A STUDY ON INVESTMENT PORTFOLIO OF FEWA FINANCE COMPANY LIMITED POKHARA

By:

KRISHNA KUMAR K.C.

Prithvi Narayan Campus

Roll. No. 65/063

T.U. Registration Number: 7-1-297-469-2000

A Thesis Submitted to:

Office of the Dean

Faculty of Management

Tribhuwan University

In the partial fulfillment of the requirements of the degree of

Master of Business Studies (M.B.S.)

Pokhara

February, 2011

RECOMMENDATION

This is to certify that the thesis:

Submitted by

Krishna Kumar K.C.

Entitled

A Study on Investment Portfolio of Fewa Finance Company Limited, Pokhara

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

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Dr. Puspa Raj Sharma **Thesis Supervisor**	***Dr. Puspa Raj Sharma*** **Head of Department Department**	**Campus Chief**

Date :----------

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the

thesis presented by

Krishna Kumar K.C.

Entitled

A Study of Investment Portfolio of
Fewa Finance Company limited, Pokhara

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 requirement for Master's Degree in Business Studies (M.B.S)

Viva-voce Committee

Chair Person (Viva voce committee): ----------

Member (Thesis Supervisor): ----------

Member (External Expert): ----------

Campus Chief: ----------

Date:-…….

ACKNOWLEDGEMENTS

Giving me great opportunity to prepare this thesis to fulfill the partial requirement of MBS program held under Tribhuvan University, I would like to heartily thank to Tribhuvan University.

I would like to express my gratitude to all my respected lecturer for their support and guidence in the completion of this dissertation. I am highly indebted to my supervisor associate professor Dr. Puspa Raj Sharma, Head of Department of Management of P.N. Campus, Pokhara for his scholarly guidence, comments and suggestions for making this thesis possible.

My special thanks goes to Mr. Amrit Lal Shrestha and Mr. Hari Pathak for their valuable suggestions. I also owe an indebtedness to all reputed authors whose writings have provided me the necessary guidance and invaluable materials for the enrichment of my research paper in all possible ways. I would like to express my genuine appreciation to all the staff of Prithivi Narayan Campus, Central library staff and Fewa Finance Company Limited that provide me necessary information and data.

I am very much grateful to my friends Mr. Santosh Sharma, Mr. Bimal poudel and Mrs. Hari Maya Rana who helped me by providing different supports for my research work. I am too much grateful to my parents and all my family members for their continuous support and inspiration throughout my study period.

Krishna Kumar K.C.

February, 2011

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

C. V.	Coefficient of Variation
S.D.	Standard Deviation
C/D Ratio	Credit to Deposit Ratio
B.S.	Bikram Sambat
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
Rs.	Rupees
P.E.	Probable Error
FFCL	Fewa Finance Company Limited
MBS	Master of Business Studies
AFCL	Annapurna Finance Company Limited
NCC	Nepal Credit and Commerce Bank Limited
NEPSE	Nepal Stock Exchange
Govt.	Government
NABIL	Nabil Bank Limited
EBL	Everest Bank Limited
NIBL	Nepal Investment Bank Limited
HBL	Himalayan Bank Limited
BOKL	Bank of Kathamndu Limited
NRB	Nepal Rastra Bank
T.U.	Tribhuvan University
i.e.	That is
r	Correlation Coefficient
r^2	Coefficient of Determination
P.N.	Prithvi Narayan
S.No	Serial Number

CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Nepal is a small Himalayan country, which is located between the two most populous countries in the world namely China and India. Its total area is 147181 square kilometer. Nepal occupies 0.03 and 0.3 percent land of the world and Asia respectively. The elevation of the country ranges from 59 meter above sea level to the highest point on earth, Mt Everest at 8848 meter, all within average distance of 855 kilometer from east to west and 195 kilometer from south to north with climate conditions ranging from subtropical to Artic.

Nepal is a developing country. Most of the people are depend on agriculture sector for their livelihood. Agriculture is the key sector of the Nepalese economy, which is characterized by low productivity due to lack of technical know-how, poor infrastructure, support services like agriculture credit etc. More than 80% of the total population is directly or indirectly engaging in agriculture farming and agro-based industries. In Nepal context traditional agriculture system was barrier of agriculture development. There was not any agency or institution to help the agriculture development. Lack of effective manpower, economic support and lack of infrastructure of agriculture, the development could not successes. To remove these types of problems banking sector plays important role.

According to national population census 2001 population of Nepal is 2,31,51,423 with an annual growth rate of 2.24%.Current population of urban areas comes to be 32,27,879 (i.e. 14.20%) and that of rural areas is 1,93,23,544 (i.e. 85.80%). About 31% of population of Nepal is absolutely poverty line. The development of any country largely depends upon its economic development. The process of economic development depends upon various factors, to uplift the country's economy we should consider that type of factors. Nepal is developing country so depended in foreign aid too. Dependency upon foreign aid is dramatically inclining in each year. For the development to trade and industry within the country it is essential

to invest capital in huge level. Nepalese people are poverty stricken as well as characterized by low saving capacity. This is the main reason for making investment. Financing and baking sector plays an important role in the economic development of the country. Finance companies are one of the vital aspects of this sector, which deals in the process of channelising the available resources to the needy sector. A finance company is an institution, which deals with money and credit. It accepts deposits from the public and mobilizes the fund to productive sectors. It also provides remittance facility to transfer money from one place to another place. Generally, finance company accepts deposits from business institutions and individuals, which is mobilized or invested into productive sectors mainly business and consumer lending. Finance company is therefore known as a dealer of money.

At present context, Finance company is not only confined to accepting deposits and distributing loan. In addition to this, a finance company may exchange currency, joint venture underwriting, bank guarantee discounting bills etc. Finance company also promote investment in different enterprises of the national economy that spontaneously assist in alleviating poverty, uplifting of employment opportunities and thereby developing the society and country and then disburse them among the different economic facets as per the priorities laid by national plan policy. Finance company has the intermediary role between the deficit and surplus of financial resources. People keep their surplus money as deposit in the finance company and then finance company invests such fund.

Investment operation of the finance company is very risky one. For this finance company have to make better consideration while formulating investment policy. A proper and viable investment policy can be suitable and effective for the nation to uplift national economy. A proper investment policy attracts both borrowers and lenders, which help to increase the volume and quality to deposits, loan and investment.

Ojha (1965) “Before 1848 B.S., the goldsmith used to store people’s goods and charge nominal charge against the deposits. At that time, people deposited their gold and valuable goods for the security rather than earning” (p.68).

Samuelson (1980) “The depositor would leave their gold and valuables for safekeeping and are given a receipt by the goldsmith. Whenever the receipt was presented, the depositors would get back their gold and valuables after paying a small fee for safekeeping services” (p.17).

Nepal Rastra Bank (2004) “Financial Sector is regarded as the backbone or engine of growth of any economy whether developed or developing or in transition or emerging. It plays a very important role in the development of all sectors of the economy and actually works as a lubricator by providing financial resources. It operates as an intermediary between financial surplus units and financial deficit units." (p.16)

Gurung (2005) “Finance companies are important component of financial system in under developing countries. They work as financial intermediaries and basically deal on consumers and business loan. They collects small savings and mobilize savings in various tasks like hire purchase, purchase of land, housing loan between the person who has got saving and investors, finance company and also persons or organizations which need the loan of small amount, as well as term loan in trade, industry, education, health agriculture etc. Moreover most of the finance companies are also offering their services in bank guarantee, Collection of shares and underwriting shares” (p.163)

After the arrival of democracy in 2007 B.S., the government began to perform several reforms. As an outcome, “Nepal Rastra Bank” came in B.S. 2013 Baishakh 14 as central bank in the arena of Nepal under Nepal Bank Act, 2012 (B.S.). Afterwards, Agriculture Development Bank was established in B.S. 2024and “Commercial Bank Act” was amended in B.S. 2031. Nepal Arab Bank Limited, “Nabil Bank” came as first joint venture in 2041 B.S. and went up to Nepal Grindlays Bank Limited” in 2043 B.S. under partyless Panchayat system.

On the reports of World Bank stated that the first finance company, the ‘Nepal Housing Development Finance Company Limited’, began operations in 1992. One study urges that these companies make up 6.5% of the total assets, 6.6% of the total deposits and 9.8% of the total credits of the banking system compared to 0.6%, 0.4% and 0.8% respectively in 1994 (excluding NRB). This rapid growth in the number of finance companies has also been accompanied by a corresponding rapid increase in the level of total assets that they hold (p.72).

Fewa Finance Company Limited (FFCL) is the one of the best finance company. It was established in the year 2060 B.S. under Finance Company Act 2053 B.S. It consists of one head office located in B.P. Chowk Chipledhunga Pokhara, and branch offices are in Bagdarbar Sundhara Kathmandu, in Jomsom Mustang, in Birauta Pokhara, in Amarsinghchowk Pokhara, and in Bagar Pokhara. FFCL has, authorized

capital of Rs. 10 million, issued Capital of Rs. 5 million and paid up capital of Rs. 3 million.

The main objectives of FFCL is to collect scattered saving of people through attractive different schemes, accept to the deposit and mobilize the saving through financial instruments, convert them into capital and lend them to individuals and institutional borrowers. As a whole its main objectives is to uplift the national economy by considering financial and technical facility to general public.

1.2 Focus of the study

Finance company has no longer history and it is new horizon in Nepal. The title also clears that focus of the study. The main focus of the study is to find out the investment structure and investment process of the Fewa Finance Company limited.

Finance company performs various activities. Among them, investing in different sector is also considered as important one. The objective is to maximize the return by minimizing the risk. The good investment policy attracts both borrowers and lenders which help to increase the volume and quality to deposits, loans and investment.

In this study whole time and energy spend on analysis of investment structure and investment decision process of the Finance company. In this study, the trend of investment process of Finance company in various sectors is analyzed and the existing investment situation and its investment strategy are also carefully observed.

1.3 Statement of the problem

For the development of the country's economy financial institutions and banking sectors play the vital role. Most of the government banks in Nepal running in loss though the private sector banks are somehow running in profit. Nepal Rastra Bank is running under the government rules and regulations so here we have a question why the most of government banks are running in loss? And why the private sectors financial institutions and banks are running in profit? We know that all banks have the same rules and regulations. It means that banking sector do not absorb systematic rules and regulations. It is also says that bank do not have proper managing system. Another reason is that there is increasing competition among the banks. They are facing stiff competition between financial institutions, commercial banks, development banks and

co-operatives. Due to stiff competition no any bank can earn smoothly without well-managed portfolio of investment.

The general problem of the study is to examine into the investment policy of the Finance company. Based on this general problem the specific problems are raised, these specific problems are as follows:

1. What is the trend of investment made by Finance company for past five years?
2. What is the relationship between the deposit mobilization and loan investment?
3. What is the liquidity position of the Finance company?
4. What is trend of risk and return of the company?
5. What are the level, trend and stability of the company's profit? Is the rate of return satisfactory or not?

1.4 Objective of the study

Undoubtedly the role of the bank in mobilizing and utilizing scare and scattered resources of nation is praiseworthy one. The basic objective of the study is to have true insight into investment portfolio aspects of Finance company. The specific objectives of this study are given below:-

1. To analyze the trend of investment of the finance company in past five years.
2. To analyze the deposit mobilization and investment trend of the Finance company.
3. To examine the liquidity position of the Finance company
4. To evaluate the risk return of the company
5. To evaluate the level, trend and stability of Finance company's profit.

1.5 Significance of the study

This study itself has its own importance because its main objective is to gain some knowledge and to add a drop of literature in the field of research. This study will be helpful to the management of Finance company to make new plans, policies and strategies. It will suggest to policy makers the areas for further improvement in financial institutions. On the other word the study may also be guideline to the management of the financial institutions. The study shows the actual figure of the Finance company. It is expected that the study will helpful to the all banking sectors,

and to show a small way to make an important decision and policy. The study of investment portfolio of Fewa Finance limited will be beneficial to the followings:-

To the management: This study will be helpful to compare and analyze own with others regarding performance success or failure, effective and so forth.

To policy makers: Central bank, ministry, officers of government, security exchange and tax office can formulate appropriate policy regarding Development bank limited with the help of this study.

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To the shareholders: Shareholders are the true owner of the finance company. This study will be useful to them for acquiring the answer to the following questions:

- How funds are utilized as investment?
- To what extent they are gaining?
- Is the productivity of their limited resources satisfactory?

To outsiders: Debtors and depositors, creditors, competitors, investors, financing agencies, stock exchange, and personnel can get information about the investment performance of Fewa Finance limited with the help of this analysis. They can make yes or no decision regarding investment decision.

1.6 Limitation of the study

Each and every study has its own limitations. We can not write freely where we want. No study can be free from constraints such as economic resources, time etc. All the necessary data may not be available due to business secrecy. This study too is no exception and is characterized by the following limitations:

- This study examines only the investment portfolio Fewa Finance limited, so all the activities and efforts are intended to analyze the investment portfolio
- The reliability of the study greatly depends on accuracy of data provided and collected. Hence, it is not free from limitations of secondary data.
- Necessary data are collected from secondary sources
- The study use the limited tools and techniques
- Only five years data are taken into consideration for the study.

- There are so many external variables which directly affect the finance company's activities which are not considered in this study.
- This study is conducted only for suggesting the concerned limited but not for directing.

1.7 Organization of the study

The study investment portfolio of Finance company is presented in organized form. The whole research report is bifurcated into five chapters and they are as given below:

- The first chapter entitled "Introduction chapter" disclose the subject matter of the study. This contains general background of the study, focus of the study, statement of problem, objectives of the study, significance of the study, limitation of the study and organization of the study.
- The second chapter deals with the review of literature. It contains conceptual framework of the review and review of related studies.
- The third chapter concerned with the research methodology. It includes research design, justification for the selection of the study unit, sources and procedure of data collection data processing procedure, tools and techniques and limitation of the methodology.
- The forth chapter named by 'presentation and analysis of data' describe the actual study of investment portfolio of Finance company, with the uses of techniques relating to analysis such as descriptive expression, diagrams and so forth. Similarly, statistical tools are used wherever and whenever necessary to twinkle the research work.
- Like this way the final chapter summarizes the whole study. It also contains the summary of the report, conclusion derived on the basis of data analyzed and recommendations or some solid suggestions for improvements to the concerned institution.

CHAPTER - II

REVIEW OF LITERATURES

The investment portfolio decision has played an important role in banking sectors as well as other organizations. Effective investment portfolio decision encourages to each and every investor to invest their funds on profitable field in order to achieve high return. Before proceeding to descriptive study, the researcher made an effort to clarify, understand and explore the concept and theory of Investment portfolio and Portfolio Management. The review of literature helps the researcher to avoid repetition in the same task. Every possible effort has been made to grasp knowledge and information that is available from libraries, document collection centers, other information managing bureaus and concerned Finance company. This chapter helps to take adequate feed back to broaden the information base and inputs to the study. This part of the study will be directed to examine and review some of the related books, articles published in various newspapers, economic journals, related business magazines and websites. Basically, this chapter gives more emphasizes on the literature relevant to the study. Some literatures relevant to the chapter are as follows:

2.1 Conceptual/Theoretical Reviewed

Conceptual and theoretical review deals with the theoretical aspects of investment, return, risk, portfolio, diversification etc. Various books are reviewed under this.

2.1.1 Investment

Sharpe, Alexander & Baily (2002) “Investment brings forth vision of profit, risk, speculation and wealth. For the uninformed, investing may result in disaster. In general sense; investment means to pay out money to get more. But in the broadest sense, investment means the sacrifice of current money for future money. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain” (p.1).

Francis (1986) “Investment in its broadest sense means the sacrifice of current dollars for future dollars. Two different attributes are generally involved: time and risk**.** The sacrifice takes place in present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain” (p.1).

> Charles (1991) has defined that, investment as the commitment of funds to one or more assets that will be held over some future time period. Investment is concerned with the management of an investor’s wealth, which is the sum of current income and present value of all income (p.2).
>
> Bhattarai (2004) “Investments are made in assets. Assets in all are of two types, real assets (land, buildings, factories etc) and financial assets (stocks, bond, T-bill etc.). These two investments are not competitive but complementary. Highly developed institutions for financial investment greatly facilitate real investment” (p.3).
>
> Frank & Reilly (2004) “Investment is the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time funds are committed, for the expected rate of inflation and also for uncertainty involved in the future flow of the funds”(pp. 298-299).
>
> An investment involves sacrifices of current rupees in future rupees. Investment is not a gamble rather it is the systematic and scientific way of using the excess fund to get the maximum return at minimum level of risk. Investment made to obtain some expected profit. Investment forgives the present return for future return. Present investment is contribution to the future return. Investment is not gambling rather than it is systematic and scientific way of using excess fund from income to gain expected return with lower level of risk. While investing future return one should not forget that the amount she/he investing i.e. capital, a collective form of surplus. The surplus is that part of money deducting all the expenses from income.

A person spends their years in capital formation process. That is why each one should be rational while investing. Since most of investors are risk averters, they require additional unit of return for bearing one more level of risk. People always try to reduce the risk factor. Common definition say us that contribution of present value for

future return is investment or it's a search of certainty within the uncertainty. An investment is a commitment of money that expects to generate additional money. Every investment entitles some degree of risk; it required a present sacrifice for a future uncertain benefit. The motivating factor of investment is collective form of saving, expectation of future return and wealth position maximization.

2.1.2 Investment process

Sharpe (2002) has stressed that the investment process describes how an investor makes decision about what securities to invest in, how extensive this investment should be and when they should be made. The investment process involves these steps:-

Set investment policy:

The first step of the investment process is to set the investment policy. It determines the objectives and the amount of his/her investment fund. Investor objective should be stated in terms of both risk and return. This step involves the identification of the potential categories of financial assets for consideration in the ultimate portfolio.

Perform securities analysis:

In this step, securities analysis involves examining a number of individual securities/group of securities within the broad categories of financial assets. The investor will evaluate them in term of their price whether they are under priced or overpriced, risk associated with that specific security; his/her expected return and real return and so on. There are two main techniques to securities analysis: -

I) Technical analysis

II) Fundamental analysis

Construct a portfolio:

Construction of portfolio involves identification of specific securities in which to invest, along with the proportion of invest able wealth to be put into each security. The investor may construct portfolio according to his/her interest either he/she wants active or passive strategy to manage his/her investment. There should be clear vision of strategy, risk bearing capacity and required rate of return before deciding the alternatives of investment.

Revise the Portfolio:

Portfolio revision concerns the periodic repetition of the previous three steps. That is, overtime the investor may change his or her investment objectives, which in turn may cause the currently held portfolio to be less than optimal.

Evaluate the Performance of the Portfolio:

It involves determining periodically how the portfolio performed, in terms not only the return earned but also the risk experienced by the investor (pp. 11-14).

2.1.3 Investment alternatives:

> Cheney & Moses (1995) "In the market, a wide range of investment alternatives are available to an individual investor" (p.8).
>
> Traditionally, there are various investment alternatives like, common stocks, preferred stock and bank as financial assets. But with the increase in financial market concept and principles, a lot of other financial alternatives have mesh roomed. Commercial bankers, investment bankers and brokers provide the financial manager with detailed information on each of the forms of investment listed.

The financial manager decides on a suitable maturity pattern for the holdings on the basic of how long the funds are to be held. If the funds are wrongly invested without any financial risk, business risk and other various types of risk and facts, the bank cannot obtain profitable return as well as it should sometimes lose its principle. Therefore the suitable alternative can be selected and balanced in such a way those maturities and risk appropriate to the financial situation of the firm is obtained. There are various alternatives, which are as follows:-

1. Equity Securities:

Equity securities represent ownership shares in a corporation. Equity securities are traded in organized exchanges OTC market.

- Common Stock: Common stock is an ownership share in a corporation.
- Preferred Stock: Preferred stock is a fixed income security. Preference shareholder does not have voting rights. It is suitable for that investor who does not want to bear high risk but wants fixed return.

2. Debt Securities:

Debt securities are those on which interest has to pay and they have certain maturity period. Debt securities can be divided into two parts. They are as follows:-

a) Short Term Debt Securities**:** It is the obligation that matures in one year or less. Short term debt securities are traded in to money market. They are negotiable certificates of deposit, commercial paper, bankers acceptance and treasury bills.

b) Intermediate and long-term debt securities: It is the obligation that matures in more than one year. Intermediate and long-term debt securities are traded in OTC market. They are as follows:

Government Securities: Government securities are fixed income securities issued by the government. These securities are among the safest of all investment as the government is unlikely to default on interest or on principle repayments. They are treasury notes, treasury bonds and saving bonds.

Agency Securities: Agency securities are traded in the OTC market. Government national mortgage association, Federal home loan mortgage corporation, Federal National mortgage association are the example of it.

Municipal Securities: Municipal bonds are debt obligation issued by state or local government and agency. Revenue bonds and general obligation bonds are municipal securities.

Corporate Bonds**:** It is traded in organized exchanges and the OTC market.

3. Hybrid Securities:

Securities that have characteristics of both equity and debt are called hybrid securities. They are convertible preferred stock, convertible bonds.

4. Derivative securities:

Securities that derive their value from the value of an underlying asset. They are option, commodity futures, financial futures, option of futures, rights and warrant.

5. Real Assets:

Real assets are the non-financial assets. Precious metals, real estate, collectibles are the real assets.

6. International Investment:

International investments are the investment by individual in debt or equity securities issued by organizations outside country of residence of the investor. They are:-

- Multinational corporations.

- Foreign stocks traded on a local exchange.
- American depository Receipts are the international investment.

7. Other Investment alternatives:

There are some other investment alternatives they are Pension funds, Mutual funds and closed end companies.

2.1.4 Portfolio Management

Portfolio management is concerned with efficient management of portfolio investment in financial assets, including shares and debentures of companies. The management may be by professionals, by others or by individuals themselves. A portfolio of an individual or corporate unit is the holding of securities and investment in financial assets. These holding are the results of individual preferences and decisions regarding risk and return.

Foerge et al.(1999) "Portfolio management is the art of handling a pool of funds so that it not only preserves its original worth but also over time appreciates in value and yields an adequate return consistent with the level of risk assumed" (p.75).

2.1.5 Objective of portfolio management

There are several objectives under portfolio management. The main objective of portfolio analysis is to develop a portfolio these has a maximum return at whatever level of risk, the investors seems appropriate. There are two types of objectives, they are as follows:-

Table 2.1

Primary Objectives	**Secondary Objectives**
- Maximization of return - Minimization of Risk	- Regular Return - To stable income - Appreciation of Capital - To ever liquidity - To easy Marketability of assets - To get income by interest and dividend - To safety of Investment through diversification - Tax planning- capital gain tax, income tax and wealth tax

2.1.6 Portfolio Management Policies

There are so many portfolio management policies which directly affect the portfolio management decision. They are as follows:-

Aggressive Policy:

Aggressive policy is normally based on yields of securities. This policy assumed that the market is strong and rising, that common stocks will be best outlets for the portfolio in rising market. This policy depends more on short-terms source of fund.

Defensive Policy:

Policy gives more emphasis on safety of principal amount. This policy will be useful when it is suspected that the marker will decline in near future. Bonds and preferred stocks are defensive types of securities. This policy depends more upon long term source of fund.

Moderate Policy:

Policy suggests for the construction of balanced portfolio of various types of securities. It is the hedge of aggressive and defensive policy or hedge against a rise or fall in the stock market.

Income vs. Growth policy:

The income policy gives more emphasis upon maximization of current income and attaches insignificant importance to capital gain and growth. The growth policy gives more emphasis on the capital appreciation of the portfolio.

2.1.7 Factor affecting Portfolio decisions

Amount of Decision:

While determining the investment portfolio the finance manager should actually consider the amount of fund available with organization trading and manufacturing organization deal in securities only for the purpose of best utilization of their available surplus cash resource. The amount of surplus funds available with them will therefore decide the quantum of their investment in securities.

Objective of Investment Portfolio:

While determining the investment portfolio we should be clear about objective of making investment in securities. The objective may differ from organization to employees can think of having in its investment portfolio only such securities which can assure safety of the fund and its returns.

Selection of Investment:

This is an essential decision which a finance manager has to take. He has to decide the kind of investment in which he has to put his fund. The selection of investment involves deciding about the type of securities, proportion between fixed and variable yield securities, selection of industries, selection of companies etc.

Timing of Purchase:

To maximize the profit it is not only important for the finance manager to buy the right security but it is also equally important to buy and sell it at the right time. It is the most intricate and complex decision for finance manager.

2.1.8 Sources of Investment Risk

Every investment involves uncertainties that make future investment returns risky. The sources of uncertainty that contribute to investment risk are :

Interest Rate Risk:

Interest rate risk is potential variability of return caused by changes in the market interest rate. If market interest rates rise, then, investments' values and market price will fall and vice versa. The variability of return that results is interest rate risk.

$$\text{PV of investment} \quad \alpha = \frac{1}{InterestRate}$$

Thus, the investment rate risk affects the prices of securities like stocks, bonds, real estate, gold, puts, calls, and other investments as well.

Purchasing Power Risk (Inflation risk):

It is the variability of return an investor suffers because of inflation. Economists measure the rate of inflation by using a price index. The percentage change in the consumer price index is a widely followed measure of the rate of inflation. The rate of inflation is measured by consumer price index.

$$\frac{CPI_t \; Z \, CPI_{tZ1}}{CPI_{tZ1}}$$

Rate of inflation =

Where,

CPI_t = consumer price index in period t.

CPI_{tZ1} = consumer price index in period t-1.

When inflation takes place, financial assets such as stocks, bonds, etc. may lose their ability to command the same amount of real goods and services they did in the past.

Bull-Bear market Risk:

When a security index rises fairly consistently from a low point for a period of time, this upward trend is called a bull market. The bull market ends when the market index reaches a peak and starts a downward trend. The period during which the market declines to the next trough is called a bear market.

Management Risk:

Errors made by business managers can harm those who invested in their firms. Forecasting management errors is difficult work that may not be worth the effort and, as a result, imports a needlessly skeptical outlook. Agency theory provides investor with an opportunity to replace skepticism with informed insight as they endeavor to analyze subjective management risks.

Default Risk:

Default risk is that portion of an investments' total risk that results from changes in the financial integrity of the investment. The variability of returns that investors experience as a result of changes in the creditworthiness of a firm in which they invested is their default risk.

Liquidity Risk:

Liquidity risk is that portion of an assets' total variability of return which results from price discounts given or sales commissions paid in order to sell the asset without delay.

Callability Risk:

Some bonds and preferred stocks are issued with a call provision. Issuers like the call provision because it allows them to buy back outstanding preferred stocks and/or bonds with the funds from a new issue if market interest rates drop below the level being paid on the outstanding securities. But, whatever the issuing company gains by calling in on issue is gained at the expense of the investors who have their securities called.

That portion of a security's total variability of returns that derives from the possibility that the issue may be called is the callability risk**.** Callability risk commands a risk premium that comes in the form of a slightly higher average rate of return. This additional return should increase as the risk that the issue would be called increases.

Convertibility Risk:

Conversion is a contractual stipulation that is included in the terms of original security issue. This provision alters the variability of returns from the affected security. Convertibility risk is that portion of the total variability of return from a convertible bond or preferred stock that reflects the possibility that the investment may be converted into the issuer's common stock at a time or under terms harmful to the investors' best interests.

Political Risk:

Political Risk arises from the exploitation of a politically weak group for the benefit of a politically strong group, with the effects of various to improve their relative position increasing the variability of return from the affected asset regardless of whether the charges that causes political risk are sought by political or by economic interests, the resulting variability of return is called political risk if it is accomplished through legislative, judicial or administrative branches of the government. Political risk can be international as well as domestic.

Industry Risk:

Industry risk is that portion of an investments total variability of return caused by events that affect the products and firms that make up an industry. The stage of the industry's life cycle, international tariffs and/or quotas on the products produced by an industry, product or industry related taxes; industry wise labor union problems, environmental restrictions, raw material availability, and similar factors interact and

affect all the firms in an industry simultaneously. As a result of these commonalities, the prices of the securities issued by competing firms tend to rise and fall together.

Thus, total Risk = Interest rate risk + Purchasing power risk +Market risk + Management risk + Default risk + Liquidity risk + Call-ability risk + Convertibility risk + Taxability risk + Political risk + Industry risk + Other risk factors.

2.1.9 Portfolio Risk and Return

Investment is made with the goal of earning some expected rate of return. Investors seek to minimize inefficient deviations from this expected rate to return. To minimize inefficient deviations, diversification is essential to the creation of an efficient investment as it can reduce the variability of returns around the expected return.

Weston &Copeland (1992) "The risk and return of an individual security should be analyzed in terms of how that security affects the risk and return of the portfolio in which it is held" (p.183).

i. Portfolio expected return

The expected portfolio return is the simple weighted average of the expected return from the investment represented by a portfolio. This expected return is calculated by determining the expected return of each component of the portfolio and using these returns to compute a weighted average. The weights used are the portfolio weights, which describe how the portfolio's investment is weighted among the various assets/securities. Portfolio weights are percentage of the total amount available to be invested in the portfolio and sum to 1. The portfolios expected return is defined in equation as follows: -

$$E(Rp) = W_1K_1 + W_2K_2 + \ldots + W_nK_n$$

Where,

$E(R_p)$ = The expected return on the portfolio

W_1 = Weight for stock 1

W_2 = Weight for stock 2

K_1 = Expected return for stock 1

K_2 = Expected return for stock 2

ii. Portfolio Risk

Thapa, Bhattarai & Basnet (2006) defined that Portfolio risk is a function of the proportional invested in the components. Portfolio risk is the risk as a whole for the specific portfolio. In totally, what is the risk of wealth is the risk of portfolio. Calculation of portfolio risk is not as easy as portfolio return. The portfolio risk depends upon the risk of each securities and the covariance of particular securities. Portfolio risk can be measured in terms of standard deviation and variance. The variance used to measure the risk of the portfolio. It is the square root of the standard deviation.

The variance of a portfolio of assets depends on not only the variance portfolio but also how the assets track each other asset in the portfolio. This introduces the concept of covariance or correlation; that is to say the degree by which the returns of two assets vary or change together. To determine the variance of a portfolio of assets, the sum of the weighted variances of the individual assets and the sum of the weighted covariance of the assets added together. Portfolio risk is measured by statistical tool standard deviation and variance. It is a function of the proportions invested in the components. The riskness of the components and the correlation of returns on the components securities are computed by using the following equations:

$$\text{Var}(rp) \text{ or } \sigma p^2 = \sum_{i=1}^{n}\sum_{j=1}^{n} Wi\ Wj\ \text{cov}\ ij \text{ or } = \sum_{i=1}^{n}\sum_{j=1}^{n} Wi\ Wj\ \text{cov}\ ij\ Wi\ Wij\ Pij\ \sigma i\ \sigma j.$$

Where,

σp = Standard deviation of portfolio's return

Wi = Proportion of investment in asset i

Wj = Proportion of investment in asset j

Covij = covariance of the return between asset i and asset j

Pij = Correlation co-efficient between asset I and asset j (p. 150).

2.1.10 Correlation Coefficient and Portfolio Risk

Thapa (2003) "The risk of the portfolio can be measured by using covariance of the returns of assets in the portfolio. The covariance's simply means the degree to which the returns of the two assets vary together. In other words its measures how two variables co-vary. A positive covariance indicates that the returns of two assets move in the same direction where as a negative covariance indicates that the return of two assets moves in opposite direction. If the covariance is zero, it means the rate of return on assets is independent. The correlation coefficient is the covariance divided by the product of the standard deviation for the investments.

$$\text{Correlation coefficient } (\rho ij) = \frac{\text{cov } (rirj)}{\sigma i \sigma j}$$

Where,

*P*ij = Correlation coefficient between assets i and j

Σi = Standard deviations of return for asset i

Σj = Standard deviation of return for asset j

The correlation coefficient between –1 and +1, if the value of correlation is 1, it is perfectly positively correlated. It indicates that the return on two assets move together exactly the same way. In additional, the value of correlation –1 means perfectly negatively correlated which indicates that the return on two assets move together perfectly opposite way. If the value of correlation 0 means that, there is no relationship between two assets return"(pp. 38-39).

2.1.11 Measurement of risk

Standard Deviation:

Standard deviation is a statistically concept and is widely used to measure risk from holding a single assets. A high standard deviation represents a large dispersion of return and is a high risk, a low deviation is a small dispersion and represents low risk. It provides more information about the risk of the assets.

Coefficient of variation:

Risk is measured by the standard deviation, and then risk per unit of expected return can be measured by the coefficient of variation (c.v.). High C.V. represents the higher risk of the investment. The c.v. shows the risk per unit of return and it provides a more meaningful basis for comparison when the expected return and risk on two alternatives is not the same.

2.1.12 Features of Sound Lending and Investing Policy

Some of the main characteristics of sound lending and investment policies which most of the banks must consider have been given by many authors are as under:

i. Safety and Security:

While selecting the sectors for investing the funds, a bank should be very much conscious. It should never invest its funds in those securities, which are too volatile because a little difference may cause a great loss. Similarly, the businessman who is bankrupt at once or earns a million in a minute should not be financed at all. The companies invest its funds in legal securities only. The company should accept that type of securities, which have marketability; ascertainability, stability & transferability and it also accept those securities, which are commercial, durable and high market prices. For the safety and security in investing funds the company can use the investment portfolio tools also.

ii. Liquidity:

Liquidity generally refers to the cash or any assets that can be converted into cash immediately. Generally, people deposit money at the finance company in different account with confidence that the bank will repay their money whenever it is needed. In order to maintain the confidence to the depositors, the company must always be ready to meet current or short-term obligations when they become due for repayment Liquidity is the capacity of company to pay cash against deposits. Hence the liquidity position of a bank is such an important factor.

iii. Profitability:

Finance companies invest on those sectors from where more and more return can flow because through maximizing the returns on its investment,

company can maximize its volume of wealth. Hence the investment or granting of loan & advances by them are highly influenced by the profit margin. Generally, the profit of finance company depends upon the interest rate of the company, volume of loan provided, time period of loan and nature of investment on different securities. Profitability is only the term, which always motivates finance companies to invest their money more and more.

iv. Suitability:

A banker should always know why a customer is in need of loan. If a borrower misuses the loan granted by the bank, he will never be able to repay the loan and bank will possess heavy bad debts. Therefore, in order to avoid such circumstances, advances should be allowed to select suitable borrowers and it should demand all the essential detailed information about the scheme of the project. Bank should also keep in mind the overall development plans of the nation and the credit policy guidelines of the central bank.

iv. Purpose of Loan:

In the viewpoint of security, a banker should always know that why a customer is in need have loan. If a borrower misuses the loan granted by the bank, he can never repay therefore in order to avoid this situation each and every bank should demand all the essential detailed information about the scheme of project or activities.

v. Diversification:

The finance company should be careful that while granting loan, it should not be always in one sector. To minimize risk and maximize the profit, a company must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the law of average because if securities of a company depreciated, there may be appreciation in the securities of other companies. In this way, the loss can be recovered.

vi. Tangibility:

A commercial bank should prefer tangible security to an intangible one. Though it may be considered that tangible property doesn't yield an income apart from intangible securities, which have lost their value due to price level inflation.

vii. Legality:

Illegal issued securities may cause problems to the investors. Therefore, all the finance companies should follow the directives of NRB, Ministry of Finance and other relevant organization at the time of mobilizing funds.

viii. National Interest:

In additional to its own profitability the bank should also consider the national interest. Even though the bank cannot get maximum return from such investment, it should carry out its obligation towards the society and the country. The bank is required to invest on such sectors as per the government and Nepal Rastra Bank's instruction. Investment on government bonds, priority and deprived sector lending are the examples so such investments.

2.1.13 Sources of Funds for the Investment

There are different sources of funds for the investment of the Finance Company: -

a) Capital:

Capital is the lifeblood of the trade and commerce. Therefore, capital is needed for the operation of the finance company as in other business. The capital fund consists of two elements like:-

- Issuing Shares: - Finance company issues its share for the collections of capital. So this is one of the sources of fund to invest. By increasing in the issue of share, the bank can increase its capital.
- General Reserves: - Reserves are kept by the bank separated from the profit. This reserve is also invested at the time of contingency and to cover the loss in future.

b) **Accumulated profit:**

If the capital is not sufficient and there is need of more money to invest in that case the finance company uses the accumulated profit to invest. In the time of contingency also, the company invests its accumulated profit for recovering its future loss.

c) Deposits:

Deposits are the main source of funds. By providing certain rate of interest, finance company calls for the deposit from the customer. Mainly, three types of deposits are accepted by the company like current deposit, fixed deposit, saving deposits. These different types of deposits are used for lending the money to different sectors like agriculture, production, trade, service sector and other industry. The deposits will lead to increase in the working capital of the bank.

d) External and Internal Borrowings:

The funds can be collected by borrowing money through different banks or different institution. In a developing country like Nepal, those types of borrowings are very important. The finance companies may not have sufficient fund to invest in different sector. In that case it has to borrow from other bank or other financial institutions. Generally the finance company borrows from two sources i.e. external and internal. Generally external borrowing means the borrowing from foreign banks, and foreign government. Internally, the company borrow mainly from inter bank and Nepal Rastra Bank. So the finance company cannot provide loan or investment without the funds. From the fund collected from above different source, the finance company grants loan.

2.1.14 Portfolio Analysis and Diversification

Portfolio Analysis considers the determination of future risk and return in holding various blends of securities. The objectives of portfolio analysis is to develop a portfolio that has the maximum returns at whatever level of risk the investor deems appropriate. Diversification of portfolio helps to minimize risk and different diversification techniques have been developed for reducing portfolio's risk. The objectives of portfolio analysis are to reduce risk by combing securities of low risks with securities of high

Van Horn (2000) stated that portfolio manager seeking efficient investments works with two kinds of statistics –expected return statistics and risk statistics. The expected return and risk statistic for individual assets are the exogenously determined input data analyzed by the portfolio analyst. The objective of portfolio analysis is to develop a portfolio that has the maximum return at whatever level of risk the investor seems appropriate (p.90).

The real meaning of diversification is dividing available assets across a number of different securities. The key to diversification is the correlation across the securities. Portfolio theory suggests creating a well-diversified investment portfolio that has the maximum return at whatever level of risk the investor seems appropriate. Portfolio theory was originally proposed by Harry M. Markowitz. Professor of Finance Harry M. Markowitz began a revolution by suggesting that the value of a security to an investor might best be evaluated by its mean return, its standard deviation (risk), and correlation to other securities in the portfolio.

> Weston & Copeland (2003) "Investment risk can be reduced by including more than one alternative or categories of assets in the portfolio and by including more than one asset from each category. Hence, diversification is essential to the creation of an efficient investment because it can reduce the variability of returns around the expected return. This diversification may significantly reduce risk without a corresponding reduction in the expected rate of return on the portfolio" (p. 366).

> The main objective of portfolio construction is to diversify the risk by combining securities of low risk with securities of high risk to obtain the highest expected return for a given level of risk. One of the well-said proverbs "never keep all the eggs in a same basket" supports this. So diversification plays an important role in designing efficient portfolios (that is portfolios whose return is maximize for a given level of risk or, equivalently, portfolios whose risk is minimized for a given level of return.).

Bodie, Kane & Marcus (2000) "Diversification is the one important means that control portfolio risk. Investments are made in a wide variety of assets so that exposure to the risk of any particular securities is limited. By placing one's eggs in many baskets, overall portfolio risk actually may be less than the risk of any component security considered in isolation" (p.162).

Diversification simply means spreading the risk among the various companies, industries and asset class. It reduces the portfolio risk thereby eliminating the unsystematic risk, which is not rewarded. There are two types of risk attached with investment; systematic and unsystematic risk. The investors are only rewarded for systematic risk that is market risk, which is unavoidable. It is important to investors as

it protect them from business risk, financial risk and the volatility. There are different types of diversification risk management techniques that help in reducing portfolio risk. There are some different diversification techniques for reducing a portfolio's risk:-

I. Simple diversification

In simple diversification is the random selection of securities to add to a portfolio. It would reduce unsystematic risk or diversifiable risk. According to this approach, it is found that 10- 15 securities in portfolio brings adequate returns with average risk and each selected securities in this portfolio is provided equal weight in its portfolio. This is better way of reducing the risk.

II. Superfluous Diversification

If 10 or 15 different assets are selected for a portfolio, the maximum risk reduction benefits from simple diversification have most likely been attained. Further spreading of the portfolio's assets is superfluous diversification and should be avoided. Superfluous diversification will usually result in the following portfolio management problems:

1. Impossibility of good portfolio management.
2. Purchase of lackluster performer.
3. High search costs.
4. High transaction costs.

Although more money is spent to manage a superfluously diversified portfolio, there will most likely be no concurrent improvement in the portfolio's performance. Thus, superfluous diversification may lower the net return to the portfolio's owners after the portfolio's management expenses are deducted

III. Diversification across Industries

Some investment counselors advocate selecting securities from different industries to achieve better diversification. It is certainly better to follow this advice than select all the securities in a portfolio from one industry. Since all the industries are highly correlated with one another, diversification across industries is not much better then simply selecting securities randomly.

IV. Simple Diversification across quality Rating Categories

Quality rating measure defaults risk-essentially the risk of bankruptcy. The highest quality portfolio of randomly diversified stocks was able to achieve lower levels of risk than the simply diversified portfolios of lower quality stocks. This result

reflects the fact that default risk (as measured by the quality ratings) is part of total risk. The higher quality portfolios contain assets with less default risk. This finding suggests that portfolio managers can reduce portfolio risk to levels lower than those attainable with simple diversification by not diversifying across lower-quality assets.

V. Markowitz Diversification

Markowitz Diversification may be defined as combining assets which are less than perfectly positively correlated in order to reduce portfolio risk without sacrificing portfolio return. It can sometime reduce below the un-diversifiable level. There is a nature trade off between risk return in the market but at any given level of expected return, Markowitz diversification can reduce risk more than simple diversification. Applying diversification to a collection of potential investment assets with a computer is Markowitz portfolio analysis. It is a scientific way to manage a portfolio and its results are quite interesting. Since, Markowitz portfolio analysis considers both the risk and return of dozen and hundreds of different securities simultaneously. It is a more powerful method of analyzing a portfolio than using intuition.

2.1.15 Review of related studies

Every scientific research is based on past knowledge. The previous studies cannot be ignored because they provided the foundation to the preset study. Therefore, in the light of this dissertation in this section review of articles, review of research papers & review of thesis of previous study are taken into consideration.

Markowitz, (1952) “portfolio selection” entitled the portfolios theory establishes a relationship between a portfolios expected return and its level of risk as the criterion for selecting the optimum portfolio. So as to find the efficient set of portfolios and select the most effecting one, the portfolio manager will need to know the expected returns and the risk of these returns for the individual securities. The portfolio model developed by Markowitz is based on the following reason able assumptions.

- The risk of an individual asset or portfolio is based on the variability of returns (standard deviation or variance)

- Investors depend solely on their estimates of return and risk in making their investment decisions. This means that an investor's utility (indifference) curves are only a function of expected return and risk.
- Investors adhere to the dominance principal. That is, for only given level of risk, investors prefer assets with a highest expect return to assets with lower expected return, for the expected return, for assets with the same expected return, investors prefer lower to higher risk.
- The expected return of the portfolio is the weighted average of the expected returns of the individual assets in the portfolio. The weights are defined as the portion of the investor's wealth invested in a particular asset.

$R_p = \sum R_i \times X_i$

$R_p = R_1X_1 + R_2X_2 + R_3X_3 + \ldots + R_nX_n$

Where,

R_p = expected return to portfolio.

R_i = expected return to security.

X_i = the proportion of total portfolio investment in security.

The Markowitz has presented the risk of the portfolio consists of the risk ness of the individual securities and the covariance between the returns of the securities among all possible combinations of them. Thus, portfolio risk can be calculated as follows:-

The portfolio risk

$\pm_p^2 \; XX_1^2\pm_1^2 \Gamma X_2^2\pm_2^2 \Gamma 2X_1X_2 \mid \pm_1\pm_2 \mid \circ_{12}$

Where,

X1 = proportion of funds invested in security 1.

X2 = proportion of funds invested in security 2.

$\pm_1^2, \pm_2^2$ = variance of the returns on securities 1 and 2.

r_{12} = correlation between the return of 1 and 2 (pp.77-91).

Shrestha (1998) has given a short foretaste on the "Portfolio Management in Commercial Bank, Theory and Practice". Shrestha has highlighted the following issues in his article.

The portfolio management becomes very important for both individuals as well as institutional investors. Investors would like to select a best mix of investment assets subject to the following aspects:

- Higher return which is comparable with alternative opportunities available according to the risk class of investors.
- Good liquidity with adequate safety of investment.
- Certain capital gain.
- Maximum tax concession.
- Flexible investment.
- Economic, efficient and effective investment mix.

In view of above aspects, following strategies are adopted:

- Do not hold any single security i.e. try to have a portfolio of different securities.
- Do not put all the eggs in one basket i.e. to have a diversified investment (making investment in different sectors).
- Choose such a portfolio of securities, which ensures maximum return with minimum risk or lower of return but added objectives of wealth maximization.

However, Shrestha also presented the following approaches to be adopted for designing a good portfolio and its investment:

- To find out the invisible assets (generally securities) having scope for better returns depending upon individual characteristics like age, health, need, disposition, liquidity, tax liability etc.
- To find out the risk of securities depending upon the attitude of investor toward risk.
- To develop alternative investment strategies for selecting a better portfolio this will ensure a trade off between risk and return to attach the primary objective of wealth maximization at lowest risk.
- To identify securities for investment to refuse volatility of return and risk.

In this study, Shrestha has presented two types of investment analysis techniques i.e. fundamental analysis and technical analysis to consider any securities

such as equity, debentures bond and other money and capital market instruments. He has further suggested that the banks having been international net work can also offer assess to global financial market. He has also point out the required skilled work force research and analysis and proper management information system in any type of commercial banks to get success in portfolio management and customer's confidence (pp.28-67).

Kane & Burser (1979) in the title "Portfolio diversification at commercial banks" deals with how a firm performs a useful function by holding a portfolio of efficiently priced securities.

According to them, it is rational for a form to engage in prior found of assets diversification of behalf of its shareholder even when all assets are priced efficiently and available for direct purchase by shareholders. As a way of testing their perceptive empirically, they estimated regression model designed to explain the no. of distinct of U.S. treasury and federal agency debt held in a time series of cross section of large US commercial banks. They interpret the systematic pattern of diversification observed for large US commercial banks as evidence that bank stockholder for a relatively uniform diversification clientele. For firm, marginal benefits from diversification take reductions in the cost equity funds offered by its specific clientele of stockholders. To maximize the value of the firm, these benefits must be weighted against the explicit and implicit marginal cost of diversification.

The Kane and Burser drown following concluding remarks:

a. Even wealthy investors should be sensitive to administrative costs associated with selection, evaluation, managing, and continually keeping track of a large number of securities.

b. Either homemade of firm produced diversification, reduces the variance of shareholders portfolio return. If homemade diversification bears in ordinary high levels of information risk, some benefit of form-produced diversification might not be reproduce able by individual investors acting on their own.

c. Investors with even modest resources, the stock of financial institutions should be relatively less attractive than the stock of that avoided extensive diversification costs by engaging in specialized activities (pp. 19-31).

Bajracharya (1990), in his article "Monetary policy and deposit mobilization in Nepal", has concluded that mobilization of domestic savings is one of the prime objectives of the monetary policy in Nepal and commercial banks and the more active financial intermediary for generating resources in the form of deposit of private sector and providing credit to the investor in different sectors of the economy (pp.93-97).

In an interview with Annapurna post (2008), Sushil Joshi, Managing Director of Himalayan, Bank clarified that commercial banks are not able to invest in hydropower projects, road and other infrastructure because of huge amount of capital required for those projects and due to the political instability of the country. At present banks are willing to invest in these projects. (Annapurna post, 22 sep. 2008).

Thapa (1994) expresses his views in his research paper **"**Financial System of Nepal**"** that the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing. But compared to high credit needs particularly by newly emerging industries, the bank still seems to lack adequate funds. The banks are increasing their lending to non –traditional sectors along with the traditional sectors.

Out of all commercial banks (excluding two recently opened regional commercial banks), Nepal Bank Ltd. and Rastriya Banijya Bank are operating with a nominal profit, the later turning towards negative from time to time. Because of growing competition and limitation of investment sectors, the spread between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount. On the contrary, they have got heavy burden of personal and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit position of these banks has been seriously affected.

He concludes that by its very nature of the public sector, these two domestic banks couldn't compete with the private sector banks, so only remedy to the problems of these banks, as the government decided, is to hand over the ownership as well as the management of these banks to the private hands (pp. 29-37)

2.1.16 Review of unpublished master's thesis

Basnet (2002) research entitled "Portfolio management of joint venture banks in Nepal**"** is try to presented data of eight years from 1994-2001 A.D. The objective of the research was to find out the situation of the portfolio management of joint venture banks in Nepal. To evaluate the investment and advances portfolio of joint venture banks, to evaluate the financial performance of joint venture bank. To analyze the risk and ratio of commercial banks. Mr. Basnet summarized the findings as NBBL, HBL, SCB, and EBL was investing very high amount of its fund in government securities. It has providing very high amount of its loan and advances to the private sector in increasing trend. It has also given the priority to foreign bills purchase and discount. He analyzed portfolio by only banking industries using secondary data provided by bank. According to him banks are very strong in investment in comparison to individual investors.

Bhatta (2003) prepared a thesis "Portfolio Management of listed finance companies of Nepal". The main objective of the study was to identify the present situation of portfolio management of finance com. in Nepal with the help of risk return and other relevant variables. Which conclude that the most of finance companies have enough unsystematic risk (diversifiable risk) that means there is no effective portfolio management of listed finance companies. In context of portfolio risk and return of Nepalese finance companies investor has to bear higher portfolio risk to increase little bid of portfolio return.

The major problem to manage the portfolio is volatility of different securities in Nepalese capital market. For the selection of portfolio in Nepal technical analysis does not work effectively but fundamental analysis work effectively. In Nepalese stock market passive strategy is more suitable then active strategy to achieve better result. Corporate investor think portfolio evaluation is necessary but lack of specific knowledge they depend on conventional method.

Shrestha (2004) study on "Optimum portfolio investment in Nepal", the main theme of the study is to analyze rationalities of portfolio theory in context Nepalese security market. Always investor tries best to make sure return, return is not cent percent sure or investment will not ruin. The study mainly focused on the specific sector of market i.e. currently listing in NEPSE for last 6 years and this study mainly based on the companies listed in NEPSE and applies the different categories. His

analysis is based on secondary data as well as primary data of 6 years collected by small survey of 25 investors main objectives of this study are to find out and analyze the major problem of investor regarding selection of optimal portfolio. He try to analyze the risk and return, market sensitivity, composition of risk and pricing status of securities. And to suggest the measure for the improvement of investment rationalities. Investor should be aware of risk and return. This research helps them to find out the degree of risk associated with the stock, systematic and unsystematic risk estimation of stock.

Shrestha, (2005) in her thesis entitled "Portfolio Analysis of Common Stock of Commercial Banks in Nepal" has been done in 2005. The main objective of the study is to find out level of portfolio risk and return on stock of commercial bank investment and other objective are; to analyze the trend of NEPSE index, to analyze the risk and return of common stock of reviewed banks, to analyze the market price movement of the common stock, to try to find out the best portfolio from NEPSE. She describes that the correlation of stock, return and market shows that all of the banks stock are highly positive correlated with the market. The correlation values of common stock of all bank with the markets is nearly equal +1. Stock of NBB is highest positive correlation which has values of +O.918 and HBL is lowest positive correlated which has a value of +0.82. Nepal Bangladesh bank (NBB) has highest portfolio return and highest portfolio risk. NBB has invested its more funds on risky assets and fewer funds on risk free assets. So there exist highest risks as well as return. The principle "higher the risk higher the return" is applied for it. Likewise, Himalayan bank limited (HBL) has the lowest portfolio return and portfolio risk. It has invested more of its fund in on risk free assets and least fund in risky market. The principle "no risk no gain" is applied for it. The performance measure shows the ranking stock by different method.

Shrestha (2006) in his thesis entitled "A Study on Investment Portfolio of Commercial Banks in Nepal" has been done in 2006. The general objective of this research is to identify the current situation of investment portfolio of CBs in Nepal. The main objectives are to analyze the investment portfolio, to analyze the risk and return, to forecasting and examine the trend of investment. In his study he stated that the return on share and debenture of commercial banks shows wide fluctuation. These fluctuations in returns are caused mainly by the volatility of the shares prices in market

and by the changes in dividends in some extent. Comparatively to other assets, share and debenture has higher return and higher risk. Hence, it is cleared from analysis that investment on share and debenture is high risky assets. The return is slightly lower than average return from loan and advances and share and debentures. The portfolio risk on investment is less than that of risk on loan and advances and risk on share and debenture. It shows there is vital role of government securities to reduce the risk. The study shows that the portfolio return is decreasing trend every year. It shows the investment portfolio concept is not using properly by the selected banks.

Paudyal (2006) conduct a study on "A study on Portfolio Analysis of Commercial Banks in Nepal". In his study he conclude the major findings, they are; the industrial mean ratio of investment to total deposit is 21.86%. The only EBL has a greater ratio above industrial mean ratio. But other banks have lower investment to total deposit ratio than industrial mean ratio. It shows that EBL has effective mobilization its deposit on investment to generate the return. Among four commercial banks HBL has invested its more funds on government securities and lesser fund on share and debenture. All of the selected commercial banks are granting very high amount its loan and advances to private sector. NIBL and HBL have given second priority to government enterprise and EBL and BOKL give second priority to foreign bills purchase and discount. EBL and BOKL have granted very low (less than 1%) loan and advance to government enterprises. BOKL stock has the highest expected return and HBL has the lowest expected return. NIBL has negative return. EBL is utilizing its more collected fund on loan and advances and investment which mean percentage ratio is 95.85%. It is the highest average ratio among four commercial banks. HBL is in lost position on its 67.36%. Other banks NIBL and BOKL are utilizing their deposit in loan and investment is 83.59% and 94.73% respectively.

Adhikari (2008) study on "Portfolio analysis on investment with special reference to Nepalese Commercial & Development Bank". On his study he found that the overall market return and risk, the shares of all commercial banks are attractive for investment. Considering the return and risk characteristics of the common stock of all the selected Development Banks, the common stock of DCBL is most attractive and NDBL is seen most risky. All sampled Commercial Banks are providing Cash Dividend most often. Development Banks are not providing dividend regularly as

Commercial Banks. Most of stocks of Commercial and Development Banks move in the same direction, they are highly positively correlated to the market. The stocks of all sampled Commercial Banks and most Development Banks are under-priced, since their required rate of returns are less than average rate of returns. While making two or three assets portfolio between commercial banks, investing large proportion in NIBL and small portion in NABIL and HBL significantly reduces the risk without significant reduction in return likewise while making two or three assets portfolio between Development Banks, investing large proportion in DCBL and small portion in NDBL and ACEDBL significantly reduces the risk without significant reduction in return. Forming the portfolio between Commercial and Development Banks, higher weights providing in Commercial Banks and lower in Development Banks can reduces risk significantly without significant reduction in return.

Wagle (2008) "Portfolio management of commercial bank in Nepal". The major objective of the stuy are to find out the portfolio of commercial banks for an investor, to analyze risk and return of investment securities, to find out the optimum portfolio of security trading in NEPSE. This study is also helpful to find out, to what extent commercial banks manage their risk and return using portfolio concept. Main objective of the studies are to find out the portfolio of commercial banks for an investor, analyze risk and return of investment securities, analyze risk and return of investment securities He stated that most of commercial banks are interested to invest their funds in more liquid and less risky sectors. Investment on loan and advances is better than that of investment on share, debentures and government securities because loan and advances provides fixed interest income. Commercial bank most mobilizes their deposit and other funds to profitable sector. All the bank able to attract the investors because of their performance. The expected return of all the banks are above 45%. The banks providing good return to the investors and able to achieve the trust of people. All the banks has beta of greater than 1 that means all the banks has aggressive stock. By the analysis of different tools and techniques and monitoring closely the market.

Shrestha (2009) performed research on "Investment policy and portfolio management of Nepal Credit and Commerce Bank Limited". The main objectives of the study are to evaluate the Investment Policy of the bank for loans and advances and that for investment on securities, to analyze the investment portfolio of bank in ground of portfolio's liquidity, portfolio management, portfolio performance and portfolio's

profitability, to analyze how efficiently the resources have been utilized, to evaluate changes in the portfolios after the improvement in the Capital Adequacy position of the bank.

On her study she found that bank has formulated a satisfactory loans and advances policy. Most of the credit related matters were found well incorporated in the policy documents. Current assets of NCC Bank have exceeded current liabilities in average position, Liquid loans to total loans ratio reflects poor liquidity position of the loan portfolio, Financial ratio of marketable or liquid securities to total securities indicated improving situation. The loan and advance to total assets ratio ranges from the minimum of 53.67% to the maximum of 92.41%, which shows the ratios are inconsistent over the study period. Investment on government securities to total assets ratio has shown fluctuating trend in her study period. The ratio of NCC Bank shows decreasing trend, it might be due to increasing competition in the banking sector or bank was not paying enough attention towards non-funded business. Portfolio performance ratios reflects the non- performing loan of the bank face the major problem, and Profitability ratio analysis reflects poor profitability position of bank. The Interest incomes to total income ratios were more or less consistent over the study period.

Thapa (2009) conduct a research on "investment portfolio of Annapurna finance ltd". The researcher found that maximum of investment is made on loans and advances. He found that investment regarding on hire purchase loan, housing loan, term loan, and fixed deposit loan are increasing trend with fluctuating. Researcher said that highest percentage of investment in initial year and thereafter percentage of investment is decreasing year by year. The loan loss provision to total loans and advances ratio has fluctuating trend, the loan and advance to total asset ratio of AFCL has increasing with fluctuating trend likewise the loan and advances to total deposit ratio of AFCL has increasing as well as slightly decreasing trend. Investment to total deposit ratio of AFCL has decreasing trend over the researcher study period. Researcher found that non-performing loan ratio and return on total assets ratio of AFCL has fluctuating trend. From the analysis of growth ratios of total deposit, total loans and advances and total investment of AFCL during his study period shows that the total deposit of the company is increasing.

2.1.17 Justification of the study / Research gap

Going through the review of various books, articles, publications and also the unpublished research works previously done in this field, Portfolio investment is the most important part of finance because they can strong impact on investment. Thus, it is not very new concept. Many researchers have done research on this aspect. As long as researcher knows, no specific research has yet been able to go in-depth of the topic and has successfully accomplished the specified objectives of the research work.

All of the previous researcher has been used same statistical tools on this topic so result is same each other, previous researchers did not show the trend of investment, deposit, loan and advances and net profit. Hence, this research will fulfill the prevailing research gap by showing trend of investment, deposit, loan and advances and net profit, using some new statistical tools and by adding some new literature. This study further evaluate the existing situation of investment portfolio management, and also evaluate the liquid risk and credit risk, under current investment portfolio management which is not shown by previous study.

Furthermore, there is no any research regarding the portfolio investment of Fewa finance company Limited. Predicting portfolio investment on the basis of financial statements may lead into false interpretation. Investment portfolio aims at creating high yielding portfolio structure. So, portfolio structure should be analyzed side-by-side to evaluate the policy's effectiveness. This type of study is not found in the past.

This study covers the more recent financial data, literature and NRB directives/circulars and literature so that the recent issues and scenarios can be highlighted. In this research, researcher presents the current data up to 2010.

CHAPTER- III
RESEARCH METHODOLOGY

3.1 Background of the study

Research methodology describes the methods and process applied in the entire aspect of the study. It includes all the procedures from theoretical foundation to the collection and analysis of data. Research methodology is a systematically way to solve the research problem. It may be understood as a science of studying how research is done scientifically.

Research methodology is a way to systematically solve the research problem. It refers to the various sequential steps that are to be adopted by a researcher during the course of studying the problem with certain objectives. This chapter refers to the overall research method from the theoretical aspects to the collection and analysis of data. This study covers quantitative methodology in a greater extent and also uses the descriptive part based on both technical aspects and logical aspect. This research tries to perform a well-designed, quantitative, and qualitative research in a very clear and direct way by using both financial and statistical tools.

3.2 Research Design

Kerlinger (1986) "Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. The plan is the over all scheme or program of the research. It includes an outline of what the investigator will do from writing the hypothesis and their operational implications to the final analysis of data. The structure of the research is more specific. It is the outline, the scheme, the paradigm of the operation of the variables. When we draw diagrams that outline the variables and their relation and juxtaposition, we build structural schemes for accomplishing operational research purpose "(p.275)

The present study is mainly based on two type of research design i.e. descriptive and analytical. Descriptive research design describe the general pattern of the Nepalese investors, business structure, problem of portfolio management etc.

The analytical research design makes analysis of the gathered facts and information and makes a critical evaluation of it.

Finally research design is the plan, structure and strategy of investigations conceived so as to obtain answers to research questions and to control variances. To achieve this study descriptive and analytical research designs have been used.

Further added that after analyzing the sequences and inter-relationships of these facts, he or she conducts a comprehensive study of social unit as it functions in society. The research design for this thesis is shown below:-

Procedure of preparation of research

For the preparation of this research, following procedure is followed:

Conception phase:

For the appropriate topic, various interaction with friends, college library visit, net surfing was done. After making this effort the topic "Investment portfolio" was chosen.

Definition Process:

In the definition phase, certain vision to be carried out for research was developed, the description of the problems and the research topic were analyzed. After that, the aim of the research was listed out.

Planning phase:

Planning is very important phase. In this phase, the methodology to gather information was developed, reference books and reports were collected and the overall work schedule was prepared. Appropriate Finance Company for the topic was selected.

Implementation phase:

The real work started in this phase. “Fewa Finance Company Limited" was visited. The effort made by the staff in managing investment portfolio was observed. Finally, the annual financial reports of the Finance company were collected.

Termination phase:

The final assignment report was edited, printed and binded with a copy of collected information and then was submitted to the college. As per above diagram, first of all the necessary data related with Fewa Finance were collected from Fewa Finance Company Limited. Collection of data consists of compiling useful information to quantify and analyze to ascertain the conclusion of the research. Then a thorough

analysis of all the data collected was made. After that, necessary data were sorted and analyzed in a systematic manner.

Some financial and statistical tools have been applied to examine facts and descriptive analysis techniques have been adopted to evaluate Investment Policy and its influences on the investment portfolio of Fewa Finance.

3.3 Sources of Data

Secondary sources of data refer to the readymade data and report, which is already published by the concerned organization, or data that has been compiled by others. Secondary data is thus defined as the data collected earlier for a purpose other than one currently being pursued. Secondary data are the brochures, annual reports, published reports and statements, published official documents, etc

This study mainly based on secondary data. However, besides the annual reports of the subjected Finance company, the following sources of data have also been used in the course of the study:

- Nepal Rastra Bank Directives.
- Economic Survey (Published by Ministry of Finance)
- Banking and Financial Statistics.
- Journal of Finance.
- Journal of Business.
- Various text books.
- Previous Research Studies, Dissertation and Articles on the Subject
- Different Library
- Different website related to study.

3.4 Data Analysis Tools

Various financial and statistical tools were used to analyze the data ratio analysis, correlation coefficient, trend analysis, risk and return, standard deviation, hypothesis test, etc were used in the study. A brief explanations of statistical and financial tools employed in this study is given below.

3.4.1 Financial Tools

Financial tools basically help to analyze the financial strength and weakness of a firm. Ratio analysis is one of the important financial tools that have been used in the study. A ratio is relation between two or more variables. It expresses the quantitative relationship between any two numbers. Ratio can be expressed in terms of percentage, proportion and as coefficient. Financial ratio is the mathematical relationship between two accounting figures. Even though there are many ratios to analyze and interpret the financial statement, only those ratios that are related to the investment operation of the bank have been used to complete this research.

3.4.1.1 Liquidity Ratios

Liquidity Ratio measures the firm's ability to meet its current obligation. Financial company collect fund from the community with a commitment to return depositor's fund, facilitate withdrawal on demand. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity. It is necessary to strike a proper balance between high liquidity and lack of liquidity. The following ratios are evaluated under liquidity ratio.

i) Cash and bank balance to total deposit ratio:

They are the most liquid of current assets to pay off depositors immediately. This ratio is calculated by dividing cash and bank balance by total deposits. In order to bring about consistency in this research, checks for clearing have been excluded from cash and bank balance and included in other assets. Mathematically,

$$\text{Cash \& Bank Balance to Total Deposit Ratio} = \frac{\text{Cash \& Bank Balance}}{\text{Total Deposits}}$$

Cash and bank balance includes cash in local currency & foreign currency on hand or with banks. The total deposits consists of deposits in current account, savings account, fixed deposit account, money at call deposits, margin deposits etc. A higher ratio indicates greater ability of banks to meet their deposits and vice-versa.

ii) **Cash and bank balance to current assets ratio:**

This ratio measures the percentage of liquid assets i.e. cash and bank balance in the current assets of the firm. Higher ratio shows greater capacity of firms to

meet cash demand. The ratio is calculated by dividing cash and bank balance by current assets. Mathematically,

$$\text{Cash \& Bank Balance to Current Assets Ratio} = \frac{\text{Cash \& Bank Balance}}{\text{Current Assets}}$$

3.4.1.2 Assets Management Ratio

Assets management ratios measure the efficiency of the finance company to manage its assets in profitable and satisfactory manner. They indicate the speed with which assets are being converted into cash. Thus these ratios are used to measure the finance company's ability to utilize their available resources.

i) **Loan and advances to total deposit ratio:**

This ratio is also called credit-deposit ratio (CD ratio). It is calculated to find out how successfully the banks are utilizing their total deposits on loan and advances for profit generating purpose. Loans and advances are the highest yielding assets in a bank's portfolio. Greater ratio implies better utilization of total deposits at the cost of liquidity. This ratio can be obtained by dividing loan and advances by total deposit as under,

It is computed by dividing total loan and advances by total deposits. Mathematically,

$$\text{Loan and Advance to Total Deposits Ratio} = \frac{\text{Loan and Advances}}{\text{Total Deposits}}$$

ii) **Loans and Advances to Total Assets Ratio**

Loan and advances is the major component in the total assets, which indicates the ability of bank to utilize its deposits in the form of loans and advances to earn high return. This ratio is computed to assess credit proportion in the total assets.

$$\text{Loans and Advances to Total Assets Ratio} = \frac{\text{Loans and Advances}}{\text{Total Assets}}$$

iii) **Total investment to total deposit ratio:**

This ratio shows the utilization of firm's deposits on investment in government securities and purchasing shares and debentures of other companies. A high ratio is indicative of high success in mobilization of deposits in investments and

vice-versa. This ratio can be calculated by dividing total investment by total deposits. Mathematically

$$\text{Total Investment to Total Deposit Ratio} = \frac{\text{Total Investment}}{\text{Total Deposits}}$$

3.4.1.3 **Profitability Ratio**

Profitability ratios are used to indicate and measure the overall efficiency of a firm in terms of profit and financial performance. For better performance, profitability ratios of firms should be higher. Following ratios have been computed to study the portfolio's profitability:

i) Return on Total Assets Ratio:

This ratio measures the overall profitability of all total assets. It is also known as return on assets (ROA). This ratio is calculated by dividing net profit/ (loss) by total assets. This can be mentioned as,

$$\text{Return on total assets ratio} = \frac{\text{Net Profit after Tax}}{\text{Total Assets}}$$

ii) **Return on Equity Ratio**:

This ratio measures how efficiently the bank has used the funds of the owners. This ratio is calculated by dividing net profit/loss by total equity capital (net worth). This can be stated as,

$$\text{Return on equity ratio} = \frac{\text{Net Profit after Tax}}{\text{Equity}}$$

iii) Return on Investment Ratio:

Return on investment ratio shows how efficiently the organization is investing it fund in different sector for generating profit. The higher the ratio the better the organization profit. The ROI ratio measures how efficiently the organization can earn on its investment. It is a kind of technique that measures the profitability position of the organization.

$$\text{Return on investment ratio} = \frac{\text{Net Profit after Tax}}{\text{Total Investment}}$$

3.4.1.4 Risk Ratios

Risk means uncertainty, variability of return, which is inherent in any investment portfolio of a business enterprise. Risk is an important element since investment with greater risk requires higher return than investments with lower risk. Risk ratios measures the degree of risk involved in various financial operations. The possibility of risk involved in bank's financial operations makes the bank investment a challenging task. As the notion goes," no risk no gain", therefore, if a bank expects high return on its investment it must be prepared to accept the risk and manage it efficiently.

The following risk ratios are used to analyze and interpret the financial data and investment policy.

i) Liquidity risk ratio:

Liquidity risk of the bank defines its liquidity needs for deposit. Cash and bank balance are the most liquid of all the assets and are considered bank's liquidity sources. Deposits on the other hand refer to the liquidity needs of banks.

This ratio measures the risk associated with the liquid assets i.e., cash and bank balance that are kept to satisfy the cash demand of customers. A higher ratio shows that the banks has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the bank. A trade off between liquidity and profitability must be maintained. This ratio is calculated by dividing cash and bank balance by total deposit. Mathematically,

$$\text{Liquidity Risk Ratio} = \frac{\text{Total Cash \& Bank Balance}}{\text{Total Deposits}}$$

ii) **Credit risk ratio:**

Normally, every credit is good at the time it is sanctioned. Most of the bank failures are due to shrinkage in the value of loan and advances. Loan is a risky asset and risk of non-repayment of loan in known as credit risk or default risk. Credit risk ratio measures the possibility of loan going into default. While sanctioning loans banks measure credit risk involved in the project. Credit risk is calculated by dividing total loan and advances by total assets.

Mathematically,

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan and Advances}}{\text{Total Assets}}$$

3.4.1.5 Growth Ratio

Regarding the investment function, growth ratio of total deposit, growth ratio of loans and advances and growth ratio of total investment are calculated by following formula.

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

Where,

D_n = Total growth ratio of total deposit, total loans and advance and total investment in n^{th} year.

D_o = Total growth ratio of total deposit, total loans and advances and total Investment in the initial year

g = Growth year

n = total number of years

3.5 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study statistical tool such as mean, standard deviation, coefficient of variation, Karl Pearson's correlation co-efficient, Probable Error and trend analysis have been applied for analysis.

3.5.1 Mean

A mean is simply the average value or the sum of all the observation divided by the number of observation and it is given by formula below.

$$\text{Mean } \bar{X} = \frac{X}{n}$$

Where,

X = Mean of the values.

N = Number of pairs of observations.

3.5.2 Standard Deviation

The standard deviation measures the absolute dispersion. Dispersion means the measure of the seatteredness of the mass of figures in a series about an average. The greater the amount of dispersion, greater the standard deviation. A small standard deviation means a high degree of uniformity of the observations as well as

homogeneity of a series; a large standard deviation means low degree of uniformity. This is calculated as follows.

Standard Deviation (S.D.) $= \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$

$$= \sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right)^2}$$

Where,

n = no. of observation

x = individual value

$\bar{x}$ = simple arithmetic mean/ average

3.5.3 Coefficient of Variation (CV)

The standard deviation calculated in the above formulas gives an absolute measure of dispersion. Hence, where the mean value of the variables is not equal, it is not appropriate to compare two pairs of variables based on standard deviation only. The coefficient of variation measures the relative measures of dispersion and compare two variables independently in terms of their variability. The coefficient of variation (C.V.) is given by the following formula and this gives the percentage.

$$\text{C.V.} = \frac{\sigma}{\bar{x}} \times 100$$

Where,

σ = Standard Deviation

$\bar{x}$ = average or mean

When the relative dispersion is stated in terms of mean and standard deviation, the resulting percentage is known as the coefficient variation or coefficient of variability.

3.5.4 Karl Pearson's correlation co-efficient analysis:

This statistical tool interprets and identifies the relationship between two or more variables. It identifies whether two or more variables are positively correlated or negatively correlated Statistical tool helps to analyze the relationship between these variables and aids the selected banks to prepare appropriate investment policy relating to deposit collection, fund utilization

(loan and advances and investment) and profit maximization. Karl Pearson's correlation coefficient (r) can be obtained by using the following formulae.

$$r = \frac{xy}{\sqrt{x^2 \quad y^2}} \qquad \text{Where } x = (x - \bar{x}), \quad y = (y - \bar{y})$$

Here, ϕx = Sum of observation in series x

ϕ y = Sum of observation in series y

ϕ x^2 = Sum of squared observation in series x

ϕ y^2 = Sum of squared observation in series y

ϕ xy = Sum of the product of observation in series x & y.

The co-efficient of correlation (r) lies between –1 to +1, If r = +1 there exists a significant relationship between the two variables. If r = -1, then the two variables are negatively correlated or there is no significant relationship between the two variables.

3.5.5 Probable Error

Probable Error (P.E.) of the correlation coefficient is applicable for the measurement of reliability of the computed value of the correlation coefficient (r). The probable error is defined by

$$\text{P.E.} = 0.6745 \times \frac{1 Z r^2}{\sqrt{n}}$$

Where,

r = correlation of coefficient

n = No. of pairs of observation

If the r is greater than P.E, there is evidence of correlation between the variable. If the r is less than P.E., there is no evidence of correlation between the variable.

3.5.6 Trend analysis:

Under this topic the trend of investment, risk and return and deposit collection and mobilization of Fewa Finance Company are analyzed.

i) Trend analysis of total deposit.

ii)Trend analysis of total investment.

iii)Trend analysis of total loan and advances.

iv) Trend analysis of net profit.

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

The presentation of data is the basic organization and classification of the data for analysis. The main theme of this chapter is to analyze and interpret the data by using financial and statistical tools. In this chapter, the concern is given in the presentation and analysis part of data in detail. As data presentation and analysis is the crucial part of any research, the purpose is to organize the collected data so that it can be used for interpretation whereas analysis of the data is to convert it from a crude form to an easy and understandable presentation. It is so obvious that the presentation of the data and its analysis help us to draw valid conclusion. There are a number of methods which can be used to simplify the data. It is being felt that the easiest way to understand the data is by examining it through charts, tables and graphs. Necessary tables and figures are personated to achieve the objectives of the study.

4.1 Analysis of Investment Portfolio

Investment portfolio is one of the tools that help for proper utilization of resources. Finance companies have to investment its funds in different productive sector of the investment alternatives to earn profit. Higher risks can get higher returns. To minimize the risk, Finance companies have to invest different types of assets not only the same risk plays a vital role while analyzing the investment alternatives. The measurement of risk has always been a subject for debate in the investment operation. Risk can be measured in many ways using various statistical techniques such as, mean, standard deviation, variance etc. (Working details in appendix no. 2)

Table 4.1
Investment Portfolio of FFCL

(In percentage)

Investment Portfolio	Fiscal Year						Mean
	061/62	062/63	063/64	064/65	065/66	066/67	
Loans & Advances	99.77	99.86	99.9	99.64	99.70	99.9	99.78%
Government securities	0.23	0.14	0.10	0.30	0.23	0.10	0.18%
Others investment	----	----	----	0.06	0.07	----	0.04%

Total	100	100	100	100	100	100	

Source: FFCL, Annual Reports

The above table shows that the investment portfolio of FFCL from the F/Y 2062/63 to F/Y 20666/67. It indicates the pattern of investment made by the FFCL, which clarifies that investment is made on loan and advances, government securities and others investment. The table 4.1 depicts that the company made the most of the investment in loan and advances. This indicates that FFCL has given more emphasis on loan and advances. So, it shows that the company is able to providing fund to outsiders by loans and advances. It means the company survive small amount investment has been made in government securities as it is a riskless assets. But, later in order to maximize the profit and sustain in the competitive market, large amount of the investment has been made in loans and advances. They have also made investment on other investment. But the percentage of investment in other investment is not more. This types investment policy of FFCL shows that it does not well diversified its investment. FFCL has only made on investment in risky assets to earn more profit. The investment on government securities and others investment has less and decreasing trend during the research period.

4.2 Analysis of Sector Wise Loan Investment

The primary objective of the finance companies is to serve to the people and to earn more profit. Finance company can also perform banking transaction after getting permission from NRB. The company has mainly concentrated its loan investment on four sectors. Such as, hire purchase loan, housing loan, fixed deposit loan and other loans to different types of borrowers. As per NRB directives, finance companies should not exceed their investment regarding to the different types of sector wise loan investment. Thus sector wise investment made by FFCL as below:

4.2.1 Hire Purchase Loan

Hire purchase loan is a type of loan which is issued for the purpose of purchasing vehicles, machinery and instrument by keeping the (collateral) or same vehicle, machinery and instrument as a primary security. The interest rate charged on the hire

purchase loan was 18% during the study period. The hire purchase loan investment of FFCL is shown in Table 4.2

Table 4.2

Hire Purchase Loan Investment of FFCL

(Rs. in million)

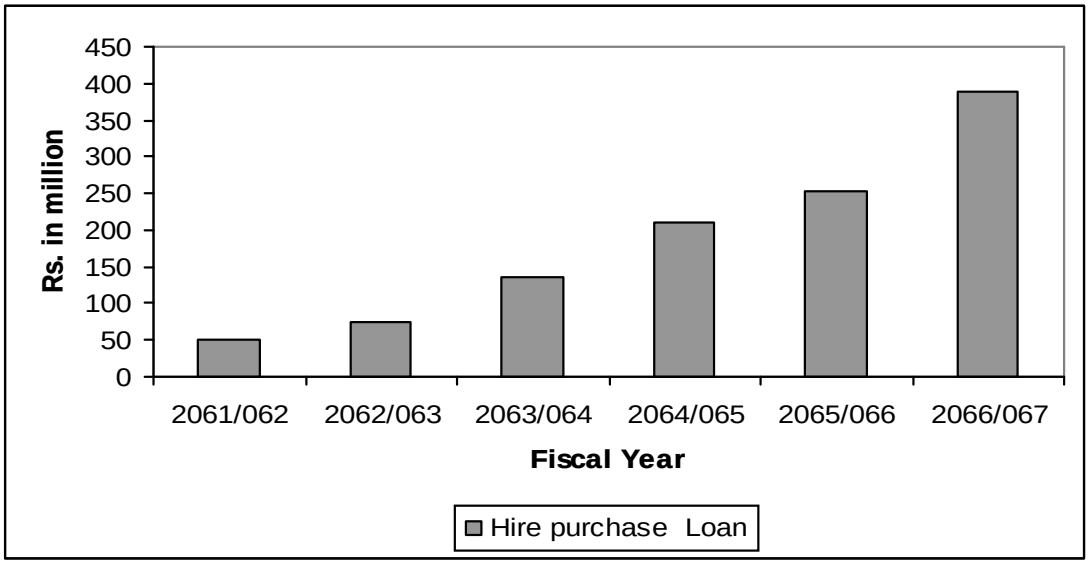
Fiscal Year	Hire purchase Loan	Mean
2061/062	51.04	185.38
2062/063	75.64	
2063/064	134.54	
2064/065	209.52	
2065/066	254.13	
2066/067	387.43	

Source: FFCL, Annual Report.

The table 4.2 shows the hire purchase loan investment of FFCL from F/Y 2061/062 to F/Y 2066/067. It is found that the investment of FFCL on hire purchase loan is increasing year by year. In F/Y 2061/062, it is Rs. 51.04 million and continuously increased and reached to Rs 387.43 million in F/Y 2066/067. The mean for the study period is 185.38% High mean ratio shows that trend of investment on hire purchase loan is going to increase. So finding shows that the investment on hire purchase loan has been increasing substantially during the study period.

Figure – 4.1

Hire Purchase Loan



The figure 4.1 shows the hire purchase loan of FFCL under last six years study period. The analysis represents that hire purchase loan of FFCL is slightly increasing over the years having mean ratio 185.38% during the study period.

4.2.2 Housing Loan

Housing loan is a type of loan which is sanctioned purchasing land, to construct a building or to enhance the floor of the existing house as per client's request. The interest rate charged on the housing loan was 18% during the study period. The housing loan of FFCL is shown in Table 4.3 as below:

Table 4.3

Housing Loan Investment of FFCL

(Rs. in million)

Fiscal Year	Housing Loan	Mean
2061/062	91.01	316.92
2062/063	155.25	
2063/064	226.27	
2064/065	293.33	
2065/066	497.20	
2066/067	638.45	

Source: FFCL, Annual Report.

Table 4.3 shows that the loan investment on housing loan has been increasing year by year. The amount of the loan investment ranged of FFCL from Rs. 91.01 million to Rs 638.45 million with the mean of 316.92. The mean value clear that the investment on housing loan has been increasing which is favorable for the FFCL. It is because of the growing interest of the people of the society to purchase and construct the personal as well as institutional land and houses. This shows that investment regarding to housing loan is becoming more popular among the people.

Figure - 4.2

Housing Loan Investment of FFCL

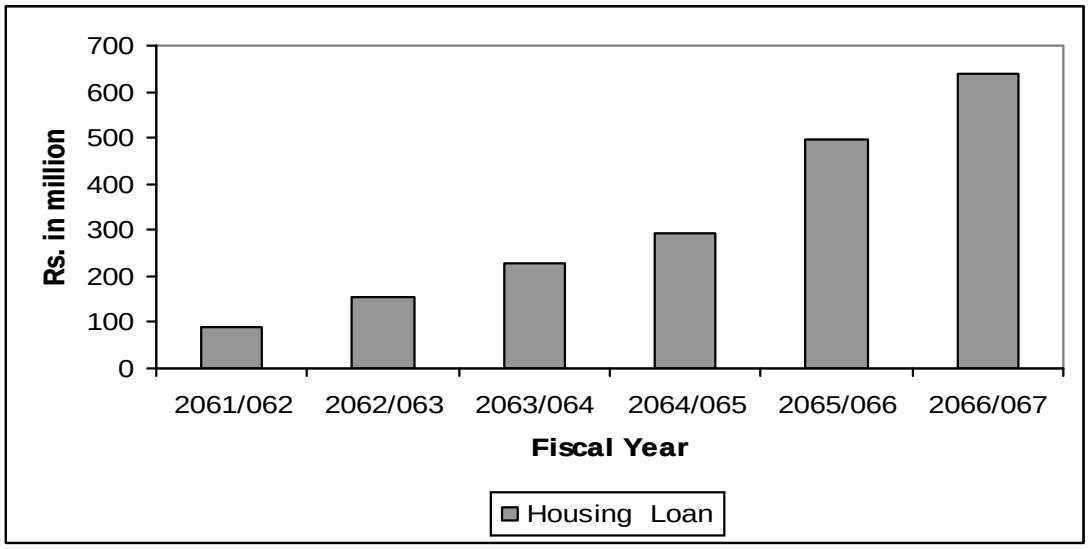


Figure 4.2 shows that investment made by FFCL in housing loan is continuously increasing over the study period. Increasing trend of housing loan shows that it is going to be popular year by year.

4.2.3 Fixed Deposit Loan

In the case of fixed deposit loan, the customers take the loan against the fixed deposit account. The interest rate charged on the basis of spread rate. Basically finance company charged interest rate on fixed deposit loan over than the fixed deposit account. The interest rate on deposit was regulated by NRB in the past years but now the NRB has freed the company, itself to determine the rate. The fixed deposit loan investment of FFCL is shown in Table 4.4 as below:

Table 4.4

Fixed Deposit Loan Investment of FFCL

(Rs. in million)

Fiscal Year	Fixed Deposit Loan	Mean
2061/062	3.30	13.42
2062/063	7.96	
2063/064	12.23	
2064/065	8.38	
2065/066	11.05	

2066/067	37.59	

Source: FFCL, Annual Report.

The table 4.4 shows the fixed deposit loan investment of FFCL from F/Y 2061/062 to F/Y 2066/067. FFCL has made the very few percentage of investment on fixed deposit loan. It is found that the investment of FFCL on fixed deposit loan is fluctuating trend. Highest loan made by FFCL on fixed deposit loan in F/Y 2066/067 is Rs. 37.59 million and lowest fixed deposit in F/Y 2061/062 is Rs. 3.30 million. Mean ratio is 13.42%, this ratio shows that FFCL keep this loan in last priority sector.

Figure - 4.3

Fixed Deposit Loan Investment of FFCL

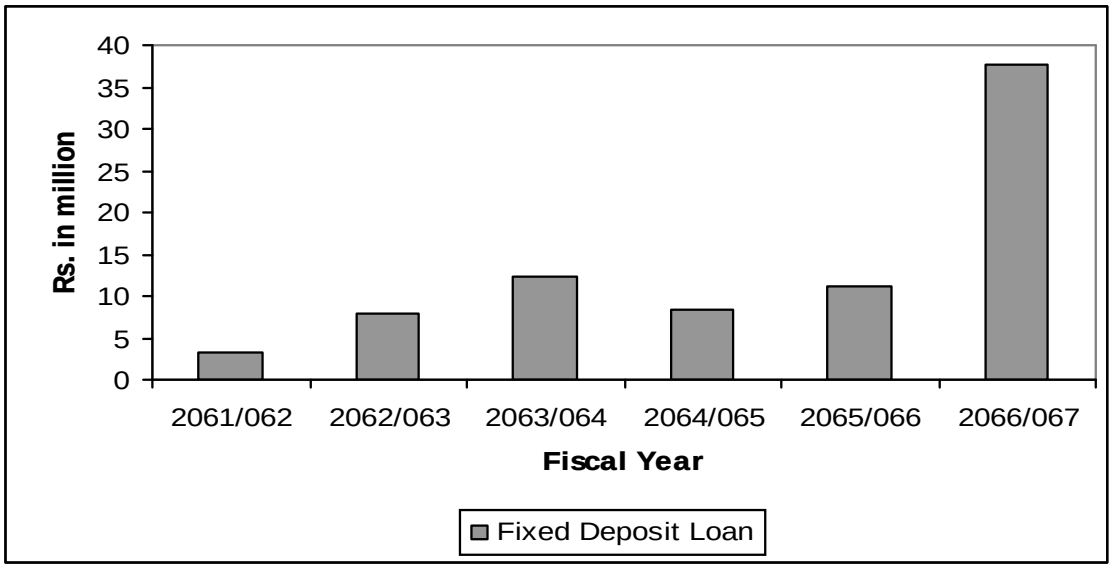


Figure 4.3 depicts the fixed deposit loan investment of FFCL over the research period. The amount invested on this sector ranges from Rs 7.96 million to Rs 37.59 million with the mean of 13.42%. Above figure also describes that FFCL has invested their fund in fixed deposit loan is negligible.

4.2.4 Others Loan

Others loan is that type of loan which is mainly taken by the industry, business, social, project, low income group people, trade, personnel, foreign employment, education, health, agriculture, tourism, water resources and other service oriented sectors. The interest rate charged on the term loan was 18% during the study period. Others loan investment of FFCL is shown in Table 4.5

Table - 4.5
Others Loan Investment of FFCL

(Rs.in million)

Fiscal Year	Others Loan	Mean
2061/062	91.51	289.50
2062/063	159.23	
2063/064	238.50	
2064/065	326.86	
2065/066	342.51	
2066/067	578.19	

Source: FFCL, Annual Report.

Table 4.5 shows the others loan investment made by Fewa finance company limited. Above table describes that FFCL made second preference to others loan investment. On this title FFCL submit business loan, industrials loan, educational loan, health loan, tourism loan, agricultural loan, social loan, personnel loan, real state loan and so on. In F/Y 2061/062 the investment is Rs. 91.51 million and F/Y 2066/067 the investment has been tremendously increase and reached Rs. 578.19 million. The mean ratio of others loan is 289.50%. This shows that the investment regarding to other loan is becoming popular among the people.

Figure - 4.4
Others Loan Investment of FFCL

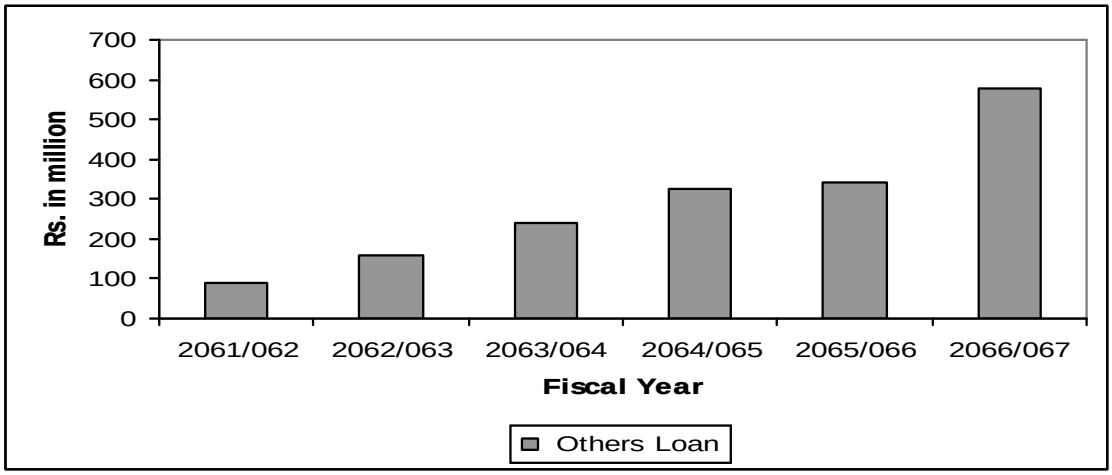


Figure 4.4 shows that the trend of investment on others investment is increasing over the research period. This figure shows that others loan made by FFCL is becoming popular among the people. Thus, the sector wise loan investment of FFCL is tabulated below: -

Table 4.6

Sector Wise Loan Investment

(Rs. in million)

Fiscal Year	Hire Purchase Loan	Housing Loan	Fixed Deposit loan	Others Loan
2061/062	51.04	91.01	3.3	92.51
2062/063	75.63	155.25	7.96	159.23
2063/064	134.54	226.27	12.23	238.50
2064/065	209.52	293.33	8.38	326.85
2065/066	254.12	497.20	11.05	342.51
2066/067	387.43	638.45	37.59	578.19
Mean	185.38	316.92	13.42	289.63
S.D.	125.55	210.63	12.24	170.84
C.V. %	68	66	91	59

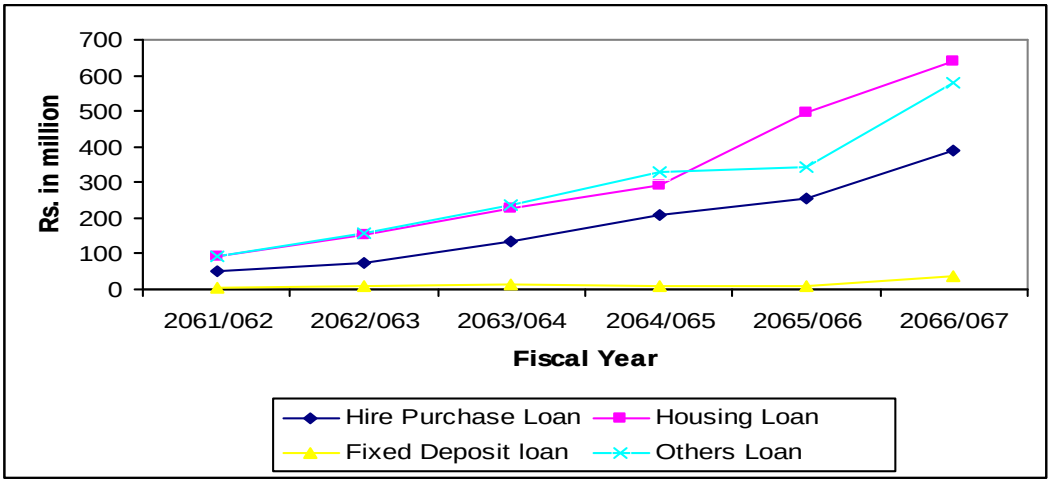
Source: FFCL Annual Report

Above table 4.6 shows the sector wise loan investment of the FFCL from F/Y 2061/062 to F/Y 2066/067. From the table, it is clear that the major portion of the loan investment of the company is done on housing loan, others loan and hire purchase loan which get the second and third priority respectively. While the fixed Deposit loan gets the last preference in the company loan portfolio The table depicts that the loan investment of fixed deposit is in fluctuating order and hire purchase and housing loan investment and others loan are in increasing year by year. By seeing above table FFCL has made main priority to housing loan.

The mean ratio of housing loan is 316.92% which and C.V. is 66%, mean ratio says that FFCL has main priority to housing loan. Similarly the mean ratio of others loan is 289.63% which get the second priority. The mean ratio of hire purchase and fixed deposit loan are 185.38% and 13.42% respectively.

Figure - 4.5

Sector Wise Loan Investment of FFCL



Above figure depicts that the sector wise loan investment of the FFCL from F/Y 2061/062 to F/Y 2066/067. Above figures revels that investment of all sectors are not same. On the basis of mean ratio FFCL has made the first priority to housing and others loan, hire purchase loan and fixed deposit loan get the second, third and fourth priority. Housing loan and others loan shows the steady upward movement i.e. it is increasing over the research period. In the case of hire purchase loan, there is slightly increase over the research period. Finally the fixed deposit loan amount has been fluctuating over the study period. Thus, it reflects that FFCL has emphasized more on housing loan rather than on the other remaining three loans.

4.3 Liquidity Ratios

Liquidity Ratio measures the firm's ability to meet its current obligation. Financial company collect fund from the community with a commitment to return depositor's fund, facilitate withdrawal on demand. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity. It is necessary to strike a proper balance between high liquidity and lack of liquidity. The following ratios are evaluated under liquidity ratio.

Cash and bank balance to total deposit ratio:

They are the most liquid of current assets to pay off depositors immediately.

This ratio is calculated by dividing cash and bank balance by total deposits. In order to bring about consistency in this research, checks for clearing have been excluded from cash and bank balance and included in other assets.

Cash and bank balance includes cash in local currency & foreign currency on hand or with banks. The total deposits consists of deposits in current account, savings account, fixed deposit account, money at call deposits, margin deposits etc. A higher ratio indicates greater ability of banks to meet their deposits and vice-versa. (Working details in appendix no. 3)

Table 4.7

Cash and bank balance to total deposit ratio

Investment Portfolio	Fiscal Year					
	2061/062	2062/063	2063/064	2064/065	2065/066	2066/067
Cash & bank balance to total deposit Ratio (%)	14.20	18.04	11.20	16.84	23.67	26.80
Mean	18.46					
S.D.	5.84					
C.V. %	32					

Source: FFCL, Annual Report.

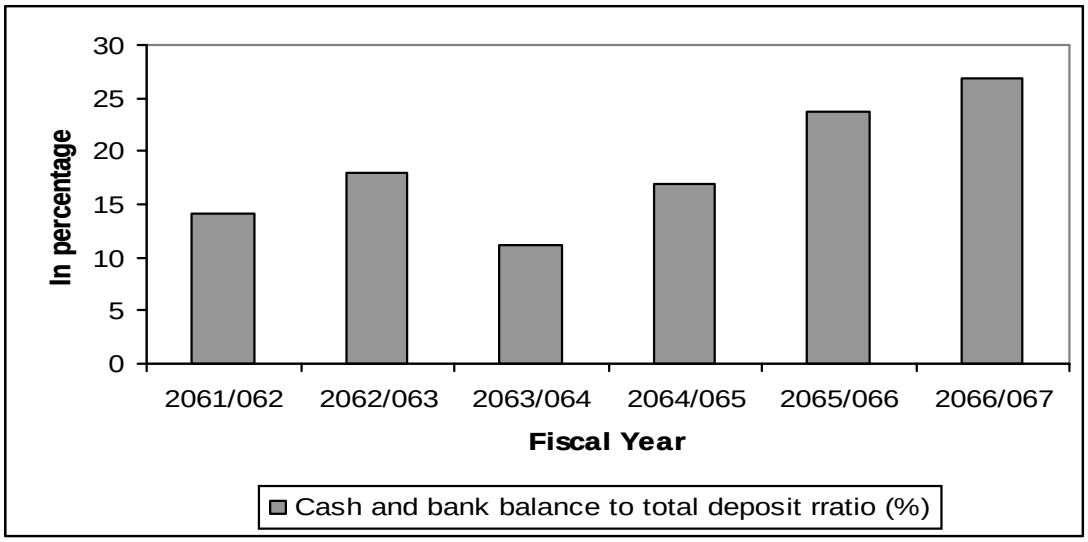
The figures shown in table 4.7 above reveal that the cash and bank balance to total deposit of Fewa finance company in fluctuating trend. FFCL has a high ratio of 26.80% in F/Y 2066/2067 and a low ratio of 11.20% in F/Y 2063/064. The average mean ratio of FFCL is 18.46%, and the C.V.% is 32% shows, Fewa finance's readiness to meet customer requirement. But to high ratio is unfit as capita will be tied up and too lower ratio lower ratio can not fulfill the demand of the public immediately. So, the FFCL should maintain sufficient cash reserve in order to their short term obligation.

Although the above ratios implies a slightly better liquidity position of FFCL, a high ratio of non-earning cash and bank balance indicates the banks inability to

invest its fund in income generation areas that might have helped it to improve its profitability. This table is presented in figure 4.6 below:

Figure – 4.6

Cash and Bank Balance to Total Deposit Ratio



Above figure shows the cash and bank balance to total deposit ratio which is fluctuating over the study period. This is increased for first two years and then decreased after F/Y 2063/064, it has been tremendously increased.

ii) **Cash and bank balance to current assets ratio:**

This ratio measures the percentage of liquid assets i.e. cash and bank balance in the current assets of the firm. Higher ratio shows greater capacity of firms to meet cash demand. (Working details in appendix no. 4).

Table 4.8

Cash and bank balance to total current assets ratio

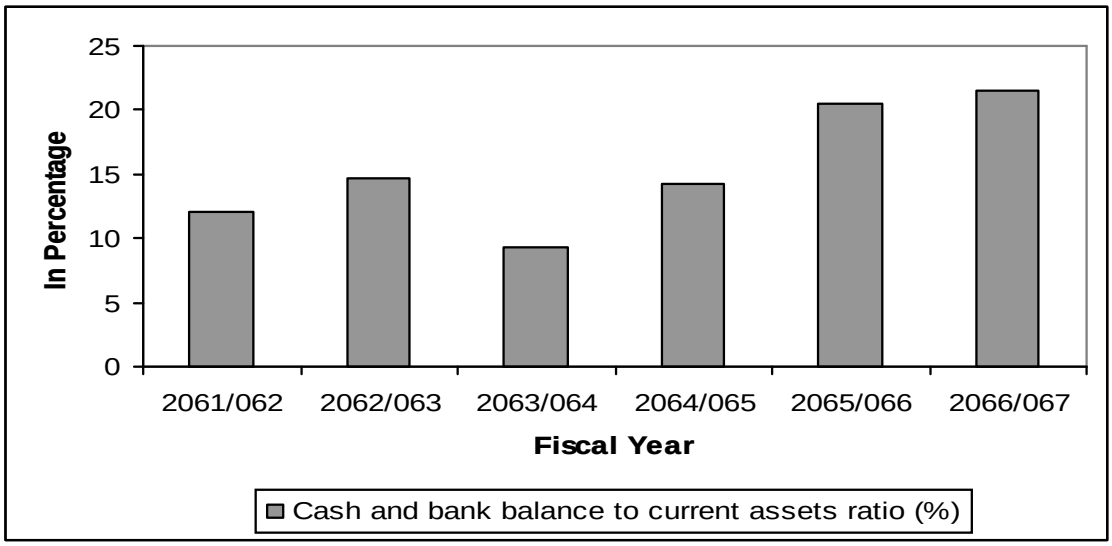
Investment Portfolio	Fiscal Year					
	2061/062	2062/063	2063/064	2064/065	2065/066	2066/067
Cash & bank balance to current assets Ratio (%)	12.10	14.72	9.23	14.27	20.43	21.50
Mean	15.38					
S.D.	4.76					
C.V. %	31					

Source: FFCL, Annual Report.

The figures calculated in table 4.8 show that the cash and bank balance to current assets of FFCL is in a fluctuating trend. FFCL has maintained a high ratio of 21.50% in F/Y 2066/67, and a low ratio of 9.23% in F/Y 2063/064. The average mean ratio of FFCL is 15.38% and C.V. is 31% which is lies between above variables which shows that variables are less consistent. Although it is cleared that FFCL has fared well in meeting their depositor's daily cash requirement and investing the surplus fund in other productive areas. The table 4.8 has presented into figure 4.7 below:-

Figure - 4.7

Cash and Bank Balance to Current Assets Ratio (%)



This figure shows the cash and bank balance to current assets ratio which is fluctuating trend. In the F/Y 2066/067 has the highest proportion of cash and bank balance to current assets ratio as compared to other fiscal year. Fluctuation in this ratio during the study period is 31% that implies that 59% consistency in case of FFCL while to cash and bank balance in the form of current assets.

4.4 Assets Management Ratios

Asset management ratios measure the efficiency of the finance to manage its asset in profitable and satisfactory manner. They indicate the speed with which assets are being converted into cash. Thus these ratios are used to measure the finance’s ability to utilize their available resources.

i) **Loan and advances to total deposit ratio:**

This ratio is also called credit-deposit ratio (CD ratio). It is calculated to find out how successfully the banks are utilizing their total deposits on loan and advances for profit generating purpose. Loans and advances are the highest yielding assets in a bank's portfolio. Greater ratio implies better utilization of total deposits at the cost of liquidity.(Working details in appendix no. 5).

Table 4.9
Loan and advances to total deposit ratio

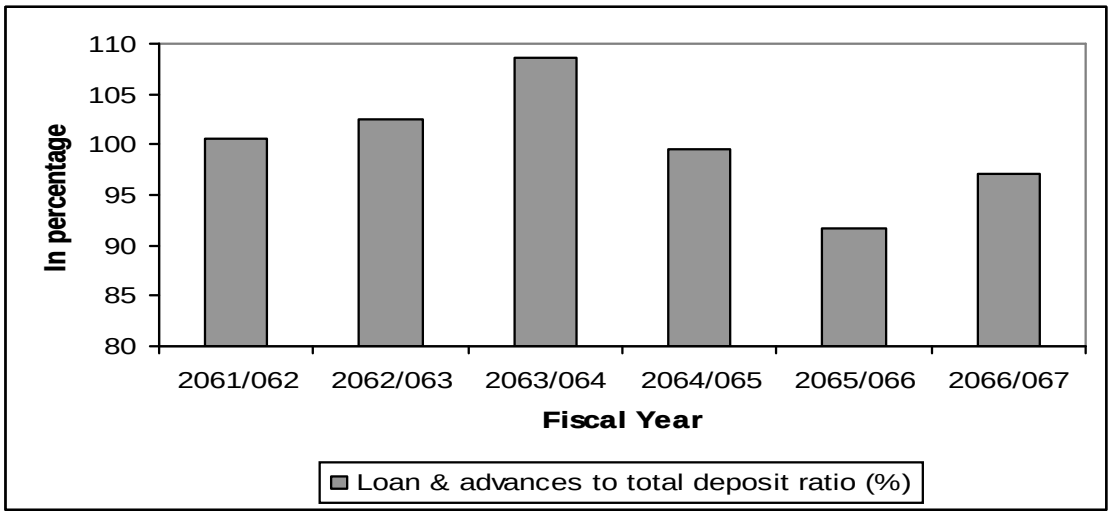
Fiscal Year	Loan & advances to total deposit ratio (%)	Mean	S.D.	C.V. %
2061/062	100.66	100.04	5.60	5.0
2062/063	102.55			
2063/064	108.60			
2064/065	99.47			
2065/066	91.73			
2066/067	97.18			

Source: FFCL, Annual Report

The above table shows that loan & advances to total deposit ratio of the bank was highest 108.60% in F/Y 2061/62. Since then, the trend showed decreasing order. The mean of the ratios is 100.04% with 5.60% C.V. between them, which shows that the ratios are moderately consistent over the study period. Loan and advances to total deposit ratio is slightly high, from this point of view, the loan & advances to total deposit of the company is satisfactory, and whatever may be the case during the initial period. Loan and advances is the proportion of company's investment into the most risky assets. High level of risk is not desirable for finance company as any default can create the liquidity problem. In the other hand, lower CD ratio indicates inability of investing the fund in profitable portfolio which will reduce the profitability of the bank. The table 4.8 presented into figures as below:-

Figure – 4.8

Loan and Advances to Total Deposit Ratio



Above figure reveals that the loan and advances to total deposit ratio of FFCL for six years. In F/Y 2063/064 FFCL has made highest investment and lowest investment in F/Y 2065/066. Fluctuation in this ratio during research period is 5% that implies that 95% consistency in case of FFCL while lending total deposit into loan and advances. Overall it is found that ratios are generally in mixed trend during the study period.

ii) **Loans and Advances to Total Assets Ratio**

Loan and advances is the major component in the total assets, which indicates the ability of bank to utilize its deposits in the form of loans and advances to earn high return. This ratio is computed to assess credit proportion in the total assets. (Working details in appendix no.6).

Table 4.10

Loan and Advances to total Assets Ratio

Fiscal Year	Loan & advances to total assets ratio (%)	Mean	S.D.	C.V. %
2061/062	85.43	83.06	4.39	5.3
2062/063	83.49			
2063/064	89.24			
2064/065	84.05			
2065/066	78.83			

2066/067	77.29			

Source: FFCL, Annual Report

The Table 4.10 shows that the loan and advances to total assets ratio of FFCL has a fluctuating trend. FFCL has a high ratio of 89.24% in F/Y 2063/064 and a low ratio of 77.29% in F/Y 2066/067. The mean ratio of FFCL is 83.06%. With 5.3 percent C.V. between them which shows the ratios are moderately consistent over the study period. This shows that loan and advances comprise 83.06% in average of the total asset of the Company. Loans and advances is the most risky and most productive asset of the Company. High ratio suggests high risk and eventually high return to the Company. So, FFCL has taken optimum risk towards the mobilization of its fund to risky assets. The table 4.4 is presented in figure below:-

Figure - 4.9

Loan and Advances to Total Assets Ratio

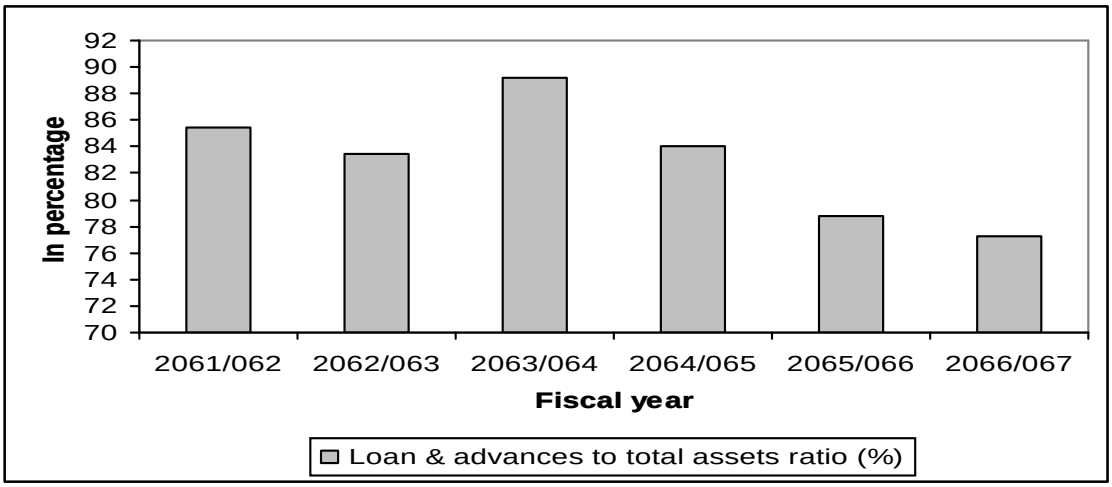


Table 4.9 shows that the ratio of loan and advance to total asset of FFCL in fluctuating trend throughout the review period. Highest in F/Y 2063/064 with 89.24% thereafter ratio has gown down. This indicates that FFCL is able to utilize its deposit in the form of loan and advances to earn high return.

iii) **Total investment to total deposit ratio:**

This ratio shows the utilization of firm's deposits on investment in government securities and purchasing shares and debentures of other companies. A high ratio is indicative of high success in mobilization of deposits in investments and vice-versa. (Working details in appendix no. 7)

Table 4.11

Total Investment to Total Deposit Ratio

Investment Portfolio	Fiscal Year					
	2061/062	2062/063	2063/064	2064/065	2065/066	2066/067
Total investment to total deposit ratio (%)	100.89	102.67	108.61	99.85	91.99	97.21
Mean	100.20					
S.D.	5.55					
C.V. %	5.50					

Source: FFCL, Annual Report

The Table 4.11 shows that Total investment to total deposit ratio of FFCL has a fluctuating trend. FFCL has a high ratio of 108.61% in F/Y 2063/064 and a low ratio of 91.99% in F/Y 2065/066. The mean ratio of FFCL is 100.20%, with 5.5 percent C.V.

In conclusion, the above analysis reveals that FFCL has been more successful mobilizing its resources in beginning year, after F/Y 2063/064 FFCL has reduced their deposit in the various form of investment.

Figure – 4.10

Total Investment to Total Deposit Ratio

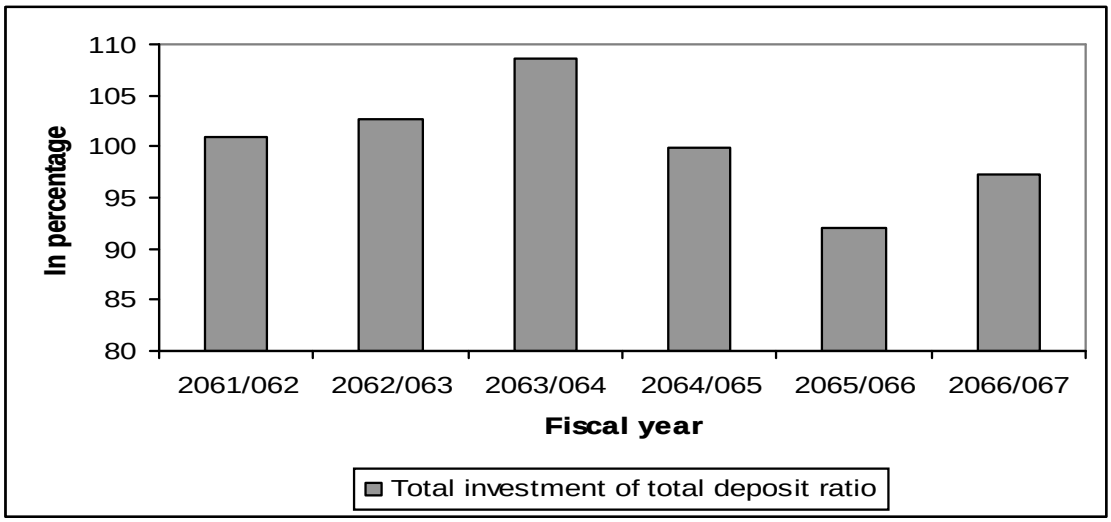


Figure 4.10 reveals that the total investment to total deposit ratio of FFCL the F/Y 2061/062 to F/Y 2066/067. Total investment of total deposit ratio is also fluctuating over the research period. In F/Y 2063/064 FFCL has invested high amount in productive sector to generate more profit as compared to other fiscal year.

4.5 Profitability Ratio

Profitability ratios are used to indicate and measure the overall efficiency of a firm in terms of profit and financial performance. For better performance, profitability ratios of firms should be higher. Following ratios have been computed to study the portfolio's profitability:

i) Return on Total Assets Ratio:

This ratio measures the overall profitability of all total assets. It is also known as return on assets (ROA). (Working detail in appendix no. 8).

Table 4.12

Return on Total Assets Ratio

Fiscal Year	Return on total assets ratio (%)	Mean	S.D.	C.V. %
2061/062	2.48	2.39	0.2509	10
2062/063	2.09			
2063/064	2.49			

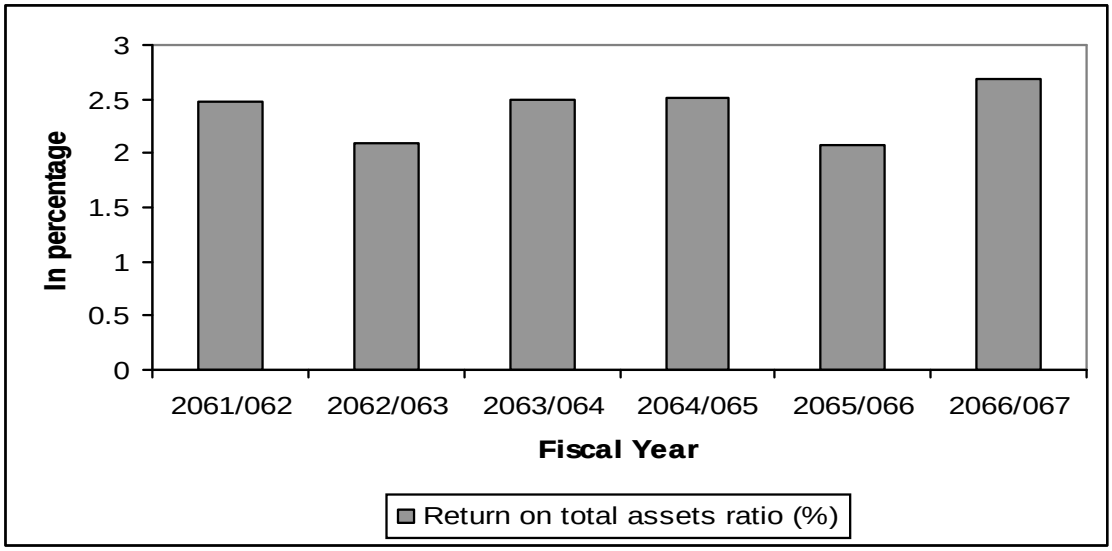
2064/065	2.51			
2065/066	2.07			
2066/067	2.69			

Source: FFCL, Annual Report

The 4.12 table shows that FFCL has highest return i.e. 2.69% in F/Y 2066/067 and the lowest i.e. 2.07% in F/Y 2065/066 through out the review period. Return on total assets of FFCL has been fluctuating during the study period. C.V. of Return on total assets is 10% i.e. between above table value. This indicated those variables are less consistent over the study period. The finding has shown that there is high efficiency in utilizing overall resources in the initial year but in later years profit has fluctuated.

Figure – 4.11

Return on Total Assets Ratio



Above figure of return on total assets shows that all the ratios are in positive and fluctuating order. Highest ratio is in F/Y 2066/067 and lowest ratio is in F/Y 2065/066.

ii) Return on Equity Ratio:

This ratio measures how efficiently the bank has used the funds of the owners.(Working details in appendix no. 9).

Table - 4.13

Return on Equity Ratio

Fiscal Year	Return on Equity ratio (%)	Mean	S.D.	C.V. %
2061/062	34.58	29.53	7.149	24.2

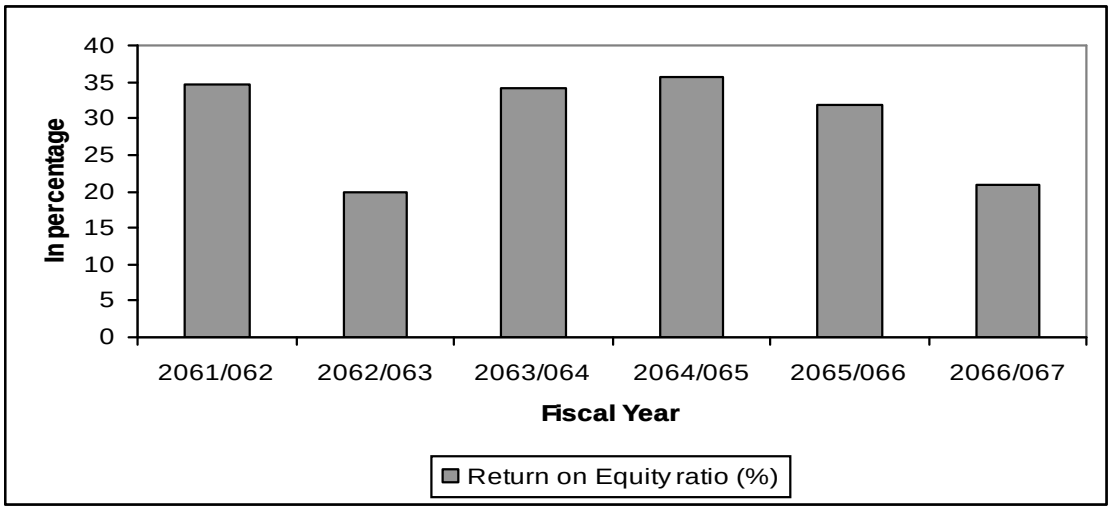
2062/063	19.97			
2063/064	34.08			
2064/065	35.75			
2065/066	31.88			
2066/067	20.94			

Source: FFCL, Annual Report

The above table shows, the mean return, S.D. and C.V. on total assets ratio of FFCL is highest return on equity is 35.75% in F/Y 2064/065 and the lowest return on equity is.19.97% in F/Y 2062/063 through out the review period. The mean ratio is 29.53% with 7.149% C.V. between them which shows that the ratios are consistent with less variable over the study period. The table 4.12 is presented in figure below:

Figure – 4.12

Return on Equity Ratio



Above figure shows the return on equity over the years. This figure shows that maximum return on equity ratio in F/Y 2064/065, there after ratio has slightly decreased over the study period. The ROE ratio of the company is fluctuating due to increase in shareholders' equity but the profit of the company has not increased in same ratio as the equity has increased.

iii) Return on Investment Ratio:

Return on investment ratio shows how efficiently the organization is investing it fund in different sector for generating profit. The higher the ratio the better the organization profit. The ROI ratio measures how efficiently the organization can earn on its investment. It is a kind of technique that measures the profitability position of the organization. (Working details in appendix no. 10).

Table - 4.14

Return on Investment Ratio

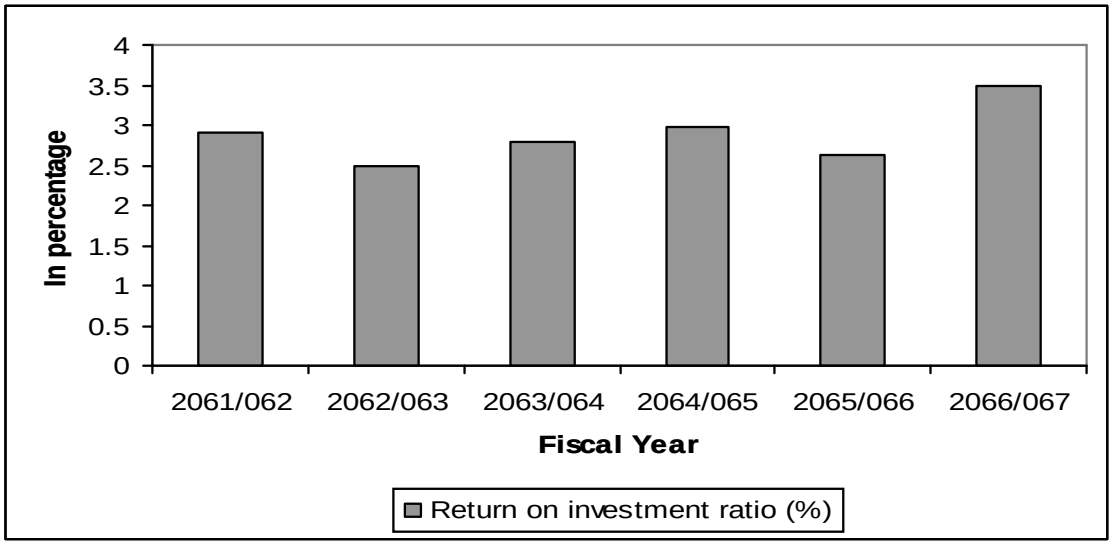
Fiscal Year	Return on investment ratio (%)	Mean	S.D.	C.V. %
2061/062	2.90	2.88	0.119	41
2062/063	2.50			
2063/064	2.79			
2064/065	2.97			
2065/066	2.62			
2066/067	3.48			

Source: FFCL, Annual Report

Above table shows that the return on total investment ratio of FFCL is in fluctuating trend. FFCL has maximum in FY 2066/67 with 3.48% and minimum in F/Y 2062/063 with 2.50%. The mean ratio is 2.88% with C.V. of 41% percent between them. This indicates that there is 59% fluctuation on return on investment. The table 4.13 is presented in figure below:

Figure – 4.13

Return on Investment Ratio



Above figure shows the return on investment over the years. This figure shows that maximum return on investment ratio in F/Y 2066/067, and minimum return on investment in F/Y 2062/063. It describes that return on investment fluctuated over the study period.

4.6 Risk Ratios

Risk means uncertainty, variability of return, which is inherent in any investment portfolio of a business enterprise. Risk is an important element since investment with greater risk requires higher return than investments with lower risk. Risk ratios measures the degree of risk involved in various financial operations. The possibility of risk involved in bank's financial operations makes the bank investment a challenging task. As the notion goes," no risk no gain", therefore, if a bank expects high return on its investment it must be prepared to accept the risk and manage it efficiently. The following risk ratios are used to analyze and interpret the financial data and investment policy.

i) Liquidity risk ratio:

Liquidity risk of the bank defines its liquidity needs for deposit. Cash and bank balance are the most liquid of all the assets and are considered bank's liquidity sources. Deposits on the other hand refer to the liquidity needs of Company. This ratio measures the risk associated with the liquid assets i.e. cash and bank balance that are kept to satisfy the cash demand of customers. A higher ratio shows that the banks has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the Finance company. A trade off between liquidity and profitability must be maintained. (Working details in appendix no. 11).

Table 4.15

Liquidity Risk Ratio

Investment Portfolio	Fiscal Year					
	2061/062	2062/063	2063/064	2064/065	2065/066	2066/067
Liquidity risk Ratio	14.20	18.04	11.20	16.84	23.67	26.80

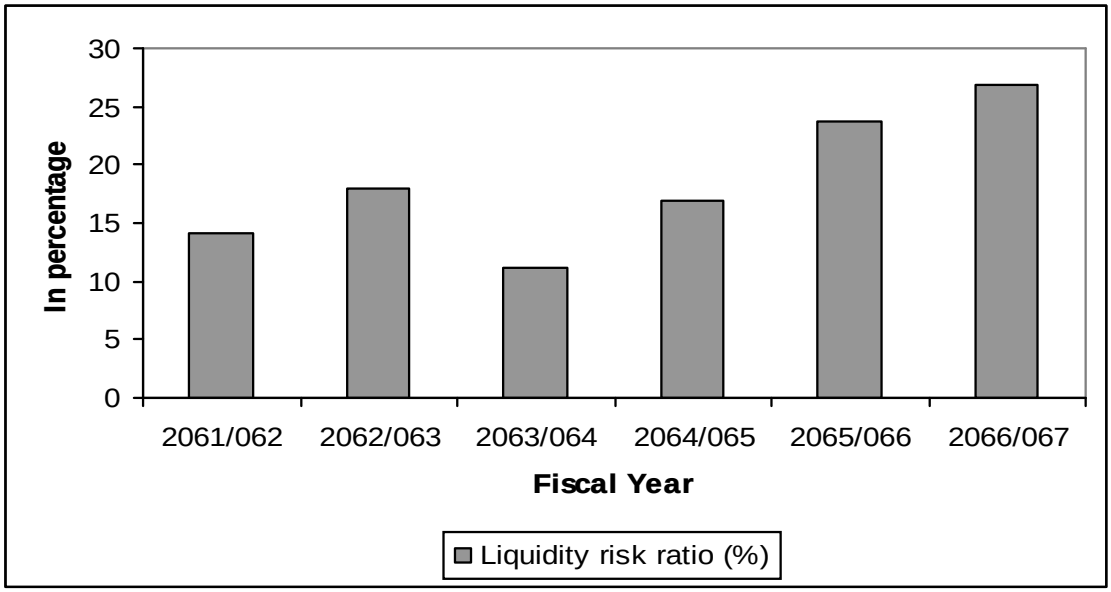
(%)						
Mean	18.46					
S.D.	5.84					
C.V. %	32					

Source: FFCL, Annual Report

As per the information processed in table 4.15, it is seen that the liquidity risk ratios of the company has been remained in fluctuating trend. FFCL has recorded a high ratio of 26.80% in F/Y 2066/067 and a low ratio in F/Y 2063/064 11.20%. When mean ratios are taken in to consideration, it is found that the mean ratio of FFCL is slightly high comparison with ratio which indicates that FFCL has more cash and bank balance But we must not discount the fact that, too much idle cash has an adverse impact on profitability. A trade off between liquidity and profitability must be maintained at all times.

Figure – 4.14

Liquidity Risk Ratio



The figure 4.14 depicts that Liquidity risk of FFCL is fluctuating over the year. After F/Y 2063/064, liquidity risk of FFCL slightly increase which is not better for the FFCL. To reduce the liquidity risk ratio FFCL try to maintain appropriate cash and bank balance, or to reduce liquidity risk, FFCL invest the idle cash in productive sector.

ii) Credit risk ratio:

Normally, every credit is good at the time it is sanctioned. Most of the finance companies failures are due to shrinkage in the value of loan and advances. Loan is a risky asset and risk of non-repayment of loan in known as credit risk or default risk. Credit risk ratio measures the possibility of loan going into default. (Details in appendix no. 12).

Table - 4.16

Credit Risk Ratio

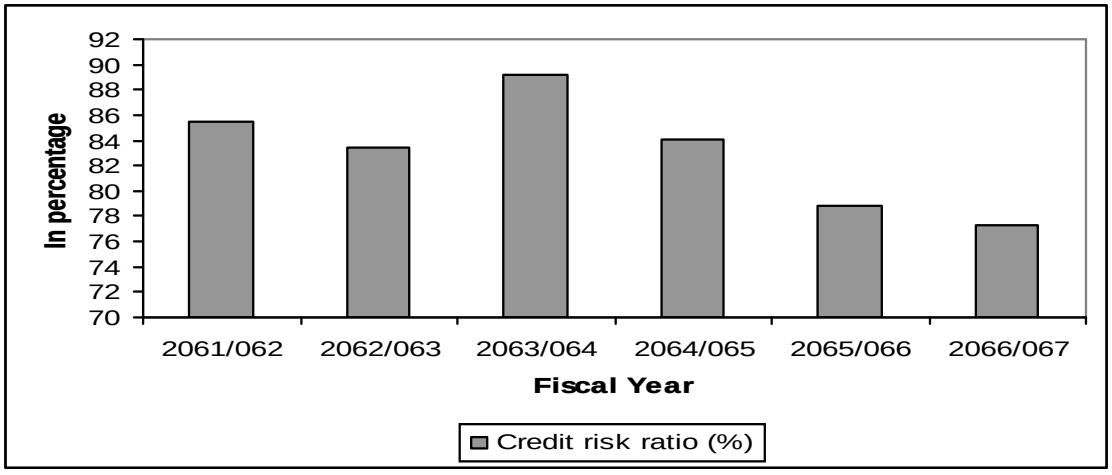
Fiscal Year	Credit risk ratio (%)	Mean	S.D.	C.V. %
2061/062	85.43	83.06	4.39	5.30
2062/063	83.49			
2063/064	89.24			
2064/065	84.05			
2065/066	78.83			
2066/067	77.29			

Source: FFCL, Annual Report

Table 4.16 shows that credit risk ratio of FFCL for six years study period starting from F/Y 2061/062 to F/Y 2066/067.FFCL has maintain highest ratio is 89.24% in F/Y 2063/064 and the lowest ratio is 77.29% in F/Y 2066/067 and average mean ratio of FFCL is 83.06% which is slightly high. High ratio indicates that the FFCL has the high credit risk ratio.

Figure – 4.15

Credit Risk Ratio



The above table shows that credit risk ration of FFCL is slightly high during the year. After F/Y 2063/064 FFCL able to minimize the credit risk, this is better for the FFCL.

4.7 Growth Ratios

Growth ratios are directly related to the fund mobilization and investment management of the Financial Company. It represents how well the Finance Companies are maintaining the economic and financial position. Growth ratio measures the increase and decrease of present year's figure in comparison to previous year's figure. Higher the ratios represent the better performance of the Company and vice-versa.

Table 4.17

Growth Ratio of Total Deposit

(Rs. in million)

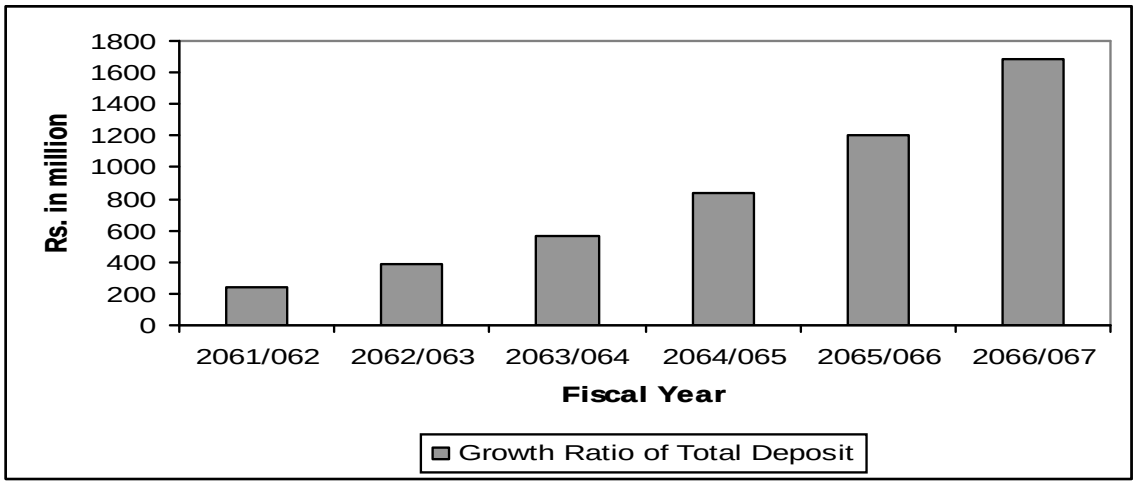
Growth Ratio of Total deposit	Fiscal Year						Growth Ratio (%)
	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	48.20
	236.30	388.19	563.11	842.41	1204.45	1689.28	

Source: FFCL, Annual Report.

The table 4.17 shows the growth ratio of total deposit of FFCL under last years study period. (Working details in appendix no. 13). The analysis represents that total deposit of FFCL is slightly increasing over the study period having net growth rate 48.20%, which considered as satisfactory. Above table shown as figure below:

Figure – 4.16

Growth Ratio of Total Deposit



Above figure shows the growth trend of total deposit. It shows that trend of deposit slightly increase over the research period.

Table – 4.18

Growth Ratio of Total Investment

(Rs. in million)

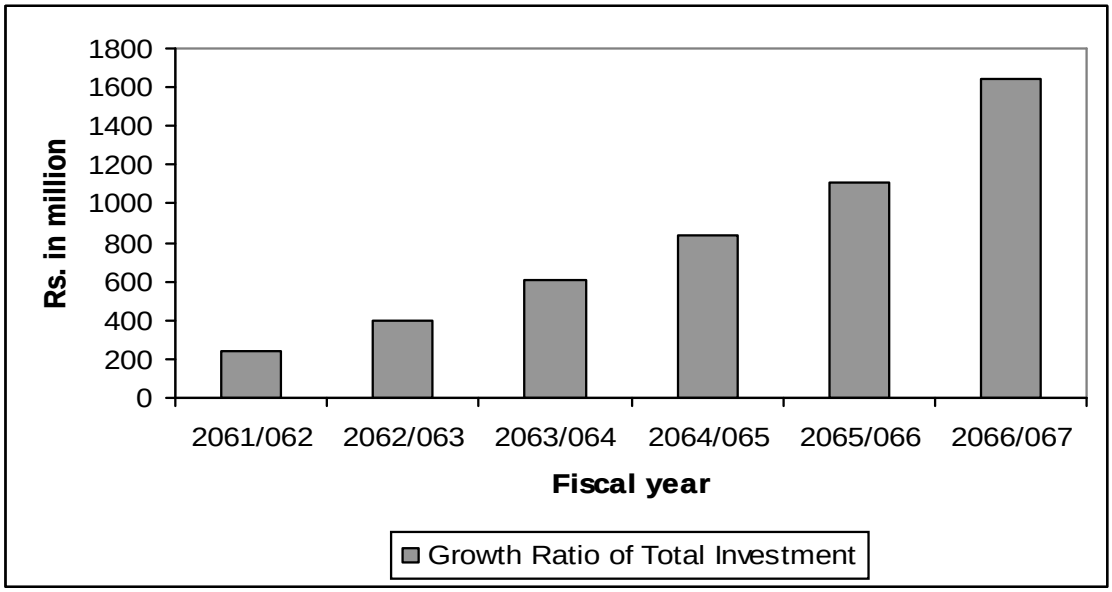
Growth Ratio of investment	Fiscal Year						Growth Ratio (%)
	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	47.10
	238.43	398.62	611.59	841.14	1107.94	1642.22	

Source: FFCL, Annual Report.

The table 4.18 represents the total investment of FFCL. It shows that total investment of Fewa Finance Company is in increasing order. FFCL has the growth ratio in total investment is 47.10%. This can be shown in figure as below:-

Figure- 4.17

Growth Ratio of Total Investment



The figure 4.17 shows the growth of total investment. Figure clearly shows that if economic and financial condition does not go down it will positively increase year by year.

Table - 4.19

Growth Ratio of Total Loan and advances

(Rs. in million)

Growth Ratio of Loan & advances	Fiscal Year						Growth Ratio (%)
	2061/62	47.16	2063/64	2064/65	2065/66	2066/67	47.16
	237.88	398.07	611.54	838.09	1104.89	1641.67	

Source: FFCL, Annual Report

The table 4.19 shows the growth ratio of total loan and advances of FFCL under last years study period. The analysis represents that total loan and advances of FFCL is slightly increasing over the study period having net growth rate 47.16%, which considered as satisfactory. Above table shown as figure below:

Figure – 4.18

Growth Ratio of Total Loan and advances

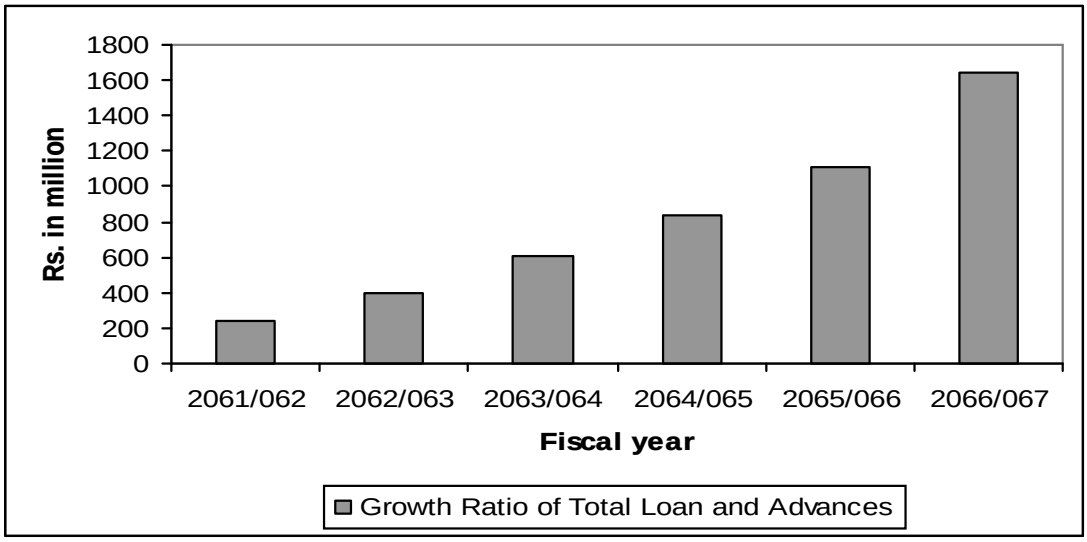


Figure 4.18 shows the growth ratio of total deposit and loan and advances. There is the increasing trend over the study period.

4.8 Coefficient of Correlation Analysis

It is useful statistical too for measuring the intensity of the magnitude of linear relationship between the series. Karl Pearson's coefficient of correlation is used to find out the relationship between deposit and investment, deposit and total loan and advances, investment and loan and advances.

i) Co-efficient of Correlation between Deposit and investment

Coefficient of correlation between deposit and investment measures the degree of relationship between these two variables. Here, the deposit is taken as independent variable (x) and the variable dependent on deposits is total investment, which is denoted by (y). The purpose of calculating 'r' is to judge whether deposits are significantly mobilized as Investments or not. (Working details in appendix no.14)

Table 4.20

Correlation between Deposit and Investment

Correlation Coefficient (r)	Coefficient of Determination (r^2)	p.Er.	6×p.Er.	Remarks
0.9943	0.9886	0.00313	0.01878	r >6×p.Er

Source: FFCL, Annual Report

The table 4.20 shows that the coefficient of correlation between independent variable deposit and dependent variable investment of FFCL is 0.9943 and coefficient of determination is 0.9886. This indicates that the 98.86% of the variation in the dependent variable has been explained by the independent variable. Further, p.Er and 6*p.Er are 0.00313 and 0.01878 respectively. It shows that the value of coefficient 'r' is greater than six times probable error '6*p.Er.' i.e.0.9943>0.01878. Therefore value 'r' is significant which means there is positive relationship between the deposit and investment of FFCL.

ii) Coefficient of correlation between deposits and loans and advances:

The coefficient of correlation between deposits and loan and advances measures the degree of relationship between them. In this study, the present researcher has taken deposit as an independent variable denoted by (x) and loans and advances as dependent variable (y). (Details in appendix no. 15)

Table 4.21

Correlation between Deposit and Loan and Advances

Correlation Coefficient (r)	Coefficient of Determination (r^2)	p.Er.	6×p.Er.	Remarks
0.9942	0.9884	0.00318	0.0191	r >6×p.Er

Source: FFCL, Annual Report

Table 4.21 shows the value of correlation coefficient 'r', coefficient of determination 'r'. Probable error 'p.Er.' and six times error '6*p.Er.' between two variable i.e. deposit and loan and advances. While analyzing this variable we find that correlation coefficient between deposit and loan and advances of FFCL is 0.9942. It is found that there is a high degree of positive correlation between deposits and loan and advances. Value of coefficient of determination (r^2) is 0.9884 and it means 98.84% of the variation in the dependent variable i.e. loan and advances has been explained by the independent variable (deposit). When we compare the Correlation coefficient (r) with 6*p.Er. Correlation coefficient 'r' is found greater than of six times probable error i.e.

0.9942>0.0191. It shows that the relationship between deposit and loan and advances is significant.

iii) Correlation between Investment and Loans and Advances

The correlation between the investment and loans and advances measures whether the finance company has a rigid policy to maintain a consistent relationship between two assets. So the increase or decrease in the volume of loans and advance directly reduces or increase the level of idle fund and this result is to effect the investment. Here investment is the independent variable (x) and the loan and advances is the dependent variable (y). (Details in appendix no. 16)

Table 4.22

Correlation between Investment and Loan and Advances

Correlation Coefficient (r)	Coefficient of Determination (r^2)	p.Er.	6×p.Er.	Remarks
0.9999	0.9998	0.00313	0.0187	r >6×p.Er

Source: FFCL, Annual Report

The table 4.22 shows that the coefficient of correlation between independent variable investment and dependent variable loan and advances of FFCL is 0.9999 and coefficient of determination is 0.9998. This indicates that the 99.98% of the variation in the dependent variable (loan and advances) has been explained by the independent variable (investment). Further, p.Er and 6*p.Er are 0.00313 and 0.01878 respectively. It shows that the value of coefficient 'r' is greater than six times probable error '6*p.Er.' i.e.0.9999>0.0187. Therefore value 'r' is significant which means there is positive relationship between the investment and loan and advances of FFCL.

4.9 Trend Analysis and Projection for Next Five Years

Trend analysis is a statistical tool which highlights the previous trend and forecast for a future with the help of past and present information. This is known

as time series analysis. Trend analysis, present or future analysis is utilized to see the movement of upward of downward by the help of given numerical values of some specified period of time. The purpose of trend analysis in this chapter is to analyze the trend of investment, total deposits, total loan and advances and net profit and its projection for the next five years the basis of past performance and records available.

The projections are based on the following assumptions:-

- The company will run in this present position i.e. trend will repeat itself.
- Other things will remain constant or unchanged.
- The economy will remain in the present stage.
- Nepal Rastra Bank will not change its guidelines relating to finance companies.
- The forecast will hold true only when the limitation of least square method is carried out.

i) Analysis of trend values of total investment:

Under this topic, based on the trend values of Investment from F/Y 2061/062, an attempt has been made to forecast the projections for next five years i.e. up to F/Y 2071/072. The following table shows the trend value of eleven years from F/Y 2061/062 to F/Y 2071/072. (Details in appendix no. 17)

Table - 4.23

Trend Values of Investment

(**Rs. in million)**

S.No	Fiscal Years	Trend Value
1	2061/062	136.91
2	2062/063	404.81
3	2063/064	672.71
4	2064/065	940.61

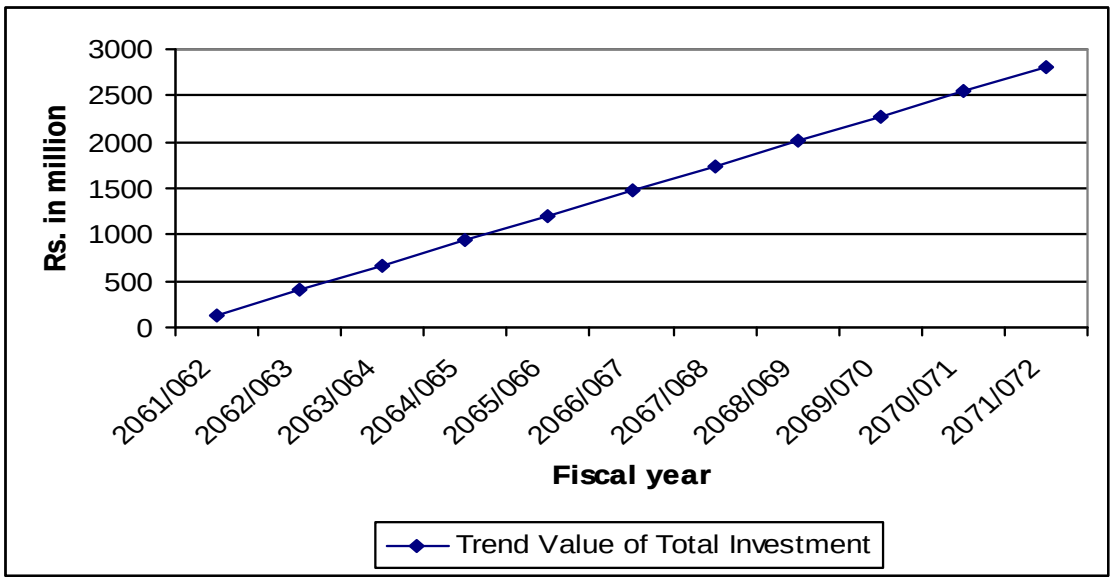
5	2065/066	1208.51
6	2066/067	1476.41
7	2067/068	1744.31
8	2068/069	2012.21
9	2069/070	2280.11
10	2070/071	2548.01
11	2071/072	2815.91

Source: FFCL, Annual Report

The table 4.23 represents the trend value of total investment of FFCL. The trend value is in positive or increasing trend. The calculated trend values of total investment of FFCL are fitted in the trend line is depicted in the following figure 4.19.

Figure – 4.19

Trend Value Analysis of Total Investment



The figure 4.19 shows that it other things remaining the same or stable the investment pattern or trend of Fewa finance company will increase tremendously.

ii) Trend Analysis of Total Deposits

The trend value of the total deposits in the study period is calculated and next five years trend value of deposits is forecasting on the basis of last six years deposit trend. The calculated trend value of the study period i.e. F/Y 2061/062 to F/Y 2066/067 is on the basis of real data and on the basis of these values, next five years i.e. F/Y 2067/068 to F/Y 2071/072 trend values are expected.

Under this topic the trend values of deposit of FFCL has been calculated for six years from F/Y 2061/062 to F/Y 2066/067 and the forecast for next five years. i.e. from F/Y 2067/068 to F/Y 2071/072.

The following table 4.24 shows the trend values of deposits from F/Y 2061/062 to F/Y 2071/072. (Working details in appendix no. 18).

Table - 4.24
Trend Values of Deposit

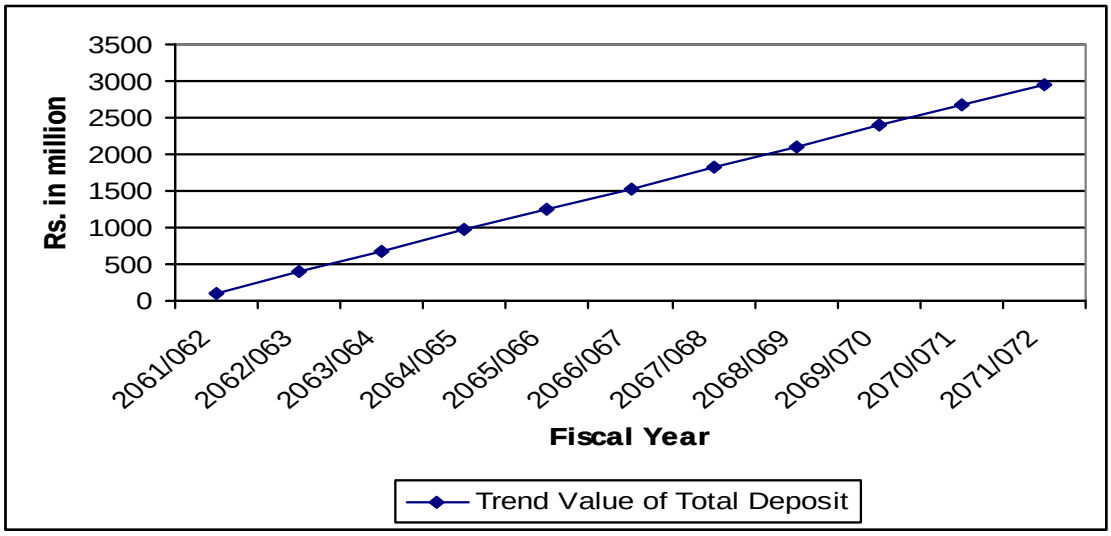
(**Rs. in million)**

S.No	Fiscal Years	Trend Value
1	2061/062	106.85
2	2062/063	392.36
3	2063/064	677.87
4	2064/065	963.38
5	2065/066	1248.89
6	2066/067	1534.40
7	2067/068	1819.91
8	2068/069	2105.42
9	2069/070	2390.93
10	2070/071	2676.44
11	2071/072	2961.95

Source: FFCL, Annual Report

The above table 4.24 shows that the trend values of the total deposit of first six years study period and then forecasting next five years value on the basis of these six data of FFCL. The trend value of total deposit of FFCL has positive in all study period which is in increasing trend. If other things remaining the same or constant, total deposit of FFCL will be Rs. 2961.95 million in the F/Y 2071/072. The above calculated trend values of FFCL is fitted in the trend line given in Figure 4.20

Figure – 4.20
Trend Value Analysis of Total Deposit



The above figure 4.20 shows that the trend of total deposit of the FFCL is continuously increase. The reason of increasing in total deposit is rise in special policy of affiliated by the FFCL.

iii) Analysis of trend values of loan and advances:

The trend values of loan and advances of FFCL has been calculated for six years from F/Y 2061/062 to F/Y 2066/067 and the forecast for next five years. i.e. from F/Y 2067/068 to F/Y 2071/072 has been made Table 4.25 illustrates the statistical information to reveal the trend values of loan and advances of FFCL. (Working details in appendix no.19).

Table -4.25

Trend Values of Loan and Advances

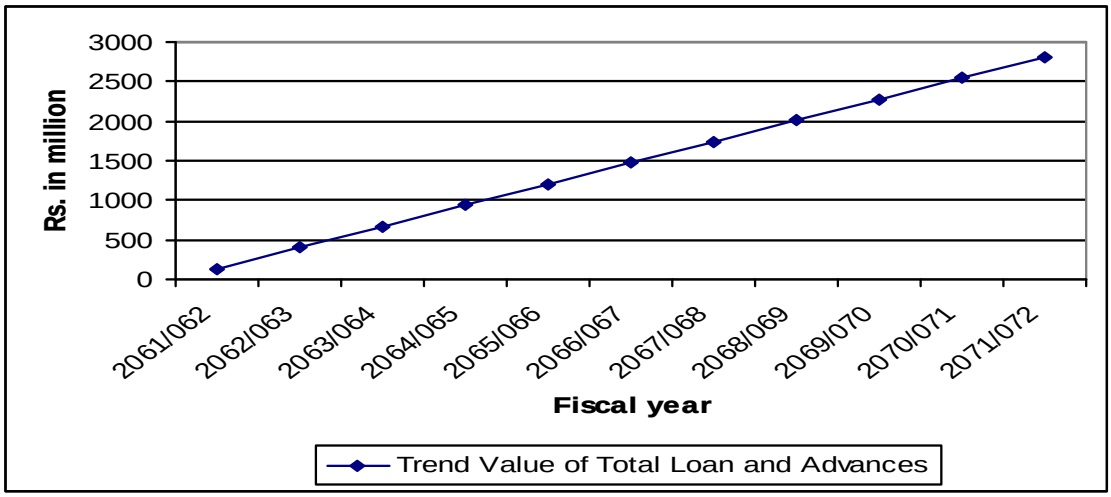
(**Rs. in million)**

S.No	Fiscal Years	Trend Value
1	2061/062	136.36
2	2062/063	403.96
3	2063/064	671.56
4	2064/065	939.16
5	2065/066	1206.76
6	2066/067	1474.36
7	2067/068	1741.96
8	2068/069	2009.56
9	2069/070	2277.16
10	2070/071	2544.76
11	2071/072	2812.36

Source: FFCL, Annual Report

The table 4.25 shows that loan and advances of FFCL is in increasing trend from F/Y 2061/062 to F/Y 2071/072. From this table it is clear that if other things remaining the same the loan and advances of FFCL will be Rs 2812.36 million.

Figure – 4.21
Trend Value Analysis of Total Loan and Advances



The above figure clearly shows that the loan and advance of FFCL is in an increasing trend. Assuming that other things will remain constant, the loan and advances of FFCL at the end of F/Y 2071/072 is predicted to be Rs. 2812.36 million.

iv) Trend Analysis of Net Profit

The following table shows the trend values of net profit of FFCL has been calculated for six years from F/Y 2061/062 to F/Y 2066/067 and the forecasted for next five years. (Details in appendix no. 20)

Table - 4.26
Trend Values of Net Profit

(Rs. in million)

S.No	Fiscal Years	Trend Value
1	2061/062	1.58
2	2062/063	10.62
3	2063/064	19.66
4	2064/065	28.7
5	2065/066	37.74
6	2066/067	46.78
7	2067/068	55.82
8	2068/069	64.86
9	2069/070	73.90
10	2070/071	82.94
11	2071/072	91.98

Source: FFCL, Annual Report

The table 4.26 shows the trend value of net profit of FFCL. The table clear that the trend of net profit is increasing year after year. If other things remain constant net profit will be Rs. 91.98 million in F/Y 2071/072. The calculated trend values of net profit of FFCL are plotted in the trend line that is exhibited in the figure 4.22.

Figure – 4.22

Trend Analysis of Net Profit

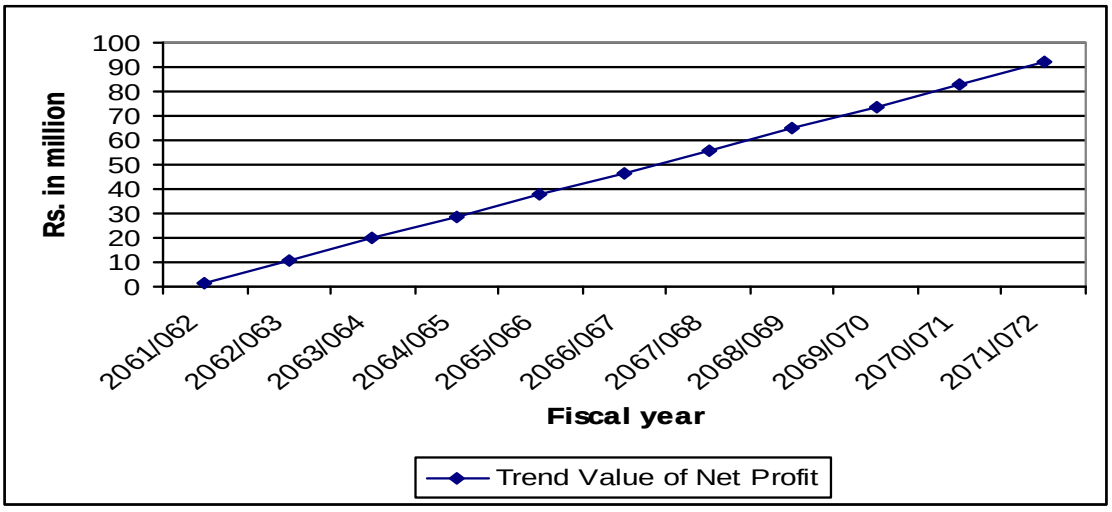


Figure 4.22 shows the trend value of net profit of FFCL from F/Y 2061/062 to F/Y 2071/072. It exhibits that FFCL is running in profit in each and every year with increasing trend.

4.10 Major Findings of the Study

Having completed the basic analysis required for this study, the final and the most important task of the research is to enlist the findings. On the basis of various categories of analysis adopted in this study, a comprehensive summary of the major findings of this study is presented below:

- The investment portfolio of FFCL from F/Y 2061/062 to F/Y 2066/067 has been made regarding loans and advances, government securities and others investment. While analyzing the data, it is found that maximum of investment is made on loans and advances where it shares the highest percentage of investment i.e.

99.9% in F/Y 2063/064 and F/Y 2066/067 respectively. While the lowest percentage of investment is 99.64% in F/Y 2064/065 during the study period. FFCL has made all of the investment on loan and advances which indicates that it has managed to efficiently as to maximize the return there from but it has not sufficiently diversified its investment to reduce the portfolio risk. FFCL made the investment regarding on government securities and others investment has low investment percentage in comparison to other total investment.

- FFCL has diversified its loan and advances into four broad different sectors namely hire purchase loan, housing loan, fixed deposit loan and others loan. As compared these four types of loan, on the basis of mean ratio FFCL has made highest investment on housing loan over the study period. Similarly the fixed deposit loan gets the last preference in the loan portfolio of the company. This shows that investment portfolio policy of FFCL is not having fixed pattern.
- Cash and bank balance to total deposit ratio of FFCL is in fluctuating trend i.e. 14.20%, 18.40%, 11.20%, 16.84%, 23.67%, and 26.80% respectively. The mean ratio is 18.46% and C.V. between them is 32% which indicates that ratios are variable and less consistent over the study period.
- Cash and bank balance to current assets ratio of FFCL is fluctuating trend. Highest ratio of cash and bank balance to current assets is 21.50% in F/Y 2066/067 and lowest ratio is 9.23 in F/Y 2063/064. The mean ratio of cash and bank balance to current assets ratio is 15.38% and C.V. is between them is 31%. This indicates that ratios are variable and less consistency.
- Loan and advances to total deposit ratio is slightly high. From this point of view, the loan & advances to total deposit of the finance is not satisfactory. FFCL has the highest loan and advances ratio 108.60 in F/Y 2063/064 and lowest ratio 91.73% in F/Y 2065/066. Thus this type of highest ratio is very risky situation for the FFCL. High level of risk is not desirable for FFCL as any default can create the liquidity problem.
- The high ratio of investment of total deposit ratio indicates that the high success in mobilization of deposits in investments and vice versa. The investment trend of FFCL is fluctuating order. Highest ratio of FFCL is in F/Y 2063/064 and lowest

in F/Y 2065/066, with mean ratio 100.20%. The C.V. between them is 5.50%, which shows ratios are fluctuating during the study period. High mean ratio shows that FFCL has the high success in mobilization of deposits in investments.

- Return on total assets (ROA) ratios is fluctuating during the study period with highest ROA 2.69% in F/Y 2066/067 and lowest ROA 2.07% in F/Y 2065/066. It shows that there is more fluctuation on ROA of FFCL. Although the Company is not in loss. The mean ratio is 2.39 % C.V. between them is 10% which shows ratios are variable and less consistent over the study period.
- Returns on equity (ROE) ratios are fluctuating during the study period with overall positive value. The ratio ranges between 34.58% in F/Y 2061/062 and 20.94% in F/Y 2066/67 with the mean ratio of 29.53% C.V. between them is 24.2%, which shows that the ratios are less consistent and more variable during the study period. The ratios indicate that the shareholders are some how enjoying profit from their investment. The Return on Equity for F/Y 2064/65 is attractive as the shareholders have earned 35.75% on their investment. Similarly the return on equity in F/Y 2066/067 is gone down from 35.75% to 20.94%, it is not best for the shareholders.
- The return on total investment ratio FFCL has fluctuating over the study period. The ratio has ranged from minimum to 2.5% in F/Y 2062/063 and maximum to 3.48% in F/Y 2066/067. The mean ratio is 2.88% and C.V. between them 41% percent which shows that the ratios are less consistent and variable.
- The liquidity risk ratio measures the risk associated with the liquid assets i.e., cash and bank balance that are kept to satisfy the cash demand of customers. FFCL has the higher liquidity risk ratio is 26.80% in F/Y 2066/067 and the lowest liquidity ratio is 11.20 in F/Y 2063/064. Mean ratio of liquidity risk is 18.46%. A higher ratio shows that the finance has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the Finance company. A trade off between liquidity and profitability must be maintained.
- Credit risk ratio measures the possibility of loan going into default. While sanctioning loans banks measure credit risk involved in the project. The mean

ratio of credit risk of FFCL is 83.06% which is normally high ratio. From the analysis, it can be conclude that FFCL has high risk ratio

- The correlation analysis shows that the correlation coefficient (r) between deposit and loans and advances of the company is 0.9942 and the probable error multiplied by six is found to be 0.0191. Since r is greater than 6*p.Er. (0.9942>0.0191) and r is positive and near by 1, it can be stated that there is a very strong positive correlation between deposits and loans and advances during the study period.
- The correlation analysis shows that the correlation coefficient (r) between investment and loans and advances of the company is 0.9999 nearby 1 or which is greater than probable error multiplied by 6*p.Er. (0.9999>0.0187) and 'r' is positive. It shows that there is strong positive correlation between investment and loan and advances during the research period.
- the correlation analysis shows that the correlation coefficient (r) between the deposits and investment of FFCL is 0.9943 which is greater than probable error multiply by six times i.e. 6*p.Er. is found to be 0.01878. Since, 'r' is greater than 6*p.Er. and 'r' is positive and nearby 1, it can be inferred that there is high degree positive correlation between deposit and investment during the study period.
- The growth ratio indicates the ability of finance company to maintain the economic and financial position. The analysis result of growth ratios of deposit, of FFCL during the study period i.e. F/Y 2061/062 to F/Y 2071/072 shows that the total deposit of the company is increasing over the years having net growth rate of 48.20%. Similarly total investment and loans and advances of the company is also increasing trend with net growth rate of 47.10% and 47.16% respectively during the research period.

Trend analysis and projection for next five years:

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

- The trend value of total investment of eleven years revel that the total investment of FFCL is increasing trend. The total investment of FFCL is predicted to be Rs. 2815.91 million at the end of F/Y 2071/072, if other things remaining the same.

- Deposit collection is the one of the main important source of the finance company. Trend analysis of deposit shows that if other things remaining the same the deposit of FFCL will be Rs. 2961.95 million in F/Y 2071/072.
- The loan and advance of FFCL has an increasing trend. The total loan and advance of FFCL is predicted to be Rs. 2812.36 million at the end of F/Y 2071/072, if economic condition of the does not go down.
- The net profit of the FFCL also increasing year after year if other things remaining same. From trend of net profit it is found that the profi' ill be Rs. 91.98 million at the end of F/Y 2071/072.

CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The development of any country depends upon its economic development. Financial restructuring is necessary for economic development. Similarly, good investment policies have a positive impact on economic development of the country. Financial companies are essential part of the business activities which are established to safeguard people's money and thereby using the money in making loans and investment in various sectors. There are several finance companies operating in different sectors. They are running for the purpose of carrying out specific operation such as investment in trade, business and industries by forming a negotiation between various groups of industries. The basic objectives of finance company is always to earn more profit and to increase its market value of the firm by investing its funds in various profitable sectors and by granting the funds in the form of loans and advances to people trade and business industries etc. who are in need of them . How well a finance manages its investment has a lot to do with the economic health of the country because the finance company loans and support the growth of new business and trade empowering the economic activities of the country.

This is globalization age so; there is a very high competition in the financial sectors but very less opportunities to make investment. The opportunities are hidden. Thus the finance companies should take initiative in searching new opportunities. So that they can survive in this competitive business world and earn profit. The development of finance companies is a milestone for any economic development. As intermediaries the finance companies help the process of resources mobilization in various sectors. Financial institutions generally are the mediators, who collect the idle money scattered in the country and society provided different services and facilities and invest those funds in productive sectors generate profit.

Investment portfolio refers to an investment that combines several assets. Investment portfolio is one which the income or profit of the companies depend upon directly. Investment portfolio usually offers the advantage of reducing risk through diversification of risk from risky investment to less risky investment. The objective of portfolio is to develop a portfolio that has the maximum return at whatever level of risk. The investment portfolio is the tool which helps to reduce risk and maximize return. The banks should never invest its funds in those securities; difference may cause a great loss. The company should accept that type of securities which are commercial, durable, marketable stable, transferable and high market price.

The analysis of investment portfolio FFCL has made their investment portfolio mainly in three sectors i.e. investment in government securities, others investment and loan and advances. Likewise, the company provides their loans and advances mainly in four sectors. They are hire purchase loan, housing loan, fixed deposit loan and others loan. From the analysis of secondary it shows that the company has provided their more amounts to housing loan and then others loan.

In the analysis of financial ratios, the liquidity ratio which included cash and bank balance to total deposit ratio and cash and bank balance to current assets ratio showed that the FFCL has less strong liquidity position. Liquidity position of a company may affect by external as well as internal factors. Such factors may be supply and demand position of loan and advances, internal rates, NRB directives, company rules and regulation etc. In the analysis of assets management ratio, basically loan and advances to

total deposit ratio, loan and advances to total assets ratio and total investment to total deposit ratio showed that the FFCL is able to highly mobilize their funds to earn more profit by providing fund to outsider in the form of loan and advances.

The profitability ratio of FFCL shows that it has tried to maintain a positive return even though there is a fluctuation. Low profitability ratio indicates that it has not been able to earn adequate profit but however tried to maintain the profit in relative years. Among the various profitability ratios, like return on total assets, return on equity and return on total investment. The performance of FFCL is fluctuating in terms of all profitability. By analysis of risk ratio i.e. liquidity risk ratio and credit risk ratio, it shows that FFCL has the high credit risk ratio. From the view point of growth ratio i.e. growth ratio of total deposit, total investment and total loan and advances, it shows that FFCL has the highest growth rate. All growth rate of FFCL is satisfactory. Similarly in the analysis of correlation coefficient, between deposit and investment, deposit and loan and advances and investment and loan advances that show that there is a strong positive relation between deposits, loans and advances and investment. Finally, while calculating the trend value of total deposit, loan and advances, total investment and net profit, if other thins remaining the same the future trend of next five years will be increasing range.

5.2 CONCLUSION

The finance companies are acting as financial intermediaries which provide a link between borrowers and lenders by mobilizing the scattered fund towards productive investment. So it can say that finance companies have been operating smoothly and successfully in becoming the pillars of the economic system of the country. It is not possible to achieve such goal without using portfolio concept on the investment strategies, which helps to reduce risk and increase return on investment. Following conclusion are drawn on the basis of that analysis, specially based on secondary data analysis.

1. From the study of investment portfolio it is found that the industry average investment in government securities is 31.34%. But the FFCL has made the investment under the industry average. The industry average investment in shares and debentures is 13%, but FFCL has not invested any amount of their shares and

debenture. Similarly industry average of investment in others is 55.66%, but the FFCL has lower than industry average. FFCL has the highest amount of investment in loan and advances. These types of result describes that it has managed efficiently as to maximize the return there from but it has not sufficiently diversified its investment to reduce the portfolio risk.

2. From the analysis sector wise investment portfolio, FFCL do not have fixed pattern investment. On the basis of mean ratio it is found that FFCL has given first priority to invest high amount of their loans and advances to housing loan and others loan, second priority to hire purchase loan, third and least priority to fixed deposit loan.

3. Cash and bank balance to total deposit ratio of the finance companies is 18.66% in average. But the FFCL has the below the industry average ratio during the years. The ratios are in increasing trend from the period F/Y 2065 to F/Y 2067.

4. Cash and bank balance to current assets ratio of the finance companies is 11.33% in average. From the analysis data of FFCL it is found that FFCL has the mixed cash and bank balance to current assets ratio. In an average it can be conclude that cash and bank balance to current assets ratio of the FFCL is satisfactory.

5. Loans and advances to total deposit ratio of the FFCL is slightly high. From the analysis of data it is found that FFCL has the higher loans and advances to total deposit ratio than industry average.

6. The loan and advance to total assets ratio ranges from the minimum of 77.29% in F/Y 2066/067 to the maximum of 89.24% in F/Y 2063/064. The mean of the ratio is 83.06% and the C.V. between them is 5.3 %, which shows the ratios are inconsistent over the study period. Findings show that Loan and advances to total assets ratio is slightly high. Loan and advances is taken as the most risky and productive assets of the company. High ratio reflects high risk and eventually high return to the company. So, FFCL has taken optimum risk towards the mobilization of its fund to risky assets in order to maximize the return.

7. The industry average of investment to total deposit ratio is 33.08%. The ratio of investment to total deposit of FFCL has very high. From this point of view it is conclude that FFCL is being able to utilize more amounts of its deposits on investment.

8. The industry average return on total assets ratios is 2.28%. FFCL has the mixed ratios or fluctuated ratios. From the view of industry average, it concludes that return on total assets ratios of FFCL is some how satisfactory.

9. Looking the return on equity, it is found that the industry average return of equity is 16.09%.From the analysis of secondary data of FFCL, it shows that return on equity is higher the industry average. So it concludes that the return on equity of FFCL is satisfactory.

10. From the analysis of return on investment ratio it is found that the industry average ratio is 16.41%. But the FFCL has the below the industry average, so it is not satisfactory.

11. From the analysis of liquid risk ratio, FFCL has the fluctuated liquid risk ratio. From the analysis of secondary data liquid risk ratio of FFCL is satisfactory.

12. Through the analysis of credit risk ratio, it can be conclude that the credit risk of the FFCL is slightly higher. Higher credit risk means higher the possibility of loan and advances to go into default.

13. The growth ratio of total deposits, total investment and loan and advances shows that the company has been increasing its disbursement of loans and advances than in deposits collection and investment. It shows that FFCL is employing safe landing procedure for investing its fund and this leads of increase in return.

14. The analysis of correlation coefficient of FFCL, it can be conclude that there is a strong positive relation between deposits, loans and advances and investment during the research period.

15. Finally, the analysis of trend of investment, deposit, loan and advances and net profit of FFCL, it can draw a conclusion that the trend values of those variable will be positive increment for next five years, if other things remaining the same or stable.

5.3 Recommendations

On the basis of analysis and findings of the study, following recommendations have been made as suggestions to overcome the weaknesses and to strengthen the existing investment portfolio of FFCL:

- FFCL is focusing more investment on loans and advances rather than on government securities and shares and debentures of other companies so the portfolio conditions should be regularly revised from time to time and also try to maintain the equilibrium in the portfolio condition. It should always try to make the continuous effort to explore competitive and highly yielding investment opportunities to optimize its investment portfolio.

- There is no uniformity of investment portfolio set by FFCL. FFCL has not invested any amount of their fund in shares and debentures of others companies. It shows that FFCL is not following NRB directives. So it is suggested that FFCL should invest their fund in shares and debentures of others companies as per the directives given by NRB.

- It is suggested that FFCL should give more emphasis on investment in shares and debentures for desirable Govt. securities and corporate securities.

- During the year cash and bank balance to total deposit ratio is below the industry average, after F/Y 2065 to F/Y 2067 it is increasing continuously. It shows that before F/Y 2065 FFCL is unable meet their quick obligation but after F/Y 2065 it is going to improve. So FFCL should maintain the level of ratio at least to the industry level.

- Return on total assets and return on investment of the FFCL is not satisfactory position, so the company should give more emphasis on better utilize assets to

increase the return by reducing the portion of idle assets. The company always keeps a careful watch on every investment made i.e. what types, kind of projects and sectors are suitable for investment.

- FFCL has to have an idea of the level of risk that one needs to bear while investing its funds. The highest risk of FFCL is in credit risk. Thus, it recommended that FFCL should minimize the credit risk to achieve high return.
- Modern growth rate as seen by the trend analysis of FFCL for further five years projection i.e. up to F/Y 2071/072 induce to suggest the FFCL to formulate sound deposit and investment policy to achieve high growth rate and generate high profit to sustain in the competitive banking environment.

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www.nrb.org.np

Appendix-1

Fewa Finance Company Limited

(Rs. in million)

F/Y	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67
Current Assets	277.33	475.72	682.92	994.17	1395.66	2105.74
Cash and Bank Balance	33.56	70.02	63.04	141.85	285.09	452.66
Total Investment	238.43	398.62	611.59	841.14	1107.94	1642.22
Total Deposit	236.30	388.19	563.11	842.41	1204.45	1689.28
Loan and Advances	237.88	398.07	611.54	838.09	1104.89	1641.67
Investment in Government Securities	0.55	0.55	0.55	0.55	0.55	0.55
Others investment	12.10	----	----	2.50	2.50	----
Net Profit	6.91	9.98	17.03	25.02	29.00	57.15

Source: FFCL Annual Report F/Y 2061/062 to F/Y 2066/067

Appendix-2

Fewa Finance Company Limited
Investment Portfolio of Fewa Finance Company

Fiscal Year	Loan and Advance		Government Securities		Others investment		Total	
	Amount	%	Amount	%	Amount	%	Amount	%
2061/62	237880435	99.77	550000	0.23	----	----	238430435	100.00
2062/63	398079897	99.86	550000	0.14	----	----	398629897	100.00
2063/64	611540886	99.9	550000	0.10	49500	0.06	611595886	100.00
2064/65	838095374	99.64	550000	0.30	2500000	0.07	841145374	100.00
2065/66	1104899740	99.70	550000	0.23	----	----	1107949740	100.00
2066/67	398079897	99.86	550000	0.14	------	----	1642221859	100.00

Appendix-3
Fewa Finance Company Limited
Cash and Bank Balance to Total Deposit Ratio

F/Y	Cash & Bank Balance	Total Deposit	Percentage
2061/62	53.56	236.09	14.20
2062/63	70.02	388.19	18.04
2063/64	63.04	563.11	11.20
2064/65	141.85	842.41	16.84
2065/66	285.09	1204.45	23.67
2066/67	452.66	1689.28	26.80

Appendix-4
Fewa Finance Company Limited
Cash and Bank Balance to Current Assets Ratio

F/Y	Cash & Bank Balance	Current Assets	Percentage
2061/62	53.56	277.33	12.10
2062/63	70.02	457.72	14.72
2063/64	63.04	682.92	9.23
2064/65	141.85	994.17	14.27
2065/66	285.09	1395.66	20.43

2066/67	452.66	2105.74	21.50

Appendix-5
Fewa Finance Company Limited
Loan and Advances to Total Deposit Ratio

F/Y	Loan and Advances	Total Deposit	Percentage
2061/62	237.88	236.09	100.66
2062/63	398.07	388.19	102.55
2063/64	611.54	563.11	108.60
2064/65	838.09	842.41	99.47
2065/66	1104.89	1204.45	91.73
2066/67	1641.67	1689.28	97.18

Appendix-6
Fewa Finance Company Limited
Total Loan and Advances to Total Assets Ratio

F/Y	Loan and Advances	Total Assets	Percentage
2061/62	237.88	278.45	85.43
2062/63	398.07	476.78	83.49
2063/64	611.54	685.27	89.24
2064/65	838.09	997.09	84.05
2065/66	1104.89	1401.65	78.83
2066/67	1641.67	2124.10	77.29

Appendix-7
Fewa Finance Company Limited
Total Investment and Total Deposit Ratio

F/Y	Total Investment	Total Deposit	Percentage

2061/62	238.43	236.09	100.89
2062/63	398.62	388.19	102.67
2063/64	611.59	563.11	108.61
2064/65	841.14	842.41	99.85
2065/66	1107.94	1204.45	91.99
2066/67	1642.22	1689.28	97.21

Appendix-8
Fewa Finance Company Limited
Return on Total Assets Ratio

F/Y	Net Profit	Total Assts	Percentage
2061/62	6.91	278.45	2.48
2062/63	9.98	476.78	2.09
2063/64	17.03	685.27	2.49
2064/65	25.02	997.09	2.51
2065/66	29.00	1401.65	2.07
2066/67	57.15	2124.10	2.69

Appendix-9
Fewa Finance Company Limited
Return on Equity Ratio

F/Y	Net Profit	Equity	Percentage
2061/62	6.91	20.00	34.58
2062/63	9.98	50.00	19.97
2063/64	17.03	50.00	34.08
2064/65	25.02	70.00	35.75
2065/66	29.00	91.00	31.88
2066/67	57.15	273.0	20.94

Appendix-10
Fewa Finance Company Limited
Return on Total Investment Ratio

F/Y	Net Profit	Total Investment	Percentage
2061/62	6.91	238.43	2.90
2062/63	9.98	398.62	2.50
2063/64	17.03	611.59	2.79
2064/65	25.02	841.14	2.97
2065/66	29.00	1107.94	2.62
2066/67	57.15	1642.22	3.48

Appendix-11
Fewa Finance Company Limited
Liquid Risk Ratio

F/Y	Cash & Bank Balance	Total Deposit	Percentage
2061/62	53.56	236.09	14.20
2062/63	70.02	388.19	18.04
2063/64	63.04	563.11	11.20
2064/65	141.85	842.41	16.84
2065/66	285.09	1204.45	23.67
2066/67	452.66	1689.28	26.80

Appendix-12
Fewa Finance Company Limited
Credit Risk Ratio

F/Y	Loan and Advances	Total Assets	Percentage
2061/62	237.88	278.45	85.43

2062/63	398.07	476.78	83.49
2063/64	611.54	685.27	89.24
2064/65	838.09	997.09	84.05
2065/66	1104.89	1401.65	78.83
2066/67	1641.67	2124.10	77.29

Appendix-13

Fewa Finance Company Limited

Growth Ratio of Total Deposit

(Rs. in million)

Fiscal Year	Deposit	Loan and Advances	Investment
2061/62	236.09	237.88	238.43
2062/63	388.19	398.07	398.62
2063/64	563.11	611.54	611.59
2064/65	842.41	838.09	841.14
2065/66	1204.45	1104.89	1107.94
2066/67	1689.28	1641.67	1642.22
Growth Rate (%)	29.81	30.45	28.27

Calculation of Growth Ratio of Total Deposit of FFCL

Where

D_n = Total Deposit in the n^{th} year (2066/067) = 1689.28

D_0 = Total Deposit in Initial Year (2061/062) = 236.09

g = Growth Rate

n = Total number of Years i.e. 6 years

We have,

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

Or $1689.28 = 236.09 (1+g)^{6-1}$

Or, $g = \sqrt[5]{7.14862276}$ Z1

Or, $g = 1.48198 - 1$

Or, $g = 0.48198$

… g = 48.20%

Other growth rates are calculated accordingly.

Appendix-14

Fewa Finance Company Limited

Correlation between Total Deposit and Investment.

Fiscal year	Deposit (X)	Investment (Y)	X=(x-$\bar{x}$) (x-820.62)	x^2	y = (y-$\bar{y}$) (y-806.66)	Y^2	XY
061/62	236.30	238.43	-584.32	341429.86	-568.23	322885.33	332028.15
062/63	388.19	398.62	-432.43	186995.70	-408.04	166496.64	176448.74
063/64	563.11	611.59	-257.51	75905.76	-195.07	38052.30	50232.48
064/65	842.41	841.14	21.79	474.80	34.48	1188.87	751.32
065/66	1204.45	1107.94	383.83	147325.47	301.28	90769.64	115640.30
066/67	1689.28	1642.22	868.66	754570.20	835.56	698160.51	725817.55
	ϕx= 4923.74	ϕy= 4893.94		ϕx^2= 1506701.79		ϕy2= 1317553.29	ϕxy= 1400918.54

Here, N = 6

$\bar{X}$ =ϕx /N =4923.74/6 = 820.62

$\bar{y}$ =ϕy /N =4893.94/6 = 806.66

We have,

ϕx^2 = 1506701.79
ϕy^2 = 1317553.29
ϕxy = 1400918.54

Calculation of correlation coefficient (r):

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

$$r = \frac{1400918.54}{\sqrt{1506701.79}\sqrt{1317553.29}}$$

$$r = \frac{1400918.54}{1408962.92}$$

r = 0.9943

Or r = 0.9942

Calculation of Probable error,

$$P.\ Er. = 0.6745\ \frac{1 Z r^2}{\sqrt{N}}$$

$$= 0.6745\ \frac{1 Z 0.9943^2}{\sqrt{6}}$$

Or P. Er= 0.00313019 6. P. Er. = 0.01878

Appendix-15

Fewa Finance Company Limited

Correlation between Total Deposit and Loan and Advances

Fiscal year	Deposit (X)	Loan and Advance (Y)	X=(x-$\bar{x}$) (x-820.62)	x^2	y = (y-$\bar{y}$) (y-805.36)	Y^2	XY
061/62	236.30	237.88	-584.32	341429.86	-567.48	322033.55	331589.91
062/63	388.19	398.07	-432.43	186995.70	-407.29	165885.14	176124.41
063/64	563.11	611.54	-257.51	75905.76	-193.82	37566.19	49910.59
064/65	842.41	838.09	21.79	474.80	32.73	1071.25	713.19
065/66	1204.45	1104.89	383.83	147325.47	299.53	89718.22	114968.60
066/67	1689.28	1641.	868.66	754570.20	836.31	699414.42	726469.04

		67					
	ϕx= 4923.74	ϕy= 4832.14		ϕx^2= 1506701.79		$\phi y2$= 1315688.77	ϕxy= 1399775.74

Here, N = 6

$\bar{X}$ $= \phi x / N = 4923.74/6 = 820.62$

$\bar{y}$ $= \phi y / N = 4832.14/6 = 10314.85$

We have,

$\phi x^2 = 1506701.79$
$\phi y^2 = 1315688.77$
$\phi xy = 1399775.74$

Calculation of correlation coefficient (r):

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

$$r = \frac{1399775.74}{\sqrt{1506701.79}\sqrt{1315688.77}}$$

$$r = \frac{1399775.74}{1407956.38}$$

$r = 0.9942$

Or r = 0.9942

Calculation of Probable error,

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

$$= 0.6745 \frac{1 - 0.9942^2}{\sqrt{6}}$$

Or P. Er = 0.003184 6. P. Er. = 0.01910

Appendix-16
Fewa Finance Company Limited
Correlation between Investment and Loan and Advances.

Fiscal year	**Investment (X)**	**Loan and Advance (Y)**	**X=(x- $\bar{x}$) (x-820.62)**	**x^2**	**y = (y- $\bar{y}$) (y-805.36)**	**Y^2**	**XY**
061/62	238.43	238..43	-568.23	322885.33	-567.48	322033.55	322459.16
062/63	398.62	398.07	-408.04	166496.64	-407.29	165885.14	166190.61
063/64	611.59	611.54	-195.07	38052.30	-193.82	37566.19	37808.47
064/65	841.14	838.09	34.48	1188.87	32.73	1071.25	1128.53
065/66	1107.94	1104.89	301.28	90769.64	299.53	89718.22	90242.40
066/67	1642.22	1641.67	835.56	698160.51	836.31	699414.42	698787.18
	ϕx= 4839.94	ϕy= 4832.14		ϕx^2= 1317553.29		ϕy2= 1315688.77	ϕxy= 1316616.35

Here, N = 6

$\bar{X}$ =ϕx /*N* =4923.74/6 = 820.62

$\bar{y}$ =ϕy /*N* =4832.14/6 =10314.85

We have,

ϕx^2 = 1317553.29
ϕy^2 = 1315688.77
ϕxy = 1316616.35

Calculation of correlation coefficient (r) :

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

$$r = \frac{1316616.35}{\sqrt{1317553.29}\sqrt{1315688.77}}$$

$$r = \frac{1316616.35}{1316618.39}$$

r = 0.9999

or r = 0.9999

Calculation of Probable error,

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

$$= 0.6745 \frac{1 - 0.9999^2}{\sqrt{6}}$$

Or P. Er= 0.00005506 6. P. Er. = 0.0003304

Appendix - 17
Fewa Finance Company Limited
The Trend value of Total Investment

(Rs. in million)

F/Y	Total Investment (y)	x=T- 2064.5	x^2	xy	y = a + bx Trend Values
061/62	238.43	-2.5	6.25	-596.07	136.91
062/63	398.62	-1.5	2.25	-597.93	404.81
063/64	611.59	-0.5	0.25	-305.79	672.71
064/65	841.14	0.5	0.25	420.57	940.61
065/66	1107.94	1.5	2.25	1661.91	1208.51
066/67	1642.22	2.5	6.25	4105.55	1476.41
	$\phi y = 4839.94$	$\phi x=0$	$\phi x^2=17.5$	$\phi xy=4688.24$	

Here, N = 6

or, $a = \phi y / N$ = 4839.94/6 or , a = 806.66

$b = \phi xy / \phi x^2$ = 4688.24/17.5 or , b = 267.90

Let the trend line be,

$y = a + bx$ ..... (i)

The two normal equation are

$\phi y = na + b \phi x$ ..... (ii)

$\phi xy = a \phi x + b \phi x^2$ ..... (iii)

… From (ii) $a = \frac{y}{N}$ ..... (iv)

From (iii) $b = \frac{xy}{x^2}$ ..... (v)

… The straight line trend for total investment is,

$y = a + bx$
$y = 806..6 + 267.90x$

For year 2067/068, When, x= 3.5
$y = a + bx$
$806.66 + 267.90 \mid 3.5$

y = Rs. 1744.31 million
Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2064.5	y (Projected Investment) = a+bx
2067/68	3.5	1744.31
2068/69	4.5	2012.21
2069/70	5.5	2280.11
2070/71	6.5	2548.01
2071/72	7.5	2815.91

Appendix - 18
Fewa Finance Company Limited
The Trend value of Total Deposit

(Rs. in million)

F/Y	Total Deposit(y)	x=T- 2064.5	x^2	xy	y = a + bx Trend Values
2061/62	236.30	-2.5	6.25	-590.75	106.23
2062/63	388.19	-1.5	2.25	-582.28	391.74
2063/64	563.11	-0.5	0.25	-281.55	677.25
2064/65	842.41	0.5	0.25	421.20	962.76
2065/66	1204.45	1.5	2.25	1806.67	1248.27
2066/67	1689.28	2.5	6.25	4223.2	1533.78
	$\phi y = 4923.74$	$\phi x=0$	$\phi x^2=17.5$	$\phi xy=4996.49$	

Here, N = 6

or, $a = \phi y / N$ = 4923.74/6 or , a = 820.62

$b = \phi xy / \phi x^2$ = 4996.49/17.5 or , b = 285.51

Let the trend line be,

$y = a + bx$ ..... (i)

The two normal equation are

$\phi y = na + b \phi x$ ..... (ii)

$\phi xy = a \phi x + b \phi x^2$ ..... (iii)

…From (ii) $a = \frac{y}{N}$ ..... (iv)

From (iii) $b = \frac{xy}{x^2}$ ..... (v)

…The straight line trend for total Deposit is,

$y = a + bx$

$y= 820.62+285.51x$

For year 2067/068, When, x= 3.5

$y = a + bx$

$= 820.62+285.51 \mid 3.5$

y = Rs. 1819.91 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2064.5	y (Projected deposit) = a+bx
2067/68	3.5	1819.91
2068/69	4.5	2105.42
2069/70	5.5	2390.93
2070/71	6.5	2676.44
2071/72	7.5	2961.95

Appendix - 19
Fewa Finance Company Limited
The Trend value of Loan and Advances

(Rs. in million)

F/Y	Loan and Advances (y)	x=T- 2064.5	x^2	xy	y = a + bx Trend Values
2061/62	237.88	-2.5	6.25	-594.70	136.36
2062/63	398.07	-1.5	2.25	-597.12	403.96
2063/64	611.54	-0.5	0.25	-305.77	671.56
2064/65	838.09	0.5	0.25	419.05	939.16
2065/66	1104.89	1.5	2.25	1657.34	1206.76
2066/67	1641.67	2.5	6.25	4104.18	1474.36
	$\phi y = 4832.14$	$\phi x=0$	$\phi x^2=17.5$	$\phi xy=4682.98$	

Here, N = 6

or, $a = \phi y / N = 4832.14/6$ or , a = 805.36

$b = \phi xy / \phi x^2 = 4682.98/17.5$ or , b = 267.60

Let the trend line be,

$y = a + bx$ ..... (i)

The two normal equation are

$\phi y = na + b \phi x$ ..... (ii)

$\phi xy = a \phi x + b \phi x^2$ ..... (iii)

… From (ii) $a = \frac{y}{N}$ ..... (iv)

From (iii) $b = \frac{xy}{x^2}$ ..... (v)

… The straight line trend for total Loan and Advances is,

$y = a + bx$

$y = 805.36 + 267.60x$

For year 2067/068, When, x= 3.5

$y = a + bx$

$= 805.36 + 267.60 \times 3.5$

y = Rs. 1741.96 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	**x = t – 2064.5**	**y (Projected loan & advances) = a+bx**
2067/68	3.5	1741.96
2068/69	4.5	2009.56
2069/70	5.5	2277.16
2070/71	6.5	2544.76
2071/72	7.5	2812.36

Appendix - 20
Fewa Finance Company Limited
The Trend value of Net profit

(Rs. in million)

F/Y	**Net Profit (y)**	**x=T- 2064.5**	**x^2**	**xy**	**y = a + bx Trend Values**
2061/62	6.91	-2.5	6.25	-17.28	1.58
2062/63	9.98	-1.5	2.25	-14.97	10.62
2063/64	17.03	-0.5	0.25	-8.52	19.66
2064/65	25.02	0.5	0.25	12.51	28.70
2065/66	29.00	1.5	2.25	43.5	37.74
2066/67	57.15	2.5	6.25	142.88	46.78
	$\phi y = 145.09$	$\phi x = 0$	$\phi x^2 = 17.5$	$\phi xy = 158.12$	

Here, N = 6

or, $a = \phi y / N = 145.09/6$ or , a = 24.18

$b = \phi xy / \phi x^2 = 158.12/17.5$ or , b = 9.04

Let the trend line be,

$y = a + bx$ ..... (i)

The two normal equation are

$\phi y = na + b \phi x$ ..... (ii)

$\phi xy = a \phi x + b \phi x^2$ ..... (iii)

…From (ii) $a = \frac{y}{N}$ ..... (iv)

From (iii) $b = \frac{xy}{x^2}$ ..... (v)

…The straight line trend for total Net profit is,

$y = a + bx$

$y = 24.18 + 9.04x$

For year 2067/068, When, x= 3.5

$y = a + bx$

$= 24.18 + 9.04 \times 3.5$

y = Rs. 55.82 million

Other trend values have been calculated accordingly.

(Rs. in Million)

Year (t)	**x = t – 2064.5**	**y (Projected loan & advances) = a+bx**
2067/68	3.5	55.82
2068/69	4.5	64.86
2069/70	5.5	73.96
2070/71	6.5	82.94
2071/72	7.5	91.98