

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Surrounded by China and India, the two regional giant economic powers, Nepal is still in the list of the least developed countries in the world. Majority of the population is still under the line of poverty. The agro-dominated economy is further deteriorated by the complex geographical situation. Various factors e.g. landlocked situation, poor resource mobilization, lack of expertise knowledge, lack of institutional commitment, inconsistent government policy, political instability etc. are responsible for the slow pace of development of Nepal. Low economic growth rate, growing unemployment and identifying poverty etc. are main problems of the country. These problems can be reduced through mobilizing all kinds of available resources. Nepal has adopted mixed economy, to develop nation through participation of both private as well as public sector.

Most of people living in the rural areas and are below the line of poverty. Though agriculture is main stay of Nepalese economy, only this sector is handicapped, so the nation should also emphasize other industrial and commercial areas.

Like other developing countries in the world. The government of Nepal has taken public enterprises as a means of economic development of the country, after the introduction of first plan in 1956. The relational behind the establishment of such enterprises is to carry the programs set in the economic plan for economic development, which makes the country self sufficient ultimately. Due to lack of infrastructure, lack of skilled manpower, investment problem, unwillingness to bear the risk of private

sector, unbalance development of the country were the reasons behind the emergence of public sector.

Industrialization is an important (major) factor for achieving the basic objectives of country's economic and social progress or in another word, industrialization is considered essential for economic development of the country these days. Industrialization not only provides goods and services but also creates employment opportunities. It facilitates an effective mobilization of resources of capital and skill, which might otherwise remain unutilized. Industrial development thus has a multiplier effect on the economy (Pant, 2003: 188).

Nepal is one of the developing countries. The economy is totally dominated by the agricultural sector. There are no basics infrastructures in rural and semi urban communities and social services such as modern medical care; clean drinking water and adequate sanitation are very limited. Nepal's economy is heavily characterized per-dominant agriculture, approximately 39 percent of GDP is driving from agriculture and 82 percent of the population are employing in this sectors. So, industrialization is the major instrument of progress, modernization and social development. In the country like Nepal, industrial development plays vital role in economic development. Industrial development helps a country in various ways. It contributes to national income, reduces unemployment reduce the dependency on imports and promotes exports. Industrialization helps to create capital money by means of utilization of unused resources by sifting them from unproductive sector to productive sectors.

Industrialization is comparative a new phenomenon in Nepal. The historical background of the development of modern manufacturing

industries is not very old. Birtnagar Jute Mills, set up 1963. Market the beginning of the organized industry in the country. It was established under the Company Act 1963, which is the first joint stock company of Nepal. There after the Morang Cottan Mills (1941), the Morang Sugar Mills (1946), the Raghupati Jute Mills (1964), the Juddha Match Factory (1964) were set up in collaboration with Indian businessman. Nepal Bank Limited is the first commercial bank of Nepal, which was incorporated in 1973 (Pant, 2003: 118).

Developing countries will remain associated with various form of backwardness unless they tackle the problem of economic backwardness through industrialization. Expansion of industry offers prospects of increased employment. Improve balance of payment and more efficient use of resources. In present situation, industrialization has proved itself a most powerful instrument in speeding up the economic development through establishment of different companies in different sector.

HMG of Nepal has been emphasizing the development of industries both in public and private sector. The private companies play vital role in industrialization and economic growth of the nation. The overall development of the country depends on the development of manufacturing companies.

Now, Nepal has adopted the policy of economic liberalization and entered into globalization through the member of WTO. The government is privatizing the public sectors enterprises and there are not many new manufacturing industries established in the public sectors. Government adopts foreign direct investment policy to encourage foreign investors. This policy creates positive impact on the private manufacturing companies in industrial development. Nepal has recently got the

membership of WTO. So, the role of manufacturing companies to develop the national economy is very important.

In above paragraphs, the background as well as the process and growth of manufacturing companies in the context of Nepal have been discussed. In manufacturing companies, cash management plays a vital role in the success or failure of these companies. Cash management is an important aspect of the manufacturing companies. Every business firms needs various types of assets to carry out their operation. Some assets one required to meet long-term needs which are fixed assets and some are needed to meet day to day expenses and to pay current obligation which are formed as current assets. Cash management is related to management of current assets.

Amount invested in the form of raw material, cash, semi-finished goods etc. put together is called cash management. There are two concepts of cash management net concept and gross concept. Net concept of cash management is excess or current assets over current liabilities. Gross concept is the total current assets. It is particularly useful for business in deciding the size of the investment in each type of current assets. Inadequate investment in cash threatens the solvency of the companies where as excessive investment affects firm's profitability. The cash management is compared as lifeblood of on companies. It is a controlling nerve of business. Hence, the success and failure of any company depends on cash management. Similarly, due to lack of cash management, there is problem in day-to-day operation or production. In other words, especially in small firm's cash management may be the factor that decides success or failure, in larges firm efficient cash management can significantly affects the firm's risk-return and share

price. The excess cash as well as short cash is harmful for business. Therefore, proper use of cash is necessary for these organizations.

1.2 Profile of Dabur Nepal Pvt. Ltd.

With the liberalization policy adopted by both India and Nepal, Nepal has become a place for immediate investment to Indian entrepreneurs. Considering the geographical advantage of Nepal. Dabur entered into a Joint venture with a majority share, thereby establishing Dabur Nepal Pvt. Ltd. In 1989 although established in 1989, the commercial production started on Nov. 5, 1992 Nepal being situated in the Himalayan ranges is an abundant sources of natural herb and spices, used in various Ayurvedic (i.e. personal care, health care and food products), formulation in which Dabur has gained extensive knowledge and expertise. The company's factory and registered office is in Rampur Tokam at Bara district. The corporate office is in TNT building at Teenkune, Koteswore, Kathmandu.

Subsequent to the review of India-Nepal treaty in 1992, the government of India eased out the procedure in Nepal having more than 50 percent component of India and Nepali origin along with cost. This gave further impetus to Dabur Nepal to increase it's production target, with in a span of more than 12 years of it's operation and to be sold at prevalent rates for domestic use and export to India, Bangladesh and other neighboring countries. Company has achieved a turnover of NRs. 300 corers in the year 2006/07 out of which NRs. 270 Crores were export. DNPL is a leading company operating on a private sector of Nepal. It produces various types of products that are related to health and personal care. Today, DNPL produces and sales following types of products.

1. Lal Dant Manjan
2. Binaca Tooth Powder
3. Vatika Hair Oil
4. Vatika Shampoo

- | | |
|--|---------------------------------|
| 5. Amala Hair Oil | 6. Anmol Product |
| 7. Special Haire Oil | 8. Baby Olive Oil |
| 9. Hajmola Tablet/Candy | 10. Real Fruit Juice |
| 11. Gulcose D & C | 12. Dantmukta / Shakti |
| 13. Honey Processing | 14. Nursery for Medical Plants. |
| 15. Perfumery Compounds. | 16. Development of Apiculture |
| 17. Chywanprash Parkshep / DCP Mishran. | |
| 18. Khsudhavardhak Churn / Pachan Curna. | |
| 19. LDM Plastic Containers / Bottles. | |
| 20. Extraction of Taxus Baccata Leaves. | |
| 21. Himalayan Ayurvedic Product etc. | |

DNPL is exporting Honeybee machinery to Australia, USA, UK and honey product to Europe and also Bee Queen to Europe.

In addition, to this commercial development, Dabur Nepal has also contributed to the development of socio-economic condition in various remote hill areas by processing/cultivating herbs, spices and leaves utilizing local manpower. In other to produce the Ayurvedic products, the company needs raw materials and depend solely on the material that grow in the wild and the company faces pressures from the environments who claimed that various species and herb were getting endangered. Under the situation Dabur development farm herbs and put up a 'State of Art' technology and 'Plant for Life' 90 million green house projects at Banepa in 1996. The green house has a facility to produce about 3-4 million sampling per annum with an aim to give these sampling to various farmers located at remote areas of high hills and mid hills for their income generation as well as to source of renewable sources of raw material. The green house has 20 species of medicinal plants of which eight are said to be on the list of endangered species.

Realizing the potentiality of natural reservoir of honey in Nepal, Dabur has set up on Apiculture Research Center. Efforts are concentrated on breeding the superior honeybee queens and develop on appropriate technology for bee rearing for the Nepal farmers. In this technology Dabur is producing the beehive frames. The complete set of beehives along with the superior training and technical assistance is provided to the farmers and the guarantee for the 'buy-back' of honey is given to the farmers.

DNPL has employed about 700 local Nepalese for employment in the factory. A part from that more than 3500 families at various remote places are benefited from the collection of Taxus Baccata Leaves, Pipli, Tamar Beeds, Sunthi etc. Over and above, Government of Nepal is also getting royalty for more that 4.00 crore from these raw materials collection, which are the basic raw materials for manufacturing of Dabur Nepal's products.

The company's various community initiatives, generations of employment and additional income for the local people have resulted in improved socio-economic condition. Besides, it has earned several accolades including the highest exporter award from the ministry of commerce, NICCI award for excellence, and CIP award for outstanding contribution to the country.

'The main objectives behind the establishment of this company is to establish a modern factory process and blend local and imported herbs and thus produce different varieties of healthful products according to license issued by the depended manner for their sale and distribution and also export them to foreign countries' (Annual Report of DNPL, 2007).

Vision: Dedicated to the health and well being of every household.

Core Values:

Ownership: This is our company. We accept personal responsibility, and accountability to meet business needs.

Passion for Winning: We all are leaders in our areas of responsibility, with a deep commitment to deliver results. We are determined to be the best at doing what matters most.

People Development: People are our most important asset. We add value through result-driven training and we encourage and reward excellence.

Consumer Focus: We have superior understanding of consumer needs and develop the products to fulfill them better.

Team Work: We work together on the principle of mutual trust and transparency in a boundary-less organization. We are intellectually honest in advocating proposals, including risk recognition.

Innovation: Continuous innovation in products and process is the basis of our success.

Integrity: We are committed to the achievement of business success with integrity. We are honest with integrity. We are honest with consumers, with business partners and with each other.

1.3 Focus of the Study

Industrialization is an integral part of a national plan to accelerate the rate of economic development in Nepal. It is imperative therefore to create situation in which industrial investment is encouraged and the private sectors can be persuaded to play on important role. A nation can

undertake development works through a sound economic development, Which is possible with the establishments of different industries i.e. banking, manufacturing, trading etc. when such industries are established, they can provide various services and products at fair price and create more employment to skilled as well as unskilled work force of the country. Therefore, an establishment problem as well as better use of available resources and can earn foreign currency.

Every business firm needs various types of assets to run the business without any interruption. Some assets are required to meet the needs of regular production and some to meet the expenses and short-term obligation of a firm. Therefore, management has to manage properly different types of assets especially required to run the operation of the firm smoothly. To run daily production activities of the company besides the manpower, equipment, cash, receivable, inventories etc. One of the major components is cash without which other things are useless. Therefore, this study mainly focuses on how DNPL is managing its cash

1.4 Statement of the Problems

Cash is the circulating capital, which is compared as lifeblood of the human beings for the organization. As cash is the size of investment in each type of current assets, each of these current assets should be managed efficiently and effectively. It is because decision regarding cash not only affects profitability of the organization in the short run but also affects the survival in the long run.

We know that cash management became difficult in DNPL manufacturing companies. Here, we are trying to find out why manufacturing companies are not able to manage the cash of the company and why they have not followed good policy of the cash management.

In most companies, the management of cash has misunderstood as the ‘management of money’ and the managers are found over-conscious about the burden of money rather than its efficient utilization. Regarding the management of cash source, most of public manufacturing enterprises have never thought it seriously. They are usually found to depend on government even for overcoming the shortage of cash in spite of trying to manage cash need from their own source. Some of the manufacturing enterprises have used reserve fund and depreciation fund to overcome the shortage of cash.

Cash management decision is a significant management decision. Various factors affect the cash management of the business organization. Cash management has been the most intricate and challenging area of modern manufacturing companies.

This study is primarily focused on cash management of DNPL or how they are managing their cash and is the management policy appropriate? Therefore, the specific problems that will be analyzed during this study are as follows.

- a. What is the size of investment in each type of current assets?
- b. Is there appropriate investment in current assets to the total assets of DNPL?
- c. Which cash policy does DNPL will follow?
- d. Is there sound liquidity position in DNPL?
- e. Is overall profitability of DNPL is satisfactory?

1.5 Objectives of the Study

Cash plays vital role of success or failure of the business firms and cash has been interpreted as the interrelationship that exists between current assets and current liabilities.

The main objective of this study is to examine the cash policy of DNPL. The following are the specific objectives of the study.

- a. To evaluate the factors affecting the size of cash of DNPL.
- b. To analyze the current assets and current liabilities of DNPL.
- c. To study the cash practice of DNPL.
- d. To study the liquidity of DNPL and its utilization.
- e. To study the impact of cash in profitability.
- f. To provide appropriate suggestion and recommendations for the improvement of cash management of DNPL.

1.6 Significance of the Study

An organization needs not only fixed capital but also the current assets. Cash is nothing but the capital needed to run day to day operation of the business. Such as wages, freight, raw materials etc. This study provides information about cash management of DNPL. This study is important for:

- a. BOD and management of DNPL.
- b. Further Researcher.
- c. Prospective Investors.

1.7 Limitations of the Study

Limitation exists everywhere and the study is also not an exception. The data problem in actual in Nepal, in order to make a study on cash management more fruitful, it is essential that data should be of frequent time intervals but, here such type of frequent data could not be obtained. Therefore, due to time constraint and area of study covered by this research, it has certain limitations. These are as follows:

- a. This study is only done for the prospective study of cash management of DNPL.
- b. This study has covered only secondary data.
- c. This study have covered only a period of 8 years from fiscal year 2055/56 to 2062/63 and processed for drawing conclusion.
- d. Most of the data are collected from financial statements. Therefore, the accuracy of the research work slowly depends on the data provided by the concerned company.
- e. This study has been conducted to fulfill the requirements of the MBS program of T.U. for the prescribed time not for generalization purpose.

1.8 Plan of the Study

The study has been classified into five major chapters; each part includes different chapters, which as follows:

Chapter – I: Introduction.

Chapter – II: Review of Literature.

Chapter – III: Research Methodology.

Chapter – IV: Presentation and Analysis of Data.

Chapter – V: Summary, Conclusions and Recommendations.

Introduction: This is the first chapter of the study. It consists of the background of the study or background information, profile of the company, focus of the study, statement of the problem, objectives of the study, significance of the study, limitations of the study and the same topic plan of study.

Review of Literature: This second chapter ‘Review of Literature’ includes the contain of theoretical analysis and brief review of related

literature available. i.e., related books, and research work which are already published journals/articles and conducted by different experts and researcher in the field of cash.

Research Methodology: This is the third chapter of the study, which describe the various aspects includes in research design. Population and sample, nature and source of data and information along with different analytical as well as statistical tools and technique.

Presentation and Analysis of Data: The fourth chapter ‘presentation and analysis of data’ is the main body of the study work. It fulfill the objectives of the study by presenting the data analyzing them to draw conclusion with help of various methods or different financial statistical tools.

Summary, Conclusions and Recommendations: It is the last chapter that states summary and conclusions of the study. This chapter presents the major findings, gaps and suggestion to DNPL manufacturing companies by the way of recommendation. The bibliography and appendices are incorporated at the end of the study.

CHAPTER – II

REVIEW OF LITERATURE

2.1 Conceptual Framework

Every manufacturing firm needs various types of assets in order to carry out its functions without any interruption. They are fixed and current assets. Some fixed assets have physical existence and are required to produce goods and services over long period. This type of fixed assets is called tangible fixed asset. It included land, building, plant, machinery, furniture, and so on. But some other fixed assets do not generate goods and services directly. However, it reflects the right of the firm. It is called intangible fixed assets. It represents patents, copyright, trademarks and goodwill. Both fixed assets are written off over a period of time. Current assets are those resources of the firm, which are either held in the form of cash or expect to be converted into cash within an operating cycle of the business. It includes; cash, marketable securities, account receivable stock of raw materials, work-in-progress and finished goods. Among these, some assets are required to meet the need of regular production and some for day-to-day expenses and short-term obligations. Current liabilities are those claims of outsiders, which are expecting to be matured within an accounting year. It includes; creditors, bills payable and outstanding expenses.

Cash management is concerned with the problem that arises in the management of the current assets and current liabilities. It affects the overall functional areas of the firm. Thus, the success or failure of cash management firms virtually depends upon the efficiency of cash management. Therefore, it is the crucial aspect of any firm.

Cash is the life-blood and controlling nerve center for any types of business organization because without the proper control upon it no business organization can run smoothly. As the management of current assets and current liabilities is necessary for day-to-day operations of any organization, it plays the crucial role in the success and failure of an organization as it deals with that part of assets, which are transformed from one form to another form during the course of manufacturing cycle. Therefore, the role of cash management is more significant for every business organization irrespective to their nature. There have been done a number of studies on cash management from different expects in various enterprises.

The main purpose of this chapter is to review the available literature on cash management in the context of Nepalese enterprises including the available information of DNPL.

2.1.1 Meaning of Cash Management

The term cash management is concerned with the management of current assets and current liabilities of the business, which is necessary for day-to-day operation. Cash management is concerned with the decision regarding the short-term funds influencing overall profitability and risk involving in the firm. The management of cash has been regarded as one of the conditioning factors in the decision-making issues. It is no doubt, very difficult to point out as to how much cash is needed by a particular company, but it is very essential to analyze and find out the solution to make an efficient use of funds for maximizing the risk of loss to attain profit objectives.

Cash is the important current asset for the operations of business. Cash is the basic input needed to keep the business running on a continuous basis;

it is also the ultimate output expected by selling the service or product manufactured by the firm. The firm should keep sufficient cash, neither more nor less. Cash shortage will disrupt the firm's manufacturing operation while excessive cash will simply remain idle, without contributing anything towards the firm's profitability. Thus, a major function of the financial manager is to maintain a sound cash position.

“Cash is the money, which a firm can disburse immediately without any restriction. The term cash includes coins, currency and cheques held by the firm and balance in its bank accounts” (Pandey, 1992: 911).

Cash is the most liquid asset, is of vital importance to the daily operations of business firm. Cash is both the beginning and the end of the working capital cycle-cash, inventories, receivable and cash. Its effective management is the key determinant of efficient working capital management. Cash is like the blood stream in the human body gives vitality and strength to business enterprises. The steady and healthy circulation of cash throughout the entire business operation is the basis of business solvency. According to J.M Keynes “It is cash which keeps a business going. Hence, every enterprise has to hold necessary cash for its existence. In a business firm ultimately, a transaction results in either an inflow or an outflow of cash. In an efficient managed business, static cash balance situation generally does not exist. Adequate supply of cash is necessary to meet the requirement of the business. Its shortage may stop the business operations and may degenerate a firm into a state of technical insolvency and even of liquidation. Through its idle cash is sterile, its retention is not without cost. Holding of cash balance is has an implicit cost in the form of its opportunity costs. The highest the level of idle cash the greater is the cost of holding it in the manner of loss of interest, which could have been earned either by investing it in securities

or by reducing the burden of interest charges by paying off the loans taken previously. If the level of cash balances is more than the desired level with the firm, it shows mismanagement of funds. Therefore, for its smooth running and maximum profitability, proper and effective cash management in a business is of paramount importance.

2.1.2 Efficiency of Cash Management

Cash can use a number of functions as it makes payment possible. It serves to meet emergencies. However, if cash is kept idle it contributes directly nothing to the earning of corporation. As such corporation must adopt such a policy that makes optimum cash management possible. The financial manager of the corporation should try to minimize the corporations' holding of cash while still efficiency of cash maintaining enough to insure payment of obligation. For improving the efficiency of cash management, effective method of collection and disbursement should be adopted (Shrestha, 1982:62). Some methods for efficiency of cash management are briefly described below.

Speedy Cash Collection of Useable Cash

Reducing the lag can accelerate cash collection or gap between the times a customer pays his bill and the time the cheque is collected and funds become available for use. Within this time gap the daily loss is caused by the mainly time. The amounts of cheque sent by customers but not yet collected is called deposit float.

The greater the deposit float, the longer the time is taken. There are mainly two techniques, which can be used to save mailing and processing time concentration banking, lock box system.

i. Concentration Banking

Concentration Banking is a system of centralizing corporate cash in order to control the firms' funds and minimize idle cash balances. Under this system a concentration bank is designated to receive funds from lock boxes or any of the subsidiaries, depository to instruction given by the firm. The concentration bank reports available balances daily so that the firm's treasurer can take maximum advantage of investment opportunities.

A Second method of concentration banking employs a depository transfer check (D.T.C). The D.T.C can be paper or electronic, that is it can be transmitted in the form of paper like other check or it can be sent electronically unlike a wire, which is sent immediately during the day. The DTC is sent so that arrives at night or the next day.

In the system the firm operated in the area where the firm has its branches. All branches may not have the collection centers. The collection centers will be required to collect cheques from customer and deposit them in their local bank above some predetermined minimum to a control at the firms' head office each day. A concentration bank is one where the firm has a major bank account usually the disbursement account.

ii. Special Handling of Cash

Special handling of cash enables Corporation to have sufficient funds that can be put too profitable use.

iii. Slowing Disbursement

Apart from speedy collection of account receivable the operating cash requirement can be reduce by slow disbursement of account payable. It

may be recalled that a basic strategy of cash management is to delay payment as long as possible without impairing the credit rating of the firm. In fact, slow disbursement represents a source of funds requirement, no interest payments. There are some techniques to delay are: avoidance of early payment centralized disbursement, floats and accruals.

iv. Cash Velocity

Efficiency in the use of cash depends upon the cash velocity, i.e. level of cash over a period of time.

$$\text{Cash Velocity} = \frac{\text{Annual Sales}}{\text{Annual Cash}}$$

v. Minimum Cash Balance

Corporations are required to keep a minimum cash balance requirement of bank either for the service it renders on in consideration of lending arrangement.

vi. Synchronized Cash Flows

Situation in which inflows coincide with outflows, thereby permitting a firm to hold transaction balance to a minimum.

vii. Using Float

Float is defined as the difference between the balance shown in a firm's (or individual's) checkbook and the balance on the bank's records.

viii. Overdraft System

A system where by deposits may write check in excess of their balances with their books automatically extending loans to cover the shortage most of the foreign countries use overdraft system.

ix. Transferring Funds

There are two principal methods: wire transfers and electronic depository transfer. Checks with a wire transfer, funds are immediately transferred from one bank to another, with an electronic depository transfer check (D.T.C) arrangement in the movement of funds an electronic checks image is processed through an automatic clearing house. The funds become available one business day later. From small transfers, a wire transfer may be too costly.

2.1.3 Different Techniques of Cash Management

i. Cash Planning

Cash planning can help anticipate future cash flows and needs of the firm and reduces the possibility of idle cash balance and cash deficits. “Cash Planning is a technique to plan for and control the use of cash” (Pandey, 1982: 483) Therefore, costs may be based on the present operations or anticipated future operation. Cash plans are very crucial in developing the overall operating plans of the firm. Cash planning may be done on daily, weekly or monthly basis. It depends upon the size of the firm and philosophy of management.

ii. Cash Budget

The planned statement of cash budget is necessarily prepared near the end of the annual planning cycle along with the planned income statement and balance sheet. Cash budget is the most significant device to plan for and control cash receipt and payment. A Cash budget is a summary statement of the firm expected cash inflows and outflows over a projected time period. It gives information on the timing and magnitude size or importance of expected cash flows and cash balances over the projected period. This information helps the financial managers to determine the

future cash need of the firm, plans for the financing of these needs and exercise control over the cash and liquidates of the firm.

The time horizon of cash budget may differ from firm to firm. A firm whose business is affected by seasonal variation may prepare monthly cash budget. Daily or weekly cash budget should be prepared from determining cash requirement is cash flows show extreme fluctuation cash budget for longer interval may be prepared of cash flows are relatively stable.

iii. Cash Forecasting

A useful tool to deal with the forecasting aspect of cash budget is the cash forecast. Cash forecasting may be done short or long term basis.

Short Term Cash Forecasting

Two most common used methods of short term cash forecasting are described as below.

i. Receipt and Disbursement Forecast

The primary aim of receipt and disbursement forecasts is to summarize these flows during a predetermined period. In cash of those companies where each items of incomes and expenses involves flow of cash, this method is favored to keep a close control over cash.

ii. Adjusted Net Income Method

This method is also called the sources and approach. In this approach, there are two objectives, i.e. to protect the company's need for cash at some future date and next to show if the company can generate this money internally and if not how much will have to borrow or raise from the capital market. It is based on Performa financial statement. Sources of cash, uses of cash and the adjusted cash balances are three different

sections of this method which is used in preparing the adjusted net income forecasts items such as net income, depreciation, taxes, dividend, etc.

Long Term Cash Forecasts

These types of forecasts are prepared to give an idea of the company's financial requirement of distant future. These forecasts are not detailed as the short term forecast. The long-term cash forecast can be used to indicate a company's future financial needs especially for its working capital requirement.

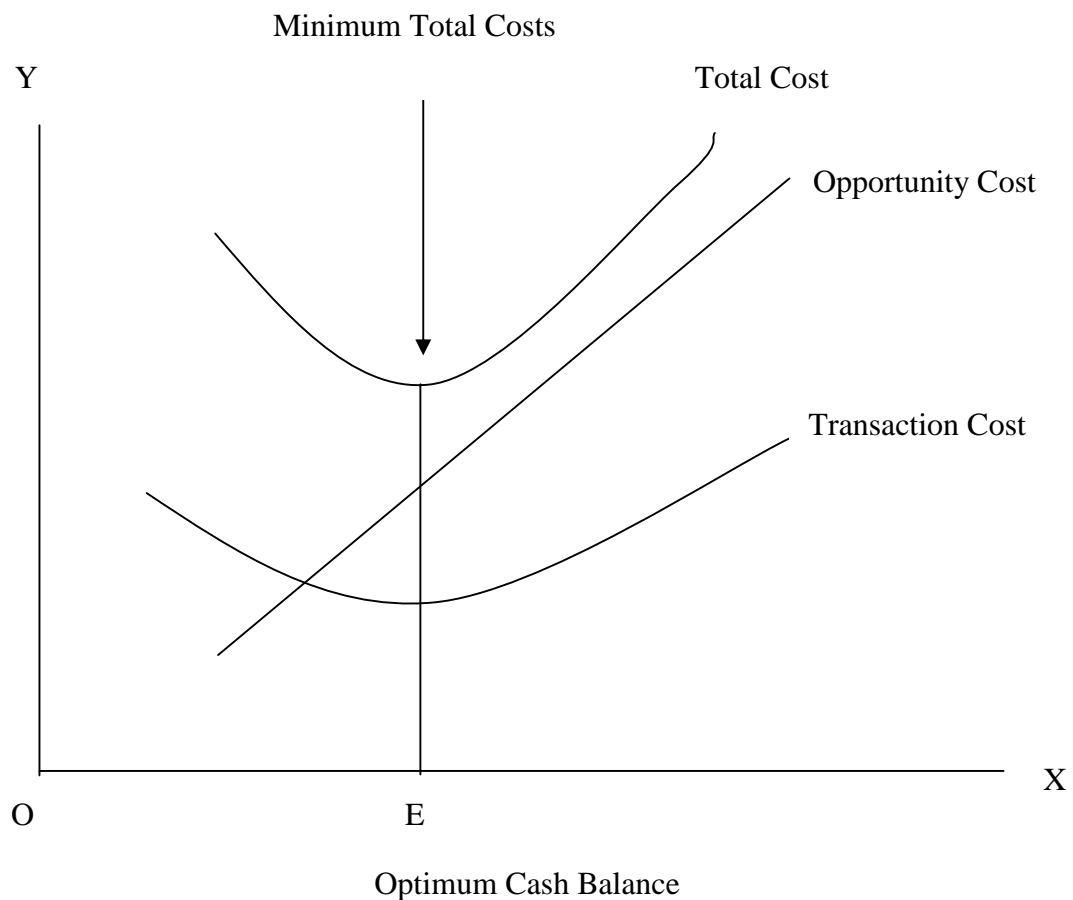
- a. To evaluate proposed capital projects: It pinpoints cash required to finance these projects as well as the cash to be generated by company to support them.
- b. It helps to improve corporate planning long-term cash forecasts may be made for two, three or five years. As with the short-term forecasts, company's practices may differ on the duration of long-term forecasts to suit their particular needs.

2.1.4 Determining the Optimum Cash Balance

Financial manager responsibilities are to maintain a sound liquidity position of the firm. So that dues may be settled in time. The firm needs cash for many purpose, i.e. purchase raw material, pay wages, dividend interest, etc. Cash balance is maintained as a buffer or safety stock. The financial manager should determine the appropriate amounts of cash balance. If the firm maintains a small cash balance, its' liquidity position becomes weak and suffer from a capacity of cash to make payments. But investing released funds in some profitable opportunities can attain a higher profitability. If the firm maintains a high level of cash balance it will have a sound liquidity position but forego the opportunity to earn

interest. Thus the firm should maintain an optimum cash balance to find out the optimum cash balance the transaction costs and risk of too small a balance should be matched with the opportunity costs of too large a balance. The figure shows this trade-off graphically.

Figure 2.1: Optimum Cash Balance



If the firm maintains larger cash balances its transaction costs would decline but the opportunity costs would increase. At point 'E' the sum of the two costs is minimum. This is the point of optimum cash balance, which a firm should sack to achieve.

2.1.5 Cash Management Models

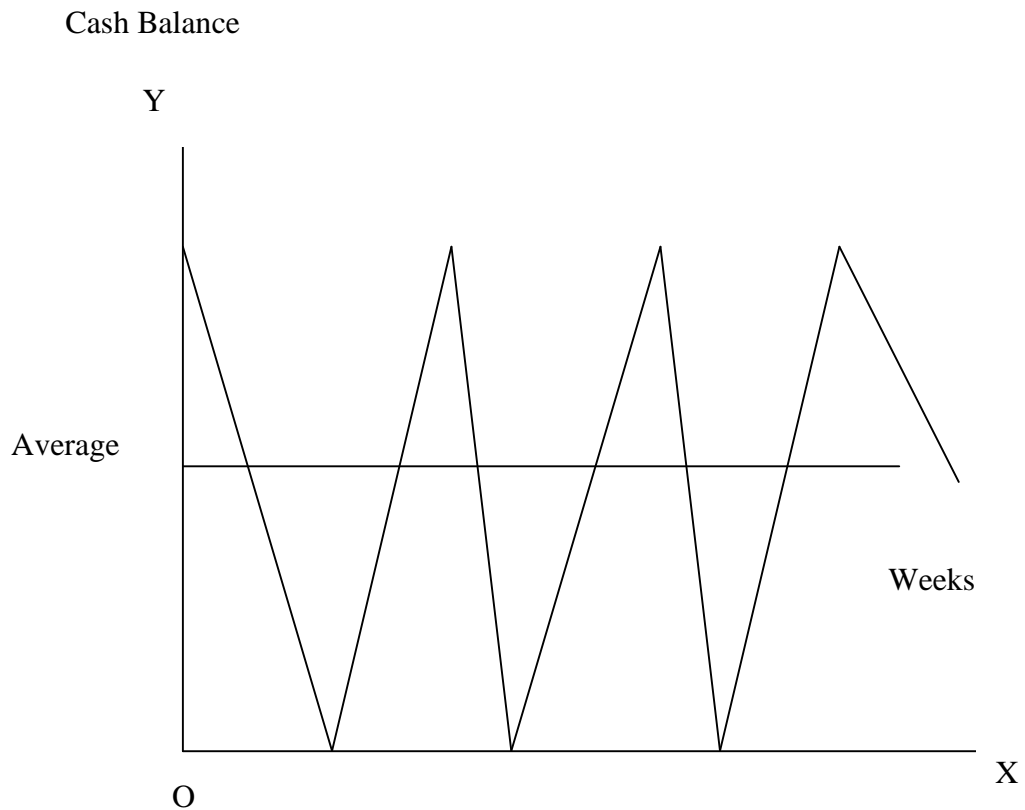
These are different types of analytical model for cash management.

- a. Baumol Model
- b. Miller-Orr Model
- c. Orgler's Model
- d. Cash Management Models

a. Baumol Model (Baumol, 1952: 545-556)

In view of minimizing the opportunity cost of holding cash and maximizing the return on the available funds, the cash balance should be maintained at a minimum level and the funds not required for immediate use is invested in the marketable securities. Baumol model is one of the methods that can be used for this purpose. Baumol identifies the cash maintenance as analogues to inventory maintenance and demonstrates that the model of economic order quantities that is applicable to inventory management is perfectly applicable in cash management too. Baumol model is based on the assumption that (i) The cash is used at a constant rate (ii) The periodic cash requirement is more or less and (iii) There are some costs such as opportunity costs that increase and other costs such as transaction costs that decrease as cash balance increase. Because of the assumption (i) and (ii) the graphical representation of cash position looks like as follows:

Figure 2.2: EOQ Model of Cash Balancing

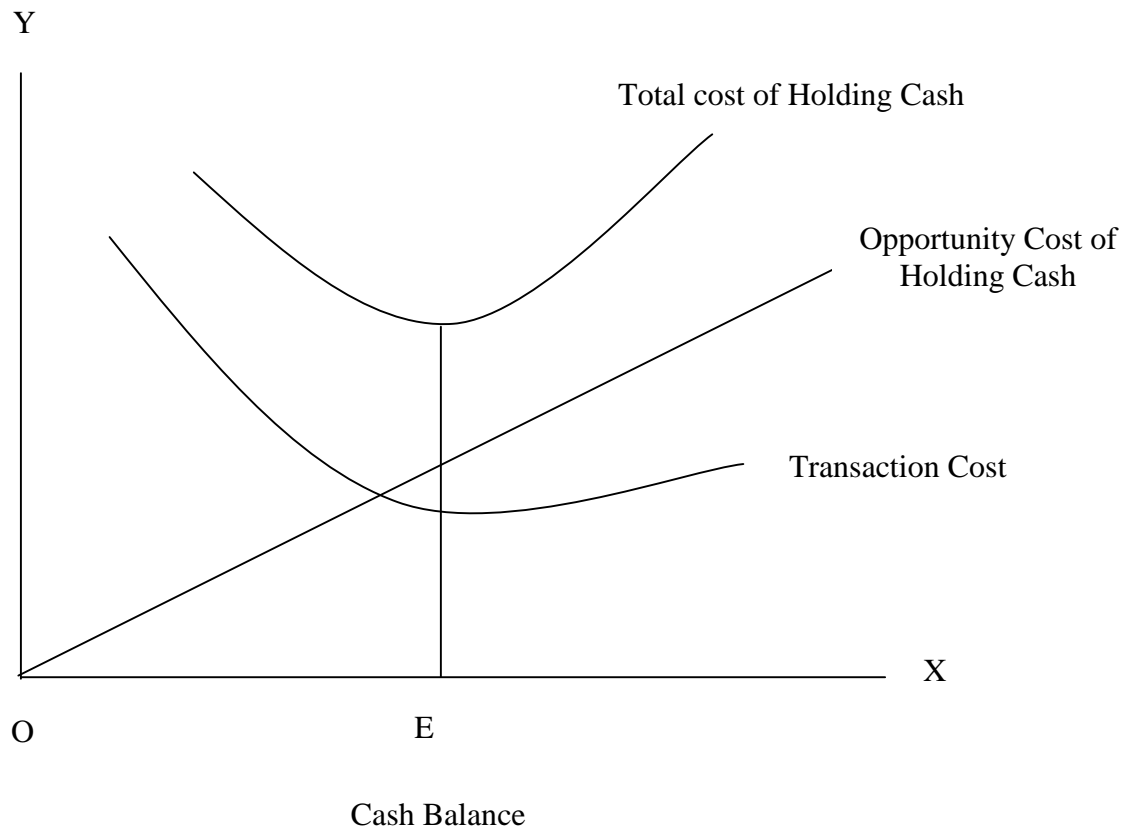


Unlike the case of inventory purchases, the cash transfer does not take time. Therefore, it is normally not required to maintain safety stock of cash.

Given its assumption, the model prescribes an optimal size of cash balance and the optimal size of cash transfer from marketable securities to cash account or borrowing. What matter for a firm is the total of opportunity cost and transaction cost? Therefore, the objective of model is to minimize the total cost.

The figure below shows the relationship between the average size of cash balance and various costs associated with the cash maintenance.

Figure 2.3: Relationship between Cash and Various Costs



Mathematically, the optimal size of cash transfer from investment accounts or line of credit, E is determined as follows:

$$E = \sqrt{\frac{2FR}{K}}$$

Where,

F= Fixed transaction cost per transaction

R= Requirement of cash per period

E= Opportunity cost of holding cash or interest rate on borrowing

The Baumol model can be appropriately applied in case of predictable uniform net cash flows, but not in the situations characterized by irregular and uncertain cash flows.

The average cash balance (c) is calculated as follows:

$$C = \frac{E}{2} + M$$

Where, M = Minimum balance or cash for precautionary purpose.

b. Miller-Orr Model (Miller and Orr. 1966: 413-435)

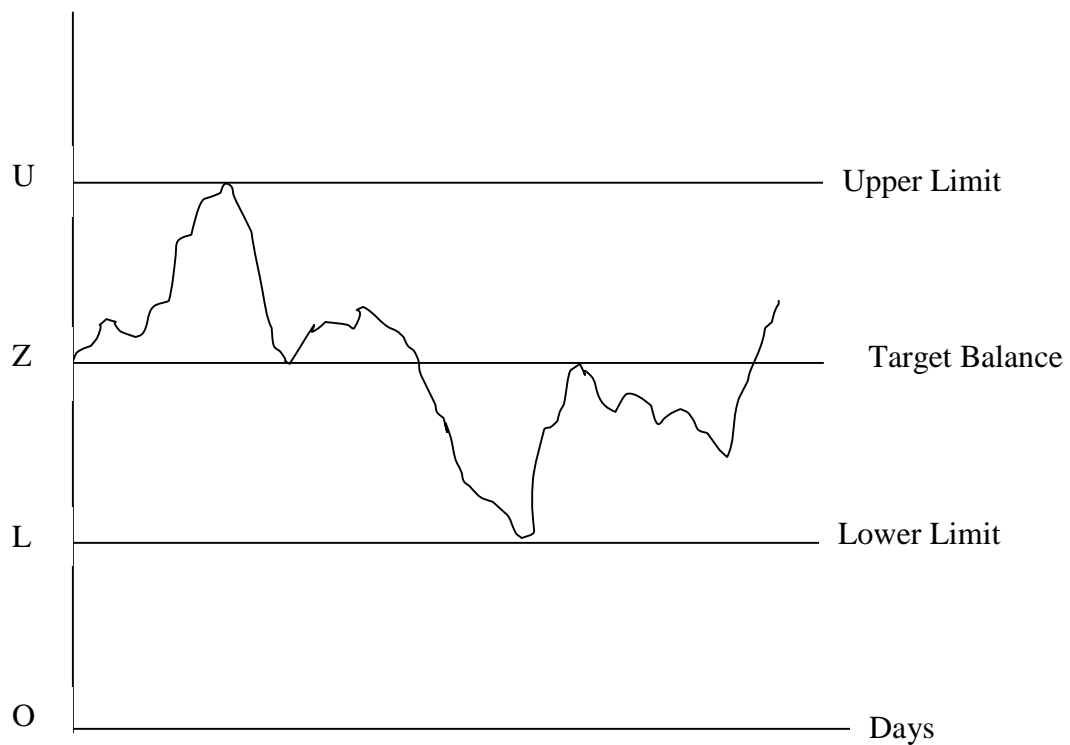
The size of cash need depends on the pattern and degree of irregularity of inflows. The Baumol model does not consider the possible irregularity and uncertainty of receipt and payments. Merton Miller Daniel ORR have developed a model known as miller-orr model, that takes into account the realistic pattern of cash flows and prescribed when and how much to transfer from cash to investment account and vice-versa.

The model is based on the assumption that the daily net cash flows are random in size as well as in the negative or positive flows and are normally distributed in the long run. The model sets a range of high and low limits within which the cash balance is allowed to fluctuate and sets the target cash balance (Z) in between these two limits.

The model suggests bringing the cash balance to target balance whenever it drifts away to the limits in either direction. The rule is to transfer the amount of cash that is necessary to bring the cash position to its target balance slides down to the lower limit (L), to transfer the cash in excess of target balance to the investment account whenever it reaches to the upper limit (U). The lower limit in the model is set by either managerial decision to meet emergency need or as required by bank to maintain compensating balance in the account. The graphical representation of this model is as follows:

Figure 2.4: Miller-Orr Model

Cash Balance



Mathematically, the model is set as follows:

$$Z = \left[\frac{3F\sigma^2}{4i} \right]^{\frac{1}{3}} + L$$

The lower limit L is given, the model calculate the Z and U

$$U = 3 \left[\frac{3F\sigma^2}{4i} \right]^{\frac{1}{3}} + L, \quad = 3Z - 2L$$

The average cash balance (C) is obtained as follows:

$$C = \frac{4Z - L}{3}$$

Where, Z = target cash balance

F = fixed transaction cost per transacts

σ^2 = variance of net daily cash flows

I = daily interest / opportunity cost

L = lower limit

c. Orgler's Model (Orgler, 1970: 220)

According to this model, an optimal cash management strategy can be determined through the use of a multiple linear programming model comprise three society i) selection of the appropriate planning horizon. ii) Selection of the appropriate decision variables. iii) Formulation of the cash management strategy itself. The advantage of linear programming model is that it enables co-ordination of the optimal cash management strategy with the other operation of the firm such as production and with less restriction on working capital balance.

The model basically uses one year planning horizon with twelve monthly periods because of its simplicity. It has four basic sets of decision variables which influence cash management of a firm and which must be incorporated into the linear programming model of the firm. These are i) payment schedule ii) short-term financing iii) purchase and scale of marketable securities and iv) Cash balance itself.

The formulation of the model requires that the financial manager first specify an objective function and then specify a set of constraints. Orgler's objective function is to minimize the horizon value of the net revenues from the cash budget over the entire planning using the assumption that all revenue generated is immediately re-invested and that any cost is immediately financed. The objective recognizes each operation of the firm that generates cash inflow or cash outflows as adding or subtracting profit opportunities for the firm it cash management operations. In the objective function decision variables, which cause inflow such as payment on receivables, have positive coefficient, while decision variables, which generate cash outflows, such as interest on short-term borrowings, have negative coefficient. The purchases of marketable securities would for example produce revenue and their have

a positive co-efficient while the sale of those securities, would incurred conversion costs and have a negative co-efficient.

The constraints of the model could be i) institutional ii) policy constraints. The institutional constraints are those imposed by external factors, for instance, the financial manager may be prohibited from selling securities before maturity. Either constraint can occur in the model during on monthly period or over several or all the months in the one year planning horizon.

An example of the linear programming model is as follows:

Objective function: $\max.\text{profit} = a_1 x_1 + a_2 x_2$

Subject to: $b_1 x_2$ production

$b_2 x_2$ constraints

$c_1 x_1 + c_2 x_2 <$ cash available constraints

$g_1 x_1 + g_2 x_2 >$ current assets requirement constraints

Very important feature of the model is that it allows the financial managers to generate cash management with production and other aspects of the firm.

d. Cash Management Model (Weston and Copeland, 1990: 784-785)

In this model, it is assumed that the firm on average is growing and is a net user of cash. Marketable securities represent a buffer stocks between episodes of external financing which is drawn as required periodically ordering costs are represented by clerical and transactions costs of making transfers between the investment portfolio and the cash account. The holding cost is the interest foregone a cash balance held. Assuming that expenditure occurred evenly over time and that cash replenishment

come in lump sums at periodic intervals. The optimal size of the cash transfer is formulated as follows:

$$C = \sqrt{\frac{2bT}{I}}$$

Where:

C = the optimal size of the cash balance.

T = the total cash usage for the period of Time involved.

b = the most of the transaction in the purchase or sale of marketable securities.

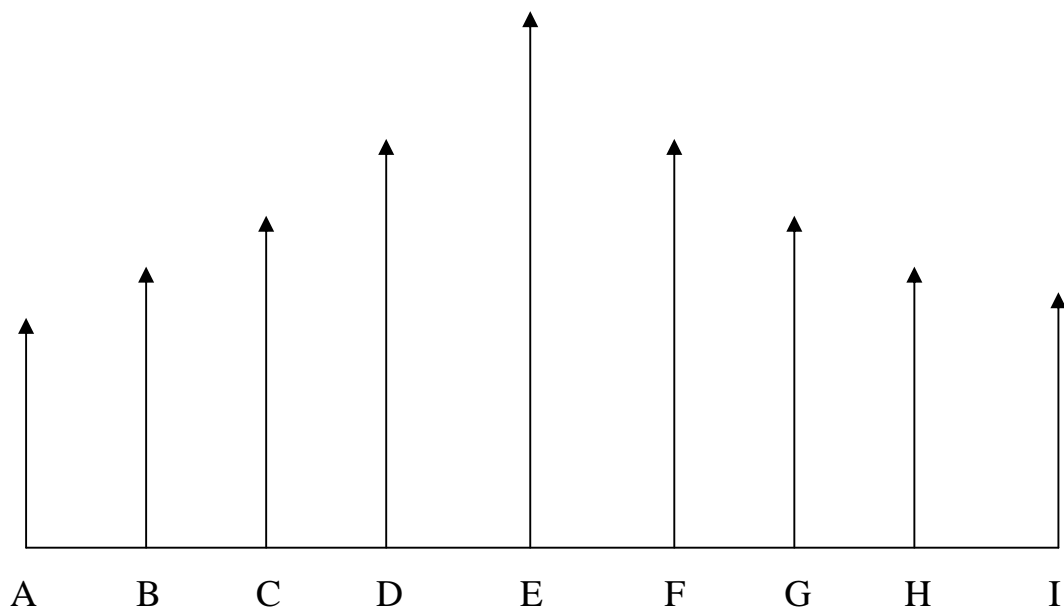
i = the applicable interest rate on marketable securities.

2.1.6 Cash Cycle

The cycle refers to the process by which cash is used to purchase materials from which are produced goods, which are then sold to customers, who later pay bills (Ezra and Pringle, 1978:178).

The Cash Cycle involves several steps along the way as fund flow from the firm accounts as shown as below:

Figure 4.5: Cash Cycle



Where,

A = Materials order

B = Materials received

C = Payment

D = Cheque clearance

E = Goods sold

F = Customer mails payment

G = Payment received

H = Cheques deposited

I = Funds collected

In addressing ourselves to the cash management strategies, we concerned with the time periods involved in stages B, C, D and F, G, H, I. It may be mentioned that a firm has no control over the time involved between stages A and B the lag between D and E is determined by the production by credit terms and the payments policy of customers. This hypothetical example explains that the corporation needs 60 days or two months to collect funds from the beginning of materials ordered to have ultimate cash. It takes 14 days to receive ultimate cash. It takes 14 days to receive materials from suppliers and adding 20 days for payment and still 2 days assumed for clearing the Cheque. Sales of inventory take 48 days to have complete clearing off stocks and customers might pay only after 28 days by mailing cheques. Moreover, six additional days are taken for payment receipt, cheque deposit and ultimate collection. This is applicable only for direct selling of customer goods but in a manufacturing concern the time lag may be still greater.

2.2 Review of Books

In this section, an attempt has been made to review some books on financial management, which deal with management of cash.

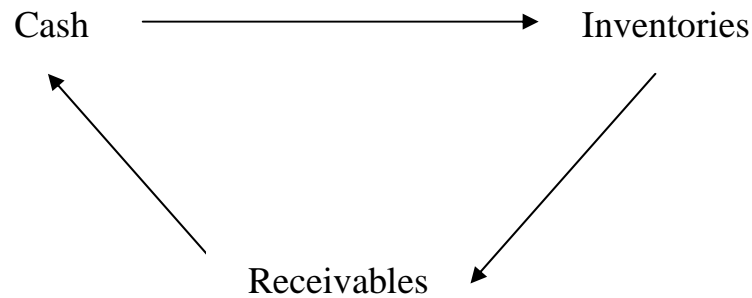
Well known Indian Professors M.Y. Khan and P.K. Jain define cash management is one of the key areas of working capital management. Apart from the fact that it is the most liquid current assets, cash is the common denominator to which all current assets can be reduced because the other major liquid assets get eventually converted in the cash (Khan and Jain, 1974: 664).

For the Cash Management, A well-known Indian Professor or I.M. Pandey has described some conceptual ingredients, which are based on his various research studies. We can learn lesson from it and it is also helpful for this study indeed. He described various concepts of cash management which are as follows: facts of cash management, motive of holding cash, cash planning, cash forecasting and budgeting, managing the cash flows, determining the optimum cash balance (Pandey, op.cit.: 839-869).

Some theoretical concept of cash management in relation of working capital has been taken from the book “Financial Management Accountancy written by S.P. Jain and K.L. Narang.” First of all it is obvious that cash is component that correlated with working capital, which is known to be current assets.

The circulation nature of current assets can be depicted as figure given below.

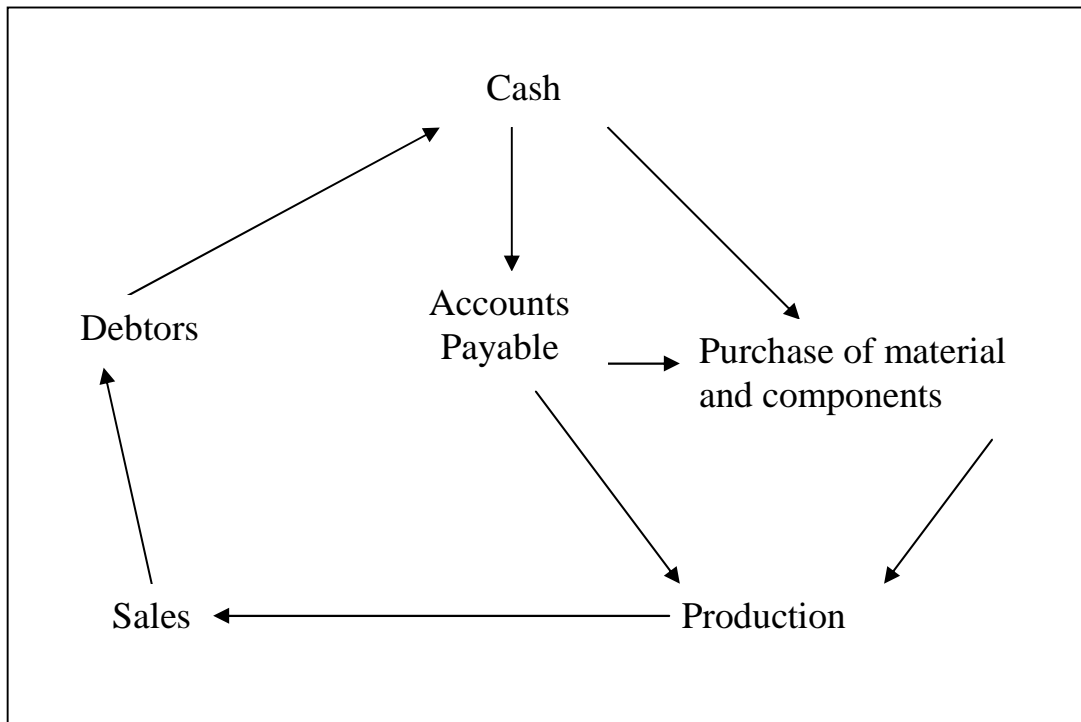
Figure 2.6: Circulation Nature of Current Asset



A firm begins with cash, which is used for purchase of raw material and bought in components. Material and other operating supplies can also be purchased on credit, which in turn generates account payable. Further cash is expected to pay the labor and other manufacturing costs and other further trade credit obtained to enable production of finished goods, which are eventually sold on credit giving rise to accounts receivable. The collection of receivables brings cash into the firm and creditors are paid. The average time which elapses between the acquisition of material or services entering into the manufacturing process and the final cash realization constitutes an operating cycle (Jain and Narang, 1988:174-175).

The working capital cycle can be presented as given below.

Figure 2.7: Working Capital Cycle



Therefore, the nature and interrelationship of working capital can be best understanding by the above figure of operating cycle of the firm.

The well known Professors Weston and Brigham have given some theoretical insights into current management (cash management) after their various research studies provides on it. The bond conceptual findings of their studies provide sound knowledge and guidance for the further studies and naturally to this study as well. They explain in the beginning the motives for holding cash specific advantages of adequate cash, synchronization of cash flows, expending collection and check clearing using float, cost of cash management, determining the minimum cash balance, compensating balances, overdraft system, cash management, marketable securities, arrangement of account receivable, credit policy, evaluating changes in credit policy, substitute for cash criteria for selecting securities investment alternatives.

We also received from theoretical concept on the component of cash management from book by Van Horne. He has categorized the various component of cash management. These are the functions of cash management: managing collection, transferring funds, concentration banking and other procedures, lock-box system, control of cash disbursements, payroll and dividend disbursement, zero balance account, electronic fund transfer, balancing cash and marketable securities, compensating balance and fees, model for determining optimal cash, inventory model, stochastic model, a probabilities approach, optimum level of cash (Van Horne 2002: 389-415).

The relation between sales growth and need to finance current assets is closed and direct. The growth of sales means generation of more funds provided such sales constitute cash sales and this enables corporation to be self supporting without any need to tap additional funds for current assets but if there are more credit sales, the size of account receivable rises so that for the short period firm have to manage funds either through effective credit policy to have quick collection or arranging a bank loan for short period. The amount of earning also decide how much to interest in current assets as more earning lead to more inflow of cash enabling corporation to meet cost of operation easily (Weston and Brigham, 1973:138).

But decline in earning put burden of liquidity and additional investment in current assets. The highly developed money market and efficient banking services make easy availability of credit at any time when it is needed and in such situation corporation can avoid maintenance of higher cash balance and also can easily discount accounts receivable. But lack of these services compel corporation to follow precautionary policy of holding more current assets. The turnover of corporation is equally

important to be considered as quick turnover, which means ability of corporation to have fast process of conversion, makes no burden of liquidity and they're by helping to undertake further production expansion. But prospect of business has much to do in the overall evaluation of current assets to achieve better results. During the peak seasons corporation have to keep more stock of commodities readily available to meet increasing demand and it can generate cash quickly. However, during the condition of recession, the current assets should be converted into cash. The taxation policy and other subsequent developments that take place within a given cycle also affected management of current assets. In view of consideration of the above factors, current assets management involves a common set of problem concerned with the size of investment required in those assets (Pandey, op.cit. P.839).

In this section of the review of theses relating to cash management, have been made. In this regard, review of Working Capital Management of Bansbari Leather and Shoe Factory by Mr. Sindhu Lal Shrestha was made. The analysis of the factory was based on the secondary data. The objective of this study was to operate with setting certain sales target and make regular inspection to find out the excess or deficit of current assets and to adopt suitable credit policy with responsible discount and should have appropriate cash balance and working capital.

Liquidity is the lifeblood of a corporation a want of cash is the only factor, which may free it out of business cash flow in a corporation by direct cash sales of assets. It flows out indirect purchase and payment to creditors, wages and other costs. Cash also flows in the purchase and payment to creditors, wages and other equipment. In the payment of taking interest on important bearing on the overall liquidity position and

failure of maintaining sufficient degree of liquidity may cause interruption of regular operation. Besides making corporate manager's unable to pay obligation in time, while each situation is unique the one common threat that runs through all corporate in crisis is a lack of liquidity.

In the type of financial manager should not only attain towards the aspect of profitability but he should also turn towards ensuring the liquidity of the corporation. Since every business is a constant debtor an enterprise borrows funds from financial institution and purchase merchandise on credit, there by are fewer obligations to the government. Thus every enterprise owns liabilities unless the payment is made at the maturity of the particular debt, the reputation of the firms is tarnished at worst the creditor may force the firm to terminate its business (Flink, and Gusrewald, 1964: 13).

A cash budget shows the planned cash inflows, outflows and ending position by interim period for a specific time span. Most companies should develop both long term and short-term plans about their cash flows. The short-term cash budget is included in the annual profit plan. A cash budget basically includes two part: I) the planned cash receipt II) planned cash disbursement, planning cash inflow and outflow give the planned beginning and ending cash position for the budget period planning the cash inflows and outflows will include: I) need for financing probable cash deficit or the need for the investment planning to put excess cash to probable uses (Welsch, Hilton and Gordon, op.cit, : 433).

As such whatever cash a corporation has must be utilized efficiently to meet obligation of interest payment if cash is obtained from borrowing and it is received through issue of shares the corporation has

responsibility to owners in assuring them to pay favorable rate of return since cash is not easy to obtain the available cash must be prudently spent without incurring loss. Although it is impossible to formulate a set of assets management policy of universal applicability, one policy or rule that appears to be unanimously accepted is that cash must be conserved (Kent, 1964: 128).

The cash budget is forward looking. It sees to estimate future cash receipts and cash disbursement.

The primary purpose of cash budget is to:

- a. Give the probable cash position at the end of each period as a result of planned operation.
- b. Identify cash excess or shortage by time periods.
- c. Establish the need for financing and or the availability of idle cash for investment.
- d. Co-ordinate cash with total working capital.

A firm's major needs for cash are the following:

- a. Transaction Needs: A firm needs cash to carry out the day-to-day function of the business.
- b. Contingency Needs: The firm must be prepared for contingencies and should be concerned with unexpected occurrences or emergencies that require cash.
- c. Opportunity Needs: This involves the chances to profit from having cash available.

Collectively, these activities are usually called cash management, which in and of it should be cost effective. Cash management in large company

is so important that the related policies and process should be subject to internal audits (Msonson, 1987: 30-33).

Cash is the important aspect of working capital. Cash is the basic input needed to keep the business running on continuous basis so the cash should be managed efficiently in order to keep the firm sufficient liquid and to use excess cash in profitable way. The firm should held sufficient cash neither more nor less. Cash shortage will disrupt the firms operation while excessive cash will simply remains idle, without contributing anything towards the firm profitability. Thus a major function of the financial manager is to maintain a sound cash position (Pandey, op.cit.: 839).

Corporate must adopt such a policy that makes optimum cash management possible for improving the efficiency of cash management effective method of collection and disbursement should be adopted. However in a developing country corporation has given not so much attention in assessing the time value of money so certain method of efficient cash management practiced by corporation in developed countries may not be viable in view of either the deficiency of knowledge or lack of consciousness among corporate managers of developing country to calculate the interest lost or fund lost if cash is not collected promptly (Shrestha, op. cit., P.62).

It was observed that the goal of working capital is to manage each of the firm current assets efficiently in order to maintain the firms liquidity while not keeping any assets as to high level. Cash is the most liquid assets, if the common denominator all can be reduced because the major liquid assets get eventually converted into cash (Giri, 1986:35).

The cash management of corporation is significant enough to have the best use of idle cash balances and to take the advantages from the opportunity interest in cash velocity determined by sales volume and turnover of assets. Corporate manager must be familiar with the cash cycle to undertake measure for improvement of collection and disbursement.

The various motives for holding cash and determination of safety level based on normal periods and peak period must be adequately considered. The cash flow balance of corporation can be sufficiently improved by increasing volume of sales and turnover of total assets. But on the whole measure should be taken to have efficient collection combined with disbursement (Shrestha, op. cit.: 64).

Mr. Suresh Pradhan in his study on working capital policy of manufacturing public enterprises (MPES) in Nepal sought to sort out the problem of low economic performance and poor financial management in MPES and examine whether or not there was any association between the various aspects of working capital policy in financial management and the poor financial management performance of MPES and also the lack of appropriate assets mix policy in MPES. Hence this study deals with liquidity position, utilization of working capital, profitability position, sources of financing of current assets and determinants of working capital in MPES. For the study he had considered fine MPES for the study. The major findings of the study are:

- a. Almost all selected MPES had followed a moderate working capital approach. The holding of cash and receivables in relation to total asset was decreasing whereas the inventory was increasing.
- b. The selected MPES had sufficient liquidity.

- c. There are improvement in the use of current assets in selected MPES there was high turnover of cash and receivable in comparison to inventory.
- d. Capacity utilization was the significant factor while sales, cash flow cycle and interest rate were not significant in working capital determinations.

To the end he had made some suggestion for the improvement of working capital management and efficiency in the MPES. He suggested for aggressive sales promotion policy, indicated the need to match production and demand schedule, adoption of standard costing as well as marginal costing techniques, formulation of sound working capital policy and training to financial employees to acquaint about latest development in the area of working capital management (Pradhan, 1989:45).

Previous theses, which are to some extent related to the proposed study, are also taken into consideration. In this context, three theses, “The cash management: A case study of Gandaki Noodles Pvt. Ltd,” by Gautam Biranji and Ramesh Prtihi with the title “A study on cash management of United Mission Hospital Tansen” along with Subarna Lal Bajrahcharya with the title “Cash management on Nepalese public enterprises” are reviewed here onwards respectively.

Biranji conducted this study on cash management of Gandaki Noodles Pvt. Ltd by using six years data of 2048/049 to 2053/054. Among different objectives, the being:

“To analyze the cash disbursement needs, minimize funds committed to cash balance and access the credit policy adopted in GNPL and their impact and relationship to each other.”

Ramesh Prtihi conducts another study in the title of “A study on cash management of UMHT” by using six years data of 2054/055 to 2059/060. Out of different objectives, one is “To have true insights into its cash management and to present the existing cash management and to expand few suggestions on the basis of analysis to improve the cash management for future.”

Subarna Lal Bajrahcharya conducted the study on “cash management in Nepalese public Enterprises” by using eleven years data from 1977 to 1987. Out of different objectives, the is “to critically review the cash management techniques practiced by Nepalese public enterprises.”

The review, clearly pointed out that cash management is the major problem in Nepalese enterprises. But the success and failure of an enterprise is greatly dependent upon the efficient management of cash.

2.3 Review of Journals

Advanced and research based journals of finance are hardly found in Nepal. Very limited numbers of journals of finance cannot cover its full dimensions. Though, in this section articles from various national and international journals are reviewed and the attempt is concentrated to build the sound conceptual framework of subject matter, which may helps for the success of the study.

The journal of finance, published bimonthly by American Finance Association for many decades is taken into account. In its volume XV of September 1960, Joseph C. Schabacker, at his article, “A Study of cash planning in small manufacturing companies” is reviewed here, which is as follows:

A Study of Cash Planning in Small Manufacturing Companies

JOSEPH C. SCHABACKER

University of Wisconsin

SEVERAL SIGNIFICANT investigations have been conducted to explain the causes of failure among small businesses. The most widely accepted theory forthcoming from such studies is that poor internal management is the predominant factor in failure. Businesses do not fail merely because they are small.

The purpose of this study is to explore one specific phase of the managerial job in small companies, namely the forward planning of cash requirements. Many small business owners allow themselves to be pressured into *ad hoc* decisions as a result of no advance planning. The research was designed to test the hypothesis that “the financial health of a small manufacturing firm is directly related to the amount of formal cash planning which is done”.

A formal cash plan is here defined as a written forecast, as opposed to mental estimates. The definition of a small manufacturing company is a firm with 150 employees or less.

The solution of this problem involved a determination of the kinds of financial planning feasible, an analysis of how much is actually being done, and the formulation of a minimum amount of financial planning that should be accomplished.

A random sample of twenty-eight small machinery-manufacturing companies in the Los Angeles area was investigated. Financial and operational data were obtained through questionnaires and personal interviews with the president (or senior executive). In addition,

information was collected from each company's outside auditor, from the bank loan officer, and from Dun and Bradstreet files.

Statement analyses were prepared for the Dun and Bradstreet fourteen financial ratios for each company for the period 1951-56. These ratios were compared with appropriate industry results by year as published by Dun and Bradstreet. A "Score" was then developed for each company representing (a) over-all operating results and (b) net profit results.

The responses to the questionnaire items by the three parties and the comparative ratio analysis results were then analyzed to determine whether the use of formal (written) cash planning resulted in higher profits or improved operating results.

This investigation of twenty-eight small machinery-manufacturing companies in Los Angeles indicates that there is no direct correlation between higher profits in the small company and the act of formal (written) cash planning. The evidence does not support a preconceived notion that the eight out of twenty-eight presidents who used written cash forecasts experienced any greater profit results or over-all operating improvements there by. Other variables in the business environment appear to have had a stronger influence on profitability.

However, there are times in the life of a small company when formal cash forecasts seem to be crucial. These include (a) when a company is undercapitalized, (b) when a lending institution is approached for a loan, and (c) when a company is contemplating or experiencing a growth stage.

Evidence in the study pointed to a need for more assistance in matters of financial planning on the part of bankers and certified public accountants

for their small-business clients. (*A dissertation completed at the University of California at Los Angeles in 1989)

Similarly, quarterly published journal of economics and management quality are also reviewed here.

W.J. Baumol, at his article “The Transaction Demand for cash: An inventory theoretic Approach” on quarterly journal of economic (Vol. LXV, Nov.1952) identifies cash maintenance as analogues to inventory maintenance and demonstrates that the model of economic order quantities that is applicable to inventory management is perfectly applicable in cash management too. He has presented model in view of minimizing the opportunity cost of holding cash and maximizing the return on the available funds, the cash balance should be maintained at a minimum level and the funds not required from immediate use be invested in the marketable securities.

Similarly, M.H. Miller and Orr. D., in their article “A Model of the Demand for money in firms” on quarterly journal of economic, (Vol. LXY, Aug.1996) have developed a model known as miller-orr model, that takes into account the realistic pattern of cash flows and prescribed when and how much to transfer from cash to investment account and vice-versa.

Ram M. Saksena at his article,“ Towards more efficient cash management” on quarterly journal of management quality (Vol.No.5, 1974) identified that the term cash management has a meaning according to the purpose for which it is used and persons with varying branches of knowledge implies various meaning of cash. Economics considered cash, as the means to satisfy human want, the lawyer the view that cash is the

legal tender money issued by a determinate authority. However, our concern of the meaning of cash is an asset constituting the most liquid item among all the assets. But to obtain cash involves cost because corporation has to rise through issue to share or by borrowing with interest. In through generation money market procurement is liability and wasted opportunity unless it is not put to its optimal use.

Review from other Independent Study in Nepal

There are few independent studies available in the research purpose. The study conducted by Radhe shyam Pradhan in a topic of “The demand for cash by corporations” has been useful to take knowledge regarding demand of cash.

There are two studies in which one is conducted by Radhe Shyam Pradhan and Kundan Dutta Koirala, in a topic of “Aspects of working capital management in Nepalese corporations.” Radhe Shyam Pradhan conducts another, in a topic of “the Demand for working capital by Nepalese corporations”.

Above studies has provide us a little but more knowledge for our research purpose. Similarly, other studies have also been considered if available at the time of research period.

Reviewing various books, journals, thesis and other independent studies by different authors related to the topic, it could be concluded that all those works performed are related to the study of cash management.

Shrestha (July 1982 - June 1983) in his study cash management in public enterprises ‘states that manager often lacks basic knowledge of cash & its overall impact on the operative efficiency & financial viability of public enterprises. This study the cash management of ten selected public

enterprises focused on the liquidity, turnover & profitability position of these selected public enterprises. The studies found that majority of PE s were unable to maintain adequate liquidity position. The turnover & profitability aspect of the PE s were also unsatisfactory. In his study he has brought certain issues & problems faced by PE s such as lack of appropriate financing planning, negligence of cash management & deviation between liquidity & turnover to assets. At last, he had made some suggestive measures to overcome from the above issues i.e. identification of required funds regular check of accounts, positive attitude towards risk & return, development of management information system & determination of right combination of sources of funds (i.e. short term & long term funds) to finance & choice appropriate cash policy (Shrestha, 1982-1983: vol., 8).

The article relating to cash management by Pradhan (1988) has studies on the demand for cash by Nepalese corporation (Pradhan. 1988:53-60). He has selected nine manufacturing public corporation with 12 years dates for 1973 to 1984. Those nine corporations ha represent about 80% of Nepalese manufacturing public corporations established before 1973 Regression analysis has been used or adopted as the tools of analysis. The earlier studies concerning the demand for cash & inventories by business firms did not report unanimous finding. A lot of controversies exists with respect to the presences of economies of scales, role of capital cost & capacity utilization rates & the speed with which actual cash & inventory one adjusted to designed cash & inventories respectively. That study paper had inventories these various issues in the context of manufacturing public corporation of Nepal.

The pooled regression results showed the presence of economies of scale with respect to the demand of cash & its various components. The

regression results suggested strongly that the demand for cash & its components is a function of both sales and their capital costs.

Acharya (1985) has published another article relating to cash management. He has described the two major problem operational problems & organizational problem regarding the cash management in Nepalese PE s. the operational problems he found one increase of current liabilities than current assets, not allowing the current ratio of 2.1 & slow turnover of inventory. Similarly change in cash in relation to fixed capital had very low impacts over the profitability thin transmutation of capital employed to sales absent of apathetic management information system, break even analysis funds flow analysis & ration analysis went either not done or ineffective for performance evaluation. Finally monitoring of the proper functioning of cash management has never been considered management job.

In the second part he has listed the organizational problems in the PE s there is lack of regular internal & external audit system as well as evaluation of financial results. Similarly very few PE s have been able to present their capital requirement functioning of finance department is not satisfactory & some PE s one even facing the under utilization of capacity (Archarya, Vol. 10).

Pradhan & Koirala (1982) have jointly conducted a study on cash management in Nepalese corporation Pradhan & Koirala. 1982). They focus on evaluation the cash position of selected manufacturing and non-manufacturing corporations of Nepal. For the purpose of that study corporation & they compared between these two sectors. For that study total of 5 corporations were taken from manufacturing sectors as sample. The specific objective of that study were as following.

- a. To assess the size of investment in each type of CAs.
- b. To study the change in the size of investment in each type of CAs over a period of time.
- c. To point out the need to control investment in the size of cash receivable & inventory.

This study stated that the majority of Nepalese corporation was facing the problem of formulation & implementing the suitable policy as to CAs management. For manufacturing corporation CAs management is important to non Manufacturing Corporation is due to the fact that requires larger investment. Inventory management is of great significance of manufacturing corporation & the management of cash & receivable one of great significance to non Manufacturing Corporation. The major factors to be the liberal credit policy followed by Nepalese corporation.

The major reason for holding inventories in Nepalese corporation was to facilitate smooth operation of production & sales but not take advantages of price increases.

2.4 Review of Related Dissertations

Under this section on effort is some of research outcomes performed under the heading of cash management.

Shrestha (1994) has carried out “A Study on Cash Management of Dairy Development Corporation (DDC)”. He has analyzed the financial statement of DDC for five years. He has focused on the cash. For the purpose of the analysis he has used ratio analysis & correlation test or major tools of the study. He found the inventory has held the major share of CA followed by cash & receivables respectively. There was the high liquidity position & low level of cash turnover of DDC. There was no functional relationship between total assets & current assets &

receivables. There was no proper relationship between current assets & share of inventory.

Giri (1996) “Studied on Cash Management in Birgunj Sugar Factory Ltd., Nepal (BSFL)”, had taken the data cut for the financial statement Viz. profit & loss account & balance sheet for 10 years. In his research study he applied ratio analysis as the major tools for analyzing the available secondary data. On the study he found that BSFL has followed neither conservative nor aggressive cash management policy.

In BSFL inventories hold the major portion of CAs. The turnover position of the company was very poor. Return on CAs total assets & net worth were not satisfactory. Profitability of the factory was also not satisfactory. The research pointed out some constraints of BSFL, this one management inability. Lack of definite government policy, Interference of the government, absence of forecast of plan & lack of skill manpower etc. the management of cash is not satisfactory & it was also found that there was lack of knowledge about cash and its important for manufacturing company due to ineffective human resource management system or manpower selection system of the company. The company did not apply the rule that right man at right place.

Another student of management, Gurung (2001) set main objectives for her study “To Examine the cash Position of Gandaki Noodles Pvt. Ltd. (GNPL)” & studies the relationship between sales & different variables of company (Gurung 2001) in this study she analyzed 5 years financial statement of the cash to achieve the object. In that study she found the proportion of cash & bank, sundry debtors, inventory & other CA s to current assets on an average 4.76% 10.34% 54.31% & 31.77% respectively which shows that inventory holds the largest portion. Study clearly shows that the investment in CA s was high with respect to its

total assets & not fixed assets. Fluctuations in the position of receivable was affected by the fluctuating sales volume of the company from that study it was also found long term source of funds i.e. general reserve & less amount was financed from short term source of found i.e. from bank borrowing. In short the company was followed conservative cash policy.

Gurung (2002) has done the research on the title of “A Study on cash Management of Nepal Lever limited (NCL)” main objectives of that study is to analyze the cash management of NCL. The specific objective of that study one to analyze the specific objective of that study one to analyze the liquidity composition of cash assets utilization & profitability of cash to analyze financing pattern & to examine the relation between liquidity & profitability of NCL.

The study covered 5 years period & analyze secondary data by using financial & statistical models. He has found that major components of CAs one inventories receivables & prepaid expense. Among them inventories holds major portion of CA s were fluctuating during study period. It indicated that company did not have any clear vision about the investment of cash CA investment policy of NCL has been sifting towards the moderate policy. The current ratio of the company was satisfactory. The CR contains more inventory & receivables & there was in significance relationship in between CA & LLS. This mgmt had not proper policy of maintain the liquidity position & its liquidity position was not sound.

“A Study on Cash Management of Pharmaceutical Industry of Nepal with Special Reference Royal Drugs Ltd. (RDC)” was conducted by Aryal (2003) a student of management. The main objectives of that study was to find out we management system & its effect on find profitability of the

company by using nine years data. The major finding of the study one described in the next paragraph.

Cash is more difficult to manage than of fixed capital. 65 year of respondents of RDC said that cash was more difficult to manage than fixed capital & only 35 percent were in factors of that fixed capital management is more difficult to manage than cash. Of respondents of RDL opine that a lot of time has taken to it. With respect to receivable management the major factors affecting the larger investment in receivable is found to be liberal credit policy. The major reasons for holding inventories is to facilitate smooth operation of production and sales majority of respondents of RDL performed for it not for to take advantage of price increase.

Shrestha (2003) he carried out a study titled “A Study on Cash Management with Respect to National Trading Limited (NTC) & Salt Trading Limited (STC)”. Her main objective is to present overall picture of cash of NTL & STL. The major findings of the study are:

- a. The current assets to total assets of NTL & STL are both in fluctuating trend.
- b. The investment assets to total assets of NTL & STL are both of the trading companies with respect to its total assets & net fixed assets.
- c. Cash & bank balance holds the largest portion followed by inventory in NTL whereas cash & bank balance holds the least in STCL & inventory holds the higher portion.
- d. The turnover positions of the NTL & STCL are in fluting trend.
- e. The liquidity position of the STCL is satisfactory & favorable in comparison to the liquidity position of the MTL.

CHAPTER – III

RESEARCH METHODOLOGY

3.1 Research Design

Research design is highlighter for ascertaining the basic objectives of the study. Research design includes procedures and technique, which guide to sufficient way for analyzed & evaluating the study. As already mentioned the main objectives of the study is to evaluate the cash management of DNPL manufacturing companies, so the research design of this study is based on descriptive and analytical study, that means to conduct the study, descriptive and analytical research design is to be adopted (used). Descriptive research design is essentially a fact finding approach relative largely to the present and abstracting generalization by the cross sectional study of the current situation. It is utilized for conceptualization, problem identification, conclusion and suggestion for the research. Analytical approach (design) is followed to the parametric and non-parametric test of the data. It is the process of microanalysis and appraisal to the data. The data on DNPL of five years are collected and analyzed as per the need of this study.

3.2 Population and Sample

All the manufacturing and trading organization are population. Out of them, only DNPL is taken as a sample.

3.3 Nature and Source of Data

The study is mainly based on the annual reports of the Dabur Nepal Pvt. Ltd. For the period of 8 years. 2055/56 to 2062/63, which have been collected from the corporate office of DNPL, which is located at TNT Building, Teenkune, Kathmandu. Other facts and information were

collected from the website of DNPL. The data for the study have, therefore, primarily been secondary in nature.

3.4 Collection of Data

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

3.5 Data Processing and Analysis

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

a. Analytical Tools

The analytical tools used for this study is financial ratio analysis.

Ratio Analysis:

Ratio analysis is a powerful tool for financial analysis. A ratio is defined as the relationship between two or more variables or mathematical expression. In Financial analysis, a ratio is used as benchmark for evaluating the financial position and performance of a firm (Pandey, 1999: 109). It is useful to make financial expression more meaningful and to draw appropriate conclusions from them. Financial analysis is the process of identifying the financial strengths and weakness of the firm by

property establishing relationship between the items of the balance sheet and the profit and loss account. Financial ratio analysis can be undertaken by management of the firm or by parties outside the firm, viz. owners, auditors investors, and other. The nature of the ratio analysis is differ depending on the purpose of the analyst. So, the examine the cash management or cash policy of manufacturing companies ratio concerted with cash has been extensively used in this study. The cash has been studied by analyzing the following ratios.

i. Percentage of Current Assets to Sales (CAs):

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

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

As the percentage of CAs increase the risk and profitability also increase.

ii. Percentage of Current Assets to Fixed Assets (CAFA):

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

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

iii. Sundry Debtors to Current Assets (ADCA):

This ratio shows the percentage of current assets in the form of debtors. This ratio is calculated by dividing sundry debtors by current assets.

$$\text{SDCA} = \frac{\text{Sundry Debtors}}{\text{Current assets}} \times 100$$

The increase in the ratio is an indication of weak current assets management of the firm.

iv. Cash and Bank Balance to Current Assets (CBCA):

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

$$\text{CBCA} = \frac{\text{Cash and Bank}}{\text{Current Assets}} \times 100$$

Higher the percentage covers the risk and profitability of the business.

v. Misc. Current Assets to Current Assets (MCACA):

This ratio shows the percentage of current assets in the form of Misc. Current assets. It is given by:

$$\text{MCACA} = \frac{\text{Misc Current Assets}}{\text{Current Assets}} \times 100$$

vi. Sundry Creditors to Current Liabilities (SCCL):

This ratio shows the percentage of current liabilities in the form of sundry creditors. It can be calculated as:

vii. Provision to Current Liabilities (PCL):

It shows the percentage of current liabilities in the form of provisions. It is given by:

$$\text{PCL} = \frac{\text{Provisions}}{\text{Current Liabilities}} \times 100$$

viii. Current Ratio (CR):

This ratio is computed as dividing current assets by current liabilities. The high ratio indicates the liquidity position of company is strong & able to pay current obligation or bills. Generally, the current ratio of 2:1 is considered satisfactory. More ratios indicates censer amount of cash. It is given by:

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

ix. Quick Ratio (QR):

This ratio is computed as dividing current assets by current liabilities. The quick assets do not include the amount invested in the inventories. It is reliable to measure the company's liquidity. Generally, the company with quick ratio 1:1 is considered to be in sound position. It is given by

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

xii. Inventor Turnover Ration (ITR)

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

$$ITR = \frac{\text{Sales}}{\text{Closing Inventory}}$$

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

xii. Receivable or Debtors Turnover Ratio (RTR)

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

$$\text{PTR} = \frac{\text{Credit Sales}}{\text{Debtors}}$$

xiii. Total Assets Turnover (TATR)

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

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

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

xiv. Gross Profit Margin (GPM)

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

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

xv. Net Profit Margin (NPM)

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

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

xvi. Return on Total Margin (ROA)

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

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

b. Statistical Tools

Statistical method one the mathematical techniques used to facilitate the analysis & interpretation of numerical data secured from groups of individuals or group of observation from a single individuals. Statistical method studies only a group of individual but not a single unit. A introduction of the statistical tools which have been used in this study are given below:

i. Karl's Parson's Correlation Coefficient Method

Karl's Person's method is must widely used method of measuring the relationship between two variables. The relationship between two variable say 'X' & 'y' for a given set 'n' observation as defined by Pearson's correlation coefficient is measured by 'r'.

$$R = \frac{\text{Cov}(x,y)}{x \cdot y}$$

Where, Cov (x,y)= covariance between variable x & y is given by

$$= \frac{\sum (X - \bar{X})(Y - \bar{Y})}{n}, \text{ Or}$$

$$r(x, y) = \frac{\sum xy}{n \uparrow x \cdot \uparrow y}$$

Where, $x = (X - \bar{X})$

$$y = (Y - \bar{Y}).$$

$\uparrow x$ = Standard deviation of x series & equal to.

$$= \sqrt{\frac{\sum x^2}{n}}, = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

y = Standard Deviation of Y series is given by.

$$= \sqrt{\frac{\sum y^2}{n}}, = \sqrt{\frac{\sum (Y - \bar{Y})^2}{n}}$$

Where,

\bar{X} = Mean of Variable x.

\bar{Y} = Mean of Variable y.

n = Number of Pairs of x and y observation.

Here, the value of coefficient cannot be more than +1 and less than -1 i.e. its value lies between the range of +1 and -1. If the value of coefficient is near +1 there is positive correlation and if the value is near -1 there is negative correlation between two variables. But if the value is zero there is no correlation exists between variables.

The degree of reliability of computed correlation can be judged with the help of its probable error,

$$\text{Probable Error (P.E.)} = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

Where, r = Correlation Coefficient.

n = Number of Pairs of Observation.

$$\frac{1-r^2}{\sqrt{n}} = \text{Standard error of correlation coefficient (S.E.).}$$

$$\text{P.E.} = 0.6745 \times \text{S.E.}$$

If $r < \text{P.E.}$ than the correlation coefficient is insignificant.

If $r > 6 \text{ P.E.}$ that correlation coefficient is significant.

Where, 6 P.E. = 6 times of probable error.

The upper and lower limits with in which the correlation coefficient of the population is expected to lie are $(r + \text{P.E.})$ and $(r - \text{P.E.})$ respectively.

ii. Simple Linear Regression Model

Regression is that statistical tool with the help of which the unknown value of the variable can be estimated (or predicted) on the basis of known value of the other variable. The analysis used to describe the average mathematical relationship between two variables is called simple linear regression model. There is only one independent variable. The variable to be predicted is called the dependent variable and the variable on which the prediction is based is called the independent variable.

A simple regression equation, which is used in this research study, is given by:

$$X = a + by$$

Where, X = Dependent variable.

Y = Independent variable

a & b = Parameters.

The estimating equation or regression equation of x on y is written by:

$$X - \bar{X} = b_{xy} (Y - \bar{Y})$$

Where,

$$B_{xy} = r \frac{x}{y}$$

Similarly, regression equation of y on x is given by:

$$Y - \bar{Y} = b_{yx} (X - \bar{X})$$

Where,

$$B_{yx} = r \frac{y}{x}$$

r = coefficient of simple correlation between variable x and y .

σ_x = Standard deviation of variable x .

σ_y = Standard deviation of variable y .

\bar{X} = Mean of x

\bar{Y} = Mean of y .

3.6 Definition of the Operational Terms

The operational terms used in this study have been defined below to avoid any confusion and misunderstanding.

i. Cash: The term cash refers to the gross cash for this study. It means that the cash cover total volume of current assets of DNPL.

ii. Current Assets: Current assets in the company's compares usual items like cash in hand and at bank, account receivable, and inventories. But in addition, balance sheet of some of the companies shows other miscellaneous current assets. In this study, current assets include the sum

total of cash, receivable, inventories and miscellaneous CAs. In short CAs includes those assets, which can be converted into cash within a year.

iii. Current Liabilities: These liabilities include account payable short term bank loans and reserve and provision created for specific purpose. But general reserve and reserve for future contingencies are not included in CLs though they are sometimes shown under the heading of CLs by sum of the companies in other word all the payment that has to be mode by the company within an accounting period included in current liabilities.

iv. Sales: Sales means trading sales only and it does not included miscellaneous sales.

v. Fixed Assets: The fixed assets of the DNPL consist of ordinary fixed assets like land and building, plant and machinery, furniture and fixtures, vehicles and office equipment etc.

vi. Inventories: It includes the stores and spores, raw material, packing materials, stock in process, finished goods and materials in transit.

vii. Receivable: It includes receivables from the debenture, which are over six months and others.

viii. Prepaid, Advances, Loans: It includes the advance to employees, other advances, security deposits, advance to supplier, prepaid expenses, insurance claim etc.

ix. Sundry Creditors: It includes total amount purchases and others, which are to be paid to the creditors.

CHAPTER – IV

PRESENTATION AND ANALYSIS OF DATA

The basic objective of this study as stated in chapter one is to have true insight in to “Cash Management” of DNPL. For accomplishment of these objectives, a definite course of research methodology has been followed, which is described in chapter third. Now in this study the effort has been made to assess and analysis the cash management to disclose the actual position of cash management in DNPL.

4.1 Analysis of Liquidity Position

4.1.1 Analysis of Cash and Bank Balance

Management of cash plays a significant role in current assets of DNPL. The total cash includes cash in hand, cash at bank and cash in transit. The below table shows the cash position of the company during the period under study.

Table 4.1: Cash and Bank Balance and Variations

Fiscal Year	Cash Balance in Rs.	Increase/Decrease
2055/56	35027847	-
2056/57	63079051	80.08%
2057/58	53822377	(14.67)%
2058/59	38530836	(28.41)%
2059/60	58823666	52.67%
2060/61	76545426	30.13%
2061/62	51678428	(32.49)%
2062/63	65072809	25.92%

Source: Audited Balance Sheet of DNPL for the Relevant Year.

Note: Figures in brackets () indicates negatives.

Above table 4.1 shows the cash balance of the DNPL in different last eight years. The reflects that the company's cash management policy is fluctuating nature. In the year 2056/57, the cash balance increased by 80.08%. In the year 2057/58 the cash balance decreased by 14.67%, and the cash balance of 2058/59 also decreased by 28.41%. In the year 2059/60 the cash balance increased by 52.67% and 2060/61 the cash balance also increased by 30.13%. And in the year 2061/62 the balance decreased by 32.49% and in the year 2062/63 the balance increased by 25.92%.

Hence, it shows that the company has been following strict policy to manage cash. The table described that there exists uncertainty about cash balance. It also shows that the company has not clear plan to manage cash.

4.1.2 Analysis of Dispersion of Cash and Bank Balance

Standard deviation is the measurement of disposition, used for the analysis.

Table 4.2: Cash and Bank Balance and Dispersion

(Rs. In million)

Fiscal Year	Cash Balance (X)	$x = (X - \bar{X})$	$x = (X - \bar{X})^2$
2055/56	35.02	-20.297	411.968
2056/57	63.07	7.753	60.109
2057/58	53.82	-1.497	2.241
2058/59	38.53	-16.787	281.303
2059/60	58.82	3.503	12.271
2060/61	76.54	21.223	450.415
2061/62	51.67	-3.647	13.30
2062/63	65.07	9.753	95.121
Total	X = 442.54		$x^2 = 1327.226$

$$\text{i. Mean } (\bar{X}) = \frac{\sum X}{N}, = \frac{442.54}{8}, = 55.317$$

$$\text{ii. S.D. ()} = \sqrt{\frac{\sum x^2}{N}}, = \sqrt{\frac{1327.228}{8}}, = 12.88$$

$$\text{iii. Coefficient of Variation (C.V.)} = \frac{\text{S.D.}}{\bar{X}}, = \frac{12.88}{55.317} \times 100, = 23.28$$

The cash balance of the company is in very fluctuating pattern. The standard deviation Rs. 12.88 million, which indicates the fluctuating pattern of cash balance. Coefficient of variation of cash balance is 23.28, by this result company has less homogeneity or consistency in the cash balance pattern in the study of 8 years periods.

4.1.3 Analysis of Cash Turnover Ratio/Sales to Cash Bank Balance

The cash turnover ratio shows the speed of cash received from the sales, higher ratio represents sound liquidity and vice versa.

Table 4.3: Sales and Cash or Bank Balance, Turnover Ratio

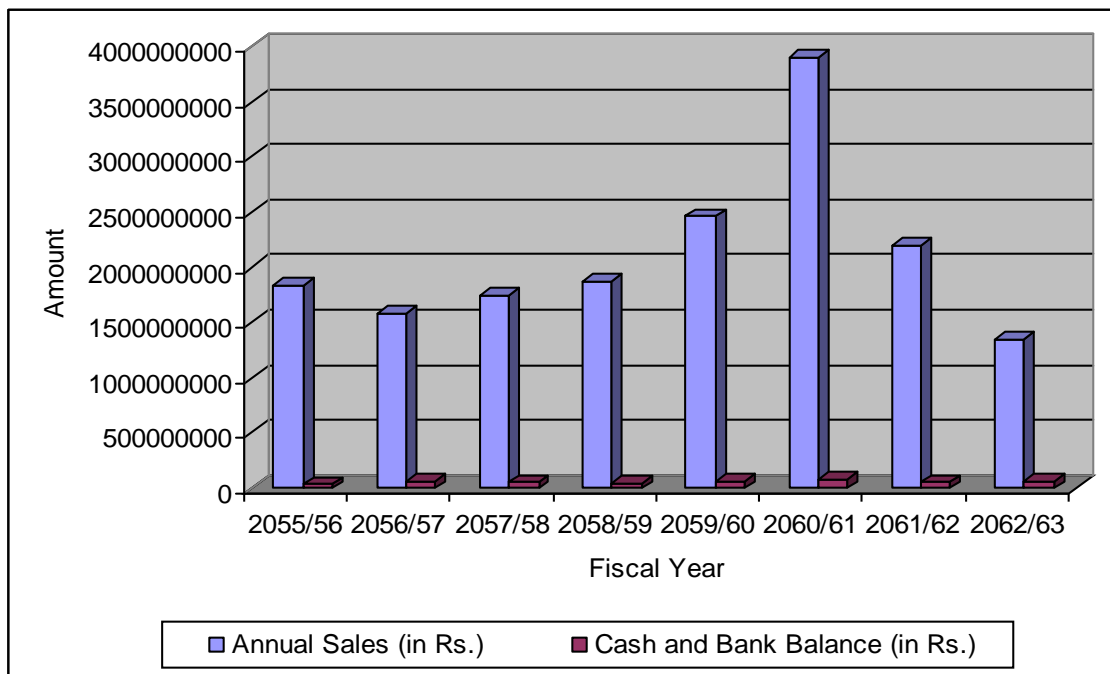
Fiscal Year	Annual Sales (in Rs.)	Cash and Bank Balance (in Rs.)	Cash Turnover Time	Cash Conversion Days
2055/56	1842372311	35027847	52.59	7
2056/57	1580455250	63079051	25.06	14
2057/58	1743145018	53822377	32.39	11
2058/59	1875868790	38530836	48.68	8
2059/60	2461000708	58823666	41.84	9
2060/61	3898942646	76545426	50.94	7
2061/62	2193935368	51678428	42.45	9
2062/63	1350551513	65072809	35.81	10
Total	17446271600	442580440		
Average			41.22	

Source: Audited Balance Sheet and P/L A/C of DNPL

Above table 4.3 shows that the highest cash turnover ratio is 50.94 times in the fiscal year 2060/61. the average turnover ratio is 41.22 times. The lowest turnover ratio is in the year 2056/57, which is 25.06 times. This result shows that cash turnover time in the company is not consistent.

The table also shows that the cash conversion cycle fluctuated 7 to 11 days. The average conversion days is 9.38. This shows the company is able to get amount due in time.

Figure 4.1: Graphical Presentation of Sales and Cash/Bank Balance



4.1.4 Analysis of Correlation between Sales and Cash/Bank Balance

The balance held at the end of fiscal year could fluctuate in relation to fluctuations in other variables. But in general sales grow higher, the cash balance held trend to be higher too, and vice versa. It means that cash balance held and sales volume is positively correlated. The following statistical analysis shows if the company has been following the general rule or not.

Table 4.4: Analysis of Correlation between Sales and Cash/Bank Balance

Fiscal Year	Sales (X)	Cash & Bank Balance (Y)	x = (X-\bar{X})	x²	y = (Y-\bar{Y})	y²	xy
2055/56	1842	35.02	-338	114244	-20.30	412.09	6861.4
2056/57	1580	63.07	-600	360000	7.75	60.06	-4650
2057/58	1743	53.82	-437	190969	-1.50	2.25	655.5
2058/59	1875	38.53	-305	93025	-16.79	281.9	5120.9
2059/60	2461	58.82	281	78961	3.50	12.25	983.5
2060/61	3898	76.54	1718	2951524	21.22	450.29	36456
2061/62	2193	51.67	13	169	-3.65	13.32	-47.45
2062/63	1850	65.07	-330	108900	9.75	95.06	-3217.5
N = 8	X = 17442	Y = 442.54		x² = 3897792		y² = 1327.22	xy = 42162.35

i. Mean (\bar{X}) = $\frac{\sum X}{N}$, = $\frac{17442}{8}$, = 2180

ii. Mean (\bar{Y}) = $\frac{\sum Y}{N}$, = $\frac{442.54}{8}$, = 55.317

iii. Karl Pearson's Correlation (r)

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$= \frac{42162.35}{\sqrt{3897792} \sqrt{1327.22}}, = \frac{42162.35}{1974.23 \times 36}$$

$$= 0.59$$

Above calculated correlation shows high degree of positive correlation between sales volume and cash balance. The correlation coefficient 0.59 is practically significant. To test the measurement of reliability of the correlation coefficient (r) the probable error can be shown as below.

$$\begin{aligned}\text{Probable Error (P.E.)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.59^2}{\sqrt{8}}, = 0.155\end{aligned}$$

Conclusion: $0.59 > \text{P.E.}$ the value of (r) is significant. i.e. the correlation is significant.

The upper and lower limits within which the correlation coefficient expected to lie are given by:

$$\text{Upper Limit } r + \text{P.E.} = 0.59 + 0.155 = 0.745$$

$$\text{Lower Limit } r - \text{P.E.} = 0.59 - 0.155 = 0.435$$

So, the coefficient of correlation expected to lie between 0.745 and 0.435.

4.2 Analysis of Liquidity Relation between Its Variables

Liquidity ratios measure the firm's ability to meet current obligations. It reflects the short-term financial strength of the business. If firm has adequate liquidity position, the short-term liquidity position, the short-term creditors are interested in such firm as a result the firm requirements readily. But too much liquidity position indicates the mismanagement of liquid assets. The liquidity position can be analyzed with the help of current ratio and quick ratios are as follows.

4.2.1 Analysis of Current Ratio (Current Assets of Current Liabilities)

The current ratio of DNPL can be traced below.

Table 4.5: Current Assets, Current Liabilities and Current Ratio

Fiscal Year	Current Assets	Current Liabilities	Ratio
2055/56	335654639	246134174	3.39:1
2056/57	102314484	293167030	3.49:1
2057/58	1068440043	246423761	4.33:1
2058/59	1114809737	277445231	4.10:1
2059/60	1681074449	340863195	4.93:1
2060/61	1597561896	3505307225	4.56:1
2061/62	1752856957	1631182626	1.07:1
2062/63	1884210608	1835166144	1.03:1

Source: Audited B/S and P/L of DNPL

Higher the current ratio better is the liquidity position and vice versa. For the many firms the standard ratio 2:1. Here the table 4.5 shows that in the fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 the current ratios are 3.39:1, 3.49:1, 4.33:1, 4.10:1, 4.93:1, 4.56:1, 1.07:1 and 1.03:1 respectively. These ratios show that the company has invested more amounts in current assets with comparing current liabilities. From the creditor's point of view, it is favorable but companys view point excessive investment is current assets that do not produce good return. This table shown that in the year 2061/62 and 2062/63 the ratios are 1.07:1 and 1.03:1, which falls below than standard.

4.2.2 Analysis of Acid Test or Quick Ratio or Quick Assets to Current Liabilities

The acid test ratio shows the relation between quick assets and current liabilities. This ratio conveys the most precise information on liquidity position of a firm. Since it excludes the inventory, the least liquid assets from the current assets and compares it with current liabilities. Inventory is less liquid because it requires certain time to get convert into cash. Quick ratio measures the capacity of firm to meet its current liabilities quickly. It is current liabilities quickly. It is computed dividing quick assets by current liabilities.

Table 4.6: Quick Assets, Current Liabilities and Quick/Acid Test Ratio

Fiscal Year	Quick Assets	Current Liabilities	Ratio
2055/56	670245756	246134174	2.72:1
2056/57	733163834	293167030	2.5:1
2057/58	868472512	246423761	3.52:1
2058/59	744093223	277445231	2.63:1
2059/60	992940900	340863195	2.91:1
2060/61	1126892123	3505307225	3.21:1
2061/62	962968752	1631182626	0.59:1
2062/63	1007632376	1835166144	5.49:1

Source: Audited B/S of DNPL for the Relevant Year

The standard quick ratio is 1:1. The table 4.6 shows that the fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 the company has quick ratio are 2.72:1, 2.5:1, 3.52:1, 2.63:1, 2.91:1, 3.21:1, 0.59:1 and 5.49:1 respectively. Above some ratios are higher than the standard and some are lower. Higher ratios are indicates the good liquidity position.

4.3 Analysis of Profitability Position

A company should earn profit to survive and growth over a long period of time. Profit is essential, but it would be wrong to assume that every action initiated by management of a company should be aimed at maximizing profit, irrespective of social consequence. It is fact that sufficient profit must be earned to sustain the operation of the business to be able to obtain funds from investors for expensing and growth and to contribute towards the social overheads for the welfare of the society.

Profit is difference between revenues and expenses over a period of time. Profit is the ultimate output of company, and it will have no future if it fails to make sufficient profit. Therefore, the financial manager should continuously evaluate the efficiency of its company in term of profit. The profitability ratios are calculated to measure the operating efficiency of the company. Besides management creditors and owners are also inherited in the profitability of the firm (Pandey, 1999:124).

4.3.1 Analysis of Net Profit Margin Ratio

It measures the relation between net profit and sales of a firm. A high profit margin indicates adequate return to the firm and that enable a firm to stay in adverse economic situation such as: vast competition, sales price declining, cost of production rising and demand of product falling. Net profit margin ratio is computed by dividing net profit after tax by sales.

Table 4.7: Net Profit, Sales or Net Profit Margin Ratio

Fiscal Year	Net Profit	Sales	Ratio %
2055/56	5282830	1842372311	0.29
2056/57	(15232585)	1580455250	0.96
2057/58	10545243	1743145018	0.60
2058/59	26657889	1875868790	1.42
2059/60	50250248	2461000708	2.04
2060/61	73024651	3898942646	1.87
2061/62	49807981	2193935368	2.27
2062/63	29052985	1350551513	1.57
Average			1.38

Source: Audited B/S of DNPL for the Relevant Year

Table 4.7 shows the net profit margin of DNPL of last eight years. It is the saying that the public companys operate in loss but the profit earned by the DNPL is very nominal net profit percentage in year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 are 0.29%, 0.96%, 0.60%, 1.42%, 2.04%, 1.87%, 2.27% and 1.57% respectively. In the year 2061/62 the net profit margin is higher than other years. While the amount of sales is highest in the year 2060/61 but the percentage of net profit is minimum.

4.3.2 Analysis of Return on Working Capital

This ratio shows the utilization of current assets with respect to net profit after tax. It is computed by dividing net profit after tax by current assets. Higher ratio indicates higher utilization of current assets to earn profit and vice versa.

Table 4.8: Net Profit after Tax, Current Asset and Return on Working Capital

Fiscal Year	Net Profit	Current Assets	Ratio %
2055/56	5282830	335654639	0.632
2056/57	(15232585)	102314484	1.49
2057/58	10545243	1068440043	0.99
2058/59	26657889	1114809737	2.39
2059/60	50250248	1681074449	2.99
2060/61	73024651	1597561896	4.57
2061/62	49807981	1752856957	2.84
2062/63	29052985	1884210608	1.542
Average			2.18

Source: Audited B/S and P/L of DNPL for Relevant Year

The table shows that the DNPL earns a little profit on its current assets. The company is not able to utilize its available current assets. The company's net profit on current assets ratio in fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 are 0.632%, 1.49%, 0.99%, 2.39%, 2.99%, 4.57%, 2.84%, 1.542% respectively. The company's highest net profit percentage is 4.57% in the year 2060/61. It shows the profit margin ratio is in the increasingly trend up to the year 2060/61 but decreased in the year 2062/63.

4.3.3 Analysis of Net Profit after Tax to Quick Assets

This ratio is used to analyze whether the firm is able to utilize its quick assets or not. Higher the ratio indicates efficient utilization of quick assets and vice versa. This is computed by dividing net profit after tax by quick assets.

Table 4.9: Net Profit after Tax, Quick Assets and Return on Quick Assets

Fiscal Year	Net Profit	Quick Assets	Ratio %
2055/56	5282830	670245756	0.79
2056/57	15232585	733163834	2.03
2057/58	10545243	868472512	1.21
2058/59	26657889	744093223	3.58
2059/60	50250248	992940900	5.06
2060/61	73024651	1126892123	6.48
2061/62	49807981	962968752	5.17
2062/63	29052985	1007632376	2.86
Average			3.41

Source: Audited B/S and P/L of DNPL for relevant years.

Quick Assets = Current Assets – Inventory

Table 4.9 shows that the net profit on quick assets of DNPL is in the increasing order. The highest percentage of net profit on quick assets is 6.43% in the fiscal year 2060/61, and the lowest 0.79% is in the year 2055/56. The profit margin is not satisfactory of the DNPL.

4.4 Analysis of Liquidity Relation to Profitability

There exists conflict between two words liquidity and profitability. Liquidity measures the solvency position of a firm in the short period, that's way the firm should maintain provision for cash and bank balance. But profitability refers the earning ability. Higher the liquidity, lower the risk consequences lower the profitability, lower the liquidity, higher risk and higher the profitability. Thus, there is contradiction between liquidity

and profitability. So the firm should seek for traded off between the two i.e. liquidity and profitability.

4.4.1 Analysis of Correlation between Return on Working Capital Ratio and Current Ratio

The analyzing the relation between return on working capital ratio and current ratio, Karl's Pearson's Coefficient of correlation has been analyzed.

Table 4.10: Correlation between Return on Working Capital Ratio and Current Ratio

Fiscal Year	Return on WC (X)	Current Ratio (Y)	x = (X - \bar{X})	x ²	y = (Y - \bar{Y})	y ²	xy
2055/56	0.63	339	(1.55)	2.40	4	16	(6.2)
2056/57	1.49	349	(0.69)	0.47	14	196	(9.66)
2057/58	0.99	433	(1.19)	1.42	98	9604	(116.62)
2058/59	2.39	400	0.21	0.04	65	4225	13.65
2059/60	2.99	493	0.81	0.66	158	24964	127.98
2060/61	4.57	456	2.39	5.71	121	14641	289.20
2061/62	2.84	107	0.66	0.44	(228)	51984	(150.48)
2062/63	1.54	103	(0.64)	0.41	(232)	53824	148.48
N = 8	X = 17.44	Y = 2680		x ² = 11.55		y ² = 159454	xy = 296.32

i. Mean (\bar{X}) = $\frac{\sum X}{N}$, = $\frac{17.44}{8}$, = 2.18

ii. Mean (\bar{Y}) = $\frac{\sum Y}{N}$, = $\frac{2680}{8}$, = 335

iii. Karl Pearson's Correlation (r)

$$\begin{aligned} r &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ &= \frac{296.32}{\sqrt{11.55} \sqrt{159454}} \\ &= \frac{296.32}{3.39 \times 399.316} \\ &= 0.22 \end{aligned}$$

This indicates that there exists nominal degree of positive correlation. The significant of this positive correlation has been tested as follows:

$$\begin{aligned} \text{Probable Error (P.E.)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.22^2}{\sqrt{8}} \\ &= 0.21 \end{aligned}$$

Since $r > \text{P.E.}$ i.e. $0.22 > 0.21$, so it indicate that there is significant positive correlation.

4.5 Analysis of Receivable/Debtors Turnover Ratio

This ratio related with total sales and credit sales (debtors). This ratio shows how quickly receivables or debtors are converted into cash. In other word the debtor turnover ratio is a test of liquidity of the debtors of a firm. The ratio reflects that the company's effectiveness of receivable handling, that shows the speed of cash collection from the customers. Higher ratio and shorter the average collection period indicates better trade and consequently better liquidity of the enterprises and vice versa.

Table 4.11: Sales Receivables Turnover Ratio and Average Collection Days

Fiscal Year	Annual Sales (in Rs.)	Receivables (in Rs.)	Ratio (Time)	Average Collection Days
2055/56	1842372311	139638054	13.2	27
2056/57	1580455250	135406514	11.67	31
2057/58	1743145018	150109178	11.61	31
2058/59	1875868790	152192977	12.33	30
2059/60	2461000708	167778845	14.67	25
2060/61	3898942646	177781002	21.93	17
2061/62	2193935368	203881404	10.76	34
2062/63	1350551513	196258556	9.243	38
Average			13.2	22

Source: Audited B/S and P/L of DNPL of relevant years

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

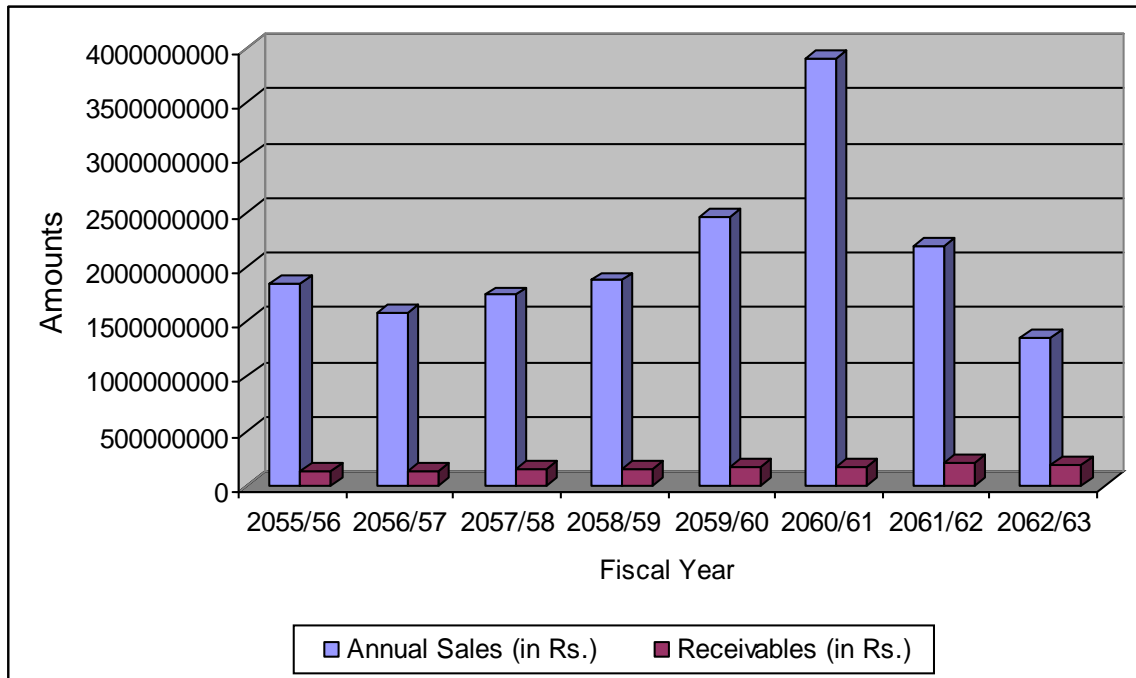
$$\text{Average Collection Days} = \frac{\text{Days in Year}}{\text{Debtors Turnover Ratio}}$$

Table 4.11 shows that the receivable turnover ratio is fluctuating nature. The minimum times is in the fiscal year 2061/62 is 10.76 times, where as the highest ratio is in the year 2060/61 21.93 times. The sales of receivable ratios are 13.2, 11.67, 11.61, 12.33, 14.67, 21.93, 10.76, 9.43 in the fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 respectively.

Average collection day of the DNPL is satisfactory. The company's collection days vary between minimum 17 to 38. The average is 22 days. It shows that by the nature and income status of the customer the credit

collection period is not so bad. Average collection days are 27, 31, 31, 30, 25, 17, 34 and 38 in the fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 respectively.

Figure 4.2: Graphical Presentation of Sales and Receivables



4.6 Analysis of Inventory Turnover Ratio

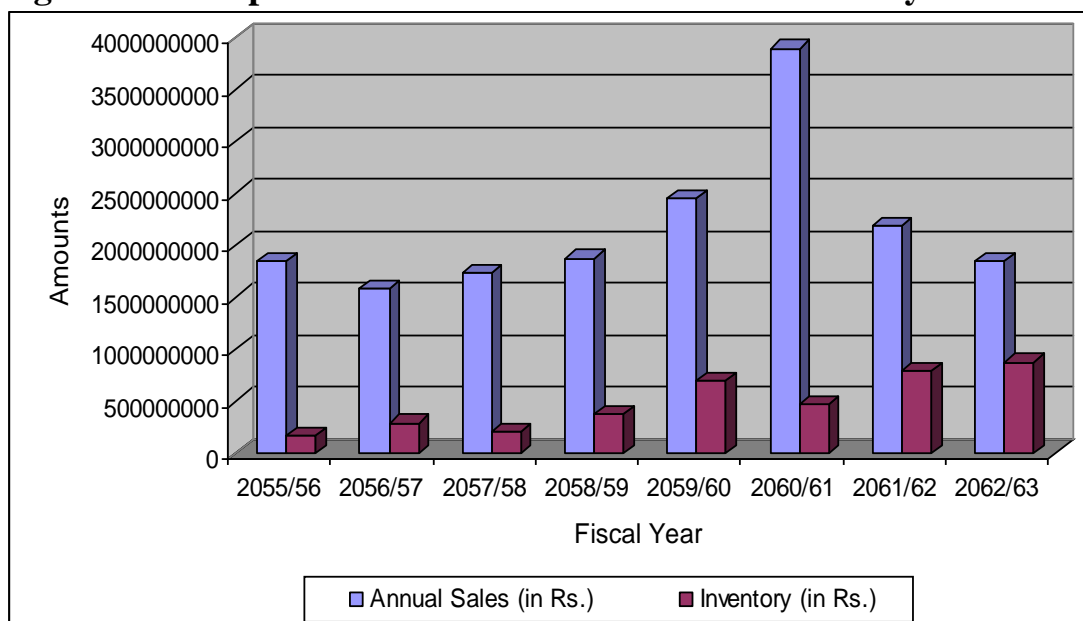
All organizations have a certain inventory. Inventory is least liquid current assets high inventory turnover ratios signals better inventory management and speculative. Thus, every firm has to manage optimum level of inventory. Higher inventory turnover time is favorable and good sign of profitability and vice versa. The inventory turnover time can be calculated dividing sales by the ending or average inventory.

Table 4.12: Sales, Inventory Turnover Ratio

Fiscal Year	Annual Sales (in Rs.)	Inventory (in Rs.)	Ratio (Time)
2055/56	1842372311	165408883	11.14
2056/57	1580455250	289980900	5.45
2057/58	1743145018	199967531	8.72
2058/59	1875868790	370716514	5.06
2059/60	2461000708	688133549	3.58
2060/61	3898942646	470669773	8.28
2061/62	2193935368	789888205	2.78
2062/63	1850551513	876578232	2.11
Average			5.90

Source: Audited B/S and P/L of DNPL for relevant years

The table shows that the DNPL has not efficient inventory management. The inventory turnover is highest in the fiscal year 2055/56 is 11.14 times and least in the year 2062/63 is 2.11 times. In the fiscal year 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62 inventory turnover times are 5.45, 8.72, 5.06, 3.58, 8.26 and 2.78 respectively. These ratios are not satisfactory higher the ratio that leads company toward profitability.

Figure 4.3: Graphical Presentation of Sales and Inventory

4.7 Analysis of Cash and Bank Balance to Account Receivable

This ratio can be computed dividing cash and bank balance by account receivable. It measures the relationship between the cash balance on hand to account receivables. The higher ratios indicates better liquidity position and vice versa. However, too high ratio indicates excessive cash balances are held idle or unproductive.

Table 4.13: Cash and Bank Balance to Account Receivable Ratio

Fiscal Year	Cash / Bank Balance (in Rs.)	Receivables (in Rs.)	Ratio %
2055/56	35027847	139638054	25.08
2056/57	63079051	135406514	46.58
2057/58	53822377	150109178	35.85
2058/59	38530836	152192977	23.32
2059/60	58823666	167778845	35.06
2060/61	76545426	177781002	43.06
2061/62	51678428	203881404	25.35
2062/63	65072809	196258556	33.16
Average			33.43

Source: Audited B/S and P/L of DNPL for relevant years

The table 4.13 shows the relation between cash and bank balance to accounts receivable. The percentage of cash and bank balance vary 25.08% in fiscal year 2056/57. The percentages of cash/bank balance in fiscal year 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 are 35.85%, 25.32%, 35.06%, 43.06%, 25.35% and 32.93% respectively.

Evaluating the percentage of cash and bank balance to accounts receivable it is satisfactory. But here, when account receivable increased cash and bank balance amount decreased. In the fiscal year 2056/57 the

account receivable amount is highest and in the year cash and bank balance is comparatively minimum.

Figure 4.4: Graphical Presentation of Cash/Bank Balance and Receivable

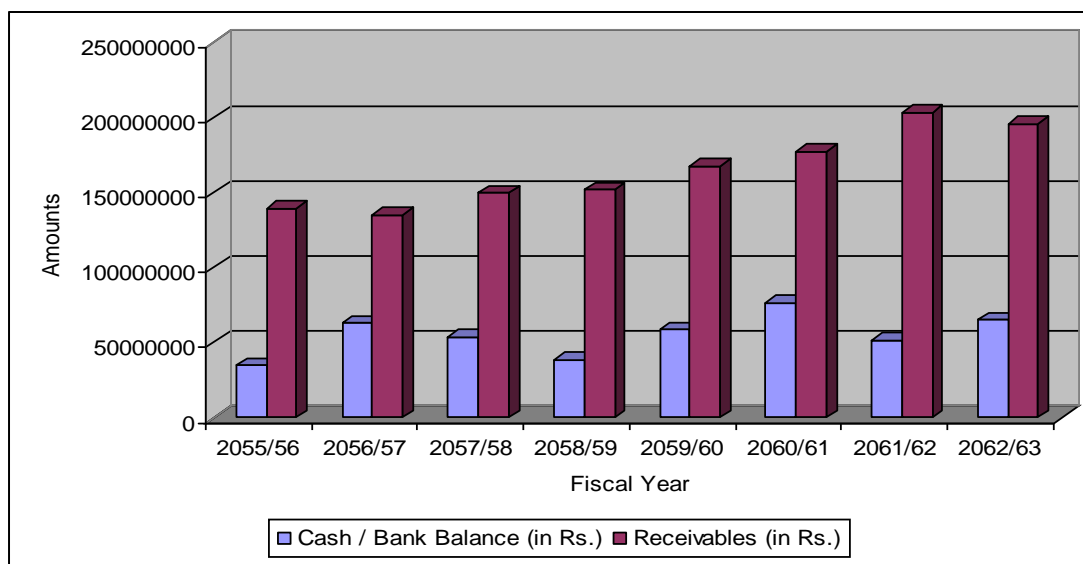


Table 4.14: Analysis of Correlation between Cash and Bank Balance and Account Receivables

(Rs. In million)

Fiscal Year	Cash/Bank Balance (X)	Amount Received (Y)	x = (X - \bar{X})	y = (Y - \bar{Y})	x ²	y ²	xy
2055/56	35.02	139.6	-20.35	-25.77	414	664	524.42
2056/57	63.07	135.4	7.7	-29.97	59.29	898.2	-230.77
2057/58	53.80	150.1	-1.57	-15.27	2.46	233.17	23.97
2058/59	38.50	152.1	-16.87	-13.27	28.45	176.09	223.86
2059/60	53.80	167.7	3.43	2.33	11.76	5.43	77.99
2060/61	76.50	177.7	21.13	12.33	446.5	152	260.5
2061/62	51.60	203.8	-3.77	38.43	14.21	1476.8	-144.88
2062/63	65.70	196.2	10.33	30.83	106.7	950.48	318.47
N = 8	X = 442.99	Y = 1322.99		x ² = 1339		y ² = 4556	xy = 983.56

$$\text{i. Mean } (\bar{X}) = \frac{\sum X}{N}, = \frac{442.99}{8}, = 55.37$$

$$\text{ii. Mean } (\bar{Y}) = \frac{\sum Y}{N}, = \frac{1322.99}{8}, = 165.37$$

iii. Karl Pearson's Correlation (r)

$$\begin{aligned} r &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ &= \frac{983.56}{\sqrt{1339} \sqrt{4556}} \\ &= \frac{983.56}{36.59 \times 67.5} \\ &= 0.398 \end{aligned}$$

This correlation coefficient shows medium degree of positive correlation between cash bank balance and account receivable. To measure the reliability of the correlation coefficient (r), the probable error can be computed as follows:

$$\begin{aligned} \text{Probable Error (P.E.)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.398^2}{\sqrt{8}} \\ &= 0.201 \end{aligned}$$

Since $r > \text{P.E.}$ i.e. $0.398 > 0.201$, so it indicate that there is significant positive correlation.

4.8 Analysis of Cash and Bank Balance to Total Assets

The higher the cash and bank balance over total assets, indicates the less risk and less profit and lower the ratio means higher the profit as well as risk. The ratio is calculated dividing cash and bank balance by total assets.

Table 4.15: Cash and Bank balance to Total Assets Ratio

Fiscal Year	Cash / Bank Balance (in Rs.)	Total Assets (in Rs.)	Ratio %
2055/56	35027847	798057526	4.39
2056/57	63079051	921583634	6.84
2057/58	53822377	1240059011	4.34
2058/59	38530836	1699616037	2.27
2059/60	58823666	2282845857	2.58
2060/61	76545426	2215225172	3.46
2061/62	51678428	3587774566	1.44
2062/63	65072809	3234218306	2.01
Average			3.41

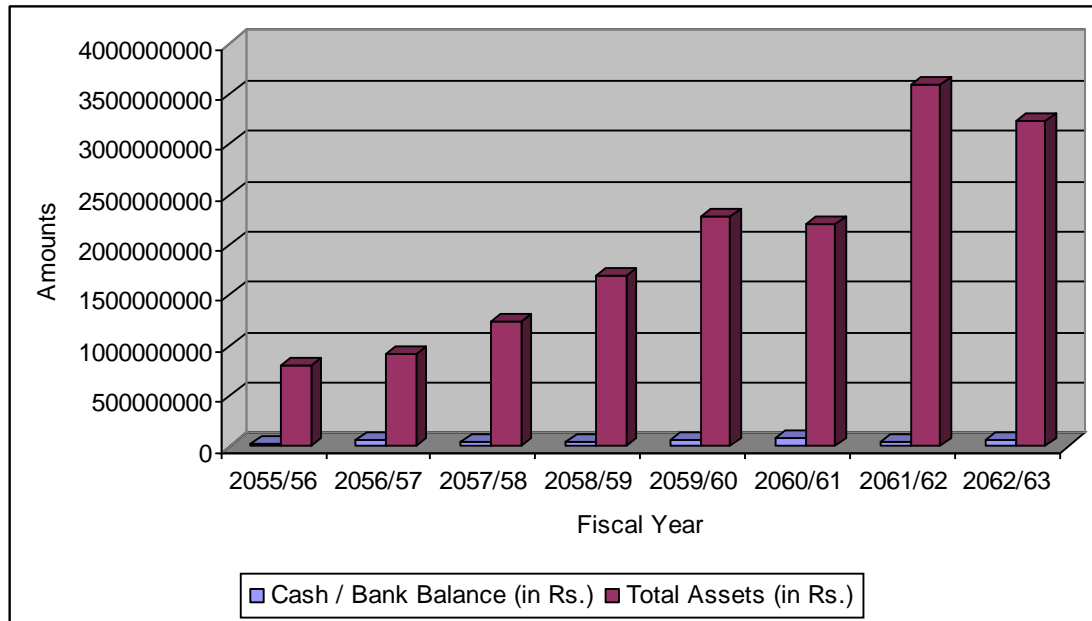
Source: Audited B/S of DNPL for the relevant year

The table 4.15 shows the percentage of cash and bank balance on total assets of DNPL. The percentage of cash balance and bank balance on total assets in fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 are 4.39%, 6.84%, 4.34%, 2.27%, 2.58%, 3.46%, 1.44%, 2.01% respectively.

The table indicates that the proportion of cash balance is very small amount. It concludes that the company could not able to capture business opportunities with this maintained cash balance. The highest cash and

bank balance is in the fiscal year 2056/57 and lowest is in the fiscal year 2062/63. The average balance is 3.41%.

Figure 4.5: Graphical Presentation of Cash/Bank Balance and Total Assets



4.9 Analysis of Cash and Bank Balance to Current Liabilities

Cash and bank balance to current liabilities ratio indicates the amount of cash in percentage available to pay the current obligation of the firm.

The below table shows the level of cash balance in relation to current liabilities of DNPL.

Table 4.16: Analysis of Cash and Bank Balance to Current Liabilities

Fiscal Year	Cash / Bank Balance (in Rs.)	Current Liabilities (in Rs.)	Ratio %
2055/56	35027847	246134174	14.23
2056/57	63079051	293167030	21.52
2057/58	53822377	246423761	21.84
2058/59	38530836	277445231	13.88
2059/60	58823666	340863195	17.26
2060/61	76545426	3505307225	21.84
2061/62	51678428	1631182626	3.17
2062/63	65072809	1835166144	3.60
Average			14.67

Source: Audited B/S of DNPL for the relevant year

The above table shows that cash and bank balance to current liabilities ratios of DNPL. In the fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 the percentage of cash bank balance against current liabilities are 14.23%, 21.52%, 21.84%, 13.88%, 17.26%, 21.84%, 3.17%, and 3.6% respectively. In the fiscal year 2061/62 is very minimum, it is because of the short term loan.

4.10 Analysis of Cash Flow Statement

Cash flow statement describes the cash inflows, out flows and year and cash balance. Inflow of cash is known as source of cash and outflow is called use of cash.

In this analysis, the three components of cash flow statement: Operating activities, investing activities and financing activities have been analyzed.

Table 4.17: Cash Flow Statement

Year Details	2055/56	2056/57	2057/58	2058/59	2059/60	2060/61	2061/62	2062/63
A. Cash Flow from operating activities								
i. Income before tax	5282830	(15232585)	13891662	36528624	66590663	93160276	70412037	41359055
Add: Adjustment for depreciation	2370162	2373865	2109782	2079885	2536865	3628563	3873130	4733227
Differed revenue expenditure written off	2223609	981240	981240	-	-	-	18761	-
Share investment written off	-	20216231	-	-	-	-	-	-
Profit and loss from sale of assets	-	-	(9672)	(183594)	(133344)	7993	(144783)	(840)
Interest expenses	-	-	933562837	105032677	11142576	115686298	119994903	154015233
Share investment written off	-	-	535000	-	-	-	-	-
Dividend received	-	-	(1143400)	(1276000)	(908010)	(7710)	-	-
Interest received on fixed account	-	-	-	-	-	(767325)	-	-
Operating profit before working capital change	-	-	109717449	142181642	179511935	216708095	194154048	117863276
Less: Increase in CA	(114887891)	(159438940)	(191308572)	(172832782)	(545971882)	(112182716)	(346032652)	(86690027)
Add: Decrease in CA & increasing CL	38426983	83139208	90013369	142293017	68725317	227877807	150070404	4109334
Prize of BOD	(391638)	(264142)	-	(527262)	(1332894)	(1507507)	(2190740)	-
Payment of Corporate Tax	(246990)	(564198)	-	(24500000)	-	(9426186)	(14807869)	-
Net cash operating activities	67222955	68789321	8422246	36614615	(299067524)	321469487	(18806720)	62548892
B. Cash from investing activities								
Sale of fixed assets	1460117	967851	1448884	406054	248622	79881	289552	24779
Purchase of fixed assets	(5857129)	3395367	(4418351)	(9597453)	(19695944)	(7595519)	(12050295)	(29078989)
Dividend received	-	-	1143400	1276000	908010	7710	-	-
Investment in various co's Share	-	-	62200000	10800000	6000	675957	284235000	5076000
Cash from investing activities	(4397012)	(2427516)	(8046067)	(8715399)	(18545312)	(14327499)	(301738985)	(41056064)
Cash from financing activities								
Issue of Share	75000	40000	-	-	-	-	-	-
Loan Issue	68729215	99228041	83719984	28036345	456792652	(175520443)	(120865035)	(57220527)
Payment of dividend	(4955540)	-	-	(6194425)	(7433310)	(4955540)	(4422634)	(5052067)
Payment of interest	-	-	(93352837)	(105032677)	(111453676)	(115154848)	(114790794)	(161934199)
Bank overdraft	-	-	-	-	-	5443276	535757179	216108346
C. Net cash from financial activities	63848675	99268041	(963853)	(83190757)	337905666	289920228	295678716	8098447
Net cash flow generation for the year (A+B+C)	(7771292)	(28051204)	(9256674)	(15291541)	202928301	(17721760)	(24866998)	(13394381)
Add: Opening cash balance for the year	42799139	-	63079051	33822377	38530836	58823666	76545426	51678428
Closing balance of cash	35027847	63079051	53822377	38530836	58823666	76545426	51678428	65072809

4.10.1 Analysis of Operating Activities

Those transactions, which are considered in the determination of net income, are known as operating activity.

All cash flows expect related with investing and financing activities are classified as cash available from operating activities.

Table 4.17 shows cash flow statement of the DNPL for the last eight years 2055/56 to 2062/63. The operating result of the DNPL is fluctuating nature. The operating result ranges between Rs. 62548892 to (299067524). In the fiscal year 2062/63 the amount of cash inflow is 62548892 and in the fiscal year 2060/61 there is the highest cash inflow from operating activities is Rs. 32146948. Similarly, the cash inflow in fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60 are 67222955, 68789321, 8422246, 86614615 and respectively. The highest cash outflow from operating result is Rs. 299067524 in fiscal year 2059/60 and in the fiscal year 2061/62 there is Rs. 18806729 cash outflow from operating activities. This result cleans that the DNPL has not following an accretion guidelines policy. There is not consistency in the operating activities. It directly affects the cash balance and requirement.

4.10.2 Analysis of Investing Activities

Investing activities are the acquisition and disposal of long-term assets and other investment not included in cash equivalents. The table shows that the investing activities result is negative that means the DNPL makes investment or outflows of cash in the year. The highest outflow is Rs. 301738985 in the fiscal year 2061/62 and the lowest outflow is Rs. 2427516 in the fiscal year 2056/57. In fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 are 4397012, 8046067, 18715399, 18545312, 14327499 and 41056064 respectively. There is also inconsistent respectively. There is also inconsistent in the investing activities.

4.10.3 Analysis of Financing Activities

A company's transactions with its owners and long term creditors are typically called financing activities. IAS defines, "financing activities are activities that result in changes in the size and composition of the equity, capital and borrowing of the enterprises.

The table shows that the company has not issued any kind of shares during the study period. Where as the long-term and mid-term borrowing is in the fluctuating trend. The company borrows highest amount of Rs. 456792652 in the fiscal year 2059/60 and Rs. 68729215, 99228041, 83719984 and 28036345 are borrowed in the fiscal year 2055/56, 2056/57, 2057/58 and 2058/59 respectively. The company makes payment of Rs. 175520443, 120865035 and 57220527 in the fiscal year 2060/61, 2061/62 and 2062/63 respectively. There is minimum closing cash balance is Rs. 76545426 in the fiscal year 2061/62, which indicates that the company has not a policy to maintain a certain closing cash balance.

Net cash flow result of the DNPL is up and down nature. The aggregate cash position is negative flow or outflow in the year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 are 7771292, 2, 51204, 9256674, 15291541, 17721760, 24866998, and 133944381 respectively. The cash inflow of Rs. 20192830 is in the fiscal year. There is minimum closing cash balance of Rs. 35027847 in the fiscal year 2055/56 and maximum closing cash balance of Rs. 76545426 in the fiscal year 2061/62, which indicates that the company has not a policy to maintain a certain closing cash balance.

4.11 Analysis of Current Assets Variables, Inventory, Sundry Debtors and Advance Deposit

This analysis aims to examine the position of current assets of DNPL. The operating activities are main elements of the cash flow statement and one integral parts of operating activities include current assets variables.

Table 4.18: Current Assets Variables and Fluctuation in these Variables

Fiscal Year	Inventory	Increase (Decrease) Inventory	Sundry Debtor	Increase (Decrease) In Debtor	Advance Deposit	Increase (Decrease) Advance Deposit
2055/56	165408883	-	139638054	-	530470310	-
2056/57	289980900	124572017	135406514	(4231540)	534678319	4208009
2057/58	199967531	(90013369)	150109178	14702664	664540957	129862638
2058/59	370716514	170748983	152192977	2083799	553369410	(111171547)
2059/60	688133549	317417035	167778845	15585868	766338389	212968979
2060/61	470669773	(217463776)	177781002	10002157	872565695	106227306
2061/62	789888205	319218432	203881404	26100402	707408920	(165156775)
2062/63	876578232	86690027	216800211	12918807	714310930	6902010

Source: Audited B/S and P/L A/C of DNPL

Note: Amounts in the brackets indicates negative

One part of the cash management is current assets management. If current assets are properly managed, there is lack of fluctuation in these assets and ultimately that leads consistency in the closing balance of cash. One aspect of current assets management is that, if there has been sound cash management practice in on organization, the fluctuation of these variables is moderate. The other aspect is that these increase/decrease in variables mores in the same direction as the increase/decrease in sales and profit of the organization. In other words, these variables are related with sales

amount of the organization. Thus it can be generalize that inventory, sundry debtors and advance deposit are positively correlated to sales and profit.

The table 4.18 shows inventory is increased by Rs. 124572017 in the fiscal year 2056/57 with comparing to fiscal year. Thereafter in the fiscal year 2058/59 and 2059/60 the inventory is increased each years by Rs. 170748983 and 317417035 respectively. In the fiscal year 2055/56 the inventory is decreased by Rs. 90013369 and in the fiscal year 2060/61 also decreased by Rs. 319218432 and 86690027 in the fiscal year 2061/62 and 2062/63 respectively.

The table shows the picture of sundry debtors is decreased by 139638054 in the fiscal year 2055/56. After the fiscal year 2055/56 the sundry debtors are increasing trend. In the fiscal year 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 the sundry debtors increased each year by Rs. 14702664, 2083799, 15585868, 10002157, 261004020 and 12918807 respectively.

The table shows advance deposits are in fluctuating trend. In the year 2056/57 is in increased by Rs. 4208009 and also increased by Rs. 129862638 in the fiscal year 2057/58. In the fiscal year 2058/59 and 2061/62 is in decreased by Rs. 111171547 and 165156775. In the fiscal year 2059/60, 2060/61 and 2062/63 sundry debtors are increased by Rs. 212968979, 106227306 and 6902010 respectively.

4.12 Analysis of Dispersion in Inventory and Correlation between Sales and Inventory

Standard deviation the measurement of dispersion and coefficient of variation of the inventory has been computed as follows:

$$\text{i. Mean } (\bar{X}) = \frac{\sum X}{N}, = \frac{3846}{8}, = 480.75$$

$$\text{ii. Mean } (\bar{Y}) = \frac{\sum Y}{N}, = \frac{17445}{8}, = 2180.63$$

$$\begin{aligned} \text{iii. Standard Deviation of Inventory } s_x &= \sqrt{\frac{\sum x^2}{N}}, = \sqrt{\frac{522423.48}{8}}, \\ &= 255.54 \text{ (Appendix – II)} \end{aligned}$$

iv. Karl Pearson's Coefficient of Correlation (r) between Sales and Inventory

$$\begin{aligned} r &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ &= \frac{292207.24}{\sqrt{522423.48} \sqrt{3900643.86}}, = \frac{292207.24}{722.788 \times 1975.00}, = 0.205 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation on Investors} &= \frac{s}{\bar{X}} \\ &= \frac{255.54}{480.75} \times 100, = 53.15\% \end{aligned}$$

$$\begin{aligned} \text{Probable Error (P.E.)} &= 0.6745 \times \frac{(1-r)^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{(1-0.205)^2}{\sqrt{8}}, = 0.189 \text{ (Appendix – II)} \end{aligned}$$

The result, standard deviation 255.54 and coefficient of variation 53.15% means there is fluctuation in the inventory. The company is unable to manage its inventory properly.

Karl Pearson's Correlation coefficient 0.205, which means there is positive correlation between sales and inventory and $r < \text{P.E.}$ So the relation is insignificant.

a. Analysis of Dispersion in Sundry Debtors, Correlation between Sales and Sundry Debtors

i. Mean (\bar{X}) = $\frac{\sum X}{N}$, = $\frac{1319}{8}$, = 164.875

ii. Mean (\bar{Y}) = $\frac{\sum Y}{N}$, = $\frac{17445}{8}$, = 2180.63

iii. Standard Deviation of Inventory $s_x = \sqrt{\frac{\sum x^2}{N}}$, = $\sqrt{\frac{3900643.83}{8}}$,
= 698.269 (Appendix – II)

iv. Karl Pearson's Coefficient of Correlation (r) between Sales and Inventory

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}, = \frac{48737.6}{\sqrt{4522.83} \sqrt{3900643.83}}, = \frac{48787.6}{67.25 \times 1975.00}, = 0.367$$

Coefficient of Variation on Investors = $\frac{s_x}{\bar{X}}$, = $\frac{698.269}{164.875} \times 100$, = 4.23%

Probable Error (P.E.) = $0.6745 \times \frac{(1-r)^2}{\sqrt{N}}$, = $0.6745 \times \frac{(1-0.367)^2}{\sqrt{8}}$,
= 0.0729 (Appendix – II)

Standard deviation (Rs. 698.269 million) and coefficient of variation 4.24% suggest that there is wide fluctuation in sundry debtor. Karl Pearson's coefficient of correlation (r) between sales and sundry debtor is 0.367. This indicates lower degree of positive correlation between two.

Here, P.E. < r < 6(P.E.) i.e. 0.0729 < 367 < 0. It implies although there exist positive correlation between two no conclusion could be derived as to statistically significant/insignificant. This suggest that DNPL has been maintaining sundry debtors in accordance with sales.

The upper and lower limits within which the correlation coefficient is expected to lie are given by:

$$\text{Upper Limit} = R + \text{P.E.} = 0.367 + 0.0729 = 0.4399$$

$$\text{Lower Limit} = R - \text{P.E.} = 0.367 - 0.0729 = 0.2941$$

So, the coefficient of correlation is expected to lie between 0.2941 and 0.4399.

b. Analysis of Dispersion in Advance Deposit and Correlation between Sales and Advance Deposit

$$\text{i. Mean } (\bar{X}) = \frac{\sum X}{N}, = \frac{5340}{8}, = 667.5$$

$$\text{ii. Mean } (\bar{Y}) = \frac{\sum Y}{N}, = \frac{17445}{8}, = 2180.63$$

$$\text{iii. Standard Deviation of Inventory } x = \sqrt{\frac{\sum x^2}{N}}, = \sqrt{\frac{105096}{8}}, = 114.62$$

iv. Karl Pearson's Coefficient of Correlation (r) between Sales and Inventory

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}, = \frac{457574.21}{\sqrt{105096} \sqrt{3900643.83}}, = \frac{457574.21}{640255.5}, = 0.71$$

$$\text{Coefficient of Variation} = \frac{x}{\bar{X}}, = \frac{114.62}{667.5} \times 100, = 17\%$$

$$\text{Probable Error (P.E.)} = 0.6745 \times \frac{(1-r)^2}{\sqrt{N}}, = 0.6745 \times \frac{(1-0.71)^2}{\sqrt{8}}, = 0.12$$

Standard deviation (Rs. 114.62 million) and coefficient of variation 17%, declares that there is consistency in the advance deposit. Karl Pearson's coefficient of correlation coefficient (r) between sales and advance deposit is 0.71, two are highly correlated. (Appendix – II)

Here, P.E. < r, i.e. 0.12 < 0.71 this indicates that the correlation coefficient is significant.

4.13 Analysis of Current Liabilities

To analyze the current liabilities, the degree of dispersion and coefficient of variation tools are used. Low degree of dispersion and coefficient of variation considered favorable, signifying the firm to handle properly its liabilities.

c. Analysis of Dispersion and Coefficient of Variation of Current Liabilities

i. Mean (\bar{X}) = $\frac{\sum X}{N}$, = $\frac{5218}{8}$, = 652

iii. Standard Deviation of Inventory $s_x = \sqrt{\frac{\sum x^2}{N}}$, = $\sqrt{\frac{3145656}{8}}$, = 627

Coefficient of Variation = $\frac{s_x}{\bar{X}}$, = $\frac{627}{652}$, = 0.96

Standard deviation is 627 millions and coefficient of variation 0.96, which is 96%.

4.14 The Main Findings of the Study

The main findings of the study are attributed as follows:

- a. It is found that public sectors enterprises play backbone role for the economic development the nation. DNPL is multinational pioneering manufacturing organization of the Nepal. It serves every parts and limbs of the country. The organization manufactures and sells goods in cash and credit. Average collection

day of the company is nearly 22 days. Company purchase goods in cash as well as credit, it uses LC method for the payment to the suppliers, generally, it sales goods in cash.

- b. The study result implies that the main sources of cash of DNPL are sales revenues and loan from the bank. The company has a few countable sources of miscellaneous incomes. Commission, dividend, and sales of fixed assets, administrative, selling and distribution express.
- c. During the study period the organization has been following tradition accounting system. There is lack of proper planning budgeting and forecasting there is absence of any formalized system of cash planning and cash budgeting is DNPL.
- d. The organization has not exercised the modern techniques to debt collection, monitoring the payment behavior monitoring the payment behavior of customers etc.
- e. The average cash turnover in a year is 41 times which is in fluctuating trend over the study period. The average inventory turnover ratio over the study period is 5.90 times.
- f. The organization has not maintained optimum cash balance. The cash and bank balance with respect to current assets has been fluctuating trend similar to the case with respect to the total assets.
- g. The percentage of cash and bank balance over account receivable is in average 33.43% over the period.
- h. The dispersion of cash and bank balance is Rs. 12.88 million and coefficient of variation is 23.28%. That results there is lack of consistency in cash and bank balance.
- i. The correlation coefficient between sales and cash/bank balance is 0.59, which indicates that both variables are highly positively correlated.

- j. From the fiscal year 2055/56 to 2060/61 the current ratio is enjoyable that means it is higher the general standard 2:1 but in the fiscal year 2061/62 and 2062/63 it is goes down to 1.07:1 and 1.03:1. Similarly the quick ratio is also higher in the preceding six year study and it is not satisfactory in the fiscal year 2061/62 i.e. 0.59:1.
- k. The net profit margin of the company is minimum. The average net profit margin is 1.38% over the study period. Similarly return on working capital is also unsatisfactory the average return on working capital is 2.18%.
- l. Over the study period the average inventory turnover ratio is hardly 6 times.
- m. Cash and bank balance in average is about 33% of account receivable. The about of account receivable is in the increasing trend.
- n. The cash and bank balance is in average 3.18% of the total assets. It is in average 14.67% of current liabilities.
- o. The organization is paying a great amount interest per year. It is found that the main source of financing is bank overdraft, the company has raised from this source in the year 2060/61, 2061/62 and 2062/63 respectively.

CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with the summary of prior chapters, conclusions of the study and recommendations.

5.1 Summary of the Study

With the liberalization policy adopted by both India and Nepal, Nepal has become a place for immediate investment to Indian entrepreneurs. Considering the geographical advantage of Nepal. Dabur entered into a Joint venture with a majority share, thereby establishing Dabur Nepal Pvt. Ltd. In 1989 although established in 1989, the commercial production started on Nov. 5, 1992 Nepal being situated in the Himalayan ranges is an abundant sources of natural herb and spices, used in various Ayurvedic (i.e. personal care, health care and food products), formulation in which Dabur has gained extensive knowledge and expertise. The company's factory and registered office is in Rampur Tokam at Bara district. The corporate office is in TNT building at Teenkune, Koteswore, Kathmandu.

Subsequent to the review of India-Nepal treaty in 1992, the government of India eased out the procedure in Nepal having more than 50 percent component of India and Nepali origin along with cost. This gave further impetus to Dabur Nepal to increase it's production target, with in a span of more than 12 years of it's operation and to be sold at prevalent rates for domestic use and export to India, Bangladesh and other neighboring countries.

So, the objective of the study is focused on the cash management of manufacturing companies. This is a case study of DNPL. The objectives of study are: to examine and critically analyze the cash management

practice of DNPL to examine and analyze liquidity position profitability position and relation between difficult variables, to examine and analyze the practice of DNPL in cash flow statement and cash budgeting and to recommend variable suggestions to cope up with cash management short comings in DNPL.

In this study many dissertations textbooks and journals, which are related with the study topic are reviewed in review of literature chapter. The study period is 8 years so the data involved in the study 2055/56 to 2062/63. The data are analyzed by applying different financial and statistical tools.

The main part of the study is presentation and analysis the data are collected from the balance sheet, profit and loss account and cash flow statement of the DNPL. The data are presented in the table and bar diagram also they are analyzed by using statistical and financial tools.

While analyzing the data it is resulted that the organization's liquidity position is better except the fiscal year 2061/62 and 2062/63, than the profitability position. DNPL doesn't have practice of the cash budget and planning system. Like wise, the correlation between liquidity and profitability variables are adverse.

5.2 Conclusions of the Study

The research study concludes that cash is one of basic elements for all organizations. All activities are lifted by cash. Above analysis reveals that the cash management of DNPL is not satisfactory. The element of cash management such as cash and bank balance, sales, inventory, receivables, advance deposit, cash turnover, debtors turnover all are not managed

properly following definite rules and regulations. There is not separate cash planning and budgeting technique adopted by the company.

The liquidity position of the DNPL is fluctuating in nature but last year 2061/62 and 2062/63 the liquidity ratio is below the general standard.

Although the company has not suffered the loss, but the profit is minimum or nominal, and net profit after tax to quick assets shows the unsatisfactory financial position.

The correlation between different variables of liquidity and profitability are not also in the required situation. The correlation between sales and cash, bank balance is statistically significant positive correlation. But all other correlation between different liquidity and profitability variables are not statistically significant/insignificant. It is concluded that these variables are poorly managed.

The different ratios are very fluctuating in nature, debtors turnover ratio, inventory turnover ratio etc. are also not managed properly.

Many factors or determinants such as nature of business, level of sales, nature of products, quality of customers, competitive position economic condition etc. have to be considered in cash management. The scope of cash management is also related with level of purchases, availability of goods in the market, credit terms, from the suppliers to the buyers, types of credit policy, motives for holding cash cycle and cash budget etc.

5.3 Recommendations

Following variable suggestions are recommended to the DNPL for improving cash management efficiency.

- a. DNPL should maintain optimum cash balance in every fiscal year by determining minimum and maximum cash balance level according to its incomes and expenditures.
- b. DNPL should prepare monthly trial balance. It help to the organization to take corrective measures on adverse financial situation in time. Cash management being management of cash and near cash assets with in a period of one year is very lengthy.
- c. DNPL should give attention in account receivable management. Account receivable can be managed efficiency by designing an appropriate receivable management programme. Either by selling on cash or try to maximize collection efforts. DNPL should provide attractive credit terms to encourage payments by its customers.
- d. Earlier and at the same time make a comprehensive study of character, capacity, capital, customers or institutions that request credit from the company.
- e. DNPL should prepare cash budget on the basis of flow statement. The objective of preparing cash budget is to predict whether at any point of time there is likely to be an excess or shortage of cash. By finding excess or shortage of cash the company can manage the excess cash in investing short-term assets and can manage cash deficit by borrowing short term loan.
- f. DNPL should emphasis its investing activities to invest its surplus cash and activate financing activities to fulfill its cash deficit.
- g. DNPL should maintain optimum level of its current assets variables (Inventory, sundry debtors, and advance deposit) and current liabilities every year. To maintain such level the company should practice the model of inventory control EOQ, ABC debtors should be analyzed and consider while making advance payment. The optimal level of current assets should be determined by fixing

minimum and maximum point of assets the firm should maintain at the particular time period.

- h. DNPL should give attention in operating expenses. The operating expenses is high that reduces the net profit of the company. So the company should apply the cost reduction and cost control techniques in its operation. Standard costing, budgeting, variance analysis, techniques should adopt and periodically performance report should be prepared for cash responsibility center.
- i. For proper utilization of cash and to reduce uncertainty about future cash requirement the firm should apply separate cash budgeting exercise. The specimen of cash budget is given below.

Cash Budget for the Month

Particulars	Amount	Amount
Beginning Balance of Cash		***
Add: Receipts:		
Cash sales	***	
Collection from debtors	***	
Sales of fixed assets	***	
Interest received	***	
Dividend received	***	
Issues of shares	***	
Debenture issues	***	
Loan taken		***
Total receipt		***
Total Cash Available (A)		***
Less: Payments		
Cash purchase	***	
Wages and Salaries	***	
Manufacturing overhead	***	
Administrative overhead	***	
Administrative overhead	***	
Selling overhead	***	
Interest	***	
Dividend	***	
Fixed assets purchases	***	
Repayment of borrowed capital	***	
Total Payment (B)		***
Closing Cash Balance (A-B)		***

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ANNEX – I

Dabur Nepal Private Limited Balance Sheet

2055/56 to 2062/63

Particular	2055/56	2056/57	2057/58	2058/59	2059/60	2060/61	2061/62	2062/63
	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)
Shareholder Fund	244777700 39383542	24777700 63744135	24777700 67990395	24777700 473842404	24777700 517719525	24777700 584204906	247777000 1546000307	24777700 15941638 30566870
Share Capital Reserve and Surplus	691815868	791043909		902800238	1359592890	1184072447	362889233	30566870
Loans Liability								
Secured Loan								
Grand Total	755977110	879565744	967537988	1401420342	1902090115	17930550533	1546000	18546102
Fixed Assets at Cost	42080416	42017890	42782690	445170022	11462129130	465991989	1393158082	13796080
Investment	143367509	123151278	128836278	139636278	139642278	151781287	441759529	45572138
	1855447925	165169168	171618968	584806300	601771408	617773276	1834917611	1835329
Current Assets	165408883	289980900	199967531	370716514	688133549	470669773	789888205	8765782
	139638054	135406514	150109178	152192977	167778845	177781002	203881404	1962585
	35027847	63079051	53822377	38530836	58823666	76545426	51678428	6507280
	495579855	534678319	664540957	553369410	766338389	872565695	707408920	7463010
Inventory Debtors	835654639	1023144784	1068440043	1114809737	1681074449	1597561896	1752856957	18842106
Cash and Bank Balance								
Loan, Advance and Deposit								
Less: Current Liabilities	226590240	309729448	272527023	298195695	380755742	422280119	1654107328	18649297
Net Current Assets	609064399	713415336	795913020	816614042	1300318707	1175281777	98741629	19280819
Preliminary Exp. (to be written off)	1962480	981240	0	0	0	0	0	0
Grand Total	796474804	967531988	967531988	1401420342	1902090115	1793055053	19363366724440	18546102

APPENDIX – II

Analysis of Dispersion and Correlation between Sales and Inventory

(Rs. In Million)

Fiscal Year	Inventory (X)	Sales (Y)	$x = (X - \bar{X})$	$y = (Y - \bar{Y})$	x^2	y^2	xy
2055/56	165	1842	(315.75)	(338.63)	99698.06	114670.27	106922.42
2056/57	286	1580	(191.75)	(600.63)	36768.06	360756.39	115170.80
2057/58	199	1743	(218.75)	(437.63)	79383.06	191520.01	123302.25
2058/59	370	1876	(110.75)	(304.63)	12265.56	92799.44	33737.77
2059/60	688	2461	207.25	280.37	42952.56	78607.34	58106.68
2060/61	470	3899	(10.75)	1718.37	115.56	2952795.45	(18472.47)
2061/62	789	2194	308.25	13.37	95018.06	178.76	4121.3
2062/63	876	1850	395.25	(330.63)	156222.56	109316.20	(130681.51)
N = 8	X = 3846	Y = 17445			$x^2 =$ 522423.48	$y^2 =$ 3900643.86	xy = 292207.24

Analysis of Dispersion in Sundry Debtors, Correlation between Sales and Sundry Debtors

(Rs. In million)

Fiscal Year	Receivable (X)	Sales (Y)	$x = (X - \bar{X})$	$y = (Y - \bar{Y})$	x^2	y^2	xy
2055/56	139	1842	(25.875)	(338.625)	669.515	114670.27	8761.92
2056/57	135	1580	(29.875)	(600.625)	892.515	360756.39	17943.67
2057/58	150	1743	(14.875)	(437.625)	221.26	191520.01	6509.67
2058/59	152	1876	(12.875)	(304.625)	165.75	92799.44	3922.04
2059/60	167	2461	2.125	280.375	4.515	78607.34	595.79
2060/61	177	3899	12.125	1718.375	147.01	2952795.45	20835.29
2061/62	203	2194	38.125	13.375	1453.51	178.76	509.92
2062/63	196	1850	31.125	(330.625)	968.76	109316.20	(10290.70)
N = 8	X = 1319	Y = 17445			$x^2 =$ 4522.83	$y^2 =$ 3900643.86	xy = 48787.6

Analysis of Dispersion in Advance Deposit and Correlation between Sales and Advance Deposit

(Rs. In million)

Fiscal Year	Advance Deposit (X)	Sales (Y)	$x = (X - \bar{X})$	$y = (Y - \bar{Y})$	x^2	y^2	xy
2055/56	530	1842	-137.5	-338.63	18906.25	114670.27	46561.63
2056/57	534	1580	-133.5	-600.63	17822.25	360756.39	80184.10
2057/58	664	1743	-3.5	-437.63	12.25	191520.01	1531.70
2058/59	553	1876	-114.5	304.63	13110.25	92799.44	-34880.13
2059/60	766	2461	98.5	280.37	9702.25	78607.34	27616.44
2060/61	872	3899	204.5	1718.37	41820.25	2952795.45	351406.66
2061/62	707	2194	39.5	13.37	1560.25	178.76	528.11
2062/63	714	1850	46.5	-330.63	2162.25	109316.20	-15374.30
N = 8	X = 5340	Y = 17445			$x^2 = 105096$	$y^2 = 3900643.86$	xy = 457574.21

Computation of Dispersion and Coefficient of Variation of Current Liabilities

(Rs. In million)

Fiscal Year	Current Liabilities (X)	$x = (X - \bar{X})$	x^2
2055/56	246	-406	164836
2056/57	293	-359	128881
2057/58	246	-406	164836
2058/59	277	-375	140625
2059/60	340	-312	97344
2060/61	350	-302	91204
2061/62	1631	979	958441
2062/63	1835	1183	1399489
N = 8	X = 5218		$x^2 = 3145656$