# CHAPTER - I

# INTRODUCTION

## 1.1 Background of the Study

Nepal is one of the least developed countries, considered to be economically less privileged among the countries in the world with around 320 US dollar per capital income, 3.5% economic growth and 30% people are under the line of poverty. More than 76% or the total population are actively engaged on agriculture the contribution of agriculture sector to the gross domestic product is only 36% the sustainable development of the country industrial sector should be contribute more in GDP with involvement of more people. Now Nepal has adopted the path of economic development through liberalization for the economic growth of the nation.

The overall development of the nation depends upon the uplifting of the national economy which in turn depends upon the nature of its infrastructure. One of the basic elements in achieving self reliant growth of the economy for sustaining desired level of economic development is an accelerated rate of infrastructure development. Telecommunication has been identified as one of the three basic infrastructures apart from power and Roads, which is needed for the socio-economic development. Investment in telecom sector has multiplier effects. Telecommunication in the pre-requisite for other dimension of development and it plays an important role for other industries. Information and the facilities for accessing, processing and disseminating it in electronic form have become strategic resources as important as and, labors and capital. Thus telecom has dual role as both a traded product and service and as a facilitator of trade in other product and services. Moreover Telecommunication can have a dramatic impact on achieving specific social and economic development objectives.

In fact the development of telecommunication is not only vital for IT based industry but it has wide effect on entire economy of the country. Realizing the facts, Nepal Government has also recognized that the provision of world class Telecommunication infrastructure is the key to rapid economic and social development. For bringing telecommunication as the major infrastructure of development, government has implemented national communication policy (1992), Introduction economic policy in Nepal has gradually facilitated the private sector investment as a result multinational companies also showed their presence. At this context, to speed up the process of telecommunication development. The Telecommunication Act; 1997 was brought into action which has created the competitive atmosphere in telecom industry which resulted the private sector investment in the telecommunication industry. As size and sector of telecommunication grew up to IT, Telemedicine, e-governance, e-commerce, e-education etc the government brought the telecommunication policy; 2004 to address the entire telecommunication sector. At this point of time, there are various telecom based company which are actively doing their business. The major telecommunication service providers are Nepal Doorsanchar Company Limited, United Telecom Limited(UTL), Spice Nepal(P) Ltd. Other small players are STM Sanchar (P) Ltd and Global Plus. UTL is in the business of fixed basic telephone and limited mobility mobile telephone of wireless technology whereas Spice Nepal has the business of Mobile telephone. Both UTL and Spice Nepal have the focus in urban area only. STM has got the license to perform the business of V-Sat Telephone if 534 VDCs of eastern development region where as Global plus has been establishing Tele-centers in various part of Mustang District.

Nepal Doorsanchar Company Limited is popularly known with its name as Nepal Telecom as a trade mark. In Telephone services, Nepal Telecom is the key market

players as it holds about 64% of total no mobile phones and 89% of total no of fixed telephones. (NTA-MIS-2006, Ashad) It offers various services like basic telephone, Mobile telephone, internet, email, ISDN, ADSL, leased line etc. The primary objective incorporated by Nepal Telecom is to provide reliable and affordable telecommunication services in every nook and corner of the country. It has been able to provide its telephone services with STD and ISD services in all the 75 districts of the country. It has 245 public switch Telephone services is not accessed. Total telephone line distribution till Ashad 2066 BS is 4,293442. The installed capacity of PSTN telephone line is 726,980 on the other hand the organization is working hard to build the one million capacity of CDMA based fixed as well as mobile telephone and 3.5 million of GSM based mobile telephone within few years. The company has the telephone density of 15.58 per 100 people which one year ago was 10.12. There are 98,981 internet users and 4,504 email users subscribed from the company. There are 4,841 international Telephone circuits in operation and domestic microwave channels available are 4584E1. Similarly optical SDH-E1 link are in the figure of 1693 which are owed by the company. East west optical Fiber link is considered as information super high way and is expected to bring about IT revolution in the country. Nepal Telecom has high contribution in the total revenue of the nation which is about 4.2% of total national revenue. Considering the fact the company has got the felicitation of 'commercially Important Person' (CIP) from the government. The major portion of the total revenue of the company is from international subscriber dialing. These days due to fall in ISD tariff and illegal use of voice over internet protocol, there is high fluctuations in the trend of international revenue. Other services provided by Nepal Telecom in various parts of the country are Telegram, Telex, PCC, IVR, HCD, V-SAT, ISDN, ADSL, Leased line etc which too have their own important in revenue generation and serving the people for their information and communication needs.

The quality of services it offers is considered to be of high rational as compared to the other Telecommunication operators of the Asian region.

Thought the company was registered in Magh 2060 BS in office of the company register the company has got the formal inception in Baishakh 2061 after all the assets and liabilities of then Nepal Telecommunications Corporation (NTC) were transferred to it by formal notice of the government in gazette. Nepal Telecommunication Corporation was state owned enterprise established in 2032 BS to provide telecommunication in the nation. Before its establishment the telecommunication service were managed and distributed by Telecommunication Development Board both as an operator and authority, a government body under the ministry of communication. The main reason behind the changing of status of 'Nepal Telecommunications Corporation', a state owned enterprise as a public utility concern to 'Nepal Doorsanchar Company Limited (Nepal Telecom)' as a limited company is to transfer the government investment in the organization to the private sector. This was happened according to the policy of economic liberalization that the government has adopted. Nepal Telecom is just a hypothetical company as its entire ownership is yet held by government in the name of state owned entities. The change of organization status gave it autonomy to some extent though there is still interference of government in decision making process. The company is on the process of issuing share to the public and expected to enjoy full autonomy after its share disbursement to provide sector.

The capital structure of Nepal Telecom consists of only equity capital and at present Nepal Telecom has the authorized capital of Rs 25 Billion allocated to 250 million shares of each Rs 100 Par. Issued and paid up capital is Rs 15 Billion. Distribute 5% to its employee and 3.6% to the public.

The company at its top most level has a seven member Board of Director (BOD), Chairman is secretary of Ministry of information and Communication; Members are representatives from Ministry of information and communication, Ministry of Finance, Ministry of Law, Justice and parliamentary affairs and Citizen Investment Trust. Other members are Managing Director and representative from employees (Article of memorandum-2). Senior Management Committee is the second in hierarchy which is headed by Managing Director and constitutes senior executives of the company. Managing Director performs as a Chief Executive Officer (CEO). Under the Head Office there are 20 departments 4 directorates. The regional directorates are performing as fully fledged profit centers. Total approved post in NT are 7,088 but the total no of working manpower at present is 5,876 out of which 1,192 are officers and 4,684 are of Assistant level. (MIS-2033; Ashadh).

Industrialization and Information revolution has brought the globalization which is considered as the economic, technical and political integrations of the people in world. This is reality made the world as a global village. At the 21$^{st}$ century people in one corner of the earth is affected by the activities in another corner. Globalization made trade facilitation around the world. In this context , Nepal could not be alone without affiliating to the global Trade forum of World Trade Organization(WTO), hence became the member of World Trade Organization in 2004. Now Nepal is the member of other regional economic blocks BIMSTEC and SAARC. To become successful in present global environment of the business, organizations should be able to face the global competition in quality and cost of the product. In this context, Nepal has adopted the liberalized economy and hence giving up the ownership of state owned enterprises gradually by participation private sector in the ownership. The Government is promoting the private sector by various means which facilitated

the investment of private sector, as a result there are various players doing their business in Telecommunication industry as well.

In this context Nepal Telecom is facing competition in its services and seems to face stiff competition in future. Despite the competition rose, the demands of NT services are high but the company is not able to meet the customers demand due to various constraints like government intervention, slow procurement procedure, management style, work culture, mismanagement or resources etc.

Despite the various shortcomings the company plays vital role in achievement of desired level of national development goal by fulfilling the need reliable dimension of infrastructure development.

**Role of Nepal Telecom**

- To fulfill the need of distance communication
- To add a reliable dimension of infrastructure development
- To introduce emerging technology of communication
- To enhance economic development of nation
- To minimize the digital divide by serving in rural area

## 1.2 Focus of the study

Although, Nepal Telecom has better performance than other state owned enterprise of Nepal, in the sense that it is such a state owned enterprise which is operating under the net profit margin since the establishment of NTC, coming days are not so easy as earlier because it has to face stiff competition in the future. Financial statement show that the Gross Revenue as well as Net Profit has increased to a tune of higher rate

before 1998 but after that the increasing rate is lower in comparison to earlier years. Profitability alone could not show the overall financial position of the organization and to make the assessment of the organizational strength and weakness, ups and downs, opportunities and challenges financial performance analysis could be very important tool. Different financial indicator shows the capability of the organization to meet the various expectations of stakeholders of the company. The present study primarily focuses on the financial performance aspect of company in terms of its capacity on meeting financial obligation, generating rate of return, capital investment and internal revenue generation. The study confines to the problem of financial operation in Nepal Telecom on the basis of primary information and latest available secondary data. It will light upon the past financial strength and weakness faced by the company and will provide the guideline to improve the financial health.

## 1.3 Statement of the Problem

Nepal Telecom as a state owned enterprise has involved providing the cost effective and people friendly telecom services in the nation since long time. The organization has enjoyed monopoly in the telecom market and got policy privilege during long period. The scenario has completely changed after recent entry of telecom operators in the market. As those companies are involved in business of various telecom services the natural monopoly enjoyed by Nepal telecom tends to be ended. In the emerging liberalized policy that the government should not involve in the profit motive business except the sensitive affairs and facilitating jobs, private and multinational companies were established in the various part of the nation. Similarly the public enterprises were made private by making them private company or public limited company. In this scenario, Nepal telecom a state owned enterprise is going to issue its share to the public as a public limited company. In this context the analysis

of financial health of Nepal Telecom as a largest business enterprise in Nepal would have great deal of importance to the various stakeholders.

Nepal Telecom as a state owned enterprise; it is complicated to assess the efficiency with its socio economic development goals but every organization should have sound financial health to be efficient in the utilization and management of the resources. To make assurance of the strong financial operation of the company, the empirical analysis called financial performance analysis can have the great importance.

As most of the organization depends heavily upon the external and internal information, industrialization without proper access of telecommunication is difficult to imagine. Nepal is on the process of industrialization and people have the demand of new and new technology and telecommunication is now thought to be basic requirement in urban area and important means of development in rural sector. In this context, there is high demand of NT services and it does have little market competition. Despite the fact NT has not seen efficient to fulfill the demands.

The balance sheet shows the huge amount of cash and bank balance lying idle. Volume of sundry debtors seems to be very large. Various studies related to the NT pointed out the problem of its outstanding debt collection and high liquidity position. Further suggestion is that NT management should estimate immediate required finds and either invest the entire excess fund in marketable securities, or use that fund in refunding debt as the interest it pays for loan for capital investment is less than the rate of earning in liquid find. Studies have shown that the return on assets is not so good. Thus the problem toward which this study is directed is assessment of financial operation of Nepal telecom. So, the present research tries to solve the following research questions.

- What are sources of long term financing on Nepal Telecom?

- If assets utilization in Nepal Telecom is efficient?
- What is the position of Nepal Telecom to meet the current obligations?
- Is the company providing fair rate of return?

Financial analysis may not provide exact answer to these questions but it does indicate what can be expected in the future.

## 1.4 Objectives of the Study

Objectives of the study are guidelines by which the study can be conducted in a systematic manner. The main objective is to assess the strength weakness of Nepal Telecom. The specific objectives are:

- To analyze the financial performance of Nepal Telecom through financial analysis.
- To fore see the future trend of different financial ratios.
- To study the relation between sales with total cost, investment and profit.
- To offer the package of suggestions to improve the financial performance of Nepal Telecom.

## 1.5 Significance of the Study

Analysis of financial performance is a crucial part of financial decision making process of business enterprise. Poor financial management affects adversely on liquidity, turnover and profitability. It is required to measure the financial position of the enterprise periodically in order to ensure smooth function of an enterprise. Financial analysis assists in identifying the major strength and weakness of a business enterprise. It indicates whether a firm has enough funds to meet the

obligation, a reasonable accounts receivable collection period an efficient inventory management policy, sufficient plant property and equipment and adequate capital structure, all of which are necessary if a firm is to achieve the goal of maximizing shareholder's wealth. Financial analysis can also be used to assess a firm's viability as an ongoing enterprise and to determine whether a satisfactory return on investment is being earned for the risks taken.

Nepal Telecom is an enterprise of great national concern. It has to face stiff competition in near future as private players are already entered and there is open door to further enter. The government is going to participate to the private sector in its ownership. So the concerned parties are looking over its performance with keen interest. As a state owned enterprise it has the obligation of socio economic development with its profitability concern. So the insight over financial position of Nepal Telecom; leading telecommunication service provider in the nation will be useful to provide information to stakeholders and draw attention of concerned management regarding what can be done for further strengthening the financial position. Further it will be important for the following groups and individuals.

- Present and perspective customers
- Present and perspective investors
- Policy making authority
- Further researchers
- Government
- ICT based companies

### 1.6 Limitation of the Study

There are some limitations while undergoing this study. The main limitations of the study are:

- This study based on the 5 years financial reports.
- Only the financial aspect and financial structure analysis shall be made with bird eyes view, the other area such as Marketing, Human Resource, Research and Development aspects are also the combined input to measure the overall efficiency.
- Secondary data are collected from annual reports of the concerned enterprises, so the study suffers from all those limitations that are associated with those reports.
- The study makes the analysis of financial performance of Nepal Telecom; it may not be applicable to any other enterprise.
- There is time and budget limitation.

### 1.7 Organization of the study

The study is divided in the following five chapters as prescribed by the university.

Chapter I : Introduction

Chapter II : Review of Literature

Chapter III : Research Methodology

Chapter IV : Presentation and Analysis of Data

Chapter V : Summary, Conclusion and Recommendation

**Chapter one;** concentrates on introductory part of the study. It includes introduction of NT, historical background of NT, and development of Telecommunication system in Nepal as well as the statement of the problem, significance of the study, limitations of the study and chapter plan.

**Chapter two;** is review of literature under conceptual framework and review of previous studies have been covered.

**Chapter three;** is concentrated in research methodology, which deals research design, period covered types and sources of data, data collection procedure, method of analysis and analytical tools used.

**Chapter four;** is the major part of the thesis, which is related to presentation, analysis, and interpretation of data related to the financial performance of the NEA.

**Chapter five;** is the concluding chapter, discusses the summary, conclusion and recommendations.

Besides these, bibliography and annexes are included at the end of the thesis.

# CHAPTER - II

# REVIEW OF LITERATURE

The review of literature basically highlights the existing literature and research work related to the view of finding out what had been already explained by the authors and researcher and how the current research adds further benefits to the field of research. This review of literature had been classified into three subgroups as follow.

- Theoretical review
- Review of related studies

## 2.1 Theoretical review

Finance is concerned with those activities related to money. Previously finance was limited for procurement of long term fund. Due to industrialization, technological innovations and intense competition there has been a vast change in the philosophy of management. Likewise the discipline of financial management has undergone an unprecedented change. “Financial management is that managerial activity which is concerned with planning and controlling of the firm’s financial resources (Pandey, 2004:31).

Evaluation of financial performance is a study of overall financial position of any organization. It is closely related to the decision making. In the modern context, it gives vital support for the investment decisions, financing decisions and dividend decisions. Financial performance analysis is undergone with the help of periodically made financial statements of the firm.

### 2.1.1 Financial Statements

The financial statements are the means of presentation of a firm's financial condition and basically consist of two types of statements – the Balance Sheet & Income Statement. These are prepared to repost the overall business activities as well as financial status of the firm for a specified period to its stakeholders. These contain summary of information regarding financial affairs that is organized systematically. The top management is responsible for preparing these statements. "The basic objective of financial statements is to assist in decision making. The analysis and interpretation of financial statements depend on the nature and type of information available there in" (Pandy, 2004:31).

Hence financial statement refers to any formal and original statement that discloses the financial information related to any business concern during a period. The income statements and balance sheet usually prepared at the end of each financial year show the firm's position.

#### A) Balance Sheet

Balance Sheet is one of the basic financial statements of an enterprise. It is also called the fundamental accounting report. As the name suggests, the balance sheet provide information about financial standing or a position of a firm at a particular point of time usually end of the financial year. It can be visualized as a snapshot of the financial status of a company (Khan and Jain, 1993:13).

Balance sheet summarizes the assets, liabilities and owner's equity of a business at a moment of time, usually at the financial year. Balance sheet is a financial statement, which contains information regarding different capital expenditures made on purchase of assets on particular date and information regarding various sources of

funds acquired by the business concern to finance these assets and also the different sources of capital and liabilities at that particular point of time.

**B) Income Statement**

Income statement is designed to portray the performance of the business firm for specific period of time i.e. for a year or moth or quarter. The business revenues and expenses resulting from the accomplishment of the firms operation are shown in the income statements. It is the "Scoreboard" of the firm's performance during particular period of time. It shows the summary of revenues, expenses and net income or loss of a firm for a particular period of time. Income statement also serves as a true measure of the firm's profitability (Khan and Jain, 1993:15).

### 2.1.2 Financial Analysis

Financial analysis is the process of determining financial strengths and weaknesses of a company by establishing strategic relationship between the components of a balance sheet and profit and loss statement and other operative data (Panday, 1999:96).

In the word of Myer, "Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set of statements and a study of the trends factors as shown in a serious of statement"(Myer, 1961:4).

Financial statement analysis involves the use of various financial statements. These statements perform several things. First, the balance sheet summarizes the assets, liabilities and owner's equity of a business at a moment in time, usually the end of a year or a quarter. Next, the income statement summarizes the revenues and expenses of the firm over a particular period of time, again usually a year or quarter. While the

balance sheet represents a snapshot of the firm's profitability over time. From these two statements certain derivate statements can be produced, such as statement of retained earnings, a sources uses of funds statements and a statement of cash flows etc. (Van Horne, 1976:56)

"Financial analysis is the process of identifying the financial strength and weakness of firm by properly establishing relationship between the items of the balance sheet and profit and loss account. (Panday, 2004:560). Analyzing financial statements is a process of evaluating relationship between component parts of financial statements to obtain a better understanding of a firm's position and performance (Metcalf, 1976:157).

In the words of Raymond P. Neveu, "Financial statement analysis allows managers, investors and creditors as well as potential investors and creditors to teach conclusion about the recent and current status of a corporation". The checking of financial performance in a business deserves much attention in carrying out the financial position. It also requires to retrospective analysis for the purpose of evaluating the wisdom and efficiency of financial planning. Analyzing of what has happened should be of great value in improving the standards, technique and procedures of financial control involved in carrying out finance function.

The four basic statements contained in the annual report are the balance sheet, the income statement the statement of the retained earnings and the statements of cash flows. Investors use the information contained in these statements to form expectations about the future levels of earnings and dividends and about the risks of these expected values. Financial statement analysis generally begins with the calculation of a set of a financial ratios designed to reveal the relative strength and weakness of a company as compared to other companies in the same industry, and to

show whether the firm's position has been improving or deteriorating over time (Weston, 1996:306). Financial analysis is that sort of calculation which is done with the help0 of annual report. And the annual report. And the annual report would contain the essentials for such analysis. So the data retrieved from the annual report is indispensable for the financial analysis.

It is both an analytical and judgmental process that helps answer questions that have been properly posed. Therefore, it is means to end. Apart from the specific analytical answer, the solutions to financial problems and issues depend significantly on the views of the parties involved, the related importance of the issue and on the nature and reliability of the information available (Helfert, 1992:2).

Financial appraisal is a scientific evaluation of profitability and financial strength of any business concern. Financial appraisal is the process of scientifically making a proper, critical and comparative evaluation of the profitability and financial health of a given concern through the application of the techniques of financial statement analysis. A complete financial analysis and interpretation of financial statement involves the assessment of part business performance, an evaluation of the present condition of the business and the predictions about the future potential achieving expected or desired results (Jain, 1996: 36-37).

The analysis and interpretation of financial statement depicts the actual position of a firm regarding the objectives of that firm within a specified period of time. "Financial appraisal is a process of synthesis and summarization of financial and operative date with a view to get an insight in to the operative activities of a business enterprise. It is a technique of X-raying the financial position as well as progress of a concern" as observed by Robert H. Wessel.

According to Man Mohan "The main function of financial analysis is the pinpointing of the strengths and weakness of a business undertaking by regrouping and analysis of figures contained in financial statements by making comparison of various components and by examining their contents. This can be used by financial managers as the basis to plan future financial requirement by means of forecasting and budgeting procedures."

"Financial statement analysis involves a comparison of firm's performance with that of other firms in the same line of business which often is identified by the firm's industry classification. Generally speaking, the analysis is used to determine the firm's financial position in order to identify its current strengths and weakness and to suggest actions that might enable the firm to take advantage of the strengths and correct its weaknesses."(Weston, 1996:78)

"Financial analysis is used primarily to gain insight into operating and financial problems confronting the firms with respect to these problems. We must be careful to distinguish between the cause of problem and symptom of it. It is thus an attempt to direct the financial statements into their components on the basis of purpose in the one hand and establish relationship between these components and between individual components and totals of these items on the other. Along with this a study of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization." (Hampton, 1998:99)

Thus, Jain says "Much can be learnt about business performance and financial position through appraisal of financial statements, the appraisal or analysis of financial statements spotlights the significant facts and relationship concerning managerial performance, corporate efficiency, financial strength and weakness and

credit worthless that would have otherwise been buried in a maze of details." (Jain, 1996:37)

### 2.1.3 Objectives of Financial Analysis

Financial analysis enables us to explore various facts related to the past performance of business and predicts about the future potentials for achieving expected results. Major objectives of analysis of financial statement are to asses various factors in relation to the business firm as presented below;

- The present and future earning capacity or profitability of the concern.
- The operational efficiency of the concern as a whole, and of its various parts or departments.
- The short-term and long-term solvency of the concern.
- The comparative study regarding to one firm with another firm.
- The possibility of developments in the future making future forecasts and preparing budget.
- The real meaning and significance of financial data.
- The long-term liquidity of its fund.

### 2.1.4 Need of Financial Analysis

The need for the analysis of financial statement arises in order to address the following questions (Pradhan, 2000:47-48).

- How was the firm doing in the past? Was there any problem? If so, in what area?

- How it is doing at present? Is it doing better compared to the past performance, competitors and industry average? Is there any problem at present? If so, in what areas?
- What about the future? Is there any likely problem on the way in the future? What will its position be in the future?
- What corrective actions can be taken now to solve the problems and improve the performance? How will the recommendation of any course of actions or changes in the policy or practice help solve problems and improve the firm's position?
- What are the expected results of recommendations? Are there any improvements?

### 2.1.5 Significance of Financial Analysis

Significance of analysis lies on the objectives of financial analysis of any firm. The facts discovered by the analysis are perceived differently by different groups associated with the concern. The facts and the relationships concerning managerial performance, corporate efficiency, financial strengths and weakness and credit worthiness are interpreted on the basis such analysis leads management of an enterprise to take crucial decision regarding operative policies, investment value of the firm, internal financial control system and bargaining strategy for funds from external sources (Agrawal, 1993:582)

The parties that are benefited by the results or conclusion drawn from the analysis of financial performance can be numerated as ( Srivastava, 1993:58-59)

- Top Management

- Creditors
- Shareholders
- Economists
- Labor Unions

**A) Top Management**

The responsibility of the top management is to evaluate:

- Are the resources of the firm has been used effectively and efficiently?
- Is the financial condition of the firm sound enough?

On the basis of past facts, firms can anticipate their future. Hence, top management can measure the success of failure of a company's operation, determine the relative efficiency of various departments, process and produces appraise the individual's performance and evaluate the system of internal audit.

**B) Creditors**

The creditors can find out the financial strength and capacity of the borrower to meet their claims. Trade creditors are interested in the firm's ability to meet their claims over a short span of time. The suppliers of long-term debt focus upon the firm's long-term solvency and survival. A lending bank through and analysis of these statements can decide whether the borrower retains the capacity of refunding the principal and paying interest in time or not.

**C) Shareholders**

The share holders, who have invested their money in the firm's shares, are most concerned about the firm's earning. They evaluate the efficiency of the management and determine about the necessity for the change. In large company the shareholder's interest is to decide whether to buy, sell or hold the shares. They wish to buy the shares in case of sound performance of the firm where as they simply intend to hold the shares in the condition of satisfactory performance. But they are hurried to sell the shares in case of poor performance.

**D) Economists**

To diagnose the prevailing status of business and economy, economists analyze the financial statements (of any firm). The government agencies analyze them for the purpose of price regulation; rate setting and similar other purposes.

**E) Labor Unions**

Productivity is the synonym of well-motivated labors. Labor unions are interested to rights and benefits of labor to enhance the moral of labors. For further motivation they expect increase in wages, fringe benefits and so on. These benfits are affected by the company's profitability condition. Therefore the union assesses the financial condition of the firm to determine whether the firm is in the situation or not to make such facilities available.

### 2.1.6 Process of Financial Analysis

Financial analysis basically financial statement analysis, is a technique of answering various questions regarding the performance of a firm in the past, present and the future on the basis of past performance. The analysis recommends the steps to be taken by financial managers while undergoing the assessment of financial position.

The questions, that as elucidated above create the need to follow certain steps such as first identification and analysis of problem in order to come up with appropriate recommendations, and then to project the expected results and examine them if there are improvements before implementing such recommendations.

### 2.1.7 Types of Financial Analysis

In the words of Man Mohan "The nature of financial analysis differs according to the purpose of the analyst. A distinction may be drawn between various types of financial analysis either on the basis of material used for the same or according to the modus operandi of the analysis."

#### A) According to material used

#### I. External analysis

It is made by those who do not have access to the detailed records of the company. This group which has to depend almost entirely on published financial statements includes investors, credit agencies and governmental agencies regulating a business in a nominal way.

#### II. Internal Analysis

The internal analysis is accomplished by those who have access to the books of accounts and all other information related to the business. While conducting this analysis, the analyst is a part of the enterprise he is analyzing. Analysis for managerial purpose is the internal type of analysis and is conducted by executives and employee of the enterprise as well as governmental and court agencies which may have major regulatory and other jurisdiction over the business.

**B) According to Modus Operandi Analysis**

**I. Horizontal Analysis**

When financial statements for a number of years are reviewed and analyzed, the analysis is called horizontal analysis. As it is based on data from year to year, rather than in one date or period of times as a whole, this is also known as dynamic analysis.

**II. Vertical Analysis**

It is frequently used for referring to ratios developed for one date or for one accounting period. It is also called static analysis. Besides, the types of financial analysis on the basis of material used and modus operandi, SP Jain and K. L. Narang have categorized on the basis of objective of the study.

**C) According to Objective**

**I. Long Term Analysis**

This is made in order to study the long term financial stability. Solvency and liquidity as well as profitability and earning capacity of a business concern. For the long-run success of a business concern, this analysis helps in the long term financial planning.

**II. Short Term Analysis**

This is made to determine the short-term solvency, stability and liquidity as well as earning capacity of the business. This analysis is helpful for short term financial planning.

### 2.1.8 Techniques of Financial Statement Analysis

The fundamental of the analytical technique is to simplify or reduce the data under review to the understandable terms. There are various tools and techniques of financial statement analysis, each of which is used according to the purpose for which the analysis is carried out. The widely used techniques are as follows:

a. Ratio Analysis

b. Du Pont System of Financial Analysis

c. Common Size Analysis

d. Funds Flow Analysis

e. Cash Flow Analysis

#### a. Ratio Analysis

Ratio analysis has been used as a major tool in the interpretation and evaluation of financial analysis. The term ratio refers to the numerical quantitative relationship between the two items/variables. A ratio is calculated by dividing one item of the relationship with the other base. In financial analysis, a ratio is used as a yardstick for the evaluation of financial performance of the firm. "The analysis of financial ratio involves two types of comparison. First, the present ratio may be compared with the past and expected future ratios t\for the same company and second, the method of comparison involves comparing the ratios of one firm with those of similar firm or with industry averages at the same point, in time. Such comparison gives insight into the financial performance of the firm." Ratio analysis is widely in use. It may not give the entire picture of an enterprise. Ratios themselves are not conclusion. They are only the means. The ratios are calculated from data available in the financial

statement of an enterprise. The ratio completed from the available data are numerical, there should not be the tendency to regard them as a precise portrayals of a firm true financial status. For some firms, accounting data may closely approximate economic reality, for others, it is necessary to go beyond the figures in order to obtain their financial condition of performance.

### Types of Ratios

Several ratios calculated from the accounting data can be grouped into various classes according to financial activity of function to be evaluated. The parties interested in financial analysis are short and long term creditors, owners and management. Short-term creditor' main interest is in the liquidity position or the short solvency and profitability of the firm. Similarly owners concentrate on the firm's profitability and financial condition. Management is interested in evaluating every aspect of firm's performance.

In view of the requirement of several of ratios we may classify them into following four groups.

1) Liquidity ratios
2) Capital adequacy ratios
3) Activities ratios
4) Profitability ratios

**1) Liquidity ratios:**

Liquidity ratios measure the firm's ability to meet current obligations. It reflects the short-term financial strength of the business activities, two ratios under liquidity ratios, which are as follows:

a) Current ratio
b) Cash and Bank Balance to total Deposit Ratio

**2) Capital Adequacy Ratio:**

This ratio shows the proportion of debt and equity in financing the firm's assets. Long-term creditors, like debenture holders, financial institutions etc. are more concerned with the firm's long-term financial strength. The following ratios are included in capital adequacy ratio.

a) Shareholder's funds to total deposit ratio.
b) Shareholder's funds to total assets ratio.

**3) Activities Ratio:**

Activity ratios are employed to evaluate the efficiency with which the firm manage and utilizes its assets. These ratios are also called turnover ratio because they indicate the spiced with which the assets are being converted turn over into sales. Activity ratios, thus, involve a relationship between sales and assets.

a) Loan and advances (total credit) to total deposit ratio.
b) Investment to total deposit ratio.
c) Performing assets to total assets.

**4) Profitability ratio:**

The profitability ratios are calculated to measure the operating efficiency of a company. Beside management of the company, creditors and owners are also interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a reasonable return on their investment. This is possible only when the company earns enough profits.

The profitability position can be evaluated through following ratios.

1. Return on total assets (ROA)

2. Return on total deposit (ROD)
3. Return on risky assets i.e. loan and advances
4. Interest earned to total assets.

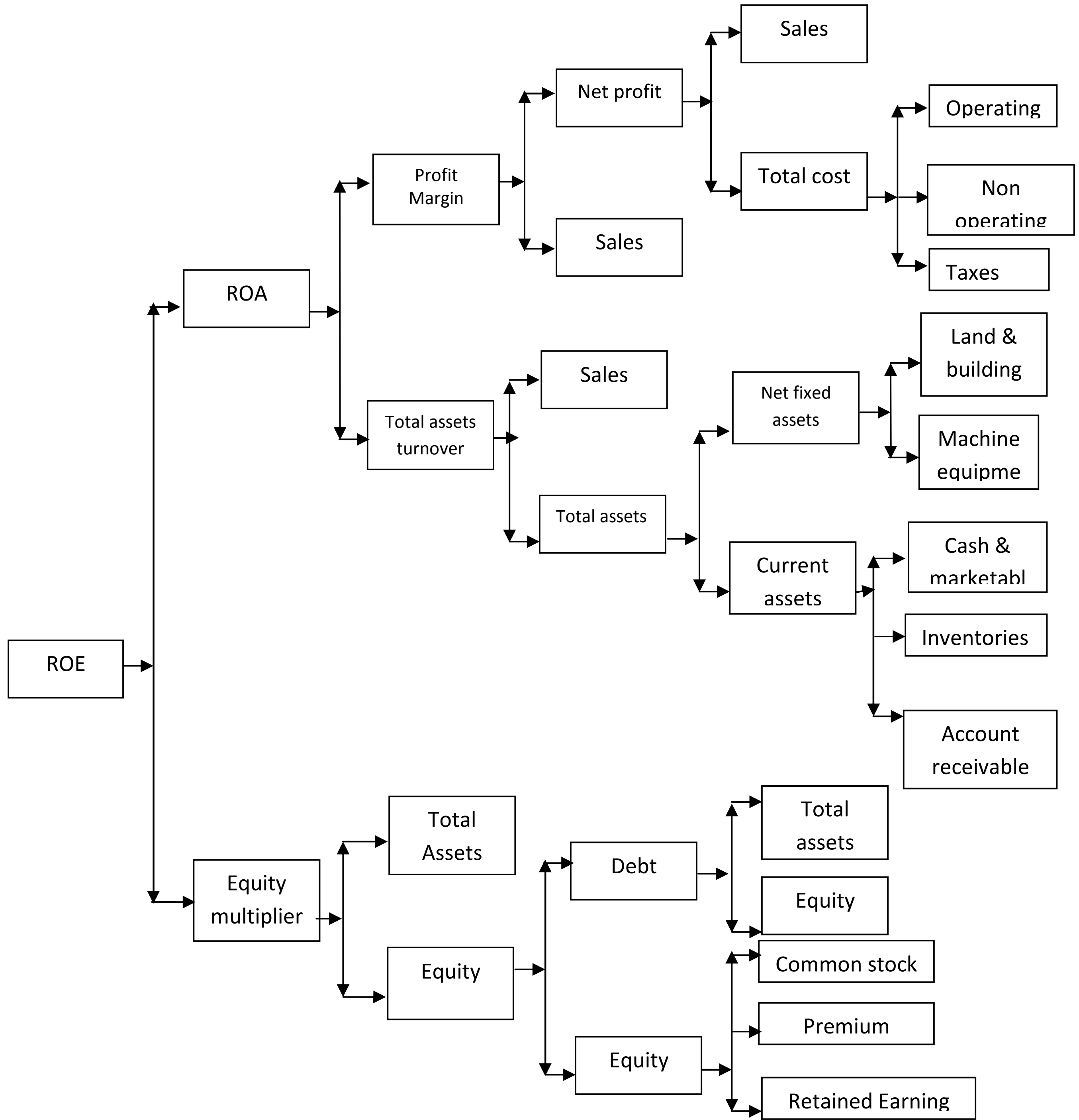
Ratio analysis is the process of determining and interpreting numerical relationships based on financial statements. A ratio is a statistical yardstick that provides a measure of the relationship between two variables or figures. As ratio are simple to calculate and easy to understand, there is a tendency to employ them profusely. While such statistical calculations stimulate thinking and develop understanding, there is a danger of the accumulation of a mass of data that obscures rather than clarifies relationship. The financial analyst has to steer a careful course. His experience and objectives of analysis help him in determining which of the ratios are more meaningful in a given situation.

**b. Du Pont System of Financial Statement Analysis:**

"The Du Pont system is designed to show how the profit margin on sales. The assets turnover ratio and the use of debt interact to determine the rate of return on equity (Weston, 1996:307)". The Du Pont system of financial statement analysis is developed by the financial experts of the Du Pond Company by putting together the effects of profitability, investment and the equity ratios. The approach is based on the relationship among the three basic areas of the firm such as (i) cost controlling area (ii) Assets management area and (iii) Financial leverage area. The directed to address the concern of the shareholders; hence its main focus is on the return on equity (ROE). The ROE is analyzed in terms of the factors that directed affect the ROE. The factors such as costs, assets utilization and leverage ratio are the grounds on which several test are made to see how the ROE is affected by such factors. The following modified Du Pont Chart presents the relationship among these factors and RO

**Figure**

**Chart of Du Pont System of Financial Analysis**




Source: Weston & Brigham, 1996:99.

For a business, the return on assets (ROA) is the rate of return on the total investment that includes both equity and debt capital. The ROA does not reflect the actual rate of return to equity holders. What reflects the return for stock holders is the return on their money (i.e. ROE), which is generally higher than the ROA. Thus ROA is an overall measure and reflects the overall performance of the company. The Du Pont system addresses the concerns of st5ockholder and focuses on ROE.

Du Pont equation defines ROE as a product of ROA and equity multiplier and ROA as a product of profit margin and total assets turnover.

ROA = ROA X equity multiplier

= Profit margin X total assets turnover X equity multiplier

= (Net profit/ sales) X (sales/total assets) X (total assets/equity)

**C. Common Size Analysis**

The common size analysis is another technique of analyzing the items of financial statement on relative terms. Under this method, the percentage of every item in the income statements and balance sheet is carried out of past several years to determine the performance trend of each item during the period under analysis. After analyzing the rising, falling or constant trend of efficiency in the business operation one can make comparison with the industry average of competitors.

The common size analysis is carried for a period of one or more. The income statement items are divided by sales and expressed as a percentage of sales. The balance sheets items are divided by total assets and expressed as percentage of total assets. These percentages for a company are compared with the standard measures such as percentages calculated in the same manner industry and the competitors.

**d. Funds Flow Analysis**

Funds flow analysis is the statement of changes in financial position of any organization that determines only the sources and used of fund between two dates of balance sheet. It is prepared to uncover the information that financial statements fail to describe clearly. It describes the sources from which finds were derived and used to which these funds were put.

The statement is prepared to summarize the changes in assets and liabilities resulting from financial and investment transactions during the period as well as those changes occurred due to the changes in owner's equity. It also uncovers the way of using financial resources during the period by the firm.

Method of preparing funds flow statement depends essentially upon the sense in which the term "fund" is used. There are three concept of fund: cash concept, total resources concept and working capital concept. According to cash concept, the word fund is synonymous with cash. Total resources concept refers total assets and resources as fund. The term 'fund' represents only to working capital on the stated last concept. However, capital concept of fund has gained wide acceptance as compared to the other concepts. Therefore any transaction that increases the amount of working capital is taken as source of fund while conducting funds flow analysis. Any transaction that decreases working capital is treated as application. But, any transaction that affects current liabilities or current assets without resulting any changes in working is not taken as sources or use.

**e. Cash Flow Analysis**

This statement is carried out to know clearly the several of inflow outflow of cash. It is different from funds flow analysis in the sense, the analysis relates to the movement of cash rather than the inflow and outflow of working capital.

It deals the causes of changes in cash position for the period of two balance sheet date in brief. At the time of preparing cash flow statement, only cash receipt from debtors against credit deals are considered as the source of cash. Similarly, cash purchases and cash payments to suppliers for credit purpose are regarded as the uses of cash. The same holds true for expenses and incomes outstanding and prepaid expenses are not to be considered under this analysis.

### 2.1.9 Limitations of Financial Analysis

Financial performance analysis is of great significance for investor, creditor, management, economist, and other parties having interest in business. It helps management to evaluate its efficiency in past performance and takes decision relating to the future (Jain, 1989-33). However, it is not free from drawbacks. Its limitations are listed below.

**(a) Historical nature of financial statements:**

The basic nature of statements is historical. Past can never be a precise and can never be perfectly helpful for the future forecast and planning.

**(b) NO subject for judgment:**

Financial analysis is a tool to be used by experts, analysts etc. to evaluate the financial performance of firm. That’s why it may lead to faulty conclusion if used by unskilled analyst.

**(c) Reliability of figures:**

Reliability of analysis depends on reliability of the figures of the financial statements under scrutiny. The entire working of analysis will be vitiated by manipulation in the

income statement, window dressing in the balance sheet, questionable procedures adopted by the accountant for the valuation of fixed assets and such other facts.

**(d) Single year analysis is not much valuable:**

The analysis of these statements relating to single year only will have limited use and value. From this, one cannot draw meaningful conclusion.

**(e) Result may have different interpretation:**

Different users may differently interpret the result derived from the analysis. For examples, a high current ratio may suit the banker but it may be the cause of inefficiency of the management due to under utilization of fund.

**(f) Change in accounting method:**

Analysis will be effective if the figures derived from financial statement are comparable. Due to change in accounting methods the figures of current period may have no comparable base, and then the whole exercise of analysis will become futile.

**(g) Pitfall in inter-firm comparison:**

When different firms are adopting different procedures, records, objectives, policies and different items under similar heading, comparison will be more difficult. If done, it will not provide reliable basis to assess the performance, efficiency, profitability and financial condition of the firm as compared to the whole industry.

**(h) Price level change reduces the validity of analysis:**

The continuous and rapid changes in the value of money, in the present day, economically also reduces the validity. Acquisition of assets at different level of

prices make comparison useless as no meaningful conclusion can be drawn from a comparative analysis of such items relating to several accounting periods.

**(i) Selection of appropriate tool:**

There are different tools of analysis available to the analyst. The tools to be used in a particular situation depends on skill, training, intelligence and expertise of the analyst. If wrong tool is used, it may lead to wrong conclusion. This may be harmful to the interest of business.

## 2.2 Reviews from Articles/Journals

Acharya (1999), in his article “Present status of NTC and privatization”, suggested to utilize its fund rather than accept high interest bearing loans for capital investment, since the rate of earning in liquid fund is less than the rate of interest it pays for the loan. In another article, again has suggested utilizing its internal resources. He concluded, “It has become possible to maximize profit utilizing internal resources with minimum cost. On the other hand, liquidity position of the corporation of the corporation is quite high as it keeps capacity to pay off whole debt at once if the circumstances so required.”

Neupane (2006), “increasing bad debt: matter of thinking “in his articles, pointed out some facts about the bad debt and doubtful debt of Nepal Telecom during 2005/56 to 2059/60 BS.

He found the amount doubtful debt is in increasing trend and bad debts are in fluctuation trend.

He concluded the following reasons;

- There is no clear strategies and vision to recover bad debt in time.

- There is lack of inter office coordination to collect receivables.
- It has seen that delay payment by government offices which has enhanced others to make delay payment or remain unpaid.
- There is lack of motivation to employees as they feel recovery of bad debt is a risky job.
- In some cases, there is unauthorized use of telephone service and organization has no effective control mechanism.

A study on the performance of PEs of Nepal was conducted by the Management Consultant Company. In the study it was concluded that the assets management, in general Current Assets Management in particular were weakest point in Nepalese PEs.

It was pointed out that financial performance of the PEs was poor and indicated management of the resources. The report also pointed out that because of the lack of operational objectives, application of the long run planning, use modern management tools. Capital budgeting and efforts towards cost control had not seen made so far. The study thus pointed that there was poor current assets management and management of resources in PEs of Nepal thereby causing poor financial performance.

Shrestha (2001), "Analysis of capital structure of selected enterprises" pointed out that majority of corporations in our country had large amount of government investment and they posses huge amount of assets. He also pointed out that the existing assets were not fully utilized in many corporations. As for example, according to him, it was found that there had been large amount of construction materials remaining without use in NTC, underutilized assets and holding of useless

assets by NTC and so on. It's the fund concept as effective system of conversion was what our corporate managers must think to change their traditional view of funds as "cash to cash" transaction.

Upadhaya (2007), in his article "Five years financial projection of Nepal Telecom" published in 3rd anniversary Souvenir 2007. He highlights Nepal Telecom have to invest on modern technology in time and optimum utilization of the technology so as to guide for the high return on investment. Only investing on modern technology may not be sufficient to get the required return on investment its optimum utilization is must otherwise the investment in new technology cannot give the return. Investment in modern new technology may turn riskier for the company. He had analyze past five year financial data of NTC and tried to project the financial future of the company. He found that the operating profit of NTC is slightly increasing this is due to decreasing of operating expenses. Study shows that NTC is successful to manage cost efficient. Return on assets is about 26% this means company is able earn 26% profit in terms of total assets. He projects the future five years financial performance of NTC by using regression analysis, judgmental approach. According to his projection growth rate on return will remain around 4.69%.

Strategies plan of 7th phase of NTc-2002 based on the analysis of the period 1996-2000, has drawn attention upon the investment environment of NTC as follow.

- Total income is increasing
- Liquidity is also increasing
- NTC has got sufficiently good fund for investment.
- There is high possibility of external funding to NTC as it has strong base to pay the loans back on due time.

## 2.3 Review of Related Dissertations

There are few researchers that have been made in the areas of financial performance of NTC. Most of the researchers have not been fully able to explain the financial condition of this organization. Thus an attempt has been made to review the available thesis, which is relevant to this study. Most research works have been done in the areas of manufacturing. But there are few in the areas of public utilities.

Adhikari (1995), on his unpublished thesis "An Evaluation of financial Position of Nepal Telecommunication Corporation" the main objectives of the study are:-

- To highlight the different aspects of NTC.
- To analyze, examine and interpret the financial position of NTC by using various techniques.
- To give workable recommendation, if there are weaknesses inherent in the corporation.

**The Main Findings were:-**

**1. Liquidity Position:**

There is no serious liquidity problem in NTC. The current Ratio of NTC is 1.15 times. The current assets of NTC are greater than current liabilities in each fiscal year. It shows the better liquidity position of NTC. But is does mean that there is not any liquidity problem in NTC. The current Ratio is affected by the huge amount of sundry debtors. The coefficient of correlation between current assets and current liabilities is 0.9904 and the probable error of the correlation is 0.0089. This means that both the variables are positively correlated and the corporation has been following a uniform policy to finance current assets and current liabilities.

**2. Utilization of Fixed Assets:**

NTC has invested the huge amount in purchasing the fixed assets but the revenue generating ability is very low in comparison to investment, which is only 0.04 times. This shows that there is o effective utilization of fixed assets in generating revenue.

**3. Utilization of Total Assets:**

There is increasing trend in the size of total assets but it is not significant. The total assets turnover ratio is very low. On an average, the total assets turnover ratio is only 0.22 times. Therefore, it can be said that the management of NTC is not able to utilize the assets properly.

**4. Receivables Management:**

From the analysis of financial statement, we know sundry debtors are the most sensitive sector for the management of NTC. In an average, the collection period is 132 days. Only in there years, the collection period is below the average debt collection period and in other three years the collection period is highly greater than the standard debt collection period. Because the receivables are taking long period to be collected, there is very low debtor's turnover ratio. Therefore, it can be inferred that the firm is not adopting proper receivables management policy. When referred to NTC management, it has set 90 days as standard collection period.

**5. Return on Total Assets:**

It is already mentioned that NTC has been operating under the profit position over the five years study period. But return on total assets percentage shows poor performance. On an average, NTC is able to earn only 3.88% rate of return on total assets. This shows the very low profitability position. In the first four fiscal years, it has not even been able to cover the average rate of retune on total assets. But it has

shown some improvements in the last fiscal year of the study period. In most of the fiscal years, the return is very low in relation to total assets. It means return has not increased as increment in the investment of assets.

Adhikari shows major issues and gaps as follows:

- There is no effective utilization of assets in NTC.
- NTC has been seriously facing the problem of outstanding debt collection. In each fiscal year, the collection period is too long in comparison to the allowed collection period.
- Profit earned by NTC is not sufficient to make it self-reliance in its activities.
- Increment of cost in each fiscal year is another important issue of NTC. It is not adopting the cost control tools and techniques.
- NTC is not able to fulfill the requirement of funds from the successful operation of the cooperation's activities. It has been talking considerable amount of loan to fulfill the requirement of funds.
- Another hottest issue is that NTC is not conducted under the business principle. The idea of privatization is coming into the telecommunication sectors boost. But NTC is not in a position to meet the competition with the private sectors.

Aryal, (1999), has submitted the Thesis entitled, "Working Capital Management in Nepal Telecommunication Corporation".

Objectives of the study were:

- To appraise working capital of NTC with respect to cash, receivable and inventory management.
- To know how far NTC is being able to utilize its assets properly.
- To evaluate the credit policy of NTC and its effectiveness.
- To study the relationship between sales and different variable of working capital.
- To shed light on creation and mobilization of fund in NTC.

**The Major Findings were:**

- NTC dept its large portion of profit as retained earnings. There are no systematic techniques used for managing the cash in NTC.
- The fund collected from different sources is used mainly to purchase of fixed assets. Large portion for purchase or current assets and in repayment of current liabilities some amount is used in purchasing marketable securities.
- The sizes of current assets were increasing rapidly than the fixed assets. This indicates the conservative policy in current assets. Size of working capital in NTC is far greater than the industry average.
- Cash and bank balance constitute the most important and largest element of working capital in NTC. About 36% of current assets is held as cash during the study period.
- The growth trend of current assets is highly increasing than the total assets and net sales. The increasing trend of receivable seems to be consistent with the

increase in net sales. But the size of cash has been increased in an inconsistent manner, which is the main cause of rapid increase of current assets.

- NTC kept excess amount of working capital. The volume of sales seems to be increasing every year. But rate of growth in working capital is higher than that of sales. Therefore, the turnover ratios are continuously decreasing every year.
- There has been excess liquidity position in NTC. The relationship between liquidity and profitability ratio does not follow any regular trend during that period. There is no correlation between liquidity and profitability. This condition does not meet the proposition that 'higher the liquidity lower the profitability'. Calculation of t-statistic shows that there is no significance difference between liq2uidity and profitability in NTC.
- There is no comprehensive long/mid term planning or control system of account receivable in the corporation. Langer amount is still due from many a last years and the amount of doubtful covers a significant portion of account receivable.

The Recommendations were as follows:

- Optimize liquidity position.
- Concentrate on collection of outstanding bills. As credit terms and standard are too much liberal in NTC. NTC should make appropriate decision regarding credit terms, credit standard and policy.
- Apply cash management techniques so as to invest excess fund in marketable securities.

- It would be better to pay off long term loan by using internal fund as NTC has large amount of internal fund lying idle on one hand and a significant portion of total fund is provided by high interest bearing loan on other.
- The financial position should be timely assessed through financial experts in order to know the financial strength and weakness.
- Long term and mid term planning and control system of account receivable and cash budget should be prepared.

Neupane D.K. (2001), had make study on the topic, "A study on Profit Planning in Nepal Telecommunication Corporation". The general objective was:

- To examine the present comprehensive profit planning system applied by NTC. The other specific objectives of the study were to highlight NTC analyze functional budgets adopted in the Corporation, to analyze: Ratio analysis and variances of NTC, etc.

The Main Findings were as follows:

- Budgets are prepared for the formalities.
- The corporation has no skilled planners.
- NTC has not adequately considered controllable and non-controllable variables affecting the organization.
- Actual sales line trends are always below the budgeted sales lines.
- Net profit of NTC is in increasing trend.
- Huge amount of cash is remaining idle.

- There is no clear-cut criterion to separate cost into fixed and variable.
- Turnover Ratio is not so good even it enjoys monopoly market.

The Recommendations were as follow:

- NTC must restructure its capital structure.
- Long term objectives should be reformulated.
- Estimation of fund is needed.
- CVP relationship should be considered while formulating profit plan.
- There should be timely address of the weakness shown by the evaluation.
- A separate profit planning department must be established.

## 2.4 Research Gap

The former research in telecommunication sector, there are only one stake holder telecom company NTC. Nowadays, there are many telecom service providers. In the past research period the total no. of shares of NTC owned by Government. Now government distributes the some portion of the shares to the public and its employee. Here are very high tough competitions between the telecom service providers. The organization has enjoyed monopoly in the telecom market and got policy privilege during long period. The scenario has completely changed after recent entry of telecom operators in the market. As those companies are involved in business of various telecom services the natural monopoly enjoyed by Nepal Telecom tends to be ended

# CHAPTER – III

# RESEARCH METHODOLOGY

## 3.1 Introduction

A simple words, research means to search or study about a phenomenon. The research in composed by‘re’ and ‘search’ where‘re’ means repeatedly or again and again, and ‘search’ means to investigate or find. Thus, search again and again is research. Research methodology is the way to solve systematically about the research problem. It is the application of scientific methods to the study of the universe.

The basic objective of the study is to appraise the true picture of the financial performance of Nepal Telecom and to recommend necessary suggestions for the improvements. Financial analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing the relationships between capital and assets of the organization. Financial analysis plays an important role in finding the real picture of financial performance of any organization. It provides an idea to the management while adopting the financial policies.

The study requires an appropriate research methodology so as to achieve its objectives. The purposeful methodology has been followed for the fulfillment of the stated objectives. The methodology consists of research design, nature and sources of data, data collection procedure, data processing, sample and population and tabulation and analytical tools used.

A human nature is so curious and always wants to do something new and different. For this, several questions raises in to the mind and to get the answers, one should gather information from different sources and analyze them to get the result. The researcher for gaining the knowledge about method of goal achievement, when we

desire, is known as research methodology (Joshi, 2001:12-13). Research methodology is the way to solve systematically about the research problem.(Kothari, 1990:39).

### 3.2 Research Design

Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions. In order to make any type of research, a well set research design is necessary, which fulfills the objective of the study. This research work is analytical and descriptive as per the need of classification and arrangement of research work.

Analysis is made on the basis of post, so the research is also historical in nature. The accumulated data is presented, tabulated and described systematically under specific heading so as to meet the objective of the study. Thus, research design is a plan to obtain the answer of research question through analysis of data.

### 3.3 Population and Sample:

Among the all service providing organization, Nepal Telecom is selected for the study which is the most crucial infrastructure developing organization. The objective is mainly focused with the financial performance analysis of Nepal Telecom. The study comprises financial statement i.e. only balance sheet and profit and loss account of Nepal Telecom. Thus, the entire fiscal years are considers as the population and the five years from 2004/2005 are taken as sample.

### 3.4 Nature and Sources of Data

The main source of data for the purpose of this study is the published financial statements the Nepal Telecom. The study is thus mainly based on the secondary data. It constitutes mostly the annual reports, which comprises balance sheet and profit and

loss account statement. Information has also been supplemented from various publications of Nepal Telecom. Through the study basically covers the secondary data. All other available published and unpublished materials concerning the study as well as some journal abstracts will also be used in the study. The data has been processed through editing, coding and classification of the collected data. Presented data have been analyzed using various analytical as well as descriptive financial and statistical tools. The reliability of the study and its findings depends upon the available secondary data.

The main sources of data and information are as follows:

- Website of Nepal Telecom: http://www.ntc.net.np
- Annual Reports and other published documents of Nepal Telecom.
- Economic Survey F/Y 2008/2009, Ministry of Finance, Government of Nepal.
- Various Planning Documents, National Planning Commission Government o of Nepal.
- Telephone inquiries.
- Materials published in paper and magazines.
- Various Research Studies, Dissertations and articles related to the subject, and other related books and booklets.

### 3.5 Data Collection Procedure

The main sources of data are secondary and they are collected directly from official records and published statements. The researcher has consulted concerned officials

for data and information. Verification and clarification of date has been done through discussion with the concerned authority.

### 3.6 Data Processing

The Balance sheet, income statements and the profit and loss account of the company for 5 years create from 2004/2005 are collected for the convenience of the study. Then all the raw data are processed and presented in tabular form with the help of simple arithmetic rules. Entire raw data are converted into approximate and condensed in the form of consolidated balance sheet and income statements. Most of the data have been compiled in one form and processed and interpreted as per the need of the study. The secondary type of data is presented for the analytical purpose after the tabulation of data. This type of data processing will help to present the clear situation of financial position of Nepal Telecom.

### 3.7 Analytical Tools Used in the Study

Since the study is concentrated on Financial Performance of Nepal Telecom some important financial as well as statistical tools and techniques are used for the analysis. The major tool employed for the analysis of this study is the ratio analysis that establishes the quantitative relationship of two variables of the financial statements. Ratio analysis is the basic tool used for the study and is considered to be the powerful tool of financial analysis. Beside ratio analysis, various other financial tools and statistical tools have been studied.

#### 3.7.1 Ratio Analysis

Ratio simply expresses a quantitative relationship between tow figures. It, in general is a statistical yardstick through which the relationship between two figures can be compared and measured. Ratio analysis is the process of determining, interpreting

and presenting the relationship of items and groups of items from the financial statements. Financial ratios help describe the financial conditions of a business firm, efficiency of its comparable profitability, and the perception of investors as expressed by their behavior in financial market. They often permit analysts and decision makers in partying post reveal strengths and weaknesses of the firm. The ratios are expressed as percentages, fractions, or proportions. The way a particular ratio is used depends on the need of a particular user. Through there are many categories of financial ratios, each serving the particular purpose is commonly categorized in four classes, liquidity, activity, leverage and profitability.

Ratio analysis may be done for a variety of purposes, which ranges from a simple analysis of the short-term liquidity position of the firm to a comprehensive assessment of the strengths and weakness of the firm in various areas. In other words, ratio analysis helps the analyzer to make quantitative judgment on the firms' financial position as well as performance.

It presents the actual situation of the organization and provides guidelines especially in spotting trend towards better or poor performance.

Ratio analysis has many managerial uses also. Ratio analysis helps in assessing the operating efficiency of the business and measuring the financial solvency. Not only these it helps in making quantitative judgment while decision making, taking connective action and forecasting future.

#### 3.7.1.1 Types of Ratio Used

a) Liquidity Ratio
b) Turnover Ratio
c) Profitability Ratio
d) Leverage Ratio

**A) Liquidity Ratios: -**

Liquidity ratios are used to analyze a firm's efficiency to met short-term obligations. Short-term liquidity includes the relationship between current assets and current liabilities. Two ratios are mainly used to measure the liquidity position.

i. Current Ratio
ii. Quick/Acid –test Ratio

**1. Current Ratio:**

Current ratio is the proportion of current assets to the current liabilities. Current ratio is also known as working capital ratio.

$$\text{Current Ratio} = \frac{\textit{Current Assets}}{\textit{Current liabilities}}$$

Current asset includes cash and those assets that can be converted into cash within a year such as account receivables, marketable securities, inventories and prepaid expenses. Creditor's bills for payment, accrued expenses, bank overdraft, income tax, liability, interest and long term debt within a year are included in the current liability.

Higher the current ratio, greater is the probability of timely and full payment for current liability, low ratio value indicates the firm will not be able to pay its future bills. For an instance, 2:1 ratio is considered acceptable for many firms.

**2. Quick/Acid Test Ratio;**

Quick ratio is the proportion of quick assets to current liabilities which is more accurate measure of liquidity rather than the current ratio. The quick ratio is calculated by dividing the total quick assets by current liabilities.

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

Quick Assets= Current- Inventories

Inventories and prepaid expenses are considered to be less liquid as the emphasis is on ready availability of cash. Quick ratio is considered to be better than current ratio for the test of financial soundness of a firm. As a guideline 1:1 quick ratio is believed optimum for many firms. Higher ratio indicates that the firm has excessive quick assets and indicates inefficient management. A ratio with a low value indicates that payments of bills on time would be difficult in future.

**B) Turnover Ratio:**

Turnover ratios involve comparison between the level of sales and investment of various assets. Funds of creditors and owners are invested in various assets to generate sales and profit. The better management of assets, that large amount of sales. The activity ratios are employed to evaluate the efficiency with which firm manages and utilizes its assets. A proper balance between sales and assets generally reflects that assets are managed well several activity ratios can be calculated to judge the effectiveness of asset utilization. Following four turnover ratios are generally used in practice.

1. Fixed Assets Turnover Ratio
2. Total Assets Turnover Ratio
3. Inventory Turnover Ratio
4. Average collection period

**1. Fixed Assets Turnover Ratio;**

Fixed assets turnover ratio measures the efficiency with which the firm utilizes its investment in its various net fixed assets. It is calculated as:

$$\text{Fixed Assets Turnover Ratio} = \frac{\textit{Total Sales in a Year}}{\textit{Net Fixed Assets in a Year}}$$

Net fixed asset is defined by difference between gross fixed assets and cost of depreciation. Generally high fixed asset turnover ratio indicates efficient utilization of fixed asset while inefficiency in utilization is shown by low fixed asset turnover ratio.

**2. Total Assets Turnover Ratio:**

Total assets turnover ratio indicates the sales generated per rupee of investment in the total assets.

$$\text{Total Assets Turnover Ratio} = \frac{\textit{Total Sales in a Year}}{\textit{Total Asset in a Year}}$$

Total assets constitute the fixed assets as well as current assets and investment of the firm. Generally higher turnover ratio shows efficiency in utilization of firm's scarce resources and vice-versa.

**3. Inventory Turnover Ratio:**

Inventory turnover ratio is defined as a ratio between sales and inventory.

$$\text{Inventory Turnover Ratio} = \frac{\textit{Total sales in a Year}}{\textit{Inventory in a Year}}$$

Inventory turnover ratio shows how rapidly the inventory is turning into receivable through sales. Generally, high inventory turnover is the indication of good inventory management and lower inventory. Turnover suggests an inefficient inventory management. A relatively higher inventory turnover ratio will overall a lower one that results frequent stock out and raises the cost of the firm.

**4. Average Collection Period:**

The average collection period provides the average turnover days of receivable and outstanding, the average times it takes to convert them into cash. The average collection period is computed in two steps.

a. Annual sales divided by number of days in a year (360 days) to get the average daily sales.
b. Account receivable is divided by daily sales to find out the number of days tied up in receivable.

$$\text{Sales per Day} = \frac{\textit{Total Sales in a Year}}{\textit{No. of Days in a Year}}$$

$$\text{Average Collection Period} = \frac{\textit{Receivable}}{\textit{Net Sales/365}}$$

Short average collection period shows the timely payment of debt but it may suggest an excessive and restrictive credit policy of firm. Too long average collection period indicates inefficiency of the firm in collection of receivables.

**C) Profitability Ratio:**

Profitability ratio measures success of a firm to achieve return of the total sales or of the investment. It gives information regarding how effectively the firm is being managed. Profitability ratio can be classified in to following major groups.

1. Net Profit Margin
2. Operating Expenses Ratio
3. Return on Total Asset.

**1. Net Profit Margin:**

The net profit margin establishes the relationship between net profits as sales.

$$\text{Net Profit Margin} = \frac{\textit{Net Profit in a Year}}{\textit{Total sales in a Year}}$$

Net profit, here is defined as firm's profit after taxes excluding other charges such as dividend and other provisions. The ratio measures the firm's ability to change each rupee sales into net profit. In other words, if the net profit margin is inadequate the firm will fail to satisfactory returns on owner's equity.

**2. Operating Expense Ratio:**

Operating expense ratio is the yardstick of operating efficiency, which computed by dividing operating expenses by sales.

$$\text{Operating Expenses Ratio} = \frac{\textit{Operating Expenses in a Year}}{\textit{Sales in a Year}}$$

Operating expenses constitute administrative and selling expenses excluding interest. In general higher operating ratio indicates the inefficiency due to higher operating cost in terms of sales; lower operating ratio is favorable since it will generate higher operating income, which will be sufficient to meet interest, dividend and other expenses of the firm.

**3. Return on Total Asset:**

Return on total assets ratio is the proportion of net income after taxes plus interest expenses to total assets.

$$\text{Return on Total Assets} = \frac{\textit{Net Income after Tax+ Interest}}{\textit{Total Assets}}$$

It is the rate of return earned by the firm for all its investments including the lenders. Higher return on total assets ratio shows higher earning of the firm in terms of its total assets. Lower ratio indicates unsound financial position due to level of return.

**D) Leverage Ratio:**

Financial leverage ratios are calculated to judge the long-term financial position of the firm. This ratio indicates the mix of fund provided by owners and lenders. The short-term creditors like bankers and suppliers of new material are more concerned with the firms' current debt paying ability on the other hand, long-term creditors like debenture holders; bondholders etc. are concerned with the firm's long-term financial strength. In fact, a firm should have a strong short as well as long-term financial position. As a general rule, there should be an appropriate mix of debt and owner's equity in financial mix of the firm's assets.

The manner in which assets are financed has a number of implications. Debt is considered to be more risky in compare to equity. The firm has a legal obligation to pay interest to debt holders, irrespective of the profits made of losses incurred by the firm. If the firm fails to pay the debt holders in time, they can take legal action against to get payments and in extreme cases can force the firm into liquidation. On the other hand employment of debts is advantages for shareholders in two ways, they can retain control of the firm with a limited stake, and secondly their earning will be magnified when the firm earns a rate of return on the total capital employed. The process of magnifying the shareholders return through the employment of debt is called financial leverage:

The leverage ratio consists of:

1. Total Debt to Total Assets Ratio
2. Debt-Equity Ratio

**1. Total Debt to Total Assets Ratio:**

The ratio between total debt and net assets is called, total debt ratio. Total debt will include short and long term borrowings from financial institutions, debentures, bonus, deferred payment arrangements for buying capital equipments and bank borrowings, public deposits and any others interest bearing loan.

$$\text{Debt Ratio} = \frac{\textit{Total Debt}}{\textit{Total Assets}}$$

**2. Debt-Equity Ratio:**

The ratio between total debt and net worth is called debt-equity ratio.

$$\text{Debt-Equity Ratio} = \frac{\textit{Total Debt}}{\textit{Net Worth}}$$

**3.7.1.2 Comparison of Standards**

"The Ratio analysis involves comparison for a useful interpretation of the financial statements" (Pandy, 2005:104). A Ration itself could not help much to the analyzer unless he/she makes comparison of it with some standards. There are many types of standards available for comparisons. The important ones are:

a. Past Ratios
b. Projected Ratios
c. Competitors Ratios

d. Industry Ratios

Comparison with past ratios of the company may be suitable to evaluate performance over a period of time of a company. It is known as time series analysis of trend analysis. Projected Ratios are future Ratios that are developed from projected financial statements of the company. Comparison with future ratios helps to find whether the company's performance is accordance with long term planning or not. Comparison with competitors' Ratio is also called cross-sectional analysis. The analyzer compares the company's performance with its competitors and finds the company's relative financial position/ performance. Industry ratio are always useful to compare the company's performance with whole the industry's as it is from the same industry. "This sort of analysis, known as the industry analysis, helps to ascertain the financial standing and capacity of the firm vis-à-vis other firms in the industry" (Panday, 2006: 105).

Among various types of comparisons, this research mainly uses the past ratios for meaningful analysis of NT's financial performance.

### 3.7.2 Statistical Analysis

Statistical methods are the mathematical techniques used to facilitate the analysis and interpretation of numerical data scared from groups of individuals of groups of observations from a single individual. The statistical analysis is one particular language, which describes the data and figures and complicated problems can be studied in very simple way. It becomes possible to convert abstract problems into figures and complex data in the form of tables.

Facts and figures about any phenomenon whether it relates to population, production, sales profit or any matters are called 'statistics'. In this sense, the term statistics is considered synonymous with figure. To the layman, the term statistics usually carries

only the nebulous and too often distasteful connections of figures. “The word statistics refer either to quantitative information or to a method of dealing with quantitative information” (Gupta, 1983:1). This Research applies the following statistical tools for the required financial analysis.

- Arithmetic Mean
- Correlation Analysis
- Regression Analysis

#### 3.7.2.1 Arithmetic Mean

The Arithmetic Mean is the most Popular a commonly used measures of central tendency, which represents the entire data by a single value. The Arithmetic Mean of values of variable in a given set of observation is the summation of all the values of the variables divided by the number of observation. In general, X1, X2, X3,…………….$X^n$ are given observations up to $N^{th}$ term, then their Arithmetic Mean (X bar) is given by:

X bar = (X1+X2+X3+………….. $X^n$) / N

Where, X bar = Mean, X1, X2, X3,…………….$X^n$ are the given set of observation and N = numbers of item observed.

#### 3.7.2.2 Correlation Analysis

Correlation Analysis is the statistical tool generally used to describe the degree to which one variable is related with another. The relationship is generally assumed to be a linear one. This analysis is also used in conjunction with Regression Analysis to measure well the regression line explains the variations of the independent variable.

It enables one to determine to the degree and direction of association between two variables.

For measuring Correlation, it is essential that the tow phenomena should have cause and effect relationship. In absence of such relationship, one should not talk of Correlation between them. But the Correlation in itself does not tell about the nature of the cause and effect of relationship between the variables. It is explained by Regression analysis.

There are several mathematical methods of measuring Correlation. The method developed by Carl Pearson, Popularly known as Pearson's co-efficient of Correlation, is most widely used in practice. Carl Pearson's co-efficient of Correlation measures the degree of association between two variables, say variables X and variables Y, and is denoted by the symbol 'r'. The formula for computing Pearson's correlation 'r' is:

$$r = \frac{Cov(XY)}{VAR(X)\ VAR(Y)} \quad \text{or}$$

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

Where,

X = Value of variable X

Y = Value of variable Y

The value of the co-efficient of Correlation obtained by the above formula shall always lie between +1 to -1. The following general rules are taken to interpret the value of ‘r’.

A. If ‘r’ = +1, it means that there is perfect positive relationship between the two variable.

B. If ‘r’ = -1, it means that there is perfect negative relationship between the two variables.

C. If ‘r’ = 0, it means that there is no relationship between the two variables i.e. the variables in question are independent.

D. The closer the value of ‘r’ to = +1 or -1, the closer the relationship between the two variables; and the closer the value of ‘r’ to 0, the less close is the relationship.

The correct interpretation of ‘r’ depends on the size of the sample, among the other things. Smaller the size of sample, less reliable is the result. So we need to test the statistical significance of ‘r’ before confidently inferring from it.

**Probable Error:**

The probable Error of the co-efficient of Correlation helps in interpreting its value. With the help of Probable Error, it is possible to determine the reliability of the value of coefficient in so far as it depends on the conditions of random sampling. The Probable Error of the coefficient of Correlation is obtained as follows:

P.E. $r = 0.6745 * (1-r^2)/\ \ n$

Where r is coefficient of Correlation and n is the number of pairs of items.

Interpretation:

1. If the value of r is less than the Probable Error, there is no evidence of Correlation, i.e. the value of r is not at all significant.

2. If the value of r is more than six times the Probable Error, the existence of Correlation is practically certain. i.e. the value of r is significant.

**3.7.2.3 Regression Analysis**

Regression analysis is used to estimate the likely value of one variable from the known value of the other variable i.e. in regression analysis were establish a kind of average irreversible functional relationship between the two variables. The cause and effect relationship is clearly indicated through regression analysis than by correlation. In other words, regression analysis is a mathematical measure of the average relationship between two or more variables in terms of original units of data. There are two types of variables in regression analysis viz. dependent variables and independents variables, the variable whose value is influences of is predicted is called dependent variable whereas the variable which influences the value or is used for prediction is called independent variable. The dependent variable is also known as explained variable while the independent variable is called as regress or predictor or explanatory variable.

**3.7.2.4 Lines of Regression**

If there exists a relationship between two variables, the points in the scatter diagram will more or less concentrate around a cure, called the curve of regression. If the curve is a straight line, it is called the line of regression and relationship between the variables is said by linear regression.

A line of regression is the line, which gives the best estimate to the value of one variable for any specified value of the other variable. Thus the line of regression is the line of best fit.

The term best fit is interpreted in accordance with the principle of Least Squares which consists in minimizing the sum of squares of the residuals or the errors of estimates, i.e. deviation between the given observed values of the variables and their corresponding estimated values as given by the line of best fit. If we have two variables X and Y, we shall have two regression lines, minimizing squares of error parallel to y-axis gives the equation of the line of regression equation of Y on X and minimizing the sum of squares of the errors parallel to X-axis, gives the equation of the line of regression of X on Y.

Regression Equation of Y on X.

It is the line, which gives the best estimates for the values of Y for any specified values of X.

Regression equation of Y on X is given by

$Y = a + bX$……………………….(i)

Where,

Y = Dependent Variable

X = Independent Variable

a = Intercept of the line

b = Slope of the line (It measures the average changes in the value of Y as a result of one unit change in value of X). It is also called regression coefficient of Y on X. In other words, it measures the rate of relationship.

The value of the constants a and b can be determine by solving following equation.

Y = n a + b  X…………………… (ii)

XY = a  X + b  X……………… (iii)

By calculating the equation no (i) and (ii), we get the values of 'a' and 'b' and substituting these value in equation (i), we get required estimated regression equation of Y on X.

**3.8 Methods of Presentation and Analysis**

Simple methods of analysis have been sued, data presentation and analysis has been divided into small sub-topics. Every result has been tabulated and clear interpretations have been given simultaneously. Details of calculation are presented at the end of the report. Tables, diagrams and graphs have been used to make report clear and easily understandable. Summary, conclusion and recommendations have been presented at the last chapter of the report.

# CHAPTER – IV

# PRESENTATION AND ANALYSIS OF DATA

## 4.1 Introduction

This chapter highlights the financial position of Nepal Telecom the tools used of the purpose of the analysis have been discussed in detail in the research methodology. Some financial and statistical tools have been used to evaluate the financial position of Nepal Telecom. The financial tools include ratio analysis between various variables where as the statistical tools include graphical presentation as well as regression analysis between some to the variables. The major variables like assets, liabilities, sales, debt, and equity are taken for the analysis. Moreover, the variables affecting to the financial performance are also considered in the study.

The analysis is made through the data presentations and various financial ratios reflecting the relationship among variables affecting financial performance with the help of ratio analysis, the financial performance of Nepal Telecom has been analyzed and interpreted so that the strengths and weakness of the Nepal Telecom as well as its historical performance and current financial condition can be determined.

The operational target for the current fiscal year and the impact it will leave in the financial position in coming future can be ascertained. The single ratio cannot indicate the favorable or unfavorable condition of Nepal Telecom. It should be compared with some standard for evaluation. Therefore the average ratio from the actual ratios of 7 years period have been calculated and used as a standard the ratios used have been described as below.

### 4.2 Financial Analysis

The main objective of this study is to examine the financial position/ performance of NTC. To meet these objectives, it is essential to present, analyze and interpret data contained in annual reports of NTC. The annual reports include balance sheet and income statement along with their supporting schedules. Analysis and interpretation of data is an attempt to find-out the implications and the significance of past activities/decisions in the light of present position and future prospect and to make suggestion for future action. In this study, the data are presented, analyzed and interpreted on the basis of research questions. The analysis part begins with a brief overview of financial position/performance indicators of the firm. The different types of tools and techniques that have been used to analyze the data are as follows:

- ❖ Ratio Analysis
- ❖ Trend Analysis
- ❖ Correlation/ Regression Analysis

**Ratio Analysis:**

Ratio analysis will help us to analyze the financial position of Nepal Telecom. The rationale of Ratio Analysis lies in the fact that it makes related information comparable. A single figure by itself has no meaning but when expressed in terms of a related figure, it yields significant inferences. Following are some of the ratios that will help us to analysis the financial position of Nepal Telecom.

#### 4.2.1 Liquidity Positions:

Liquidity ratios are used to judge an organizations ability to meet its short-term obligations. These ratios are comparison of short-term obligation with the resources

available and are measured by current ratio and quick ratio. The liquidity ratio reflects the short-term financial strength of a firm.

#### 4.2.1.1 Current Ratio (CR):

Current ratio measures the liquidity position of the organization. The standard current ratio should be 2:1 and it is also defined by the nature of the organization. As already discussed in chapter three, the current ratio is a measure of liquidity calculated by dividing the firm's current assets by current liabilities. The position of current ratio and the values of current assets and current liabilities according to NEA balance sheet are tabulates as below.

**Table 1**

**Calculation of Current Ratio:**

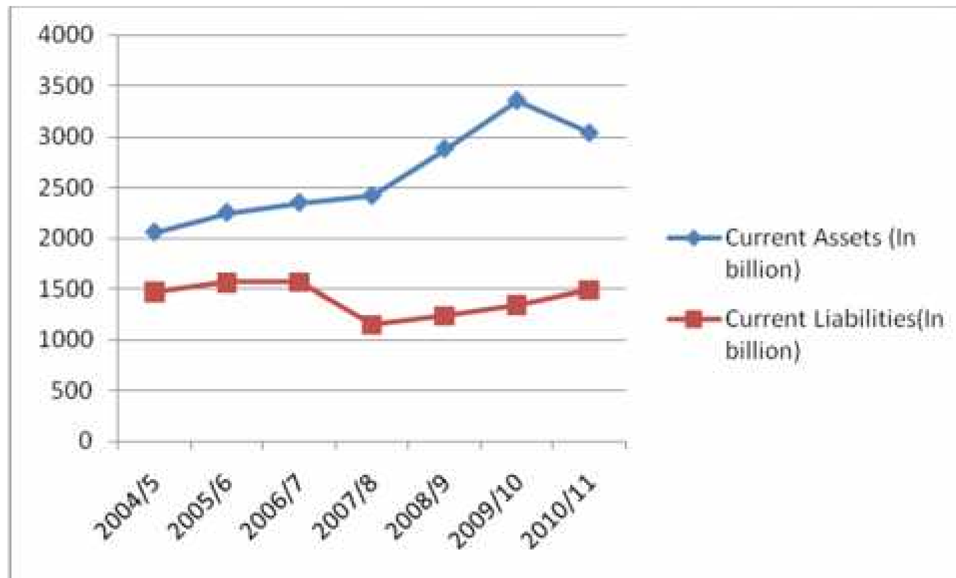
| Year | Current Assets | Current Liabilities | Current Ratio |
|---|---|---|---|
| 2004/5 | 20598352122 | 14722678059 | 1.3991 |
| 2005/6 | 22526522206 | 15665379821 | 1.4380 |
| 2006/7 | 23519753772 | 15675153717 | 1.5004 |
| 2007/8 | 24180638361 | 11518713104 | 2.0922 |
| 2008/9 | 28837295203 | 12406063044 | 2.3245 |
| 2009/10 | 33555576522 | 13462143285 | 2.4926 |
| 2010/11 | 30379035840 | 14941655119 | 2.0332 |
| Average Current Ratio | | | 1.8971 |

Source: Annual Reports of NTC

Table 1 show that the average Current Ratio is 1.8971 times during the study period. The ratio 1.8971 on an average indicates that the organization has current assets of

Rs. 1.8971 for each rupee of current liabilities. As current liabilities are paid from the current assets, it seems that NTC will be able to pay its current liabilities at the time of requirement. It ranges between a highest of 2.4926 times in F/Y 2009/10 AD and a lowest of 1.3991 times in F/Y 2004/05. The overall Ratio trend does not show any clear direction but in most recent years it seems increasing slowly and decreased F/Y 2010/11. While comparing with the average, one finds that in F/Y 2007/08 to 20010/11 AD the ratio is higher than the average and for F/Ys 2004/05 to 2006/07 AD the ratio is lower than the average. If we see the actual trend, we can find its current ratio is not so volatile over time.

**Fig. 1 Graphical Presentation of Current Assets and Current Liabilities:**




The graphical line of current assets and current liabilities above shows that the current assets is increasing from the starting year but decreasing after 2009/10. The current liabilities sightly increasing starting year and decreasing from 2006/07 and again increasing from 2007/08 to current year. With regard to its overall liquidity

position can be considered that there is satisfactory between current assets and current liabilities.

#### 4.2.1.2 Quick Ratio/ Acid Test Ratio

One defect of Current Ratio is that it fails to convey any information on the composition of the current assets of a firm. Quick Ratio is a measure of liquidity designed to overcome the defect of Current Ratio. The term quick refers to current assets which can be converted into cash immediately or at a short notice without diminution of value. The current assets excluded from this category are inventory and prepaid expenses. So, while calculating Quick Ratio for NTC, inventory is deducted from total current assets and divided by total current liabilities. Quick Ratio is supposed to be around 1:1 but this standard also should be defined by the nature of the organization.

Quick Ratio = Quick Assets/ Current Liabilities or

Quick Ratio = Current Assets – Inventory

**Table 2**

**Calculation of Quick Ratio:**

| Year | Quick Assets | Current Liabilities | Quick Ratio |
|---|---|---|---|
| 2004/5 | 2028/495358 | 14722678059 | 1.3780 |
| 2005/6 | 22197206771 | 15665379821 | 1.4169 |
| 2006/7 | 23192069630 | 15675153717 | 1.4795 |
| 2007/8 | 23764214211 | 11518713104 | 2.0630 |
| 2008/9 | 28657163600 | 12406063044 | 2.3099 |
| 2009/10 | 32713170700 | 13462143285 | 2.4300 |
| 2010/11 | 29420983274 | 14941655119 | 1.9691 |
| Average Quick Ratio | | | 1.8638 |

Source: Annual Reports of NTC

Table 2 shows that the average Quick Ratio is 1.8638 times during the study period. The Ratio of 1.8638, on an average, indicates that the organization has quick assets of Rs 1.8638 for each rupee of current liabilities. As average Current Ratio is 1.8638 throughout the study period, we can see little different between these two ratios. It means that the least liquid item among the current assets of NTC. In this respect, NTC can be said to have a good liquidity position to fulfill its current obligations when they become due.

The table shows that the Ratio ranges between a highest of 2.4300 times in F/Y 2009/10 AD and a lowest of 1.378 times in F/Y 2004/05 AD. The overall Ratio Trend shows the positive direction. While comparing with the average, one finds that in 2004/05 to 2006/07 AD the Ratio is lower than the average and in F/Y2007/08 to F/Y 2010/11 AD is higher than average.

### 4.2.2 Turnover Ratio/ Activity Ratio

Funds of creditors and owners are invested in various assets to generate sales and profits. The better the management of assets, the larger will be amount of sale. Activity Ratios are employed to evaluate the efficiency with which the firm managers and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. So, it involves a relationship between sales and assets reflecting whether assets are managed well. Several activity ratios can be calculated to judge the effectiveness of assets utilization.

#### 4.2.2.1 Inventory Turnover Ratio (ITR)

The Inventory Turnover Ratio (ITR) is the relation between the sales and the inventory of a firm. It indicates the efficiency with which the firm is able to use its inventory to generate sales revenues. Generally, the higher a firm's inventory turnover, the more efficient its inventory management is supposed to be. The inventory turnover is calculated by dividing sales by closing inventory. This ratio of NTC for the period of five years along with its straight line trend is calculated.

Inventory Turnover Ratio = Sales /Inventory

**Table 3**

**Calculation of Inventory Turnover Ratio:**

| Year | Operating Sales | Inventory | Inventory Turnover |
|---|---|---|---|
| 2004/5 | 9194297192 | 309856764 | 29.6727 |
| 2005/6 | 11058914824 | 329315435 | 33.5815 |
| 2006/7 | 14751623805 | 327684142 | 45.0178 |
| 2007/8 | 17889310266 | 416424150 | 42.9593 |
| 2008/9 | 22147582000 | 180131603 | 122.9522 |
| 2009/10 | 27162303314 | 842405822 | 32.2437 |
| 2010/11 | 29849161062 | 958052566 | 31.1561 |
| Average Inventory Turnover Ratio | | | 48.2262 |

Source: Annual Reports of NTC

Table 3 shows that the average Inventory Turnover Ratio of NTC is 48.2262 times for the past Rs. 48.2262 indicates that each rupee of inventory is generating sales of Rs. 48.2262. It ranges between a highest of 122.95 times in F/Y 2008/09 AD and a lowest of 29.67 times in F/Y 2004/05 AD. The overall ratio trend shows an upward direction particularly in the most recent years. If we see the actual trend, we can find that the inventory turnover ratio is mildly volatile over time. But for the last years, the ratio is increasing continuously. And since a high ratio is good from the view point of inventory utilization, the increasing ratio seems favorable for NTC.

### 4.2.2.2 Average Age of Inventory

Average Age of Inventory is just an alternate method of expressing the efficiency of the inventory management. Lesser the time the inventory remains in the go down,

better would be the inventory management. The Average Age of Inventory is calculated by dividing 360 by Inventory Turnover Ratio.

Average Age of Inventory = 360/ Inventory Turnover Ratio

**Table 4**

**Calculation of Average Age of Inventory (Days)**

| Year | Inventory Turnover | Average Turnover |
|---|---|---|
| 2004/5 | 29.67273353 | 12.1324 |
| 2005/6 | 33.58152594 | 10.7202 |
| 2006/7 | 45.01781415 | 7.99680 |
| 2007/8 | 42.95934870 | 8.38000 |
| 2008/9 | 122.9522284 | 2.92800 |
| 2009/10 | 32.24370000 | 11.1650 |
| 2010/11 | 31.15610000 | 11.5547 |
| Average | | 9.2682 |

Source: Annual Reports of NTC

Table 4 shows that the Average Age of Inventory of NTC for the Study period is 9.3 days. The average value of 9.3 indicates that an item of inventory purchased by the firm remains in the go down for 9.3 days before being released for sale or service to its customers (i.e. a typical item of inventory in the store is replaced every 9.3$^{th}$ day. The Average Age ranges between a highest of 12 days in F/Y 2004/05 AD and a lowest of 3 days in F/Y 2008/09 AD. The overall value trend shows a downward direction particularly in the most recent years. If we see the actual trend, we can find that the Average Age of Inventory is showing decreasing tendency over time,

particularly for the last four years. And since a lower value is good from the view point of inventory utilization, the decreasing value is a good indication for NTC.

#### 4.2.2.3 Debtors Turnover Ratio (DTR)

The Debtors Turnover Ratio (DTR) is the relation between the sales and the receivables of a firm. The analysis of Debtors Turnover Ratio supplements the information regarding liquidity of one item of current assets of the firm. It indicates the efficiency with which the firm is able to turn its credit sales into cash. Generally, the higher a firm's Debtors Turnover, the more efficient its credit management is supposed to be and vice-versa. This Ratio of NTC for the period of seven years.

Debtors Turnover Ratio = Sales/ Debtors

**Table 5**

**Calculation of Debtors Turnover Ratio:**

| Year | Sales | Debtors | Debtors Turnover Ratio |
|---|---|---|---|
| 2004/5 | 9194297192 | 2825943646 | 3.2535 |
| 2005/6 | 11058914824 | 3099495949 | 3.5680 |
| 2006/7 | 14751623805 | 3455511680 | 4.2690 |
| 2007/8 | 17889310266 | 3482610812 | 5.1368 |
| 2008/9 | 22147582000 | 3593205053 | 6.1637 |
| 2009/10 | 27162303314 | 4295998004 | 6.3227 |
| 2010/11 | 29849161062 | 3904742902 | 7.6443 |
| Average Debtors Turnover Ratio | | | 5.1940 |

Source: Annual Reports of NTC

Table 5 shows that the average DTR of NTC for the past seven years is 5.194 times. The average Ratio of 5.194 indicates that each rupee of investment in receivables is generating sales of Rs. 5.194. It ranges between a highest of 7.6443 times in F/Y 2010/11 AD and a lowest of 3.2535 times in F/Y 2004/05 AD. The overall trend of the Ratio does not show any specific direction. The ratio seems to be mildly volatile over time but it has shown marked improvements over the most recent years of the study period which, if maintained, can be a very good sign for the credit collection of the NTC. While comparing with the average, one finds that from F/Y 2008/09 and 2010/11 the Ratio is higher than the average and for F/Ys 2004/05 to 2007/08 AD the Ratio is lower than the average.

#### 4.2.2.4 Average Collection Period (ACP)

The average number of days through which debtors remains outstanding is called average collection period. Average collection period is just an alternative method of expressing the turnover efficiency of the receivables. Lesser the time the receivables remains due, better it is supposed to be. The average collection period is calculated by dividing 360 days debtors' turnover ratio.

Average Collection Period (ACP) = Debtors * 360/Sales

**Table 6**

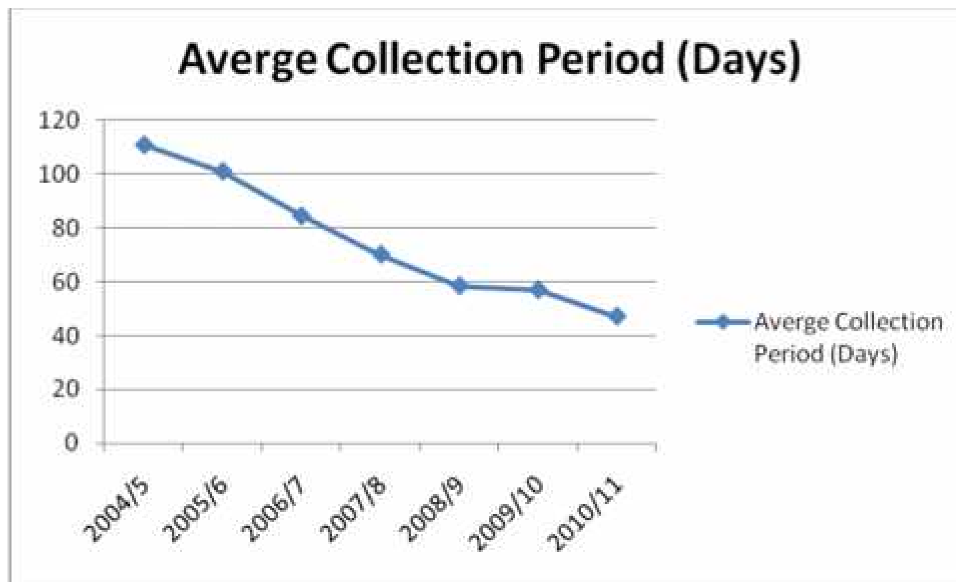
**Calculation of Average Collection Period**

| Year | Sales | Debtors | ACP(Days) |
|---|---|---|---|
| 2004/5 | 9194297192 | 2825943646 | 110.6490 |
| 2005/6 | 11058914824 | 3099495949 | 100.8977 |
| 2006/7 | 14751623805 | 3455511680 | 84.3286 |
| 2007/8 | 17889310266 | 3482610812 | 70.0832 |
| 2008/9 | 22147582000 | 3593205053 | 58.4061 |
| 2009/10 | 27162303314 | 4295998004 | 56.9220 |
| 2010/11 | 29849161062 | 3904742902 | 47.0912 |
| 7-Yearly Average | | | 75.4825 |

Source: Annual Reports of NTC

Table 6 shows that the Average Collection Period of NTC over the seven years of study period is 75 days. The average value of 75 indicates that an invoice of credit receivable remains outstanding for 75 days before being collected from the customers (i.e. a typical debtor of NTC pays his/her dues 75 days after the purchase of goods/consumption of services). The ACP ranges between a higher of 110 days in F/Y 2004/05 and a lowest of 47 days in F/Y 2010/11 AD. While comparing with the average, one finds that from F/Y 2004/05 to 2006/07 the values are higher than the average and for F/Ys 2007/08 to 2010/11 the values are lower than the average. If we take a close look at the actual trend, we can find that the Average Collection Period is showing decreasing tendency over the periods of the study periods. And since a lower value is good from the view point of collection efficiency, the decreasing value may be a good indication for NTC in coming years.

**Fig.2 Graphical Presentation of Average Collection Period:**




The above fig-2 graph shows average collection period of NTC. According to the trend line the average coolection period of NTC is decreasing from starting year. So this trend is very good condition for NTC.

### 4.2.2.5 Total Assets Turnover Ratio

The Total Asset Turnover (TATR) is the relation between the sales and the total assets of a firm. It indicates the efficiency with which the firm is able to use all its assets to generate sales revenues. Generally, the higher a firm's Total Asset Turnover, the more efficiently its assets said to be. The Total Assents Turnover is calculated by dividing sales by total assets. This Ratio of NTC for the period of five years along with its graphic trend is shown in the following table.

Total Assets Turnover Ratio (TATA) = Sales/Total assets

**Table 7**

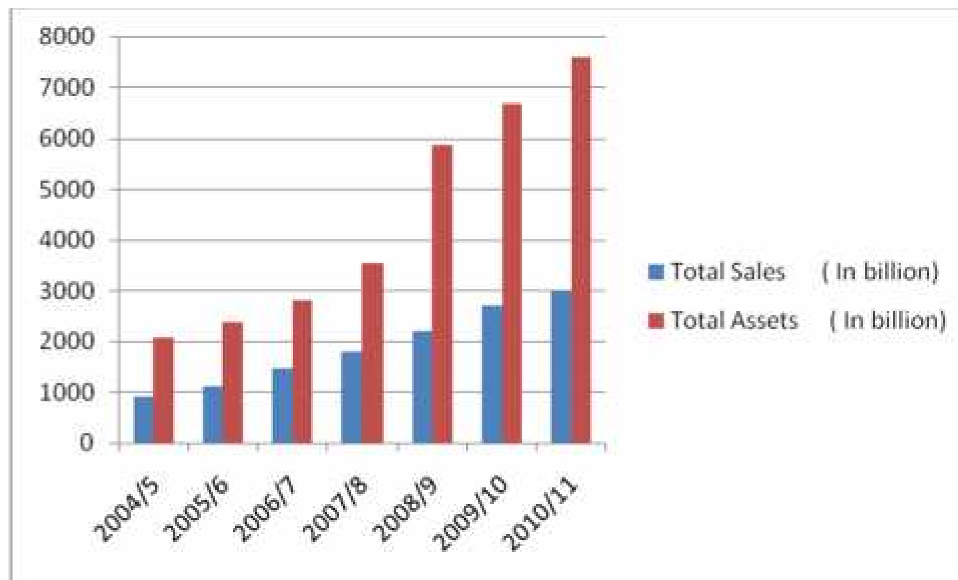
**Calculation of TAT Ratio:**

| Year | Total Sales | Total Assets | TA Turnover |
|---|---|---|---|
| 2004/5 | 9194297192 | 20850093671 | 0.4410 |
| 2005/6 | 11058914824 | 23686026881 | 0.4669 |
| 2006/7 | 14751623805 | 27985960845 | 0.5271 |
| 2007/8 | 17889310266 | 35343894199 | 0.5061 |
| 2008/9 | 22147582000 | 58686689120 | 0.3774 |
| 2009/10 | 27162303314 | 66835844174 | 0.4064 |
| 2010/11 | 29849161062 | 76021558762 | 0.3926 |
| Average of Total Assets Turnover | | | 0.4455 |

Source: Annual Reports of NTC

Table 7 shows that the average of the TATR Ratio of NTC for past seven years is 0.4455 times which is lower then the general standard average of at least 1.00 times for this line of business. The Ratio seems to be a little volatile as it ranges from 0.4410 in F/Y 2004/05 to 0.5271 in F/Y 2006/07 AD. The average Ratio of 0.4455 indicates that each rupee of the Ratio over the eight year period. Though the inventory Turnover Ratio is mildly volatile over time, but for the last 3-4 years, the Ratio is increasing continuously which shows the good trends for NTC. Unless the firm generates sufficient volume the further investment in assets will not be justified.

**Fig. 3 Graphical Presentation of Total Sales and Total Assets:**




Total assets of the NTC are increasing gradually in every year and the sales of NTC are increasing slightly than assets. The average return on total assets of NTC indicates that there has been up planned investment in the assets of NTC without making proper analysis of cost and benefits attention did not seem to be paid in the revenue generation aspects of assets and their effective utilization as well as the costs of investments. The main cause of decrease in total assets turnover ratio was in the low volume of sales in comparison to its investments made. NTC has remaining idle assets or they were not properly utilized. The result of total assets turnover ratio does not seem to be satisfied.

### 4.2.2.6 Fixed Assets Turnover Ratio (FATR)

The Fixed Assets Turnover measures the efficiency with which the firm has been using its fixed (earning) assets to generate sales. This Ratio shows the relationship

between sales and net fixed assets of a firm. Generally, higher turnover is preferred because it reflects greater efficiency in the utilization of fixed assets.

The Fixed Assets Turnover is calculated by dividing the firm's sales by its net fixed assets. This Ratio of NTC along with its graphical trend for the period of five year is shown as follows:

Fixed Assets Turnover Ratio (FATR) = Sales / Net Fixed Assets

**Table 8**

**Calculation of Fixed Assets Turnover Ratio:**

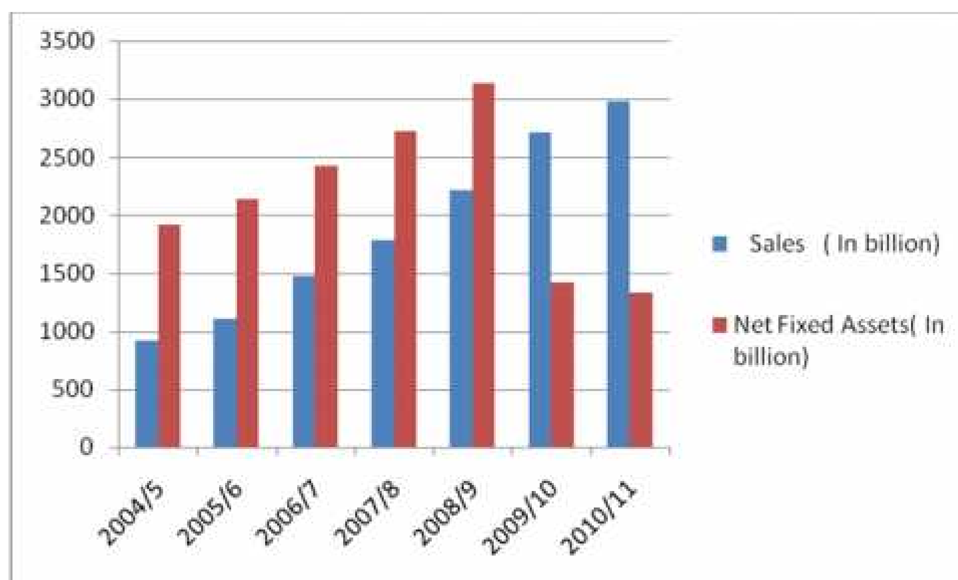
| Year | Operating Sales | Net Fixed Assets | FA Turnover |
|---|---|---|---|
| 2004/5 | 9194297192 | 19168413096 | 0.4797 |
| 2005/6 | 11058914824 | 21412058749 | 0.5165 |
| 2006/7 | 14751623805 | 24234180530 | 0.6087 |
| 2007/8 | 17889310266 | 27241988330 | 0.6567 |
| 2008/9 | 22147582000 | 31389578442 | 0.7056 |
| 2009/10 | 27162303314 | 14143908061 | 1.9204 |
| 2010/11 | 29849161062 | 13310852881 | 2.2425 |
| Average of Fixed Assets Turnover | | | 1.0186 |

Source: Annual Reports of NTC

From the above table 8, it is clear that the Fixed Assets Turnover of NTC is in increasing trend. It ranges from a minimum of 0.4797 times in F/Y 2004/05 AD to a

maximum of 2.2425 times in F/Y 2010/11. While comparing with the average, one finds that in initial two years, the ratios are below the average and for later three years, the ratios are above the average. The average ratio is 0.5934 times which indicates that each rupee of investment in fixed assets is generating sales of 0.5934 paisa. Although average of this ratio is 1.00 marks, the good aspect is that is showing a clear upward trend in later half of the study period. It can be safely termed that the company's efficiency in using its fixed assets is wealth and going toward the right direction in the most recent years. Last two year's turnover ratio is better than the previous years. It shows the good condition of the NTC.

**Fig.4 Graphical Presentation of Sales and Fixed Assets:**




The above fig.4 shows the real figure of the NTC. From starting year to F/Y 2008/09 net fixed assets is increasing and last two year's figure shows the net fixed assets are decreasing.

### 4.2.2.7 Working Capital Turnover Ratio (WCTR)

The Working Capital Turnover Ratio measures the efficiency with which the firm has been using its net current assets (revolving assets) to generate sales. This ratio shows the relation between sales and net current assets of a firm. Generally, higher turnover is preferred because it reflects greater efficiency in the utilization of net current assets. Working capital here means only that part of current assets which is financed by the long term sources. The working capital turnover is calculated by dividing the firm's sales by its net working capital. This ratio of NTC along with its graphical trend of the period of five year is shown as follows:

Working Capital Turnover Ratio (WCTR) = Sales/ Net Working Capital

**Table 9**

**Calculation of Working Capital Turnover Ratio:**

| Year | Operating Sales | Net Working Capital | WC Turnover |
|---|---|---|---|
| 2004/5 | 9194297192 | 5875674063 | 1.5648 |
| 2005/6 | 11058914824 | 6861142385 | 1.6118 |
| 2006/7 | 14751623805 | 7844600055 | 1.8805 |
| 2007/8 | 17889310266 | 9166198936 | 1.9517 |
| 2008/9 | 22147582000 | 16431232159 | 1.3479 |
| 2009/10 | 27162303314 | 20093433237 | 1.3518 |
| 2010/11 | 29849161062 | 15437380721 | 1.9336 |
| Average of Working Capital Turnover | | | 1.6632 |

Source: Annual Reports of NTC

The above table 9 and figure show that the average of the wCTR of NTC for past seven years is 1.6632 times and this is lower than the general standard average of at least 2.00 times for this line of business. The ratio seems to be increasing as it ranges from 1.3479 in 2008/09 AD to 1.9517 in 2007/08 AD. The average ratio of 1.6632 indicates that each rupee of investment in working capital is generating sales of Rs. 1.6632. The overall ratio trend shows upward movement of the ratio over the five year period. It means that for the 5 years, the ratio is increasing continuously up to F/Y 2007/08 and decreasing and again increasing which should be the real cause of concern for the NTC. Unless the firm generates sufficient volume the further investment in current assets will not be justified.

#### 4.2.2.8 Capital Employed Turnover Ratio (CETR)

Funds of owners and creditors are invested in various assets to generate sales, so the invested capital must be compared & analyzed with sales in order to examine the efficiency of the company's management in generating revenues from available capital. The sales to capital employed ratio, also called capital employed turnover, have been computed to know how efficiency the long term capital is employed in generation of revenues. Higher ratio is desirable from the viewpoint of owners as well as creditors. The ratio shows the future sales promotion condition by appropriate use of long term debt and capital. This ratio computed by dividing sales by capital employed. This ratio for NTC for the period of five year is shown in the following table:

Capital Employed Turnover Ratio (CETR) = Sales / Total Capital Employed

Capital Employed Turnover Ratio (CETR) = Total of Net Worth + Long Term Liabilities.

**Table 10**

**Calculation of Capital Employed Turnover Ratio:**

| Year | Total Sales | Capital Employed | CE Turnover |
|---|---|---|---|
| 2004/5 | 9194297192 | 20707903625 | 0.4440 |
| 2005/6 | 11058914824 | 23549578731 | 0.4696 |
| 2006/7 | 14751623805 | 27854145165 | 0.5296 |
| 2007/8 | 17889310266 | 3534894199 | 0.5061 |
| 2008/9 | 22147582000 | 41629021574 | 0.5320 |
| 2009/10 | 27162303314 | 47819733327 | 0.5680 |
| 2010/11 | 29849161062 | 53893886985 | 0.5539 |
| Average of Capital Employed Turnover | | | 0.5147 |

Source: Annual Reports of NTC

Table 10 shows that the average of the CETR of NTC for past seven years in 0.5147 times which is lower than the general standard average of at least 1.00 times for this line of business. Barring a sudden upward swing, the ratio seems to be steadily increasing over the 7-year period. The ratio ranges from the lowest of 0.444 in F/Y 2004/05 AD to the highest of 0.5680 in 2009/10 AD. The average ratio of 0.5147 indicates that each rupee of investment in permanent capital is generating sales of just 47.63 paisa, while comparing with the average. The overall ratio trend shows a positive movement of the ratio over the seven year period. While comparing with the average, one finds that in F/Ys 2004/05, 2005/06 and 2006/07 AD. The ratio is lower than the average and for F/Ys 2007/08, 2008/09, 2009/10, 2010/11 AD. The ratio is higher than the average.

### 4.2.3 Leverage Ratios

The short-term creditors like bankers and suppliers of raw material are more concerned with the firm's current debt paying ability. On the other hand, long term creditors, like debenture holders, financial institutions, etc. are more concerned with the firm's long term financial strength. In fact, a firm should have a strong short as well as long term financial position. To judge the long term financial position of the firm, financial leverage, or capital structure ratios are calculated. These ratios indicate mix of the funds provided by owners and lenders. As a general rule, there should be an appropriate mix of debt and owners equity in financing the firm's assets.

#### 4.2.3.1 Total Debt Ratio (TDR)

The relationship between creditors' funds and total assets is known as proprietary ratio. This ratio measures the proportion of total assets financed by owners' funds. This ratio intends to show the long term financial composition/strength of the company. Higher ratio means high financial risk and lower ratio not-proper utilization of leverage benefit. So, an average position between the two extremes is favorable. It is calculated by dividing total liabilities by total assets. The total debt ratio along with its straight line trend of NTC for the past five year period is shown in the following table.

Total Debt Ratio = TD/ TA Where TD = CL + LTD

**Table 11**

**Calculation of Total Debt Ratio:**

| Year | Total Debt | Total Assets | Total Debt Ratio |
|---|---|---|---|
| 2004/5 | 14746916713 | 20850093631 | 0.7073 |
| 2005/6 | 15665379821 | 23686026881 | 0.6614 |
| 2006/7 | 16866833717 | 29485960845 | 0.5720 |
| 2007/8 | 15014439425 | 35343894199 | 0.4248 |
| 2008/9 | 17057667546 | 58686689120 | 0.2907 |
| 2009/10 | 19016110847 | 66835844174 | 0.2845 |
| 2010/11 | 22127671777 | 76021558762 | 0.2911 |
| Average of Total Debt Ratio | | | 0.5397 |

Source: Annual Reports of NTC

In the table 11, Total Debt to Total Assets Ratio of NTC from F/Y 2004/05 to F/Y 2010/11 AD is presented. The average ratio for the seven year period indicates that the creditors have contributed just around 24% of the fund requirement of the business. It seems that in recent years the Corporation, recognizing the risk and utilizing the surplus profit, has increased the debt.

**4.2.3.2 Debt Equity Ratio (DE)**

Debt to Equity Ratio is another type of measure of financial structure. This ratio shows the position of total debt relative to the owner's liabilities as a percentage of owners' capital. There is no exact standard norm of this ratio, but in common practice this ratio will be good for industries of this sort if it is below 1.5:1. This Ratio is

calculated by dividing total debt by net worth. The table given below shows the Debt Equity Ratio of NTC for five years with the Trend Line in accompanying graph.

Debt Equity Ratio (DE) = Total Debt / Net Worth

Net Worth = Total of Equity Capital + Reserve and Surplus + Deferred Expenditure.

**Table 12**

**Calculation of Debt Equity Ratio and its Straight Line Trend Equation**

| Year | Total Debt | Net Worth | Debt Equity Ratio |
|---|---|---|---|
| 2004/5 | 14746916713 | 20683664971 | 0.7130 |
| 2005/6 | 15665379821 | 23549578731 | 0.6652 |
| 2006/7 | 16866833717 | 26662465165 | 0.6326 |
| 2007/8 | 15014439425 | 35343894199 | 0.4248 |
| 2008/9 | 17057667546 | 41629021574 | 0.4098 |
| 2009/10 | 19016110847 | 47819733327 | 0.3977 |
| 2010/11 | 22127671777 | 53893886985 | 0.4106 |
| Average of Debt Equity Ratio | | | 0.5220 |

Source: Annual Reports of NTC

Table 12 shows that the Total Debt to Net worth Ratio of NTC is increasing year by year. This increase indicates that the organization deliberately wants to increase its financial leverage/risk and show the management's attitude to content with lever up the capital structure of the organization. The ratio ranges from a highest of 0.712 in F/Y 2004/05 AD to a lower of 0.3977 in F/Y 2009/10 AD. The average is 0.5220 which means that for each rupee of equity holder's money, the debt holders have

contributed 56 paisa to finance the firm's operation. This Ratio is lower than average in initial three years and higher than the average in the final four years of the study period. The average of this ratio over the study period is clearly much lower than the general industry norm of 1.5:1.

#### 4.2.3.3 Long Term Debt to Capital Employed Ratio (LTD to CE)

The relationship between creditors' finds and firm's capital can also be expressed in terms of another leverage ratio, known as LTD to CE ratio. Here, the just the long term creditors' funds are measured relative with the total capitalization of the firm and not merely with the NW. the total capitalization or Capital employed includes the total explicit cost bearing debt (long term) and shareholders' equity. This ratio is computed by dividing LTD by CE. The table given below shows the LTD to CE ratio of NTC for five years of study period. And the figure shows the trend line for this ratio.

Long Term Debt to Capital Employed Ratio = LTD + CE

**Table 13**

**Calculation of Long Term Debt to Capital Employed:**

| Year | Long Term Debt | Capital Employed | CE to NW Ratio |
|---|---|---|---|
| 2004/5 | 24238654 | 20707903625 | 0.0011705 |
| 2005/6 | 0 | 23549578731 | 0 |
| 2006/7 | 1191680000 | 27854145165 | 0.0427830 |
| 2007/8 | 0 | 35343894199 | 0 |
| 2008/9 | 0 | 41629015740 | 0 |
| 2009/10 | 0 | 47819733327 | 0 |
| 2010/11 | 0 | 53893886985 | 0 |
| Average of Long Term Debt Ratio | | | 0.0062790 |

Source: Annual Reports of NTC

The ratio shows steeply decreasing pattern over time. The average ratio of 0.6% implies that out of total capitalization, only about one-fifth is financed by permanent debt sources and remaining four-fifth by equity fund. This may imply a good margin of safety to the company lenders point of view. But, from the view point of the owners, the reduction in this ratio position signifies that the company is not properly utilizing the benefits of the leverage for magnifying the return to the stockholders.

### 4.2.3.4 Interest Coverage Ratio (IC)

Interest Coverage (IC) ratio is one of the most important Coverage Ratio used to test the firm's debt – servicing capacity. This ratio is computed by dividing EBIT by interest expenses. This Ratio, as the name implies shows how many times the interest charges are covered by EBIT. A higher IC ratio is desirable, but too high indicates

that firm is conservative in using debt and firm is not using enough creditors' securities to the best advantage of shareholders. A lower IC Ratio indicates excessive use of debt or inefficient weak operational profit. This ratio for NTC for the period of F/Y 2000/01 to 2004/05 is calculated follows.

Interest Coverage Ratio = EBIT / Interest

**Table 14**

**Calculation of Interest Coverage Ratio:**

| Year | EBIT | Interest Expenses | IC Ratio |
|---|---|---|---|
| 2004/5 | 4921528988 | 696200 | 7069.1309 |
| 2005/6 | 6843726817 | 1107992 | 6176.6934 |
| 2006/7 | 7983321923 | 0 | 0 |
| 2007/8 | 10871456130 | 10303949 | 1055.0766 |
| 2008/9 | 13633989872 | 0 | 0 |
| 2009/10 | 14441095208 | 0 | 0 |
| 2010/11 | 16389639364 | 0 | 0 |
| Average of Long Term Debt Ratio | | | |

Source: Annual Reports of NTC

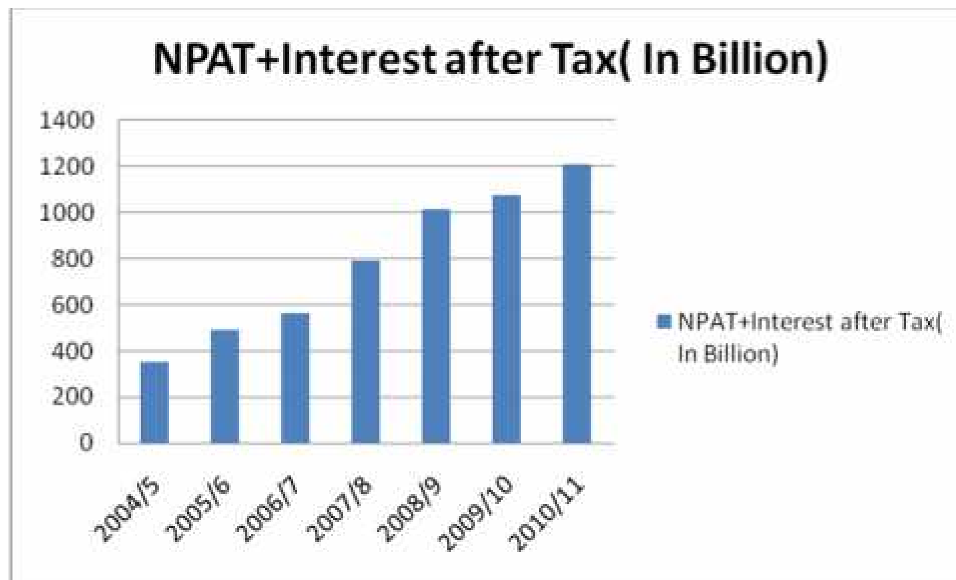
Table 14 shows the Interest Coverage Ratio of NTC over the study periods. It seems that the organization has excellent and all time increasing coverage ratios over the period i.e. the debt servicing capacity of NTC seems quite favorable. But this is a good performance in disguise because we can see that the organization is reducing its use of long term debt over the years so fast that the fixed interest burden of the organization becomes almost negligible in the most recent year.

### 4.2.4 Profitability Ratio

A company should earn profits to survive over a long period of time. Therefore, profits are essential for a company. But, then it does not mean that every action initiated by management of a company should be aimed at maximizing profits. The social consequence of the actions does also matter. So, maximum profit consistent with social responsibility should be the long run objective. It is unfortunate that the word 'profit' is looked upon as a term of abuse since some firms always want to maximize profits at the cost of employees, customers and society. Except such infrequent cases, it is a fact that sufficient profits must be earned to sustain the operation of the business, to be able to obtain funds from investors for expansion and growth and to contribute towards the social overheads for the welfare of the society.

Profit is the difference between revenues and expenses over a period of time. Profit is the ultimate 'output' of a company, and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuously evaluate the efficiency of the company in terms of profits. The profitability ratio is calculated to measure the operating efficiency of the company. Creditors and owners both are interested in the profitability of the firm. If company is making profits regularly, creditors will also be assured of getting their dues on time.

**Fig.5 Graphical Presentation of Net Profit after Tax:**




The above fig.5 bar chart of profit of NTC are increasing trend in every year. This shows the good condition of NTC. Profit measures the real condition of the compnay.

### 4.2.4.1 Net Profit Margin (NPM)

The Net Profit Margin measures the relationship between profit and sales and indicates management's efficiency in manufacturing, administrating and selling the product. This ratio is the overall measure of the firm's ability to turn each rupee sales into net profit. A high Net Profit Margin would ensure adequate return to the owners as well as enable the firm to withstand adverse economic conditions. A low Net Profit Margin has the opposite implications. However, a firm with low Net profit margin can earn a high rate of return on investment if it has a higher inventory turnover. The net profit margin is measured by dividing profit after taxes by sales.

Net Profit Margin = Net Profit after Tax / Sales

**Table 15**

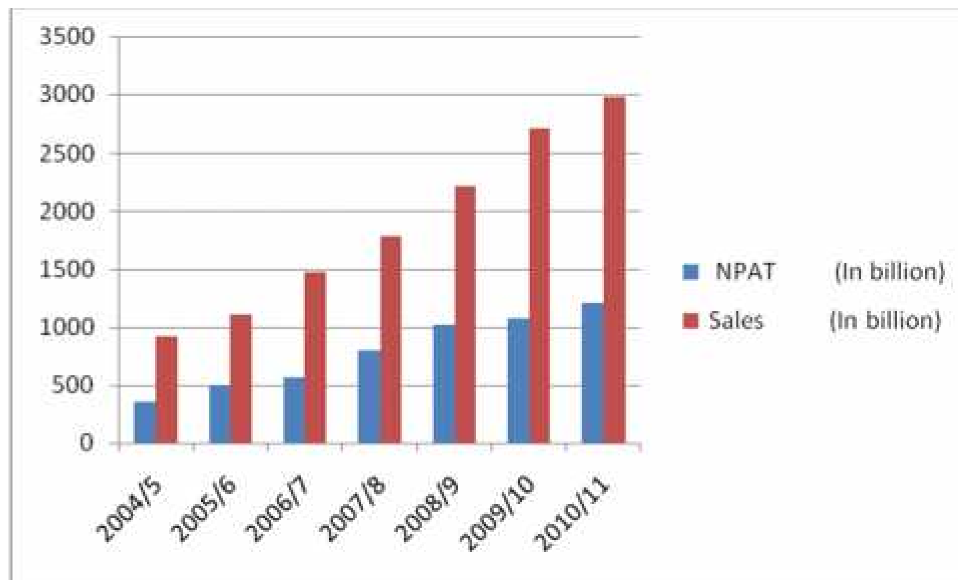
**Calculation of Net Profit Margin Ratio:**

| Year | NPAT | Total Sales | NP Margin |
|---|---|---|---|
| 2004/5 | 3542461326 | 9194297192 | 0.3853 |
| 2005/6 | 4936647252 | 11058914824 | 0.4464 |
| 2006/7 | 5652688491 | 14751623805 | 0.3832 |
| 2007/8 | 7942901598 | 17889310266 | 0.4440 |
| 2008/9 | 10178024718 | 22147582000 | 0.4595 |
| 2009/10 | 10775154464 | 27162303314 | 0.3967 |
| 2010/11 | 12120298794 | 29849161062 | 0.4061 |
| Average of Net Profit Margin Ratio | | | 0.4173 |

Source: Annual Reports of NTC

Table 15 shows that the average of the NPM Ratio of NTC for past seven years is 41.73%. The ratio seems to be stable barring over the study period. The average ratio of 0.4173 times indicates that each rupee sales is contributing 42 paisa for rewarding the owners, the overall ratio trend shows a small swing in either direction of the ratio within the range of 38.53% to 45.96% over the seven year period. The computations show that the Net Profit Margin upon Sales is favorable. With the low turnover ratio, further decline in NPM is sure

**Fig.6 Graphical Presentation of Profit and Sales:**




The above bar chart of profit and sales of NTC shows that the profit of NTC increasing. NTC has been earning porfit from study starting period. Chart also shows the increasing trend of sales in every year. This graphical figure shows that good condition of NTC.

### 4.2.4.2 Modified Net Profit Margin (MNP)

Depending on the concept of profit employed by the company, Net Profit Margin Ratio can be calculated differently. The company's capital structure, non-operating income and non-operating expenses etc. are some factors that affect the earnings by its operation. So among different factors, capital structure is an important factor which can bring important variation in this ratio and can make comparison distorted. Because the conventional measure of net profit margin computed above is affected by the firms financing policy. So, for a true comparison free of biases of the leverage ratio variation, profit should also include the financing charges. This, the revised net profit margin can be computed in the following way:

Net Profit Margin = (NPAT + Interest after Tax)/ Sales

**Table 16**

**Calculation of Net Profit Margin Ratio:**

| Year | NPAT+Interest after Tax | Total Sales | NP Margin |
|---|---|---|---|
| 2004/5 | 3542461326 | 9194297192 | 0.3853 |
| 2005/6 | 4936647252 | 11058914824 | 0.4464 |
| 2006/7 | 5652688491 | 14751623805 | 0.3832 |
| 2007/8 | 7942901598 | 17889310266 | 0.4440 |
| 2008/9 | 10178024718 | 22147582000 | 0.4595 |
| 2009/10 | 10775154464 | 27162303314 | 0.3967 |
| 2010/11 | 12120298794 | 29849161062 | 0.4061 |
| Average of Net Profit Margin Ratio | | | 0.4173 |

Source: Annual Reports of NTC

If we eliminate the effect of financing charges from the Net Profit Margin, the Trend Line ranges between a highest of 45.96% in F/Y 2008/09 to 38.53% in F/Y 2004/05 AD. Besides these, the Modified Net Profit Margin Ratio has similar strength and weaknesses as general Net Profit Margin Ratio calculated above.

#### 4.2.4.3 Operating Expenses Ratio (OE)

Operating expenses constitute service/product costs, administrative costs ad selling costs. The operating Expenses Ratio indicates the average aggregate variation in expense. In general, higher operating Expenses Ratio means inefficiency due to

higher operating cost relative to sales. A lower operating expenses ratio is favorable since it will leave a higher amount of operating incomes to meet interest, taxes., bonus, dividend and plough back of profit in the firm. It is measured by dividing operating expenses by sales.

Operating Expenses Ratio (OE) = Operating Expenses / Sales

**Table 17**

**Calculation of Operating Expenses Ratio:**

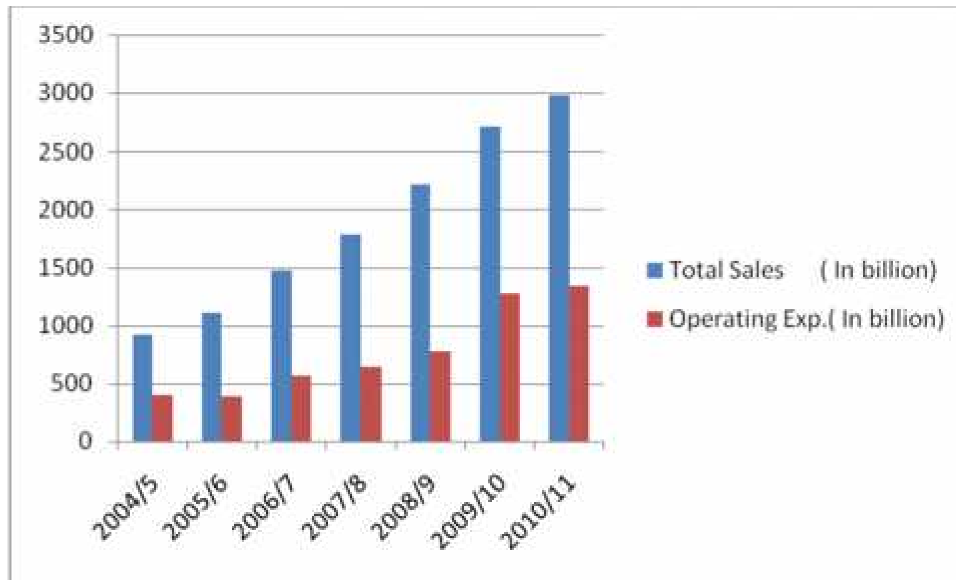
| Year | Total Sales | Operating Expenses | Opt. Exp. Ratio |
|---|---|---|---|
| 2004/5 | 9194297192 | 3990360743 | 0.4340 |
| 2005/6 | 11058914824 | 3892039342 | 0.3519 |
| 2006/7 | 14751623805 | 5668840348 | 0.3843 |
| 2007/8 | 17889310266 | 6401598507 | 0.3578 |
| 2008/9 | 22147582000 | 7753431879 | 0.3501 |
| 2009/10 | 27162303314 | 12721208106 | 0.4683 |
| 2010/11 | 29849161062 | 13459521698 | 0.4509 |
| Average of Operating Expenses Ratio | | | 0.3996 |

Source: Annual Reports of NTC

Table 17 shows that the average OE of NTC for past seven years is 39.96% which is lower than the general standard average of around 50% for this line of business. The ratio seems to be stable but slightly in decreasing trend as it ranges from a lower of 35% in F/Y 2008/09 to in F/Y 2004/05 AD but in the recent year’s trend is increasing. The average Ratio of 39.96 indicates that the firm incurs decreasing on

year to year to year basis. Though the operating expenses ratio is relatively stable over time, it shows the good health of NTC.

**Fig.7 Graphical Presentation of Operating Expense and Sales:**




The above graph shows that the operating expenses is increasing slightly compare with sales.

### 4.2.4.4 Return on Assets Ratio (ROA)

Here the profitability is measured in terms of profit and the assets. The ROA is also called return on investment (ROI). The conventional approach of calculating ROA/ ROI is to divide NPAT by investment/assets. Assets represent pool of funds supplied by shareholders and lenders, while NPAT represents residue income of the owners. Therefore, it is conceptually unsound to use NPAT in the calculation of ROA. Secondly, NPAT is affected by the capital structure. It is therefore more appropriate to use the following formula to compute the ROA/AOI.

Return on Assets = (NPAT + Interest after Tax)/ Total Assets

NPAT = Net profit After Tax

**Table 18**

**Calculation of Return on Assets Ratio:**

| Year | (NPAT+interest after tax) | Total Assets | Return on Assets |
|---|---|---|---|
| 2004/5 | 3542461326 | 20850093631 | 0.1699 |
| 2005/6 | 4936647252 | 23686026881 | 0.2084 |
| 2006/7 | 5652688491 | 29485960845 | 0.1917 |
| 2007/8 | 7942901598 | 35343894199 | 0.2249 |
| 2008/9 | 10178024718 | 46280626076 | 0.2199 |
| 2009/10 | 10775154464 | 66835844174 | 0.1612 |
| 2010/11 | 12120298794 | 76021558762 | 0.1594 |
| Average of Return on Assets Ratio | | | 0.1908 |

Source: Annual Reports of NTC

Table 18 shows that the average ROA of NTC for the study period is 19.08%. The ratio seems to be a almost stable as it ranges from 17% from in F/Y 2004/05 to 22.49% in F/Y 2007/08 AD. But the real trend of this ratio is showing upward movement particularly in the most recent years. The average ratio of 19.08% indicates that each 100 rupees of investment in assets is generating a profit of Rs. 19.08.

#### 4.2.4.5 Return on Capital Employed (ROCE)

The relationship between the after tax return earned by both equity holder and lender and the capital they provided indicates the efficiency of management for capital utilization. The ratio is similar to the ROA expected in one respect. Here the profits are related to capital employed. The funds employed in net assets or the funds financed by permanent sources are known as capital employed. This ratio shows the effectiveness of management in generating profit by the utilization of available capital. Higher the ratio, the more efficient is the use of capital employed. It is calculated as follows:

ROCE = (NPAT + after Tax Interest on Long-Term Debt)/ Capital Employed

**Table 19**

**Calculation of Return on Capital Employed Ratio:**

| Year | (NPAT+ after tax interest on Long term debt ) | Capital Employed | ROCE |
|---|---|---|---|
| 2004/5 | 3542461326 | 20707903625 | 0.1710 |
| 2005/6 | 4936647252 | 23549578731 | 0.2096 |
| 2006/7 | 5652688491 | 27854145165 | 0.2029 |
| 2007/8 | 7942901598 | 35343894199 | 0.2249 |
| 2008/9 | 10178024718 | 41629021574 | 0.2444 |
| 2009/10 | 10775154464 | 47819733327 | 0.2253 |
| 2010/11 | 12120298794 | 53893886985 | 0.2249 |
| Average of Return on Capital Employed Assets Ratio | | | 0.2147 |

Source: Annual Reports of NTC

Table 19 shows that the average ROCE of NTC for the study period is 21.47% as is the case with ROA; this is good if we compare this return with the cost of debt. But the past trend of this ratio show the upward trend as it is the case with ROA. Therefore, it can be safely said assuming that costs of the short-term sources are negligible.

The average of 21.47% indicates that each rupee of long term fund employed by the organization is generating after tax profit tax profit of 21.47 paisa.

#### 4.2.4.6 Return on Equity (ROE)

The return on shareholders' equity (ROSE) or simply return on equity (ROE) indicates how well the company's management is able to provide return to its owners. The return on common stock is not fixed. The residue of the earnings, on which the stockholders have claim, may be distributed to them or retained in the business. Nevertheless, the net profit after taxes represents their return. The shareholders' equity includes the total of equity capital, reserve & surplus minus deferred expenditure. ROE is regarded as an important measure because it reflects the productively of shareholders' capitals well as the operational efficiency of management. We use the following formula to calculate ROE.

Return on Equity (ROE) = Net Profit after Tax (NAPT)/ Capital Employed

**Table 20**

**Calculation of Return on Equity Ratio:**

| Year | NPAT | Net Worth | ROE |
|---|---|---|---|
| 2004/5 | 3542461326 | 20683664971 | 0.1713 |
| 2005/6 | 4936647252 | 23549578731 | 0.2096 |
| 2006/7 | 5652688491 | 26662465165 | 0.2120 |
| 2007/8 | 7942901598 | 35342894199 | 0.2247 |
| 2008/9 | 10178024718 | 41629021574 | 0.2449 |
| 2009/10 | 10775154464 | 47819733327 | 0.2253 |
| 2010/11 | 12120298794 | 53893886985 | 0.2249 |
| Average of Return on Equity Assets Ratio | | | 0.2161 |

Source: Annual Reports of NTC

Table 20 shows the ROE of NTC for past years 5 years. The average Ratio for the 7-year period is around 21.61% which indicated that the equity holders of NTC earned 21.61 paisa of return on their investment of Rs. 1.00 over the last 7-years, on average. It is obvious from the table that after the initial 2 years of the study period the average ROE 7 years has been satisfactory movement toward positive. NTC has to take measure to make the ratio more stable in future which should increase the confidence of the owners.

## 4.3 Statistical Analysis

### 4.3.1 Trend Analysis

Here, we are using the technique to forecast the future trend of sales revenue and operational expenses of NTC the trend forecast will be based on the past data of study period.

To forecast the trend of sales revenue of NTC we have chosen two variables. One of them is time and other is the sales revenue. So, we have taken the data of sales revenue over our study period (F/Y 2004/05 to 2010/11).

**Table-21**

**Trend Analysis for Sales Revenue (In billions)**

| Year(X) | Total Sales and Revenue(Y) | X=(X-2007/08) | $Y^2$ | XY |
|---|---|---|---|---|
| 2004/5 | 9.19 | -3 | 9 | -27.57 |
| 2005/6 | 11.05 | -2 | 4 | -22.10 |
| 2006/7 | 14.75 | -1 | 1 | -14.75 |
| 2007/8 | 17.89 | 0 | 0 | 0 |
| 2008/9 | 22.14 | 1 | 1 | 22.14 |
| 2009/10 | 27.16 | 2 | 4 | 54.32 |
| 2010/11 | 29.85 | 3 | 9 | 89.55 |
| N=7 | Y=132.03 | X=0 | $X^2$=28 | XY=101.59 |

Let the straight line trend y = a + bx…………..(i)

Since,

X=0 so, a = y/N =132.03/7 = 18.8614

B= xy/ $x^2$ = 101.59/28 = 3.6282

Substituting the values of a/b is (i), the equation of the trend line is

Y= a + bx

Y = 18.8614 + 3.6282* x

Trend Values,

For the year 2011/12 X = 4, Y = 18.8614+3.6282 * 4 = Rs. 33.3782

For the year 2013/14 X =6, Y = 18.8614 + 3.6282 * 6 = Rs. 40.6306

From the above analysis the sales trend is increasing the sales will be Rs. 33.3782 billion in 2011/12 and the sales will be Rs. 40.6306 billion in 2013/14.

**Table-22**

**Trend Analysis for Operational Expenses (In billions)**

| Year(X) | Total cost (Y) | X=(X-2007/08) | $Y^2$ | XY |
|---|---|---|---|---|
| 2004/5 | 4.32 | -3 | 9 | -12.27 |
| 2005/6 | 4.22 | -2 | 4 | -8.44 |
| 2006/7 | 6.15 | -1 | 1 | -6.15 |
| 2007/8 | 7.02 | 0 | 0 | 0 |
| 2008/9 | 8.51 | 1 | 1 | 8.51 |
| 2009/10 | 12.72 | 2 | 4 | 25.44 |
| 2010/11 | 13.46 | 3 | 9 | 40.38 |
| N=7 | Y=56.35 | X=0 | $X^2$=28 | XY=47.47 |

Let the straight line trend y = a + bx………….(i)

Since,

X=0 so, a = y/N =56.35/7 = 8.05

b= xy/ $x^2$ = 47.47/28 = 1.6954

Substituting the values of a/b is (i), the equation of the trend line is

Y= a + bx

Y = 8.05 + 1.6954 * x

Trend Values,

For the year 2011/12 X = 4, Y = 8.05 + 1.6954 * 4 = Rs. 14.8314

For the year 2013/14 X =6, Y = 8.05 + 1.6954 * 6 = Rs. 18.2224

From the above analysis the sales trend is increasing the sales will be Rs. 14.8314 billion in 2011/12 and the sales will be Rs. 18.2224 billion in 2013/14.

### 4.3.2 Correlation and Regression Analysis

#### 4.3.2.1 Correlation & Regression Analysis of Investment (Total Assets) and Profit.

The relationship between Investment and Profit is measured and tested by Karl Pearson's Co-efficient of Correlation. A positive Correlation here would imply that the Corporation maintains a stable growth (or decline) in its profit in line with its Investment increase (or decrease). Insignificant or negative value would point out the weakness of management to keep the profit in line with the Investment i.e. it points to the fact that the Corporation's expansion may not be giving desirable results. The Regression Equation would develop a function using which we can predict what the size of profit would be in the coming years with a planned additional investment in Assets.

**Table 23**

**Calculation of Correlation & Regression Co-efficient from the variables Investments and Profit. (In Billion)**

| Year | Investment (X) | Profit (Y) | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| 2004/5 | 20.85 | 3.54 | 434.7225 | 12.5316 | 73.8090 |
| 2005/6 | 23.69 | 4.94 | 561.2161 | 24.4036 | 117.0286 |
| 2006/7 | 27.99 | 5.65 | 783.4401 | 31.9225 | 158.1435 |
| 2007/8 | 35.34 | 7.94 | 1248.9156 | 63.0436 | 280.5996 |
| 2008/9 | 46.28 | 10.18 | 2141.8384 | 103.6324 | 471.1304 |
| 2009/10 | 53.37 | 10.78 | 2848.3569 | 116.2084 | 575.3286 |
| 2010/11 | 61.08 | 12.12 | 3730.7664 | 146.8944 | 740.2896 |
| Summation | 268.60 | 55.15 | 11749.2560 | 498.6365 | 2416.3293 |

Summary of Computations

$r = 0.9867$

$PE = 0.00672$

$|r| > PE$

$|r| > 6 \times PE$ & $|r| > 0.5$

The value of r is found to be 0.9867, which implies that there exists a high a high degree of positive Correlation between Total Investment and Total Profit. This means the two variables move in the same direction; i.e. if total investment increases then total profit also increase and vice-versa. The value of r is greater than 6 times the probable error and higher than +0.5; means that there is significant degree of positive Correlation between the variables i.e. the value of r is significant. Hence, the relationship between total investments and total profit is that of a cause and affect one.

The regression co-efficient is 2.0127. The regression equation of profits (Y) on investments (X) is given by:

$= -0.103 + 0.208 * (X)$

The value of b is found to be 0.208 which means that, on average, 1 unit change in total investment (Assets) would result in 0.208 unit change in the Net Profit of NTC. Given the capital budget plan of the NTC for coming years, we can use the above Equation to estimate what the profit of the NTC would likely to be the coming years.

#### 4.3.2.2 Correlation & Regression Analysis of Sales revenue and Total Cost

The relationship between Sales Revenue and Cost is measured and tested by Karl Pearson's Co-efficient of Correlation. A positive Correlation here would imply that most of the Costs of NTC are of variable nature. A low positive Correlation would imply that the average cost would go down as the volume expands. A negative Correlation, which is highly unlikely, would point out that cost of NTC decreases with the increase in Sales Volume and vice-versa. The Regression Equation would develop a function, with the help of which, we can predict what the amount of cost would be in the coming years with various predicted sales levels.

**Table 24**

**Calculation of Correlation & Regression Co-efficient from the variables Sales Revenue and Total Cost. (In Billions)**

| Year | Total Sales and Revenue(X) | Total cost (Y) | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| 2004/5 | 9.19 | 4.27 | 84.4561 | 18.2499 | 39.2596 |
| 2005/6 | 11.05 | 4.22 | 122.11025 | 17.7662 | 46.5757 |
| 2006/7 | 14.75 | 6.15 | 217.5625 | 37.8594 | 90.7567 |
| 2007/8 | 17.89 | 7.02 | 320.0521 | 49.2523 | 125.5520 |
| 2008/9 | 22.14 | 8.51 | 490.1796 | 72.4882 | 188.4999 |
| 2009/10 | 27.16 | 12.72 | 737.6656 | 161.7984 | 345.4752 |
| 2010/11 | 29.85 | 13.46 | 891.0225 | 181.1716 | 401.7810 |
| Summation | 132.03 | 56.35 | 2863.0408 | 538.5343 | 1237.9003 |

Summary of Computations

$r = 0.9839$

$PE = 0.00812$

$|r| > PE$

$|r| > 6 \times PE$ & $|r| > 0.5$

The value of r is found to be 0.9839 which implies that exist a high degree of positive Correlation between Sales Revenue and Cost. This means the two variables move in the same direction; i.e. if Sales Revenue increases then Cost also increases, and vice-versa. The value of r is greater than 6 times the probable error and higher than +0.5;

means that there is significant degree of positive Correlation between the variables i.e. the value of r is significant. Hence, the relationship between total costs and Total Sales Revenue is that of a cause and affect one.

The regression co-efficient is 7.1851. Hence the regression equation of Costs (Y) on Sales (X) is given by,

= -1.239 + 0.470 * (X)

The value of b is found to be 0.470 which means that, on average, 1 rupee change in Volume (Sales) would result in 47.00 paisa change in the Total Cost of NTC. Given the sales forecasts of the NTC for coming years. We can use the above Equation to estimate what the Costs of the NTC would likely to be in the coming years.

## 4.4 Major findings

### 4.4.1 Ratio Analysis

Ratio is said to tell more than what is told alone by absolute values comprising the Ratio. Indexing of two items tell more than the items tell together. All Ratios computed in chapter four try to measure the financial position and or performance of NTC, the core subject matter of this study. The analysis becomes irrelevant if the corrective actions based on the suggestion do not make difference.

#### 4.4.1.1 Liquidity Position

This research has used two short-term liquidity indicator Ratios. On the basis of these Ratios, one should say that the overall short-term solvency position of NTC is satisfactory. Perhaps, because of the service nature of its operation, NTC has maintained low level of inventory and Quick Ratio is negligible. Though both these ratios decreasing beyond 2:1. The nominal negative growth rate shown by the actual

trend should not be let increase this way for long time. Payment of short term dues and obtaining short term loans under favorable terms and conditions should not be of problem to the NTC in coming years.

#### 4.4.1.2 Turn over Position

This research has used 7 turnover Ratios to judge the efficiency of the component/aggregate of the resources used by the firm in generating volume. The Average Age of Inventory and the Average Collection Period are simply mirror images of Inventory Turnover and Debtor Turnover Ratios. Conclusions are solely based on historical Actual Trend and historical average.

The various resources being enquired, current assets have the poorest performance. Though inventory seems to have good utilization rate compared to other current assets, it is because of the inventory's small size NTC carries. So NTC should be concerned about its current assets investment in future. As the increase in sales is not accompanied proportionally by the rate of increase in working capital. So there seems to be laxity in management in efficiently mobilizing the working capital. Fixed Assets Turnover/ utilization seem to be improving over time. But it is 1.00 marks which should make management to be complacent. The performance of current assets in terms of volume generation was so poor over time that the improvement in performance of fixed assets could compensate it. That's why the Total Assets Turnover is wealth. So, overall, the asset utilization position of NTC is termed little poor as well as deteriorating over the seven years of study period. NTC should pay the company can improve asset utilization, it can charge cheaper rates for its service which would be vital in coming days because of the competition from the private sector permitted by the government under its liberalization and open market policy. Its utilization trend needs to be improved if the organization has to obtain better

return on its resources. We see that, on average, it takes 3 months to collect a typical account from a customer.

#### 4.4.1.3 Long term Solvency Position

This research has, in effect, used 3 Leverage Ratios to judge the extent to which NTC has been financed with debt and bear fixed obligations. TD to TA and TD to TE ratios are essentially the same measure. It seems that NTC has kept the policy of increasing its debt financing proportion gradually over the study period. The amount of long-term debt used by NTC has decreasing. Capital employed now solely consists of equity. On overall, the firm should maintain its long-term debt to the levels so that Debt ratio is around 50%.

#### 4.4.1.4 Profitability Position

This research has used 6 Profitability Ratios to judge the overall effectiveness of the firm. The first Three Ratios use sales as a base to measure performance, while the other three use investment/ capital as a vase to measure performance. The profitability position shown by the first type of Ratios seems good. The profit margin are good, operating costs proportion are minimum. But the trends are not satisfactory enough. The cause may be the destruction of infrastructure during the civil war and internal problems of the concern. Operating Expenses Ratio Trend is maintaining its stage up and Modified Net Profit Margin. It means that operating expenses as well as other expenses are slowly going up on average over the period. To reserve this trend, the Organization needs to put stringent cost control measures in place. The profitability of assets/capital is also poor. With so huge investment, the average return of 20% on assets can safely be termed as poor. Because of the cheaper debt source, the return to equity holder could be magnified by 21% on average over the study period. Because the organization is reducing sharply its long term debt

financing (interest bearing) sources, the shareholders of the organization can expect to receive medium level rate of return in future on their investments. The after tax return on total assets is also going in upward trend according to least square method. The way it behaved to its customers under monopoly is certainly not going to work under competitive market. Given the competitors mainly concentrated around big cities, the organization subsidizing its rural operation through urban profit is going to face competition with such a severe constraint.

Solvency position, short –term as well as long-term, is good and the direction of the Ratios which indicate these positions is positive particularly from the view point of the lenders. But when it comes to resource employment position, it can be safely said that the turnovers poor. Profitability on the operational front seems fairly good but with such low turnover, this cannot be termed excellent. Moreover, the negative trend of profit on operation makes the situation even more disappointing. The low rate of profit on assets/capital accompanied by decisions are weak, operational efficiency are weak, only financial position/management is good. But even the financial management from the viewpoint of the equity holder can be termed unsatisfactory because of the reducing leverage benefits to the Share holders. So, on all fronts, NTC need to have a fresh re-look so that it can run smoothly in coming days of the 21$^{st}$ century.

### 4.4.2 Regression and Correlation Analysis

Regression and Correlation Analysis are used to see the relationship between the variables that does not point to the past position and performance but to the future prospect based on which planning for better performance can be done. We computed Correlations and Regression Equations between there pairs of variables. Correlations between all the pairs of variables are highly positive as per our anticipation. Because

the Correlation is highly positive and significant, one can safely use the Regression Equations to forecast the value of dependent variables based on the anticipated value of independent variable.

The relation between the Investment and profit indicates the profitability on investment. High and significant Correlation between investment and profit points to the fact that additional investment project, NTC is expected to initiate, can expect to earn around 20% Return on Investment, approximately equal to the 7 years average ROI.

The relationship between sales and investment indicates turnover. The sales and investment are highly positively correlated means that an increase in investment would definitely increase sales. But as indicated by the Regression Co-efficient 'b' on average, 1 rupee change in Volume (Sales) would result in 47.00 paisa change in the Total Cost of NTC. Next time when NTC considers further investment, the company should see that whether or volume generated by the investment is sufficient or not.

On sum, the Correlation and Regression Analysis backs the same conclusion we drew under Ratio Analysis. Profitability on Investment is around 20% which we already termed medium position in Ratio Analysis. As of the relation between sales and investment, the company should see that whether the turnover or volume generated by the investment is sufficient or not.

# CHAPTER - V

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Summary

Telecommunication is an inevitable infrastructure of development to all countries. It is considered as prerequisite for the other dimension of development. In Nepal the need of telecommunication services are primarily fulfilled by Nepal Telecom.

Introduction of liberalized economic policy in Nepal gradually facilitated the private sector investment as a result multinational companies also showed their presence. Further more public enterprises started to be privatized. Such trend couldn't also remain intact without influencing Nepal Telecommunications Corporation. Hence Nepal Telecommunications Corporation has been changed to Nepal Doorsanchar Company limited in 2061 BS under the company act. It's popularly known commercial name is "Nepal Telecom". Although Nepal Telecom has been established under the company act and its 91.50% ownership has been held by Nepal Government, 0.03% has Citizen Investment Trust, 4.5% has its employee & 3.97% ownership has the general public.

As financial health is the key indicator of the success and failure of the organization. Different financial indicator show to what extent would the organization is capable to meet the expectations of various stakeholders of the company. In the light of this main issue of the study has focused to evaluate the financial position of Nepal Telecom on the basis of latest available information. Financial analysis and planning function is not a decision making in itself rather it is an ancillary service, which helps in planning for those two decisions and evaluating the outcome of those two decisions and recommending necessary rectifying measures.

To make the study significant, ratio analysis and trend analysis, income and expense analysis, correlation and regression analysis have been carried out regarding the major variables of NTC. Before the analysis of such financial and statistical tools the details of the same has been explained in the chapter namely literature review and for the mathematical calculations research methodology has been carried out. On basis of the analysis we will conclude our findings and try to provide some relevant recommendations to the management of NTC so that they can apply those recommendations if they deem appropriate.

Nepal Telecom as a state owned enterprise has involved in providing the cost effective and people friendly telecom services in the nation since long time. Even thought, with the upcoming of private sectors telecom, Nepal Telecom has been able to maintain its profit growth. Nepal Telecom is financially performing well. It has able to use its assets in an effective manner providing a huge return to the government.

## 5.2 Conclusion

Nepal Telecom has better position than other state owned enterprise of Nepal, in the sense that it is such a state owned enterprise, which is operating under the net profit margin since the establishment of NTC. Financial statement of the company shows that the Gross Revenue as well as Net Profit has increased to a tune of higher rate. The overall short –term solvency position of NTC is satisfactory. Perhaps, because of the service nature of its operation, NTC has maintained low level of inventory compared with other current assets components.

There seems to be laxity in management in efficiently mobilizing the working capital. Fixed Assets Turnover/utilization seems to be improving over time. it is 1.00 which should make management to be complacent. The position of current assets in

terms of volume generation was so poor over time that the improvement in position of fixed assets could compensate it but not satisfied. That's why the Total Assets Turnover is little poor and fluctuating.

So, overall, the asset utilization position of NTC is termed poor as well as deteriorating over the seven years of study period. NTC should pay constant/close attention on the desirability of the current size of its current assets investment. If the company can improve asset utilization, it can charge cheaper rates for its service which would be vital in coming days because of the competition from the private sector permitted by the government under its liberalization and open market policy. Solvency position, short term as well as long term, is good and the direction of the ratios which indicate these positions is positive particularly from the viewpoint of the lenders. But when it comes to resource employment position, it can be safely said that the turnovers generated by the assets are not satisfactory.

Utilization of working capital in particular is very poor. Profitability on the operational front seems fairly good but with such low turnover, this cannot be termed excellent.

The relation between the Investment and profit indicates the profitability on investment. High and significant Correlation between investment and profit points to the fact that additional investment, on aggregate; by rupee 1.00 will lead to increase in profit by 20.8 paisa. So, a typical investment project, NTC is expected to initiate, can expect to earn around 20% return on Investment, approximately equal to the 7 years average ROI.

Overall the company is able to perform well. The general faith of people on the government telecom will drive the profit of the business in upward trend. Because of its low price of calls, and effective reach it will prove to be one of the best earning

company for the government. If the management is managed properly, this company should and will provide a huge return to the government and its shareholders.

## 5.3 Recommendations

The following recommendations are in order NTC's management on improving its financial position and performance addressed by this study.

- NTC being a service oriented firm does not need higher liquidity position. Thus company should stabilize its current ratio near 1:1. Large amount of fund tied up in current assets may bypass the opportunity cost so it is better to invest such excess amount in fixed assets to increase its capacity.

- Average collection period of NTC is very poor. On average, it takes more than average 3 months to collect a typical account, soothe collection effort needed to be intensified by providing attractive packages to the customers, providing more authority and accountability to the concerned officers so that ACP can be reduced to more manageable level.

- Though the average cost of producing and selling services to the customers of this organization is satisfactory, the increasing trend of cost should be a cause of concern. With such a low Turnover Ratio of the Organization's assets, the management should be careful not to let the Profit Margin go down. This can be achieved either by increasing price charged to the customer or by reducing cost. Given the competition that is forthcoming in the recent years, the organization should concentrate itself seriously on second alternative (i.e. reducing cost).

- It seems that the organization is losing the benefit of the leverage over time. Particularly in the most recent years. A profitable company like NTC should

not hesitate to use the cheaper debt source to magnify the Return of Equity. So, the management should consider using long -term debt when financing new expansion projects in the future.

- It seems that the working capital is not managed properly in generating sales volume. The excess investment in working capital is not properly utilized. So NTC can think of reducing its current assets components by using cash to expand its equipment capacity or reducing operating expenses.
- Though Fixed Assets Turnover is increasing over time, it is 1.00 times barrier. So, NTC management should be careful in future undertake capital intensive investment projects if they fail to generate sufficient volume. And the Fixed Assets Turnover could be increased to some extent if the company runs in installed capacity of the equipment as far as possible.
- Given the high risk perception on most part of the countryside where the key communication towers and related structures are situated, NTC should buy enough insurance for all of these structures. So that it does not suffer from huge losses even if the facilities/structures. So that it does not suffer from huge losses even not buying enough insurance for those valuable structures should have taught a good lesson to them.
- The investment appraisal criteria should be overhauled to make it more scientific so that it weights all relevant factors before further investment decision so that the project do not provided lesser return than cost of capital.
- Set up pro-forma balance sheet and income statements to use these as a general guideline to determine the size/proportion of investment and financing items of balance sheet and operational items of the income statement. So that a

standardization and rationalization in operation, financing and investment can be made.

- The organization should impart professional management on its top hierarchy. Given the tough competition emanating from the private sector, the organization should resist unnecessary political interferences in managing its day to day operations. It should seek freedom to decide on its own under the broad guidelines given by the government.

- The delay of share distribution to the public may cause the organization would not face stiff competition in future due to government intervention in decision making. So the organization should issue share timely. As the organization have largest issued capital in the amount yet not distributed by any single company in Nepal. The proper regulation and procedure should be followed so as to avoid speculation and wrong interest of any party.

- The company should diversify its investment in different infrastructure and services sectors that gives the good and positive return to the company.

- The company should invest some percent of profit to the social responsibility as the education, health, sports and basis infrastructure such that service holders feel the pride of its service.

- The top management should be hired as the professional and high skilled that gives fast tracking the technology acquisition and market captured policy to the organization.

- The company should make proper business plan and attractive marketing policy.

- The company should make their services reliability and focus to lift up service all over the rural areas.

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