CASH MANAGEMENT IN SALT TRADING CORPORATION LIMITED

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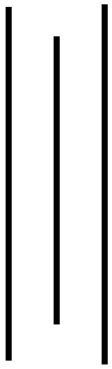

In partial fulfillment of the requirement for the Degree of Master of Business Studies (MBS)

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RECOMMENDATION

This is to certify that the Thesis

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CASH MANAGEMENT IN SALT TRADING CORPORATION LIMITED

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

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DECLARATION

I hereby declare that the work reported in this thesis entitled **"Cash Management in Salt Trading Corporation Limited"** submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master Degree in Business Studies (MBS) under the supervision of **Keshab Raj Pantha** of Saraswoti Multiple Campus.

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ABBREVIATIONS

APPP	Average Payable Processing Period
AR	Accounts Receivable
ARPP	Average Receivable Processing Period
ASP	Average Stockholding Period
C.V.	Coefficient of Variation
CA	Current Assets
CATA	Current Assets to Total Assets
CATR	Current Assets Turnover Ratio
CBB	Cash and Bank Balance
CBBAR	Cash & Bank Balance to Accounts Receivables
CBBCA	Cash & Bank Balance to Current Assets
CBBCL	Cash & Bank Balance to Current Liabilities
CBBTA	Cash & Bank Balance to Total Assets
CCC	Cash Conversion Cycle
CL	Current Liabilities
CMU	Cash Management Unit
CTR	Cash Turnover Ratio
DSO	Days Sales Outstanding
FY	Fiscal Year
NP	Net Profit
P.E.	Probable Error
r	Correlation Coefficient
r^2	Coefficient of Determination
RTR	Receivable Turnover Ratio
S.D.	Standard Deviation
SME	Small Medium Enterprises
STCL	Salt Trading Corporation Limited
TA	Total Assets

1.5 CHAPTER – I

INTRODUCTION

1.6 1.1 Background of the Study

In economics, the development of a country is measured by the efficiency and capability of the government in utilizing the available resources such as natural resources and human resources. For directing these resources toward the development avenues, at first capital is most necessary, although the role of other determinants of economic growth, however, could not be undermined. If defined narrowly, the capital here means the required cash for launching any venture. After the operation of any investment also, the entrepreneur needs to be cautious on whether sufficient cash is on hand or at bank for meeting the obligation and for broadening the business. Thus, cash management is an integral part of business in nourishing the so called business. Under cash management, the cash manager or the entrepreneur himself should have good notion about the possible sources of cash at urgency, the flow of cash from different activities, the cash conversion cycle and other cash related matters. As credit is palpable in business, the cash manager or treasurer should try to reduce not the credit amount but the receivable period to guarantee the continuous flow of cash. In addition, the cash manager should elongate the payable period to some extent, if possible, and the firm should keep only the required inventory for having sufficed cash. Managing cash should be deliberated, otherwise it creates panic in the firm's business world and may even turn the business to be a just none other than a fiasco. Thus, cash management is the concern of all business activities varying from small medium enterprises (SME) to large corporate enterprises, manufacturing to service industry, state-owned to private company, and others.

In countries like Nepal, where the number of manufacturing industry is just countable in hand, the trading companies get greater chance to serve the nation by making available the necessary commodities in the market either through importing the goods or just carrying the goods from one nook to the other within the nation and by contriving to reduce the abyss of trade deficit through exporting the goods produced within the country or in the third country. At present, many trade companies, including both private and public companies, have shown their extant in Nepal. Amongst them, Salt Trading Corporation Limited (STCL), is one of the oldest trading corporations. However, STCL is just healing up from the severe loss incurred

in the past, and such loss have been caused more or less by not paying much concern to the cash management, as the cash management and profitability are among the various facets of the company. The cash management policy or liquidity policy of the company has direct greater impact on the profitability. The company just needs to keep right cash reserve, as keeping excess cash reserve hinders the company for investing in lucrative investment and keeping less cash reserve barricades the company for paying to the creditors in time, and losing its credibility among the creditors, creating problem in next borrowing. Considering this significance, the present study concentrates on the cash management of STCL.

The proposed thesis is based on information provided by the corporation. The emphasis on this thesis is to find out the cash management of STCL, and how the company could tackle the cash drawback, if any. Government organizations are not satisfactory to compete with private sector organization because of poor management of cash. Therefore to find out the public enterprises' drawbacks of cash management and to suggest the companies, the study will be beneficial one.

1.1.1 Salt Trading Corporation Limited

Salt Trading Corporation Limited (STCL) was established in 2020 through the joint efforts of Government of Nepal and the private sector to ensure proper supply and distribution of essential consumer items throughout the country. STCL can play on trading activities for all over the country and abroad. Its first task was to make edible salt readily available. The salt trade then was disordered and unreliable. The success in supply management led to the additional of essential commodities such as sugar, food grains and processed eatables into its distribution network.

STCL has equity in many pioneering and leading industries in the country such as Khadya Udyog Limited, Nepal vegetable Ghee Udhyog Limited, Butwal Spinning Mills Limited, Gorakhkali Rubber Udyog Limited, Morang Sugar Mills Limited and Gharelu Hastakala Udyog P. Limited and shoulders management responsibilities of many more industries.

Fifty years of dedication and services to the nation and here people has today made STCL a major catalyst in bringing about the desired economic changes and growth in Nepal.

1.2 Statement of the Problem

Cash management refers to the proper management of firm's cash position. It is concerned with all decisions 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 an enterprise is that portion of its total current assets which is put to variable operating and rapidity of turnover which influence the types and terms 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 indicated and challenging area of modern corporate finance as much as the management always faces a trade-off between the liquidity and profitability of the firm. Though most of the enterprises in Nepal have been well recognized the importance of proper cash management, they are still facing the problem of cash management.

Cash management in the public enterprises of Nepal is primarily based on the traditional practices, lacking a scientific approach. A more serious aspect of cash management has been the absence of any formalized system of planning and cash budgeting in many of enterprises do have the practice of forecasting cash requirement of a form basis.

By and large most enterprises had periodic accumulation of surplus cash and corresponding cash shortage from time to time. However none of the enterprises considered the implications of holding idle cash balance and few took in the potential benefit of investing surplus in marketable securities. Those that did fail to consider the cost of administrating such investments. For the study, the researcher has been considering to find the answers to the following research question;

a. What is the flow of cash from different activities of STCL?
b. How long should be the cash conversion cycle?
c. What relation exists between the cash management and profitability management?
d. How the cash management of STCL could be further improvised?

1.3 Objectives of the Study

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

a. To analyze the cash flow of STCL.
b. To measure the cash conversion cycle of STCL.
c. To find the relationship between cash and profit of STCL.
d. To provide necessary suggestions and recommendations for better cash management.

1.4 Justification/Scope of the Study

The planning to run the business successfully strikes ultimately on the availability of the cash. Thus, cash is the integral current assets of any business enterprises. Having sound cash management is the requisite for measuring the success of any business. The study analyses the cash management of STCL, so basically the findings, conclusion and recommendations provided on this study would be much beneficial to the management team of Salt Trading Corporation Limited. The study presumes that it would be helpful for the management for making some important decisions related to the cash management by reviewing its weakness in the past presented by the study. Besides them, the study would also turn to be significant to the sister organizations of STCL, such as Khadya Udyog Limited, Nepal vegetable Ghee Udhyog Limited, Butwal Spinning Mills Limited, Gorakhkali Rubber Udyog Limited, Morang Sugar Mills Limited And Gharelu Hastakala Udyog P. Limited. Moreover, the other trading companies; both the private and government owned, would find the study to be important. In addition, the study would also be crucial to the lawmakers governing the operation of the government owned organization. Also, the study would be much beneficial to the researchers.

1.5 Limitations of the Study

Due to the time constraints, financial constraints and other, the study is bound for limited area. Hence, this study is not far from several limitation of its own kind, which weakens the heart of the study. Some of such limitations are as follows.

a. This study is limited to cash management of STCL only.
b. The study covers the period of five years beginning from 2007/2008 to 2011/2012.

c. **The study is based on the financial statement and annual reports provided by STCL. The sources of data are company's balance sheet, profit and loss account and cash flow statement etc. which are in the company's annual general meeting prospectus, company's brochures and on website which is assumed to be correct and true.**

1.6 Organization of the study

The study will be divided into five chapters, they are;

Chapter-I: Introduction

This chapter includes general background of the study, Introduction of the STCL, statement of the research problem, objective of the study, limitation of the study and organization of the study.

Chapter-II: Review of Literature

This chapter covers the introduction need and importance of Salt Trading Corporation Limited, meaning and concept of cash management, theoretical review of studies, and review of previous studies and justification of study.

Chapter-III: Research Methodology

This chapter includes the research design, time duration, nature of data, sources of data, data collection methods and procedure and tools used to analysis the collection data.

Chapter-IV: Presentation and Analysis of Data

This chapter is most important and plays a vital role in this study. This chapter explains and analyzes the relevant data by using various statistical and accounting tools. Here different tools as well as tables and figures will be presented, interpreted to accomplish the objectives of the study.

Chapter-V: Summary, Conclusion and Recommendations

This final chapter is divided into three sections first section includes the major findings and summary from the study. Second section includes conclusion and at last the recommendation for the STCL about their weakness and problems. It represents all the

opinions, findings of the study which will be the very useful and helpful to the Salt Trading Corporation Limited.

Besides these chapters, Bibliography and Appendix have also been presented at the end of the research work.

CHAPTER – II
REVIEW OF LITERATURE

2.1 Conceptual Review

2.1.1 Cash Management

Cash is the most crucial component of the working capital of a firm. Its effective management is the key determinant of efficient working capital management. It is the most unproductive of all assets while fixed assets like machinery and plant, etc., and current assets such as inventory help the business in increasing its earning capacity, cash in hand does not add anything to the business concern. “Managers, therefore spend much time and effort in planning cash receipts and disbursements to ensure a desirable level of cash and they take great care to prevent cash from being lost, stolen or misused” (Lester; 1976: 574).

Today, “the financial manager’s prime function is not only to manage cash resources of the firm efficiently but also at the same time he has to set a minimum level of cash so that the firm’s liquidity is not jeopardized and the firm’s profitability is maximized" (Srivastava; 1979: 477). Cash management is one of the key components of working capital management. The term cash management is usually used for management of both cash and near cash assets. Although the concept of cash management is not new, it has assumed greater importance in modern business due to significant changes in the conduct of business and ever increasing difficulties in the cost of borrowings. It is the duty of the finance manager to provide adequate cash to all segments of the business. He also has to ensure that no funds are blocked in the idle cash since this will involve cost in terms of interest to the business organization.

Cash is one of the important ingredients of working capital of a business. It is both the beginning and end of the working capital cycle, irrespective of its length and breadth. From the point of liquidity, cash is the most liquid of all current assets. A firm should keep required amount of cash to protect itself from the problems of liquidity and prevent disruptions in the process of production. The importance of cash in an organization hardly requires any emphasis. “A business enterprise should keep its cash and near cash reserves below the requirements of one month’s normal expenditure. If cash and near cash reserves happen to be more than this limit, it should be taken for granted that excessive cash is being kept by the

firm" (Walter; 1957: 31). Cash is the life blood of a business enterprise and its steady and healthy circulation throughout the entire business operation is the basis of business solvency.

Cash management includes management of marketable securities also, because in modern terminology money comprises marketable securities and actual cash in hand or in a bank. Thus cash management is concerned with the management of cash inflow and cash outflow of the business concern, cash flows within the business concern and cash balance held by the business concern at any point of time. Management of cash is of paramount importance for the overall activities of a business concern to survive and for smooth running.

2.1.2 Objectives of Cash Management

Cash plays a crucial role in a company's operation. It is used to pay wages and salaries, trade debts, taxes and dividends. It not only enables the company to promptly pay its creditors and suppliers so as to foster good relations but also lets the company take advantage of favourable business opportunities. Most importantly, it keeps the company liquid and prevents it from insolvency or bankruptcy.

It is said in academic literature that companies hold cash for the following three motives:

(i) Transaction motive: Cash is used to pay bills, especially when disbursements are greater than cash receipts from business. This is the most important reason for keeping cash.

(ii) Precautionary motive: Cash is used for safety reasons as a financial reserve to meet unexpected demand, for example, an unexpected delay in collection of accounts receivable or a sudden increase in costs of materials.

(iii) Speculative motive: There may be unexpected profitable opportunities when doing businesses, like speculative interest rate movements. "If a company has excess cash on hand, it may take advantage of such opportunities" (Singhvi & Kacipisch; 1970: 95).

Yet, cash on hand is considered as a non-earning asset. It earns no return for shareholders. If a company holds excess cash on hand, it loses the profits that may be earned if the cash had been invested elsewhere.

The objectives of cash management are therefore two-fold: (i) to have sufficient cash for operation in order to maintain liquidity; and (ii) to invest excess cash for a return. Cash management is not easy. Cash inflows from receipts do not perfectly coincide with the cash outflows for disbursements. Further, some businesses are seasonable in nature so that cash inflows and outflows fluctuate throughout the year. The company therefore needs to manage its cash properly. One of the tools it can use to do this is to prepare a cash budget.

2.1.3 Cash Management Models

Financial manager responsibilities are to maintain a sound liquidity position of the firm, so that dues may be settled in time. The firms need cash not only to purchase raw materials and pay ways 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 maintained for transaction purpose and an additional amount may be maintained as a safety stock. The financial manager should determine the appropriate amounts of cash balance, a trade-off between risk and return influences such a decision.

2.1.3.1 Baumol's Model

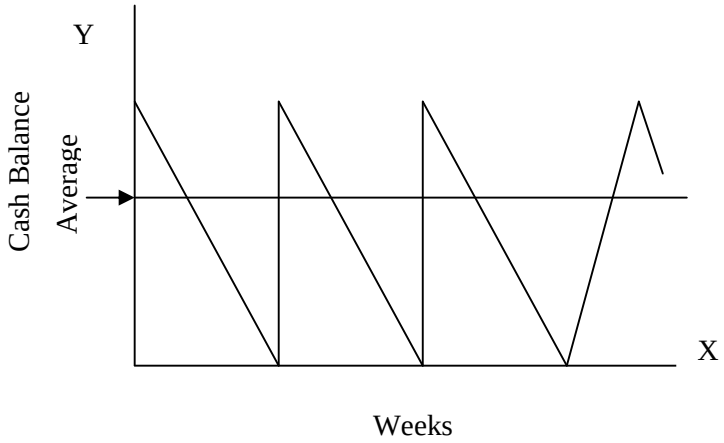
In view of minimizing the opportunity cost of holding cash and maximizing the return on the available funds, the cash balance should be maintained at a minimum level and the funds not required firm immediate use be invested in the marketable securities. Baumol model is one of the methods that can be used for this purpose. "Baumol model is based on the assumptions that;

1. **The cash is used at a constant rate,**
2. **The periodic cash requirements is more or less and**
3. **There are some costs such as opportunity costs that increase and other costs such as transaction costs that decrease as cash balance increase" (Baumol, extract from Khan and Jain; 1986: 136)**

Because of the assumption (1) and (2) the graphical representation of cash position looks like as follows:

Figure 2.1

Cash Balance Under the Baumol Cash Management Model



(Source: Baker and Powell; 2005:166)

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

2.1.3.2 Miller-Orr Model

In order to manage its cash balance, the company can employ a mathematical model, one of which is the Miller-Orr model. The Miller-Orr model helps the company to meet its cash requirements at the lowest possible cost by placing upper and lower limits on cash balances. The operation of the model is as follows:

(i) A company should have its desired cash level, an upper limit and lower limit on cash balances.

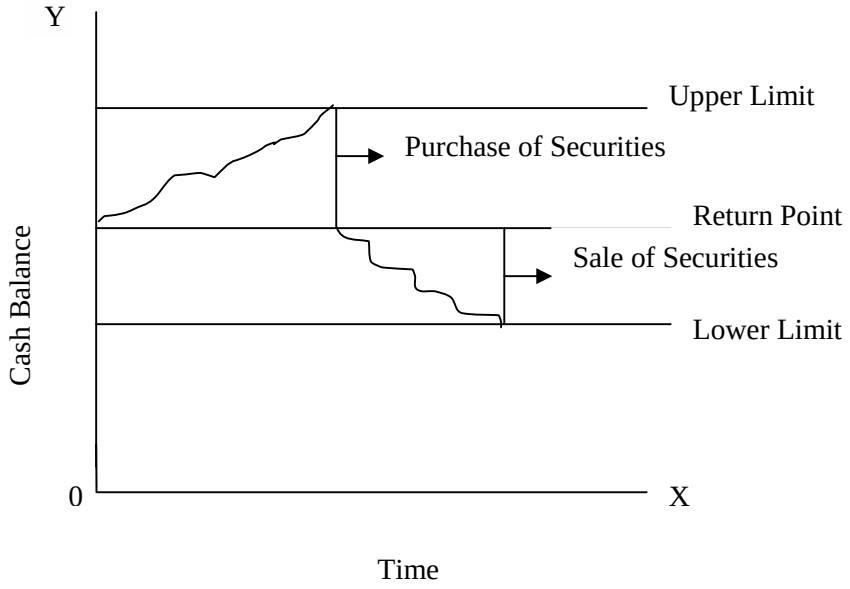
(ii) When the cash balance reaches the upper limit, the company has too much cash. It then should use its cash to buy marketable securities in order to bring the cash balance back to its desired cash level.

(iii) When the cash balance hits the lower limit, the company lacks cash. It then sells its securities in order to bring the cash balance back to its desired cash level.

(iv) If the cash balance lies between the upper and lower limits, there will be no transaction in securities.

Figure 2.2

The Miller-Orr Cash Management Model



(Source: Miller and Orr; 1966)

The Miller-Orr model increases its practicability by incorporating an assumption that cash balances randomly fluctuate and therefore are uncertain. The formula in determining the desired cash level is as follows:

$$z = \sqrt[3]{\frac{3F\sigma^2}{4r}} + L$$

where z = desired cash level

F = fixed transaction cost of buying and selling marketable securities

σ^2 = variance of daily cash flows (which indicates its randomness)

r = daily interest rate on marketable securities

L = minimum cash balance

The upper limit cash balance is then determined as:

Upper Limit = 3z – 2L

It should be noted that the Miller-Orr model is a theoretical model. It however sheds light on how the company can manage its cash balances. Recall that the Miller-Orr model requires

selling and buying marketable securities. The next section discusses some of the features of marketable securities.

2.1.4 Investing Idle Cash

It is not uncommon to have cash surplus, especially for businesses with seasonal or cyclical activities. If the company has a temporary cash surplus, it can consider investing its excess cash in marketable securities in money market, which is defined as the market for short-term financial assets. Normally, the company needs to take into account the following criteria in determining such investments:

(i) Maturity: Maturity refers to the time period over which interest and principal payments are made. The company should consider the maturity of investments with reference to its cash budget, in particular how long the company has a cash surplus and when the company will need money for its expenditure. Normally, the maturity period for marketable securities will be less than three months.

(ii) Default risk: Default risk refers to the probability that interest and the principal will not be paid in the promised amount on the due dates. The company should avoid investments with high default risks as an investment for its idle cash. The investments should be safe enough to provide cash for future payments.

(iii) Marketability: Marketability refers to how easy it is to convert the financial assets to cash. The company should minimize the amount of time required to convert the securities into cash (Beaver; 1989).

2.1.5 Cash Budget

A cash budget is a statement showing the estimated cash inflows and outflows over the planning horizon. Companies can prepare a cash budget on a quarterly, monthly, weekly or even daily basis. The ultimate purpose is to identify the net cash position of the company in the future, that is, whether there is any cash surplus or deficit.

"Preparation of a cash budget is an indication of good planning. If such a budget is not prepared, the company runs the risk that if unfortunately it is in sudden need of cash, there may be insufficient time for the company to search for alternative source of financing, forcing it to accept funding which is more expensive" (Williams; 2003: 78).

After identifying the net cash position of the company in the future, the next question is then how the company manages its cash surplus or deficit.

2.1.6 Cash Flow Cycles

Cash is the most liquid of assets and it represents the lifeblood for growth and investment. In order to generate cash, the firm must efficiently and effectively manage the activities that provide cash. These activities include billing customers as quickly as possible, disbursing payments only when they come due, collecting cash on overdue accounts, and investing idle cash. Therefore, "managing cash flow involves several objectives:

- Accelerating cash inflows wherever possible.
- Delaying cash outflows until they come due.
- Investing surplus cash to earn a rate of return.
- Borrowing cash at the best possible terms.
- Maintaining an optimal level of cash that is neither excessive nor deficient" (Gamble; 1996: 83).

Cash flow management consists of several activities: Collecting accounts receivable, processing vendor payments, etc. The firm needs to understand the time involved with each of these activities before it can properly plan cash flows. Since cash consists of disbursements and receipts, the firm can think of cash flow in terms of two cycles.

Disbursement Cycle: It is the total time between when an obligation occurs and when the payment clears the bank. The overall objective within the Disbursement Cycle is to increase the cycle time; i.e. delay making payments until they are due. "The firm can delay payments by:

1. Mailing checks from locations not close to customers. This will increase the mail time or mail float within the disbursement cycle.
2. Disbursing checks from a remote bank. This will increase the time required for the payment to clear the bank; i.e. clearance float.

3. Purchasing with credit cards so that the time required for making payment is much longer. By using a credit card, the firm will receive a bill at the end of the month payable in 30 days. This creates more processing time or processing float" (Peel & Wilson; 53).

Therefore, when the firm manages cash flow cycles, it tries to control three types of float times:

1. Mail Float: Time spent in the mail.
2. Clearance Float: Time spent trying to clear the bank.
3. Processing Float: Time required to process cash flow transactions.

By increasing the float times within disbursements, the firm has the use of cash for several more days. This is a source of spontaneous financing and the firm can measure our cash savings.

Receipt Cycle: The total time between when products or services are delivered and when payment from the customer clears the bank. The overall objective within the Receipts Cycle is to decrease the cycle; i.e. shorten the time necessary to collect and have use of cash. "The firm can shorten the receipt cycle by:

- Invoicing customers as quickly as possible.
- Taking immediate action when a customer becomes delinquent.
- Rewarding customers for making early payment by offering a discount.
- Imposing a finance charge on customers that are seriously delinquent.
- Evaluating the financial soundness of customers before extending credit.
- Accepting credit cards for payment.
- Issuing monthly statements to remind customers of amounts owed.
- Placing collection centers near customers and/or having banks control deposits" (Peel & Wilson; 57).

A lockbox system is an example of placing control with the bank. Under a lockbox system, customers send payments to a lockbox which is cleared daily by the bank. This can reduce processing time for deposits and reduce clearance float. Before adopting a lockbox system, one should weigh the costs versus the benefits.

In order to monitor progress in managing cash, it is useful to understand how much cash is locked-up; i.e. not available to us. The firm can get an idea of cycle times by looking at average days in

inventory, average days in receivables, and average days in payables. These three components cover the two basic cash flow cycles, disbursements and receipts. The overall cash flow cycle time is calculated as the sum of inventory and receivables; tying up cash receipts, less payables for disbursements.

2.1.7 Short-Term Financing

"Part of managing cash flows is to understand how to finance operating cash flows. Whenever the firm uses short-term financing to cover cash deficits, it must consider costs, risks, restrictions imposed upon the organization, financing flexibility, the current financial situation, and other factors. Some of the questions the firm need to consider include:

- How long will the firm need financing?
- How much cash does it need?
- How will the firm use the borrowed funds?
- When and how will it repay the borrowed funds" (Hanke; 2004: 206)?

The first and most practical source of financing is spontaneous financing or trade credit. By lengthening the disbursement cycle, the firm obtains additional cash. Once the firm has exhausted spontaneous sources of financing, the firm use conventional sources of financing, such as bank loans, lines of credit, and asset based borrowing.

a. Bank Financing

One of the key partners in business should be the bank. Therefore, it is essential that the firm establishes a good working relationship with a bank officer. This relationship is the basis for how the firm will obtain bank financing. For example, a line of credit is one way to address recurring cash deficits. The firm can also arrange a revolving loan. Under these arrangements, it borrows as deficits occur up to a maximum amount. Unless it has excellent credit, the firm will be required to put up collateral (such as receivables, inventory, etc.). "The bank may also require a commitment fee or compensating balance (percentage of loan). Some key points about bank financing are:

- Making arrangements to borrow when the firm least needs it. This is the best way to obtain favorable terms and conditions for short-term financing.

- Borrowing more than the firm thinks it will need. Many organizations under-estimate the amount of borrowing required for short-term financing.
- The moment the firm thinks it will need short term financing, begin preparing immediately. Bank financing takes time to arrange and execute.
- Borrowing to meet the strategic plans, not to avoid possible bankruptcy. Banks are much more receptive to financing when it fits with some type of long-term plan.
- Ensuring to maintain the best possible relationship with the bank by sending regular reports and information to the bank officer" (Altman; 1983: 304).

b. Receivable Financing

In addition to bank financing, the firm can borrow against its assets from a financing company. Accounts Receivable is a liquid asset that provides a form of financing. In order to borrow against the accounts receivable, it must meet the following criteria:

1. Receivables are related to the sale of merchandise and not services.
2. Receivable customers are financially sound and there is a high probability of payment.
3. Receivable customers obtain title to merchandise when it is shipped.

There are two forms of receivable financing, factoring and assignments.

Factoring: Under this form of financing, the firm sells its receivables to the financing company. It receives the face value of the receivable less a commission charge. "The financing company assumes responsibility for collecting the receivable. Factoring gives the firm immediate cash and freedom from collecting from customers. However, it is costly and it sometimes confuses customers since they now make payment to a financing company" (Altman; 1983: 307).

Assignment: Under this arrangement, the firm transfers or assigns its receivables over to the financing company. However, the firm still retains ownership of the receivables. The financing company advances, in general, 60% to 80% of the receivable balance. The firm continues to collect the receivables and the financing company charges interest and service fees on the borrowed funds.

c. Inventory Financing

"Inventory financing is similar to receivable financing. Inventory financing has the following requirements:

1. Inventory must be highly marketable.
2. Inventory is non-perishable and not subject to obsolescence.
3. Inventory prices are relatively stable" (Copeland, Koller & Mullin; 1994: 405).

There are three forms of inventory financing:

Floating or Blanket Liens: The financing company will place a lien on the firm's inventory; i.e. they obtain a security interest in the inventory in exchange for lending cash. The firm continues to manage and control the inventory.

Warehouse Receipts: The financing company obtains an interest in a certain segment or part of the inventory. The firm will have to separate the inventory that it uses for financing from the inventory not used for financing. This may require physical separation as well as separate accounting.

Trust Receipts: The financing company lends money for a specific item in the inventory until the firm is able to sell it. When the firm receives cash for the inventory sale, it pays the financing company. For example, car dealerships often buy automobiles by financing the purchase. When the car is sold, they pay off the financing company.

d. Unsecured Financing

For large corporations with financially sound operations, cash can be obtained on the credit worthiness of the corporation; i.e. unsecured financing. Smaller organizations can sometimes obtain unsecured financing, but costs are often much higher than secured financing.

2.1.8 Some Finer Points in Cash Flow Management

Under this, the study focuses on some specific practices that are part of cash flow management. For example, how do the firms manage the collection of cash and how can the firms reduce certain types of cash outflows?

a. Collection Practices

The receipts cycle requires a diligent collection process. The firm needs to balance this need for quick cash collections with the needs of our customers. For example, customers who are important to the business should be treated carefully as opposed to customers who mean little or nothing to our future. Therefore, collection efforts must be customer specific in order to be effective. Specific collection techniques include letters, telephone calls, faxes, emails, and legal action.

b. Disbursement Practices

How the firm manages various disbursements and current assets can have a big impact on cash flows. There are several problem areas to watch-out for, such as payroll, purchasing, inventories, and insurance.

Payroll: "Payroll is a large cash outflow and requires special attention. One obvious trend in payroll is to implement a flexible workforce since the flow of work fluctuates. Outsourcing and temporary workers are often part of a flexible workforce" (Dechow & Dichev; 2002: 36). The firm can also increase payroll float times by simply distributing payroll checks after the banking time at Friday. Banks will not clear payroll checks until the following week.

Purchasing: Flexible purchasing can help cash flow. The firm should consider renting certain items as opposed to purchasing. The firm should further consider on whether it really needs this item and how often will we use it? If practical, it should order items out-of-season when prices are low. Finally, it should consider using credit cards to make purchases since this will give the firm more time for making payment.

Inventory: Inventories have several hidden costs that can drain cash flow. These costs include storage, insurance, spoilage, handling, taxes, and financing. "The firm should get rid of inventory that is not moving. Obsolete inventory should be removed immediately and it should find new ways of disposing of inventory" (Dechow & Dichev; 2002: 37). For example, it is better to sell inventory at costs than not at all. The overall objective should be to maintain inventory levels at a profitable level.

Insurance: The firm should ensure that it does not over insure its business. Rather it should purchase insurance in group packages to obtain the lowest premiums; starting by covering the largest risks first. It needs to avoid duplication and excessive insurance, shift certain costs, such as

health insurance to the employee through higher payroll deductions. Insurance should be used to cover risks that are material, but occur infrequently.

"One important element in cash flow management is to fully understand the warning signs of cash flow distress. Some early warning signs include:

- Cash balances are low compared to historical balances.
- Inventory is not moving.
- Vendor payments are made late.
- Banks are requesting financial statements.
- Major purchases have to be postponed.
- Management has become very risk adverse; i.e. overly cautious about spending money" (Dechow & Dichev; 2002: 38).

One way to monitor cash flow is to track liquidity ratios and compare these ratios to historical ratios and/or industry averages. Some examples include:

- Current Ratio = Current Assets / Current Liabilities
- Acid Test = Cash + Accounts Receivable + Marketable Securities / Current Liabilities
- Cash Flow to Debt Ratio = Cash Flow / Total Debt
- Cash Flow to Income Ratio = Operating Cash Flow / Net Income

2.1.9 Cash Planning and Projections

For effective cash management, the manager needs to develop accurate and timely short term estimates of cash inflows and outflows. The flows to be forecast include receipts and payments (i.e., those that contribute to the fiscal balance—deficit or surplus) and financing transactions (i.e., changes in net financial assets and liabilities, which finance the fiscal balance). A key objective is to anticipate the cash needs of the firm and to ensure that payments are made in a timely manner.

1. Key features of a Cash Forecasting Framework

These include the need to:

a. Have a comprehensive framework that includes all inflows of cash resources and provides a framework for planning the payment of short- and long-term cash liabilities when they fall due. This requires budget information management systems that are comprehensive, with data that are timely, accurate, and reliable.

b. Align expenditure planning and actual cash spending so that there is no disruption to spending during budget execution, or any payment arrears. This requires managers to carefully plan expenditures, in collaboration with the board of directors, which, in turn, needs to be responsive to the cash needs of managers.

c. Provide incentives to budget department to supply realistic cash plans. There are always uncertainties in making projections: agencies' in-year plans may change; contracts are not signed when expected; invoices are not received as anticipated, etc. However, when moving away from a cash rationing system towards a more active cash management, a carrot and stick approach may be necessary. Budget departments that submit accurate projections of cash needs can be provided with increased autonomy to manage spending of their budget appropriations (Defond & Hung; 2003).

2. Forecasting is a technical exercise that requires collaboration with all interested parties.

Desirable features for the preparation of short-term cash plans are:

a. Consistency with annual budget projections. The starting point for in-year cash plans is the cash needed to implement the annual budget adopted by company. The regular updates of projections of daily, weekly and monthly cash flow forecasts continue to be constrained by the projections of the annual budget (on a cash basis).

b. Concentrating on the major inflows and outflows. The focus should be on ensuring that the projections for the major taxes and other revenues, and for the most important expenditures, are as realistic as possible. The projections of small revenues and expenditures can be assumed to follow a simple pattern.

c. Identifying past patterns for particular inflows and outflows. For this, an information database should be developed, using historical data from the company's financial management system. The cash projection module, although using historical accounting data, can have a separate database. It is timeliness of data and the ability to generate scenarios that are crucial.

d. Identifying the timing of the major flows. Some large flows are specific as to timing and can be identified in advance. These may include: grants by foreign donors; bond issuances and redemptions; salary payments; interest on debt; payments on major public projects; and social welfare or pension payments.

e. Ascertaining cash needs from expenditure commitments. It is the authority officer that enter into contractual arrangements that later require invoices to be paid. Typical delays between the recording of expenditure commitments and the payment of goods or services are known by spending authorities. It is important to ensure that the managers prepare financial plans: both a schedule of commitments and likely cash outflows. When commitment limits are in place, for example quarterly, the predictability of cash outflows is enhanced.

f. Distinguishing information-sharing from expenditure control. Managers may need to be reassured that the information provided will be used only for cash management purposes, not for expenditure control purposes. If this is not clear, managers may be reluctant to provide unbiased estimates of cash needs or, worse, withhold information, including on revenues that they generate through their own operations and hold in bank accounts outside oversight of the treasury (Defond & Hung; 2003).

3. The projections of the cash plan need to be regularly updated

Over time, they should also be refined. In large companies, daily projections of cash flows are prepared for at least three months ahead, and these are rolled forward frequently (Defond & Hung; 2003). In small companies, weekly or 10-day projections are often prepared in the first instance. The largest items are disaggregated, with a view to preparing detailed projections by revenue-collecting agency or by major spending manager, and also to pin-pointing the exact day in which large revenues are received or large payments made.

4. The frequency of updating should eventually be daily

As cash management becomes more active, the cash manager will seek to minimize daily idle cash balances, and may borrow to address short-term temporary shortages of cash. The updating of forward cash plans eventually needs to become daily. For the most large managers, within-the-day cash management is practiced.

2.1.10 Sequencing of Cash Management Reforms

This section outlines four stages involved in moving from primitive cash management to active daily cash management. The speed at which cash management can be improved depends on: (1) the starting point, especially the extent to which basic conditions for effective cash management are in place; (2) the willingness of authorities to reform cash management practices; (3) the infrastructure available for rapid transfer of funds by electronic means; and (4) human capacity and organizational arrangements.

Phase 1: Addressing fundamentals

The six fundamental features of cash management discussed earlier are preconditions for developing effective modern cash management. Given that relatively long time periods are required to complete some of individual steps, one has to be realistic when establishing plans to complete the steps listed below.

a. Establishing a cash management unit (CMU). "It is desirable to establish a technical cash management unit in the company. This would normally be located in the Accounting Department, although the Budget Department would be involved also" (Horngreen & Elliot; 2002: 172).

b. Establishing a policy-making cash management body. For cash management policy decision making, a high-level committee is also required. In cash rationing environments, the committee would establish cash ceilings for managers. In such situations, there is a temptation for these committees to become cash triage committees, deciding what bills get paid, in what order.

c. Highlighting the importance of effective cash management. "In small companies, the financial costs of maintaining idle balances in multiple bank accounts are unknown. Identifying the costs of ineffective cash management enhances the awareness of good cash management practices" (Wild & Subramanyam; 2001: 383). The opportunity cost (interest foregone) of maintaining idle balances in cash or in multiple bank accounts—including float in revenue and expenditure accounts—should be calculated.

d. Ensuring realistic annual budget projections. Although optimistic revenue projections or the underestimation of budget expenditures are not cash management problems per se,

unrealistic annual budget projections engender cash management problems, especially in companies where borrowing is not an option.

e. Limiting cash advances. "In some companies, the release of cash advances to managers can result in cash shortages for certain budgeted expenditures. To avoid such problems, the advances should be limited in size and by type of expenditure" (Scott; 1991: 472). Moreover, managers should be made accountable, by requiring them to justify the use of the advances prior to their replenishment with new advances.

Phase 2: Preparing cash plans and developing cash management skills

a. Preparing short-term projections of cash flows. The CMU would be responsible for preparing short-term projections of cash inflows and outflows (initially on spreadsheets), analyzing recent projection performance, updating the database, and revising short-term projections. One area of focus should be on ensuring that the timing and amounts of large inflows or outflows are as accurate as possible.

b. Establishing information-sharing arrangements. "A network at technical level should be established, with representatives from the accounting departments, marketing and sales departments, and the operational departments, to provide inputs for projections of short-term cash flows" (Storkey; 2003: 186).

c. Ensuring information exchanges for cash projections takes place. "To prepare short-term projections of cash flows, it is necessary for cash managers in the company to receive information on past and projected inflows and outflows" (Dechow; 1994: 38). The CMU should distinguish flows that occur regularly (e.g., on the same day of a given month) and are always relatively easy to project from those that are less predictable, such as payments for certain large projects or spending for new investments.

d. Preparing cash plans. Monthly, bi-monthly, or weekly cash plans should be prepared in the first instance. Frequencies should be progressively shortened, with the ultimate objective of preparing daily cash plans.

e. Developing cash projection skills. The preparation of cash plans is a technical exercise that requires trained staff to project, monitor, analyze and update projections. The CMU needs to be staffed by people with appropriate skills.

Phase 3: Going beyond prerequisites and basic cash planning

a. Shortening receivable delays. If there are delays in receivables, steps should be taken to shorten, and eventually eliminate, them. The CMU should report the party persistently delaying the payments liable to company so that prompt action could be taken to ensure sufficient cash balance.

b. Assessing the impact on cash projections of expenditure commitments in the pipeline. The decision to commit to spend budget allocations is usually made by budget managers. "Budget managers with responsibility for large expenditures should be required to submit regularly to the cash department the time profile of expected cash disbursements of outstanding spending commitments, to enable the cash department to include these when updating cash plans" (Poutziouris, Chittenden & Michaelas; 1998: 193).

c. Computerizing expenditure processes. Increased reliance on computerized processing and electronic payment can shorten lags between spending commitments and payments, and reduces the necessity for expenditure commitment control to be used as an instrument for effective cash management.

d. Maintaining a minimum cash balances. Unremunerated balances should be minimized. However, a minimal cash balance is needed when "rough-tuning" cash management is practiced. The size of the threshold for the cash balance is higher than in situations where cash is managed actively on a daily basis.

e. Coordinating cash and debt management. As the company's debt management function develops—including issuance of debentures—close coordination is needed between cash managers and debt managers, so as to establish a debenture issuance program that takes account of the cash profile, to avoid unnecessary debt issuances, and to ensure that interaction with the money and debenture markets is handled consistently.

f. Using banking facilities. "After phasing out transactions in physical cash, the next step is to phase out the use of checks, by replacing paper-based payments with direct electronic payments" (Peacock; 1985: 46). Enhanced use of banks' internal electronic payment networks eliminates payment delays and the need to maintain overnight balances in bank accounts.

Phase 4: Introducing active daily cash management

As cash management operations advance, there is need to go beyond the intermediate phase of "rough tuning" and increase the focus on daily management of available cash. The following refinements can be made.

a. Becoming more active in daily management of cash balances. As the instruments for "fine tuning" become available and the updating of short-term projections becomes more frequent, an operating target for the daily balance should be established. Any temporary surpluses would be invested in financial markets.

b. Refining cash flow projections. "As the focus turns towards daily projections of inflows and outflows, the accuracy of projections needs to be enhanced, including for the exact timing of large-value transactions. There needs to be a well-qualified team able to refine the forecasts intensively (especially for the immediate days ahead), in line with new information on actual flows" (Tregesen; 2002: 91). Capacity to refine within-the-day projections is also needed. Daily projections should extend out for at least two to three months. Refining projections requires enhancements in the feedback from receivable-collection agencies for revenue projections, and managers on their cash needs.

c. Strengthening coordination. Daily cash management requires very frequent coordination between the cash manager, the debt manager, and the other authorities. In advancing to more sophisticated cash management systems, the distinct responsibilities of cash managers, debt managers, and the other authorities may have to be delineated more clearly, in updated memoranda of understandings.

2.2 Review of Related Studies

Dechow, Kothari & Watts (2010), in their article, *"The Relation between Earnings and Cash Flows"*, have developed a model of operating cash flows and the formal accounting process by which those cash flows are converted into accounting earnings. The model can explain why operating cash flow changes are negatively correlated, how accruals offset that negative correlation to produce earnings changes that are much less negatively serially correlated and why current earnings by itself is a better forecast of future operating cash flows than current operating cash flows by itself. The model has two versions: one in which all expenses are variable; and one that allows for both variable and fixed expenses. The latter version was developed to explain some correlations not well-explained by the first version and some of its correlation predictions were developed from knowledge of the data. Both model versions generate the prediction that current earnings should better predict future operating cash flows than current cash flows and that the difference in accuracy of the two predictions should be a positive function of the firm's expected cash flow cycle. Serial correlations and cross correlations are predicted for earnings, operating cash flows and accruals at the firm and portfolio levels and for the whole sample on average using estimates of model parameters for both model versions.

Maddy (2011), in her article, *"An Evaluation of Construction Cash Flow Management Approaches in Contracting Organizations"*, has attempted to look into cash flow management approaches in the UK construction industry. Essentially, the study investigated the strategies adopted by the industry for resolving deficit cash flow. It also evaluated the extent of usage of some identified cash flow forecasting methods. The study concludes that the industry's preferences for resolving deficit cash flow appears to be on average, in the order of overvaluation, company's cash reserves, tender unbalancing, delayed payment to subcontractors, delayed payment to suppliers, use of company's assets and borrowed funds. This order appears to be according to the increasing level of associated risk; with overvaluation being the least risky and borrowed funds being the most risky strategy. It then suggests that risk perception seems to dictate contractors' preferences to the kind of strategy adopted for resolving deficit cash flow.

While the above listed order reflects the situation in the medium and large firms, the smaller firms perceive the order of the strategies differently. Thus, firm size seems to influence the choice of strategies for resolving deficit cash flow. This may have implications for cash flow

management in SME's. Moreover, the study concludes that on average, the use of spreadsheet and the detailed approach of breakdown of bill items into work/schedule continue to be the dominant methods of cash flow forecasting in the UK construction industry. Furthermore, it is observed that the industry seems to prefer the value approach as opposed to the cost approach to cash flow forecasting. Finally, the paper concludes that the industry has not embraced the use of developed software to aid cash flow forecasting.

Frankel (2012), in his article, *"Managing Reported Operating Cash Flow",* investigated quarterly changes in non-cash working capital to provide evidence on whether managers attempt to reduce non-cash working capital in the fourth quarter. The study finds that non-cash working capital drops significantly in the fourth quarter. This decrease is subsequently reversed in the first quarter of the fiscal year. Moreover, this temporary decrease in fourth-quarter working capital remains significant after controlling for seasonal variation in the firm's activity level. The belief that managers manage reported operating cash flows is reinforced by another result. The distributions of operating cash flows levels, changes, and forecast errors show statistically significant breaks at zero, indicating that firms work to exceed operating cash flow thresholds. Further tests indicate that the occurrence of reported cash flow management is related to incentives. In particular, the discontinuity in the operating cash flow level distribution is most pronounced for firms near bankruptcy.

Finally, the study provides evidence that managers respond to working capital performance incentives. Firms that base compensation on working capital measures have larger reductions in fourth non-cash quarter working capital. However, these extra reductions are not reversed in the first quarter, suggesting that managers are not temporarily reducing working capital to maximize current compensation. This research extends the literature on manipulation of numbers reported in financial statements, which has focused on manipulation of income. Given net income, changes in working capital affect cash flow from operations. Thus, managers' concern about working capital levels can arise directly because compensation committees and investors emphasize the minimization of non-cash working capital or indirectly if these parties a focus cash flow from operations.

McInnis & Collins (2013), in their article, *"The Effect of Cash Flow Forecasts on Accrual Quality and Benchmark Beating",* have stated that cash flow forecasts enable investors and regulators to decompose an earnings surprise into the portion attributable to cash flow and the

portion attributable to accruals. The study posits that cash flow forecasts make accrual manipulations to manage earnings more transparent, which increases the expected costs to firms and managers of engaging in opportunistic earnings management through accrual manipulations.

The study finds that using inter-temporal change analysis accrual quality improves, and the probability of meeting earnings targets declines, after analysts begin issuing cash flow forecasts. Tests using a propensity-score matched control sample do not reveal similarly significant changes in accrual quality or benchmark beating. Additional analyses reveal that firms for which cash flow forecasts are provided turn to other benchmark-beating mechanisms, such as real activities management and earnings guidance, following the provision of cash flow forecasts.

2.3 Review of Thesis

Satyal (2009), has conducted a thesis on *"Cash Management in Gorakhkali Rubber Udhog Limited"*, with the following objectives;

a. **To Measure the Profitability of the GRUL.**
b. **To measure the Liquidity position of the GRUL.**
c. **To examine the cash flow statement of the GRUL**

The major findings of the study are;

a. **The management of GRUL is incapable of controlling its overflowing expenses as a result the expenses are increasing year to year.**
b. **GRUL has been suffering from operating loss. The main cause of loss is low contribution margin ratio, burden of high fixed costs, under capacity utilization.**
c. **GRUL has improper cash position. The cash flow statement shows the negative cash flow operation due to increase in operating expenses and improper cash management.**
d. **The balance sheet shows that the financial structure of GRUL is not satisfactory. The total assets of GRUL are financed by the equity capital. No long-term debts are taken. So GRUL has no financial leverage and insolvency risk. Only some current assets are financed by current liabilities.**
e. **Liquidity position of GRUL is poor. One major cause of poor operation and under utilization of capacity is its inadequate liquidity.**

Thapa (2010), has conducted a study on, *"Cash Management Practices in Nepal Telecom"*, with the following objectives;

a. To examine the management of cash in Nepal Telecom.
b. To identify the liquidity position of Nepal Telecom Pvt. Ltd.
c. To review cash flow from operating, financing and investing activities.
d. To provide NT recommendation in terms of cash management.

The major findings of the study are;

a. The main sources of cash of NTC are international trunk telephone, local telephone and domestic trunk telephone both of PSTN and mobile.
b. The actual cash balances were higher than approved budgeted amount. It shows that there was no effective implication of budgeted amount.
c. When comparison is made between actual cash source and actual cash uses, there was big deviation resulting surplus. So, it shows that budget was not implemented properly and surplus was not used in productive investment.
d. Total budgeted sources involved closing cash balance of previous year, external and internal source. Internal source of cash was main portion of the total cash source to meet the budget.
e. Current ratio shows that NTC is efficient in maintaining the good liquidity position. Cash flow analysis shows strong financial position of the company.
f. NTC has not adequately considered controllable and uncontrollable variables affecting the company. Similarly, the company is lacking the proper system of performance evaluation of employees.

Kafle (2011), has conducted a study on *"A study of Cash Management in Nepalese Public Enterprises, A Case Study of Nepal Electricity Authority"*, with the following objectives:

a. **To examine the cash management practices in Nepal Electricity Authority through ratio analysis.**
b. **To examine and analyze the liquidity position of Nepal Electricity Authority.**
c. **To analyze the profitability position of NEA.**
d. **To examine the cash flow statement of Nepal Electricity Authority.**

The major findings of the study are;

a. **NEA's cash management is very poor. Liquidity position is dissatisfactory. Negative profitability of the company adds much to the worsening financial position of the company.**
b. **The accumulated amount of account receivable which is increasing year by year denotes the inefficiency of the authority to collect its revenue in time. There is the absence of effective utilization of capital employed and liquidity position is also not satisfactory.**
c. **Because of the absence of the competitors, authority has become monopolistic and, hence, it is not alert towards its possible threats and opportunities. Different statistical tools show the positives relationship with two variables like cash and sales, cash and account receivable, current assets and cash, current liabilities and cash.**

Banjade (2013), has conducted a study on, "*Cash Management of Nepal Telecom*" with the following objectives;

a. **To examine the liquidity position of Nepal Telecom.**
b. **To examine the profitability of Nepal Telecom.**
c. **To analyze the allocation and expenditure of cash of Nepal Telecom.**

The major findings of the study are;

a. **The company was able to collect more cash from different sources than it targeted in the budget. It shows good position of actual cash collection of the company.**
b. **On the other hand, company did not spend cash as targeted. Due to these facts, there was enough surplus cash in hand every year. But company could not manage the surplus in the productive sector.**
c. **The study shows that the company has high liquidity which adversely affects profitability of the company. The company has also taken external loan from foreign institution which was not required to borrow. It was able to meet its expenses of budget by its own source.**
d. **There are strict provisions regarding cash control practices like procedure of running bank account, central collection policy, authority and responsibility for expenses, etc. in NTC Strict and lengthy procedure of business activities hamper**

in decision making which may cause to suffer for not getting business opportunity.

2.4 Research Gap

All of the above reviewed theses have their distinct relevance while conducting this study. In general, all these theses showed the way to the researcher for conducting the study; gathering the data, tabulating them and interpreting these data. However, these reviewed studies possess some shortcomings. Some of the studies analyzes the cash management from liquidity perspectives alone and thus does not analyze from the efficiency perspective, while some of the studies focus mainly on the cash flow, and most importantly these reviewed studies do not conduct primary data analysis and do not show the relationship between cash management and profitability. Considering these shortcomings, the present study analyzes the cash management by analyzing the ratios; liquidity and efficiency ratios, cash conversion cycle, cash flow statement, relationship between net profit and cash management and responses obtained from questionnaire.

CHAPTER - III
RESEARCH METHODOLOGY

For the purpose of achieving the objectives of the study, the applied methodology is used. It thereby helps to highlight and recommend the useful and meaningful points so that all concerned can achieve something from this study. The research methodology used in the present study is briefly mentioned below.

3.1 Research Design

A well settled research design is necessary to fulfill the objective of the study. This study mainly concerned with historical research. Generally, to show the cash management of Salt Trading Corporation Limited, past historical data are used. The relevant and needed data has been collected from various publications such as annual reports and brochures of STCL.

3.2 The Population and Sample

The research topic is about cash management practices of trading companies. So, all trading enterprises, either government owned or privately run, are assumed to be the population of the study and among all of them STCL is taken for research purpose.

3.3 Sources of Data and Collection Procedure

For this study, both primary and secondary data are used. These secondary data are collected from published sources like annual report, prospectus, balance sheet, newspaper, journal, Internet and other sources of STCL, while the primary data are collected through opinion survey.

3.4 Data Analysis Tools

The following financial and statistical tools will used for the analysis of the research study.

3.4.1 Financial Tools

1) Cash and Bank Balance

A bank balance is that amount which is actually deposited in any of the bank or the amount which has been credited in bank account. On the other side, it is an amount which is there in hand. i.e., it is otherwise called as cash in hand. The cash and bank balance shows the liquidity of the firm.

2) Ratio Analysis

Ratio analysis is one of the strongest tools to measure to financial health of an organization. This tool is used to judge various aspects of the financial condition of the organization by comparing it with standard ratio. The following ratios will be used in this research:

a) Cash Turnover Ratio

A company's cash turnover ratio measures how many times per year it replenishes its cash balance with its sales revenue. A higher cash turnover ratio is generally better than a lower one. Analyzing the cash turnover ratio can help you determine how efficiently you keep cash flowing through your small business, but there are some drawbacks to the ratio that could present an inaccurate picture.

$$\text{Cash Turnover Ratio} = \frac{\text{Sales}}{\text{Cash in Hand and at Bank}}$$

b) Account Receivable Turnover

Accounts receivable turnover is the ratio of net credit sales of a business to its average accounts receivable during a given period, usually a year. It is an activity ratio which estimates the number of times a business collects its average accounts receivable balance during a period.

$$\text{Account Receivable Turnover Ratio} = \frac{\text{Sales}}{\text{Average Receivables}}$$

c) Days Sales Outstanding

Days sales outstanding is a calculation used by a company to estimate their average collection period. It is a financial ratio that illustrates how well a company's accounts receivables are being managed.

$$\text{Days Sales Outstanding Ratio} = \frac{\text{Accounts Receivables}}{\text{Annual Sales}} \text{ x 360 days}$$

d) Current Assets Turnover Ratio

Current assets turnover ratio shows the relationship between net sales and current assets. When we divide the net sales with current assets and multiply with 100, we find that value net sale which has been possible due to $ 100 investment of current assets.

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

e) Cash and Bank Balance to Current Assets

This ratio is also supportive to analysis the liquidity position of the firm. It measures the proportion of cash and bank balance, the most liquid current asset in the total current assets. Higher ratio implies sound liquidity position and vice versa. It is complies as follows:

$$\text{Cash and Bank Balance to Current Assets Ratio} = \frac{\text{Cash \& } \textit{Bank Balance}}{\text{Current Assets}} \text{ x } 100$$

f) Cash & Bank Balance to Total Assets

Cash and bank balance to total assets ratio reflect what percentage of the total assets is covered by cash. The higher ratio indicates higher liquidity and lower profitability whereas lower ratio indicates lower liquidity and higher profitability.

$$\text{Cash \& } \textit{Bank Balance to Total Assets Ratio} = \frac{\text{Cash \& } \textit{Bank Balance}}{\text{Total Assets}} \text{ x } 100$$

g) Cash and Bank Balance to Current Liabilities

It calculates the cash balance available with the firm in meeting payments of current liabilities. Moderately higher ratio indicates good liquidity too high and too low ratio are unfavorable for the firm since too high indicates excess cash balance held idle and too low ratio means the firm unable to meet current liabilities. It is calculated as follows:

$$\text{Cash \& } \textit{Bank Balance to Current Liabilites Ratio} = \frac{\text{Cash \& } \textit{Bank Balance}}{\text{Current Liabilities}} \text{ x } 100$$

h) Cash and Bank Balance to Account Receivable

This ratio measures the cash and Bank Balance in relation with Accounts receivables (or sundry debtors) of the firm. Higher ratio refers to sound liquidity position and vice versa.

$$\text{Cash \& } \textit{Bank Balance to Account Receivable Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Account Receivables}}$$

i) Current Assets to Total Assets

Current assets are important to must companies as a source of funds for day- to- day operations. The higher the current assets to total assets, the higher would be the capacity of the company to have sufficient liquidity.

$$\text{Current Assets to Total Assets Ratio} = \frac{\text{Current Assets}}{\text{Total Assets}} \text{ x } 100$$

3) Cash Conversion Cycle

A cash conversion cycle is the amount of time that passes from the time that a sale of a good or service is made and when the cash is actually received for the product that was sold. Understanding cash conversion cycles can give a business some concept of how long certain assets are tied up in the production, payables and receivables process and are thus not available for use in making investments in the business operation.

$$\text{Cash Conversion Cycle} = \text{ASP} + \text{ARPP} - \text{APPP}$$

a) Average Stockholding Period

It is an asset utilization ratio that indicates how long goods remain in stock or unsold. The average stockholding period ratio is measured by dividing days in a year by stock turnover.

$$\text{Average Stockholding Period} = \frac{\text{Inventory}}{\text{Purchase}} \text{ x } 360 \text{ days}$$

b) Average Receivable Processing period

An average receivable processing period, also known as *days in receivable,* is the average amount of time it takes a business to collect money from customers to whom it has extended credit. This calculation is particularly important because it effects a company's anticipated cash flow.

$$\text{Average Receivables Processing Period} = \frac{\text{Average Receivables}}{\text{Sales}} \text{ x } 360 \text{ days}$$

c) Average Payable Processing Period

The average payment period is a measurement of how long a time it takes on average for a business to pay back its creditors. Companies use the average payment period to see how efficiently they are paying back their creditors.

$$\text{Average Payable Processing Period} = \frac{\text{Payables}}{\text{Purchase}} \text{ x } 360 \text{ days}$$

4) Cash Flow Statement

A cash flow statement, also known as statement of cash flows, is a financial statement that shows how changes in balance sheet accounts and income affect cash and cash equivalents, and breaks the analysis down to operating, investing, and financing activities.

3.4.2 Statistical Tools

To achieve the objectives of the study set out in first chapter, the following statistical tools have been efficiently utilized in fourth chapter to analyze the data.

a) Mean

The arithmetic mean (or simply the mean) of a list of numbers is the sum of the list divided by the number of items in the list. The mean is the most commonly-used type of average and is often referred to simply as the average.

$$\text{Mean}(\bar{X}) = \frac{x_1 + x_2 + \ldots\ldots\ldots\ldots\ldots\ldots + x_n}{N}$$

b) Standard Deviation

Standard deviation is a widely used measure of the variability or dispersion. A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of values.

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\Sigma(X - \bar{X})^2}{N}}$$

c) Coefficient of Variation

The coefficient of variation represents the ratio of the standard deviation to the mean, and it is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from each other.

$$C.V. = \frac{\text{Standard Deviation}}{\text{Mean}} \times 100$$

d) Correlation Coefficient

Two variables are said to have correlation, when they are so related that the change in the value of one variable is accompanies by the change in the value of the other. One of the widely used mathematical methods of calculating the correlation coefficient between two variables is Karl Pearson's correlation coefficient (r), which is defined by;

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

e) Regression

Regression refers to any approach to modeling the relationship between one or more variables denoted Y and one or more variables denoted X, such that the model depends linearly on the unknown parameters to be estimated from the data. The simple regression line of Y on X is given by;

$$Y = a + bX \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (i)$$

f) Probable Error

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation coefficient. Significance of relationship has been tested by using the probable error (P.E.) and it is denoted by the following model:

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

Where, r = the value of correlation coefficient

n = number of pairs of observations

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

if r > 6 P.E., it is significant.

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

The basic objective of this study is to inquire the cash management of STCL. This study indicates to show the cash management and profitability situation in brief. Therefore, this chapter includes the analysis and results of the gathered data with a view to assessing cash management of the industry for the period of five years. In this regards, to show the cash management of STCL, different tools and techniques have employed in this chapter.

4.1 Cash and Bank Balance Position

Holding of cash balance is the rational cash management practice of a business firm. Total cash balance refers to the cash in hand, cash at bank and cash in transit, near cash assets as marketable securities and time deposits in bank

Table 4.1

Cash and Bank Balance Position

FY	Cash & Bank Balance	Growth %
2007/08	62.95	----
2008/09	104.83	66.53
2009/10	65.30	-37.71
2010/11	111.69	71.04
2011/12	259.35	132.21
Mean	**120.82**	**58.02**
S.D.	**72.06**	**61.05**
C.V.%	**59.64**	**105.23**

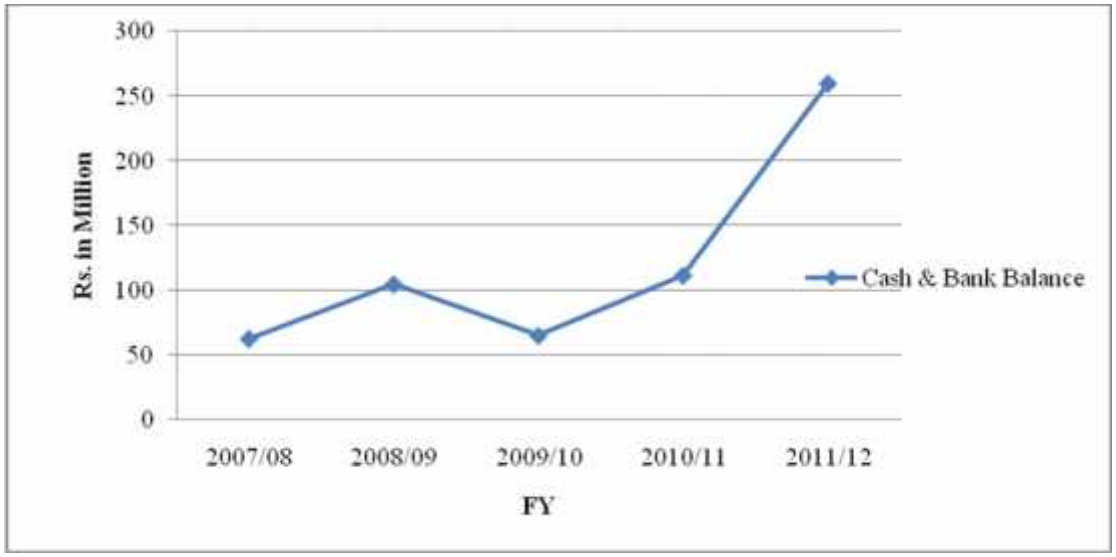
(Source: Appendix I)

The table shows that the reservation for cash and bank balance is not planned in advance by STCL, as the trend of cash and bank balance is in fluctuating trend and the range in this balance is wide. This means that the cash and bank balance is just the consequence of the unutilized amount. The noticable reduction in the cash and bank balance in the FY 2009/10 is just unjustifiable. As the receivables has also decreased, which would be analyzed in the later section, in this year 2009/10, in contrast to the increment in other constituents of the current assets and the increment in the fixed assets, it can be certainly said that this decrement in the

cash and bank balance is just due to the raising the prepaid expenses, keeping higher inventory, and the acquistion of fixed assets. Quantitatively, the cash and bank balance has ranged from Rs. 62.95 million in the FY 2007/08 to Rs. 259.35 million in the FY 2011/12. Moreover, the growth rate in the cash and bank balance has ranged from -37.71%, decrement, in the FY 2009/10 to 132.21% in the FY 2011/12. In average, the STCL has maintained Rs. 120.82 million cash and bank balance per year and the growth rate in this current asset is 58.02%. Further, the study has found that the variation in the cash and bank balance is high, 59.64%, as the cash and bank balance has fluctuated much and the variation in the growth rate, 105.23%, is also much incosistent. This results suggests that the cash manager or treasurer and the board need to redesign its cash management policy, if any, or create an effective and achievable cash management policy to prevent from the state of insolvency or from the state of cash deficit while investing at lucrative project.

Figure 4.1

Cash and Bank Balance Situation



4.2 Ratio Analysis

Under this section of the study, the different ratios that are related to the management of cash in STCL have been measured.

4.2.1 Cash Turnover Ratio

Cash turnover ratio represents how quickly the cash is received from its sale by formulates to find out. Higher turnover is the signal of good liquidity and vice versa.

Table 4.2

Cash Turnover Ratio (CTR)

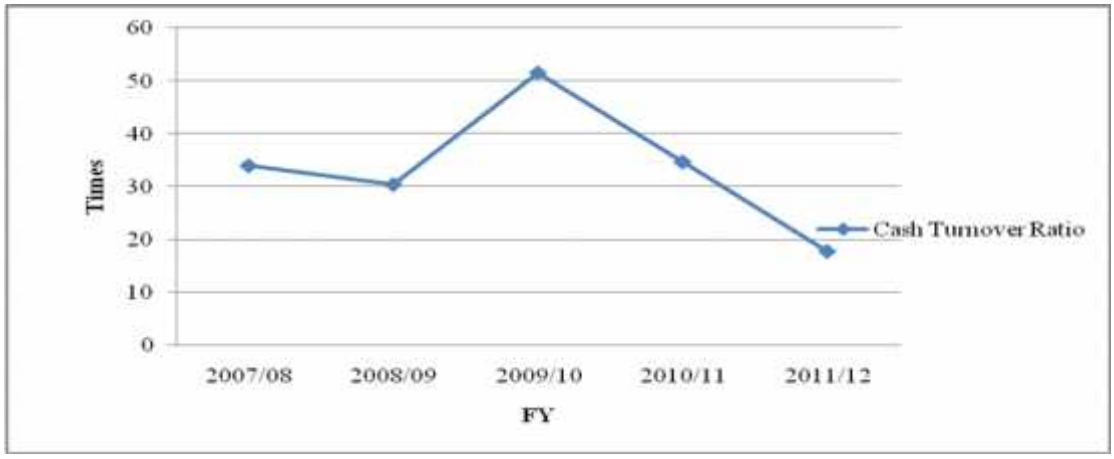
FY	Sales	CBB	CTR	Growth %
2007/08	2138.96	62.95	33.98	----
2008/09	3190.43	104.83	30.43	-10.43
2009/10	3366.34	65.30	51.55	69.39
2010/11	3874.06	111.69	34.69	-32.72
2011/12	4619.85	259.35	17.81	-48.64
Mean			**33.69**	**-5.60**
S.D.			**10.80**	**45.37**
C.V.%			**32.04**	**-810.05**

(Source: Appendix I)

In each year, the corporation has been able to increase its sales. The sales of STCL has been gradually increased from Rs. 2138.96 million in the FY 2007/08 to Rs. 4619.85 million in the FY 2011/12. In the examined five fiscal year periods, the sales of the corporation has been more than double, however, the trend of the cash and bank balance is not alike the trend of sales. The cash turnover ratio, which is the consequence of the sales and cash and bank balance, has been in fluctuating trend, which indicates that the number of replenishment times per year of cash with the sales has thus varied within the examined periods. The cash turnover ratio has ranged from 17.81 times in the FY 2011/12 to 51.55 times in the FY 2009/10. From the cash turnover standpoint, it can be said that the STCL performance in getting cash from sales is much better in the FY 2009/10, although the cash and bank balance has decreased in this year due to various reasons, than in the FY 2011/12. The study has found that the average cash turnover ratio of the corporation is 33.69 times, which means that the STCL generates cash from sales in each 11 days, indicating the better performance of the corporation in cash generation from sales. However, the negative growth rate in the cash turnover ratio in most of the observed periods and in average signals that the performance of the corporation would have been better, if STCL has maintained the cash turnover ratio like that of the FY 2009/10. The STCL needs to find out what cash turnover ratio would be best for its considering all the factors affecting the ratio, and should maintain the consistency the ratio, as the variation in cash turnover ratio is high, 32.04%, and also need not decide for much higher cash turnover ratio, as unnecessarily higher cash turnover ratio indicates low cash balance in comparison to sales, and reflects financial trouble in the corporation.

Figure 4.2

Cash Turnover Ratio (CTR)



4.2.2 Account Receivable Turnover

Receivables turnover ratio is an activity ratio, measuring how efficiently a firm used its assets. A low ratio implies the company should re-assess its credit policies in order to ensure the timely collection of imparted credit not earning interest for the firm.

Table 4.3

Receivable Turnover Ratio (RTR)

FY	Sales	Average Receivables	RTR	Growth %	DSO
2007/08	2138.96	221.63	9.65	----	38
2008/09	3190.43	234.52	13.60	40.96	27
2009/10	3366.34	233.89	14.39	5.80	25
2010/11	3874.06	258.43	14.99	4.15	24
2011/12	4619.85	278.49	16.59	10.66	22
Mean			**13.85**	**15.39**	**27**
S.D.			**2.31**	**14.95**	**6**
C.V.%			**16.72**	**97.13**	**20.18**

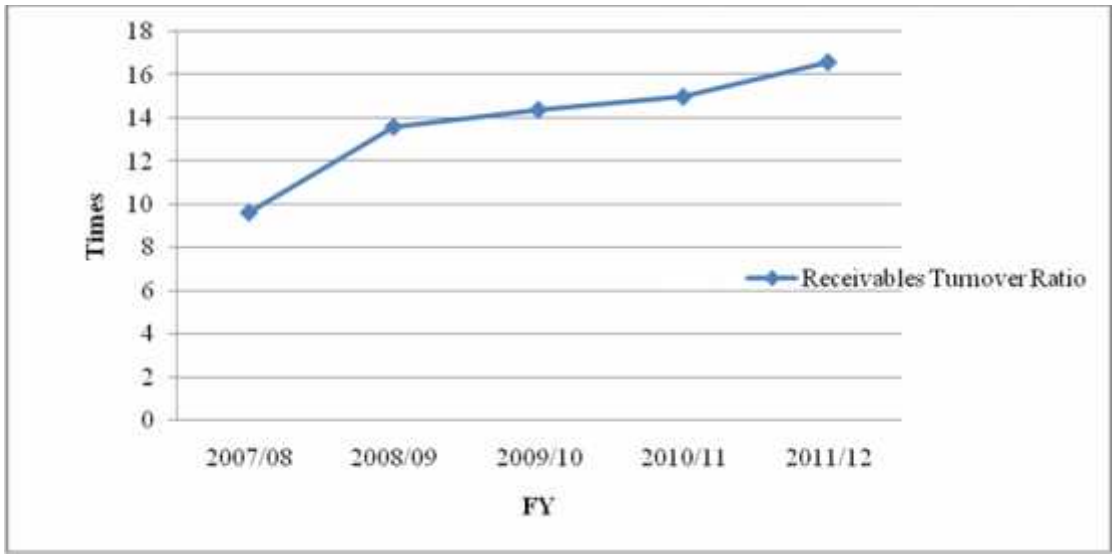
(Source: Appendix I)

If the slight decrement in the account receivables is ignored, it can be said that the increment trend of average receivables is alike that of sales in each year. The average account receivable has increased from Rs. 221.63 million in the FY 2007/08 to Rs. 278.49 million in the FY 2011/12. Moreover, the receivable turnover ratio indicates that the sales has direct effect with the account receivables, as the receivable turnover ratio has increased in each fiscal year,

although this increment in the ratio is unfavorable to the corporation. The receivable turnover ratio of STCL has been recorded to be lowest, 9.65 times, in the FY 2007/08 and to be highest, 16.59 times, in the FY 2011/12. The average receivable turnover ratio is computed to be 13.85 times, and the coefficient of variation in the ratio is 16.72%, indicating acceptable inconsistency. The growth rate in receivable turnover ratio is, however, highest, 40.96%, in the FY 2008/09 and lowest, 4.15%, in the FY 2010/11, and the average growth rate in the ratio is 15.39% with 97.13% variation, indicating much inconsistency in the growth rate. Interpreting the receivable turnover ratio from the facet of days sales outstanding, the study concludes that the corporation is gradually improvising its collection policy, or in other words the STCL is making the collection policy much tighter in each year indicating greater concern shown by the corporation in credit collection, as the days sales outstanding is decreasing in each examined fiscal year. At the inception of the observed periods, the DSO is 38 days, and at the end of the examined periods, the DSO is measured 22 days, showing that the corporation has been able to decrease the DSO by 16 days within the five year periods. The average DSO of 27 days indicates that the corporation is collecting the receivables in each 27 days; nearly 14 times per year. The standard deviation in the DSO is just 6 days and the variation in the collection days is 20.18%, indicating normal inconsistency. Although the STCL has made laudable effort in decreasing the DSO or increasing in the receivable turnover ratio, the decrement is not enough. It would be better if the the collection period would be at least once in each week. Thus, the study concludes that the STCL needs even much tighter collection period after considering the nature of business and that of debtors and specify a day or number of collectible times, and recruit or transfer more employees in collection department as per necessity for making the cash management much effective.

Figure 4.3

Receivable Turnover Ratio (RTR)



4.2.3 Current Assets Turnover Ratio

Current Assets are items such as cash, inventory and account receivables that are currently cash or expected to be turned into cash within one year. Current Assets Turnover may be used as a broad measure of cash management efficiency.

Table 4.4

Current Assets Turnover Ratio

FY	Sales	Current Assets	CATR	Growth %
2007/08	2138.96	1874.52	1.14	----
2008/09	3190.43	2529.89	1.26	10.52
2009/10	3366.34	2874.49	1.17	-7.14
2010/11	3874.06	3286.28	1.18	0.66
2011/12	4619.85	3002.32	1.54	30.53
Mean			**1.26**	**8.64**
S.D.			**0.15**	**14.10**
C.V.%			**11.59**	**163.12**

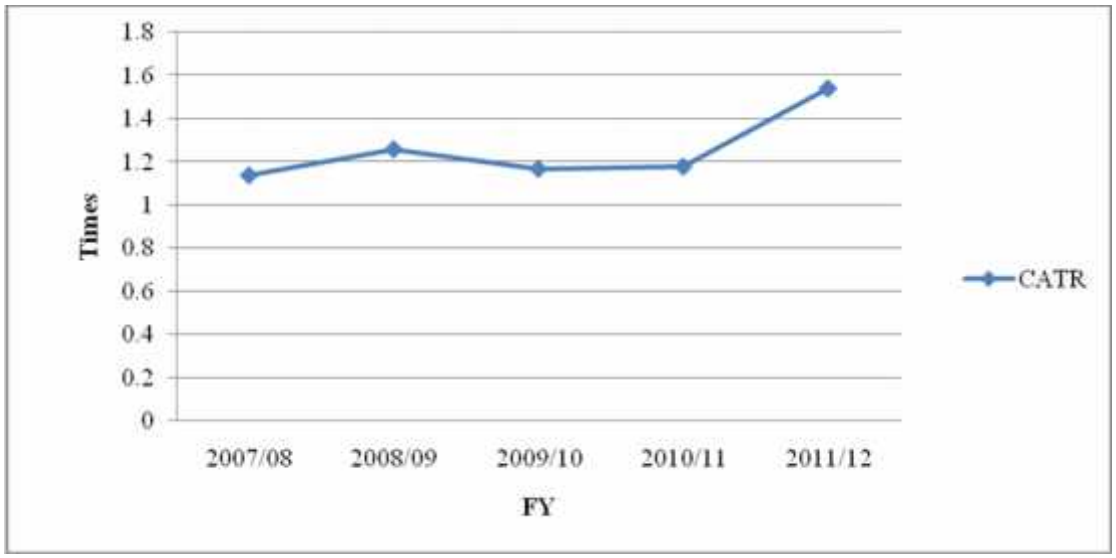
(Source: Appendix I)

Except in the FY 2011/12, the current assets of STCL has been increased in each fiscal year. The current assets of the corporation has been raised from Rs. 1874.52 million in the FY 2007/08 to Rs. 3286.28 million in the FY 2010/11, and it has been measured to be Rs. 3002.32 million in the FY 2011/12. Despite the decrement in the current assets in FY

2011/12, the corporation has been able to increase the sales and in fact the current assets turnover ratio is highest, 1.54 times, in this FY 2011/12. It can, thus, be said that the corporation has much efficiently mobilized its cash, cash equivalents and easily convertible assets to cash in this period. Except in the FY 2009/10, the current assets turnover ratio has been found to be in increasing trend. The current assets turnover ratio has numerically ranged from 1.14 times in the FY 2007/08 to 1.54 times in the FY 2011/12. In average, the ratio has been measured to be 1.26 times, and the variation in the ratio is 11.59%, indicating much consistency. Similarly, the growth in the current assets turnover ratio has ranged from -7.14%, decrement, in the FY 2009/10 to 30.53% in the FY 2011/12, with the average increment by 8.64%. Although the current assets turnover ratio is not less than 1, it would not be enough to conclude that the corporation has efficiently utilized the current assets for generating sales; part of the efficient cash management. The corporation should contrive to maintain the current assets turnover ratio at two digits.

Figure 4.4

Current Assets Turnover Ratio



4.2.4 Cash & Bank Balance to Current Assets

Cash is the most liquid current assets and as such the more the amount of cash balances in an enterprise the more liquid the enterprise in meeting its current obligation.

Table 4.5

Cash & Bank Balance to Current Assets

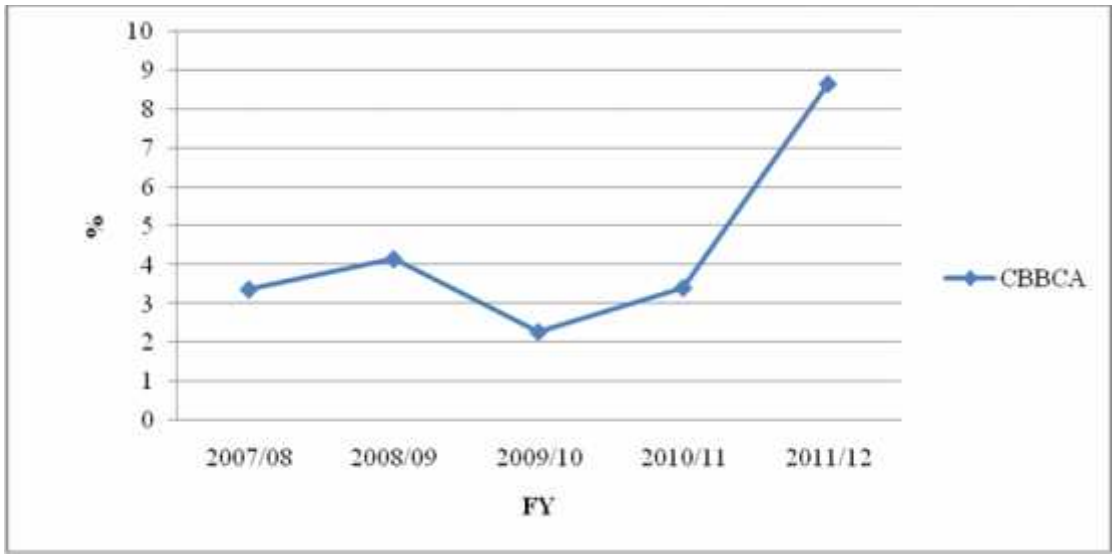
FY	CBB	CA	CBBCA	Growth %
2007/08	62.95	1874.52	3.36	----
2008/09	104.83	2529.89	4.14	23.39
2009/10	65.30	2874.49	2.27	-45.18
2010/11	111.69	3286.28	3.40	49.61
2011/12	259.35	3002.32	8.64	154.17
Mean			**4.36**	**45.50**
S.D.			**2.22**	**71.65**
C.V.%			**50.89**	**157.49**

(Source: Appendix I)

The table presents the amount of cash and bank balance in current assets. In Salt Trading, it shows the 4.36% average cash balance in current assets. It has standard deviation of 2.22% and CV of 50.89%, indicating greater variation. The table shows that in the FY 2007/08, 2008/09, 2009/10 and 2010/11, the ratio is less than average and in 2011/12 alone, it is higher than average, so there is much fluctuation of cash balance in current assets. Thus, it can be said that the cash position in current assets is needs to be meticulously reviewed by the corporation. In fact, the cash and bank balance to current assets has ranged from 2.27% in the FY 2009/10 to 8.64% in the FY 2011/12 and the growth rate in this ratio has ranged from -45.18%, decrease, in the FY 2009/10 to 154.17% in the FY 2011/12, with the average growth rate of 45.50%. The corporation needs to make a sound policy on what percentage of the current assets should be kept as the cash and bank balance, and any amount excess to this percentage should be further invested to generate sales, and the deficit should be recovered either by the collecting receivable, selling inventories or by other methods.

Figure 4.5

Cash & Bank Balance to Current Assets



4.2.5 Cash & Bank Balance to Total Assets

Cash and bank balance to total assets ratio reflect what percentage of the total assets is covered by cash. The higher ratio indicates higher liquidity and lower profitability whereas lower ratio indicates lower liquidity and higher profitability.

Table 4.6

Cash & Bank Balance to Total Assets

FY	CBB	TA	CBBTA	Growth %
2007/08	62.95	3622.27	1.74	----
2008/09	104.83	4272.71	2.45	41.18
2009/10	65.30	4591.63	1.42	-42.04
2010/11	111.69	5077.12	2.20	54.69
2011/12	259.35	4785.93	5.42	146.33
Mean			**2.65**	**50.04**
S.D.			**1.43**	**66.80**
C.V.%			**54.10**	**133.50**

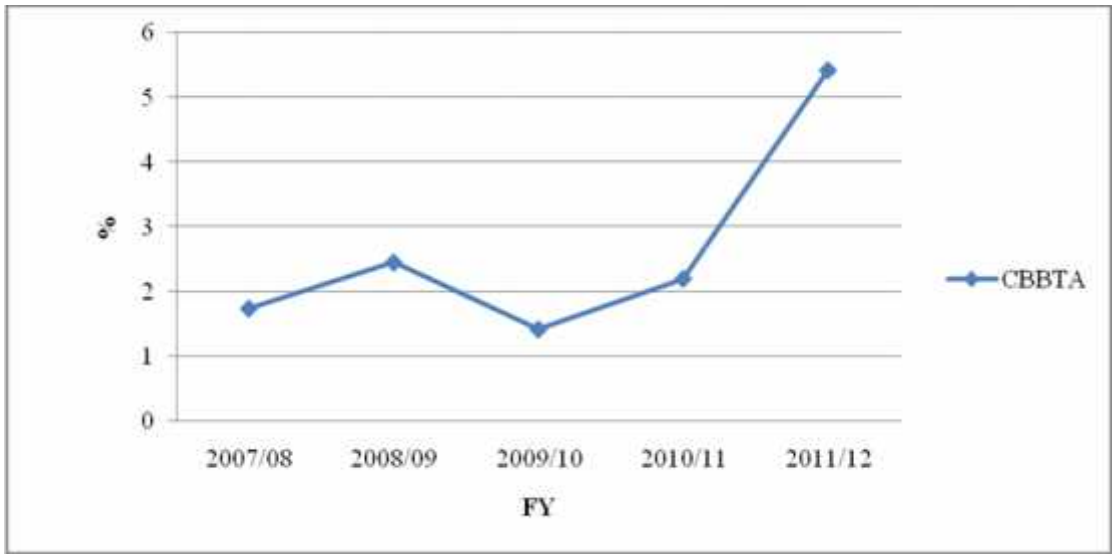
(Source: Appendix I)

In the first four fiscal years, the total asset of the corporation has increased from Rs. 3622.27 million to Rs. 5077.12 million. However, the total assets has decreased in the FY 2011/12 to Rs. 4785.93 million and the causes for this decrease is due to the decrease in value of fixed assets, and reduction of inventory and receivables, as evidenced by the balance sheets of the

corporation. Nevertheless, the representation of the cash and bank balance in this FY 2011/12 on total assets has not decreased; in lieu it has rather been measured to be highest, 5.42%. Except in the FY 2009/10, the representation of cash and bank balance in the total assets has increased in most of the periods, and thus it has ranged from 1.42% in the FY 2009/10 to 5.42% in the FY 2011/12. The increment in the ratio in most of the periods shows that the management has paid concern to the importance of the availability of the cash and bank balance for operating the business, however, whether such concern is enough is still dubious looking the representation of the cash and bank balance in total assets, as the most of the ratio is within the periphery of 2%. Also, the average ratio is measured to be 2.65% with the variation of 54.10%, indicating greater inconsistency in the representation of cash and bank balance on total assets. The growth rate in the ratio has varied from -42.04% in the FY 2009/10 to 146.33% in the FY 2011/12. It can be said that the STCL needs to decrease its receivables and inventory mostly to have necessarily sufficient cash balance and make itself able to meet its obligations in times to increase the credibility in the market so that in case of emergency it can easily get short term loan from the creditors.

Figure 4.6

Cash & Bank Balance to Total Assets



4.2.6 Cash & Bank Balance to Current Liabilities (Cash Assets Ratio)

Cash Assets Ratio is the total value of cash & bank balance divided by current liabilities. It measures the extent to which a corporation or other entity can quickly liquidate assets and cover short-term liabilities and therefore is of interest to short-term creditors.

Table 4.7

Cash & Bank Balance to Current Liabilities

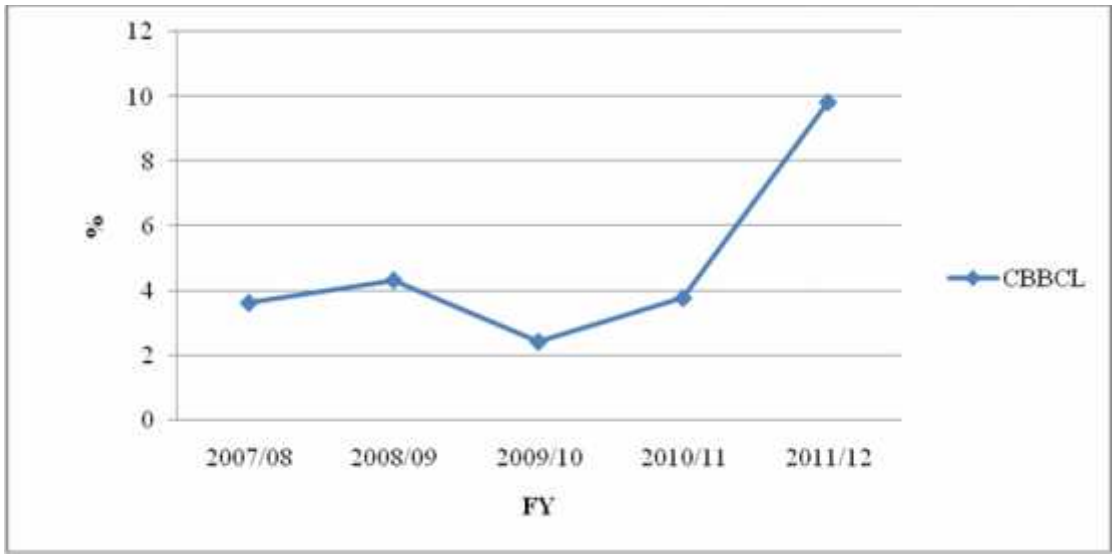
FY	CBB	CL	CBBCL	Growth %
2007/08	62.95	1731.99	3.63	----
2008/09	104.83	2423.67	4.33	19.00
2009/10	65.30	2692.63	2.43	-43.93
2010/11	111.69	2957.73	3.78	55.71
2011/12	259.35	2639.63	9.83	160.19
Mean			**4.80**	**47.74**
S.D.			**2.59**	**74.06**
C.V.%			**53.98**	**155.11**

(Source: Appendix I)

Alike the current assets, the current liabilities of the STCL has increased in the first four fiscal years; i.e. from Rs. 1731.99 million to Rs. 2957.73 million, and then decreased in the last fiscal years; the current liabilities has been measured to be Rs. 2639.63 million. If the noticeable decrement in the cash and bank balance is ignored for the FY 2009/10, the STCL has increased its cash balance along with the increment in current liabilities, as the proportion of cash and bank balance to current liabilities has increased in most of the periods, except in the FY 2009/10. The cash and bank balance to current liabilities has ranged from 2.43% in the FY 2009/10 to 9.83% in the FY 2011/12 and in average, it has been measured to be 4.80%. This indicates that the STCL is able to meet only 4.80% of the current liabilities on cash payments in average. The other remaining liabilities are paid only after collecting the receivables, clearing out the inventories and turning other current assets to cash. However, there is wide inconsistency in such paying habits, as the coefficient of variance is much higher, 53.98%; caused by the higher contribution in the average ratio by the high cash and balance to current liabilities in the FY 2011/12 alone. The growth rate in the ratio has also varied widely, as it has ranged from -43.93% in the FY 2009/10 to 160.19% in the FY 2011/12.

Figure 4.7

Cash & Bank Balance to Current Liabilities



4.2.7 Cash & Bank Balance to Account Receivable

Most companies operate by allowing some portion of their sale to be on credit. Account receivable is also very good liquid assets like cash and bank balance which can be collect quickly if the company has a good credit policy.

Table 4.8

Cash & Bank Balance to Account Receivable

FY	CBB	AR	CBBAR	Growth %
2007/08	62.95	224.31	0.28	----
2008/09	104.83	244.73	0.43	52.63
2009/10	65.30	223.04	0.29	-31.65
2010/11	111.69	293.81	0.38	29.84
2011/12	259.35	263.16	0.99	159.25
Mean			**0.47**	**52.52**
S.D.			**0.26**	**68.90**
C.V.%			**55.30**	**131.20**

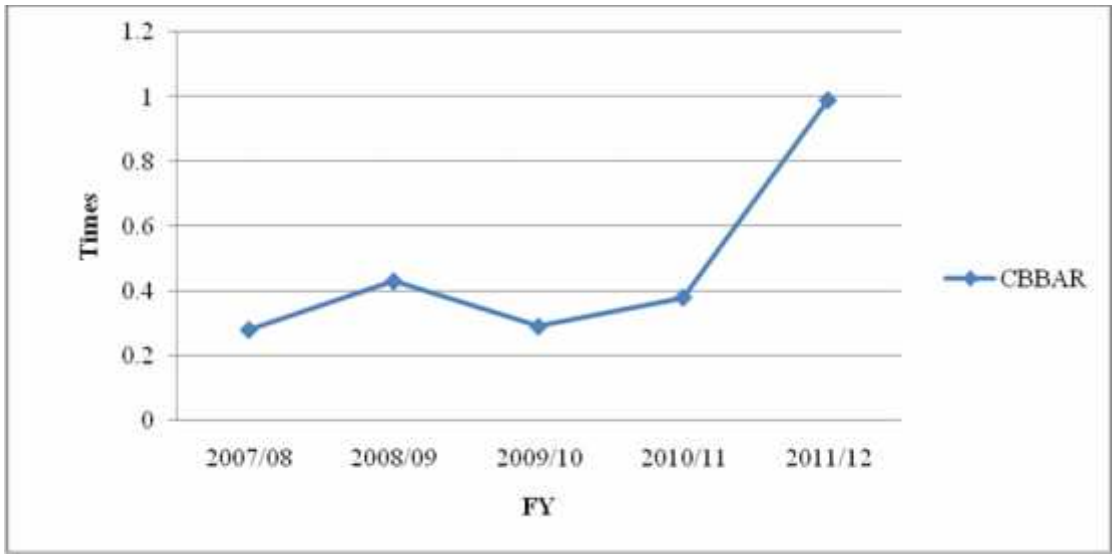
(Source: Appendix I)

The table delineates that the account receivables of the corporation has fluctuated in the entire observed periods, and thus it has ranged from Rs. 223.04 million in the FY 2009/10 to Rs. 293.81 million in the FY 2010/11. In each year, the corporation has been improvising its cash management considering the facet of the cash and bank balance to account receivables ratio,

as these ratio is in increasing trend in most of the periods. However, except in the FY 2011/12, the ratio in other fiscal years indicated that the large section of the credit sales was still collectible in comparison to the cash and bank balance. Nonetheless, the achievement of the corporation in increasing the ratio is praiseworthy and could be the benchmark for the same nature of other corporations. Numerically, the ratio has been gradually increased from 0.28 times in the FY 2007/08 to 0.99 times in the FY 2011/12 and the average ratio has been gauged to be 0.47 times. The average ratio indicates that cash and bank balance to account receivables is approximately in the proportion of 1:2, which is acceptable in the credit business. However, the ratio of 0.99 in the FY 2011/12 indicates that the STCL has adopted much tighter collection policy in that period centralizing the cash requirement. The study computes that the coefficient of variation in the cash and bank balance to account receivables is 55.30%, indicating inconsistency in the ratio but acceptable inconsistency as the inconsistency is caused by increasing trend of the ratio in most of the periods. Further, the growth rate in the ratio is also in increasing trend, except in the FY 2009/10 when the cash and bank balance has decreased tremendously. The growth rate of the corporation with regard to the cash and bank balance to account receivables has ranged from -31.65% in the FY 2009/10 to 159.25% in the FY 2011/12. Finally, it can be said that the corporation should manage decrease the ratio by lessening the receivables through having tight collection policy and by making the major section of the sales in cash to have sound cash management.

Figure 4.8

Cash & Bank Balance to Account Receivable



4.2.8 Current Assets to Total Assets

Current assets are important to must companies as a source of funds for day- to- day operations. The higher the current assets to total assets, the higher would be the capacity of the company to have sufficient liquidity.

Table 4.9

Current Assets to Total Assets

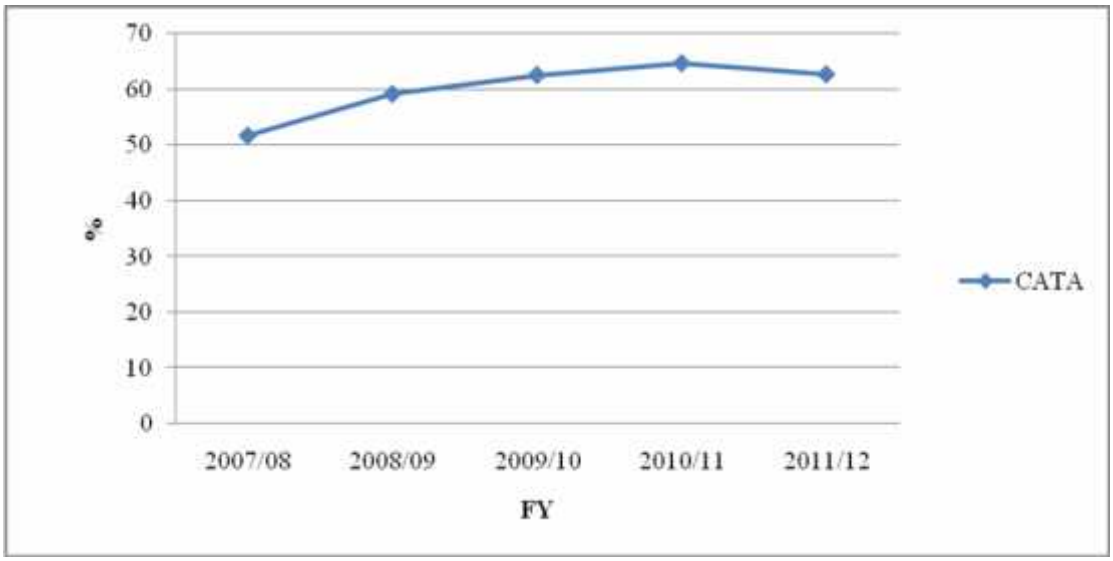
FY	CA	TA	CATA	Growth %
2007/08	1874.52	3622.27	51.75	----
2008/09	2529.89	4272.71	59.21	14.42
2009/10	2874.49	4591.63	62.60	5.73
2010/11	3286.28	5077.12	64.73	3.39
2011/12	3002.32	4785.93	62.73	-3.08
Mean			**60.20**	**5.11**
S.D.			**4.58**	**6.27**
C.V.%			**7.61**	**122.52**

(Source: Appendix I)

The preponderance of total assets is reflected by the current assets, which means that the major section of total assets of the STCL could be easily converted in cash; as the current assets to total assets ratio is at least 51.75%. In most of years as well, the STCL has been concerned in increasing the ratio of current assets to total assets, as a result the ratio has gradually increased in the first four fiscal years, the ratio, however, has decreased in the last year, as both the current assets and total assets of corporation have decreased in this year; indicating that the decrease rate in current assets is higher than that of total assets. The ratio has ranged from 51.75% in the FY 2007/08 to 64.73% in the FY 2010/11, and in the FY 2011/12, it is measured to be 62.73%. In average, the 60.20% of total assets is comprised of current assets and the variation in the ratio is just 7.61%, indicating consistency in the ratio. Similarly, the growth rate in the current assets to total assets ratio has ranged from -3.08% in the FY 2011/12 to 14.42% in the FY 2008/09. Summarizing the interpretation, it can be said that the composition of total assets is much convertible to the cash and cash equivalents, and thus STCL need not be much panic in case of cash shortage; indeed it would be better if STCL further increases this ratio.

Figure 4.9

Current Assets to Total Assets



4.3 Cash Conversion Cycle

The cash conversion cycle is the number of days between paying for raw materials and receiving the cash from the sale of the goods made from the raw materials.

4.3.1 Average Stockholding Period

Average stock holding period indicates the efficient of the firm in selling its product. The short period indicates fast conversion of inventory to sales and the long period indicates slow conversion period of inventory to sales.

Table 4.10

Average Stockholding Period

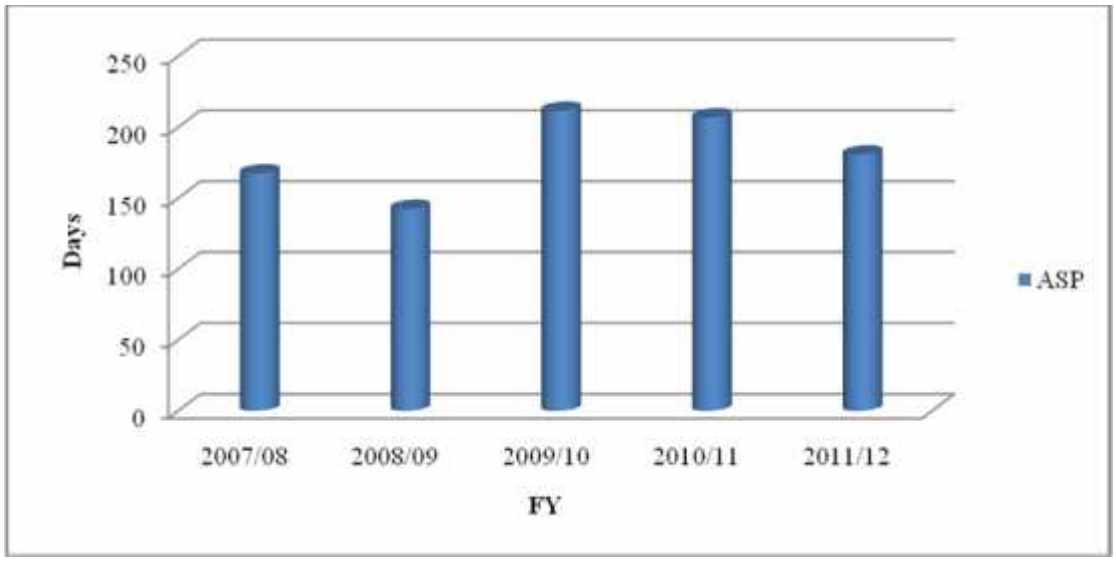
FY	Days	Purchase	Inventory	ASP	Growth %
2007/08	360	1315.78	611.62	167.34	----
2008/09	360	2546.76	1007.18	142.37	-14.92
2009/10	360	2463.59	1447.51	211.52	48.57
2010/11	360	2748.82	1579.42	206.85	-2.21
2011/12	360	3083.05	1547.78	180.73	-12.63
Mean				**181.76**	**4.70**
S.D.				**25.60**	**25.78**
C.V.%				**14.08**	**548.03**

(Source: Appendix II)

In each year, the corporation has made the purchase higher, and the purchasing amount of trading goods has increased continously from Rs. 1315.78 million in the FY 2007/08 to Rs. 3083.05 million in the FY 2011/12. Similarly, the inventory keeping of the corporation has increased in the first four fiscal years; i.e. from Rs. 611.62 million to Rs. 1579.42 million, and then has slightly decreased to Rs. 1547.78 million in the FY 2011/12. If the slight decrement in the inventory the FY 2011/12 is neglected, it can be assumed that the inventory policy of the corporation is centralized on the purchasing policy of trading goods. However, the table shows that the corporation is inefficient in converting the inventroy to sales in time, as the averge stockholding period has ranged from 142.37 days in the FY 2008/09 to 211.52 days in the FY 2009/10. In average, the average stockholding period is 181.76 days, which is unexpectedly long period for such trading companies, and the variation in the period is 14.08%, indicating that there is much consistency in the stockholding period. Also, the growth rate in the ASP has ranged from -14.92% in the FY 2008/09 to 48.57% in the FY 2009/10, showing high variance in the growth rate. It can, thus, be said that the STCL nees to review its inventory policy and should contrive to tremendously decrease the ASP, so that the inventory could be easily turned to sales and finally to cash, otherwise this long ASP would certainly affect badly to the cash management of the corporation.

Figure 4.10

Average Stockholding Period



4.3.2 Average Receivable Processing Period

Average Receivable processing period measures the average number of days from the sale of goods to collection of receivables. It analyzes the determining collectibles of debtors. The longer collection period refers liberal credit policy and short period refers the strict credit policy.

Table 4.11

Average Receivable Processing Period

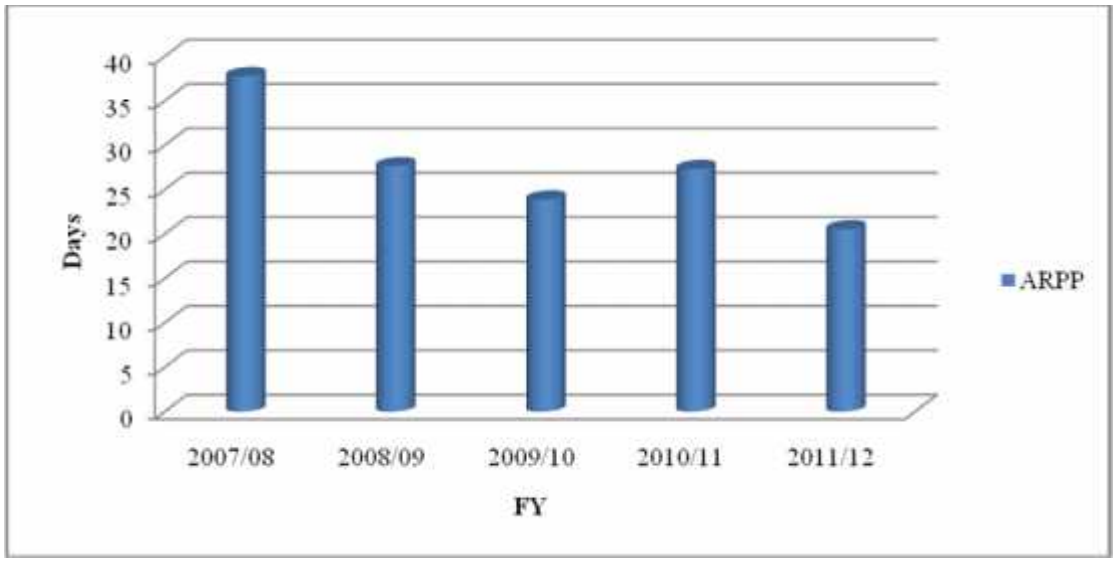
FY	Days	Sales	Average Receivables	ARPP	Growth %
2007/08	360	2138.96	224.31	37.75	----
2008/09	360	3190.43	244.73	27.61	-26.85
2009/10	360	3366.34	223.04	23.85	-13.63
2010/11	360	3874.06	293.81	27.30	14.47
2011/12	360	4619.85	263.16	20.51	-24.89
Mean				**27.41**	**-12.73**
S.D.				**5.79**	**16.49**
C.V.%				**21.11**	**-129.58**

(Source: Appendix II)

The average receivables of the corporation has oscillated during the periods and has ranged from Rs. 223.04 million in the FY 2009/10 to Rs. 293.81 million in the FY 2010/11. Along with the average receivables, the average receivables processing period has also fluctuated during the examined periods, and it has quantitatively ranged from 20.51 days in the FY 2011/12 to 37.75 days in the FY 2007/08. The collection of the receivables once in at least 20 days would not be favorable to the corporation and obviously this procrastination in collection would debilitates the cash management of the corporation. The average receivables collection period is 27.41 days, which means that the corporation makes approximately 13 times collection per trading year, and the variation in the collection period is 21.11%. The growth rate on the other side has ranged from -26.85% in the FY 2007/08 to 14.47% in the FY 2010/11. In most of the years, the growth rate is negative, but the decrement rate is not enough for the corporation to have sound cash management practices. The long receivable periods suggest that the corporation need to adopt much tighter collection policy, otherwise the corporation may soon find itself to be impecunious.

Figure 4.11

Average Receivable Processing Period



4.3.3 Average Payable Processing Period

Payable processing period indicates the speed of creditors payable. A high payable period is favorable for the company which will increase in working capital.

Table 4.12

Average Payable Processing Period

FY	Days	Purchase	Payable	APPP	Growth %
2007/08	360	1315.78	191.21	52.32	----
2008/09	360	2546.76	218.30	30.86	-41.02
2009/10	360	2463.59	389.46	56.91	84.43
2010/11	360	2748.82	234.78	30.75	-45.97
2011/12	360	3083.05	93.20	10.88	-64.61
Mean				**36.34**	**-16.79**
S.D.				**16.66**	**59.10**
C.V.%				**45.84**	**-351.95**

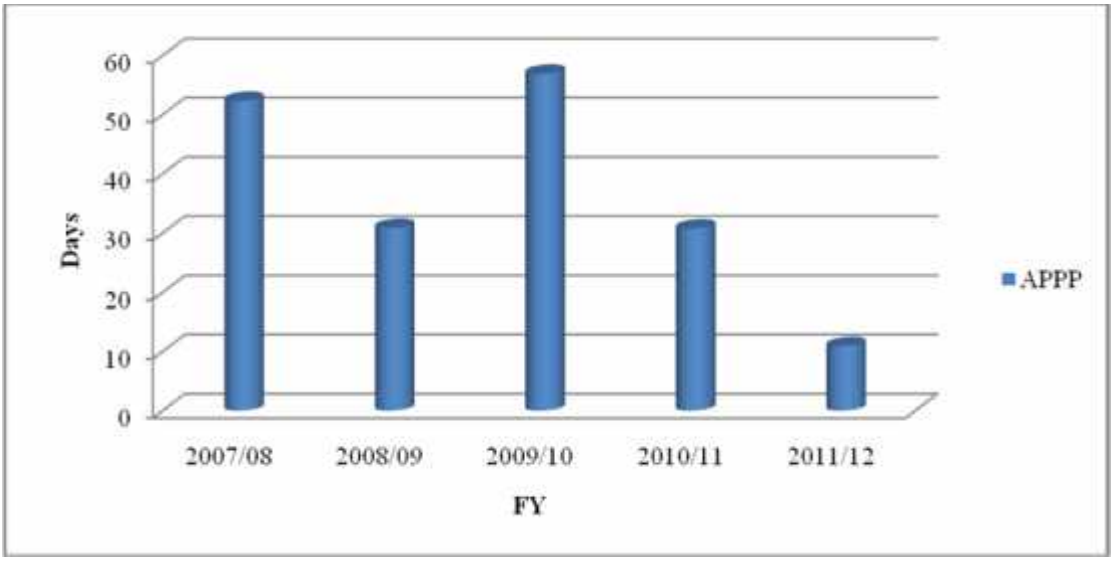
(Source: Appendix II)

The payable of the corporation has fluctuated during the entire periods, and thus it has ranged from Rs. 93.20 million in the FY 2011/12 to Rs. 389.46 million in the FY 2009/10, as a consequence the average payable processing period (APPP) has also swung during the periods. The APPP has been observed to have varied from 10.88 days in the FY 2011/12 to 56.91 days in the FY 2009/10. In the last fiscal year, the APPP is even lower than the ARPP

in that period, signaling that the corporation is either ignoring the axiom of cash conversion cycle or just trying to gain credibility among the creditors by paying fast. However, the average payable procession period, 36.34 days, is higher than the average receivable procession periods, 27.41 days. Nonetheless, the corporation needs to reduce both the procession periods because both of them ultimately affects negatively the cash management. The variation in the APPP, 45.84%, and the wide gap between the growth rates; lower rate is -64.61% and the upper rate is 84.43%, suggest that there is much inconsistency in the payable periods, and thus the corporation should revise its payable policy as well.

Figure 4.12

Average Payable Processing Period



4.3.4 Cash Conversion Cycle

It is the duration between the purchase of a firm's inventory and the collection of accounts receivable for the sale of that inventory. The cash conversion cycle is also known as cash cycle.

Table 4.13

Cash Conversion Cycle

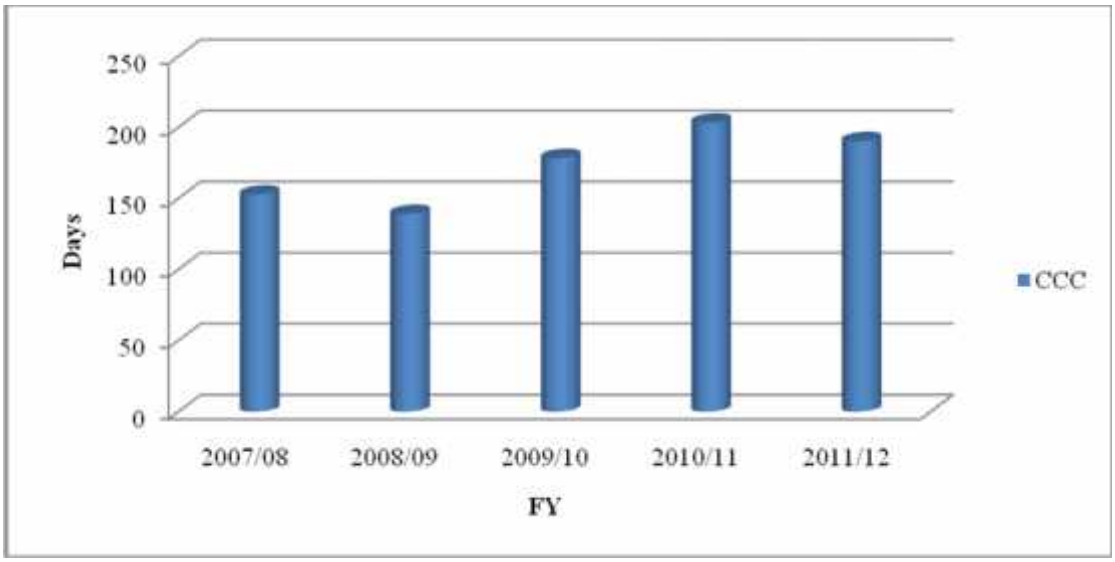
FY	ASP	ARPP	APPP	CCC	Growth %
2007/08	167.34	37.75	52.32	152.77	----
2008/09	142.37	27.61	30.86	139.12	-8.94
2009/10	211.52	23.85	56.91	178.46	28.28
2010/11	206.85	27.3	30.75	203.40	13.98
2011/12	180.73	20.51	10.88	190.36	-6.41
Mean				**172.82**	**6.73**
S.D.				**23.72**	**15.29**
C.V.%				**13.72**	**227.27**

(Source: Appendix II)

The cash conversion cycle of the corporation does not show satisfactory cash management, as the cash conversion cycle (CCC) is extremely high indicating that it takes long time to convert the inventory to cash. Also, the CCC is not in decreasing trend, rather it is in fluctuating trend, which indicates that the management has not played sufficient role to rapidly generate cash from the inventory. The CCC has ranged from 139.12 days in the FY 2008/09 to 203.40 days in the FY 2010/11, and the average CCC is 172.82 days, which is extremely very high for the trading companies. The greater consistency in the CCC, 13.72%, shows ineffective cash management of the STCL from the facet of CCC. The growth rate, which should be negative in each year, has ranged from just -8.94% in the FY 2008/09 to 28.28% in the FY 2009/10. The greater CCC has been caused by the inefficiency of the corporation to lessen the ASP at first, and then ARPP at second, and finally to accentuate the APPP at last.

Figure 4.13

Cash Conversion Cycle



4.4 Cash Flow Statement

The statement of cash flows reflects an enterprise's major sources of cash receipts and cash payments. It reports the cash effects during a period of an enterprise's operations, its investing transaction and its financing transaction. The statement provides information to explain the movements over the period in cash and cash equivalents.

Table 4.14

Cash Flow Statement

FY	Cash Flow From			Total Cash Flow	Opening Balance	Closing Balance	% Change
	Operating Activities	Investing Activities	Financing Activities				
2007/08	211.75	-36.84	-192.25	-17.34	80.29	62.95	21.60
2008/09	-206.93	-40.17	294.78	47.68	62.95	104.83	66.53
2009/10	235.51	-7.93	-267.12	-39.54	104.83	65.30	-37.71
2010/11	190.72	-31.01	-113.32	46.39	65.30	111.69	71.04
2011/12	237.34	112.74	-202.43	147.66	111.69	259.35	132.21
Average	**133.68**	**-0.64**	**-96.07**	**36.97**	**85.01**	**120.82**	**50.73**

(Appendix III)

The trading company maintains quite satisfactory cash balance in operating activities except in the fiscal year 2007/08 Rs. (206.93 million). The negative cash flow indicates that the company has increased in current assets while decrease in current liabilities. The organization

should try to decrease the administrative expenses to increase the cash from operating activities and so on in order to maintain a smooth cash flow.

The STCL has negative cash flow in investing activities in the first four fiscal years. This negative cash flow indicates that the STCL is acquiring more fixed assets. The corporation should consider whether increasing fixed assets is proportionately increasing the profit or not. The positive cash flow from investing activities in the FY 2011/12 is due to the higher dividend received, Rs. 126.49 million, by the corporation than the investment in fixed assets in that year. The cash flow from investment in the FY 2011/12 has been measured to be Rs. 112.74 million.

Except in the fiscal year 2009/10, STCL has negative cash flow from financing activities. In this year, the cash flow from financing activities is Rs. 294.78 million, The corporation is strived to finance the cash requirement from short term and mid term loan, which liable the corporation to pay huge interest, in other fiscal years. The corporation paid more dividends, interest in debentures in these years. To maintain a smooth flow of cash the corporation should consider these negative cash flows.

Consequently, the STCL has negative cash flow in two fiscal years; (Rs. 17.34 million) in the FY 2007/08 and (Rs. 39.54 million) in the FY 2009/10, and positive cash flow in three fiscal years; Rs. 47.68 million in the FY 2008/09, Rs. 46.39 million in the FY 2010/11 and Rs. 147.66 million in the FY 2011/12. This shows that the corporation need to control the negative cash flow in each activities unless such negative cash flow is lucrative for the corporation. Nevertheless, the STCL has been able to keep positive average cash flow in the five fiscal years, and the average percentage change in the opening and closing cash balance is positive.

4.5 Correlation and Regression Analysis

This statistical tool measures the relationship between the variables. The correlation coefficient measures the relationship whereas the regression analysis measures to what extent the dependent variable is affected by the per unit change in independent variable.

4.5.1 Net Profit & Cash and Bank Balance

To measure the relationship of net profit with cash and bank balance, the net profit (Y) has been assumed to be the dependent variable on cash and bank balance (X), independent

variable. Then the correlation coefficient and regression line calculated in appendix have been summarized below.

Table 4.15

Correlation & Regression Analysis between Net profit & Cash and Bank Balance

Correlation between Net Profit & CBB					**Regression Equation**
r	**r^2**	**P.E.**	**6 P.E.**	**Remarks**	
0.8775	0.7700	0.0694	0.4163	Significant	NP = -5.53 + 0.42 CBB

(Source: Appendix IV)

The table delineates that the net profit has positive relationship with the cash and bank balance and thus net profit increases/decreases with the increment/decrement in cash and bank balance of STCL. The correlation between net profit and cash and bank balance is 0.8775. Also, the coefficient of determination indicates that 77.00% variation in net profit of STCL respectively has been explained by change in cash and bank balance. The probable error in the relationship between these two variables is 0.0694, and the six times probable error is 0.4163.

Since, the value of 'r' is greater than the calculated 6 P.E., it can be considered that the relationship between net profit and cash and bank balance is statistically significant in STCL, and thus net profit increases with the increase in cash and bank balance and vice-versa. Further, the regression line of net profit on cash and bank balance indicates that the net profit increases by Rs. 0.42 with per rupee increment in cash and bank balance, if the other variable of the STCL remains constant.

4.5.2 Net Profit & Cash Conversion Cycle

For the study, it has been presumed that the longer the cash conversion cycle, the lower would be the net profit. To test this presumption, the correlation and regression analysis between these two variables has been conducted.

Table 4.16

Correlation & Regression Analysis between Net profit & Cash Conversion Cycle

Correlation between Net Profit & CBB					Regression Equation
r	**r^2**	**P.E.**	**6 P.E.**	**Remarks**	
0.7881	0.6211	0.1143	0.6858	Significant	NP = -152.86 + 1.15 CCC

(Source: Appendix IV)

Although the cash conversion cycle is extremely long, as discussed in previous section, it has unbelievable positive relationship with the profitability of the corporation. The correlation coefficient between the net profit and the cash conversion cycle is 0.7881, and the coefficient of determination is 0.6211, indicating 62.11% change in the net profit is caused by the cash conversion cycle. Further, it has been ascertained that the correlation coefficient, 0.7881, is greater than the 6 P.E., 0.6858, which clearly shows that there exists statistically significant positive relationship between net profit and cash conversion cycle. This means that the net profit increases with the increase in cash conversion cycle. This might be due to the high interest liable to the debtors for long receivable periods and price inflation on the inventory that is kept for longer period. The regression line indicates that with per day increment in cash conversion cycle, the net profit increases by Rs. 1.15 million, if other variables of STCL remain constant.

4.6 Primary Data Analysis

In addition the secondary data analysis, the study also makes empirical analysis. For this empirical analysis, the researcher prepares a set of questionnaire containing 8 questions and distributed to the 10 employees of STCL, requesting them to express their experience relating the cash management of the corporation.

4.6.1 Satisfaction on Cash Management Policy

To know whether the cash management practiced by the corporation is as per the desirability of the employees and as per the capability of the corporation in terms of implementation, the respondents are asked on this issue.

Table 4.17

Satisfaction on Cash Management Policy

Answer	No.	%
Yes	2	20
No	8	80
Total	**10**	**100**

(Source: Field Survey, 2013)

It has been observed that the majority of the surveyed employees of the STCL are not satisfied with the cash management. The 80% of the surveyed employees said that the planned cash management policy turned fiasco in the previous periods, and the corporation faced cash problems while financing in new opportunities, purchasing materials, paying to the creditors and others. As per these employees, the corporation urgently needs good cash management policy and for this the corporation may even required experienced personnel in planning team. However, only 20% of the surveyed employees said that the cash management policy of STCL is good enough for the operation. Considering the majority of the responses, it can be undoubtedly said that the STCL's cash management policy needs to be changed.

4.6.2 Reason behind Reduction on Cash & Bank Balance in FY 2009/10

In secondary analysis, the study found tremendous decrement in the cash and bank balance. To know the reason behind such unexpected decrease in the cash balance, the employees are asked on this matter.

Table 4.18

Reason behind Reduction on Cash & Bank Balance in FY 2009/10

Answer	No.	%
Decreased as per the Policy	1	10
Greater Inventory	2	20
Loose Credit Policy	4	40
Inefficient Manpower for Collection	2	20
Unnecessary Investment	1	10
Total	**10**	**100**

(Source: Field Survey, 2013)

As per the opinion of the 1 employees of STCL, the heavy reduction in the cash and bank balance in the FY 2009/10 is purposively done as per the policy of management. However, believing on this answer absolutely would be just credulous as the STCL has increased again the cash and bank balance highly in the next years, and it is cleared that the STCL wants to increase the cash balance in each year. Similarly, the 2 employees have said that the STCL has the policy of keeping higher inventory in that period, which ultimately affected the cash balance. Next to it, the 4 employees, 40%, have said that the decrease in the cash balance in that year is due to the loose credit policy of the STCL, which means that the collection policy of the STCL turned weak to collect cash from the debtors. Moreover, 2 employees said that the STCL lacks efficient manpower for following the debtors and finally for collecting the cash from them. In addition, 1 employee said that the STCL made unnecessary investment in financing activities in that year, as a result the cash balance reduced drastically. Summarizing the responses, it can be said that the decrease in the cash balance in the FY 2009/10 is much affected by the loose credit policy of the corporation in that year.

4.6.3 Opinions on Average Stockholding Period

The study analyzed that the average stockholding period of the corporation is much lengthy, which could negatively affect the cash management policy. To know the opinions of the employees regarding such lengthy stockholding period, the researched asked question to them.

Table 4.19

Opinions on Average Stockholding Period

Answer	**No.**	**%**
The corporation is selling at high Price	2	20
The corporation is facing cash problems	6	60
The corporation is facing loss due to damage	2	20
Long Stockholding Period is the Policy of the corporation	0	0
Total	**10**	**100**

(Source: Field Survey, 2013)

The majority of the respondents, 60%, have said that the corporation is facing cash problems due to the long stockholding period, as the investment is in the form goods which have not

been turned in cash. As per these employees, the STCL lost many apparently lucrative investments in the past due to the cash problems caused by the long stockholding period, have to pay additional interest to the creditors and in some cases even lost the creditability of the corporation in the creditors' world, and the cash deficiency ultimately affected the profitability of the corporation. On the other side, the 20% of the employees said that the long inventory holding period did not affected the profitability of the corporation, as the corporation sold the inventory at hiked prices which recovered the losses caused by holding for longer periods. In addition, the other 20% of the surveyed employees said that the corporation in fact faced loss due to the long stockholding period. The loss is caused by the expiry of the date, damage done by the mice at warehouse, pilfering of goods may be by the warehouse keepers or others and selling the damaged goods at lower value. However, none of the surveyed employees said that the long stockholding period is the policy of the corporation, and from this it can be said the STCL even wants to shorten the inventory holding periods but undesirable circumstances is lengthening the stockholding period.

4.6.4 Opinions on Average Receivables Period

Theoretically, the receivables period should be short for ensuring the regular cash inflow, however, the study found lengthy receivables period in STCL. To know the reason behind lengthy collection period, a question has been asked to the employees.

Table 4.20

Opinions on Average Receivables Period

Answer	**No.**	**%**
It is the Policy of corporation to gain interest due to long period	0	0
Ineffective Collection Policy	4	40
Inefficient Manpower for Collection	1	10
The Clients purposively make delay payment	5	50
Total	**10**	**100**

(Source: Field Survey, 2013)

Lengthening the receivables collection period is not the policy of the corporation, as it is supported by none of the respondents, rather this longer period is caused by other factors. As per the 40% of the surveyed respondents, the seemed delay in receivables collections is

mostly due to the ineffective collection policy of the corporation. As per these employees, the collection policy of corporation is good from theoretically perspective, but pragmatically it turns ineffective. Similarly, the 10% of the employees said that even the manpower that have the accountability to collect the receivables as per the stipulated time is not efficient, and thus this inefficiency has laid to the longer receivables period and ultimately weaken the cash management of the corporation. However, the other 50% of the surveyed employees said that the majority of the clients/debtors intentionally make procrastination in the payment so that they can get additional interest from the deposited amount. From the analysis, it can be said that the intention of the debtors to delay the payment and the ineffective collection policy are the major factors that are stretching the collection periods of the corporation.

4.6.5 Opinions on Average Payable Periods

It is assumed that the lengthy payable period strengthens the cash position of the corporation. To test whether such assumption really works in case of the trading company like Salt Trading, the researcher asked this question to the employees.

Table 4.21

Opinions on Average Payable Periods

Answer	**No.**	**%**
Delaying Payment benefits additional bank interest for the corporation	1	10
Delaying Payment decreases the credibility of the corporation	5	50
Delaying payment shortens the cash conversion cycle	4	40
Total	**10**	**100**

(Source: Field Survey, 2013)

Although 1 employee said that delaying payment benefits the corporation an additional bank interest, the rest of the surveyed employees rejected this fact. As per the opinions of 50% of the employees, the delaying payment rather decreases the credibility of the corporation in the creditors' world, and may invite the situation at which the corporation may need the urgent cash and the creditors hesitate to provide loan due to the past delaying payment behavior of the corporation. The other 40% of the respondents have said that the delay payment in fact shortens the cash conversion cycle and may help in managing the cash requirement.

Nonetheless, it can be said that the lengthening payable periods have both positive and negative outcome for the corporation.

4.6.6 Duration of Cash Conversion Cycle

To find out the appropriate cash conversion cycle to the Salt Trading, the employees of the corporation are asked to state their opinions.

Table 4.22

Duration of Cash Conversion Cycle

Answer	**No.**	**%**
Within 1 Month	1	10
1 Month to 2 Months	7	70
More than 2 Months	2	20
Total	**10**	**100**

(Source: Field Survey, 2013)

As per the opinion of the majority of the employees, 70%, the cash conversion cycle should not be more than 2 months. It would be better if the cash conversion cycle lies within 1-2 months duration making the cash management much effective. However, the 1 employee said that the cash conversion cycle should be within 1 month duration, as the corporation faced cash problems in many instances. The other 2 employees said that the cash conversion cycle blow 2 months is unrealistic for achievement and thus it should be above 2 months. From the opinions of the majority of the respondents, it is certain that the practiced cash conversion cycle by the corporation is certainly lengthy and should be reduced for having better cash management practice.

4.6.7 Relationship between Cash Management and Net Profit

Statistically, the study found positive relationship between the cash management and the net profit of the corporation. To examine whether such positive relationship between these two variables is experienced by the employees, the question has been asked.

Table 4.23

Relationship between Cash Management and Net Profit

Answer	**No.**	**%**
Negative	5	50
Positive	2	20

Non-effective	3	30
Total	**10**	**100**

(Source: Field Survey, 2013)

Although the statistical analysis showed that the cash management has positive effect with the net profit of the corporation, the majority of the respondents said that cash management practiced by the corporation has negative effect on the net profit. As per these employees, the cash and cash equivalents of the corporation is comparatively very less; caused by mainly the ineffectiveness collection policy of the corporation, hindering the corporation for making lucrative investment. Also, the lengthy inventory policy which caused shortages of cash in the corporation has resulted damages and loss to the corporation, lessening the profit. However, the 20% of the employees said that the cash management practiced by the corporation has really positive effect on the profitability of the corporation and the rest 30% of the employees said that the impact of cash management practiced by STCL is null at all. Thus, the study found confusing relationship between the cash management of STCL and profitability, as the result from the statistical analysis and empirical analysis differed.

4.6.8 Suggestion for Effective Cash Management

Finally, the employees are asked to express their opinions for improvising the cash management of Salt Trading. The answers obtained from them are tabulated and interpreted in this section.

Table 4.24

Suggestion for Effective Cash Management

Answer	**No.**	**%**
Tighter Collection Policy	4	40
Lengthen Payment Periods	0	0
Shorten Inventory Periods	3	30
Mobilize Efficient Employees for Collection	2	20
Others	1	10
Total	**10**	**100**

(Source: Field Survey, 2013)

To improvise the cash management policy, the corporation needs to adopt tighter collection policy as the receivables collection period is undesirably very high, as per the opinion of 40% of the surveyed employees. In addition, the other 30% of the surveyed employees said that the corporation needs to make fast conversion of the inventory to sales and realize cash from there, as the inventory processing period is long making the cash management policy ineffective. Similarly, the 20% of the employees said that the staffs of the corporation who are accountable to collect the cash from debtors in time need to transferred to other departments and in lieu the more capable employees should be appointed in that position for realizing the objectives of cash management policy. However, none of the employees suggested the delaying of payment periods, as these employees know the consequences of the unjustifiable delay in payment. Similarly, the 1 employee said that the others, such as selling the products in cash, though it might be unrealistic in trading business, for making the cash management much effective. Summarizing the analysis, it can be said that the corporation should focus much on reducing the receivables processing period and stockholding period for making the cash management much effective.

4.7 Major Findings of the Study

From the analysis, the following major findings have been drawn;

Findings from Secondary Data Analysis

- There is irregularity in the cash balance trend of the salt trading. The cash balance of the corporation has ranged from Rs. 62.95 million in the FY 2007/08 to Rs. 259.35 million in the FY 2011/12. The average cash balance of the corporation is Rs. 120.82 million.
- The highest computed cash turnover ratio is 51.55 times and the average cash turnover ratio is 33.69 times.
- The receivable turnover ratio is in increasing trend. The RTR is measured to be 13.85 times in average, while the average DSO is 27 days.

- The average current assets turnover ratio is 1.26 times and the cash and bank balance to current assets ratio is 4.36% in average, the proportion of cash and bank balance on total assets is 2.65%.
- The corporation has the capability to pay immediately only 4.80% of the current liabilities in average on cash. In average, the ratio of cash and bank balance to account receivables is 1:2. However, the current asset has greater preponderance on total assets, as the ratio is 60.20%.
- The study found lengthy average stockholding period. The average stockholding period of the corporation is 182 days approximately.
- The corporation collects cash from the debtors once in approximately 27 days, and makes payment to the creditors in each 36 days. Moreover, the cash conversion cycle of the salt trading is approximately 173 days.
- The cash flow is negative in the two fiscal years, and positive in three fiscal years. The negative cash flow is caused mostly by the investing and financing activities of the corporation.
- The correlation and regression analysis shows positive relationship between cash and bank balance and profit, and cash conversion cycle and net profit.

Findings from Primary Data Analysis

- Most of the surveyed employees, 80%, are not satisfied with the cash management of the corporation.
- 40% of the employees claimed that the huge reduction in the cash balance in the FY 2009/10 is due to the loose credit policy of the corporation.
- The 60% of the employees said that the corporation is facing cash problems from lengthy average stockholding period. The 50% of the employees said that the clients purposively delays on payments to Salt Trading.
- The 50% of the surveyed employees stated that lengthening average payable processing periods decreases the credibility of the corporation in creditors' world. And 70% of the employees said that the cash conversion cycle should be with 1 to 2 months duration.
- 50% of the employees experienced negative impact of cash management on the profitability of the corporation. The 40% of the employees suggested Salt Trading to adopt much tighter collection policy for making the cash management effective.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

In this economic world, the relevance of money
is increasing in each step. One cannot even think on taking any action without money or cash. So, it can be said that every activity in this world is cash centric. What happens and what is happening is for the cash. The significance of cash is important for both the service organization and the manufacturing organization. Although it is said that the service is the major goal of service organization, it is arguable whether such organization can provide services without having sufficient cash. The existence of such organization would be jeopardized in case of insolvency. The study here is not trying to undermine the importance of service organization but just clarifying on how important is the cash for every nature of organization.

In underdeveloped countries like Nepal, the role of the trading companies is much important, as such country less developed due to the non utilization of available resources by various reasons, and the number of manufacturing industries is less in this type of countries. However, the demand of the consumers does not care whether the country is developing or developed, as the existence of the trading companies make them accessible to the product that are manufactured in the other nook of the world. Also, these trading companies aid in exporting the goods to other nation for lessening the economic gap. The role of the cash management in this type of companies could not be minimized, as these companies need to have sufficient cash to make frequent purchase of the materials.

Among various trading companies, the study examines the cash management of Salt Trading Corporation Limited, as this corporation reflects the joint management of the government and the private sector and is one of the oldest trading companies of Nepal. The study starts with the main objective of evaluating the cash management of STCL. To achieve the main objective, the study broadens to the specific objectives to find out the cash flow, cash conversion cycle, relationship between cash and profit and ways for determining effective cash management. For attaining these objectives, the whole study has been classified in five main chapters, and different financial and statistical tools have been applied. Both primary

and secondary data analysis have been conducted. The study finds that the cash management of the Salt Trading is not effective, as the cash conversion cycle is very long; all the stockholding period, receivables period, and payable periods are unexpectedly very long.

5.2 Conclusion

The Salt Trading needs to revise its cash management policy, as the days to convert the inventory into cash are unexpectedly very long. This means that the inventory processing period and receivable processing periods are long. Although the payable processing period is also long, which affects the corporation's reputation among the creditors; it could not noticeably decrease the cash conversion cycle. The ineffectiveness of the management in having sound cash management policy is also evidenced by the negative, which means less return, financing and investing activities; reflected by the cash flow statement. Moreover, even the employees of the Salt Trading are not satisfied with the cash management policy of the corporation and suggested to reduce each two components, inventory and receivables, of cash conversion cycle. Although the statistical analysis showed positive relationship between the cash management and net profit, such relationship is nullified by the opinion of the employees, who in lieu said that there exists negative relationship between these two variables. The inefficiency of the Salt Trading is also supported by the negative cash flow in financing and investing activities, and the lower ratios related with the cash. Eventually, it can be said that the cash management policy may be theoretically strong, but pragmatically the Salt Trading fails to precisely implement the policy, and thus the corporation is losing many lucrative opportunities due the shortage and infrequent collection of cash.

5.3 Recommendations

On the basis of the major findings and conclusion drawn, the following recommendations have been provided for the enhancement of cash management of Salt Trading;

- The Salt Trading needs to reconsider its cash management policy, and should incorporate those goals that are unrealistic for achievement. It means that the cash management of the corporation should be based on market conditions for clearing the inventory, collecting the receivables, and paying the creditors in time.
- The Salt Trading should not finance on those activities which generates minimal interest and dividend, and should not take loan that costs high in terms of interest.

Moreover, the corporation should not unnecessarily invest more on the fixed assets, as the fixed assets devalue with the time.

- The corporation needs to make its collection policy tight, should decrease the inventory at faster rate, and make the payment to the creditors on time.
- For the collection of the receivables, active, energetic and diligent employees should be placed, since the current employees are not efficiently following the debtors for collection process.
- The promoters of the Salt Trading should have transparent and sound facilities and payment policy to the employees, so that the Salt Trading is free from any strike. The employees in turn should also not put unfulfilling demand to the management, and should not unnecessarily interfere in the management decision.
- Analysis of Cash Turnover showed that STCL should speed up its credit collection. The greater number of cash inflow at regular time interval is necessary for the corporation.
- The corporation needs to reduce the high interest amount by paying loan because such interest is reducing the cash inflow amount.
- Finally, STCL needs to set up a separate planning department for cash management and should involve lower echelon employee as well while making policy. The corporation should disseminate information to various departments and various levels so that communication barriers can be eliminated.

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APPENDIX - I

a) Calculation of Mean, S.D. and C.V. of CBB, CTR and RTR

Year	CBB X	CTR Y	RTR Z	$x = X-\bar{X}$	$y = Y-\bar{Y}$	$z = Z-\bar{Z}$	x^2	y^2	z^2
2007/08	62.95	33.98	9.65	-57.87	0.29	-4.20	3349.40	0.08	17.64
2008/09	104.83	30.43	13.6	-15.99	-3.26	-0.25	255.81	10.64	0.06
2009/10	65.3	51.55	14.39	-55.52	17.86	0.54	3082.91	318.91	0.29
2010/11	111.69	34.69	14.99	-9.13	1.00	1.14	83.43	1.00	1.30
2011/12	259.35	17.81	16.59	138.53	-15.88	2.74	19189.45	252.24	7.51
Total	**604.12**	**168.46**	**69.22**				**25961.01**	**582.87**	**26.80**

(Source: Annual Reports of STCL)

i) Calculation of Mean

For CBB

Mean $\bar{X} = \sum X/5 = 120.82$

For CTR

Mean $\bar{Y} = \sum Y/5 = 33.69$

For RTR

Mean $\bar{Z} = \sum Z/5 = 13.85$

ii) Calculation of Standard Deviation (б)

For CBB

$$б_x = \sqrt{\frac{\sum (x-\bar{x})^2}{N}} = \sqrt{\frac{25961.01}{5}}$$

$$= 72.06$$

For CTR

$$б_y = \sqrt{\frac{\sum (y-\bar{y})^2}{N}} = \sqrt{\frac{582.87}{5}}$$

$$= 10.80$$

For RTR

$$\sigma_z = \sqrt{\frac{\sum (z-\bar{z})^2}{N}} = \sqrt{\frac{26.80}{5}}$$

$$= 2.31$$

iii) Calculation of Coefficient of Variation (C.V.)

For CBB

$$C.V.x = \frac{\sigma x}{X} = \frac{72.06}{120.82}$$

$$= 59.64$$

For CTR

$$C.V.x = \frac{\sigma y}{Y} = \frac{10.80}{33.69}$$

$$= 32.04$$

For RTR

$$C.V.z = \frac{\sigma z}{Z} = \frac{2.31}{13.85}$$

$$= 16.72$$

b) Calculation of Mean, S.D. and C.V. of CBBTR, CBBCA and CBBTA

Year	CBBTR X	CBBCA Y	CBBTA Z	$x = X-\bar{X}$	$y = Y-\bar{Y}$	$z = Z-\bar{Z}$	x^2	y^2	z^2
2007/08	1.14	3.36	1.74	-0.12	-1.00	-0.91	0.01	1.00	0.82
2008/09	1.26	4.14	2.45	0.00	-0.22	-0.20	0.00	0.05	0.04
2009/10	1.17	2.27	1.42	-0.09	-2.09	-1.23	0.01	4.38	1.50
2010/11	1.18	3.4	2.2	-0.08	-0.96	-0.45	0.01	0.93	0.20
2011/12	1.54	8.64	5.42	0.28	4.28	2.77	0.08	18.30	7.70
Total	**6.29**	**21.81**	**13.23**				**0.11**	**24.66**	**10.26**

(Source: Annual Reports of STCL)

i) Calculation of Mean

For CBBTR

Mean $\bar{X} = \sum X/5 = 1.26$

For CBBCA

Mean $\bar{Y} = \sum Y/5 = 4.36$

For CBBTA

Mean $\bar{Z} = \sum Z/5 = 2.65$

ii) Calculation of Standard Deviation (б)

For CBBTR

$$б_x = \sqrt{\frac{\sum (x-\bar{x})^2}{N}} = \sqrt{\frac{0.11}{5}} = 0.15$$

For CBBCA

$$б_y = \sqrt{\frac{\sum (y-\bar{y})^2}{N}} = \sqrt{\frac{24.66}{5}} = 2.22$$

For CBBTA

$$б_z = \sqrt{\frac{\sum (z-\bar{z})^2}{N}} = \sqrt{10.26} = 1.43$$

iii) Calculation of Coefficient of Variation (C.V.)

For CBBTR

$$C.V.x = \frac{бx}{X} = \frac{0.15}{1.26} = 11.59$$

For CBBCA

$$C.V.x = \frac{бy}{Y} = \frac{2.22}{4.36} = 50.89$$

For CBBTA

$$C.V.z = \frac{бz}{Z} = \frac{1.43}{2.65} = 54.10$$

APPENDIX - II

a) Calculation of Mean, S.D. and C.V. of ASP, ARPP and APPP

Year	ASP X	ARPP Y	APPP Z	$x = X - \bar{X}$	$y = Y - \bar{Y}$	$z = Z - \bar{Z}$	x^2	y^2	z^2
2007/08	167.34	37.75	52.32	-14.42	10.34	15.98	207.99	106.92	255.23
2008/09	142.37	27.61	30.86	-39.39	0.20	-5.48	1551.73	0.04	30.07
2009/10	211.52	23.85	56.91	29.76	-3.56	20.57	885.54	12.67	422.96
2010/11	206.85	27.3	30.75	25.09	-0.11	-5.59	629.41	0.01	31.29
2011/12	180.73	20.51	10.88	-1.03	-6.90	-25.46	1.07	47.61	648.42
Total	**908.81**	**137.02**	**181.72**				**3275.74**	**167.25**	**1387.98**

(Source: Annual Reports of STCL)

i) Calculation of Mean

For $\bar{A}SP$ For $\bar{A}RPP$

Mean $\bar{X} = \sum X/5 = 181.76$ $\bar{Y} = \sum Y/5 = 27.41$

For $\bar{A}PPP$

Mean $\bar{Z} = \sum Z/5 = 36.34$

ii) Calculation of Standard Deviation (б)

For ASP For ARPP

$$б_x = \sqrt{\frac{\sum (x-\bar{x})^2}{N}} = \sqrt{\frac{3275.74}{5}}$$

$$= 25.60$$

$$б_y = \sqrt{\frac{\sum (y-\bar{y})^2}{N}} = \sqrt{\frac{167.25}{5}}$$

$$= 5.79$$

For APPP

$$б_z = \sqrt{\frac{\sum (z-\bar{z})^2}{N}} = \sqrt{\frac{1387.98}{5}}$$

$$= 16.66$$

iii) Calculation of Coefficient of Variation (C.V.)

For ASP

$$C.V.x = \frac{бx}{X} = \frac{25.60}{181.76}$$

$$= 14.08$$

For ARPP

$$C.V.x = \frac{бy}{Y} = \frac{5.79}{27.41}$$

$$= 21.11$$

For APPP

$$C.V.z = \frac{бz}{Z} = \frac{16.66}{36.34}$$

$$= 45.84$$

b) Calculation of Mean, S.D. and C.V. of CCC

Year	CCC X	$\bar{x}$ x = X-X	x^2
2007/08	152.77	-20.05	402.08
2008/09	139.12	-33.70	1135.82
2009/10	178.46	5.64	31.79

2010/11	203.4	30.58	935.01
2011/12	190.36	17.54	307.58
Total	**864.11**		**2812.29**

(Source: Annual Reports of STCL)

i) Calculation of Mean

For CCC

Mean $\bar{X} = \sum X/5 = 172.82$

ii) Calculation of Standard Deviation (б)

For CCC

$$б_x = \sqrt{\frac{\sum (x-\bar{x})^2}{N}} = \sqrt{\frac{2812.29}{5}}$$

$$= 23.72$$

iii) Calculation of Coefficient of Variation (C.V.)

For CCC

$$C.V._{\bar{x}} = \frac{б_{\bar{x}}}{\bar{X}} = \frac{23.72}{172.82}$$

$$= 13.72$$

APPENDIX - IV

a) Calculation of correlation coefficient and regression line between Net Profit & Cash and Bank Balance

Year	CBB X	NP Y	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
2007/08	62.95	13.03	-57.87	-32.19	3349.40	1035.94	1862.73
2008/09	104.83	11.56	-15.99	-33.66	255.81	1132.73	538.29
2009/10	65.3	37.15	-55.52	-8.07	3082.91	65.06	447.86
2010/11	111.69	60.00	-9.13	14.78	83.43	218.57	-135.04
2011/12	259.35	104.34	138.53	59.12	19189.45	3495.65	8190.21
Total	**604.12**	**226.08**			**25961.01**	**5947.94**	**10904.06**

(Note: Rs. in Million)

i) Calculation of Mean

For CBB $\bar{X}$ For NP $\bar{Y}$

Mean $\bar{X} = \sum X/5 = 120.82$ $\bar{Y} = \sum Y/5 = 45.22$

ii) Calculation of Correlation Coefficient between CBB and NP

$$r_{xy} = \frac{\sum}{\sqrt{\sum x^2}\sqrt{\sum y^2}} = \frac{10904.057}{12426.36} = 0.8775$$

iii) Calculation of Standard Deviation (б)

For CBB $б_x = \sqrt{\sum x^2} = \sqrt{25961}$

For NP $б_y = \sqrt{\sum} = \sqrt{5947.94}$

y^2

N 5 N 5

= =

72.06 34.49

iv) Simple Regression Equation of NP on CBB

$$\frac{Y-\bar{Y}}{} = \frac{r \times \sigma_y (X-\bar{X})}{\sigma_x}$$

or, $Y-45.22 = \frac{0.8775 \times 34.49 (X-120.82)}{72.06}$

or, $Y-45.22 = 0.42X - 50.75$

or, $Y = 5.53 + 0.42X$

v) Calculation of Probable Error (P.E.)

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

r^2	$1-r^2$	$0.6745 (1-r^2)$	$\sqrt{N}$	P.E.	6 P.E.
0.7700	0.23	0.16	2.2361	0.0694	0.4163

b) Calculation of correlation coefficient and regression line between Net Profit & Cash Conversion Cycle

Year	CCC X	NP Y	$x = X-\bar{X}$	$y = Y-\bar{Y}$	x^2	y^2	xy
2007/08	152.77	13.03	-20.05	-32.19	402.08	1035.94	645.39
2008/09	139.12	11.56	-33.70	-33.66	1135.82	1132.73	1134.27
2009/10	178.46	37.15	5.64	-8.07	31.79	65.06	-45.48
2010/11	203.4	60.00	30.58	14.78	935.01	218.57	452.07
2011/12	190.36	104.34	17.54	59.12	307.58	3495.65	1036.92
Total	**864.11**	**226.08**			**2812.29**	**5947.94**	**3223.17**

(Note: Net Profit in Million & CCC in days)

i) Calculation of Mean

For CCC $\bar{X}$ For NP $\bar{Y}$

Mean $\bar{X} = \sum X/5 = 172.82$ $\bar{Y} = \sum Y/5 = 45.22$

ii) Calculation of Correlation Coefficient between CCC and NP

$$r_{xy} = \frac{\sum}{\sqrt{\sum x^2}\sqrt{\sum y^2}} = \frac{3223.1739}{4089.91} = 0.7881$$

iii) Calculation of Standard Deviation (б)

For CCC

$$б_x = \sqrt{\frac{\sum x^2}{N}} = \sqrt{\frac{2812}{5}} = 23.72$$

For NP

$$б_y = \sqrt{\frac{\sum y^2}{N}} = \sqrt{\frac{5947.94}{5}} = 34.49$$

iv) Simple Regression Equation of NP on CCC

$$\bar{Y}-Y = \frac{r \times \sigma_y (X-\bar{X})}{\sigma_x}$$

or, $Y-45.22 = \frac{0.7881 \times 34.49 (X-172.82)}{23.72}$

or, $Y-45.22 = 1.15X - 198.07$

or, $Y = -152.86 + 1.15X$

v) Calculation of Probable Error (P.E.)

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

r^2	$1-r^2$	$0.6745 (1-r^2)$	$\frac{}{\sqrt{N}}$	P.E.	6 P.E.
0.6211	0.38	0.26	2.2361	0.1143	0.6858

APPENDIX -V

Questionnaire to Salt Trading Corporation Limited's Staff

Dear Sir/Madam,

I am a second year student of Management at Saraswoti Multiple Campus of Tribhuvan University. I am conducting this research to analyze the cash management of Salt Trading Corporation Limited. There are some questions, which take few minutes to answer, related to the cash management of your corporation. Are you willing to answer the questions?

a. Yes ( ) b. No ( )

(If No, please leave the section)

Please tick the best answer choice.

1. Are you satisfied with the cash management of Salt Trading?
   a. Yes
   b. No

2. While analyzing the cash balance, as reported by the annual reports, the study found tremendous decrement in the cash balance in fiscal year 2009/10, what could be the possible reasons behind it?
   a. The reduction is as per the policy of the corporation.
   b. The reduction is due to the greater inventory held by the corporation.
   c. The corporation has loose credit policy.

d. The inefficient manpower exists in the corporation for collection.
e. The corporation made unnecessary investment in this year.

3. What do you think on the long average stockholding period of the corporation?
   a. Although the processing period is high, the corporation is selling the stock at high price later on.
   b. The corporation is facing cash problems due to long stockholding period.
   c. The corporation is facing loss due to the damage of goods on warehouse caused by long stockholding period.
   d. Long stockholding period is the policy of the corporation.

4. Please clarify your opinion regarding the long average receivable processing period.
   a. It is the policy of the corporation to get addition interest from the debtors on long receivables period.
   b. The long receivable processing period is caused by the ineffective collection policy of the corporation.
   c. The corporation has inefficient manpower to collect the receivables on stipulated period.
   d. The clients purposively make unnecessary delay so that their interest on deposit increases.

5. Why do you think on about the long payable processing periods of Salt Trading?
   a. Delaying payment benefits the corporation with additional interest on deposit.
   b. Delaying payment decreases the credibility of the corporation among the creditors.
   c. Delaying payment shortens the cash conversion cycle.

6. The cash conversion cycle should be within …….
   a. 1 Month

b. 1 Month to 2 Months
c. More than 2 Months

7. What relationship have you experienced between the cash management and net profit of Salt Trading?
   a. Negative
   b. Positive
   c. No Impact at all

8. Finally, what do you suggest the Salt Trading for having effective cash management?
   a. Follow tight collection policy.
   b. Extend the payment periods.
   c. Lessen the inventory processing periods.
   d. Mobilize efficient employees for collection.
   e. Others (Specify) …….

Thank You!