CHAPTER ONE
INTRODUCTION

1.1   Background of the Study

The Nepalese economy is totally dominated by the agriculture sector. About 80% of total economically active population of Nepal is to be involved in agriculture sector. But the agriculture sector has contributed to the total Gross Domestic production (GDP) 36.1% (1064-65) only and growth rate 3.4% at current price in fiscal year 2064/065. Prospects for overall economic development will be brighter only if the present structure of the economy with pre-dominant dependence on traditional agriculture can be gradually transform through the process of industrialization.

The history of development of public enterprise begins after democracy of 2007 B.S. During Rana regime only handful of PEs existed-Biratnager Jute mills, Nepal Bank Ltd. and Juddha Match factory. Realizing the need of industrialization after 2007 democracy, government established 'Udyog Parisad' to encourage industrialization. After some years it changed name to 'Cottage' and village industry department and have began the development of PEs. In 2048 B.S. the democratic government of Nepal adopted the policy of economic liberation. Now many enterprises are under the process of privatization.

Due to the almost Nepalese public manufacturing companies are in hug loses or in bankrupts, therefore government organization is social oriented organization, which serves for society. Bottlers Nepal Limited was establishing in 2037 B.S through as a private sector. But after five years, it's converted into public manufacturing company limited at 2042 B.S. It ensures proper supply and distribution of essential consumer items or soft drinking product through out the country. BNL can play on manufacturing activities for all over the country.

The proposed thesis is based on information provided by the company's finance manager and objectives ones. My emphasis on this thesis is to find out how and when the company taught about the management of cash and what does company to eliminate such types of poor management of cash and drawbacks follow the remedies. Public Organization is not satisfactory completed with private sector organization because of poor management of cash. Therefore, the researcher can find out the public enterprises drawbacks of cash management and to suggest the companies. The study will be beneficial one.

1.2   Introduction of Bottlers Nepal Limited

Bottlers Nepal Limited was establishment in 27th Bhadra, 2037 B. S. (August 1980 A.D.) as a Bottlers Nepal Private Limited. After five years it converted into public company as a Bottlers Nepal Limited. The amount is not invested by HMG. BNL is a Multinational Company. So, the Coca-Cola Sabco (Asia) Ltd, a company incorporated in Dubai, UAE which holds 98.8 Percent share of Bottlers Nepal Limited and only 1.2 Percent share are distributed on common people. It's established its branches in many countries like India, Singapore and Hong Kong etc. The company continues to receive support in the form of rebate on concentrate procured from the Coca-Cola Export Corporation. The Company also received support from Coca-Cola Sabco (Asia) Limited, the parent on sales, marketing and technical operations.

The concept of globalization is one of the major factors which brought in the concept of multinational company. The multinational company is establishing close relationship between each country in the world. Multinational company is being very importance to poor country like Nepal. It is supplies new technology and import huge amount of capital which is must necessary for developing country. Multinational company has been beginning at all country in the world at present situation. Many branches are established in many countries in the world.

The Bottlers Nepal Limited continues to maintain its leadership in the soft drink market because of its strong market infrastructure backed up by company's effective sales and promotional plans and consumers' preferences in company's products. The company has already started distributing the product through the Manual Distribution Center (MDC) directly through its wholly owned company Troika Traders (P) Ltd since 1 Jan. 2006. The result of this distribution through the MDCs is very productive. The company able to increase the market share and numeric distribution by serving the markets more effectively due to the implementation of the MDC distribution model.

The irregularities in the distribution had to be corrected through organize supply and delivery system. The company was not only able to maintain quality but also provide different kinds of service to the consumers.

The success of supply management of BNL led to the addition of supply of essential commodities such as Coca-Cola, Fanta, Sprite and processed edible to its distribution net-work. The profit received form trading activities were invested in the production of basic necessities to boost self sufficiency to accelerate economic growth, and gain public and private support. The following integrants of Coca-Cola can be available:

Nitration facts per 100 ml

Energy   -   42Kcl

Fat   -   0g

Carbohydrate -   11

Carbonated beverage

Ingredients: Carbonated water, sugar, Acidulate, Natural colour and Natural flavours.

At present many branches offices in over all Nepal. Their main office is situating in Balaju, industrial area, Kathmandu. After its establishment, BNL

has continuously distributed qualitative Coca-Cola with proper price to its people, customer and to its country as a whole very honestly.

Since in infancy, as a manufacture house BNL has matured in to diversified conglomerate distribution network all over the country. Its only one Branch Bottlers Nepal (Terai) Limited which is settled at Bharatpur, Chitawan District. The one hundred three dealers through out the country, provide the people easy access to locally produced good and act as a major procurement out led for goods supply in various parts of the country the employment opportunity that arise through the activities of the organization are hard to quantify as they also provide plenty of self-employment opportunities. BNL has helped to develop and boost the Nepalese entrepreneurial abilities. At present the Bottlers Nepal Limited directly employ about 500 individuals all over the company.

A corporation is importing the Sugar and concentrates from India and third country annually and is mixing in processing of product. Corporation has sold Coca Cola at the rate of Rs. 400 per Case/Crate to dealers and at the rate of RS.450 to wholesaler. Out of the total demand of Coca-Cola for 1 year, the Coca-Cola sufficient for 3 month is kept as a buffer stock by company. Because of this reason, there is no lack of goods in all over the country although many goods create lankness from time to time. The Coca-Cola is the seasonable drinking goods therefore, its produce on warm in huge quantity.

The Bottlers Groups are as follows:

1. Bottlers Nepal Limited, Balaju Industrial Area, Kathmandu.

2. Bottlers Nepal (Terai) Limited, a subsidiary company, Bharatpur Chitawan.

3. Troika Traders Pvt. Ltd, a wholly owned subsidiary company.

4. Coca-Cola Sabco (Asia) Ltd. Parent Company.

1.3   Focus of the Study

As stated in the interim plan, the financial situation of the government corporation as a matter of a fact is in very poor shape. Apart from other measure required their performance; public enterprises may be expected to have better prospects with effective cash management.

The focus of the study is being on a critical examination of cash management techniques of BNL. The period covered by the study will be five years from 2061/62-2065/66.

1.4   Statement of Research Problem

Cash management refers to the proper management of firm's cash position. It is concerned with all decision and acts that influence the determination of the appropriate level of cash and their efficient use as well as choice of the financing method, keeping in view of liquidity.

The cash and bank balance of a company is that the portion of its total current assets which is put to variables operative purpose and has the characteristics of greater divisibility liquidity and rapidity of turnover which influence the types and term of financing. Hence, cash management is in itself a decision making area within the framework of the overall current assets management.

Cash management has been the most intricate and challenging area of modern corporate finance as much as the management always face a trade -off between the liquidity and profitability of the firm. Through most of the enterprise in Nepal have been well recognized the importance of proper cash management, they are still facing the problem of cash management.

Cash management in public enterprise of Nepal is primarily based on the traditional practices, lacking in scientific approach. More serious aspect of cash management has been the absence of any formalize system of planning and

cash budgeting in many of enterprise do have the practic of forecasting cash requirement or a form basis.

By the large most enterprise had periodic accommodation of surplus cash and corresponding cash shortage from time to time. However none of the enterprise considers the implication of holding idle cash balance and few took in the account the potential benefit of investing surplus in marketable securities. Those which did fail to consider the cost of administration such investment.

Nepalese public enterprise never through of the source of current assets i. e. cash usually depends on HMG for it. Some of PEs has used depreciation, fund and utilized surplus to overcome the scarcity of cash. Thus the existing problems in the area of finance are mostly directed towards the management of cash rather then in any other area. Similar is the problem faced by BNL if we look on the financial statement of the corporation we can find that management is not satisfactory and encouraging, Very low level of cash in fluctuating trend are maintained in the corporation, which is one of the major problem in BNL.

1.5   Objective of the Study

The major objective of the study is to examine the management of cash in BNL. The specific objectives of this study are as follows:

    a.   To study of the existing cash management system in BNL.

    b.   To critically review the cash management technique practiced by BNL.

    c.   To suggest appropriate cash management policy for the future

1.6   Significance or Importance of the Study

This study concern to the theoretical explanation and practical application of cash management of BNL. Business transactions with out the investment of cash are mythical in this monetary world. The conflicting interest of that department is bound to create serious problem. The study of cash

management is considered as an integrated approach to management science. The idea behind cash management is therefore maintaining adequate liquid assets whenever and wherever required by the firm. The maintenance the corporate liquidity therefore consists of determining the volume and timing of cash required by the firm.

Liquidity and technical solvency are two different terms always confused and misused in cash management. A company could be solvent and yet may not have enough cash to meet these current obligations. This is because the solvency of the company is known only after sale of its total assets. The technical solvency therefore does not mean that its current bills can be paid in cash on due date. Hence "liquidity" denotes the capability to meet its current obligation, where as "solvency" is the strength of the enterprise to meet its entire obligation including long-term loans. In conclusion every rupee reduce in the cash balance may contributed to the generation of additional profit. It does not mean that an enterprises.

Saving to zero cash balance but consideration of the cost of idle cash maintain minimum level of cash.

1.7   Research Methodology

Descriptive research design is used in this study. Analysis of the data is based on the development of various financial and statistical tools. All these are discussed in methodology chapter.

Secondary sources of data are collected. It constitutes mostly the annual report which compares profit and loss account, balance sheet and income statement. Thus these are the main sources of data.

1.8   Limitation of the Study

I.   This study is limited to cash management of BNL.

II.   The study covers the period of five years beginning 2061/62-2065/66.

III. Basically the financial statements provided by BNL Head office at Blalju, Industrial Area are used. They are secondary data.

IV. The researcher could not found material of BNL which are most important for this study.

1.9 Organization of the Study

This study has been organize in five chapters

The first chapter is the introductory, which deals with background of the study. Bottlers Nepal Limited, focus of the study, statement of the research problems, objective of the study, significance of the study, research methodology and limitation of the study.

The secondary chapter deals with the review of the literature relating to cash management i.e. books and thesis.

In the third chapter, the research methodology employed for the study has been described. It includes introduction research design, data collation and sources, data processing procedure and tabulation, financial tools and techniques, research question and definition of key terms.

Then, the acquire data are presented and analyzed through the way given in methodology in the forth chapter.

At last, the summary of findings, issue and constraints and some recommendation have been presented in the fifth chapter. A bibliography and appendix have also been included in the last part of the study.

CHAPTER-TWO
REVIEW OF LITERATURE

2.1 Conceptual Review

Review of literature refers to the reviewing of the past studies in the concerned field. such studies could be thesis/dissertations that are written earlier, books, articles, journals and any other publications concerning the subject matter, which were written prior by a person or an organization. The purpose of this literature review is to get acquainted with what has been accomplished in the concerned subject matter and what is yet to be studied and for tells worthiness of the study being undertaken.

2.1.1 Meaning of Cash Management

The term "cash" is defined in various ways as per context. For instance, from an economist's point of view, cash is the means to satisfy human wants, whereas a lawyer states that is the legal tender of money issued by the government of the state. On the contrary, when it comes to the financial literature, cash is defined in yet another fashion from earlier definitions.

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 (Saksena, 1974; 31). 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 money, which the firm can disburse immediately without any restriction. The term cash with references to cash management is used in

two senses. In a narrow sense it is used broadly to cover cash currency and generally accepted equivalents of cash such as cheques drafts and demand deposit in bank. The broader view of cash also includes near cash assets, such as, marketable securities and time deposits in bank.

Cash is both the beginning and end of the working capital cycle Cash, Inventories, receivables and cash. Its effective management is the key determinant of efficient working capital management. Cash like the blood stream in the human body gives vitality and strength to a business enterprise. The steady and healthy circulation of cash through out the entire business operation is the business solvency. 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 exit. Adequate supply of cash is necessary to meet the requirement of the business. Its shortage may stop 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 idle cash is sterile; its retention is not without cost. Holding of cash balance has an implicit cost in the form of its opportunity costs. If cash holding is bad for inefficient corporations, cash shortage is dangerous for efficient corporations. As for inefficient corporations it does not matter weather cash increases or decrease if they are not in a position to utilize them. But efficient corporations due to undertaking of more operations need more cash besides having profit. Therefore, for its smooth running and maximum profitability, Proper and effective cost management in a business is of paramount importance. *(Kent, 1964; 123)*

2.1.2 Efficiency of Cash Management

Cash performs a number of functions as it makes payment possible and serves to meet emergencies. But if cash is kept idle it contributes directly nothing to the as such, policy that makes optimum cash management possible.

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The financial managers of the corporations should try to minimize the corporation holdings of cash while still maintaining enough to insure payment of obligations. For improving the efficiency of cash management, effective methods of collection and disbursement should be adopted. Then the knowledge of some methods is necessary to insure their usefulness in course of time as corporate manager become more conscious to adopt these methods. Some methods are discussed below (Shrestha, 1980;32).

i) Speedy Collections of Cash

On method of optimum cash management is to speed collection of usable cash from customer's payments of receivables. Reducing the lag for gap between the times a customer pays his bill can accelerate cash collection and the time the cheque is collected and funds become available for use. Within this time gap, the delay is caused by the mailing time. The amount of cheques sent by customers but not yet collected are called deposit float. The greater the deposit floats, the longer time taken in converting cheques into usable funds. There are manly two techniques, which can be used to save mailing and processing time concentration banking and lock box system.

ii) Concentration Banking

The establishment of a strategic collection centre also helps the corporation to fasten the time when the customer pays the bill and the time when the corporations have the use of funds. In this system, the firm will have a large number of bank accounts orated in the area where the firm its branches. All branches may not have the collection centers. The collection centers will be required to collect cheques form customers and deposit them in their local bank accounts. The collection centre will transfer funds above some predetermined minimum to control generally at the firms head office, each day. A concentration bank is one where the firm has major bank account usually the disbursement.

iii) Slowing Disbursement

The general policy of every corporation is to collect sundry debtors and accounts receivables as quickly as possible but while making payments to sundry creditors and account payables it wants to pay as slowly as possible. It may be recalled that a basic strategy of cash management is 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 requiring no interest payments. There are some technique to delay payments avoidance of early payment centralized disbursement, floats and accruable.

iv) Cash Velocity

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

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

v) Synchronized Cash Flows

Situation in which inflow coincides without flows, there by permitting a firm to hold transaction balance to a minimum.

vi) Using Float

Cheque written by firm and not deducted from bank records until they are actually received by the bank, possible a matters of several days the lag between the time check is written unit the time and bank receives it is known as float.

Vii) Over Draft System

A System where by depositors my write cheques in excess of their balances with their banks automatically extend loans to cover the shortage. Most of the foreign countries are over draft system.

Viii) Minimum Cash Balance

Corporations are required to keep a minimum cash balance requirement of a bank either for the service it renders or in consideration of a lending arrangement. In practice the cash balance of the corporations with the bank is higher than cash in hand. It is because corporations always find it safe to keep large funds with bank otherwise it may be miss utilized or misappropriated it kept in hand.

ix) Transferring Funds

There are two principle method–wire transfers and electronic depository transfer cheque. With a wire transfer funds are immediately transferred from one bank to another with and electronic depository transfer cheque (DTC) arrangement in the movement of funds, an electronic cheque image is processed through an automatic clearing house. The funds become available on business day later. From small transfers, a wire transfer may be too costly.

2.1.3 Different Techniques of Cash Management

i. Cash Planning

The forecasts may be based on the present operation or anticipated future operation. Cash planning can help anticipate future cash flows and needs of the firm and reduces the possibility of ideal cash balance and cash deficits. Cash plan are very crucial in developing the overall operation 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. The cash planning is a technique to plan for and control the use of cash.

ii. Cash Budget

Cash budgeting is an effective way to plan and control the cash flows, assess cash needs and effectively use excess cash. 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. This information helps the financing of these needs and exercise control over the cash and liquidity of the firm. (Ibid)

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

iii.   Short Term Cash Forecasting

There are most two common used methods of short term cash forecasting are as follows:

a. Cash Receipts and Disbursement Method

This method is also known as direct or cash account method. This method is based on a detailed analysis of the increases and decreases in the budgeted cash account that would reflect all cash inflows and outflows from such budgets as sales, expenses, and capital expenditures. The prime aim of receipt and disbursement forecasts is to summarize these flows during a predetermined period. In cash of those companies where cash items of income and expenses involves flow of cash, this method is favored to keep a close control over cash.

b. Financial Accounting Method

This method is also known as indirect or income statement method. The starting point in this method is the planned net income shown in the budgeted net income statements. Basically, planned net income is converted from on accrual basic to a cash basis. Next, the other cash sources and requirements are identified. This method of cash forecasting involves the tracing of working capital flows. Sometime it is also called the sources and uses approach. In preparing the adjusted net income forecasts items such as net income depreciation taxes, dividend etc. can easily be determined from the company annual operating budget.

iv. Long Term Cash Forecasting.

The long term cash forecasting is fundamental to sound financial decision and to optimum use of cash and long term credit. It prepares to give and idle of the company financial requirement of distant future. Once a company has developed long term cash forecast, it can be to evaluate the impact of say new product development on the firm financials condition three, five or more years in futures. The major uses of the long term cash forecasts are company's future financial needs especially, for it working capital requirements, to evaluate proposed capital projects and it help to improve corporate planning long term cash forecasting not only reflects more accurately the impact of any recent acquisitions but also foreshadows financing problems these new additional may put for the company.

2.1.4 Determining the Optimum Cash Balance

The way how corporations manage current assets has an important bearing on the overall liquidity position, and failure to maintain sufficient degree of liquidity caused to stop regular operations besides making corporate managers unable to play obligation in time. The financial managers are to maintain a sound liquidity position of the firm. So that deeps may be settled in time. The firm needs cash not only to purchase raw materials and pay wages but also for payment of dividend interest, taxes and countless other purpose. The test of liquidity is really the availability of cash to meet the firm obligations when they become due. Thus the cash balance is maintains for transition purpose and an additional amount may be maintained as a safety stock. The financial manger should determine the appropriate amounts of cash balance. A trade off between risk and return influences such a decision. If the firm maintains small cash balance, its liquidity position becomes weak and suffers from capacity of cash to make payment. But investing released funds in some profitable opportunities can attain a higher profitability. It the form maintains a high level of cash balance it will have a sound liquidity position but forego the opportunity to earn interests. 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 of graphically.

Figure no: 2.1 Determination of Optimum Cash Balance
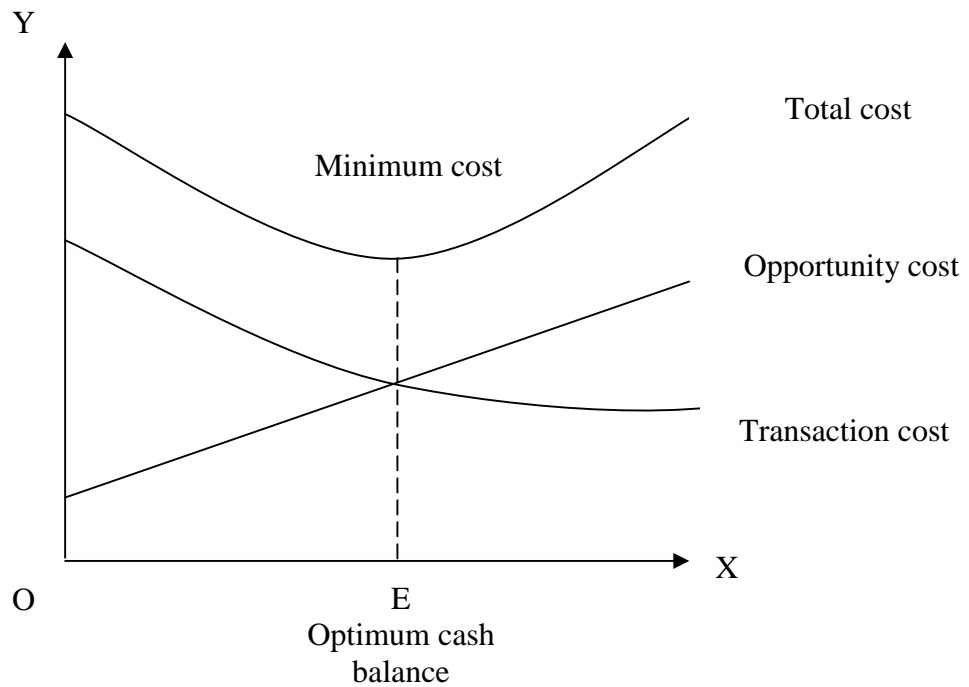
Source: Pandey, Financial Management, p.311

2.1.5 Cash Management Models

There are different types of analytical model for cash management.

i.   Baumol Model

ii. Miller-Orr Model

iii. Orgeler's Model

i.   **Baumol Model:**

In view of minimizing the opportunity cost of holding cash and maximizing the return, on the return on the available funds, the cash balance

should be maintained at a minimum level and the fund not required firm immediate use be invested in the marketable securities.

Baumol model is onto the methods that can be used for this purpose. Baumol identities the cash maintenance as analogies 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. Boumol model is based on the assumptions that

    i. The cash is used at a constant rate

    ii. The periodic cash requirements is more on less and

    iii. There are some costs such as opportunity costs that increase and other costs such transaction costs that decrease as cash balance increase. Because of the assumptions (i) and (ii) the graphical representation of cash position looks like as follows:

Figure no: 2.2 EOQ Model of Cash Balancing
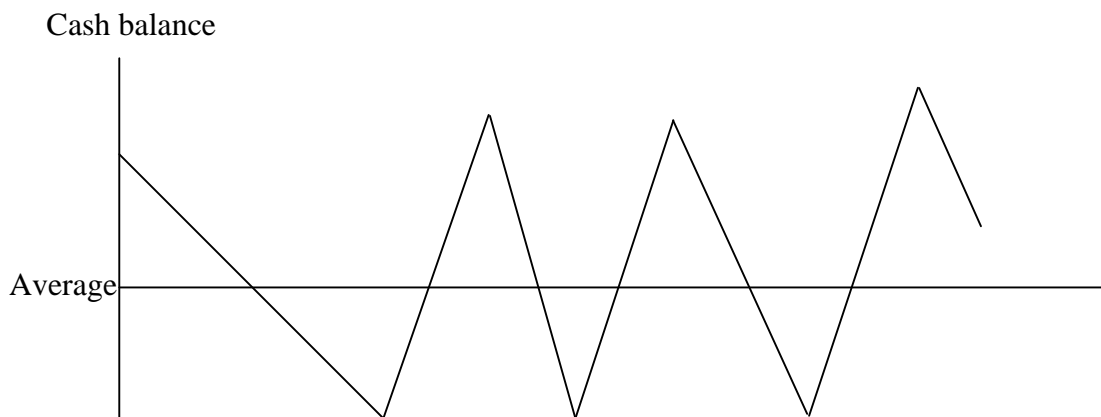
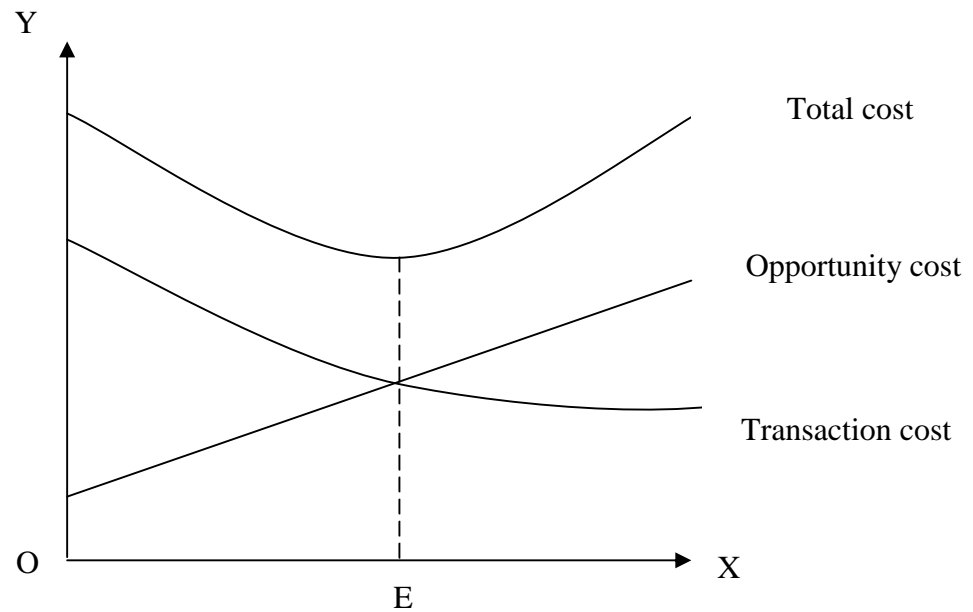Source: Bounol, "The transaction demand for cash"

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

Given it assumption, the model prescribes an optimal size of cash balance and the optimal size of cash transfer from marketable securities to cash account on borrowing. What matter for a firm is the total of opportunity cost

and the transition cost? Therefore, the objective of this 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 no: 2.3 Relationship between Average Cash Balance and Cost of Cash Maintains

Source: Boumol "The transaction demand for cash"

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

    K = opportunity cost of holding cash or interest rate on borrowing

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The Baumol mode can be appropriately applied in case at 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 precaution are purpose.

ii. Miller–Orr Model:

The size of cash need depends on the pattern and degree of irregularity of inflow and outflows. The Baumol model does not consider the possible inflow and outflows. The Baumol mode does not consider the possible irregularity and uncertainty of receipt and payments. Merton Miller Dainel 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 arrange of high and low limits with in when 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 when ever its drifts away to the limit sin either direction. The rule is to transfer the amount of cash is necessary to bring the cash positions to its target balance from the investment account whenever the 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 mountain compensating balance in the account. The graphical representation of this model is as follows:

Figure no: 2.4 Graphical Presentation of Millet-Orr Model of Cash Balance

U ——————————————————————— Upper time

Z ——————————————————————— Target balance

L ——————————————————————— Lower limit

O
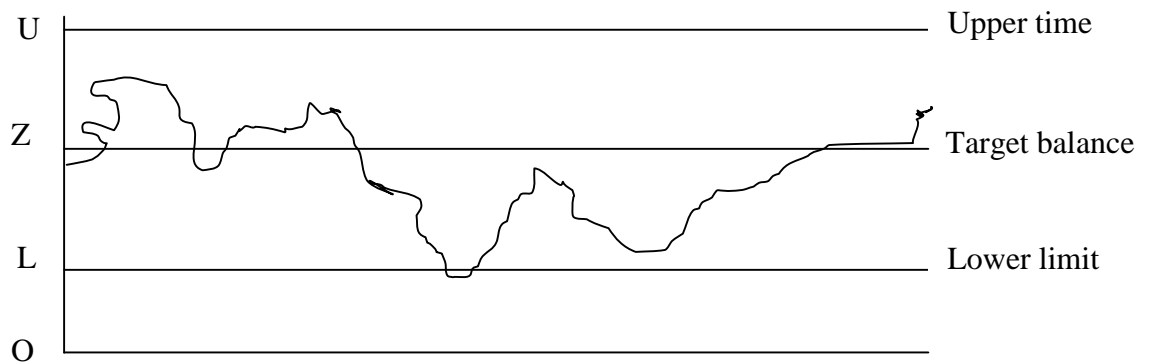
Source: Pandey, 1964, p.929

Mathematically, the model is set as follows:

$$Z = \left(\frac{3F^2}{4i} \right)^{1/3} + L$$

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

$$U = 3 \left(\frac{3F^2}{4i} \right)^{1/3} + L$$

$$= 3Z - 2L$$

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

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

Where,

Z = target cash balance

F = Fixed transaction cost per transactions

I = Daily interest/opportunity cost

$\dagger 2 =$ Variance of net daily cash flows

L = Lower limit

iii)   Orgler's Model:

According to this model, on optimal cash management strategy can be determined through the use of a multiple linear programming model comprises three societies (i) Selection of the appropriate planning horizon (ii) Selection of the appropriate decision variables (iii) Formulation of the cash management strategy with the other operations 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 decisions variables which influence cash management of a firm and which must be incorporated into the linear programming model of the firm. These area (i) Payment schedule (ii) Short-term financing (iii) Purchase and sale of marketable securities and (iv) Cash balance itself.

The formulation of the model requires that the financial manger 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 period using the assumption that all revenue generated is immediately re-invested and that any cost is immediately financed. The objective function recognizes each operation of the firm that generates cash inflow or cash out flows as adding or subtracting profit opportunities for the firm is cash management operations. In the objective function decision variables which cause inflow such as payment on receivable which cause inflow such as payment on receivable have positive co-efficient, while decision variables which generate cash outflows, such as interest on short term borrowings have negative co-efficient. 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 constrain 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 linear programming model is as follows:

Objectives function: max. profit $= a_1 x_1 + a_2 x_2$

Subject to constraints:

$c_1 x_1 + c_2 x_2 \leq$ Cash available constraints

$b_1 x_1 + b_2 x_2 >$ Current assets requirement constraints.

Very important feature of the model is that it allows the financial mangers to generate cash management with production and other aspects of the firm.
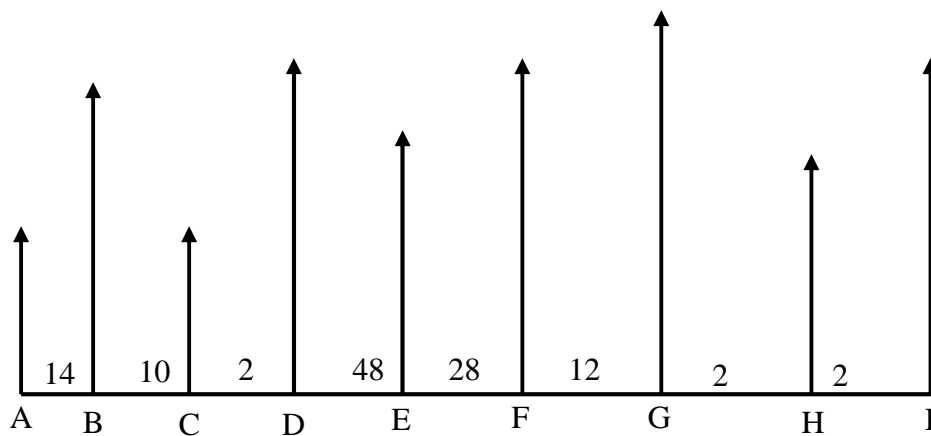
2. 1.6 Cash Cycle

The financial needs of the corporations are affected by the details of the cash cycle involved in the process of conversion form purchase, production and sale to ultimate collection. Opportunities to improve cash cycle help in best management of cash. The two important questions that the corporate mangers should born in mind are as given below.

How the collection and disbursement of cash balance should be effectively managed through careful insight into the cash needs of the consolations.

Given as total pool of cash, how would it be appropriate to determine the size of cash and how is it possible to make best use of idle funds by investing in gilt edged securities?

The cash cycle of the corporation is given below:

Figure no: 2.5 Cash cycle

Source: Solomon and Pingle, p. 197

Details of cash cycle

Where,

A = Materials ordered

B= Materials received

C= Payment

D= Cheque Clearance

E= Goods sold

F= Customer mails payments

G= Payments received

H=Cheques deposited

I= Funds collected

In addressing ourselves to the cash management strategies, we concerned with the time periods involved in stages A,B, C, D, E, 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 process and inventory policy. The time period between I and F is determined

by credit terms and the payments policies of customers. The hypothetical example explains that the corporation needs 60 day or two months to collect funds from the beginning of materials ordered to have ultimate cash. It takes 14 days to receive materials from supplies and adding 20 days for payment and still two days assumed for clearing the cheques. Sales inventory takes 48 days to have complete clearing off stocks and customers might pay only after 28 days by mailing cheque. Moreover, six additional days are taken for payment receipt, cheque deposit and ultimate collection. This is applicable only for direct selling of consumer goods but in a manufacturing concern the time lag may be still grater. Some of the time lags can be controlled to have speedy collection of cash through minimizing time periods BCD and FGHI. Time period AB is beyond the control of the corporation and does not directly affect the financial statement although they have much to do with production schedules of corporations. Time period DE depends upon the production processes and inventory policy and to a great extent affects the total investment in inventory. This is applicable only for direct selling of customer's goods but in a manufacturing concern the time lag may be still grater.

2.1.7 Motives for Holding Cash:

The economic theory as developed by Keynes in relation to the question why people in general maintain liquid cash because of various motives also apply to the policies of corporations except the motives of speculation in mist at he case. "Keynes" identified there motives for hiding cash: "The transaction motives Precautionary motive and speculative motive". All corporations regardless of sizes type, locations etc have the same motives in holding cash. We discuss briefly these motives at corporations to hold cash below. (Khan and Jain, 2003;165)

2.1.7.1 Transaction Motive

This refers to holding of cash to meet routine cash requirement to finance the transaction which a firm carries in the ordinary course of business. A firm enters in

to a variety of translation to accomplish its objectives which have to pay in the form of cash. The requirement of cash balance to meet is known as transaction motive and such motive refers to the holding of cash to meet anticipated obligation whose timing is not perfectly synchronized with cash receipt.

2.1.7.2 Precautionary Motive

The cash balance hold in reserves for random unforeseen fluctuation in cash flows are called as precautionary balances. In other word precautionary motives of holding cash implies the need to hold cash to meet unpredictable obligation. Thus precautionary cash balance serves to provide a cushion to meet unexpected contingences. The most unpredictable are the cash how the larger is the need or such balance.

Another factor which has a bearing as the levels cash balances is availability of short term credit. If a firm borrows a short notice to pay for unforeseen obligation, it will need to maintain are a relatively small balance and vice versa

2.1.7.3 Speculative Motive:

It refers to the desire of firm to take advantage of opportunity which presents themselves at unexpected movement and which is typically outside the outside normal course of business. While the precautionary motive is defensive in nature in that firm must make provision to tide over unexpected contingencies, the speculative motive represents a positive and aggressive approach. The firms aim to exploit profitable opportunities and keep cash in reserve to do so. The speculation motive helps to take advantages of

- An opportunity to purchase raw materials at a reduced price on payment of immediate cash.

- A change to speculate on interest rate movement by buying securities when interest rates are expected to decline.

- Delay purchase of raw materials on the anticipation of decline in prices and

- Make purchases at favorable prices.

2.1.7.4 Compensating Motive:

It is to compensate banks for providing certain services and loans. Usually, clients are requested to maintain a minimum balance of cash at the bank. Since this balance can not be utilized by the firm for transaction purchase, the banks. Themselves can use of amount to earn a return. Such balances are comprehending balance.

Compensating balance is also required by some loon management between a bank and its customer. During periods when the supply credit is restricted and interest rates are rising, banks required a borrower to maintain a minimum balance in his account as a condition precedent to the grant of loon. This is presumably to 'compensate' for a rise in the in the rate during the period when the loon will be pending if four primary motives of holding cash balances the two most important are transaction motive and the compensation motive. Business firm do not normally speculate and need not have speculated balances. The requirement of precautionary balances can be made out of short term borrowing. (Lynch, 1998; 36)

2.1.7 Definitions of Key Terms

To avoid ambiguity confusion and misunderstanding the key terms used in this study have been defined as follows:

a. Sales:

Sales including only trading sales ignore the miscellaneous sales.

b. Average Collection Period:

This indicates number of days entertained by sundry debt or credit period allowed to sundry debt on.

$$\text{Average Collection period} = \frac{\text{TimeReveivable turnover}}{\text{No, ct day in a year}}$$

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c. Account Receiving to Cash Balance:

It is an indicator of the liquidity of cash. it measure the relationship between cash and volume of account receivable a period of time.

$$\text{Account receivable to cash balance} = \frac{\text{Cash and bank balance}}{\text{Account receiveable}}$$

d. Cash Budget:

Cash budget is the most important tools of cash management it is a plan of future Cash received and payment.

2.2   Introduction and Purpose of Cash Management

One of the major responsibilities of management is to plan, control and sales guard the resources of the enterprises. Two kinds of resources how through many business cash and non- cash assets. This chapter focuses on the cash planning and control of the cash in (i.e. cash received) and cash out and the related financing is important in all enterprises. The cash budgeting is an effective way to plan and control of the cash how assess cash made and effectively use excess cash A primary objective is to plan the liquidity position of the company as a basis for determining future borrowings ad future investments. For example excess cash is not invested incurs an opportunity cost that is loss of the interest. That could be earned in the excess cash. The timing of cash flows can be controlled in many ways by management. Such as increasing the effectiveness of credit and collection activities. Making payment by time draft rather than by cheque, making payment and last day of discount periods batching payments and giving discount on cash sale. Cash management is important in enterprises, whether large on small. Many lending agencies require cash flows projections before granting loan. *(Welsch, et.al; 1988 ; 433).*

The focus of cash planning, time horizons in cash planning and control approach used to develop a cash budget, financial accounting approach to compute cash flows, planning and controlling cash in a non manufacturing company.

2.2.1 Review of Books, Journal and Articles

Various scholars as well as authors have given different views about cash management some of have to be taken as review of books for cash management. According to Batty (1972) cash in only one constituent of what is essentially a combination of a business resource. It is the part of working capital and as such provides the means of earning a profit investment for business. The objective should aim to obtain an optimum level for each component of current assets figure and a smooth and rapid conversion of these assets to cash both of these lead to improve earning power. He again suggested that if cave is taken for crash programme for improving cash may have unexpected consequences. In the short term it will be possible to cut back expenditure on marketing and other functions, but future sales will probably suffer and, consequently, there will possible to cut back expenditure on marketing and other functions, but future sales will probably suffer and, consequently, there will be further detoriation in cash flow. Further, he defined cash management as the process involve in the effective planning and control of cash requirement of a business.

Similarly, Pandey (1999) suggested that the firm should keep sufficient cash neither nor less. Cash shortage will disrupt the firm's manufacturing operations while excessive cash will simply remain idle, without contributing anything towards the firm's profitability. According to him, the major function of financial manager is to maintain sound cash position. Some theoretical insights about cash management has presented by him. He said that cash management is concern with the managing of, (i) cash flows into and out of the firm, (ii) cash flow within firms, and (iii) cash balance hold by the firm at

point of time by financing deficit or investing surplus cash. It can be represented by a cash management cycle. Sales generated cash which has to be disbursed out. The surplus cash has to be invested while deficit has to be borrowed cash management seeks to accomplish this cycle at a minimum cost. At the sometime, it also seeks to achieve liquidity and control. Cash management assumes more important that other current assets because cash is the most significant and the least productive assets that the firms hold it is significant because it is used to pay the firm's obligation. However, cash is unproductive. Unlike, fixed assets or inventories, it doesn't produce goods for sale. Therefore, the aim of cash management is to maintain adequate control over cash position to keep the firms sufficiently liquid and to use excess cash in some profitable way. The cash management cycle is shown as follows:

Figure No. 2.6: Cash Management Cycle
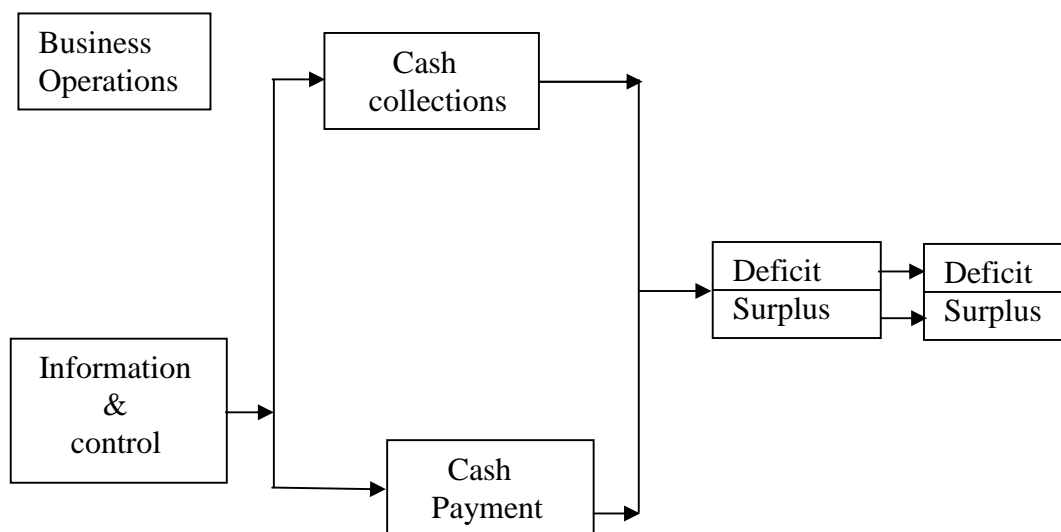
Source: Pandey, Financial Management; 912

The management of cash is also important because it is difficult to predict cash flows accurately, the inflows, and there is no perfect coincidence between inflows and out flows of cash. During some period cash outflows will exceed cash inflows because payment of taxes, dividend or seasonal inventory builds up. At other times, cash inflows will be more than cash payment because there may be large cash sales and debtors may be

realized in large sums promptly. Cash management is also important because cash constitutes the smallest portion of the total current assets. Yet management's considerable time is devoted in managing it. In current past, a number of innovations have been done in cash management techniques. An obvious aim of the firm now-a-days is to manage its cash affairs in such a way as to keep cash balance at a minimum level and to invest the surplus cash in profitable investment opportunities.

Jain & Narang (1993) have described about cash management. He said that cash is crucial component of working capital of a concern. Cash like blood stream of human body, gives strength to human body, gives strength to business unit. He explained that cash is ultimate resource for a business, so management of each business unit should endeavor to secure larger cash at the end of each working capital cycle than what it had at the beginning of working capital cycle. Further, the important objective in managing cash should be trade off liquidity and profitability in order to maximize profits. By keeping larger amount of cash, the firm is able more to meet its obligation when they fall due and the risk of technical insolvency is reduced. However, cash is non earning assets, so unnecessary cash should nor be kept as and than the optimum required to continue the operation of the business efficiency. Liquidity and profitability must be balanced in such a way that the organization retains its liquidity and at the same time maximizes its profitability. They also stressed that business transaction, without involvement of cash is mythical in this monetary world. Today the importance of cash management in recognized by all segments of organizations activities. If some of departments are bound to create serious problem. The study of cash management is therefore considered as an integrated approach to management science.

Simons & Kerrenbrock (1964) expressed that cash is more often than other assets is the item involved in business transaction. This is due to nature of business transactions which include a price and condition calling for settlement in terms of medium of exchange. In striking contrast to activity of cash it is

unproductive in nature. Since cash is measure of value, it can not expand to grow unless it is converted in to other properties Excessive balance of cash on hand are often referred to as "idle cash". To be most useful to a business enterprise, cash must be kept moving.

Shrestha (1998) has described some conceptual ingredients about cash management which is based on his various research studies. We can learn lessen from it and also helpful for this study indeed. He suggested that if cash holding is bad for inefficient corporations. He suggested that if cash holding is bad for inefficient corporation, cash shortage is dangerous for efficient corporations. As for inefficient corporations, it does not matter whether cash inverses or devisees if they are not in a position to utilize them. But efficient corporation due to undertaking of more operations need more cash besides having profit.

Hampton (1990) has given more suggestion for effective management of cash. He explained that net working capital is the measure of liquidity, which is defined and the adequacy of near term cash to meet the firm's obligation. The highly liquid firm has sufficient cash to pay its bills at all time. An illiquid firm is unable to pay its bills when due. The investment of excess cash, minimizing of inventory, speedy collection of receivables, and elimination of unnecessary and costly short term financing all contribute to maximizing the value of firm. In a periled of high interest rate, customer may be slow in paying their bills, a fact that will be cause an increase in receivable. If the level of cash is linked to the level of sales, variable working capital may be changed.

Khan and Jain (2003) explained that cash management linkage with working capital management. He expressed that cash management is one part of the key areas of working capital management. A part from the fact that is the most liquid current asset, cash is the common denominator to which all current assets can be reduced because the other major liquid assets, that is, receivables and inventories get eventually converted into cash. This underlines the significance of management. He presented a detail account of the problem involved in managing cash, i.e. motive for holding cash, objective of cash

management, factors determining cash needs, cash management models, cash budgets, basic strategies for efficient management of cash, and specific techniques to manage cash subsequently.

Van Horne (2002) has prescribed the knowledge about cash management. He said that cash management involves managing the monies of the firm to maximize the cash availability and interest income to any idle funds. At one end the function starts when a customer writes a check to pay the firm on its account receivable. The function ends when a supplier, am employee or government realizes collected fund from the firm as an amount payable or accruals. All activities between these two points fall within the realm of cash management. The firm's efforts to get customers to pay their bills at a certain time fall within account receivable management on other hand, the firm's decision about when to pay its bills involves account payable and accrual management. He again described an idea of effective collection and disbursement of cash, we should attempt to accelerate collection & handle disbursement so that maximum cash is available. Collection can be accelerated by means of concentration banking, a lock-box system and certain other procedures. Disbursement should be handled to give maximum transfer flexibility and the optimum timing of payment, being mind-full, however, of supplier relations. Methods of controlling disbursement i.e. electronics fund transfer is becoming increasingly, and most corporation use such transfer in one way or another.

Weston and Brigham (1999) have poured some views about cash management after their various studies on it. The bond conceptual findings of their studies provide sound knowledge and guide lines for the future studies in the field of cash management. They explained in the beginning the motives for holding cash, specific advantage of adequate cash, synchronization of cash flows, expanding collection and cheque clearing, using float, cost of cash management, determining minimum cash balance, compensating balance, marketable securities. Substitute for cash criteria for setting securities investment alternatives.

Brigham and Friends (2001) have described some conceptual insights which are based on various research studies. They believed that cash is often called 'non earning assets'. It is need to pay for labour and raw materials, to buy fixed assets, to pay taxes, to service debt, to pay dividend and so on. However, cash it self earn no interest. Thus, the goal of the cash manager is to minimize the amount of cash the firm must hold for use in conducting its normal business activities. Yet, the same time, to have sufficient cash (i) to take trade discount, (ii) to maintain its credit rating, and (iii) to meet unexpected cash needs.

Pradhan (2004) explained about cash and it management. He told that cash includes coins, currencies, cheque hold by a firm, and balances in its bank account, this money is immediately useable to pay bills. Some times "near cash Items" are also included in cash, e.g., marketable securities. If the firm has excess cash, it may decide to convert it to short term investments. The financial manger will purchase low risk, high liquidity money market instrument that can be converted back to cash without delay if the need arises. The securities provide a small profit on cash that may not be needed immediately for the firm's operation. These securities are widely used as short term investment by the firm's operation. These securities are widely used as short term investment by the firm in developed countries. Each security offers different characters that make it suitable for different firms. He said cash management is also called management of money position because cash includes not only the cash or current in hand but also he readily convertible securities or other near cash items, e.g. time and demand deposit, readily available credit and so on.

Acceding to him concerning area of cash management areas of cash management are,

- ❖ Management of cash flows into and out of the firms

- ❖ Management of cash flow within the firm

- ❖ Management of cash balance held by the firm at a point of time.

Weston & Copeland (1992) suggested about cash management firm various study and research. They said that relatively high level of interest rates have increase the impotence of cash management, while at same time advance in technology have changed the nature of cash management function. Financial manager have developed new techniques for optimizing cash balance and determine the appropriate relation between holding investment in marketable securities.

2.2.2 Review of Previous Research

In this section an attempt has been made to review some thesis/dissertation and other related publications related to cash management.

Only five dissertations have been adjusted which are written on cash management in different categories in Nepal. No on dissertation has shown the significant result. In other word, cash management was found on very weak position in Nepalese companies.

Pracharman Pradhan (1997) from his objective of case study of cash management in STCL are,

i)   To analyze the cash disbursement needs.

ii)   To minimize funds committed to cash balance.

iii) To access the credit policy and impact relationship to each other.

From his case study of cash management in STCL had found that:

i)   STCL could not make the best are of available cash balance prudently.

ii)   The cash collection of trade credit in the corporation in low during three years of study period.

iii) Management has taken liberal credit policy to sales of goods. Hence the cash and balance of study period is minimum AR.

iv) No optimum cash balance is maintained. The cash and bank balance with respect to current assets has been fluctuating trend. Similar in the case with respect to the total assets.

To improve such problem i.e. major critical findings, he had recommended the STCL, to

i) Efficient management of cash

ii) Prepare monthly trial balance cash, fund statement and financial report.

iii) Design the effective A/R management. Adopt efficient credit policy.

iv) Invest surplus cash in profitable opportunities

v) Prepare cash budget

vi) Maintain optimum cash balance

Ram Chandra Lamichhane, **(2005)** has studied the cash management practices in Nepalese Listed Manufacturing Companies. He has taken six enterprises as a sample. After analyzing the relevant data and different aspects of cash management of his study, there are following objectives.

i) to critically review cash management techniques practiced by Nepalese Public enterprise,

ii) to examine the demand for cash in the case of Nepalese Public Enterprises.

iii) to suggest appropriate cash management policy for the future.

Major findings of his study;

i. The selected manufacturing companies are unable to make sufficient cash balance.

ii. They fail to utilize the cash balance properly.

iii. There is no uniformity in cash position in these companies.

iv. There is greater fluctuation in liquidity position of these manufacturing companies.

v. Average receivable position in most of the companies is seen higher.

vi. So, there is the greater possibility of bad debts. If they do not consider about it, they will be thrown in great cash crisis.

vii. While comparing the profit and cash position, it is seen that there is no significant bearing of cash balance on net profit in most of the organization.

Similarly, same type of study has been done by Gautam (1999). Approximately same conclusion and recommendation has been provided on his study.

His study concerned with cash management in Gandaki Noodles Pvt. Ltd. as a cash study. The research has not provide another informative findings and conclusion more than the research has been undertaken by Pradhan (1997)

Tikaram Ghimire, (2007) has also study in Cash management of Gorakhkali Rubber Udhyog Limited. He has found following result:

i. The industry itself has the responsibility of its management

ii. The industry supplies its main products directly to the sales deposits.

iii. The sales forecast of the company is generally near equal to actual sales and production also depends upon sales forecast. The industry's capacity utilization is low (about 50%) during the study period cause of low sales position.

iv.   The industry has been facing the problem of skilled manpower, lack of quick availability of raw materials and fluctuating price of raw material.

v.   There is no systematic appointment of personnel and there is lack of system of right man kin right place and other related activates.

vi.   The industry has poor economic status. The industry is not able to achieve profit during the study period and the loss amount is very high. The industry is unable to pay even interest of bank loan.

vii.   The main sources of cash of the GRUL are sales of products and loan. The industry uses cash at huge amount for purchase of raw materials, payment of interest and tax, wages payment, and selling and distribution expanses etc.

viii.   The industry sales its productions in cash and credit basic and there is no strict policy of quick collection of account receivable.

ix.   The industry purchases raw materials and other related goods both in cash and credit, which depends upon situation of time, nature of goods and balance of cash.

x.   The cash balance of different years shows no optimum cash balance is maintained and there is no definite policy applied for cash management.

xi.   Cash turnover ratio is low which indicates low collection efficiency of the industry and account receivable turnover is also low, this shows the higher collection period of the industry.

xii.   Management has taken liberal credit policy of sales hence the cash and bank balance during the study period is minimum of account receivable in many years.

xiii.   Cash to current liabilities ratio found highly fluctuation that means the industry has been facing problem of cash management.

xiv. The cash and bank balance with respect to current assent and total assets are fluctuating trend are fluctuating trend. This shows the cash position of the industry is not properly good.

In summary, above findings and conclusions are shows that the cash management of GRUL is very poor and fluctuate. So the GRUL ought to do good cash collection and invests it.

Another research which has currently submitted has been found to make the study easier. This study has concerned on cash management in public trading company: a case study of Salt Trading corporations LTD. and studied by **Toyanath Neupane (2007).** Overall, he concluded the poor cash management practices of STCL. From his case study of cash management in STCL, had found that, Many factor or determination such as nature of business, level of sales, credit terms, quality of customers, economic condition etc. have to be considered in cash management. Apart from the level of purchase, method of creating cash management, establish of credit terms, types of credit policy. Motives for holding cash, efficiency of cash management, different technique to cash management cash cycle etc. are to be considered. Corporation must prepare cash budget to plan for and control cash flow.

Thus, for STCL it is necessary to highlight the importance of developing appropriate strategies for cash management in respect of:

i. Cash planning and cash budgeting in a formal basis so as to project cash surplus or cash deficit for a period not exceeding one year and broken up into shorter intervals.

ii. Managing of cash flows so as to accelerate the inflows and as for as possible to decelerate out flows.

iii. Optimizing the level of cash balance by matching the cost of holding excess cash and the danger of cash deficiency.

iv. Investing idle cash balance taking into account the cost of administering investments in marketable securities.

These studies were not able to represent overall status of the companies. So that, the efforts has been made on the study of cash management in Salt Trading Corporation Limited (STCL). Identification of cash conversion cycle and motives for holding cash are the uniqueness of the study.

Finally, the previous study of cash management in STCL has not been fulfilling the necessary requirement in present situation. So, that the researcher has chosen this topic (A cash management of cash management system on Salt Trading Corporation Limited).

A study done by **Amrit Thapa (2008)** entitled working capital policy of manufacturing public enterprises in Nepal sought to sort out the problem of law economic performance and poor financial management in manufacturing public enterprises 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 manufacturing public enterprises and also the lack of appropriate assets mix policy in manufacturing public enterprises. There are following objectives;

- To operate with setting certain sales target.

- To make regular inspection to find out the excess or deficit of Current Assets.

Major findings of study are:

1. Almost all selected manufacturing public enterprises 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.

2. The selected manufacturing public enterprises has sufficient liquidity.

3. Capacity utilization was the significant factor while sales, cash flow cycle and interest rate were not significant in working capital determinations.

He had recommended that;

- The improvement of working capital management and efficiency in the manufacturing public enterprises.

- 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.

2.3 Research Gap

Above studies has provide us a little but more knowledge for our research purpose. Similarly, 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. The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make study management of Nepalese Manufacturing Companies. There are various researches conducted on cash management and policy of manufacturing companies.

So, this study will be fruitful to those interested person, parties, scholars, professor, students, businessman and government for academically as well as policy perspective. Hope this study will help to others in future in the related field.

CHAPTER THREE
RESEARCH METHODOLOGY

In the preceding chapter, we have overviewed briefly on cash management concept; the basic purpose of this chapter is to enlighten the research designing, nature and source of data collection procedures and methods of analysis of data in brief.

3.1   Introduction

Methodology states the method wit which data have been extracted and discuss the tools of that have been used in interpretation of such data to fulfill the objectives. More specifically, it describes about the research design. The population and sample, nature of source of data and tools that will be used to analyze data.

The main purpose of this chapter is to focus on different research method and condition, which are used while conducting this study. Every study needs a systematic methodology to show the better results of the research. In this study, a cash management of Bottlers Nepal Limited also needs an appropriate research method for the purpose of this study only secondary data have been used which was available from Bottlers Nepal Limited, Balaju, Kathmandu.

3.2   Research Design

The research study attempts to analyze the cash management techniques adopted by the public companies like BNL. Hence, analytical and descriptive research is applied.

A well settled research design is necessary to fulfill the objective of this study. It means definite procedures and techniques that guide to study and propounds way for research viability. This study aim to evaluate managerial efficiency and performance regarding cash management of BNL. This study tries to make comparison and to establish relationship between two or mire

variables. So as to facilitate the assessment, the researcher collected five years data of BNL and have tabulated and different financial accounting tools are used to analyze and to find out needed result.

Descriptive research is essentially a fact finding approach relative largely to present and abstracting generalization by the cross section study of the current situation.

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

3.3   Population and Sample

There are many trading companies, which are actively operating their business in market. It is not possible to study all of them regarding the research topic. Therefore among them, one reputed manufacturing company is taken as a sample company from population for this research study.

3.4   Source of Data

This study is based upon secondary data, published by the Bottlers Nepal Limited. For this study more than four years balance sheet, profit and loss account, related appendix and auditor's reports have been collected. Other related information has been collected through the direct interview and questionnaire with companies.

3.5   Data Gathering Instruments

Data recording system of NML is scientific and systematic type of record keeping has been found because most of the personnel are trained and effective directions from the general manager.

The published data relating to the cash management position of BNL have been obtained from account department. The balance sheet and profit and loss account and other related documents, which are secondary nature, are directly collected from the company's account department.

3.6   Data Collections Procedure

The main sources of data are the head office of BNL. This study is found a mentally based on secondary sources of data, the annual financial statement have been collected directly from the account department. Five years balance sheet, profit and loss account and other related documents were not published in books of account simultaneously. However the annual general meeting audited prospectus was taken through the account department and administrative department. The data were collected from the fiscal year 2059/060 to 2063/064 and were in the form of pointed books balance sheet other related data ate also collected and used in this thesis from the head office. An opinion survey with the general manager, account officers also included for the data which are not cover only by the prospects.

3.7   Data Processing Procedure

The collected new data are processed and presented in tabular form with the help of simple arithmetic rules. The entire raw data are converted into approximate and condensed in the form of summary balance sheet and profit and loss account; most of the data have been complied in one form and processed and interested as per the need of the study. The secondary type data are presented for the analytical purpose after the tabulation of the data. These types of data processing represents are clear situation.

3.8   Methods of Data Analysis

Only financial and statistical tools are used for the analysis of data which is already stated in the limitation of the study. The producers of analyzing data are described as follows:

3.8.1 Financial Analysis

3.8.1.1 Ratio Analysis

Ratio analysis is a widely used tool of financial analysis. The ratio reveals the relationship in a mire meaningful way so as to enable one to draw conclusion from it. As the case study of cash management involves ratio analysis for tudging operational efficiency, the rate of return on total assets and capital employed and activity, efficiency ratio would be particularly meaningful for management and investing, although there is no hard and fast rule.

a. Analysis of Cash Turnover:

This ratio indicates the number of times average cash balance is turned over during the year. It is computed as follows:

$$\text{Cash turnover} = \frac{\text{Sales}}{\text{Cash in hand/bank}}$$

It measures the speed with which cash moves through as enterprise's operation.

b.   Account Receivable Turnover:

This ratio is computed by dividing sales by account receivables.

Thus,

$$\text{Receivable turnover} = \frac{\text{Sales}}{\text{Account Receivable}}$$

It indicates the no. of time the receivables are turned over during the year. It gives the general measure of the productivity of the receivable measurement. If the ratio is high the working capital becomes higher and if the ratio is low the working capital becomes lower.

c. Collection of Account Receivable:

$$\text{Collection of account} = 1 - \frac{\text{Receivables}}{\text{Sales}} \times 100$$

d. AR to Cash/Bank Balance:

$$\text{AR to Cash/Bank balance} = \frac{\text{Cash/Bank balance}}{\text{Account Receivables}}$$

e. Analysis Cash to Current Liabilities:

$$\text{Cash to current liabilities} = \frac{\text{Cash/Bank balance}}{\text{Current liabilities}}$$

ii.   Average Collection Period (ACP):

It indicates the no. of days it takes on an average to collect account receivables. It is computed as

$$\text{a) Average Collection Period} = \frac{\text{Days in a years(360)}}{\text{Receivable turnover}}$$

$$\text{b) Average days of five years} = \frac{\text{Total dauys of five years}}{\text{Five years}}$$

3.8.2 Statistical Analysis

i. Straight line trend, correlation and regression:

   a) Straight line trend $(Y_c) = a + bx$

   b) Correlation (r):

"Correlation analysis is the statistical tools that we can use to describe the degree to which one variable is linearly related to another" (Richard and David 1991). It does not tell as anything about causes and effect relationship. correlation analysis helps in determining the degree of relationship between two or more variable. "In business, correlation analysis enables the executive to estimate costs, sales price and other variables. On the basis of some other series with which their costs, sales or prices may be functionally related. Some of the guesswork can be removed from decisions when the relationship, between variables to be estimated and the one or more other variables to be estimated

and the one or more other variables on which it depends are closed and reasonably in variant" (Gupta, 1986 ; 103).

For the purpose of analysis of cash management in BNL the correlation analysis is applied in same related topics. In these topics it can be seen the correlation between dependent and independent variables of cash management the formula applied on the correlation is as follows:

$$r = \frac{uy}{\sqrt{u^2 \times v^2}}$$

c)   **Standard deviation**

The standard deviation of a series of value is defined as the square root of the mean of the square deviation from mean of the distribution. It may be found by finding the differences between each individual frequency and the mean of the distribution, squaring these differences individually adding the square deviation and dividing by N and then extracting the square of the results. The fundamental formula for the standard deviation is as follows:

$$S.D = \sqrt{\frac{d^2}{N} - \frac{(^2)}{N}}$$

"The S.D or the root mean square deviation is the square root of the mean of the square deviation from their mean of a set of values" (Monga).

"The standard deviation measures the absolute variability the greater the SD, for the greater from their mean. A small S.D means a high degree of uniformity of the observation   as well as homogeneity of a series" (Ibid). In BNL standard deviation is applied where it is necessary.

d) $P.E.R. = 0.6745 \frac{(1 - r^2)}{\sqrt{n}}$

If 'r' is less than its PE, it is not all significant. If 'r' is more as PE there is correlation. If 'r' is more than 6 times it's PE and greater than is $\pm$ 0.5, than it is considered significant.

e)   Regression line of sales (x) on cash balance Y

"Regression is the determination of statistical relationship between two or more variables. One is independent variable that affects the behavior of dependent variable. Regression can only be interpreted of what exists physically i.e. there must be physical way in which independent variable x can effect dependent variable (Y)" (Kothari, 1989; 46).

For the analysis of cash management of BNL simple regression analysis is applied to locate the relationship between sales on cash balance. The computation of regression line of sales (x) on cash balance (Y) is as follows:

$$(x - \bar{x}) = r \frac{x}{y} (y - \bar{y})$$

The regression line of cash balance (Y) on actual

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

CHAPTER FOUR
ANALYSIS AND PRESETATION OF DATA

The basis objective of this study as stated in chapter one is to have true insight into "Cash Management" of BNL. For accomplishment of these objectives is 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 of BNL.

4.1 Analysis of the Data by Financial Tools

4.1.1 Analysis of cash balance

Management of cash plays a vital role in current assets of BNL. The total cash include cash in hand, cash at bank and cash in transit. The table below shows the cash position of the company during the study period

Table 4.1: Analysis of Cash Balance

Fiscal year	Cash and Bank balance (Rs)	Increase (Decrease) %
2061/062	5335000	-
2062/063	13755000	157.83
2063/064	1917000	(86.06)
2064/065	35926000	1774.07
2065/66	3464000	(90.36)

Source: Annual report of BNL for the relevant year

The cash holding of the company shows very fluctuate as it increased by 157.83 percent in FY 2062/063 as compared to 2061/62and in FY 2063/64 decreased by 86.06 percent as compared to cash balance of 2062/63 But strong chances occurred in 2064/65 where the cash balance increased to 1774.07 percent. In fact this visualizes that the company could not make the best use of these available cash balance prudently. There is declined of cash balance

to 90.36 percent in 2065/66 which is more than as compared to 2063/64 but the cash balance in 2064/65 is very less amount as compared to 2063/64. On the whole these figure show that there is no any definite policy of cash management. While in some years it has maintained excessive of cash balance, while in others years it has very low. Moreover the company has not planned cash inflow and outflow forecasts. It is of crucial importance for the company to keep careful watch over the cash movements of determine how cash throw offs become available and also to investigate the opportunity for the use of cash.

4.1.2 Analysis of Cash Turnover

Table 4.2 Analysis of Cash Turnover

Fiscal year	cash and bank balance(Rs)	sales (Rs)	Cash Turnover (Time)
2061/62	5335000	609654000	114.27
2062/63	13755000	632114000	45.96
2063/64	1917000	614739000	320.68
2064/65	35926000	621827000	17.31
2065/66	3464000	434190000	183.08
Average			136.264

Source: Annual Report of BNL for the Relevant Year

Cash turnover ratio represents how quickly the cash is received from its sale be formulates to find out. Higher turnover is the signal of good liquidity and vice versa. The above table shows that the highest cash turnover is 320.68 times in the FY 2063/64 when average being 136.26. In the year 2063/64 and 2064/65, the cash turnover time is more than that of the averages. This shows that in the year 2063/64 it takes 320.68 times and 2065/66 it takes 183.08 times which are above from the standards i.e. averages. This table shows that a cash turnover time in a company is not homogeneity i.e. there is fluctuating trend.

Some time it takes more time where as some time it takes very less time than that of averages.

Which indicates that in the year 2061/62 2062/63 and 2064/65 company unable to collect cash from its credit sale timely. From the calculation it is observed that the collection efficiency in BNL is very low.

Figure 4.1: Graphical Presentation between Cash and Bank Balance and Sales
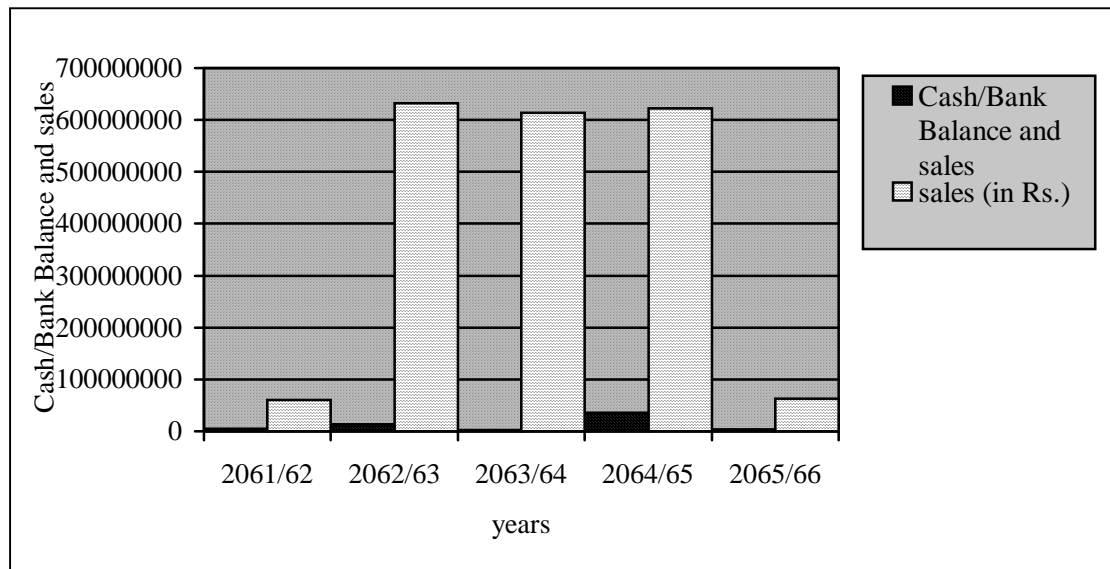
The above bar diagram shows that the graphical presentation of the relation between cash and bank balance and sales. The graph shows that the sales are maximum in the fiscal year 2062/63 and minimum in the year 2065/66. The figure also shows that cash and bank balance is minimum in the year 2063/64 and maximum in the year 2064/65. In the figure it is seen that the cash and Bank balance comparison with sales is very minimum.

4.1.3 Analysis of Cash Conversion Cycle

Liquidity is the most important factor in determining firm's working capital policy. Liquidity has two aspects ongoing liquidity and protective liquidity, out of which, ongoing liquidity refers to the inflows and outflows of cash. So it is important to go through the cash flow of the company with the help of analyzing firm's cash conversion cycle.

A cash conversion cycle reflects the net time interval in days between actual cash expenditure of the firm on conversion period indicates resources and ultimate recovery of the cash. The cash conversion cycle is calculated as follows:

Cash conversion cycle = Inventory conversion period + conversion period-payable deferral period

To analyze the cash conversion cycle first of all it should be analyzed inventory conversion period, receivable period and payable deferrable deferral period.

i.   Inventory Conversion period:

Inventory conversion period indicates efficient of the firms in selling its product. The short period indicates fast conversion of inventory to sales and the long period indicates fast conversion of inventory to sales and the long period indicates slow conversion period of inventory to sales. It can be calculated as follows:

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

$$\text{ICP} = \frac{360}{\text{Invontory Turnover}}$$

Table 4.3: Analysis of Inventory Conversion Period

Fiscal Year	Days in a year	sales (Rs)	inventory (Rs)	Inventory turnover time	I.C.P. (days)
2061/62	360	609654000	226861000	2.69	133.83
2062/63	360	632114000	184980000	3.42	105.26
2063/64	360	614739000	224070000	2.74	131.39
2064/65	360	621827000	176936000	3.51	102.56
2065/66	360	434190000	189256000	2.29	157.21
Average					126.05

Source: Annual Report of BNL for the Relevant Year

The calculation of inventory conversion period of BNL in the above table has shown fluctuating trend in the study period. Varies from maximum of 157.21 =157days in the fiscal year 2065/66 to minimum of 102.6 = 103days in the fiscal year 2064/65. The maximum period refers the slow inventory turnover and minimum period prefers the fast inventory turnover. The average ICP is found 126.05=126days which is more than that of year 2062/63 and 2064/65 and less than in the year 2061/62 2063/64 and 2065/66 inventory conversion period .

Figure 4.2: Graphical Presentation between Sales and Inventory
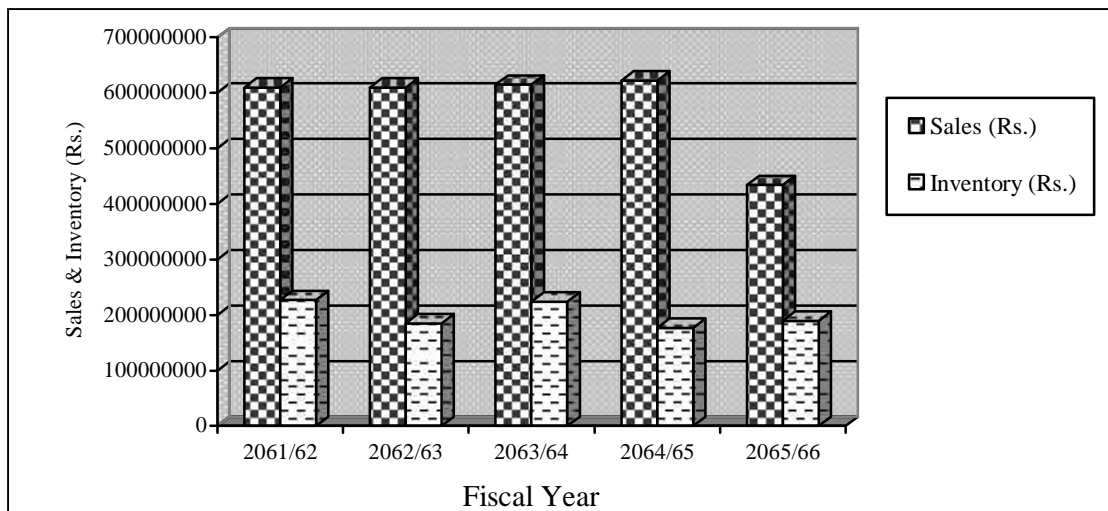
The above bar diagram shows that the relation between sales and inventory. In the figure shows that, the relation of inventory with comparing to sales except in fiscal year 2063/64 is in decreasing trend. The sales are maximum in the year 2062/63 and minimum in the year 2065/66 and inventory in the year 2064/65 and in the year 2061/62 is very high.

ii.   Analysis of Receivable Conversion Period:

Receivable conversion period indicates the number of day's debtor turnover into cash. It analyzes collectable of debtors. The longer collection period, more efficient is the management of credit policy or it refers to the liberal credit policy and short period refers to the strict credit policy. The receivable conversion period is calculated as follows:

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

$$\text{RCP} = \frac{\text{Days in a year}}{\text{receivable turnover}}$$
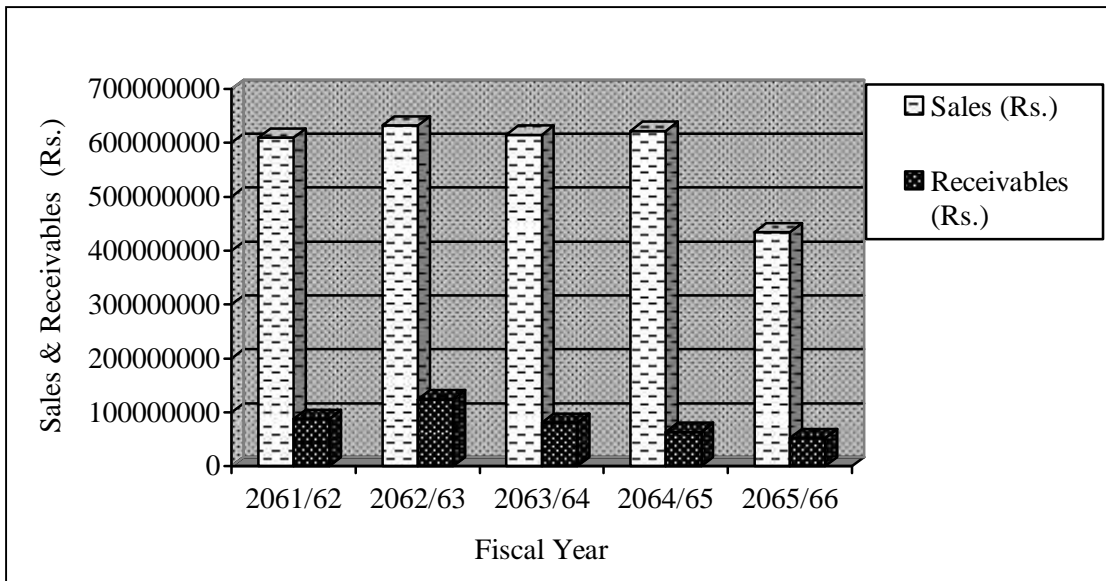
Table 4.4: Analysis of Receivable Conversion Period

Fiscal Year	days in a year	says (Rs)	Receivables (Rs)	Receivable turnover Times	RCP days
2061/62	360	60,96,54,000	8,80,39,000	6.92	52.07
2062/63	360	63,21,14,000	12,41,78,000	5.09	70.73
2063/64	360	61,47,39,000	8,08,45,000	7.60	47.37
2064/65	360	62,18,27,000	6,36,57,000	9.77	36.85
2065/66	360	43,41,90,000	5,28,23,000	8.22	43.80
Average					50.154

Source: Annual Report of BNL for the Relevant Year

The calculation of receivable conversion period of BNL in the above table has shown fluctuating trend in the study Period. It varies from the minimum 36.85=37 days in the year 2064/65 to maximum 70.73=71 days in the year 2062/63. The average receivable conversion period of NBL is 50.15=50days. Low collection period indicates fast conversion of receivable and long collection period indicates slow conversion period. Here in the year 2063/64, 2064/65 and 2065/66, collection period is less than average and in the year 2061/62 and 2062/63 the collection period is higher than average collection period.

Figure 4.3: Graphical Presentations between Sales and Receivable

In the above figure it is seen the receivables are in fluctuate trend. Sales are minimum in the year 2065/66 Receivable with compare to sales are very minimum which is positive signal for the company.

iii.   Analysis of Payable Conversion Period:

Payable conversion Period indicates that speed of creditors payable. A high payable conversion period is favorable for the company. Payable differed (conversion) period is calculated as follows:

$$\text{PDF} = \frac{\text{Creditors} \times \text{Days in a year}}{\text{Purchases}}$$

Table 4.5: Analysis of Payable Conversion Period

Fiscal year	Creditors (Rs)	Purchase (Rs)	Days in a year	PDP (days)
2061/62	5,81,65,000	32,62,63,000	360	64.18
2062/63	5,42,96,000	31,64,96,000	360	61.76
2063/64	7,23,33,000	33,93,15,000	360`	44.91
2064/65	3,53,36,000	21,28,80,000	360	59.76
2065/66	4,63,02,000	30,15,78,000	360	55.28
Average				57.178

Source: Annual Report of BNL for the relevant year

The calculation of payable deferral period of BNL in the above table indicates fluctuating trend in the study period. In the study period PDP varies from maximum of 64.18 days in the year 2061/62 and minimum of 44.91 days in the year 2063/64. The average payable period of 57.178 = 57days has taken by company for the payment of trade creditors.

Figure 4.4: Graphical Representations between Purchase and Creditors
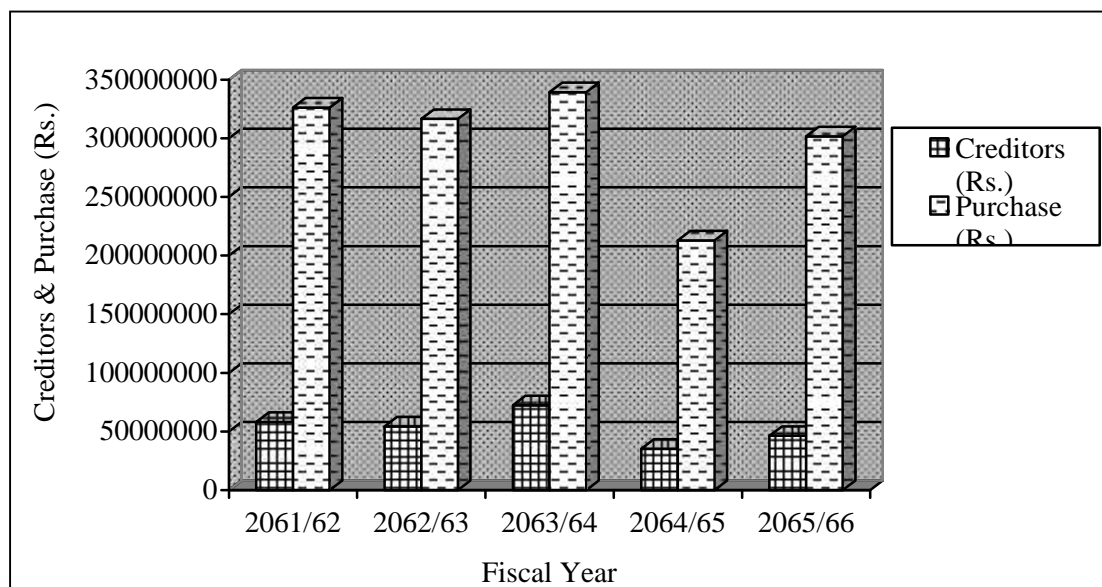
The figure shows that the graphical presentation between purchase and creditors. In the figure it is seen that the purchase is minimum in the year 2064/65 and maximum in the year 2063/64. The relation of the creditors in comparison to purchase is homogeneous in preceding four years and in final years it is in increasing trend.

iv.   Calculation of Cash Conversion Cycle (CCC)

Cash conversion cycle shows how many time does it take to convert the receivable into cash, inventory turnover into cash and how much time it takes to repay its obligation. Shortly, it refers the cash inflow and outflow of the company. The cash conversion cycle is calculated as follows:

CCC = ICP + RCP – PDP

Table 4.6: Analysis of Cash Conversion Cycle (Days)

Fiscal year	ICP	RCP	PDP	CCC
2061/62	134	52	64	122
2062/63	105	71	62	112
2063/64	131	47	45	133
2064/65	103	37	60	80
2065/66	157	44	55	146
Average				119

Source: Audited Balance Sheet of BNL for the Relevant Year

The above table shows the cash conversion cycle CCC of BNL for the study period of five years from the fiscal year 2061/62 to 2065/66. Above table shows fluctuating trend in the company during the study period. The average cash conversion cycle of BNL is 199 days which seem to be not satisfactory but company's credibility is good. Firm could not get the credit due to the company delay in paying its obligation. BNL has maximum of 146 days in the year 2065/66 and minimum of 80 days in the year 2064/65

Figure 4.5: Graphical Presentation among RCP, PDP and CCC
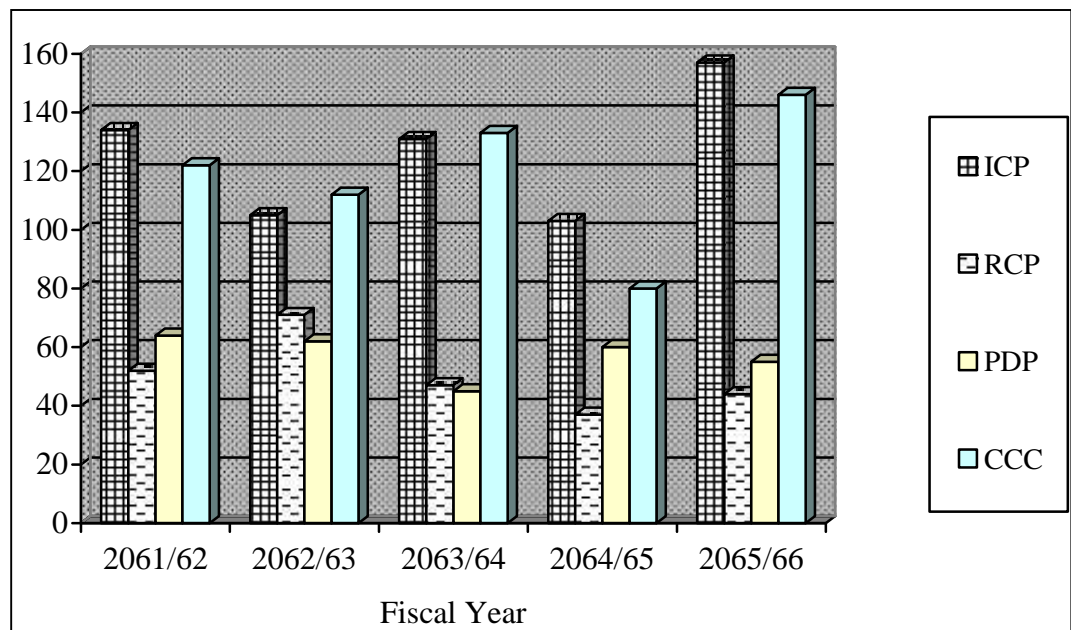
The above figure shows that the graphical representation among ICP, RCP, PDP and CCC. In the above multiple bar diagram it is seen that ICP are in decreasing trend except in the year 2065/66 over study period, RCP is increased in the year 2062/63 and decreasing in the year 2063/64 and maximum in the year 2061/62 and CCC is fluctuating trend.

4.1.4 Analysis of Account Receivable of BNL

The comparison sells its goods on credit and cash basis. When the corporations extend credit to its customers, book debts are credited. Debtors or account receivables are to be converted into cash over a short period in included in correct assets. The liquidity position of the corporation depends on the quality of debtors to a great extent.

Account receivables turnover in the relationship between credit sales and collection period. If turnover is high, there will be little congestion of fund in turnover and vice versa.

Table 4.7: Analysis of Account Receivable Turnover of BNL

Fiscal Year	Receivable (Rs)	Sales (Rs)	Ratio in (Time)	Total Collection (%)
2061/62	88039000	609654000	6.92	85.56
2062/63	124178000	632114000	5.09	80.36
2063/64	80845000	614739000	7.60	86.85
2064/65	63657000	621827000	9.77	89.76
2065/66	57823000	434190000	8.22	87.83

Source: Audited Balance Sheet of BNL for the Relevant Year

From the above table, a receivable turnover time on the year 2064/65 is 9.77, which is very high in the study period whereas in the other previous study years it seems to be homogeneity. The table also shows that the company account receivable is 11 to 20% that is very positive signal for the company because collection of sales over than 80 percent in relevant year is a satisfactory situation for the company.

4.1.5 Analysis of Account Receivable to Cash and Bank Balance

Cash and bank balance measures the relationship between level of cash and bank to AR over a period of time. The greater the AR the better the turnover would be provided that, cash and bank balance can be maintained at a desirable level. The following table shows the relationship of AR to cash and bank balance.

**Table 4.8: Analysis of Account Receivable to Cash and Bank Balance**

Fiscal year	AR(Rs.)	cash and bank balance(Rs.)	% of AR
2061/62	88039000	5335000	6.06
2062/63	124178000	13755000	11.08
2063/64	80845000	1917000	2.37
2064/65	63657000	35926000	56.44
2065/66	52823000	3464000	6.56
Average			16.50

Source: Audited Balance Sheet of BNL for the Relevant Year

The analysis of the above table shows the analysis of account receivable to cash and bank balance in the study period. It clearly shows that in the study period is in fluctuating trend i. e. 6.06 percent, 11.08 percent, 2.37 percent, 56.44 percent and 5.56 percent respectively for year 2061/62 2062/63 2063/64 2064/65 and 2065/66. During the study period cash and bank balance is not homogeneity i.e. from 2.37%and 56.44 percent the amount of cash and bank balance with respect to account receivable is minimum which shows that the management is less concerned to speed of the collections of account receivables. By this situation company is suffered the deficit of cash balance to meet its current liabilities and also shows that management has taken semi liberal credit policy of sales of goods.

Evaluating this situation, cash and bank balance is neither so good nor so bad I e moderately satisfactory because the minimum percentage of the AR on cash and bank balance is not satisfactory in corporation to account receivables thus it can be said that, higher the account receivables thus it can be said that, higher the account receivable caused lower cash balance and vice versa. Thus management should not adopt strength policy to increase cash balance to maintain at a desired level of cash balance.

Figure 4.6: Graphical Presentations between Account Receivable and Cash and Bank Balance
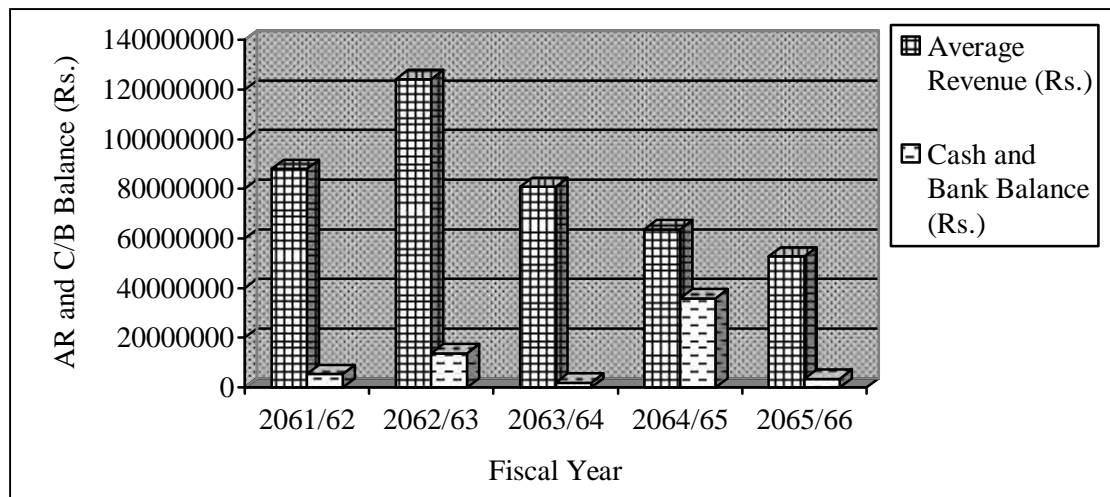
The above bar diagram shows that the relation of account receivable with cash and bank balance. In the figure it is seen that the account receivable with cash and bank balance. In the figure it is seen that the account receivable except in the year 2062/63 is in decreasing trend and cash and bank balances are in fluctuating trend. It is minimum in the year 2063/64 and maximum in the year 2064/65. But increase of AR it is minimum in the year 2065/66 and maximum in the year 2061/62

4.1.6 Analysis of Cash and Bank Balance to Current Assets

The ratio directly offers the cash management of the company. Lower ratio shows the sound liquidity management of the company it is calculated by cash and bank balance divided by current assets, which is shown in following table.

Table 4.9: Analysis of Cash and Bank Balance to Current Assets

Fiscal year	CLB balance	Current assets (Rs)	% of CLB on CA
2061/62	5335000	532383000	1.00
2062/63	13755000	447831000	3.07
2063/64	1917000	453211000	0.42
2064/65	35926000	436045000	8.24
2065/66	3454000	469701000	0.74
Average			2.694

Source: Audited Balance Sheet of BNL for the Relevant Year

Above table shows the percentage of cash and Bank balance to current assets of the company. Above table indicates that the cash and bank balance with respect to current assets has been fluctuating trend. During the study period it is the lowest 0.42 percent for the year 2063/64 and the highest 8.24 percent in the year 2064/65 On an average the projection of cash and bank balance to current assets for the study period 2.694 percent while comparing with the average it is found that the percentage of cash and bank balance to current assets for the year except 2062/63 and 2064/65 are lower. Thus it can be said that the cash position of BNL is not good.

Figure 4.7: Graphical Presentations between Cash Balance and Current Assets
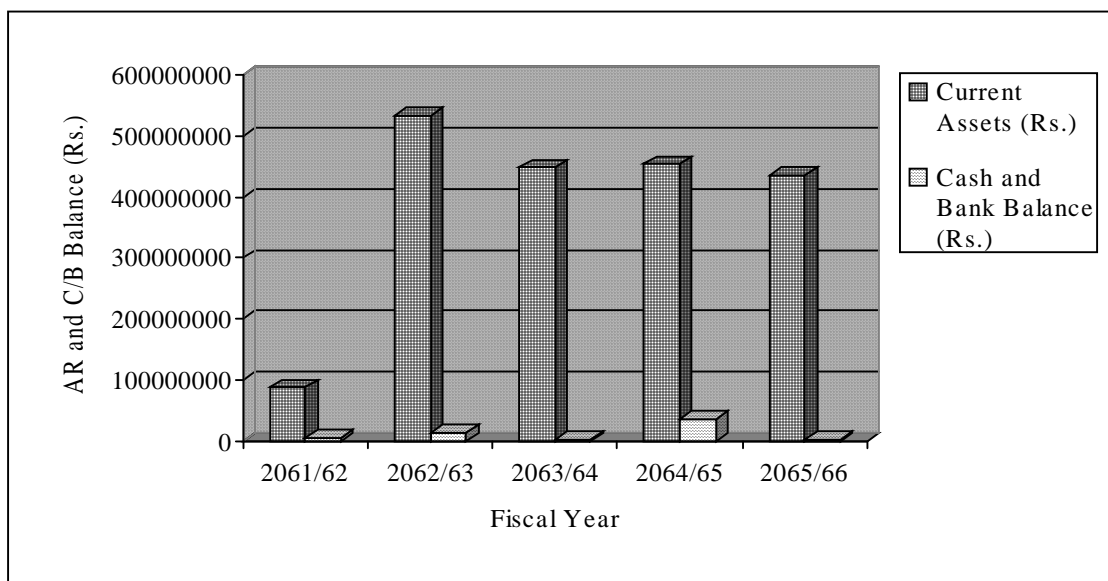
The above diagram shows that the graphical relation between current assets and bank balance. In the figure it is seen that the current assets are in fluctuating trend over the study period whereas the cash and bank balance also in the fluctuating trend. The figure also clearly shows that portion of cash and bank balance with comparing to its current assets are very low.

4.1.7. Analysis of Cash and Bank Balance to Total Assets

The higher ratio indicates the lower risk and profitability whereas lower ratio indicates higher risks and higher profitability. It is calculated dividing cash and bank balance by total assets which is shown in below.

Table 4.10: Analysis of Cash Management and Bank Balance to Total Assets

Fiscal year	C and B balance	total assets	% of C and B balance on T.A.
2061/62	5335000	1022405000	0.52
2062/63	13755000	886555000	1.55
2063/64	1917000	975266000	0.20
2064/65	35926000	10483530000	3.43
2065/66	3464000	1252066000	0.77
Average			1.29

Source: Annual Report of BNL for the Relevant Year

The above table shows the percentage of cash and bank balance to total assets of BNL the ratio represents the proposition of cash and bank balance to total assets investments of BNL of study period. Above BNL, the percentage of cash and bank balance to total assets in the fluctuating trend. The ratio varies from minimum 0.52 percent to maximum 3.43 percent in the year 2063/64 and 2064/65 respectively. It has average ratio of 1.29 percent which seems very low for the company BNL. On the average 1.39 percent during the study period which is greater that in the year i.e. 2061/62, 2063/64 and 2065/66. Among the components of current assets cash and bank balance hold the minimum proportion. Cash is required for day to business operation. Cash shortage for

the firm means, firm is not able to invest in golden opportunities. From the personal construct with the divisional manager, it is known that it is due to improper management of cash of the company.

Figure 4.8: Graphical Presentation between Cash and Bank Balance and Total Assets
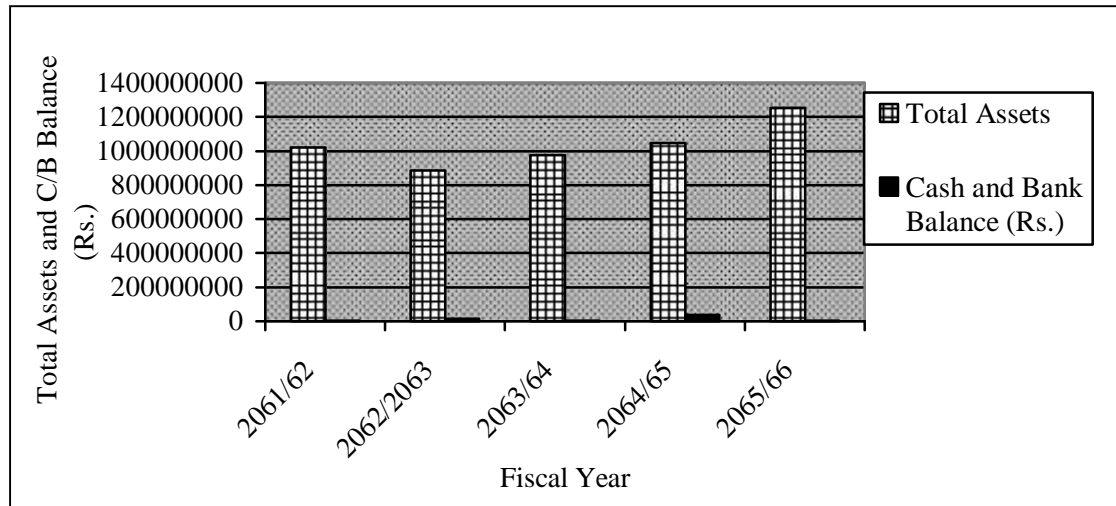
Above bar diagram shows that, the relation between cash and bank balance and total assets. In the figure it is seen that the total assets are in increasing trend over the study except the year 2062/63 whereas cash and bank balances are in fluctuating trend. The figure clearly shows that the proportion of cash and bank balance with comparing to its total assets are very low.

4.1.8 Analysis of Cash and Bank Balance to Current Liabilities

Among the techniques of measuring company's liquidity the ratio of cash to current liabilities may also be used as index of cash management. This ratio indicates the amounts of cash (in percentage) available to pay the current obligation of the firm. In general a low percentage of cash to current liabilities may be regarded as a favorable indicator. However, a very ratio is also not desirable as it may lead to corporate solvency. The table shows the level of cash in relation to current liabilities of Nepal Bottlers limited.

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Table 4.11: Analysis of Cash and Bank Balance to Current Liabilities

Fiscal year	C& B balance	Current liabilities (Rs)	% of C & B on CL
206162	5335000	332848000	1.60
2062/63	13755000	174022000	7.90
2063/64	1917000	22891000	0.84
2064/65	35926000	275483000	13.04
2065/66	3464000	576400000	6.01
Average			5.88

Source: Annual Report of BNL for Relevant year

From the above table the lowest ratio i.e. 0.84 percent for the fiscal year 2063/64 and highest ratio i.e. 13.04 percent for the fiscal year 2064/65 In the fiscal year 2061/62, 2062/63 and 2065/66, the levels of cash relations to current liabilities are 1.6, 7.90 and 6.01percent respectively. The ratio is in fluctuating trend during the study period. Thus it can be said that the BNL has face the problem of cash management.

Figure 4.9: Graphical Presentations between Cash and Bank Balance and Current Liabilities
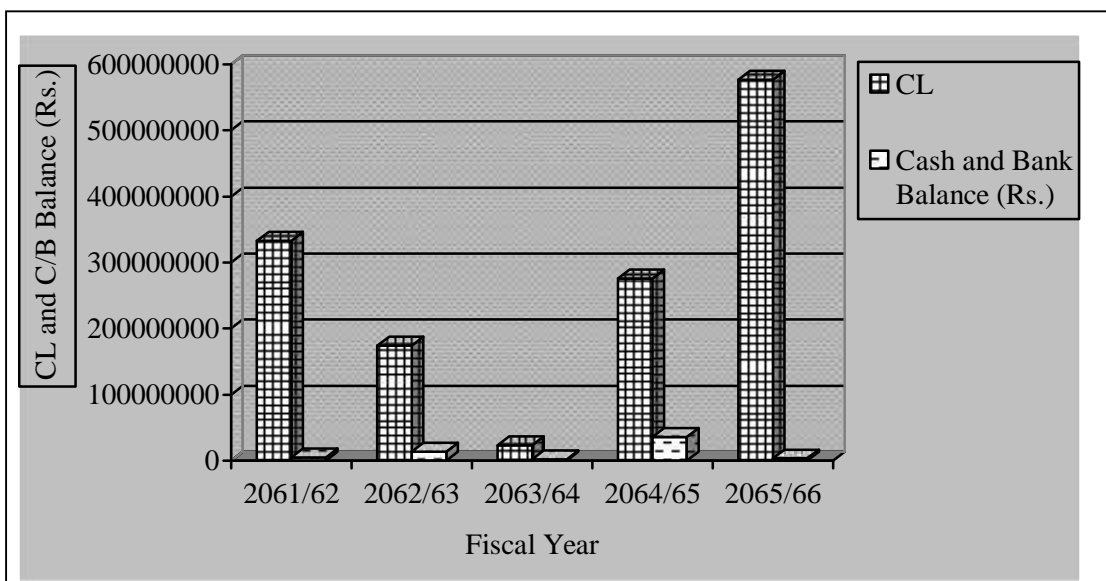
Above bar diagram shows that he graphical presentation between current liabilities and cash and bank balance. In the figure it is seen that the current liabilities are in fluctuating trend it is minimum in the year 2062/63. There is also fluctuating trend in cash and bank balance. The portion of cash and bank balance with comparison to current liabilities are very low.

4.2 Statistical Analysis

4.2.1 Fitting the Straight Line Trend by Least Square

Spreadsheet for variation s in cash balance to analyze the data by using least square method let us assume that the fiscal year be   and cash balance be Y. if we keep the fiscal year ranking from 1 to 5 than number of observation would be 5. Similarly, cash balance Y would be kept in four figures i.e. in Rs. to make calculation easier.

So that the straight line trend $Yc = a + bx$

Where,
$$\overline{X} = \frac{\sum X}{N}$$
$$a = \frac{\sum Y}{N}$$
$$b = \frac{\sum XY}{\sum X^2}$$
$$X = (X - \overline{X})$$

Table 4.12: Least Square Spreadsheet between FY and Cash and Bank Balance

Fiscal Year	Cash balance in Rs. (000) (Y)	$X - \overline{X}$	X^2	XY
2061/62 (1)	5335	-2	4	-10670
2062/63 (2)	13755	-1	1	-13755
2063/64 (3)	1917	0	0	0
2064/65 (4)	35926	1	1	35926
2065/66(5)	3464	2	4	6928
$\overline{X} = \frac{\sum X}{N}$	$\sum Y = 60397$	$\sum X = 0$	$X^2 = 10$	XY = 18429

Source: Annual Report of BNL for the Relevant Year

$$\overline{X} = \Sigma x/N = 15/5 = 3$$

$$a = \Sigma y/N = 60397/5 = 12079.9$$

$$b = \Sigma XY/\Sigma X^2 = 18429/10 = 1842.9$$

$$Y_c = 12079.4 + 1842.9X$$

This trend ling shows the positive figure of cash balance for future. The annual rate of increment of cash balance is same to be $1842.9 \times 1000 = 1842900$.

To predict the future cash balance fitting the above calculated cash trend line in the following table for future four year, by taking FY 2061/62 as a base year.

Table 4.13: Future Trend Line of Cash Balance

Fiscal Year	X	Trend line $Y_c = 42079.4 + 1842.9X$	Cash Balance (Y)
2066/67	(2066/67-2061/62)=6	Yc= 42079-471842.9×6	23136.8
2067/68	(2067/68-2061/62)=7	Yc=12079.4+1842.9×7	24979.7
2068/69	(2068/69-2061/62)=8	Yc=12079.4+1842.9×8	26822.6
2069/70	(2069/70-2061/62)=9	Y_c=12079.4+1842.9×9	28665.5

By the help of fit line trend in the FY 2066/67 will be cash balance 23136.8 thousand similarly 2497.7, 26822.6 and 28665.5 thousand for the year 2067/68 2068/69 and 2069/70 respectively.

In the conclusion the cash generated trend is increasing slop. Which implies cash will be more than present.

Figure 4.10: Future Trend of Cash Balance
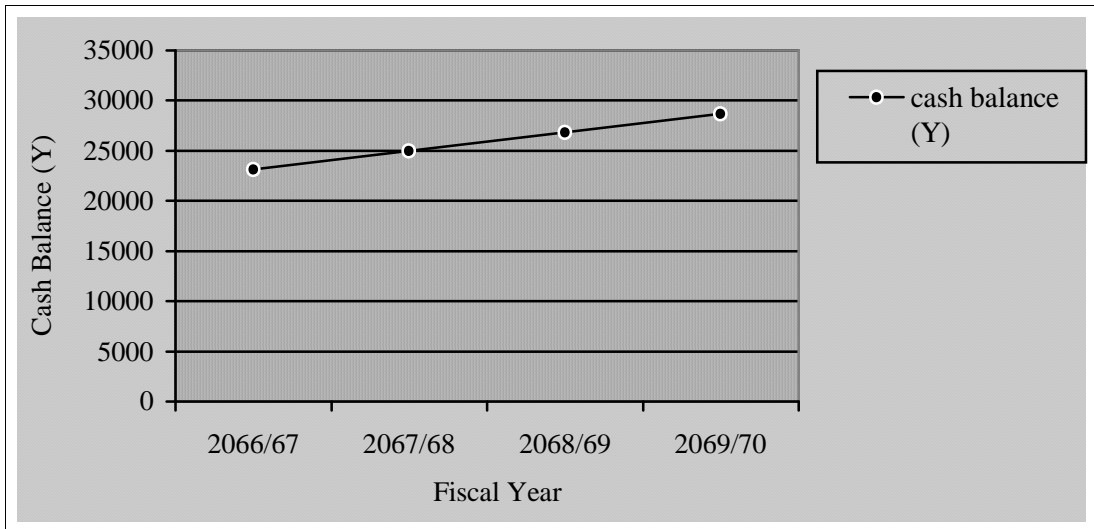
The trend line shows that cash balance will increase trend in future.

4.2.2 Correlation Coefficient between Cash/Bank Balance and Actual Sales

To find correlation between sales and cash/bank balance Karl Pearson's coefficient of correlation (r) is determined. For this purpose actual sales (X) are assumed to be dependence variables and cash balance Y are assumed to be independent variable. At first, it is assumed that actual sales will increase as cash balance will increase or vice versa. It means these be positive correlation between cash balance and actual sales. The significance of correlation 'r' is tested with probable error or 'r'.

Table 4.14: Correlation 'r' between Actual Sales and Cash Balance (in Rs. 000)

Fiscal Year	Actual Sales (X)	Cash Balance (Y)	$X - \overline{X}$ (U)	$Y - \overline{Y}$ (V)	U^2	V^2	UV
2061/62	609654	5335	-12850.8	-6744.4	165143060.6	45486931.36	866709305.52
2062/63	632114	13755	9609.2	1675.6	92336724.64	2807635.36	16101175.52
2063/64	614739	1917	-7765.8	-10162.4	60307649.64	103274373.8	78219165.92
2064/65	621827	35926	-677.8	23846.6	459412.84	568660331.6	-16263225.48
2065/66	634190	3464	11685.2	-8615.4	136543899	74225117.16	-100672672.1
Total	$\Sigma X=$ 3112524	$\Sigma Y=$ 60397	$\Sigma U=0$	$\Sigma V=0$	$\Sigma U^2=$ 454790746.8	$\Sigma V^2=$ 794454389.3	64055379.38

Source: Audited Balance Sheet of BNL for the Relevant Year

$$\overline{X} = \frac{\sum X}{N} = \frac{3112524}{5} = 622504.8$$

$$\overline{Y} = \frac{\sum Y}{N} = \frac{60397}{5} = 12079.4$$

$$r = \frac{\sum UV}{\sqrt{\sum U^2 \times \sum V^2}} = \frac{64055379.38}{601091095.4} = 0.107 \approx 0.11$$

$$\therefore \quad r = 11\%$$

We have standard deviation of actual sales X

$$_X = \sqrt{\frac{\sum (X - \overline{X})^2}{n}} = \sqrt{\frac{957790746.8}{5}} = 9537.20$$

Similarly, standard deviation of cash balance Y

$$_Y = \sqrt{\frac{\sum (Y - \overline{Y})^2}{n}} = \sqrt{\frac{794454389.3}{5}} = 12605.19$$

The value of 'r' 0.107 i.e. 11% shows that there is lower positive correlations between cash and sales. But this positive correlation is not only due to chances. The test of significant of the value or 'r' is shows that either there is significant positive relationship or not between the cash balance and sales.

i.e. P.E. of 'r'

$$r = \frac{8.6745[1 - (0.107)^2]}{\sqrt{5}} 0.2981917 = 0.30$$

Since, r < P.E. 'r' the value of 'r' is not at all significant so it is doubt to say that whether cash balance, will increase actual sales will also increase actual sales will also increases or vice versa. So that, my assumption is found wrong.

A regression line can also be fitted to show the degree of relationship between actual sales and cash and bank balance. Cash balance can be

forecasted by the value of actual sales. For this purpose cash balance and actual sales have been assumed interrelated economic variables. So, the regression line of sales (X) on cash balance (Y) is

$$X - \overline{X} = r.\frac{X}{Y}(Y - \overline{Y}), \quad \overline{X} = 622504.8, \quad \overline{Y} = 12079.4$$

$$X - 622504.8 = 0.107 \times \frac{9537.20}{12605.19}(Y - 12079.4)$$

or, X-622504.8 = 0.08096 (Y-12079.4)

or, X - 622504.8 = 0.08096Y - 977.91

$\therefore$ X = 0.08096Y + 621526.89

This equation shows that sales will be increased by 0.0809 per Rs. increases in cash balance.

Next the regression line of cash balance (Y) on actual sales (X) or Y on X is as under:

$$Y - \vec{Y} = r.\frac{Y}{X}(X - \overline{X})$$

$$Y - 12079.4 = 0.107 \times \frac{12605.19}{9537.20}(X - 622504.8)$$

or, Y-12079.4 = 0.1414X - 88034.92

$\therefore$ Y = 0.1414X - 75955.52

Thus, an assumption that cash balance is a function of sales achieved this shows that per Rs. increases in sales by 0.1414 per Rs. increases in cash balance.

4.2.3 Fitting the Straight Line Trend by Least Square for Sales and Receivables

Time element is also important factor because with the passage of time sales achievements account receivables changes, which can be expressed by the component of time series. A straight line trend by the method of least square will show the relationship between years (time) and ratio in time of account receivables and sales.

Table 4.15: Fitting the Straight Line Trend by Least Square for Sales and Receivable

Fiscal Year (X)	Ration in time (Y)	$(X - \overline{X})$	X^2	ΣXY
2061/62 (1)	6.92	-2	4	-13.84
2062/63 (2)	5.09	-1	1	-5.09
2063/64 (3)	7.60	0	0	0
2064/65 (4)	9.77	1	1	9.77
2065/66 (5)	8.22	2	4	16.44
$\Sigma X = 15$	$\Sigma Y = 37.60$	$\Sigma X = 0$	$\Sigma X^2 = 10$	$\Sigma XY = 7.28$

Source: Annual Report of BNL for the Relevant Year

$$\overline{X} = \frac{\Sigma X}{N} = \frac{15}{5} = 3$$

X = No. of observation

Y = Time in ratio of AR and sales straight line trend

$Y_c = a + bx$

$$a = \frac{\Sigma Y}{n} = \frac{37.60}{5} = 7.52$$

$$b = \frac{\Sigma XY}{\Sigma X^2} = \frac{7.28}{10} \, 0.728$$

Therefore, $Y_c = 7.52 + 0.728X$

This trend line shows that sales are directly affected by the account receivable in future.

To predict the future trend for sales and receivable, fitting the above calculated sales and receivable trend in the following table for future four years by taking FY 2061/62 as a base year.

Table 4.16: Future Trend line for Sales and Receivable

Fiscal year	X	Trend line	A/R ratio in time (Y)
2066/67	2066/67 – 2061/62 = 6	$Y_c = 7.52 + 0.728 \times 6$	11.89
2067/68	2067/68 – 2061/62 = 7	$Y_c = 7.52 + 0.728 \times 7$	12.62
2068/69	2068/69 – 2061/62 = 8	$Y_c = 7.52 + 0.728 \times 8$	13.34
2069/70	2069/70 – 2061/62 9	$Y_c = 7.52 + 0.728 \times 9$	14.07

By the help of above data presentation indicates that sales and receivables both are in increasing trend for future simultaneously. If sales will be increases. The receivable will be also increases.

Figure 4.11: Future Trend Line of A/R and Sales by A/R Turnover Ratio
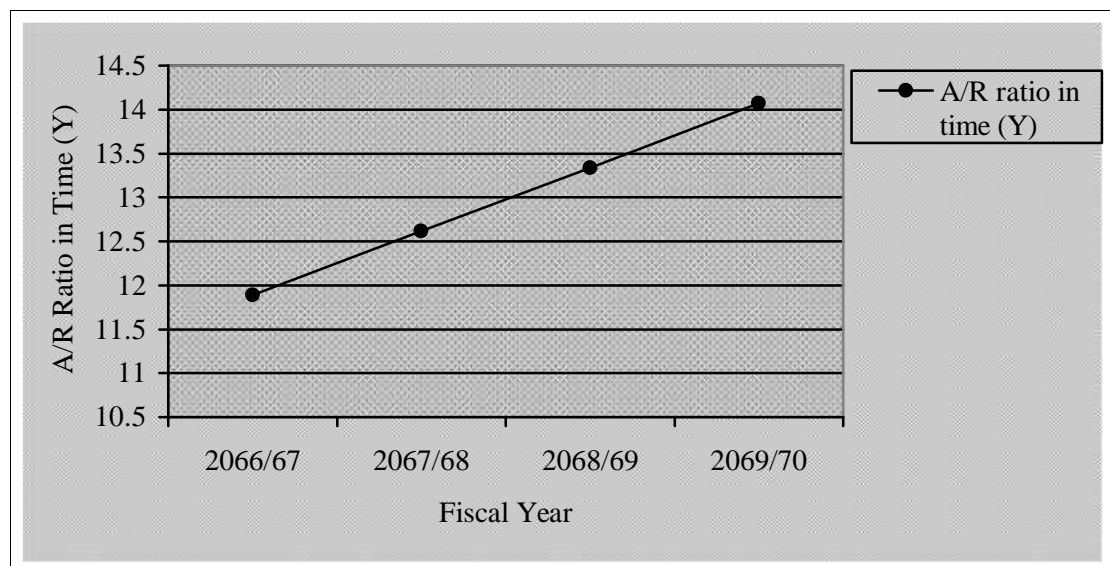
The trend line shows that A/R turnover ration in future will increasing trend that means sales and receivable are increasing in future.

4.2.4 Analysis of Correlation Coefficient between Sales and Account Receivables

To find out the correlation between sales and receivable, Karl Pearson's communities-efficient of correlation 'r' is determined. For this purpose sales and receivables are assumed to be interrelated economic variables. So both receivables relations are explored. Its assumed receivables (X) are dependent variables and sales (Y) are independent variables. It is assumed that sales will increase as receivables increases or vice-versa. It means that there should be positive relationship between sales and receivables.

Table 4.17: Correlation 'r' between Receivables and Sales (in Rs. 000)

Year	Receivables (X)	Sales (Y)	$Y - \overline{Y}$ (y)	Y^2	$X - \overline{X}$ (x)	Σxy	X^2
2061/62	88039	609654	-12850.8	165143060.6	6130.6	-8783114.48	37584256.36
2062/63	124178	63244	9609.2	92336724.6	42269.6	406177040.3	1786719084
2063/64	80845	614739	-7765.8	60307649.6	-1063.4	8158151.72	1130819.86
2064/65	63657	621827	-677.8	459412.8	-18251.4	12370798.92	333113602
2065/66	52823	434190	11685.2	13654389.9	-29085.4	-339868716.1	845960493.2
	ΣX = 409542	ΣY = 3112524	Σy = 0	Σy² = 454790746.8	Σx = 0	Σxy = 8154160.36	ΣX² = 3004508255

Source: Annual Report of BNL for the Relevant Year

$$\overline{X} = \frac{\sum X}{N} = \frac{409542}{5} = 81908.4$$

$$\overline{Y} = \frac{\sum Y}{N} = \frac{3112524}{5} = 622504.8$$

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \times \sum y^2}} = \frac{8154160.16}{3004508255 \times 454790746.8} = \frac{8154160.16}{1168940783} = 0.00698$$

The value of 'r' + 0.00698 shows that, there is lowest positive correlation between sales and receivables. But this positive correlation is not only due to chances. The test of significant of the value of shows either there is significant positive relation or not between sales and receivables.

The probable error of 'r'

$$r = * \frac{(1-r^2) \times 0.6745}{\sqrt{n}} = \frac{[1-(0.00698)^2] \times 0.6745}{\sqrt{5}} \, 0.3016$$

$6 \times$ P.E. 'r' $= 6 \times 0.3016 = 1.8098$

The probable error of 'r' is greater than correlation coefficient and then also grater value of 6 P.E. So, $6 \times$P.E.$>$'r' the value of r is lowest. So that, there is no significant and no relationship between sales & account receivables. We can say that it sales will increase, receivables will not increase or vice versa. A regression line can also be fitted to show the degree relationship between sales and account receivables. For this purpose receivable have been assumed to be dependent on sales.

So that, the regression line of receivable (x) on sales (y) is as follows:

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

$$x = \sqrt{\frac{\sum(X-\overline{X})^2}{n}}, \sqrt{\frac{3004508255}{5}}, \, 24513.295$$

$$†_Y = \sqrt{\frac{\sum(Y-\overline{Y})^2}{n}} = \sqrt{\frac{454790746.8}{5}} = 9537.198$$

$$X - 84908.4 = 0.00698 \times \frac{24573.295}{9537.198} (-y - 622504.8)$$

$$X - 81908.4 = 0.018y - 11195.43$$

$$X = 0.018y + 70712.97$$

$$X = 70712.97 + 0.018y$$

Thus, for Rs 1. increases in sales, the amount receivable increases by Rs. 0.018 .

Again, the regression line of sales y on receivable X is as follows:

Or,
$$Y - \overline{Y} = r. \frac{Y}{X}(X - \overline{X})$$

$$Y - 622504.8 = 0.00698 \times \frac{9537.198}{24513.295} (X - 81908.4)$$

Or, Y-622504.8 = 0.00272X − 222.435

Or, Y = 622282.365 + 0.00272X

4.2.5 Analysis of Correlation Coefficient between Account Receivables and Cash and Bank Balance

To find out the correlation between receivables, cash and bank balance Karl Pearson's coefficient of correlation r is determined. For this purpose account receivable and cash and bank balance are assumed to be interrelated economic variables let us assume receivables X is dependent variable and cash and bank balance are independent variables.

Table 4.18: Correlation between Account Receivable and Cash & Bank Balance (Rs. in '000')

Fiscal year	A/R (X)	C/B balance (Y)	$X - \overline{X}(U)$	$Y - \overline{Y}$ (V)	U^2	V^2	UV
2061/62	88039	5335	6130.6	-6744.4	37584256.36	45486931.36	-41347218.64
2062/63	124178	13755	42269.6	1675.6	1786719084	2807635.36	70826941.46
2063/64	80845	1917	-1063.4	-10162.4	1330819.56	103274373.3	10806696.16
2064/65	63657	35926	-18251.4	23846.6	333113602	568660331.6	-435233835.2
2065/66	52823	3464	-29085.4	-29085.4	845960493.2	74225117.16	250582355.2
Average	ΣX= 409542	ΣY = 60397	ΣU = 0	ΣV = 0	ΣU² = 3004508256	ΣV² = 794454389.3	ΣUV = -144365061

Source: Annual Report of BNL for the Relevant Year

$$\overline{X} = \frac{\sum X}{N} = \frac{409542}{5} = 81908.4$$

$$\overline{Y} = \frac{\sum Y}{N} = \frac{60397}{5} = 12079.4$$

$$r = \frac{\sum UV}{\sqrt{\sum U^2 \times \sum V^2}} = -\frac{144365061}{\sqrt{3004508256 \times 794454389.3}} = -0.09344$$

The value of 'r' is -0.09344 shows that there is negative correlation between receivables and cash and bank balance. But the negative correlation is not only due to chances. The test of significance negative and the value of 'r' shows either there is a significance negative correlation or not between account receivables and cash and bank balance.

The probable error P.E. (r) = $\frac{0.6745(1-r^2)}{\sqrt{n}} = \frac{0.6745[1-(0.09344)^2]}{\sqrt{5}} = 0.299$

$$P.E. (r) = 6 \times 0.299 = 1.794$$

Since the value of r < 6P.E. the value of r is not at all significant so that it is doubt to say that weather receivable increases cash balances will increases and vice versa. So that there is no extra evidence to proof that either receivable will increases cash and bank balance increases.

4.3 Analysis of Cash Flow Statement of BNL

Cash flow statement of the company significances the movements of cash in and out of company. Inflow of cash is known as source of cash and outflow is called use of cash. This statement also depicts the factors for such inflow and gets flow of cash. It virtually takes the nature and character of cash receipt and cash payments, through the basic information used in the preparation of this statement differs from that which is used in recording cash receipts and cash payments in cash inflow and outflow are explained and shown in cash flow statement before highlighting its nature and utility. The actual cash flow statement is financing activities and cash from investment activities for the FY 2061/62 to 2065/66.

Table 4.19: Calculation of Cash Flow Statement (in Rs. '000')

	2061/62	2062/63	2063/64	2064/65	2065/66
Cash flows from Operating Activities					
1. Profit/(loss) before taxation	45008	45009	43876	30963	(27279)
Adjustment					
Add: Depreciation		57330			
Depreciation	55823	6041	49176	64166	60228
Amortization	3045	1966	6602	503	532
Interest expenses	284	3	265	1329	8875
Provision for Bonus & Staff Quarter	7019	7019	6928	4889	-
Other non-cash expenditures	-	3485	-	2544	3989
Loss/(Profit) on sale of fixed Assets	1	-	-	-	(385)
2. Cash flows from Operation before Working Capital Changes	**111179**	**120853**	**106847**	**104394**	**45960**
Decrease (Increase) in current assets	73575	24505	(117358)	22427	(63198)
Increase/ (Decrease) in current liabilities	(55400)	(99311)	47201	46302	205820
Interest paid	(284)	(284)	(265)	(929)	(8814)
Payment of Gratuity	(264)	(398)	(40)	(1900)	(438)
Payment of bonus and staff quarter	(4701)	(4701)	(7615)	(6928)	(4427)
Taxes paid in respect of earlier years	(6300)	(633)	(556)	-	(1337)
Special fees paid	-	(9488)	(556)	-	-
Net cash flows from operating activities	**118089**	**30823**	**28214**	**163366**	**173526**
B. Cash flows from financing activities					
Sale/(purchase) of fixed assets/investments	(108103)	(7999)	(32457)	(36433)	(25755)
(Addition)/Deletion to capital work in progress	-	-	-	(176107)	(204204)
Others (capitalization of deferred expenses on bottles & crates	16001	-	-	11411	-
Additional to deferred expenditure	-	(4660)	(7595)	-	-
Net cash flows from investing activities	**(92102)**	**(12659)**	**(40052)**	**(201129)**	**(229959)**
C. Cash Flows from Financing Activities					
Borrowing/(repayment) of bank loan	(25000)	-	-	72000	72000
Interest paid	(200)	-	-	(400)	-
Others	(368)		-	172	-
Dividend distribution	-	(9744)	-	-	-
Net cash flows from financing activities	**(25578)**	**(9744)**	**-**	**71772**	**72000**
Net increase/(decrease) in cash (A+B+C)	**420**	**8420**	**(11838)**	**34009**	**(128433)**
Cash and cash equivalents at the beginning of the year	4915	5335	13755	1917	35925
Cash and cash equivalents at the end of the year	**5335**	**13755**	**1917**	**35926**	**(92508)**

Source: Cash Flow Statement of BNL for the Relevant Year

The actual cash flow statement is presented on the heading of cash from operating activities, cash from investing activities and cash from financing activities for the fiscal year 2061/62 to 2065/66. The above table shows that the detail calculation of cash from operating activities, investing activities and financing activities and net cash flow statement for the year end or closing cash balance. It is seen that the amount of depreciation of fixed assets is in fluctuating trend all over the study years. Above table shows that, the current assets and current liabilities are also fluctuating trend. From this analysis, we can say that the amount of operating profit is in increasing trend except FY 2062/63 and 2063/64 It is seen that the operating balance if cash are in positive figure.

In investing activities, it is seen that sales of fixed assets amounts are fluctuating trend and also in the purchase of fixed assets, it is in fluctuating trend. Company sales/purchase/investments are minimum amount of Rs. 25755 in FY 2065/66 and maximum amount of Rs. 108103 in FY 2061/62. It is also fluctuating trend. Deletion to capital work in progress minimum amount of Rs. 176107 in the FY 2064/65, maximum Rs. 204204 in the FY 2065/66 and non or zero balance in the FY 2061/62, 2062/63 and 2063/64. Deferred expenditure is 4660 in FY 2062/631 Rs. 7595 in FY 2063/64 and none of other years. Similarly capitalizations of deferred expenses are 16001, and Rs. 11411 in the FY 2061/62 and 2064/65 respectively and zero balance other three years.

From the table it can be seen that, the company is not issued share capital in the all study period it has fallen down in long term borrowing with company to its succeeding year. Payment or borrowings of Bank loan also fluctuate.

After the adjustment of financing items, we can conclude that BNL's financial position is not so good. It is poor only due to inefficient cash management

Corporation purchase goods both in cash and credit depends up on condition of cash balance, situation of time and nature of goods. Credit facilities provided by creditors are two month.

It is found that cash management of BNL is not effective. The company is sales goods in cash and credit. The percentage of credit sales depends upon credits situation of time and nature of goods. Credit period is only fifty days provided to customers. The corporation follows telephone call and personal visit method for quick collection of account receivable. There is no systematic forecast of cash in corporation.

During the study period, it seems that main sources of cash of BNL are sales of goods and loan from bank. Besides this corporation receives miscellaneous income, like interest, commission, dividend and sales of fixed assets. Corporation uses cash at huge amount for purchase of commodities paid bonus, interest, income tax, purchase of fixed assets; selling expenses etc. the corporation holds cash for transaction motives.

The basic objective of the study is to have sight over "cash management" of BNL and recommended some concrete suggestions of package for the improvement in view of analysis. Due to lack of good cash management, BNL is not able to provide necessary data, except annual balance sheet and profit and loss account.

The research design chosen for this study is descriptive and analytical. The data has been derived from annual report lacking from fiscal year 2061/62 to 2065/66. So the nature of data used for the study is secondary in nature. The data derived from annual report of BNL is presented in required tabular form and presented in the graph or bar diagram. They are analyzed by using various financial techniques such as ratio analysis and average collection period. In course of preparing this thesis some of the questionnaire based on cash management of BNL. I had asked some of the questions to the employees of

different post of that company. On the basis of analysis of answers given by them as well as result of financial and statistical analysis the main finding of this study is high lighted below:

4.4   Major Findings

1. Cash management in the BNL is primarily based on the practices lacking in scientific approach. A more serious aspect of cash management has been the absence of any formalized system of cash planning and cash budgeting in BNL.

2. The BNL could not make the best use of available cash balance prudently.

3. Modern practices with respect to debt collection monitoring the payment behavior of customers and relevant banking arrangements in connection with collection of receivables have been virtually ignored in BNL.

4. The average cash turnover time in a year is found 136 times which is in fluctuating trend over the study period.

5. The average inventory conversion period into cash is found more than 4 months i.e. 128 days which is slow than cash turnover time.

6. The average cash conversion period is faster than average receivable period which is not a good signal for the purpose of managing cash.

7. Average cash conversion cycle takes 126 days i.e. little more than 4 months which is also normal signal for cash management or cash collection efficiency of company is very normal.

8. Management has taken liberal credit policy to sales of goods. Hence the cash and bank balance of the study period is minimum of account receivable.

9. No optimum cash balance is maintained. The cash and bank balance with respect to current assets has been fluctuating trend similar is the case with respect to the total assets.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATION

5.1   Summary

Bottlers Company Limited was established on 2037 B.S. under the private company limited after the five years its convert into public company limited on 2042 B.S. This corporation has growing concern of greater rational importance in the area of providing goods and services to the public at large.

It is manufacturing company and industrial enterprise. It contributes significantly to the economic development of the country. However, BNL is found to be suffering from 'Cash Management'. So the objective of this study is to have true insight into its 'Cash Management'. An effort has been made in the study to provide a possible suggestive framework for the better cash management of BNL.

This is the first study on the cash management in the history of BNL. This study covers the period of five years begin from 2061/62 to 2065/66.

For the purpose of conducting this study, mainly the secondary date are used. It contributes mostly the balance sheet and profit and loss account besides, the performance has also been supplemented from interview with the related persons of BNL, i.e. general manager, Charter Account (CA), Account Officers and Divisional Manager through the means of questionnaire.

This study use financial tools to accomplish the objectives. They are financial ratio, and correlations regression for the relevant years.

While analyzing the management of cash in BNL, some issues and constrains have been noticed which may be described as follows:

I. Absence of forecast and plan. It is observed that the cash management is least concerned to forecast of cash for the coming period. The cash forecasting is completely lacking in the corporation. The fluctuating trend of cash deficit reveals the fact clearly.

II. The lack of accurate and proper sales forecasts is one of the important constraints that affect the financial performance of the corporation. If the corporation forecasts the expected sales accurately, it can manage the various activities accordingly. For example, it can plan for capital, investment, requirement of current expenses and inventories etc.

III. The quality of management itself is a scarce factor in BNL. The performance of BNL exhibits that the management lacks basic knowledge of financial management.

IV. Restrictive credit policy is one of the important constraints that affected the sales volume of the corporations. If it adopts liberal credit policy, it can increase the sales volume and the receivable turnover by employing a very restrictive credit policy. But however, this is true up to the certain point only because such strategy lends to decrease the sales.

V. Due to certain constraints in management, BNL denied to provide information except balance sheet and profit and loss account, which are not sufficient for analysis of cash management.

5.2 Conclusion

In conclusion, it can be said that cash management is an important part of the financial decision making variable.

Many factors or determinants such as nature of business, level of sales, credit terms, quality of customers, economic condition etc. have to be considered in cash management. Apart from the level of purchase, method of creating cash management, establish of credit terms. types of credit policy. Motives for holding cash efficiency of cash management cash cycle etc. are to

be considered. Corporation must prepare cash budget to plan for and control cash flow.

Thus, for BNL it is necessary to highlight the importance of developing appropriate strategies for cash management in respect of:

1. Cash planning and cash budgeting in a formal basis so as to project cash surplus or cash deficit for a period not exceeding one year and broken up into shorter intervals.

2. Managing of cash flows so as to accelerate the inflows and as for as possible to decelerate out flows.

3. Optimizing the level of cash balance by matching the cost of holding excess cash and the danger of cash deficiency.

4. Investing idle cash balance taking into account the cost of administering investments in marketable securities.

5.3   Recommendations

Based on the findings of the analysis and the issues and constraints mentioned above, some practicable recommendations have been provided in the following page.

i.   Efficient Management of Cash

Bottlers Nepal limited should have proper cash planning to estimate the cash receipts and payments. It helps to minimize the problem of excess of deficit cash balance. Corporation should first identify the cash needs for operation. For this company should consider the various expenses it has to incur such as, purchase raw materials, payment to be made for wages, salaries, rent and power etc. In other words it should forecast the cash needs for trading expenses, administrative and selling overheads for certain period of time, say one month. After identifying the cash needs, then the corporation should estimate the cash to be received. It could be estimated with the proper budgeting of cash sales and collection of credits. when the cash flows are

forecasted, the corporation should then determine the minimum level of cash balance needed to the corporation. At the same time the seasonal requirement should also be considered.

ii.   To Prepare Monthly Trial Balance Cash/Funds Flow Statements and Financial Reports:

Account receivable management is one of the basic components of current assets and management should be given top priority by the top management of the company since major share of company current assets has been occupied by account receivables. Account receivable can be managed efficiently by designing an appropriate receivable management programme. This programme has two main approaches in the first place, the company should try to minimize account receivable by selling only in cash terms secondly, it should try to maximize collection efforts by different process restoring to various measures. That is to determine appropriate credit policy.

Not only that the BNL should follow suitable credit terms, specially providing discount that is attractive to encourage payments earlier and at the same time make a comprehensive study of character, capacity, capital, collateral and conditions of all those customers or institutions that request credit from the company.

iii.   Adopt Effective Credit Policy:

The company should have suitable credit policy to handle the cash management effectively. It should adopt liberal credit policy to increase the sales. Next, it should adopt strength credit policy especially for its staff and workers for effective credit collection performance as low total receivable. One of the reasons of lower turnover and high collection period arise due to more advances to company's employees.

iv. Maintain Optimum Cash Balance:

BNL should maintain optimum cash balance by matching between surplus and deficiency of cash balance. As the size of the cash balance directly varies with peak period, slack period, and general economic factors and investment opportunities. The BNL should take all those situations, while determining optimum cash balance. During the peak period, slack period, and general economic factors and investment opportunities. The BNL should take all those situations, while determining optimum cash balance. During the peak period while in the production those the company should hold more cash to make huge purchase for the fulfillment of domestic as well as international demand. Like this small cash or bank balance should be kept by the BNL in off season because of no any purchase is made in off season. Moreover, in general economic conditions such as sugar flour and rice. Some time BNL get a chance to take advantage of investment opportunity to purchase shares, debentures, marketable securities, when interest is expected to decline etc. The company should exploit those profitable opportunities and keep cash reserve to do so.

v. Invest the Surplus Cash in Profitable Opportunities:

Company should manage its cash affairs in such a way as to keep cash balances at a minimum level and to invest the surplus cash funds in profitable opportunities.

vi. Prepare Cash Budget:

For an estimation of closing balance of cash, receipt of cash and payment of cash a cash Budget has to prepare. The following steps are considered for construction of a cash budget.

vii. The company should prepare cash flow in formal format

Step 1: To identify the sources of cash inflows (receipt) is the first step of cash budget. Normally the sources of a business are as follows:

a) Beginning cash in hand and at bank

b) Cash sale

c) Cash collection from debtors

d) Cash sales of fixed assets

e) Interest and dividend received

f) Issue of share and debenture

g) Band loan

h) Loan from financial institutions

Step 2: To determine the cash out flow (payment) is the second step.

Following is the list of payment of a firm:

a) Cash purchase

b) Payment of the credit purchase

c) Wages and salary payment

d) Payment of manufacturing administrative and selling expenses

e) Repayment of borrowed capital

f) Payment for purchase of fixed assets

g) Payment of other expenses

Step 3: To find out the closing balance: The closing balance of cash can get by the following way:

Closing balance of cash = Opening balance of cash + Receipt of cash-Payment of cash.

The specimen of a cash budget is given below:

viii.   Investment in Marketable Securities:

There is close relationship between cash and marketable securities. Excess cash should normally be invested in marketable securities which can be conveniently and promptly converted into cash. The excess cash may build up during slack season but it would be needed when the demands pick up. This excess cash during slack season is idle temporarily, but has predictable requirement later on next excess cash may be held as a buffer to meet unpredictable financial needs. The financial manager must decide about the portfolio of marketable securities in which the firm's surplus cash should be invested. A firm can incest its temporary transaction balance or precautionary balance of both, it primary criteria in selecting a security will be its quickest convertibility in to cash when the need for cash arises. In choosing these securities are safety maturity and marketability.

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Questionnaire

(To study of the cash management of BNL of the respondent of Bottlers Nepal Limited)

Please answer the following questions putting a tick mark at the appropriate space or as other wise requested in specific questions. I resize that some question may not lend there selves to short answer. However even practical information no matter how brief it is will be great value to my study.

1. Does your organization use "Cash Budget"?

    Yes ☐   No ☐

2. It "yes" how often do you prepare a cash budget?

    a. Annually ☐

    b. Semi-annually ☐

    c. Monthly ☐

    d. Weekly ☐

3. Do you have uniform terms of credit allowed to customers?

    Yes ☐   No ☐

4. What methods do you follow to forecast your cash requirements?
    Please rank 5 for the highest.

    a. Cash Budget method. ☐

    b. Adjusted not income method ☐

    c. Ration analysis ☐

    d. Projected balance sheet method ☐

    e. Mathematical models ☐

5. What policy does your organization follow in respect of sales?

    a. Cash sales ☐

    b. Credit sales ☐

    c. Cash and credit sales ☐

6.   If "yes" then what is the rate of interest charged?

Please specify [   ] %

7.   If "yes" what is the period of credit allowed to customers?

    a. net/7 days

    b. net/15 days

    c. net/30 days

    d. net/60 days

    e. net/90 days

8.   Do you have a policy of charging interest on delayed payments?

Yes   No

9.   Does your company offer cash discount to the customers for early payment?

Yes   No

10.   If "yes" what is the rate of discount percent?

Please specify

11.   What is the cash collection ratio in your company?

Please specify

12.   Is there any over due amount to the collection?

Yes   No

13.   If "yes" what is your opinion may be the causes of over-due amounts receivables?

    a. Customers attitudes

    b. Problem of liquidity of the customers

    c. Risk of loosing customers

    d. Defective system of credit collection

    e. Any other

14.   What are your suggestions to improve cash collection system?

    a. Contact on telephone

     b. Initiate compromise   ☐

     c. Charging higher rate of interest   ☐

     d. Seek the health of collection agent   ☐

     e. Any other   ☐

15. In monitoring the payment behaviour of your customers which methods do you apply?

     a. Account receivable turnover   ☐

     b. Average collection period method   ☐

     c. Days sales out standing   ☐

     d. Any other-under binding   ☐

16. Do you have a system of collection system of advance payment from customers?

    Yes ☐   No ☐

17. To what extent does your company take advantage of cash discount offered by bank arrangement?

     a. Always   ☐

     b. Rarely   ☐

     c. Never   ☐

18. Is your company able to discharge all short term liabilities on due date?

     a. Shortages of cash   ☐

     b. Practice   ☐

     c. Delayed payment by customers   ☐

     d. Decline to cash sales   ☐

     e. Any other   ☐

20. Do you have practice leaving a portion of cash fund as optimum cash of bank balance?

    Yes ☐   No ☐

<p align="center">✳✳✳</p>