

CHAPTER I

INTRODUCTION

1.1 Background of the study

Nepal is one of the least developed country in the world. More than 90 percent of total population is still live in the rural areas. The country's per capita income has been grouping at little over at a situation when more than two fifth of the population is in absolute poverty. Nepal's half of the population living below poverty line and unemployment and disguised unemployment together depriving one half of the labour force. In Nepalese economy agriculture is only the leading sector for the nation building as it the main source of income employment and production and there by the only means to alleviate poverty from the nation. The proportion of agricultural and non agriculture sector's contribution to gross domestic product is around 60:40 ratio. Current state of Nepalese economy is characterized by unutilized natural resources, miserable agriculture, deficit trade, mass poverty, illiteracy and so on.

The economic structure of Nepal is mixed economy. In such a system the private sector has to pay a predominated role in market oriented and competitive economic activities in order to increase production through efficiency enhancement in resources use. To develop the Nepalese economy the financial institutions should be established. Financial institutions are not simply the traders in money and credit who accept deposits, grants loans, discount bills and remit money and credit. In fact they are backbone of economic development. The existence and development of a good banking system in any country is a reflection of its economic development. Hence various banks, resources companies, financial companies have been established in the Government sector and private sector as well to develop the economic development. But however even with the rapid development of financial institutions, the country has not been able to achieve the desire income so far which due to the poor capital market conditions of our country and the early stage of economic growth.

A bank is an institution that accepts deposits of money from the public withdrawable by cheque and used for lending. Thus, there are two essential functions which make a financial institution a bank: (1) acceptance of deposits (of money) from the public and (2) lending. The former is its unique or most distinctive function.

Banks are the effective tools to collect saving and mobilize it. In other words, they receive deposits, create big amount of resources and invest in different sector of the economy. It is difficult to see how; in the absence of banks could small savings of the people be mobilized or even made possible. It is also difficult to see who would distribute these saving among entrepreneurs. It is through the agency of the banks that community's saving automatically flow in to channels which are productive. Banks play a predominant role in underdeveloped economy. They promote capital formation by developing banking habit of the people and collecting the saving that people have and mobilizing them in productive channels. Banks role in the economic development is to remove the deficiency of capital by stimulating saving and investment.

Commercial banks are the heart of our financial system. They hold the deposits of millions of persons, government and business units and other organizations. They make funds available through their lending and investing activities to borrowers like individuals, business firms and government. Commercial banks also provide technical and administrative assistance to industries, trades and business. Commercial Banks play an important role in facilitating the affairs of the economy in various ways. The operations of commercial Banks record the economic pulse of the country. The size and composition of their transaction reflect the economic happening in the country. Commercial Banks have played a vital role in giving the direction in economic growth over the time by financing the requirement of industries and trade in the country. By encouraging thrift among the people, banks have fostered the process of capital formation in the country. In the context of deposit mobilization, commercial banks induce the savers to hold their saving in the form of bank deposits thus help bringing the scattered resources into the organized banking sector which can be allocated to the different to the different economic activities. In this way they help in country's capital assets formation. Through their advances, banks also help the creation of income out of which future saving by the community and further growth potentials emerge for the goof of the economy. In a planned economy, banks make the entire planned productive process possible by providing funds to the public sector, joint sector or private sector for any type of organization. All employment income

distribution and other objectives of the plan as far as possible subsumed into the production plan which banks finance

In Nepal there are several kinds of financial institutions such as commercial banks, development banks, rural development bank, financial companies, co-operatives involving in saving and credit activities etc. All the financial institutions in Nepal are under regulation of Nepal Rastra bank (NRB), the central bank of Nepal.

Profit maximization is the basic objectives of a firm and to make it reliable service should render to its customers. Profit is a device to measure efficiency of a firm." Profit do not just happen profits are managed." (Lynch and Williamson 2005).

In fact profit does not acquire immediately. It is managed. The technique of managing profit is called profit planning. For the long run stability of a firm every task should be performed according to long term vision. Profit planning directs organization towards achieving the targets on profit. Therefore it is the part of overall planning process of an organization. Budget is the primary operating document in this regard. Profit planning requires commitment on the performance of budgeting. To be more specific various functional budgets are basic tools for proper profit planning.

Budgeting is an important food of the firm to achieve the objectives. Budgeting is a forward planning and involves the preparation in advance of the quantitative as well as financial statement to indicate the intention of the management in respect of the various aspects of the business. Profit planning in fact is managerial technique and profit plan is such a written plan in which all aspects of business operation with respect to a definite future period are included. It is a normal statement of plan, objectives and tool established by the management in respect of some future period. Budgeting is a pre-determined detail plan of action developed and distributed as a guide to current operations and as a practical basic 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 sources of action in controlling the actual performance. (Gupta SP, Management accountancy1995).

Budgeting covers planning, organizing and controlling all the financial and operating activities of the firm of the budgeted period.

Nepal Bank limited is first commercial bank established in 1994 BS under the NBA 1993. The government lunched RBB under the Banijya Act 2021 BS. Again government established the third bank, Agriculture development Bank. This bank is fully owned by the government for the purpose of developing agriculture.

Introduction of RBB

Rastriya Baniya Bank (RBB) is fully government owned, and the largest commercial bank in Nepal. RBB was established on January 23, 1966 (2022 Magh 10 BS) under the RBB Act. RBB provides various banking services to a wide range of customers including banks, insurance companies, industrial trading houses, airlines, hotels, and many other sectors.

RBB has Nepal's most extensive banking network with over 123 branches. Through its branch network, RBB has been contributing to Nepal's economic development by providing banking services throughout the country.

RBB has many correspondent arrangements with major international bank all over the world that facilitate trade finance, bank originated personal funds transfers and interbank funds transfer via SWIFT. In a bid to promote remittance business, RBB works with Western Union and International Money Express, two leading person-to-person funds transfer networks.

In addition RBB runs various programmes i.e. banking with the poor, Micro Credit project for women etc. to enhance the living standard of people as per the government directives. As well, RBB actively delivers various government programs to people living in remote parts of the country; these programs are intended to raise living standards.

Objectives and activities of RBB

RBB main objectives are to provide banking services through out Nepal and contribute in the socio economic development of the country. The bank's major activities include accepting deposits, investment in government securities, lending to productive sector, dealing with foreign currency, processing domestic and foreign remittances, merchant banking and corresponding banking services etc.

The bank has deposit base of with more than 12 million depositors. The depositors are individuals, institutions, private organizations, business houses, non profit organizations, social organizations, industries, finance companies, co-operatives, etc. The bank more than 30,000 clients who have used the bank's resources for their business and development activities. They vary from big business houses to public sector enterprise, medium and small scale industries to farmer and individuals.

Banking with poor is an important development oriented program to eliminate absolute poverty of the country. The program is run under the priority sector credit program.

Major Activities of the program include:

-) Production credit for rural women
-) Banking with the poor for the deprived people, micro credit
-) Loan to unemployed graduates, Intensive banking program
-) Mini and microbus/clean Tampo credit program for environment protection, etc.
-) Biogas credit program.

Mission and vision of RBB

RBB is committed towards the satisfaction of its customers by providing modern banking facilities. At the same time, the bank is equally committed to the economic growth and development of the country. The bank aims to reach every rural and urban corner of Nepal to accommodate the requirement of the people. The bank's extensive branch network and international connections are designed to transact banking activity between any part of the country and any part of the world.

Introduction of MBL

Machhapuchchhre Bank Limited was registered in 1998 as the first regional commercial bank to start banking business from the western region of Nepal with its head office in Pokhara. Today, with a paid up capital of above 820 million rupees, it is one of the full fledged commercial bank operating in Nepal; and it ranks in the topmost among the private commercial banks. It has 31 branches over the Nepal

Machhapuchchhre Bank Limited is striving to facilitate its customer need by delivering the best of services in combination with the state of the art technologies and best international practices.

Machhapuchchhre Bank Limited is the pioneer in introducing the latest technology in the banking industry in the country. It is the first bank in Nepal to introduce centralized banking software named GLOBUS BANKING SYSTEM developed by Temenos NV, Switzerland Currently it is using the latest version of GLOBUS referred as T-24 BANKING SYSTEM. The bank provides modern banking

facilities such as any branch banking, Internet Banking and Mobile Banking to its valued customers.

The bank in the last few years have really opened up with branches spread all around the country. At this stage it has its corporate office in Kathmandu and branch offices in other parts of Kathmandu, and different parts of country. A full fledged banking branch is in operation in Jomsom located high up in the mountains too. The bank intends to open many more branches in the coming years.

Machhapuchchhre Bank Limited caters different types of Deposit accounts tailored to suit the needs of its customers, both individuals and organizations. It opens deposit accounts both in Local currency and foreign currencies.

-) Current Deposit
-) Call Deposit
-) Saving Deposit
-) Royale Saving Deposit
-) Fixed /Term Deposit
-) Share Holder's Account
-) Pewa Bachat
-) Yuva Bachat
-) Salary Management Scheme
-) Samman Bachat Khata

Interest paid on Deposits is subject to Tax Deduction at Source (TDS), as per rules of Government of Nepal, circulated from time to time. Accounts Statements can be mailed or collected from the branches in the desired frequency at your choice No account maintenance charge, if minimum balance condition is fulfilled.

Machhapuchchhre Bank Limited provides various types of Loans and Advances designed to suit the varied requirements of Industrialist, Business Houses, Professionals, Entrepreneurs and individuals.

-) Term Loan
-) Working Capital (Overdraft / Short Term Loan)
-) Trust Receipt / Importers' Loan
-) Packing Credit / Exporters' Loan

-) Priority Sector /Deprives Sector Loan
-) Home Lone
-) Hire Purchase Loan
-) Education Loan
-) Foreign Employment Loan
-) Loan Against
 - o 1st Class Bank Gurantee
 - o Other Bank Gurantee
 - o Other Financial Gurantee
 - o Our Fixed Deposit
 - o Other's Fixed Deposit
 - o Government Bonds
 - o Foreign Currency Deposits
 - o Marketable Securities
-) Loan against Marketable Securities
-) Consortium / Syndicate Loan ,Other Loans

Vision, Mission and Objectives of MBL

The mission of the bank states as with the slogan" Service with a person touch". We at MBL our goal is to aim and achieve the highest standard of professionalism and service to client by providing customized financial products and services through proactive management.

The objectives and goals set by the bank can be noted as follows;

1. To aim and achieve highest standard of professionalism.
2. To aim and achieve to provide highest standard of customized products and services to their clients.
3. To create life long relationship with their customer.
4. To achieve strategic advantage in the dynamic environment every their designed deferential qualified financial product.
5. To maintain management proactively.

Organizational Structure of MBL

The success of business largely depends on management quality. Machhapuchhre bank limited is managed by chief executive officer (CEO) under the supervision and control of board of directors. Board of directors appoints the chief executive officer. The board of directors of Machhapuchhre bank limited is constituted by the body of seven member altogether. Directors are appointed as follows.

1 Director (Chairman)	MR. Surya Bahadur K.C
2 Director	MRS. Gita Shrestha
3 Director	MR. Prakash K.C
4 Director	MR. Aajat Shrestha
5 Director	MR. Nerash Bahadur Malla
6 Director	MR. Praneshower Pokharel
7 Director	MR. Kishor Kumar Sha

1.2 Statement of problem

A sound banking with wide spread of branches through out the country availing verities of banking services to fulfill commerce, trade industry and agriculture needs of the country is of crucial important for Nepal. It can be visualized that the banking development in Nepal is get in its impact stage. So we can have to go still a long way to make the country rich with a sound and modern banking system.

Every financial institutions as a commercial banks must make profit out of its operations for its survival and fulfillment of the responsibilities assigned major activities of a commercial bank, comprise mobilization of resources with involves cost and profitable deployment of those resources, which generates income. The different interest income over the interest cost which is popularly called as interest margin can be considered as the contribution margin in the profit of the bank. The bank attempts to compensate the other operational expenses by generating other income out of non fund based business activities of the bank.

The Budgeting is a newly developed concept as a crucial way in the business organization. By proper Budgeting a business can be managed more effectively and efficiently. The present study aims to analyze and examine the application of Budgeting system in the commercial banks taking a case of RBB and MBL. In this ground the study deals with the following issues for the purpose of this study

1. Who is responsible for formulating Budget and how it is implemented in both of the banks?
2. What types of programmes are introduced by both banks to increase the profit?
3. What is the relationship between investment, loan and advances with total deposit, net profit and total assets of RBB and MBL?
4. What is the trend position of banks in terms of deposit collection and net profit?
5. What are the strength and weakness of RBB and MBL?

1.3 Objectives of the study

The basic objective of the study is to analyze the Budgeting system of commercial banks with reference to RBB and MBL. The specific objectives of the study are

- 1 To compare the formulation and implementation process of Budget in RBB and MBL.
- 2 To identify the difference between the programmes introduced by RBB and MBL to increase the profit.
- 3 To compare the relationship between total investment, loan and advances with deposit, net profit and total assets of RBB and MBL.
- 4 To analyze and forecast the trend and structure of deposit utilization and its projection for five years of Banks.
- 5 To compare and analyze strength and weakness of RBB and MBL.

1.4 Significance of the study

Budgeting system has become the vital and important food in the field of managerial decisions. The study is concerned with budgeting system of the commercial bank. It attempts to examine and analyze the applicability of budgeting system in the bank. Budgeting process significantly contributes to improve the profitability as well as the overall financial performance of an organization with the help of the best utilization of resources.

Budgeting is crucial for management profit is the most indicators for judging managerial efficiency and does not just happened for this every organization has to manage. Various functional budgets are the basic tools for proper planning of profit and control. Therefore, this study will be useful for those who want to the profit planning tool and also for next researcher as a reference.

1.5 Limitation of the study

The study confines only budgeting of the RBB and MBL, so the limitations of this study are

- 1 The study is for a partial fulfillment of M.B.S degree and prepared with the time constraints.
- 2 This study focuses only on Budgeting system and its application in the RBB and MBL.
- 3 This study covers the related data of the bank from F/Y 2060/061 to 2065/65.
- 4 This study is mostly based in secondary data. Primary data are collected for some objectives.
- 5 It might not give actual results due to different nature of studies banks.

1.6 Organization of the Study

The study is divided in to the following five chapters.

Chapter I	Introduction
Chapter II	Review of Literature
Chapter III	Research Methodology
Chapter IV	Data presentation and Analysis
Chapter V	Summary, Conclusion and Recommendations

The first chapter deals the background of the study, brief profile of the RBB and MBL, statement of problem, objectives of the study, significance of the study, limitation of the study and organization of the study.

Second chapter deals with the review of available literature. It takes in review of related books, journals, articles and previous unpublished Master Degree thesis etc.

Third chapter deals with the research methodology employed in this study. It includes research design, population and sample, data collection procedure and sources of data, data analysis techniques etc.

The fourth chapter is the important chapter of the study which implies the presentation and analysis of data as well as major findings of the study.

The fifth and last chapter covers the summary of the study, the main conclusion that flows from the study offers some recommendation as well as suggestions for further improvement.

CHAPTER II

REVIEW OF LITERATURE

Conceptual foundation is most important for every study. Without clear concept on subject matter the study may not go through right way. This chapter devotes to review some of the existing literature regarding the budgeting. In this regard various books, journals and articles concerned to this topic have been reviewed. This chapter has been divided in to two parts. The first part deals with conceptual frame work of the study and second part deals with the review of articles, journals and previous dissertation.

2.1 Conceptual frame work

To define the budgeting it will be better to define the concept of profit, planning and profit planning.

Profit

Profit in the accounting sense tends to become a long term objectives. It is the primary objectives of a business. It measures the success of the business. "Several economists have their different views in respect of the term profit. According to F.B Hawley, profit is the reward for risk taking in business. Schumpeter expressed that an entrepreneur earn profits as rewards for his introducing innovation. Robinson and chamberlain opined that greater the degree of monopoly power, the greater the profits made by the entrepreneur". So profit is the primary measure of business success in any economy. In the absence of profit nobody can think about the long-term survivability of the enterprises.

Planning

Planning is the specific process of setting goals and development ways to reach them. It is the first essence of management and all other functions are performed within the framework of planning. Planning means deciding in advance what is to be done in the future. Planning is the process of developing enterprise objectives and selecting a future course of action to accomplish them. "It involves four stages: objectives, goals, strategies and plan/ budget. Objectives are the broad and long range desired state or position in the future, goal represents targets specified in quantitative terms, strategies denote specific course of action to achieve the goals and budgeting is the periodic planning".

Profit Planning

Profit does not acquire immediately. It is managed. The technique of managing profit is called profit planning. Profit planning is a comprehensive plan expressed in financial terms by which operating programs can be made effective for a given period of time. It is a tool of direction, coordination and control. It involves the development and application of broad and long range objectives for the enterprise, specification of enterprise goals, and a long range profit plan developed in broad terms, a short range profit plan detailed by relevant responsibilities, a system of periodic performance reports detailed by assigned responsibilities and follow-up procedure.

Budget

A budget is a written plan for the future. It is one of the methods used for preplanning and coordinating the activities of an enterprise. It is a major tool for planning, motivating and controlling business operations. According to Fremgen "a budget is a comprehensive and coordinated plan expressed in financial terms for the operations and resources of an enterprise for some specific period in the future". The budgeting process forces management to determine the goals and objectives of enterprises and to develop a coordinated plan for achieving these goals. The essential elements of the budget are plan, operations and resources, financial terms, specified future period, comprehensive and coordination.

Classification of budget

Budget can be classified according to various bases and the following are the most important among them in existence.

A. Classification according to time

Based on time factor budgets can be classified in to thee types

1) Long-term budget

These budgets are related to planning the operations of an organization for a period of five to ten years. They are usually expressed in physical quantities.

2) Short- term budget

These budgets are drawn usually for a period of one or two years. They are usually quantified and expressed in monetary terms.

3) Current budgets

These budgets cover a period of one month or more and the short-term budgets are modified according to current conditions of prevailing situations.

B. Functional classification

When budgets are classified on the basis of functions they are called functional budgets. The function budgets which are commonly found in a business concern are as follow

1) Sales budget

This represents the forecast of the total sales classified according to types of products, salesmen and the geographic location.

2) Selling and distribution cost budget

It relates to estimates of cost of selling and distribution of goods. This is prepared on the basis of past experience taking in to consideration a variety of a factor such as future trends, economic conditions and competition.

3) Production budget

This represents a forecast based on sales and production capacity.

4) Material budget

This is a by-product of production budget. This expressed in terms of physical quantities and value of materials to be issued from the4 stores for production purpose. The budget resources that right materials of right quantity and quality area procured.

- 5) Labor budget
This represents the utilization of labor force employed in productive activity. The standard time required for production by employees of various skills is fairly estimated.
- 6) Cash budget
This represents the sum total of the requirements of cash in respect of various functional budgets and of estimated cash receipts for a stipulated period.
- 7) Research budget
This includes the salaries of the research assistants and technical expense of the research department. This concerns improvement in the quality of the products or introduction of new products.
- 8) Plant utilization budget
This includes the plant and machinery requirements to meet the budgetary production within the stipulated period. Various schedules are prepared including the available load in each department expressed in standard hours or units.
- 9) Administrative expenses budget
This comprises the salaries and expenses of the administrative office and management for a stipulated period. All administrative expenses such as staff salaries including that of directors and managing director and expenses of office management like rents, insurance lighting etc. are all included in this budget.
- 10) Capital budget
This represents the forecast of the total financial outlay on acquisition of fixed assets such as plant and machinery, building and furniture and fixture as also of different sources of capital required. The budget period contemplated in this case which differs from that of other budgets, is a fairly long period.
- 11) Master budget
The final integration of all functional budgets by the accountant provides the master budget. This reflects the estimated profit and loss account, for the future period and balance sheet at the end thereof summarized figures are indicated for each item in the budget. This portrays the overall plan for the budget period. This highlights information relating sales, production, direct and indirect cost, profits and appropriation of profits.

C. Classification according to flexibility

Budgets based on flexibility can be divided into fixed budgets and flexible budgets.

1) Fixed budgets

This sets the targets in rigid terms. These budgets which are also known as static budgets are usually prepared for one year period, in advance. These static budgets are prepared where sales can be accurately forecast such that costs and expenses in relation to the budgeted sales can be accurately determined.

2) Flexible budget

This budget is resorted to by all business concerns where sales forecasts for the future could not be affected with certainty, the figures range from the lowest to the highest possible percentage of operating activity in relation to the standard operating performance. But the figures are adoptable to any given set of operating conditions.

Master Budget

Master budget is a summary budget which incorporates all functional budgets. It is prepared by integrating various functional budgets so as to represent the estimated profit and loss for the future period and balance sheet at the end of the budgeted period. This budget includes sales budget, expenses budgets, equipment purchase budget and a cash budget. It is a complete budget for an enterprise.

Production Budget

The production budget is an estimation of planned quantity of goods to be manufactured during the budget period. It is an estimate of number of units of each product that will be produced in the budget period. The production plan involves determining the number of each product that must be manufactured to meet planned sales and maintain the planned inventory levels of finished goods.

Just-In-Time (JIT) Production

The just-in-time (JIT) approach to production planning is a recent trend in manufacturing. In just in time production no things is purchased or manufactured until just before it is needed. It minimizes safety stocks and very high quality of subassemblies and final products must be achieved in order to reduce the need for safety stock.

Raw Materials and Purchase Budget

Raw material budget is prepared on the basis of the quantity of raw-materials required per product multiplied with quantity estimated to be produced. Sufficient raw materials will have to be available to meet production needs and to provide for the desired ending raw material inventory. Some quantity of material requirement will already exist in the form of beginning raw material inventory but the remainder will have to be purchased. There are four components of material budget: material consumption budget cost of material used budget, material purchase budget and material inventory budget.

Just-In –Time Purchasing

Just –in –time assume that the purchase of raw material and components parts arrive just in time for use in the manufacturing process- often with in a few hours of the time they are scheduled for uses and sales. It reduces the amount of money tied up in inventory of raw material and finished goods and reduces inventory holding cost.

Direct Labour Budget

Direct labour comprises all the workers who were directly on specific productive output. The direct labour includes the planned direct labour requirements necessary to produce the types and quantities of outputs planned in the production budget. There are three components of direct labour budget; direct labour budget, manpower budget and direct labour cost budget.

Overhead Budget (Expenses Budget)

The overhead plan is needed to maintain reasonable expense levels to support the objectives and planned programmed of the enterprise. Overhead budget should focus on the relationship between expenditures and the benefits derived from these expenditures. The desired benefits should be viewed as goals and sufficient resources must be planned to support the operating activities essential for their accomplishment. There are various techniques and basis to classify overhead, among them functional and behavioral classifications are most important.

Factory overhead Budget

This budget estimates the production overhead which is classified in to variable expenses, semi variable expenses and fixed overheads. Fixed constant overheads as the term itself signifies, remain constant over a long period irrespective the level of output. However, the fixed overheads may also vary at times when there is an expansion in the factory of the machines inclined there in on the other hand variable and semi variable expenses will vary directly with the level of capacity.

Selling and distribution overhead Budget

Selling and distribution expenses include all costs related to selling, distribution and delivery of products to customers. In many companies, this cost is significant percentage of total expenses. Carefully planning of such expenses affects the profit potential to the firm. Fundamental the top marketing executive has the direct responsibility for planning the optimum economic balance between sales, advertising and distribution expenses budget. Because of inter relationship between them sales, advertising and distribution expenses should be viewed as are basic problem.

Administrative expenses Budget

Administrative expenses include those expenses other than manufacturing and distribution. They are incurred in the responsibility centers that provide supervision of and service to all function of the enterprise, rather than in the performance of any function. Because a large portion of administrative expenses are fixed rather than variable, the notion persists that they cannot be controlled.

Flexible expenses Budget

Flexible budgets directly relate only to expenses (and costs). Flexible budgets are also called variable, dynamic, activity and output-adjusted expense budgets. The fundamental concept of flexible budgets for expenses is that all expenses are incurred because of 1) the passage of time 2) output or productive activity or 3) s combination of time and output or activity. If this premise is reasonable in a business, the expenses can be given mathematical formulations from which expenses plans can be computed for planning and control.

Capital Expenditure Budget

A capital expenditure is the use of funds to obtain operational assets that will help to earn future revenues or to reduce future costs. Capital expenditure budget is the firm's formal plan for his expenditures of money to purchase fixed assets. The investment decision of the firm is commonly known as the capital budgeting or capital expenditure. Capital budgeting decision may be defined as the firms decision to invest its current funds most efficiently in long term activities in anticipation of an expected flow of future benefits over a service of year.

Methods of alternative evaluation

Some widely accepted methods of alternatives evaluation are as follows;

A. Simple method

The methods that does not consider the time value of money is denoted as simple method of measuring capital expenditure decision. There are two major methods under this category.

1) Pay back period method

Pay back period is the minimum time required to recover the initial cash outlay from the annual cash inflows. We should accept the capital expenditure decision of low length of PBP and reject of higher length of PBP. It is very easy to evaluate

a) In case of even earning

$PBP = I/EC$, Where PBP=Pay back period, I=Investment, EC=Economic cash flow

b) Uneven earning

$PBP = N + 1 - \text{Cumulative EC at } N/EC \text{ of } (N+1) \text{ year}$

Where, N= Minimum no of year when cumulative Ec is very near to investment

2) Accounting Rate of Return method

Average rate of return on investment is the percentage of annual net return before depreciation and but after taxes to the initial investment we have to select the project having higher average rate of return vice versa.

a) Even Earning, $ARRI = EC \times 100/I$, b) Uneven Earning, $ARRI = \text{Average } EC \times 100/I$

B. Discounted cash flow method

The time value of money is considered in this method. The process of adjusting the face value of future cash flows to their present value by means of an inputted interest rate is known as discounting rate.

1) Net present value

In the method the discounting rate is used to discount the cash flow. If the NPV of the project is positive, the investment is profitable. Therefore, we should accept the project. If the NPV is negative investment is non profitable.

a) Even earning, $NPV = (Ec \times Pn) - I$,

b) Uneven earning

$$NPV = (Ec_1 \times Pn_1 + Ec_2 \times Pn_2 + \dots + Ec_n \times Pn) - I$$

2) Profitability index

The benefit at present value of Rs1 invested is known as PI. It is a ratio between total present value and investment; P.I is calculated is following ways

$$PI = TPV / I$$

3) Internal ratio of return

It is an important method of evaluating capital expenditure decision, IRR so that cost of capital ;which is applied to assess a series of future cash flour that origins the sum of their present values to the same levels as the original investment. The project should be accepted; if the IRR is more that the cost of capital and rejected if IRR is less that the cost of capital. The equation for calculating IRR is

$$IRR = LR + \frac{Pn \cdot LR - Pb / PnLR - PnHR \times (HR - LR)}{PnHR - PnLR}$$
, Where, LR=lower discount

PnLR=Discounting factor in lower rate, Pb=Payback period

PnHR=Discounting factor in higher rate

Cash flow Budget

One of the major responsibilities of management is to plan, control and safeguard the cash assets of the enterprise. Cash budget shows the planned cash inflows, outflow and ending position by interim periods for a specific time. Most companies should develop both long and short term plans about their cash flow.

Review of commercial bank

A commercial bank is purveys of financial for trade and plays a vital role in the economy and financial life of the country. By economic development we generally means the development of the leading sector of the economy like agriculture, industry trade and commerce etc. the development and commercial banks serves as reservoir for supplying and controlling the stream of that field i.e. finance. So the importance and contribution of commercial banks towards the economical and industrial activities, and upon the prudence of their administration depends the economic well being of the nation.

As Nepal like most of the developing countries suffer from almost complete lake of capital market, both commercial banks and other non banking finance institutions consequently have a social role to play in the long process of growth. In principle they could undertake the responsibility for activating the increasing flows personal saving so that the amount of hoards wealth are productive uses.

Commercial Bank Act 2031 B.S of Nepal has defined commercial bank as an organization which exchanges money accepts deposit advances loans and performs other commercial transactions and which is not specially established with the objectives of cooperative, agriculture, industrial, or any other of such kinds of its objects and activities. Referring to the act a commercial bank:

- 1) Should be established with a specified objective of co-operative, agriculture, industrials or any of such of specific purpose
- 2) Should accept customer deposit.
- 3) Should accept customer deposit
- 4) Should advice loans and make investment
- 5) Perform commercial transaction.

Commercial bank area controlled and regulated by the central bank of the nation. In Nepal NRB controls and regulates all the commercial banks in the country.

Rastriya Banijya Bank (RBB) is fully government owned, and the largest commercial bank in Nepal. RBB was established on January 23, 1966 (2022 Magh 10 BS) under the RBB Act. RBB provides various banking services to a wide range of customers including banks, insurance companies, industrial trading houses, airlines, and many other sectors.

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2.2 Review of Journals

After reviewing the books and newspapers, certain useful journals focusing on Budgeting of bank are studied to know the recent trend and development and its implication on commercial banks.

Chalise (1989) has given some suggestion to the banks in his articles. Budgeting integrates all the functions of each department appropriately so every bank needs to prepare it. According to view of Chalise There should be a separate planning department in each of the commercial banks and this department should be entrusted with the task of budget preparation, in addition to the preparation of five years plan annual programmes. Planning should cover deposits, credit, and profit and loan recovery. Suggestions of Chalise are

-) Every bank need to prepare Budget because it integrates all the functions of each department appropriately.
-) There should be separate budgeting department in each of the commercial bank.
-) Budgeting should cover deposits, credit and profit and loan recovery.

Poudel (2053) has given some useful information in his article," Financial statement analysis" published in Nepal Rastra Bank Samachar. According to him, balance sheet, profit and loss account and the accompanying notes are the most useful aspects of the bank. We need to understand the major characteristics of bank's balance sheet and profit and loss account. The bank's balance sheet is composed of financial claims as liabilities in the form of deposits and as assets in the form of loans. Fixed assets account forms a small portion of the total assets. Financial innovations, which are generally contingent in nature, are considered as off balance sheet items.

Interest received on loans and advances and investment and paid on deposit liabilities are the major components of profit and loss account. The other sources of income are fee, commission, discount and service charges. The users of the financial

statement of a bank need relevant, reliable and comparable information which assists them in evaluating the financial position and performance of the bank and which is useful to them in making economic decisions. The disclosure requirement of bank's financial statement has been expressly laid down in the concerned act. Commercial banking act 1974 requires the audited balance sheet and profit and loss account to be published in the leading newspaper for the information of general public.

According to Poudel, the principle objectives of analyzing financial statement are to identify:

-) Financial Adaptability (Liquidity)
-) Financial Performance (Profitability)
-) Financial Position of Bank (Solvency)

Most of the users of the financial statements are interested in assessing the bank's overall performance i.e. profitability which is affected by the following factors;

-) The structure of Balance sheet and profit and loss account
-) Operating efficiency and internal management system
-) Managerial decisions taken by top management regarding interest rate. Exchange rate, lending policies etc.
-) Environmental changes (technology, government competition, economy)

Others factors to be considered in analyzing the financial statements of bank is to assess the capital adequacy ratio and liquidity position. In the line of the norms set by bank for international settlement, capital adequacy of a bank is assessed on the basis of risk weighted assets. It indicates a bank's financial strength and solvency.

Pyakuryal (1987) has said Proper utilization of bank's resources is an indication of sound performance. The present changing context of the economy calls for a substantial revitalization of the resources. How much they have gained over the year depends chiefly on how far they have been able to utilize their resources in an efficient manner. Therefore the task of utilization of resources is a much crucial as the mobilization is the underutilization of resources not only result in loss of income but also goes further to discourage the collection of deposit. Thus

-) The bank should properly utilize the resources mobilized and increase profitability.

-) Bank should have appropriate and more realistic budgeting system because budgeting is the direction or way of action.
-) It is not better only the good budgeting system banks also should be able to implement planning in time.

Shrestha (2047) has emphasized in the classification of loan so as to enable to assets performing loans form that of non -performing loans. A beginning has been made to classify loans under three categories good, substandard and doubtful loans. A clean out criteria is necessary to treat interest suspense account and it is advisable that all interest unpaid more than six month needs to be treated as unearned income. Adequate provisioning is the surest way to get relief from sinking loan after careful consideration of portfolio risk. Mandatory provisions should not be linked with the duration of loan. Instead, provisions in case of doubtful debts must cover from the very beginning. For bad loans, a less stringent provisioning policy should be adopted depending upon considerable of customers' situation and value of guarantees.

Shrestha has given some suggestions. The more honestly one applies these concept, the better change it brings in the life of bank. His views are the great contribution in the field of commercial banking. His suggestions are,

-) No additional loan facilities should be granted to customer or firm who has overdue loans of two years or more.
-) Strong reservation should be applied in restructuring portfolio relating to overdue loans.
-) All credits even overdrafts should be given a maturity data and be subjected and doubtful loans.
-) The professional credit committee must be formed and a broad member must be appointed in that committee to have proper check and balance.
-) No credit should be granted without presented of audited balance sheets and financial statements.
-) An estimate of personal wealth and income becomes important while granting credit to individuals

2.3 Review of previous Research work

Karki (2000) has carried out a research on the topic "A comparative study on profit planning on Rastriya Banijaya Bank and Himalayan Bank limited. The study covered five years period of time from F/Y 1993/94 to 1998/99. Data were collected from primary and secondary sources. The basic objective of the study is to highlight the current practices of profit planning and its effectiveness in Nepalese enterprises specially in both Banks and other objectives are to examine the system of profit planning applied in both banks to analysis the major functional and financial plans formulated and implemented in both banks to examine the outcomes of those plans in terms of achievement and to sketch the main problems of development and implementing profit planning system in both banks.

Some findings of her study are

- 1) No proper profit planning strategy seems to be developed although HBL operating at profit but RBB is running with heavy cumulative loss.
- 2) Total revenue and total cost of RBB is higher but profit is lower than HBL
- 3) Deposit, total revenue loan and advances are increasing every year in RBB but Profits are negative or highly fluctuating due to high fluctuation in cost
- 4) RBB is unable to control idle expense.
- 5) Cost control mechanism is found not to be followed
- 6) There is no detailed publicity of their utilization of money effectiveness except Interest rate and annual final account report.
- 7) Government seems less conscious in the present situation of RBB.

Karki recommended following major points in her study for consideration to improve the existing situation.

- 1) Government has to be conscious about the present situation of RBB
- 2) As Banks are playing on the public money, it is recommended for these banks to walk out target rate of return every year and on the basic of which the bank should plan of profit by linking its activities with income generating programmed.
- 3) Accounting system should be systematic so that proper strategy can be applied special in use of RBB and auditing of accounts should be done in time.

- 4) The management of the bank should have more interactions with the share holders
- 5) Bank are advised to prepare better plans
- 6) RBB should focus on constant return because it has always negative earning on capital
- 7) RBB should emphasis to increase earning from other sources also.
- 8) Local experts should be involved more in top level of management of RBB so that they can run the bank easily in future.

Subedi (2001) has carried out a research on the topic" Profit planning in commercial Bank" A case study of Rastriya Banijaya Bank. The study covered the time period of five years from f/y 1993/94 to1997/98. Data were collected from primary or secondary sources. Subedi has tried to present the effectiveness of profit planning system of commercial banks. The basic objectives of her study is to examine the effectiveness of profit planning system in the commercial banks and other objectives are to identify the policies and trend loans and advances to highlight on important is us like income and expenditure credit to priority sector, number of bank branches numbers of bank employees etc and to show the growth trend of Rastriya Banijya Bank on important issue.

The major findings of her study are:-

- 1) The rate of expansion of branches of RBB was increased after introduction of priority sector program in 2031 but the growth could not be desired concentration of the branches is more in urban areas than in rural areas.
- 2) Most of the investments made against the security of land, gold and silver.
- 3) Banking costs are relatively utilized.
- 4) No specific and clear investment policy and functioning without any define direction.
- 5) Deposit mobilized is not properly utilized
- 6) The rate of changes in interest has no effect in business growth in deposit side or in investment side.
- 7) Social objectives are met but commercial spirit is lacking in RBB
- 8) RBB tried to manage in true, professional way but the political environment in bureaucratic approach has compromised the commercial environment

- 9) RBB has not been publishing its annual reports balance sheet and profit and loss account and related schedule along with the audited reports.

Subedi has recommended following major points.

- 1) Performance of every branch is needed to be evaluated and those having performance below satisfactory level should be closed down.
- 2) Reduce interest rate in deposit so as to reduce the same in leading.
- 3) Banking business should be free from undesirable interference from politicians and high ranking officials.
- 4) Adequate training should be given to the personal and make the operation computer system based to make the service prompt.
- 5) The investment policy of RBB should be in accordance with the goal of economic up liftmen of the nation and it should also accommodate long and medium term credit demands besides the short terms loans.
- 6) Bank should look for new sectors of investments as well for its growth.

Sharma (2001) has carried out the research on the topic "Profit planning in commercial Bank, A case study of Nepal Bangladesh Bank". The main objectives of his study are to trace out the situation of profit planning in Nepalese commercial Bank with a case study of Nepal Bangladesh Bank.

Major findings of the study are:

- 1) NB Bank works active and organized planning department to undertake innovative products research and development works
- 2) Bank has the policy to employee academically highly qualified candidates at management trainee, which may be considered as food aspect for future manpower planning.
- 3) Objectives of the Bank one expressed in literary term, and not specified clearly, therefore there is a danger of it being misinterpreted in the ways of ones benefit by the concerned.
- 4) Major concentration of resources mobilization of NB is at deposit mobilization. In this respect they are incurring cost toward deposit mobilizations.

- 5) Banks resources development for non-yielding liquid asset (cash and bank balance) is increasing every year, which is determine to profitability objectives, but it is supportive to meeting liquidity requirement of the bank.
- 6) Outstanding, letter of credit liabilities of the bank are increasing every year however the growth is not constant.
- 7) Interest expense amount is the highest among total expenses items of the Bank every year.
- 8) Interest income amount of the bank is the highest among other income items in the total Revenue.
- 9) 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.

Some recommendations of the study are

- 1) Bank management should adept the policy of appropriate authority delegation at all of management. In order to save the valued time of the chief executive officer for other productive use.
- 2) Branch monitoring and controlling mechanism should be made at the regional level also in order to ensure the better functioning of the branch offices located at such locations which are for from the head office.
- 3) Objective of the bank should be clearly defined in order to avoid the risk of it being misinterpreted.
- 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. There by, reducing the interest cost because due to he high cost of deposit, bank is forced to niters its fund more on high fielding assets, which are generally nit liquid and obviously risk for the bank.
- 5) The Nepal Rasta Bank has put the restriction on the difference of an average rate of interest income and average rate of interest expenses of the bank has not to exceed 5%. Therefore , the bank has to put more focus on the other kind of non funded activities by it shall increasing income from other sources than interest to increase its profitability.
- 6) Expenses cannot be avoided an always are growing with increasing activities, but it should be optimize and should be related with the income generating activities. Bank should minimize, those expenses, which are not related to

income earning. Other expenses then in interest from a burden to the gross profit margin of the bank. Therefore lowering the other expense the bank shall enhance its profit.

- 7) Net profit of the bank is the amount which is obtained by subtraction g the amount of net burden from the amount of gross interest margin. Therefore, NB Bank shall attempt to lower the burden cost. by increasing the other income and decreasing the other expenses. At the some time it should take a policy to make the interest margin at the maximum extent as allowed by the central banks norm.

Parajuli (2002) has conducted a research on the topic "A study on effectiveness of managerial budgeting in Annapurna Finance Company limited". The study covered five years periods of time from f/y 1996/97 to 2000/01. Data were collected from primary and secondary sources. The main objectives of the study is to analyze and examine the management budgeting in Annapurna finance company limited other objectives of the study are to study of managerial budgeting , to analyze the performance of managerial of managerial budgeting.

Some findings of his study are as followings;

- 1) There is some highly experienced financial expertise in management committee. It has made its financial plan or profit plan and implemented it in seriously
- 2) The goals and objectives of that company are already defined
- 3) The management budgeting process and methods are applied in traditional method.
- 4) Projected income statement was prepared on the basis past years data and traditional method so projected income is less than actual achievement
- 5) There is under capitalization situation in Annapurna finance company.
- 6) There is no opportunity to small client who are demanded loan less than Rs500.
- 7) There is no job description job evaluation and proper evaluation of the performance of staff in timing.

Some recommendations of his study are

- 1) There should be involvement of the lower level management to top level management on setting up of goals and objectives of the company
- 2) The managerial budget should be prepared by considering the future expansion of business, market situation, modern technology, economic environment and capacity of the company.
- 3) It is necessary to increase the effort and efficiency both of management and employees.
- 4) The company should make continuous efforts to explore new competitive, productive and high yielding investment opportunities.
- 5) The company should adopt modern and scientific accounting system.
- 6) There should be a clear-cut defined duty and responsibilities for employees.
- 7) Scientific and systematic mechanism should be developed for performance evaluation of staff timely and continuously.

Tiwari (2003) has carried out his research on the topic "Profit planning in commercial Bank, a case study of standard chartered bank Ltd. Nepal. He has tried to examine whether the standard chartered bank is applying planning system or not properly. The study covered eight years period of time from F/Y 1994/95 to 2001/02. The basic objective of this study is to appraise standard chartered bank appropriately for the application of comprehensive profit planning system. Some major findings pointed by Mr. Tiwari is as follows:

- 1) Standard chartered bank is adopting a policy to keep minimum number of employees as possible.
- 2) The top level executives are only involved in decision making and lower participation is not encouraged but top management takes the feedbacks. For annual planning and strategies making through conferences and strategic meetings organized twice in a year at the head office from manager level employees.
- 3) Bank has the policy to recruit the highly qualified fresh candidates.
- 4) Lack of advanced training to the personnel.
- 5) Absence of skilled and academic manpower in budgeting section of the authority.

- 6) The authority is suffering from high fixed costs.
- 7) There is lack of proper coordination among the various responsible departments.
- 8) Deposit mobilized by the bank is bound to standard chartered considerably growing every year with an average growth over the period of last 8 years being high as 33.93%.
- 9) From regression analysis of the budget and actual deposits, remaining the trend same for the coming too, the deposit to be mobilized by the bank by the end of F/Y 2002/03 shall reach up to Rs.17072056.
- 10) Outstanding guarantee liability of the bank is fluctuating up to maximum growth rate is 42.39% and minimum growth rate is negative 50%.
- 11) The total deposit of the bank is found increasing each year corresponding to the increase in interest expenses. The total deposit is perfectly and positively correlated with total interest expenses.
- 12) Interest income amount of the banks is the highest among other income items of the total revenue.
- 13) The current ratio, debt equity ratio, debt to assets ratio, profitability ratio and cost volume profit analysis of the standard chartered bank is positive and perfectly correlated.

Saud (2005) has carried out a research on the topic "Profit planning in Commercial Bank, a case study of Machhapuchhre bank limited". The main objective of his research is to exam the main approaches of profit planning and to test the extant of achievement of planning of MBL. The study covered five years period from fiscal year 1998/90to2002/04.

The major findings of the study are

- 1) MBL does not prepare the long term strategic plan but it pre practical short term profit plan the period covered by the budget is one year but not detailed by areas.
- 2) The plans are prepared from the top level and later it communicated to the lower level.
- 3) MBL has not been able to utilize all capacity average 70%capacity utilization condition.

- 4) Employees are careful of their duties and responsibilities. The system of reward and punishment to employees on the basis of their work performance is maintained in MBL.
- 5) Liquidity position of MBL is better. The ratio is above standard.
- 6) Interest income amount of the bank is highest among other income items in the total revenue.
- 7) Interest expenses amount is the highest among total expenses items of the bank every year.
- 8) The expenses are not differing as controllable expenses and non-controllable expenses. Thus there are not effective cost control programs.
- 9) Bank has two branches which are operating in rural areas like Jomsom Branch, Mustang other Damaualui Branch, Tanahun. There is no other private and joint venture bank. So there is highly monopoly of this bank to make profit by rendering best services to the people.
- 10) Budgeted collection is made in accordance with budgeted investment
- 11) There is no clear cut boundary to separate costing to fixed and variable.
- 12) Budgets are prepared just to fulfill the some formalities but these are not used effectively for the profit planning process.

Some recommendations of the study are

- 1) Level wise specific job description and responsibilities assignment should be mentioned clearly.
- 2) Bank management should adopt the policy of appropriate authority delegation at all level of management in under to save the valued time of the chief executive officer of the productive use.
- 3) Bank should develop its specific good for the coming budget year.
- 4) The bank is facing problem of under capitalization by which fund is affective, so to enhance the fund capacity the necessary financial arrangement should be over viewed.
- 5) Credit investment budget should be developed by interim time period also such collection budget will help the bank to plan the necessary money fund and other deposits factors at appropriate time.
- 6) Capital expenditure should be planned in detail for evaluation purpose, different techniques should be applied

- 7) Bank should be operated on purely commercial basis, so every manager of the bank should understand role of the budgets.
- 8) Effective programs should be initiated to improve the productivity over labor, employee moral should be increased and to motivated employee.
- 9) MBL should develop specific program to face competition on market of Nepal.

Karki (2005) has carried out the research on the topic "profit planning in commercial Bank, A case study of Everest Bank limited". The basic object of the study is to apprise Everest Bank Ltd appropriately for the application of comprehensive profit planning control system.

Major findings of his study are

- 1) The bank is able to maintain its liquidity position to meet the daily cash requirement.
- 2) Bank has strong position regarding the mobilization of total deposit as loans and advances and normal position and decreasing trend regarding the mobilization of total deposit as investment
- 3) Return on equity , ratio of total interest earned to total assets employed and other profitability with respect to financial resources investment of the bank assets are unsatisfactory
- 4) There is satisfactory position on mobilization deposit as an investment, mobilization of deposit as loan advances.
- 5) The trend analysis of deposit, net profit loan and advances and Eps show the increasing trend.

Karki recommended following points on the basis of analysis, findings issues and gaps of the study.

- 1) The bank is suggested to maintained to its liquidity position in normal standard i.e. 2:1.
- 2) The bank is recommended to utilize its risky assets and shareholders fund to gain profit margin. It should reduce its expenses and should try to collect cheaper fund being more profitable.
- 3) EBL is recommended to increase foreign investment Nepal banking means of their wide international banking network.

- 4) Through loan and advances to total deposit of Everest Bank limited is better but it seems that is necessary to make more important in coming days,. Sound and liberal lending policy would help in this regard.
- 5) It will be better for EBL to open the branches in other cities and rural areas in order to find the profitable investment opportunities.
- 6) The bank should encourage small, medium and higher levels of customers for enjoying deposits, burrowing another service.
- 7) Portfolios condition of the bank should be examined from time to time and attention should be made to maintain equilibrium in the portfolio condition as far as possible. The Bank should make continuous effort to explore new; competitive and high fielding investment optimizes their investment portfolios. Nepalese commercial banks should invest in different projects; finance the help of government which provide security to them.

Kharel (2008) has conducted a research on the topic "Profit planning of commercial Bank in Nepal. A comparative study of Everest Bank limited, Nabil Bank limited and Bank of Katmandu limited. The basic object of the study is to analysis the profit planning policy of commercial banks with reference to EBL, NABIL, and BOK.

Some of the findings of his study are

- 1) The liquidity position of EBL is comparatively better than that of NABIL and BOK.
- 2) From the analysis of assets management ratio it can be found that EBL is in better position as compared to that of NABIL and BOK
- 3) The loan and advances to total deposit ratio, loan and advances to total working fund ratio EBL lies in between those of NABIL and BOK.
- 4) To make the profit BOK is taking highest risk by providing the highest portion of its deposits as a loan
- 5) The return on loan and advances ratio and return on assets of EBL is lowest of all.
- 6) The trend of the total investment, total deposit, loan and advance and profit of EBL shows better positions than that of NABIL and BOK.

Some recommendations of his study are

- 1) Current ratio of all three banks is not satisfactory. It is below its standard 2:1 so the banks are suggested to improve current assets.
- 2) NABIL is recommended to invest its fund in government securities instead of keeping them idle.
- 3) Banks are recommended to open the branches in rural areas.
- 4) EBL is suggested to invest more of its fund in share and debenture of different companies
- 5) Profitability ratios of banks are not satisfactory. The banks should use its fund in more portfolios sectors. They should utilize their risk assets and shareholders funds and they should reduce their expenses should try to collect cheaper fund being more profitable.
- 6) The banks should develop on "innovative approach to bank marketing and formulated new strategies of serving customers in a more convenient way.

2.4 Research Gap

Most of the past research studies about budgeting or profit planning are related to the manufacturing company and commercial banks. All the researches have pointed out there is no proper profit planning system in concerned institution and recommended for the effective implementation of profit planning system in the concerned institutions.

This study shall be a new study in the field of budgeting system. No study has been made in the comparative study of budgeting system in Government sector and private sector commercial banks i.e. Rastriya Banijya Bank and Machhapuchchhre Bank Limited. This study has tried to indicate the formulation and implementation of budgeting system in RBB and MBL. Budgeting covers planning, organizing and controlling all the financial activities of the institutions. This study has compared the financial position of RBB and MBL by applying the tools of ratio analysis, statistical tools and hypothesis testing. After analysis, it concludes the various findings of research and recommends to RBB and MBL for immediate and long term improvement and correction.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Background

This chapter describes the methodology employed in this study. Research methodology is the composition of two words Research and methodology. Research methodology is the systematic method of finding solution to a problem i.e. systematic collection recording, analysis, interpretation and reporting of information's about various facts of a phenomenon under study." Research methodology is followed to achieve the basic objectives and goals of the research work. It is the way to systematically solve about the research problem." In this study research methodology describes the methods and processes applied in the entire describe research design, population sampling producer sources of data and analysis of data. Research methodology is the way to solve systematically about the research is exploratory as well as descriptive in order to accomplish the objectives of this study.

3.2 Research Design.

Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions. It is the conceptual structures within which research is conducted. The research design of the study is analytical as well as descriptive approaches. This study is closely related with the various functional budgets and other accounting statement as well as result of the budget. This information and data are presented in an analytical method. The research such as formulation and implementation process of budgeting in RBB and MBL and programmes introduced by RBB and MBL to increase the profit are explained by using descriptive method.

3.3 Population and sample

This research work is designed with Budgeting system of Nepalese commercial bank taking the reference of RBB and MBL. The total numbers of commercial banks in Nepal are the population of the study. Among the total population RBB and MBL have been selected as sample for the present study.

3.4 Time period of Budgeting

This study covers a time period of five years from fiscal year 2060/61 to 2064/65. Data are taken from RBB and MBL and the analysis is basically made and on the basic of these 5 years data.

3.5 Nature and sources of data

Basically the data used in this study are secondary data. Primary data have been used in few cases. Secondary data have been collected from the annual published accounting and financial statement of the banks. Other necessary data have collected from websites, newspapers and related publications. The primary data are collected through questionnaire with employee of both banks.

3.6 Statistical tools used

Data collected from varies sources are managed, analyzed and presented in proper tables and formats such formats and tables are interpreted and explained whenever necessary.

To analysis the collected data, various financial tools and simple statistical tools like arithmetic mean, standard deviation, coefficient of variance, percentage, coefficient of correlation, multiple bars diagram, pie chart, graphs and hypothesis testing are used.

3.6.1 Arithmetic mean

The central values that represent the characteristics of the whole distribution or the values around which all items of the distribution tend to concentrate are called average. It is one of the important statistical measures of average. The arithmetic mean of a given set of observation is their sum divided by the number of observations.

3.6.2 Standard deviation

The standard deviation is the absolute measure of dispersion. It is defined as the positive square root of the mean of the square of the deviation taken from the arithmetic mean. The greater the amount of dispersion or variability, the greater the standard deviation, the greater will be the magnitude of the deviation of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series.

3.6.3 Coefficient of variance

The relative measure of dispersion based on the standard deviation is known as the coefficient of variation. It is independent of unit. So, two distributions can be compared with the help of C.V. for their variability. Less the C.V. more will be the uniformity, consistency, stable and homogeneous etc.

3.6.4 Percentage

Percentage is one of the most useful tools for the comparison of two quantities or variables. Simply, the word percentage means per hundred. In other words, the fraction with 100 as its denominator is known as a percentage and the numerator of this fraction is known as rate of percent.

3.6.5 Coefficient of correlation

The coefficient of correlation measures the direction of relationship between the two sets of figures. It is the square root of the coefficient of determination. It always lies between +1 to -1.

3.6.6 Hypothesis

A hypothesis is a tentative generalization, the validity of which remains to be tested. In its elementary stage, a hypothesis may be any hunch, guess, imaginative, idea which becomes the basis for action or investigation.

3.6.7 Multiple Bar-diagrams, pie chart and graphs

Diagrams, pie chart and graphs are visual aids which give a bird's eye view of a set of numerical data which show the information in a way that enables us to make comparison between two or more than two sets of data. Diagrams are in different

types. Out of these various types of diagram one of the most important form of diagrammatic presentation of data is multiple bar diagram which is used in cases where multiple characteristics of the same set of data have to be presented and compared.

3.7 Research variables.

Loan disbursement, deposit collection, profit and loss, total assets, total capital employed, capital expenditure, interest expenses, interest income investment and other income etc of the banks are research variables.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

In this chapter analysis and presentation of collected data has been done. The whole research is based on the analysis and interpretation of collected data. Without analysis, interpretation and presentation of the primary and secondary data the thesis don't give any meaning. Primary and secondary data are calculated on the basis of financial and statistical tools.

4.1 Analysis of Primary Data

The primary data are collected from the RBB and MBL through the questionnaires method. Data analysis has been done with the help of collected questionnaires. The analysis has been presented in the paragraph form to give the clear idea of the analysis.

A Budget is a numerical plan of action which generally covers the areas of revenues and expenditure. The main aim of budgeting is to present the future forecasting numerically expressed in appropriate over profit and costs. Budgeting is a tool of direction, co-ordination and control.

In RBB there is central Budget unit having separate department to formulate the Budget. Chief financial officer is responsible for formulating Budget. Budget is formulated by taking the reference of previous budget and considering the different variables like prevalent accounting system, NRB regulation, banking and financial act, past trend of income and expenses, strategies and work plan of bank, resource mobilization extending loan, profitability, expansion of better service, consistency, co ordination, monitoring and performance evaluation. Junior officers involve at primary steps of budgeting process for data accumulation. Budgeting system is communicated by top to lower and lower to top approach. Relevant variables of budget are evaluated by budget committee. Variance analysis is used to measure the performance of the bank. At present budgetary system of RBB is working effectively so the system needs

not to be improved now. Excess funds of the bank are utilized by purchasing Government treasury.

Profit maximization is the major objectives of the bank. To increase the profit RBB takes different policies to control and reduce the cost. RBB uses advanced technologies like ATM, SMS banking, e-banking and other online banking system. Resource mobilization, branch expansion etc are the major programmes introduced by the RBB to increase the profit. RBB gives various facilities to its customers. Internet banking, ATM, ABBS, are the major facilities of the RBB to its customers. For foreign remittance RBB gives the facility of western union money transfer. RBB has provides various types of loan in low interest rate to its customers.

When the government adopted open market and liberal economic policy then there was a suitable environment for commercial banks to be established. Modern commercial banks were established in private sector under the rules of government. Machhapuchchhre Bank Limited is the first commercial bank in the western part of the country. MBL has been established by Nepalese promoters. It is fully computerized bank. At the time of beginning it has authorized capital 240 million, issued capital 120 million and paid up capital 84 million.

In MBL financial planning department formulate the budget and chief of financial department is responsible for budgeting. Budget is prepared by taking the reference of previous Budget and on the basis of capital budgeting, trend analysis and future cash flow. Junior officers are also involved in formulating budget; planning department evaluates the relevant variables of budgeting. Payback period method is used to evaluate the major capital expenditure in MBL. Ratio analysis tool is used to measure the performance of the bank. To improve the budgeting system MBL gives emphasis on proper planning and coordinating among different department. Excess funds of the bank are kept as a fixed deposit.

MBL has launched different programmes like Youva bachat, Pewa bachat, samman bachat, and salary management scheme etc to attract the customers. 31 branches of MBL are operating in different part of the country. The branches of the MBL cover all the region of the country. MBL has been providing different services such as accepting deposits, paying the amount of cheque drawn by the depositor by means of computerized and facilities counter through 31 branches. It also provides the loan for short and long term against commercial good, movable and immovable property. It also provides the facility of discounting bill of exchange, issuing traveler

cheque, issuing letter of credit provide guarantee, sale and buy of foreign currency and remittance of money from one place to another. MBL has most sophisticated GLOBUS banking software with modern banking facilities like tale banking, internet banking, point of sale service, ATM facilities, mobile banking, ABBS and many more.

4.2 Analysis of Secondary Data

The secondary data of RBB and MBL are collected through the published book and website. The analyses have been done by using the statistical and financial tools and are presented by using the multiple bar diagrams, graphs and chart.

4.2.1 Financial Analysis

4.2.1.1 Liquidity Ratio

The ability of a firm to meet its obligation in the short term is known as liquidity. Commercial Banks must maintain its satisfactory liquidity position to satisfy the credit needs of the commercial to meet demands for deposits, withdraws, pay nation by obligation in time and convert non cash assets in to cash to fulfill immediate needs without loss of bank and consequent impact on long run profit. The high degree of liquidity shows inability of proper utilization of funds where as the lack of liquidity shows the signal of poor credit worthiness.

i) Current Ratio

It is the relationship of current assets and current liabilities. Current assets can be converted in to cash with in short period of time normally not exceeding one year. Current liabilities are those which are payable within short period. Current assets consist of cash and bank balance, money at call or short terms notice, investment in government securities. We can unable to define loan and advances and other assets as current assets due to the non ability of information. Current liabilities consist of current deposits, bill payable, income tax liabilities and current liabilities.

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

Table 4.1
Current Ratio

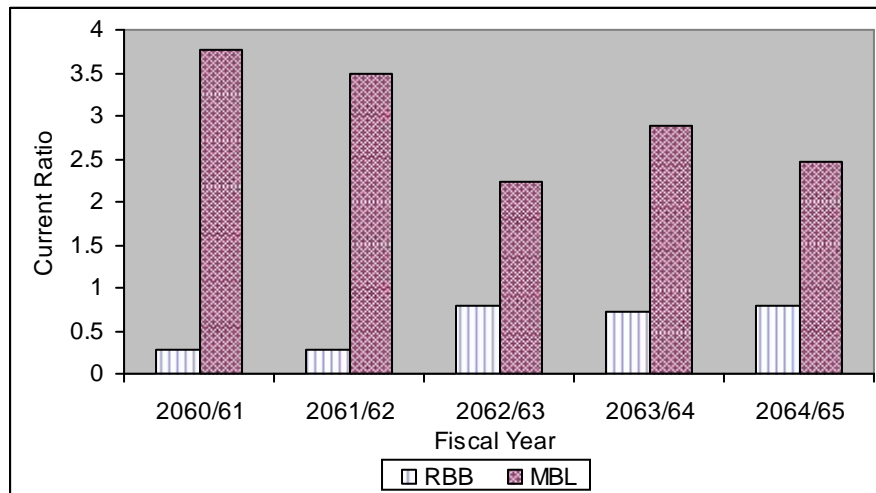
Banks	Fiscal Year					Mean	S.D	C.V %
	2060/61	2061/62	2062/63	2063/64	2064/65			
RBB	0.27:1	0.28:1	0.78:1	0.73:1	0.78:1	0.57	0.237	41.64
MBL	3.76:1	3.49:1	2.24:1	2.88:1	2.47:1	2.963	0.579	19.54

(Source: Appendix No. 1)

The table 4.1 shows the current ratio of RBB and MBL. The reference current ratio of the company is 2:1. The current ratio of RBB is less than the standard liquidity ratio 2:1 but in case of MBL current ratio is above the standard liquidity ratio 2:1. In fiscal year 2060/61 liquidity position of MBL is very strong. In fiscal year 2062/63 the liquidity position is less in comparison other fiscal years.

From the above analysis it can be concluded that liquidity position of MBL is very strong than RBB.

Figure 4.1
Current Ratio



ii) Cash and Bank balance to total Deposit Ratio

It reflects the ability of bank huge fund to cover their current deposit. Higher the ratio shows higher liquidity position and ability to cover the deposit and vice versa

Cash and bank balance include cash on hand including foreign cheques other cash item and balance with domestic bank and abroad.

$$= \frac{\text{Cash and Bank balance}}{\text{Total deposit}}$$

Table 4.2
Cash and Bank Balance to Deposit Ratio

Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	17	13	11	12	15	13.6	3.44	25.29
MBL	15	13	10	13	14	13	1.67	12.85

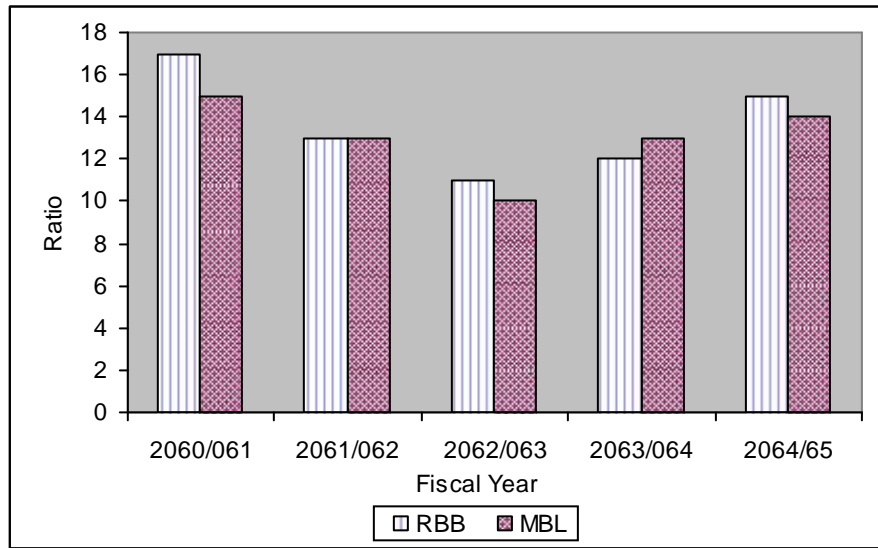
(Source: Appendix No. 2)

The table 4.2 shows the percentage of cash and bank balance to total deposit ratio position of RBB and MBL. The cash reserve ratio determined by Nepal Rastra Bank is 5 times. The average mean ratios of both banks are higher than the reference cash reserve ratio determined by Nepal Rastra Bank so the mean standard deviation and coefficient of variation of cash and bank balance to total deposit ratio of both banks are better.

The above table reflects RBB and MBL both have fluctuating trend. RBB has maintained highest ratio in F/Y 060/061 i.e. 17% and lowest ratio in F/Y 062/063 i.e. 11%. MBL has maintained highest ratio in F/Y 060/061 i.e. 15% and lowest ratio in F/Y 062/063 i.e. 10%. In average RBB has higher cash and bank balance to total deposit ratio than MBL.

Figure 4.2

Cash and Bank Balance to Total Deposit Ratio



iii) Cash and Bank Balance to Current Assets Ratio

Cash and bank Balance to current assets ratio reveals the position of cash and bank balance in total of current assets. Higher ratio indicated the banks ability to meet the daily cash requirement of their customers' deposit.

$$= \frac{\text{Cash and Bank Balance}}{\text{Current assets}}$$

Table 4.3

Cash and Bank Balance to Current Assets Ratio

Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	82	53	43	39	46	52.6	15.39	29.25
MBL	65	84	33	44	64	58	17.78	30.65

(Source: Appendix No. 3)

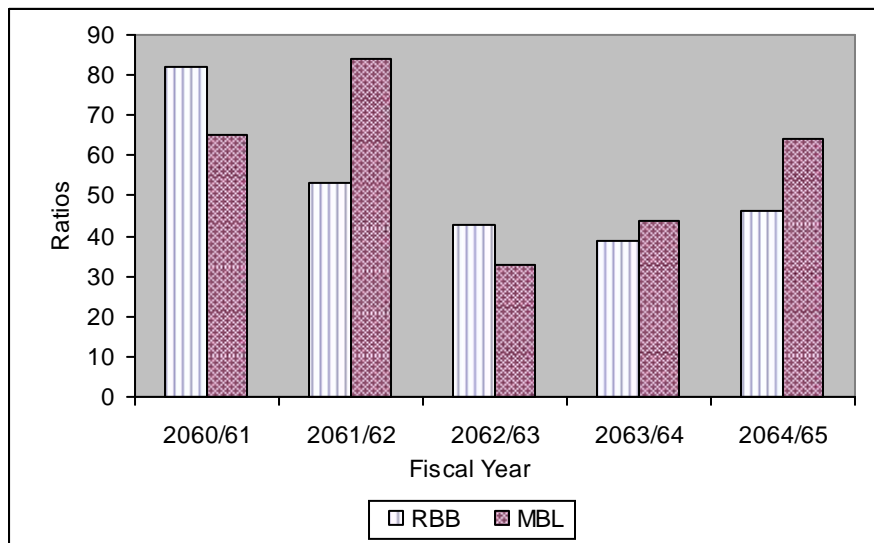
Table 4.3 shows the percentage of cash and bank balance to current assets ratio of both banks have fluctuating trend during the study period. They show the ability to manage the deposit with drawls from the customers. RBB has maintained highest ratio in F/Y 060/061 i.e. 82 and lowest ratio in F/Y 063/064 i.e. 39. MBL has

maintained highest ratio in F/Y 061/062 i.e.84 and lowest ratio is F/Y 062/063 i.e. 33 . The mean value of MBL is higher than RBB. Similarly standard deviation and coefficient of variation of MBL are also higher than RBB.

The analysis reveals the MBL is in better position during the study period as the banks shows the ability to manage the deposit withdraws from the customers although it has the fluctuating trend.

Figure 4.3

Cash and Bank Balance to Current Assets Ratio



iv) Investment on Government Securities to Current Assets Ratio

This ratio examines the portion of a commercial banks current assets which invested in different Government securities i.e. treasury bills and Government bonds.

$$= \frac{\text{Investment on Government securities}}{\text{Current Assets}}$$

Table 4.4

Investment on Government securities to Current Assets Ratio

Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	34	61	69	64	52	56	12.31	21.98
MBL	11	15	37	32	34	25.8	10.64	41.24

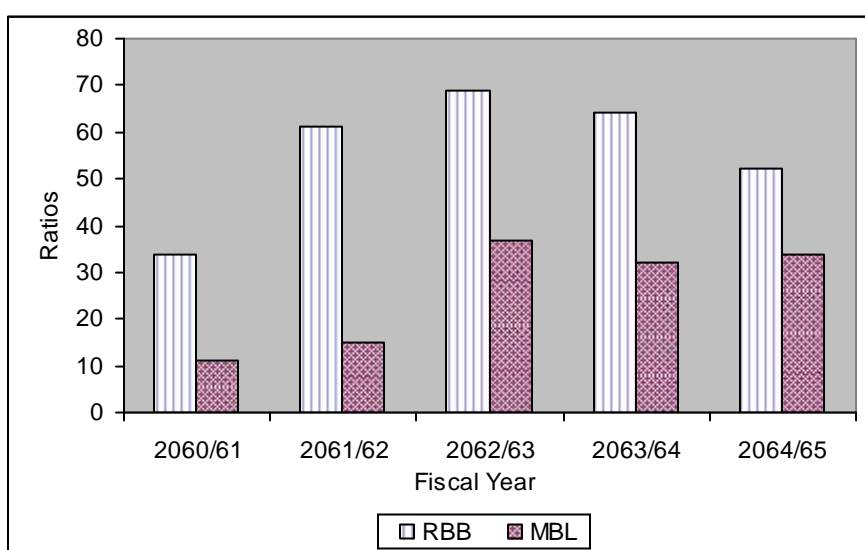
(Source: Appendix No. 4)

The table 4.4 shows that investment in Government securities to current assets ratios of the banks. RBB has maintained highest ratio in F/Y 2062/63 i.e. 69% and lowest ratio in F/Y 2060/061 i.e. 34%. MBL has maintained highest ratio in F/Y 2062/063 i.e. 37% and lowest ratio in F/Y 2060/061 i.e. 11%. The ratio of RBB is in fluctuating trend and MBL is in increasing trend. The mean ratio of investment on Government securities to current assets ratio of RBB is higher than MBL so RBB invest its much as portion its current assets as Government securities than that MBL. The coefficient of variation of RBB is less than MBL.

It can be conclude that RBB has invested its more of portion assets as Government securities than MBL

Figure 4.4

Investment on Government Securities to Current Assets Ratio



v) Loan and Advances to Current Assets Ratio

Loan and advances to current assets ratio reflects the capability of bank discounting and purchasing the bills, loans and overdraft facilities to the customer to make a high profit and mobilizing its funds in the best way.

$$X \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

Table 4.5

Loan and Advances to Current Assets Ratio

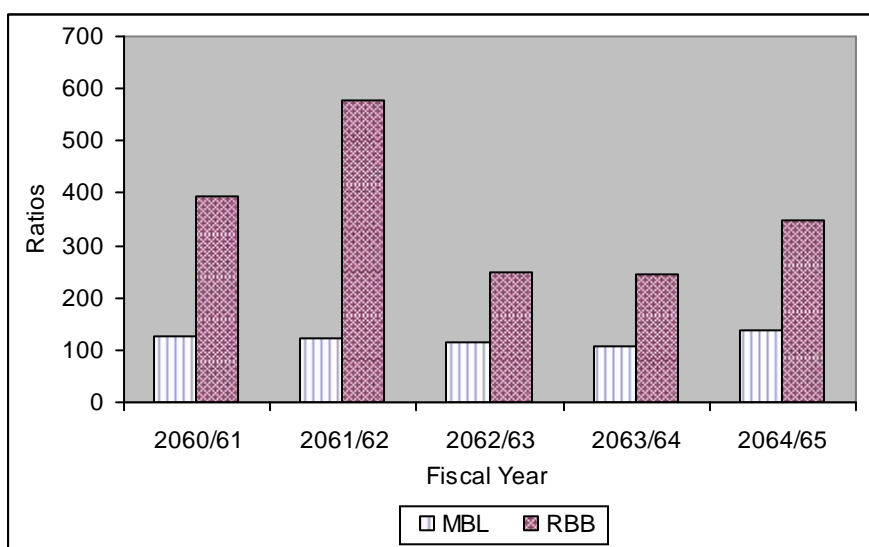
Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	127	124	114	109	138	123	10.33	8
MBL	394	579	249	243	347	362.4	122	33.85

(Source: Appendix No. 5)

The table 4.5 shows the percentage of loan and Advances to current assets ratio of RBB and MBL. RBB has maintained highest ratio in F/Y 2064/065 i.e. 138% and lowest ratio in F/Y 109%. MBL has maintained highest ratio in F/Y2061/062 i.e.579% and lowest ratio in F/Y 2063/064 i.e.243%. The loan and advances to current assets ratio of both banks are in fluctuating trend. The mean ratio of MBL is higher than that of RBB. The coefficient of variation ratio of RBB is less than MBL. So it can be conclude that it is better to mobilize its funds as loan and Advances

Figure 4.5

Loan and Advance to Current Assets Ratio



4.2.1.2 Activity Ratio

Activity ratio measures the efficiency of the bank

i) Loan and Advances to total Deposit Ratio

This ratio measure how successfully the banks are able to mobilize the total deposit on loan and advances for profit generating purpose

$$= \frac{\text{Loan and advances}}{\text{Total deposit}}$$

Table 4.6

Loan and Advances to total Deposit Ratio

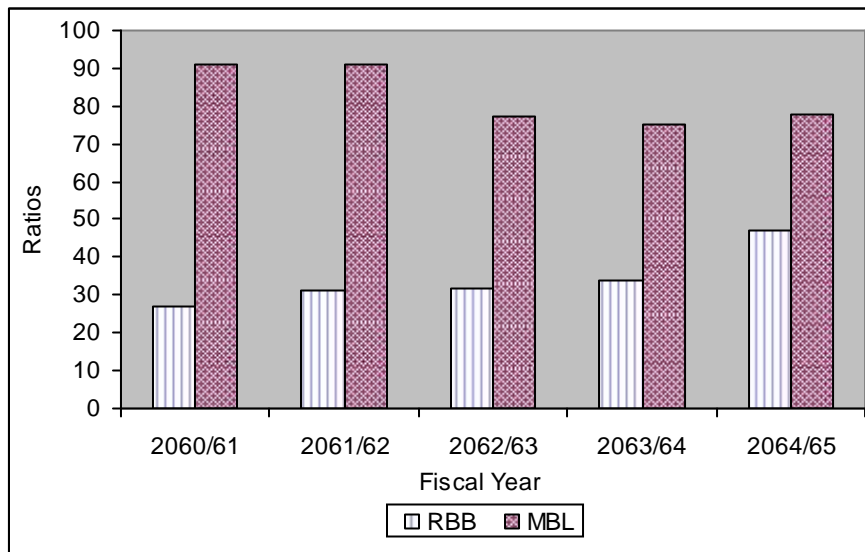
Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	27	31	32	34	47	34.2	6.79	19.85
MBL	91	91	77	75	78	82.4	7.08	8.59

(Source: Appendix No. 6)

The table 4.6 shows the percentage of loan and advances to total Deposit ratio position of RBB and MBL. The loan and advances to total Deposit ratio of RBB is in increasing trend and the ratio of MBL is in fluctuating trend. RBB has maintained highest ratio in F/Y 064/065 i.e.47% and lowest ratio in F/Y 060/061 i.e.27. MBL has maintained higher ratio in F/Y 060/061 i.e.91 and lowest ratio in F/Y 063/064i.e.75%. The mean ratio of RBB is lesser than MBL and the coefficient of variation of RBB is greater than MBL.

It can be concluded that MBL is in strong position regarding the mobilization of total deposit on loan and advances and acquiring higher profit in comparison with RBB. The coefficient of variation of MBL is lower than that of RBB which indicate that loan and advances of it is stable and consistent.

Figure 4.6
Loan and Advances to Total Deposit Ratio



ii) Total investment to Total Deposit Ratio

This ratio measures the extent to which the banks are capable to mobilize their deposits on investment in various securities.

$$= \frac{\text{Total investment}}{\text{Total deposit}}$$

Table 4.7
Total investment to total Deposit Ratio

Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	8	20	25	25	25	20.6	6.59	31.99
MBL	10	8	15	13	13	11.8	2.48	21.01

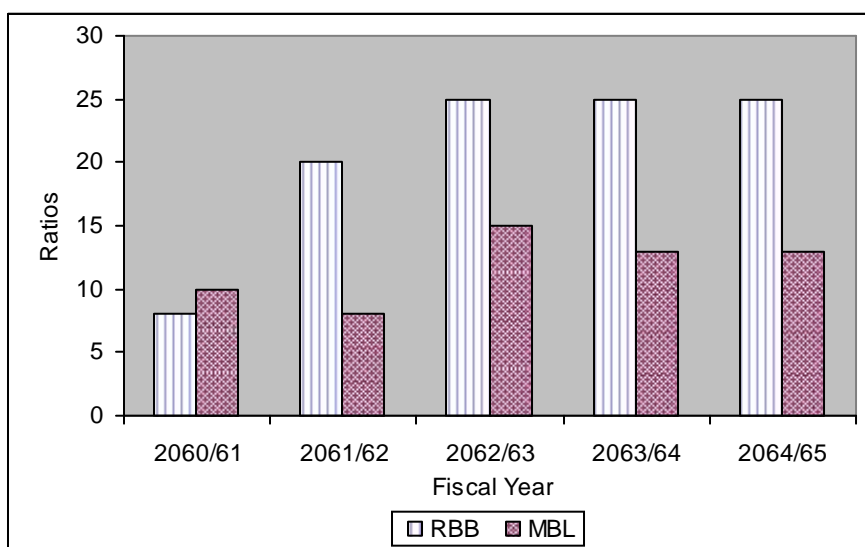
(Source: Appendix No. 7)

The table 4.7 shows the percentage of total investment to total deposit ratio. The ratio of RBB is in increasing and constant trend but the ratio of MBL is in fluctuating trend. RBB has highest ratio in F/Y 062/063 to 064/065 i.e.25 and lowest ratio in F/Y 060/061 i.e.8. Similarly MBL has maintained highest ratio in F/Y 062/063 i.e.15 and

lowest ratio in F/Y 061/062 i.e.8. The mean value of RBB is greater than MBL and coefficient of variation of RBB is greater than MBL.

It can conclude that investment policy of MBL is in better position in comparison to RBB. The total investment to total deposit ratio of MBL is more homogeneous because it has low coefficient of variation

Figure 4.7
Total investment to total Deposit Ratio



iii) Loan and Advance to Total Assets employed

This ratio reflects some extend to which the commercial banks are able to utilize their assets loan and advances for the purpose of profit generation.

$$= \frac{\text{Loan and advances}}{\text{total assets}}$$

Table 4.8
Loan and Advance to total Assets Employed

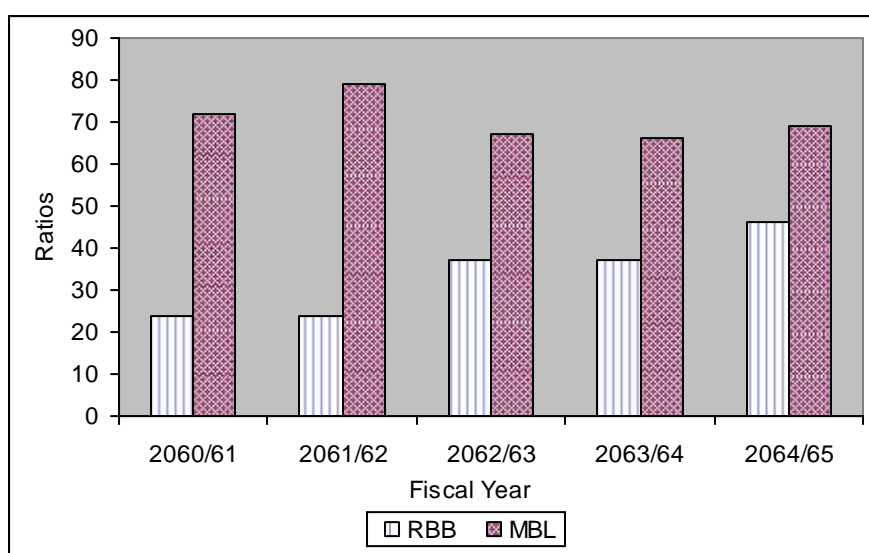
Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	24	24	37	37	46	33.6	8.49	25.26
MBL	72	79	67	66	69	70.6	4.67	6.61

(Source: Appendix No. 8)

Table 4.8 shows the percentage of loan and advance to total assets employed. The ratio of RBB is in increasing trend but the ratio of MBL is in fluctuating trend. RBB has maintained highest ratio in F/Y 064/065 i.e.46 and lowest ratio in F/Y 060/061 i.e.24. Similarly MBL has maintained its highest ratio in F/Y061/062 i.e. 79 and lowest ratio in F/Y 063/064 i.e.66.The mean value of RBB is lesser than MBL. The coefficient of variation of RBB is higher than MBL.

MBL has higher mean value so MBL is in better position than RBB. The coefficient of variation of MBL is lower than RBB which clear that loan and advance to total assets employed ratio is less variable than RBB.

Figure 4.8
Loan and Advance to Total assets Employed



4.2.1.3 Profitability Ratio

Profit is the difference between revenue and expenses over a period of time. Profit is the indicator of the financial performance. Profitability ratios indicate degree of success in achieving desired profit level. It measure the management overall effectiveness. Banks acquire profit by providing different services to their customers.

i) Return on Total working fund Ratio

It is also known as return on total assets. This ratio measures the profit earning capacity by mobilizing available resources. The bank has to earn satisfactory return on assets or working funds are well manage and are efficiently utilized, maximizing taxes with in the legal options available with also improve the return.

Net profit includes the net profit after taxes.

$$= \frac{\text{Net Profit}}{\text{Total assets}}$$

Table 4.9
Return on Total working fund Ratio

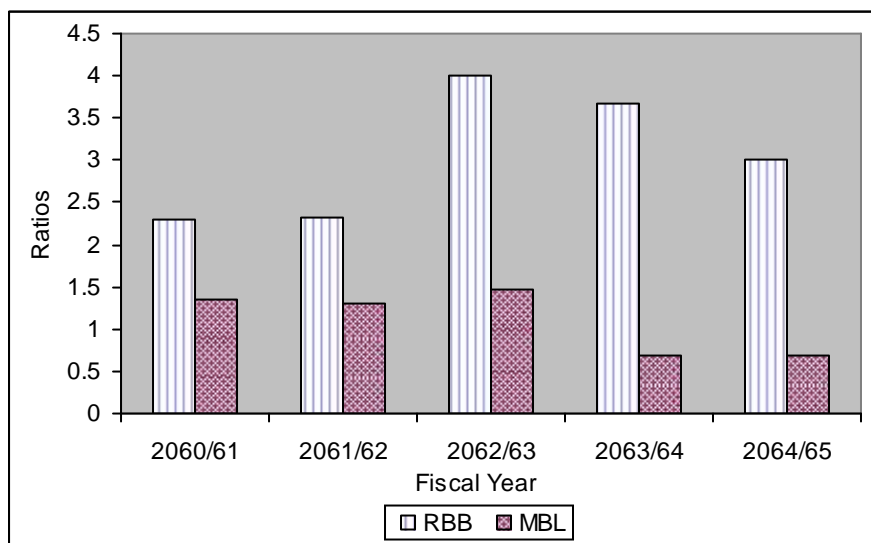
Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	2.30	2.33	4	3.66	3	3.058	0.68	22.236
MBL	1.35	1.31	1.47	0.69	0.68	1.1	0.357	32.45

(Source: Appendix No. 9)

The table 4.9 shows the percentage of net profit to total working fund ratio. The ratio of RBB is in fluctuating trend and the ratio of MBL is in fluctuating and decreasing trend. RBB has maintained highest ratio in F/Y 062/063 i.e.4 and lowest ratio in F/Y 060/061 i.e.2.30. MBL has maintained highest ratio in F/Y062/063 i.e.1.47 and lowest ratio in F/Y 064/065 i.e.0.68. The mean value of RBB is higher than MBL and coefficient of variation of RBB is lesser than that of MBL.

The analysis clear the profitability ratio with respect to financial resources investment of RBB is better than MBL.

Figure 4.9
Return on Total working fund Ratio



ii) Return on Total Deposit Ratio

This ratio provides a test for profitability related to the deposit of bank. It also reveals how much the deposit collection in bank is efficiently utilized.

$$= \frac{\text{Net profit}}{\text{Total Deposit}}$$

Table 4.10
Return on Total Deposit Ratio

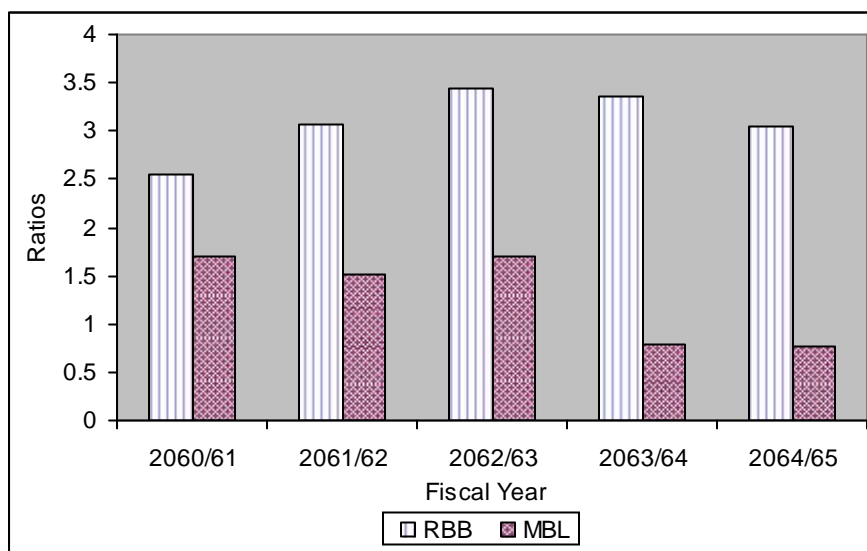
Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	2.54	3.07	3.44	3.36	3.05	3.092	0.3159	10.21
MBL	1.69	1.52	1.69	0.78	0.76	1.288	0.427	33.15

(Source: Appendix No. 10)

The table 4.10 shows the percentage of net profit to total deposit ratio. The ratio of RBB is in fluctuating trend. It has maintained highest ratio in F/Y 063/064 i.e. 3.36 and lowest ratio in F/Y 060/061 i.e.2.54%. The ratio of MBL is in decreasing trend. It has highest ratio in F/y 060/061 i.e. 1.69 and lowest ratio in F/Y 064/065 i.e.0.76. RBB has higher mean ratio than MBL and coefficient of variation of RBB is lesser than that of MBL during the study period.

The return on total deposit ratio of RBB is stable and consistent in comparison to MBL. The coefficient of variation of RBB is lesser than MBL so the profitability ratio with respect to deposit of RBB is better as well as stable.

Figure 4.10
Return on Total deposit Ratio



iii) Return on Loan and Advances Ratio

Return on loan and Advances ratio measure the earning capacity of commercial banks on its deposit mobilized on loan and advances. In other words return on loan and advances ratio indicates how efficiently the banks have employed its resources in the firm of loan and advances.

$$= \frac{\text{Net profit}}{\text{Loan and advances}}$$

Table 4.11
Return on Loan and Advances Ratio

Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	9.60	9.84	10.87	9.97	6.43	9.34	1.51	16.16
MBL	1.87	1.67	2.20	1.03	0.98	1.55	0.47	30.32

(Source: Appendix No. 11)

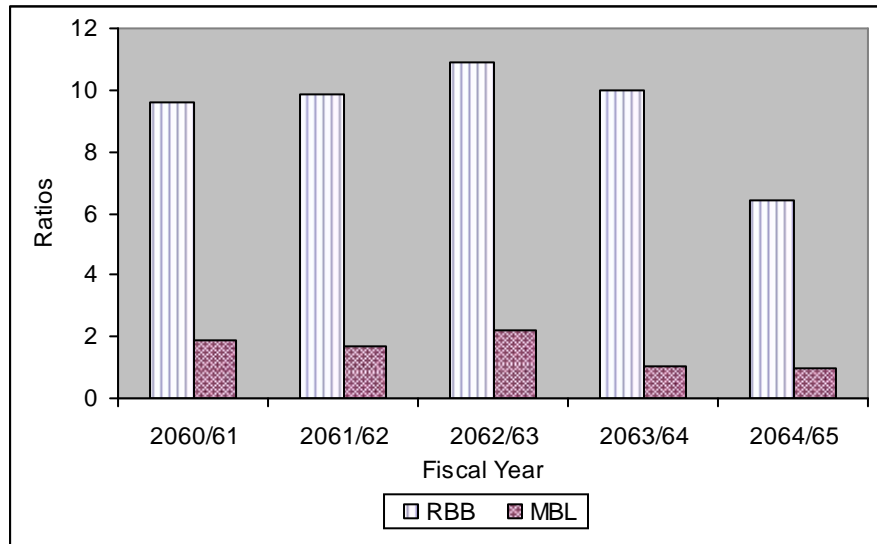
The table 4.11 shows the percentage of net profit to loan and advances ratio RBB and MBL have fluctuating trend. RBB has highest ratio in F/Y 062/063 i.e.10.87 and lowest ratio in F/Y 064/065 i.e. 6.43. Similarly MNL has highest ratio in F/Y

062/063 i.e. 2.20 and lowest ratio in F/Y 064/065 i.e. 0.98. The mean ratio of RBB is higher than MBL and coefficient of variation of RBB is lesser than that of MBL.

From above analysis it is clear that RBB is in better position in comparison to MBL.

Figure 4.11

Return on Loan and Advances Ratio



iv) Total interest Earned to total assets ratio

This ratio is calculated to find out the percentage of interest earned to total assets. It reflects the extent to which the banks are success in mobilizing their total assets to gain higher income as interest. Higher ratio indicated higher earning power of the banks of its total working fund.

$$= \frac{\text{Total interest earned}}{\text{Total assets}}$$

Table 4.12

Total Interest Earned to Total Assets Ratio

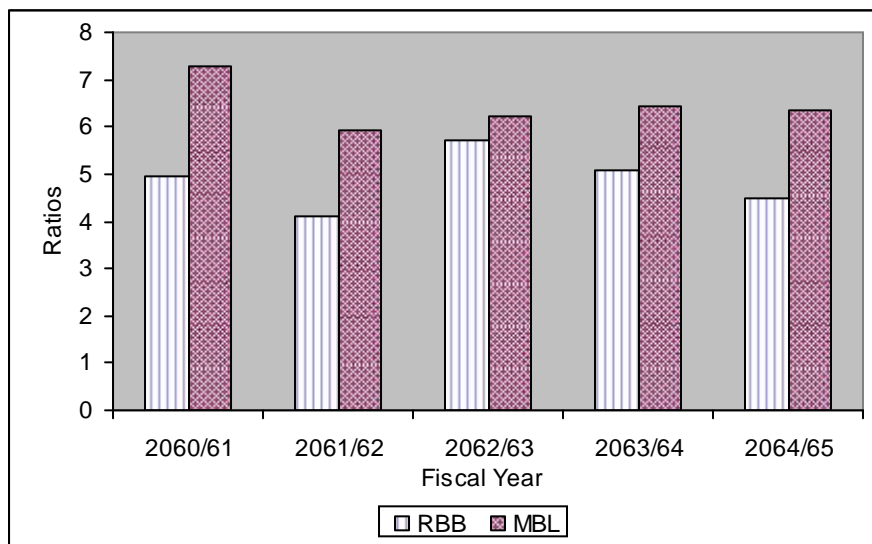
Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	4.96	4.09	5.72	5.08	4.49	4.868	0.548	11.25
MBL	7.28	5.92	6.21	6.42	6.37	6.44	0.44	6.83

(Source: Appendix No. 12)

The table 4.12 shows the percentage of interest earned to total assets ratio of both banks. RBB has fluctuating trend and highest ratio in F/Y 062/063 i.e.5.72 and lowest ratio in F/Y 061/062 i.e.4.09. Similarly MBL also has fluctuating trend. MBL has highest ratio in F/Y 060/061 i.e.7.28 and lowest ratio in F/Y 061/062 i.e.4.09. The mean ratio of MBL is higher than RBB and coefficient of variation of MBL is lesser than RBB.

After analysis it can be concluded that total interest earned to total assets ratio of MBL is better than RBB.

Figure 4.12
Total Interest Earned to Total Assets Ratio



v) Total Interest Paid to Total Assets Ratio

This ratio is calculated to find out the proportion of interest paid against the total working fund. Higher ratio indicated the higher interest expenses on total working fund and vice versa.

$$= \frac{\text{Total interest paid}}{\text{Total assets}}$$

Table 4.13
Total Interest Paid to Total Assets Ratio

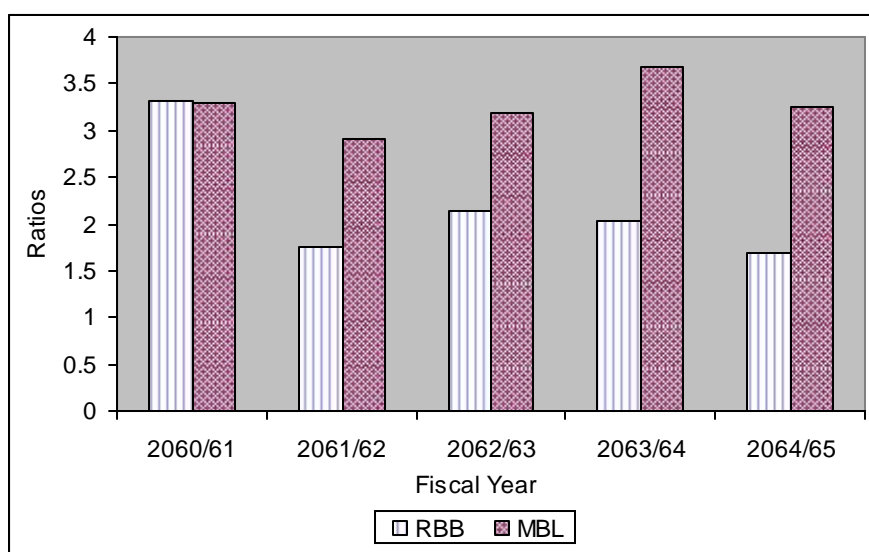
Banks	Fiscal Year					Mean	S.D	C.V
	2060/61	2061/62	2062/63	2063/64	2064/65			
	%	%	%	%	%			
RBB	3.31	1.76	2.13	2.03	1.69	2.184	0.85	26.55
MBL	3.29	2.90	3.18	3.67	3.26	3.26	0.23	7.05

(Source: Appendix No. 13)

The table 4.13 shows the percentage of total interest paid to total assets ratio of both banks. Both banks have fluctuating trend of ratios. RBB has maintained highest ratio in F/Y 060.061 i.e.3.31 and lowest ratio in F/Y 064/065 i.e. 1.69. MBL has maintained highest ratio in F/Y 063/064 i.e. 3.67 and lowest ratio in F/Y o62/063 i.e. 2.90. The mean ratio of MBL is higher than RBB and coefficient of variation of MBL is less than RBB.

After analysis it can be concluded that the return on total interest paid to total assets ratio of MBL is stable and consistent in comparison to RBB. MBL is in better position from payment of interest point of view.

Figure 4.13
Total Interest Paid to Total Assets Ratio



4.2.1.4 Growth Ratio

Growth ratio represents how well the commercial banks are maintaining their economic and financial position. Growth ratios which are related to fund mobilization and investment management of banks are calculated.

i) Growth Ratio of total deposit

Growth ratios of total deposit of RBB and MBL are calculated to find out the trend of growth of total deposit and to detect better position of banks.

Table 4.14
Growth ratio total deposit

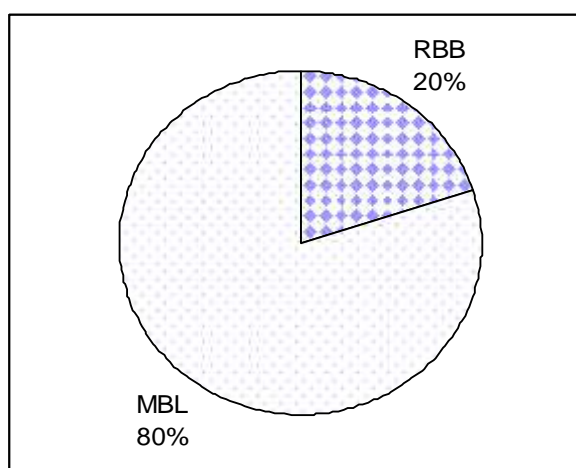
Rs in '000'

Fiscal Year	Banks	
	RBB	MBL
2060/61	40866768	2754632
2061/62	43016063	5586803
2062/63	46195482	7893298
2063/64	50464129	9475452
2064/65	57970844	11102242
Growth rates	9.13%	41.69%

(Source: Appendix No. 14)

The above table 4.14 shows the growth ratio of RBB and MBL. Growth ratio of MBL i.e.41.69% is higher than the growth ratio of RBB i.e.9.13%. The performance of MBL to collect deposit is better than RBB.

Figure 4.14
Growth ratio of Deposit



ii) Growth ratio of Loan and Advance

Growth ratios of total loan and advances of banks are calculated to find out the trend of growth of total loan advances and to detect better position of banks.

Table 4.15
Growth ratio of Loan and Advances

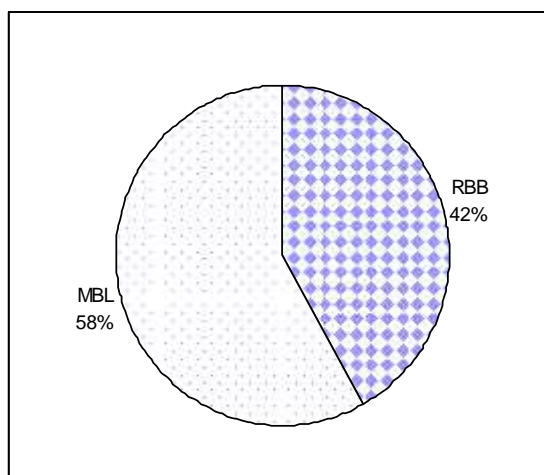
Rs in '000'

Fiscal Year	Banks	
	RBB	MBL
2060/61	10831085	2493108
2061/62	13430932	5061433
2062/63	14633545	6068427
2063/64	17006456	7129892
2064/65	27524922	8642323
Growth ratios	26.26%	36.45%

(Source: Appendix No. 15)

The above table 4.15 shows that the growth ratio of MBL loan and advances is higher than that of RBB. MBL has able to maintain of 36.45%, where RBB has maintain 26.26%. The performance of MBL to grant loan and advances is better in comparison to RBB.

Figure 4.15
Growth ratio Loan and Advances



iii) Growth ratio of Total Investment

Growth ratios of total investment of sample banks are calculated to find out the trend of growth of total investment and to detect better position of banks.

Table 4.16
Growth ratio of Total Investment

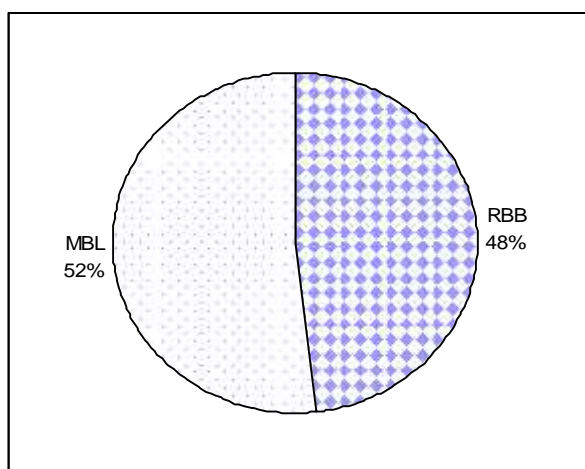
Rs in '000'

Fiscal Year	Banks	
	RBB	MBL
2060/61	3117026	274407
2061/62	8415882	468612
2062/63	11555358	1190830
2063/64	12650146	1278469
2064/65	14543141	1443551
Growth ratios	46.97%	51.45%

(Source: Appendix No. 16)

The comparative table 4.16 shows that the growth ratio of total investment of MBL is higher than RBB i.e. $51.45\% > 46.97$. The growth ratio of total investment of MBL is in better position than RBB.

Figure 4.16
Growth ratio of Total investment



iv) Growth Ratio of Net Profit

Growth ratios of total net profit of both banks are calculated to find out the trend of growth of total net profit and to detect better position of banks.

Table 4.17
Growth ratio of Net Profit

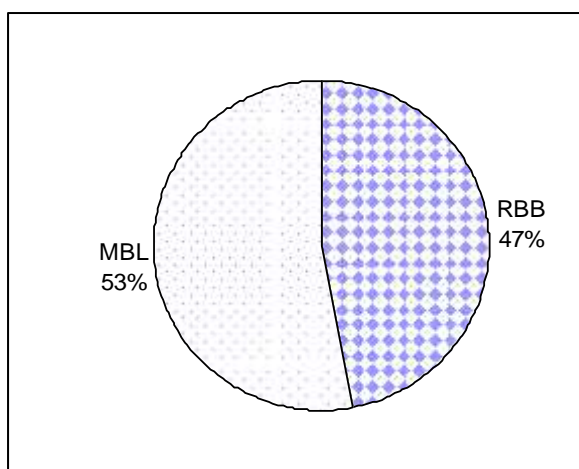
Rs in '000'

Fiscal Year	Banks	
	RBB	MBL
2060/61	1040101	46690
2061/62	1322894	84870
2062/63	1591489	133997
2063/64	1697088	74086
2064/65	1770554	85016
Growth ratios	14.22%	16.16%

(Source: Appendix No. 17)

The above table 4.17 shows that the growth ratio of MBL total net profit is higher than RBB. So MBL is in better position in according to the growth ratio of net profit.

Figure 4.17
Growth ratio of Net Profit



4.2.2 Statistical Tools

Under this heading some statistical tools such as trend analysis of deposit, loan and advances, total investment and profit and coefficient of correlation analysis between different variables are used to achieve the objectives of the study.

4.2.2.1 Trend analysis and projection for next five years

In this study the trend analysis of the financial condition are presented which is objected to provide the insight of the bank position.

In this study the method of lest square is used for the analysis of the bank's total deposit trend, loan and advances trend, total investment trend and net profit trend.

The projections are based on following assumption:

-) The main assumption is that other things being will remain unchanged.
-) The bank will run in the present position.
-) The economy will remain in the present stage.
-) The forecast will be true only when the limitation of least square method is carried out.
-) Nepal Rastra Bank will not change its guidelines to commercial banks

i) Trend analysis of Total Deposit

Under this topic, an effort has been made to calculate the trend value of deposit for five years from 2060/61 to 2064/65 and forecast for next five years till next 2065/066 to 2069/70

Table 4.18
Trend Value of Total Deposit

(Rs in Million)

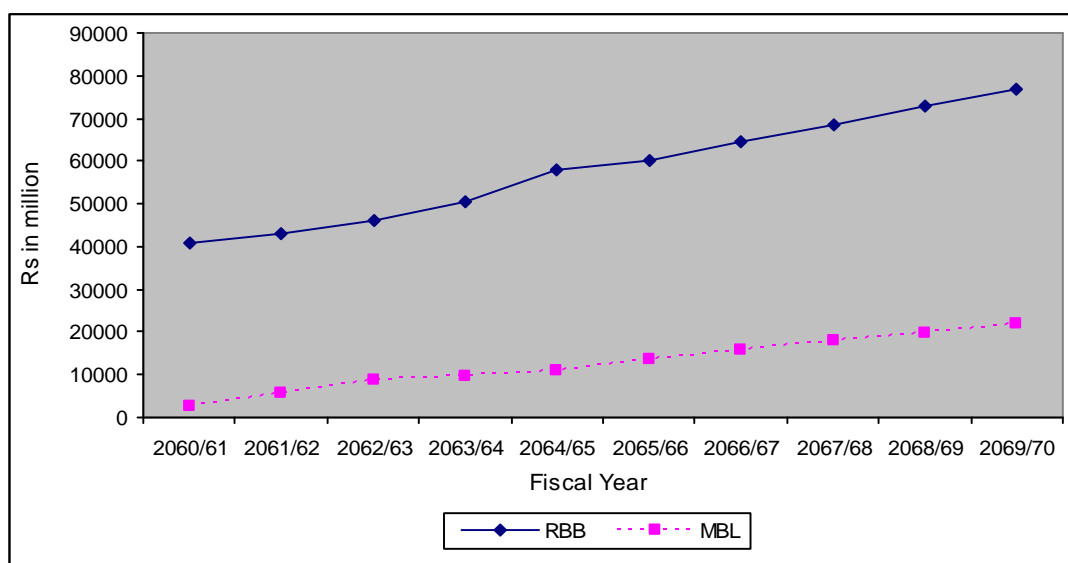
Fiscal Year	Trend Value of Deposit	
	RBB	MBL
2060/61	40866.768	2754.632
2061/62	43016.063	5586.803
2062/63	46195.482	8793.298
2063/64	50464.129	9475.452
2064/65	57970.844	11102.242
2065/66	60199.522	13717.646
2066/67	64365.144	15776.033
2067/68	68530.766	17834.420
2068/69	72696.388	19892.807
2069/70	76862.010	21951.195

(Source: Appendix No. 18)

The above table shows the trend value of 10 years from 2060/61 to 2069/70. The total Deposits of RBB and MBL have in the increasing trend. If all other things remain the same the total deposit of RBB is higher than MBL.

By analyzing the above trend value, it is found that the total collection position of RBB is better in comparison to MBL.

Figure 4.18
Trend Value of Total Deposit of RBB and MBL



ii) Trend analysis of Loan and Advances

Here the trend value of loan and advances of RBB and MBL have been calculated for five years from 2060/61 to 2064/65 and forecasted for next five years up to 2069/70 have been done.

Table 4.19
Trend Value of Loan and Advances

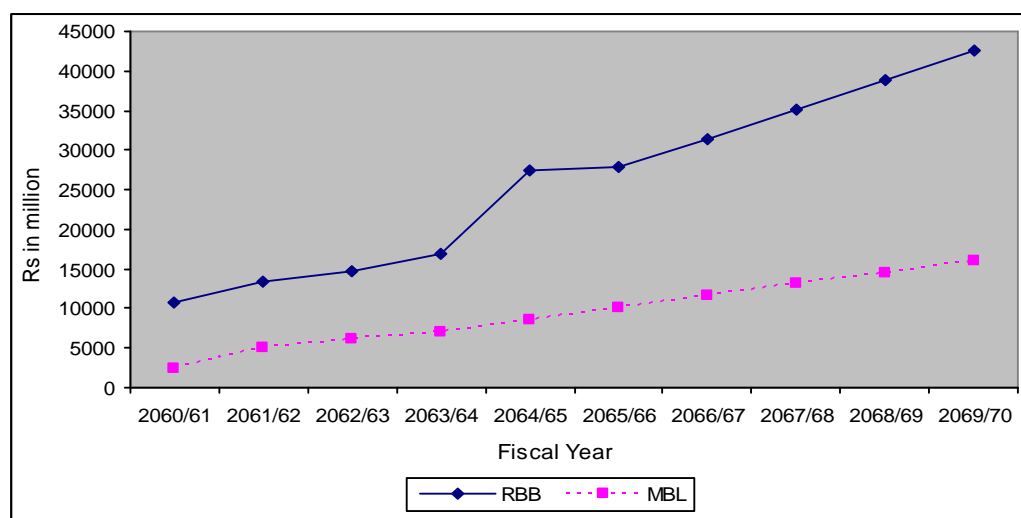
(Rs in Million)

Fiscal Year	Trend Value of Loan and Advances	
	RBB	MBL
2060/61	10831.085	2493.108
2061/62	13430.932	5061.433
2062/63	14633.545	6068.427
2063/64	17006.456	7129.892
2064/65	27524.922	8642.323
2065/66	27774.348	10189.104
2066/67	31470.668	11625.793
2067/68	35166.988	13062.482
2068/69	38863.308	14499.171
2069/70	42559.628	15935.860

(Source: Appendix No. 19)

The above table 4.15 shows the trend value of loan and advances of RBB and MBL have been in increasing trend. If other things remain same total loan and advances of RBB is higher than MBL during the study period. By analyzing the above trend value, it is found that the total loan and advances position of RBB is better than MBL

Figure 4.19
Trend Value of Loan and Advances of RBB and MBL



iii) Trend analysis of Total Investment

Under this topic, an effort has been made to calculate the trend value of total investment from F/Y 2060/061 to 2064/6 and forested to 2069/70.

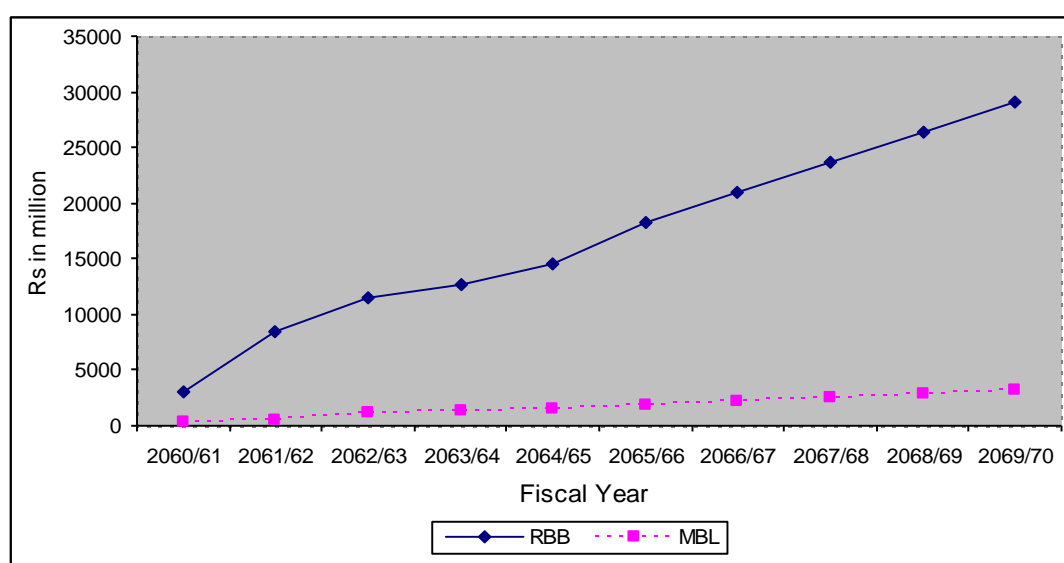
Table 4.20
Trend Value of Total Investment
(Rs in Million)

Fiscal Year	Trend Value of Total Investment	
	RBB	MBL
2060/61	3117.026	274.407
2061/62	8415.882	468.612
2062/63	11555.358	1190.830
2063/64	12650.146	1278.469
2064/65	14543.141	1443.551
2065/66	18182.258	1875.619
2066/67	20890.907	2190.434
2067/68	23599.556	2505.249
2068/69	26308.205	2820.064
2069/70	29016.854	3134.879

(Source: Appendix No. 20)

The above table 4.16 shows the value of total investment of RBB and MBL have increasing trend value. RBB has higher value of total investment. From above analysis can be concluded that RBB has maintained well investment than MBL.

Figure 4.20
Trend Value of Total Investment of RBB and MBL



iv) Trend analysis of Net Profit

Under this topic an effort has been made to analyze the net profit of RBB and MBL from F/Y 2060/61 to 2064/65 and forecast from F/Y2065/66 to 2069/70.

Table 4.21
Trend Value of Net Profit

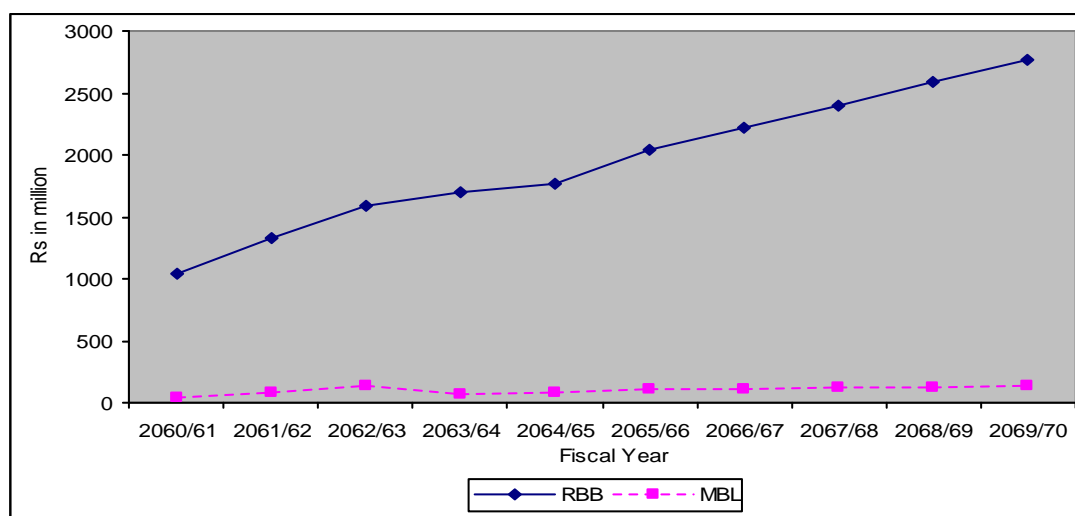
(Rs in Million)

Fiscal Year	Trend Value of Net Profit	
	RBB	MBL
2060/61	1040.101	46.690
2061/62	1322.891	84.870
2062/63	1591.489	133.997
2063/64	1697.088	74.086
2064/65	1770.554	85.016
2065/66	2034.955	104.693
2066/67	2218.465	111.280
2067/68	2401.975	117.867
2068/69	2585.485	124.454
2069/70	2768.995	131.041

(Source: Appendix No. 21)

The above table 4.17 shows the value of Net profit for ten years from F/Y2060/61 to 2069/70 of RBB and MBL. The table shows the net profit of RBB is in increasing trend and net profit of MBL is in fluctuating trend. The net profit of RBB is greater than MBL. From above analysis it can be concluded that RBB has maintained higher Net profit than MBL.

Figure 4.21
Trend Value of Net Profit of RBB and MBL



4.2.2.2 Coefficient of Correlation Analysis

Under this heading Karl Pearson's coefficient is used to find out the relationship between Deposit and Loan and Advances, Deposit and Total investment, Deposit and Net profit, Deposit and Interest earned and total working fund and Net profit.

i) Relationship between Deposit and Loan and Advances

Deposits have played a very important role in performance of a commercial bank and similarly loan and advances are important to mobilize the collected deposits. Coefficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables.

In this analysis, deposit is independent variable (X) and loan and advances is dependent variable (Y). The objectives of computing coefficient of correlation between two variables are to justify whether deposit is significantly used as loan and advances or not.

Table 4.22

Coefficient of Correlation between Deposit and Loan and Advances

Banks	Evaluation Criteria			
	r	r ²	P.Er	6P.Er
RBB	0.9738	0.9483	0.015	0.0934
MBL	0.9926	0.9853	0.0044	0.0264

(Source: Appendix No. 22)

The table 4.22 shows the value of Coefficient of correlation (r), coefficient of determination (r²), Probable Error (P.Er) and 6P.Er between deposit and loan and Advances of RBB and MBL.

In case of RBB, it is found that coefficient of correlation between deposit and loan and Advances (r) is 0.9738. It shows the positive relationship between two variables. Similarly the value of coefficient of determination (r²) is 0.9483, which means 94.83% in the dependent variable (loan and advances) has been explained by the independent variable (deposit). Considering the value of r i.e. 0.8738 and comparing it with 6P.Er i.e. 0.0934, we can find it is greater than the value of 6P.Er which reveals that value of r is significant. There is significant relationship between deposit and loan and Advances.

In case of MBL, it is found that coefficient of correlation between deposit and loan and Advances is (r) is 0.9926. It shows the higher positive correlation between two variables. Similarly the value of coefficient of determination (r^2) is 0.9853, which means 98.53% in the dependent variable (loan and advances) has been explained by the independent variable (deposit). Considering the value of r i.e.0.9926 and comparing it with 6P.Er i.e. 0.0246, we can find it is greater than the value of 6P.Er which reveals that value of r is significant. There is significant relationship between deposit and loan and advances.

The above analysis clears that in both banks (RBB and MBL) there is significant relationship between deposit and loan and advances because the value of r is greater than value of 6P.Er.MBL has higher correlation between deposit and loan and advances as well as higher value of r^2 than RBB. It can conclude that MBL is successful to grant loan and advances to mobilize the collected deposit in a proper way.

ii) Relationship between Deposit and Investment

Coefficient of correlation between deposit and total investment measures the degree of relationship between these two variables. Here deposit is independent variable (X) and total investment is dependent variable (Y). The purpose of computing it is to find out whether deposit is significantly used as investment or not.

Table 4.23
Coefficient of Correlation between Deposit and Investment

Banks	Evaluation Criteria			
	r	r^2	P.Er	6P.Er
RBB	0.874	0.765	0.07122	0.425
MBL	0.9653	0.9318	0.0205	0.123

(Source: Appendix No. 23)

The table 4.23 shows the value of Coefficient of correlation (r), coefficient of determination (r^2), Probable Error (P.Er) and 6P.Er between deposit and investment of RBB and MBL.

In case of RBB, it is found that coefficient of correlation between deposit and investment (r) is 0.874. It shows the positive relationship between two variables. Similarly the value of coefficient of determination (r^2) is 0.765, which means 76.50% in the dependent variable (investment) has been explained by the independent variable (deposit). Considering the value of r i.e. 0.874 and comparing it with 6P.Er i.e. 0.425, we can find it is greater than the value of 6P.Er which reveals that value of r is significant. There is significant relationship between deposit and investment.

In case of MBL, it is found that coefficient of correlation between deposit and loan and Advances is (r) is 0.9653 It shows the higher positive correlation between two variables. Similarly the value of coefficient of determination (r^2) is 0.9318, which means 93.18% in the dependent variable (investment) has been explained by the independent variable (deposit). Considering the value of r i.e.0.9653 and comparing it with 6P.Er i.e. 0.123, we can find it is greater than the value of 6P.Er which reveals that value of r is significant. There is significant relationship between deposit and investment.

The above analysis clears that in both banks (RBB and MBL) there is significant relationship between deposit and investment because the value of r is greater than value of 6P.Er.MBL has higher correlation between deposit and investment as well as higher value of r^2 than RBB. It can conclude that MBL is successful in maximizing the investment of their deposit

iii) Relationship between Deposit and Net profit

Coefficient of correlation between deposit 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 objectives of computing between these two variables are to justify whether net profit is significantly correlated with deposit or not.

Table 4.24
Coefficient of Correlation between Deposit and net profit

Banks	Evaluation Criteria			
	r	r^2	P.Er	6P.Er
RBB	0.876	0.7687	0.0697	0.4184
MBL	0.433	0.1879	0.2449	1.4694

(Source: Appendix No. 24)

The table 4.24 shows the value of Coefficient of correlation (r), coefficient of determination (r^2), Probable Error (P.Er) and 6P.Er between deposit and net profit of RBB and MBL.

In case of RBB, it is found that coefficient of correlation between deposit and net profit (r) is 0.876. It shows the positive relationship between two variables. Similarly the value of coefficient of determination (r^2) is 0.7687, which means 76.87% in the dependent variable (net profit) has been explained by the independent variable (deposit). Similarly the value of r i.e. 0.876 is greater than the value of 6P.Er which shows that value of r is significant. Or there is significant relationship between deposit and net profit.

In case of MBL, it is found that coefficient of correlation between deposit and net profit is (r) is 0.433, it shows the positive correlation between two variables. Similarly the value of coefficient of determination (r^2) is 0.1879, which means 18.79% in the dependent variable (net profit) has been explained by the independent variable (deposit). The value of r i.e.0.433 is less than the value of 6P.Er i.e. 1.4694 which shows that value of r is not significant. There is not significant relationship between deposit and net profit.

The above analysis clears that in RBB there is significant relationship between deposit and net profit but in MBL there is no significant relationship between deposit and net profit. RBB is successful in maximizing the net profit of its deposit but MBL has not been successful in mobilization of its deposit.

iv) Relationship between Deposit and Interest earned

The coefficient of correlation between deposit and interest earned measure the relationship between these two variables. Deposit is independent variable (X) and interest earned is dependent variable (Y). The objectives of calculating r between two variables are to justify whether deposit is significantly used to earned interest or not.

Table 4.25

Coefficient of Correlation between Deposit and net Interest earned

Banks	Evaluation Criteria			
	r	r^2	P.Er	6P.Er
RBB	0.9197	0.8458	0.0464	0.2789
MBL	0.9943	0.9886	0.00343	0.0206

(Source: Appendix No. 25)

The table 4.25 shows the value of Coefficient of correlation (r), coefficient of determination (r^2), Probable Error (P.Er) and 6P.Er between deposit and interest earned of RBB and MBL.

In case of RBB, it is found that coefficient of correlation between deposit and net profit (r) is 0.9197. It shows the positive relationship between two variables. Similarly the value of coefficient of determination (r^2) is 0.8458, which means 84.58% in the dependent variable (net profit) has been explained by the independent variable (interest earned). Similarly the value of r i.e. 0.9187 is greater than the value of 6P.Er i.e.0.2789 which shows that value of r is significant. Or there is significant relationship between deposit and interest earned.

In case of MBL, it is found that coefficient of correlation between deposit and interest earned is (r) is 0.9943, it shows the higher positive correlation between two variables. Similarly the value of coefficient of determination (r^2) is 0.9886, which means 98.86% in the dependent variable (net profit) has been explained by the independent variable (interest earned). The value of r i.e.0.9886 is greater than the value of 6P.Er i.e. 10.0206 which shows that value of r is significant. There is significant relationship between deposit and interest earned

The above analysis clears that in both banks (RBB and MBL) there is significant relationship between deposit and interest earned because the value of r is greater than value of 6P.Er.MBL has higher correlation between deposit and interest earned as well as higher value of r^2 than RBB. It can conclude that MBL has effectively mobilized its deposit to get higher interest.

v) Relationship between Total Working fund and Net Profit

Coefficient of correlation between working fund and net profit measures the degree of relationship between these two variables. Total working fund is independent variable (X) and net profit is dependent variable (Y). The objectives of computing between these two variables are to justify whether total working fund is significantly used to generate profit or not.

Table 4.26

Coefficient of Correlation between Total working fund and net profit

Banks	Evaluation Criteria			
	r	r ²	P.Er	6P.Er
RBB	0.2093	0.0438	0.2880	1.7301
MBL	0.4342	0.1880	0.2449	1.4696

The table 4.26 shows the value of Coefficient of correlation (r), coefficient of determination (r²), Probable Error (P.Er) and 6P.Er between total working fund and net profit of RBB and MBL.

In case of RBB, it is found that coefficient of correlation between total working fund and net profit (r) is 0.2093. It shows the positive relationship between two variables. Similarly the value of coefficient of determination (r²) is 0.0438, which means 4.38% in the dependent variable (net profit) has been explained by the independent variable (total working fund). Similarly the value of r i.e.0.2093 is less than the value of 6P.Er which shows that value of r is not significant. Or there is no significant relationship between total working fund and net profit.

In case of MBL, it is found that coefficient of correlation between total working fund and net profit (r) is 0.4342; it shows the positive correlation between two variables. Similarly the value of coefficient of determination (r²) is 0.188, which means 18.80% in the dependent variable (net profit) has been explained by the independent variable (total working fund). The value of r i.e.0.4342 is less than the value of 6P.Er i.e. 1.4696 which shows that value of r is not significant. There is not significant relationship between total working fund and net profit.

The above analysis clears that in RBB there is not significant relationship between total working fund and net profit in both banks RBB and MBL

4.2.2.3 Test of Hypothesis

Under this topic, an effort has been made to test the significance regarding the parameter of the population on the basis of sample drawn from the population.

i) Test of hypothesis on Loans and Advances to total Deposits Ratio

To test the ratios of loan and advances to total deposit of RBB and MBL are taken under statistical tools. T-test has been done.

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 RBB and MBL.

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 RBB and MBL

$$\text{Test statistics under } H_0 \quad t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$t = 9.81$$

(Source: Appendix No. 27)

Decision, since calculated value of t i.e.9.81 is greater than the tabulated value or t i.e.2.306, the null hypothesis is rejected. There is significant difference between mean ratios of loans and advances to total deposit of RBB and MBL.

ii) Test of hypothesis on Total investment to total Deposits Ratio

To test the ratios of total investment to total deposit of RBB and MBL are taken under statistical tools. T-test has been done.

$$\text{Test statistics under H} \quad t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$t= 2.50$$

(Source: Appendix No. 28)

Decision, since calculated value of t i.e.2.50 is greater than the tabulated value, the null hypothesis is rejected. There is significant difference between mean ratios of total investment to total deposit of RBB and MBL.

iii) Test of hypothesis on Investment on Government securities to Current Assets Ratio

To test the ratios of investment on Government securities to Current Assets of RBB and MBL are taken under statistical tools. T-test has been done.

$$\text{Test statistics under H} \quad t = \frac{\bar{X}_1 - Z \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$t=3.710$$

(Source: Appendix No. 29)

Decision, since calculated value of t i.e. 3.710 is greater than the tabulated value, the null hypothesis is rejected. There is significant difference between mean ratios of investment on Government securities to current assets ratio of RBB and MBL.

iv) Test of hypothesis on Loan and Advances to Current Assets Ratio

To test the ratios of Loan and advances to Current Assets of RBB and MBL are taken under statistical tools. T-test has been done.

$$\text{Test statistics under H} \quad t = \frac{\bar{X}_1 - Z \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$t=3.89$$

(Source: Appendix No. 30)

Decision, since calculated value of t i.e. 3.89 is greater than the tabulated value, the null hypothesis is rejected. There is significant difference between mean ratios of loan and advances to current assets ratio of RBB and MBL.

v) Test of hypothesis on Return on Total Deposit Ratio

To test the ratios of Loan and advances to Current Assets of RBB and MBL are taken under statistical tools. T-test has been done.

Test statistics under H_0

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$t=6.7896$$

(Source: Appendix No. 31)

Decision, since calculated value of t i.e.6.7896 is greater than the tabulated value; the null hypothesis is rejected. There is significant difference between mean ratios of return on total deposit of RBB and MBL.

4.3 Major Findings of the study

1. RBB is the government sector bank having 123 branches over the 65 districts of the country. All the regions of the Nepal are covered by the branches of RBB. Most of the branches of RBB are computerized. RBB used the software PUMARI. MBL is the private sector bank having 31 branches. It is the first commercial bank in the western part of the country has been established by Nepalese promoters. It is fully computerized bank. It has the most sophisticated GLOBUS banking software. MBL is the first commercial which has opened the branch in hilly region Jomsom.
2. In RBB there is central budget unit having separate department to formulate the budget and chief financial officer is responsible for formulating budget. In case of MBL financial planning department formulate the budget and chief of financial department is responsible for formulating budget.
3. In RBB budget is formulated by taking the reference of previous budget and considering the various variable like prevalent accounting system, NRB regulation, Banking and financial Act, past trend of income and expenses, strategies and work plan of bank, resource mobilization and profitability etc. In MBL budget is formulated by taking the reference of previous budget and on the basis of capital budgeting, trend analysis and future cash flow.
4. In RBB, junior officers are involved at primary steps of budgeting process for data accumulation process but incase of MBL junior officers are also involved in formulating the budget.
5. In RBB, budgeting system is communicated by top to lower and lower to top approach. But in MBL budgeting system is communicated by only top to lower approach.
6. Relevant variables of budget in RBB are evaluated by budget committee and variance analysis is used to measure the performance of the bank. In MBL planning department evaluate the relevant variable of budget. Payback period method is used to evaluate the major capital expenditure in MBL. Ratio analysis tool is used to measure the performance of the bank.
7. Excess fund of RBB is used to purchase government securities and excess fund of MBL is kept as a fixed deposit.

8. Budgetary system of RBB is working effectively. MBL gives emphasis on proper planning and coordinating among different departments to improve budgeting system.
9. Both banks, RBB and MBL give various facilities to their customers like ATM, ABBS, Remittance, various loan facilities, bank guarantee, various deposit schemes etc.
10. Liquidity position affects external and internal factors such as saving for investment situations, central bank requirements etc. Current ratio of RBB is not satisfactory because current ratio of RBB is lower than standard ratio i.e. 2:1 but MBL has maintained the standard current ratio. Liquidity position of MBL is strong than RBB.
11. The cash and bank balances to total deposit ratio of RBB and MBL ha fluctuating trend. In average RBB has higher cash and bank balance to total deposits ratio than MBL.
12. The mean ratio of cash and bank balance to current assets ratio of MBL is greater than RBB. MBL is in better position in maintaining its cash and bank balance to meets its daily requirement to make the payment on customers withdraws than RBB.
13. Investment in Government securities to current assets ratio of RBB is in fluctuating trend and MBL is in increasing trend but RBB has invested more of its assets on the Government securities than MBL.
14. Loan and advances is the most risky and most productive assets of the bank. MBL has higher mean ratio of loan and advances to current assets ratio. MBL is more successful to mobilize its current deposit on loan and advances.
15. Loan and advances to total deposit ratio of RBB is in increasing trend and MBL is in fluctuating trend. The mean ratio of MBL is higher than RBB. MBL has strong position regarding the mobilization of total deposit as loan and advances.
16. Investment policy of MBL is in better position in comparison to RBB. The total investment to total deposit ratio of MBL: is more homogeneous because it has low coefficient of variation.

17. MBL has higher mean value of loan and advances to total assets employed than RBB. MBL has better position towards the utilization of working fund on loan and advances.
18. Return on total working fund ratio of RBB and MBL are in fluctuating trend. The profitability ratio with respect to financial resources investment of RBB is better than MBL.
19. The return on total deposits ratio of RBB is stable and consistent in comparison to MBL. The coefficient of variation of RBB is less than MBL so the profitability ratio with respect to deposit of RBB is better as well as stable.
20. Mean ratio of return on loan and advances of RBB is greater than MBL. RBB has efficiently employed its resources in the form of loan and advances to get profit.
21. From the table 4.13 it is shown that total interest earned to total assets ratios of RBB and MBL are in fluctuating trend. From the analysis it is found that total interest earned to total assets ratio of MBL is better than RBB.
22. The return on total interest paid to total assets ratio of MBL is stable and consistent in comparison to RBB. MBL is in better position from payment of interest point of view.
23. From the trend analysis of total deposit, loan and advances, total investment net profit, it is found that total deposit, loan and advances and total investment of RBB and MBL have increasing trend but in case of profit RBB has increasing trend but MBL has fluctuating trend. From the trend analysis it is clear that RBB is in better position than MBL.
24. The coefficient of correlation (r) between deposits and loan and advances of the MBL is 0.9926 which is higher than RBB i.e.0.9738. Its probable error multiplied by six is found 0.0264. Since $r > 6P.Er$ and r is positive which is near by 1. There is very strong positive correlation between deposits and loan and advances in MBL than RBB during the study period.
25. The coefficient of correlation (r) between deposits and investment of RBB and MBL are 0.874 and 0.9653 respectively. In case of RBB, $r > 6P.Er$ i.e.0.874 > 0.4184 and in case of MBL, $r > 6P.Er$ i.e.0.9653 > 0.123. From the analysis it is clear that there is strong positive correlation between

deposits and investment in MBL than RBB. MBL is successful in maximizing the investment of their deposits.

26. The correlation coefficient (r) between deposits and net profit of RBB is 0.876 and MBL is 0.4335. In case of RBB $r > 6P.Er$ i.e. $0.786 > 0.4184$ but in case of MBL $r < 6P.Er$ i.e. $0.4335 < 1.4694$. In RBB there is significant relationship between deposits and net profit but in MBL there is no significant relationship between deposits and net profit. From the analysis it is clear that RBB is successful in maximizing the net profit of their deposit but MBL is not successful in maximizing the net profit of their deposit during the study period.
27. The correlation coefficient (r) between deposits and interest earned of RBB is 0.9197 and MBL is 0.9943. In both banks $r > 6P.Er$ i.e. $0.9197 > 0.3789$ and $0.9943 > 0.02064$. There is significant relationship between deposit and interest earned in RBB and MBL but MBL has very strong positive correlation between deposits and interest earned. MBL has effectively mobilized its deposits to get higher interest.
28. The correlation coefficient (r) between total working fund and net profit of RBB and MBL are 0.2093 and 0.4342 respectively but in both banks, $r < 6P.Er$ i.e. $0.2093 < 1.730$ and $0.4342 < 1.4696$. From the analysis it is clear that there is not significant relationship between total working fund and net profit of RBB and MBL.
29. From the hypothesis testing it is found that calculated value of t is greater than tabulated value, so there is significant relationship between mean ratio of loan and advances to total deposits of RBB and MBL. There is significant difference between mean ratio of loan and advances to current assets ratio of RBB and MBL. It must invest its collected funds and bank balance in order to make high profit by mobilizing its funds by keeping some amount as liquidity.
30. There is significant difference between mean ratio of total investment to total deposit ratio of RBB and MBL because calculated value of t is greater than tabulated value. So these banks must utilize their deposits funds by investing in different securities issued by Government and other financial sector.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The role of commercial bank in the economic growth of the nations can be fairly estimated to be very prominent by mobilizing the scattered idle resources from the savers. Commercial banks have introduced new technology in the banking system to mobilize the saving of community. They have focused their services on commerce, trade and industry along with general public. The study has been conducted for Budgeting system of RBB and MBL in order to find out their strength and weakness.

Commercial banks have its own role and contribution in the economic development. A commercial bank is purvey of financial for trade and plays a vital role in the economy and financial life of the country. By economic development we generally mean the development of the leading sector of the economy like agriculture, industry, trade and commerce etc. The development and commercial banks serve as reservoir for supplying and controlling the stream of that fuel i.e. finance. So the importance and contribution of commercial banks towards the economical and industrial activities and upon the prudence of their administration depends the economic well being of the nation. Obviously a sound banking system is the main support for the economic development of the country is generally influenced by the development of sound banking system. The banking sector has to play developmental role to boost the economy by adopting the growth oriented investment policy and building up the financial structure for future economic development formulation of sound investment policies and planned effort pushed forward the force of economic growth.

Strengthening and the institutionalization of the commercial banks are very important to have a meaningful relationship between commercial banks and national development through shift of credit to the productive industrial sectors. At the same time the series of reforms such as consolidation of commercial banks directing attention to venture capital financing, appropriate risk return trade of by linking credit to timely repayment schedules, avoiding imperfection, allowing flexibility in lending,

one window service from NRB, diversity scope of activities of commercial banks etc. All these are necessary to ensure better future performance of commercial banks that have already been established and growing in Nepal. The commercial banks in Nepal must work hard to that they are really efficient and viable agencies for mobilization of saving and its investment in to productive sector are professionally managed and competent enough to ensure adequate fate of return on investment and are strategically well planned to be competitive.

Every bank in Nepal is offering competitive schemes to their customers. Every possible facility is being offered to the market. To become successful in competitive market situation each and every bank is trying to provide as much facilities as it can be offered. There are many banks with different facilities and services to the customers. Today's important facility is being provided by bank to the customer is customer loan facilities. Banks do not want to freeze their bulk of amount in only one product so they introduces different product with different facilities with low interest rates, low service charge and installment system.

There are 26 commercial banks have operating in Nepal which are considered to be population of the study and out of them two commercial banks RBB and MBL have been taken as a sample of the study. RBB is the Government sector bank and MBL is the private sector bank. This research is related to the Budgeting system aspects, the financial strength and weakness of RBB and MBL are compared in the basis of Balance sheet, income and expenditure account and profit and loss account. The study is based on primary data and secondary data. Primary data are collected from questionnaire and secondary data have been collected by using published books and website. The collected data have been analyzed by using various financial tools and statistical tool like ratio analysis, correlation coefficient, trend analysis and test of hypothesis.

The limitations of the study are random selection of two commercial banks among the 26 commercials banks. Only five years data from fiscal year 2060/61 to 2061/62 have been analyzed. This study focuses only on Budgeting system and its implication in the RBB and MBL. The study is mostly based on secondary data and primary data are collected for some objectives.

The study has been organized in five main chapters consisting of introduction, review of literature, research methodology, data presentation, analysis of data and major findings and summary, conclusion and recommendations.

5.2 Conclusion

A budget is a written plan for the future. In RBB, to formulate the budget there is separate department in central budget unit and chief financial officer is responsible for formulating budget. But in MBL financial planning department formulate the budget and chief of financial department is responsible for budgeting. Junior officers of RBB are involved at primary step of budgeting for data accumulation but in MBL junior officer are also involved in formulating budget. From the analysis of questionnaires it is found that RBB considers the variables like prevalent accounting system, NRB regulation, Banking and Financial act, past trend of income and expenses, strategies etc. while formulating budget. To improve the budgeting system MBL gives the emphasis a proper planning and coordinating among different department. 123 branches of RBB and 31 branches of MBL are operating at different part of country giving various banking facilities like ATM, ABBS, e-banking, mobile banking etc.

The liquidity position of MBL is better than RBB. MBL is in better position in maintaining its cash and bank balance to meets its daily requirement to make the payment on customer's withdrawal than RBB. RBB has invested more of its assets in Government securities than MBL. MBL is more successful to mobilize its current deposit on loan and advances. From the analysis of Activity ratio it can be found that MBL has strong position than RBB regarding the mobilization of total deposit as loans and advances. Investment to total deposit ratio of MBL is more homogeneous. MBL has better position towards the utilization of working fund on loan and advances. RBB takes low credit risk.

From the analysis of profitability ratio, it is found that profitability ratio with respect to deposit of RBB is better and stable than MBL. Return on loan and advances ratio indicates RBB is in better position than MBL. The earning capacity of RBB on its deposits mobilized on loan and advances is higher than MBL. Total interest earned to total assets ratio of RBB is lower than MBL. MBL is success in mobilizing their total assets to gain higher income as interest than RBB. Total interest paid to working fund ratios is less than the interest earned to total working fund ratio in both banks. So both banks are getting higher return than their interest cost.

The trend analysis of total deposit, loan and advances, total investment and net profit of RBB is show better position than MBL. From the coefficient of correlation analysis of deposit and loan and advances, deposit and investment, deposit and net profit, deposit and interest earned and working fund and net profit it can be found that MBL is successful to grant loan and advances to mobilize the collected deposits to get higher interest by mobilizing its deposits. RBB is successful in maximizing the net profit of their deposits.

5.3 Recommendation

On the basis of analysis, findings and gaps of the study the following suggestion may be recommended for the consideration to improve the existing situation.

- 1) 123 branches of RBB and 31 branches of MBL are operating. Many branches of RBB are operating with loss. RBB should give the emphasis to improve the performance of such branches. A proper study is needed to open the new branches. Those branches having their performance below the satisfaction have to be closed down if required.
- 2) All the branches of MBL are computerized. RBB is recommended to computerize all the branches to give the fast and accurate services.
- 3) There are energetic and smart employees in MBL. Employees are careful to their duties and responsibilities. The system of reward and punishment to employees on the basis of their work performance is maintained. RBB should give computer training and knowledge to its employee and should replace the old and tired employees to adopt in the competitive computerized banking environment.
- 4) Effectives programmes should be initiated to improve the productivity of labor, employee, moral should be increased to motivate employees. Incentive plans should be started, rewarded and punishment system should be make effective and should be based on work performance in RBB.
- 5) Banks should develop its specific goal for the coming budget year and should make the budget to fulfill the desired goals.
- 6) There should be involvement of the junior level officers on setting up goals and objectives of the company.
- 7) The budget should be prepared by considering the future expansion of banks, market situation, modern technology, economic environment, political environment and capacity of the banks.
- 8) The standard current ratio is 2:1. Current ratio of RBB is below than its standard ratio 2:1 so RBB is recommended to improve the current ratio to improve its liquidity position.
- 9) Cash and bank balance to total deposit ratio of RBB is higher than MBL, it means RBB has higher cash and bank balance which decrease the profit of the bank. So RBB is recommended to mobilize cash and bank balance in profitable purpose.
- 10) From the analysis it is found that RBB has invested more of its assets in government securities. MBL has not invested in government securities than

that of RBB. MBL is recommended to invest its excess fund in government securities instead of keeping them idle.

- 11) Investment policy of MBL is in better position in comparison to RBB. The total investment to total deposit ratio of MBL is more homogeneous. Loan and advances to total deposit ratio of RBB is lower than MBL. RBB is recommended to follow liberal lending policy and invest more of its total deposit in loan and advances and maintained stability on the investment policy.
- 12) Profitability ratios of banks are not satisfactory. Profitability position of MBL is weaker than that of RBB. If resources held idle bank have to bear more cost and result would be lower profit margin. So profitability condition of a bank should be regularly revised from time to time. It should always try to maintain the equilibrium in the portfolio condition of the bank. Bank should use its fund in more profitable sector. It should utilize its risky assets and shareholder funds at it should reduce its expenses.
- 13) Banks should be careful in increasing profit in a real sense to maintain the confidence of shareholders, depositors and their customers. So it is recommended to utilize its risky assets and shareholders' fund to gain highest profit margin.
- 14) To make very clear to the customer bank should make transparent in service charge and interest rate.
- 15) For speedy development of the country government of Nepal and commercial banks are suggested to follow decentralization policy in order to extend the modern and computerized banking facilities to the remote areas and the lower level people of the country.
- 16) Banks should encourage small, medium and higher level of customers for enjoying deposits, burrowing and other service.
- 17) Banks are recommended to offer new schemes and programmes in the market to attract the customers.
- 18) The banks are suggested to improve the social responsibility by investing a part of profit on social activities.
- 19) Banks should have in depth analysis of the bank's strength and weakness. It should try to overcome its weakness by using the strength
- 20) Before issuing license for the commercial banks the government should make the market study for the background and reputation of the people establishing a bank, this will help in avoiding the corrupt banking and existing banks will also get benefit from this policies because they don't have to face false competition launched by the corrupt banks.

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WEB SITES

<http://www.machbank.com>

<http://www.rbb.com.np>

<http://www.nrb.org.np>

APPENDIX

Supplementary Questionnaire

Name of Respondent:

Position :.....

Department :.....

Name of Bank :.....

Please tick as () on the one of more boxes and fills in the blanks as per requirement.

1. Which department has the overall responsibility of Budgeting?

.....
.....

2. Who is responsible for formulating Budget?

.....
.....

3. To what level, budgeting system is communicated?

a) From top to lower []

b) From top to middle []

c) Top level only []

4. Do junior officers involve in formulating Budget?

a) Yes [] b) No []

5. Do you take the reference of previous Budget to formulate new Budget?

a) Yes [] b) No []

6. What are the major variables considered while formulating budget?

- a)
- b)
- c)
- d)
- e)
- f)

7. Who evaluates the relevant variables?

- a) Budget Committee []
- b) Planning Department []
- c) Top Management []
- d) Consultants []
- e) Others []

8. What evaluation criteria are used to evaluate major capital expenditures?

- a) Net present value []
- b) Internal rate of return []
- c) Payback period []
- d) Average rate of Return []
- e) Others []

9. What are the tools used to measure performance?

- a) Ratio analysis
- b) Variance analysis
- c) Flexible budget
- d) Others

10) What are the major steps should be taken to improve the Budgeting system in your organization?

- a).....
- b).....
- c).....
- d).....
- f)

11) How are the excess funds utilized?

- a) Bank deposit
- b) Purchasing Government treasury
- c) Others

12. What types of programmers are introduced to increase the profit by the bank?

- a)
- b)
- c).....
- d).....

13. What are the facilities given by your bank to the customers?

- a)
- b).....
- c).....
- d).....
- e).....
- f)

14) How many branches of the bank are operating?

.....

15. What are the major coverage areas of the bank?

a)

b)

c).....

d).....

Appendix: - 1

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

Rs in '000'						
Banks	RBB			MBL		
Fiscal Year	Current Assets	Current Liabilities	Ratio %	Current Assets	Current Liabilities	Ratio %
060/061	8505903	3119549	0.27	632065	109018	3.76
061/062	10545145	36802579	0.29	873469	209341	3.49
062/063	12781127	16348987	0.78	2436870	362600	2.24
063/064	15592665	21269422	0.73	2929353	445776	2.88
064/065	19924578	25685192	0.78	2485925	641920	2.47

Calculation of mean, standard deviation and coefficient of variation

Fiscal Year	Ratio (X)	X ²
2060/61	0.27	0.0729
2061/62	0.29	0.0841
2062/63	0.78	0.608
2063/64	0.73	0.5329
2064/65	0.78	0.6084
	2.85	1.9063

$$\text{Mean } \bar{X} = \frac{\sum X}{n} = \frac{2.85}{5} = 0.57$$

$$\text{Standard deviation (SD)} = \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2}$$

$$= \sqrt{\frac{1.9063}{5} - (0.57)^2}$$

$$= 0.2374$$

$$\text{C.V.} = \frac{0.2374}{0.57} \times 100$$

$$= 41.64\%$$

Appendix: - 2

Cash and Bank balance to total deposit ratio = $\frac{\text{Cash and Bank balance}}{\text{Total deposit}}$

Rs in '000'

Banks Fiscal Year	RBB			MBL		
	Cash and bank balance	Total Deposit	Ratio %	Cash and bank balance	Total Deposit	Ratio %
060/061	701090	40866768	17	410745	2754632	15
061/062	5553194	43016063	13	731133	5586803	13
062/063	5528822	46195482	11	813924	7893298	10
063/064	6034400	50464129	12	1284080	9475452	13
064/065	9269348	57970844	15	1588564	11102242	14

Appendix: - 3

Cash and bank balance to current assets ratio = $\frac{\text{Cash and bank balance}}{\text{Current Assets}}$

Rs in '000'

Banks Fiscal Year	RBB			MBL		
	Cash and Bank Balance	Current Assets	Ratio %	Cash and Bank Balance	Current Assets	Ratio %
060/061	701090	8505903	82	410745	632065	65
061/062	5553194	10545145	53	731133	873469	84
062/063	5528822	12781127	43	813924	2436870	33
063/064	6034400	15592665	39	1284080	2929353	44
064/065	9269348	19924578	46	1588564	2485925	64

Appendix: - 4

Investment on Government securities to current assets ratio

= $\frac{\text{Investment on Government securities}}{\text{Total Current assets}}$

Rs in '000'

Banks Fiscal Year	RBB			MBL		
	Investment on Government Securities	Current Assets	Ratio %	Investment on Government Securities	Current Assets	Ratio %
060/061	2918897	8505903	34	71320	632065	11
061/062	6434035	10545145	61	127336	873469	15
062/063	8874389	12781127	69	904472	2436870	37
063/064	10023289	15592665	64	951272	2929353	32
064/065	10375755	19924578	52	827352	2485925	34

Appendix: - 5

Loan and advances to current assets ratio = $\frac{\text{Loan and advances}}{\text{Total Current assets}}$

Rs in '000'

Banks Fiscal Year	RBB			MBL		
	Loan and advance	Current Assets	Ratio %	Loan and advance	Current Assets	Ratio %
060/061	10831085	8505903	127	2493108	632065	394
061/062	13430932	10545145	127	5061433	873469	579
062/063	14633545	12781127	114	6068427	2436870	249
063/064	17006456	15592665	109	7129892	2929353	243
064/065	27524922	19924578	138	8642323	2485925	347

Appendix: - 6

Loan and advances to total deposit ratio = $\frac{\text{Loan and advances}}{\text{Total deposit}}$

Rs in '000'

Banks Fiscal Year	RBB			MBL		
	Loan and advance	Total Deposit	Ratio %	Loan and advance	Total Deposit	Ratio %
060/061	10831085	40866768	26	2493108	2754632	90
061/062	13430932	43016063	31	5061433	5586803	90
062/063	14633545	46195482	32	6068427	7893298	77
063/064	17006456	50464129	33	7129892	9475452	75
064/065	27524922	57970844	47	8642323	11102242	78

Appendix: - 7

Total investment to total deposit ratio = $\frac{\text{Total investment}}{\text{Total deposit}}$

Rs in '000'

Banks Fiscal Year	RBB			MBL		
	Total investment	Total Deposit	Ratio %	Total investment	Total Deposit	Ratio %
060/061	3117026	40866768	8	274407	2754632	10
061/062	8415882	43016063	20	468612	5586803	8
062/063	11555358	46195482	25	1190830	7893298	15
063/064	12650146	50464129	25	1278469	9475452	13
064/065	14543141	57970844	25	1443551	11102242	13

Appendix: - 8

$$\text{Loan and advances to total assets ratio} = \frac{\text{Loan and advances}}{\text{total assets}}$$

Rs in '000'

Banks	RBB			MBL		
	Loan and advances	Total assets	Ratio %	Loan and advance	Total assets	Ratio %
060/061	10831085	45056322	24	2493108	3448634	72
061/062	13430932	56822016	24	5061433	6445423	79
062/063	14633545	39879619	37	6068427	9069830	67
063/064	17006456	46367931	37	7129892	10810331	66
064/065	27524922	60163727	46	8642323	12498548	69

Appendix: - 9

$$\text{Return on total working fund ratio} = \frac{\text{Net Profit}}{\text{Total assets}}$$

Rs in '000'

Banks	RBB			MBL		
	Net Profit	Total assets	Ratio %	Net profit	Total assets	Ratio %
060/061	1040101	45056322	2.30	46690	3448634	1.35
061/062	1322894	56822016	2.33	84870	6445423	1.31
062/063	1591489	39879619	4	133997	9069830	1.47
063/064	1697088	46367931	3.66	74086	10810331	0.69
064/065	1770554	60163727	3	85016	12498548	0.68

Appendix: - 10

$$\text{Return on total deposit ratio} = \frac{\text{Net profit}}{\text{Total Deposit}}$$

Rs in '000'

Banks	RBB			MBL		
	Net profit	Total Deposit	Ratio %	Net profit	Total Deposit	Ratio %
060/061	1040101	40866768	2.54	46690	2754632	1.69
061/062	1322894	43016063	3.07	84870	5586803	1.52
062/063	1591489	46195482	3.44	133997	7893298	1.69
063/064	1697088	50464129	3.36	74086	9475452	0.78
064/065	1770554	57970844	3.05	85016	11102242	0.76

Appendix: - 11

$$\text{Return on loan and advances ratio} = \frac{\text{Net profit}}{\text{Loan and advances}}$$

Rs in '000'

Banks	RBB			MBL		
	Net profit	Loan and advances	Ratio %	Net profit	Loan and advances	Ratio %
060/061	1040101	10831085	9.60	46690	2493108	1.87
061/062	1322894	13430932	9.84	84870	5061433	1.67
062/063	1591489	14633545	10.87	133997	6068427	2.20
063/064	1697088	17006456	9.97	74086	7129892	1.03
064/065	1770554	27524922	6.43	85016	8642323	0.98

Appendix: - 12

$$\text{Total interest earned to total assets ratio} = \frac{\text{Total interest earned}}{\text{Total assets}}$$

Rs in '000'

Banks	RBB			MBL		
	Total interest earned	Total assets	Ratio %	Total interest earned	Total assets	Ratio %
060/061	2235881	45056322	4.96	251207	3448634	52.99
061/062	2328821	56822016	4.09	381930	6445423	35.04
062/063	2282825	39879619	5.72	563322	9069830	38.56
063/064	2358338	46367931	5.08	694482	10810331	41.21
064/065	2703846	60163727	4.49	796597	12498548	40.57

Appendix: - 13

$$\text{Total interest paid to total assets ratio} = \frac{\text{Total interest paid}}{\text{Total assets}}$$

Rs in '000'

Banks	RBB			MBL		
	Total interest paid	Total assets	Ratio %	Total interest paid	Total assets	Ratio %
060/061	1494845	45056322	3.31	113579	3448634	3.29
061/062	1004722	56822016	1.76	187028	6445423	2.90
062/063	850136	39879619	2.13	288661	9069830	3.18
063/064	942801	46367931	2.03	397722	10810331	3.67
064/065	1019340	60163727	1.69	407919	12498548	3.26

Calculation of Growth Ratio

Let,

D_n = Variable in the n^{th} year

D_0 = Variable in the initial year

n = no of period study

g = Grow rate

Appendix:-14

Total deposit growth ratio of RBB

$$D_n = D_0 (1+g)^{n-1}$$

$$57970844 = 40866768 (1+g)^{5-1}$$

$$g = 9.13\%$$

Total deposit growth ratio of MBL

$$D_n = D_0 (1+g)^{n-1}$$

$$11102242 = 2754632 (1+g)^{5-1}$$

$$g = 41.69\%$$

Appendix:-15

Loan and advances growth ratio of RBB

$$D_n = D_0 (1+g)^{n-1}$$

$$27524922 = 10831085(1+g)^{5-1}$$

$$g = 26.26\%$$

Loan and advances growth ratio of MBL

$$D_n = D_0 (1+g)^{n-1}$$

$$8642323 = 2493108 (1+g)^{5-1}$$

$$g = 36.45\%$$

Appendix:-16

Total investment growth ratio of RBB

$$D_n = D_0 (1+g)^{n-1}$$

$$14543141 = 3117026 (1+g)^{5-1}$$

$$g = 46.97$$

Total investment growth ratio of MBL

$$D_n = D_0 (1+g)^{n-1}$$

$$1443551 = 274407 (1+g)^{5-1}$$

$$g = 51.45\%$$

Appendix:-17

Net Profit growth ratio of RBB

$$D_n = D_0 (1+g)^{n-1}$$

$$1770554 = 1040101 (1+g)^{5-1}$$

$$g = 14.22$$

Net Profit growth ratio of MBL

$$D_n = D_0 (1+g)^{n-1}$$

$$85016 = 46690(1+g)^{5-1}$$

$$g = 16.16$$

Trend Analysis
Appendix:-18
Trend Analysis of total Deposit of RBB

Rs in '000'

Fiscal Year (t)	X=t-2063	Total Deposit (Y)	X ²	XY
2061	-2	40866768	4	-81733536
2062	-1	43016063	1	-43016063
2063	0	46195482	0	0
2064	1	50464129	1	50464129
2065	2	57970844	4	115941688
Total		238513286	10	41656218

$$a = \frac{Y}{n} = \frac{238513286}{5} = 47702657.2 \quad b = \frac{XY}{X^2} = \frac{41656218}{10} = 4165621.8$$

Now, projected trend values of Total deposit for next five years

$$Y_c = a + bx = 47702657.2 + 4165621.8 \times X$$

Year(t)	X=(t-2063)	Y _c = a + bX
2066	3	60199522
2067	4	64365144
2068	5	68530766
2069	6	72696388
2070	7	76862010

Trend Analysis of total Deposit of MBL

Rs in '000'

Fiscal Year (t)	X=t-2063	Total Deposit (Y)	X ²	XY
2061	-2	2754632	4	-5509264
2062	-1	5586803	1	5586803
2063	0	7893298	0	0
2064	1	9475452	1	9475452
2065	2	11102242	4	22204484
Total		37712427	10	20583869

$$a = \frac{Y}{n} = \frac{37712427}{5} = 7542485 \quad b = \frac{XY}{X^2} = \frac{20583869}{10} = 2058387$$

Now, projected trend values of Total deposit for next five years

$$Y_c = a + bx = 7542485 + 2058387 \times X$$

Year(t)	X=(t-2063)	Yc= a + bX
2066	3	13717646
2067	4	15776033
2068	5	17834420
2069	6	19892807
2070	7	21951194

Appendix:-19
Trend Analysis of Loan and Advances of RBB

Rs in '000'

Fiscal Year (t)	X=t-2063	Loan and advances(Y)	X ²	XY
2061	-2	10831085	4	-21662170
2062	-1	13430932	1	-13430932
2063	0	14633545	0	0
2064	1	17006456	1	17006456
2065	2	27524922	4	55049844
Total		83426940	10	36963198

$$a = \frac{Y}{n} = \frac{83426940}{5} = 16685388 \qquad b = \frac{XY}{X^2} = \frac{36963198}{10} = 3696320$$

Now, projected trend values of Total deposit for next five years

$$Y_c = a + bx = 16685388 + 36963198 \times X$$

Year(t)	X=(t-2063)	Yc= a + bX
2066	3	27774348
2067	4	31470668
2068	5	35166988
2069	6	38863308
2070	7	42559628

Trend Analysis of Loan and Advances of MBL

Rs in '000'

Fiscal Year (t)	X=t-2063	Loan and advances(Y)	X ²	XY
2061	-2	2493108	4	-4986216
2062	-1	5061433	1	-5061433
2063	0	6068427	0	0
2064	1	7129892	1	7129892
2065	2	8642323	4	17284646
Total		29395183	10	14366889

$$a = \frac{Y}{n} = \frac{29395183}{5} = 5879037 \qquad b = \frac{XY}{X^2} = \frac{14366889}{10} = 1436689$$

Now, projected trend values of Total deposit for next five years

$$Y_c = a + bx = 5879037 + 1436689 \times X$$

Year(t)	X=(t-2063)	Y _c = a + bX
2066	3	10189104
2067	4	11625793
2068	5	13062482
2069	6	14499171
2070	7	15935860

Appendix:-20

Trend Analysis of Total Investment of RBB

Rs in '000'

Fiscal Year (t)	X=t-2063	Total Investment (Y)	X ²	XY
2061	-2	3117026	4	-6234052
2062	-1	8415882	1	-8415882
2063	0	11555358	0	0
2064	1	12650146	1	12650146
2065	2	14543141	4	29086282
Total		50281553	10	27086494

$$a = \frac{Y}{n} = \frac{50281553}{5} = 10056311 \qquad b = \frac{XY}{X^2} = \frac{27086494}{10} = 2708649$$

Now, projected trend values of Total investment for next five years

$$Y_c = a + bx = 10056311 + 2708649 \times X$$

Year(t)	X=(t-2063)	Yc= a + bX
2066	3	18182258
2067	4	20890907
2068	5	23599556
2069	6	26308205
2070	7	29016854

Trend Analysis of Total Investment of MBL

Rs in '000'

Fiscal Year (t)	X=t-2063	Total Investment (Y)	X ²	XY
2061	-2	274407	4	-548814
2062	-1	468612	1	-468612
2063	0	1190830	0	0
2064	1	1278469	1	1278469
2065	2	1443551	4	2887102
Total		4655869	10	3148145

$$a = \frac{Y}{n} = \frac{4655869}{5} = 931174 \quad b = \frac{XY}{X^2} = \frac{3148145}{10} = 314815$$

Now, projected trend values of Total investment for next five years

$$Y_c = a + bx = 931174 + 314815 \times X$$

Year(t)	X=(t-2063)	Yc= a + bX
2066	3	1875619
2067	4	2190434
2068	5	2505249
2069	6	2820064
2070	7	3134879

Appendix:-21
Trend Analysis of Net Profit of RBB

Rs in '000'

Fiscal Year (t)	X=t-2063	Net Profit (Y)	X ²	XY
2061	-2	1040101	4	2080202
2062	-1	1322894	1	1322891
2063	0	1591489	0	0
2064	1	1697088	1	1697088
2065	2	1770554	4	3541108
Total		7422123	10	1835103

$$a = \frac{Y}{n} = \frac{7422123}{5} = 1484425$$

$$b = \frac{XY}{X^2} = \frac{1835103}{10} = 183510$$

Now, projected trend values of Net Profit for next five years

$$Y_c = a + bx = 1484425 + 183510 \times X$$

Year(t)	X=(t-2063)	Y _c = a + bX
2066	3	2034955
2067	4	2218465
2068	5	2401975
2069	6	2585485
2070	7	2768995

Trend Analysis of Net Profit of MBL

Rs in '000'

Fiscal Year (t)	X=t-2063	Net Profit (Y)	X ²	XY
2061	-2	46690	4	-93380
2062	-1	84870	1	-84870
2063	0	133997	0	0
2064	1	74086	1	74086
2065	2	85016	4	170032
Total		424659	10	65868

$$a = \frac{Y}{n} = \frac{424659}{5} = 84932$$

$$b = \frac{XY}{X^2} = \frac{65868}{10} = 6587$$

Now, projected trend values of Net Profit for next five years

$$Y_c = a + bx = 84932 + 6587 \times X$$

Year(t)	X=(t-2063)	Y _c = a + bX
2066	3	104693
2067	4	111280
2068	5	117867
2069	6	124454
2070	7	131041

Appendix:-22

Coefficient of correlation between Deposit and Loan and Advances of RBB

Rs in million

Fiscal Year	Deposit (x)	Loan and Advances (y)	$\sum dx$	$\sum dy$	$\sum dx^2$	$\sum dy^2$	$\sum dx \cdot dy$
060/061	40866.77	10831.085	-6835.886	-5854.304	46729337.4	34272875.32	40019354.75
061/062	43016.06	13430.93	-4686.596	-3254.459	21964182.07	10591503.38	15252334.53
062/063	46195.48	14633.55	-1507.176	-2051.839	2271579.495	4210043.283	3092482.497
063/064	50464.13	17006.46	2761.474	321.071	7625738.653	103086.587	886629.2187
064/065	57970.84	27524.92	10268.184	10839.531	105435602.7	117495432.3	111302298.8
Total	238513.2	83426.945	0	0	184026440.3	166672940.9	170553099.8

$$\bar{x} = \frac{\sum x}{N} = 47702.656 \quad \bar{y} = \frac{\sum y}{N} = 16685.389$$

Coefficient of Correlation:

(r)

$$r = \frac{\sum dx \cdot dy}{\sqrt{\sum dx^2} \cdot \sqrt{\sum dy^2}} = \frac{5 \mid 170553099.8 - 0}{\sqrt{5 \mid 184026440.3} \cdot \sqrt{5 \mid 166672940.9 - 0}}$$

$$r = 0.9738$$

$$\text{Coefficient of Determination } (r^2) = 0.9738 \times 0.9738 = 0.9483$$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.6745 \times \frac{1 - 0.9483}{\sqrt{5}} = 0.015$$

$$\therefore \text{P.Er} = 0.0934$$

Coefficient of correlation between Deposit and Loan and Advances of MBL

Rs in million

Fiscal Year	Deposit (x)	Loan and Advances (y)	$\sum dx X_x Z \bar{x}$	$\sum dy X_y Z \bar{y}$	$\sum dx^2$	$\sum dy^2$	$\sum dx.dy$
060/061	2754.632	2493.108	-4607.8534	-3385.9286	21232312.96	11464512.48	15601862.61
061/062	5586.803	5061.433	-1775.6824	-817.6036	3153047.986	668475.6467	1451804.323
062/063	7893.298	6068.427	530.8126	189.3904	281762.0163	35868.7236	100530.8106
063/064	9475.452	7129.892	2112.9666	1250.8554	4464627.853	1564639.232	2643015.682
064/065	11102.24	8642.323	3739.7566	2763.2864	13985779.43	7635751.728	10334018.55
Total	36812.42	29395.183	0	0	43117530.24	21369247.81	30131231.98

$$\bar{x} X \frac{x}{N} = 7362.4854 \quad \bar{y} X \frac{y}{N} = 5879.0366$$

Coefficient of Correlation:

$$(r) = \frac{N \sum dx.dy Z \quad \sum dx \cdot \sum dy}{\sqrt{N \sum dx^2 Z (\sum dx)^2} \cdot \sqrt{N \sum dy^2 Z (\sum dy)^2}} = \frac{5 | 30131231.98 - 0}{\sqrt{5 | 43117530.24 Z 0} \cdot \sqrt{5 | 21369247.81 - 0}}$$

$$r = 0.9926$$

$$\text{Coefficient of Determination } (r^2) = 0.9926 \times 0.9926 = 0.9853$$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} = 0.6745 \times \frac{1 Z 0.9853}{\sqrt{5}} = 0.00441$$

$$6. \text{ (P.Er)} = 0.0264$$

Appendix:-23

Coefficient of correlation between Deposit and Investment of RBB

Rs in million

Fiscal Year	Deposit (x)	Investment (y)	$\sum dx X_x Z \bar{x}$	$\sum dy X_y Z \bar{y}$	$\sum dx^2$	$\sum dy^2$	$\sum dx.dy$
060/061	40866.77	3117.03	-6835.886	-6939.282	46729337.4	48153634.68	47436140.67
061/062	43016.06	8415.88	-4686.596	-1640.432	21964182.07	2691017.147	7688042.049
062/063	46195.48	11555.36	-1507.176	1499.048	2271579.495	2247144.906	-2259330.67
063/064	50464.13	12650.15	2761.474	2593.838	7625738.653	6727995.57	7162816.197
064/065	57970.84	14543.14	10268.184	4486.826	105435602.7	20131607.55	46071554.94
Total	238513.2	50281.56	0	0	184026440.3	79951399.85	106099223.2

$$\bar{x} X \frac{x}{N} = 47702.656 \quad \bar{y} X \frac{y}{N} = 10056.312$$

Coefficient of Correlation: (r)

$$= \frac{N \sum dx \cdot dy}{\sqrt{N \sum dx^2} \cdot \sqrt{N \sum dy^2}} = \frac{5 | 106099223.22 - 0}{\sqrt{5 | 184026440.3} \cdot \sqrt{5 | 79951399.85 - 0}}$$

$$r = 0.874$$

Coefficient of Determination (r^2) = $0.874 \times 0.874 = 0.765$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 \sum r^2}{\sqrt{N}} = 0.6745 \times \frac{1 \sum 0.765}{\sqrt{5}} = 0.07122$$

$$6. (\text{P.Er}) = 0.425$$

Coefficient of correlation between Deposit and Loan and Investment of MBL

Rs in million

Fiscal Year	Deposit (x)	Investment (y)	$dx \sum x \bar{x}$	$dy \sum y \bar{y}$	dx^2	dy^2	$dx \cdot dy$
060/061	2754.632	274.407	-4607.8534	-656.7668	21232312.96	431342.6296	3026285.132
061/062	5586.803	468.612	-1775.6824	-462.5618	3153047.986	213963.4188	821362.8472
062/063	7893.298	1190.830	530.8126	259.6562	281762.0163	67421.3422	137828.7826
063/064	9475.452	1278.469	2112.9666	347.2952	4464627.853	120613.9559	733823.1579
064/065	11102.24	1443.551	3739.7566	512.3772	13985779.43	262530.3951	1916166.015
Total	36812.42	4655.869	0	0	43117530.24	1095871.742	6635465.935

$$\bar{x} \sum \frac{x}{N} = 7362.4854 \quad \bar{y} \sum \frac{y}{N} = 931.1738$$

Coefficient of Correlation:

(r)

$$= \frac{N \sum dx \cdot dy}{\sqrt{N \sum dx^2} \cdot \sqrt{N \sum dy^2}} = \frac{5 | 6635465.935 - 0}{\sqrt{5 | 43117530.24} \cdot \sqrt{5 | 1095871.742 - 0}}$$

$$r = 0.9653$$

Coefficient of Determination (r^2) = $0.9653 \times 0.9653 = 0.9318$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 \sum r^2}{\sqrt{N}} = 0.6745 \times \frac{1 \sum 0.9318}{\sqrt{5}} = 0.0205$$

$$6. (\text{P.Er}) = 0.123$$

Appendix:-24

Coefficient of correlation between Deposit and Net Profit of RBB

Rs in million

Fiscal Year	Deposit (x)	Net Profit (y)	$dx \sum x Z \bar{x}$	$dy \sum y Z \bar{y}$	dx^2	dy^2	dx.dy
060/061	40866.77	1040.101	-6835.886	-444.324	46729337.4	197423.817	3037348.211
061/062	43016.06	1322.894	-4686.596	-161.531	21964182.07	26092.263	757030.539
062/063	46195.48	1591.489	-1507.176	107.464	2271579.495	11548.511	-161967.162
063/064	50464.13	1679.088	2761.474	212.662	7625738.653	45224.700	587260.584
064/065	57970.84	1770.554	10268.184	286.128	105435602.7	81869.690	2938014.95
Total	238513.2	7404.126	0	0	184026440.3	362158.981	7157687.123

$$\bar{x} \sum \frac{x}{N} = 47702.656 \quad \bar{y} \sum \frac{y}{N} = 1484.4252$$

Coefficient of Correlation:

$$(r) = \frac{N \sum dx \cdot dy}{\sqrt{N \sum dx^2} \cdot \sqrt{N \sum dy^2}} = \frac{5 \mid 1421960165 - 0}{\sqrt{5 \mid 184026440.3} \cdot \sqrt{5 \mid 362158.981 - 0}}$$

$$r = 0.876$$

$$\text{Coefficient of Determination } (r^2) = 0.876 \times 0.876 = 0.7687$$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 \sum r^2}{\sqrt{N}} = 0.6745 \times \frac{1 \sum 0.7687}{\sqrt{5}} = 0.06974$$

$$6. \text{ (P.Er)} = 0.41844$$

Coefficient of correlation between Deposit and Loan and Net Profit of MBL

Rs in million

Fiscal Year	Deposit (x)	Net Profit (y)	$dx \sum x Z \bar{x}$	$dy \sum y Z \bar{y}$	dx^2	dy^2	dx.dy
060/061	2754.632	46.690	-4607.8534	-38.2418	21232312.96	1462.4352	176212.6082
061/062	5586.803	84.870	-1775.6824	-0.0618	3153047.986	0.003819	109.7371
062/063	7893.298	133.997	530.8126	49.0652	281762.0163	2407.3938	26044.4263
063/064	9475.452	74.086	2112.9666	-10.8458	4464627.853	117.63137	-22916.8131
064/065	11102.24	85.016	3739.7566	0.084	13985779.43	0.00705	314.1395
Total	36812.42	424.659	0	0	43117530.24	3987.4712	179764.098

$$\bar{x} X \frac{x}{N} = 7362.4854 \quad \bar{y} X \frac{y}{N} = 84.9318$$

Coefficient of Correlation:

(r)

$$= \frac{N \sum dx \cdot dy}{\sqrt{N \sum dx^2} \cdot \sqrt{N \sum dy^2}} = \frac{5 | 179764.098 - 0}{\sqrt{5 | 43117530.24} \cdot \sqrt{5 | 3987.4712 - 0}}$$

$$r = 0.4335$$

Coefficient of Determination (r^2) = $0.4335 \times 0.4335 = 0.1879$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 \sum r^2}{\sqrt{N}} = 0.6745 \times \frac{1 \sum 0.1879}{\sqrt{5}} = 0.2449$$

$$6. (\text{P.Er}) = 1.4694$$

Appendix:-25

Coefficient of correlation between Deposit and Interest earned of RBB

Rs in million

Fiscal Year	Deposit (x)	Interest earned (y)	$dx X x Z \bar{x}$	$dy X y Z \bar{y}$	dx^2	dy^2	dx.dy
060/061	40866.77	2235.881	-6835.886	-145.9612	46729337.4	21304.671	997774.1236
061/062	43016.06	2328.321	-4686.596	-53.521	21964182.07	2864.498	250831.305
062/063	46195.48	2282.825	-1507.176	-99.01	2271579.495	9802.980	149225.2977
063/064	50464.13	2358.338	2761.474	-23.5042	7625738.653	552.438	-64906.2371
064/065	57970.84	2703.846	10268.184	322.003	105435602.7	103685.932	3306386.053
Total	238513.2	11909.211	0	0	184026440.3	138210.519	4638310.542

$$\bar{x} X \frac{x}{N} = 47702.656 \quad \bar{y} X \frac{y}{N} = 2381.8422$$

Coefficient of Correlation:

(r)

$$= \frac{N \sum dx \cdot dy}{\sqrt{N \sum dx^2} \cdot \sqrt{N \sum dy^2}} = \frac{5 | 4638310.542 - 0}{\sqrt{5 | 184026440.3} \cdot \sqrt{5 | 138210.519 - 0}}$$

$$r = 0.9197$$

Coefficient of Determination (r^2) = $0.9197 \times 0.9197 = 0.8458$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} = 0.6745 \times \frac{1 Z 0.8458}{\sqrt{5}} = 0.0464$$

$$6. (\text{P.Er}) = 0.2789$$

Coefficient of correlation between Deposit and Interest earned of MBL

Rs in million

Fiscal Year	Deposit (x)	Interest earned (y)	$dx \sum x Z \bar{x}$	$dy \sum y Z \bar{y}$	dx^2	dy^2	dx.dy
060/061	2754.632	251.207	-4607.8534	-286.3006	21232312.96	81968.033	1319231.193
061/062	5586.803	381.930	-1775.6824	-1555.5776	3153047.986	24204.3896	276256.4062
062/063	7893.298	563.322	530.8126	25.8144	281762.0163	666.3832	13702.60878
063/064	9475.452	694.482	2112.9666	156.9744	4464627.853	24640.9622	331681.6643
064/065	11102.24	796.597	3739.7566	259.0894	13985779.43	67127.3171	968931.2936
Total	36812.42	2687.538	0	0	43117530.24	198607.0852	2909803.166

$$\bar{x} \sum \frac{x}{N} = 7362.4854 \quad \bar{y} \sum \frac{y}{N} = 537.5076$$

Coefficient of Correlation:

(r)

$$= \frac{N \sum dx \cdot dy}{\sqrt{N \sum dx^2} \cdot \sqrt{N \sum dy^2}} = \frac{5 | 2909803.166 - 0}{\sqrt{5 | 43117530.24} \cdot \sqrt{5 | 198607.0852 - 0}}$$

$$r = 0.9943$$

$$\text{Coefficient of Determination } (r^2) = 0.9943 \times 0.9943 = 0.9886$$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} = 0.6745 \times \frac{1 Z 0.9886}{\sqrt{5}} = 0.00343$$

$$6. (\text{P.Er}) = 0.0206$$

Appendix:-26

Coefficient of correlation between Working Fund and Net Profit of RBB

Rs in million

Fiscal Year	Working Fund (x)	Net Profit (y)	$dx \sum x Z \bar{x}$	$dy \sum y Z \bar{y}$	dx^2	dy^2	dx.dy
060/061	45056.32	1040.101	-4601.601	-444.324	21174731.76	197423.817	2044601.763
061/062	56822.01	1322.894	7164.093	-161.531	51324228.51	26092.263	-1157223.10
062/063	39879.61	1591.489	-9778.304	107.464	95615229.12	11548.511	-1050815.66
063/064	46367.93	1679.088	-3289.992	212.662	10824047.36	45224.700	-699656.278
064/065	60163.72	1770.554	10505.804	286.128	110371917.7	81869.690	3006004.687
Total	248289.5	7404.126	0	0	389310154.5	362158.981	2142911.404

$$\bar{x} \times \frac{x}{N} = 49657.923 \quad \bar{y} \times \frac{y}{N} = 1484.4252$$

Coefficient of Correlation:

(r)

$$= \frac{N \sum dx \cdot dy - \sum dx \sum dy}{\sqrt{N \sum dx^2 - (\sum dx)^2} \cdot \sqrt{N \sum dy^2 - (\sum dy)^2}} = \frac{5 | 2142911.404 - 0}{\sqrt{5 | 389310154.5} \cdot \sqrt{5 | 362158.981 - 0}}$$

$$r = 0.2093$$

Coefficient of Determination (r^2) = $0.2093 \times 0.2093 = 0.0438$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 \sum r^2}{\sqrt{N}} = 0.6745 \times \frac{1 \sum 0.0438}{\sqrt{5}} = 0.288$$

$$6. (\text{P.Er}) = 1.730$$

Coefficient of correlation between Working Fund and Net Profit of MBL

Rs in million

Fiscal Year	Working Fund (x)	Net Profit (y)	$\sum dx \cdot x \sum Z \bar{x}$	$\sum dy \cdot y \sum Z \bar{y}$	$\sum dx^2$	$\sum dy^2$	$\sum dx \cdot dy$
060/061	3448.634	46.690	-5005.9192	-38.2418	25059227.04	1462.4352	191435.3609
061/062	6445.423	84.870	-2009.1302	-0.0618	4036604.161	0.003819	124.1642
062/063	9069.830	133.997	615.2768	49.0652	378565.5406	2407.3938	30188.6792
063/064	10810.33	74.086	2355.778	-10.8458	5549689.985	117.63137	-25550.2970
064/065	12498.54	85.016	4043.9948	0.084	16353893.94	0.00705	339.6955
Total	42272.75	424.659	0	0	51377980.67	3987.4712	196537.6028

$$\bar{x} \times \frac{x}{N} = 8454.5514 \quad \bar{y} \times \frac{y}{N} = 84.9318$$

Coefficient of Correlation:

(r)

$$= \frac{N \sum dx \cdot dy - \sum dx \sum dy}{\sqrt{N \sum dx^2 - (\sum dx)^2} \cdot \sqrt{N \sum dy^2 - (\sum dy)^2}} = \frac{5 | 196537.6028 - 0}{\sqrt{5 | 51377980.67} \cdot \sqrt{5 | 3987.4712 - 0}}$$

$$r = 0.4342$$

Coefficient of Determination (r^2) = $0.4342 \times 0.4342 = 0.188$

$$\text{Probable Error (P.Er)} = 0.6745 \times \frac{1 \sum r^2}{\sqrt{N}} = 0.6745 \times \frac{1 \sum 0.188}{\sqrt{5}} = 0.2449$$

$$6. (\text{P.Er}) = 1.4696$$

Hypothesis Testing

Appendix:-27

Loans and Advances to Total Deposits Ratios between RBB and MBL

Banks	RBB			MBL		
Fiscal Years	x_1	X_1	X_1^2	x_2	X_2	X_2^2
2060/61	27	-7.2	51.84	91	8.6	73.96
2061/62	31	-3.2	10.24	91	8.6	73.96
2062/63	32	-2.2	4.84	77	-5.4	29.16
2063/64	34	-0.2	0.04	75	-7.4	54.76
2064/65	47	12.8	163.84	78	-4.4	19.36
Total	171		230.8	421		251.2

$$\bar{X}_1 = \frac{\sum X_1}{n} = \frac{171}{5} = 34.2$$

$$\bar{X}_2 = \frac{\sum X_2}{n} = \frac{421}{5} = 84.2$$

Again, $X_1 = x_1 - \bar{X}_1$

$X_2 = x_2 - \bar{X}_2$

$$S_p^2 = \frac{1}{n_1 + n_2 - 2} \left(\sum X_1^2 + \sum X_2^2 \right)$$

= $\frac{1}{5 + 5 - 2} (230.8 + 251)$

$S_p^2 = 60.25$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$= \frac{34.2 - 84.2}{\sqrt{60.25 \left(\frac{1}{5} + \frac{1}{5} \right)}}$$

$t = 9.81$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level of significance = 5%

Calculated value of (t) = 9.81

Appendix:-28
Total investment to total deposit ratio of RBB and MBL

Banks	RBB			MBL		
Fiscal Years	x_1	X_1	X_1^2	x_2	X_2	X_2^2
2060/61	8	-12.6	158.76	10	-1.8	3.24
2061/62	20	-0.6	0.0036	8	-3.8	14.44
2062/63	25	4.4	19.36	15	3.2	10.24
2063/64	25	4.4	19.36	13	1.2	1.44
2064/65	25	4.4	19.36	13	1.2	1.44
Total	103		216.84	59		30.8

$$\bar{X}_1 = \frac{\sum x_1}{n}$$

$$= \frac{103}{5}$$

$$\bar{X}_1 = 20.6$$

$$\bar{X}_2 = \frac{\sum x_2}{n}$$

$$= \frac{59}{5}$$

$$\bar{X}_2 = 11.8$$

Again, $X_1 = x_1 - \bar{X}_1$

$X_2 = x_2 - \bar{X}_2$

$$Sp^2 = \frac{1}{n_1 + n_2 - 2} \left(\sum X_1^2 + \sum X_2^2 \right)$$

$$= \frac{1}{5 + 5 - 2} (216.84 + 30.8)$$

$$Sp^2 = 30.95$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$= \frac{20.6 - 11.8}{\sqrt{30.95 \left(\frac{1}{5} + \frac{1}{5} \right)}}$$

$$t = 2.50$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level of significance = 5%

Calculated value of (t) = 2.50

Tabulated value t at 5% level of significance with 8 degrees of freedom for two tailed test is 2.306

Appendix:-29

Investment on Government securities to current assets ratio

Banks	RBB			MBL		
Fiscal Years	x_1	X_1	X_1^2	x_2	X_2	X_2^2
2060/61	34	-22	484	11	-14.8	219.04
2061/62	61	5	25	15	-10.8	116.64
2062/63	69	13	169	37	11.2	125.44
2063/64	64	8	64	32	6.2	38.44
2064/65	52	-4	16	34	8.2	67.24
Total	280		758	129		566.8

$$\bar{X}_1 = \frac{\sum X_1}{n}$$

$$= \frac{280}{5}$$

$$\bar{X}_1 = 56$$

$$\bar{X}_2 = \frac{\sum X_2}{n}$$

$$= \frac{129}{5}$$

$$\bar{X}_2 = 25.8$$

Again, $X_1 = x_1 - \bar{X}_1$

$X_2 = x_2 - \bar{X}_2$

$$Sp^2 = \frac{1}{n_1 + n_2 - 2} \left(\sum X_1^2 + \sum X_2^2 \right)$$

$$= \frac{1}{5 + 5 - 2} (758 + 566.8)$$

$$Sp^2 = 165.6$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$= \frac{56 - 25.8}{\sqrt{165.6 \left(\frac{1}{5} + \frac{1}{5} \right)}}$$

$$t = 3.710$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level of significance = 5%

Calculated value of (t) = 3.710

Tabulated value t at 5% level of significance with 8 degrees of freedom for two tailed test is 2.306

Appendix:-30
Loan and advances to current assets ratio

Banks	RBB			MBL		
Fiscal Years	x ₁	X ₁	X ₁ ²	x ₂	X ₂	X ₂ ²
2060/61	127	-4.6	21.16	394	31.6	998.56
2061/62	124	1.6	2.56	579	216.6	46915.56
2062/63	114	-8.4	70.56	249	-113.4	12859.56
2063/64	109	-13.4	179.56	243	-119.4	14256.36
2064/65	138	15.6	243.36	347	-15.4	237.16
Total	612		517.2	1812		75267.2

$$\bar{X}_1 = \frac{\sum X_1}{n}$$

$$= \frac{612}{5}$$

$$\bar{X}_1 = 122.4$$

$$\bar{X}_2 = \frac{\sum X_2}{n}$$

$$= \frac{1812}{5}$$

$$\bar{X}_2 = 362.4$$

$$\text{Again, } X_1 = x_1 - \bar{X}_1$$

$$X_2 = x_2 - \bar{X}_2$$

$$Sp^2 = \frac{1}{n_1 + n_2} \left(\sum X_1^2 + \sum X_2^2 \right)$$

$$= \frac{1}{5 + 5} (517.2 + 75267.2)$$

$$Sp^2 = 9473.05$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$= \frac{122.4 - 362.4}{\sqrt{9473.05 \left(\frac{1}{5} + \frac{1}{5} \right)}}$$

$$t = 3.89$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level of significance = 5%

Calculated value of (t) = 3.89

Tabulated value t at 5% level of significance with 8 degrees of freedom for two tailed test is 2.306

Appendix:-31
Return on total deposit ratio

Banks	RBB			MBL		
Fiscal Years	x_1	X_1	X_1^2	x_2	X_2	X_2^2
2060/61	2.54	-0.552	0.304	1.69	0.402	0.1616
2061/62	3.07	-0.022	0.00048	1.52	0.232	0.0538
2062/63	3.44	0.348	0.121	1.69	0.402	0.1616
2063/64	3.36	0.268	0.171	0.78	-0.508	0.258
2064/65	3.05	-0.042	0.00176	0.76	-0.528	0.2789
Total	15.46		0.498	6.44		0.9139

$$\bar{X}_1 = \frac{\sum X_1}{n} = \frac{15.46}{5}$$

$$\bar{X}_1 = 3.092$$

$$\bar{X}_2 = \frac{\sum X_2}{n} = \frac{6.44}{5}$$

$$\bar{X}_2 = 1.228$$

Again, $\sum X_1 = \sum x_1 - n \bar{X}_1$

$\sum X_2 = \sum x_2 - n \bar{X}_2$

$$Sp^2 = \frac{1}{n_1 + n_2} \left(\sum X_1^2 + \sum X_2^2 \right)$$

$$= \frac{1}{5 + 5} (0.498 + 0.9139)$$

$$Sp^2 = 0.1764$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{Sp^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$= \frac{3.092 - 1.228}{\sqrt{0.1764 \frac{1}{5} \Gamma \frac{1}{5}}}$$

$$t = 6.7896$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level of significance = 5%

Calculated value of (t) = 6.7896

Tabulated value t at 5% level of significance with 8 degrees of freedom for two tailed test is 6.7896