CHAPTER I

INTRODUCTION

1.1 Introduction

Nepal is one of the least developed countries in the world. It lies between two huge countries, i.e. China and India by geographically. It is found that China is 66 times greater than Nepal and India by 23 times. So that their economic condition always affects the Nepalese economy. China and India are the industrial countries where as Nepal is agriculture one and it has also a problem of export/ import due to landlocked countries. Nepal has been facing the poverty problems. It has per capita income of around $300. The annual per capita GDP of Nepal is estimated to be just $388 by ADB (Nepal in figure; 2008). Nepal is depended to import to daily foods as well as equipments. Therefore, Nepal needs strong policies for effective resources mobilization; especially for removing the foreign dependency like foreign aid, subsidies and grants. Nepalese economy seems tiny and underdeveloped compared to the giant and rapidly progressing economies of two neighbors. Northern neighbor has exhibited the highest double digit growth throughout some years. Similarly the neighbor in the south with open boarder in three sides and bearing close cultural and social ties since ages has gained an attractive growth path nearly equivalent to the northern neighbor.

The reason behind Nepal's underdeveloped economy is not only due to the lack of resources but it is due to lack of proper utilization of the available resources. For the productive and effective utilization of resources, there must be proper plan, strategy and control system. Management is concerned with the efficient use of important resources for the productive result. It is a process of planning, controlling and feedback. These various components are interrelated with each other. Cash is an important asset for every organization. Managing cash is challenging task which deal with planning and controlling of cash, maintaining liquidity, proper financing and investment of cash etc. Budgeting is used as an important tool for the same purpose which helps to achieve desired goals and objective according to its plan and control standard.

Public enterprises in Nepal constitute a vital instrument for the socioeconomic development of the country. It enjoys a strategic and crucial position in our mixed economy. 'PE' is autonomous bodies which are owned and managed by government and which provide goods or service for a price. The ownership with the government should be 51 percent or more to take an entity PE (Laxmi Narayan, 1972; 42). They have been established in many sectors for the overall development of the country with different goals and objectives. Nepal tried to develop public sector institutions after the advent of democracy in the year 1951. The first enterprise to be turned to public sectors was Nepal Bank limited established in 1994 B.S. Nepal started planned economic development in 1956 with launching of first five year plan. Since then the number of PE has increased substantially in the various field of Nepalese economy. There were 64 PE's before the privatization program of His Majesty Government at present there are 43 PE's in Nepal. Out of 43, 13 are in industrial sector, 6 are in trading sector, 8 are in service sector, 5 are in social sector, 3 are in public utility sector and 8 are in financial sector. The PE's are dominant in the production of sugar, cement, cigarettes, agriculture tools, petroleum product. Since the establishment of Nepal Telecom Limited, 28 years ago as public enterprises, its responsibility has been to provide reliable and affordable telecommunication service throughout the kingdom. Through its contribution effort to fulfill this responsibility, NTCL's contribution towards the overall socio-economic development of the nation is note worthy.

Cash budgeting is a major component of comprehensive budgeting. It is interrelated and interdependent with other component of comprehensive budgeting.

Cash is the liquid asset. Cash management is one major responsibility of management so as to plan, control and safeguard of cash in enterprise. Planning and controlling cash focuses on cash inflows, cash outflows and financing. Cash budgeting is an attractive way to plan and control the cash flow, assess cash need and effective use of excess cash. Cash management consider right quantity of money, right time to solve, right sources of cash and right cost of capital for effective planning and controlling of cash.

1.2 Introduction of the Organization.

Telecommunication is system which facilities conveying information quickly over long distance with a cheap cost. It is also known as one of the quickest, cheapest as well as the most scientific means of communication in modern world. In a developing country like Nepal, the role, importance and contribution of telecommunication in the economic development of country can not be exaggerated as there is no sector where telecommunication has not played role. The effect of telecommunication on the rural areas and their contribution to rural development are potentially extremely important, yet rather difficult to measure.

The history of telecommunication development in Nepal is not long one. The first telecommunication services were started in Nepal during the regime of Chandra Shamser in 1972 B.S. it was the first time and a good opportunity for Nepalese people to transmit message from Kathmandu to Birgunj. This telephone line attributed as magneto connected Birgunj with Kathmandu under the name of “Shree Chandra Telephone”. Through no remarkable development has been found, another telephone line connecting in Kathmandu and Gaur had been installed in the year 1980 B.S. In the year 1992 B. S., 25 automatic telephone lines were distributed among the high ranking personalities of Nepal for their own uses. The telecommunication office was first established near Rani Pokhari, Kathmandu.

Future telecommunication lines were made available during the rule of Prime Minister Juddha Shamser by catering the line in the different districts to the extent of 300 miles long. The telephone lines were being extended from Kathmandu to Siraha, Shaptari while the same being extended up at Hanuman Nagar in 1994 B.S. In the year1998 B.S. additional installation of telephone line linking Dhankuta, Dharan and Biratnagar were distributed.

A noticeable change happened toward telecommunication during the period of Juddha Shamser. About 200 miles long telephone line was also bought into use in western part of Nepal. The government of Nepal felt the need of telecommunication for effective administration and active participation of people to achieve national goal. So 200 local C.B. telephone lines were setup and distributed for his Majesty's Government offices having exchange office at Singh Durbar. In the year 2002 B.S. before implementation of first five year national plan, Nepal 200 C.B. lines, 100 magnet lines, 15 automatic lines, 10 military exchange lines and 600 miles of trunk lines connecting Kathmandu with other districts.

Before the implementation of first five year national plan had wireless relation between 28 centers only in various parts of the country. About 18 of these stations were equipped with modern equipment. The wireless services were made workable by means of petrol generators in different districts 65except Kathmandu and Biratnagar. As the material and machinery required for wireless has been made available during the period of second world-war, a satisfactory service could not be achieved on account of problems faced while transporting the petrol in remote districts.

Nepal telecom ltd. was established on 2032\03\01 B.S. under Nepal telecommunication act 1971 to provide reliable and affordable telecommunication service all over the country. Most rural areas of Nepal are characterized by low population density, long distances between settlement areas and unfavorable geographical and climatic conditions. Other difficulties are low education level, less job opportunities, low per capita income, increasing tendency of population to migrate to urban centers, poor, unreliable or non-existent public transport, irregular or nonexistent power supply, poor health care and medical services. The basic objective of the need for providing telecommunication facilities in those rural areas is to trigger the development activities and to minimize above mentioned disadvantage, thereby by improving the quality of life. NTCL is planning to serve rural areas by adopting various technologies. VSAT shall be deployed in high mountain areas and in those remote areas where other terrestrial system are not feasible or viable. Mid mountain areas and southern plain areas (tearibelt) shall be served by combination of wireless local loop (WLL), VHF/UHF radio communication, small rural exchanges with copper network or other appropriate system.

Nepal telecommunications corporation (NTC) is a wholly government owned public sector entity, administered by a government appointed aboard of Directors which includes a chairman and voting members. The board includes NTC’s General Manager who chairs the meeting in the absence of the chairman. A senior officer of NTCL is appointed as a nonvoting secretary. NTCL, like other government owned corporations, is subjected to government regulations for investment plan approval, foreign credit access and staffing and staffing and employment conditions. However, more autonomy to the entity may be in the offing in near future which shall be a part of the Government’s proposed deregulation and liberalization policy in the telecommunication sector. NTC’s general manager is the chief executive officer and is appointed by GOVT. OF NEPAL, not by NTCL’s Board of Directors.

Mission Statement:

"Nepal Telecom, as a progressive, public spirited and consumer responsive entity is to provide nationwide reliable telecommunication services to serve as an impetus to the social political and economic development."(Annual report of NTCL)

Company's Vision:

"Nepal Telecom's vision is to remain as a dominant player in the telecommunication sector of the country while extending reliable and affordable telecommunication services to all regions including the remotest area of the kingdom and at the same time retaining its present sound financial health even in the coming competitive environment." (Annual report of NTCL)

Goal:

"Goal of Nepal telecom is to provide cost effective telecommunication services to every nook and corner of the country." (Annual report of NTCL)

1.2.1 Services provided by NTCL

NTCL is moving ahead to establish nationwide telecommunication infrastructure, the foundations for it revolution in the country. In view of unprecedented development in the world of information and communication technologies, NTCL is trying it's best to make a quantum leap forward to expand services not only in urban areas but also in the vast rural areas. More efficiency, increased productivity, better consumer services and more professionalism in the management are the key areas where NTCL will be giving top priority in the coming days of competitive environment in the telecom sector. The main services provided by NTCL are as follows.

I. Basic Telephone Services:-

In its continued effort to satisfy the ever growing demand for telephone lines, NTCL has augmenting its telephone exchange line capacity for the best interest of its valued costumers. As per MIS report of Magh 2065, the total installed capacity and distributed telephone line of NTCL has reached the 554566 and 371816, 2060/61 marks respectively. The total capacity includes all the telephone exchanges, rural exchange spread throughout the country. Recently NTCL has 171 operational exchanges in 72 districts and the service is available in all the 75 districts of Nepal.

All the exchanges of Kathmandu valley are linked by optical fiber SDH network. Outside the valley the exchanges between Bhairahawa-Butwal is also linked by optical fiber network. This shift towards the optical transmission systems has resulted in more reliable network and significantly improved quality of voice and data transmission.

II. National Trunk Telephone Services:-

The total number of trunk circuits is 50,700. This network enables NTCL to provide telephone service to more then 72 district, metropolitan centers and main towns of the country.

III. Rural Telecom Services:-

The significance of communication channels such as Public Call Offices (PCO's) in a country where about 85 percent of the people live in the rural areas with very remote and inaccessible terrains cannot be overlooked. NTCL is working vigorously towards achieving the GOVT. OF Nepal's objective to serve all the VDC's of Nepal with basic telephone lines and is expanding its communications infrastructure is rural areas to connect more VDC's to the national network irrespective of its economical value and law prospects of returns. NTCL now covers about 72 districts.

IV. Pay Phone Services:-

Catering to the customer's need who do not own a own telephone line, for easy access to the telephone services anywhere, any time while on the move without having to carry coins to make phone calls. NTCL launched payphone services using smart cards in Kathmandu since 2058 and other parts of the country such as Pokhara, Bharatpur, Nepalgunj and Dhanagadhi later. Today there are altogether 260 payphone sets (201 indoors and 59 outdoor sets) installed in key commercial, business oriented and public service places of the country.

V. **GSM mobile services**:-

NTCL started GSM cellular mobile services in year 1999 in recent days this service has been expanded to various major cities throughout the country. At present, the total mobile subscribers in the country are reaching a 38,000 landmark. By end of July 2003, GSM cellular mobile coverage has been extended along the highways from Kathmandu to Pokhara, Kathmandu to Bharatpur, Bhairahawa region, Nepalgunj region in the west and to Kakarvitta in the east. Hence, all neighboring towns along the highway shall also have GSM coverage. Together with the expansion of the coverage area of the mobile services the subscriber capacity has been increased to 50,000 lines for post paid services. 40,000 lines for new services like PPC (Pre-Paid Service) with have been introduced from September 2003. Mobile subscribers continue to avail services such as voice, fax, Data, Voice mail system (VMS), short message services (SMS), National and International services. In fiscal year 2065/66 magh GSM Mobile are 2357790.

VI. Voice, Data and Telegraph Leased Circuits Services:-

NTCL provides voice leased circuit services for voice telecast to the various countries to which NTCL has direct links. NTCL also provides national and international leased circuit services of high speed and low speed for data communication purposes.

VII. Email and Internet Services:-

NTCL has been providing Email and Internet service to its customers in Kathmandu valley since 2000. Internet billing system has been in operation since October 2001. Monthly bills for all mobile telephone subscribers have also been put on the net since January 2002. Number of subscribers utilizing these facilities is on the rise everyday. At present a total of 10441 internet user and 4489 email users have registered to this service.

VIII. Inmarsat mini-services:-

Keeping in tune with the fast changing technology trend in the present mobile communications Industry has become a necessity. This being used for commercial, rescue, adventurous and safety applications. NTC‟s Inmarsat mini-m is a digital, fax and data system which works with very compact terminals.

IX. Home Country Direct Dialing Services:-

Foreign visitors in Nepal can directly call their own country's telephone operator by dialing specific access code and book to their home country numbers without need of paying locally. Presently NTCL provides home country direct dialing services to USA, UK, Japan, South- Korea and Singapore.

X. International Telegraph Services:-

International telegraph service available is quail able to all parts of the world through satellite optical fiber links. Nepal has direct telegraph circuits with India Japan.

XI. International Program TV Services:-

NTCL provides this service for occasional use. This service includes transmission of video message by press correspondent, TV broadcast of major events either records or live on booked basis.

XII. Telex Services:-

The telex service provided by NTCL is fully automatic. The present new telex exchange was installed in 2001. Telex service operates through satellites circuits and optical links. Nepal has direct telex links with 7 countries- 8 destinations (USA, UK, Germany, Singapore, Japan, Hong Kong, and India- Mumbai and Kolkatta). It provides international telex services to more than 200 countries. Domestic telex services are available in Birgunj, Biratnagar, Bhairahawa, Pokhara, Butwal and Nepalgunj. This services has been closed by NTCL recently because the advanced services of this type is available from the company.

XIII. V-SAT and Wll Services:-

NTCL has been providing telecommunication service in various remote and inaccessible parts of the northern mountains region by v-sat equipment. The v-sat service provided by NTCL has altogether 61 stations installed in various parts of the country under the Wll system 67 lines in Nawalparasi, 62 lines in Rupandehi and 15 lines in Kapilvastu district were distributed.

1.2.2 Present Status of NTCL in the telecommunication Sectors:

With the present tendency (number of telephone per 100 populations) of just 1.3 and more than 60 percent of rural areas without any kind of telecommunication services, the main challenge in telecommunication sector is to fulfill the ever increasing urban demand for telephone lines and at the same time expand telecom infrastructure in vast areas of rural areas. If one looks back at the development scenario of the telecommunication sectors in the past decade, the picture could be considered as reasonably satisfactory. Between 1995 and 1999, annual growth rate in telephone lines in Nepal was 28.8 percent, the third highest in Asia-Pacific region after Srilanka (33.8) and Cambodia (32.1%). The figures were 8.9 percent in Bangladesh, 27 percent in China, 19.8 percent in India, 7.4 percent in Pakistan, 10 percent in Thailand and 26.3 percent in Vietnam. However, with present waiting list of about 2,90,000 applications, for new telephone connections as against 3,25,000 connected main lines, coupled with urban demand for latest high-tech services on one side and rural obligation on the other side, the current and future challenge remain daunting. It now a forgone conclusion that in the modern day world, IT (Information Technology) development is essential for overall economic growth of a country like Nepal and without adequate telecommunication infrastructure, IT development is not possible.

Given Nepal's mountains and Kathmandu valley's separation on from the densely populated areas of the terai region on the south along the border with India, telecommunications service has become a vital element in government administration, trade and industry and the entire socio-economic development of the society. With this realization, GOVT of Nepal has already formulated the new telecommunication Act and Telecom Policy, which has allowed competition with entry of one private operator each in mobile as well as fix telephone service based on wireless local loop. An autonomous regulatory body named Nepal Telecommunication Authority (NTA) is functioning last five years. With more than a dozen ISPs (Internet Services Providers) and V-SAT operators operating with licenses from NTA, IT sector is moving at faster pace and NTCL is the leading role in establishment of telecommunication infrastructure in the entire country including remote rural areas.

1.2.3 Objectives of the NTCL in Tenth National Plan:

Since its establishment 28 years back, NTCL is dedicated towards providing reliable and affordable telecommunication services throughout the country as a sole national telecommunications operator of local, mobile, long distance and international telecom services. NTC's role is crucial for the social, economic, cultural development and overall upliftment of the nation. NTCL has 100 percent digitalized network employing the world's latest state-of –art technologies. NTCL's vast telecommunications network infrastructure is playing a key role in the fast development of information technology in the country, aiding its participation in the global economy and ultimately helping in poverty alleviation.

The main objectives or aim of the NTCL in the tenth national plan as follows:-

- To attain teledensity (basic fixed telephone lines) of 2.7 (this excludes the possible telephone line addition from private operators) by the end of tenth national plan (expected teledensity at the of ninth national plan is about 1.35)
- To provide basic telephone facilities in those VDCs of central, western, mid-western and far-western regions, where there are no telephone facilities at the end of ninth plan. It is to be noted that eastern region is singled out to be served by private operating company as per NAT's directive.

- To attain mobile teledensity (number of telephones per 100 population) of 0.6 (this excludes the possible mobile subscribers of private operators) by the end of tenth national plan (expected mobile teledensity at the end of ninth national plan is about 0.1).
- To provide basic telephone service within six month of demand by any person or institution anywhere in any part of the country including remote rural areas by the end of tenth national plan.
- To create "on- demand" telephone distribution situation (which means connection of new telephone lines within 7 days of application) in all major cities and towns of the country by the end of tenth national plan.
- To introduce new services and high technologies to fulfill the demand from urban population, specially to cater trade and industry requirements
- To give impetus to IT development in the country by expanding internet network throughout the country.
- To establish broadband backbone links in terlinking major cities and towns, which will help the country to move towards "information society"?

1.2.4 NTC Turns into the Company:

Nepal telecom Ltd. (NTCL), the countries biggest and the most profitable public enterprises, is turning into a company. The 34 years old NTC, the state-owned telecom operator is known as by new named Nepal Telecom from 1st Baishakh 2061. With the beginning of the New Year 2061, the NTCL is converted into a company and the change in name has come to reflect its new status. Its official registration name however, will be Nepal Telecommunication Company Limited. But even after becoming a company, it will continue to run as a government entity units its shares floated by year end.

NTCL is among few state-owned enterprises that had been drawing good returns for years-largely due to monopoly market. The government however, declared to open the telecom sector from the last of 2060. The privatization of the NTCL is taking place in accordance with the government's plan of gradually handing over public enterprises to private hands.

The estimated amount of paid up capital an authorized capital of corporation, mean while, stand at 15 billion and Rs. 25 billion respectively. However the management is yet to decide on the proportion of shares that the Nepal Telecom would issue to general public.

Meanwhile, a seven-member committee has already been constituted that will manage and decide on behalf of Nepal Telecom. The committee has been formed under the chairmanship of the secretary at the ministry of information and communications (MOIC). The other members of the committee include representatives from the NTC, the MOIC, finance ministry, citizenship investment trust and ministry, of law and justice.

It is believed that changing into the company will make NTCL an autonomous entity, giving full authority of decision making on its own. This will certainly enhance its entire function and make NTCL more efficient. The service delivery will be further enhanced with the conversion of NTCL into company limited.

1.3 Statement of the Problem

Nepal Telecom, is one of the largest organizations in the country with high capital investment, is a leading and successful public enterprises functioning in the public utility sector. It has been financed by Nepal Government, many donor agencies and public. Although it was enjoying almost full monopoly in the telecommunication sector, now it is facing market competition with telecommunication service provider in some areas. So, now it must prepare and strengthen existing competency to achieve productive output in by optimum utilization of resources. The management must focus in implementation of effective and appropriate action plan, strategies, and control mechanism.

Cash management is the crucial part of overall planning and control system of management. Although cash management in Nepal Telecom is primarily based on traditional approach, it has applied several tools and established mechanism for proper planning and control of cash. The study attempts to have an insight over the problem of cash management of Nepal Telecom so that strength has been gathered to identify the answer of the following question as major problem:

1. What kind of planning and controlling devices of the cash is existed in the company?
2. What are the internal control policy regarding cash control practices in NTCL?
3. Is there any cash shortage or excess in the company? What are the sources of financing or sector of investment?
4. What is the liquidity and cash position of the company?

1.4 Objectives of the Study

The major objective of the study is to examine the management of cash in Nepal Telecom. The general objectives are as follows.

1. To observe devices of planning and control of cash in NTCL.
2. To examine the existing internal control policy in NTCL regarding cash control practices.
3. To identify the shortage or excess of cash in the company and the procedures of financing for the shortage and investment of excess cash.

4. To study the liquidity position of the company.

1.5 Significance of the Study

In every organization, the availability of the resources is scarce and out of this resources, the objective of the organization are to be accomplished. The financial performance of the organization depends prominently on the use of its resources. The organization always strives to use its resources optimally. So the study of cash management tells us how to generate, utilize and manage cash properly.

Globally, the concept of zero working capital has got more emphasis. The expert, researcher and practitioner are involved in great effort in the management of working capital management through efficient cash management. The most important objective of cash management is optimizing the use and collection of cash.

The study of cash management of NTCL provides crucial information about the existing cash management system. It helps to determine strength and weakness of the particular part of the cash management on which the objective of the study is based. Management and other stockholder's of the company will be benefited by the assessment of the cash and liquidity position of the company. This study helps other managerial person to have reference about the better cash management potential and practices. Academician and researcher can highlight the issue of this study in their future research work.

1.6 Limitations of the Study

The area of the study is very limited in terms of investigation. It is a part and partial analysis of cash management of Nepal Telecom. Overall study of cash management is not possible in this thesis due to its deadline of completion and availability of data and information. The study is not bounded by the fixed standard of measurement and relationship between two or more variable with cash. The limitation of the study is as follows:

i) The study covers the analysis of recent six years only.

ii) The study is totally based on secondary data collected from Nepal Telecom.

iii) The accuracy of this study is based on the data available from management of Nepal Telecom and various published documents of the organization.

iv) The study is based on historical data and it is a case study of specific portion of cash management of the company. So the outcome of the study may applicable to the company only.

v) Only financial and managerial tools are used for analysis of data.

1.7 Research methodology or Scheme of study

Research methodology is the way to solve systematically about the research problem. Methodology states the method with which data have been extracted and discuss the tool of that have been used in interpretation of such data to fulfill the stipulated objectives. The research study attempts to analyze the cash management system adopted by NTC. Hence, descriptive as well as analytical research designs have been employed.

The data is used in this study are secondary as they have been collected from concerned authorities. Secondary data have been taken mainly from the following sources:

- Published and unpublished document and annual reports of the company.
- Journals, government and non government publication. Other supportive book and websites of related topic. Such as www.ntc.com.np

Different financial, statistical and management tools will be used for the analysis of data. Some inference and generalizations might also be made in the course of preparation of report as demanded by situation.

This study has been organized in five chapters. They are:-

1. Introduction:

This chapter concerns on the background of the study, focus of the study, significant of the study, statement of the problem, objective of the study, research

2. Review of Literature:

This chapter deals with review of various books, journal, old dissertation, published and unpublished reports, articles and previous newspapers.

3. Research Methodology:

This chapter represents as a form of the tools to collect data, techniques for the study and analysis of data.

4. Data Presentation and Analysis:

In this chapter the acquired data are presented and analyzed through the way of designed methodology. Tables and diagrams are also presented to accomplish the research objectives. Major findings of the study are also included in this chapter.

5. Summary, Conclusion and Recommendation:

This chapter will deal with the summary, conclusion and recommendations. In the final of this dissertation the bibliography and necessary annex are enclosed.

CHAPTER II

REVIEW OF LITERATURE

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

2.1 Conceptual Frame Work

2.1.1 Meaning of Cash Management:

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

"Cash Provides liquidity, but it does not pay interest: it is just one of the raw materials that you need to do business. It is expensive keeping your capital tied up in large inventories of raw material when in could be earning interest" (Brealey And Myers, 1999: 884)

"Cash management involves managing the monies of the firm in order to maximize cash availability and interest income on any idle funds. At one end, the function starts when a customer rites a check to pay the firm on its accounts receivable. The function ends when a supplier an employee, or the government realizes collected funds from the firm on an account payable or accrual" (vanhorn,1991:326)

"The term cash which refers to cash management is used in two senses. In an arrow sense, it is used to cover cash (currency) and generally accepted equivalent of cash such as cheques, drafts and demand deposits in bank. The broader view of cash also includes near cash assets, such as marketable securities and time deposits in banks. The main characteristic of these is that they can be readily sold and converted into cash. They serve as reserve pool of liquidity that provides cash quick when needed. They also provide a short-term investment outlet for excess cash and are also useful for meeting planed outflows of funds. We employ the term cash management in a broader sense. Irrespective of the form in which it is held, a distinguished feature of cash as an asset is that it has no earning power" (Khan and Jain, 1972, 667).

It is cash, which keeps a business going. Hence, every enterprise has to hold necessary cash for its existence. In a business firm ultimately, a transaction results in either an inflow or outflow of cash. In an efficient managed business, static cash balance situation generally does not exist. Adequate supply of cash is necessary to meet the requirement of the business. Its shortage may stop the business operation and may degenerate a firm into a state of technical insolvency and even of liquidation. Though idle cash is sterile; its retention is not without cost. Holding of cash balance has an implicit cost in the form of its opportunity cost. According to J.M.Keyns the highest level of idle cash the greater is the cost of holding it in the manner of loss of interest, which could have been earned either by investing it and securities or by reducing the burden of interest charges by paying off the loans taken previously. If the level of cash balance is more than the desired level with the firm, it shows poor management of funds. Therefore, for its smooth running and maximum profitability, proper and effective cash management in a business is of paramount."

The term "cash management" is concerned with the management of current assets and current liabilities of the business, which is necessary for day to day operation. "Cash management is concerned with the decision regarding the short-term funds influencing overall profitability and risk involving in the firm. The management of cash has been regarded as one of the conditioning factors in the decision-making issues". (Saksena, 1974; 31)

Cash is the most liquid asset, is of vital importance to the daily operations of business firm. "Cash is both beginning and end of the working capital cycle: cash, inventories, receivable and cash. Its effective management is the key determinant of efficient working capital management. Cash like the blood stream in the human body gives vitality and strength to a business enterprise. The steady and healthy circulation of cash through out the entire business operation is the business solvency". (Kent, 1964; 128)

So, a corporation must utilize cash efficiently to meet obligation of interest payment, if cash is obtained from borrowing. And if it is received through issue of share, the corporation has responsibility to owners in assuring them to pay favorable rate of return. Since cash is not easy to obtain, the available cash must be prudently spent without incurring loss (Shrestha, 1980:243)

Cash management involves the following aspects:

1. Cash Planning.
2. Controlling Cash Inflows.
3. Controlling Cash Outflows.
4. Determining Optimum Liquid Balance.
5. Investing Surplus Cash.

All the above aspects have been explained hereunder, in detail.

2.1.1.1 Cash Planning.

Cash policies and procedures are to be formulated with a view to satisfy different motives for holding cash, Normal cash requirements as well as requirements of cash for abnormal or irregular reasons are to be provided for . The nature of the business, credit position, the amount of sales, time required in conversion of accounts receivable etc.-all these determine the normal cash requirement of affirm. On the basis of past experience, Perform balance sheet etc, cash balance required for the future may be projected. Cash forecasts may be prepared for a short-term as well as a long-term period to estimate the requirements or cash. Cash budget is a summary statement of the firm's expected cash inflows and outflows over a projected time period. The projected time period may be a year, a quarter, a month, a week, or even a day-it depends upon the nature of the business and the status of the firm's cash position. Cash budget throws light not only on the amounts of inflows and outflows expected during a budget period, but also helps managements in determining the future cash needs, in planning financing of these needs and in exercising control over cash and liquidity of the firm. If cash shortage is indicated by the budget, the same may be managed by arranging short-terms loans and if cash surplus is pointed out, it may be managed be investing the amount in readily marketable securities.

For the above purpose, cash flow statement can also be prepared. It records and reflects the quantum and the nature of inflow and outflow of liquid funds. A cash flow statement is actually the summarized form of cash book in which the actual receipts and payments are sectionalized. It can be prepared in the following two ways:

(i) Showing in detail each item o inflows of outflow of cash irrespective of whether it is capital or revenue in nature; or

(ii) Showing the net inflows /outflows from revenue operations as one consolidated figure and inflows/outflows of capital nature separately.

2.1.1.2 Controlling Cash Inflows

Efficient cash management is possible only when the collections of cash are accelerated. The delay between the time customers pay their dues and the time the cash is collected in the sense of becoming useable by the firm should be attempted to be reduced to the extent possible. Collection process may be speeded up in any of the following manners:

(i) The mailing time of payment from customers to the firm may be reduced.

(ii) The time during which payments received by the firm remain uncollected may be minimized, it includes the time a company takes in processing the chouse internally and the time consumed in the clearance of the cheques through the banking system.

Following techniques are considered to be useful to accelerate the collection:

A. Concentration banking:

To speed up collections, collections should be decentralized as far as possible. If, instead of one collection centre, there are a number of collection centers for the purpose, collections would certainly be speeded up. This procedure is named as concentration banking. Through this procedure, the mailing time of the customers is reduced. Customers of a particular region may be directed to deposit/remit their payments to a collection centre will deposit the payments received in the local bank regularly (may be daily), which is generally at the firm's head office. This concentration bank or central bank can get the payments by telegraphic transfer or telex, as per the instructions given by the firm. The collection centers may themselves collect the cheques or the cash payment from the customers, instead of customers remitting the payments to the collection centre. It furthers accelerates the process of collection because of the reduction in the mailing time. The advantage of system of decentralized collection in two-fold:

a) The mailing time is reduced, because the bills are prepared by the local collection centers and sent by them to the customers. Further, if the collection centers collect the payments by themselves, the time requires for mailing is reduced on this account also.

b) Collection time is reduced, since the payments collected are deposited in the local bank accounts. The funds become useable by the firm immediately on hearing from the collection centre about the amount being deposited in the local bank account.

B. Lock box system:

The system is a further improvement over the concentration banking system in the matter of accelerating the cash inflows. Under this system, the time required in collecting the payments, processing them and finally depositing them in the local bank accounts is further reduced. Before determining the collection centers a feasibility study is made of the possibility of cheques that would be deposited under alternative plans. In this regard operations research techniques have proved useful in the location of lock box sites. A post office box is hired by the firm at each collection centre and the customers are instructed to mail through remittance of the box. The remittance is picked up by the local bank directly from the post office box (i.e. lock box) as per the instructions given by the firm. The bank can pick up the mail several times a day and deposit the cheques in the amount of the firm. A record is kept by the bank regarding the cheques deposited and is sent to the firm as and when required. The advantages of such a system are as under:

a) The cheques are deposited sooner than if they were processed by the firm prior to deposit thus the time lag between the receipt of cheques by the firm and the actual deposit thereof at the bank is eliminated.

b) The firm is freed from the responsibility of handling and depositing the cheques. The main disadvantages of such a system is the cost involved of making such arrangements hiring post office box and loading the bank with additional burden of work entail costs and sometimes it may be uneconomical for the firm to adopt such a system. Thus, the appropriate rule for deciding whether to use lock-box system or not is to compare the added cost of the most efficient system with the marginal income that can be generated form the released funds. If costs are less than income, the system is profitable, if not, the system is not a profitable one.

C. Collections through messengers:

Certain firms like to send messengers at the places of customers to collect the payments. It certainly reduces the mailing time but increases the costs of collection in terms of the traveling costs of messengers.

To conclude, whatever system of speeding up collections is adopted, the costs are to be compared with the benefits derived there from. In case the benefits of a particular system exceed the costs on a comparative basis, the same may be recommended by the finance manager for adoption by the firm.

2.1.1.3 Controlling Cash Outflows

Just as the golden rule for controlling cash inflows is accelerate the collections'; similarly, the golden rule for controlling cash outflows is 'slow down the disbursements.' Decentralized collection system is the best way to accelerate collections and centralized payment system is the best way to slow down the disbursements. Delaying the accounts payable to the extent possible can help the firm only if the firm's credit standing does not suffer. If an effective control over disbursements is exercised, without losing goodwill, cash availability is certainly enhanced. The following techniques can be fruitfully employed to slow down the disbursements as far as possible.

(i) Centralized payments:

Centralized payment system is the most advantageous methods of slowing disbursements. The payment should be through a single account maintained at the company's headquarters

(ii) Paying the float:

'Float’ is the lag between the time the time the cheque is written and the time the firm's bank receives it. A firm may have less balance in its bank account but the firm may issue a cheque to its supplier because the supplier would present the cheque to his bank for payment only when be receives it after a few days . Moreover, after presentation to the bank, the bank would send the cheque for collection, which would also consume some time. The time by which firm's bank receives the cheque for payment can be used by the firm for utilizing fund for business purposes and exactly on the time when the payment has to be made by the bank the amount may be deposited in the bank by the firm. In case the period of time gap can be accurately estimated by the financial manager, the firm can certainly earn during the float period. However, the game is a risky one and should be played with caution.

(iii) Payment on due dates only.

Payment should be made on the due dates, not before. For maximum use of cash, If cash discount is more lucrative, payments may be made early also depending upon the availability of funds. Delaying payments beyond the due date cannot be favored at all since the credit rating of the firm is endangered.

2.1.1.4 Determining Optimum Liquid Balance

Liquid balance (balance of cash and marketable securities) must be maintained at the optimum level. It is the level which gives the minimum cost of holding the liquid balance. Determination of such a level is very important for an efficient cash management. If the liquid balance, it remains idle and, therefore, it involves opportunity costs in the sense that the amount could have been put to the other hand, if liquid balance is short of the requirements, the firm may have to incur shortage cost. The firm may be required to forego cash discounts and pay higher rates of interest on borrowings. It may have to forego cash discounts and pay higher rates of interest borrowings. There is a danger of losing goodwill and there is a risk of insolvency even. Thus, costs go down, and vice versa. The combination of opportunity cost and shortage costs gives the total cost of maintaining liquid balances at various levels. The point which gives the minimum total cost is the point of optimum liquidity balance-representing a trade-off of shortage costs against opportunity cost. The following graph shows the position clearly:

Figure No.2.1

Optimum Liquid Balance of Cash

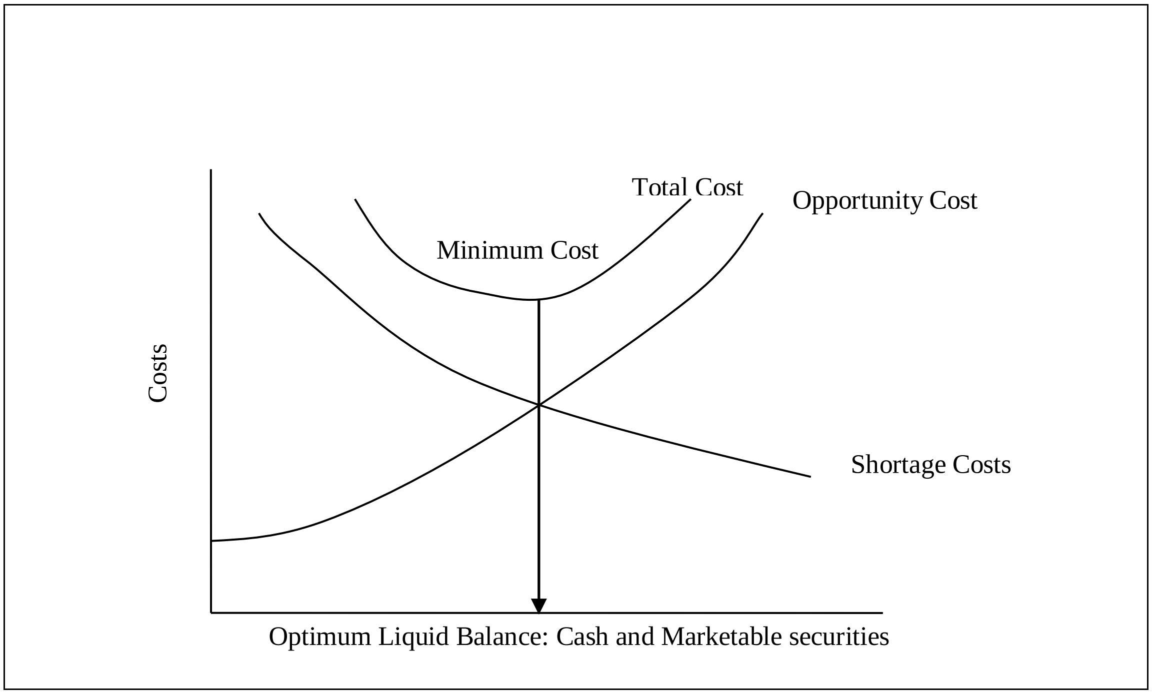


Chart: Optimum Liquid Balance of Cash

Source: (Maheshwari, and Mittal 2003)

2.1.1.5 Investing Surplus Cash

Cash not required of short durations can be invested in near-cash assets, i.e.; marketable securities which are readily convertible in to cash, Even though cash is temporarily ideal; it should not be kept so because if the firm has an opportunity to earn interest through investing it in marketable securities, why should it not avail of the same. The criterion for selecting securities may be the followings.

(i) **Marketability:**

The firm must be able to sell its holdings and realize cash as and when required. The securities must be readily marketable.

(ii) **Maturity:**

The maturity period of the securities should be short; otherwise, the company might suffer losses on account of getting the funds pre-maturely released. The period should be selected according to the time for which the cash would remain surplus otherwise.

(iii) **Risk of default:**

The investment should not be risky in the sense that if it depreciates in safety value, the firm will be financially embarrassed.

(iv) **Yield:**

Investment should be in such securities which yield the highest return. However, safety should not be sacrificed at the expense of yield.

How much amount should be invested in marketable securities and when should a security transaction take place is a crucial problem before the financial manager. If the amount and the timing of transactions can be determined, the firm can minimize the costs of maintaining liquid balance. (Maheshwari and Mittal, 2003)

2.1.2 Principal of Cash Management

The size of cash balance in the hand and in the account to be maintained depends on the behavior of the operating cash flows of the firms. Each business operation is unique in the matter of cash collection and disbursement, as such, a firm needs to follow cash management strategies based on its own financial strength and objective in the matter of cash management, financial manager are mainly concerned with the (a) management or cash receipt, (b) management of disbursement, (c) minimization of cash balance, (d) use of most inexpensive source of financing for cash balance, (e) investment of excess balance of cash.

The standard principles of cash management are follows:

- To collect account receivable as soon as possible with out annoying and loosing potential customers by establishing a system of lock boxes, electronic fund transfer, preauthorized checks, and deposit concentration.
- To delay payment as long as permitted without damaging the firm's credit rating by establishing controlled disbursement system.
- To minimize cash balance without adversely affecting the business operation by following the techniques of cash balance management such as Boumol & Miller Orr-models.
- To manage most inexpensive source of financing for meeting short term cash deficiency by optimally balancing between cost and risk.

To invest short term excess cashes in most efficient market portfolios of securities such money market instruments. (Pradhan, 1992: 158).

2.1.3 Motives for holding Cash:

The term with reference to cash management is used in two senses. In a narrow sense, it is used broadly to cover currency and generally accepted equivalent of cash, cheques, draft and demand deposit in bank. The broad view of cash is also includes near cash assets, such as marketable securities and time deposit in banks. The main characteristics of these are that they can be really sold and converted into cash. They served as reserve pool of liquidity that provides cash quickly when needed. They also provide a short term investment outlet for excess cash are also useful for meeting planned out flow of fund. Irrespective of firm in which it hold a distinguished feature of cash as an asset, is that it has no earning power. Cash does not earn any return, why it is hold? There are four primary motives of cash balance, these are:

2.1.3.1 Transaction motive:

This refers to holding of cash to meet routine cash requirement to finance the transaction which a firm carries in the ordinary course of business. A firm enters in to a variety of transaction to accomplish its objectives which have to pay for in the form of cash. The requirement of cash balance to meet routine cash needs is known as transaction motive and such motive refers to the holding of cash to meet anticipated obligation whose timing is not perfectly synchronized with cash receipt.

2.1.3.2 Precautionary Motive

The cash balance hold in reserves for random and unforeseen fluctuation in cash flows are called as precautionary balances. In-other word precautionary motives of holding cash implies the need to hold cash to meet unpredictable obligation. Thus, precautionary cash balance serves to provide a cushion to meet unexpected contingences. The more unpredictable are the cash flows. The larger is the need for such balance. Another factor which has a bearing as the level of such cash balances is the availability of short term credit. If a firm borrows at short notice to pay for unforeseen obligation, it will need to maintain a relatively small balance and vice versa.

2.1.3.3 Speculative Motive

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

- An opportunity to purchase raw materials at a reduced price on payment of immediate cash.
- A change to speculate on interest rate movement by buying securities when interest rates are expected to decline.
- Delay purchases of raw materials on the anticipation of decline in prices, and
- Make purchases at favorable prices.

2.1.3.4 Compensating Motive

It is to compensate banks for providing certain services and loans. Usually, clients are requested to maintain a minimum balance of cash the bank. Since this balance can not be utilized by the firm for transaction purpose, the banks themselves can use the amount to earn a return. Such balances are compensating balance. Compensating balance is also required by some loan arrangement between a bank and its customer. During periods when the supply of credit is restricted and interest is rising, banks require a borrower to maintain a minimum balance in his account as a condition precedent to the grant of loan. This is presumably to compensate for a rise in the interest rate during the period when the loan will be pending.

Of four primary motives of holding cash balances the two most important are transaction motive and the compensation motive. Business firm do not speculate and need not have speculate balances. The requirement of precautionary balances can be met out of short term borrowing. (Khan and Jain, 2003: 18.9)

2.1.4 Objectives of Cash Management

The main objectives of cash management are to determine the optimal cash balance which is neither excessive nor inadequate, and to ensure that the optimal cash balance is maintained all through; Cash should not remain idle unnecessarily, and simultaneously, it should not fall short of the requirements also. For this, the collections and the disbursements of cash are to be managed properly. In case the flow of cash in not even, the cash is to be arranged by rising short-term loans for meeting the payment bills; and in cash the collections have been made but there is no immediate outlet for payment, the idle funds are invested in temporary securities so as to yield some return. Thus, the problem is to manage the cash affairs in such a manner that gives the least possible cost of maintaining cash. The main objective of financial management-maximizing profitability without sacrificing liquidity-should be borne in mind while attempting to manage cash and bank balances. Optimal cash balance does not mean minimum cash balance since minimum cash may lead to shortage of cash and the day-to-day operations of the business may suffer. The level of cash which meets the requirements appropriately and which gives the minimum cost is known as the optimum level of cash.

Cash management covers the management of not only cash but near-cash assets also, e.g., marketable securities and time deposits with banks, because these are readily convertible into cash, As a matter of fact, 'near-cash assets' are to be included under' cash' for the purpose of cash management since surplus cash is required to be invested in near-cash assets for the time being.

The following are the important motives for holding cash:

- **Transaction motive:** To conduct the ordinary business. i.e.; making purchases and sales and meeting day-to-day expenses cash is always required by a firm. There is never a perfect synchronization in the inflows of cash and outflows of cash, hence the need for maintaining cash balance.

- **Speculative motive:** To avail of the profit –making opportunities that may raise in future, certain firms may like to hold cash in advance. Though a normal business concern should not indulge in speculation, yet, sometimes it becomes necessary for the firm to keep cash available with this objective in view. For example, if three is a liked hood that material prices will fall down in near future, cash may be withheld for a certain period.

To avail of the profit –making opportunities that may arise in future, certain firms may like to hold cash in advance, Though, a normal business concern should not indulge in speculation, yet m sometimes it becomes necessary for the firm to keep cash available with this objective in view. For example, if there is a likelihood that material prices will fall down in near future, cash may be withheld for a certain period. Examples of certain specific advantage of holding cash are as under:

(i) Certain companies maintain cash balance to take advantage of the trade discounts and cash discounts, which may be available to them on the basis of the terms of sale.

(ii) Credit standing can be maintained if the firm has sufficient cash. To meet the standards of the line of business in which firm is engaged, the firm may like to have sufficient cash balances.

(iii) The firm may like to take advantage of the available business opportunities.

(iv) Emergencies, e.g.; strikes, floods, fires etc. can be met out successfully only when the firm has sufficient liquidity.

2.1.5 Factors Determining Cash Needs

The factors which determine cash needs are described in the following points.

2.1.5.1 Synchronization of cash Flow

With a perfect synchronization of cash inflows and out flows and a higher degree of predictability, cash balance could be held to low levels. An example of synchronization demonstrates low cash flows can be improved through more frequent requisitioning of fund to divisional offices from the firm's central office. If funds are requisitioned once a month, we may now explore the possibility of requisitioning of funds on fortnightly, or weekly of daily basis, Moreover, effective forecasting can be achieved, it will enable the firm to economic on the amount of money it must borrow and thereby keeping interest expenses to a minimum. It is necessary to understand now that there are different types of float. We have seen that the float is the different between book cash and bank cash, representing the net effect of changes in process of clarity. The first types of float are disbursement float. As we write check, it declares book balance but does not immediately change available balance. Similarly, the collection float refers to the reset of cheque received, which increases book balance but not immediately change available balance. The net float is the overall different between the firm's available and its book balance. (Pradhan, 2004: 187)

2.1.5.2 Short Cost

Another general factor to be considered in determining cash need is the cost associated with a short fall in the cash needs. The cash forecast presented in the cash budget would revel period of cash shortages. In addition, there may be some unexpected short fall. Every shortage of cash, whether expected or unexpected involved a cost depending upon the severity, duration and frequency of the shortfall and how the shortage is covered. Expenses incurred as a reset of shortfall are called short costs. Included in the short cost are the following.

- Transaction cost associated with raising cash to tide over the shortage, this is usually the brokerage incurred in relation to the sale of some short term near cash assets such as marketable securities.
- Borrowing cost associated with borrowing to cover the shortage these include items such as interest on loan, commitment charge and other expenses relating to the loan.
- Loss of cash discount, that is, a substantial loss because of temporary shortage of cash.
- Cost associated with deterioration of the credit rating which is reflected a higher bank charges on loans, stoppages of supplies, demand for cash payments, refusal to sale, loss of image and the attendant decline in sales and profits. Penalty rates by bank to shortfall in compensating balances
  (Khan and Jain, 2003: 18.4)

2.1.5.3 Excess Cash Balance Cost

The cost of having excessively large cash balance is known as the excessive cash balance cost. If large funds are idle, the implication is that the firm has missed opportunities to invest those funds and has thereby lost inters which it would otherwise have earned, this lost of interesting primarily the excess cost. (Khan and Jain, 2003: 18.5)

2.1.5.4 Procurement and management

There are the cost associated with the establishing and operating cash management staff and activities. They are generally fixed and are mainly accounted for by salary, shortage, handling of securities and so on. (Khan and Jain, 2003: 18.5)

2.1.5.5 Uncertainty and Cash Management

Finally, the impact of uncertainty of cash management strategy is also relevant on cash flows can not be predicted with complete accuracy. The first requirement is a precautionary cushion to cope with irregularities in cash flows. Unexpected delays in collections and disbursements, default and unexpected cash needs.

The impact of uncertainty on cash management can, however, be mitigate through (1) improved forecasting of tax payments, capital expenditure dividend, and do on: and (2) increased ability to borrow though over draft facility (Khan and Jain, 2003: 18.5)

2.1.6 Techniques for effective Cash Management

There various tools and technique are applied for effective and efficient management of cash. Various techniques for cash management are discussed as follows:

2.1.6.1 Cash Planning

Cash planning is a technique to plan and control the use of cash; it protects the financial condition of the firm by developing a projected cash statement from a forecast of expected cash inflows and outflows for a given period. Cash plans are very curtail in developing the overall operating plans of the firm

2.1.6.2 Cash forecasting and budgeting

Cash budget is the most significant device to palm for and control cash receipt and payment, a cash budget is a summary statement of the firm's expected cash inflows and outflows over a projected time period.

Cash forecast are needed to prepare cash budget. Generally forecasts covering period of one year of less are considered as short term forecast. The important functions of carefully developed short term forecast are to, (a) determine operating cash requirement (b) anticipate short term financing, and (c) manage investment surplus cash. Methods of short term forecasts are:

- **Receipt and Disbursement Method**

The prime aim of receipt and disbursement forecast is to summarize these flows during a predetermined period. In cases of these companies where each items of income and expenses involve flows of cash; this method is favored to keep a close control over cash.

- **Adjusted Net income Method**

This method of cash forecasting involves the tracing of working capital flows. It is same time called the sources and uses approach. There are two objectives of the adjuster net income method, They are to project company's need for cash at a future date and to show whether the company can generate the required fund internally, and id not how much will have to be borrowed or raised in the capital mordent. It is a projected cash flow statement based on perform financial statement, one popularly used method of projecting working capital is to use ratios relating account receivable and inventory to sales.

- **Sensitivity Analysis**

One useful method of getting insights about the variability of cash flow is sensitivity analysis. Cash budget can be prepared under three sales condition, they are optimistic, most probable and pessimistic. Knowledge of the outcome of extreme expectation will help the firm to be prepared with contingency plans. A cash budget prepared under woes condition will prove to be useful t management to face these circumstances.

- **Long Term Cash Forecasting**

Forecasts, these extending beyond one year are considered long term. Once a company has developed long term cash forecast, it can be used to evaluate the impact of say, new product development or plan acquisition on the firm's financial condition three, five or more years in the future. The major uses of long term forecasts are:

- To indicate as company's future financial needs especially for its working capital requirement.
- To evaluate proposed capital projects. It pin pints the cash required to finance these project as well as the cash to be generated by the company to support them.
- To improve corporate planning. Long –term cash forecast compel each division to plan for future and no formulate project carefully.

2.1.6.3 Managing the Cash flows

The flow of cash should be properly managed. The cash inflows should be accelerated while, as far as possible, the cash out flow should be declared.

2.1.6.4 Optimum Cash Level

The firm should decide about the appropriate level of cash balances. The cost of excess cash and danger of cash deficiency should be matched to determine the optimum level of cash balances.

2.1.6.5 Investing surplus cash

The surplus cash balance should be properly invested to earn profits. The firm should decide about the decision of such cash between alternative short-term investment opportunities such as bank deposits, marketable securities, or incorporate landing.

2.1.7 Cash Management Models

The analytical models for cash management are as follows:

a) Baumol Model

b) Miller-Orr model

a) Baumol model

William Baumol developed a basic inventory model to cash management. In this model it is assumed that the firm on average is growing and is a net user of cash. Marketable securities represent buffer stock between episodes of external financing, which is drawn down as required periodically. Ordering costs are represented by the clerical and transactions cost of making transfers between the investment portfolio and the cash account. The holding cost is the interest foregone on cash balance held. Assuming that expenditures occur evenly over time and that cash replenishments come in lump sumps at periodic intervals the optimal size of the cash transfer is formulated as follows

$$C^* = \sqrt{\frac{2bt}{i}}$$

Where,

C*= the optimal size of the cash transfer

t= the total cash uses for the period of time include.

b=the cost of transaction in purchase or sales of marketable Securities.

i = the applicable interest rate on marketable securities.

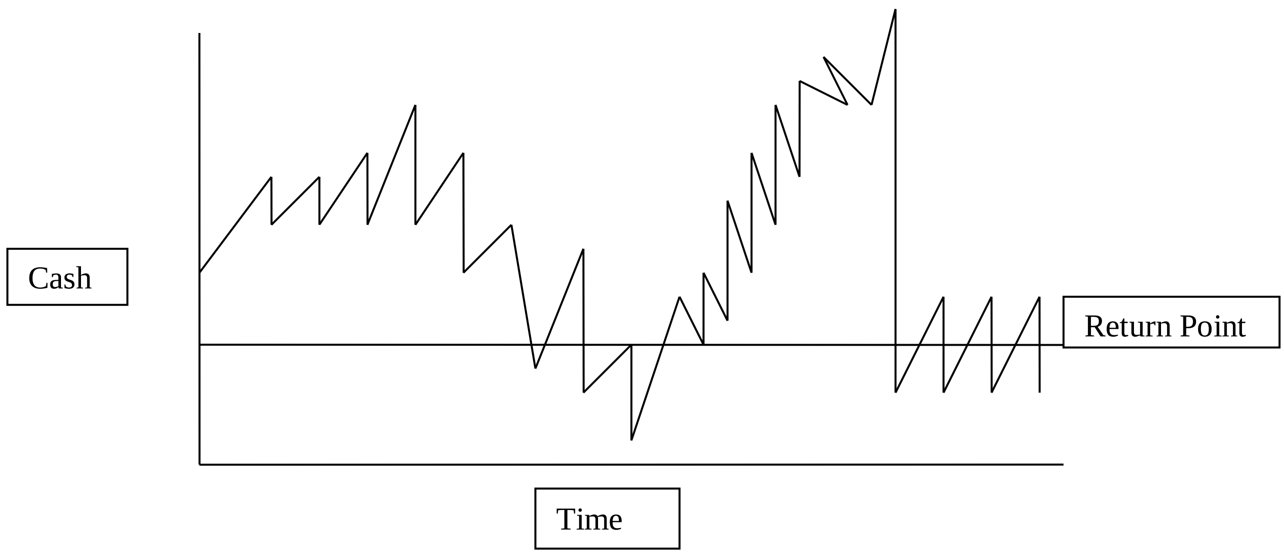
(Western and Copland, 2000; 784).

b) Miller – Orr Model

Miller and Orr incorporated stochastic nature of cash flows in their model. According to this model the cash flow is completely stochastic. the cash balance is adjusted to optimal return point Z when the cash balance touches zero or the optimal upper limit h. that is, when the cash balance touches zero an amount equal to OZ will be converted from liquid assets to cash. When the cash balance touches **h** an amount **hz** will be invested in liquid asset and the cash balance will be brought to **oz.**

Figure No.2.2

Graphical presentation of Miller Orr Model of cash balance



Under certain assumptions about the distribution of the cash flows they have established that

h = 3z

and the optimal value of z is given by

$$z = \left(\frac{3r^2}{4c}\right)$$

Where,

r is average yield of the alternate liquid assed.

z is the variance of net cash flow .

c is the cost per transfer from cash to alternate asset and vice versa.

This model like Baumol's model assumes transfer cost independent of the amount of transfer and direction. Again, the extreme assumption that net cash flows are completely stochastic may not be true on many occasions (Kuchhal, 1998; 177).

2.2 Review of Related Thesis and Publications

In this section the review of thesis relating to cash management have been considered. It encompasses a combined effort of entire researcher. The main objective of this part is to analyze the previous research study. An attempt is made here to review some of the research work works submitted are as follows:-

a) ***Bijaya Pradhan*** *(1997)* has conducted a research on the topic "**A study on cash management of Salt Trading Corporation Limited**". His main objective of the study is to examine the management of cash in STCL.

Under this main objective, he has set the following specific objectives.

- To study the existing cash management system in STCL.
- To access the credit policy adopted in STCL.
- To expand few suggestions on the basis of above analysis to improve the cash management in future.

To find the above objectives, he had conducted a research of six years periods under consideration from FY 2047/48 to FY 2052/53. He had used both primary and secondary data. Primary data were collected from questionnaires; interview and secondary data were collected from financial statements of STCL.

After his brief study, he has found the following conditions of STCL;

- The STCL could not make the best use of available cash balance prudently.
- The cash collection efficiency in the corporation is very low.
- The collection of trade credit in the corporation is low during the three years of study period.
- No optimum cash balance is maintained.

On the basis of above findings, it is suggested to adopt the following recommendation for better management of cash.

- Cash should be efficiently managed.
- Monthly trial balance, cash and funds flow statement and financial report should be prepared.
- Effective account receivable management should be designed.
- Effective credit policy should be adopted.
- Optimum cash balance should be maintained.
- The surplus cash balance should be maintained
- The surplus cash should be invested in profitable opportunities.

b) ***Dipendra Kumar Neupane*** *(2001)* has conducted a research on topic, **"A study on profit planning in Nepal Tele Communication Ltd".** The main objectives of the study were:-

- To examine the practices an effectiveness of profit planning in NTC.
- To examine the present comprehensive profit planning system applied by NTC.
- To analyze the various functions, plan formulated and implemented in NTC.
- To analyze the financial position of NTC by the help of ratio analysis.

The main findings are as follows:-

- Lack of systematic profit planning and control, plans are prepared on "adhoc" basis.
- Actual production lines are more variable than budgeted production line.

- ❖ Overhead expenses are not classified systematically and it creates problem to analyze its expenses properly.
- ❖ Financial analysis shows that the financial performance of NTCL is not so good during the study period.
- ❖ Profit pattern of NTCL is on increasing trend.

The recommendations are as follows:-

- ❖ Long-term objectives should be clearly formulated.
- ❖ Sales budget should be made on realistic ground.
- ❖ Management of NTCL should bring the effective programs of cost reduction and control.
- ❖ Profit planning concept should be communicated top to lower level.
- ❖ Variance analysis should be effective.

c) ***Bishwash Shrestha*** *(2005)* has conducted a research on the topic, Cash Management in Public Manufacturing Enterprizes of Nepal, **"A case study of Royal Drugs Limited."** His major objectives are to examine the management of cash in Royal Drugs Limited. The other objectives of this study are as given below:-

- ❖ To make the analysis of cash flow of RDL.
- ❖ To examine the liquidity position of RDL.
- ❖ To analyze the cash budgeting practice
- ❖ Critically analyze the cash management practice.
- ❖ Large portion of RDL"s current assets has been tied-up in the most illiquid asset, i.e. inventory.
- ❖ Current assets and quick assets are not being maintained in accordance with current liabilities.

After analysis of above findings, he had suggested to adopt the following recommendation for better cash management.

- Recommend to maintain optimum cash balance every year.
- Recommend to prepare cash flow statement.
- Recommend not tie-up current assets in unsaleable inventories
- Maintain optimum current assets variables and current liabilities every year.
- Use extensively financial and statistical tools as per required.

d) ***Tikaram Ghimire*** *(2005)* conducted a research on the topic **"Cash Management, A case study of Gorakhkali Rubber Udhyog Limited."**

In his study he has set the research problem: what policy is taken for cash management of the company? What system is adopting the company for collection and disbursement of cash? Average collection period is satisfactory or not? What position exists in holding of cash to transaction motives? The cash management system which is adopted by the company is well or not?

The main objectives of the study were:-

- To present overall cash condition of GRUL.
- To study the existing cash management system of GRUL.
- To analyze the cash collection and disbursement system adopted GRUL.
- To analyze the cash management policy adopted in GRUL.

After his study he has found the following findings:-

- The company's capacity utilization is about 50%.
- The industry has been facing the problem of skilled manpower.
- The main sources of cash of the GRUL are sales of products and loan.

- ❖ The industry sales its products in cash and in credit basis.
- ❖ The company maintained optimum cash balance.
- ❖ Cash turnover ratio is low which indicates low collection efficiency of the industry.

e) The other thesis reviewed was presented by ***Rishi Raj Joshi*** *(2006)*, entitled "**Cash Management of Public Enterprizes in Nepal"** (A case study of Salt Trading Corporation Limited).

The main objectives of the study were:-

- ❖ To examine practices used to control cash in STC Ltd.
- ❖ To analyze liquidity position, profitability position and relation between different variables.
- ❖ To examine and analyze cash flow statement and cash budgeting practices used by the STC Ltd.
- ❖ To provide suitable recommendation to improve the cash management system in STC Ltd.

The main findings of the study were:-

- ❖ The main sources of cash of STCL are sales revenue and loan from the loan from the bank.
- ❖ There is lack of proper planning, budgeting and forecasting. There is absence of any formalized system of cash planning and cash budgeting in STCL.
- ❖ The corporation has not exercised the modern techniques to debt collection, monitoring the payment behavior of customers etc.
- ❖ The corporation has not maintained optimum cash balance. The cash and bank balance with respect to current assets has been fluctuating trend similar to the case with respect to the total assets.

f) ***Tika Ram Bhandari*** *(2009)*has conducted a research on the topic**, Cash Management in Public Enterprises of Nepal** A case study of **Nepal Telecom Ltd.**

The major objective of the study is to examine the management of cash in NTC.

The general objective of the study is to examine the cash management techniques adopted by the NTC. The specific objectives this study is as follows:-

- To examine and critically analyze the existing cash management practices in the organization.
- To assess the revenue generation practices of the organization.
- To examine the financial performance of the organization.
- To review the cash mobilization practices of the organization.
- To make suggestions for the effectiveness of cash management in NTC.

After his study he has found the following findings:-

- NTC has satisfactory liquidity position and it has maintained proper cash and bank balance. The cash and bank balance with respect to current liabilities has been increasing trend
- NTC has low consistency in cash and bank balance.
- Sales relationship with cash balance is positive.
- Relationship between sales and net profit of NTC is in good condition it has been increased earned profit in each fiscal year and sales has been increasing trend.
- Relationship between sales and net profit of NTC is in good condition it has been increased earned profit in each fiscal year and sales has been increasing trend.
- NTC does not follow the periodic performance reports.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction

Research is the systematic and organized effort to investigate a specific problem that needs a solution. Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with the certain objects in view to get the conclusion. The objective of this research work is to find out the answer of the questions.

The methodology, which has been used in this study, consists of research design, nature and sources of data, data gathering procedure and the analytical tools etc.

3.2 Research design

The research design refers on overall framework or plan for the collection and analysis of data. It also refers to the systematic framework under which the research is conducted. The research design serves as a framework for study, guiding the collection and analysis of data. The research design focuses on the data, collection methods, the research instruments utilized and the sampling plan to be followed. It is planned structure and the strategy for research investigation. It involves selecting the most appropriate methods or techniques to solve the particular problems under the investigation. This research has followed the descriptive as well as analytical approach to achieve the objective.

3.3 Nature and Sources of Data

True and fact information are necessary for the reliability and effectiveness of research work as information is the lifeblood for any research work. For this study different techniques and procedure have been adopted to collect necessary information and data. The study is based on secondary data. Secondary data have been taken mainly from the following sources:

- published and unpublished document and annual reports of the company
- Journals, government and non-government publication. Other supportive book and websites of related topic.

3.4 Data Analysis Tools

Collection data is the connecting link to the world of reality for the researcher. The data collection in raw and crude form are managed, arranged, analyzed and presented in proper tables and formats are interpreted. To analyze the collected data, basically two types of tools are used.

3.3.1 Financial Tools for Analysis

I. Analysis of Cash Turnover:

The cash turnover ratio explains how quickly the cash received from the sales; in other words in measures the speed with cash move through an enterpriser's operation. Cash turnover ratio is obtained by following formula:-

$$\text{Cash Turnover} = \frac{\text{Sales}}{\text{Cash in hand /at Bank}}$$

II. Analysis of Current Ratio:

This ratio examines the liquidity position of the company. It examines the position of the company as to its holding of current assets against its current liabilities. Higher ratio indicates satisfactory position and vice versa. However, too high ratio is indication of poor cash management indicating high inventory and poor credit management.

The ideal current ratio is 2:1 however for a public enterprise, the ratio tends to be little lower than 2:1, as these enterprises generally require very little current assets. But never the less any company should maintain this ratio above 1:1, since ratio lower than this definitely indicates poor liquidity position.

The ratio computed as follows:

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

III. Analysis of Quick ratio or Acid Test Ratio:

This ratio establishes a relationship between quick or liquid assets and current liabilities. An assert is liquid if it can be converted into cash immediately or reasonably soon without a loss value the quick ratio is found by dividing quick assets by current liabilities.

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

Hence, inventories are considered to be less liquid. The standard quick ratio is 1:1

IV. Receivables /Debtors Turnover Ratio:

Receivable turnover ratio gives an idea as to how quickly receivables are converted into cash. The ratio can be computed as follows:-

$$\text{Receivable Turnover(in time)} = \frac{\text{sales}}{\text{receivable}}$$

Along with this ratio, average collection period of receivables is also calculated. Shorter average collection period refers to good credit management and vice versa. But too short collection period suggests that the company has very rigid credit policy and thus sales curtail would be the consequences.

The average collection period can be calculated as follows.

$$\text{Average Collection Period} = \frac{\text{Days in Year}}{\text{Receivable Turnover in Times}}$$

V. Inventory (stock) Turnover Ratio

Inventory turnover ratio gives idea on how quickly inventory is converted into sales. Following formula is used to calculate inventory turnover ratio

VI. Cash and Bank Balance to Account Receivable

This ratio measures the cash and bank balance in relation with account receivables of the firm. Higher ratio refers to sound liquidity position and vice versa. However, too high ratio indicates that the business dealing are restricted to only those parties making quick payments, thereby limiting its scope of sales volume.

It is computed by

$$\text{Cash Balance to Account Receivable} = \frac{\text{Cash and Bank}}{\text{Account Receivable}}$$

3.4.2 Statistical Tools for Analysis:

1. Karl Pearson's Coefficient of Correlation (r):

$$\textbf{Karl Pearson'sCoefficient of Correlation (r)} = \frac{\sum \mathbf{xy}}{\sqrt{\sum \mathbf{x^2}}\sqrt{\sum \mathbf{y^2}}}$$

If two variables (Say x and y) vary such that change in one variable results the change in other, then these two variables are said to be correlated. Such correlations may be positively correlated, if increases in X results increases in Y and decreases in X follows decrease in Y. Likewise, such correlations are said to be negatively correlated, if increases in X results decrease in Y and decrease in X follows increase in Y.

Correlation analysis refers to the statistical technique, which measures the degree of relationship or association between the variables. To put it differently, it helps in analyzing the co-variation of two or more variables. It is to be noted that a high degree of correlation between two variables doesn't always necessarily imply that changes in one variation cause changes in the other, i.e. correlation doesn't necessarily imply causation while causation always implies correlation.

Out of the several methods of computing correlation, Karl Pearson's coefficient of correlation is one of the best and popular methods. Karl Pearson's coefficient of correlation (r) measures the degree of association between the two variables suppose X and Y given by;

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

Where,

r = Karl Pearson's coefficient of correlation between X and Y

$x = (X - \overline{X})$

$x = (Y - \overline{Y})$

And,

$$\overline{X} = \frac{\sum \mathrm{X}}{\mathrm{N}}$$

N = No. of years/time period.

The value of r lies between +1.00 to -1.00

Value of +1 refers to highly positive correlation between the variables. i.e. one variable is directly proportional to another and vice versa.

Value of -1 refers to highly negative correlation between the variables, i.e. one variable is indirectly proportional to another, or in other words, increase in one variable leads to decrease in another variables and vice –versa.

Likewise, value nearer zero "O" refers, there is no association between the variables, i.e. increase or decrease in one variable result no impact on another variable and vice-versa.

Together with Karl Pearson coefficient of correlation, probable error (P.E.) of the correlation coefficient is also computed. The probable error is used to measure the reliability and test of significance of correlation coefficient. It is calculated by the following formula:

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

Where,

r = the value of correlation coefficient.

N=number of pairs of observation.

P.E.= Probable error of correlation coefficient.

P.E. is used in interpretation whether the calculated value of r is significant or not.

i. If r <P.E., it is insignificant, i.e. there is no evidence of correlation.
ii. If r > 6 P.E., it is significant; practically the correlation is certain.
iii. If PE < r < 6(PE) nothing can be calculated.

2. Standard Deviation (S.D.):

Standard Deviation (S.D.)measures scatterness, spreadness or variation and provides idea of homogeneity or heterogeneity of the distribution out of various method of studying dispersion such as Range, Inter quartile range and Quartile deviation, mean deviation, standard deviation and variance, Lorenz curve. The most popular methods are the standard deviation and variance method. Standard deviation is represented by the symbol sigma "σ" and is calculated by this formula.

$$S.D(\sigma) = \sqrt{\frac{1}{N}\sum x^2} = \sqrt{\frac{\sum d^2}{N} - (\frac{\sum d}{N})^2}$$

Where,

$x = (X - \overline{X})$

N = Number of years/observations/time period

3. Coefficient of Variation (C.V.):

Along with standard deviation, coefficient of variation (C.V.) is also computed. Coefficient of variation is the relative measure based on standard deviating and is defined as the ratio of standard deviation to the mean expressed in percent.

Coefficient of Variation (C.V) is given by

$$C.V. = \frac{\sigma}{\overline{X}} \times 100$$

CHAPTER – IV

PRESENTATION AND ANALYSIS OF DATA

The main purpose of this chapter is to introduce the method of interpretation of the data to fulfill the research objective. The raw data collected from the literature review and through review of various financial statement of Nepal Telecom limited, were organized and presented in the form of tables, charts, diagrams, appropriate statistical and financial tools were applied to the data to draw valid conclusions. Thus, the main purpose of this study is to highlight the cash management system in the non-manufacturing public enterprises. For this reason, Nepal telecommunication limited has been reason, Nepal telecommunication limited has been randomly selected from the study. To accomplish these objectives, this chapter gives a detailed analysis the various aspects of cash management as prevailed in the organization. Specially, the study covers the period of 5 years fiscal years from 2060/061 to 2064/065.

4.1 Analysis of Cash Balance

Economic planning and management department of Nepal Telecom demands various proposals of budget along with detail of plan programs from different regional directorates. High level management committee, respective representative, experts discuss on the budget proposals. The budget should be consistent with long term plan (five years plan) of the country on telecommunication sector. After discussion of the proposed budget, the committee approved the proposed budget after certain amendments and correction. The budget so prepared is implemented and on the third quarter of fiscal year it is reviewed with the actual achievement and performance. Necessary amendments as the cases required are made and revised budget is forecasted. The figures of revised budget are more realistic than that initial budget as they are based on the real figures of half of the year.

At the time of preparation of annual budget, the company also prepares the cash budget of that year. It includes the analysis of projected cash inflows, cash outflows for operating expenses and capital expenditures. The company makes the projections of cash inflows and outflows based on projected incomes and expenditures.

4.1.1 Approved Cash Budget and Actual Cash at End of various Fiscal Years

Table 4.1

Approved Cash Budget and Actual Cash at End

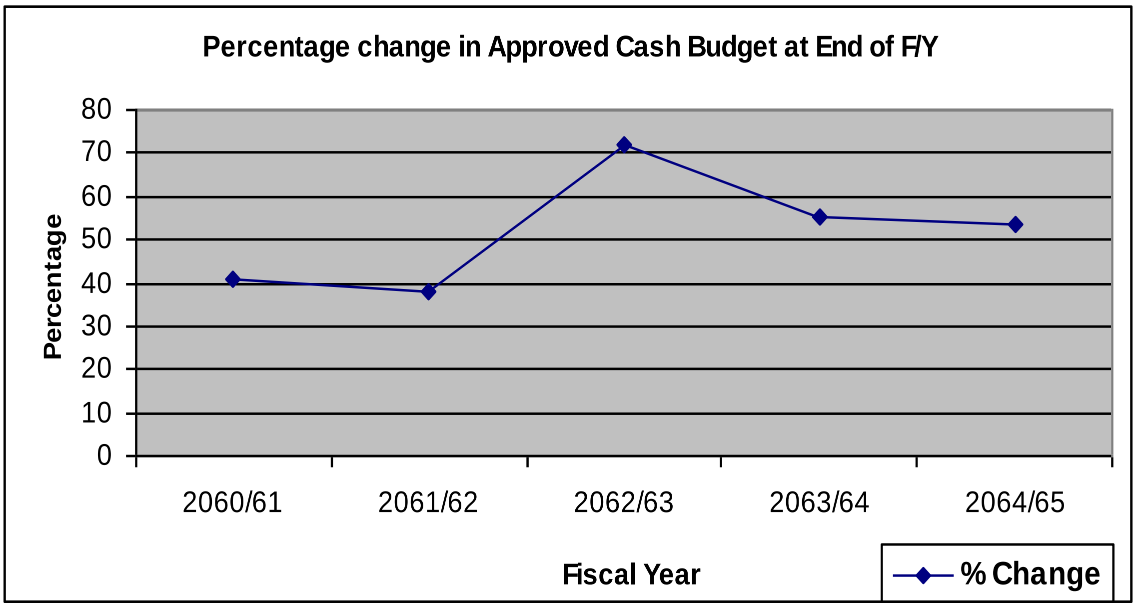
Fiscal Year	Approved Budget	Actual	Deviation	% Change
2060/61	7,375,201	12,417,486	5,042,285	40.61
2061/62	5,936,374	9,5745,00	3,638,126	38.00
2062/63	3,399,304	12,021,625	8,622,321	71.72
2063/64	6,590,307	14,746,338	8,156,031	55.31
2064/65	7,482,165	16,134,517	8,652,352	53.63

Source: Budget and Policy Program (2060/61 to 2064/65)

Table 4.1 shows the ending cash position of the company in different fiscal year. Both actual cash and approved budgeted cash at end are shown in the table. The actual cash balances were higher than approved budgeted amounts in every year. In fiscal year 2060/61 actual cash ending balance is Rs 12,417,486 and approved ending cash balance is Rs 7,375,201. This year actual ending cash balance is 40.61% higher than approved budget. In the same way in F/Y 2061/62 the actual cash balance is 38% higher than approved budget. Rs 3,399,304 thousand only approved in F/Y 2062/63 but in actual is Rs. 12,021,625 thousand. This year 71.72% deviation in actual ending cash balance between approved cash balance. In F/Y 2063/64 and 2064/65 the actual ending cash balance is higher by 55.31% and 53.63% respectively. In the study period actual cash ending balance is very much higher than approved budgeted cash balance. It indicates that there was no effective implication of budgeted amount or they have not study the total sources of cash.

Figure 4.1

Trend line showing percentage change in Approved Cash Budget with Actual Cash at end



Source: Budget Book for 2009/10, Nepal Telecom

As shown in the figure 4.1 the degree of deviation of actual cash balances and budgeted cash balances is very high. In the fiscal year 2061/62 the deviation was 38% which is the smallest deviation during the review period. It reaches to highest peak in F/Y 2062/63 and thereafter it slightly decreased. In F/Y 2064/65 the same was 53.63% which can as significant deviation.

4.1.2 Revised Cash Budget and Actual Cash at End of various Fiscal Years:

NDCL makes revision on the approved budget on the third quarter in each financial year based on the actual data of the six months for that year. As the revised budget base on actual figures, the projection of cash balance based on revised budget appears more realistic and close to actual cash balances. The comparison of cash balances as per revised budget and actual cash balance in various financial years are shown in the following table.

Table 4.2

Cash Balance as per Revised Budget and Actual Cash Balance

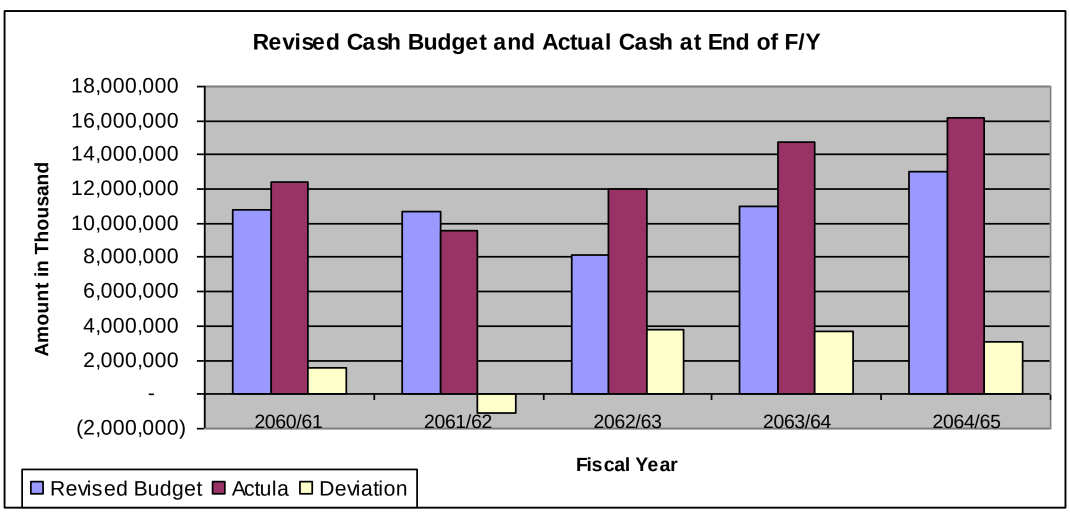
Fiscal Year	Revised Budget	Actual	Deviation	% Change
2060/61	10,829,362	12,417,486	1,588,124	13
2061/62	10,655,130	9,574,500	(1,080,630)	(11)
2062/63	8,195,242	12,021,625	3,826,383	32
2063/64	11,030,579	14,746,338	3,715,759	25
2064/65	13,063,568	16,134,517	3,070,949	19

Source: Budget Book for 2009/10, Nepal Telecom

The above figures are plotted in the following diagram;

Figure 4.2

Revised Cash Balance, Actual Cash Balance and its Deviation



This table and chart shows actual cash balance higher than revised budgeted cash amount. The degree of deviation was of insignificant amount. In year 2061/62 actual cash balance was smaller than revised budgeted amount. Revision of budget tried more to adjust the degree of deviation between actual and approved budget amounts. In the F/Y 2060/61, NTCL have increased their cash at end to Rs. 10,829,362 thousand after the revision. Although they revised their approved budget, actual ending cash balance is more by Rs 1,588,124 thousand than revised cash budget. In F/Y 2061/62 they revised their cash balance to Rs 10,655,130 thousand. This year actual cash balance is Rs. 9,574,500 thousand which is less by 11% than revised budget. In the study period except F/Y 2061/62 NTCL's revised cash budget is higher than the actual cash ending balance. F/Y 2062/63, 2063/64 and 2064/65 actual cash balance is greater by 32%, 25% and 19% respectively than revised cash budget.

NTCL budgetary committee can not reach near by actual cash balance. It shows they have not study their total cash sources and total cash application.

4.2 Shortage or Excess Position of Cash

4.2.1 Without considering previous year remaining cash balance

Nepal telecom prepares deficit budget. Deficit budget indicates shortage of source to cover overall uses of budget. In this portion of study, opening cash balance is not included as sources of total cash.

4.2.1.1 Statement Showing Approved Budget Cash Surplus/Deficit without Previous Cash

Table 4.3

Statement of Approved Budget Cash Surplus/Deficit without Previous Cash

(Rs. in Thousand)

Fiscal Year	Total Cash Sources	Total Cash Uses	Deviation	Surplus/ Deficit
2060/61	10,915,387.00	12,932,299.00	(2,016,912.00)	Deficit
2061/62	12,870,339.00	17,763,327.00	(4,892,988.00)	Deficit
2062/63	11,912,645.00	19,168,471.00	(7,255,826.00)	Deficit
2063/64	17,858,091.00	21,952,914.00	(4,094,823.00)	Deficit

2064/65	25,847,492.00	30,169,399.00	(4,321,907.00)	Deficit

Source: Budget and Policy Program (2060/61 to 2064/65)

The table shows, that budgeted total cash uses amount is higher than budgeted total cash sources. There is not included last year closing cash balance or opening cash balance for the year. In the fiscal year 2060/61, they have prepared Rs 2,016,912 thousand higher cash uses then sources. The deficit amount have gradually increased up to fiscal year 2062/63 and reached to Rs 7,255,826 thousand. In fiscal year 2063/64 and 2064/65, the deficit amount is Rs 4,094,823 thousand and Rs 4,321,907 thousand respectively. In this table shows they have follow their rules by preparing their deficit budget. The main causes of deficit is not mentioning of last year closing cash balance.

4.2.1.2 Statement Showing Revised Budget Cash Surplus/Deficit without Previous Cash

Table 4.4

Statement Showing Revised Budget Cash Surplus/Deficit without Previous Cash

(Rs.In Thousand)

Fiscal Year	Total Cash Sources	Total Cash Uses	Deviation	Surplus/ Deficit
2060/61	12,098,696.00	11,367,071.00	(731,625.00)	Deficit
2061/62	11,821,612.00	13,583,968.00	1,762,356.00	Surplus
2062/63	13,132,546.00	14,511,804.00	1,379,258.00	Surplus
2063/64	19,797,607.00	20,788,653.00	991,046.00	Surplus
2064/65	24,830,374.00	23,304,222.00	(1,526,152.00)	Deficit

Source: Budget and Policy Program (2060/61 to 2064/65)

This table shows revised total cash sources and total cash uses without considering last year cash balance. NTCL has revised their approved budget after half year running. In the revision they consider their cash flow of the running year and revised their cash sources and uses. In the fiscal year 2060/61 their revised cash budget is in deficit by Rs 731,625 thousand. Fiscal year 2061/62 to 2063/64 their revised budget has change to surplus by deficit cash position. In the last study period the revised cash budget is in deficit by 1,526,152 Thousand. This was happened when budget was revised during mid of budgeted period.

4.2.1.3 Statement Showing Actual Cash Surplus/Deficit without Previous Cash Balance

Table 4.5

Statement Showing Actual Cash Surplus/Deficit without Previous Cash Balance

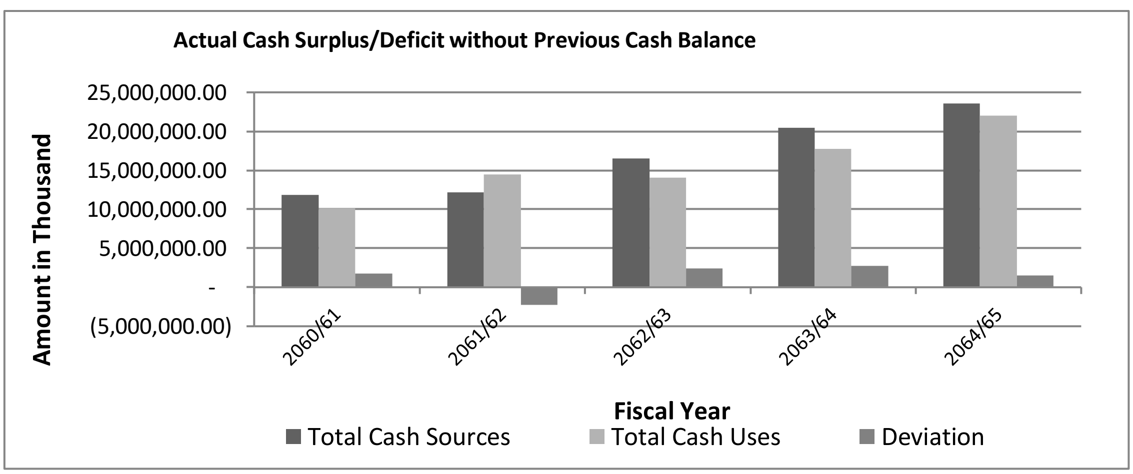
(Rs.In Thousand)

Fiscal Year	Total Cash Sources	Total Cash Uses	Deviation	Surplus/ Deficit
2060/61	11,843,217.00	10,090,042.00	1,753,175.00	Surplus
2061/62	12,151,818.00	14,444,112.00	(2,292,294.00)	Deficit
2062/63	16,510,177.00	14,063,052.00	2,447,125.00	Surplus
2063/64	20,482,552.00	17,757,839.00	2,724,713.00	Surplus
2064/65	23,576,892.00	22,024,505.00	1,552,387.00	Surplus

Source: Budget and Policy Program (2060/61 to 2064/65)

Figure 4.3

Actual Cash Surplus/Deficit without Previous Cash Balance



This Table and Chart shows big deviation between actual sources and uses. It means there was surplus of cash at the end of every fiscal year except F/Y 2061/62. This shows that budgeted amount was not actually spent according to the plan of the company. Question about investment of surplus cash and opportunity cost of that surplus amount was not answered by concerned authority. In those idle cash, previous year closing balance cash was not included. Figure 4.5 shows the surplus rises up to F/Y 2060/61 and falls on F/Y 2061/62 and again rises up to 2063/64. In F/Y 2064/65, the surplus is the slightly decreased than F/Y 2063/64.

4.2.2 Considering previous year remaining cash balance:

When opening cash is considered as one of the source of financing, there was sufficient cash to manage all the cash expenses as the company plan in budget. Moreover, surplus cash could be diverted into secured investment too. Budgeted position of cash shows large amount of surplus which is pile up for the next year. To meet the budget expenses the company also financed small portion cash from external source. It made payment of its liability in due time. It does not make sense to finance by borrowing from external source if there was enough cash balance already. It involves cost.

4.2.2.1 Statement Showing Approved Budget Cash Surplus/Deficit with Previous Cash

Table 4.6

(Rs. In Thousand)

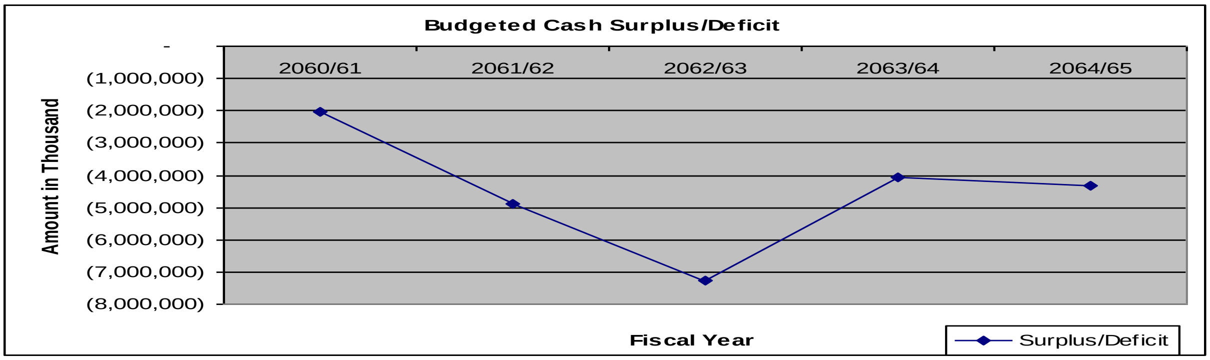
Fiscal Year	Opening Cash	Internal Sources	External Sources	Total Sources	Total Uses	Closing Cash	Surplus/ Deficit
2060/61	9,392,113	10,785,387	130,000	10,915,387	12,932,299	7,375,201	(2,016,912)
2061/62	10,829,362	12,770,339	100,000	12,870,339	17,763,327	5,936,374	(4,892,988)
2062/63	10,655,130	11,912,645	-	11,912,645	19,168,471	3,399,304	(7,255,826)
2063/64	12,021,625	17,858,091	30,000	17,888,091	21,952,914	6,590,307	(4,064,823)
2064/65	11,030,579	25,847,492	-	25,847,492	30,169,399	6,708,672	(4,321,907)

Source: Budget and Policy Program (2060/61 to 2064/65)

Table shows that 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. The total approved budget cash expenses could be met by total budgeted cash source and there were deficit in every year.

Figure 4.4

Trend line Showing Budgeted Cash Surplus & Deficit in various F/Y



This chart shows approved budgeted cash balance is deficit in every year. They have followed their rule to make the deficit budget. The highest deficit amount is in F/Y 2062/63.

4.2.2.2 Statement Showing Revised Budget Cash Surplus/Deficit with Previous Cash Balance

Table 4.7

Rs. In Thousand)

Fiscal Year	Opening Cash	Internal Sources	External Sources	Total Sources	Total Uses	Closing Cash	Surplus/ Deficit
2060/61	10,097,797	12,004,378	94,318	12,098,696	11,367,071	10,829,362	731,625
2061/62	12,417,486	11,821,612	-	11,821,612	13,583,968	10,655,130	(1,762,356)
2062/63	9,574,500	13,132,546	-	13,132,546	14,511,804	8,195,242	(1,379,258)
2063/64	12,021,625	19,797,607	-	19,797,607	20,788,653	11,030,579	(991,046)
2064/65	14,746,338	24,830,374	-	24,830,374	23,304,222	16,272,489	(1,526,151)

Source: Budget and Policy Program (2060/61 to 2064/65)

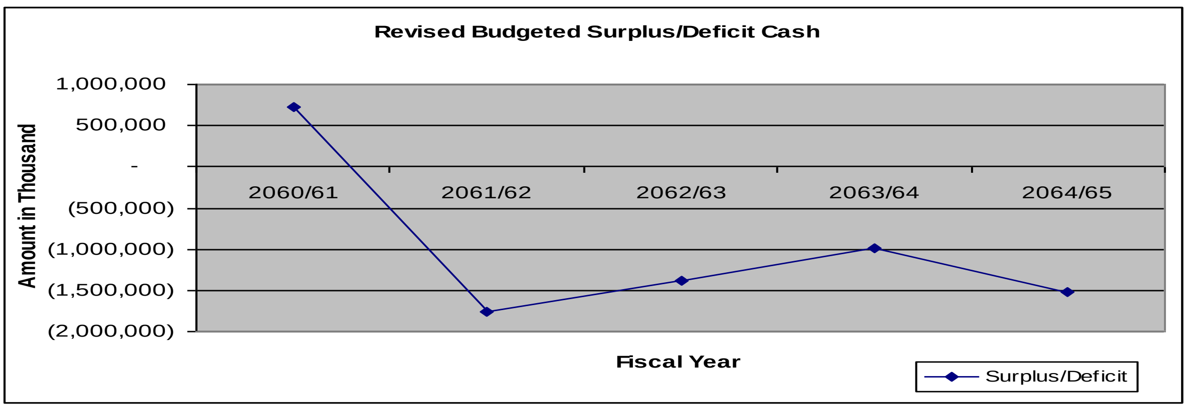
This table shows the surplus or deficit cash balance of revised budget. In the study period the revised budgeted cash is always deficit except F/Y 2060/61. F/Y 2060/61 the revised cash source is higher by Rs. 731,625 thousand than total Uses. In

F/Y 2061/62, 2062/63, 2063/64 and 2064/65 the revised cash is deficit by Rs 1,762,356, Rs.1,379,258 Rs.991,046 and Rs 1,526,151 thousand respectively.

NTCL budgetary committee has tried to minimize their deficit in the revision. In the approved budget the deficit amount is lead by Rs 7,255,826 thousand in F/Y 2062/63. But in the revised budget that year deficit amount is only Rs 1,379,258 thousand. In each year they have decreased deficit cash balance in the revision.

Figure 4.5

Trend line Showing Revised Budgeted Cash Surplus & Deficit in various F/Y



This chart also shows the surplus or deficit cash balance of revised budget. In F/Y 2060/61 cash balance is surplus. In the revised budget F/Y 2061/62 the cash deficit is highest.

4.2.2.3 Statement Showing Actual Cash Surplus/Deficit with Previous Cash Balance

Table 4.8

Actual Cash Surplus/Deficit with Previous Cash Balance

(Rs.In Thousand)

Fiscal Year	Opening Cash	Other (external & internal) Cash	Cash not incurred	Total Actual Cash Sources	Total Actual Uses	Closing Cash	Surplus/ Deficit
2060/61	10,097,737	11,843,217	566,574	22,507,528	10,090,042	12,448,819	1,753,175
2061/62	10,780,699	12,151,818	1,086,125	24,018,642	14,444,112	9,574,500	(2,292,294)
2062/63	9,574,500	1,650,177	-	26,084,677	14,063,052	12,021,625	2,447,526

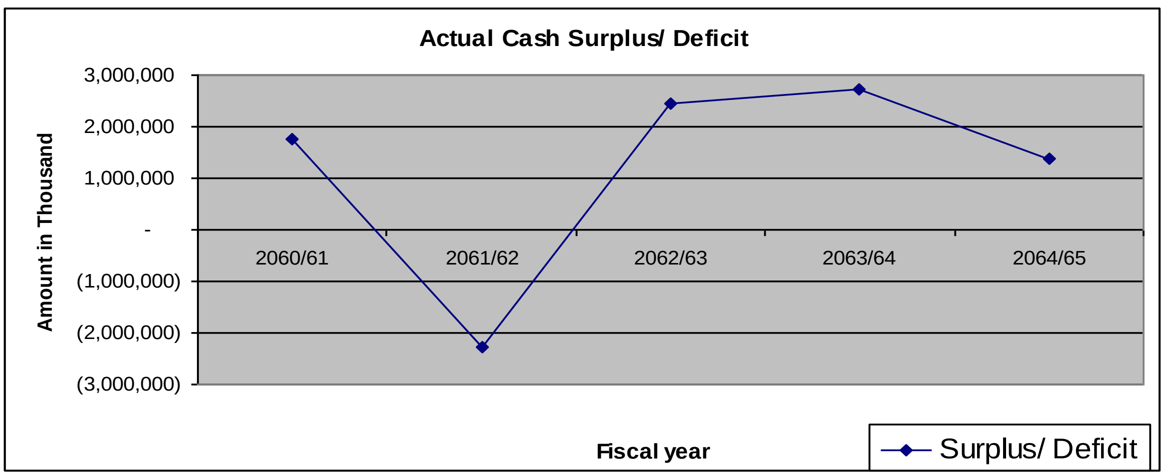
2063/64	12,021,625	20,482,552	-	32,504,177	17,757,839	14,746,338	2,724,896
2064/65	14,746,338	23,576,892	-	38,323,230	22,024,505	16,134,517	1,388,179

Source: Budget and Policy Program (2060/61 to 2064/65)

This table shows the surplus or deficit actual cash balance including previous years cash. In the study period the actual cash is always surplus except F/Y 2061/62. F/Y 2060/61 the total cash source is Rs. 22,507,528 thousand. Total actual uses cash is Rs. 10,090,042 thousand. This year closing cash balance is Rs 12,448,819 thousand. In total cash surplus by Rs 1,753,175 thousand. In F/Y 2061/62, the actual cash is deficit by Rs 2,292,294 thousand. In F/Y 2062/63, 2063/64 and 2064/65 the actual cash is surplus by Rs 2,447,526, Rs. 2,724,896 and Rs 1,388,179 thousand respectively. In F/Y 2063/64 the actual cash surplus amount lead on the study period.

Figure 4.6

Trend line of Actual Cash Surplus and Deficit



This trend line shows that Actual Cash is surplus is every year except F/Y 2061/62 in the study period. F/Y 2063/64 has lead in the surplus amount. Surplus amount is decreased in F/Y 2064/65

This study shows that previous year cash balance is prime sources of cash. If the previous year cash is not included, the cash balance is deficit in approved & revised budget but in the actual the cash balance is surplus. Including previous cash balance, the cash balance is deficit in approved & revised budget but in the actual the cash balance is surplus. NTCL budgetary committee has not proper study of the cash sources & cash uses. In actual cash surplus is significant amount. It indicates they have not proper utilized of cash. The erratic fluctuation suggest that the company hasn't been following a definitive policy regarding how much cash balance to hold at the fiscal year end.

4.3 Analysis of Liquidity Position

4.3.1 Analysis of Cash and Bank Balance

Management of cash is a critical task of management. Cash management ensures optimum cash balance holding. The cash refers to cash in hand, cash at bank and cash in transit, near cash assets such as marketable securities and time deposit in bank. Table show the amount of cash and Bank balance at the end of each fiscal year under study. The ending balance of cash is compared with proceeding year to analyze the fluctuation.

Table 4.9

Actual Cash and Bank Balance and Variations

(Rs. in hundred million)

Fiscal Year	Cash and Bank	Increase (Decrease %)
2060/61	107.8	6.76
2061/62	95.74	-11.19
2062/63	120.21	25.34
2063/64	147.46	22.67
2064/65	161.34	9.41

Source: Annual Report of NTCL

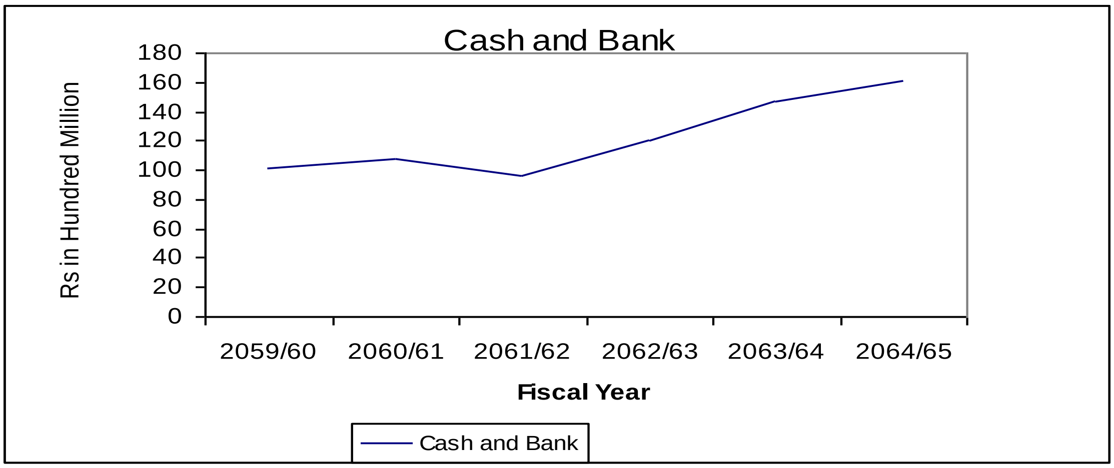
Above table shows the amount of cash and bank balance of NTCL during the period under study. The cash balance of each fiscal year and has been compared to preceding year to analyze fluctuations. Beginning from the year 2059/60, the corporation has an increasing trend in overall the year 2064/65. In fiscal year 2059/60 the cash balance of company was Rs. 100.97 hundred million, which increase by

6.76% to Rs. 107.8 hundred million in the year 2060/61. In FY 2061/62 decreasing ratio is 11.19% to 95.74 hundred million. In FY 2062/63, 2063/64 and 2064/65 the increasing ratio is 25.34%, 22.67% and 9.41% respectively.

Hence to calculate this interpretation it can be said that NTCL has satisfactory liquidity position and it has maintained proper cash and bank balances. The above table shows in line diagram

Figure 4.7

Line Diagram showing Cash and Bank Balance



The above line diagram shows that cash and bank balance is minimum in the year 2061/62 and maximum in the year 2064/65.

4.3.2 Analysis of Dispersion of Cash and Bank Balance

Table shows the dispersion in the cash balance at the year ends under study. Standard deviation is the measures of dispersion used for the analysis.

Table 4.10

Cash and Bank Balance and Dispersion

Fiscal Year	Cash and Bank (X)	$x = (X - \bar{X})$	$x^2 = (X - \bar{X})^2$
2060/61	107.8	-18.71	350
2061/62	95.75	-30.77	946.79
2062/63	120.21	-6.3	39.69

2063/64	147.465	20.95	438.90
2063/64	161.34	34.83	1213.12
N=5	$\sum x = 632.55$		$\sum x^2 = 2988.50$

Source: Annual Report of NTCL

Mean (X) = $\frac{\sum x}{N} = \frac{632.55}{5}$ =126.61 hundred Million

Standard deviation (σ) = $\sqrt{\frac{\sum x^2}{N}} = \sqrt{\frac{2988.5}{5}}$ = 24.44 hundred million

Standard deviation of cash balance shows that the company has been holding satisfactory cash balance. The cash balance held one sometimes increasing ratio is high and sometimes is low. Computed S.D. has been found Rs. 24.44 hundred million, which indicates the fluctuation pattern of cash balance.

Coefficient of variation (C.V.) = $\frac{\sigma}{\bar{x}} \times 100$

$= \frac{24.44}{126.51} \times 100$

=19.31%

Lower C.V. indicates higher consistency or higher homogeneity or highly stable cash balance, whereas higher. C.V. indicated just the opposite. C.V. 19.31% definitely signifies that the homogeneity on holding cash balance of NTCL is not stable.

4.3.3 Analysis of Cash Turnover Ratio/ Sales to Cash and Bank Balance

The cash balance of the company should be optimum to meet its current obligations in course of daily business transaction. The cash turnover ratio explains how quickly the cash is received from the sales, or in other words it measures the speed with which cash move through an enterprise's operation.

The ratio shows the number of cash balance turnover during the year. Higher ratio represents sound liquidity and vice versa. However, too high ratio indicates excess cash balance being held idle.

Table 4.11

Analysis of Cash Turnover Ratio

(Rs. in hundred million)

Fiscal Year	Sales	Cash and Bank	Ratio	Cash Conversion days
2060/61	88.55	107.8	0.8214	444
2061/62	91.94	95.74	0.9603	380
2062/62	110.58	120.21	0.9199	397
2063/64	147.51	147.46	1.0003	365
2064/65	169.15	161.34	1.0484	348
Total	607.73	632.55	-	-
Average	121.55	126.51	0.9501	387

Source: Annual Report of NTCL

Table shows that the highest cash turnover ratio is 1.0484 times in the fiscal year 2064/65. The average turnover ratio is 0.9501 times the lowest turnover ratio in the year 2060/61 is 0.8214 times. This table shows that cash turnover time in the corporation is not consistent.

The table also shows that the cash conversion cycle fluctuates 348 to 444 days. The average conversion day is 387. However due to unavailability of information regarding credit policy of the company, the days allowed to its customer was not known. So no precise analysis could be carried out for cash turnover cycle.

4.3.4 Analysis of Correlation between Sales and Cash and Bank Balance

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

Table 4.12

Sales Cash and Bank Balance and Correlation

Fiscal Year	Sales(X)	Cash& Bank(Y)	$x=X-\overline{X}$	x^2	$y=Y-\overline{Y}$	y^2	xy
2060/61	88.55	107.8	-32.99	1088.34	-18.71	350.06	617.24
2061/62	91.94	95.74	-29.6	876.16	-30.77	946.79	910.79
2062/63	110.58	120.21	-10.96	120.12	-6.3	39.69	69.04
2063/64	147.51	147.46	25.97	674.44	20.95	438.9	544.07
2064/65	169.15	161.34 4	7.61	2266.71	34.83	1213.12	1658.25
N=5	$\sum x$=607.73	$\sum y$=632.55		$\sum x^2$ = 5025.77		$\sum y^2$ = 2988.5	$\sum xy$= 3799.39

Source: Annual Report of NTCL

$$\text{Mean } (\bar{x}) = \frac{\sum \mathbf{x}}{\mathbf{N}} = \frac{607.73}{5} = 121.54$$

$$\text{Mean } (\bar{y}) = \frac{\sum \mathbf{Y}}{\mathbf{N}} = \frac{632.55}{5} = 126.51$$

$$\textbf{Karl Pearson's Coefficient of Correlation (r)} = \frac{\Sigma \mathbf{xy}}{\sqrt{\Sigma \mathbf{x}^2}\sqrt{\Sigma \mathbf{y}^2}}$$

$$= \frac{3799.39}{\sqrt{5025.77} \times \sqrt{2988.50}}$$

$$= \frac{3799.39}{70.89 \times 54.66}$$

$=0.98$

Above calculated correlation shows high degree of positive correlation between sales volume and cash Balance. The correlation coefficient 0.98 is practically significant, which is nearer to 1 to test the measurement of reliability of the correlation coefficient (V) the probable error can be shown as below:

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

$$= \frac{0.6745 \times (1-0.98^2)}{\sqrt{5}}$$

P.E $=0.0119$

6 (P.E) $=6 \times 0.0119$ $=0.0714$

Now, if R > 6 (P.E.) it is indicative of statistically significant positive correlation. The upper and lower limit within which the correlation coefficient expected to lie is given by:

Upper limit = r + P.E. = 0.98 + 0.0714 =1.0514

Lower limit = r – P.E. = 0.98 – 0.0714 =0.9086

So the coefficient of correlation expected to lie between 1.0514 and 0.9086.

4.4 Analysis of Liquidity Relation between its Variables

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

4.4.1 Analysis of Current Ratio (Current Assets to Current Liabilities

The current ratio of NTCL can be traced below:

Table 4.13

Current Assets, Current Liabilities and Current Ratio

(Rs. in hundred Million)

Fiscal Year	Current Assets	Current Liabilities	Ratio (times)
2060/61	218.33	41.23	5.30
2061/62	205.98	38.58	5.34
2062/63	225.26	44.75	5.03
2063/64	235.19	57.12	4.12
2064/65	241.8	79.15	3.05
Total	1126.56	260.83	22.84
Average	225.312	52.166	4.57

Sources: Annual Report of NTCL

Completed current Ration shows that the firm did not get any scarcity of the short-term settlement during the last 5 years period. The ratio of 4.57 times on an average indicates that the corporation has current Assets of Rs. 4.57 for the liabilities of Rs. 1. NTCL is able to pay its current liabilities at the time of requirement but company has much more idle capital. To conclude this interpretation it can be said that NTCL is facing the problem of idle capital because there is mismanagement of cash normally, current assets should have positive correlation with current liabilities. In other words, when current liabilities are higher the current Assets should also be higher so as to counter the problem of payment in short-tern business or vice versa. If the company has been able to maintain good liquidity position the correlation between these two variables should be significantly positive.

4.4.2 Analysis of Acid test or quick Ratio or Quick Assets to Current Liabilities

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

Table 4.14

Quick Asset, Current Liabilities and Quick/Acid Test Ratio

(Rs. in hundred Million)

Fiscal Year	Quick Assets	Current Liabilities	Ratio QA/ C.L
2060/61	215.77	41.23	5.23
2061/62	202.88	38.58	5.26
2062/63	221.97	44.75	4.96
2063/64	231.92	57.12	4.06
2064/65	237.64	79.15	3.00
Total	1110.18	260.83	22.51
Average	222.04	52.166	4.50

Sources: Annual Report of NTCL

Quick Assets = current Assets – Inventory

The standard quick ratio is 1:1, observing the figures in table to conclude that the ratio obtained are satisfactory for the all fiscal years however, ratios for all fiscal years have above the standard ratio and as such liquidity position creates the harmful situation for the company because there is possibility of mis-utilization of cash.

Overall the liquidity position is satisfactory through the ratio of fluctuate moderately. The average the ratio of fluctuates moderately. The average ratio is 4.5 higher than conventionally accepted ratio of 1:1 and thus it is satisfactory.

4.4.3 Analysis of Receivable /Debtors Turnover Ratio

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

Table 4.15

Sales Receivables Turnover Ratio and Average Collection Days

(Rs in hundred Million)

Fiscal Year	Sales (Rs)	Receivables	Ratio (Times)	Average collection
2060/61	88.55	26.68	3.32	110
2061/62	91.94	28.25	3.25	112
2062/63	110.58	30.99	3.57	102
2063/64	147.51	34.55	4.27	85
2064/65	169.15	34.82	4.86	75
Total	607.73	155.29	19.27	485
Average	121.546	31.058	3.85	97

Source: Annual Report of NTCL

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

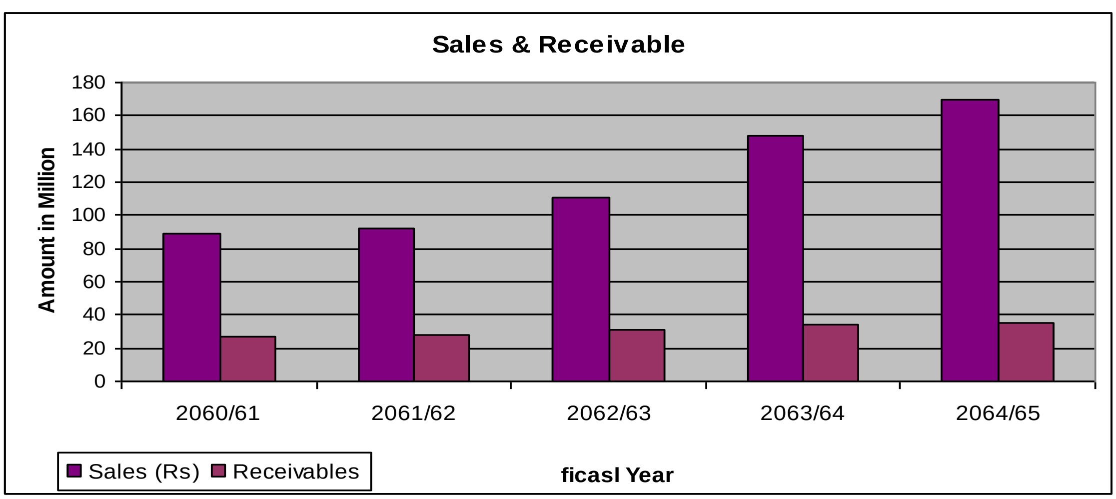
$$\text{Average collection days} = \frac{\text{Days in Year}}{\text{Debtors turnover ratio}}$$

Table shows that the receivable turnover ratio is fluctuating nature. The minimum time is in the fiscal year 2061/062 is 3.25 times where as higher ratio is in the year. 2064/65 is 4.86times. The sales to receivable ratios are 3.32, 3.25, 3.57, 4.27 and 4.86 in the fiscal year 2060/61, 2061/62, 2062/63, 2063/64 and 2064/65respectively.

Average collection days from 75 days to 112 days and overall the average of average collection days is 97 days. Since the information regarding credit days extended to customers are not available and more over such credit days are likely to very depending upon the nature of debtors. There is no absolute means of comparison available to compare the average collection days. So analysis regarding average collection days has not been carried out.

Figure 4.8

Graphical Presentation of Sales and Receivables



In the figure it shows that the receivable one in the increasing trend. In the year 2064/65 sales is maximum and receivable is also maximum in this year.

4.4.4 Analysis of Cash and Bank Balance to Account Receivable

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

Table 4.16

Cash and Bank Balance to Account Receivable Ratio

(Rs. in hundred million)

Fiscal Year	Cash & Bank Balance(Rs)	Accounts Receivable(Rs)	Ratio (%)
2060/61	107.8	26.68	404.05
2061/62	95.94	28.25	339.61
2062/63	120.21	30.99	387.90
2063/64	147.46	34.55	426.80
2064/65	161.34	34.82	463.35
Total	632.75	155.29	
Average	126.55	31.058	404.34

Source: Annual Report of NTCL

The table 4.13 shows the relation between cash and bank balance to account receivable. Cash and Bank Balance is 404.05% held than the Account Receivable amount in F/Y 2060/61. The percentage of cash and bank balance is 463.35% in F.Y. 2064/65 which is the highest ratio in study period. The percentage of cash and bank balance is in fiscal year 2061/62, 2062/63 and 2063/64 are 339.61%, 387.90% and 426.80% respectively. This has indicated that the cash balance held in excessive and has been idle. The erratic fluctuation suggest that the company hasn't been following a definitive policy regarding how much cash balance to hold at the fiscal year end. The average ratio is 404.34%.

4.5 Analysis of Cash Flow Statement

Cash flow statement prevails the cash and liquidity position of any organization. Cash flow statement describes the cash inflow, outflow and year and cash balance. Inflow of cash is known as source of cash and out flow in called use of cash. Cash flow statement is of great importance to both financing and investing activities of business enterprise and the consequent changes in its financial position for a period.

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

Table 4.17

Cash Flow Statement of Study Period

(Rs. in hundred million)

Fiscal Year / Particulars	2060/61	2061/62	2062/63	2063/64	2064/65
Cash flow from operating activities:					
Net Profit before tax	45.50	49.21	68.43	79.83	108.71
Adjustment:					

Depreciation	10.27	10.50	11.96	13.66	14.86
Defered Exp	0.32	0.40	0.40	0.58	0.71
Foreign exchange Gain or loss	0.28	2.51	(2.8)	5.26	0
Provision for staff bonus and incentive	3.09	2.81	3.22	4.89	3.52
Provision for pension and gratuity	2.34	3.12	2.41	2.86	(0.47)
Interest on loan	0.032	0.0069	0.011	0	0.10
Bad debts	0.0	-	0	2	-
Provision for liability	-	-	-	--	11.83
Provision for doubtful debt	2.25	-	-	-	-
Fixed assets written off	0.33	0.012	-	-	-
Income from investment and Bank deposit	(4.90)	(4.63)	(5.96)	(7.01)	(9.03)
Special charge	0.07	-	-	-	-
Optical Inventory	-	-	-	0.37	0
Provision for Exp on lost goods	1.63	-	0.085	1.22	-
Provision for earned leave	0.37	0.24	0.65	0.71	(0.28)
Royalty	1.26	4.91	5.91	8.11	-
Operating profit before working capital changes	62.91	69.11	84.33	112.46	122.9
Adjustment for working capital changes					
Increase/ Decrease in A/R	1.35	(1.57)	(2.73)	(5.56)	-
Increase/ decrease in stock	0.50	(0.54)	(0.34)	(0.34)	0.0065
Increase/ decrease in Interest Accrued	(0.18)	0.54	0.024	0.04	-
Increase/ decrease in advance	(2.47)	2.21	3.82	(2.72)	-
Increase in Advance Tax	(13.15)	16.02	(16.84)	(24.04)	-
Branch A/C (Adjust)	0.12	0.04	0.027	(0.13)	-

Increase/ Decrease in payable	3.32	2.26	(0.023)	0	-
Payment of Interest	(0.13)	0.0047	(0.023)	-	-
Payment of earned leave	(0.21)	(0.21)	(0.22)	(0.21)	-
Payment of pension	(0.21)	(0.23)	(0.30)	(0.35)	-
Payment of bonus and incentive	(3.61)	(3.84)	(3.01)	(2.48)	-
Payment of income tax	(7.66)	-	-	(0.58)	-
Last year adjustment	0.48	1.58	0.012	0.72	
Payment of Royalty	0	(4.50)	(3.70)	5.63	
Gratuity receive	0	-	0.000082	0.0000089	0.0000035
Working capital changes	(22.84)	(20.84)	(17.11)	(31.94)	24.91
Net cash flow from operating Activities(A)	**40.07**	**48.27**	**67.22**	**80.52**	**97.99**
Cash flow from investing Activities:					
Purchase of fixed assets	(15.49)	(19.57)	(22.43)	(16.67)	(30.47)
Decrease in WIP	(0.41)	(10.75)	(0.15)	(14.43)	(0.76)
Increase in deferred Exp.	0.053	(0.42)	(0.34)	(1.90)	-
Increase/ Decrease in investment	(3.83)	0.55	(8.18)	(7.26)	(34.86)
Income from investment and Bank deposit	4.90	4.63	5.96	7.01	9.03
Premium debenture	-	-	-	-	0.03
Net cash flow from inventing Activities(B)	**(14.89)**	**(25.95)**	**(24.83)**	**(33.26)**	**(57.09)**
Cash flow financing Activities:					
Receive in long-term debt	0.11	0.24			
Payment of long term debt)	(2.33)	(0.11)	(0.24	-	(12.013)
Payment of dividend	(5.88)	(3.00)	(4.33)	(14.75)	(14.99)

Payment of retained earning to Nepal Govt.	(10.0)	(29.00)	16.11	0	0
Capital reserve Adjusted to retain earning	0	0	0.023	0	0
Receipt of share capital	0.05	0	0	0	0
Net cash flow from financing Activities(C)	**(18.06)**	**(31.87)**	**(20.71)**	**(14.75)**	**(27.01)**
Net increase in cash (A+B+C)	7.11	(9.55)	21.67	32.50	13.88
Cash at Beginning	100.97	107.8	95.74	120.21	147.46
Foreign exchange Gain/Loss	(0.28)	(2.51)	2.8	(5.26)	0
Cash at end	**107.8**	**95.74**	**120.21**	**147.46**	**161.34**

Source: Annual Report of NTCL

4.5.1 Analysis of Operating Activities

Those transactions, which are considered in the determination of net income, are known as operating activities. All cash flows except related with investing and financing activities are classified as cash available from operating activities. Table 4.17 shows cash flow statement of the NTCL for the last five year 2060/61 to 2064/65. The operating result of the NTCL is increasing nature. The operating cash inflow range between Rs. 40.07 hundred million to 97.99 hundred million in study period. In the fiscal year 2060/61 the amount of cash flow is minimum 40.07 hundred million and in the fiscal year 2064/65 there is highest cash flow from operating activities is Rs. 97.99 hundred million. Similarly the cash inflow in fiscal year 2061/62, 2062/63 and 206364 are 48.27, 67.22 and 80.52 hundred million respectively this result clears that the NTCL has following a certain guidelines policy. There is consistency in the operating activities.

4.5.2 Analysis of Investing Activities

Investing activities are the acquisition and disposal of long term assets and other investment not included in cash equipments. The table shows that the investing activities result is negative that means the NTCL makes investment or outflow cash in the all fiscal year. The highest outflow is Rs. 57.09 hundred million in the fiscal year 2064/65 and lowest outflow amount is Rs. 14.89 hundred million in fiscal year 2060/61. In the fiscal year 2061/62, 2062/63 and 2063/64 cash outflow are Rs. 25.95, 24.83 and 33.26 hundred million respectively. There is no consistency in the investing activities

4.5.3 Analysis of Financing Activities

A company's transaction with its owners and long term creditors are typically called financing activities. IAS defines "Financing Activities are activities that the result in changes in the size and composition of the equity, capital and borrowing of the enterprises". The table shows that the company has issues share capital Rs. 0.05 hundred million in fiscal year 2060/61 during the study period. Financing activities has been observed to be satisfactory position of NTCL. The company has earned profit its operating and investing activities have been seen in good condition. There is cash flow in all fiscal year.

4.6 Policy Analysis:

Some of the provision, procedure and rules relating cash management practices and internal control are discussed and analyzed in this phase of study.

- Strategic plan for ten years have prepared with revision and amendment in every five years.

- Short term plans and annual programs have prepared to meet the objective of the strategic plan.
- Annual programs and estimated income/expenditure budget have presented in central office before three month by the beginning of fiscal year. Managing director, with revision and amendment present that budget in committee for the discussion and approval.
- To meet operating expenses, 25 % of actual annual expenses can be provided as advance budget in case the budget is not approved.
- Budget can be transferred and adjusted in different heads if it is required after getting prior approval of managing director or the committee.
- In case income and deposit, income amount have deposited in the company's fund account.
- Deposit or income amount received against services and from other source have deposited in the same day. If it is not possible, the cash have to deposit in next day which is mandatory.
- Deposits from customer or other parties received time to time have deposited in deposit account.
- In regards of account operation, transactions have done with Nepal Rastra Bank or other commercial banks as recommended by committee.
- Signature of minimum two authorized persons is required in such transaction.
- Telecom offices should transfer the income amount from office fund account to central fund account keeping maintaining with minimum balance amount in their offices.
- Final responsibility of all book keeping and accounting procedure relating income expenditure lies upon office in charge although account officer have to perform tasks and responsibility related to economic transaction under the order of office in charge and within economic rules of the company.

- All the transaction should be in due course within rules and procedure which has to be reported to the authority.
- After internal audit has to be done within specific time, all the reports and records have prepared within two months by the end of fiscal year for final audit.
- There is strict provision for the advance and advance clearance.
- All the records and account have kept systematically and in organize way following accounting policy of the company.
- There is provision of penalty and punishment for deregulating accounting rules and economic policy of the company.
- For the daily petty expenses Rs 25,000 and Rs 10,000 petty cash fund is established for central office, directorates, departments and account office respectively on reimbursement basis.

There are strict provisions regarding cash handling in the company. These legal provisions are mandatory for every authorized officer along with other subordinates staffs of the company. The decision making process will be lengthy due to compliance of time consuming rules and procedure as prescribed. Prompt decision cannot be made on the behalf of the company. The Policy study shows that the company is still suffering from centralization problem of management.

4.7 The Findings of the Study

On the basis of the different analysis, the following major findings have been drawn:

1. It is found that public sectors enterprises play backbone role for the economic development of the nation. NTCL is pioneering service oriented corporation of the Nepal which facilities conveying information quickly overlong distance with a cheep

cost. The effects of the communication icon the rural areas and their contribution to rural development are potentially extremely important, yet rather difficult to measure.

2. Specific goal and strategy for the organization are setup by the top level executive and the management is governed by Government of Nepal.

3. The study result implies that the main sources of cash of NTCL are international trunk telephone, local telephone and domestic trunk telephone both of PSTN and mobile.

4. The actual cash balances were higher than approved budgeted amounts. It shows that there was no effective implication of budgeted amount. The degree of deviation simply increased up to 2062/63 and decreased in 2063/64. It indicates positive trend in closing balance of cash. Similarly, actual cash balances were higher than revised budgeted cash amount. The degree of deviation was of insignificant amount. In year 2061/62 actual cash balance was smaller than revised budgeted amount. Revision of budget tried more to adjust the degree of deviation between actual approved budget amounts.

5. Nepal Telecom prepared and approved deficit budget each year from 2060/2061 to 2064/2065. When opening balance was not included in source side of budget, total budgeted cash uses was always higher. This situation was totally differed when the company revised its budget. The result of revision showed surplus position of cash. This shows that company was not able to meet the target of budget. Moreover, when comparison is made in 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. It could be done by keeping required level of closing cash balance in hand.

6. That 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. The total approved budget cash expenses could be met by total budgeted cash source and there were deficit in every year. When budget was revised, there was deficit in the study period.

7. The dispersion of cash and bank balance is Rs. 24.44 hundred million and coefficient of variation is 19.31%. That result, there is low consistency in cash and bank balance.

8. The percentage of cash and bank balance over account receivable is in average 404.34 over the period.

9. The average cash turnover in a year is 0.95 times which is in fluctuating trend over the study period.

10. The current ratio of NTCL is satisfactory throughout the study period. It is found within the range of 3.05 to 5.34. This shows that NTCL is efficient in maintaining the good liquidity position. The ratio helps to analyze the financial capacity of NTCL to repay current liabilities and short-term loan.

11. Cash flow position of company in different fiscal year was discussed in actual cash flow analysis portion of the study. From F/Y 2060/61 to 2064/65 cash inflow from operating activities was increasing year by year. Cash inflow position from operating activities was in gradual increasing trend from year 2060/61 to 2064/65. Cash outflow in investment activities was lower in year 2061/62 in rest of the study period there was increasing trend. This shows that company was extending it services and project. Again, it shows that company was in growing stage. Company had negative cash flow in financing activities from year 2060/61 to 2064/65 that means it was paying it long term liabilities. Company was paying back its loan and investing its fund simultaneously which become possible because of retained earning. Cash from operating activities was ploughed for the investment and loan payment. It shows strong financial position of company.

12. Cash Budgeting practice of NTCL is poor there is absence of any formalized system of cash budgeting.

13. NTCL does not follow the periodic performance reports.

14. NTCL has not adequately considered controllable and uncontrollable variables affecting the corporation similarly, the corporation is lacking the proper system of performance evolution of employees.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Cash is the life blood of every business organization. Without cash no businesses come to the establishment. So cash come to the position of the foundation of present business environment. From the early stage of human being when money came to the exchange system, they have been aware with management of money or cash. So the management of cash came to the exchange system when human mind has created money. After creating money in the exchange system, human being thought to manage cash in the best way in their daily house hold arrangement and business organization. And those business organizations come to the strong competitive position, which make the effective cash planning and best management of cash.

The idea of cash management has not come directly and independently in it's separate entity. Before 1970's cash management was affiliated with the economics.

Many more organization of the world was enjoying by making reasonable profit margin and many organizations before 1970's period survive without proper management of cash. But by the reason of inflation in 1970's the situation changed and many profitable enterprises were confronted with the problem of liquidity and even faced technical insolvency. The investors once again lost confidences in the credit worthiness of enterprises. As a result rising of funds, through the issue of shares from the present and potential investors become impossible. The liquidity problem also put pressure on the financial institutions making long term loans and forced them to rise to rates of interest very frequently. After 1970 and problem faced by the enterprises cash is considered as a major component of the working capital of the organization and started to manage cash in the best way then the separate entity of cash management has established. So the cash was come to the separate and independent entity by the 1970's inflation (Bajracharya, 1990).

Nepal Telecom Ltd. was established on 2032-03-01 B. S. under Nepal Telecommunication Act 2028 B.S. but name change on 2060-10-22 B.S under company act 2053 as a public utility sector enterprise to provide reliable and affordable telecommunication services throughout the country. It is exerting it's almost effort to provide communication services to larger scale of population. In the fiscal year 2062/63 NTCL has seen 20.28% growth in its revenue, 2063/64 is 33.39% and 2064/65 is 21.27% increasing revenue from the previous fiscal year. Fiscal year 2061/62 to 2064/65 revenue is double. These increased can be attributed to the growth of 44,693 and total line is 554566 till 2065/66 magh additional lines distributed throughout the country along with the strict surveillance in revenue collection from the domestic and international services.

NTCL has already installed 437,919 lines and distributed about 369,428 lines by the end of Chaitra 2061 B.S. Out of which almost 199,312 telephone lines are concentrated in the Kathmandu valley alone. With the beginning of the New Year 2062, the 30 years old NTCL is converted into a company and the changes in the new name as Nepal Telecomm Company Limited. The head office is located at Bhadrakali Plaza, Kathmandu.

The basic objective of this study is to analyze the cash management practices of the Nepalese organization. The present study is small step to examine the use of cash management practices in Nepal Telecommunication Ltd. The scope of the study is limited for five years period i.e. fiscal year 2060/61 to 2064/65. Analytical and descriptive research design is followed; mainly secondary data has been used. Financial tool like financial ratio have been used to analyze the data. Similarly, accounting and statistical tool have been also used.

The study concentrates in accounting and financial aspects. Thus it lacks the other area. This study has been divided into five different chapters: -introduction, review of literature, research methodology, presentation and analysis of data and summary, conclusion and recommendation.

5.2 Conclusion

The research study concludes that cash is one of basic elements for all organizations. All of the activities of any business are governed by cash. Above analysis reveals that the cash management of NTCL is satisfactory. The elements of cash management such as cash and bank balance, sales, inventory, receivables, advance deposit, cash turnover all are managed properly following definite rules and regulations. But there is not separate cash planning and budgeting technique adopted by the corporation.

The liquidity position of the NTCL is satisfactory level. The corporation has earned maximum profit over the study period. The correlation between different variables of liquidity and profitability is in the required situation.

NTCL is also trying to address social needs of the common people by organizing various programs but has not been very successful. The corporation has been facing some problems in corporation planning, participative management, evaluation of broad and long range objectives and co-ordination system in the organization. NTCL's management system needs change. NTCL is having another problem of government intervention. Most of the top level executive has linkage with political parties and they manipulate the decisions in the interest of the parties of their concern. Frequent intervention and instability of the government very negatively influence the performance of NTC. The corporation has ignored the environmental factors and it has also not adequately considered controllable and non-controllable variables affecting the corporation. Moreover, the corporation has no in depth analysis of the strengths, weakness and threats, where as this study can be concluded by listing out of the strength and weakness as follows:-

Strengths

- Government favors.
- Sufficient manpower.
- Sophisticated and technically enriched machinery.
- Leading as monopolistic organization in telecom sector.

Weakness/Threats:

- Lack of proper management.
- High government and political intervention.
- Lack of technical manpower and technical know how.
- Natural challenges such as heavy rain, lighting, storm, landslide, conflagration etc.
- The change and development of technology.

5.3 Recommendations

It is a suggestive framework based on analysis of the study. These recommendations will be useful to the management of the NTC, other concerned organization, individuals, institutions and other interested parties.

- While preparing budget, the Finance Department should analyze the actual past data and present needs of the programs applying systematic and scientific method of data analysis. Actual total uses of budget amount were not matching with budgeted target for expenses purpose. There must not be such vast deviation between actual and budgeted figure.

- NTCL should prepare cash budget on the basis of cash flow statement. The objective of preparing cash budget is to predict whether it any point of time there is likely to be an excess or shortage of cash. By finding excess or shortage of cash the company can manage the excess cash in investing short term assets and can manage cash deficit by borrowing short term loan.

- On the basis of study, there seems enough cash surplus than it was required. So there must be appropriate policy and strategies to use that surplus cash in profitable sector.

- There is high liquidity in the company. If the liquidity of the company is too high, it adversely affects the profitability of NTC. So, the company should hold the cash as required to run annual operating expenses. Idle cash should be utilized in appropriate sector; which can be for extending services of the company, investment in secured sector etc.

- Internal source is sufficient to finance whole budgeted expenses of the NT. It should not borrow loan from foreign institution because it involves cost.

- NTCL should prepare monthly trail balance. Which help to the organization, to take corrective measures on adverse financial situation in time.

- NTCL should give attention in account receivable management. Account receivable can be managed efficiently by designing an appropriate receivable management programme by trying to maximize collection efforts by using credit terms likes 2/10 net 30, 1/20 net 60, 3/5 net 20 etc.

- According to capital capacity, market situation of NTCL, it has not provided adequate service to its customers.

- Telecom technologies have been changing in the blink of an eye. Choices of customers are also changing in accordance with the changing technologies. In this competitive and complex situation, NTCL and its entire employer should focus more towards customer-service oriented. They have to provide promote and quality service because “customers are king” in case of any service-oriented organization. The mentality of all employees must be positive towards the organization.

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