A CASE STUDY OF FINANCIAL PERFORMANCE OF MACHHAPUCHHRE BANK LIMITED

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RECOMMENDATION

This is to certify that the thesis:

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Entitled:

A CASE STUDY OF FINANCIAL PERFORMANCE OF MACHHAPUCHHRE BANK LIMITED

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

Mr. Jagat Timilsina	Prof. Dr. Bal Krishna Shrestha	Prof. Dr. Bal Krishna Shrestha
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VIVA -VOCE SHEET

We have conducted the viva-voce examination of the thesis

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And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for Master's Degree in Business Studies (M.B.S.).

<u>Viva-Voce Committee</u>

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DECLARATION

I, hereby declare that the present study entitled **"A Case Study of Financial Performance of Machhapuchhre Bank Limited"** submitted to Office of the Dean, Tribhuvan University, is based on my original research work. It has prepared in the form of Partial fulfillment of the requirements for the Master of Business Studies (MBS) under the supervision and guidance of Mr.Jagat Timilsina, Central Department of Management, University Campus, Tribhuvan University, Kirtipur, Kathmandu.

……………………

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Researcher
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Kathamandu Rajiv Chaudhary

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ABBREVIATIONS

AD	Anno Domini
ATM	Automatic Teller Machine
B.S.	Bikram Sambat
C.V.	Coefficient of Variation
CA	Current Assets
CDM	Central Department of Management
CEO	Chief Executive Officer
CL	Current Liabilities
d.f.	Degree of Freedom
EBIT	Earning Before Interest and Taxes
et al.	and others
Fy	Fiscal Year
ICR	Interest Coverage Ratio
i.e.	that is
Ltd.	Limited
MBL	Machhapuchhre Bank Ltd.
No.	Number
NPAT	Net Profit After Tax
NRB	Nepal Rastra Bank
PE	Probable Error
Pvt.	Private Limited
r	Correlation Coefficient
r^2	Coefficient of Determination
S.D.	Standard Deviation
TU	Tribhuvan University

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Nepalese economy is different in its character from the regional economies. Poverty, less developed geographical situation, technological backwardness, landlockedness and dominated by two large economies etc are the main features of Nepalese economy. Most of the population of the country is in the rural areas, where there is no access of banking facilities. Due to lack of awareness and guidance to the poor, the poor are still in severe condition at many places. From the beginning of the 1970s same programs have been introduced focusing on rural and poverty stricken areas people. But these programs did not achieve significant results in the area of the poverty reduction. The population below the poverty line is still 25.4% by the end of the Three Year Interim Plan *(www.npc.org.np).*

Nepal has short history of banking sector as compared to other developed country in the world. Bank is the lifeline of a nation and its people. In regard of commercial banks they are internal parts of the economy in all countries. Outside the commercial banking realm, there are several financial institution that affects financial operation in a country. The place of commercial banks in financial system is more significant to play increasingly dynamic and vital role in the economy of the least developed likes ours, which provides economic and financial intermediation in the economy *(NRB, 2009).*

Speaking of priority to the establishment of Nepal Bank limited, there was no organized financial institution in Nepal. During the Primeministership of Ranodip Singh around 1877 AD a number of economic and financial reforms were introduced. The establishment of the Teejarath Adda was the outcome of that reform. Adda may be regarded as the father of modern banking institution and for quite a long time intended a good service to government servant as well as to the general public. However, the installation of Kausi Tosha Khana as a banking agency during the regime of king Prithivi Nayaran Shah could also claim to be regarded as the first step towards initiating banking development in Nepal. The inception of Nepal Bank Limited in 1937 was a landmark in the field of banking and financial sector in Nepal. It was established under special banking act 1936 having elementary function of commercial bank a semi-government organization. The Central Bank named as Nepal Rastra Bank which was established in 26th April 1955 with the objective of supervising, protection and direction. The function of commercial banking activities by the government named as Rastriya Banijya Bank was established in 1966. Later on large number of commercial banks have been come into operation till date *(Chaudhary, 2066).*

Government involvement in business, trade and transit was indispensable and the end of the 18th century through few sole trading were also in existence during that pursued Adam Smith through his popular Wealth of National advocated minimum government intervention in business in 1776 AD through his first treatise on economic development. He suggested government to develop adequate infrastructure to promote the business rather actively participate in it. Major economic in the world followed Smith fill they approached great depression in 1929 AD. The year 1929-30 proved smith theory’s of invisible hand’s to be unsuccessful and left the growing economic of the world at crossed. To overcome the sudden and unexpected disaster in the economy, Keyn’s theory of multiplier came which redefined the role of government and suggested it to invest a lot in business to mitigate the problems of unemployment and scarcity of affective demand in the market. Thus adoption of Keynesian theory once again the world economy moved towards mixed economy. The USSR started to use the concept of planned economic development from the same time *(Chaudhary, 2066).*

During the 1970’s, the economic development come to be redefined in terms of reducing the rate of poverty and unemployment. In order to boost up the economy of any country both public and private firm most play vital role. Concept of public enterprise was emerged in the USA during the regime of Roosevelt through his view deal although other countries is also followed this concept that public enterprise couldn't run smoothly while arriving in 70's decade *(Chaudhary, 2066).*

Their productivity decline and ultimately they resulted in heavy loss. The oil price hike of 1973 forced even developed countries to flash back there economic structure. This wave of privatization slowly speeded up all over the world. Ending year 1980's and beginning of 90's are characterized by the political change. Germany unified USSR split up and changed its socialist pattern of economy. Centralized economy of china slightly directed towards liberalization in 1990's led to global economy *(Chaudhary, 2066).*

Developed countries have opened their market not only scare raw material from developing countries but also finished good with economic quality. Economic development in Nepal is really started only after Rana Regime. In the late period of Rana Regime some positive attempts were made .as a result dog perished for in existent in 1935AD, Biratnagar Jute Mill in 1936AD and Raghupati Jute Mill in 1946AD. Before the break of Second World War a twenty-year plan was announced and national planning committee was set up in 1949AD *(Chaudhary, 2066).*

Thus the present study focused on the comparative financial performance analysis of Machhapuchhre Bank Limited. For this purpose an evaluation of position of the Bank with respect to liquidity, leverage, capital adequacy, turnover and profitability and the relationship between various variable are made. This study assumes the hypothesis that the performance of sampled banks does not differ significantly *(MBL, 2067/68).*

1.1.1 Commercial Banking and Activities

1.1.1.1 Beginning of the Banks in World

In the past bank used just to accept deposit from the savers of money and give loans to the user of money. Savers of money are those units whose earning exceeds expenditure on real assets (land, building, cloth, food etc) and users of money are these units whose expenditure on real assets exceeds their earnings. In such a situation deficit units sell their security/IOUs (I OWE YOU) to surplus units. These securities are financial assets. If entire income of units matches with investment on real assets no financial are created. The evolution of banking can be traced back to the era, when the use of metallic coins as the media of exchange of good and service began storage of metallic coins was a serious problem for the common people. Because of the danger of thief and robbery people started leaving gold and silver and metallic coins in the custody of some reputed person a wealthy merchant or a moneychanger. The custodian had strongbox and other means of safe keeping. He offered this service as favor for his friend or made a charge for it. The depositor had to go personally to custodian for the withdrawal of his money. But this practice was found to be inconvenient *(Khadka and Singh, 2067/68).*

How did the use of word Bancus become popular? The origin of Bank is traced to Latin word Bancus which means a bench. European money lender and money changers used to transit their business at bench at benches or tables. They followed the practice of receiving gold and other metals as deposit and issuing receipts. The bench or table used by the trader in money was the symbol of the business of banking or dealing in money. The success of failure in trading was associated with his bench when a banker railed his bench used to be destroyed by the people *(Khadka and Singh, 2067/68).*

1.1.1.2 Beginning and Growth of Banks in Nepal.

The growth of banking in Nepal is not so long in comparison with other developing or developed country. The institutional development in banking system of Nepal is far behind Nepal had to wait for long time to come to the present banking position. The stepwise development of banking in Nepal can be narrated as follows: *(NRB, 2009):*

Nepal Bank Ltd.

Nepal Bank Ltd (1994,30th Kartik) and was established under the Nepal bank act 1994BS. Its initial authorized capital was 10 million rupees and issued capital was 25 lakh and paid up capital was 8 lakh 42 thousand.

Nepal Rastra Bank

The Nepal Rastra Bank act 2012 Nepal Rastra Bank was established in 2013 BS, Baishskh 14th but this act has been replaced and the Nepal Rastra Bank act 2058 is coming very soon.

Rastriya Banijya Bank

Rastriya Banijya Bank was another important Bank established in Nepal. The bank was established in the government sector in 2002BS. After connection the commercial bank act 2031 both the Banijya Bank act 2020 and the Rastriya Banijya Bank act 2021 were replaced.

Agriculture Development Bank

Under the Agriculture Development Bank act 2024 the Agriculture Development Bank (ADB) was established on 2024 7th Magh. Prior to the establishment of ADB cooperative Bank was established to meet requirement of found in the agriculture sector. But later on this cooperative Bank was converted into Agriculture Development Bank.

The Modern Phase of Banking Development

The process of the Development of Banking system in Nepal was not satisfied up to 2040. Not a single Bank was opened during this period except expanding the branches of the banks, which were established in the earlier period. Nepal was observing the event that taking places in the world also.

Nepal was deeply studying and searching what sorts of programs, policies, law and regulation should be brought into the practice. The country can't change it status by using only its own capital in the country without importing the new technology from foreign country. Accordingly, law, and policy have been enacted by the state to encourage the foreign investment on banking sector. As a result of it the Development of the Banking system started in Nepal. The competition began to grow the banks began to offer their valuable service to the people through new technology. This was the great significant event. Thus some Banks were opened on the joint investment basis brief accounts of such banks are as follows:

S.N.	Names	Head Office
1	Nepal Bank Limited	Kathmandu
2	Rastriya Banijya Bank	Kathmandu
3	Agriculture Development Bank Ltd.	Kathmandu
4	NABIL Bank Limited	Kathmandu
5	Nepal Investment Bank Limited	Kathmandu
6	Standard Chartered Bank Nepal Limited.	Kathmandu
7	Himalayan Bank Limited	Kathmandu
8	Nepal SBI Bank Limited	Kathmandu
9	Nepal Bangladesh Bank Limited	Kathmandu
10	Everest Bank Limited	Kathmandu
11	Bank of Kathmandu Limited	Kathmandu
12	Nepal Credit and Commerce Bank Limited	Siddharthanagar, Rupendehi
13	Lumbini Bank Limited	Narayangadh, Chitwan
14	Nepal Industrial & Commercial Bank Limited	Biaratnagar, Morang
15	Machhapuchchhre Bank Limited	Pokhara, Kaski

16	Kumari Bank Limited	Kathmandu
17	Laxmi Bank Limited	Birgunj, Parsa
18	Siddhartha Bank Limited	Kathmandu
19	Global Bank Ltd.	Birgunj, Parsa
20	Citizens Bank International Ltd.	Kathmandu
21	Prime Bank Ltd	Kathmandu
22	Sunrise Bank Ltd.	Kathmandu
23	Bank of Asia Nepal Ltd.	Kathmandu
24	Development Credit Bank Ltd.	Kamaladi, Kathmandu
25	NMB Bank Ltd.	Babarmahal, Kathmandu
26	KIST Bank Ltd.	Kathmandu
27	Janata Bank Ltd.	Kathmandu
28	Mega Bank Ltd.	Kathmandu
29	Nepal Trust and Commerz Bank Ltd.	Kathmandu
30	Civil Bank Limited	Kathmandu
31	Century Bank Ltd.	Kathmandu
32	Sanima Bank Ltd.	Kathmandu

Source**:** *NRB, Mid-July, 2011*.

Hence, there are so many commercial banks in operation in Nepal till date operating with their main objectives of carrying out activities under the Commercial Bank Act 2031, Nepal Rastra Bank Act 2058 the Company Act 2053.

After the restoration of democracy in Nepal, there is tremendous development in banking sector. Different types of banking activities are being operated. It has played positive role in economic activities. Till now apart form commercial banks have five rural development banks are in operation in Nepal. They are as follows.

Eastern Rural Development Bank Ltd.

Far Western Rural Development Bank Ltd.

Western Rural Development Bank Ltd.

Mid Western Rural Development Bank Ltd.

Middle Rural Development Bank Ltd.

The main objectives of these Bank is to uplift the living standard of the people by without security group basis to operate an income generating business these bank established according to the Rural Banks system by the government of Bangladesh with the objectives of providing loan to the poor people who are derived from the institutional loan facilities due to the lack of reasonable security and guarantee. The Rural Development Banks have their own fundamental concept every man has own characteristics and skill. The Rural development Banks have a concept, it can bring the poor mass of people in the level of respectable living standard providing the opportunity to the rented people and oppressed to increase the income and create the productive poverty.

Before the introduction of Nepal Development Bank Act 2052 the Nepal Industrial Development Corporation and Agricultural Development Bank were established but after this Act various Development Banks Have been opened in the different place of Nepal. They are performing their function according their objectives. These Banks have given benefits to their owners and they are also helping, the people and the nation in the process of economic development directly of indirectly. It is clear that the establishment of the different mentioned Banks is also the development of banking field in Nepal

1.1.1.3 Role of Commercial Banks in Economic Development

The main objectives of commercial bank are to mobilize idle resources for productive use after collection them from scattered resources. The essence of commercial banking is the financial inter mediation between the ultimate savers and borrowers. In other words main functions of bank is to act as an intermediary between the surplus and deficit units in the economy. A bank as any other firm is in business to make profit for its shareholders it draws its profit mainly from the different of interest on deposits and lending. Commercial banks have become in hearts of financial system as they hold the deposits of millions of people, government and business units, and make fund available through their lending and investing activities of individual business firms and government. So, the commercial banks are the most important institutions for capita formation.

CV Chandler has view regarding economic development of country as “the low income underdeveloped countries are not only ones that have recently awakened to the possibility of growth and low attach unprecedented important to promoting it. The highest income most highly developed countries in the world are also giving unprecedented attention to these objectives.”

“Economic development is a process whereby an economy’s real income increases over a long period of time.

In the history of Nepal the important of bank has been accepted many years also. In the beginning 1994 B.S Nepal Bank limited was established in 2013 Nepal Rastra Bank in 2021 B.S commercial Bank act was ruled out in 2031 B.S and new Act 2031 was ruled which helped to open the private commercial banks. The importance of banks in economic life is greater Nepal, is a small and poor country it has sufficient natural resources. To use those resources, capital is most important the commercial bank should grant long term loan in the industrial sector. By providing loan in industry the productive capacity of industry can be increased. It thus reduces import of foreign goods and increases exports. Again due to development of industry, goods can be available in cheap price. Similarly the loan advanced to the agricultural sector can enhance the agriculture production thus it helps to increase the level of income of the majority of the Nepalese people. Therefore, Nepal needs commercials banks to accumulate the saving and to invest them. Banks provides facilities to their costumers by other services also, such as, remittance of fund, purchase and sale of bills, supplying of timely credit and other market information. Some of the important roles of the commercials bank are mentioned below.

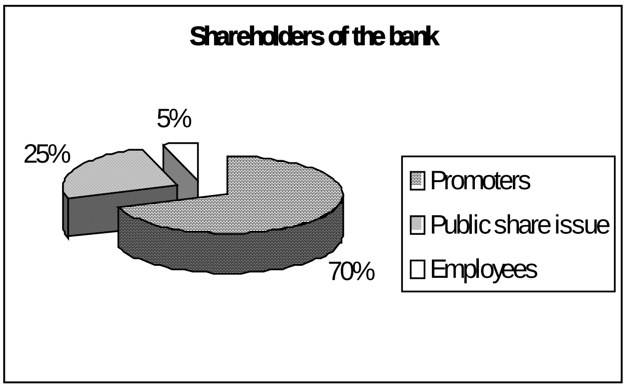
1. To collect the unutilized funds from the different parts of the country and to mobilize this capital.

2. Commercial bank is important of the country for the further development of the country so for this commercial banks are established to provide loan by taking the different kinds of collaterals
3. To facilitate the citizen of the country and outside the country for sending and receiving the money form different places easily and reliably.
4. For the promotion of businessman bank provides letter of credit facilities.
5. For the comfort of the traveler banks also provide the travelers cheque facilities etc.

These services help to run the business and other economic activities rapidly as well as smoothly. Thus, these services of commercial banks also affect the development process of a country (Khadka and Singh, 2067/68).

1.1.1.4 Profile of Machhapuchchhre Bank Limited

Machhapuchchhre bank, the first commercial bank in the western part of the kingdom has been established by Nepalese promoters and begin its operations on 17th Aswan 2057 B.S. MBL fully computerized bank. It has the most sophisticated GLOBUS banking software with modern banking facilities like tale banking, internet banking, mobile banking, ATM facilities and many more. The branches are interlinked by centralized database system and enables the bank to provide anywhere facilities to its valuated customer. At the time of establishment of MBL with total authorized capital 240 million and issued and paid up capital Rs. 84 million. At the present of MBL with authorized capital



1000 million and issued and paid up capital 550 million. (MBL bank, annual reports 2067/68). The shareholders of the banks are as follows.

a. Promoters, 70%sharesholders
b. Public share issue, 25% shareholders
c. Employees, 5% shareholders

The success of business largely depends on management quality. Generally the management body of any business organization has two fold major objectives, first to manage the firm well and second, to maximize profit and enhance shareholder's wealth.

Machhapuchchhre bank limited is managed by chief executive officer (CEO) under the supervision and control of board of directors. Board of directors appoint the chief executive officer. The board of directors of Machhapuchchhre bank limited is constituted by the body of seven (7) member altogether.

The management under the board is entrusted to nominate CEO under which corporate office at various branch operations. Currently there are 39 numbers of branches offices of the bank *(Annual Report of MBL, 2067/68).*

1.2 Statement of the Problem

The number of joint venture banks are being increased in response to the economic liberalization policies of the government besides joint venture commercial banks are also being registered by the Nepalese promoters.

Other most of the business organization along with banks are facing different problems due to the lack of political stability and unrest. Bank has been facing the considerable pressure to lower the lending rates, which affects the profitability adversely. The problem of the study refers the study of strength and weakness of the Machhapuchhre Bank Limited. Although the study is not compressive as expected, attempts are made to sort out the answer for the following question.

1. How far the Machhapuchhre Bank Limited is able to maintain its sound financial position?
2. What is financial growth condition of this Machhapuchhre Bank Limited?
3. Is there correlation between financial variables?

1.3 Objectives of the Study

The basic objective of the study is to analyze the financial performance of Machhapuchhre Bank Limited for the past five years and also find out the causes of the high and low performance. It is the study about the financial performance of this bank by studying the detail data. It tries to evaluate the overall financial performance of Machhapuchhre Bank Limited by using various tools such as statistical tools and financial tools.

The main objectives of the study are as follows.

- To asses and analysis the financial performance of Machhapuchhre Bank Ltd.
- To examine the growth condition of this Machhapuchhre Bank Limited.
- To explore the trend of the financial performance for coming five years.
- To explore the correlation coefficient between financial variable.

1.4 Significance of the Study

The study evaluates the financial performance of Machhapuchhre Bank Limited. The study highlights financial performance by using ratio analysis, which helps the concerned companies to formulate strategies to face the increasing competition and to achieve the targeted objectives.

Similar the aim of the study is to identify the financial problems. It provides a useful feedback, remedial actions, and good financial planning and takes appropriate decision to the policy-makers to the selected bank, government and also the other concerned field.

Likewise the research will provide required information to the persons and parties such as general readers, decision makers, brokers, traders, stockholder financial agencies, businessman and general public and also useful for teacher and students of the particular subjects and the other those having interested on financial management.

1.5 Limitations of the Study

Following are the limitations of the study made:

- The study covers the analysis of only five years (Fy 2063/64 to Fy 2067/68) data.
- This study is limited to only Machhapuchhre Bank Limited.
- This study is mostly based on the secondary data.
- This study does not examine the factor affecting the financial performance in different sectors of because of limited variables.

1.6 Organization of the Study

This research has been divided into five parts which are as follows.

CHAPTER I: First part deals and includes the background of the study, introduction of the study, focus of the study, statement of the problems, objectives of the study, significant of the study, limitation of the study and plans of the study.

CHAPTER II: Second chapter includes review to the literature, which was obtained during the library research, theoretical review, and review of related studies.

CHAPTER III: Chapter third contents research design, population and sample, sources of data, data collection and processing techniques analysis of tools.

CHAPTER IV: This part of the study includes a presentation and analysis of data.

CHAPTER V: Last part of the study deals together with summary of finding conclusion and recommendation.

At the end of the chapters bibliography and appendices are included.

CHAPTER II

REVIEW OF LITERATURE

Review of literature comprises upon the existing literature and research related to the present study with a view to find out what had already been studied. This chapter has been divided into two parts:

a. Conceptual Framework

b. Review of Related Studies

2.1 Conceptual Framework

The modern financial evaluation has greatly affected the role and importance of financial performance. Nowadays, finance is best characterized as ever changing with new ideas and techniques. Only efficient manager of the company can achieve the set up goals. If a bank does not maintain adequate equity capital, it makes the bank more risky. If a bank has inadequate equity capital, it must be used more debt that has high fixed cost. So any firm must have adequate equity capital in their capital structure.

The main objectives of the banks are to collect deposits as much as possible from the customers and to mobilize into the most profitable sector. If a bank fails to utilize it’s collected resources than it can not generate revenue. Resource mobilization management of bank includes resource collection, investment portfolio, loans and advances, working capital, fixed assets management etc. It measures the extent to which bank is successful to utilize its resources. To measure the bank performance in many aspects, we should analyze its financial indicator with the help of financial statements.

2.1.1 Financial Performance

Analysis of financial performance is a crucial part of financial decision making process of business enterprise. Poor financial management affects adversely on liquidity, turnover and profitability. It is required to measure the financial position of the enterprise periodically in order to ensure smooth function of an enterprise. Financial analysis assists in identifying the major strengths and weakness of a business enterprise. It indicates whether a firm has enough funds to meet the obligation, a reasonable accounts receivable collection period, an efficient inventory management policy, sufficient plant property and equipment and adequate capital structure, all of which are necessary if a firm is to achieve the goal of maximizing shareholder's wealth. Financial analysis can also be used to assess a firm's viability as an ongoing enterprise and to determine whether a satisfactory return on investment is being earned for the risks taken.

“A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm’s overall financial health over given period of time and can be used as a general to compare similar firms across the same industry or to compare industries or sectors in aggregation. Financial performance analysis focus on financial statements and the significant relationship that exist among the various contained in this regard. “Analyzing financial performance is a process of evaluating financial statements to obtain a better understanding of a firm’s positions and performance” (*I.M.Pandey; 1992).*

“Financial performance means measuring the result of a firm’s policies and operations in monetary terms. These results are reflected in the firm’s return on investment, return on assets value added, etc. there are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operation operating income or cash flow from operation can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper in to financial statement and seek out margin growth rates or any declining debt” *(I.M.Pandey; 1992).*

Below are seven ways to measure the financial performance of a business: *(www.businessdictionery.com/Financial performance)*

- © **Profit**

The creation or consumption of wealth over a certain period of time is profit /loss. Other words for profit are earning, net income, and the bottom line. A full measurement of profit must include owner's compensation. More profit is good.

- © **Cash flow**

The difference between the amounts of cash you end up with at the end of a certain period of time versus how much you started with. More positive cash flow is good.

- © **Balance sheet strength**

Generally speaking, company's assets relative to its liabilities at a specific point in time indicate the balance sheet strength. More assets (what the company owns) and fewer liabilities (what a company owes) result is stronger balance sheet. A stronger balance sheet is good.

- © **Risk**

Business is risky, we might not get paid by a customer, and we might default on a debt. Our company might get sued, etc. risk is sometimes defined as probability time's consequence. The likely hood of something multiplied by the damage it would case. To earn the same dollar of profit with less risk is good or to earn more profit with the same amount of risk is good. Hence, there is a risk /reward relationship.

- © **Owner's Time invested**

How many hours per day, week month, and a year do you put in to business? To earn the same dollar of profit while investing less of your time is good.

- © **Business owner's Net Worth**

Financially, the purpose of a business is to create wealth for its owners. Does the owner have substantial investments in retirement accounts, real estate, and other holdings? Has the owner's net worth increased a result of money she /he has taken out of the business? Look to the owner's personal balance sheet for a full understanding of a small business financial performance.

© **Valuation**

What is the fair market value of your business? Is it rising or falling? In addition to providing current income, business creates wealth for their owners by having a resale value when it comes time for you to execute your exit strategy, a higher business valuation is better. This last way to measure financial health is outside the company realm altogether.

The steps of analysis are as follows

1. Selection of relevant to the decision.
2. Arrangement of the selected information to highlight the significant relationship of the financial yardsticks.
3. Interpretation and drawing of inferences and conclusion.

Ratio analysis is the systematic way of financial indicator, which can achieve the information of the firm's strength and weakness as its historical performance, and current financial condition can be determined. After calculation various ratios, we need to compare with the certain standard and draw out the conclusion of the result

"Financial analysis is the process of determining financial strength and weakness of a company by establishing strategic relationship between the component of the balance sheet and profit and loss statement and other operative data" *(I.M.Pandey; 1999*).

"It is the process of determining the significant operating and financial statement. The goal of such analysis is to determine the efficient and performance of the firm's management as reflected in the financial records and reports" *(J.J.Hampton; 1998).*

2.1.2 Financial Statement Analysis

Financial statement published by the listed company in the stock exchange are collected and analyzed by Nepal Stock Exchange for the calculation of the financial performance of the concerned company.

Every business organization is established with the objective of earning the profit. Bank is also established with the same motives. Profit is necessary for the long term existence of the business. Every investor wants to invest their money in profitable area. Financial statement is the indicator of business ratio in terms of its strength and weaknesses and profitability. Therefore, the financial ratio analysis reflects the financial position of a firm; financial statement analysis is helpful to the decision maker for finding out favorable or unfavorable situation of a business concern.

“The main function of financial ratio analysis is the pointing out the strength and weaknesses of a business undertaking by regrouping and analysis the figures contains in financial statement by making composition of various components and by examining their content. This can be used by financial managers as the basis to plan future financial requirements by means of forecasting budgeting procedures” *(Weston and Copeland; 1992).*

“Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set of statement and study of trends of these factors as shown in a series of statements” *(Weston and Copeland; 1992).*

Financial Analysis identifies the financial strength and weakness of the firm with the help of basic financial statement. For this purpose a ratio helps the analysis to make qualify about the firm's financial performances.

“The financial statement provides a summarized view of the financial operation of the firm. Therefore, much can be learnt about a firm and careful examination of its financial statement as invaluable documents. The analysis of financial statement is thus important aid to financial analysis. He also mentioned that the ratio analysis is one of the major tools of financial statement analysis" *(I.M.Pandey; 1992).*

"Financial Analysis is the purpose of identifying the financial strength and weakness of the firm by properly establishing relationship between the balance sheet and profit and loss accounts” *(I.M.Pandey; 1995).*

"Ratio Analysis is the systematic use of ratio to interest the financial performance so that the strength and weakness of a firm as well as its historical performance and current financial condition can be obtained" *(Jain and Narang; 1993).*

"Ratio may also be judge in comparisons with those of similar firms in the same line of business and when appropriate with an industry average. from Empirical testing in the recent years, it appears that financial ratios can be used successfully to predict certain events, bankruptcy in particular. With this testing, financial ratio analysis has become more scientific and objectively than ever before" *(Van Horne; 1997).*

Financial Statement analysis and technique used by various group like creditors, shareholders, investors, management, government and so on. Financial statements reflect a firm overall performance as well as its future growth and solvency, analysis financial statements are crucial.

Financial analysis is a process of evaluating the relationship between components parts of financial statements to obtain a better understanding of a business concerns financial health. It can be undertake by different parties, but the nature of analysis will differ depending on the purpose of users. Financial statement analysis doesn't provide extract answer, but it informs about future expectation.

“Financial statement analysis involves a comparison of a firm’s ratio with that of other firms in the same line of business, which offers is identified by the firm’s industry classification. Generally, speaking the analysis is used to determine the firm’s financial position in order to identify its current strength and weakness and to suggest actions that might enable the firm to take advantage of its strength and correct its weakness” *(Weston and Copeland; 1996).*

“Financial ratio analysis is the process of identifying the financial strengths and weaknesses of the firm by property establishing relationship between the items of the balance sheet and the profit and loss account. Management of the firm can undertake it or by parties outside the firm” *(I.M.Pandey; 1997).*

Financial ratio analysis focused on the key figure contained in the financial statement and significant relationship between them. Management of the firm is generally interested in every aspect of the financial ratio analysis, which is responsible for the overall efficient and effective utilization of the available resources and financial position of the firm.

By analyzing the financial statement, every firm can determine their financial soundness in terms of profitability, interest payment ability, debt maturity dividend policy, capital structure and so on.

“Financial ratio analysis is used primarily to gain insight into operating financial problems confirming the firms, with respect to this problem, we must be careful to distinguish between the causes of problem and symptom of it” *(J.J.Hampton; 1998).*

“It is the process of determining the significant of operating and financial statement. The goal of such analysis is to determining the efficiency and ratio of the firm’s management. As reflected in the financial records and reports” *(J.J.Hampton; 1998).*

“Financial ratio analysis is to analyze the achieved statement to see, if the results meet the objectives of the firm, to identify problem. If any, in the past or present and or likely to be in the future and to provide recommendation to solve the problem" *(Vanhorn; 2000).*

"Financial ratio analysis is process of identifying the financial strength and weakness of the firm by establishing relationship between the items of the balance sheet, which represents analysis snapshot of the firm's financial position analysis at analysis moment in the time and text, income statement, that depots analysis summary of the firm's profitability overtime" *(Vanhorn; 2000).*

"Thus, the analysis of financial statement is an important aid to financial ratio analysis. It is helpful in assessing the financial position and profitability of concerned business organization" *(I.M.Pandey; 1979).*

"For the financial analysis of any firm, the vertical and horizontal analysis would be done. The vertical analysis consists of financial balance sheet. Profit and loss account of certain period of time only which is known as static analysis. And the horizontal analysis consist of a series of statement relating to the number of years are reviewed and analyzed. It is also known as dynamic analysis that measure the changes of the position trend of business over the number of years" *(Thapa; 2003)*. Here, horizontal study has been done for the purpose of finding out the key financial indicators of the EBL and HBL over the period of fiscal year 2004/05 to 2008/09.

To find and evaluate the financial ratio of the firm, ratio analysis is taken as an effective tool. Ratio analysis is a way of establishing the relationship between items which are expressed as percentage, fraction or proportion of numbers. Ratio analysis enables us to summarize the large number of quantities date and analysis it in a simple way. "Financial ratio helps us to find out the symptoms of the operational and financial problem of a corporation which can be ascertained by examining the behavior of these ratios" *(Vanhorn; 2000)*.

“Ratio analysis is the systematic use of financial information of the firm’s strength and weakness as its historical ratio and current financial condition can be determined” *(Weston and Brigham; 1987).*

Ratio analysis is a powerful tool of financial ratio analysis, which helps in identifying strength and weakness of business concerns. It is an important way to present the meaningful relationship between components of financial statement. So, ratio analysis is a major tool which can be used to interpret and evaluate the financial statement.

It is thus an attempt to direct the financial statements into their components on the basis of purpose in hand and establish relationship as between these components and totals of these items on the other. Among with this a study of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization.

2.1.3 Balance Sheet

Balance sheet is the most significant financial statement. It indicates the financial condition or the state of affairs of a business at a particular moment of time. Balance sheet is the base for the analysis of financial performance of any company. Balance sheet contains information about resources and obligations of a firm entity and about its owners' equity. Balance sheet provides a snapshot of the financial position of the firm at the closed of fiscal year.

As we know, Balance sheet is very important tools for the analysis of financial performance. The functions severed by Balance sheet can be pointed out as follows:

- It gives concise summary of the firm's resource obligations.
- It is a measure of the firm's liquidity.
- It is a measure of the firm's solvency.

2.1.4 Profit and Loss Account

Balance sheet plays very significant role for the banker and other creditors because it indicates the firm's financial Solvency and liquidity, where as profit and loss account reflect the earning capacity and potentiality of the firm. The profit and loss account is a scoreboard of the firm's performance during a period. Since the profit and loss account reflects the results of operations for a period, it is a flow statement. In contrast, balance sheet is a stock or status statement as it shows assets, liability and owners' equity at a point of time.

Profit and Loss account presents the summary of revenues and expenses and net income of a firm. It servers as a measure of the firm's profitability. The functions of profit and loss account can be described as follows:

a. It gives a concise summary of the firm's revenue and expenses during a period.
b. It measures the firm's profitability.
c. It communicates information regarding the results of the firm's activities to owners and other.

In conclusion, financial information is required for a financial planning, analysis and decision-making. The user of financial information includes owner's managers, employees, customers, suppliers and society.

The financial statements like Balance Sheet and P/L account are the basic instruments for the analysis of financial performance.

2.1.5 Income Statement

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

2.1.6 Statement of Retained Earning

This statement explains about the Company's position of earnings to be paid as dividend and the portion of profit to be retained for future uses. It also explains how profit, dividend and other transaction affect the retained earnings and share-holders' equity.

Financial analysis is done on the basis of financial statement of the concerned company. The objective of financial analysis can be described as:

- To get the entire information that can be used at the time of decision making.
- To judge overall performance and management effectiveness.
- To identify the deficiencies and weaknesses.
- To take corrective action in time to check such deficiencies and improve the performance.
- To evaluate the possible implications of alternative course of actions.
- To get in dept information of possibilities of brining changes worthwhile.

2.1.7 Tools of Financial Statement

2.1.7.1 Ratio Analysis

The following are the some important financial ratios to analyze the financial performance of selected bank:

(i) Liquidity Ratio

A liquidity ratio measures the ability of the firm to meet its current obligations. In fact, analysis of liquidity need the preparation of cash budgets and cash and funds flow statements; but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provide a quick measure of liquidity a firm should ensure that it doesn't suffer from lack of liquidity, and also that it doesn't have excess liquidity. The failure of company to meet its obligation due to lack of sufficient liquidity, will result in poor creditworthiness, loss of creditors' confidence, or even in legal tangles resulting in the closure of the company. A very high degree of liquidity is also bad; idle assets. Therefore, it is necessary to strike a proper balance between high liquidity and lack of liquidity.

(ii) Leverage Ratio

The short-term creditors, like bankers and suppliers of raw materials, are more concern with the firm's debt-paying ability. On the other hand, long-term creditors, like debenture holders, financial institutions etc., are more concerned with the firm's long-term financial strength. In fact, a firm should have a strong short as well as long-term financial position. To judge the long-term financial position of the firm, financial leverage, or capital structure ratios are calculated. These ratios indicate mix of debt and owners' equity in financing the firm's assets. The process of magnifying the shareholders' return through the use of debt is called financial leverage or financial gearing or trading on equity.

(iii) Activity Ratio

Activity ratios are concerned with the measuring of efficiency in assets management. This ratios are employed to evaluate the efficiency with the bank manages and utilizes funds. These ratios are also called turnover ratios because they indicate the speed with which the assets are being converted or turned over into sales.

(iv) Profitability Ratio

A company should earn profits to survive and grow over a long period of time. Profit is the difference between revenues and expenses over a period of time. Profit is the ultimate output of the company, and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuously evaluate the efficiency of the company in terms of the profits. The profitability ratios are calculated to measure the operating efficiency of company. Besides management of the company, creditors and owners are also interested in the probability of the firm. Creditors want to get interest and repayment of principal regularly only when the company earns enough profits.

(v) Credit Ratio

Credit ratios are calculated in order to measure the credit position of the banks. It shows what portion of collected deposits are used to make credit and remain cash and bank balances to make immediate payments.

2.1.7.2 Funds Flow Statement

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

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

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

2.2 Review of Related Studies

2.2.1 Review of Journals and Articles

N.P.Poudel (2053 B.S.), has published an article on *"Financial Statement Analysis: An Approach to Evaluate Bank's Performance"* explained that the 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 accounts form 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/advances and investments and paid on deposits 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 statements of a bank need relevant, reliable and comparable information, which assist 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 the bank's financial statement has been expressly laid down in the concerned act. Commercial Bank Act 2031 B.S. requires the audited balance sheet and profit and loss account to be published in the leading newspaper for the information of general public.

B.Pendelton (2061 B.S.), has published an article on *"Nepal's Financial Reform: A Tardy Pace of Deliberate Race."* He is trying to explore the need and relevancy of financial reform program in Nepal. In this article he suggest that 'HMG/N' has way to go for complete financial reform, restore financial soundness to deserving public much work is left to do; however, the government had set to 'Road Map' to complete this phase and continues to improve the reform process, a process vision to sustain the economy for generations to come. It is important that the citizens of Nepal, particularly the media services, support this effort as well.

R.Upadhaya (2007), has published an article on "*Five years financial projection of Nepal Telecom.*" He highlighted Nepal Telecom have to investor modern technology in time and optimum utilization of the technology so as to guide for the high return on investment. Only investing on modern technology may not be sufficient to get the required return on investment its optimum utilization is must otherwise the investment in new technology cannot give the return. Investment in modern new technology may turn riskier for the company. He had analyze past five year financial data of NTC and tried to project the financial future of the company. He found that the operating profit of NTC is slightly increasing this is due to decreasing of operating expenses. Study shows

K.Mundul (2007), has published an article on "*Corporate Financial Sector: Restructuring.*" He mentioned that corporate and financial sector restructuring are two aspects of the same problem. The amount of debt and company can sustain – and on which lenders can expect reliable debt service - is determined by the unit's cashflow. Indeed, a company cannot sustain interest payments in excess of its cashflow (i.e. interest coverage < 1:1), let alone make any repayments on the principal. Hence, substantially higher ratios of interest coverage are most desirable. He concluded that the corporate debtors and financial institution creditors will naturally seek to minimize their losses from corporate restructuring. The government has a role to play in balancing a variety of conflict interest.

that NTC is successful to manage cost efficient. Return on assets is about 26 percent this means company is able earn 26 percent profit in terms of total assets. He projects the future five years financial performance of NTC by using regression analysis, judgmental approach. According to his projection growth rate on return will remain around 4.69 percent.

2.2.2 Review of Thesis

Prior to this study, the several researchers have found various studies regarding financial performance of commercial and joint venture banks. In this study, only relevant subject matters are reviewed which are as follows:-

Surendra Deoja (2001) has carried out a study entitled *A Comparative Study of the Financial Performance between Nepal SBI Bank Ltd. and Nepal Bangladesh Bank Ltd*. analyzed different ratio of NSBIBL and NBBL for the period of five years till fiscal year 2000. Here, in some cases the liquidity position of NBBL is higher where as in some cases the ratio of NSBIBL is higher. It concludes that liquidity position of these two banks is sound. NBBL has better utilization of resource in income generating activity than NSBIBL. They are on decreasing trends while interest earned to total assets and return or net worth ratio of NBBL is better than NSBIBL. It seems overall profitability position of NBBL is better than NSBIBL and both banks are highly leveraged."

A thesis conducted by **Jhalak Bahadur Oli** (2002) has carried out study entitled, *A comparative study of financial performance of HBL, NSBIBL and NBBL*. concludes that the liquidity position of two JVBs i.e. NSBIBL and NBBL are always above than non standard and HBL is always below than normal standard. Total debt with respect to shareholders fund and total assets are slightly higher for HBL than NSBIBL and NBBL. The researcher has found from the analysis that NBBL has been successfully utilized their total deposits in terms of extending loan and advances for profit generating purpose on compared to NSBIBL and HBL. But NSBIBL is also better than HBL. It has concluded that net profit to total assets ratio in case of HBL is found better performance by utilizing overall resources but the generated profit is found lower for the overall resources in three JVBs."

Keshab Raj Joshi (2003) has done a research study entitled, *"A Study on Financial Performance of Commercial Banks."* concludes that "Liquidity position of commercial banks is sound. Their debt to equity ratio is high which doubts on solvency. Debt to equity ratio of local commercial banks is higher than other joint venture banks. Assets utilization for earning purpose is 2/3 of the total assets. The main source of income for these banks is interest from loan and advance of overall profitability position, is better than others."

A study conducted by **Nabin Kishor Luitel** (2003) on, *"A Study on Financial Performance Analysis of Nepal Bank Limited"* reveals that, since NBL has not maintained a balanced ratio among its deposit liabilities during the second period with the first period, the bank seems to be unable to utilize its high cost resources in high yielding investment portfolio. During both the periods there are negative operating profit for two years however, the company enjoyed the net profit due to the non-operational activities from first period of both years. Hence, there is a demarcation between operational and non-operational activities of the bank and performance and result of the first period shows that the bank is more inclined towards non-operating activities. Furthermore, the liquidity position of the bank is also not satisfactory during both periods. It is even worse during the second period as various current ratios have fluctuated during these periods and it shows lack of specific policy of holding various types of current assets. Thus, it can be said that the financial position of the NBL is worse during the second period due to its inefficiency in risk management. Yet, the overall financial position of the bank is unsatisfactory during both periods.

Jitendra Man Joshi (2004), has conducted a study on entitled *"Financial Analysis of Nepalese Commercial Banks"* with the objectives of finding the comparative financial strengths and weakness of various commercial banks, return rate and expected return to the shareholders, systematic and unsystematic risk of the banks and providing recommendation on the basis if research findings, by using financial ratios, it is calculated that lending condition of banks are in decreasing trend. Banks in strong condition are holding good customers and discoursing low rated and less amounted loans. Instead of that, they are initiated towards remittance, bank guarantees and other commission generating activities, while other banks are showing aggressive and are spontaneously increasing loan loss provision. Deposits in the banks are also decreasing while some banks are holding enough funds. Its recommended for SCBNL was utilizing the maximum of the outsider's funds towards the credit sector because return on credit sector is higher than on investment sector. Loan loss provision of SCBNL is comparatively higher. It is recommended to control while sanctioning loan outflows. So, the bank should improve its credit management.

Mahindra Maharjan (2006) has performed a research work on *"A Study on Financial Performance of NABIL Bank Limited"* concluded that the liquidity position of the bank is good enough to meet the short-term obligations. The study shows that the bank is mobilizing its loan and advances adequately. The bank has better mobilization of its saving deposits in loans and advances adequately. The bank has better mobilization of its saving deposits in loan and advances for income generating purpose but it has not nicely mobilized its fixed deposits in loans and advances to generate the income. So it is suggested investing more in loan and advances a well as less in government securities efficiently for generating profit. Interest earned by the bank is inadequate in comparison to the assets. So it has drawn attention of the bank towards the sense of significant EBIT. Since the net profit of the bank in comparison to the total deposit is relatively low, it focused on earning operational profit wither by increasing their operational efficiency, or by decreasing their operational expenses as far as possible. The bank is also suggested to formulate and implement some sound and effective financial and non financial strategies to meet required level of profitability as well as the social responsibility.

Miss Sharmila Rajbhandari (2009), has conducted a research entitled *"A Comparative Study on Financial Performance of Nabil Bank Limited and Standard Chartered Bank Nepal Limited."* The main objective of her study was to analyze, examine and interpret the financial position of SCBNL and NABIL with the help of ratio analysis and other financial tools. In her study she had chosen only two commercial banks as sample i.e. SCBNL and NABIL.

Narendra Pandey (2010), has conducted a research entitled *"An Analysis of Key Financial Ratio of Commercial Banks in Nepal: A Special Reference with Himalayan Bank Limited and Everest Bank Limited."* The main objective of his study was to find out exact financial ratio of these two commercial banks over the periods of time. Again the basic objective of this study was to examine the overall financial ratio of the selected commercial bank. He had taken Everest Bank Limited and Himalayan Bank Limited as sample. Mainly he had conducted this research based on secondary data available in both banks' annual reports and manuals. He had presented data using both financial and statistical tools in his study.

His main findings were that current ratio of both of the banks showed consistent trend. Both the banks could not maintain the conventional standard of 2:1. EBL has higher average ratio which implies that EBL is more capable to meet short term obligation in comparison to HBL. Normally, the ratio remained consistent in HBL but the ratio of EBL is fluctuated more which is reflected by higher standard deviation. Both the selected banks were successful to mobilize their fund as loan and advance with respect to total assets. However, EBL has higher mean ratio than HBL over the study period which implies that EBL can be taken as better investor than HBL as concerned to consistency, both the sample banks able to maintain consistency. According to the analysis of assets management ratio, both the banks were successful in on-balance sheet utilization. Out of these two banks, EBL is found to be best in mobilizing the assets to the profitable sector.

Similarly, analysis of leverage ratio, HBL had used more debt fund than that of EBL. It means HBL is more levered than EBL. Capital adequacy ratio was taken into consideration. EBL was in safer position. Average value of return on assets ratio is higher in EBL than HBL. HBL had higher mean value of return on shareholder's equity than EBL, Ratio of HBL was fluctuating more than EBL as shown by C.V. EBL had able to earn more profit than HBL by mobilizing its total assets into different profitable sectors. So, EBL had found better profitability than HBL. By analyzing the valuation ratio of selected bank, market value of EBL was higher position than HBL. Total deposits and loan and advances of both the bank were almost positively perfect correlated. Correlation coefficient between total deposit and total investment of both the banks were more than 0.5 with positive sign, which means investment will increase proportionally with the increment in total deposit. The trend analysis of EBL was better than that of HBL in all the cases. The growth rate of total deposit, total loan and advance, total investment and total net profit of EBL is higher than that of HBL.

Research Gap

Large numbers of research are available bearing the same or similar topic. However, the researcher will sustain gap by covering the relevant data and information from the year 2063/64 to 2067/68. Moreover, the researcher has selected only one commercial bank of Nepal as sample banks i.e. Machhapuchhre Bank Limited. That itself demonstrates the gap of this research from the previous one because the researcher has not found any research done in the bank in collective form. Under this topic many researches have been done but none of the researchers are undertaken regarding the case study of financial performance of Machhapuchhre Bank Limited. Financial analysis is the major function of every commercial bank for evaluating the financial performance. Therefore, it is the major concern of stakeholders to know the financial situation of the bank.

Machhapuchhre Bank Limited is a leading commercial bank of the country having the huge market share and its investment activities and the bank has significant impact on developing the economy of the country. Every year the financial performances are changing according to the environment of the country. Hence, this study fulfills the prevailing research gap about the in-depth analysis of the financial performance which is the major concern of the shareholders and stakeholders.

CHAPTER III

RESEARCH METHODOLOGY

The main objective of this study to examine the major components of portfolio of the balance sheet of bank as well as to evaluate financial performance of the bank to achieve that objective the study require an appropriate research methodology therefore this chapter highlights about the methodology adopted in the process of present study.

An appropriate choice of research methodology is a difficult task which is most necessary to support the study in realistic term with sound empirical analysis *(Sharma, 2064).* So that, the study uses the following research methodology like research design, population and sample, data collection procedure, method of data analysis, method of presentation etc explanations of the above points are given which seems appropriate to understand methodology in detail.

3.1 Research Design

The research design followed is basically the evaluation of financial performance of Machhapuchhre Bank Limited. Analytical as well as descriptive approaches are used to evaluate the financial performance of the bank. Analysis is basically on the basis of secondary data.

3.2 Sources of Data

Secondary data are used for the purpose of the study. They are collected from official publication of the bank. Also some data has been gathered from website, article, journals related to the financial performance study, previous research reports etc.

3.3 Population and Samples

On the basis of researcher’s judgment the study cover only one sample bank of Machhapuchhre Bank Limited.

3.4 Method of Data Analysis

Different data obtained through various sources are arranged and analyzed using financial and statistical tools which are presented as under.

3.4.1 Financial Tools

In this research study various financial tools are employed for the analysis. There are more than 200 ratios existing today, but in this study some selected ratio are used.

A ratio is defined as "the indicated quotient of two mathematical expression" and as the relationship between two or more things *(I.M. Pandey, 1998).*

3.4.1.1 Liquidity Ratio

Liquidity is measure by the speed with which a bank's assets can be converted into a cash to meet deposit withdrawals and other current obligation. These ratios provide insight into the present cash solvency in the event of adverse financial condition. This ratio is used to measure the company's short-term obligation with short term resources available at a given point of time.

The following ratios are evaluated liquidity ratios:

a. Current Ratio

It is computed dividing current assets by current liability

$$\text{Current ratio} = \frac{Current\ assets}{Current\ liabilities}$$

The current ratio of a firm measures its short-term solvency that is its ability to meet short-term obligations. As a measure of short term current financial liquidity it indicates the rupees of current assets available for each rupee of current liability. The higher the current ratio the larger is the amount of rupees available per rupees of current liability, the more is the firm ability to meet current obligations and the greater is the safety of funds of short term creditors. Thus current ratio in a way is a measure of margin of safety to the creditors.

b. Cash and Bank Balance to Current Saving Deposits Ratio

The ratio is computed by dividing the cash and bank balance by current saving and deposit

Cash and bank balance to current and saving deposit ratio $= \frac{Cash\ and\ bank\ balance}{Current\ saving\ deposit}$

The ratio measures the ability of bank to meet immediate obligations. The bank should maintain adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of deposits. High ratio indicated sound liquidity position of the bank however too high ratio is not good enough as it reveals the under utilization of fund.

c. Cash and Bank Balance to Total Deposit Ratio

The ratio is computed by dividing cash and bank balance by total deposits

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

The ratio shows the proportion of total deposits held as most liquid assets. High ratio shows the strong liquidity position of the bank. But too high ratio is not favorable for the bank because it produces adverse effect in profitability due to idleness of high interest bearing fund .

d. Fixed Deposit to Total Deposit Ratio

The ratio is computed by dividing fixed deposit by total deposit

Fixed deposit to total deposit ratio $= \frac{Fixed\ deposit}{Total\ deposit}$

The ratio shows what percentage of total deposit has been collected in form of fixed deposit. High ratio indicates better opportunity available to the ban to invest sufficient generating long term loans. Low ratio means the bank should investment the fund of low cost in short term loans.

3.4.1.2 Leverage Ratio

The long term position of the firm is judge by the leverage of capital structure ratios. The leverage ratio is calculated to measure the financial risk and the firm ability or using debt or benefit of share holder. These ratio measures the proportion of outsider's fund and owner's capital used in the bank. The following ratio is used in this group.

a. Total Debt to Shareholder's Equity Ratio

It is computed by dividing total debt by shareholder equity

Total debt to shareholder's equity ratio = $\frac{Total\ debt}{Shareholder\ equity}$

This ratio is assessed as borrowing funds and owner's capital that is a popularly measure the long term financing solvency of firm it reflected to relative claim creditors and shareholders against the assets of its.

b. Total Debt to Assets Ratio

It is computed by dividing total by assets

Total debt to assets ratio = $\frac{Total\ debt}{Assets}$

Debt to assets ratio simply debt ratio reflects the financial contribution at outsiders and owner on total assets of the firm. It also measures the financial security to the outsiders.

c. Debt to Total Capital Ratio

It is computed by dividing debt by total capital

Debt to total capital ratio = $\dfrac{Debt}{Total\ capital}$

Total capital refers to the sum of interest bearing debt and net shareholders equity. High ratio indicate greater claim of creditors low ratio is the indication of claim of outsiders.

d. Interest Coverage Ratio

The ratio is also known as times interest earned ratio is used to test the debt servicing capacity of the bank.

Interest coverage ratio = $\dfrac{EBIT}{Interest\ charge}$

3.4.1.3 Turnover Ratio

Turnover ratio measure the performance efficiency of an organization that whether it is using it resources properly or not. To carry out operation a firm needs to invest in bank short term and long term activity ratio describe the relationship between the firm level of operation and the assets to sustain the activity turnover ratio can be used to forecast a firm capital requirement . The turnover ratio analyzed in the study.

a. Loan and Advance to Total Deposit Ratio

It is calculated by dividing loan and advance by total deposit

Loan and advance to total deposit ratio = $\dfrac{Loan\ and\ advance}{Total\ deposit}$

This ratio indicates the proportion of total deposits invested the greater use of deposit for investing in loans and advance but very high ratio shows poor liquidity position and risk in loan on the contrary, too low ratio may be cause of idle cash or use of fund in losses productive sector.

b. Loan and Advance to Fixed Deposit Ratio

It is calculated by dividing loan and advance by fixed deposit

Loan and advance to fixed deposit ratio = $\frac{Loan\ and\ advance}{Fixed\ deposit}$

The ratio indicated what proportion of fixed deposits has been used for loans and advances. Since fixed deposit carry high ratio of interest funds so collected need to be invested is such sectors which yield at least sufficient return to meet the obligation. High ratio means utilization of fixed deposit in form of loans.

c. Loan and Advance to Saving Deposit Ratio

It is calculated by dividing loan and advance by saving deposit.

The ratio measure what extent of saving deposit has been turned over or loans and advance. High ratio indicates greater utilization of saving deposit in advancing loans.

d. Investment to Total Deposit Ratio

It is calculated by dividing investment by total deposit.

The ratio shows how efficiently the major resources of the bank have mobilized. High ratio indicated managerial efficiency regarding the utilization of deposits .low ratio is the result of less efficiency in use of funds

3.4.1.4 Profitability Ratio

Profitability ratio measures the efficiency of a business enterprise. The profit measure the management ability regarding how well they have utilized their funds to generate surplus for this following ratio has been analyzed.

a. Return on total assets ratio

It is computed by dividing net profit after tax by total assets

Return on total assets ratio = $\frac{Net\ \ profit\ \ after\ \ tax}{Total\ \ assets}$

It measures the sufficiency of bank in utilization of overall assets. High ratio indicates the success of management in overall operation. Lower ratio means insufficient operation of the bank.

b. Return on Net Worth Ratio

It is computed by dividing net profit by net worth.

Return on net worth ratio = $\frac{Net\ \ profit}{Net\ \ worth}$

The ratio is tested to see the profitability o the owner's investment. It reflects the extent to which the objective of business is accomplished.

c. Return in Total Deposit Ratio

It is computed by dividing net profit after tax by total deposit

Return in total deposit ratio = $\frac{NPAT}{Total\ \ deposit}$

The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. Higher ratio is the index of strong profitability position.

d. Interest Earned to Total Assets Ratio

It is calculated by dividing interest income by total assets of the bank

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

The ratio shows the percentage of interest income as compared to the assets of the bank. High ratio indicted the proper utilization of bank's assets for income generation purpose. Low ratio represents unsatisfactory performance.

e. Total Interest Expenses on Total Income

It is computed by dividing total interest by total interest income

Total interest expenses on total income ratio = $\frac{Total\ \text{interest}}{Total\ \text{interest}\ income}$

This ratio measures the percentage of total interest expenses against total interest income.

f. Staff Expenses to Total Income Ratio

It is computed by dividing the staff expenses by total income.

Staff expenses to total income ratio = $\frac{Staff\ \text{expenses}}{Total\ income}$

The ratio measures the proportions of income spend for the staff, whose contribution is of significance in the success of the bank. High ratio indicates that the major portions of income used for staff. From the firm's point of view low ratio is advantages. But the staff prefer high ratio, as it is the result of higher level of facilitated and benefits provided to them.

g. Office Operation Expenses to Total Income Ratio

It is computed by dividing office expenses by total income

Office operation expenses to total income ratio = $\frac{Office\ \text{expenses}}{Total\ income}$

It shows the percentage of income spent for the operating activity of the bank. High ratio shows the large amount of income is spent for the operation activity of the bank. Lower ratio is favorable to the bank, as it is reflection o operational efficiency.

3.4.2 Statistical Tools

3.4.2.1 Arithmetic Mean

Arithmetic mean is the most popular and widely used measure for representing the entire data by one value also called average. Arithmetic mean of a given sσet of observation is their sum divided by the number of observations. In general X1, X2, X3…..Xn are the given observations then their arithmetic mean, usually denoted by X.

Symbolically,

Arithmetic mean, $\bar{x} = \frac{x1+x2+x3+\cdots+xn}{n}$

$$\bar{x} = \frac{\sum x}{n}$$

Where, $\bar{x}$ = arithmetic mean

x1, x2, x3,………………, xn = values of the variable

∑x = sum of the values of the variables x

n = number of observation

3.4.2.2 Coefficient of Variation

The coefficient of variation is the relative measure of dispersion, comparable across distribution. This I defined s the ratio of the standard deviation to the mean expressed in percent.

$$CV = \frac{\pm}{\bar{X}} \mid 100\%$$

Where, σ = standard deviation

$\bar{x}$ = arithmetic mean

3.4.2.3 Correlation Coefficient

The Coefficient of correlation is an important measure to describe how well one variable is explained by another. It measures the degree of relationship between the two casually related variables. Karl person's coefficient of correlation between two variables X and Y is usually devoted by 'r' which is the numerical measure of linear association between the variables.

Where,

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

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

Where, r = correlation coefficient

N= No. of pairs of observation.

If r > 6 P.E, then the correlation coefficient is significant and reliable.

If r < P.E, then the correlation coefficient is insignificant and there is no evidence of correlation.

3.4.2.4 Trend Analysis

Trend Analysis is one of the statistical tools which is used to determine the improvement or deterioration of its financial situation. Trend analysis informs about the expected future values of various variables. The Least square method has been adopted to measure the trend behaviors of these selected Banks. This method is widely used in practices. The formula of least square method for the straight line is represented by the following formula.

$Y_c = a + bX$

Where,

Y_c = Trend Values

a = Y intercept or the computed trend figure of the Y variable, when X = 0

b = Slope of the trend line of the amount of change in Y variable that is associated with change in 1 unit in X variable.

X = Variable that represent time i.e. time variable

The value of the constants a and b can be determined by solving the following two normal equations.

$$\Sigma Y = Na + b\Sigma X \quad \ldots\ldots\ldots\ldots\ldots\ldots\text{(i)}$$

$$\Sigma XY = a\Sigma X + b\Sigma X^2 \quad \ldots\ldots\ldots\ldots\text{(ii)}$$

Where, N = number of years

But for simplification, if the time variable is measured as a deviation form its mean i.e. mid-point is taken as the origin, the negative value in the first half of the series balance out the positive values in the second half so that ($\Sigma X = 0$).

The values of constant a and b can easily be determined by using following formula.

$$a = \frac{\Sigma Y}{N}$$

$$b = \frac{\Sigma XY}{\Sigma X^2}$$

3.4.2.5 Test of Statistics

To test the significant difference, t-test has been considered in this study. Two hypothesis i.e. null and alternative hypothesis is setted to find out the significant difference. Where null hypothesis shows two variables are not correlated and alternative hypothesis shows two variables are correlated. t-calculated value is calculated using this formula:

$$t = \frac{r}{\sqrt{1-r^2}}\sqrt{n-2}$$

Where, r = Correlation coefficient

R^2 = Coefficient of determination

n = Number of pair of observation

3.4.2.6 Diagrammatic and Graphical Representation

Diagrams and graphs are visual aids that give a bird eye view of a given set of numerical data. They represent the data in simple and readily comprehensive form. Hence various bar diagrams, pie charts and graph have been used for presentation and analysis of data.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

In this chapter, data collected from secondary sources has been presented and analyzed by using financial and statistical tools. The available data has been tabulated, analyzed and interpreted so that financial forecast of banks can be done easily. To evaluate the financial performance of selected bank, ratio analysis, correlation analysis and trend analysis are used in this study.

4.1 Financial Ratio Analysis

4.1.1 Liquidity Ratios

Liquidity ratio is a pre-requisite for every survival of a firm. A proper balance between the two contradictory requirements i.e. liquidity ratio measures the ability of a firm to meet its short term obligation and reflects the short term financial strength or solvency of a firm. According to the nature of the firm, various ratios may be calculated their liquidity position. Below here have been calculated some liquidity ratios which have been thought to be important to indicate the liquidity position of a bank and have been used to analyze the financial position of Machhapuchhre Bank Limited.

4.1.1.1 Current Ratio

The current ratio is measure of the firm's short-term solvency. It indicates the availability of current assets in rupees for each one rupee of current liabilities. A ratio of greater than one means that the firm has more current assets than current liabilities. Current ratio measures the relationship between current assets and current liabilities.

Table No. 4.1

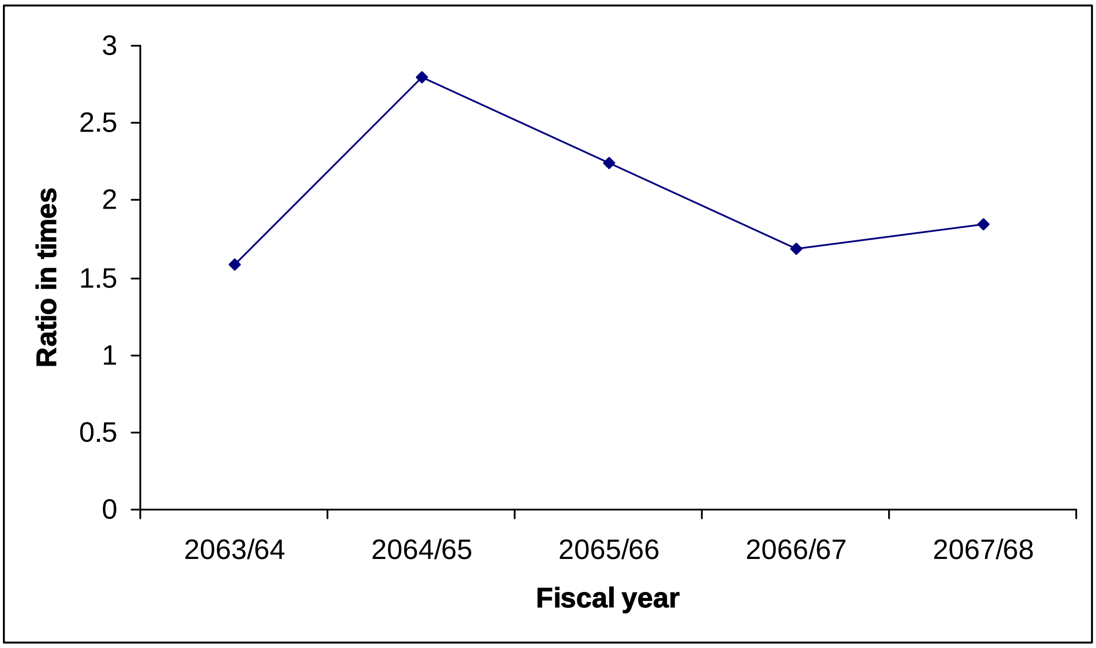
Current Ratio

Rs. in lakh

Fiscal year	Current assets	Current liabilities	Ratio (times)
2063/64	81374.44	51064.4	1.59
2064/65	92290.89	32903.41	2.80
2065/66	127520.88	57007.7	2.24
2066/67	178931.24	106181.61	1.69
2067/68	195450.34	112128021	1.84
Mean			2.032
S.D.			0.49
C.V.			24.11%
r			0.95

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.1: Current Ratio



From the above table and figure no. 4.1, it is seen that the ratio of current assets to current liabilities are 1.59, 2.80, 2.24, 1.69 and 1.84 in the fiscal year 2063/64 to 2067/68 respectively. It is in fluctuation trend every year. Its mean deviation is 2.032, standard deviation is 0.49, coefficient of variation is 24.11% and correlation coefficient is 0.95.

The ratio of the bank are in fluctuation trend. The current ratio of the bank is not satisfactory because it is below the standard level of 2:1.

According to the trend in ratio of commercial bank, the ratio below the normal standard may seen unsatisfactory, but it denotes that the bank has adequate liquidity in the fiscal year 2064/65 and 2065/66. But in other fiscal year of has below has the standard level of liquidity i.e. 2:1. Coefficient of variation measures the risk. Bank having low C.V. is preferable than high C.V. From the overall point of view i.e. higher the CV, higher standard deviation and lower current assert ratio, it is unsatisfactory to Machhapuchhre Bank Limited.

Correlation between current assets and current liabilities is 0.95, which shows the high correlation between current assets and current liabilities. This shows the high consistency of CA and CL.

4.1.1.2 Cash and Bank Balance to Total Deposit Ratio

This ratio indicates the ability of banks immediately funded to cover their current margin calls, saving, fixed, call deposit and other deposits and vice versa. This ratio is calculated by dividing cash and bank balance by total deposits. The following table shows the cash and bank balance to deposits ratio.

This ratio indicates the ability of banks immediately funds to cover their current margin call, saving, fixed, call deposit and other deposits.

Table No. 4.2

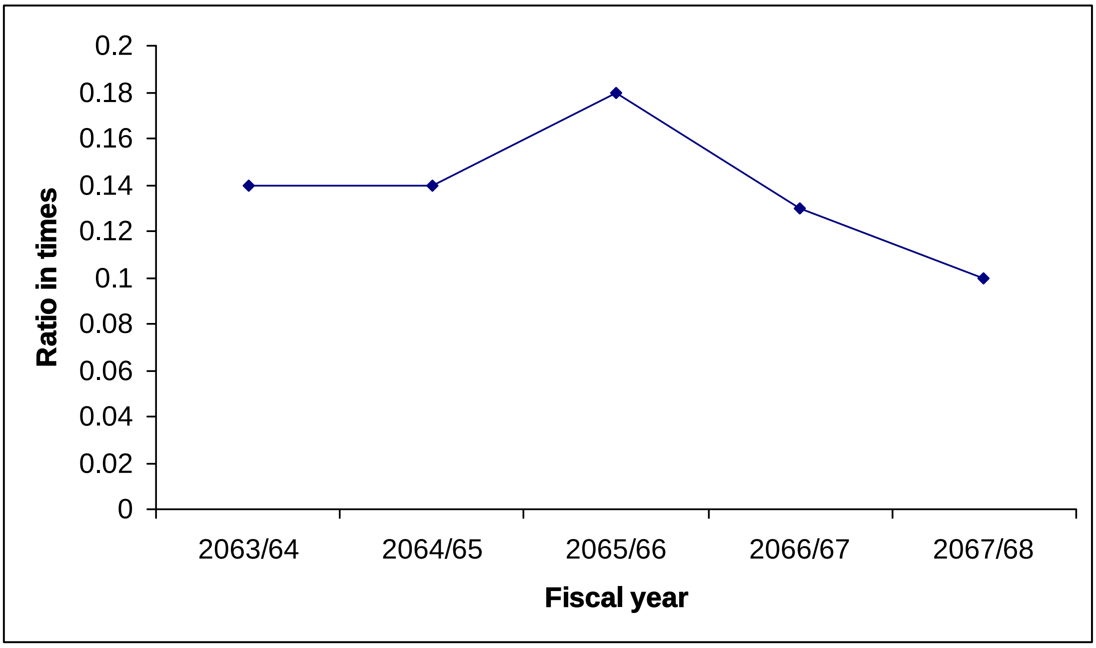
Cash and Bank Balance to Total Deposit Ratio

Rs. in lakh

Fiscal year	Cash and bank balance	Total deposit	Ratio (times)
2063/64	12840.8	94754.52	0.14
2064/65	15885.64	111022.42	0.14
2065/66	27666.49	155967.91	0.18
2066/67	24597.17	185359.17	0.13
2067/68	21475.12	212780.19	0.10
Mean			0.14
S.D.			0.03
C.V.			19.22%
r			0.93

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.2: Cash and Bank Balance to total Deposit Ratio



From the above table and figure show the ratio of cash and bank balance to total deposit. The lowest ratio in Fy 2067/68 is 0.10 and the highest is 0.18 in Fy 2065/66. The ratio is slightly exceeded than average 0.14 and 0.18 in Fy 2064/65 and 2065/66 respectively. In the fiscal year 2063/64 and 2067/68 are near the average, and other remaining fiscal year 2067/68 in 0.10 are below the average. Thus, the ratio has inverse relationship in each other.

From the point of correlation coefficient cash bank balance to total deposit ratio is closely related which is a strong point of MBL.

4.1.1.3 Cash and Bank Balance to Current and Saving Deposit Ratio

Cash and bank balance comprise cash in hand, foreign cash in hand cheque and other cash items balance held in foreign banks. Current and saving deposit consist all types of deposits excluding fixed deposits.

Table No. 4.3

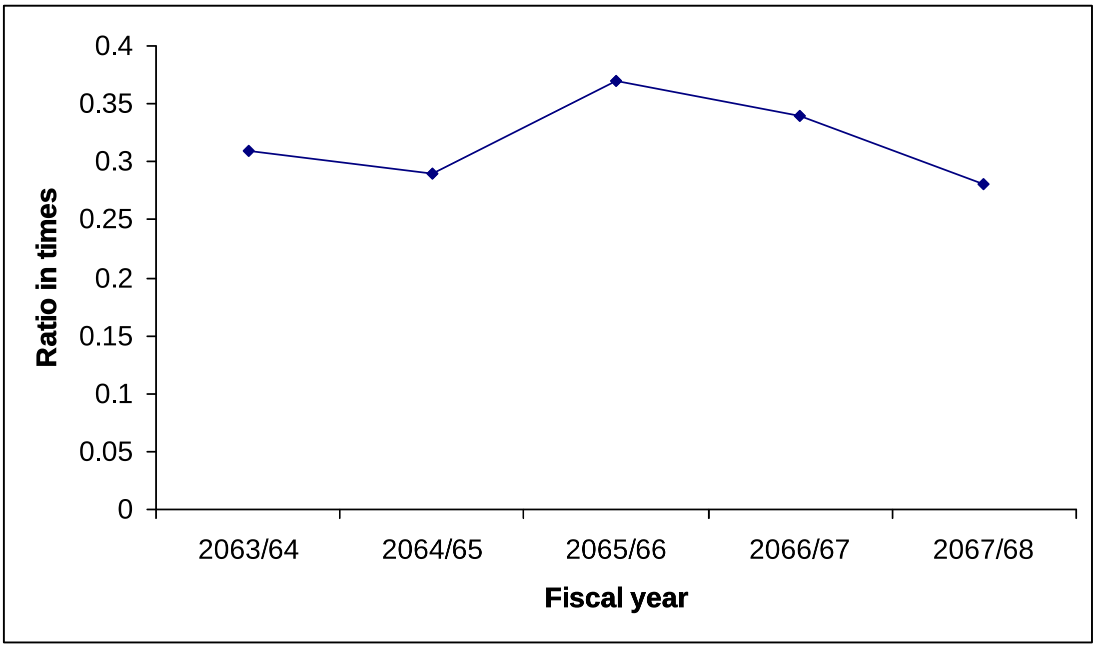
Cash and Bank Balance to Current and Saving Deposit Ratio

Rs. in lakh

Fiscal year	Cash and bank balance	Current and saving deposits	Ratio (times)
2063/64	12840.8	42035.08	0.31
2064/65	15885.64	54318.28	0.29
2065/66	27666.79	73946.26	0.37
2066/67	24597.17	72272.07	0.34
2067/68	21475.12	75720.25	0.28
Mean			0.32
S.D.			0.04
C.V.			12.5%
r			0.91

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.3: Cash and Bank Balance to Current and Saving Deposit Ratio



From the above table and figure reveal the cash and bank balance to current deposit ratio. The highest ratio is 0.37 in Fy 2065/66 and lowest ratio is 0.28 in Fy 2067/68. Below the average ratio's are 0.31, 0.30, and 0.28, in Fy 2063/64 and 2067/68 respectively and higher the average ratio are 0.37 and 0.34 in Fy 2065/66 and 2066/67 respectively.

The standard deviation is 0.04, which shows a very low deviation between the ratio of cash and bank balance to current and saving deposit ratio. Coefficient of variation i.e. 12.5% shows the less riskiness of the bank in maintaining cash and bank balance and current and saving deposit.

Correlation coefficient between cash and bank balance to current and saving deposit is 0.91, which shows the high consistency between cash and bank balance to current and saving deposit. Which shows the bank is able to maintain cash and bank balance to saving deposit ratio.

4.1.1.5 Fixed Deposit to Total Deposit Ratio

The ratio shows that percentage of total deposit has been collected in form of fixed deposit. High ratio indicates better opportunity available to the bank to invest in sufficient profit generating long-term loans. Low ratio means the bank should invest the fund of low cost in short term loans.

Table No. 4.4

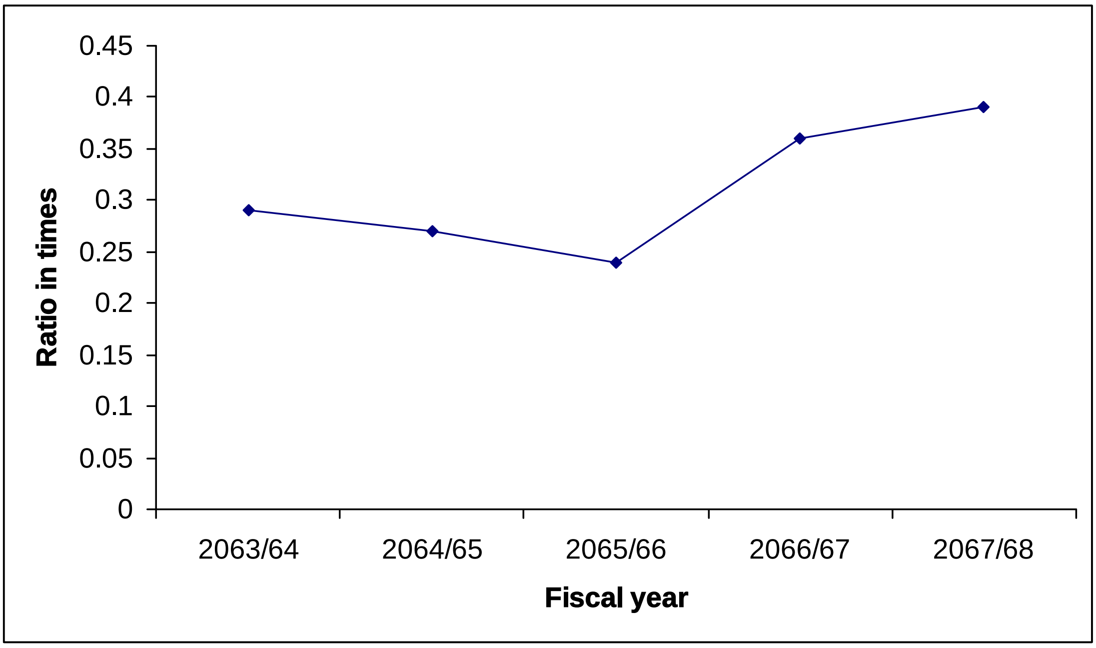
Fixed Deposit to Total Deposit Ratio

Rs. in lakh

Fiscal year	Fixed deposit	Total deposit	Ratio (times)
2063/64	27333.6	94754.52	0.29
2064/65	29611.41	111022.42	0.27
2065/66	36818.3	155967.91	0.24
2066/67	67541.51	185359.17	0.36
2067/68	83640.56	212780.19	0.39
Mean			0.31
S.D.			0.06
C.V.			19.35%
r			0.94

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.4: Fixed Deposit to Total Deposit Ratio



From the above table and figure no. 4.4 shows fixed deposit to total deposit ratio of Machhapuchhre Bank Limited. The ratio of MBL exceed mean is 0.29 and 0.39 in Fy 2063/64 and 2067/68. In remaining years it is lower than mean ratio i.e. 0.29, 0.27 and 0.24 in the year 2063/64, 2064/65 and 2065/66 respectively.

Higher the fixed deposit ratio indicates better opportunity available to the bank to invest in sufficient profit generation long-term investment.

However the ratio is in fluctuation trend but the standard deviation is not so greater. This is the positive sign for the bank. On the other hand, C.V. is only 19.35% which shows a little bit risky position between fixed deposit to total deposit ratio. Correlation coefficient i.e. 0.94, highly correlated, shows the better combination of fixed deposit to total deposit ratio.

4.1.2 Leverage Ratio

Financial leverage or capital structure ratio are calculated to judged the long – term financial position of the firm. These ratios indicate mix of funds provided by owners and lenders. Generally, there should be an appropriate mix of debt and owners equity in financing the firm's assets. Administration of capital can smoothly by carried with the help of such ratios.

The leverage ratio are calculated to measure the financial risk and firm ability of using debt for the benefit of shareholders.

4.1.2.1 Debt to Equity Ratio

Debt–equity ratio examines the relative claims of creditors and owners against the bank's assets. Alternatively, total debt to equity ratio indicates the contribution of debt capital and equity capital fund to the total investment.

It shows the relationship between debt and equity. It shows the equity capacity towards the debt. Generally very high debt to equity ratio is unfavourable to the business because the debt gives third parties legal claims on the company, there claims are for interest payment at regular intervals, plus repayment of the principle by the agreed time. On the other hand low debt also favourable from the share holder point of view.

Table No. 4.5

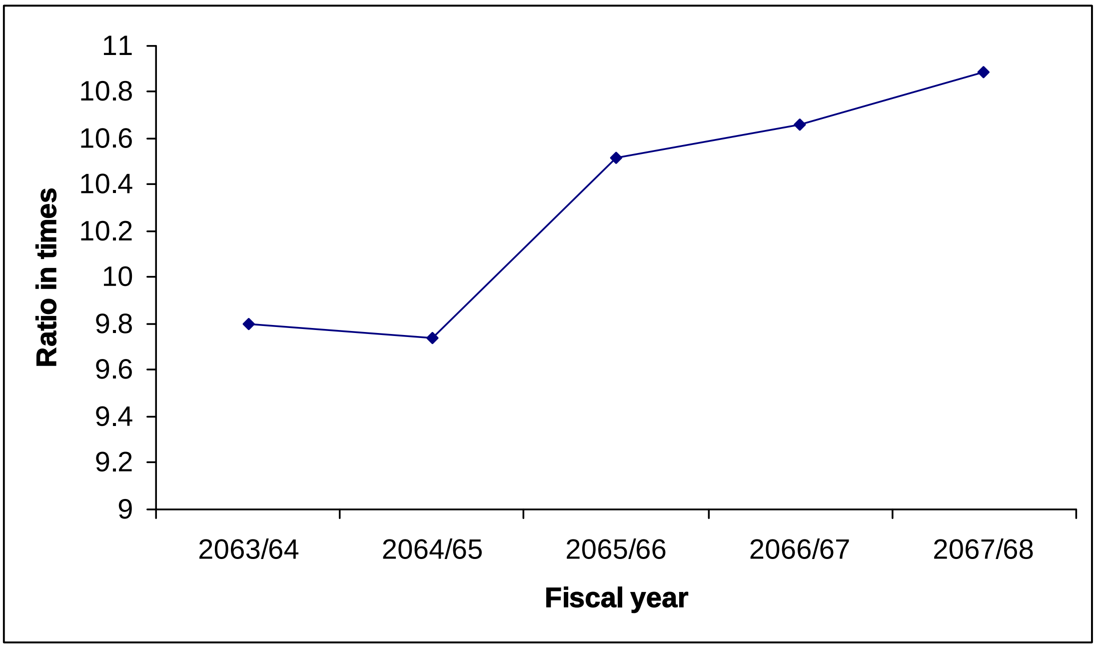
Debt to Equity Ratio

Rs. in lakh

Fiscal year	Total debt	Shareholder's equity	Ratio (times)
2063/64	98073.52	10002.65	9.80
2064/65	113352.01	11633.47	9.74
2065/66	157905.84	15013.62	10.52
2066/67	189052.8	17735.5	10.66
2067/68	217582.21	19980.56	10.89
Mean			10.32
S.D.			0.52
C.V.			5.04%
r			0.99

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.5: Debt to Equity Ratio



From the above table and figure no. 4.5 shows that debt equity ratio is increasing trend except fiscal year 2064/65. Its ratio are 9.80%, 9.74%, 10.51%, 10.66% and 10.89% in the year 2063/64 to 2067/68 respectively. In Fy 2067/68 is debt to equity ratio is high i.e. 2063/64 its debt to equity ratio is low i.e. 9.74%.

From the point of S.D. and C.V., bank has satisfactorily debt equity ratio. This shows the bank is able to maintain debt equity ratio.

Correlation coefficient between debt to shareholder's equity is perfectly positive. Form above figure we can conclude that MBL is able to maintain total debt to shareholder's equity ratio.

4.1.2.2 Total Debt to Total Assets Ratio

Debt to Assets Ratio reflects the financial contribution of outsides and owners on total assets of the firm. It also measures the financial security to the outsiders. Generally creditors prefer a low debt ratio and owners prefer high debt ratio in order to magnify their earning on the one hand and to maintain their concentrated control over the firm on the other.

The ratio shows the contribution in financing the assets of the bank. High ratio indicates that the greater portion of the bank's assets have been financing through the outsiders fund. The ratio should not be too high or too low. The ratio shows the contribution of creditors in financing the assets of the bank lower ratio indicates that the greater portion of the banks assets been financed through the equity fund. The ratio should not be too high nor too low.

Table No. 4.6

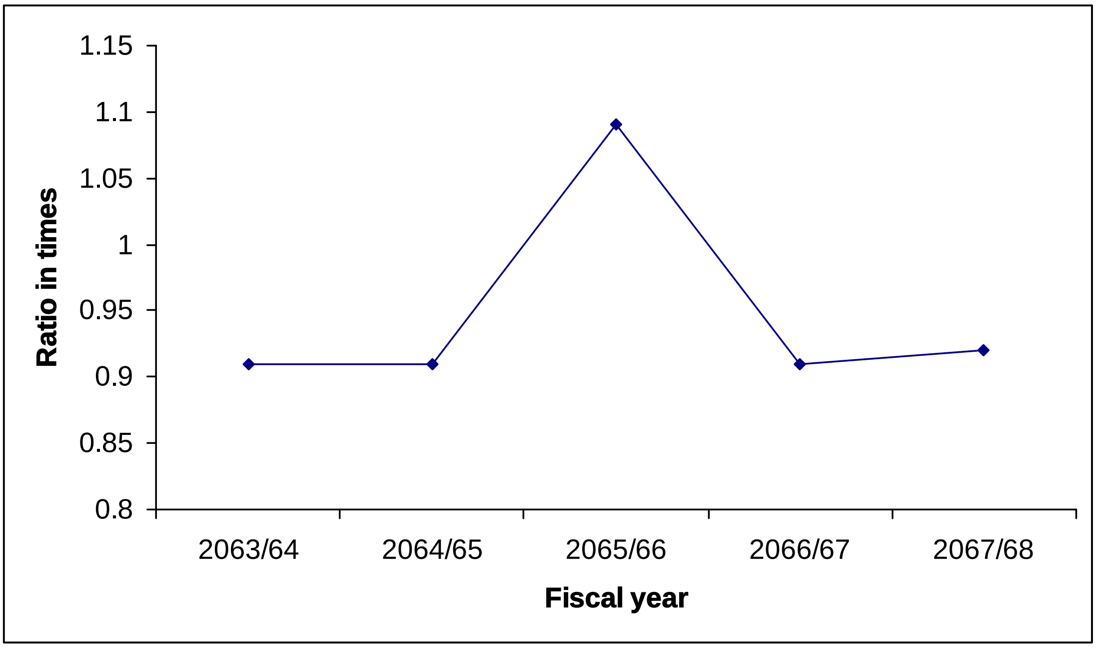
Total Debt to Total Assets Ratio

Rs. in lakh

Fiscal year	Total debt	Total assets	Ratio (times)
2063/64	98073.52	108076.17	0.91
2064/65	113352.01	124985.48	0.91
2065/66	157905.84	144907.82	1.09
2066/67	189052.8	206787.91	0.91
2067/68	217582.21	235765.85	0.92
Mean			0.95
S.D.			0.08
C.V.			8.42%
r			0.97

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No.4.6: Total Debt to Total Assets Ratio



From the above table shows that banks debt to assets ratio is satisfactory, but fiscal year 2065/66 are total asset is less than total debt, other then debt portion is low than assets so it has big possibilities to invest for other big productive sectors.

Total debt to total assets ratio is slightly changed in every fiscal year. It is stable in 0.90 to 0.91 in fiscal year 2063/64 to 2064/65. In fiscal year 2065/66 it is increased to 1.09 in Fy 2066/67 it is decreased to 0.91 times and in Fy 2067/68 it again increased to 0.92 times. From the viewpoint of standard deviation and C.V. i.e. 0.08 and 8.42%, coefficient of correlation is 0.97 also shows there is highly correlation between total debt to total assets ratio. So, we can easily say that the bank is able to maintain its total debt to total assets ratio.

4.1.2.3 Interest Coverage Ratio

The ratio is also known as time interest earned ratio is used to test the debt. It shows the numbers to times the interest charge are covered by funds that are ordinarily available for the payment. It indicates the event to which the earning may fall without causing any embarrassment to the regarding the payment to interest.

Table No. 4.7

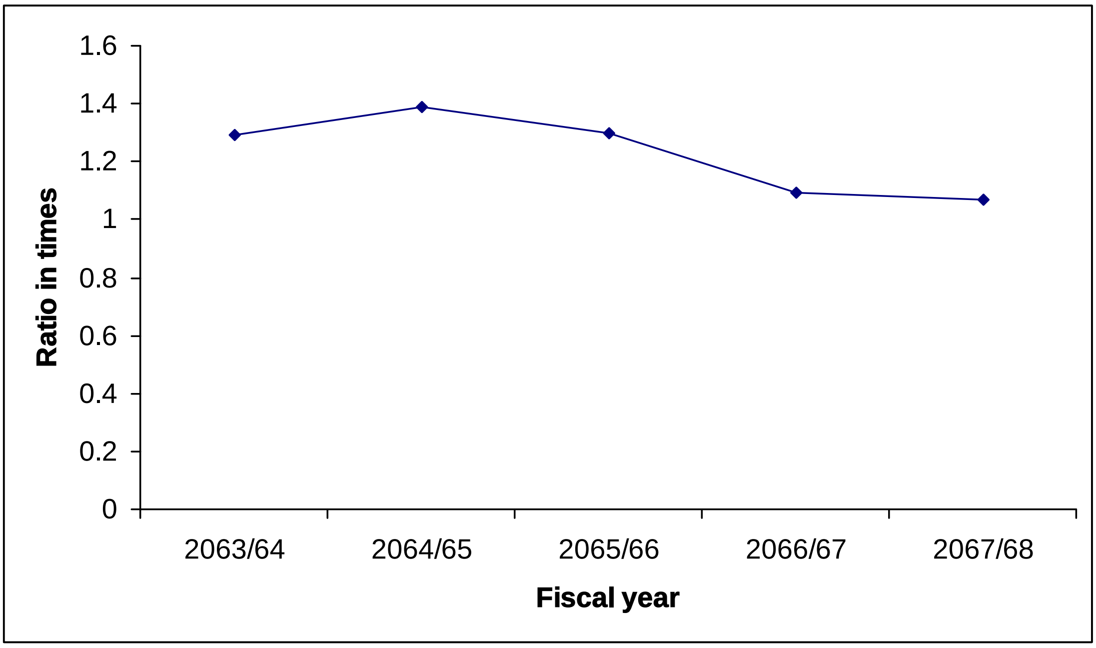
Interest Coverage Ratio

Rs. in lakh

Fiscal year	EBIT	Interest charge	Ratio (times)
2063/64	5117.48	3977.22	1.29
2064/65	5671.41	4079.19	1.39
2065/66	7563.04	5800.36	1.30
2066/67	12486.14	11448.08	1.09
2067/68	17845.24	16675.15	1.07
Mean			1.23
S.D.			0.14
C.V.			11.38%
r			0.99

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.7: Interest Coverage Ratio



From the above table and figure 4.7 shows EBIT to interest charge ratio of banks. During the Fy 2063/64 to 2064/65 the ratio has increased. The ratio of MBL has fluctuating trend during the study period. The highest ratio has been observed by 2064/65 which it is 1.39 times and lowest ratio has been observed Fy 2067/68 which it is 1.07 times. The mean ratio of MBL is 1.23 times.

Standard deviation 0.14, C.V. 11.38% and r 1.0 shows the bank has consistency in interest coverage ratio. The higher mean ratio of MBL measure the higher percentage of net worth in relation to the total deposit collected in the bank.

4.1.2.4 Total Debt to Total Capital Ratio

Total capital refers to the sum of interest bearing debt and net shareholder equity. it shows the proportion to debt in total capital employed by the bank. High ratio indicates greater claim of the creditors. Low ratio is indication of lesser claim of outsider. For the sound solvency position the ratio should not be too high nor too low.

Table No. 4.8

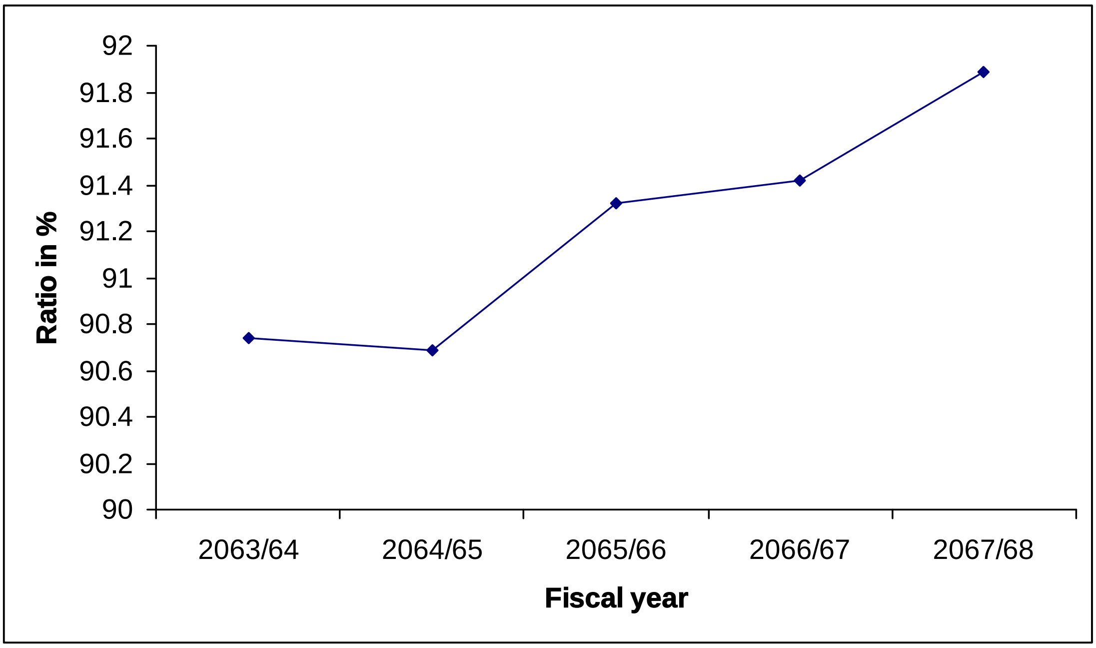
Total Debt to Total Capital Ratio

Rs. in lakh

Fiscal year	Total debt	Capital	Ratio (%)
2063/64	98073.52	108076.17	90.74
2064/65	113352.01	124985.48	90.69
2065/66	157905.84	172919.46	91.32
2066/67	189052.8	206788.30	91.42
2067/68	217582.21	236795.36	91.89
Mean			91.21
S.D.			0.502
C.V.			0.55%
r			0.35

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.8: Total Debt to Total Capital Ratio



From the above table and figure 4.8 show debt to total capital ratio of Machhapuchhre Bank Limited. The ratio has fluctuated on increasing trend during the year. During the Fy 2067/68 the ratio has increased.

Debt to total capital ratio of MBL is in slightly fluctuation on increasing trend during the study period. The highest ratio has been observed Fy 2067/68 which it is 91.89% and lowest ratio has been observed Fy 2065/66 which is 91.32 %. The least C.V. and S.D. i.e. 0.55% and 0.502 shows the higher consistency between total debt and capital of MBL.

The higher mean ratio of MBL indicates the higher claim of creditors that means higher capital employed by the bank and greater proportion of debt in total capital.

Correlation coefficient i.e. r = 0.35 shows the total debt to total capital ratio is perfectly correlated. This shows the bank has been able to maintain debt to capital ratio because higher debt capital ratio shows the higher creditor's claim in bank.

4.1.4 Turnover/Activity Ratios

This ratio refers how efficiently the organization is managing its resources. Thus, this ratio measures the degree of effectiveness in use of resources or funds by a firm. It is also known as turnover or efficiently ratio or assets management ratio. Turnover or conversion indicates more efficiency of a firm in managing and utilizing its assets.

Activity ratios are intended to measure the effectiveness to employment of resources in a business concern. Through this ratio, it is known whether the funds have been used effectively in the business activities or not. The common activity ratios that are determined under this are as follows.

4.1.4.1 Loan and Advance to Total Deposit Ratio

The ratio indicates what proportion of total deposit has been used for loan and advance. Since fixed deposit carry high ratio of interest funds so collected need to be invested in such sectors which yield at least sufficient return to meet the obligation.

Table No. 4.9

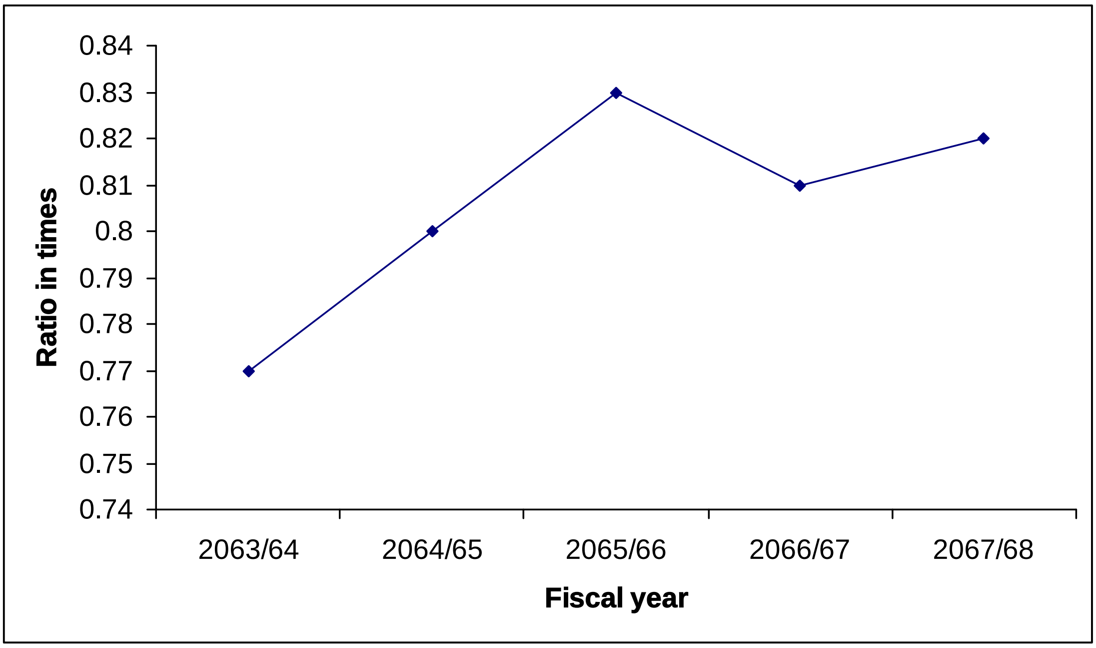
Loan and Advances to Total Deposit Ratio

Rs. in lakh

Fiscal year	Total loan and advances	Total deposit	Ratio (times)
2063/64	72750.24	94754.52	0.77
2064/65	88749.14	111022.42	0.80
2065/66	129570.99	155967.91	0.83
2066/67	149347.18	185359.17	0.81
2067/68	174672.65	212780.19	0.82
Mean			0.806
S.D.			0.023
C.V.			2.85%
R			0.99

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.9: Loan and Advances to Total Deposit Ratio



Above table and figure 4.9 show loan and advance to total deposit ratio of MBL. The ratio of MBL is in increasing trend except Fy 2067/68. The highest ratio for the period has been observed in the Fy 2065/66 which is 0.83 and lowest ratio in the Fy 2063/64 which is 0.77.

The mean ratio of loan and advance to total deposit ratio of MBL reveals that the bank has highly used deposit for investing in loan and advance. The mean ratio of loan and advance to total deposit ratio of MBL reveals that the bank has greater use of deposit for investing in loan and advance.

Above description helps to conclude that the MBL is more successful to mobilize the total deposit on loan and advance.

Lower S.D. i.e. 0.023, lower C.V. i.e. 2.85% and perfect correlation i.e. 0.99 shows the higher consistency between total loan and advance to total deposit ratio.

4.1.4.2 Loan and Advance to Saving Deposit Ratio

The ratio indicates what proportion of fixed deposit has been used for loans and advance. Since fixed deposit carry high ratio of interest funds so collected fund needs to be invested in such sectors which yield at least sufficient return to meet the obligation.

Table No. 4.10

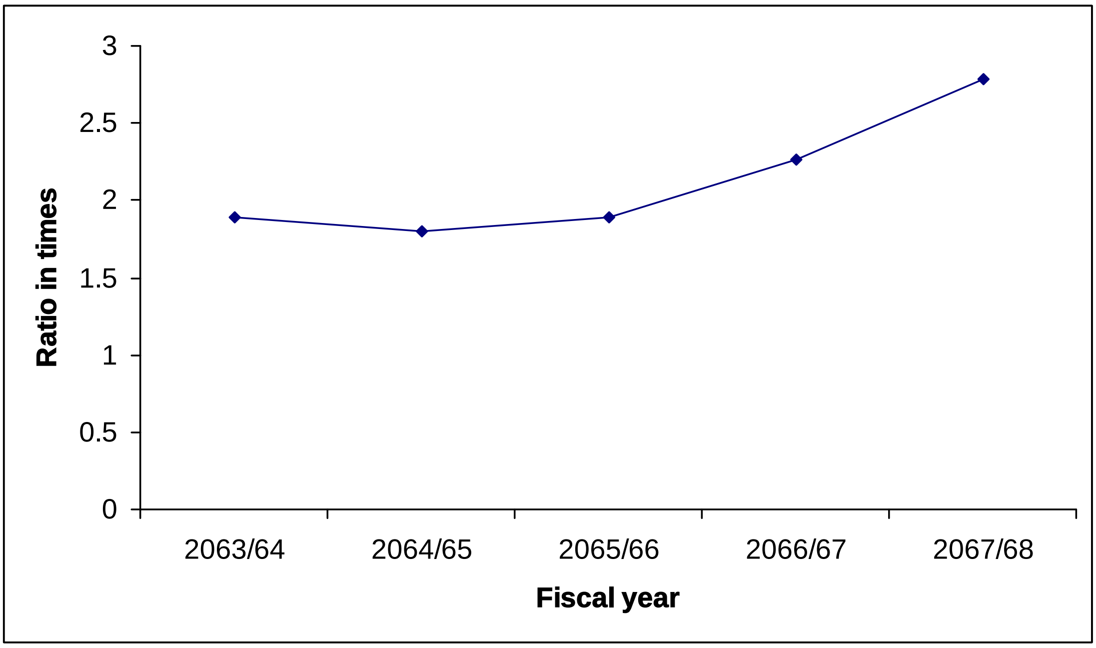
Loan and Advance to Saving Deposit Ratio

Rs. in lakh

Fiscal year	Total loan and advances	Saving deposit	Ratio (times)
2063/64	72750.24	38568.15	1.89
2064/65	88749.14	49343.59	1.80
2065/66	129570.99	68450.79	1.89
2066/67	149347.18	66018.15	2.26
2067/68	174672.65	62563.19	2.79
Mean			2.13
S.D.			0.41
C.V.			19.25%
r			0.84

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.10: Loan and Advance to Saving Deposit Ratio



From the avobe table and figure no. 4.10 shows loan and advance to saving deposit ratio of MBL. The high ratio of loan and advance to saving deposit is 2.79 in 2067/68, it decreases to 1.89, 1.80 in the year 2063/64 and 2064/65, then it is increased to 1.89 and 2.26 for next two years 2065/66 and 2066/67. Its mean ratio is 2.13, standard deviation is 0.41, coefficient of variation is 19.25% and r is 0.84, which shows slightly fluctuation in loan and advance to saving deposit ratio.

4.1.4.3 Loan and Advance to Fixed Deposit Ratio

The ratio indicates what proportion of fixed deposit has been used for loan and advance. Since fixed deposit carry high ratio of interest funds so collected need to be invested in such sectors which yield at least sufficient return to meet the obligation.

Table No. 4.11

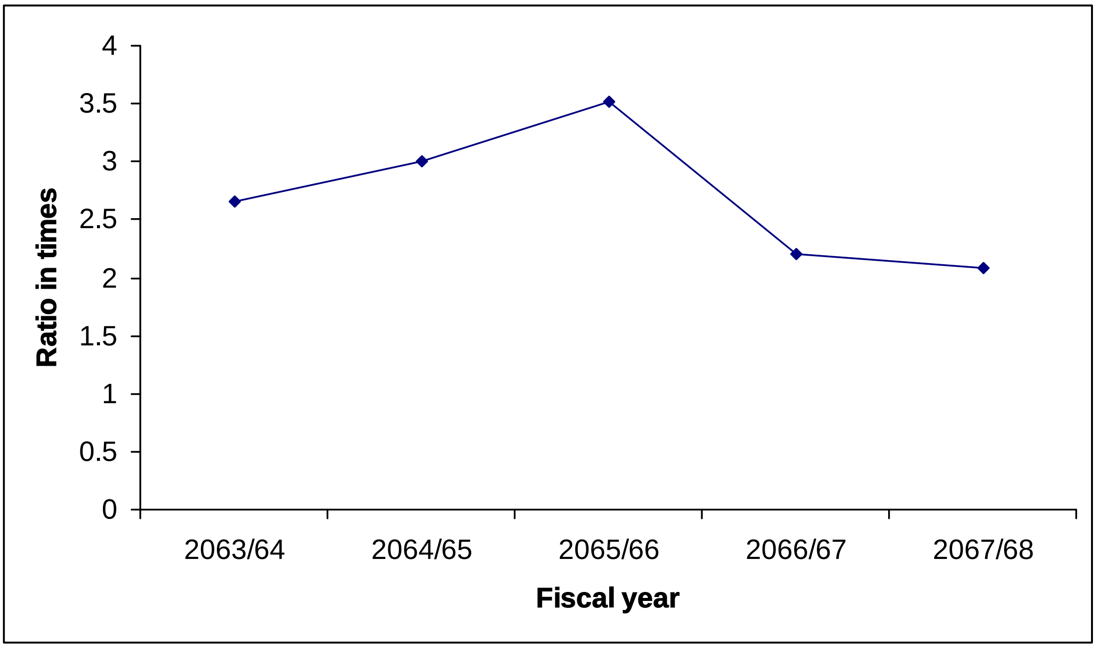
Loan and Advance to Fixed Deposit Ratio

Rs. in lakh

Fiscal year	Total loan and advances	Fixed deposit	Ratio (times)
2063/64	72750.24	27333.6	2.66
2064/65	88749.14	29611.41	3.00
2065/66	129570.99	36818.3	3.52
2066/67	149347.18	67541.51	2.21
2067/68	174672.65	83640.56	2.09
Mean			2.70
S.D.			0.59
C.V.			21.85%
r			0.93

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.11: Loan and Advance to Fixed Deposit Ratio



The ratio indicates what proportion of fixed deposit has been used for loan and advance. Since fixed deposit carry high ratio of interest funds. So collected fund needs to be invested in such sectors which yield at least sufficient return to meet the obligation.

Above table and figure shows loan and advance to fixed deposit ratio of MBL. The ratio is in fluctuating trend. It is 2.66, 3.00, 3.52, 2.21 and 2.09 in the year 2063/64 to 2067/68 respectively. The mean ratio is 2.70, standard deviation is 0.59, coefficient of variation is 21.85% and r is 0.93.

The mean ratio of loan and advance to saving deposit ratio of MBL reveals that the bank has been not able to turnover fixed deposit into loan and advance.

4.1.4.4 Loan and Advance to Total Assets Ratio

It is measures what extent of total asset have been turnover to loan and advances.

Table No. 4.12

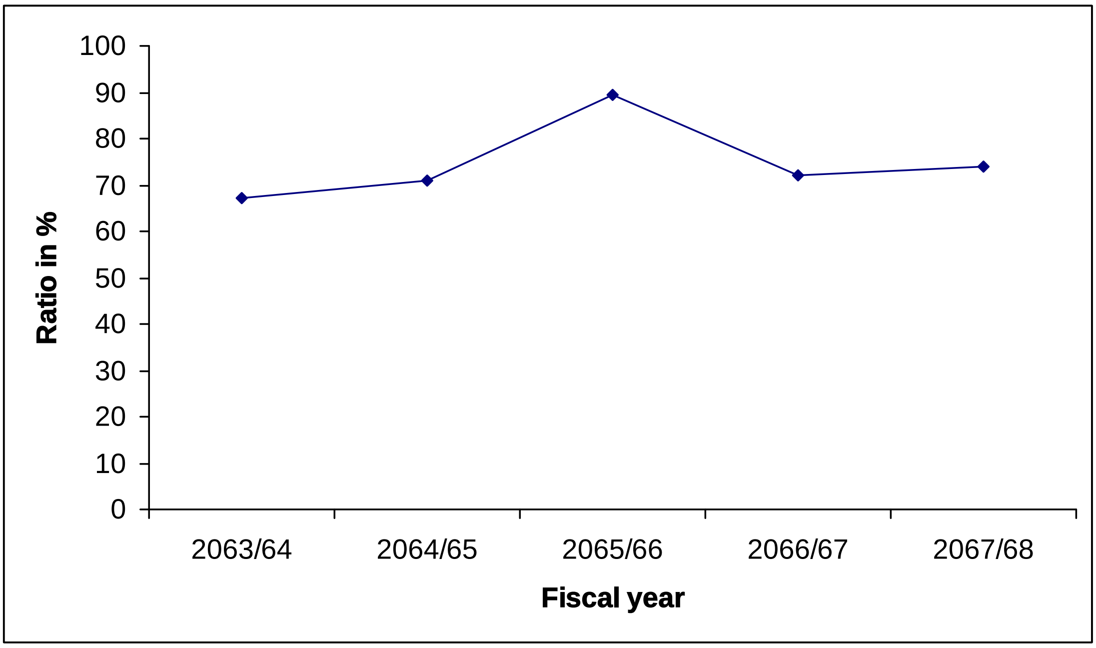
Loan and Advance to Total Assets Ratio

Rs. in lakh

Fiscal year	Total loan and advances	Total assets	Ratio (%)
2063/64	72750.24	108076.17	67.31
2064/65	88749.14	124985.48	71.01
2065/66	129570.99	144907.82	89.42
2066/67	149347.18	206787.91	72.22
2067/68	174672.65	235765.85	74.09
Mean			74.81
S.D.			7.4
C.V.			9.89
r			0.96

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.12: Loan and Advance to Total Assets Ratio



From the above table and figure shows loan and advance to total deposit ratio MBL. The ratio of MBL has increasing trend upto Fy 2065/66 but it decreases 72.22 for Fy 2066/67. The highest ratio for the period has been observed in the Fy 2065/66 which is 89.42% and lowest ratio in the Fy 2066/67 which it is 72.22%.

The mean ratio of loan and advance to total assets of MBL is 74.81%, it has 7.4% standard deviation, 9.89% coefficient of variation and correlation coefficient is 0.96. The highest mean ratio of loan and advance to total assets of MBL reveals the bank has been able to turnover total asset into loan and advance in higher extent.

4.1.4.5 Investment to Total Deposit

Investment comprises of investment its government treasury bills, development bonds, company shares and other types of investment. The ratio shows how efficiently the major resources of the bank have been mobilized.

Table No. 4.13

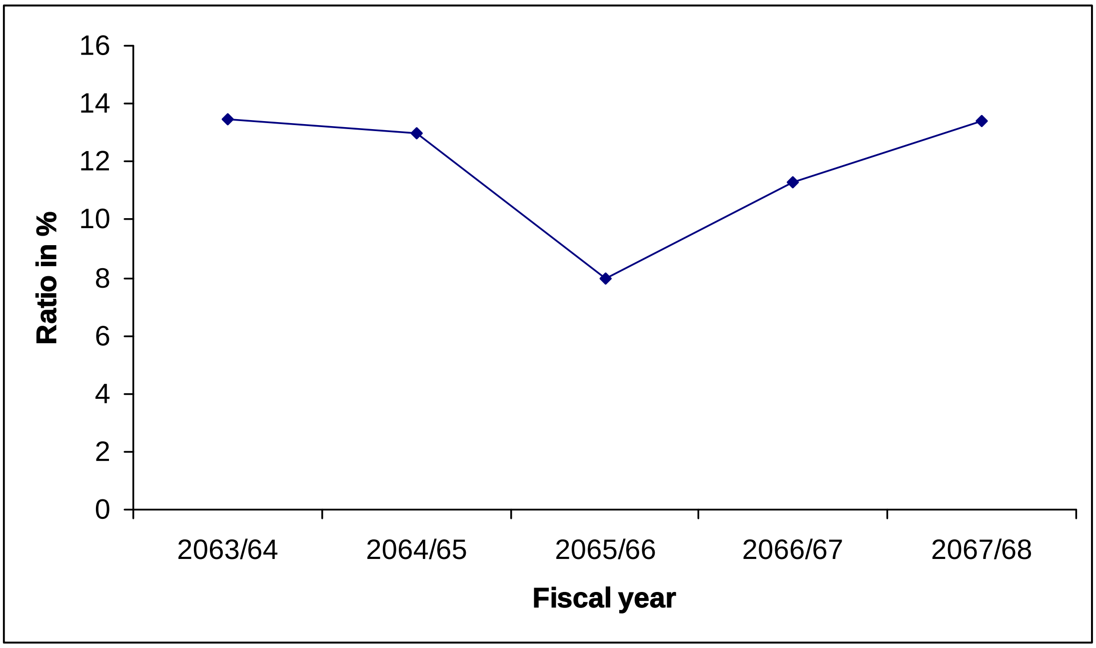
Investment to Total Deposit

Rs. in lakh

Fiscal year	Investment	Total deposit	Ratio (%)
2063/64	12784.69	94754.52	13.49
2064/65	14435.51	111022.42	13.00
2065/66	12461.59	155967.91	7.99
2066/67	20967.92	185359.17	11.31
2067/68	28577.84	212780.19	13.43
Mean			11.84
S.D.			2.33
C.V.			19.68
r			0.85

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.13: Investment to Total Deposit



From the above table and figure No. 4.13 shows investment to total deposit ratio of MBL. The highest ratio of MBL in Fy 2063/64 i.e. 13.49% and lowest in 2065/66 i.e. 7.99%. During the Fy 2063/64 the ratio has 13.49% then other decreased upto Fy 2065/66 then increased Fy 2066/67 and 2067/68 This ratio indicates management efficiency regarding the utilization of deposit.

Standard deviation 2.33, coefficient of variation 19.68% and correlation coefficient of correlation 0.85 shows the bank has been able to maintain investment to total deposit ratio to some extent.

4.1.5 Profitability Ratios

A company should earn profits to provide services and grow over a long period of time. Profit is the difference between revenues and expenses over a period of time. Profit is the ultimate output of the company, and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuously evaluate the efficiency of the company in terms of the profits. The profitability ratios are calculated to measure the operating efficiency of company. Besides management of the company, creditors and owners are also interested in the probability of the firm. Creditors want to get interest and repayment of principal regularly only when the company earns enough profits.

However, profitability is a measure of efficiency and the search for it provides an incentive to achieve efficiency. The profitability of a firm can be measured by its profitability ratio and profitability are these ratios which indicates degree of success in achieving desired profit levels.

4.1.5.1 Return on Total Assets Ratios

Net profit refers to the profit after deduction of interest and tax. Total assets mean the asset that appear in asset right side of balance sheet. It measure the sufficiency of bank in utilization of the overall assets.

Table No. 4.14

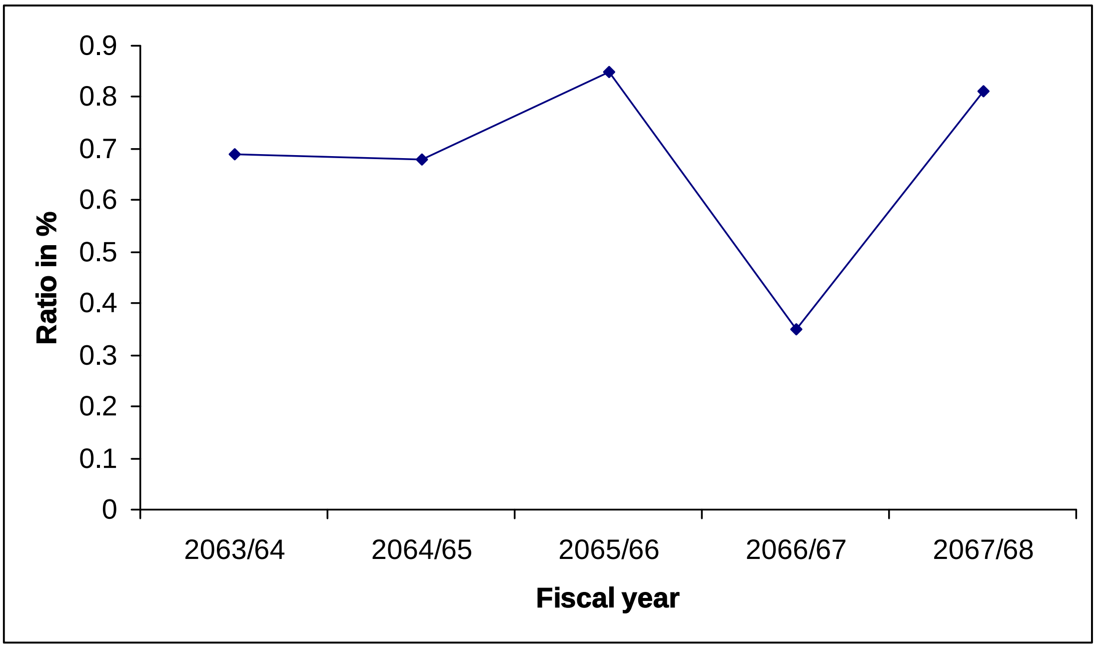
Return on Total Assets Ratios

Rs. in lakh

Fiscal year	NPAT	Total Assets	Ratio (%)
2063/64	740.86	108076.17	0.69
2064/65	850.16	124985.48	0.68
2065/66	1232.51	144907.82	0.85
2066/67	733.13	206787.91	0.35
2067/68	1920.21	235765.85	0.81
Mean			0.67
S.D.			0.31
C.V.			46.27
r			0.64

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.14: Return on Total Assets Ratios



From the above table and figure show return on total deposit ratio of bank. In fiscal year 2065/66 it has 0.85% then it has decreased to 0.69%, 0.68% , 0.35% and 0.81% in fiscal year 2063/64, 2064/65, 2066/67 and 2067/2068 respectively. Upto fiscal year 2064/65 to 2065/66 it is slightly increased and decreased. But in fiscal year 2066/67 it is highly decreased from 0.85% to

0.35%. Again in fiscal year 2067/68 it has highly increased from 0.35% to 0.81.

From above table and figure it is found that the highest ratio is 0.85% in 2065/66 and least is 0.35% in 2066/67. The mean ratio is 0.67%, standard deviation is 0.31%, coefficient of variation is 46.27% and correlation coefficient is 0.64.Higher the standard deviation, higher C.V. is 46.27 and positive correlation is 0.64 which shows the return on total assets ratio of MBL is not consistent i.e. riskier.

4.1.5.2 Return to Total Deposit Ratios

The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. Higher ratio is index of strong profitability position.

Table No. 4.15

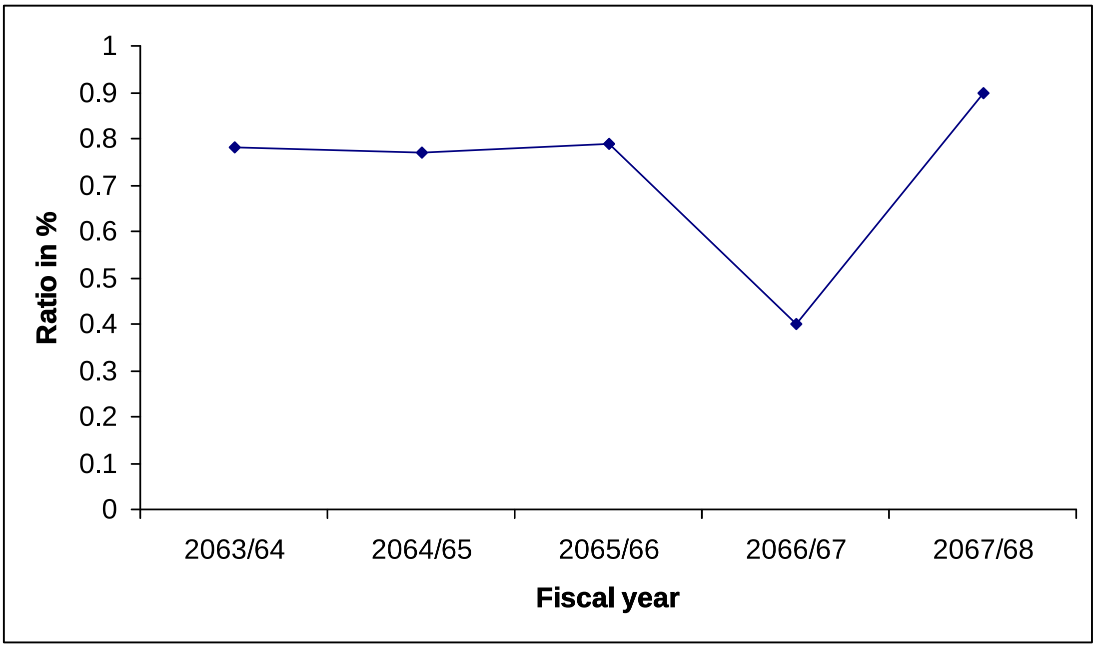
Return to Total Deposit Ratio

Rs. in lakh

Fiscal year	NPAT	Total deposit	Ratio (%)
2063/64	740.86	94754.52	0.78
2064/65	850.16	111022.42	0.77
2065/66	1232.51	155967.91	0.79
2066/67	733.13	185359.17	0.40
2067/68	1920.21	212780.19	0.90
Mean			0.73
S.D.			0.19
C.V.			26.03
r			0.69

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.15: Return to Total Deposit Ratio



From the above table and figure show return on total deposits ratio of bank. Like in return on total assets ratio, return on total deposit ratio is changing every year. The ratio of return on total deposit of MBL has decreasing trend every year except fiscal year 2065/66 and 2067/2068. The highest return to total deposit ratio is 0.90% in Fy 2067/68 and least is 0.40 in 2066/67.

The mean ratio is 0.73%, standard deviation is 0.19, coefficient of variation is 26.03% and correlation coefficient is 0.69 Higher the standard deviation, higher C.V. and negative correlation shows the bank is not able to maintain return to total deposit ratio promptly. From this figure, we conclude that the bank should take corrective action to improve this positive situation of earning.

4.1.5.3 Total Interest Expenses to Total Interest Income

Total interest expenses consist of interest expenses incurred for deposit, borrowing and loan taken by the bank. Total interest income includes interest income received form loan and advance, cash credit, overdrafts, government securities, inter bank loans and other investment. Lower ratio is favorable from profitability point of view.

Table No. 4.16

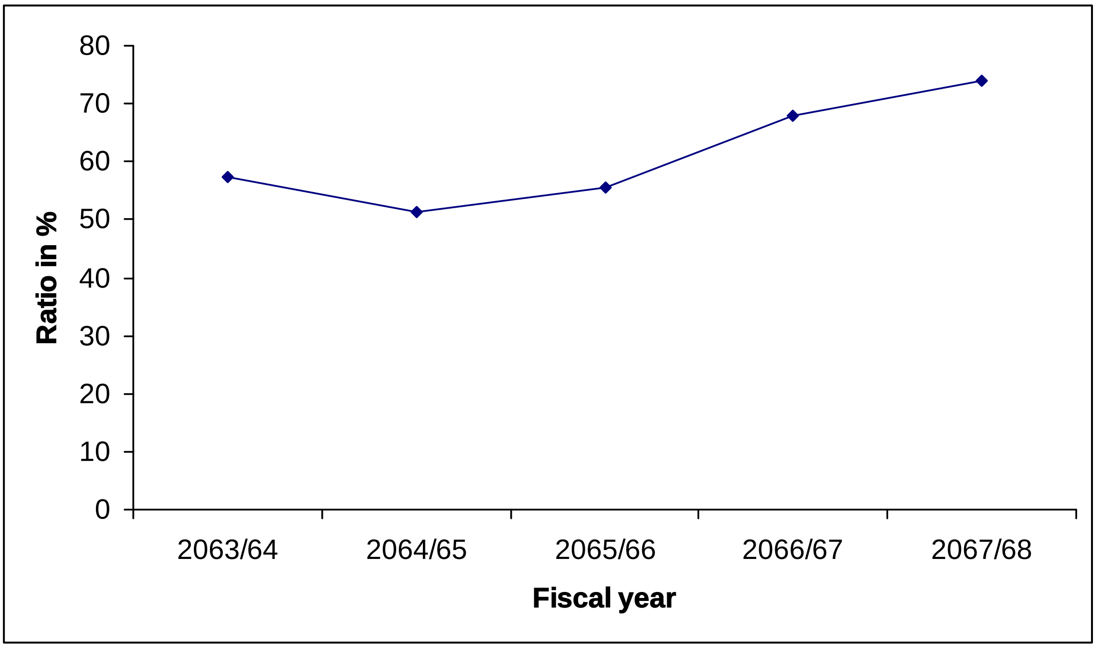
Total Interest Expenses to Total Interest Income

Rs. in lakh

Fiscal year	Interest expenses	Interest income	Ratio (%)
2063/64	3977.22	6944.82	57.27
2064/65	4079.19	7965.97	51.21
2065/66	5800.36	10414.73	55.69
2066/67	11448.08	16886.18	67.80
2067/68	17645.23	23848.29	73.99
Mean			61.19
S.D.			9.39
C.V.			15.34
r			0.99

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.16: Total Interest Expenses to Total Interest Income



From the above table and figure show total interest expenses to total interest income ratio of MBL. The ratio of MBL has been fluctuated during the year. The highest ratio is 73.99% in the year 2067/68 and lowest in 2064/65 i.e. 51.21%. Lower the interest expenses to interest income shows the higher profit of the bank. Likewise, the bank is able to decrease this ratio except fiscal year

2065/66, 2066/67 and 2067/68. But in fiscal year 2065/66, 2066/67 and 2067/68 it is increased to 55.69% , 67.80% and 73.99 respectively.

The mean ratio is 61.19%, standard deviation is 9.39%, C.V. is 15.34% and correlation coefficient is 0.99. Lower the standard deviation, Lowr the C.V. shows the bank has fluctuating expenses and income. It is more riskier for bank. This shows the bank has become to maintain interest expenses to interest income ratio properly. But correlation coefficient i.e. 0.99 shows the perfect correlation between interest expenses and interest income. This shows there is perfect correlation between interest income and interest expenses which is a strong point for bank.

As a whole, we can conclude that MBL has been able to minimize interest expenses in relation to interest income.

4.1.5.4 Interest Income to Total Assets

The ratio shows the percentage of interest income as compared to the assets of the bank. High ratio indicates the proper utilization of banks assets for income generating purpose. Low ratio represents unsatisfactory performance.

Table No. 4.17

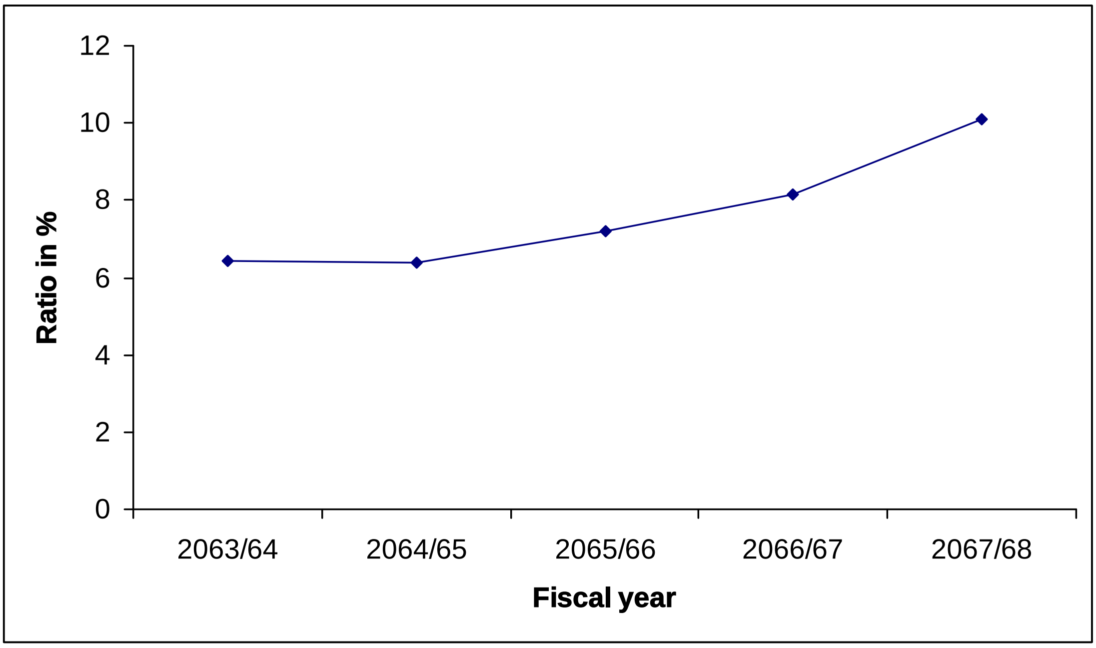
Interest Income to Total Assets

Rs. in lakh

Fiscal year	Interest income	Total assets	Ratio (%)
2063/64	6944.82	108079.17	6.43
2064/65	7965.97	124985.48	6.37
2065/66	10414.73	144907.82	7.19
2066/67	16886.18	206787.91	8.17
2067/68	23848.29	235765.85	10.11
Mean			7.65
S.D.			1.55
C.V.			20.26
r			1.00

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.17: Interest Earned to Total Assets



From the above table and figure No. 4.17 show the interest income to total assets of MBL. The ratio of MBL has fluctuated slightly during the year. The highest ratio is observed in Fy 2067/68 which is 10.11% and lowest ratio is 6.37% in Fy 2064/65.

The mean ratio of 7.65%, standard deviation is 1.55%, coefficient of variation is 20.26% and correlation coefficient is 1, shows there is slightly changed in the ratio of interest income to total assets. But the correlation between interest income to total assets is perfectly correlated.

Lower the standard deviation, lower C.V. and perfect correlation shows the bank is able to maintain its interest income to total assets ratio properly.

4.1.5.5 Staff Expenses to Total Income Ratio

Staff expenses include salary and allowance, contribution to provident fund and gratuity fund, staff training expenses and other allowance and made for staff.

This ratio measures the proportion of income spent for the staff , whose contribution is of great significance in the success of the bank. High ratio indicates that the major portion of income is used for staff expense. From the firm's point of view ,low ratio is advantage. But the staff prefer high ratio, as it is result of higher level of facilities and benefit provided to them.

Table No. 4.18

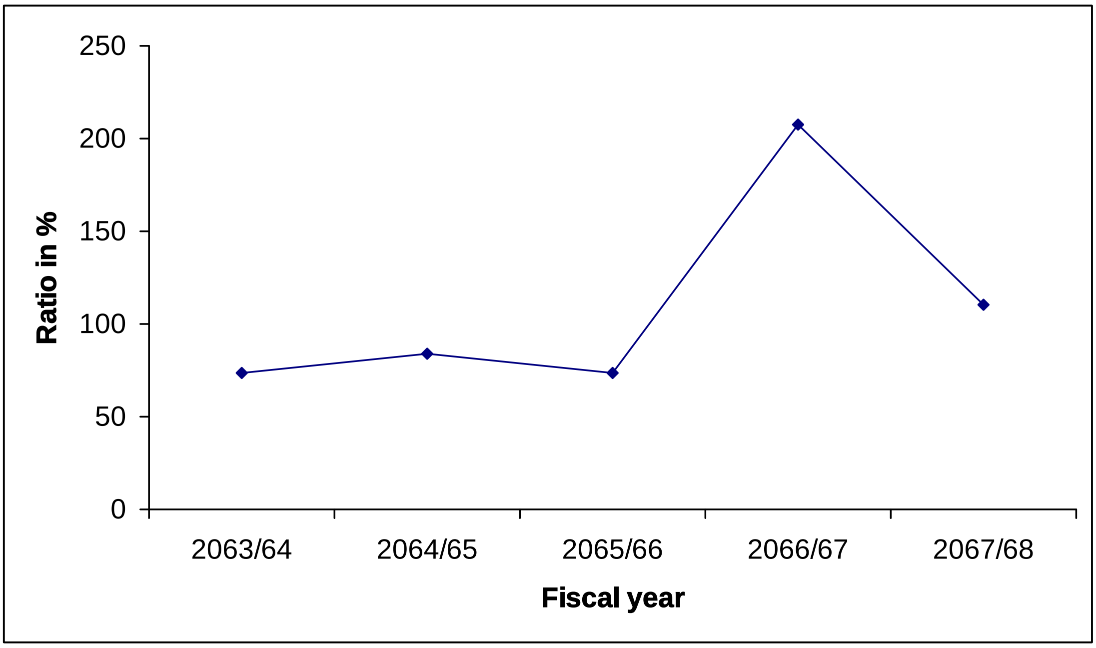
Staff Expenses to Total Income Ratio

Rs. in lakh

Fiscal year	Staff/employee expenses	Total income	Ratio (%)
2063/64	543.6	740.86	73.37
2064/65	714.21	850.16	84.01
2065/66	909.96	1232.51	73.83
2066/67	1521.13	733.13	207.48
2066/67	2125.26	1920.21	110.68
Mean			109.87
S.D.			56.63
C.V.			51.54
r			0.32

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.18: Staff Expenses to Total Income Ratio



From the above table and figure shows staff expenses to total income of the bank. The ratio of MBL has fluctuating during the year. The highest ratio is 207.48% in Fy 2066/67 and the lowest ratio i.e. 73.37% in Fy 2063/64.

Since the new branches i.e. 9, were launched by Machhapuchhre Bank Limited in fiscal year 2066/67, the operating expenses became high, so that the every aspects of bank seems weak in terms of profit. Increasing in interest expenses to total income ratio from 73.83% to 207.48% in fiscal year 2065/66 to 2066/67 then decreasing ratio 110.68% in fiscal year 2067/68 seems the bank is going to bankruptcy in near future, due to launching new branches.

The mean ratio of MBL is 109.87%, standard deviation is 56.63%, coefficient of variation is 51.54% and correlation coefficient 0.32. The higher the mean ratio of MBL measure the highest percentage of staff expenses in relation to total income.

Higher the S.D., higher C.V. and positive correlation coefficient shows the less riskier position of bank in terms of operating expenses to total income. To overcome this situation, MBL should maintain operating expenses properly.

4.1.5.6 Operating Expenses to Total Income

Operating expenses comprise of expenses incurred in house rent, water and electricity, repair and maintenance, legal expenses, audit expenses and other miscellaneous expenses made in course of operation. It shows the percentage of income spent for the operating activity of the bank. High ratio shows the large amount of income is spent for the operating activity of the bank. Low ratio is favorable to the bank, as it is the reflection of operational efficiency.

Table No. 4.19

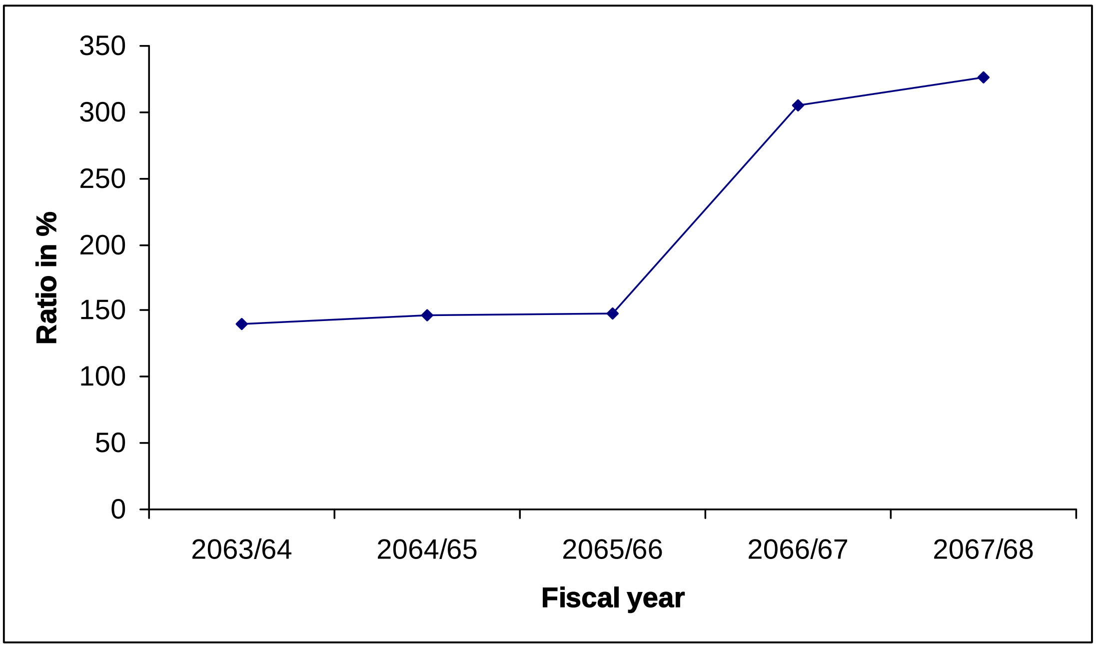
Operating Expenses to Total Income

Rs. in lakh

Fiscal year	Operating expenses	Total income	(Ratio (%)
2063/64	1041.81	740.86	140.62
2064/65	1244.08	850.16	146.33
2065/66	1828.41	1232.51	148.35
2066/67	2234.7	733.13	304.82
2067/68	6255.25	1920.21	325.76
Mean			213.17
S.D.			93.55
C.V.			43.88
r			0.91

Source: Annual reports of MBL (Fy 2063/64 to 2067/68 B.S.).

Figure No. 4.19: Operating Expenses to Total Income



From the above table and figure No. 4.19 show general expenses to total income ratio of MBL. The ratio is increasing trend during the year i.e. 2063/64 to 2067/68. The lowest ratio is 140.62% in Fy 2063/64 and highest ratio is

325.76% in Fy 2067/68. The mean ratio is 213.12%, standard deviation is 93.55%, coefficient of variation is 43.88% and correlation coefficient is 91.

From the above analysis, it is concluded that the general/operating expenses is a part of expenses which is more than 300% than total income in the year 2067/68. The bank is able to minimize it. This shows the bank is not able to maintain its operating expenses properly.

4.2 Statistical Analysis

In this study, statistical tools have been grouped into Karl Pearson's coefficient correlation, regression analysis, t-test, straight line trend, which are used to analyze the data to achieve the objective of the study.

4.2.1 Time Series Analysis

Time series is used to predict future forecasting and planning of variable on the basis of past and present information. In regard to MBL basically the trend of interest coverage ratio and interest income and interest expenses is analyzed. MBL has taken loan from different sources for certain period.

The projections are based on the following assumptions:

The main assumption is that other things will remain unchanged.

i. The forecasted will be true only with the limitations of least square methods are carried out.

ii. The MBL will continue to run in present position.

iii. The economy will remain in the present stage.

Trend of Total Interest Expenses to Total Interest Income

The trend value of interest expenses and interest income of MBL for five years from 2062/63 and forecasting for the next five years till 2071/72 are given in the below table

Table No. 4.20

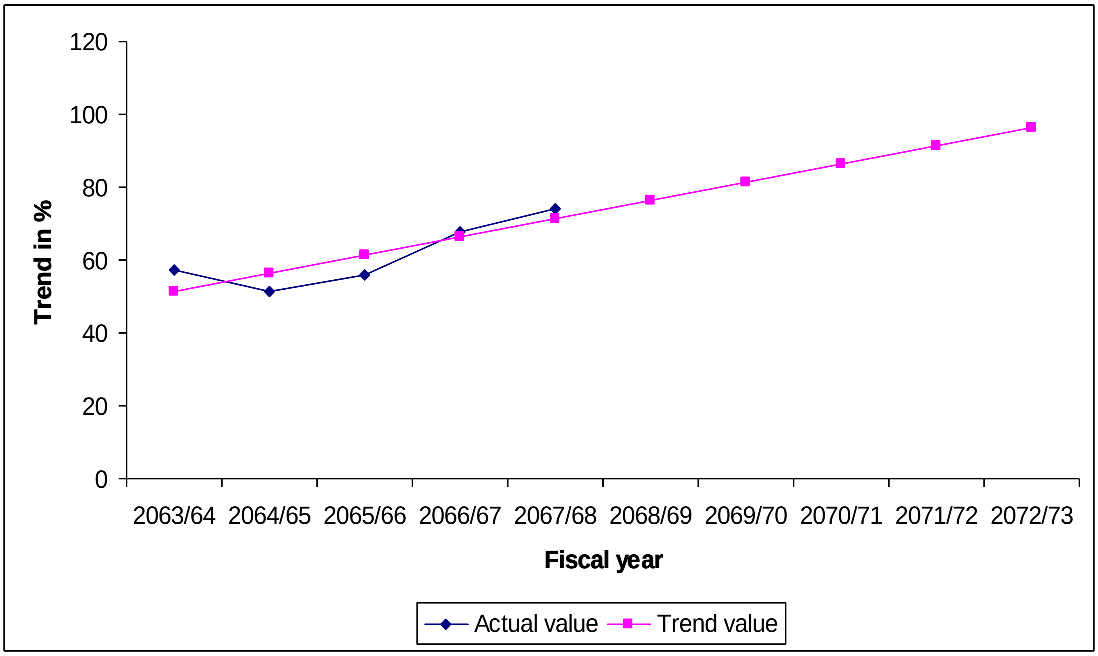
Trend Value of Total Interest Expenses to Total Interest Income

Fiscal year	Actual value	Trend value
2063/64	57.27	51.186
2064/65	51.21	56.189
2065/66	55.69	61.192
2066/67	67.80	66.195
2067/68	73.99	71.198
2068/69	-	46.183
2069/70	-	41.184
2070/71	-	36.177
2071/72	-	31.174
2072/73	-	26.171

Source: Appendix-I.

From the above table of trend value of interest expenses and interest income shows the increasing trend from 51.186% in Fy 2063/64 to 96.213% for fiscal year 2072/73. The change is interest income and interest expenses has been affected in the change of trend values.

Figure No. 4.20: Trend and Actual Line of ICR



Trend Analysis of Interest Coverage

The analysis of interest coverage ratio of MBL for five years from fiscal year 2063/64 to fiscal year 2067/678 and forecasted of the same for next 5 years are given in the following table.

Y=a+bx

Table No. 4.21

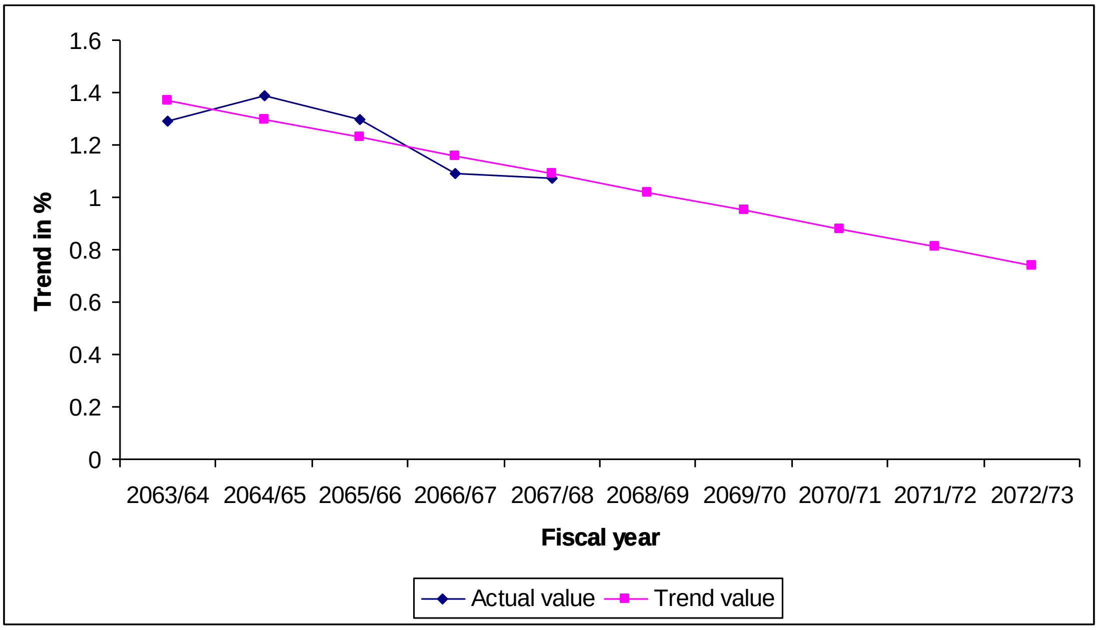
Trend Value of Interest Coverage Ratio

Fiscal year	Actual value	Trend value
2063/64	1.29	1.37
2064/65	1.39	1.3
2065/66	1.30	1.23
2066/67	1.09	1.16
2067/68	1.07	1.09
2068/69	-	1.02
2069/70	-	0.95
2070/71	-	0.88
2071/72	-	0.81
2072/73	-	0.74

Source: Appendix-II.

From the above table of trend value of interest coverage ratio, shows decreasing trend. In the fiscal year 2063/64, it was 1.37 times where as it will be decreased to 0.74 times for the forecasted year 20721/73. It means the company has ability to pay interest of Rs. 1 by earning Rs. 0.74. The above calculations of trend values are fitted in the following figure.

Figure No. 4.21: Trend and Actual Line of ICR



4.2.2 Correlation Analysis

Correlation Coefficient Correlation between Total Interest Expenses to Total Interest Income:

Under t-statistic test,

Null hypothesis: H_1: |∂ = 0, that is the variables are uncorrelated (insignificant).

Alternative hypothesis: H_1: ∂ ≠ 0, that is the variables are correlated (significant).

The following result is obtained for MBL, Nepal.

Table No. 4.22

Coefficient of Correlation between Total Interest Expenses and Total Interest Income

Evaluation criterion					
r	r^2	t-calculated value	t-tabulated value	relationship	Significant/ insignificant
0.99	0.9801	12.155	3.182	Positive	Significant

Source: Appendix-III.

Above table shows coefficient of correlation between total interest expenses and total interest income. Correlation between total interest expenses and total interest income is being independent. There is positive relationship between total interest expenses and total interest expenses. Coefficient of determination (r^2) indicates that 82.81% the variation in interest expense was explained by total interest income. Considering t-statistic calculated value, which was 3.80 and tabulated value of t-statistic, was 3.182 in 5% level of significance. T-statistic is significant because t-statistic value calculated is greater than tabulated value.

Coefficient of Correlation between EBIT and Interest Charge:

The correlation between EBIT (x) and interest charge is analyzed in order to know whether there is relationship between EBIT and interest charge.

$$r = \frac{N\sum xy - \sum x.\sum y}{\sqrt{N\sum x^2 - (\sum x)^2}\sqrt{N\sum y^2 - (\sum y)^2}}$$

Under t-statistic test,

Null hypothesis: H_1: $|\partial = 0$, that is the variables are uncorrelated (insignificant).

Alternative hypothesis: H_1: $\partial \neq 0$, that is the variables are correlated (significant).

The following result is obtained for MBL, Nepal.

Table No. 4.23

Coefficient of Correlation between EBIT and Interest Charge

Evaluation criterion					
r	r^2	t-calculated value	t-tabulated value	relationship	Significant/ insignificant
0.998	0.996	8.65	3.182	Positive	Significant

Source: Appendix-IV.

Above table shows coefficient of correlation between EBIT and interest charge. Correlation between EBIT and interest charge is being independent. There is positive relationship between EBIT and interest charge. Coefficient of determination (r^2) indicates that 99.6% the variation in EBIT was explained by interest charge. Considering t-statistic calculated value, which was 8.65 and tabulated value of t-statistic, was 3.182 in 5% level of significance. T-statistic is significant because t-statistic value calculated is greater than tabulated value.

4.3 Major Findings

From the analysis concerned to Machhapuchhre Bank Limited's financial performance, following findings have been obtained:

- Current ratio is 1.59, 2.80, 2.24, 1.69 and 1.84 times. The mean ratio is 2.032 times, S.D. is 0.49, C.V. is 24.11% and correlation coefficient is 0.95. It shows the satisfactory condition of bank in terms of maintaining current ratio.
- Cash and bank balance to total deposit has uniform ratio. It has mean ratio 0.14, S.D, 0.03, C.V. 19.22% and r is 0.93.
- Fixed deposit to total deposit ratio has 0.30 mean ratio. Its S.D. is 0.06, C.V. is 19.35% and is 0.94. It shows the better combination of fixed deposit to total deposit ratio.
- Cash and bank balance to current and saving deposit ratio is uniformly maintained. The mean ratio is 0.32, S.D. is 0.04, C.V. is 12.5% and correlation coefficient is 0.91.
- Total debt to shareholder’s equity ratio’s mean is 10.32 times, S.D. is 0.52, C.V. is 5.04% and it has perfect correlation. Ratio is found in increasing trend every year.
- Total debt to total assets ratio is consistent. The mean ratio is 0.95 times, S.D. is 0.08 and C.V. is 8.42% only. Assets is less than debt, shows the possibility to invest in productive sector.

- Total debt to total capital ratio's mean is 91.21 times, S.D. 0.502, C.V. 0.55% and correlation coefficient is 0.35. It shows the consistency between total debt to capital of MBL.
- The mean ratio between loan and advance to total deposit is 0.806 times, S.D. is 0.023, C.V. is 3.50% and it has perfect correlation i.e. 1, shows MBL is successful to mobilize the total deposit on loan and advance consistently.
- Loan and advance to fixed deposit ratio is increasing every year except year 2067/68. It has 2.70 mean ratio, 0.59 S.D., 21.52% C.V. and 0.93 correlation.
- Interest coverage ratio's mean is 1.23 times, S.D. 0.14, C.V. 11.38% and it has perfect correlation i.e. 1, shows MBL has higher percentage of net worth in relation to total deposit collected in the bank.
- Loan and advance to saving ratio's mean value is 2.13 times. It has 0.41 S.D., 19.25% C.V. and 0.84 correlation coefficient. It shows the satisfactory condition between loan and advance to saving deposit.
- MBL has 74.81% ratio between loan and advance to total assets. It has lower S.D. and C.V. is 7.4% and 9.82% respectively. Higher correlation coefficient i.e. 0.96 shows the lower fluctuation and higher consistency of MBL is in terms of loan and advance to total assets ratio.
- The mean ratio between investment to total deposit is 11.84%, S.D. 2.33%, C.V. 19.68% and correlation coefficient is 0.85. It shows the well management efficiency regarding the utilization of deposit.
- Return to total assets ratio is decreasing every year except Fy 2065/66. The mean ratio is 0.67% and correlation coefficient is 0.64.C.V. is 0.31 and correlation coefficent is 46.27.
- Return to total deposit ratio is decreasing order, and it has 26.03%, C.V. and 0.69 correlation coefficient, which shows the bank is able to mobilize total deposit ratio.

- The mean ratio of interest expenses to interest income is 61.19% shows the satisfactory condition of bank. It is 0.99 correlation coefficient. Which shows higher correlation between interest expenses to interest income.
- Interest income on total assets is in increasing trend which is 6.43% in Fy 2063/64 and 10.11% in Fy 2067/68. Correlation coefficient is also perfect i.e. 1.0.
- Staff expenses to total income ratio is in increasing trend which is 73.37% in Fy 2063/64 and 110.68% in Fy 2067/68. It shows the higher staff expenses in relation to total income. Higher S.D. and C.V. i.e. 56.63% and 51.54% shows the riskier position in terms of staff expenses to total income.
- Trend value of interest coverage ratio is in decreasing order. And trend value of interest expenses to interest income is also in decreasing order.
- t-test shows EBIT and interest charge are significantly correlated where t-calculated value is 8.65 and t-tabulated value is 3.182.
- Correlation between EBIT and interest charge is perfectly positive i.e. 0.998, and correlation between total interest expenses to total interest income is 0.99, which shows perfect positive correlation.
- Regression model NPAT on total assets is not significant and EBIT on interest charge is also insignificant.
- Total interest expenses and total interest income are significantly correlated, where t-calculated value is 12.155 and t-tabulated value is 3.182.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter highlights some selected actionable conclusion and recommendations on the basis of the major findings of the study derived from the analysis of MBL. The study has covered 5 years data from Fy 2063/64 to 2067/68. The major findings of the study based on financial and statistical analysis listed in chapter-IV of this report in order to carry out this study only secondary data have been used. The analysis of data is carried out with the help of various financial and statistical tools. The findings of the study are summarized and conclusion and recommendations are given below.

5.1 Summary

Machhapuchhre Bank Ltd, the first commercial bank in the western part of country, has been established by promoters and begin its operation on 17th Ashwin 2057 B.S. At the time of establishment of MBL with total authorized capital 240 million and issued and paid up capital Rs. 84 million. At present of MBL with authorized capital, Rs. 1000 million and issued and paid-up capital Rs. 550 million. The role of MBL cannot be over emphasized. Now, MBL has already spent more than ten years in serving the nation, apart from its traditional function it has served as a major institution for the development of the nation. Thus, it has contributed the major role for the betterment of the country.

The financial analysis is the process of identifying the financial strength and weakness of the firm. In this study the financial analysis has been adopted to know the performance of the MBL over the period of five years.

The study has been divided into five chapters. In first chapter, introductory part has been discussed. In the second chapter literature review has been done, in which, various theoretical as well as empirical study has been considered relating to financial performances. In theoretical review, different theories regarding financial performance has been mentioned and in empirical part, different previous research studies done entitled financial performance has been discussed. Chapter three clears the methods and techniques used in the research, where research design, population and sample, sources of data collection, analytical tools used in the research have been mentioned. In this research, all secondary sources of data have been used. Collected data have been analyzed and interpreted with the help of financial and statistical tools. In chapter four data and information have been analyzed, and interpreted and major findings have been also incorporated. Chapter five deals with summary, conclusion and some recommendations for improvement have been incorporated.

5.2 Conclusion

Based on the major findings of this study some conclusion has been drawn. Current ratio, which measures the liquidity position has been fluctuating i.e. 1.89 times in average. MBL has higher percentage of net worth in relation to total deposit. Return on total deposit is one of the important factor, i.e. decreasing every year, along with return on total deposit is also decreasing every year. Establishment of new branches has been increasing that's why the operating expenses has been also increasing.

Lower of total debt to shareholder's equity ratio is highly consistent. Loan and advance to total deposit ratio i.e. 0.79 times shows the bank has been able to mobilize its deposit successfully. In terms of returns of MBL, return to total assets ratio as well as return to total deposit ratio is decreasing every year. This result shows the bank is not able to mobilize its deposit properly. Staff expenses to total income ratio is in increasing trend, which shows higher staff expenses in relation to total income. In the same way, interest coverage ratio is in decreasing order. But interest expenses to interest income ratio i.e. 66.38% indicates the satisfactory condition of bank.

Statistically, interest coverage ratio is in decreasing order and trend value of interest to interest income is also in decreasing order. Correlation between EBIT and interest charge is perfectly positive i.e. 0.9950. t-test shows EBIT and interest charge are significantly correlated where t-calculated value is 18.38 and t-tabulated value is 3.182. Total interest expenses and total interest income are significantly correlated where t-calculated value is 3.80 and t-tabulated value is 3.182.

5.3 Recommendations

A clear financial picture can be viewed form all above presentation. Now, some valuable and timely. suggestions and recommendations are put forwarded on the basis of findings:

1. The liquidity position is relatively less than the standard requirement criteria i.e. 2:1, so the bank should try to meet the standard requirement.

2. The leverage ratio of MBL is in very high position. MBL should decrease its debt ratio position more and more. i.e. 9.89 times in average. So the bank should increase its equity position.

3. Credit deposit ratio i.e. total investment to total deposit ratio should be 75:100 but MBL has 12.18, which is very low. However, higher amount of current deposit and remittance is included in total deposit. Bank should try to increase total investment on total deposit.

4. Staff expenses to total income ratio is to high and it has also negative correlation. So the bank should try to minimize its staff expenses.

5. Operating expenses is the second major part of expenses, which is increasing rapidly. It has negative correlation with total income. If the bank will try to minimize this expenses, income will highly increased. So the bank should try to minimize this expenses using modern managerial tools and techniques.

6. Due to creeping lending position of the bank, the profitability position of the bank seems to be very serious. The earning power ratio to total assets is negative way. This is very serious matter. In double-digit inflation rate of Nepalese context, the bank should rethink towards the revitalization of its position and must boost-up the earning power.

7. MBL should move towards the modern banking facilities, prompt service in each branches, and provide new product to the customer to attract relative growth trend of deposit.

8. The net profit trend of MBL is highly negative in first three fiscal year because of high amount i.e. 347577740.08 non-performing assets. Therefore the bank should look forwarded to maximizes the profit through good lending and sound management.

9. The bank should adopt efficient and modern management concept to make more capable to their activities as well as fulfill the growing demand of current financial services.

10. Necessary to diversify the bank's credit investment from commercial and consumption sector to productive sector. It can make capable utilizing its resources efficiently and fulfill the goal of flourishing industry and agriculture in the country.

11. The bank should built local channel to collect deposit and lending opportunity. Similarly, in this twenty first century, in the time of globalization, the bank should provide prompt service to its customer.

12. Bank should strictly band the policy of nepotism (biasness) and favouritism, on the basis of capability and efficient recruitment, placement and promotion should be extended.

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Appendix-I

Trend Analysis of Total Interest Expenses to Total Interest Income

Fy	Mid-value (x)	y	x^2	xy
2063/64	2	73.99	4	147.98
2064/65	1	51.21	1	51.21
2065/66	0	55.69	0	0
2066/67	-1	67.80	1	67.80
2067/68	-2	57.27	4	114.54
n = 5	| x = 0	y = 305.96	x^2 = 10	xy = -50.03

Assuming 2065/66 is base year,

Trend line, $Y_c = a + bx$

$$a = \frac{y}{n} X \frac{305.96}{5} = 61.192$$

$$b = \frac{xy}{x^2} X \frac{Z50.03}{10} = -5.003$$

Now, putting the value of 'a' and 'b' in trend line,

$Y_c = a + bx$

Trend value:

2063/64 : 61.192– 5.003 (2063/64-2065/66) =71.192

2064/65 : 61.192– 5.003 (2064/65-2065/66) = 66.195

2065/66 : 61.192– 5.003 (2065/66-2065/66) = 61.192

2066/67 : 61.192–5.003 (2066/67-2065/66) = 56.189

2067/68 : 61.192– 5.003 (2067/68-2065/66) = 51.186

2068/69 : 61.192– 5.003 (2068/69-2065/66) = 46.183

2069/70 : 61.192– 5.003 (2069/70-2065/66) = 41.18

2070/71 : 61.192– 5.003 (2070/71-2065/66) = 36.177

2071/72 : 61.192–5.003 (2071/72-2065/66) = 31.174

2072/73 : 61.192–5.003 (2072/73-2065/66) = 26.171

Appendix-II

Trend Analysis of Interest Coverage Ratio

Fy	Mid-value (x)	y	x^2	xy
2063/64	2	1.29	4	2.58
2064/65	1	1.39	1	1.39
2065/66	0	1.30	0	0
2066/67	-1	1.09	1	-1.09
2067/68	-2	1.07	4	-2.18
n = 5	| x = 0	y = 6.14	x^2 = 10	xy = 0.7

Assuming 2065/66 is base year,

Trend line, $Y_c = a + bx$

$$a = \frac{y}{n} X \frac{6.14}{5} = 1.23$$

$$b = \frac{xy}{x^2} X \frac{0.7}{10} = 0.07$$

Now, putting the value of 'a' and 'b' in trend line,

$Y_c = a + bx$

Trend value:

2063/64 : 1.23 + 0.07 (2063/64-2065/66) =1.37

2064/65 : 1.23 + 0.07 (2064/65-2065/66) =1.3

2065/66 : 1.23 – 0.07 (2065/66-2065/66) =1.23

2066/67 : 1.23 – 0.07 (2066/67-2065/66) =1.16

2067/68 : 1.23 – 0.07 (2067/68-2065/66) =1.09

2068/69 : 1.23 – 0.07 (2068/69-2065/66) =1.02

2069/70 : 1.23 – 0.07 (2069/70-2065/66) =0.95

2070/71 : 1.23 – 0.07 (2070/71-2065/66) =0.88

2071/72 : 1.23 – 0.07 (2071/72-2065/66) =0.81

2072/73 :1.23 –0.07 (2072/73 -2065/66) =0.74

Appendix-III

Computation of Correlation Coefficient between Total Interest Expenses to Total Interest Income

'00,000'

Fy	Interest expenses (x)	Interest income (y)	xy	x^2	y^2
2063/64	3977.22	6944.82	27621077	15818278.93	48230524.83
2064/65	4079.19	7965.97	32494705.16	16639791.06	63456678.04
2065/66	5800.36	10414.73	60409183.3	33644176.13	108466601
2066/67	11448.08	16886.18	193314339.5	131058535.7	285143075
2067/68	17645.23	23848.29	420808562.2	311354141.8	568740935.9
n = 5	x = 42950.08	y = 66059.99	xy = 734647867.1	x^2 = 508514923.6	y^2 = 1074037815

$$r = \frac{N\sum xy - \sum x.\sum y}{\sqrt{N\sum x^2 - (\sum x)^2}\sqrt{N\sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 734647867.1 - 42950.08 \times 66059.99}{\sqrt{5 \times 508514923.6 - (42950.08)^2}\sqrt{5 \times 1074037815 - (66059.99)^2}}$$

$$= \frac{3673239336 - 2837281855}{\sqrt{697865246 \times 1006266796}}$$

$$= \frac{835957481}{837996793}$$

r = 0.99

Since r = 0.99

$r^2 = (0.99)^2$

or, $r^2 = 0.9801$

$$t = \frac{r}{\sqrt{1-r^2}}\sqrt{n-2}$$

$$= \frac{0.99}{\sqrt{1-0.9801}}\sqrt{5-2}$$

$$t = \frac{0.99}{\sqrt{0.0199}}\sqrt{3}$$

$$= \frac{0.99}{0.1406}\sqrt{3}$$

or, t = 12.19

Degree of freedom (d.f.) = n – 2

= 5-2

= 3

$\Im$ = 5% = 0.05

Critical value: Tabulated value of t for 3 d.f. and $\Im$ = 5% level of significance for two tailed test is 3.182.

Decision: Since calculated value of t i.e.12.19 is greater than tabulated value of t i.e. 3.182, null hypothesis is rejected and alternative hypothesis is accepted. Therefore we can conclude that there is significant relationship between total interest expenses and total interest income.

Appendix-IV

Computation of Correlation Coefficient between EBIT and Interest Charge

'00,000'

Fy	EBIT (x)	Interest charge (y)	xy	x^2	y^2
2063/64	5117.48	3977.22	20353343.81	26188601.55	15818278.93
2064/65	5671.41	4079.19	23134758.96	32164891.39	16639791.06
2065/66	7563.04	5800.36	43868354.69	57199574.04	33644176.13
2066/67	12486.14	11448.08	142942329.6	155903692.10	131058535.7
2067/68	17845.24	16675.15	297572053.8	318452590.7	278060627.5
n = 5	x = 48683.31	y = 41980	xy = 527870840.9	x^2 = 589909349.8	y^2 = 475221409.3

$$r = \frac{N\sum xy - \sum x.\sum y}{\sqrt{N\sum x^2 - (\sum x)^2}\sqrt{N\sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 527870840.9 - 48683.31 \times 41980}{\sqrt{5 \times 589909349.8 - (48683.31)^2}\sqrt{5 \times 475221409.3 - (41980)^2}}$$

$$= \frac{2639354205 - 2043725354}{\sqrt{579482076 \times 613786647}}$$

$$= \frac{595628851}{596387760.1}$$

r = 0.99

Since r = 0.99

$r^2 = (0.99)^2$

or, $r^2 = 0.99$

$$t = \frac{r}{\sqrt{1 - r^2}}\sqrt{n - 2}$$

$$= \frac{0.99}{\sqrt{1 - 0.9801}}\sqrt{5 - 2}$$

$$t = \frac{0.99}{0.1406}\sqrt{3}$$

or, t = 12.19

Degree of freedom (d.f.) = 5 – 2

= 5-2

= 3

$\Im$ = 5% = 0.05

Critical value: Tabulated value of t for 3 d.f. and $\Im$ = 5% level of significance for two tailed test is 3.182.

Decision: Since tabulated value i.e. 3.182 is less than calculated value i.e. 12.19, null hypothesis is rejected and alternative hypothesis is accepted. Therefore we can conclude that EBIT and interest charge are significantly correlated.