

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Money is one of the most important factors of mobilizing resources. It is needed to operate daily transactions and to boost up economic condition. The role of money in the economy is very important proper and well-planned management of money directs determines and enhances. The wealth and productivity of financial sector. Today most of the developing countries are struggling with poor economy i.e. lack of finance and technology. The performance of financial sector affects the growth of the economy. Money is managed by bank and financial institutions. Banks and financial institutions collect, disburse and control the flow of money. Bank collects the money from public who have savings and disburses money to the person who are in need of it. The whole infrastructure of national development, direction of economy, rate of progress and even the habit of people are being the function of banking system.

Development of economic condition only happens when there is proper mobilization of available resources. Bank's function of lending provides required volume of capital to mobilize resources. The primary issues of economic development is to increase the investment in productive sector. Increase in investment impacts positively in every sector of economy such as employment production, income, government revenue, international trade etc. Banks play important role on increase investment. It is the main source of capital formation. The liberalization of economy has posed more responsibilities and challenges on commercial banks and posed high degree of competition and risk

liberalization of financial sector in Nepal has opened new horizon of expectancy in banking sector. The poor structure of Nepalese economy, slow paced industrial sector low rate of employment, majority of non-organized financial sector lack of organized capital market etc have always demanding a sufficient competent and liberalized banking industry.

The existence of an ideal commercial banking system regularizes the scattered fund from public. The main function of commercial bank are borrowing and lending of money. They borrow-money by taking all kinds of deposit from general public and create value on it by providing loan to those who are in need of it. The most important function of banking business is lending. It provides different types of lending facilities to develop the economic condition of the country. It provides loan to trade business and industry sector to raise capital. Different types of lending facilities such as cash, credit, overdraft demands and term loans, bills purchased and discounted project finance etc are provided by the bank. The primary function of the bank is that of a broker and a dealer in money. But in now a day the function of commercial bank has been elaborated to merchant banking, credit card business, documentary credit traveler cheque and business. The efficiency of any banker lies in how it multiplies the deposits of deposits lending should be accompanied by some basic principle and practices safety of funds. Liquidity of funds, purpose of loans, and security of loan, profitability of spread of loan, portfolio and compliance with national interest are some of the principles that a banker should follow while granting loan.

In Nepal, seventy one ago, Nepal Bank Ltd was established under the banking act 1993. Nepal Rastra Bank, the Central bank emerged in 2013 B.S. under Rastra Bank Act 2012. Since then it has been providing

policies and guidance to the financial sectors in one hand and monitoring and controlling them on the other.

1.2 Development of Banks in Nepal

The banking history of Nepal is not so old. The floods of banking and its essential in economic growth could not keep Nepal untouched from the waves of banking. The establishment of Nepal Bank Ltd in 1994 B.S. was the result of this. To develop the trade business, industry sector there was need of one organized financial institution as a result Nepal Bank Ltd. Was emerged. It was established under the share of 51% Government and 49% general public. During the past years this bank had done pioneering work on taking the banking habit to people.

Then Nepal Rastra Bank was established in year 2013 B.S. under Nepal Rastra Bank Act 2012. This is the Central Bank of Nepal, which deals with monetary and fiscal policy and regularizes commercial banks. To fulfill the growing requirements of bank sector. Rastriya Banijya Bank was established in year 2022 B.S. Under Banijya Bank Act 2021. Nepal Bank and Rastriya Banijya Bank both played vital role on developing the economic condition of the country and making banking habit of the people. Agriculture Development Bank was established in year 2024 to develop the agricultural sector.

But the institutions were not enough to fulfill the growing need of public change in economic condition, development of trade, business sector industrialization required more facilitated banking system. To cheque whole economic sectors, Nepal has adopted the policy of liberalization. To develop the economic condition through the participation of private sector in the area of industry trade business and

banking. The government amended commercial banking Act 1974. It increased competition between commercial bank to develop their working capacity and also to open foreign joint venture in Nepal. Then Nepal Arab Bank (Now named as Nabil) was published in year 1984 A.D. as a first joint venture bank in Nepal. This was the first step of establishment of modern banking system.

The institutional network and volume of the financial system has expanded and diversified during the past decade in Nepal now a day many modern and facilitated commercial banks institutions have been established 23rd commercial banks are working in the fields of banking. The no. of banking institutions has presented below during mid April 2008.

Financial Institutions	Mid-April 2008
Commercial Banks	23
Development Banks	58
Finance Company	79
Micro-Finance Institutions	12
NRB Licensed co-operatives (Performing Limited Banking Transactions)	16
NRB Licensed NGOs (Performing micro finance activities)	47
Total	235

Source: Economic Survey, Fiscal Year 2007/08

1.3 Introduction to Commercial Banks

"Commercial banks are those institutions that perform all kind of banking function such as accepting deposits advance loans creating and advancing loan agency function etc. they provide short-term, medium term and long term loans to trade and industry". With regards of commercial bank a writer has concluded that "Commercial bank undertakes that payment of subscriptions, premium, rents and collection of cheques, bills, promissory notes etc, On behalf of its customers. It also acts as correspondents or representative of its customers other banks and financial operations."

The commercial bank Act 2031 B.S. has further pointed out that "commercial Bank debt whenever necessary for trade and commerce. They take deposits from public and grant loans in different forms. They purchase and discount bills of exchanges, promissory not and exchange foreign currency. They discharge various function behalf of their customers provided that they are paid for services." From the above definitions we can conclude that commercial banks are those financial institutions which performs widest range of economics and financial function of any business firm in the economy more over they also provide technical help and suggestions relating to administration suggestion and safe keeping of valuable collection of bills, cheques, overdraft facilities and provide modern banking facilities to industries and commerce are also carried out by those banks.

Function of commercial banks:

-) Creating money
-) Accepts deposits

-) Facilitating for the financing of foreign trade
-) Payment mechanism
-) Safe keeping of valuables
-) Extension of credit.

List of Commercial Bank as of Mid-April 2008

S.N.	Name	Operation Date (A.D.)	Head Office	Paid up capital (Rs in Lakhs)
1.	Nepal Bank Ltd.	1937/11/15	Kathmandu	3804
2.	Rastriya Banijya Bank	1966/01/23	Kathmandu	11723
3.	Agricultural Development Bank Ltd.	1968/01/02	Kathmandu	92780
4.	Nabil Bank Ltd.	1984/07/16	Kathmandu	6892
5.	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu	12030
6.	Standard Chartered Bank Nepal Ltd.	1989/01/30	Kathmandu	6208
7.	Himalayan Bank Ltd.	1993/01/18	Kathmandu	10135
8.	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu	8745
9.	Nepal Bangladesh Bank Ltd.	1993/06/05	Kathmandu	7441
10.	Everest Bank Ltd.	1994/10/18	Kathmandu	8314

11.	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu	6031
12	Nepal Credit and commercial Bank Ltd.	1996/10/	Siddhartha Nagar, Rupendehi	12758
13	Lumbini Bank Ltd.	1998/07/17	Narayangadh, Chitwan	7500
14.	Nepal Industrial and Commercial Bank Ltd.	1998/07/21	Biratnagar, Morang	7920
15	Machhapuchhre Bank Ltd.	2000/10/03	Pokhara, Ka Ski	8217
16.	Kumari Bank Ltd.	2001/04/ 03	Kathmandu	9000
17.	Laxmi Bank Ltd.	2002/04/03	Birgunj, Parsa	7320
18.	Siddhartha Bank Ltd.	2002/12/24	Kathmandu	7900
19.	Global Bank Ltd.	2007/01/02	Birgunj, Parsa	7000
20.	Citizens Banks International Ltd.	2007/06/21	Kathmandu	5600
21.	Prime Commercial Bank Ltd.	2007/09/24	Kathmandu	7000
22	Sunrise Bank Ltd.	2007/10/12	Kathmandu	7000
23	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu	7000

Source: Economic Survey: 2007/08

1.4 An Overview of NCC Bank

NCC Bank Ltd. (NCC Bank) formally registered as Bank of Ceylon Ltd. (NBOC), commenced its operation on 14th Oct. 1996, as a joint venture with Bank of Ceylon, Sri-Lanka. It was the first private sector Bank with the largest authorized capital of Nrs. 1000 million. The head office of the bank is located of Siddhartha Nagar, Rupendehi the birthplace of Lord Buddha, while its corporate office is placed at Bagbazar, Kathmandu.

The name of the bank was changed to NCC Bank. Ltd (NCC Bank) on 10th Sept 2002 due to transfer of share and management of the bank from bank of Ceylon, an undertaking of Government of Sri-Lanka to Nepalese promotes.

At present NCC Bank provides banking facilities and services to rural and urban areas of the kingdom through its 17 branches. The bank has developed corresponding agency relationship with more than 150 international Banks having worldwide network.

Capital structure –

Authorized capital - Rs. 1000 million

Issued capital - Rs. 1000 million

Paid up capital - Rs. 700 million

1.5 Statement of Problem

Money is managed by bank and financial institutions. These institutions collect, disburse, control and regulate the flow of money. Banks collects money from general public and disburses money to the

people who are in need of it in form of loan and investment. Bank generates their profit by mobilizing its deposit on productive sector in a form of short term and long-term loan. To maximize the profit it has to be properly mobilized its deposits. None of the commercial banks in long run can survive without implementing its lending function efficiently. It is possible that a commercial bank in a year or two can generate high volume of profit coming from other subsidiary free based activities, but in long run without increasing its lending functions, it cannot increase its income.

This study will answer whether it is under a planning or not. If the profit has not been realized under the technique of profit planning. This study will explore how the profit NCC is occurring? How far NCC bank has been able to mobilize the deposit and other resources at optimum cost? Does the bank display the resources generating satisfactory yield? And what are the overall problem of NCC bank and what suggestions can be recommended for their proper solution?

NCC bank is one of the lending banks of Nepal. The ratio of profit is decreasing every year. It has not been able to properly mobilize its deposit collection on one hand while the lending performance is not satisfactory on the other hand. The deposit collection is increasing but it is not utilized properly. To utilize the deposited fund on profit able sector, the bank has to make strategic plans for deposits, expenditure, loan and investment.

1.6 Objectives of the Study

The basic objective of the study is to highlight the practice of profit planning in the respective bank. To increase the profit and maintain the

profitability position the profit planning greatly helps for every organization. The broad objectives of this study are as follows:

- a) To examine the present/ current profit management practice of NCC Bank.
- b) To sketch the trend of profit and loss.
- c) To analyze the profit trends and determine the variables.
- d) To study the growth of the business of bank over the period.

1.7 Significance of the Study

The main function of the NCC Bank is lending activities, which leads the whole banking generates its profit which is necessary for running the bank. It leads an organization to ultimate success. The study of profitability of NCC Bank may be useful to all parties who are interested. The study is related with the mobilization of deposit fund towards the loan and advances and investment and also to maximize profit planning process of deposit loan and advances, investment etc. it may also help to concerned parties of the bank to develop future plan to maximize the profit. The study measure the efficiency of lending and investing behaviors of banks.

1.8 Limitation of the Study

The study is limited to the randomly selected concerned bank namely NCC Bank and is confined only to the budgeting and profit planning of this. Following factors have limited the scope of the study.

- a) Only NCC bank is taken into consideration in the study.
- b) The study is mainly depending on secondary data.
- c) The study covers the analysis of only 5 years.

- d) Only few financial and statistical tools are used in the analysis.
- e) It is mainly focused on the profitability of NCC bank.

1.9 Design of the Study

In this study only five chapters are includes which are as follows:

First chapter deals with the introduction that includes background of the study, importance of the study, profit of concerned bank, statement of problem, objective of the study, limitation of the study and design of the study.

Second chapter deals with the available literature review. It includes review of books, review of legislations related to commercial Banks review of other relevant bank's report and review of previous thesis. Third chapter explains the research methodology used in the study, which includes research design, nature and sources of data, population and samples, methods of data analysis.

Fourth chapter includes presentation and analysis of data using financial tools such as ratio analysis and statistical analysis i.e. coefficient of correlation of different variables and trend analysis.

Fifth chapter focuses on summary, recommendation and suggestions for further improvement and conclusion of the study.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

Literature have means the related printing materials about the subject matter of the research work. It may be in various forms like book, booklet, thesis report etc. There are two types of literature: research literature and conceptual literature. Research literature includes the studies made earlier, which are similar to the one proposed. Conceptual literature includes that concepts and theories about the subject review of literature is vital while doing research work as it gives the findings of the previous study; it can be used as a secondary data; and it gives the valuable information about the subject. According this chapter has been divided into two parts as:

- a) Conceptual review or conceptual framework of profit planning.
- b) Review of earlier studies regarding Commercial Bank.

In this connection the researcher has reviewed various literatures in the form of books written by various prominent authors, published newspaper, journals, browsing materials from the concerned websites, previous dissertation in the relevant subject etc.

2.2 Conceptual Framework of Profit Planning

Before explaining profit planning it is necessary to understand about profit and planning. So these two components are explained separately below.

2.2.1 Profit

Usually, profit do not happen, profit are managed profit is reward for any organization. In simple sense, profit is a surplus over the expenditure for any kind of business firm. Business and non-business organization both has peculiar objectives and goals. To achieve such objective the firm, business organization need some profit. Without profit these organization cannot run for a long period. Although in modern days many alternative objectives of firm has been cited. Nobody has been able to complete wipe out the profit maximizing objectives and objective of earning reasonable rate of profit. Profits are the main test pf individual firm's performance.

Different definitions given by different people. Some held the view that an entrepreneur performs the join and inseparable function of responsibility. The entrepreneur earns profit because to takes risks in the business. In the world of Hawley F.H. Knight that the entrepreneur earns profit because of uncertainty bearing, this arises in the economy. Schumpeter opines that an entrepreneur earns profit as a reward for introducing innovations. J.M. Keynes held the view that profits resulted from favorable movements of the general price level.

Profit is a primary objective of a business "Profit is a signal for allocation of resources yardstick for judging managerial efficiency.

From these definitions we can conclude that profit is essential need for any business organization. For business purpose an entrepreneur organize and co-ordinate various factor of production such as land, labor, capital, material. They are rewarded with rent wages and interests. Thus what left after paying them are know as profit for entrepreneurs.

No company can survive without profit for a long period. The profit is the ultimate measure of its effectiveness and in a capitalists society there is no future for a private enterprises, which always incurs losses.

Profit is the primary measure of business success in any economy. If a firm or enterprise cannot make profit it cannot obtain or hold capital for very long, if capital cannot obtain it cannot expand its business one it cannot compete with other firms.

Profit is a backbone for any organization. It helps organization to stand freely and sustain for a long period, profit measure a success of any business and if the business is in profit, it can easily acquire any type of loan and capital to expand its business. So, profit is the very important aspect for any business organization.

2.2.2 Planning

Planning is deciding in advance what is to be done in future. It is the method of thinking out acts and purpose before hand. It is the determination of action for achieving desired results. Planning is the basic function of management. It may be defined as the selection from among alternatives of course for future actions. It is the functions by which the manager decides what goals are to be accomplished and how they are to be reached.

Planning is continuous process because conditions do not remain static, conditions change rapidly and therefore plans should be revised and reformulated to adapt the changed conditions, planning is a tool of developing and achieving the organizational goals. Planning is a process

of developing enterprise objectives and selecting a future course of action to accomplish them. It includes

- a) Establishing enterprise objectives
- b) Developing premises about the environment in which they are to be accomplished
- c) Selections a course of action for accomplish the objectives.
- d) Initiating activities necessary to translate plans into action and
- e) Current re-planning to correct- current deficiencies, planning is the process of deciding in advance what is to be done in future; sp it is a future oriented concept.

According to I.M. Pandey “Planning is a free forward process to reduce uncertainly about the future. The planning process is based on conviction that management can plan its activities and action of the enterprise that determine its desiring”.

Planning can be defined as “The establishment of objectives and the formulation evaluation and selection of the policies, strategic tactics and action required to achiever these objectives. Planning comprises long term/ strategic planning and short- term operational planning. The latter refers to a period of one year.”

In conclusion planning is very necessary things or jobs for every family, businessman organization, No one can achieve goal without planning.

2.2.3 Profit Planning

A plan which is planned for achieving profit in a certain future period is called profit plan. Every organizations wants profit to survive long in the market but profit is not auto formulating component.

Profit planning is defined as “An estimation and predetermination of revenue and expenses that estimates how much income will be generated and how it should be spent in order to meet investment and profit requirements. In the case of institutional operations, it presents a plan for spending income in a manner that does not result in a loss.”

A profit plan is an advance decision of expected achievement based on the most efficient operating standards in effect or in prospect at the time. It is established against which actual accomplishment is regularly compared.

It is a predetermined detailed plan of action developed and distributed as guide to current operations and a partial basis for the subsequent evaluation of performance. Thus we can say that profit planning is a tool which may be used by the management in planning the future course of actions and controlling the actual performances. It includes

- a) Development and application of board and long range objectives of the enterprise goals, specification, development of a strategic long, range profit plans on board terms.
- b) Specification of tactical short-range profit planned detailed by assigned responsibilities (Division, departments, projects)
- c) Establishment of a system of periodic performance report detailed by assigned responsibilities and

d) Development of follow up procedures.

Profit plan, one of the most important managerial devices that plays key role for the effective formation and implementation of strategic as well as tactical plans of an organization-profit planning system requires the effective co-ordination between various functional budgets of an organization like as sales plan production plan and material requirement budget. Labor cost budget cash budget and capital expenditure budget.

Profit planning is a part of an overall process and is an area in which finance function plays major role: profit planning is now an important responsibility of financial manager.

2.2.4 Fundamentals of Profit Planning

The concept of profit planning was originally established with the function of an accountant. At its origin the function of profit planning was assigned to an accountant. But in modern day planning was assigned to an accountant. But in modern day profit planning is given much more and in more important sense is regarded as basis technique of decision making. The fundamentals of profit planning are:

Managerial involvement and commitment: Managerial involvement entails managerial support confidence, participation and performance orientation. In order to engage competently in comprehensive profit planning all level of management especially top level management must (1) understand the nature and characteristics of profit planning (2) be convinced that this particular approach to managing is to devote the effort required to make it operative (3) support the programme in all its planning process as performance commitments.

-) Organizational adaptation: A profit planning must rest upon sound organizational structure for the enterprise and a clear-cut designation of lines of authorities and responsibilities. The purpose of organizational structure and the assignment of authority is to establish a framework within which enterprise objectives may be attained in a coordinator and effective way on a continuing basis.
-) Responsibility accounting: In order to set-up profit planning on a sound basis, there must be a responsibility accounting system i.e. one tailored first and foremost to the organizational responsibilities.
-) Realistic expectation: Profit planning must be based in realistic approach or estimation. Management must use realistic assumption and must not take either irrational optimism or unnecessary conservation.

2.2.5 Purpose of Profit Planning

1. To state the firm's expectation in formal terms clearly to avoid confusion and facilitates their attainability.
2. To communicate expectation to all concerned with the management to the firm, so that they are understood, supported and implemented.
3. To provide a detailed plant of action for reducing uncertainty and for its proper direction of individual and group efforts to achieve goals.
4. To co-ordinate the activities and efforts in such a way that the use of resources in maximized.
5. To provide a means of measuring and controlling the performance of individuals and units and to supply information based on which the corrective action can be taken.

2.2.6 Origin of Profit Planning

Towards the end of 1921 national budget for the FY 1921/1923 was prepared in USA and it was presented to senate. With the introduction of national budget in USA business of USA started to realize the importance of budgeting.

The national budget covers the following aspects.

-) Forecast of problem future expenditure.
-) Analysis of source from which income is to be raised to meet the expenses.
-) Maintaining co-ordination between expenditure and source of income.
-) During the time US businessmen were also suffering from problem of co-ordination in between the expenses for the material, rent, labor and receipt from sales. So they started thinking about adaptation of budgets. Slowly and gradually. They started adopting the budget system in their business. This can be considered as origin of profit planning and control.

“Business budget and budgetary control” published on UK in year 1932 was the first book on business budget, which was written by British writer A.W. Wellstone. This book was the collections of his articles, which he had written in “The times”, Engineering supplements (published between 5-12-1931 to 5-12-1932). However this philosophy could not get popular UN before 1936.

Interest of British business man was aroused by Mr. R. Drunkenly who presented interesting review of several industries of US which has

introduced and adopted budgeting at 6th international congress for scientific management held in London in 1935.

2.2.7 Budgeting: As Device of Profit Planning

Budgeting is a forward planning. It serves basically as a device for management control. It is rather pivot of any effective scheme of control. Budgets must be based on realistic statements of goals and objectives of organization. It serves as a powerful media of communication between various levels of managers, administrators, executives, supervisors and objectives in enterprises. Employees who are responsible for performance must clearly aware of long and short term objectives and goals to well perform their responsibilities. Budgets provide media for self-discipline and control throughout the length, breath and depth of organization.

G.A. Welsh in hi book “budgeting PCC” has rightly pointed out that “Budgeting is the principle tool of planning and control offered management by accounting functions” (Welsh, 1999). John G. Glover and Coleman L. Maze have expressed a similar view. In their opinion, the prime objective of budgeting is to assist in systematic planning and in controlling the operations of the enterprises. In the word of I.M. Pandey, “A budget is a comprehensive and co-ordinate plan expressed in financial term for the operation and sources of an enterprises for some specific period in the future” (Pandey, 1991).

In fact budgeting is best source of communication and is a managerial technique. Budgets are doialostic techniques for detailed analysis of future oriented activities of persons and groups of persons responsible for administration of public services and management of enterprises. Budgets are one of the various types of instruments for

generation and sustenance of high morale, loyalty, purposive ness, a sense of belonging and organizational pride. Budgets are means of increasing efficiency and for optimization of benefit-cost ratios in public services as well as commercial enterprises.

All types of organizations and governmental units at even level must take financial plan to carry out routine operations to plan for major expenditures and to help in making financial decisions. A form with financial goals in the form of budget makes many dedications a head of time. A beget helps a form to control its cost by settling guidelines for an expenditures an unneeded items. A budget is a detailed plan, expressed in quantitative items, that specifies how resources will be acquired and used during a specified period of time. The procedures used to develop a budget constitute a budgeting system. Budget is a formal statement of policy, plan, objectives and goals established by the top level management in respect of some future period.

2.2.7.1 Nature and Characteristics of Budgeting

1. It is a managerial process that includes planning organizing, staffing, leading and controlling.
2. it is a process of achieving managerial commitment from all levels through participation for effective management.
3. It clearly specifies assignment of authority and responsibility at all organizational level, which forms the organization structure.
4. It is a continuous and consistent process of co-coordinating all management functions.

2.2.7.2 Objectives of Budgets

1. To fix the targets and to express them in monetary or quantitative terms.
2. To state the firms expectations or goals in clear and formal terms to avoid confusion.
3. To communicate expectations to all concerned departments of the firm.
4. To determine the policies for achieving the objectives or targets.
5. To co-ordinate the activities and efforts among different departments.

2.2.7.3 Essentials of an Effective Budgeting

For effective budgeting system some requisitions are necessary. These pre requisitions represents management attitude. Organizational structure and management approach is also necessary for efficient and effective budgeting system. There are some important essentials of effective budgeting.

-) Support of top management.
-) Clear and realistic goals and objectives.
-) Assignment of authority and responsibility.
-) Adaptation of accounting system.
-) Full participation
-) Effective communication
-) Budget education
-) Flexibility

2.2.7.4 Types of Budgets

Budget may be classified under different based as required. Some based to classify budget are as follows:

i. On the basis of time

(a) Long-term Budget

These budgets are prepared on the basis of long-term forecasts and such budget covers the plan, which extends from five to ten years. These types of budgets are prepared to achieve long-time objectives.

(b) Short-term Budget

These are usually operation budget for one to five years. To achieve short term goals, these shot term budgets are formulated.

(c) Current Budget

These budgets are usually prepared for one month to twelve months and are the short term budgets adjusted by current conditions or prevailing circumstances.

ii. On the basis of function

Budget for a period may also be classified according to the function carried on in business concern. The various forecast for individual functions are coordinated then consolidated to show the total effects of all the functions. The number of functional budget depends upon the size and nature of the business. Some of functional budget are as follows:

(a) Sales Budget

Sales budget is the budget which forecast future sales of each product in each region in each unit of time. A sales budget should be prepared to show the details like product wise, region wise and time wise sales to meet overall objectives of organization.

(b) Production budget

Production budget is convened with determining the quantity of the product to be produced each unit of time. Production budget is prepaid to coordinate the sales budget and inventing policy of organization.

(c) Purchase budget

Purchase budget is the process of determining the quantity of raw material and to be purchase to meet materials consumption and inventory. In other words purchase budget determines the quantity and price of materials that should be purchased to meet the raw materials for production and inventory level for seasonal variations.

(d) Cash budget

Cash budgeting focuses on each inflows, cash out flows and relating financing, cash budgeting is an attractive way to plan and control the cash flows, assess cash needs and effectively used of excess cash.

(e) Master Budget

Master Budget is a summary budget that incorporated all functional budgets and it may take the form of profit and loss account and balance sheet as at the end of budget period.

iii. on the basis of flexibility

Budget may also be classified on the basis of flexibility i.e. ability to change the budget target according to the volume of activity. From this point of view, budget may be two types.

a. Flexible budget

The budget is designed in such a way as to change with the level of activity attained. In case of such budgets, revenue and cost target are set in the respect of different level of activity even from zero to hundred percent of product volume.

b. Static budget

The budgets are prepared for fixed or standard volume of activity, they are called static budget. They do not change in accordance with the change in volume of activity. Such budgets are usually prepared from one to three months in advance of the fiscal year to which they are applicable.

2.2.7.5 Development of Profit Plan through Functional Budget

Profit plans are developed with the help of functional budgets. A budget is a comprehensive and co-ordinate plan expressed in financial terms for the operations and resources of an organization for some specific period in the future. So budget is a plan of the firm expectations in the future.

The preparation of comprehensive budget begins with planning of sales and this planning will established the basis for the detailed planning of production. With the help of production plan, material usage and purchase budget direct labor expenses budgets are derived in an

appropriate sequences. The budget culminates in a projection of the income statement and balance sheet at the end of the budget period of the company as a whole.

2.2.7.6 Master Budget

The master budget, the principal output of a budgeting system is a comprehensive profit plan that ties together all phases of an organizations operations for a specified period of time. It is comprised of many separate budgets, schedules that are interdependent. In master budget sales budget production budget purchases budget, material purchase budgets are completed master budget of the entire firm is prepared. A master budget is summary of functional budgets.

The preparation of master budget is a complex process and it involves an effort of many people from all levels of management. There are 12 basic steps in preparing a master budget. These are as follows:

1. Forecasting demand
2. Identify cost of responsibility center
3. Estimate production cost
4. Specify operating objectives
5. Develop a sales budget
6. Develop a production budget
7. Develop a purchasing budget
8. Develop budget for responsibility centers.
9. Formulate a profit plan
10. Compare profit plan with operating objectives
11. Formulate a projected cash budget
12. Prepare a projected statement of financial positions.

We have already defined that “The budget is tool of profit planning” so it is impossible to prepare profit plan without the help of budget. That’s why budget is an integral part of profit plan. A detailed profit plan can be formulated only with the help of various functional budgets. This process starts with the preparation of sales budgets and ends with the completion of budgets profit and loss account balance sheet.

2.2.7.7 Sales Budget

A sales budget is a forecast of what the company can expect to sell during a budget period. It is forecast of total sales expressed and incorporated in quantities and money. A sales budget is the starting point in which other budgets are also based. All other budgets such as production budget purchase budget labor budget, overhead budgets etc are affected by sales budgets. Therefore sales budget can be referred as nerve centre or backbone of the enterprise.

Whole preparing a sales budget, the following factors should be considered:

- (i) Past sales figures
- (ii) Assessment and reports by salesman
- (iii) Seasonal fluctuation
- (iv) Proposed management policies.
- (v) Availability of materials.
- (vi) Analysis of potential market.
- (vii) Extent of competition
- (viii) Government policies and regulations
- (ix) General trade prospectus.

- (x) Economic condition of the country.
- (xi) Sales force size.

2.2.7.8 Production Budget

The production budget is prepared after the sales budget. A production budget incorporates the estimates of total volume of production with the scheduling of operation by days, weeks and months. It specifies the number of unit of product of each product that much be produced to satisfy the sales forecast and achieve the desired level of closing finished goods.

This budget is prepared by production manager based upon sales budget production capacity and desired ending stock. In preparing the production budget, consideration should be given to the following:

- (i) Sales budget
- (ii) The opening and closing inventory to held.
- (iii) Installed plant capacity and existing utilization.
- (iv) Policy of the management regarding manufacture of purpose of component.
- (v) Production cycle.

2.2.7.9 Direct Material Purchase Budget

The budget is prepared for the determination of purchase of raw materials and components parts. The purchase units and price of materials are determined by the purchasing departments. While preparing this budget, inventory policy of the concern should aloe be considered the purchase unit is determined by adjusting closing and opening stock with required units as following:

Purchase units: Required units + ending stock – Beginning stock

2.2.7.10 Direct Labor Cost Budget

The labor required to meet production need is estimated by direct labor budget. It is developed directly from the production budget. The labor budget which shows the labor hours to required to meet the production demand of the factory during the budgeted period is know as direct labor hour budget. To compute total direct labor hours requirement, expected production volume for each product is multiplied by the number of direct labor hours required to produce a single unit. In the same way, if the labor budget is prepared for an estimation of labor cost, that is know as labor cost budget. For obtaining labor cost, the direct labor hours required to meet production requirement is multiplied by labor cost per hour.

2.2.7.11 Overhead Budget

The next step is PPC is overhead plan. The need for overhead plan arises because to maintain overhead expenses at reasonable level. Three types of budgets come under overhead budget they are:

- a. Manufacturing overhead budget
- b. Office and administrative over head budget.
- c. Selling and distribution overhead budget.

a. Manufacturing Overhead Budget

This budget presents an estimation of indirect expenses, which are related with production. It presents the forecast of all the production overheads which have to incur during the budgeted period. While forecasting manufacturing overhead, three types of costs have to be

estimated. They are fixed, variable and semi variable manufacturing cost. Examples of such overhead are salaries, factory rent, depreciation, insurance, light and fuel etc.

(b) Office and Administration Overhead Budget

Office and administration overhead budget represents forecast of all administrative expenses. Administrative overhead are mostly fixed in nature, some of which are committed while other are discretionary in nature. This budget contains expenses like director's remuneration legal charges, audit fees, salary, office lighting and hearing, property taxes postage etc.

(c) Selling and Distribution Overhead Budget

A separate cost is required for selling and distribution of finished goods. The task of estimating such cost is accomplished in this budget. This budget is closely concerned with sales budget and represents the forecast of all costs relating to selling and distribution of products. The sales manager is held responsible for selling and distribution overhead budget. For a correct estimation of the selling and distribution cost, the cost may be classified into fixed, variable and semi-variable selling and distribution overhead.

2.2.7.12 Cash Budget

The cash budget is a plan of future cash receipt and payment. The statement showing the estimated cash income and cash expenditure over a projected time period is know as cash budget. A very helpful tool in cash management is the cash budget. It helps management in planning to avoid

unnecessary idle cash balance. In the some way, it also helps to eliminate unneeded expensive borrowing.

A cash budget is a composition of estimated cash inflows and outflows for a particular period such as day, week, month, quarter or a year. A cash budget is a forecast of expected cash inflow, outflow and ending position by interim time period for a specific time period.

In annual profit plan, a short-term cash budget is to be included. Basically cash budget includes two parts (1) the planned cash receipt (in flows) and (2) the planned disbursement (outflows) planning for cash inflow and outflow gives the planned beginning and ending cash positions for the budget periods. It will indicate (i) need for financing probable cash defect (ii) need for investment with other budget such as sales budget expenses budget and capital expenditure budget etc. In this way we know about cash inflow outflow with help of cash budget.

2.2.8 Control Process of Profit Plan

2.2.8.1 Performance Report

Management has to devote the valuable time and effort for the achievement of the planned profit. So the evaluation of effectiveness and efficiency of plans operations and performance are the essential field of managerial activates. Controls are the process of getting conformity of actual performance with planned course of action, planning is incomplete if no system for control is developed.

Performance reporting for internal management use is an important part of comprehensive profit planning and control system. Performance reports are usually prepared on monthly basis. It facilitates internal

control by the management performance reports are reports in which actual results are compared with goals and budget plans. Such reports are designed to pin point both efficient and inefficient performance.

Performance report plays as an important tool to provide necessary information as it reports the performance of every responsibility center to the management. The efficiency of the management depends upon the achievement of desired result. The main objective of the performance reports are the communication of performance measurements, actual results and the related variances.

Performance reports are prepared by the accounting department on a monthly basis. These performance reports compare actual performance with planned and show each difference as a favorable or unfavorable performance variation. When reports give the favorable and unfavorable variances between actual performance and planned performance on monthly basis such variance requires immediate concern as well as continuous. Follow up procedures should analyze both unsatisfactory conditions and correct decision should be made. The main purpose of performance report is to show variance between planned and actual. Such variance requires immediate concern as well as continuous follow up by management for the betterment of the enterprises. Follows up procedures should analyze both unsatisfactory conditions and correct decision should be made. The main purpose of performance report is to show variances between planned and actual. Such variance should be expressed in amounts as well as percentage of the planned and budget amounts as well as percentage of the planned and budget amount. Statistical control units should also be implemented to determine the significance of variance. Monthly performance report should generally show variances for the

period being report and cumulative variance to date, such report are usually prepared for each responsibility centers.

2.2.8.2 Management Follow-up Procedure

Follow up is an important and key phase of effective control. Because performance reports are based on assigned responsibilities. They are the basis for effective follow up actions. It is important to distinguish between cause and effect. The identification of cause is primary a responsibility of line management. Analysis to determine the underlying cause of both favorable, unfavorable variable should be given immediate priority. In case of unfavorable performance variance, after identifying the basic cause, an alternative and corrective action must be selected. Then the corrective action much be implemented. In case of favorable performance variance, the underlying causes should be identified. The underlying cause of favorable variances often provide valuable information for improving efficiency and four developing positive reinforcements to the less successful operation and employees.

2.2.8.3 Performance Evaluation

To indicate the extensive reporting requirements, a business must fulfill and to focus on performance reporting the following classification of reports is presented.

(a) External Reporting

These are reporting to government agencies, regulation commission, creditor's investigative agencies, and other groups external to the active management. Frequently, these reports are quite extensive

and compromise a significant position of the overall reporting activities of the business.

(b) Report to Owners

These are traditional annual reports to the owners and other special reports prepared to the owners concerning special problems or items of interest. These are based upon “Generally accepted Principles” and generally report that have been subjected to audit by an independent G.P.A.

(c) Internal Report

These are reports prepared within the company for internal use only. They may be considered confidential report. They do not have to meet the needs of external groups, nor the text of “Generally Accepted Accounting” but rather the text of internal management needs.

All companies, regardless of size have reporting requirements for all the categories listed above. In the smaller companies, most of the basic reporting needs may be accomplished with a single general purpose report. However, as the size and complexity of the company increases, there is a greater need for regimentation of the reporting as suggested above.

2.2.9 Application of PPC to Various Types of Organization

Some people say that comprehensive profit planning and control is applicable only to large and complex organizations. Usually it is commented that “Comprehensive budgeting is a fine idea for most businesses but ours is different” or “it is impossible to project our revenues and expenses” and so on. Sometimes specific industries are

viewed as not amenable to profit planning and control. These views are common regarding non-manufacturing enterprises- service companies, financial institutions, hospitals, certain retail business. Construction companies and real-estate enterprises. To the contrary, profit planning and control can be adapted to any organization (profit or non-profit service or manufacturing, regardless of size, special circumstances or conditions. The fact that a company has peculiar circumstances or critical problem is frequently a good reason for the adoption of certain profit planning and control procedures. In respect to size, when operations are extensive enough to require more than one or two supervisory personnel, there may be a need for profit planning and control applications. The smaller company certainly has different needs in this respect than a larger one. As with accounting a single profit planning and control system must be tailored to fit the particular enterprise and it must be continually adopted as the enterprise and its environmental change.

2.3 Review of Previous Dissertation

Research is an on-going process, main purpose of the literature review is to find out what works have been done in the field of research study being undertaken as far as possible. Some of these submitted by master level students have been reviewed.

a. Mr. Nabin Shrestha

Nabin Shrestha has conducted the research work on profit planning in Nepalese PEs entitled “Profit planning and control of public enterprises in Nepal with special reference to DDC. The main objectives of his study is to find out practical application of profit planning in DDC and suggest to improve the financial position of these enterprises.

Objectives of the study to analyze functional budgets of the concern, to analyze the profitability and efficiency of the concern to analyze target and achievement along with their reason of deviation and to point out valuable recommendation and suggestions based on analysis.

The study covers the period of ten years from FY 2048/49 to 057/58. Mr. Shrestha has collected related data and information from the sources of primary and secondary. Primary data has been collected from interview with officials and questionnaire and secondary has been collected from published documents, magazines annual reports, statistical survey etc.

After analysis different data, information the researcher pointed out some findings and recommendation to improve the position of DDC.

Lack of clear cut measurable goals, objectives and missions. It did not have proper planning system. Only the top level of management is involved on planning and decision-making lower level of participation is not encouraged. Inadequate delegation of authority and responsibilities to different level of management. Lack of communication of objectives, missions between high level and lower level management, lack of concept of cost classification, cost control and cost segregation system. The corporation fails to maintain its periodic program report systematically to find out the cause of poor achievement. Lack of suitable technological support and expansion to meet the increasing demand. So there is variance between actual and budgeted plans. Financial position of DDC is not satisfactory. Due to poor strategic and poor performance it cannot activates its objectives and missions.

To improve the financial position, Nabin Shrestha has suggested following recommendation. A systematic approach should be adopted to prepare comprehensive profit planning to increase profitability. Establish the repeat central planning department to co-ordinate all component of profit plans i.e. sales plan, production plan, expenditure plan, manpower capacity plan, direct labor plan etc. management should given full authority, responsibility and accountability for planning and controlling process. Govt. intervention should be reduce company should try to reduce the variance between actual and budgeted plans. It should adopt the method of performance evaluation system for increasing productivity, favorable and unfavorable variance should be analyzed and necessary steps should be taken to improve unfavorable situations. Company should review present cost structure and develop effective cost system. For perfect profit planning there should be scientific and good system of separating cost into fixed and variable and to reduce the conflict between different department managers, it should clearly define the authorities and responsibility of different managers, cost centers.

(b) Mr. Binod Kumar Sharma

Binod Kumar Sharma has studied the profit planning in commercial bank wit the case study of Nepal Bangladesh Bank. He has studied the profit planning aspect of Nepal Bangladesh Bank. Specific objectives of this study are to highlight the current profit planning premises adopted and its effectiveness in Nepal Bangladesh Bank. To observe bank's profit planning on the basis for overall managerial budgets developed by bank. To analyze the variance of budgeted and actual achievements and the growth of business of the recommendations for improvements of overall profitability of the bank.

To fulfill those objectives of the study both primary and secondary data of the period the years are collected. After analysis rejected data, information he has pointed out various findings and recommendation regarding his study, his major findings is:

1. It is observed that the bank is adopting a policy to keep minimum number of employees as possible. But it has unnecessary long ladder at various level without specific job description.
2. Bank has the policy to composes academically highly qualified (first class MBA) fresh candidates at management trainee which may be considered as good aspect for future manpower planning.
3. Decision making process is highly centralized. There is lack of active and organized planning department to undertake innovative products researches and development works and lack of advance training to personnel.
4. Major concentration of resources mobilization of Nepal Bangladesh Bank is at deposit mobilization. In this respect they are incurring cost toward deposit mobilization.
5. Bank's resources development for non-yielding liquid assets (cash and bank balance) is increasing every year. Which is determinate to profitability objectives, but it is supportive to meet liquidity requirement of the bank.
6. The interest spread is found to be increasing every year. Major portion of interest income is spent towards phasing interest to depositors.

7. An average current ratio of the bank has found to be always higher than standard ratio of 2:1, which shows satisfactory liquidity position of the bank.

Binod Kumar Sharma has recommended following major points to improve the existing situation of the bank.

1. Level wise specific job description and responsibility, authority delegation should be clearly mentioned.
2. It is suggest to the bank to form a specific planning and research department, which shall be responsible for developing new innovative products, further development and up-gradation of existing profit which is turn to ensure better profitable business for the bank.
3. Branch monitoring and controlling mechanism should be made at the regional level also in order to ensure the better functioning of the branch offices.
4. The average cost of deposit to the bank is high. Therefore bank should try to lower it by mobilizing more and more low cost or cost free deposits. Thereby, reducing the interest cost because due to the high cost of deposit, bank is forced to invest its fund more on high “yielding assets, which are generally not liquid and obviously risk for the bank.
5. Bank should plan proper loan assessment and monitoring aspect and adequate infrastructure to support lending process.
6. Bank should minimize those expenses, which are not related to income earning. Lowering the other expenses the bank shall enhance its profit. Bank should attempt to lower the burden cost by increasing the other income and decreasing the other expenses. At the same time it should take a policy to make the

interest margin at the maximum extent as allowed by the central Bank's norm.

(c) Miss Smriti Shrestha

Miss Smiriti Shrestha has submitted her research report on the topic of "Profit planning in Nepal Investment Bank". She has trend to examine whether the NI Bank is applying profit planning system or not properly. She has tried to examine the application of comprehensive profit planning in NI Bank. She has also trend to examine the present planning premises adopted by the company.

The main objectives of her study is to analysis the profit planning applied in NI Bank, to analyze the major functional and financial plans formulated and complemented in NI Bank. To examine the outcome of these plans in terms of achievement and also to point out possible suggestion and recommendation to improve the performance of NI Bank with means of profit planning system.

To fulfill these objectives the researcher has collected the data from primary as well as secondary sources primary data are collected through questionnaire and interview with related officers and secondary data are collected from financial records of the Bank.

Miss Smiriti Shrestha has made several conclusion and findings. Major findings of the research work are as follows:

1. NI Bank has not been utilizing its full capacity, the actual performance is always below the targeted.
2. The to[level are only involved in decision-making and lower participation is not encouraged.

3. Bank has the policy to recruit the highly qualified fresh candidates.
4. NI Bank has failed to maintain its periodic performance report systematically.
5. The goals and objectives are limited only to high level officials.
6. Lack of advance training to the personnel.
7. Absence of skilled and party academic manpower.
8. Lack of proper co-ordination among the various responsible departments.
9. The total deposit of the bank is found increasing each year corresponding to the increase in interest expenses.
10. Interest income amount of the bank is the highest among other income items of the total revenue.
11. The current ratio, debt equity ratio, debt to assets ratio profitability ratio and cost volume profit analysis of the NI Bank is positive and perfectly correlated.

Miss Shrestha has pointed out some recommendation to formulate and implement the profit plan and to improve the financial position of the industry.

NI Bank should consider certain management technical and financial issues. There should be co-ordination between different level of employees, should be defined their responsibilities and authorities, Budget should be planned in realistic ground. It should minimize the gap and find out the causes of variation between budget and actual results. To prepare plan for Profit Company should analyze the technique of profit planning i.e. BEP analysis, budgeting cost segregation, flexible budgeting etc. Lower level management participation should be encouraged in profit planning and should be flow effective communication in system to all

level of the company. The company should adopt performance evaluation system to increase its competitiveness and to know the strength and weakness of the industry.

2.3 Research Gap

All the above mention research studies are related to profit planning of public enterprises and to the commercial banks. The study have pointed out that there is no proper profit planning system in these organizations. Decision making policy formulation and strategy formulation are made by executive directors. Participation of lower level managers is not allowed. Also found that actual achievements are lower than budgeted so the researcher have sequester and recommended to implement effective and appropriate profit planning system. This may help these organizations to active their goal and also to reduce the variance between actual and budgeted data.

This study shall be a new one from the previous study as no study has been made so far in the profit planning system in particularly Nepal credit and commerce Bank Ltd. This study has tied to indicate the role of budgets for effective formulation and implementation of profit planning system. This study has analyzed the financial position of Nepal credit and commerce Bank by applying the tool is of ratio analysis and other mathematical and statistical tools. Finally it concludes the various fandangos of research and recommend for co mediate and long-term improvement ad correction.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The term 'research' is believed to be defined from French word 'Researcher' meaning to search again. The research is original and planned investigation undertaken with the prospect of gaining new scientific and technical knowledge and understanding.

Research may be defined as systematic method of finding solution to a problem. The scientific method lies on enunciating the problems, collecting facts (data), analyzing data critically and researching conclusion based on them.

Research Methodology refers to the various sequential steps to be adopted by researcher in studying a problem with certain objectives in view. Research Methodology may be defined as method or systematic method, which make research work easy, effective and help to find a solution of the problem.

The main objective of this study is to analyze, examine and interpret the profit planning techniques and its effectiveness to the enterprise. The research Methodology is followed to achieve the basic objectives and goals of research work. Therefore this chapter deals with the following aspects of methodology.

3.2 Research Design

Research Design is a plan to obtain the answer of research question through analysis of data. Research Design is a planned structure and

strategy of investigation conceived to obtain answer to research objective through analysis of data. Research Design means the definite procedure and technique which guides the study and propounds ways of doing research. The research design of this study is analytical and descriptive as this study is an examination and evaluation of budgeting procedure in the process of profit planning of NCC bank Ltd.

The study is closely related with the various functional budgets and other accounting statement as well as the actual results of the budget. The research has its basic objective to figure out the problem their in and provide them with some recommendation. The data for the research are of secondary type. The research covers the period of five years from fiscal year 2059/60 to 2063/64.

3.3 Sources of Data and Data Collection Technique

Secondary data have been collected from the annual report of NCC bank. Similarly other necessary data have been collected from the publication of co-ordination council of ministry, Central Bureau of Statistic, Official accounting and planning records of NCC Bank, Publication of Nepal Rastra Bank and related publication. For the reference of materials the researcher visited library of Central Department of TU, Nepal Commerce Campus and Shanker dev campus

Annual reports of the bank are collected from concerned bank, especially from their corporate office. Reports of NRB such as economic bulletin, annual reports are collected from NRB head office as well as some data's are obtained from the website of Nepal Stock Exchange www.nepalstock.com.np and website of NCC Bank www.nccbank.com.np.

3.4 Research Variables

The research variables of this study are mainly related with the accounting statement of the bank. Loan and advances, customer deposits, outstanding balance of letter of credit and bank guarantees, investment, interest expenses, interest income, staff expenses, operating expenses of NCC Bank are the research variables of this study.

3.5 Method of Data Analysis

Data collected from different sources are in raw form, and data collected from various sources are managed, analyzed using various financial and statistical tools. Financial tools mainly ratio analysis, profitability analysis, growth analysis are used. Statistical tools used in this study are trend analysis, correlation analysis. Similarly hypothesis analysis is also used in this study.

3.5.1 Financial Tools

Under this heading following financial ratios are calculated:

A) Liquidity Ratio

- i. Current ratio
- ii. Cash and Bank Balance to Current Assets Ratio
- iii. Investment on Government Securities to Current Assets
- iv. Loan and Advances to Current Assets Ratio
- v. Cash and Bank Balance to Total Deposit Ratio

B) Activity Ratio

- i. Loan and advances to total Deposit Ratio
- ii. Total Investment to Total Deposit Ratio
- iii. Loan and Advances to Total Assets Employed Ratio

C) Profitability Ratio

- i. Return on Equity

- ii. Interest Earned to Total Assets Employed Ratio
- iii. Interest Paid to Total Assets Employed Ratio
- iv. Interest Earned to Operating Income Ratio
- v. Return on Total Assets Employed Ratio
- vi. Return on Loan and Advances Ratio

3.5.2 Statistical Tools

Following tools are used to analyze the data statistically:

A) Trend Analysis

Trend analysis reflects the dynamic place of movements of a phenomenon over a period of the time. This analysis simply finds out the increasing or decreasing trend of particular item. It helps on forecasting so that proper strategy can be implemented to improve the situation.

B) Correlation Analysis

Correlation refers to the degree of relationship between two variables. Between two variables, increase or decrease in one cause increase or decrease in another. Then such variables are correlated variables. The measures of correlation calculate mathematical relationship between two variables and also called correlation coefficient. The correlation coefficient between two variables describes the degree of relationship between two variables.

C) Test of Hypothesis

Under this analysis, effect has been made to test the significance level regarding the parameters of the population on the basis of sample drawn from the population.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Without analysis and interpretation of data the thesis is incomplete and don't give any meaning. In this chapter the researcher presents the analysis, calculation, interpretation and presentation of various profit variables and profit management of respective bank. It has done by applying various financial and statistical tools such as ratio analysis, trend analysis, correlation analysis; hypothesis analysis is also done to analyze the data.

4.2 Analysis of Financial Ratios

Ratio is the relationship between two figures. They provide two important facts about the management: the return on investment and the soundness of the company's financial position. Ratio analysis can be taken as a diagnostic tool which helps in identifying problem between areas and opportunities for the company.

Though there are a large number of ratios and their types, our study will be confined within the scope of bank's financial analysis. Our study will be limited to liquidity ratio, profitability ratio, growth ratio and activity ratio. The study of each ratio has its own purpose. Some communicates about the financial strength of the unit, whereas some interprets the working capital need of the unit and some tells about the profitability of the unit.

Various financial ratios related to profit planning have been presented and discussed in order to evaluate and analyze the performance

of NCC Bank. The ratios are designed and calculated to highlight the relationship between financial items and figures. These calculations are based on financial statement of concerned bank. The financial ratios that are calculated for the purpose of this study are:

A: Liquidity Ratio

B: Activity Ratio

C: Profitability Ratio

D: Growth Ratio

A. Liquidity Ratio

Liquidity ratio measures the firm's ability to meet its current obligation. The following are the ratios which measures and calculates the liquidity position of banks:

i) Current Ratio

The current assets of the borrowing unit are divided by its current liabilities. Higher the ratio, the higher is the firm's capacity to meet its current obligations. All these assets which can be converted into cash within a short period of time without loss are current assets. Cash and bank balance, inventory, marketable securities, account receivables, accrued income, prepaid expenses, short-term investment fall in the category of current assets. Current liabilities are account payable, accrued expenses, short-term bank loan, outstanding expenses etc.. Current ratio of 2:1 is considered as an ideal proportion.

Table No.1
Current Ratio (times)

(Rs in million)

FY	Current assets	Current liabilities	Current ratio
059/060	5541.47	6514.86	0.85
060/061	5296.47	6017.77	0.88
061/062	6130.38	6636.84	0.92
062/063	5448.32	6696.79	0.81
063/064	5778.10	6624.65	0.87

The above table No.1 shows the current ratio of NCC Bank. The ratios are below the normal standard. It indicates current liabilities is greater than current assets. From the above table it is clear that the liquidity position of the company is poor. So, the company should minimize the portion of current liabilities to maintain the normal standard of the liquidity.

ii) Cash and bank balance to current assets ratio

Cash and bank balance to current assets ratio shows the position of cash and bank balance in total current assets. Cash and bank balance are highly liquid assets than other current assets. In this study, cash and bank balance includes cash in hand, other cash items and cash at bank with different banks. It is calculated by dividing cash and bank balance by current assets. The cash and bank balance to current assets are given below:

Table No. 2
Cash and bank balance to current assets ratio (%)

(Rs in million)

FY	Cash and bank balance	Current assets	Ratio
059/060	712.14	5541.47	
060/061	970.39	5296.47	12.85
061/062	662.70	6130.38	10.81
062/063	970.39	5448.32	14.39
063/064	758.16	5778.10	13.12

Above table no 2 shows that cash and bank balance to current assets ratio is better as it Shows the ability to manage the deposit, withdraws from the customers and readiness to meet customer requirement.

iii) Investment on Government Securities to current Assets Ratio

This ratio is calculated by dividing investment on government securities by current assets.

Table No.3

Investment on Government securities to current assets ratio (%)

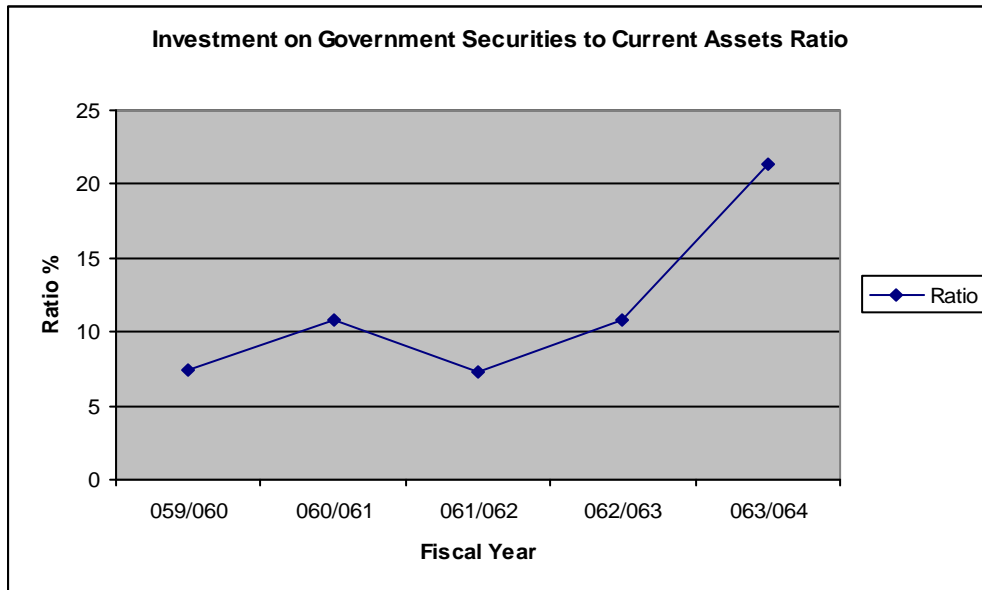
(Rs in million)

FY	Investment on government securities	Current assets	Ratio
059/060	411.83	5541.47	7.43
060/061	573.98	5296.47	10.84
061/062	400.33	6130.38	7.35
062/063	591.94	5448.32	10.86
063/064	1236.62	5778.10	21.40

The above table clearly depicts that the investment on government securities to current assets of the bank has a fluctuating trend.

From the above five years picture, it is evidenced that the ratios are in increasing trend over the years. From the above analysis NCC Bank has made higher investment on government securities. Investment on government securities to current assets ratio of NCC Bank is graphically shown as follows:

Figure No.1



iv) Loan and advances to current assets ratio

The ratio is calculated by dividing total loan and advances by current assets. The ratio is presented in the following way.

Table No. 4
Loan and advances to current assets ratio (%)

(Rs in million)

FY	Loan and advance	Current assets	ratio
059/060	4271.63	5541.47	77.08
060/061	2997.26	5296.47	56.59
061/062	5419.73	6130.38	88.41
062/063	4643.26	5448.32	85.22
063/064	3707.64	5778.10	64.17

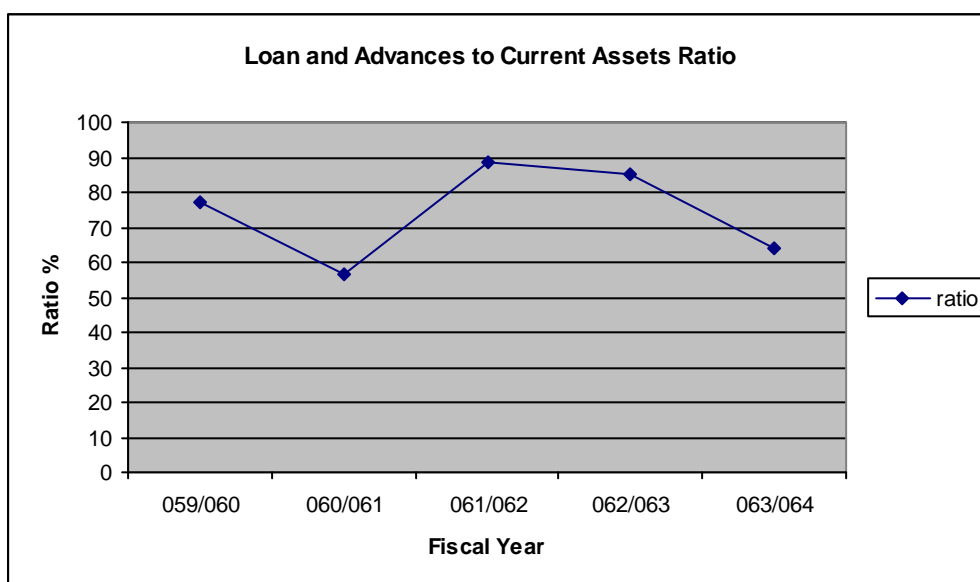
The above table clearly shows the fluctuating trend of loan and advances of NCC Bank during the study period. The ratio is higher in the

financial year 061/62. Thereafter it has witnessed a decrease in loans and advances as percentage of current assets.

The above analysis reveals that NCC has been more successful in identifying profitable investment sectors and increasing its earning.

The loan and advances to current assets ratio of NCC Bank is graphically shown as follows:

Figure No. 2



v) Cash at Bank balance to total deposit ratio

Cash at bank balance is said to be the first defense of every bank. The ratio between the cash and bank balance and total deposit measures the ability of bank to meet the unanticipated cash and all types of deposit

Table No.5

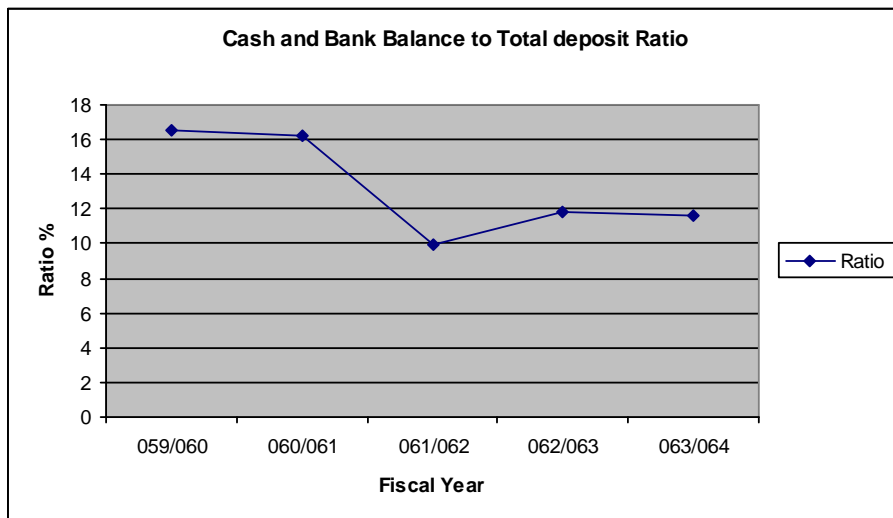
Cash and Bank balance to total deposit ratio (%)

(Rs in million)

FY	Cash and bank balance	Total deposit	Ratio
059/060	712.14	4294.10	16.58
060/061	970.39	5987.70	16.21
061/062	662.70	6630.94	9.99
062/063	783.96	6619.58	11.84
063/064	758.16	6500.58	11.64

The above table shows that the cash and bank balance to total deposit ratios are in a fluctuating trend. NCC Bank has maintained a high ratio of 16.58% in F/Y 059/60 and low ratio of 9.99% in F/Y 061/62. In average it has maintained remarkable cash and bank balance to total deposit. NCC has fared well in meeting their depositor's daily cash requirement and investing fund in other productive areas. Cash and bank balance to total deposit ratio of NCC is graphically presented below.

Figure No.3



B) Activity Ratio

Activity Ratio measures the efficiency of the bank to manage its assets in profitable and satisfactory manner. These ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. Under this following ratios are calculated:

i) Loans and advances to total deposit ratio

This ratio is calculated by dividing total loans and advances by total deposits.

The data tabulated below shows the loan and advances to total deposit ratio.

Table No. 6
Loan and advances to total deposit ratio (%)

(Rs in million)

FY	Total investment	Total deposit	Ratio
059/060	4271.63	4294.10	99.48
060/061	2997.26	5987.70	50.06
061/062	5419.73	6630.94	81.73
062/063	4643.26	6619.58	70.14
063/064	3707.64	6500.34	57.04

The above table shows that the loan and advances to total deposit of the bank is in a decreasing trend. NCC had a high ratio of 99.48% in FY 059/60. The bank seems to be strong in terms of mobilization of its total deposits as loan and advances. But higher ratio is not better from the point of view of liquidity as the loan and advances are not as liquid as

cash and bank balance and other investment. In portfolio management of bank various factors such as availability of funds, liquidity requirements, central bank norms etc needs to be taken into consideration.

ii) Total investment to total deposit ratio

This ratio is calculated by dividing total investment by total deposits.

The data tabulated below shows the total investment to total deposit ratio.

Table No. 7
Total Investment to total deposit ratio (%)

(Rs in million)

FY	Total investment	Total deposit	Ratio
059/060	411.83	4294.10	9.59
060/061	573.98	5987.70	9.59
061/062	400.33	6630.94	6.04
062/063	591.64	6619.58	8.94
063/064	1236.62	6500.34	19.02

The above table shows a highly fluctuating trend in total investment to total deposit of the bank. NCC has gradually increased the ratio. It has a high ratio of 19.02% in FY 2063/64.

From the above table, we can conclude that the bank has tried to mobilize their deposit in various profitable sectors and the investment in various securities should be increased to utilize its deposits.

iii) Loan and advances to Total assets employed ratio

This ratio reflects the extent of which the commercial banks are success in mobilization of their assets as loan and advances for the purpose of income generation. A high ratio indicates better in mobilization of funds as loan and advances and vice versa.

This ratio is computed by dividing loans and advances by the total assets employed. Total Assets employed includes current Assets, fixed assets non banking assets and other assets, etc. The table shows the ratio in different year during study period.

Table No.8

Loan and Advance to Total Assets Employed Ratio (%)

(Rs in million)

FY	Loan and advance	Total assets employed	Ratio
059/060	4271.63	4832.60	88.39
060/061	2997.26	6660.79	44.99
061/062	5419.73	6918.08	78.34
062/063	4643.26	6427.70	72.24
063/064	3707.64	6036.68	61.42

Referring to the above table No. 8 loan and advances to total assets employed ratio shows a highly fluctuating trend NCC has maintained highest ratio of 88.39% in FY 059160 and a low ratio of 61.42% in FY 063164. The ratio is in decreasing trend since FY 061162.

It reveals the weaknesses of NCC in mobilizing its total assets as

loan and advances. To increase the ratio the bank should mobilize its total assets as loan and advances efficiently as it has mobilized in previous fiscal year 059160.

c) Profitability Ratio

The following ratios are calculated under profitability ratios.

i) Return on Equity Ratio

The Return on equity measures the extend to which a bank is successful to mobilize

It's equity. The ratio is calculated by dividing net profit by total equity capital.

Equity capital includes paid up equity, profit and loss account, various reserves, general loan, loss provision etc.

The following table shows the return on equity of NCC.

Table no. 9
Return on Equity Ratio (%)

(Rs in million)

FY	Net profit	Total equity capital	Ratio
059/060	81.80	901.18	9.08
060/061	3.40	187.23	1.82
061/062	-5.16	255.85	-2.02
062/063	-569.7	1705.87	-33.40
063/064	-115.93	1908.58	-6.08

The above table shows that the ratio of return on equity is in decreasing trend. The bank's ratio has witnessed a decreasing trend during the study period. It has negative ratio from the fiscal year 061/62. The above table shows the bank has occurring net loss from the fiscal year 061/61.

From the above table it can be concluded that NCC'S profit earning capacity by utilizing available resources is weak. The bank seems to have lack of sound investment policy for the mobilization of its equity capital.

NCC should minimize their operating expenses and the investment should be used in more profitable sector to increase its profit. Its capital should be utilized efficiently.

ii) Interest earned to total assets employed ratio:

The ratio reflects the extend to which the bank is successful in mobilizing its total assets to generate high income as interest. A high ratio is an indicator of high earning power of the bank on its assets employed and vice versa.

The ratio is calculated by dividing total interest earned by total assets employed ratio. The following table shows interest earned to total assets employed ratio.

Table no.10

Interest earned to total assets employed ratio (%)

(Rs in million)

FY	Total interest	Total assets employed	Ratio
059/060	437.28	4832.60	9.05
060/061	486.83	6660.79	7.31
061/062	541.85	6918.08	7.83
062/063	562.78	6427.70	8.76
063/064	474.41	6036.68	7.86

The above table reflects a fluctuating trend in interest earned to total assets employed ratio. It has the highest ratio of 9.05% in FY 059/60 and the lowest of 7.31% in FY 060/61.

From the above analysis it can be concluded that the ratio of total interest earned to total assets employed is not satisfactory. It means the bank is not successful in generating interest income.

iii) Interest paid to total assets employed ratio:

The ratio is calculated by dividing interest paid by total assets employed ratio. The following table shows the total interest paid to total assets employed ratio.

Table no.11
Interest Paid Total Assets Employed ratio (%)

(Rs. in million)

FY	Total interest paid	Total assets	Ratio
059/060	255.91	4832.60	5.30
060/061	314.37	6660.79	4.72
061/062	315.80	6918.08	4.56
062/063	315.99	6427.70	4.92
063/064	283.01	6036.68	4.69

The above table shows a fluctuating trend in total interest paid to total assets employed ratio. The bank has the highest ratio of 5.30% in FY 059/60 and lowest ratio of 4.56% in FY 061/62. In conclusion we can say that the bank is in a better position from interest payment point of view.

iv) Interest earned to total operating income ratio

The ratio is calculated by dividing total interest earned by total operating income. The following table shows the total interest earned to operating income ratio.

Table no.12
Interest Earned to Total Operating Ratio (%)

(Rs in million)

FY	Total interest earned	Total operating income	Ratio
059/060	497.18	463.72	94.28
060/061	486.83	546.58	89.07
061/062	541.85	616.41	87.90
062/063	562.78	634.12	88.75
063/064	474.41	548.38	86.51

The above table shows the bank has a fluctuating trend of interest earned to total operating income ratio. The bank has a decreasing trend of interest earned to total operating income ratio except FY061/62. The higher and lower ratio of NCC are 94.28% in FY 059/60 and 86.51% in FY063/64.

It can be concluded that the bank has satisfactory position regarding the mobilization of interest bearing assets.

v) Return on total assets employed ratio:

This ratio is calculated by dividing net profit by total assets employed. The following table shows the return on total assets employed ratio of NCC.

Table no. 13
Return on total assets employed ratio

(Rs in million)

FY	Net profit	Total assets	Ratio
059/060	81.80	4832.60	1.69
060/061	3.40	6660.79	0.05
061/062	-5.16	6918.08	-0.07
062/063	-569.74	6427.70	-8.86
063/064	-115.93	3036.68	-1.92

The above table shows that the profitability ratio of bank is not consistent. It has a fluctuating trend. It has a negative ratio in FY061/62 to 063/64.

From the above analysis it can be concluded that NCC has poor capacity to generate income. It has a low profit earning capacity by utilizing its available resources and it seems that the investment of the bank is not managed properly.

vi) Return on loan and advances ratio

This ratio measures the earning capacity of the bank on its deposits mobilized on loan and advances. The ratio is calculated by dividing net profit by loan and advances. The following table shows the return on loan and advances ratio of NCC during the study period.

Table no. 14
Return on loan and advances ratio (%)

(Rs in million)

FY	Net profit	Loan and advances	Ratio
059/060	81.80	4071.63	1.91
060/061	3.40	2997.26	0.11
061/062	-5.16	5419.73	-0.09
062/063	-569.74	4643.26	-12.27
063/064	-115.93	3707.64	-3.13

The above table shows that the ratio of return on loan and advances is in decreasing trend. In the study of five years, it has positive ratio in FY 059/60 and 060/61. then it has negative ratio in FY 061/62 to 063/64.

In conclusion it can be said that the bank is not able to earn profit by mobilizing its assets as loan and advances.

D) Growth Ratio

Under this topic the following ratios directly related to fund mobilization and investment are calculated;

- i. Growth ratio of total deposit
- ii. Growth ratio of total investment
- iii. Growth ratio of loan and advances
- iv. Growth ratio of net profit

Table no. 15
Growth rate of total deposits (%)

(Rs in million)

FY	Total deposit	%
059/060	4294.09	0
060/061	5987.70	39.44
061/062	6630.94	10.73
062/063	6619.58	-0.17
063/064	6500.34	-1.80

Table no. 16
Growth rate of total investment (%)

(Rs in million)

FY	Total investment	%
059/060	411.83	0
060/061	573.98	39.37
061/062	400.33	-30.25
062/063	591.64	47.79
063/064	1236.62	109.02

Table no. 17
Growth rate of total loan and advances

(Rs in million)

FY	Total loan and advances	%
059/060	4271.63	0
060/061	2997.26	-29.83
061/062	5419.73	80.82
062/063	4643.26	-14.33
063/064	3707.64	-20.15

Table no. 18
Growth rate of net profit

(Rs in million)

FY	Net profit	%
059/060	81.80	0
060/061	3.40	-95.84
061/062	-5.16	-251.76
062/063	-569.74	-11141.47
063/064	-115.96	-120.35

The growth rate of deposits of the bank is in a fluctuating trend. NCC has negative growth rate in FY 062/63 and 063/64 respectively. NCC has continuously decreased deposits by 10.73% in FY 061/62, 0.17% in FY 062/63 and 1.80% in FY 0631/64 as per its strategy of shedding high cost and unprofitable deposit.

The growth rate of total investment of the bank is in a fluctuating

trend. NCC has witnessed a high growth rate of 109.02% in FY 063/64 and a negative growth rate of 30.25% in FY 061/62. Except for FY 061/62, NCC has been successful in increasing its investment.

The growth rate of total loan and advances of the bank is in a fluctuating trend. It has experienced a negative growth rate except the rate of 80.82% in FY 061/62.

The growth rate of net profit of the bank is in a negative trend. The bank has a high negative growth rate of 11141.47% in FY 062/63. It has experienced a negative growth rate during the study of five years.

4.3 Statistical tools

Under this topic, some statistical tools such as coefficient of correlation analysis between different variables, trend analysis of deposits, loan and advances, investment and net profit as well as hypothesis test (t-test) are used to achieve the objectives of the study. These statistical tools are as follows:

A) Coefficient of correlation analysis

Under this topic, Karl Pearson's coefficient of correlation is used to find out the relationship between deposit and loan and advances, deposit and total investment deposits and net profit, deposits and interest earned loan and advances and interest paid.

i) Coefficient of correlation between deposits and loan and advances

The coefficient of correlation between deposits and loan and advances measures the degree of relationship between them. In our study we have taken deposits as an independent variable denoted by(x) and

loan and advances as dependent variable (y).The main objectives of calculating 'r' between these two variables is to justify whether deposits are significantly used as loan and advances or not.

Table no. 19
Correlation between deposit and loan and advances

Evaluation criteria			
r	r²	PEr	6PEr
0.1819	0.0358	0.2908	1.7450

In the above table the coefficient of correlation between deposit and loan and advances is 0.1894. This indicates that there is a positive relationship between deposit and loan and advances. The calculated value of r^2 or coefficient of determinate is 0.0358. This means 3.58% of variation of the dependent variable loan and advances has been explained by the independent variable deposit. When the value of (r) is 0.1891 is compared with six times the probably error or 6per i.e. 1.7450, we can say that there is no significant relationship between deposit and loan and advances because 'r' is lower than six times of PEr i.e. $0.1891 < 1.7450$.

From the above analysis we can conclude that the bank shows positive relationship between deposits and loan and advances. The relationship is not significant because r is lower than 6PEr and r^2 shows lower percentage of dependency. It indicates NCC has less successful in utilizing its deposits in a proper manner.

ii) Coefficient of correlation between deposit and total investment

Coefficient of correlation between deposit and total investment measures the degree of relationship between these two variables. Here a

deposit is taken as independent variable (x) and the dependent variable is total investment which is denoted by (y). The purpose of calculated 'r' is to judge whether deposits are significantly mobilized as investment or not.

The following table shows the value of 'r', r^2 , pEr and 6pEr of NCC during the study period.

Table no. 20
Correlation between deposit and total investment

Evaluation criteria			
r	r^2	pEr	6pEr
0.6399	0.4095	0.1781	1.0686

The coefficient of correlation 'r' between deposits and total investment is 0.6399, which indicates a positive correlation between deposits and total investment. Coefficient of determination (r^2) is 0.4095. This means 40.95% of variation of the dependent variable has been explained by independent variable. The value of r i.e. 0.6399 is smaller than six times pEr. This states that there does not exist a significant relationship between deposits and total investment.

In conclusion it can be said that the bank does not show significant relationship between total deposit and total investment.

iii) Coefficient of correlation between deposits and net profit

The coefficient of correlation between deposits and net profit measures the degree of relationship between these two variables. Here deposit is independent variable (x) and net profit is dependent variable (Y). The main purpose of calculating between these two variables is to

justify whether net profit is significantly correlated with deposits or not. The following table shows the value of 'r', 'r²', pEr and 6pEr of NCC during the study period.

Table no. 21
Correlation between deposits and net profit

Evaluation criteria			
r	r²	pEr	6pEr
-0.6899	0.4759	0.1581	0.9485

The coefficient of correlation between deposits and net profit is - 0.6899, which indicates a negative relationship between deposits and net profit. The coefficient of determination (r²) is 0.4759, which indicates 47.59% of the variation of the dependent variable (net profit) has been explained by the independent variable (deposits). The value of 6pEr is greater than 'r' i.e. 0.94875-0.6899. This states that there does not exist a significant relationship between deposits and net profit.

From the above analysis we can conclude that NCC shows negative relationship or insignificant relationship. It indicates that NCC is unable to earn net profit by mobilizing its deposits.

iv) Coefficient of correlation between deposits and interest earned

The coefficient of correlation between deposits and interest earned measures the relationship between these two variables. Here deposit is independent variable(x) and interest earned is dependent variable(Y). The main objective of calculating 'r' between these two variables is to justify whether deposit is significantly used to earn interest or not. The following table shows the values of 'r', 'r²', pEr and 6pEr of during the

study period.

Table no. 22
Correlation between deposits and interest earned

Evaluation criteria			
r	r²	pEr	6pEr
0.7867	0.6189	0.1150	0.6897

The coefficient of correlation 'r' between deposit and interest earned is 0.7867, which indicates a positive relationship between these variables. The coefficient of determination (r^2) is 0.6189, which shows that 61.89% of the variation of dependent variable has been explained by independent variable. The value of six time pEr is less than 'r' i.e. $0.6897 < 0.7867$. This states that there is a significant relationship between deposits and interest earned.

In conclusion, we can say that the relationship between deposits and interest earned is highly significant showing higher percentage of dependency. The increase in interest earned is due to effective mobilization of deposits and other factors have a lesser role to play in increasing interest income.

v) Coefficient of Correlation between loan and advances and interest paid

The coefficient of correlation between loan and advances and interest paid measures the relationship between these two variables. Here, loan and advances is independent variable (x) and interest paid is dependent variable(Y). The purpose of calculating 'r' between these variables is to establish whether interest paid is significantly correlated

with loan and advances or not. The following table shows the values r , r^2 , pEr , and $6pEr$ of NCC Bank during the study period.

Table No. 23
Correlation between loan and advances and interest paid

Evaluation criteria			
r	r²	pEr	6pEr
-0.3839	0.1474	0.2572	1.5431

The coefficient of correlation between loan and advances and interest paid is -0.3839, which indicates a negative relationship between loan and advances and interest paid. The coefficient of determination (r^2) is 0.1474 which indicated 14.74% of the variation of the dependent variable (loans and advances) has been explained by the independent variable (interest paid). The value of $6pEr$ is greater than 'r' i.e., $1.5481 > -0.3839$. This stated that there does not exist a significant relationship between loan and advances and interest paid.

In conclusion, no relationship could be established between these variables.

B) Trend analysis and projection for next five years

This is known as time series analysis. The objective of this analysis is to analyze the trend of deposit collection; its utilization and net profit of NCC Bank. This topic analyzes the trend of deposit, loan and advances, total investment and net profit and its projection for the next five years on the basis of past performances and records available.

The projections are based on the following assumptions:

-) The bank will run in this present position.
-) Other things will remain constant and unchanged.
-) The economy will remain in the present stage
-) Nepal Rastra Bank will not change its guidelines relating to commercial banks.
-) The forecast will hold true only when the limitation of least square method is carried out.

i) Analysis of Trend value of total deposit

Under those topic based on the trend value of deposit from fiscal year 059/60 to 063/64 an attempt has been made to forecast the projection for next five years i.e., up to 067/68.

Table No. 24
Trend values of Total Deposit

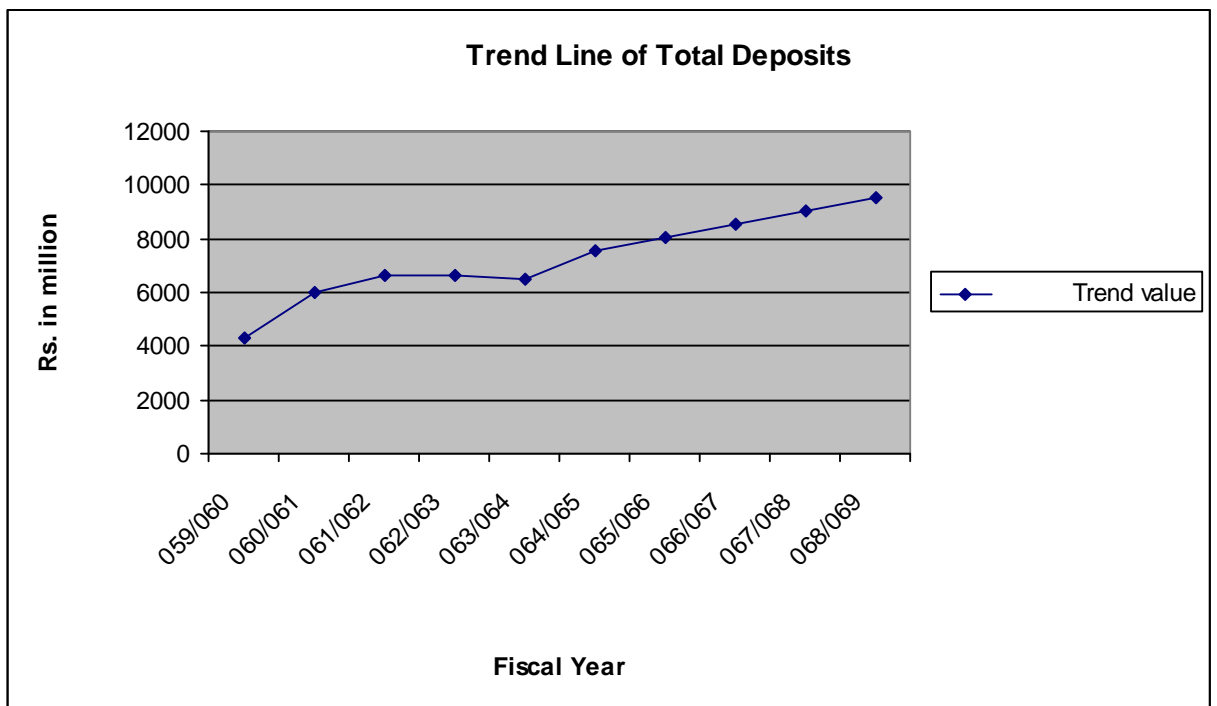
(Rs in million)

FY	Trend value
059/060	4294.09
060/061	5987.70
061/062	6630.94
062/063	6619.58
063/064	6500.34
064/065	7519.85
065/066	8024.29
066/067	8528.73
067/068	9033.17
068/069	9537.61

From the above comparative table it is clear that trend value of NCC Bank is in a fluctuating trend. If other things remain unchanged the total deposit of NCC is predicted to be Rs.9537.61 million by the end of FY 068/69.

From the above trend analysis, it is clear that NCC Bank's deposit collection is better form FY 059/60 onwards. The trend values of total deposit of the bank are fitted in the trend lines given in figure;

Figure No: 4



ii) Analysis of Trend values of loan and advances

Here, the trend values of loan and advances of NCC have been calculated for five years from FY 059/60 to FY 068/69 has been made.

Table No. 25
Trend values of Loan and advances

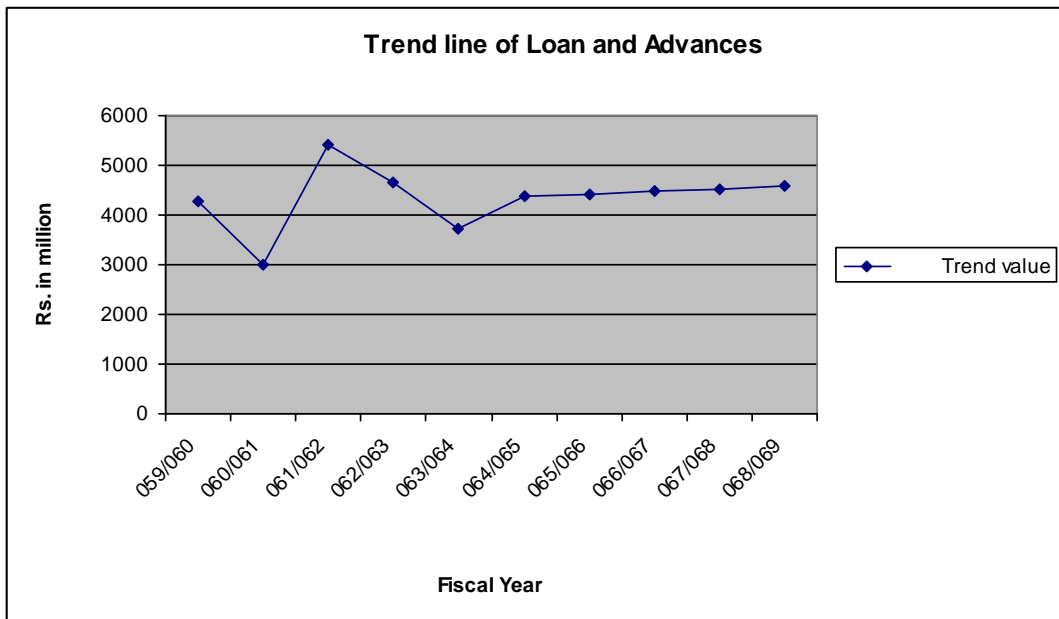
(Rs in million)

FY	Trend value
059/060	4271.63
060/061	2997.26
061/062	5419.73
062/063	4643.26
063/064	3707.64
064/065	4363.30
065/066	4415.10
066/067	4466.90
067/068	4518.70
068/069	4570.50

The above table shows that the loan and advances of the bank is in a fluctuating trend. Assuming that other things will remain constant the loan and advances of NCC Bank at the end of FY 068/69 is predicted to be Rs.4570.50 million.

From the above trend analysis, it is clear that NCC'S loans and advances were better throughout the trend projection period. The above trend values of loans and advances are fit in the trend line given in figure below.

Figure No. 5



iii) Analysis of trend values of total investment

Under this topic based on the trend values of investment from FY 059/60 to 063/64 an attempt has been made to forecast the projections for next five years i.e., up to FY 068/69.

The following table shoes the trend values of investment from FY059/60 to FY068/69

Table No. 26
Trend value of investment

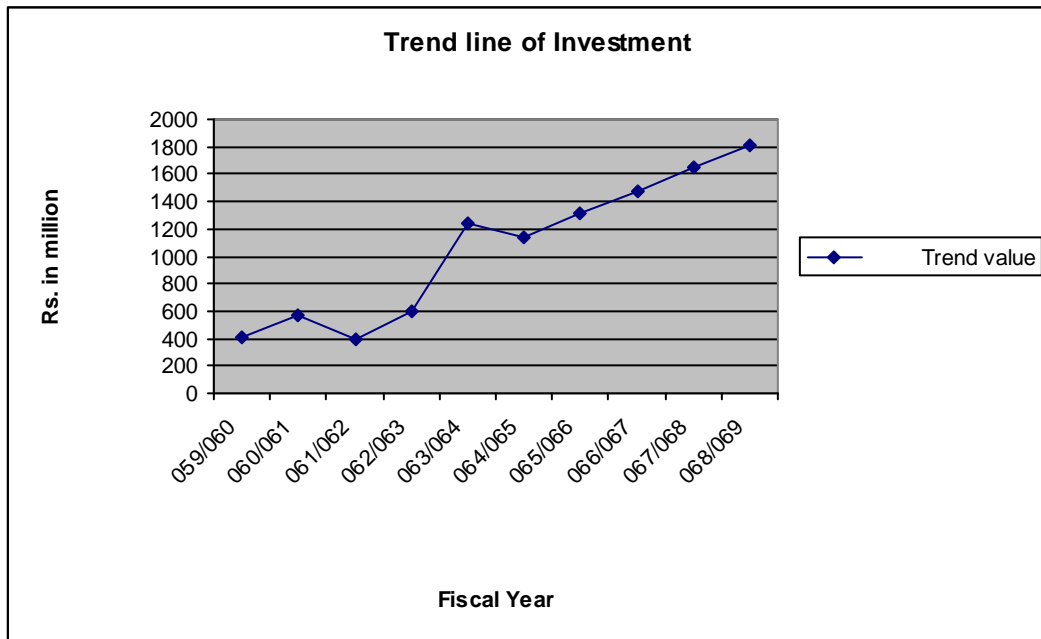
(Rs in million)

FY	Trend value
059/060	411.83
060/061	573.98
061/062	400.33
062/063	591.64
063/064	1236.62
064/065	1143.04
065/066	1309.76
066/067	1476.48
067/068	1643.20
068/069	1809.92

The above table clearly shows that the total investment of the bank is in a fluctuating trend. Assuming that other things will remain constant, the investment of NCC at the end of FY 068/69 is predicted to as 1809.92 million.

From the above trend analysis, it is clear that NCC'S investment is higher throughout the trend projection period. The above trend values of investment are fitted in the trend line given in the figure.

Figure No. 6



iv) Analysis of Trend values of Net Profit

Under this topic based on the trend values of net profit from FY 059/60 to 063/64, an attempt has been made to forecast the projections for next five years i.e. up to FY 2068/69.

The following table shows the value of net profit from FY 059160 to FY 068169.

Table no. 27
Trend values of net profit

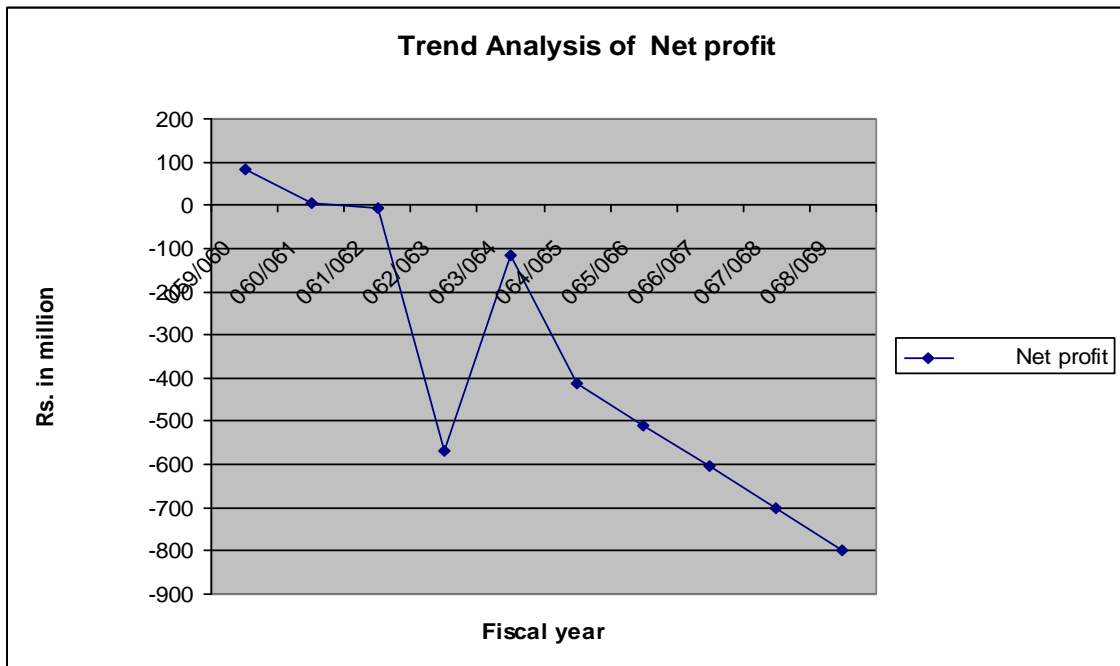
(Rs in million)

FY	Net profit
059/060	81.80
060/061	3.40
061/062	-5.16
062/063	-569.74
063/064	-115.93
064/065	-411.71
065/066	-508.57
066/067	-605.43
067/068	-702.29
068/069	-799.15

From the above table it is clear that the trend value of net profit is in a decreasing trend. Other things remaining the same the trend value of NCC will be Rs-799.15 million by FY 068/69 which is the highest net loss under the review period.

The above calculated trend values of net profit of NCC are fitted in the trend line given in figure.

Figure no-7



C) Test of Hypothesis

Under this topic an effort has been made to test the significance level regarding the parameter of the population on the basis of sample drawn from the population. The following steps have been followed in the test of hypothesis.

- i) Formulating of hypothesis
 -) Null hypothesis
 -) Alternative hypothesis
- ii) Computing the test statistic
- iii) Fixing the level of statistic
- iv) Deciding two tallied or one tailed test
- v) Having decision

i) t-test

In this research study the sample is small i.e. $n=5$. Hence to deal with small sample 't' test is used. We set up the null hypothesis $H_0: \mu_1 = \mu_2$ i.e. the sample has been drawn from normal population or the sample mean \bar{X} does not differ significantly.

The test statistic under H_0 is:

t-test

$$t = \frac{\bar{X} - \mu}{\frac{S}{\sqrt{n}}} \dots\dots\dots \text{w.d.f.} \dots n-1$$

$$S^2 = \frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2$$

By comparing tabulated value of 't' for $n-1$ d.f at the desired level of significance usually 5% we reject or retain the null hypothesis H_0 .

a) Test of Hypothesis on Loan and Advances to Total Deposit Ratio

Let loan and Advances to total deposit of NCC be denoted by X .

Calculated $s=19.74$

Solution:

Null hypothesis (H_0): $\mu_1 = \mu_2$ i.e. there is no significant difference between mean ratio of loan and advances to total deposit of the bank

Alternative Hypothesis (H_1): $\mu_1 \neq \mu_2$ i.e. there is significant difference between mean ratio of loan and advances to total deposit of the bank.

Test statistic

Under Ho the test statistic is:

$$t = \frac{\bar{X} - \mu_0}{\frac{S}{\sqrt{n}}} \dots\dots\dots \text{w.d.f.} \dots n-1$$

$$\frac{71.69 - 19.74}{\sqrt{5}} \times \frac{71.69}{8.82}$$

t = 8.12

Decision:

The tabulated value of 't' for 4d.f at 5% level of significance is 2.776. Since calculated 't' is much greater than tabulated 't', it is highly significant. Hence Ho:μ1=μ2 is rejected at 5% level of significance and we can conclude that there is significance difference between mean ratios of loan and advances to total deposit of the bank.

b) Test of hypothesis on total investment to total deposit ratio

Let the total investment to total deposit ratio be denoted by X

Calculated s=4.91

Solution:

Null Hypothesis (H0): μ₁ = μ₂ i.e., there is no significant difference between the mean ratio of total investment to total deposit of the bank.

Alternative hypothesis (H1): $\mu_1 \neq \mu_2$ i.e., there is significant difference between the mean ratio of total investment to total deposit of the bank.

Test Statistics:

Under Ho the test statistic is:

$$t = \frac{\bar{X} - \mu_0}{\frac{S}{\sqrt{n}}} \text{ w.d.f. . n-1}$$

$$\frac{10.64}{4.91} - \frac{10.64}{2.20} \times \frac{10.64}{\sqrt{5}}$$

$$t = 4.84$$

Decision:

The tabulated value of 't' for 4d.f.at 5% level of significance is 2.776. Since calculated 't' is much greater than tabulated 't' it is highly significant. Hence Ho: $\mu_1 = \mu_2$ is rejected at 5% level of significance and we can conclude that there is significant difference between mean ratio of loan and advances to total deposit of the bank.

c) Test of hypothesis on Investment on Government Securities to Current Assets Ratio

Let the total investment on government securities to current assets ratio be denoted by X

$$\text{Calculated S} = 5.76$$

Solution:

Null Hypothesis (H₀): $\mu_1 = \mu_2$ i.e. There is no significant difference between the mean ratios of investment of government securities to current assets of the bank.

Alternative hypothesis (H₁): $\mu_1 \neq \mu_2$ i.e. There is significant difference between the mean ratios of investment of government securities to current assets of the bank.

Test statistic

Under H₀ the test statistic is:

$$t = \frac{\bar{X} - \mu}{\frac{S}{\sqrt{n}}} \dots\dots\dots \text{w.d.f.} \dots n-1$$

$$\frac{11.58 - 11.58}{\frac{5.76}{\sqrt{5}}}$$

t = 4.49

Decision:

The tabulated value of 't' for 4d.f at 5% level of significance is 2.776. Since the calculated 't' is greater than tabulated value 't' it is significant. Hence null hypothesis $\mu_1 = \mu_2$ is rejected at 5% level of significance and we may conclude that there is significance difference between the mean ratios of investment on government securities to current assets of the bank.

d) Test of Hypothesis on Return on Loan and Advances Ratio

Let the return on loan and advances be denoted by X

Calculated S = 5.65

Solution:

Null Hypothesis (H₀): $\mu_1 = \mu_2$ i.e. There is no significant difference between the mean ratios of return on loan and advances.

Alternative hypothesis (H₁): $\mu_1 \neq \mu_2$ i.e. there is significant difference between the mean ratios of loan and advances of the bank.

Test statistic

Under H₀ the test statistic is

$$t = \frac{\bar{X} - \mu_0}{\frac{S}{\sqrt{n}}} \text{ w.d.f. . n-1}$$

$$\frac{2.70 - 2.53}{\frac{5.65}{\sqrt{5}}}$$

$$= -1.067$$

$$t = 1.067$$

Decision:

The tabulated value of 't' at 5% level of significance is 2.776. Since the calculated 't' is less than tabulated value 't' it is not significant. Hence H₀: $\mu_1 = \mu_2$ is accepted at 5% level of significance and we may conclude

that there is no significant difference between the mean ratios of loan and advances of the bank.

4.4 Major findings of the study

Having completed the basic analysis required for this study, the final and the most important task of the researcher is to enlist the findings. This will give meaning to the desired result. Comprehensive summary of the major findings of this study is presented below.

The main findings of the study derived from the analysis of financial data of NCC are given below.

4.4.1 Liquidity Ratio

The liquidity position of NCC reveals that:

-) From the analysis of current ratio it is found that the ratio of the bank is less than 1. This is not consistent.
-) The ratio of cash and bank balance to current assets ratio of the bank has better position. This shows NCC's readiness to meet its customer requirement.
-) The ratio of investment on government securities to current assets of the bank is in a higher position. This shows that NCC has invested more of its fund in government securities.
-) The ratio of loan and advances to current assets of the bank is in a better position. This shows that NCC has been more successful to mobilize its current assets as loan and advances.
-) The ratio of cash and bank balance to total deposits of the bank has maintained remarkable cash and bank balance to total deposit ratio. This shows NCC's readiness to meet the customer requirement.

From the above findings, we can conclude that the liquidity position of the bank is better. It has highest cash and bank balance to current assets. NCC has a lower current ratio which justifies that it is not capable to meet its current obligation. It means NCC should minimize its current obligation. NCC's ratio of investment on government securities is in a better position.

4.4.2 Activity Ratio

The activity ratio of the bank reveals that:

-) The ratio of loan and advances to total deposit of the bank is in a decreasing trend.
-) The ratio of total investment to total deposits of NCC is higher. The bank has tried to mobilize its total deposits in a profitable sector.
-) The ratio of loan and advances to total assets employed ratio is more variable.

From the above findings we can conclude that NCC has been successful in mobilization of its total deposit as loan and advances. However the ratio is decreasing yearly. The ratio of total investment to total deposit ratio seems in an increasing trend. But the bank should invest their deposit in a more profitable sector in order to increase the ratio. The ratio of loan and advances to total assets employed of the bank has maintained a higher ratio. However it is in decreasing trend. It shows bank has been less successful in mobilizing its total assets as loan and advances.

4.4.3 Profitability ratio

The profitability ratio of the bank reveals that:

-) The ratio of return on equity of the bank is found unsatisfactory, as it has not efficiently utilized its equity capital.
-) The ratio of total interest earned to total assets of the bank is not satisfactory as it is decreasing of interest earned every year.
-) The ratio of total interest paid to assets employed is satisfactory, as it seems to be successful to collect its working fund from less expensive source.
-) The ratio of total interest earned to total operating income is high as the bank seems to be successful to mobilize interest bearing assets such as loan and advances and investment.
-) The ratio of return on total assets employed ratio is unsatisfactory as it is decreasing negatively.
-) The ratio of loan and advances of the bank is not satisfactory as it is not able to earn profit by mobilizing its assets as loan and advances.

On the basis of above, we can conclude that NCC has been unsuccessful in maintaining its return on equity and loan and advances. NCC has been more successful in mobilizing of its funds in interest bearing assets. NCC is in a better position from interest payment point of view. NCC seems to have collected its fund from cheaper sources.

4.4.4 Growth Ratio

-) The growth rate of deposits of the bank is decreasing negatively.
-) The growth rate of total investment is found satisfactory.

-) The growth rate of total loan and advances is not satisfactory as it is decreasing.
-) The growth rate of total net profit is decreasing in a negative trend.

Based on above findings, we can conclude that NCC has been successful in increasing its total investment but less successful in deposit collection and loan and advances. NCC's growth rate of net profit is gradually decreasing. NCC's strategy of collecting deposit seems to seriously rethink and the assets should be invested in profitable sector to increase the net profit.

4.4.5 Co- Efficient of Correlation Analysis

Co-efficient- of correlation analysis between different variables of NCC reveals that:

-) NCC has a lower value of coefficient of correlation between deposits and loans and advances. Deposits can explain variation of loans and advances almost by 3.58%.
-) The co-efficient of correlation between deposits and total investment of NCC indicates a positive relationship, but the bank does not show significant relationship between deposits and total investment.
-) The coefficient of correlation between deposits and net profit of NCC is negative. The relationship between these two variables has been found insignificant due to $r < 6PEr$.
-) The coefficient of correlation between deposits and interest earned is positive and significant. Increase in deposits increases interest and vice versa. Positive relationship indicates deposits and interest income will move in same direction.

-) The coefficient of correlation between loan and advances and net profit is negative and insignificant. Increase in interest expenses would reduce the profit. So the bank must reduce its interest expenses.

In conclusion we can say that there exists a significant relationship between deposit and interest earned and the relationship is insignificant between deposits and loan and advances, deposits and total investment, deposits and net profit. Correlation between deposits and net profit, loan and advances and interest paid is negative and the relationship between these variables is insignificant.

4.4.6 Trend Analysis and Projection for next five years

The trend analysis of deposits, loan and advances, total investment and net profit and its projection for next five years of the bank reveals that:

-) The deposit of the bank has a fluctuating trend. The total deposit of NCC is predicted to be 9537.61 million at the end of F/Y 068/69. The deposit collection of the bank is better.
-) The loan and advances of the bank has an increasing trend for next five years projection period. The total loan and advances of NCC is predicted to be 4570.50 million at the end of F/Y 068/69.
-) The total investment of the bank has an increasing trend. The total investment of NCC is predicted to be 1809.92 million at the end of F/Y 068/69.
-) The net profit of the bank has a decreasing trend. The net profit of NCC is predicted to be -799.15 million at the end of F/Y 068/69.

From the above, we can conclude that increasing trend of deposits, loan and advances and investment is a good situation for the bank. Bank must utilize its deposits as a loan and advances and investment. This will increase its profit. Bank has to consider many other things to increase its net profit. The bank should reduce its expenses and increase its income to increase its profit.

4.4.7 Test of Hypothesis

The test of significance regarding the parameter of the population on the basis of sample drawn from the population reveals that:

-) There is significant difference between the mean ratios of loan and advances to total deposit ratio of the bank.
-) There is significant difference between the mean ratios of total investment to total deposit of the bank.
-) There is significant difference between the mean ratios of investment on government securities to current assets of the bank.
-) There is no significant difference between the mean ratios of loan and advances of the bank.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Nepal Credit and Commerce Bank is one of the leading banks in Nepal. But it is not giving satisfactory results due to some internal and external factors. Its profit is decreasing yearly. Analyzing the available data and information, it shows that the current ratio of the bank is lesser than 1, which should be considered as unsatisfactory. The cash and bank balance to current assets is better. This puts NCC in a better position with respect to meeting customer requirement.

NCC has invested more portions of its current assets on government securities. This is due to lack of other secured and profitable investment sector.

NCC has been more successful in mobilization of its current assets as loan and advances. In contrast, a high ratio is not better from the point of view of liquidity, since loan and advances is less liquid than cash and bank balance.

From the point of view of profitability NCC seems to be unsuccessful with respect to profit earning capacity by utilizing available resources. NCC has a negative return on equity. It reveals that the bank seems to have lack of sound investment policy and its capital has not been utilized efficiently .NCC has been unsuccessful in terms of interest earning power. It has been unsuccessful in mobilizing its funds in interest bearing assets to earn higher interest income. NCC is in a better position to meet its interest expenses as it has collected its fund from cheaper sources.

NCC has not been able in maintaining a steady growth rate on deposits, total investment, loan and advances and net profit year after year. The average rate of deposits is decreasing yearly. The growth rate of investment seems an increasing trend. The average growth rate of loan and advances and net profit is lower and negative trend. It shows the weakness of the bank.

From the analysis of coefficient of correlation, we can say that the bank shows positive relationship between deposits and loan and advances, deposits and total investment and deposits and interest earned. There exists a negative relationship between deposits and net profit and loan and advances to interest paid.

There is a significant relationship between deposits and interest earned. The bank shows insignificant relationship between deposits and loan and advances, deposits and net net profit and loan and advances and interest paid.

The trend value of deposits, loan and advances and investment are in an increasing trend from the projection of next years. The trend value of net profit is in a decreasing trend and has a negative trend in most of the years.

From the test of hypothesis we can conclude that there is significant difference between the mean ratios of loan and advances to total deposit ratio, total investment to total deposit of the bank and investment on government securities to current assets of the bank. There is no significant relationship between the mean ratios of loan and advances of the bank.

5.2 Conclusion

Net profit of the bank is decreasing yearly. Interest expenses are increasing yearly. Increase in expenses has reduced the net profit of the bank. Net profit of the bank is reducing each year because of higher expenses and lower interest income.

Deposit fund of the bank is decreasing each year. Bank has been failure to collect high volume of deposit. Deposit fund has reduced the net profit because the bank could not mobilize its fund properly to generate income. The bank could not utilize its deposit towards lending. Lending function of the bank is not satisfactory. There is no proper utilization of loan and advances. Major portion of loans are become bad loans. Loan and advances couldn't increase its interest income. Due to a poor credit policy and inefficient management of fund, loan and advances is decreasing yearly. This reduces the net profit of the bank.

The investment activity of the bank is not satisfactory. Mobilizing funds on investment activities are not risky job, but the bank could not properly utilize its fund on investment activities.

Banking assets and non banking assets are also increasing. But these assets are not optimum utilized. So the return on them is decreasing yearly. If these assets couldn't increase its profit, then it is not wise to increase those assets. Increase in assets means increase in unutilized fund or idle fund, which only increases its expenses. Bank must reduce these idle funds by utilizing them on profitable sector.

Analyzing the financial data of over five years we have concluded that its strength is collecting deposit and increasing interest income. But analyzing the weakness part we found that its lending and investment

function is not satisfactory. Credit policy of the bank is not effective. It couldn't mobilize its deposit on profitable sector so there is a problem of idle fund which only increases the expenses. Poor economic condition of the nation and bad debtors are threats of the bank. Due to bad debtors most of the loan and advances are becoming loan losses, which couldn't recover by the bank and goes on loss. It also directly affects on its profit. So to reduce this loss, bank has to research new area of investment. And from the investment activities it could be generate income. The bank must be revised its credit policy to maintain its profitable position and to secure its lending activities and to reduce the risk arises from these activities.

5.3 Recommendation

On the basis of analysis, findings, following recommendations are made. The bank can make use of these recommendations to overcome their weakness, inefficiency and improve their present fund mobilization and their overall investment policy.

Increase deposits

Since the past few years, banks have been targeting depositors through a large variety of deposit schemes and facilities. NCC itself introduced a saving plus deposit scheme a few years back to target high-end depositors but the growth in deposits doesn't look convincing. Like others, it also needs to come up with various incentives schemes and facilities to increase deposits.

NCC has so far been providing ATM facilities through its own premises. The ATM facilities need further expansion. For this, bank needs to identify potential locations.

Increase investment in productive sectors

NCC has given more priority to invest its fund in government securities and depositor's money has been less utilized as loan and advances. Though securities issued by government are risk free but such instruments are of lower interest rate. NCC should identify less risky and more profitable sectors and needs investment in them. Investment in the safe sector is to utilize, mobilize the fund. It doesn't increase loan loss. The bank must increase investment activities. The bank should find out new area of investment. Investment not only increases its income, it also helps to uplift the economic condition of the nation. Investment on trade, business, and industry sector and also on economic infrastructure really helps to develop the nation.

Increase investment on deprived and priority sectors

NRB has directed the banks to extend a certain percentage of loan and advances to the deprived and priority sector. The bank is recommended to adhere to the directives issued by NRB and invest more in these sectors. NRB should also speed up its supervision and monitoring in this regard. It should ensure that directives are put into practice in letter and spirit.

Reduce expenses and increase net profit

NCC should reduce expenses such as interest expenses, staff expenses, operating expenses. These expenses are increasing yearly which is not favorable. The bank must effort to collect non-interest bearing deposit. The bank should make effort to utilize the available resources effectively to reduce its staff expenses. Decrease in expenses will increase net profit of the bank.

Effective credit policy

The bank should revise its credit policy. Due to poor credit policy, it has bearing high amount of loan losses and its lending activities are also reducing. Increase in loan loss provisions will reduce its profit in long term. Loan losses are the result of mobilizing loan and advances in the defective projects. The bank should flow the loan on profitable and secured projects only. The bank must evaluate the project before flowing the loan and mobilize the fund effectively on profitable project. The bank has to make a proper plan for its credit policy to make positive relation with profit and also to reduce loan loss provisions. This will certainly increases its profit.

Effective portfolio management

Portfolio management refers to the allocation of funds into different components of its assets, having different degree of risk and varying rate of return in such a manner that the conflicting goals of maximum yield and minimum risk can be achieved. The portfolio condition of the bank should be regularly revised from time to time. Appointing an investment specialist as a portfolio manager or assigning the task of portfolio management to manager finance and planning could be proves beneficial.

Increase branches in rural areas

Integrated and speedy development of the country is possible only when competitive banking services reaches nooks and corner of the nation. NCC has opened its branches only at commercial areas. It has shown no interest to open branches in rural areas. So the bank is recommended to expand their branches and banking services in rural areas and communities to accelerate their economic development. NRB should implement policies to encourage banks, which provide extensive services while disincentivising those who are not responsive to the banking needs of the community including the underprivileged.

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APPENDIX - 1

CORRELATION BETWEEN DEPOSITS AND LOAN AND ADVANCE

FY	Deposits (X)	Loan and Advances (Y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
059/60	4294.09	4271.63	-1712.454	63.73	2932450.75	4061.51	-109133.80
060/61	5987.70	2997.26	-18.83	-1210.64	354.57	1465649.21	22796.35
061/62	6630.94	5419.73	624.41	1211.83	389887.85	1468531.95	756678.77
062/63	6619.58	4643.26	631.05	435.36	375830.30	189538.33	266897.45
063/64	6500.34	3707.64	493.81	-500.26	243848.32	250260.07	-247033.39
	X= 30032.65	y= 21039.52			x ² = 3942371.79	y ² = 3378041.07	xy= 690205.38

Here, N = 5

$$\bar{X} = \frac{\sum X}{n} = \frac{30032.65}{5} = 6006.53$$

$$\bar{Y} = \frac{\sum y}{n} = \frac{21039.52}{5} = 4207.90$$

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$X \frac{5 \mid 690205.38 Z 0}{\sqrt{5 \mid 3942371.79 Z f 0 \bar{A}} \sqrt{5 \mid 3378041.07 Z f 0 \bar{A}}}$$

$$X \frac{3451026.9}{\sqrt{19711858.95} \sqrt{16890205.35}}$$

$$X \frac{3451026.9}{18246554.63}$$

$$X 0.1891$$

$$r = 0.1891 \quad r^2 = 0.0358$$

$$P_{Er} \quad X 0.6745 \mid \frac{1-r^2}{\sqrt{n}}$$

$$X 0.6745 \mid \frac{1-0.0358}{\sqrt{5}}$$

$$X 0.6745 \mid \frac{0.9642}{2.2361}$$

$$X 0.2908$$

$$6 P_{Er} = 1.7450$$

APPENDIX - 2

CORRELATION BETWEEN DEPOSITS AND TOTAL INVESTMENT

FY	Deposits (X)	Total investment	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
059/60	4294.09	411.83	-1712.454	-231.05	2932450.75	53384.10	395659.26
060/61	5987.70	573.98	-18.83	-68.9	354.57	4747.21	1297.39
061/62	6630.94	400.33	624.41	-242.55	389887.85	5883.50	151450.65
062/63	6619.58	591.64	631.05	-51.24	375830.30	2625.54	311450.65
063/64	6500.34	1236.62	493.81	593.74	243848.32	352527.19	31412.68
	X= 30032.65	y= 3214.40			x ² = 3942371.79	y ² = 3378041.07	xy= 873014.73

Here, N = 5

$$\bar{X} = \frac{\sum X}{n} = \frac{30032.65}{5} = 6006.53$$

$$\bar{Y} = \frac{\sum y}{n} = \frac{3214.40}{5} = 642.88$$

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$X \frac{5 \mid 873014.73 Z0}{\sqrt{5 \mid 3942371.79 Zj0\ddot{A}} \sqrt{5 \mid 472114.54 Zj0\ddot{A}}}$$

$$X \frac{4365073.65}{\sqrt{19711858.95} \sqrt{2360572.7}}$$

$$X \frac{4365073.65}{6821377.70}$$

$$X0.6399$$

$$r = 0.63991 \quad r^2 = 0.4095$$

$$P_{Er} \quad X0.6745 \mid \frac{1-r^2}{\sqrt{n}}$$

$$X0.6745 \mid \frac{1-0.4095}{\sqrt{5}}$$

$$X0.6745 \mid \frac{0.5905}{2.2361}$$

$$X0.1781$$

$$6 PEr = 1.0686$$

APPENDIX - 3

CORRELATION BETWEEN DEPOSITS AND INTEREST EARNED

FY	Deposits (X)	Interest earned (Y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
059/60	4294.09	437.18	-1712.454	-63.43	2932450.75	4023.36	108620.0
060/61	5987.70	486.83	-18.83	-13.78	354.57	189.89	259.48
061/62	6630.94	541.85	624.41	41.24	389887.85	1700.74	25750.67
062/63	6619.58	562.78	631.05	62.24	375830.30	386.11	38113.32
063/64	6500.34	474.41	493.81	-26.2	243848.32	686.44	-12937.82
	X= 30032.65	y= 2503.05			x ² = 3942371.79	y ² = 10465.54	xy= 159805.72

Here, N = 5

$$\bar{X} = \frac{\sum X}{n} = \frac{30032.65}{5} = 6006.53$$

$$\bar{Y} = \frac{\sum y}{n} = \frac{2503.05}{5} = 500.61$$

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$X \frac{5 \mid 159805.72 Z 0}{\sqrt{5 \mid 3942371.79 Z f 0 \text{Å}} \sqrt{5 \mid 10465.54 Z f 0 \text{Å}}}$$

$$X \frac{799028.6}{\sqrt{19711858.95} \sqrt{52327.7}}$$

$$X \frac{799028.6}{1015615.29}$$

$$X 0.7867$$

$$r = 0.6745 \quad r^2 = 0.6189$$

$$P_{Er} \quad X 0.6745 \mid \frac{1-r^2}{\sqrt{n}}$$

$$X 0.6745 \mid \frac{1-0.6189}{\sqrt{5}}$$

$$X 0.6745 \mid \frac{0.3811}{2.2361}$$

$$X 0.1150$$

$$6 PEr = 0.6897$$

APPENDIX - 4

CORRELATION BETWEEN DEPOSITS AND INTEREST EARNED

FY	Deposits (X)	Net Profit (Y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
059/60	4294.09	81.80	-1712.454	202.93	2932450.75	41180.58	-347505.4
060/61	5987.70	3.40	-18.83	124.53	354.57	15507.72	-2344.90
061/62	6630.94	-5.16	624.41	-126.29	389887.85	15949.16	-78856.74
062/63	6619.58	-569.74	631.05	-690.87	375830.30	477301.36	-42353.78
063/64	6500.34	-155.93	493.81	-237.06	243848.32	56197.44	-117062.60
	X= 30032.65	y= (-605.63)			x ² = 3942371.79	y ² = 10465.54	xy= 159805.72

Here, N = 5

$$\bar{X} = \frac{\sum X}{n} = \frac{30032.65}{5} = 6006.53$$

$$\bar{Y} = \frac{\sum Y}{n} = \frac{-605.63}{5} = -121.13$$

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$X \frac{5 \mid 969307.54 \text{ A Z } fZ726.76 \text{ A}}{\sqrt{5 \mid 3942371.79} \sqrt{5 \mid 606136.26 \text{ Z } fZ726.76 \text{ A}}}$$

$$X \frac{fZ4846537.7 \text{ A } \Gamma 726.76}{\sqrt{19711858.95} \sqrt{3030681.30 \text{ Z } 528180.10}}$$

$$X \frac{Z484810.94}{7023450.96}$$

$$X0.6899$$

$$r = 0.6899 \quad r^2 = 0.4759$$

$$P_{Er} \quad X0.6745 \mid \frac{1-r^2}{\sqrt{n}}$$

$$X0.6745 \mid \frac{0.5241}{2.2361}$$

$$X0.1581$$

$$6 PEr = 0.9485$$

APPENDIX - 5

CORRELATION BETWEEN LOAN AND ADVANCE TO INTEREST PAID

FY	Loan and advances (X)	Interest Paid (Y)	x=X- \bar{X}	y=Y- \bar{Y}	x ²	y ²	xy
059/60	4271.63	255.91	275.01	-41.06	75630.50	1685.92	-11291.91
060/61	2997.26	314.27	-999.36	17.3	998720.41	299.29	-17288.93
061/62	4643.26	31.80	646.64	18.83	418143.29	354.57	12176.23
062/63	3707.64	315.99	-288.98	19.02	83509.44	361.76	-5496.40
063/64	4363.30	283.01	366.68	-13.96	134454.22	194.88	-511.885
	X= 19983.09	y= 296.97			x ² = 1710457.86	y ² = 2896.42	xy= 27019.86

Here, N = 5

$$\bar{X} = \frac{\sum x}{n} = \frac{19983.09}{5} = 3996.62$$

$$\bar{Y} = \frac{\sum y}{n} = \frac{1484.98}{5} = 296.97$$

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$X \frac{5 \mid Z27019.86 Z0}{\sqrt{5 \mid 1710457.86 Z \text{f}0\text{Å}} \sqrt{5 \mid 2896.42 Z \text{f}0\text{Å}}}$$

$$X \frac{Z135099.30}{\sqrt{8552289.2} \sqrt{14482.10}}$$

$$X \frac{Z135099.30}{2924.43 \mid 120.34}$$

$$X \frac{Z135099.30}{351930.58} X Z0.3839$$

$$r^2 = 0.1474$$

$$P_{Er} X0.6745 \mid \frac{1-r^2}{\sqrt{n}}$$

$$X0.6745 \mid \frac{1-0.1474}{2.2361}$$

$$X0.2572$$

$$6 PEr = 1.5431$$

APPENDIX - 6

The trend value of Total Deposit

(Rs. in Million)

FY	Total Deposit its (y)	x = t = 1	x ²	xy
059/60	4294.09	1	1	4294.09
060/61	5987.70	-2	4	11975.4
061/62	6630.94	3	9	19892.82
062/63	6629.58	4	16	26478.32
063/64	6500.34	5	25	32501.70
	y=30032.65	x=15	x ² = 55	xy = 95142.33

Here,

$$y = a + bx$$

Where,

y = deposits

a = deposits when t = 0

b = slope of least square line

x = time period (year)

We have

$$a = \frac{\sum y}{n} - b \frac{\sum x}{n} = \frac{30032.65}{5} - 504.44 \left| \frac{15}{5} \right.$$

$$= 4493.21$$

$$b = \frac{\sum xy}{\sum x^2} - \frac{\sum x \cdot \sum y}{n^2}$$

$$= \frac{5 \left| \frac{95142.33}{5} \right. - \frac{15 \left| \frac{30032.65}{5} \right. \cdot 15}{25}}$$

$$= \frac{475711.65 - 450489.75}{275 - 225}$$

$$= \frac{25221.9}{50}$$

$$= 504.44$$

Thus, the straight line trend for total deposit is

$$y = a + bx$$

$$= 4493.21 + 504.44x$$

For year 064/065

$$x = 6 \quad y = a + bx$$

$$= 4493.21 + 504.44 (6)$$

$$= 7519.85$$

Other trend value have been calculated accordingly

Year (t)	x = t	y (Projected deposits)
059/60	6	7519.85

060/61	7	8024.29
061/62	8	8528.73
062/63	9	9033.17
063/64	10	9537.61

Appendix -7

The trend value of Total Net Profit

(Rs. in Million)

FY	Net profit (y)	x = t = 1	x ²	xy
059/60	81.80	1	1	81.80
060/61	3.40	2	4	6.80
061/62	-5.16	3	9	-15.48
062/63	-569.74	4	16	-2278.96
063/64	-115.93	5	25	-579.15
	y = -605.03	x=15	x ² = 55	xy = 2785.49

Here,

$$y = a + bx$$

Where,

y = net profit

a = Net profit when t = 0

b = slope of least square line

x = time period (year)

We have

$$b = \frac{\sum xy}{\sum x^2} - \frac{\sum x \cdot \sum y}{n}$$

$$= \frac{5 \times 2785.49 - 15 \times 605.63}{5 \times 55 - 15^2}$$

$$= \frac{13927.45 - 9084.45}{50}$$

$$= \frac{4843}{50}$$

$$= 96.86$$

$$a = \frac{\sum y}{n} - b \frac{\sum x}{n} = \frac{605.63}{5} - 96.86 \times \frac{15}{5}$$

$$= 169.45$$

Thus, the straight line trend for total net profit is

$$y = a + bx$$

$$= 169.45 + (-96.86)x$$

For year 064/065

$$x = 6 \quad y = a + bx$$

$$= 169.45 + (-96.86) \times 6$$

$$= -411.71$$

Other trend value have been calculated accordingly

Year (t)	x = t	y (Projected net profit) a + bx
059/60	6	-411.71
060/61	7	-508.57
061/62	8	-605.73
062/63	9	-702.29
063/64	10	-799.15

Appendix -8

The trend value of Total Net Deposit

(Rs. in Million)

FY	Net profit (y)	x = t = 1	x ²	xy
059/60	411.83	1	1	411.83
060/61	573.98	2	4	1147.96
061/62	400.33	3	9	1200.99
062/63	591.64	4	16	2366.56
063/64	1236.62	5	25	6183.10
	y = 3214.40	x = 15	x ² = 55	xy = 11310.44

Here,

$$y = a + bx$$

Where,

y = Total investment

a = investment when t = 0

b = slope of least square line

x = time period (year)

We have

$$b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}}$$

$$= \frac{5 \times 11310.441 - \frac{15 \times 3214.40}{5}}{5 \times 55 - \frac{15^2}{5}}$$

$$= \frac{56552.205 - 9643.2}{50}$$

$$= 166.72$$

$$a = \frac{\sum y - b \sum x}{n} = \frac{3214.40 - 166.72 \times 15}{5}$$

$$= 142.72$$

Thus, the straight line trend for total net profit is

$$y = a + bx$$

$$= 142.72 + 166.72 (x)$$

For year 064/065

$$x = 6 \quad y = a + bx$$

$$= 142.72 + 166.72 (6)$$

$$= 1143.04$$

Other trend value have been calculated accordingly

Year (t)	x = t	y (Projected investment) = a + bx
059/60	6	1143.04

060/61	7	1309.76
061/62	8	1476.48
062/63	9	1643.20
063/64	10	1809.92

Appendix -9

The trend value of Loan and Advance

(Rs. in Million)

FY	Net profit (y)	x = t = 1	x ²	xy
059/60	4271.63	1	1	4271.62
060/61	2997.26	2	4	5994.52
061/62	5419.73	3	9	16259.19
062/63	4643.26	4	16	18573.04
063/64	3707.64	5	25	18538.20
	y = 21039.52	x = 15	x ² = 55	xy = 63636.58

Here,

$$y = a + bx$$

Where,

y = Total loan and advances

a = loan and advances when t = 0

b = slope of least square line

x = time period (year)

$$b = \frac{n \sum xy - \sum x \cdot \sum y}{n \sum x^2 - (\sum x)^2}$$

We have

$$b = \frac{5 \times 63636.58 - 15 \times 21039.52}{5 \times 55 - 15^2}$$

$$b = 1.80$$

$$a = \frac{\sum y - b \sum x}{n} = \frac{21039.52 - 51.80 \times 15}{5}$$

$$= 4052.50$$

Thus, the straight line trend for total loan and advances is

$$y = a + bx$$

$$= 142.72 + 166.72 (x)$$

For year 064/065

$$x = 6$$

$$y = a + bx$$

$$= 4052.50 + 51.80 (6)$$

$$= 4363.30$$

Other trend value have been calculated accordingly

Year (t)	x = t	y (Projected loan and advances) = a + bx
059/60	6	4363.30
060/61	7	4415.10
061/62	8	4466.90
062/63	9	4518.70
063/64	10	4570.50

Appendix -10

Test of the Hypothesis on Loan and Advances to Total deposit ratio

Let, the total loan and advances to total deposit ratio be denoted by x

calculation of x, S Assuming $x = X Z \bar{X}$

X	x = X Z \bar{X}	x ²
99.48	27.79	772.28
50.06	-21.63	467.86
81.73	10.04	100.80
70.14	-1.55	2.40
57.04	-14.65	214.62
x= 358.45	x=0	x²= 1557.96

$$\bar{X} = \frac{358.45}{5} = 71.69$$

$$S = \sqrt{\frac{1}{n} \sum x^2 - \frac{(\sum x)^2}{n^2}}$$

$$= \sqrt{\frac{1}{5} \times 1557.96 - \frac{(358.45)^2}{25}}$$

$$= \sqrt{389.49}$$

$$= 19.74$$

Appendix -11

Test of the Hypothesis on Total investment to total deposit ratio

Let, the total investment to total deposit ratio be denoted by x

Calculation of x and S, Assuming $x = X - \bar{X}$

X	x = X - \bar{X}	x ²
99.48	-1.05	1.1025
50.06	-1.05	1.1025
81.73	-4.6	21.165
70.14	-1.7	2.89
57.04	8.38	70.22
$\bar{x}=53.18$	$\bar{x}=0.02$	$\sum x^2 = 96.48$

$$\bar{X} = \frac{\sum X}{N} = \frac{53.18}{5} = 10.64$$

$$S = \sqrt{\frac{1}{n} \sum x^2} = \sqrt{\frac{96.48}{5}}$$

$$= \sqrt{19.296}$$

$$= 4.39$$

$$= 4.84$$

Appendix -12

Test of the Hypothesis on Total Investment on Government securities to Current assets ratio

Let, the total investment to government securities to current assets ratio be denoted by x

Calculation of x, S, Assuming $x = X - \bar{X}$

X	x = X - \bar{X}	x ²
7.43	4.15	17.22
10.84	-0.74	0.55
7.35	-4.23	17.90
10.86	-0.72	0.52
21.40	9.82	96.43
x=57.88	x=-0.20	x²= 132.62

$$\bar{X} = \frac{\sum X}{N} = \frac{57.88}{5} = 11.58$$

$$S = \sqrt{\frac{1}{n} \sum x^2} = \sqrt{\frac{132.62}{5}}$$

$$= \sqrt{\frac{1}{5} \times 132.62} = \sqrt{26.524}$$

$$= \sqrt{33.15}$$

$$= 5.76$$

Appendix -13

Test of the Hypothesis on Return on Loan and advances Ratio

Let, the return on loan and advances denoted by x

Calculation of x, s, Assuming $x = X - X \bar{X}$

X	$x = X - \bar{X}$	x^2
1.91	4.61	21.25
0.11	2.81	7.90
-0.09	2.61	6.81
-12.27	-9.57	91.58
-3.13	-0.43	0.18
$\Sigma X = -13.47$	$\Sigma x = -0.03$	$\Sigma x^2 = 127.72$

$$\bar{X} = \frac{\Sigma X}{N} = \frac{-13.47}{5} = -2.70$$

$$S = \sqrt{\frac{1}{n} \Sigma x^2} = \sqrt{\frac{127.72}{5}}$$

$$= \sqrt{25.544} = 5.054$$

$$= 5.05$$

$$= 5.05$$