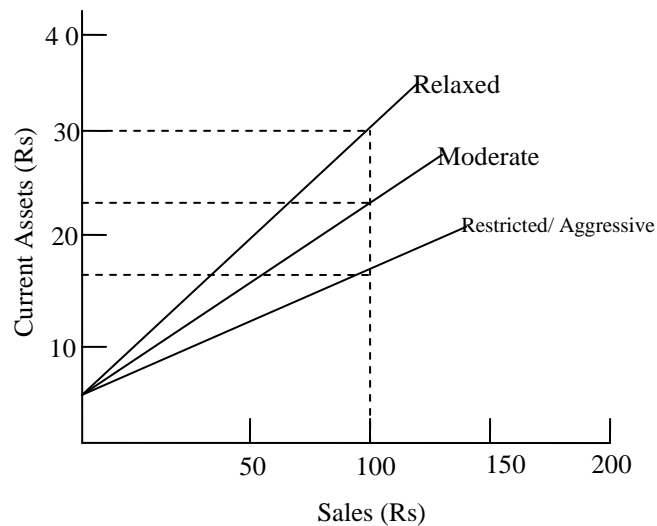
B. Restricted Current Asset Investment policy

In this policy, the firm holds the minimum level of cash, marketable securities, inventories and receivables to support the given level of sales. This policy is greater risky than other policies. The policy always tries to reduce cash conversion cycle. In this policy, the firm follows a tight credit policy. The tight credit policy reduces the level of sales. Although the sales as decrease in the policy, the financial manager intend to maximize the profit by low requirement in investment (low cost and low opportunity cost) and high cash conversion cycle make low investment and increase his profit.

C. Moderate Current Asset Investment Policy

In the moderate investment policy, the firm hold the amount or current asset between two policies. Risk and return in moderate in this policy.

Figure No. 2.3
Current Assets Investment Policy



Source: Khan & Jain, 2009; 99

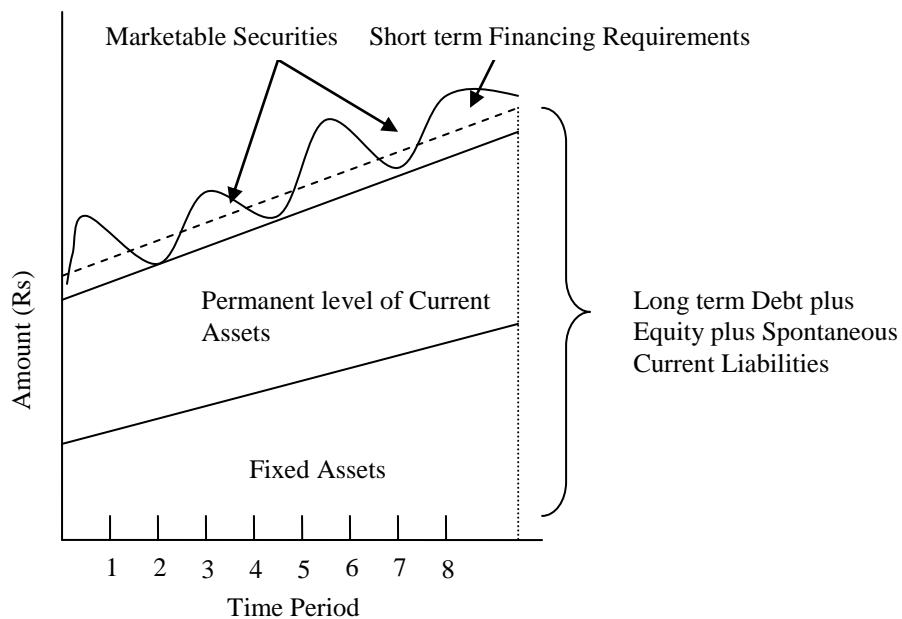
2. Current Asset Financing Policy

In the manner in which the permanent and temporary current assets are financed. Current assets are financed with funds raised from different sources. But cost and risk affect the financing of any assets. There are three variants aggressive, conservative and matching policy of current assets financing.

A. Conservative Approach

This approach suggests that the estimated requirement of total funds should be met from long term sources; the use of short term funds should be restricted to only emergency situations or when there is an unexpected outflow of funds. Under a conservative plan, the firm finances its permanent assets and a part of temporary current asset with long-term financing. Thus in this periods when the firm has no temporary current assets, it stores liquidity by investing surplus funds into marketable securities. The conservative plan relies heavily on long term financing and therefore is less risky.

Figure No. 2.4
Conservative Financing

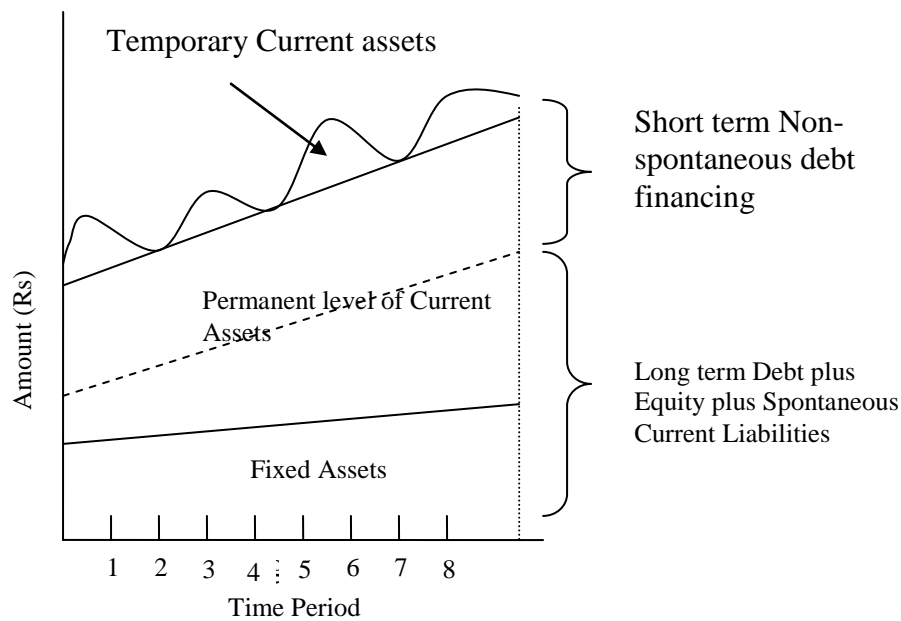


Source: Khan & Jain, 2009, 324

B. Aggressive Approach

In aggressive policy, the firm finances a part of its permanent current assets with short term financing and rest with long term financing. In other words, the firm finances only temporary current assets but also a part of the permanent current assets with short term financing. Short term financing finances 50% of the permanent current assets. In general, interest rate increases with time i.e. lower the interest rate. It is because lenders are risk adverse and risk generally increases with the length of lending period. Thus under normal the firm borrows on a short term financing rather than long term financing. On the other hand the firm finances its permanent current assets by short term financing, than it runs the risk of renewing the borrowing again and again. This continued financing expose the firm to certain risk. It is because, in future, interest expensive will fluctuate widely, and also it may be difficult for the firm to raise the funds during the stringent credit period. In conclusion, there is higher risk higher return and low liquidity position under this policy.

Figure No. 2.5
Aggressive Financing



Source: Khan & Jain, 2009, 326

C. Maturity Matching or Self Liquidating Approach

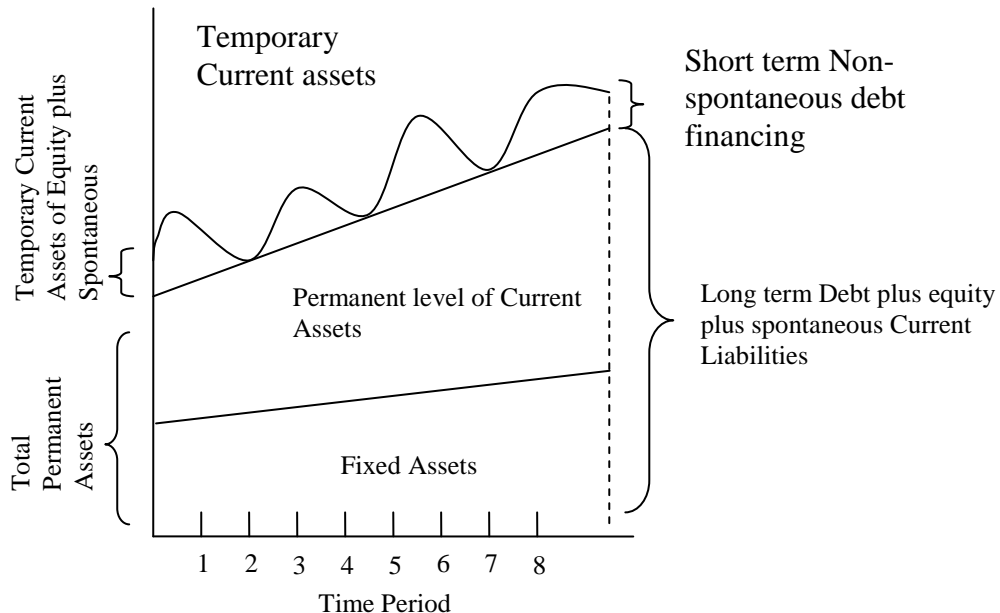
Under this approach, unlike the aggressive strategy, the conservative strategy requires the firm to pay interest on unneeded funds. The lower cost of aggressive strategy therefore makes it more profitable than the conservative strategy; however the aggressive strategy involves much more risk. For most firms a trade-off between the externs represented by these to strategies should result in an acceptable financing strategy.

The justification of the exact matching is that since the purpose of financing is to pay for assets, the financing should be relinquished (avoid). When the assets is expected to be relinquished using long term financing for short term is expensive as the funds will not be utilized for the full period. Similarly, financing long term assets with long term financing is costly as well as inconvenient as arrangement for the short term financing will have to be made as continuing basis.

Thus when the firm follows matching approach long term financing will be used to finance fixed assets and permanent assets and short term financing to finance

temporary or variable current assets. But this situation may not be realized due to the uncertainty about the expected lives of assets. The approach of working capital management entails moderate risk with moderate return.

Figure No. 2.6
Financing under Maturity Matching



Source: Khan & Jain, 2009, 343

2.6 Financing of Working Capital

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

i) Long-term Financing

Long-term financing has liquidity and low profitable. Ordinary share, debenture, preference share, retained earning and long-term debt of financing institution are major sources of long-term financing.

ii) Short-term Financing

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

Trade credit refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms have not to pay cash immediately for the purchase is called trade credit. It is mostly account basis. Another form of trade credit is bills payable. It depends upon the term of trade credit. (Van Horne; 2010; 256)

Bank credit is the primary instructional sources for working capital financing. For the purpose of bank credit, amount of working capital required has to be estimated by the borrowers and banks are approached with the necessary supporting data. After availability of this data, bank determines the maximum credit based on the margin requirement of the security. The types of loan provided by commercial banks are loan arrangement, overdraft arrangement, commercial paper etc.

iii) Spontaneous Financing

Spontaneous financing arises from the normal operation of the firms. The two major sources of such financing are trade credit and accruals. Whether trade credit is free of cost or not actually depends upon the terms of trade credit. Financial manager of the firm would like to finance its working capital with spontaneous sources as much as possible. In practical aspect, the real choice of CA financing is either short-term or long-term sources. Thus, the financial manager concentrates his power on short-term versus long-term financing. Hence, the financing of working capital depends upon the working capital

policy which is perfectly dominated by management attitude towards the risk-return.

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

- a) Hedging Approach
- b) Conservative Approach
- c) Aggressive Approach

a) Hedging Approach

The firm can adopt a financial plan which involves the match in of the expand life of assets with the expected life of the sources of funds raised to finance assets. (Pandey; 2005; 683)

In this approach the long term assets are financed by short-term funds. It is called hedging approach because it matches the risk –reducing investment strategy involving transitions of a simultaneous, but opposite nature. So, that the effect of one is likely to counter balance the effect of the other with the hedging approach short-term of seasonal variations in CA would be financed with short-term debt; the permanent components of CA would be finished with long-term debt of equity. In this approach assets are classified into three categories. (Khan and Jain, 2009; 142)

- Funds requirement for seasonally needed CA.
- Funds requirement for regularly needed CA.
- Funds requirement for fixed or long-term assets.

According hedging approach, we should finance variables or short-term WC from CL of short-term funds and long-term funds should be used to finance the fixed portion of CA.

b) Conservative Approach

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

The approach relies heavily on long-term financing, as a result firm has less possibility of financing the problems of shortage of funds. In conservative approach, permanent capital is used to finance all permanent assets requirement or also to met some or all of the seasonal demands. (Khan and Jain, 2009; 169)

c) Aggressive Approach

A firm can follow aggressive policy in financing its assets. Under an aggressive approach the firm finances a part of it permanent current assets with its short-term financing. "The relatively more use of short-term financing mace the firm more risky." (Pandey; 2005:685)

2.7 Determinants of Working Capital

The total requirement of working capital is determined by a wide variety of factors. The influenced of these factors is different business organizations. Perhaps none of them can neglect the management of adequate working capital. Therefore, an analysis of the relevant factors should be made in order to determine the total investment in working capital. The description of the factors which generally influence the working capital requirement of the firm is given below.

i) Nature and size of Business

The working capital requirement of a firm is basically related to size and nature of the business. If the size of the firm is bigger then it requires more working capital. Trading and financial firms have a very limited need of working capital

and have to invest abundantly in fixed assets. Their working capital requirements are nominal.

ii) Manufacturing Cycle

The manufacturing cycle starts with the purchase and use of raw material and complete with the production of finished goods. Longer the manufacturing cycle, larger will be the firm's working capital requirements. An extended manufacturing time span means a larger tie-up of funds in stocks. Thus, if there are alternative ways of manufacturing cycle should be chosen. Once a manufacturing cycle is completed within the specified period. This needs proper planning and coordination at all levels of activity. Non-manufacturing firms service and financial enterprises do not have manufacturing cycle. (Pandey; 2005;674)

iii) We just noted that a strategy of constant production may be maintained in order to resolve the working capital problems arising due to seasonal changes in the demand for the firm's product. A steady production policy will cause inventories to accumulate during the off-season periods and the firm will be exposed to greater inventory costs and risks. Thus, if costs and risks of maintaining a constant production schedules in accordance with changing demand. Those firms, whose productive capacities can be utilized for manufacturing varied product, can have the advantage of diversified activities and solve their working capital problem. (Pandey; 2005; 675)

iv) Credit Policy

Credit policy also affects the working capital of a firm. Working capital requirement depends on terms of sales. Different term may be followed by different customers according to their credit worthiness.

v) Operating Efficiency

The operating efficiency of a firm relates to the optimum utilization of resources at minimum costs. The firm can not effectively is low working capital turnover is improved with a better operation and financial efficiency of

a firm. Efficiency of operation accelerates the pace of cash cycle and improves the working capital turnover. It releases the pressure on working capital by improving profitability and improving the internal generation of fund.

vi) Profit Margin

The net profit is a source of working capital to the extent that has been earned in cash. The capacity to generate profit differs from company to company. "Some firms enjoy a dominant position, due to quality product or good marketing management of monopoly power in the market and earn a high profit margin." Higher profit margin contributes to more working capital. (Pandey, 2005 : 678)

2.8 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 (Westen and Bringham; 2006; 405). 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 materials 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 products. Inventory turnover is calculated by dividing the cost of sold by average inventory. It can be shown as follows:

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

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

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

2. Receivable Conversion Period (RCP)

Receivable conversion period indicates the number of day's debtor's turnover into cash. It analysis 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 management of credit, RCP is also know as average collection period of days sales outstanding (DSO). RCP can be called 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 favourable for the company but to 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 in an important financial tool and also a quick and convenient way to analyze the ongoing liquidity of the firm overtime. 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;

$$\text{Cash Conversion Cycle} = \text{Inventory Conversion Period} + \text{Receivable Conversion Period} - \text{Payable Deferral Period}$$

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.

2.9 Review of Related Journals/ Articles

This part mainly focuses on the review of articles/journals published by different management experts in the field of working capital management.

M. K. Shrestha in his study "Working capital management in public enterprises" (June, 1999) states that manager after lacks basic knowledge of working capital and its overall impact on the operative efficiency and financial viability of public enterprises which are Birgunj Sugar development corporation, National Trading Ltd., Royal Drugs Ltd., National construction company of Nepal, Harisidhhi Brick & Tile factory, Nepal Dairy Ghee Industry Ltd. and Chandeswori Textile factory Ltd. The study has pointed at certain policy such as deficient financial planning, negligence of working capital management, deviation between liquidity and turnover etc. He has suggested some measures for their effective operation. The problem can be sorted through identification of needed funds, development of management information system, determination of sound combination of short-term source to finance working capital requirements.

R. S. Pradhan has published another article relating to working capital management. He studied on "The demand for working capital by Nepalese corporation." (July, 2004) he analyzed the selected nine manufacturing public corporation with the 12 year data from 1990-2002. Regression education has been adopted for the analysis. He has summarized that the earlier studies concerning about the demand for cash and inventories respectively. The pooled regression results show the presence of economics of scale with respect to the demand for working capital and its various components. The regression results suggest strongly that the demand for working capital and its components is function of both sales and their cost. The estimated result show that the inclusion of capacity utilization variable in model seems to have contributed to

the demand function cash and net working capital only. The effect of capacity utilization on the demand for inventories receivables and gross working capital is doubtful.

Dr. Acharya has published another article relating to working capital management. He has described the two major problems-operational problems and organization of problems, regarding the working capital management in Nepalese PE's. The operational problems he found are increase of current liabilities than current assets. Not allowing the current ratio of 2:1 and slow turnover of inventory. Similarly, change in working capital in relation to fixed capital had very low impacts over the profitability, than transmutation of capital employed to sales, absent of apathetic management information system, break even analysis, funds flow analysis and ratio analysis were either not done or ineffective for performance evaluation. Finally, monitoring of the proper functioning of working capital management has never been considered managerial job. In the second part he has listed the organizational problems in the PE's. In most of the PE's there is lack of regular internal and external audit system as well as evaluation of financial results. Similarly, very few PE's have been able to present their capital requirement, functioning of finance department is not satisfactory and some PE's are even facing the under utilization of capacity.

Pradhan and Koirala had jointly conducted a study on "Working capital management of Nepalese corporations." They had focused on evaluation of working capital of selected manufacturing and non-manufacturing public enterprises. This study was concentrating public enterprise. This study was concentrated in the size of investment in current assets, significance of current assets management. The major finding of he study were as follows;

- Investment on total assets had declined over a period of time in both the manufacturing corporations. However, the manufacturing corporations consistently had more investment in cash and receivables as compared to non-manufacturing corporations.

- Inventory management was of great significance in manufacturing corporations and the management of cash and receivables was of great significance in non-manufacturing corporations.
- Management of working capital was more difficult than that of fixed capital.
- The major motive for holding cash in Nepalese corporations was to provide a reserve for routine net outflows of cash to keep on the production process.

2.10 Review of Related Thesis

Om Bikram Gurung (2002) has carried out his research on "A study on working capital management of Nepal Lever Ltd." The main objective of his study was examine the working capital management of Nepal lever ltd. The major findings of his study were as follows;

1. Inventory holds the major portion of current assets followed by miscellaneous current assets, sundry debtors, cash and bank balance.
2. The liquidity position of Nepal Liver Limited. Is satisfactory but not perfect though increasing trend implies that liquidity position can be expected to be good in future.
3. There is not trade off between liquidity and profitability however profitability of Nepal Liver Limited is satisfactory.

Basudev Shrestha (2002) has carried out his research on "A study in working capital management of Dairy Development Corporation." The main objective of the study is to analyze the current assets and current liabilities and their impact and relationship to each other. The major findings of his study are as follows:

1. The major components of current assets in DDC inventory, cash and bank balance, sundry debtors and miscellaneous current assets in which inventory hold the major portion respectively in each year.

2. The company's investment in working capital has been increasing. The average investment in current assets is lower with respect to fixed assets during the study period and DDC has no clear vision about the investment in current assets to fixed assets portion.
3. The average receivable turnover is in fluctuating trend during the study period.
4. There is ineffective liquidity position and unsatisfactory profitability ratio is DDC.
5. The overall return position DDC is negative i.e. not in favorable condition. It is because of inefficient utilization of CA-TA and shareholders wealth.

Ajita Budhathoki (2008) has carried out his study on "A study on working capital management of Himalayan Bank Ltd." His basic objective of the study is to evaluate the working the working capital position of Himalayan Bank Ltd. The other objectives of this study are to throw light on the importance of proper management of working capital in HBL.

The Major findings of the study are as follow:

- a. Working capital position of HBL was in increasing trend up to FY 2061/062 and there after it was on decreasing trend.
- b. There is a positive relationship between loan and advance and deposit.
- c. The bank has been given efforts to decrease its cost of service over the study period.

Dhurba Karki (2008) has carried out his study on working capital position of Dabur Nepal Pvt. Ltd. The basic objective of the study is to highlight the practice of working capital management and its impact over profitability. The other objectives of the study are:

- a. Study the practice of working capital of Dabur Nepal Pvt. Ltd.

- b. Analyse the current assets and current liabilities of Dabur Nepal Pvt. Ltd.
- c. Study the impact of working capital on profitability.

Findings of the study are as follow:

The trend of current assets to fixed assets is in fluctuating trend. It shows that the Dabur Nepal is following a aggressive policy of current ration and quick ratio of organization is in decreasing trend.

2.11 Research Gap

None of the researcher has been conducted to find out the comparative position of working capital of manufacturing organization from the FY 2005/06 to 2010/11. The present study explores the position of working capital in UNL and HCIL. Most of the researches are conducted as a case study of single enterprise. So, the study presents the comparative frame work of working capital position and working capital policy adopted by the organization. The present study tries to find out the answer of the different research questions which based on overall working capital position of the organizations as well as policy and management of working capital. The study analyzes the position of working capital and explains the different components of working capital on statistical basis. The latest data were used in this study. That's why this study fulfills the research gap in terms of new data with comparative study under the working capital management of two manufacturing companies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

A brief introduction of this study has been already presented in the first chapter. Besides the reviews of literature with possible review of ideas, theories and research finding have also been presented in second chapter now, it is important to have choice of research methodology that helps to make my analysis meaningful. So, this chapter deals with the methodology adopted for the study. Research methodology refers to the various sequential steps to be adopted by the researcher in studying a problem with certain object in view. (Kothari; 2004; 19).

3.2 Research Design

In common parlance research design is the conceptual structure within which the research is performed. A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to compare relevance to the research purpose with economy in procedure. Research design constitutes the blue print for collection, measurement and analysis of data. This study continues to evaluate managerial efficiencies and performance to use research design based on description and analytical study. This study attempts to make composition and establish the relationship between two or more variables of Hetauda Cement Industries Limited and Unilever Nepal Limited.

3.3 Sources of Data

The data & information used in this study are secondary in nature. The main sources of secondary data are annual reports and audited financial statements of the company.

3.4 Population & Sample

All the manufacturing companies in Nepal are population and among them two manufacturing companies Hetauda Cement Industries Limited and Unilever Nepal Limited are taken as sample for the study.

3.5 Collection of Data

Financial data required to achieve the set objectives of this study have been directly extracted from the balance sheet and income statement of the company. In order to collect the supportive data a detail review of the related documents have been carried out.

3.6 Data Processing and Analysis

This study is mainly based on the secondary data. Thus, after collection of financial statement, master sheet of financial data was prepared and necessary financial data have been extracted and tabulated as per the need of this study. In order to process the data financial statement and other available information were reviewed. These data were grouped in different tables and charts according to their nature and analytical statistical tools are used for analyzing quantitative data to reach true sincere conclusion.

3.7 Research Variable

Working capital was major research variable of this study. As being the research based on working capital management, total assets, total deposit, current assets, current liabilities, total investment, total loan and advances etc. were also taken as secondary research variables.

3.8 Tools Used

On the basis of historical data both financial and statistical tools are used to analytical of different variables.

3.8.1 Financial Tools

In this research study various financial tools are employed for the analysis. The analysis of this study is based on following financial tools.

a) Working Capital

Working capital is used by lenders to help gauge the ability for a company to weather difficult financial periods. Working capital is calculated by subtracting current liabilities from current assets. Due to differences in business and the

fact that working capital is not a ratio but an absolute amount, it is difficult to predict what the ideal amount of working capital would be for the business.

Working Capital = Current Assets – Current Liabilities

b) Liquidity Ratios

Liquidity ratios indicate the firm's ability to meet its maturing short-term obligations. Your liquidity ratio is a measure of your company's ability to generate cash to meet your short-term financial commitments. The current ratio measures debts over the next 12 months, while the quick ratio measures liquidity available for immediate demands. As stated, a ratio of 1:0 or greater is generally acceptable but depends on the nature of the company.

A comparatively low ratio can mean that your company might have difficulty meeting your obligations and may not be able to take advantage of opportunities that require quick cash. Paying off your liabilities can improve this ratio; you may want to delay purchases or consider long-term borrowing to repay short-term debt. A too high ratio may mean that your capital is being underemployed. You may want to invest your capital.

i) Current Ratio

Current ratio measures the short-term solvency, i.e. its ability to measure short-term obligations. In other words, current ratio measures the ability to pay debts. As a measure of creditors versus current assets, it indicates each rupee of current assets available by dividing current assets by current liabilities.

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

Current assets include cash, and those assets which can be converted into cash within a year, such as debtors, receivables, cash and bank balance, prepaid expenses, inventory etc. Current liabilities mean all obligations maturing within a year. Under the current liabilities include secondary creditors, provision for taxation, bank loan, miscellaneous current liabilities and provision.

ii) Quick Ratio

Quick ratio establishes a relationship between quick of liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid asset. Other assets which are considered to be relatively liquid and included except inventory of stock. Inventory can not be converted into cash immediately. This quick ratio can be found out by dividing the total of quick assets by total current liabilities.

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

iii) Percentage of Current Assets to Sales

Sales are only that activity which generates fund from outside. So it is the most important parts of manufacturing industries. The amount invested on current assets is support the given level of sales. It is calculated as:

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

As the percentage of CAS increases the risk and profitability also increases.

iv) Percentage of Current Assets to Fixed Assets

For the success of any organization, firm should invest in current assets as well as fixed assets support a particular level of output.

It is calculated as:

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

v) Cash & Bank Balance to Current Assets

This ratio shows the percentage of cash & bank balance to current assets. It is calculated as:

$$\text{Cash & Bank Balance to Current Assets} = \frac{\text{Cash & Bank}}{\text{Current Assets}} \times 100$$

Higher the percentages lower the risk and profitability of the business.

c) Turnovers Ratio

i) Inventory Turnover Ratio

This ratio establishes the relationship between costs of sold and average inventory or sales and closing inventory. The objective of this ratio is to measure the ability of the firm to utilize its inventory. This ratio is expressed as:

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

It indicates the speed with which the inventory converted into sales. Generally, high ratio indicates either the same volume of sales has been maintained with lower investment in stock or the volume of sales has increased without any increase in the amount of stock.

ii) Receivable or Debtors Turnover Ratio

The liquidity position of any firms depends upon the quality of debtors to a great extent. The receivable turnover indicates the collection efficiency of the firm. The higher ratio indicates the efficient management of credit & vice-versa. The receivables turnover ratio is given by:

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

iii) Total Assets Turnover

This ratio establishes the relationship between net sales and total assets. The objective of computing this ratio is to determine the efficiency with which the total assets are utilized.

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

It indicates the firm's ability to generate sales per rupee of investment in total assets.

iv) Average Collection Period/ Days of Sales Outstanding

Average length of time required to collect account ratio receivables.

$$\text{Days of Sales Outstanding} = \frac{\text{Sundry Debtors}}{\frac{\text{Sales}}{365}}$$

v) Cash and Bank Balance to Turnover Ratio

It shows the effectiveness of management to manage the cash with reference to application of cash in ordinary course of business. It measures how rapidly cash can convert into sales in the divided by cash and bank balance which can be shown in the following formula:

$$\text{Cash and Bank Balance to Turnover Ratio} = \frac{\text{Sales}}{\text{Cash \& Bank Balance}}$$

The higher the ratio indicates how rapidly cash is converted into sales and good cash management and low ratio shows and weak cash management.

d) Profitability Ratios

i) Gross Profit Margin

Gross profit margin ratio indicates the percentage of profit after cost of production. This ratio is measure of productive efficiency. A high profit margin reflects the higher cost of production and a low gross profit margin reflects the higher cost of production. Gross profit margin ratio is given by:

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

ii) Net Profit Margin

Net profit margin is obtained after deduction all operating expenses and income tax from gross profit. It is shows the percentage of net profit out of total sales. This ratio shows the overall measurement of the company's ability to earn net profit. It is computed by dividing net profit by sales and given by:

$$\text{Net Profit Margin} = \frac{\text{Net Profit After Tax}}{\text{Sales}} \times 100$$

iii) Return on Total Assets

This ratio studies the relationship between net profit after tax and total assets. This ratio is computed by dividing net profit after tax by total assets.

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

3.8.2 Statistical Tools

Besides the financial tools, various statistical tools have been used to conduct this study. The result of analysis has been properly tabulated, compared, analyzed and interpreted. In this study, the following statistical tools are used:

a. Average

In this study a simple arithmetic average has been used to find out the average value of different financial ratio of sampled manufacturing companies. The average is expressed as:

$$\bar{X} = \frac{\sum X}{N}$$

Where,

$$\begin{aligned} \bar{X} &= \text{Mean value of Arithmetic Mean} \\ N &= \text{Number of Observations} \\ \sum X &= \text{Sum of observations.} \end{aligned}$$

b. Standard Deviation

In this study standard deviation has been employed to know the dispersion of different ratio of sampled companies in absolute term. Standard deviation is determined in the following ways;

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(x - \bar{x})^2}{N-1}}$$

c) Coefficient of Variation (CV)

The coefficient of variation is measures the relative measures of dispersion, hence capable to compare two variables independently in term of variability.

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

Where,

σ = Standard deviation

\bar{X} = sum of the observation

d) Karl Persons Coefficient of Correlation

Correlation Coefficient is a statistical tool to measure the relative association between two variables series; it describes how much linear co-movement exists between two variables. Karl Persons measure, known as personas correlation coefficient between two variables (series) X and Y usually denoted by r (X,Y) or simply r can be obtained as;

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

The value of correlation coefficient, r lies between -1 to +1

If $r = 1$ there is perfect positive relationship

$r = -1$ there is perfect negative relationship

$r = 0$ there is no correlation at all

The closer the value of, r is 1 or -1, the closer the relationship between the variables and the closer, r is to 0, the less close relationship.

e) Probable Error (PE)

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error, it is possible to determine the reliability of the value of the coefficient in so far as it depends on the conditions of random sampling. The probable error of the coefficient of correlation is obtained as follows:

$$PE = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

Where,

r = correlation coefficient

n = number of pairs of observation

It is used in interpretation whether calculated value of r is significant or not.

If $r < PE$, it is insignificant. So, perhaps there is no evidence of correlation.

If $r > 6PE$, it is significant.

In other cases nothing can be concluded.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

The major objective of the chapter is to evaluate the working capital position of Hetauda Cement Industry Ltd. and Unilever Nepal Ltd. Overall objective of the study is highlight by presenting and analyzing the data obtained from concerned organization. This chapter will present the analysis of component of working capital of both organizations. In this chapter relevant data and information of working capital as well as financial performance of Unilever Nepal Ltd. and Hetauda Cement Industry Ltd. are presented and analyzed accordingly. This chapter presents composition of current assets and current liabilities relationship between current assets, fixed assets, turnover position, liquidity position, profitability position and financing of working capital. It also uses correlation analysis between different components of working capital.

4.1 Working Capital Policy

Working capital means current assets less current liabilities. Working capital measures how much amount in liquid assets of a company has available to build business. Working capital policy is the basic policy of the firm. Working capital management refers to the administration of all current assets and current liabilities in a proper way.

Every business organization wants to maximize the wealth of shareholders in order to obtain the target goal; it has to determine the reasonable level of current assets and current liabilities in the organization. Working capital policy reflects the level of current assets and current liabilities maintained in the organization.

4.2 Components of Current Assets

To operate the business, different kinds of assets are required for the day to day operation of the business different types of current assets are required. For

smooth operation of business appropriate level of current should be maintained by the organization. A high amount of investment made in current assets adversely affects the profitability position of the organization but provides higher liquidity position. The composition of current assets in UNL and HCIL are cash and bank balance, stock, receivables, prepaid expenses, loan and advances etc. Moreover receivables, inventories and prepaid expenses are not easily converted into cash. Therefore they are less liquid assets. Hence for qualitative consideration of the current assets and its composition should be seriously examined. The qualitative aspect of current assets can be judged with the individual evaluation of current assets components.

The following table shows the amount of current assets items of UNL and HCIL.

Table 4.1
Components of Current Assets HCIL

(Rs. in Lakhs)

FY	Cash & Bank Balance		Loan, Advance & Deposit		Inventory		Receivables		Total CA
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amount
2005/06	110.81	2.45	1828.29	40.44	2545.25	56.3	36.80	0.81	4521.15
2006/07	502.63	10.67	1728.81	36.71	2396.57	50.88	82.06	1.74	4710.07
2007/08	1251.19	23.72	1718.39	32.58	2299.31	43.59	5.55	0.11	5274.44
2008/09	1182.14	22.45	1452.31	27.58	2625.92	49.87	5.15	0.10	5265.52
2009/10	1305.22	20.86	2109.34	33.78	2834.26	54.53	7.29	0.12	6256.11
2010/11	1482.22	21.66	2306.92	33.72	3044.06	44.5	8.31	0.12	6841.52
Average	972.37	16.97	1857.34	34.14	2624.23	49.95	24.19	0.50	5478.14
S.D.	539.52	8.52	305.40	4.29	277.13	5.14	30.84	0.67	900.72
C.V.	55.49	50.23	16.44	12.57	10.56	10.30	127.48	133.70	16.44

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

Above table shows that the components of current assets of HCIL which consists cash and bank balance, receivables, loan & advance and stock in FY 2005/06 the major portion of the current assets occupies by inventory which was 56.3% of current assets and another assets and loan and advances which was 40.44% cash and bank balance was the small part of current assets. In FY

2006/07 cash and bank balance is slightly increased which was 10.67% of current assets and inventory as well as loan and advances were slightly decreased as compared to FY 2005/06. In FY 2006/07 the amount of cash balance is increased and inventory and loan and advances were decreased. In this year cash and bank balance was 23.72% of current assets. In FY 2008/09 cash and bank balance is decreased by approximately 1% but the inventory amount is increased by 6%. In FY 2009/10 cash and bank balance is decreased by 1.59% whereas loan & advance is amount is increased by 6.14%. In FY 2010/11 there is no change in cash, receivables and inventory position as compared to previous year. Receivables amount shows the small portion of current assets in various FY which represents that most of the sales made by HCIL were on cash basis. The average percent of cash & bank balance, loan advance and deposit, inventory and receivables were 49.95 percent, 34.14 percent, 16.97 percent and 0.50 percent respectively. CV of receivables was highest which is 133.70, percent and CV of inventory was only 10.56 percent it shows that inventory is less fluctuating during the study period.

Table 4.2
Components of Current Assets in UNL

(Rs. in Lakhs)

FY	Cash & Bank Balance		Loan, Advance & Deposit		Inventory		Receivables		Total CA
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amount
2005/06	3915.32	54.06	514.35	7.1	1842.16	25.44	970.63	13.4	7242.45
2006/07	4433.11	49.73	606.17	6.8	2297.65	25.78	1577.21	17.69	8914.15
2007/08	2426.72	32.72	1044.48	14.08	2561.68	34.54	1383.19	18.66	7416.06
2008/09	1016.02	15.87	802.91	12.55	3216.25	50.26	1364.50	21.32	6399.68
2009/10	989.89	13.00	1041.48	13.67	4101.17	53.87	1481.33	19.46	7613.86
2010/11	3820.50	48.23	563.29	7.11	2473.17	31.22	1065.08	13.44	7927.97
Average	2766.93	35.60	762.11	10.22	2748.68	36.85	1306.99	17.33	7585.70
S.D.	1519.49	17.93	238.61	3.56	797.99	12.32	238.41	3.25	828.97
C.V.	54.92	50.38	31.31	34.83	29.03	33.44	18.24	18.78	10.93

Source: Annual Report of UNL from FY 2005/06 to 2010/11

From the above table the components of current assets shows that the major amount of current assets was cash and bank balance in FY 2005/06 which was 54.06% and next major part is stock and receivables. In F.Y 2006/07, 2007/08, 2008/09, 2009/10 the position of cash balance was in decreasing trend. 2006/07 it was decreased by 5% and in 2008/09 it was also decreased by 17% but in FY 2010/11 it was increased and gone up by 15.23% and reached to 48.23% of current assets, loan and advance, deposit amount is in the constant trend in FY 2007/08, 2008/09, 2009/10 and it was decreased by 6% in FY 2010/11.

Another major part of current assets was stock in UNL. It was 25.44% in FY 2005/06 and 25.78% in FY 2006/07 and slightly increased in FY 2007/08. In FY 2008/09 it was drastically increased and 50% of current assets were occupied by inventory. In FY 2009/10 it was also increased and occupied 53.87% of current assets. In FY 2010/11 inventory was 31.32% of current assets .receivables amount shows the 13% to 4% of current assets in various fiscal years.

In comparison of HCIL, UNL shows the sound working capital management. Being a private owned company UNL is a good position in comparison of HCIL. UNL makes credit sales also, the amount of receivables is not more than 21% of current assets which shows that the credit sales made by UNL is not adversely affect the WC. In HCLL the major part of current assets is occupied by loan & advance and inventory but in UNL major part is occupied by cash balance and than after inventory. The average percent of inventory and cash balance were 36.85 percent and 35.60 percent which shows that these two items occupies the major portion of current assets for loan and advance average percent was 10.22 percent and for receivables it was 17.33 percent.

Cash and bank balance is highly fluctuating since it has higher CV. Which were 54.92 percent and receivables was less fluctuating it has 18.24 percent coefficient of Variation.

4.3 Components of Current Liabilities

Current liabilities is a short term obligation which is payable within a year. It is the integral part of working capital policy. The composition of current liabilities at UNL and HCIL are sundry creditors, provisions, short terms loan etc. the following table depicts the amount and their percentage of different components of current liabilities.

Table 4.3
Components of Current Liabilities in HCIL

(Rs. in Lakhs)

FY	Creditors & Other Payables		Short Term Loan		Long Term Loan		Provisions		Total Amount
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	
2005/06	3734.91	41.2	75.23	0.0083	3233.8	35.7	2019.58	22.3	9063.52
2006/07	4003.3	43.26	0.01	0	3193.8	34.51	2057.27	22.23	9254.4
2007/08	3974.05	41.68	0.01	0	2993.8	31.4	2566.2	26.92	9534.1
2008/09	3860.95	41.47	0.01	0	2443.8	26.25	3004.53	32.27	9309.3
2009/10	1617.74	16.06	0	0	4108.41	40.8	4343.97	43.14	10070
2010/11	1086.62	11.63	0	0	5218.14	55.87	3035.06	32.5	9339.8
Average	3046.26	32.55	12.54	0.00	3531.96	37.42	2837.77	29.89	9428.52
S. D.	1326.31	14.57	30.71	0.00	985.14	10.24	858.81	7.91	348.79
C.V.	43.54	44.77	244.83	0.00	27.89	27.36	30.26	26.47	3.70

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

Current liabilities of HCIL includes creditors and other payables, short term loans, long term loan which matured in the year and provisions creditors is the major portion of current liabilities in HCIL. Creditors show the constant ratio in FY 2005/06 to 2008/09 between 41.21 percent and 43.26 percent, it was reduced by 27% in FY 2009/10 and further reduced by 5% in FY 2010/11. When long term loan payable was increased in FY 2009/10 and 2010/11. The amount of provision was also in increasing trend. Short term loan is the small portion of working capital which was 0.83% in FY 2005/06 and it was negligible amount in other FY. Another major source of CL was provision which was constant in FY 2005/06 and 2006/07 and increased slightly in FY 2007/08, 2008/09 and 2009/10 in FY 2010/11 it was decreased by 11%. The

average percent of creditors, long term loan matured within a year, provisions and short term loan were 32.45 percent, 37.42 percent, 29.89 percent and 0.83 percent in HCIL. The major portion of CL occupies long term loan payable in a year. Short term loan is highly fluctuating it has 244.83 percent coefficient of variation. Provision is less fluctuating than other current liabilities.

Table 4.4
Composition of Current Liabilities in UNL

(Rs in Lakhs)

FY	Creditors		Short Term Loans		Provision		Total Amount
	Amt.	%	Amt.	%	Amt.	%	
2005/06	3357.16	61.75	-	-	2079.90	38.25	5437.06
2006/07	3702.37	41.98	-	-	5117.85	58.02	8820.23
2007/08	3533.09	47.6	-	-	3889.23	52.34	7422.32
2008/09	3857.82	50.25	-	-	3819.83	49.75	7677.65
2009/10	3841.11	47.15	-	-	4304.61	52.85	8145.73
2010/11	2667.01	52.42	-	-	2420.96	47.58	5087.97
Average	3493.10	50.19			3605.40	49.80	7098.49
S.D.	447.31	6.66			1151.78	6.66	1503.59
C.V.	12.81	13.27			31.95	13.37	21.18

Source: Annual Report of UNL from FY 2005/06 to 2010/11

In above table we can found that the components of current liabilities which consists creditors and provisions there is no short term loan in UNL. The total current liabilities of UNL are increased in FY 2006/07 and in FY 2007/08 it was decreased then after it was slowly increased in 2008/09 and in 2009/10. But in FY 2010/11 it was decreased and reduced to only 5087.97 lakhs. The amount of creditors is high in FY 2005/06 and lowest in 2006/07 the amount of provisions is highest in FY 2006/07 where as it was minimum in FY 2005/06. Both of the items of current liabilities represent 40% to 50% of current liabilities in several fiscal year. The average percent of creditors was 50.19 percent and for creditors it was 49.80 percent. The amount of provisions is less fluctuating than provision CV for creditors was 12.81 percent and for provisions it was 31.95 percent.

4.4 Net Working Capital of UNL and HCIL

Every manufacturing concern needs the working capital for its on interrupted production process. To achieve the goal of the organization, the working capital financing decision is an integral decision of the organization. The amount invested in working capital should be neither more nor less because both the position of working capital affects not only liquidity but also profitability of the organization the access of the firm in sources of funds also affects the financing policy of working capital. The organization has to raise funds required for working capital from different sources like short term, long term and spontaneous financing. The following table shows the amount of working capital and financial from short term as well as long term sources of funds.

Table 4.5
Working Capital of HCIL

(Rs. In Lakhs)

FY	CA	CL	WC
2005/06	4521.15	9063.52	(4542.37)
2006/07	4710.07	9254.39	(4544.32)
2007/08	5274.44	9534.06	(4259.62)
2008/09	5265.58	9309.29	(4043.77)
2009/10	6256.11	10070.11	(3814.00)
2010/11	6841.58	9339.82	(2498.30)
Average	5478.16	9428.53	-3950.40
S.D.	900.74	348.83	766.12
C.V.	16.44	3.70	-19.39

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The working capital position of HCIL is negative in study period. CA is less than CL in different period, it shows that CL is invested in permanent assets which is the danger situation for the company the working capital position of HCIL is not satisfactory being a government owned organization govt. granted different subsidy and guarantee for the payment. By observing the above figure we can conclude that the HCIL is not operating properly in terms of working capital management, receivables management, cash management and inventory management. Current assets is 50% less than current liabilities which indicates

a danger situation for the organization but the negative figure of WC was constantly improved in different FY and it was 2498 lakhs in FY 2010/11 where it was 4542 lakhs in FY 2005/06. Standard deviation of current assets is 900.74 percent and current liabilities is 348.83 percent, CV of CA is 16.44 percent and CL is more consistent than current assets.

Table 4.6
Working Capital of UNL

(Rs. In Lakhs)

FY	CA	CL	NWC	STF		LTF	
				Amt.	%	Amt	%
2005/06	7242.45	5437.06	1805.39	5437.06	75.07	1805.39	24.93
2006/07	8914.15	8820.23	93.92	8820.23	98.95	93.92	1.05
2007/08	7416.06	7422.32	(6.26)	-	-	-	-
2008/09	6399.68	7677.65	(1277.97)	-	-	-	-
2009/10	7613.86	8145.73	(531.86)	-	-	-	-
2010/11	7921.97	5087.97	2834.00	5087.97	64.23	2834.00	35.77
Average	7584.70	7098.49	486.20	6448.42	79.42	1577.77	20.58
S.D.	828.48	1503.59	1536.07	2061.45	17.76	1384.15	17.76
C.V.	10.92	21.18	315.93	31.97	22.37	87.73	86.30

Source: Annual Report of UNL from FY 2005/06 to 2010/11

The working capital position of UNL was fluctuating in several years. In FY 2005/06 there was RS 1805(lakhs) NWC and it was decreased in 2006/07 to Rs 93(lakhs). In FY 2007/08 to 2009/10 NWC was negative .in FY 2008/09 there was a negative WC Rs 1278(lakhs) and in FY the company is able to improve working capital position which 2834(lakhs).

In FY 2005/06 financing of current assets is made through current liabilities i.e short term financing which was 75.07% and through long term financing was 24.93%. Investment made in current assets by long term sources of fund is known as working capital. In FY 2006/07 investment made in current assets through short term financing was 98.95% where as through long term sources of fund was only 1.05% therefore the working capital is only 1.05% of current assets in FY 2007/08 to 2009/10 there is negative NWC. It means current

liabilities is invested in long term assets. In FY 2010/11 there was a dramatic change in the situation of working capital .it was increased to 5088(lakhs) current assets is financed through long term sources of fund was 35.77% and through short term sources of fund was 64.23%.

Coefficient of Variation of CA is 10.92 percent and for CL it is 21.18 percent and for NWC it is 315.94 percent it shows that CA is more consistent than CL but WL is highly fluctuating since it has 315.94 percent coefficient of variation.

In comparison of HCIL, UNL shows satisfactory position in the level of working capital. Being a multinational company NWC position of UNL should be made in reasonable level neither it is too low nor it is too high. It is observed from the above data both of the companies should try to improve the position of working capital.

4.5 Current Assets Investment Policy

Every firm needs current assets as well as fixed assets to operate its activities effectively. Current assets policy refers to the policy of regarding the total amount of current assets required to support the given level of sales. The firm may follow different investment policy according to their attitudes towards the risk and the nature of business. The current assets policy of the HCIL & UNL have been analyzed in the terms of relationship between current assets with sales and current assets with fixed assets.

4.5.1 Ratio of Current Assets to Fixed Assets (CAFA)

For the purpose of success of any manufacturing concerns firms should invest in current assets as well as fixed assets to support a particular level of output. Therefore the firm should determine the proper portion of current assets with fixed assets .the level of current assets can be measured by relating current assets to fixed assets ratio. Higher the ratio indicates a conservative current assets policy (WC) and lower the ratio indicates an aggressive policy. Aggressive policy assures that higher profitability high risk and poor liquidity.

Table 4.7
Current Assets to Fixed Assets Ratio of HCIL

(Rs. in Lakhs)

FY	CA	FA	CA to FA
2005/06	4521.15	3109.32	1.45
2006/07	4710.07	2868.57	1.64
2007/08	5274.44	2655.35	1.99
2008/09	5265.52	2548.98	2.07
2009/10	6256.11	2489.09	2.51
2010/11	6841.58	2632.46	2.60
Average	5478.15	2717.30	2.04
S.D.	900.74	231.52	0.46
C.V.	16.44	8.52	22.38

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The above table shows the investment made in fixed assets is fluctuating and in increasing trend but the investment made in fixed assets in decreasing trend. The ratio of current assets to fixed assets is in increasing trend of HCIL. In FY 2005/06 it was 1.45 times and in FY 2010/11 it was 2.60 times. Investment made in current assets is higher than the fixed assets. It shows the conservative policy of working capital. The standard deviation of CA is 900.74 and SD of FA is 231.521. Where the CV of CA is 16.44 percent and CV of FA is 8.52 percent. SD of CA is higher than FA. CV of CA is more than FA. It shows that FA is more consistent than CA.

Table 4.8
Current Assets to Fixed Assets Ratio of UNL

(Rs. in Lakhs)

FY	CA	FA	CA to FA
2005/06	7242.45	1357.11	5.34
2006/07	8914.15	1277.76	6.98
2007/08	7416.06	1457.76	5.09
2008/09	6399.68	1489.34	4.30
2009/10	7613.86	1402.18	5.43
2010/11	7921.97	1441.46	5.50
Average	7584.7	1404.27	5.44
S.D.	828.48	77.09	0.87
C.V.	10.92	5.49	16.04

Source: Annual Report of UNL from FY 2005/06 to 2010/11

It's position shows also a higher of CA to fixed assets. The ratio was fluctuating during the study period it varies from 4.297 to 6.976 times during the study period. Current assets of UNL was 6 times more than fixed assets .it shows a conservative working capital position .investment made in current assets and fixed assets are fluctuating in the study period.

Standard deviation of CA is 828.48 and where as SD of FA is 77.09. Higher the amount of CA than FA it shows higher value of standard deviation. The CV of CA is 10.92. Where as it was 5.49 percent for FA. It shows that FA is more consistent than CA.

4.5.2 Current Assets to Sales Ratio of HCIL & UNL

Sales are only that activity which generates cash inflow so it is vital for manufacturing company. The survival and growth of every manufacturing firm depend upon the proportion of sales of the product which they produce. The company's sales policy depends upon the availability of resources and demand for the product. It is greatly affected by the financial policy of the organization upon their strategic planning. Therefore the co-ordination between these elements of the company is the most necessary. Thus the company invests in current assets to support the given level of sales, which depends upon the current assets investment policy and the attitude of management. When a firm holds relatively large amount of current assets to support a given level of turnover then it is called relaxed policy. When a firm holds relatively minimum amount of current assets to support the turnover then it is called restricted policy and between these two policies is called a moderate policy.

The relationship between these two policies are presented below.

Table 4.9
Ratio of Current Assets to Sales

(Rs. In Lakhs)

FY	HCIL			UNL		
	CA	Sales	CA to Sales	CA	Sales	CA to Sales
2005/06	4521.15	6554.05	0.69	7242.45	15249.01	0.47
2006/07	4710.07	6587.20	0.72	8914.15	14848.95	0.60
2007/08	5274.44	6559.69	0.80	7416.06	14696.86	0.50
2008/09	5265.58	7063.04	0.75	6399.68	18185.28	0.35
2009/10	6256.11	9896.91	0.63	7613.86	21445.89	0.36
2010/11	6841.58	9982.77	0.69	7921.97	26258.27	0.30
Average	5478.16	7799.63	0.71	7584.70	18447.38	0.43
S.D.	900.74	1729.91	0.59	828.48	4632.81	0.11
C.V.	16.44	22.18	82.47	10.92	25.11	26.21

Source: Annual Report of HCIL & UNL from FY 2005/06 to 2010/11

The ratio of current assets to sales was fluctuating in HCIL during the study period. It varies from 63% to 80%. WC position of HCIL shows relaxed policy. When the current assets are more than 50% of sales it is known as relaxed policy. In order to maximize the sales of the company the company should invest moderate amount in current assets.

The ratio of UNL was also fluctuating and it varies from 30% to 60%. It was highest in FY 2006/07 and it was minimum in 2010/11. The company is reducing its ratio in FY 2008/09, 2009/10 and in FY 2010/11. It shows that the company followed a lean and mean policy or restricted policy of current assets.

Coefficient of Variation of CA is 16.44 percent where as it was 22.18 percent in HCIL sales. It shows that CA is more consistent than sales.

In UNL CV of CA is 10.92 percent and for sales the CV is 25.11 percent it also indicates that the sales is highly fluctuating than CA in UNL.

4.6 Turnover Position

The behaviour of working capital utilization and improvement can be analyzed with the help of turnover ratio. These ratios measure the effectiveness with which a firm uses its available resources. Turnover ratio indicates the efficiency with which the resources are being converted into sales. The

turnover ratio and conversion period depends on the firm's working capital policy is the firm follows a conservative, it will have low inventory turnover ratio and high conversion period and is the firm follows a aggressive policy, it will have high turnover ratio lowest conversion period.

4.6.1 Inventory Turnover Ratio and Inventory Conversion Period

Inventories are the stock of raw material finished goods and semi finished goods. Inventory is the major part of the current assets. The shortage of required inventory results irregular production and hamper the production process. The high level or low level of inventory is the unfavorable situation of the business organization.

Table 4.10
Inventory Turnover Ratio and Inventory Conversion Period of HCIL

FY	Sales (in Lakh)	Inventory (In Lakh)	ITR (Times)	ICP (Days)
2005/06	6554.05	2545.25	2.58	142
2006/07	6587.20	2396.37	2.75	133
2007/08	6559.69	2299.31	2.85	128
2008/09	7063.04	2625.92	2.69	136
2009/10	9896.91	2834.26	3.49	105
2010/11	9982.77	3044.06	3.28	112
Average	7773.94	2624.20	2.94	126
S.D.	1688.92	277.16	0.36	14
C.V.	21.73	10.56	12.35	11

Sources: Annual Report of HCIL from FY 2005/06 to 2010/11

The above table shows that TTR of HCIL is fluctuating between 2.575 times to 3.492 times during the study period. The inventory turnover ratio of HCIL is in increasing trend it shows the remarkable sign of good performance .but the turnover ratio is very low, due to this reason inventory conversion period is fluctuating 105 to 142 days. Inventory conversion period is higher period, but the situation is improving.

The SD of net sales and closing inventory is 1688.92 and 277.17 respectively CV is 21.73 percent 10.57 percent respectively. Closing Inventory is more consistent than sales.

Table 4.11

Inventory Turnover Ratio and Inventory Conversion Period of UNL

FY	Sales (in Lakh)	Inventory (In Lakh)	ITR (Times)	ICP (Days)
2005/06	15249.01	1842.16	8.28	44
2006/07	14848.95	2297.65	8.20	45
2007/08	14696.86	2561.68	5.74	64
2008/09	18185.28	3216.25	5.65	65
2009/10	21445.89	4101.17	5.23	70
2010/11	26258.27	2473.17	10.62	35
Average	18447.38	2748.68	7.29	54
S.D.	4632.81	797.99	2.11	14
C.V.	25.11	29.03	28.94	27

Source: Annual Report of UNL from FY 2005/06 to 2010/11

Inventory turnover ratio of UNL is fluctuating between 5.229 to 10.62 times and conversion period is fluctuating 35 days to 70 days in FY. The turnover ratio was 8.278 times and conversion period was 44 days and the turnover ratio is decreased in 2006/07, 2007/08, 2008/09, 2009/10. But the situation was improved and it was 10.62 times in 2010/11 and conversion period was 35 days.

Standard deviation of sales is 18447.38 and for closing inventory it is 797.99 and CV of sales is 25.11 percent and for inventory it is 29.03 percent it shows that sales is more consistent than inventory in UNL.

In comparison of HCIL and UNL inventory turnover ratio and conversion period is satisfactory and it shows the better utilization of inventory for converting it into sales. From the point of view of ITR and inventory conversion period UNL's position is better than HCIL.

4.6.2 Receivables or Debtors Turnover Ratio & Average Collection Period

Receivables (debtors) is the another major portion of current assets. It shows the efficiency of the firm with collection of book debts. The higher ratio, the better utilization of resources and quickly collection of cash from creditor of cash from credit sales.

Table 4.12

Receivables Turnover and ACP of HCIL

FY	Sales (Rs. In Lakh)	Debtors (Rs. In Lakh)	DTR (Times)	ACP (Days)
2005/06	6554.05	36.80	178.08	2
2006/07	6587.20	82.06	80.27	5
2007/08	6559.69	5.55	1182.07	1
2008/09	7063.04	5.15	1372.45	1
2009/10	9896.91	7.29	1357.45	1
2010/11	9982.77	8.31	1201.01	1
Average	7773.94	24.19	895.22	2
S.D.	1688.92	30.84	599.27	2
C.V.	21.73	127.48	66.94	84

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

It is observed from the above data that most of the sales of HCIL are made in cash basis. Therefore amount of receivables is the small portion of current assets. The turnover ratio is excessively high in HCIL and average collection period is 1 day to 5 days. It shows that HCIL policy on credit sales and collection is restricted policy.

Standard deviation of sales is 1688.92 and for debtors it is 30.84 and CV of sales 21.72 percent and it is 127.48 percent for debtors. It shows that a sundry debtor is highly fluctuation than net sales.

Table 4.13
Receivables Turnover and ACP of UNL

FY	Sales (Rs. In Lakh)	Debtors (Rs. In Lakh)	DTR (Times)	ACP (Days)
2005/06	15249.01	970.63	15.71	24
2006/07	14848.95	1577.21	9.41	39
2007/08	14696.86	1383.19	10.63	35
2008/09	18185.28	1364.50	13.33	28
2009/10	21445.89	1481.33	14.48	26
2010/11	26258.27	1065.02	24.66	15
Average	18447.38	1306.98	14.70	28
S.D.	4632.81	238.42	5.41	8
C.V.	25.11	18.24	36.83	30

Source: Annual Report of UNL from FY 2005/06 to 2010/11

The receivables turnover on UNL is normal to be said as per fast moving consuming goods manufacturing organization. Turnover ratio is varies from 9 times to 24 times on UNL and average collection period is range from 15 days to 39 days. It was highest in 2006/07 and collection period is minimum in 2010/11. The industry maintaining its turnover ratio and ACP on reasonable basis.

Standard deviation of sales and receivables were 4632.81 and 238.42 respectively and CV of sales is 21.72 percent and 16.15 percent for debtors it shows that debtors is more consistent than sales.

Cash conversion cycle indicates the time taken to collect the cash. How far the company is able to collect the cash is explained by cash conversion cycle.

Table 4.14
Cash Conversion Cycle = ICP + RCP - PDP

(In Days)

FY	HCIL				UNL			
	RCP	ICP	PDP	Cash Conversion Cycle	RCP	ICP	PDP	Cash Conversion Cycle
2005/06	2	181	265	-82	24	68	125	-33
2006/07	5	183	306	-118	39	208	335	-88
2007/08	1	165	285	-119	35	98	135	-2
2008/09	1	191	281	-89	28	90	100	18
2009/10	1	143	82	62	26	108	101	33
2010/11	1	138	49	90	15	52	57	10
Average	2	167	211	-43	28	104	142	-10

Source: Table 4.12 & Appendix VI, VII

Above table shows there is the highest collection period is 90 days in FY 2010/11 in HCIL. Where as the highest period in UNL was 33 days in FY 2009/10. In HCIL it was negative since 2005/06 to 2008/09 it shows that the company is able to take cash in advance form clients and there is not delay time for collection of dues amount. In FY 2009/10 and in 2010/11 it was positive. Overall position of UNL & HCIL is satisfactory. Average Collection Period was negative 43 days.

In UNL it was fluctuating. Highest period was 33 days in FY 2009/10, which is unfavorable for company. The lowest collection period was -88 days in FY 2006/07. The average period was -10 days.

4.6.3 Total Assets Turnover Ratio

This ratio shows the relationship between sales and total assets. The main objective of this ratio is to determine the efficiency with which the total assets are realized.

Table 4.15
Total Assets Turnover Ratio of HCIL

FY	Sales (Rs. In Lakh)	Total Assets (Rs. In Lakh)	TATR (In Times)
2005/06	6554.05	4521.15	1.45
2006/07	6587.20	4710.07	1.40
2007/08	6559.69	5274.44	1.24
2008/09	7063.04	5265.58	1.34
2009/10	9896.91	6256.11	1.58
2010/11	9982.77	6783.15	1.47
Average	7773.94	5468.42	1.42
S.D.	1688.92	883.19	0.12
C.V.	21.73	16.15	8.21

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The above table shows the total assets turnover ratio of six years. It was ranging from 1.24 times to 1.58 times. The sales and total assets both are in increasing trend. Total assets turnover ratio of HCIL is 1.24 times to 1.58 times which is the minimum amount than average industry ratio. It shows that the assets are not properly utilized for generating revenues.

Standard deviation of sales is 1688.92 and for total assets it is 883.19. CV for sales is 21.73 percent and for total assets it is 16.15 percent. In comparison of total assets sales is highly fluctuating.

Table 4.16
Total Assets Turnover Ratio of UNL

FY	Sales (In Lakh)	Total Assets (In Lakh)	TATR (In Times)
2005/06	15249.01	9397.20	1.62
2006/07	14848.95	10989.56	1.35
2007/08	14696.86	9671.47	1.52
2008/09	18185.28	10025.52	1.81
2009/10	21445.89	10852.54	1.98
2010/11	26258.27	11966.63	2.19
Average	18447.38	10483.82	1.75
S.D.	4632.81	963.45	0.31
C.V.	25.11	9.19	17.77

Source: Annual Report of UNL from FY 2005/06 to 2010/11

The table shows that the total assets turnover ratio of UNL. The ratio is highest than HCIL's ratio, which shows that the assets are properly utilized for increasing the revenue in UNL. The ratio is range from 1.35 to 2.194 times. The ratio was fluctuating during the study period. In FY 2005/06 it was 1.623 and In FY 2006/07 and in FY 2007/08 it was decreased to 1.52 times and than after it was increased and highest one in FY 2010/11. It shows that the industry is improving its position in respect of utilization of total assets of generating sales.

Standard deviation of sales is 4632.81 and for total assets it is 963.45 and CV of sales 25.11 percent and for total assets 9.19 percent it shows that total assets is more consistent than sales. The comparative analysis between HCIL and UNL the position of UNL is better than HCIL in respect of total assets turnover ratio.

4.6.4 Cash and Bank Balance Turnover Ratio

It shows the effectiveness of management in case of application of cash in ordinary course of business. It measures how rapidly cash can convert into sales in the company. It is calculated by Sales divided by cash and bank balance.

Table 4.17
Cash and Bank Balance Turnover Ratio of HCIL & UNL
(Rs. in Lakhs)

FY	HCIL			UNL		
	Net Sales	CBB	Ratio (Times)	Net Sales	CBB	Ratio (Times)
2005/06	6554.05	110.81	59.15	15249.01	3915.32	3.89
2006/07	6587.20	502.63	13.11	14848.95	4433.11	3.35
2007/08	6559.69	1251.19	5.24	14696.86	2426.72	6.06
2008/09	7063.04	1182.14	5.97	18185.28	1016.02	17.90
2009/10	9896.91	1305.22	7.58	21445.89	989.89	21.66
2010/11	9982.77	1482.22	6.74	26258.27	3820.50	6.87
Average	7773.94	972.37	16.30	18447.38	2766.93	9.96
S.D.	1688.92	539.52		4632.81	1519.49	
C.V.	21.73	55.49		25.11	54.92	

Source: Annual Report of HCIL & UNL from FY 2005/06 to 2010/11

The above table shows the turnover position of the cash and bank balance maintained by the HCIL and UNL during the study period. Both of the companies have cash and bank balance and turnover ratios are in fluctuating trend.

The ratio of HCIL is in decreasing trend and the highest ratio was 59.15 times in FY 2005/06, the average ratio was 16.3 times. Whereas in UNL the lowest ratio is 3.35 in FY 2006/07 and the highest ratio is 21.66 in FY 2009/10. SD of Net sales and cash and bank balance is 1688.92 and 539.52 in HCIL as well as CV was 21.72% and 55.49% respectively. It shows that the cash & bank balance varies highly than net sales.

In UNL SD of Net Sales and Cash and Bank balance was 4632.81 and 1519.49 where as CV was 25.114% for net sales and for cash and bank balance it was 54.92%. It indicates that the net sales have less co-variation than cash and bank balance. So, net sales is more consistent in UNL in comparison of HCIL.

4.7 Liquidity Ratio

Liquidity ratio indicates the company's ability to pass its short term obligations. Liquidity of any organization is directly related with working capital. In other words one of the main objectives of working capital management is keeping sound liquidity position. The industry, which is relatively, maintained the sound working capital position to maintain its day to day requirement. Liquidity is a prerequisite for the avoidance of technical insolvency and ultimately for the survival of an enteritis. However it is a very crucial problem in maintaining the appropriate liquidity of an organization as it indicates the risk return trade with highest or lower liquidity level. Higher liquidity reduces the risk but decreases the profitability and vice versa.

4.7.1 Current Ratio

Current ratio measures the short term solvency of the firm. Higher the ratio represents the better liquidity position .in other words it represents a margin of safety i.e a cushion of protection for creditors and the highest the current ratio greater the margin of safety. Current ratio is calculated by dividing current assets to current liabilities. Current assets includes: Inventory, cash & bank balances, loan advance, deposit, receivables etc. and current liabilities includes sundry creditors and provisions.

Table 4.18
Current Ratio of HCIL

(In Lakhs)

FY	Current Assets	Current Liabilities	Current Ratio
2005/06	4521.15	9063.52	0.50
2006/07	4710.07	9254.39	0.51
2007/08	5274.44	9534.06	0.55
2008/09	5265.52	9309.29	0.57
2009/10	6256.11	10070.11	0.62
2010/11	6841.52	9339.82	0.73
Average	5478.14	9428.53	0.58
S.D.	900.72	348.83	0.09
C.V.	16.44	3.70	14.94

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The current ratio is less than the standard ratio of 2:1. Current ratio shows the poor liquidity position of HCIL. The ratio is ranges from 0.4988 times to 0.7225 times, the ratio in increasing trend. The company is not able to pay its current obligations in time.

There is a high risk in the organization and due to aggressive working capital position of the company, it's a matter of problem to management how it will manage the resources to pay short term obligation in time. Current liabilities are unsecured with the current assets. The ratio is in increasing trend but the trend is slow.

Standard deviation of CA is 900.73 and for CL 348.83 and CV of CA is higher than CL. It shows that CA is more fluctuating than CL and CL is more consistent.

Table 4.19
Current Ratio of UNL

(Rs. in Lakhs)

FY	Current Assets	Current Liabilities	Current Ratio
2005/06	7242.45	5437.06	1.33
2006/07	8914.15	8820.23	1.01
2007/08	7416.06	7422.32	1.00
2008/09	6399.68	7677.65	0.83
2009/10	7613.86	8145.73	0.93
2010/11	7921.97	5087.97	1.56
Average	7584.70	7098.49	1.11
S.D.	828.48	1503.59	0.28
C.V.	10.92	21.18	24.76

Source: Annual Report of UNL from FY 2005/06 to 2010/11

The above table shows that the current assets and current liabilities position of UNL during the study period. The ratio shows that it is less than normal standard ratio 2:1. The organization is not able to pay its current liabilities in time. UNL is a manufacturing company and its current ratio shows the poor liquidity position, which adversely of the organization. Even in some cases it

distorts the production process of the organization due to fund crisis in the organization. The ratio is in fluctuating trend. It was 1.32 times in 2005/06 and decreased in 2006/07 and continuously decreased upto 2008/09 and than after. It was slightly improving and highest one in 2010/11.

SD of CA is 828.48 for CL it is 1503.59, where as CV of CL is more than CA it shows that CA is more consistent than CL.

In comparison of HCIL the working capital position and current ratio of UNL is satisfactory.

4.7.2 Quick Ratio

Current ratio measure the short term solvency position on gross term. it includes other non liquid assets too. Thus it does not measure the actual liquidity position of the firms. Quick ratio is a more rigorous test of liquidity than the current ratio and when used in conjunction with it. It gives a better picture of the firm's ability to meet its short term debts out of short term assets. Quick ratio is calculated by dividing the quick assets by the current liabilities.

Table 4.20
Quick Ratio of HCIL

(Rs. in Lakhs)

FY	Quick Assets	Current Liabilities	Quick Ratio
2005/06	1975.90	9063.52	0.22
2006/07	2313.50	9254.39	0.25
2007/08	2975.13	9534.06	0.31
2008/09	2639.60	9309.29	0.28
2009/10	3421.86	10070.11	0.34
2010/11	3797.46	9339.82	0.41
Average	2853.91	9428.53	0.30
S.D.	683.58	348.83	0.07
C.V.	23.95	3.70	22.27

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The higher portion of non liquid assets (inventory) in HCIL the quick ratio shows the poor liquidity position of HCIL. The ratio is in fluctuating trend. The ratio is for below than normal standard ratio of 1:1. The poor liquidity position of HCIL indicates that the mismanagement of resources in the organization to meet its needful activities.

SD of quick assets 683.58 and CL 348.83 and CV of quick assets is more than CL it shows that quick assets is highly fluctuating than CL.

Table 4.21
Quick Ratio of UNL

(Rs in Lakhs)

FY	Quick Assets	Current Liabilities	Quick Ratio
2005/06	5400.29	5437.06	0.99
2006/07	6616.50	8820.23	0.75
2007/08	4854.38	7422.32	0.65
2008/09	3183.43	7677.65	0.41
2009/10	3512.70	8145.73	0.43
2010/11	5448.80	5087.97	1.07
Average	4836.02	7098.49	0.72
S.D.	1292.02	1503.59	0.27
C.V.	26.72	21.18	38.27

Source: Annual Report of UNL from FY 2005/06 to 2010/11

Quick ratio of UNL shows the fluctuating trend it is nearest to standard ratio in FY 2005/06 and more than standard ratio of 1:1 in FY 2010/11. In FY 2006/07, 2007/08 it shows the less than standard but not so below than normal ratio which shows that the portion of non liquid assets in UNL is small amount .quick ratio of UNL shows the better quality of its current assets.

SD of quick assets is 1292.02 and for CL it is 1503.59 where as CV of quick assets is 26.72% and it is 21.18% for CL. Therefore the CL is more consistent than quick assets in UNL.

In comparison with HCIL the UNL shows the better position to meet its short term obligations.

4.8 Profitability Position

The profitability ratio shows the degree of success in achieving desired profit. Profitability is a measure of operating efficiency and the search for it provides incentives to achieve efficiency. The profitability position of the firm also depends on the working capital policy. When the firm is applying a conservative working capital policy has a low profitability ratio and the firm with an aggressive policy has a high profitability ratio. The profitability of a firm can be measured with the help of the following ratios.

4.8.1 Gross Profit Margin

Earning the profit is the main objective of every business organization. The gross profit provides the information about the manufacturing cost of the product and sales on it. The gross profit ratio is the excess of sales over cost of goods sold.

Table 4.22
Gross Profit Margin of HCIL

(Rs in Lakhs)

FY	Sales	Gross Profit	Gross Profit Ratio(%)
2005/06	6554.05	1477.90	22.55
2006/07	6587.20	1871.71	28.41
2007/08	6559.69	1539.28	23.47
2008/09	7063.04	2114.41	29.94
2009/10	9896.91	2752.58	27.81
2010/11	9982.77	2932.56	29.38
Average	7773.94	2114.74	26.93
S.D.	1688.92	611.79	3.14
C.V.	21.73	28.93	11.65

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The above table shows the % of gross profit to sales. The gross profit ratio is in a fluctuating trend; it would be increased in FY 2007/08, 2008/09 where as it was decreased in 2009/10 and again increased in FY 2010/11. It was highest in

2010/11 and lowest figure in 2007/08. Gross profit margin is not a satisfactory for the organization which shows that the manufacturing process cost is high amount in the organization.

SD of sales in HCIL is 1688.92 and for GP is 611.79, where as CV is 21.72% for sales and for GP it is 28.93%. Therefore it is concluded that sales in more consistent than GP.

Table 4.23
Gross Profit Margin of UNL

FY	Sales	Gross Profit	Gross Profit Ratio(%)
2005/06	15249.01	5557.92	36.45
2006/07	14848.95	5470.77	36.84
2007/08	14696.86	5294.49	36.03
2008/09	18185.28	5369.08	29.52
2009/10	21445.86	7743.78	36.11
2010/11	26258.27	9292.70	35.39
Average	18447.37	6454.79	35.06
S.D.	4632.80	1674.09	2.75
C.V.	25.11	25.94	7.86

Source: Annual Report of UNL from FY 2005/06 to 2010/11

The above table depicts the gross profit margin ratio of UNL. It was in constant trend in study period except in FY 2008/09. In other period shows the constant trend 35% to 36% of gross margin ratio.

SD of sales and GP are 4632.80 and 1674.09 respectively and CV is 25.11% and 25.94% for sales and GP. It shows that the sales and GP are fluctuating in same trend.

In comparison of HCIL & UNL company shows a satisfactory result. It was more than 7% of HCIL ratio.

4.8.2 Net Profit Margin

Net profit margin shows the relationship between sales and net profit. Another yard stick to measure the profitability of the business is net profit ratio.

The following ratio shows the profitability margin of UNL and HCIL.

Table 4.24
Net Profit Margin of HCIL

(Rs in Lakhs)

FY	Sales	Net Profit	Net Profit Margin (%)
2005/06	6554.05	207.22	3.17
2006/07	6587.20	657.18	9.98
2007/08	6559.69	398.88	6.08
2008/09	7063.04	781.01	11.06
2009/10	9896.91	945.55	9.55
2010/11	9982.77	1063.25	10.66
Average	7773.94	675.51	8.42
S.D.	1688.92	325.74	3.12
C.V.	21.73	48.22	37.09

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The net profit margin ratio shows the fluctuating trend in HCIL it was fluctuating between 3.17% to 11.06%. The lowest profit margin ratio is 3.17% in FY 2005/06 and highest is 11.05% in FY 2008/09. The net profit margin ratio shows the poor profitability position of the organization.

SD of Net Profit is 325.75 and for sales it is 1688.92 where as CV is 21.73% and 48.22% for sales and Net Profit. CV of sales is less than profit after tax so sales are more consistent than Net Profit.

Table 4.25
Net Profit Margin of UNL

(Rs in Lakhs)

FY	Sales	Net Profit	Net Profit Margin (%)
2005/06	15249.01	1407.83	9.23
2006/07	14848.95	1891.99	12.74
2007/08	14696.86	2381.57	16.21
2008/09	18185.28	2630.65	14.47
2009/10	21445.89	3351.22	15.63
2010/11	26258.27	4440.43	16.91
Average	18447.38	2683.95	14.20
S.D.	4632.81	1084.47	2.84
C.V.	25.11	40.41	20.00

Source: Annual Report of UNL from FY 2005/06 to 2010/11

Net profit margin ratio of UNL shows the increasing trend and the ratio is higher than HCIL therefore profit ratio shows the better performance of the organization the net profit margin ratio is lowest in FY 2005/06 and highest ratio in FY 2010/11.

SD of Net Profit is 1084.47 and for sales it is 4632.81 and coefficient of variation of sales and net profit is 25.11% and 40.41 respectively. Sales is more consistent than net profit.

4.8.3 Return on Total Assets

Return on total assets ratio shows the relationship between the total assets and net profit after tax. It measured the profitability of all financial resources invested in the firm's assets. It shows the earning power ratio of the firm from utilizing total investment.

Table 4.26
Return on Total Assets of HCIL

(Rs in Lakhs)

FY	Net Profit After Tax	Total Assets	ROA (%)
2005/06	207.22	4521.15	4.58
2006/07	657.18	4710.07	13.95
2007/08	398.88	5274.44	7.56
2008/09	781.01	5265.52	14.83
2009/10	945.55	6256.11	15.11
2010/11	1063.25	6783.15	15.68
Average	675.51	5468.41	11.95
S.D.	325.74	883.20	4.69
C.V.	48.22	16.15	39.20

Source: Annual Report of HCIL from FY 2005/06 to 2010/11

The above table shows that return on total assets which shows the fluctuating trend it was increased from 4.5% to 13.95% in FY 2006/07 but it was decreased in FY 2007/08 and again increased in last three years. It varies from 4.58% to 15.67%. The highest ROA is 15.67% in FY 2010/11.

SD of net profit after tax 325.75 and for total assets it is 833.19 where as CV is 48.22% for net profit and for total assets it is 16.15%. Therefore total assets are more consistent than net profit.

Table 4.27
Return on Total Assets of UNL

(Rs in Lakhs)

FY	Net Profit After Tax	Total Assets	ROA (%)
2005/06	1407.83	9397.20	14.98
2006/07	1891.99	10989.56	17.22
2007/08	2381.57	9671.47	24.62
2008/09	2630.65	10025.52	26.24
2009/10	3351.2174	10852.54	30.88
2010/11	4440.43	11966.63	37.11
Average	2683.95	10483.82	25.18
S.D.	1084.47	963.45	8.29
C.V.	40.41	9.19	32.93

Source: Annual Report of UNL from FY 2005/06 to 2010/11

The above table shows the return on total assets of UNL. It was in increasing trend in UNL. ROA is continuously increased up to FY 2010/11. The highest ROA is 37% in 2010/11 and lowest ROA is 14.98% in 2005/06.

SD of NPAT is 1084.47 and for total assets it is 963.45 where as coefficient of variation is 40.41% and for 9.19%. Therefore total assets is more consistent than net profit.

In comparison of UNL and HCIL profitability position is better than the HCIL. The assets of HCIL are not properly utilized to earn more profit but UNL is betterly utilized its assets to earn profit.

4.9 Statistical Analysis

To make the analysis more fruitful and meaning of UNL certain statistical tools have been used. Here, Karl Pearson's correlation coefficient and probable error is used to describe the relationship between gross working capital and other variables like as net profit, gross profit, sales, fixed assets and current liabilities.

The correlation coefficient measure the degree of relationship between two set of figures. It is denoted by “r” and result is lies between t 1 to t-1 when r is equal to or closest to one it means there is a strong correlations between the two variables and when r is nearest to zero it shows that there is no relationship between the two variables.

Probable error is used to describe the significance or insignificance relationship between two variables if r is less then 6PE it is not significance if r is more than 6PE there is a strong correlation between two variables or it is considered the relationship between the two variables are highly significant.

Table 4.28

Relationship Between Gross Working Capital and other Variables of HCIL

Variables	Correlation Coefficient (r)	Probable Error (PE)	Remarks
CA to NPAT	0.8409	0.4838	Significant
CA to FA	-0.7105	0.8181	Insignificant
CA to Sales	0.9397	0.193152	Significant
CA to GP	0.9175	0.26134	Significant
CA to CL	0.5557	1.142	Insignificant

Source: Appendix I, II, III, IV, V

The correlation coefficient between CA to NPAT is 0.8409 and r is greater than 6PE which shows that there is a strong and positive relationship between CA and NPAT. Hence there is a significant impact on net profit after tax due to increase or decreased in working capital.

The correlation coefficient between CA to FA is -0.7105 which shows that there is an adverse relationship between CA and FA. r is less than 6PE which shows an insignificant relationship between CA to FA.

The correlation coefficient CA to sales is 0.9397 which shows the strong and positive correlation between sales and CA and r is greater than 6PE which indicates there is a significant impact upon current assets due to changes in sales.

The correlation coefficient between CA to GP is 0.91 and r is greater than 6PE which shows that there is a perfect positive relationship between current assets and gross profit. Increased or decreased in gross profit positively affects upon gross working capital (current assets).

The correlation coefficient (r) between current assets and current liabilities is 0.5557. It shows that there is a positive relationship between the two variables but r is less than 6PE, therefore there is no significant relationship between CA and CL.

Table 4.29

Relationship between gross working capital and other variables of UNL

Variables	Correlation Coefficient (r)	Probable Error (PE)	Remarks
CA to NPAT	0.02377	1.65125	Insignificant
CA to FA	-0.7865	0.6302	Insignificant
CA to Sales	0.0025	1.65	Insignificant
CA to GP	0.21157	1.578	Insignificant
CA to CL	0.23553	1.56	Insignificant

Source: Appendix I, II, III, IV, V

There is an adverse relationship between current assets and fixed assets in UNL. However “r” is less than 6PE therefore there is insignificant adverse relationship between fixed assets and gross profit of UNL. Correlation coefficient between CA to NPAT is 0.02377 and it is a small amount which indicates there is no relationship between CA and NPAT and there is not significant relationship between CA and NPAT.

The correlation coefficient between CA to sales is only 0.0025 and 6 probable error is 1.65 therefore “r” is less than 6PE which shows there is no significant relationship between CA and sales. Hence, there is no significant impact on working capital due to increase or decrease in working capital.

There is a positive relationship between CA and GP and CA to CL. But the relationship is less amounts. CA to GP is not significant relationship. Gross profit does not affect the increment and decrease of working capital. r is less than 6PE which shows insignificant relationship between CA and GP like wise CA to GP. The correlation coefficient between CA to CL is 0.24 and r is less than 6PE which indicates that there is not significant relationship between CA and CL or CL does not affect the changes in CA.

4.10 Major Findings of the Study

- i. The major components of current assets in HCIL are inventory, cash and bank balance, loan and advance and receivables. Among them inventory holds the major portion of current assets. The current assets of HCIL during the study period seem to be inventory trend. The receivables of HCIL are very small amount which indicates that most of the sales in HCIL are made on credit basis. The components of current assets in UNL are cash and bank balance, loan advance and deposit, receivables and inventory. Stock receivables and cash and bank balance are the major portion of current assets. The current assets is in fluctuating trend in UNL.
- ii. Sundry creditors hold the major portion of current liabilities in HCIL and UNL and second major portion of CL is provision in HCIL and UNL. CL of UNL is in fluctuating trend where is HCIL it was in increasing trend.
- iii. The working capital position of HCIL is negative during the study period. CL is two times more than CA it shows that the company invests its short term funds in to long term assets. Working capital position of UNL is in fluctuating trend it was positive in FY 2005/06, 2006/07 and 2010/11 but it was negative in 2007/08, 2008/09 and 2009/10. Working capital is financed by long term sources of funds in 2005/06 is 35.77%.

- iv. The ratio of current assets of fixed assets is in increasing trend during the study period of HCIL where as it was in fluctuating trend of UNL. Current assets of both companies are higher than FA it shows conservative working capital policy of the firm.
- v. The ratio of current assets to sales was in fluctuating trend of both companies. The ratio of current assets to sales is 50% in HCIL which represent a relaxed working capital policy as a same in UNL it was less than 50% which shows a lean and mean or restricted policy of financing current assets.
- vi. The inventory turnover of HCIL is in increasing trend where as it was fluctuating in UNL. In comparison of HCIL and UNL shows the better performance in terms of inventory turnover and inventory conversion period.
- vii. Receivables turnover in HCIL is highest than UNL. HCIL does not make any credit sales. It sales are made on credit basis, the collection period is 1 day to 5 days. Where as in UNL the collection period id ranges from 15 to 39 days. The average Cash conversion cycle of HCIL is -43 & UNL is -10.
- viii. The total assets turnover ratios of both companies are in fluctuating trend. It is increasing or decreasing each year during the study period.
- ix. The liquidity positions of both companies are analyzed with the help of current ratio and quick ratio. The current ratio of HCIL is ranges from 0.49 to 0.73 times which shows the very poor liquidity position of the firm. The current ratio of UNL is ranges from 0.83 to 1.55 times. The ratio of UNL is also less than the normal ratio.
- x. The quick ratios of both companies are less than one which is the normal standard of quick ratio. Quick ratio of both companies shows fluctuating trend. UNL position is better than HCIL in terms of quick ratio.

- xi. The profitability is one of the measures of overall efficiency of the management. The profitability positions of both companies are analyzed with the help of gross profit margin, net profit margin and return on assets. GP ratio of both companies shows fluctuating trend. Where as NP ratio also shows the fluctuating trend. The profitability position of UNL is better than HCIL. Return on total assets ratio is also in fluctuating trend in both companies.
- xii. Karl Pearson's correlation coefficient between current assets and fixed assets of both companies shows negative figure, which shows adverse relationship between current assets and fixed assets, correlation coefficient between current assets to sales, current assets to net profit after tax, current assets to gross profit and current assets to current liabilities of HCIL shows positive correlation but it shows the insignificant relationship between CA to sales, CA to GP, CA to NPAT, CA to CL due to r is less than 6PE.
- xiii. Where as in UNL the correlation coefficient between CA to NPAT, CA to sales, CA to GP shows a significant and positive relationship but CA to CL shows a positive and insignificant relationship.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The first chapter presents about the brief introduction of the topics, industrialization in Nepal. Brief introduction of the sample organization, objectives of the study, problem issued by the study, limitations and plans of the study. To study about working capital management in Nepalese organization, two organizations are taken a sample.

Second chapter dealt with the review of literature, conceptual framework of the study, review of books and journals and articles. Review of literature section has also attempted to review the studies done so far on the same topic on different organizations.

Third chapter is related with research methodology used for the proposed study. It includes research design, nature and sources of data, data collocation and processing techniques and financial and statistical tools used. Financial ratios likes as current ratio, quick ratio, turnover ratio, profitability ratio as well as Karl person's correlation coefficient and problem error have been used to analyze the trend off between working capital and other variables.

The fourth chapter includes the presentation and analysis of data derived from HCIL and UNL. To analysis the working capital policy current assets to fixed assets, current assets to sales and proportion of current assets to short term sources and long term sources are used. It has also analyzed impact of working capital on the liquidity, turnover and profitability position and the composition of current assets and current liabilities are analyzed. Finally the relationship between current assets (gross working capital) and other variables like as CL, FA, NPAT sales and gross profit are analyzed with help of correlation coefficient and probable error.

According to the study WC position of HCIL negative during the study period but the negative figure was improving year by year. The working capital position of UNL shows fluctuating trend it was positive in FY 2005/06 and FY 2006/07. It was negative in three year 2007/08, 2008/09 and 2009/10 and in FY 2010/11 it was positive and drastically improved the position of working capital.

From the point of view of liquidity turnover and profitability of UNL shows the better performance than HCIL. The relationship between CA to FA is negative in both companies. CA to sales, CA to GP, CA to NPAT, CA to CL shows a positive correlation coefficient in HCIL. Where as in UNL the correlation coefficient between CA to CL, CA to sales, CA to GP, CA to NPAT shows a small amount of insignificant relationship.

5.2 Conclusion

For a smooth operation of a business concern a sound management of working capital is required gross working capital management represents the management of current assets of the firm. Different organization can adopt different working capital policy according to the management attitude towards risk return trade off.

The fluctuating trend of CA to FA ratio, large investment in current assets to improve the sale and the greater use of short term source to finance the current assets prove that the both of companies have practicing the conservative working capital policy.

From the point of view of turnover ratio of UNL is betterly utilized its assets than HCIL inventory turnover ratio, receivables turnover ratio and total assets turnover ratio of UNL is satisfactory than HCIL.

The current ratio and quick ratio of both of the companies shows the figure below than standard. Both of the companies have poor liquidity position.

Profitability position of HCIL and UNL is not better than normal ratio. HCIL shows the poor performance of profitability than UNL, GP ratio, NP ratio and ROA of HCIL is fluctuating trend where as in UNL it was in increasing trend.

From the correlation coefficient analysis we can conclude that in UNL there is no significant relationship between CA to sales, CA to NPAT, CA to GP, CA to CL and CA to FA. Where as in HCIL it is observed that there is a significant relationship between CA & sales, CA to GP and CA to NPAT.

5.3 Recommendations

On the basis of findings and conclusions of the study some recommendations have been made for the overall improvement of the working capital management in HCIL and UNL.

Working capital position of HCIL is negative therefore the company should try to maintain sufficient working capital by additional amount invest in current assets. The UNL trend is fluctuating and the company should also try to maintain constant trend of working capital.

CA to FA ratio of both companies shows that CA is higher than FA. Profitability point of view it is not sound structure therefore both of the companies should investment additional funds in to fixed assets to increase its earning capacity.

The current ratio and quick ratio of both companies are less than normal ratio. Thus the organization should try to increased current assets to meet its short term obligations.

Profitability ratios of both companies are not satisfactory but the result of UNL is much more satisfactory than HCIL. Therefore the management of HCIL should try to utilized its assets to earned profit

Inventory turnover ratio of HCIL is very low with high conversion period. Thus the management is advised to reduce its conversion period and increased the turnover ratio. The ratio of UNL is satisfactory but the management should try to reduce its conversion period. In FY 2010/11 the company UNL maintains 15 days conversion period. It is advised for the management of UNL to maintain the same ratio in future.

The investment policy in fixed assets and current assets of both companies are not properly managed and it is not sound structure. In HCIL short term liabilities are used for other activities like as investment in fixed assets, govt.

securities it is not sound practice. The organizations should try to maintain matching concept of working capital.

The profitability position can be improve by the company by reducing higher operating cost, managing sound working capital level and properly managed the assets.

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Appendix - I

Correlation Coefficient between Current Assets and Current Liabilities of HCIL

Rs. in Million

Year	CA(x)	CL(y)	x ²	y ²	xy
2005/06	452	906	204304	820836	409512
2006/07	471	925	221841	855625	435675
2007/08	527	953	277729	908209	502231
2008/09	526	931	276676	866761	489706
2009/10	626	1007	391876	1014049	630382
2010/11	684	934	467856	872356	638856
	Σx=3286	Σy=5656	Σx ² =1840282	Σy ² =5337836	Σxy=3106362

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 3106362 - 3286 \times 5656}{\sqrt{(6 \times 1840282 - (3286)^2)(6 \times 5337836 - (5656)^2)}} \\
 &= 0.5557
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.5557)^2}{\sqrt{6}} \\
 &= 0.19033
 \end{aligned}$$

$$6PE = 6 \times 0.19033$$

$$= 1.14198$$

Correlation Coefficient between Current Assets and Current Liabilities of UNL

Rs. in Million

Year	CA(x)	CL(y)	x ²	y ²	xy
2005/06	724	544	524176	295936	393856
2006/07	891	882	793881	777924	785862
2007/08	742	742	550564	550564	550564
2008/09	640	768	409600	589824	491520
2009/10	761	815	579121	664225	620215
2010/11	792	509	627264	259081	403128
	Σx=4550	Σy=4260	Σx ² =3484606	Σy ² =3137554	Σxy=3245145

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 3245145 - 4550 \times 4260}{\sqrt{(6 \times 3484606 - (4550)^2)(6 \times 3137554 - (4260)^2)}} \\
 &= 0.235529
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.235529)^2}{\sqrt{6}} \\
 &= 0.26
 \end{aligned}$$

$$6PE = 6 \times 0.26$$

$$= 1.56$$

Appendix-II

Correlation Coefficient between Current Assets and Gross Profit of HCIL

Rs. in Million

Year	CA(x)	GP (y)	x ²	y ²	xy
2005/06	452	148	204304	21904	66896
2006/07	471	187	221841	34969	88077
2007/08	527	154	277729	23716	81158
2008/09	526	211	276676	44521	110986
2009/10	626	275	391876	75625	172150
2010/11	684	293	467856	85849	200412
	Σx=3286	Σy=1268	Σx ² =1840282	Σy ² =286584	Σxy=719679

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 719679 - 3286 \times 1268}{\sqrt{(6 \times 1840282 - (3286)^2)(6 \times 286584 - (1268)^2)}} \\
 &= 0.91759
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.91759)^2}{\sqrt{6}} \\
 &= 0.043556
 \end{aligned}$$

$$6PE = 6 \times 0.043556$$

$$= 0.261337$$

Correlation Coefficient between Current Assets and Gross Profit of UNL

Rs. in Million

Year	CA(x)	GP (y)	x ²	y ²	xy
2005/06	724	556	524176	309136	402544
2006/07	891	547	793881	299209	487377
2007/08	742	529	550564	279841	392518
2008/09	640	537	409600	288369	343680
2009/10	761	774	579121	599076	589014
2010/11	792	929	627264	863041	735768
	Σx=4550	Σy=3872	Σx ² =3484606	Σy ² =2638672	Σxy=2950901

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 2950901 - 4550 \times 3872}{\sqrt{(6 \times 3484606 - (4550)^2)(6 \times 2638672 - (3872)^2)}} \\
 &= 0.21157
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.21157)^2}{\sqrt{6}} \\
 &= 0.263
 \end{aligned}$$

$$6PE = 6 \times 0.263$$

$$= 1.578$$

Appendix-III

Correlation Coefficient between Current Assets and Sales of HCIL

Rs. in Million

Year	CA(x)	Sales (y)	x ²	y ²	xy
2005/06	452	655	204304	429025	296060
2006/07	471	659	221841	434281	310389
2007/08	527	656	277729	430336	345712
2008/09	526	706	276676	498436	371356
2009/10	626	990	391876	980100	619740
2010/11	684	998	467856	996004	682632
	Σx=3286	Σy=4664	Σx ² =1840282	Σy ² =3768182	Σxy=2625889

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 2625889 - 3286 \times 4664}{\sqrt{(6 \times 1840282 - (3286)^2)(6 \times 3768182 - (4664)^2)}} \\
 &= 0.93973
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.93973)^2}{\sqrt{6}} \\
 &= 0.03219
 \end{aligned}$$

$$6PE = 6 \times 0.03219$$

$$= 0.193132$$

Correlation Coefficient between Current Assets and Sales of UNL

Rs. in Million

Year	CA(x)	Sales(y)	x ²	y ²	xy
2005/06	724	1525	524176	2325625	1104100
2006/07	891	1485	793881	2205225	1323135
2007/08	742	1470	550564	2160900	1090740
2008/09	640	1819	409600	3308761	1164160
2009/10	761	2145	579121	4601025	1632345
2010/11	792	2626	627264	6895876	2079792
	Σx=4550	Σy=11070	Σx ² =3484606	Σy ² =21497412	Σxy=8394272

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 8394272 - 4550 \times 11070}{\sqrt{(6 \times 3484606 - (4550)^2)(6 \times 21497412 - (11070)^2)}} \\
 &= 0.0025
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.0025)^2}{\sqrt{6}} \\
 &= 0.27536
 \end{aligned}$$

$$6PE = 6 \times 0.27536$$

$$= 1.65217$$

Appendix-IV

Correlation Coefficient between Current Assets and Fixed Assets of HCIL

Rs. in Million

Year	CA (x)	FA (y)	x ²	y ²	xy
2005/06	452	311	204304	96721	140572
2006/07	471	287	221841	82369	135177
2007/08	527	266	277729	70756	140182
2008/09	526	255	276676	65025	134130
2009/10	626	249	391876	62001	155874
2010/11	684	263	467856	69169	179892
	Σx=3286	Σy=4664	Σx ² =1840282	Σy ² =446041	Σxy=885827

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 885827 - 3286 \times 1631}{\sqrt{(6 \times 1840282 - (3286)^2)(6 \times 446041 - (1631)^2)}} \\
 &= -0.7105
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(-0.7105)^2}{\sqrt{6}} \\
 &= 0.136357
 \end{aligned}$$

$$6PE = 6 \times 0.136357$$

$$= 0.818143$$

Correlation Coefficient between Current Assets and Fixed Assets of UNL

Rs. in Million

Year	CA(x)	FA(y)	x ²	y ²	xy
2005/06	724	136	524176	18496	98464
2006/07	891	128	793881	16384	114048
2007/08	742	146	550564	21316	108332
2008/09	640	149	409600	22201	95360
2009/10	761	140	579121	19600	106540
2010/11	792	144	627264	20736	114048
	Σx=4550	Σy=843	Σx ² =3484606	Σy ² =118733	Σxy=636792

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 636792 - 4550 \times 843}{\sqrt{(6 \times 3484606 - (4550)^2)(6 \times 118733 - (843)^2)}} \\
 &= 0.7865
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.7865)^2}{\sqrt{6}} \\
 &= 0.105028
 \end{aligned}$$

$$\begin{aligned}
 6PE &= 6 \times 0.105028 \\
 &= 0.63017
 \end{aligned}$$

Appendix-V

Correlation Coefficient between Current Assets and Net Profit of HCIL

Rs. in Million

Year	CA(x)	NP(y)	x ²	y ²	xy
2005/06	452	21	204304	441	9492
2006/07	471	66	221841	4356	31086
2007/08	527	40	277729	1600	21080
2008/09	526	78	276676	6084	41028
2009/10	626	95	391876	9025	59470
2010/11	684	106	467856	11236	72504
	Σx=3286	Σy=406	Σx ² =1840282	Σy ² =32742	Σxy=234660

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 234660 - 3286 \times 406}{\sqrt{(6 \times 1840282 - (3286)^2)(6 \times 32742 - (406)^2)}} \\
 &= 0.840929
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.840929)^2}{\sqrt{6}} \\
 &= 0.080637
 \end{aligned}$$

$$6PE = 6 \times 0.080637$$

$$= 0.4838$$

Correlation Coefficient between Current Assets and Net Profit of UNL
Rs. in Million

Year	CA(x)	NP(y)	x ²	y ²	xy
2005/06	724	141	524176	19881	102084
2006/07	891	189	793881	35721	168399
2007/08	742	238	550564	56644	176596
2008/09	640	263	409600	69169	168320
2009/10	761	335	579121	112225	254935
2010/11	792	444	627264	197136	351648
	Σx=4550	Σy=1610	Σx ² =3484606	Σy ² =490776	Σxy=1221982

$$\begin{aligned}
 r &= \frac{N \sum xy - \sum x \cdot \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \\
 &= \frac{6 \times 1221982 - 4550 \times 1610}{\sqrt{(6 \times 3484604 - (4550)^2)(6 \times 490776 - (1610)^2)}} \\
 &= 0.0237685
 \end{aligned}$$

$$\begin{aligned}
 \text{Probable Error (PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \times \frac{1-(0.027685)^2}{\sqrt{6}} \\
 &= 0.2752
 \end{aligned}$$

$$6PE = 6 \times 0.2752$$

$$= 1.65123$$

Appendix-VI

Calculation of Inventory Conversion Period (ICP)

$$\text{ICP} = \frac{\text{Inventory}}{\text{COGs}} \times 360$$

Rs. in Lakhs

FY	HCIL			UNL		
	Inventory	COGs	ICP (in Days)	Inventory	COGs	ICP (in Days)
2005/06	2545.25	5076.15	181	1842.16	9691.09	68
2006/07	2396.37	4715.49	183	2297.65	3978.18	208
2007/08	2299.31	5020.41	165	2561.68	9402.36	98
2008/09	2625.92	4948.63	191	3216.25	12816.20	90
2009/10	2834.26	7144.32	143	4101.17	13702.12	108
2010/11	3044.06	7968.36	138	2473.17	16965.57	52

Appendix-VII

Calculation of Payables Deferral Period (PDP)

$$\text{PDP} = \frac{A/P}{\text{COGs}} \times 360$$

Rs. in Lakhs

FY	HCIL			UNL		
	A/P	COGs	PDP (in Days)	A/P	COGs	PDP (in Days)
2005/06	3734.91	5076.15	265	3357.16	9691.09	125
2006/07	4003.30	4715.49	306	3702.37	3978.18	335
2007/08	3974.05	5020.41	285	3533.09	9402.36	135
2008/09	3860.95	4948.63	281	3557.82	12816.20	100
2009/10	1617.74	7144.32	82	3841.11	13702.12	101
2010/11	1086.92	7968.36	49	2667.01	16965.57	57

Appendix-VIII

Balance Sheet as on UNL from FY 2005/06 to 2010/11

Rs. in Lakhs

Particular	05/06	06/07	07/08	08/09	09/10	10/11
<u>Assets</u>						
Fixed Assets	1357.11	1277.76	1457.76	1489.34	1402.18	1441.46
Cash & Bank B/L	3915.32	4433.11	2426.72	1016.02	989.89	3820.50
Loan & Advance	514.35	606.17	1044.48	802.91	1041.48	563.29
Inventory	1842.16	2297.65	561.68	3216.25	4101.17	2473.17
Receivables	970.63	1577.21	1383.19	1364.50	1481.33	1065.08
Total CA	7242.45	8914.15	7416.06	6399.68	7613.38	7927.97
Total Assets	8599.56	10191.91	8873.82	7889.02	9015.56	9369.43
<u>Liabilities</u>						
Capital	3162.5	1371.58	1451.50	211.37	869.83	4308.46
Creditors	3357.16	3702.37	3533.09	3857.82	3841.11	2667.01
Short Term Loans	-	-	-	-	-	-
Provision	2079.90	5117.85	3889.23	3819.83	4304.61	2420.96
Total CL	5437.06	8820.23	7422.32	7677.65	8145.73	5087.97
Total Liabilities	8599.56	10191.91	8873.82	7889.02	9015.56	9369.43

Appendix-IX

Balance Sheet as on HCIL from FY 2005/06 to 2010/11

Rs. in Lakhs

Particular	05/06	06/07	07/08	08/09	09/10	10/11
<u>Assets</u>						
Fixed Assets	3109.32	2868.57	2655.35	2548.98	2489.09	2632.46
Cash & Bank B/L	110.81	502.63	1251.19	1182.14	1305.22	1482.22
Loan & Advance	1828.29	1728.81	1718.39	1452.31	2109.34	2306.92
Inventory	2545.25	2396.57	2299.31	2625.92	2834.26	3044.06
Receivables	36.80	82.06	5.55	5.15	7.29	8.31
Total CA	4521.15	4710.07	5274.44	5265.52	6256.11	6841.52
Total Assets	7630.47	7578.64	7929.79	7814.5	8745.2	7473.98
<u>Liabilities</u>						
Capital	1433.05	1675.76	1604.31	1494.8	1524.8	134.18
Creditors	3734.91	4003.3	3974.05	3860.95	1617.74	1086.62
Short Term Loans	75.23	0.01	0.01	0.01	-	-
Long Term Loans	3233.8	3193.8	2993.8	2443.8	4108.41	5218.14
Provision	2019.58	2057.27	2566.2	3004.53	4343.97	3035.06
Total CL	9063.52	9254.4	9534.1	9309.3	10070.0	9339.8
Total Liabilities	7630.47	7578.64	7929.79	7814.5	8745.2	9473.98

Appendix-X

Income Statement of UNL from FY 2005/06 to 2010/11

Rs. in Lakhs

Particular	05/06	06/07	07/08	08/09	09/10	10/11
Sales	15249	14849	14696.9	18185.3	21445.9	26258.3
Less:						
COGS	9691.09	9378.18	9402.37	12816.2	13702.1	16965.6
Gross Profit	5557.92	5470.77	5294.49	5369.08	7743.78	9292.7
Less:						
Other Expenses & Taxes	4150.09	3578.78	2912.92	2738.43	4392.56	4852.27
Net Profit	1407.83	1891.99	2381.57	2630.65	3351.22	4440.43

Income Statement of HCIL from FY 2005/06 to 2010/11

Rs. in Lakhs

Particular	05/06	06/07	07/08	08/09	09/10	10/11
Sales	6554.05	6587.2	6559.69	7063.04	9896.91	9982.77
Less:						
COGS	5076.15	4715.49	5020.41	4948.63	7144.33	7050.21
Gross Profit	1477.9	1871.71	1539.28	2114.41	2752.58	2932.56
Less:						
Other Expenses & Taxes	1270.68	1214.53	1140.4	1333.4	1807.03	1869.31
Net Profit	207.22	657.18	398.88	781.01	945.55	1063.25