

**WORKING CAPITAL MANAGEMENT ENTITLED IN  
NEPAL INSURANCE COMPANY**

**A THESIS**

**Submitted By:**

**MADAN TIMSINA**

**SHANKER DEV CAMPUS**

T.U. Regd. No.: 7-2-504-33-2003

Campus Roll No.: 1633/063

**Submitted To:**

Office of the Dean

Faculty of management

Tribhuvan University

In the Partial Fulfillment of the Requirement for the Degree of  
**Master of Business Studies (M.B.S.)**

Kathmandu, Nepal

**May, 2010**

## **RECOMMENDATION**

This is to certify that the Thesis

*Submitted By:*

**MADAN TIMSINA**

*Entitled:*

**WORKING CAPITAL MANAGEMENT ENTITLED IN  
NEPAL INSURANCE COMPANY**

Has been prepared as approved by this Department in the prescribed  
format of Faculty of Management. This Thesis is forwarded for  
examination.

.....  
Mr. Joginder Goet  
(Thesis Supervisor)

.....  
Prof. Bisheshwor Man Shrestha  
(Head of Research Department)

.....  
Prof. Dr. Kamal Deep Dhakal  
(Campus Chief)

## **VIVA-VOCE SHEET**

We have conducted the Viva-Voce examination of the thesis presented

**Submitted By:**

**MADAN TIMSINA**

*Entitled:*

**WORKING CAPITAL MANAGEMENT ENTITLED IN  
NEPAL INSURANCE COMPANY**

And found the thesis to be original work of the student and written in accordance to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for **Master of Business Studies (MBS)**

### **Viva-Voce Committee:**

<b>Head, Research Department</b>	-----
<b>Member (Thesis Supervisor)</b>	-----
<b>Member (External Expert)</b>	-----

## **DECLARATION**

I hereby declare that the work done in thesis entitled “Working Capital Management Entitled in Nepal Insurance Company” submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University, is my own created work reported in the form of partial fulfillment of the requirement of Master’s of Business Studies (M.B.S.) course under the guidance of respected teacher supervisor Mr. Joginder Goet of Shanker Dev Campus.

.....  
**MADAN TIMSINA**  
**Researcher**

T.U. Regd. No.: 7-2-504-33-2003  
Campus Roll No.: 1633/063

## **ACKNOWLEDGEMENT**

I express my sincere gratitude to all the authors and learned personalities, whose writings have been cited in this study. I also express my sincere gratitude to those authors whose writings though are not cited but helped and inspired me in making my vision clear and reaching on conclusion.

I extend my deep sense of indebtedness to my respected supervisors Mr. Joginder Goet for his precious guidelines, inspiration and suggestion thoroughly during the period of this research. Without his valuable insight, I would not think of accomplishment of this thesis. And Nepal Insurance Company for the cooperation shown and providing necessary data.

I want to give thanks for the staff members of T.U. Central Library, Shanker Dev Campus Library who provided the reference and reading materials during the period of research.

Finally, I would like to express my sincere gratitude to my family members, all my friends for their assistance, timely encouragement in every step.

Thank you.

**MADAN TIMSINA**  
Shanker Dev Campus

# TABLE OF CONTENTS

	<b>PAGE NO.</b>
<b>CHAPTER I -INTRODUCTION</b>	<b>1-6</b>
1.1 Background of the study	1
1.2 Statement of the Problem	4
1.3 Focus of the Study	5
1.4 Objectives of the Study	6
1.5 Limitation of the Study	6
<b>CHAPTER II -REVIEW OF LITERATURE</b>	<b>7-27</b>
2.1 Conceptual Review	7
2.1.1 Conceptual Framework	7
2.1.2 Classification of Working Capital	9
2.1.3 Need of Working Capital	11
2.1.4 Importance of Working Capital	13
2.1.5 Determinant of Working Capital	13
2.1.6 Working Capital Policies	16
2.2 Articles Review	20
2.3 Review of Previous Research Work	23
2.4 Research Gap	27
<b>CHAPTER III - RESEARCH METHODOLOGY</b>	<b>28-37</b>
3.1 Introduction	28
3.2 Research Design	28
3.3 Nature and Source of Data	29
3.4 Data Processing	29
3.5 Data Processing Procedure	29
<b>CHAPTER IV - DATA PRESENTATION AND ANALYSIS</b>	<b>38-64</b>
4.1 Introduction	38
4.2 Analysis of Composition of Working Capital	38
4.3 Composition of the Current Assets	38

4.4	Composition of the Current Liabilities	40
4.5	Working Capital Policy Analysis	42
4.6	Net Working Capital	42
4.7	Liquidity Position	44
4.8	Profitability Ratios	47
4.9	Relationship between Liquidity and Profitability	50
4.10	Efficiency of Working Capital Management	52
4.11	Simple Regression Analysis of Net Profit Margins on Working Capital	59
4.12	Analysis of Primary Data	60
4.13	Findings of the Study	62

## **CHAPTER V - SUMMARY, CONCLUSION AND**

### **RECOMMENDATION**

**65-70**

5.1	Summary	65
5.2	Conclusions	68
5.3	Recommendations	69

### **BIBLIOGRAPHY**

### **APPENDIX**

## **LIST OF TABLE**

	<b>PAGE NO.</b>	
Table: 1	Composition of Current Assets NIC	39
Table: 2	Compositions of the Current Liabilities of NIC	41
Table: 3	Net Working Capital of NIC	43
Table: 4	Calculation of the Current Ratio of NIC	44
Table: 5	Calculation of Absolute Liquidity Ratio of NIC	46
Table: 6	Return on current assets	47
Table: 7	Calculations on Return on the Net Working Capital	49
Table: 8	Calculation of Return on Investment	50
Tables: 9	Liquidity and Profitability	51
Table: 10	Correlation Coefficient between Liquidity and Profitability	52
Table: 11	Receivable Turnovers ACP	53
Table: 12	Cash Turnover Ratio	55
Table: 13	Calculation of the Current Assets Turnover Ratio	56
Table: 14	Calculation of Net Working Capital Turnover	58
Table: 15	Calculations of Simple Regression Variables of Net Profit on Working Capital	60



## **LIST OF FIGURES**

	<b>PAGE NO.</b>	
Figure: 1	Composition of Current Assets NIC	40
Figure: 2	Compositions of the Current Liabilities of NIC	41
Figure: 3	Net Working Capital of NIC	43
Figure: 4	Calculation of the Current Ratio of NIC	45
Figure: 5	Calculation of Absolute Liquidity Ratio of NIC	46
Figure: 6	Return on current assets	48
Figure: 7	Calculations on Return on the Net Working Capital	49
Figure: 8	Calculation of Return on Investment	50
Figure: 9	Liquidity and Profitability	51
Figure: 11	Receivable Turnovers ACP	53
Figure: 12	Cash Turnover Ratio	55
Figure: 13	Calculation of the Current Assets Turnover Ratio	57
Figure: 14	Calculation of Net Working Capital Turnover	58

## **ABBREVIATION**

&	:	And
A.D	:	Anno Domini
B.S	:	Bikram Sambat
CA	:	Current Assets
CE	:	Capital Employed
CL	:	Current Liabilities
CV	:	Co-efficient Variation
DDC	:	Dairy Development Corporation
FY	:	Fiscal Year
i.e,	:	That is
Ltd.	:	Limited
M.B.S.	:	Master of Business Studies
NBCL	:	Nepal Battery Company Limited
NIC	:	Nepal Insurance Company
NP	:	Net Profit
NWC	:	Net Working Capital
PE	:	Probable Errors
Rs.	:	Rupees
S.N	:	Symbol Number
	:	Standard Deviation
T.U	:	Tribhuvan University
WC	:	Working Capital

# **CHAPTER - I**

## **INTRODUCTION**

### **1.1 Background of the study**

The wheel of development is accelerated by industrialization and industrialization is possible only with the support of two big institutions banking and insurance. The one pillar, banking provides capital and helps in the financial transaction of business in many ways. Another pillar, insurance offers high economic relief to different types of industrialist businessmen and individuals. Insurance has become the pillar of alertness, courage and eagerness to develop the life and living standard of common people, industrialist and trades of today's security against risk. Insurance is a kin of financial mechanism which provides financial security against risk. Insurance is equally important for common people and businessmen. It is a part and parcel of the business houses. Insurance is a developing industry of Nepal. It provides security to general people. Besides, it is one of the major employment generating sectors. Peoples who are able and not have insurance Facility are more than 98%. Nepal has tremendous insurance potential. All Nepalese are its target customers. Nepal still has a long way to go in accelerating the pace of its economic growth and human development. It is one of the best industries for the economic growth, industrialization as well as human development. In Nepal, insurance business is important not only as a source of earning currency but also as one of the major employment-generating industry.

Nepal is one of the poorest countries of the World. More than 80% of the people are dependent on agriculture. Most of the people live on low income level. Income makes them able to fulfill basic needs. They are not able to fulfill even safety need. Economic, social accidents make them unbalanced. In this regard insurance is one way to be safety managing low- income level. In this regard, what is the situation of present insurance companies in Nepal is essential to study.

All industrial sectors wish to provide maximum satisfaction to their customers. Their main objective is profit maximization, which depends upon smooth running of business. To run the business smoothly, it is highly important to manage the working capital in every direction of financing and investing activities because without properly balancing the working capital, the business enterprise cannot grab the opportunity in regular course of business.

Working capital is one of the most important aspects of any organization. Organization may success or fails because of its working capital management in this regard; how far Nepalese originations are being able to manage working capital is essential to study.

The amount tied up in working capital is equal to the value of raw materials, work-in-process, finished goods inventories and accounts receivables less account payable. The size of this net figure has a direct effect on the liquidity of an organization.

The two main objectives of working capital management are to ensure it has sufficient liquid resources to continue in business and to increase its probability.

Working capital management is a key factor in an organization's long term success. A business must have clear policies for the management of each component of working capital. The management of cash, marketable securities, accounts receivable, account payables, accruals and other means of short-term financing is the direct responsibility of financial manager and it requires continuous day-to-day supervision.

### **Background of Nepal Insurance Company**

Insurance works as a double-edge weapon. On one side it provides capital to the business houses. Now a days, insurance has not only been a necessary thing but also a part and parcel of business word. In this context, the importance and necessity of insurance business in Nepal cannot be ignored. There is no long history of insurance business in Nepal. The necessity of formal insurance was not realized before the

revolution of 2007 B.S. At that time people's life was mostly dependent on agriculture. There were no big industries and the country had not link with outer world. The sign of modern industrialization could be seen only at the end of Rana rule. Some modern factories jute mills, matches factories and sugar mills were established in Biratnagar. At that time some persons traveling in India used to make insurance in Indian insurance companies. Insurance agents of Indian life Insurance Company used to come to Nepal to make insurance of Nepalese people.

The parental role of the development of insurance in Nepal goes to Nepal Bank Limited. Transport of goods and insurance Company (Nepal Mal Chalani Ra Beema Company) was established under the control of Nepal Bank Limited in 2004B.S. The Transport of Goods and Insurance Company used to release the goods from the customs of Rakasaul-Birgunj imported through Nepal Bank Ltd.and hand over such goods to the go down of the bank or parties after receiving it. The name of this company was changed into Nepal Insurance and Transport in 2061 B.S. Again in 2048 B.S. the name of this company was changed into Nepal Insurance Company Ltd, Which is the oldest insurance company in Nepal.

The head office of the company is located on NIC building,Kamaladi, Kathmandu .It has six branches three contact offices .The company is providing fire ,motor, marine cargo personnel accident ,cash in transit, burglary and house breaking ,medical aid scheme ,contractors all risks, engineering ,student safety, house hold, overseas med claim and craved insurance services.

Nepal Insurance Company Ltd. the pioneer insurance company of Nepal and has celebrated its golden jubilee in the year 1997 .It is one of the leading non-life insurance Company of Nepal .This company is a profile making entity from day one Premium volume has exceeded Rs.200 million a year. The Company has more than 100 Insurance agents all over the country.

The head office of the company is located on NIC building, Kamaladi, Kathmandu. It has six branches at Biratnagar, Bharatpur, Nepalganj, Khasyoli, and Pokhara. It has two contact offices at Lahan and Dhangadi.

The company has Rs. 150000000 authorized capital, 63176800 paid up capital. 51% share of the company is of Nepal Bank Ltd and remaining are of general people. The company is providing fire, motor, marine cargo, personnel accident, cash in transit, burglary and house breaking , fidelity guarantee, public liability, medical aid scheme, contractors All risks, erection all risks, engineering, students safety, house hold, overseas medical and travel insurance services.

## **1.2 Statement of the Problem**

Working capital is required for financing the working needs of enterprises. So, to run smoothly, an organization requires it every time. So it can be regarded as the lifeblood of an organization. Working capital circulates from one to another in ordinary conduct of business. It is a significant part of decision as value maximization goal depends essential on present working capital decision and the cost to industry due to inadequate planning in the use of working capital is immeasurable. If a business enterprise wants to maintain sound financing position, it should maintain optimal level of working capital because high financing made on working capital will create high liquidity and low return and vice- versa.

Service sector business, generally, needs low working capital. So it has been found that they are not concerned in working capital management but working capital management is equally important for them also. Therefore, it is highly essential to analyze the working capital requirement and its proper balance in ordinary course of business transaction and profitability analysis as of oldest insurance company.

The research of this study could be done by analyzing the following research questions.

- ) Is the composition of working capital of NIC appropriate?
- ) Is NIC's investment in CAs appropriate to its total assets level?
- ) Is there sound liquidity position in NIC?
- ) How is working capital financed in this company?
- ) How far is NIC being able to utilize its CAs properly?
- ) What is the profitability position of this company?

### **1.3 Focus of the Study**

Two types of capital are employed in an organization and both are equally important. This study's focus is on working capital which is concerned to day- to-day operation. The company should always concern on structure of working capital and its management. The working capital helps to operate fixed assets in proper way. For instance, if the company doesn't have inventory, it can't increase its sales revenue and has to keep fixed assets in idle condition. In other words, the company isn't able to utilize its overall fixed assets due to the lack of working capital. Therefore, the financial manager should always concern to make optimal level of working capital; which helps in wealth maximizations as well as profit maximization of any business organization.

Working capital is crucial aspect of management. Working capital in this modern business age covers broad area. Working capital management covers almost half of the work of the financial management. Among this broad area, it is focused on its size, structure, turnover positions, liquidity and profitability position of Nepal's oldest insurance company, Nepal Insurance Company.

## **1.4 Objectives of the Study**

The main objective of this study is to evaluate the working capital management of NIC. The specific objectives are as follows,

- ) To analyze the size and structure of working capital of NIC.
- ) To analyze the relationship between income and working capital.
- ) To analyze the working capital flow cycle or cash conversion cycle of NIC.
- ) To examine whether the adequacy of working capital depends upon the nature of financing current assets or not.

## **1.5 Limitation of the Study**

This study is mainly based on secondary data which have been collected from websites, books, financial statements, and reports of the company.

Moreover the study covers the information of only five years 2005 to 2009.

Among them only Nepal insurance company can't be exact sample to represent all other companies.

The study was carried out on the basis of financial statements and records of official data. Therefore, the policies as well as the decision matters of the cooperation are not analyzed.



# **CHAPTER-II**

## **REVIEW OF LITERATURE**

The main objective of this chapter is to study and analyze the publications related to working capital management to make the study effective. This chapter concludes the key terms from the review of and studies them separately.

This chapter is divided into two parts,

### **2.1 Conceptual Review**

Under this part following aspects have been included.

- ) Concept of working capital.
- ) Classification of working capital.
- ) Need and importance of working capital.
- ) Sources of working capital.
- ) Working capital investment policy and financing policy.
- ) Working capital cash flow cycle.

#### **2.1.1 Conceptual Framework**

The word 'working' means work at present. So, working capital working at present. Therefore, working capital is defined as all the short term assets used in day to day transaction of a firm. Technically, working capital management is an integral part of overall financial management (Khan and Jain, 1999:15).It represents that part of fund, which circulates from one form of current assets to another form in ordinary course of business. For example, cash is used to purchase raw material which creates stock of finished good which is sold for cash. Therefore, working capital management is concerned with the problems that arise within attempting to manage the current assets; the current liabilities and the interrelationship that exists between them (Kulkarni, 1990:374).The current assets are such type of assets, which can be converted into cash within a year.

Making suitable current assets investment policy is a hard task for managers. It is must to maintain the good balance of the adequate working capital. Adequate working capital brings security, conferment and continued existence of the business. On the other hand, excess investment could affect profitability and inadequate amount of working capital can threaten solvency of the firm. (Pandey, 1999:808)

The financing decision on working capital management of planning, utilizing and controlling its current assets in term of the requirements of the company and is basically concerned with profitability and liquidity position of the company. The skill of working capital management should be unique to make an efficient use of funds for minimizing the risk of loss to attain profit objectives.

#### **i) Concept of Gross Working Capital**

Gross means total and working capital is short term assets. So, gross working capital means total current assets. In the other words, the term working capital is regarded as the firms' total current assets. It focuses only on the optimum investment in current assets and financing of current assets (Khan and Jain, 1999:604). It consists of cash, marketable securities, receivables and inventories. From the management view point, gross working capital deals with the problems of managing industrial assets in the day to day operation (Kuchal, 1988:157). The gross concept emphasizes that excessive investment in current assets which affects profitability as idle investment that yields nothing. Similarly, inadequate investment in current assets makes it difficult to carry out the day to day operation of the business smoothly (Kuchal, 1988:157). Gross working capital concept is also known as quantitative concept because it concerns about the current liabilities and difference between current assets and current liabilities. This concept summarizes,

Gross working capital=Total current assets.

## **ii) Concept of Net Working Capital**

Net working capital is the difference between current assets and current liabilities. It focuses the liquidity position of the firm in the long run. This concept is more appropriate than gross working capital concept because it considers current liabilities. Net working capital can be positive or Negative. When current liabilities exceed current assets, it is negative net working capital. The concept of net working capital helps the management to look for permanent sources of its financing since working capital under this approach does not increase with increase in short term borrowing(K.C, 1994:157). Net working capital is the difference between current assets and current liabilities and this amount is financed by long term fund. This concept helps to determine optimum mixture of short term capital and long term capital of business enterprises (K.C, 1994:82).

This concept is equally important in every organization but more appropriate to running business i.e. the business running at present. It enables a firm to determine how much amount is left for operational requirement (Kulkarni, 1990:376). Net working capital is not very useful for comparing the performance of different firms as a measure of liquidity, but it is quite useful for internal control. This concept is also known as qualitative concept of working capital. This concept says,

Net working capital= Current Assets- Current Liabilities.

### **2.1.2 Classification of Working Capital**

Working capital can be classified into permanent working capital and temporary working capital. They are also called fixed working capital and variable working capital respectively.

#### **i) Permanent Working Capital**

Permanent working capital is the minimum amount of current assets required throughout the year to conduct a business on a continuous and uninterrupted basis, even during the dullest season of the year. It will remain permanently in the business and will not be returned until the business is wound up (Khan and Jain, 1999:172). It

shows the fixed nature of capital and is kept permanently in the company but it can be converted into cash within a year. That's why, it is categorized in working capital. The financing source of this capital is long term fund (K.C, 1994:83). Business firm could not be able to serving itself in the competitive market without permanent working capital. For instance, every business enterprises has to maintain a minimum stock of raw materials, work-in – progress, finished products, spare parts etc. It always requires money for the payment of wages and salaries through out the year (Kuchhal, 1988:161). Permanent working capital represents the current assets, which are required on a continuing basis over the enter year. It is maintained as the medium to carry on operations at any time. This permanent working capital can be divided into two forms.

- a) Regular Working Capital
- b) Reserve Margin Working Capital

#### **a) Regular Working Capital**

These types of fixed working capital are needed to achieve the operation cycle of business enterprise. Regular working capital is known as minimum liquid asset which is required for operating the business enterprises smoothly. It is useful to convert cash to inventory, inventory to account receivable and account receivable to cash of business enterprises.

#### **b) Reserve Margin Working Capital**

If an organization keeps more than regular working capital that is called reserve margin working capital. If any unimagined crisis and problem that can hit the company and the financial market occurs, reserve margin working capital is needed i.e. this type of working capital is kept to the situation like inflation, deflation, strike and natural disaster. This working capital can be referred as the nature oriented current assets.

## **ii) Temporary Working Capital**

The working capital which changes with the change in production unit and sales is referred as temporary/variable working capital. Production and sales varies time to time depending upon market demand. If the working capital need increase or decrease with the change in business activities, that is known as variable working capital. It is required in seasonal changes of business and certain abnormal condition like strikes, lockouts, dull market conditions, cut-throat competition etc. Seasonal working capital is the additional amount of current assets particularly cash, receivable and inventory which is required during the more active business season of the year (Kulkarni, 1990: 377).

### **a) Seasonal Working Capital**

Many businesses are seasonal. Their sales and production is high in some season and low in some season. During the high selling season, extra working capital should be managed. Sugar mill, tobacco mills, jute mills, fruit mills, fruit purification industry are types of industrial business that are operated in seasonal nature. Extra working capital managed in these industries is seasonal working capital. These types of industries have to manage extra working capital in their seasonal production and sales.

### **b) Special Working Capital**

Additional Working capital is needed to business enterprises for special programs like examine the demand of new product, special promotion of the product and wide marketing programs. Such type of working capital is called special working capital.

## **2.1.3 Need of Working Capital**

The need for working capital to run day to day business activities can not be overemphasized. It helps to achieve entire goal of the business and maximize the wealth of shareholders. Generally, working capital is required to spend on raw material, salary, wages, rent, electricity, advertisement and other sales related expenses etc (K.C, 1994:85). Besides this, the business enterprises have to spend on advertisement and promotion of the product, which helps in sales of product. All

these expenses should be made at the time of production but cash is received after sales of the product. So, working capital is needed. Generally, Working capital is needed for the following motives;

**i) The Transaction Motive**

A business firm holds cash for smooth running of the business. To conduct its ordinary business and making purchase and sales, working capital is needed. In the business, where billings are predictable cash, inflows can be scheduled and synchronized with the need for the cash outflow (Weston and Copland, 1990: 367). In a seasonal business more cash may be needed and if firm want to operate transaction smoothly, they have to keep inventory of raw materials and finished goods. Generally, a business firm invests on marketable security that can be converted into cash in a short time. It is temporary investment (Weston and Brigham, 1996:439) So, to run business smoothly in a uninterrupted basis, a business firm has to manage working capital for transaction motive.

**ii)The Precautionary Motive**

The precautionary motive refers to the holding of cash to meet the random and unforeseen fluctuation in cash flow. For example, unpredictable changes in demand and supply, strikes, failure of important customers, unexpected slow down in collection of account receivable etc. Thus, the firm needs the working capital to meet any contingencies in future.

**iii) The Speculative Motive**

An organization may meet following opportunities at any time of its life.

- ) Opportunities to purchase raw material at a reduced price. Payment of immediate cash.
- ) To purchase at favorable price.
- ) To speculate on interest rate.
- ) Opportunities of profit making investment etc.

To take advantage from above opportunities, working capital is needed which is referred as working capital for speculative motive. Working capital also represents “war chest” or pool of funds from which a firm may draw quickly to meet a short term opportunity, including acquisition (Weston and Brigham, 1982:441). Therefore, cash and marketable securities are needed for speculative motives.

#### **iv) Compensation Balance Requirement**

The commercial bank performs many functions for business firms. Sometimes firm pays service charge by direct fee and sometime by maintaining compensating balance. Compensating balance is the advance deduction by bank on loan. It represents that the firm agrees to maintain in its checking account with the bank. With assurance, the bank can provide such funds as long term loan.

#### **2.1.4 Importance of Working Capital**

Working capital is important for the following reasons,

- ) More than half of the total assets are typically invested in current assets.
- ) A large proportion of the financial managers’ time is allocated to working capital management.
- ) Investment in fixed assets may be reduced by renting or leasing, but investment in inventories and receivables is usually unavoidable.
- ) Small firms may minimize their investment in fixed assets by leasing but they cannot avoid investment in cash, receivable and inventories.
- ) The relation between sales growth and need to invest in current assets is close and direct.

#### **2.1.5 Determinant of Working Capital**

A firm should plan its operations in such a way that it should have neither too much nor too little working capital. Since, there are no set rules to determine the working capital; the firm itself should manage working capital in proper way by considering

the need of business. The total working capital requirement is determined by wide variety of factors (Khan and Jain 1999:16.4). They can be classified into two parts;

**i) Internal Factors**

Internal factors are those factors which affects directly in determining the need of working capital. They are,

**a) Nature of Business**

Trading and financial firms need large sum of money to be invested in working capital. Inversely, public utilities need limited working capital only for the use of cash sales and supply services. The industrial units also require a large amount of working capital though it varies from industry depending in their assets structure (Khan and Jain, 1999:16.4). Working capital requires most of the manufacturing concern to fall between two extreme requirements of trading firms and public utilities (Pandey,1999:817).

**b) Size of Business**

A business firm, having more transaction quantity, needs more working capital than a firm having less transaction quantity. However, based on fixed assets to sales ratio of the firm, small scale business needs more working capital than large scale business firm because large scale business firm cannot collect working capital in right instant of time.

**c) Growth and Expansion of Business**

Growth and expansion of business affects in determining the requirement of working capital. If the firm grows, it naturally cost more working capital than those static one and vice versa.

**d) Rapidity of Turnover**

A business firm should collect rapidly to keep low working capital and inventory turnover and receivable turnover should be fast.



**e) Manufacturing Process**

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

**f) Firms Production Policy**

If demand for the firms product is seasonal, there are two open for such enterprises either they confine their production only to periods when goods are purchased or they follow a steady production policy through the year and produce goods at a level to meet the peak demand (Khan and Jain, 1999:16.8). In peak season firm should operate on full capacity and in slack season, working capital should be reduced. If a company has to regularly produce good and services, it should keep more stock of raw material and finished product.

**g) Operating Efficiency of Firm**

The management can contribute to a sound working capital position by operating efficiency, which refers to the efficient utilization of resources to minimum cost. Efficiency of operations accelerates the pace of cash cycle and improves the working capital turnover (Khan and Jain, 1999:16.8).

**h) Dividend Policy**

Dividend should be paid out of cash balance, which decreases the working capital. If firm earn regular income and has followed the liberal dividend policy, it reduces working capital conversely, if it retains profit, working capital requirement is low.

**i) Terms and Condition of Purchase and Sales**

If a company can purchase on credit and sale on cash, low working capital is required and if he should sale on credit and purchase on cash, high working capital is required.

**ii) External Factors**

The need of working capital is also affected by some external factors. These factors should also be considered while managing working capital. They are,

**a) Business Cycle**

Business Cycle fluctuation is another determinant of working capital requirement. The recession period need more working capital than in the period of boom and recovery.

**b) Price Level Change**

A firm requires maintaining the higher amount of working capital if price level rises because it needs more fund due to increase in price and vice versa.

**c) Access to Money Market**

Firms having easy access to commercial banks and other sources, which provide short term loan facilities, require low working capital. Alternatively, firms having difficulties in access to money market requires high working capital.

**d) Technological Development**

If manufacturing process is long, more amount of working capital is needed. Thus, if there are alternative technologies of manufacturing of product, the technological process with the shortest manufacturing cycle is chosen (Pandey, 1999:809).

**e) Transportation and Communication Facilities**

If the development of transportation and communication facilities in the country is good, low working capital can do enough work. Otherwise firm should manage high working capital.

**2.1.6 Working Capital Policies**

A firm's net working capital position is not important as index of liquidity but it is also used as a measure of the firm's risk, in this regard, means chances of the firm being unable to meet its obligations on due date (Pandey, 1999: 738) Working capital management involves deciding upon the amount and composition of current assets and how to finance these assets.

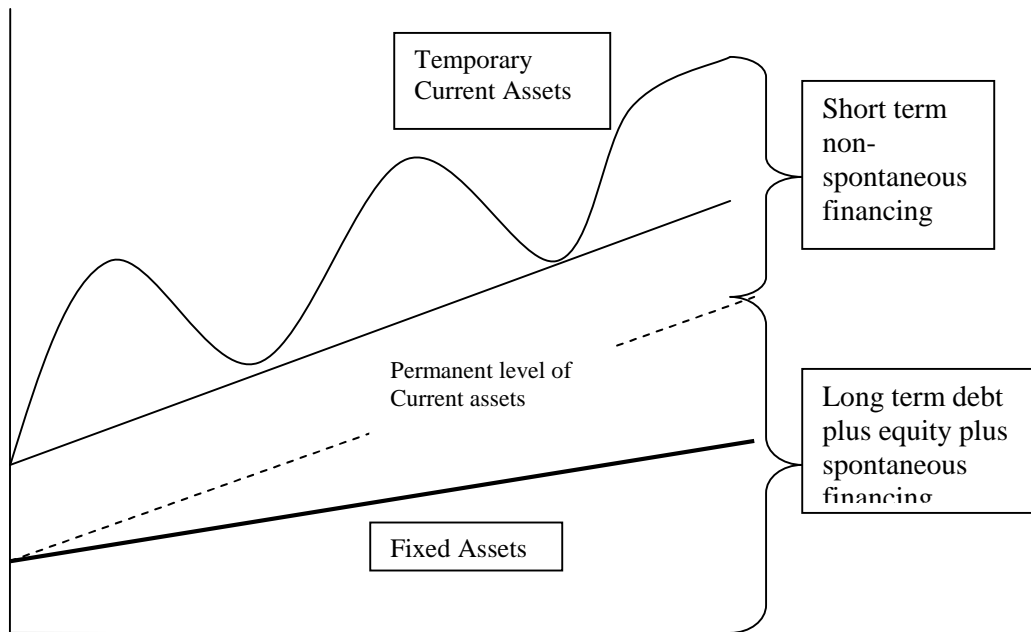
These decisions involve off between risk and profitability. The greater the relative proportion of liquid assets, the lesser the risk of running out of cash all other things being equal. Profitability, unfortunately, also will be less. The longer the composite maturity schedule of securities used to finance the firm, the lesser the risk of insolvency. Again the profits of the firm are likely to be less. Resolution of the trade off between risk and profitability with respect to these decisions depends upon the risk preferences of management.

Working capital policy refers to the firm's basic policies regarding target level of each category of current asset and how current assets will be financed (Weston and Brigham, 1996: 333). So first of all, the firm has to determine how much funds should be invested in working capital in gross concept. Every firm can adopt different financing policy according to the financial manager's attitude towards the risk-return trade off. One of the most important decisions of finance manager is how much current liabilities should be used to finance current assets. Every firm has to find out the different sources of funds for working capital.

#### **i) Current Assets Financing Policy**

##### **a) Aggressive Policy**

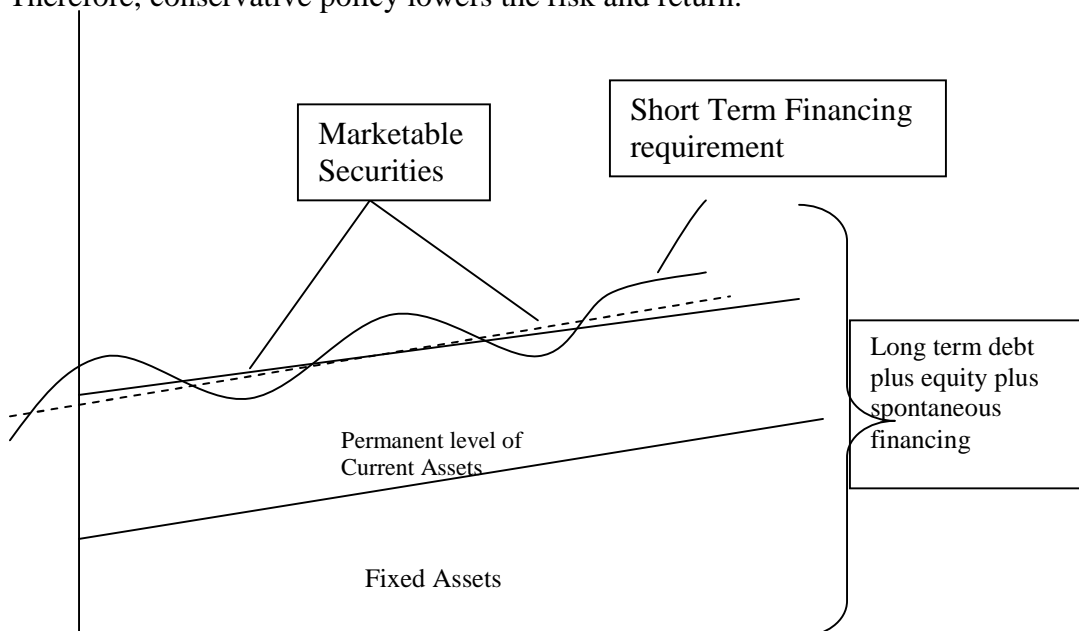
Aggressive policy carries a low level of current assets (marketable securities, cash, inventories and receivables) to sales. Aggressive policy uses more short term debt and less long term debt for financing current assets. Therefore, an aggressive policy results in a higher risk and higher profitability.



(Source: Weston and Brigham, 1996:345)

**b) Conservative Policy**

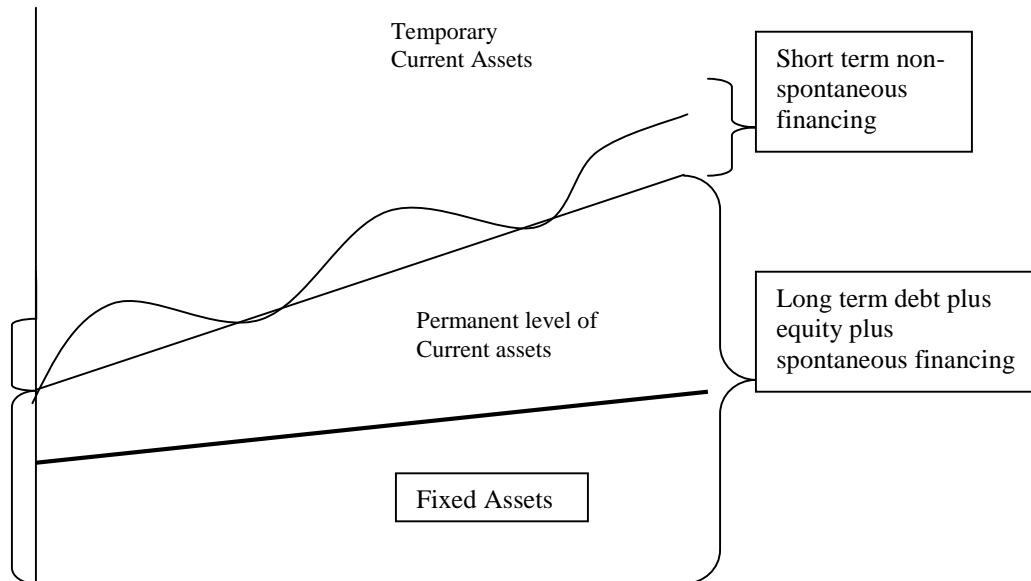
Conservative policy carries a high level of current assets to sales. Conservative policy uses more long term debt and less short term debt for financing current assets. Therefore, conservative policy lowers the risk and return.



(Source: Weston and Brigham, 1996:345)

### c) Moderate Policy

Moderate carries an average level of current assets to sale. Moderate uses mid range of short term and long term debt of above two policies. Therefore, the moderate current assets policy results in mid range risk and profitability.



(Source: Weston and Brigham, 1996:345)

### ii) Current Assets Investment Policy

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried to support the given level of sales. There are three alternative current assets investment policies-fat cat, lean and mean and moderate (Weston and Brigham, 1996: 433).

#### a) Fat Cat Policy

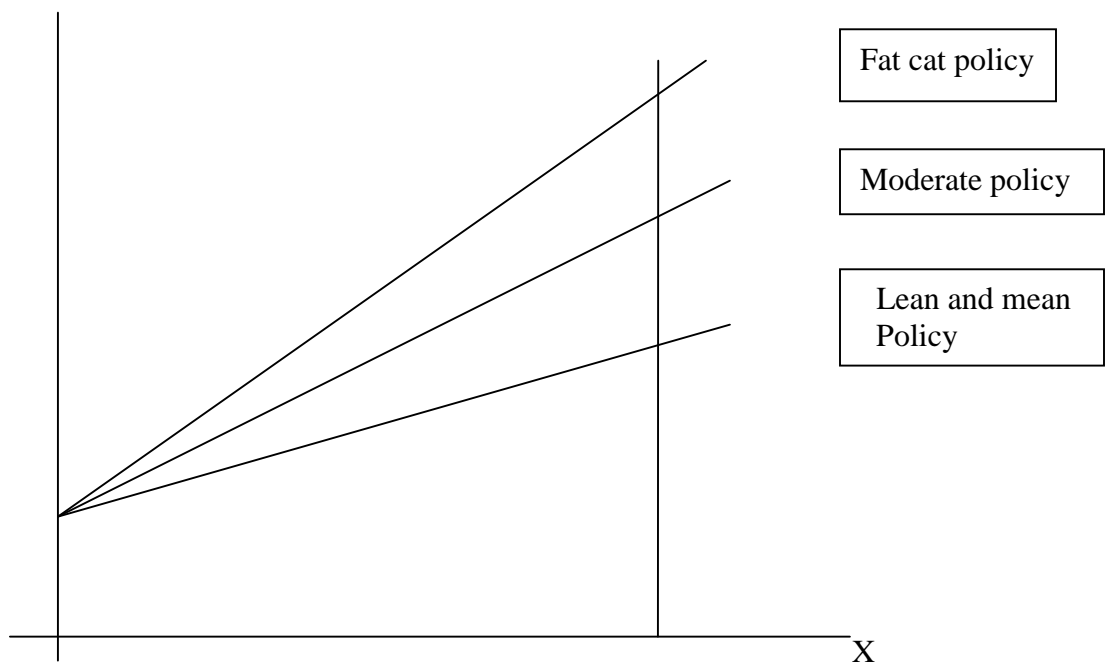
This is known as relaxed current assets investment policy. In this policy, the firm holds relatively large amount of cash, marketable securities, inventory and receivable to support a given level of sales. This policy creates longer inventory and cash conversion cycles. It also creates the longer receivable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

### b) Lean and Mean policy

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

### c) Moderate Policy

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



(Source: Weston and Brigham, 1996:345)

## 2.2 Articles Review

This section includes a workout to scrutinize some of the researches and published materials related to the topic working capital management.

**Shrestha (1983)**, has considered ten PEs and studied their working capital management. He has focused on the working capital liquidity, turnover and profitability position of those enterprises. In this analysis, he found four PEs

maintaining adequate liquidity position; two PEs having excessive and the rest four PEs failing to maintain desirable liquidity position. On the turnover side, two PEs had negative working capital turnover, four had adequate turnover, one had higher turnover and the rest three had no satisfactory turnover on net working capital.

He has also found that out of ten PEs, six were operating in losses while only four were getting some percent of profit.

With reference of findings, he has brought certain policy issues such as lack of suitable financial planning, negligence of working certain policy issues such as lack of suitable financial planning, negligence of working capital management, deviation between liquidity and turnover of assets and inability to show the positive relationship between turnover and return on net working capital. In the end, he had made some suggestive measures to overcome the above policy issues i.e. identification of needed funds, regular check of accounts, development of management information system, positive attitude towards risk and profit and determination of right combination of short-term and long- term sources of funds to finance working capital needs.

**Pradhan and Koirala (1982)**, jointly conducted a study on, “Working Capital Management in Nepalese Corporations”. They have focused on evaluation of working capital of selected manufacturing and non manufacturing corporations of Nepal. They had sampled five manufacturing and six non-manufacturing public enterprises. This study was concentrated in the size of investment in current assets, significance of current assets management. The major findings of the study were as follows:

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

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

**Acharya (2000)**, in his article on working capital management, he has described the two major problems; operational and organizational problems regarding the working capital management in Nepalese enterprises.

The operational problems he found are increase of current liabilities than current assets, slow inventory turnover and not allowing the current ratio 2:1, absent or apathetic information management system, ineffective application of performance evaluation tools and techniques like break even analysis, fund flow analysis, ratio analysis.

Similarly, the organizational problems concluded were, lack of regular evaluation of financial results as well as regular internal and external audit system, unable to present their capital requirements with proper justifications, dissatisfactory functioning of finance department, under utilization of capacity.

Acharya has made some suggestions and recommendations. They are, PEs should take care of negatively affecting policies directives from HMG Nepal itself, should avoid factious holding of assets immediately, avoid the system of crisis decision, which prevailed frequently in their operations, level of investment should optimize.

**Pradhan (2001)**, has shed light on financing of working capital. He has concluded there are two ways of financing working capital requirements i.e. internal and external sources. Internal sources include use of retained earnings, depreciation fund



and share capital. External sources include trade credit, advance from customers, short term deposit, cash credit, short term government loan etc. generally, a source or a combination of sources of financing to be used depends on the type of current assets ( permanent and variable ) to be maintained. The long term sources such as stock issues, debts and bonds are appropriate to use for the permanent type of current assets only in the spontaneous type of short –term sources are not enough or not available to cover the required size of permanent current assets. Types of financing may be distinguished into three groups.

- i. Long term financing: the sources of long term financing include long term debt (i.e. term loans and bonds), common stocks, preferred stock and retained earnings.
- ii. Short term financing: it includes short term bank loan, notes payable, line of credit, overdraft, factoring, pledging, blanket lien etc. those are obtained for period less than one year.
- iii. Spontaneous financing: it includes operating sources like trade credits, account payable, accruals etc.

A company can follow three approaches on the mix of short term and long term source of financing, namely conservative, aggressive and matching approach. If more short term funds are used in financing current and fixed assets, it can be considered as aggressive approach, conservative approach refers to more use of long- term source. In working capital management, an important aspect is matching the type of financing with the type of assets. However, the degree of managerial aggressiveness often guides in choosing a certain combination of short and long term financing for working capital.

### **2.3 Review of Previous Research Work**

**Sapkota (2006)**, had carried out “*A study on working capital management of Himal Cement Company limited*”. He had used ratio analysis using financial statements of the company for five years from 2002 to 2006.

His Major Objectives:

- ) To examine the current assets and current liabilities position.
- ) To reveal the specific performance in working capital management.
- ) To evaluate the each type of current assets of the company.
- ) To understand the accuracy of working capital depending upon the nature of financing by current assets or not.

His Major Findings:

- ) Major part of current assets is occupied by inventory.
- ) Inventory turnover ratio, cash conversion cycle and receivable conversion period is found at satisfaction level.
- ) Poor liquidity position.
- ) Poor profitability position of the firm i.e profit making capacity is low due to low utilization of plant capacity, inefficiency in sales and operations activities and lack of efficient management of the company.
- ) High operation inefficiency due to high production cost.
- ) Management of receivable seems to be far better than other aspects.

His Major Recommendation:

- ) To determine certain rate of return on investment and so set certain sales target.
- ) Suitable working capital should be formulated and implemented to keep optimum size of investment in each component of current assets and current liabilities.
- ) Proper attention should be given to employee planning.

**Sharma (2007)**, in his thesis entitled “*A study on working Capital Management of Nepal Battery Co. Ltd.*” has concerned with working capital management Of NBCL by analyzing various ratio of the period of five years. He used secondary data of balance sheet and profit and loss a/c of the company from 2001 to 2005.

His Major Objectives:

- ) To analyze the liquidity composition of working capital (assets utilization and profitability position).
- ) To study the relationship between sales and different variable of working capital of NBCL.

His Major Findings:

- ) Major component of working capital of NIBC are cash and bank balance, account receaibles, inventory and misc. current assets and inventory holds large position of current assets.
- ) Inventory to total assets shows fluctuating trend and receivable to total assets position show increasing trend. The turnover position is in fluctuating trend and receivable conversion period and inventory conversion period is long which is unfavorable for the company.
- ) Values of current and quick ratios are found nearly equal to standard inefficiency in operation can be see through wide difference between gross profit margin and net profit margin and high level of operation ratio.

**Shrestha (2008)**, has carried out his thesis entitled “*A study on working capital management of Diary Development Corporation*”. he has taken five years study period and applied the secondary data.

His Major Objectives:

- ) To appraise the working capital management of DDC.
- ) To study the relationship between sales and different variables of working capital.

His Major Findings:

- ) The Major components of current assets are inventory, cash and bank balance sundry debtors and miscellaneous current assets in which inventory hold the major position and cash hold the smallest position.

- ) Company's investment in form of working capital has been increasing. The average investment in current assets is lower with respect to net fixed assets during the study period and DDC has no clear vision about the investment in current assets to fixed assets position.
- ) There is a growing tendency of investment over current assets.
- ) Liquidity position of the company is not well because current and quick ratios are below standard value.
- ) Because of high collection, period, turnover position of the company is weak.
- ) The overall return position of DDC is negative because of inefficient utilization of CA, TA and shareholders' wealth.

**His Major Recommendation:**

- ) DDC should minimize its current assets by adjusting on inventory and cash balance. It should increase production capacity by investing capital goods.
- ) Reduce operating cost by avoiding unnecessary manpower and expenses.

**Ghimire (2008)**, in his thesis entitled "A study of working capital position of Arihanta Multi- fibers Limited" has covered the period of 5 years from fiscal year 2003 to 2008.

**His Major Objectives:**

- ) To show the working capital position of Arihanta Multi- fibers Company Ltd.
- ) With respect to cash, credit and inventory management to examine the nature of companies current assets and current liabilities properly.
- ) To see the effect of working capital on profitability.
- ) To examine the nature of funds, their sources and utilization.

**His Major Findings:**

- ) The Arihanta Multi-fibers Company Ltd's current assets consist of mainly stock of raw material, finished products, packing materials, sundry debtors,

advance and receivables, cash and balances and so on. The inventory occupies major share i.e.61.04%.

- ) The company's current liability mainly consists of sundry creditors, advance and payable provision. Sundry creditor occupies the largest share i.e.51.15%.
- ) The overall percentage of current assets on total assets is in increasing trend i.e. 19.84%, 23.22%, 26.12%, 29.81% and 29.78% respectively.

## **2.4 Research Gap**

Many research studies have been conducted by the different students, experts and researchers about working capital management. Some studies are related to case study of a single company and some are comparative in nature. The financial and statistical tools used by most of the researcher were ratio analysis, test of hypothesis, correlation analysis and trend analysis. Regression analysis and primary tools have not been used by many researches. This research will include different tools like ratio analysis, correlation analysis, regression analysis and interview as a primary tool of analysis, regression and interview are the specific tools used in this research and also used the latest data to show the overall working capital of NLC. This research can help the person who wants to know about overall working capital management of Nepal Insurance Company. This research may be new as well as the research work may be appreciable.

# **CHAPTER-III**

## **RESEARCH METHODOLOGY**

### **3.1 Introduction**

Human being is always interested to learn. They try to end their curiousness. They try to solve out the queries. They are not satisfied till they solve the question and develop the form of their beliefs or judgment about those particular phenomenon's. The method that applies during this knowledge gaining research is known as research methodology.

Research is a systematic inquiry of any particular topic and methodology is the method of doing research in a well manner so, research methodology means the analysis of specific topic by using a proper method i.e. the method that applies during the knowledge – gaining research is known as research methodology (Joshi, 2001:1). In other words, research methodology is a systematic study of the research problem that solves them with some logical evidence (Kothari, 1999:16).

This chapter consists of the methodology of studying working capital management of NIC. It represents research design, nature and source of data, data processing procedure and tools analysis.

### **3.2 Research Design**

Research design helps the investigator to obtain answer to the question of research and also helps him to control the extraneous and error variance of particular research problem under study (Joshi, 2001:12)

The design for this research is made by collection of information from different source and the data have been tabulated and analyzed by using various financial statistical tools. The financial analysis includes the analysis of different financial ratio, which relates to working capital management and statistical analysis includes

the calculation of correlation coefficient as well as probable error. All these elements are covered in research design which is very essential to find out the desired result.

There are 18 insurance companies in insurance sector and 15 of them are providing non-life insurance service ([www.nepalinsurance.com](http://www.nepalinsurance.com)). Thirteen insurance companies are providing only non-life insurance service. NIC is one of the most popular insurance companies, providing non-life insurance service. In this study NIC has been selected to study working capital management five fiscal years are study period.

### **3.3 Nature and Source of Data**

The data used in this study are based on Primary and secondary data. The primary data are collected through interviews with chief executives, directors and employees of NIC for the conformation of secondary data. The secondary data has been extracted from annual reports and audited financial statements of the company direct collected from company and submitted to Nepal stock exchange.

### **3.4 Data Processing**

The collected data are recorded systematically and identified and the available information is grouped as per the need of the research work in order to meet the research objectives. The collected data are presented on the tabular form for easy calculation and analysis.

Financial tools and statistical tools are used for calculating the ratios, correlations coefficient.

### **3.5 Data Processing Procedure**

#### **i) Financial Tools**

A widely used tool for the financial analysis is ratio analysis. It is defined as the systematic use of ratio to interpret the financial statement so that the strength and weaknesses of a firm as well as its historical performance and current financial condition can be determined (Khan and Jain, 1999:117)

Following ratios can be analyzed to determine financial position of an organization.

### **a. Liquidity Ratios**

Liquidity ratios are used to measure the firm's ability to meet the short term solvency of the company. There are three types of liquidity ratios.

#### **1. Current ratio**

Current ratio is the relationship of current assets and current liabilities. The current assets are those assets, which can be converted into cash within short period (Dangol, 2054:372).

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

Current assets includes Inventories, cash in hand , cash in bank, bill receivable, account receivable, marketable securities, prepaid expenses, loan and advance etc. and whereas current liabilities includes bills payable, cash credit , outstanding expenses, bank overdraft etc.

The ratio shows that the firm's current position to pay its current obligation. Higher ratio shows the favorable position of the firm. The standard of this ratio is taken as 2:1. Lower the ratio indicates unfavorable position of the firm. This shows the solvency position of the business is not good.

#### **2. Quick Ratio/ Acid – Test Ratio or Liquid Ratio**

The ratio is calculated by using following formula.

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



All the current assets are not equally liquid so quick assets does not include those current assets which are not converted in short period the example of these assets are prepaid expenses and inventories. The standard ratio is taken as 1:1.

### **3. Absolute Liquid Ratio**

Although current assets like receivable, marketable securities etc. can be changed into cash as required, it takes a time to be changed. It means it is not absolute liquid. The absolute liquidity ratio measures the liquidity of a firm in absolute term. Following formula is used to calculate absolute liquidity ratio.

$$\text{Absolute Liquid Ratio} = \frac{\text{Cash}}{\text{Current Liabilities}}$$

### **b. Profitability Ratio**

Profit is the main objective of the firm. The company should aim at earning maximum profit by fulfilling social responsibilities. It is necessary to have enough profit, to meet the different obligations of the firm. Every investor invests his saving only after when he is confident of reasonable return. In addition, the adequate return to its shareholders depends on profitability of the company. In other words, profit provides money for repaying debt and providing internal funds. Therefore, it shows the overall efficiency of the business concern. Following profitability ratios have been used in the present study.

#### **1. Return on Current Assets**

This ratio analysis shows the earning power of the current assets of the company. This ratio is calculated by dividing net profit by total current assets.

#### **2. Return on Net Working Capital**

This ratio measures the profitability of net working capital and also shows the efficiency of working capital. The ratio is obtained by dividing the net profit by net working capital.

### **3. Return on Investment**

Investment refers to the long term funds supplied by the creditor and owner of the firm. It is also known as net worth. It can be computed in two ways. First, it is equal to long-term liabilities plus owner's equity. Alternatively, it is equivalent to net working capital plus fixed assets. It is calculated by dividing net profit by capital employed.

The higher ROI shows efficient use of long-term fund.

### **c. Turnover Ratio**

The relationship between sales and assets are indicated by turnover ratios. It is also known as activity, efficiency or assets utilization ratio. This ratio shows efficiency of assets management, i.e. how efficient the assets management is. It means how efficiently and rapidly, firm can convert its assets into sales. The greater turnover ratio indicates higher utilization of assets. Thus, it measures the degree of effectiveness in use of resource or fund by a firm. There are following turnover ratios that can be calculated.

#### **1. Inventory Turnover Ratio**

The inventory turnover ratio measures how quickly inventory can be converted into sales. It is the test of efficient inventory management. It is computed by dividing the cost of goods sold by the average inventory for the period. The method of calculating this ratio is as follows.

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

A high inventory turnover is the indicator of good inventory management. A low inventory turnover implies excessive inventory levels than warranted by production and sales or over investment on inventory or a slow moving inventory.

#### **2. Receivable (Debtor) Turnover Ratio**

This ratio shows the relationship between sales and account receivable of the company. It indicates the velocity of debt collection of the firm. In other words, the

debtor turnover ratio is a test of the liquidity of debtors of a firm. It can be calculated in two ways.

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

The higher the ratio, the more efficient is the management on collecting the debtors. It indicates that within a short period, the firm is collecting the cash from debtors. A low ratio shows that debts are not being collected rapidly.

### **3. Current Assets Turnover Ratio**

This ratio shows relationship between current assets and sales. It analyses how far company can efficiently utilize its current assets. The ratio shows the requirement of working capital for one rupee of sales. It can calculate as follows.

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

A low working capital turnover relation may reflect an inadequacy of working capital because of low turnover of inventory or receivable.

### **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, which can be shown in the following formula.

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

The higher ratio indicates cash is rapidly converted in sales and good cash management and how ratio indicates show, weak cash management.

## ii) Statistical Tool

The help of statistical tools is essential to measure the relationship of two or more variable. In this study, the following statistical tools are used.

### a. Standard Deviation

Standard deviation is the most popular and most useful measures of dispersion and gives uniform, correct and stable result (Joshi, 2001:158). The chief characteristic of Standard Deviation is based on Mean. Mean doesn't give the clear picture about two distributions with same average because scattered ness may differ in those distributions.

Therefore, a Standard Deviation is superior to the Mean Deviation, Quartile Deviation and Range because it is used for further mathematical treatment. It is the positive square root of average sum of squares of deviation of observation from the arithmetic Mean of the distribution. Different formulae can be used to calculate standard deviation, among them following formulae has been used here.

$$= \sqrt{\frac{\sum x^2}{N}}$$

### b. Co-efficient of Variation (CV)

Standard deviation is the absolute measure of dispersion. The relative measure of dispersion based on the standard deviation is known as the coefficient of standard deviation. The percentage of measure of co- efficient of standard Deviation is called co-efficient of variation (Bajracharya, 2057:180)

It is used for comparing the homogeneity and the uniformity of two or more distributions. The less the CV, more the uniformity and consistency etc will be and the more the CV is the less the uniformity, consistency etc. will be.

$$C.V. = \frac{s}{x} \times 100$$

**c. Correlation Co-efficient (r):**

Correlation Co-efficient is defined as the association between the dependent variable and independent variable. It is a method of determining the relationship between these two variables. If the two variables are so related the change in the value of independent variable causes the change in the value of dependent variable then it is said to have correlation coefficient (Shrestha and Silwal, 2059:315). It can be calculated by using the method of Karl Person's Correlation CO-efficient, which is a widely used mathematical method of Correlation Co-efficient between two variables.

$$r = \frac{\sum dxdy - \frac{\sum dx \sum dy}{N}}{\sqrt{\sum dx^2 \frac{f}{N}} \times \sqrt{\sum dy^2 \frac{f}{N}}}$$

Interpretation:

If  $r=0$ , there is no relationship between variables.

If  $r < 0$ , there is negative relationship between the variables.

If  $r > 0$ , there is positive relationship between the variables.

If  $r = + 1$ , the relationship is perfectly positive.

If  $r = -1$ , the relationship is perfectly negative.

**d. Probable Error:**

The probable error of the Correlation CO-efficient is applicable for the measurement of reliability of the computed value of the Correlation Co-efficient 'r'. It is also denoted by P.E. it is calculated by the following formula.

$$P.E. = \frac{0.6745 \sqrt{\sum r^2 \frac{f}{N}}}{\sqrt{N}}$$

Where,

$r$  = Correlation Co-efficient

$n$  = Number of pairs of observation.

P. E. is used to interpret whether the calculated value of  $r$  is significant or not.

i. If  $r < P.E.$ , it is insignificant, i.e. there is no evidence of correlation.

ii. If  $r > P.E.$ , it is significant.

iii.  $P. E. < r < 6 P.E.$  nothing can be concluded.

### **e. Regressions**

Regression is the estimation of unknown values or prediction of one variable from known values of other variables. Regression analysis is a mathematical measure of the average relationship between two or more variables in terms of the original units of data. The regression analysis confined to the study of only two variables at a time is called simple regression.

The known value which is used for prediction is called independent variables and the unknown value that we are going to predicted is called dependent variable.

Regression equation of Y on X

General equation,

$$Y = a + bX$$

Y = dependent Variable

X = Independent Variable

$a$  = Y- intercept because its value is the point at which the line crosses the Y- axis (the vertical axis)

$b$  = slope of the line (i.e. it measures the change in Y per unit change in X)

#### **Regression Constant (a)**

The regression constant ( $a$ ) represents the value of the dependent variable when the independent variable has a value of zero. The value of the constant is intercept of the

model. The constant (a) indicates average effect on dependent variable if the entire variable if the entire variable are omitted from the model.

**Regression Coefficient (b)**

The regression coefficient of each independent variable indicates the marginal relationship between the independent variable and value of dependent variable, holding constant the affect of all other independent variables in the regression model. In other words, the coefficients describe how change in independent variables affects the values of dependent variables estimate.

# **CHAPTER-IV**

## **DATA PRESENTATION AND ANALYSIS**

### **4.1 Introduction**

The main objectives of the study are to examine the working capital management of Nepal Insurance Company Limited. In this chapter all the relevant data and information of NIC Ltd. are presented and analyzed. The data of current assets and current liabilities are presented in tabular and graphical form and analyzed the data using various ratios along with correlation and regression as mentioned in the previous chapter.

### **4.2 Analysis of Composition of Working Capital**

According to the nature of the business and attitude of the management towards risk, different organization use different current assets. Firms having risk adverse management, maintain the high liquid assets in its total working capital and vice versa. The business firm that aims to maximize return on share holders investment should earn sufficient return from its operation, which depends upon the volume of the sales and to increase sales level, optimum current assets is required the effective composition of the current assets has the greater impact on the whole working capital management as well as the success and failure of the organization. Excess current assets increases cost and low current assets decreases profitability.

### **4.3 Composition of the Current Assets**

The business firm requires the different types of assets to run their business. The assets can be fixed assets and current assets. Without current assets no business can run, so, the firm has to maintain the appropriate level of current assets to run their business smoothly. The success and the failure of any business firm depend upon the proper management of current assets. The components of the current assets are inventory, sundry debtors, cash and bank balances etc. The proper management of the current assets is necessary to achieve the principal objectives of any business



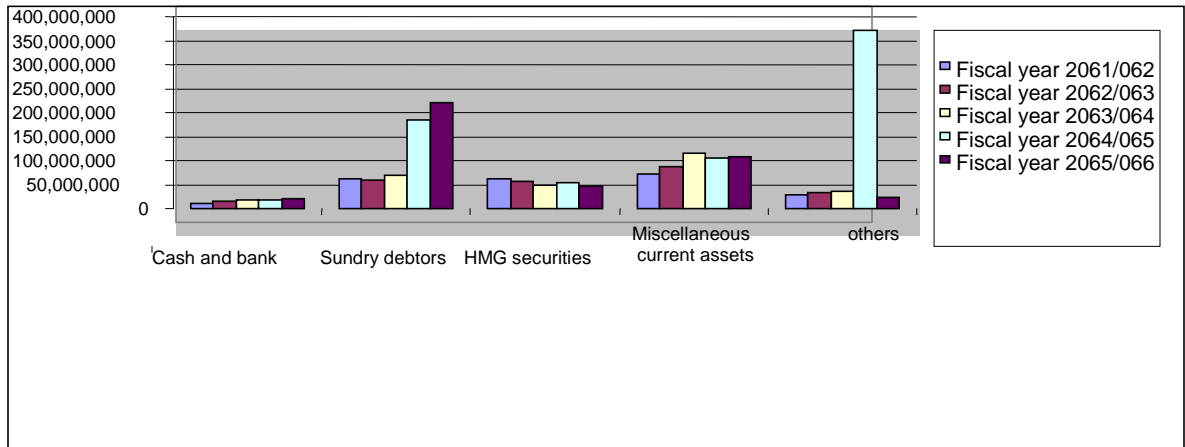
organization to earn maximum profit and ultimately maximize the share holder's wealth.

A firm needs cash to various purposes such purchase of raw materials pay expenses. This is because of not perfect matching between cash inflow and outflow. Cash may also be held to meet future expenses. The stock of raw materials is kept in order to ensure smooth production and to protect the risk of upon available of raw materials. The efficient management of current assets is an integral part of overall part of the financial management. Therefore, the overall current asserts are analyzed.

**Table: 1**  
**Composition of Current Assets NIC**

Particulars	Fiscal year				
	2061/062	2062/063	2063/064	2064/065	2065/066
Cash and bank	9065,007	14265981	18923076	18724599	20870312
Sundry debtors	61,460,428	59984123	70355673	184448406	219864706
Investments :-					
i)HMG securities	60350000	55800000	49360000	52850000	46300000
ii) others	72600000	88100000	115150000	105500000	106900000
Miscellaneous current assets	27243223	34186764	36120412	372102595	23596815
Total current assets	230718658	252336868	289909161	398733292	417531833

**Figure: 1**



This table represents current assets position of Nepal Insurance Company Ltd. NIC’s current assets consists investment, sundry debtors and cash including bank and outstanding premium and others. This table represents the pattern of current assets of NIC and their fluctuation year after year. As per the table, investment in others is more than in HMG securities. Sundry debtors and bank including cash are other important current assets. There is no need of inventory since it is a service organization providing insurance service.

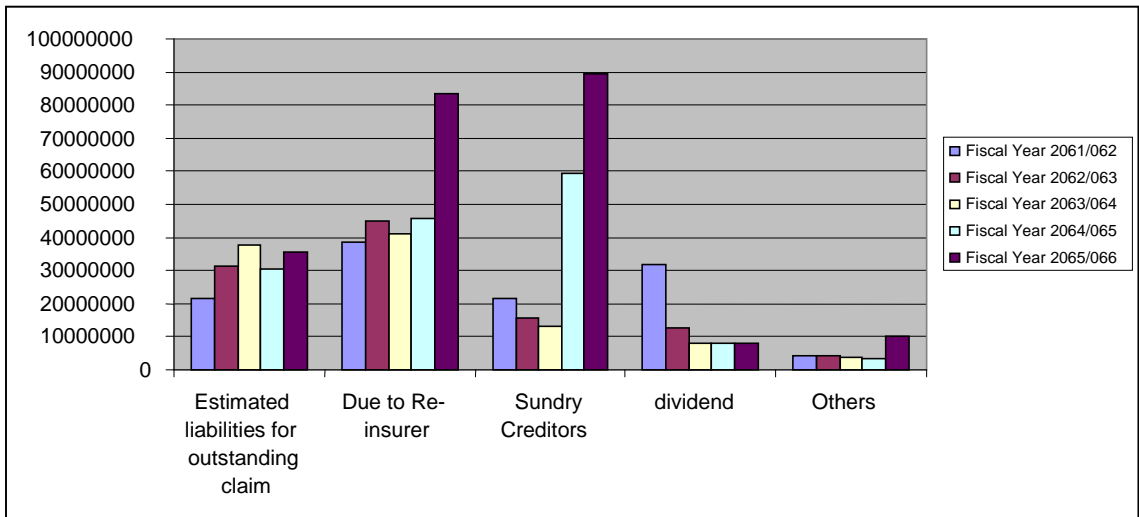
#### **4.4 Composition of the Current Liabilities**

Current liabilities is defined as debt originally schedule for repayment within one year. It involves the liquidity and solvency of the firm. The major component of the current liabilities includes estimated liabilities of outstanding claims, due to the reinsures, sundry creditors, provision for taxation, doubtful loan dividend and other and miscellaneous current liabilities, loan and advances.

**Table: 2**  
**Composition of the Current Liabilities of NIC**

Particulars	Fiscal Year				
	2061/062	2062/063	2063/064	2064/065	2065/066
Estimated liabilities for outstanding claim	21709833	31304971	37802979	30396027	35500668
Due to Re-insurer	38474017	45120689	41093410	45555177	83272755
Sundry Creditors	21774585	15574995	13174232	59150491	89573672
<b>Provision</b>					
i) dividend	31588400	12635360	7899870	7899870	7899870
ii) Others	4321262	4200968	3816156	3197903	10357408
<b>Total current liabilities</b>	<b>177868097</b>	<b>108826983</b>	<b>103786647</b>	<b>146199468</b>	<b>226604373</b>

**Figure: 2**



The current liabilities of the NIC contain estimated liabilities for outstanding claims, due to re-insurer, sundry creditors, provision as dividend and other. The above table shows the amount of different components of current liabilities hold by NJIC. As per the table, the amount of current liabilities is highest in the year 2065/066. The above

table shows the fluctuation of the current liabilities. Where as in the year 2062/063, 2063/064 and 2064/065 the amount is lower which indicates the high level of fluctuation existing.

#### **4.5 Working Capital Policy Analysis**

NIC being a service provider need not tie up its fund in the form of inventory. It sells insurance service to the customer and the trade of service is done on cash basis, NIC generates its operating income through insurance premium (fire, marine and misc.), internal dividend etc and other premiums are collected monthly.

Once a thing is insured for a limited periods. Its total insurance life is organizations income period for service of the thing. It has to spend on employee cost, operation and maintenance cost, administration cost, depreciation, bonus and intensive package for employer etc. It is obvious that the nature of the expenditure is permanent type and NIC does not need to invest its fund in variable working capital.

#### **4.6 Net Working Capital**

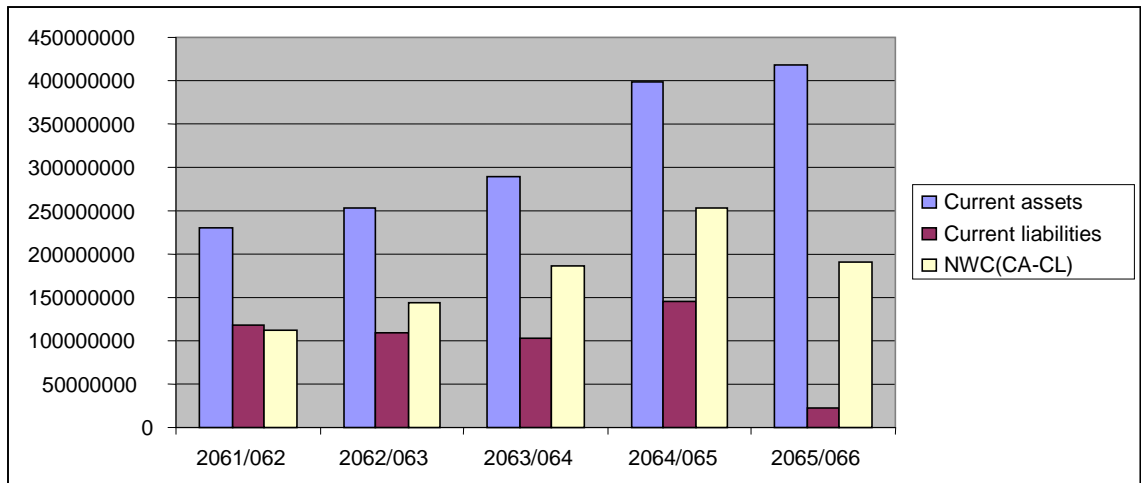
Net working capital refers the difference between current assets and current liabilities. Net working capital is calculated by deducting the current liabilities from current assets. Net working capital can be positive or negative. Positive net working capital indicates the firm has ability to pay its current obligations and the negative working capital indicates its inability to pay its current obligations.

Working capital has positive relationship with firm's prosperity. As the firm prospers, the need for working capital increases, conversely as it negatively prospers, the need for working capital declines. Generally, the prosperity of the firm is reflected by its increasing sales value, expansion of the operation and so on in order to analyze the growth of working capital of NIC.

**Table: 3**  
**Net Working Capital of NIC**

Fiscal year	Current assets	Current liabilities	NWC(CA-CL)
2061/062	230718658	117868097	112850561
2062/063	252336868	108826983	143509885
2063/064	289909161	103786647	186122514
2064/065	398733292	146199468	252533824
2065/066	417531833	22604373	190927460

**Figure: 3**



The above table indicates Net working capital of five years respectively. Net working capital of the year 2064/065 is highest whereas, in the year, the trend of working capital is increasing. In the year 2063/064 the amount of NWC is 186122514 and the amount is 252533824 in the year 2064/065 it shows the higher increased trend as both the amount of current assets and current liabilities is higher than in the year 2063/064. In the year 2065/066 the amount has been decreased.

The difference in between the current assets and current liabilities is higher in the year 2064/065 than in the year 2065/066.

## 4.7 Liquidity Position

Liquidity refers to the ability of a concern to meet its current obligations when they become due. The short term obligations are met by realizing amount from current asset. The current assets should be either in liquid form or in near liquid form. The current assets should be convertible into cash for paying obligation sort term nature. The sufficiency and insufficiency of current assets should be assessed by comparing them with short-term liabilities. If current assets can pay current liabilities then liquidity position will be satisfactory and vice versa. Due to the above reason, it is necessary to analyze the liquidity position of NIC. The following ratios have been calculated to evaluate the short-term financial solvency position of NIC.

- i) Current ratio
- ii) Quick ratio
- iii) Absolute liquidity ratio

### i) Current Ratio:

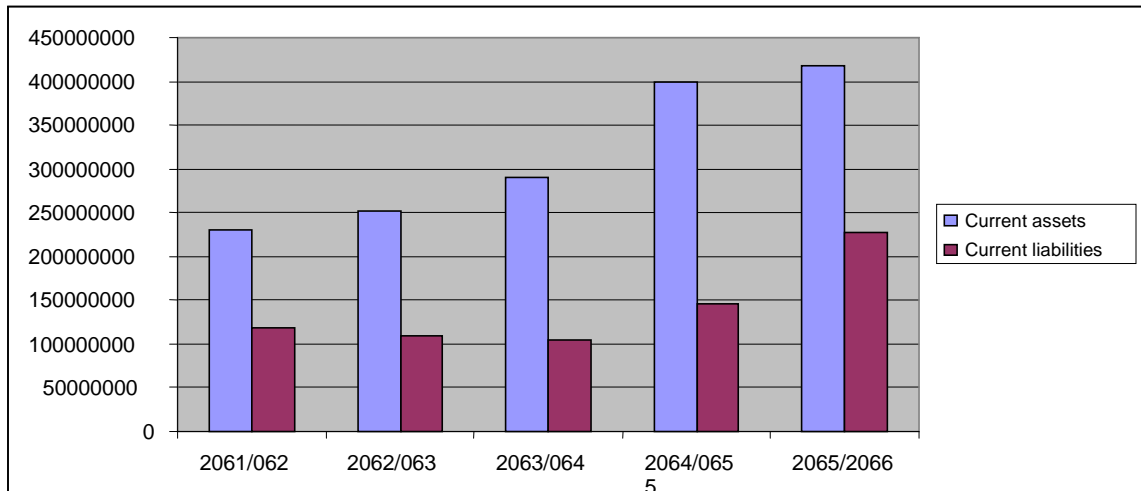
Current ratio measure the short term solvency of the firm in gross term. This ratio is the crude measurement of liquidity position of the firm, in this study also this ratio has been used to measure the liquidity position of NIC.

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

**Table: 4**  
**Calculation of the Current Ratio of NIC**

Fiscal year	Current assets	Current liabilities	Ratio (CA/CL)
2061/062	230718658	117868097	1.96:1
2062/063	252336868	108826983	2.32:1
2063/064	289909161	103786647	2.79:1
2064/065	398733292	146199468	2.73:1
2065/066	417531833	226604373	1.84:1

**Figure: 4**



The above table shows the liquidity position of NIC. Generally current ratio is said well if it is 2:1. It means the firm should hold minimum 200% of the current assets to its current liabilities. Except in the year 2061/062 and 2065/066 all the observed year have more than double current assets than current liabilities. It varies from 1.84 times to 2.79 times throughout the study period. Current assets have increased continuously but current liabilities have decreased in the year 2061/062 and 2065/066. The ratio shows the ability of the corporation to meet its short term financial obligations.

**ii) Quick Ratio:**

Generally current ratio measures the short –term solvency in gross term. It includes less liquid assets i.e. inventory. Thus, it does not measure the actual liquidity position of the firm. Generally, inventory and prepaid expenses are excluded from current assets to measure net liquidity position. NIC is a service providing business; it has service business in absolute, so there is no matter of being inventory so the current ratio of NIC is its quick ratio also.

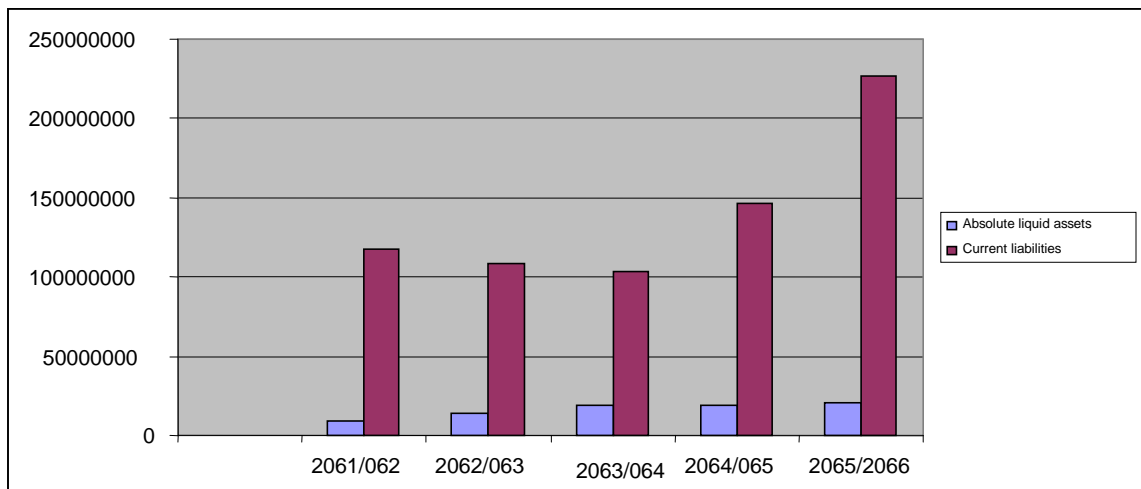
### iii) Absolute Liquidity Ratio:

Absolute liquidity ratio measure the capacity of a firm i.e. cash. Quick assets include the account receivable which is use liquid form of assets. It cannot be used to pay the short-term obligation easily as cash. Therefore, absolute liquidity ratio is calculated here to find out the short-term solvency of NIC in terms of cash. This is found out by dividing cash and bank balance by current liabilities.

**Table: 5**  
**Calculation of Absolute Liquidity Ratio of NIC**

Fiscal year	Absolute liquid assets ( cash at bank)	Current liabilities	Ratio ( cash/CL)
2061/062	9065007	117868097	0.076:1
2062/063	14265981	108826983	0.131:1
2063/064	18923076	103786647	0.182:1
2064/065	18724591	146199468	0.128:1
2065/066	20870312	226604373	0.092:1

**Figure: 5**





Above table shows the absolute liquidity ratio of NIC. This ratio is in fluctuating trend. Highest ratio observed is 0.182:1 in the year 2063/064. The trend of cash at bank is in increasing order each year respectively.

#### **4.8 Profitability Ratios**

Profitability ratios are calculated to measure the operating efficiency of the company in terms of profit. Profit is the ultimate goal of any business firm and a means to measure the efficiency of that firm. Here a relationship is established between operating profit and working capital.

For this purpose following profitability ratios are calculated.

- i) Return on current assets
- ii) Return on net working capital
- iii) Return on investment

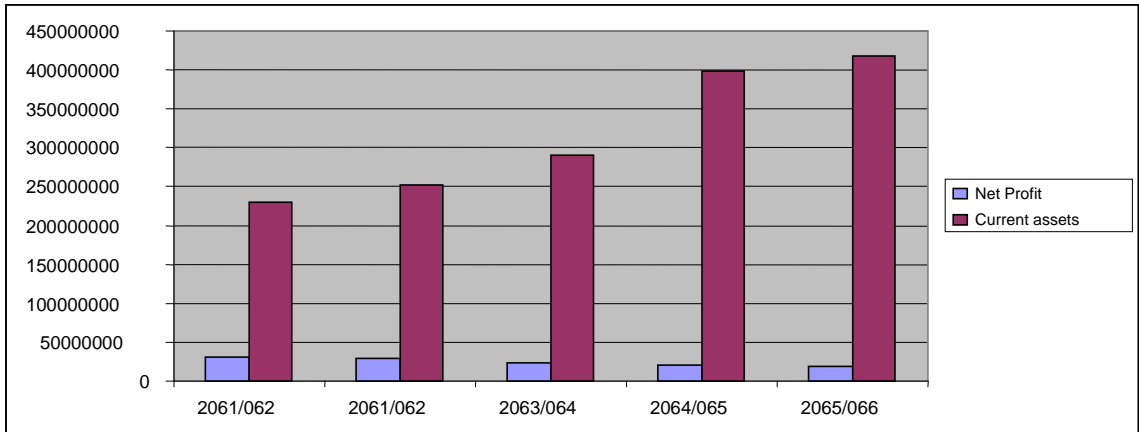
##### **i) Return on Current Assets**

This ratio helps to analyze the earning power of the current assets of the company. The ratio is calculated by dividing net profit by the total current assets. The table presented below shows the return on current assets of NIC during the study period.

**Table: 6**  
**Return on current assets**

Fiscal year	Net Profit	Current assets	Return % ( NP X 100/CA)
2061/062	30774031	230718658	13.34 %
2062/063	29477720	252336868	11.68 %
2063/064	24018312	289909161	8.28 %
2064/065	20674812	398733292	5.18 %
2065/066	18904082	417531833	4.53 %

**Figure: 6**



The above table shows the return on the current assets on NIC during the study period. Return on current assets is positive and continuously decreasing. It is because of fluctuating but not by large amount of net profit and increasing current assets. The highest profitability is 13.34 % in 2061/062 and lowest is 4.53% in 2065/066. The volume of net profit is in decreasing trend. The rapid growth in current assets and regular stock in ratio of net profit clarifies the less effectiveness of utilization of current assets.

**ii) Return on the Net Working Capital**

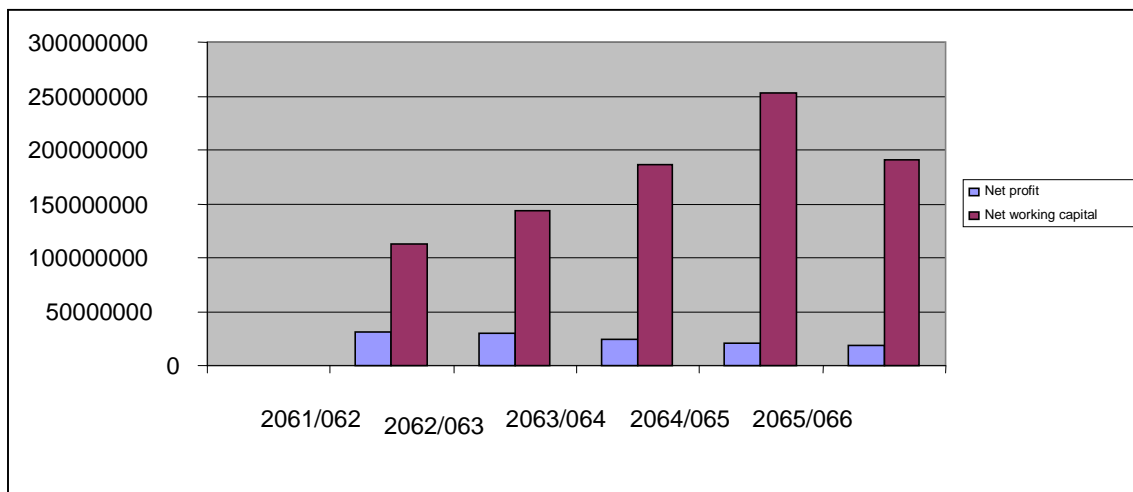
Return on The Net Working Capital measures the profitability and also shows the efficiency of working capital. It shows now NIC has used its available resources. The ratio is obtained by dividing the net profit by net working capital.

**Table: 7**

**Calculation on Return on the Net Working Capital**

Fiscal year	Net profit	Net working capital	Return on NWC% (NPX 100/NWC)
2061/062	30774031	112850561	27.27 %
2062/063	29477720	143509885	20.54 %
2063/064	24018312	186122514	12.90 %
2064/065	20674812	252533824	8.18 %
2065/066	18904082	190927460	9.90 %

**Figure: 7**



Above table helps to prove above conclusion that the low effectiveness of working capital. The net working capital is in somehow increasing trend except in the year 2064/065 and the rate of increasing or decreasing net profit is very slow. Thus the return percentage is decreasing every year. The ratio has decreased from 27.27% to 9.09%. It has decreased by 17.37% over the study period.

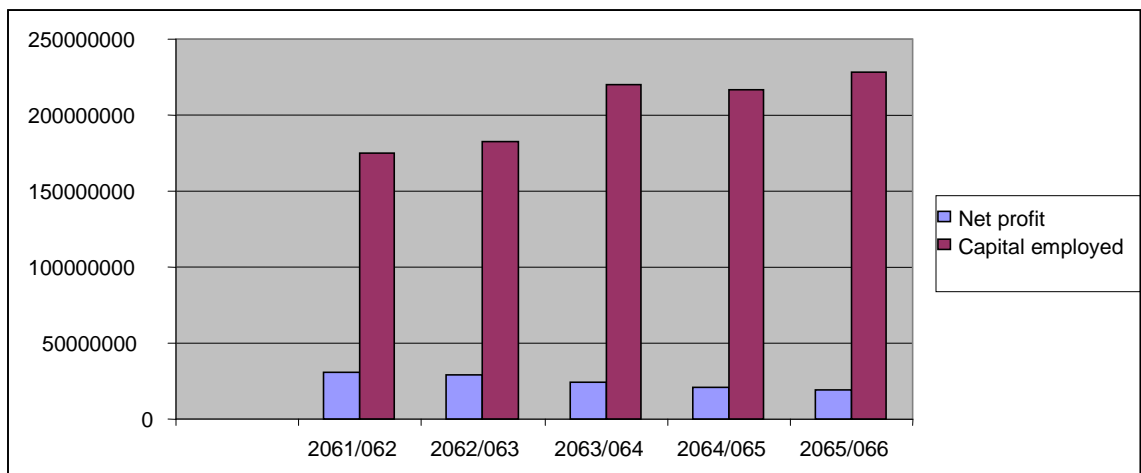
**iii) Return on Investment**

Return on investment measures the earning capacity of one rupee of capital invested. It is calculate by dividing net profit by capital employed.

**Table: 8**  
**Calculation of Return on Investment**

Fiscal year	Net profit	Capital employed	Return (NP X 100/CE)
2061/062	30774031	174688256	17.616
2062/063	29477720	182833965	16.122
2063/064	24018312	220039006	10.925
2064/065	20674812	216590250	9.545
2065/066	18904082	228536868	8.271

**Figure: 8**



Above table shows the return on investment is decreasing each year. The highest return calculated is 17.616% in the year 61/062 and lowest is 8.271% in the year 2065/066 respectively in the first and the last year of the study period. Capital employed is in increasing trend but because of almost constant fluctuating trend of net profit, earning power of capital employed is decreasing.

#### **4.9 Relationship between Liquidity and Profitability**

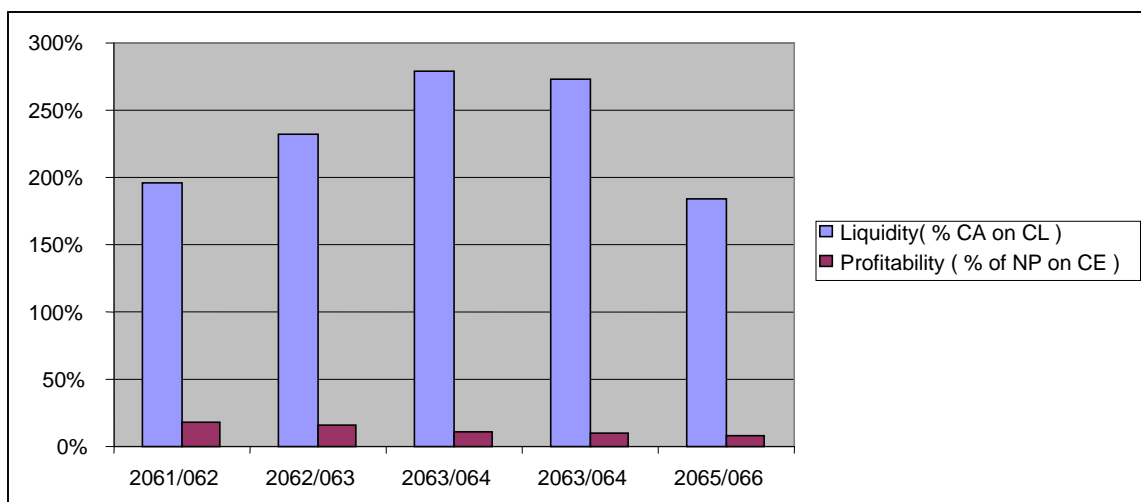
The management of the working capital is required to fulfill two aims viz. Profitability and Solvency. Solvency refers to its capacity to pay its maturing

obligations promptly. For that, the firm should maintain its liquidity by holding sufficient amount of current assets. If exact estimation of working capital is possible, any firm invest just enough on it. A larger investment in current assets under certainly means a low rate of return on investment of the firm. Excess investment on current assets reduces return. So the firm must decide about appropriate level of the current assets to be carried. The liquidity and profitability should have direct relationship. The table given below tries to establish a relationship between two variables. Liquidity refers to the current ratio and profitability for return on investment.

**Table: 9**  
**Liquidity and Profitability**

Fiscal year	Liquidity( % CA on CL )	Profitability ( % of NP on CE )
2061/062	196 %	18 %
2062/063	232 %	16 %
2063/064	279 %	11 %
2064/065	273 %	10 %
2065/066	184 %	8 %

**Figure: 9**



Working capital management both in respect of sources and uses for a balanced view of the conflicting attributes of profitability and liquidity. The trade off between profitability and liquidity is the most challenging area of working capital management. The relationship between liquidity and profitability can be accessed through correlation coefficient.

**Table: 10**  
**Correlation Coefficient between Liquidity and Profitability**

Correlation (r)	Probable errors(PE)
-0.2128	0.2879

Source: Annex- 5

The above table shows the correlation between liquidity and profitability in NIC. The correlation coefficient is just -0.2128 where the PE is 0.2879 and significant. In other words, there is negative correlation between liquidity and profitability of NIC.

#### **4.10 Efficiency of Working Capital Management**

Funds are invested on various assets in a business to make sales and profits. The efficiency in which assets are managed, directly affects the volume of sales. High portion of the current assets indicates corporation's high liquidity position but they may not achieve the desired profitability. This situation is seen in the efficiency of the working capital of NIC. Actively ratios measure the efficiency or effectiveness with which the firm manages its ratios or assets. These ratios are called the turnover ratios. Hence turnover ratios are used to measure the efficiency of working capital in NIC. The ratios studied under this heading are:

- i) Receivable turnover
- ii) Cash turnover
- iii) Current assets turnover
- iv) Net working capital turnover

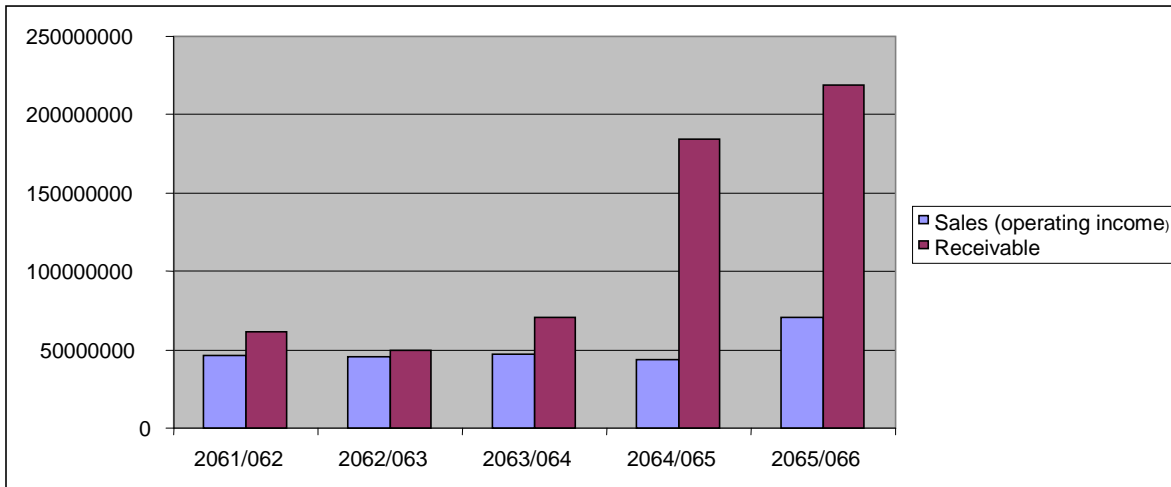
**i) Receivable Turnover**

Receivable turnover ratio indicates the speed with which receivable are being converted into sales (I which case operating income has been considered as sales). The table below shows the sales to receivable ratio. This ratio helps to analyze the capacity of NIC management in utilization of funds in current assets.

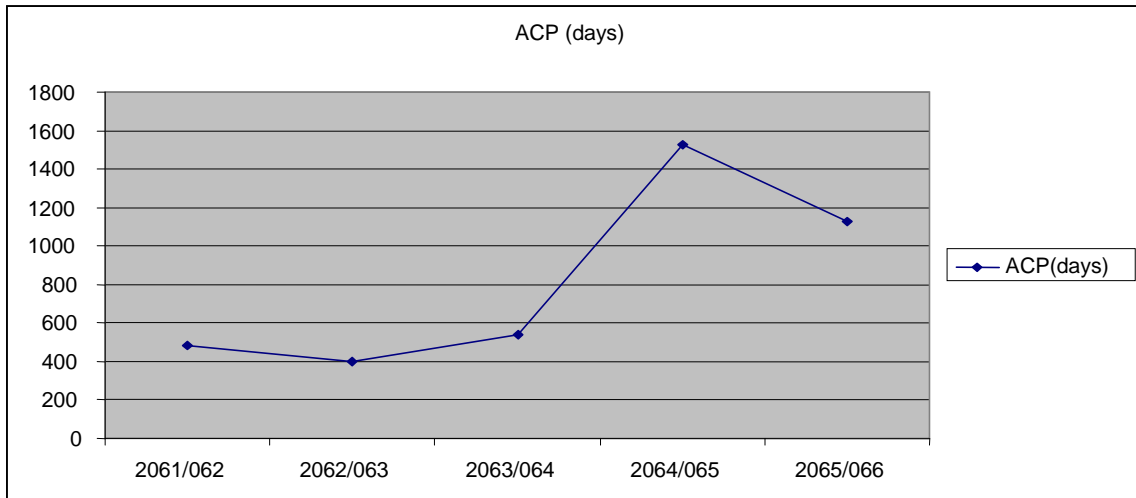
**Table: 11**  
**Receivable Turnover ACP**

Fiscal year	Sales (operating income )	Receivable	Receivable turnover ratio	Days in year	ACP
2061/062	45986090	61460428	0.75	365	481.14
2062/063	45244732	49984123	0.91	365	397.71
2063/064	47256901	70355673	0.67	365	535.96
2064/065	44021089	184448406	0.24	365	1529.35
2065/066	70897387	218964706	0.32	365	1127.29

**Figure: 11**



**Graph: 1**



Above table shows the receivable turnover of NIC during 5 years study period. Because of slight fluctuation in sales and receivable turnover is in also in fluctuating trend.

Average collection period are also shown in the above table. The ACP measure the quality of debtors of the corporation. Its degree of liquidity positions of the firm. The measure of actual liquidity position of the firm remains incomplete without the analysis of the liquidity of receivable. So, ACP has been used to measure efficiency of receivable in term of receivable turnover.

The table shows the average collection period increasing every year except in the year 2061/062 and 2065/066.

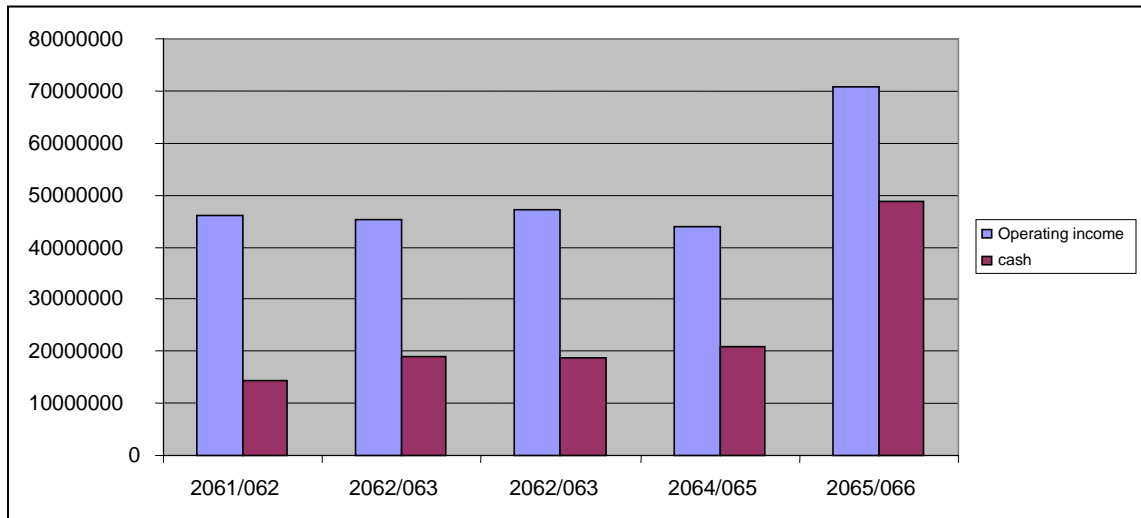


**ii) Cash Turnover Ratio**

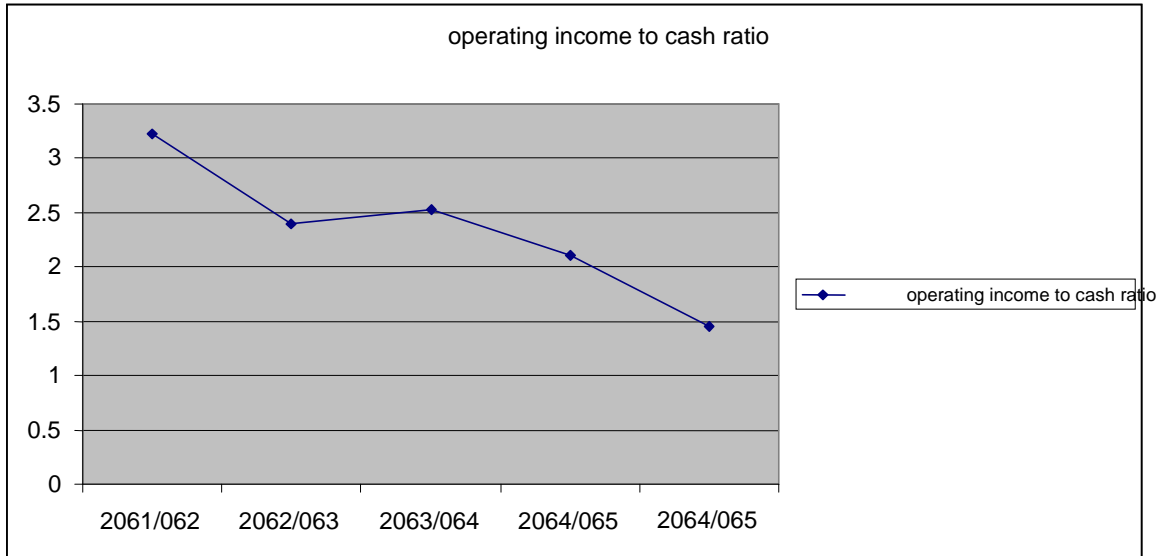
**Table: 12**  
**Cash Turnover Ratio**

Fiscal year	Operating income	cash	operating income to cash ratio
2061/062	45986090	14265981	3.22
2062/063	45244732	18923076	2.39
2063/064	47256901	18724590	2.52
2064/065	44021089	20870312	2.11
2065/066	70897387	48823964	1.45

**Figure: 12**



**Graph: 2**



The table 12 shows that the ratio of sales to cash is decreasing every year except in the year 2063/064.

**iii) Current Assets Turnover Ratio**

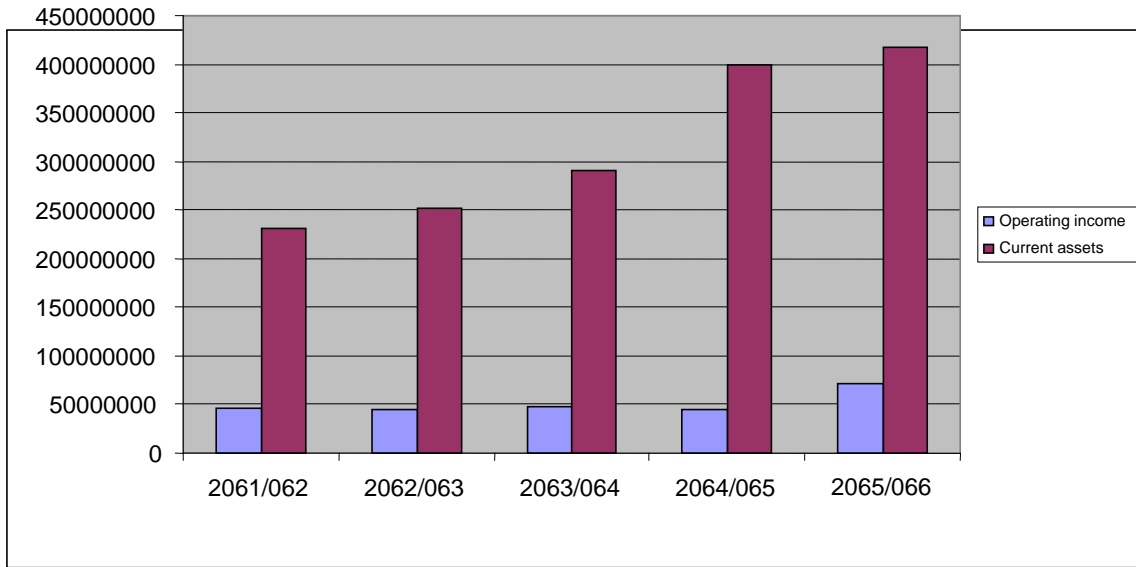
The relationship between sales (operating income) and current assets is analyzed by calculating current assets turnover ratio. This turnover ratio indicates the management efficiency n overall management of current assets, the ratio is calculated by dividing sales by current assets.

**Table: 13**

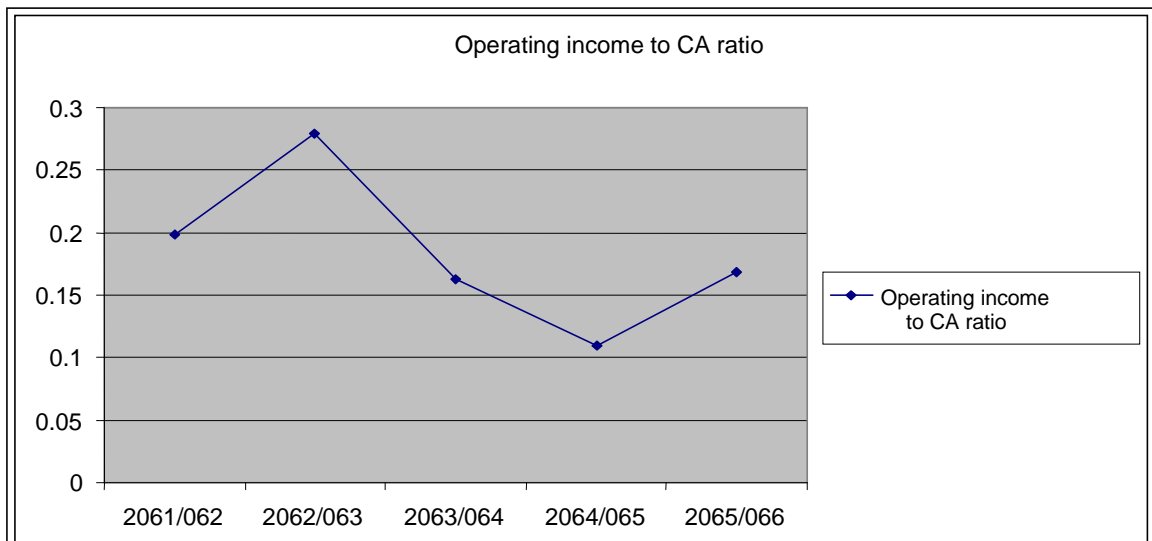
**Calculation of the Current Assets Turnover Ratio**

Fiscal year	Operating income	Current assets	Operating income to CA ratio
2061/062	45986090	230718658	0.199
2062/063	45244732	252336868	0.279
2063/064	47256901	289909161	0.163
2064/065	44021089	398733292	0.110
2065/066	70897387	417531833	0.169

**Figure: 13**



**Graph: 3**



The table 13 shows the relationship between sales and the investment in current assets of NIC. The volume of sales (operating income) is less than the current assets and its proportion to current assets is in declining trend except in the last year of the study period.

#### iv) Net Working Capital Turnover

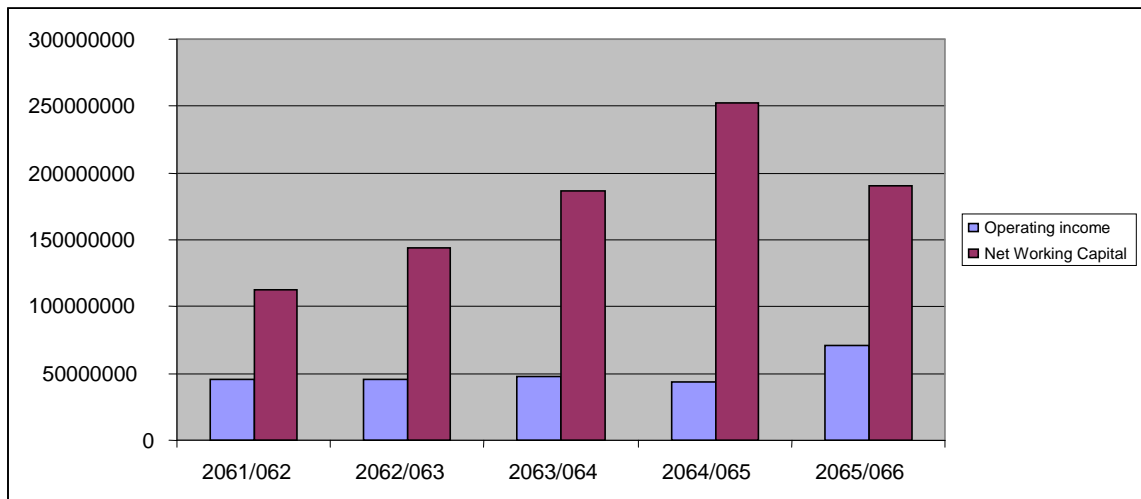
The sales to net working capital ratio helps to analyze the efficiency of working capital management. This ratio indicates the velocity of the utilization of working capital. This indicates the number of times the working capital is the course of an economic year. This ratio also measures the efficiency with which the working capital is being used.

These ratios are calculated and presented in the following table:

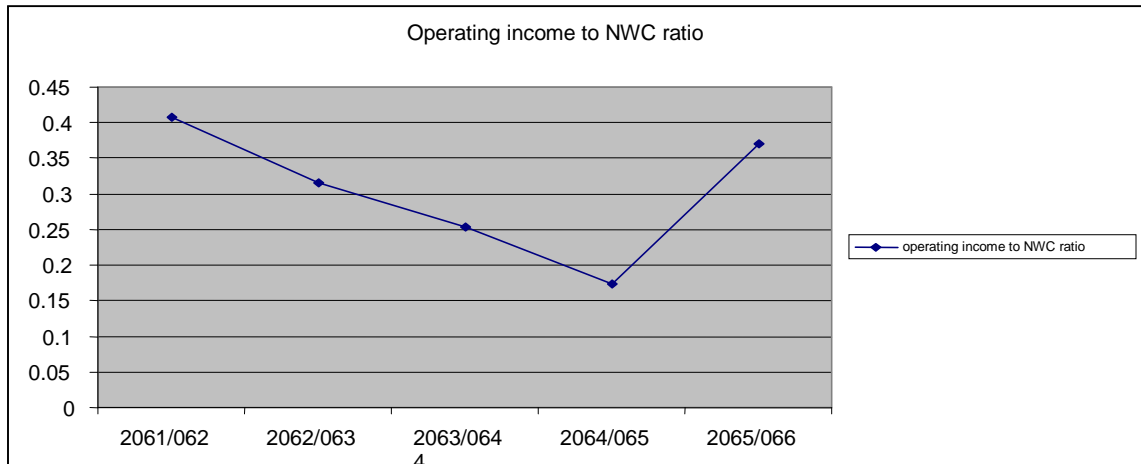
**Table: 14**  
**Calculation of Net Working Capital Turnover**

Fiscal year	Operating income	Net Working Capital	operating income to NWC ratio
2061/062	45986090	112850561	0.407
2062/063	45244732	143509885	0.315
2063/064	47256901	186122514	0.253
2064/065	44021089	252533824	0.174
2065/066	70897387	190927460	0.371

**Figure: 14**



**Graph: 4**



Although the sales are in fluctuation trend, net working capital is in increasing trend. We can see, in the table, that net working capital has doubled during the study. Period but sales in last year have decreased. The ratio is in decreasing trend till 4th year. This is due to the rapid growth in net working capital and decreasing sales.

#### **4.11 Simple Regression Analysis of Net Profit Margins on Working Capital**

The regression analysis is used to find out the estimation of unknown values or prediction of one variable from known values of other variables. Regression analysis is a mathematical measure of the average relationship between two or more variables in terms of the original units of data.

**Table: 15**

**Calculation of Simple Regression Variables of Net Profit on Working Capital**

Fiscal year	WC(X)	NP(Y)
2061/062	112.85	307.74
2062/063	143.51	294.77
2063/064	186.12	240.18
2064/065	252.53	206.74
2065/066	190.92	189.04
Total	885.93	1238.47

\* Values of X represent independent variables and Y represents dependent variable

The equation of the trend line,

$$YC = a + bx$$

Where, N=5

$$X = 885.93$$

$$a = Y/N = 247.694$$

$$b = \frac{XY}{X^2} = 1.248$$

Hence, the trend line is,

$$YC = 247.694 + 1.248 X$$

Therefore, bivariate regression of Net profit = 247.694 + 1.248 on Working Capital

The regression coefficient (b) between NP and WC is positive (1.248) which indicates that positive relationship exists between NP and WC of NIC Ltd.

#### **4.12 Analysis of Primary Data**

The primary data gives the accurate information of the company. The data are collected through questionnaires. The questionnaires distributed to Basically, the requirement of the working capital is influenced by the nature of its business. The success or the failure of the enterprises largely depends upon management of the working capital, crucial aspects of the financial management. Shortage of the funds,

regular cash flow, blocking of funds in receivable for long period are the general problem faced by the enterprises due to the lack of proper management of the working capital.

As the question is asked to NIC Ltd. about the performance role of working capital of NIC Ltd. It is found that the performance role of working capital management of NIC is highly important.

In the organization, there are different levels of management and their performance role is very important. The top level cannot work without support and co-operation of lower level and the top level cannot operate their work without the good management of lower level. The working capital consists the current assets, which are crucial for the day to day operation. The questions are asked to the NIC Ltd. about the responsible person for the management of working capital. There isn't a specific person responsible particularly for the working capital management but a top level management is responsible to manage the working capital.

There are three types of working capital financing policy. They are aggressive, moderate and conservative working capital financing policy. The policy may depend upon the nature of the business. In the NIC Ltd, it is following Moderate working Capital Policy. In which it is investing STF to temporary current assets and LTFG to permanent current assets and fixed assets.

As the question asked to NIC Ltd. that does working capital policy have impact on profitability and risk of the company, it is found that working capital policy have impact on profitability and risk of the company.

The organization needs various types of current assets. The major components of current assets are inventory, Sundry debtors and cash and bank balances. The organizations may keep different types of current assets in different level. Some organization may keep inventory in large amount, some may keep sundry debtors and

some may cash and bank balances, the composition of current assets depend upon the nature of organization and business. The financial institution keep cash and bank balances in the large amount and the manufacturing organization may keep large amount of inventory of raw materials, work in progress and finished goods to regular operation system. So, the questions are asked that the proportion of current assets and current liabilities of NIC Ltd. is appropriate? It is found that both the proportion of current assets ad current liabilities is appropriate.

The firm may keep different level of current and fixed asset. If the firm is keeping higher level of current assets than fixed assets, the firm is adopting relaxed working capital investment policy and if the firm is keeping low level of current assets, the firm is adopting restricted policy, and the medium level is called moderate working capital invested policy, as the question is asked that which working capital policy is adopting by NIC Ltd. it is found that the company is adopting moderate working capital investment policy.

### **4.13 Findings of the Study**

The major empirical findings of the whole study are presented as under:

- ) The major components of current assets in n NIC Ltd. are cash and bank balances, sundry debtors, investments in different securities and other investments, there is increasing trend of current assets every year.
- ) Current liabilities of NIC, contains estimated liabilities for outstanding claim, due to re-insure, sundry cr5editors, provision as divided and other. The amount of CL is highest in the year 2065/066. The study shows the trend of high fluctuation of CL throughout the study period.
- ) As there is positive net working capital throughout the study period, NIC has ability to p-ay its current obligations. Net working capital of the year 2064/065 is highest and the trend is increasing. In the year 2063/064 the



amount NWC is 186,122,514 of is 252,533,824 in the year 064/065 showing the high increasing trend.

- J If the current assets can pay current liabilities then liquidity position will be satisfactory. Generally current ratio is said well if it is 2:1. except in the year 2061/062 and 2065/066, all the observed year have more than double current assets than current liabilities
  
- J Absolute liquidity ratios are calculated here to find out the short term solvency of NIC in terms of cash. The calculated ratio is in fluctuating trend. Highest ratio observed is 0.182: 1 in the year 2063/064.
  
- J The analysis shows that the company has so far greater current assets those current liabilities in all years of observation that clarifies the better liquidity position in a company.
  
- J Return in current assets is positive and continuously decreasing. The highest profitability is 13.34 % in 2061/062 and lowest is 4.53 % in 2065/066
  
- J . The volume of Net profit is in decreasing trend. The rapid growth in current assets and regular slack ratio of net profit clarifies the less effectiveness of utilization of current assets.
  
- J The net working capital is in somehow increasing trend except in the year 2064/065 and the rate of increasing or decreasing net profit is very slow. Thus the return percentage is decreasing every yare. The ratio has decreased from 27.27 % to 9.90 %. It has decreased by 17.37 % over the study period.
  
- J The return on investment is decreasing each year. The highest return calculates is 17.616 % in the year 2061/062 and lowest is 8.217 % in the year 2065/066 respectively in the first and last year of the study period.

) The relationship between liquidity and profitability can be accessed through correlation coefficient. The correlation coefficient is just 0.2128 where the PE is 0.2870 and significant, In other words, there is negative correlation between liquidity profitability of NIC.

## **CHAPTER-V**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Summary**

Working Capital management is the functional area of finance that covers all the current accounts of the firm. It is concerned with the adequacy of current assets as well as the level of risk posed by current liabilities .It is a discipline that seeks proper policies for managing current assets by current liabilities and practical techniques for maximizing the benefits from managing working capital.

Working capital management is the crucial aspect of the financial management. It is the life –blood controlling nerve center for any types of business organization because without the proper control upon it no business can run smoothly. The management of current assets and current liabilities is necessary for day- to day operations of any organizations. Thus, it plays the crucial role in the success and failure of an organization as it deals with the part of assets, which are transformed from one form to another form during the course of manufacturing cycle. Therefore, the role of working capital management is more significant for every business organization irrespective to their nurture. There have been done a numbers of studies on working capital management from different experts in various enterprises. Which covers the all current assets and liabilities of the firm?

The main objectives of this study are to analyses the working capital management of NIC ltd. The review of related studies includes various articles, journals and TU Master Level Thesis. The data of NIC ltd. has been abstracted from various sources and the data are secondary as well as primary. The data has been presented in tabular and graphical form. The data has been analyzed by using various tools, such as mean, S.D, C.V, various ratios, correlation and regression, which is presented in research methodology chapter and the primary data, has been collected through questionnaire. The questions are objective and ranking form.

The major components of current assets in n NIC Ltd. are cash and bank balances, sundry debtors, investments in different securities and other investments, there is increasing trend of current assets every year. Current liabilities of NIC, contains estimated liabilities for outstanding claim, due to re-insure, sundry creditors, provision as divided and other. The amount of CL is highest in the year 2065/066. The study shows the trend of high fluctuation of CL throughout the study period. As there is positive net working capital throughout the study period, NIC has ability to pay its current obligations. Net working capital of the year 2064/065 is highest and the trend is increasing. In the year 2063/064 the amount NWC is 186,122,514 of is 252,533,824 in the year 2060/2061 showing the high increasing trend.

If the current assets can pay current liabilities then liquidity position will be satisfactory. Generally current ratio is said well if it is 2:1 except in the year 2061/062 and 2065/066, all the observed year have more than double current assets than current liabilities. Absolute liquidity ratios are calculated here to find out the short term solvency of NIC in terms of cash. The calculated ratio is in fluctuating trend. Highest ratio observed is 0.182: 1 in the year 2063/064. The analysis shows that the company has so far greater current assets those current liabilities in all years of observation that clarifies the better liquidity position in a company. Return in current assets is positive and continuously decreasing. The highest profitability is 13.34 % in 2061/062 and lowest is 4.53 % in 2065/066. The volume of Net profit is in decreasing trend. The rapid growth in current assets and regular slack ratio of net profit clarifies the less effectiveness of utilization of current assets.

The net working capital is in somehow increasing trend except in the year 2064/065 and the rate of increasing or decreasing net profit is very slow. Thus the return percentage is decreasing every year. The ratio has decreased from 27.27 % to 9.90 %. It has decreased by 17.37 % over the study period. The return on investment is decreasing each year. The highest return calculates is 17.616 % in the year 2061/062 and lowest is 8.217 % in the year 2065/066 respectively in the first and last year of the study period. The relationship between liquidity and profitability can be

accessed through correlation coefficient. The correlation coefficient is just 0.2128 where the PE is 0.2870 and significant, In other words, there is negative correlation between liquidity profitability of NIC.

The efficiency of the management of working capital has been assessed with the help of operating income (sales). The sales of any organization affect the size of working capital and reflect the efficiency of the firm to manage assets.

As of slight fluctuation is sales and receivable, turnover is also in fluctuating train. Average collection period has been used to measure efficiency of receivable in terms of receivable turnover. Here, the average collection period is increasing every year except in the year 2062/063 and 2065/066. Although operating income is in fluctuating train net working capital is in increasing train. The ratio of net working capital turnover is in decreasing train till fourth year. This is due to the rapid growth in net working capital and decreasing sales.

While analyzing correlation between net profit margins and working capital of NIC, the correlation coefficient is -0.84697, which shows there is negative increase in net profit margins leads very low decrease in net profit margin and vice-versa. The value of 'r' is less than PE. So, the relationship is significant. Simple regression analysis of net profit and working capital shows profit and working capital shows that there is a positive relationship as 'b' regression coefficient between the two variable is 1.248.

The top management is responsible to manage the working capital and working capital plays a vital role in the performance. The firm is adopting moderate working capital financing policy and working capital investment policy. The working capital policy has impact on the profitability and risk of the company. The major factors that affect in working capital policy are nature and sales of business sales and demand conditions, inventory conversion period supplies credit policy and firm credit policy which are ranking on the priority basis.

## 5.2 Conclusions

Working capital management is the crucial aspects of the financial management. It is the life blood and controlling nerve center for any type of business organization because without the proper control on it no business can run smoothly. The management of the current assets and current liabilities is necessary for day to day operation of any organizations.

- ) This research, after a long analysis process, concludes that the overall working capital management of NIC is satisfactory during five years study period. There is sufficient amount of current assets to meet the current obligation of the company which is a sign of good liquidity position. The company has sound liquidity position and there is no profitability to technological insolvency.
- ) Almost the entire variables trend but the volume of sales is in decreasing and fluctuating trend. The corporation isn't I attractive profit, it has regular slackness in the ratio of net profit. Being a service provider, it doesn't need more fixed assets. So, a great portion of total assets is current assets.
- ) As it doesn't require more liquidity, a large portion of current assets is investment. The company has assets is investment. The company has followed conservative approach of the financing. The company has efficient working capital, goods profitability and sufficient current assets, besides this, the study have also indicated some critical aspects of working capital management and has suggested too.
- ) NIC, being a service provider, kept a large volume of working capital, which indicates excess liquidity position. The trend of sales (operating Income) is fluctuating. A significant portion of current assets is held by account receivable and ACP is increasing every year. Amount of cash is less significant but increasing every year. Lastly, the research is concluded by

emphasizing the control over investment in current assets, applying cash management techniques to increase the portion of cash on total assets.

### **5.3 Recommendations**

Structure of working capital shows an imbalanced figure. Elements of working capital should be balanced by decreasing the investment on securities and increasing the cash and bank balance to meet the time at anytime when it should large amount. NIC should make regular check to identify both excess and short current assets. This avoids risk I management of working capital. These can be checked through the study of cash flow statement, ratio analysis and funds flow analysis. These financial tools help to identify the deviation.

- ) It is suggested to make a working policy for the proper management of working capital as the efficient management of resources depends upon the working capital management policy and no such policies could be found during the study period.
- ) The standard ratio between current and fixed assets that should be maintained, but it cannot be defined in the present situation. The importance of fixed investment on service business can't be ignored. The investment of the company in fixed assets seems to be very low; it is suggested to be increase.
- ) The relation between the company and the re-insurer as firm has enough profit and reserves.
- ) Although the firm has financed in fixed assets and more than half of the working capital financed by long term financing. It can be said that the firm has followed conservative approach of financing. It shows lower the risk and return. So, it s suggested to reduce the long term financing in working capital.

- ) Trend of current assets show increasing trend but the correlation shows negative relationship between current assets and operating income. So, it is suggested to search for the better use of the funds.
  
- ) Correlation coefficient between liquidity and profitability shows that there is not any relationship between liquidity and profitability of the company. Generally, there should be negative correlation between liquidity and profitability. The company should invest its investment on current assets to establish proper relation between them.



## BIBLIOGRAPHY

### Books:

- Acharya, K. (1988), *The Management of Working Capital in the Public Enterprises of Nepal*, Nepalese development Studies.
- Agrawal, N.K., *Management of Working Capital*, New Delhi, Sterling Publication P. Ltd.
- Baryle, muny D. (1909), *Industrial development; A guide for Accelerating Economic Growth*, New York, Mc Grow book Company.
- Brigham B.F. (1986), *Financial Management (Theory and Practice)*, the Dryden Press, Illinois.
- Cuker, Syorgy (1974), *Strategies for Industrialization in Developing Countries*, London, Hurns Co.
- Gupta, S.C. (1999), *Fundamental of Statistics*, Mumbai, Himalayan Publishing House.
- Gupta, S.P. (1992), *Statistical Methods*, New Delhi ,Sultan Chand Publishers.
- Kuchhal, S.C. (1982.), *Financial Management, An Analytical and Conceptual Approach*, Allahabad, Chaitenya Publishing.
- Lawrence J. Gitman (1976), *Principle of Managerial Finance*, New Delhi, Harper and Row Publishers.
- Pandey, I.M.( 1999), *Financial Management*, New Delhi ,Vikash Publishing House Pvt. Ltd.
- Pant, P.R (1999), *Social Science Research and Thesis Writing*, Kathmandu, 2nd Edition: Buddha Academic Enterprises Pvt. Ltd.
- Pradhan , Radhe Shyam (1986), *Industrialization in Nepal, A micro and Macro Perspective*, New Delhi, NBO Publisher Distributor.
- Pradhan, Radhe Shyam (1988), *The demand for working capital by Nepalese Corporations, The Nepalese management review*, Vol: 8 No 1.
- Van Horne, James C. Copland, *Financial Management and Policy*, New Delhi, Prentice Hall of India.

Weston, J .F. and Brigham E.F.( 1982) , *Essential of Financial Management*, The Dryden press, Illinois.

Weston, J. Fred (1996), *Besely, Scoot and Brigham, Eugene F., Essentials of Managerial Finance*, Chicago, The Dryden Press.

**Articles and Journals:**

National Planning Comission (2009) , Kathmandu, *Statistical Pocket Book*.

Nepal Insurance Company Limited, Report and Accounts (from 2005 to 2009).

**Previous Research Works:**

Gaudtaula, Keshav Prashad (2004), *Working Capital Management of Nepal Tea Development Corporation*, Kathmandu, Masters Degree Thesis, T.U.

Ghimire Hiramani (2008), *A study of working Capital position of Arihanta Multi-Fibers Limited*, Kathmandu, Masters Degree Thesis, T.U.

K.C, Niraj (2000), *Comparative study of working Capital Management of Nepal Bank*, , Kathmandu, Masters Degree Thesis, T.U.

Sapkota Jivan Nath (2006), *A study on Working Capital Management Of Himal Cement Co. Ltd.*, Kathmandu, Unpublished Masters Degree Thesis, T.U.

Sharma Dipendra Raj (2007), *A Study on working Capital Management of Nepal Battery Co. Ltd.* , Kathmandu, Unpublished Masters Degree Thesis, T.U.

Shrestha Basudev (2008), *A study of Working Capital Management of Nepal Dairy Development Corporation*, Kathmandu, Unpublished Masters Degree Thesis, T.U.

## ANNEX -1

Calculation of C.V to Total Assets(X) and Ratio of Current Assets on  
Total Assets(Y).

FY	X	X̄	fX-X̄ <sup>2</sup>	Y	Ȳ	fY-Ȳ <sup>2</sup>
2061/062	293.63	381.872	7786.65	78.57	82.78	17.72
2062/063	313.30	381.872	4702.12	80.54	82.78	5.02
2063/064	344.55	381.872	1392.93	84.13	82.78	1.82
2064/065	454.23	381.872	5235.68	87.78	82.78	25
2065/066	503.65	381.872	14829.88	82.90	82.78	0.01
			<b>33947.26</b>			<b>49.57</b>

$$\begin{aligned} & \dagger X \sqrt{\frac{1}{n} f_{X-\bar{X}}^2} \\ & X \sqrt{\frac{1}{5} | 33947.26} \\ & X 82.4 \end{aligned}$$

$$\begin{aligned} & \dagger X \sqrt{\frac{1}{n} f_{Y-\bar{Y}}^2} \\ & X \sqrt{\frac{1}{5} | 49.57} \\ & X 3.15 \end{aligned}$$

$$\begin{aligned} & \text{C.V. } X \frac{\dagger}{X} \\ & X \frac{82.40}{381.872} \\ & X 21.57\% \end{aligned}$$

$$\begin{aligned} & \text{C.V. } X \frac{\dagger}{X} \\ & X \frac{3.15}{82.78} \\ & X 3.80\% \end{aligned}$$

## ANNEX-2

### Calculation of Net Working Capital

FY	Current Assets	Current liabilities	NWC(CA-CL)
2061/062	230718658	178688097	112850561
2062/063	252336868	108826983	143509885
2063/064	289909161	103786647	186122514
2064/065	398733292	146199468	252533824
2065/066	417531833	226604373	190927460

### ANNEX-3

#### Calculation of Net Profit

FY	Pre-tax profit	Provision for tax	Net profit
2061/062	38891357	8117326	30774031
2062/063	37808713	8330993	29477720
2063/064	34345402	10327090	24018312
2064/065	28781132	8106320	20674812
2065/066	26803952	7899870	18904082

## ANNEX-4

### Calculation of deferred Liabilities

FY	Deferred liabilities	Net worth	Capital Employed
2061/062	47087525	127600731	174688256
2062/063	54185274	128648891	182833965
2063/064	63328585	156710421	220039006
2064/065	47104887	169485363	216590250
2065/066	63829280	164707588	228536868

Where, Net Worth = (Share Capital + Share Holders reserve)

Capital Employed = Differed liabilities + Net Worth

Differed Liabilities = Insurance Fund (Fire + Marine + Life + Misc) + LT loan + Misc.

### Calculation of Deferred Liabilities

FY	
2061/062	16325858 + 800942 + 0 + 15324105+0+14636620
2062/063	15756539 + 1396643 + 0 + 18780786 + 0 + 18251106
2063/064	18248041 + 1925521 + 0 + 25111726 + 0 + 18043297
2064/065	<u>1767543</u> + 7703501 + 14812638 + 285654 + 5525520 + 17010031
2065/066	13670866 + 1200584 + 21322041 + 253286 + 8442467 + 18940036

## ANNEX-5

Calculation of correlation coefficient of current assets on operating income

$X_1$  = CR (liquidity)

$X_2$  = ROI (profitability)

FY	$X_1$	$X_2$	$X_1^2$	$X_2^2$	$X_1 \cdot X_2$
2061/062	196	18	38416	324	3528
2062/063	232	16	53824	256	3712
2063/064	279	11	77841	121	3069
2064/065	273	10	74529	100	2730
2065/066	184	8	33856	64	1472
<b>total</b>	<b>1164</b>	<b>63</b>	<b>278466</b>	<b>865</b>	<b>14511</b>

$$\begin{aligned}
 r &= \frac{N \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{N \sum X_1^2 - (\sum X_1)^2} \sqrt{N \sum X_2^2 - (\sum X_2)^2}} \\
 &= \frac{5 \times 14511 - 1164 \times 63}{\sqrt{5 \times 278466 - (1164)^2} \sqrt{5 \times 865 - (63)^2}} \\
 &= \frac{72555 - 73332}{\sqrt{1392330 - 1354896} \sqrt{4325 - 3969}} \\
 &= \frac{-777}{193.48 \times 18087} \\
 &= \frac{-777}{3650.57} \\
 &= -0.2128
 \end{aligned}$$

$$\text{P.E.} = \frac{0.6745 (1 - r^2)}{N}$$

$$= 0.6745 \times \frac{1 - (-0.2128)^2}{5}$$

$$= 0.6745 \times \frac{0.9547}{2.2360}$$

$$= 0.2879$$



## ANNEX-6

Correlation Analysis between NP margin on Working Capital.

Where, NP Margin (Y)

Working Capital(X)

('000)

FY	Y	X	Y <sup>2</sup>	X <sup>2</sup>	X.Y
2061/062	307.74	112.85	94703.90	12735.12	34728.459
2062/063	294.77	143.51	86889.35	20595.12	42302.44
2063/064	240.18	186.12	57686.43	34640.65	44702.30
2064/065	206.74	252.53	42741.43	63771.40	52208.05
2065/066	189.04	190.92	35736.12	36450.45	36091.57
<b>Total</b>	<b>1238.47</b>	<b>885.93</b>	<b>317757.23</b>	<b>168192.74</b>	<b>210032.82</b>

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

$$= \frac{5 \times 210032.82 - 1238.47 \times 885.93}{\sqrt{5 \times 317757.23 - (1238.47)^2} \sqrt{5 \times 168192.74 - (885.93)^2}}$$

$$= \frac{1050164.1 - 1097197.727}{\sqrt{1588786.15 - 1533807.941} \sqrt{840963.7 - 784871.96}}$$

$$= \frac{-47033.627}{234.47 \times 236.836}$$

$$= -0.84697$$

$$\begin{aligned} \text{P.E.} &= \frac{0.6745 (1 - r^2)}{N} \\ &= 0.6745 \times \frac{1 - (-0.84697)^2}{5} \\ &= 0.6745 \times \frac{0.2826}{2.2360} \\ &= 0.0852 \end{aligned}$$