CHAPTER I
INTRODUCTION

1.1 Background of the Study:

The security (stock) market may be classified into primary and secondary market. When share is initially issue is called primary market and the transaction of already issued share is called secondary market. Financial companies play the role of financial intermediaries. First they issue securities and collect fund from small depositor then after invest these fund in different sector.

The process of investing different sector or collection of investment is called portfolio. Portfolio theory deals with the selection of optimal portfolios, i.e. portfolios that provides highest possible return with lowest possible risk.

A portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment asset is called a portfolio. (Weston & Brigham, 1986, p. 396)

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. (Cohen, Zinbarg & Zeikal, 1982)

The term portfolio simply means collection of investments. For an investor through the stock exchange the portfolio will be a collection of shareholding in different companies. For a property investor portfolio will be collection of buildings to a financial manager within an individual company portfolio will be a collection of real capital projects. It will be apparent that the actual nature of the components of a portfolio depends on the population of opportunities from which the selection will be made. (Raymond Brockington, 1993)

Portfolio performance is concern with how efficient portfolio is managed by manager of the company at the period of investment on financial assets like various types of shares and debentures. Specially in the case of finance company portfolio performance means allocation of fund to different degree of risk at varying rates of return in such a way that balance the conflicting goal of maximum yield and minimum yield.

The history of Nepalese financial company and its popularity is not very old. After adopting liberalization policy and with the initiative of NRB (Nepal Rastra Bank), financial company act 1986 was passed by the legislation. Again this act was amended in 1991. According to this act, a number of financial institutions were established. These institutions provide different types of services to corporate sector as well as to individual entrepreneurs. 214 companies listed in NEPSE upto Poush 2068 and out of 214 companies 72 are listed Finance Companies. Moreover, in Bhadra 2052 BS with a view to protect the common stock of the members and to encourage collection and mobilization of scattered saving and its utilization in productive industrial sectors by creating favorable investment environment to help the support in growth of the members within the country, NFCA (Nepal Finance Companies Association) a Purely non-profit voluntary organization of the finance companies was legally established. The association has been providing common platform to the members for rising various relevant issues like development of credit norms to determine quality grading of finance companies, undertaking complementary approach to growth among the companies through mutual interest, improving the credibility of the companies and also taking the public matter seriously that the companies have to be profitable for rewarding the shareholders according to their expectations.

Financial institutions have historically been regulated with the primary purpose of ensuring the safety of the institution and thus to protect the depositor. The major classes' of financial institutions are commercial banks, mutual saving banks, credit unions, pension funds, life insurance companies, finance companies and co-operative banks etc. Nepal Housing Development and Finance Company is the first private finance company established in 1992 according to finance company act 1986. With in

the short span of time, they are showing increasing trend in the financial sector both in collecting and investing the funds in Nepal. They are able to tap even smaller amount of savings from public and investing in different productive sector like manufacturing, trading and commercial activities. Finance companies are providing services to different sector for mutual benefit. They invest their fund on portfolio basis to make higher return by baring lower risk.

1.2 Security Market in Nepal:

In the context of Nepal, a capital market was initiated in the country with the establishment of security marketing center in 1976 by the government according to the industrial policy act. “The establishment of security marketing center was also considered as the first foundation stone for the institutional development of securities market in Nepal. Its objectives were, among other, to assist public limited companies to raise capital through the issue of shares and debentures and to create a market place where purchase and sale of securities take place through intermediaries operating on the floor of the exchange.”

The planned development at this sector initiated only after the Eight Plan. It was converted into Security Exchange Center (SEC) in 1984. NEPSE was established in January13, 1994, and it started its organized open-outcry system in its floor from the time.

“The main objective of the capital market is to create opportunity for the maximum number of people to get benefit from the return obtained by directing the economy towards the productive sector by mobilizing the long- term capital. The objectives can be fulfilled only by rational and accountable behavior relating to the three sectors of capital market such as intuitions, mediators and investors.” The effective role of institutions, such as stock exchange center, government, central bank and investors help to promote stock market. NEPSE has been acting as secondary market in Nepal. The performance of companies listed in NEPSE play an important role in the development and expansion of capital market since higher returns are attractive to the

investors. Involvement of large number of investors in the stock market is possible only when they get higher return on their investments. But Nepalese stock market is characterized by a low trading volume, limited information available to investors. It is therefore very important to analyze the portfolio performance of listed finance companies and its rate of returns.

1.3 Glance of Finance Companies:

Financial activities and capital market plays vital role for the development of national economy as well as world economy. History of finance company in the global context is considerably longer in comparison to Nepal. In the world, rapid growth of banking has been taking place since the decade of 1960.

Industrial revolution, globalization, liberalization and rapidly growing information and technology system has made world as a village thus it has turned into an open international market overwhelming growth of banking and non banking financial institution. Initial step to organized financing services originated from the establishment of the first Investment Bank began in Philadelphia, USA in 1764. The first commercial bank, "Bank of North America opened in the same city in 1781. In this way the first investment company "The Massachusetts Hospital Life Insurance Company" was founded in 1816 which is usually designated as the first saving bank insurance company which is an old as country it self."

So as to fulfill credit demand and deposit desire of the public, institutions like saving and loans, credit unions and finance companies came into existence in developed countries including USA and UK in the beginning of 20th century. However, a furniture company in USA named *"Cowperwaits Sons"* was the first company to provide its clients installment facility in 1807 AD. In 1850 AD popular *"singer Company"* a non depositary, put its hand in this sector providing its sewing machine to customers through installment credit. In those items the companies did not use to accept deposit from public. They used to collect required funds from banks by means of commercial paper and corporate used to provide installment credit to their

customers. Afterward finance companies started the activities like factoring, pledging, leasing etc. as demand of time. After 1980 AD, the companies have shrunk the distinction line between commercial banks and themselves as they are also accepting deposit and providing intermediate and long term loans.

There are number of example of success and failure of finance companies in the world. Out of 58 finance companies in Thailand, 56 collapse in the decade of 1990. The companies had invested huge fund in long term relatively unproductive sectors like housing, real estate etc. and the devaluation of their currency angst US dollar was the factors of dragging them towards liquidation. Indian finance companies used to operate without taking prior permission from Central Bank, so there aroused the question mark regarding guarantee of deposit made by public. But nowadays the companies of India have to get license from Reserve Bank before starting their operation. Determents factors of such companies in various countries are found to be policy undertaken by the government of the countries concerning economic liberalization and privation.

1.4 Statement of Problem:

Central bank NRB is the apex body of financial companies for financial operation in Nepal. They perform their activities on the basis of rules and regulation imposed by NRB. So the portfolio composition of assets is also influenced by these policies. This is the main problem of optimum portfolio performance of finance company in Nepal. Poor economic condition affects every sector, so financial area is no exception from this situation. Lower investment in productive sector is the reason for lower growth in GDP. The trends of mushroom growing finance companies are creating unhygienic competition in financial market; due to this, risk is higher than return. It has threatened the finance companies to improve and manage their productivity. The credit policy, discount rate, interest rate, ceiling and certain per cent of deposits to be lent to productive sector, all these policy affects investment decision of finance companies.

In Nepal, there is not enough money with general people. Their economic status is very low. Due to lack of knowledge and information individual investor is manipulated by the financial institutions or other market intermediaries to such an extent investing on common stocks is quite hazardous. Most investors use linear logic to formulate their investment strategies and make investment decisions. Linear logic is based on the assumption of the future will resemble the past. There are no sources to get exact information about the future regarding risk and return on investment in Nepal. Stock market persists highly inconsistency. Here even intellectual scholars, university post graduates and graduates in business administration, could not perfectly analyze the risk and return of stock.

Political system plays vital role to develop the industrial as well as financial activities in the country. To operate smoothly financial activities, political stability is necessary. Stable political system gives right direction to the nation. There may defined rules and regulation which is strictly followed by every one and operate their activities under this rules. But in Nepal, political instability is greater problem. Politician are busy to save their position and fully irresponsible toward their duties. Rules and regulations are formulated but implementation part is very weak. Hence lack of political stability is greater hinder to develop and expand the financial activities in Nepal.

There are no organized firm who can give such information so that it can accelerate stock investment and market efficiency. Government policy lacks encouragements to create proper investment environment. Lack of professional knowledge, resource and technology are the hindrances of risk and return analysis of individual investment and portfolio investment. This study tries to find out how efficient financial companies are performing in their portfolio investment.

1.5 Objectives of the Study:

The major objective of the study is to find out current situation of portfolio performance of listed finance companies in Nepal with the help of risk, return and other variables. The specific objectives are as follows.

- To analyze the risk and return of listed finance companies.
- To examine the portfolio structure of finance companies and computes its performance.
- To explore existing investment policy taken by listed finance companies.
- To compare finance companies performance with market performance.

1.6 Focus of the Study:

Though the finance company act has come out in 1986, the finance companies are established and operate only after the democracy and liberalization policy taken by government. After restoration of democracy in 1990, the finance company act 1986 was amended in 1991. Under this act various sizes of finance companies came into operation in Nepal. Finance companies are establishing not only to mobilized and manage funds but also to perform necessary financial activities required for the economic growth of nation. Companies establishment is not a subject matter but how well its performance is going on, is considerable. Portfolio analysis measures the performance of the companies.

Present context shows the highly growing of capital market. Share price of banks and finance companies are increasing day by day. In this scenario, the investors are safe in which extend should be evaluate. The increasing trend of share price remains stable only when these financial institutions are able to well diversify their portfolio. So the effective analysis of portfolio risk and return is necessary to achieve good result.

This study mainly focused to the portfolio analysis of finance companies which are listed on NEPSE. The study is based on the simple random sampling method.

1.7 Significant of the Study:

Expansion of stock market is essential for economic development by mobilizing long term capital needed for productive sectors. Stock market is a main source of finance

for economic development through potential investors. All investor invest their fund on common stock for getting higher return on lower degree of risk. For manage risk and return, portfolio analysis is important. Portfolio analysis shows how organizations maximize their return on desirable level of risk.

This is the age of competition. To exist in this competitive environment, financial companies should have good vision and commitment to perform their activities. Only those companies can run successfully which have knowledge of financial analysis, market demand and investment strategies. Hence finance companies should select optimum portfolio and manage it properly to get higher return on lower level of risk.

Economic liberalization opened the door to public participation on security investment in Nepal. Many finance companies are established and operate to make participation for general people. But it is limited only quantitatively not a qualitatively. Finance companies invest generally unproductive sectors, like housing, hire purchase and real estate etc. so that their return rate is low in higher degree of risk. In spite of this, the finance companies are able to collect fund even small depositor to corporate level and invest it for public welfare. Thus the finance companies may play crucial role for economic development in Nepal by innovating productive sectors for invest their funds. Hence this study focuses on finance companies of Nepal. There are limited books and journals published in Nepal about this field. This research work has attempted to analyze the portfolio of finance companies. So that it will be helpful for further researchers who are interested in this field.

1.8 Limitations of the Study:

This study concentrates only those finance companies which are listed on NEPSE and taken license from NRB. Among all listed companies only few are taken as sample and analyze. So the findings of the study may not be generally conclusive as a whole financial sector.

The main weaknesses of this study are as follows;

- Mostly analyses are depending on secondary data.
- Sample size is very small which lacks represent the as a whole population.
- There is used oral interview to take some information so personal view may not reflect overall condition.
- Unavailability of relevant data and necessary information.
- Portfolio theories have certain assumptions so this study also based on these assumptions.

1.9 Organization of the Study:

This study has been organized into five chapters. The title of each of these chapters is as follows;

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Research Methodology

Chapter 4: Data Presentation and analysis

Chapter 5: Summary, Conclusion and Recommendation

Chapter One: Introduction

This chapter deals with subject matters of the study consisting background of the study, Capital market in Nepal, Glance of the finance company, Portfolio risk and return, , Focus of the study, Statement problems, Objectives of the study, Significant of the study, and Limitation of the study.

Chapter Two: Review of literature

This chapter deals with review of the different literature of the study field. Therefore it includes conceptual framework along with the review of major books, seminar papers, , research works and thesis etc.

Chapter Three: Research Methodology

Third chapter describes the research methodology employed to attain the objectives of research work and it includes research design, population and sample, source and technique of data collection and data analysis tools.

Chapter Four: Data Presentation and Analysis

This chapter deals with analysis and interpretation of the data using financial and statistical tools described in chapter three. This deals with the presentation and analysis of data through a definite course of research methodology. This chapter deals with different statistical tools and financial tools mainly consists of ratio analysis. Similarly this chapter also includes the major finding of the study.

Chapter Five: Summary, Conclusion and Recommendations

This chapter provides summary and conclusion, suggestions and recommendations for improving the future performance of the sample banks.

Similarly, recommendation, viva-voce sheet, declaration, table of content, table of list and figure, abbreviation are presented at the front part of the study. After all, the bibliography and appendices are included at the end.

CHAPTER TWO

REVIEW OF LITERATURE

This chapter focuses the studies which are related to the present topic. There is not so much adequate study material related with this topic published in Nepal but some books are available which are directly connected with our topic. The concept of portfolio, different theories of portfolio, portfolio analysis and some of the outstanding thinking regarding finance companies are reviewed bellow in the following study.

2.1 Review of Book:

2.1.1 Portfolio Analysis and Diversification:

An investor's objective is to make maximum return from their fund at the lower risk. By investing single assets, investor cannot achieve their objectives. But it is only possible through portfolio. A portfolio is a combination of securities. By the help of portfolio risk can be diversified. It states "Do not put all the eggs in one basket". It means that one can loss all the eggs if some unlikely events occur. So we can say that risk can not be diversified by investing in a single asset. Obviously, risk can be diversified by forming portfolio. Thus the objectives of the portfolio analysis is to develop a portfolio that has the maximum return at whatever level of risk the investor deems appropriate.

Portfolio approaches usually suppose one of the following forms of diversification.

Simple diversification: Simple diversification is the random selection of securities that are to be added to a portfolio. Simple diversification reduces a portfolio's total diversifiable risk to zero.

Diversification across Industries: It means securities are selected from different industries rather then from a single industry to form a portfolio. In the context of Nepal NEPSE has categorized the listed securities into eight sectors that are Commercial Banks, Development Banks, Finance Companies, Insurance Companies,

Manufacturing and Processing Companies, Trading Companies, Hotel Companies and others. Every sector is known as an industry. Under diversification across industries, securities are taken from many different industries to form portfolio. Some investment counselors advocate selecting securities from different industries to achieve diversification.

Superfluous Diversification: It is the extended form of simple diversification. In the simple diversification, 10-15 securities are selected for a portfolio while it include more than that of simple diversification. But no further risk reduces from this diversification.

Markowitz Diversification: Markowitz diversification is the combining of assets, which are less than perfectly positive, correlated in order to reduce portfolio risk. It can sometimes reduce risk below the undiversifiable level. Markowitz diversification is more analytical than simple diversification and considers assets correlation or covariance. The lower the correlation between assets, the more that Markowitz diversification will be able to reduce the portfolio's risk

The Markwitz portfolio selection model has following assumption regarding investor's behavior:

- Investors consider each investment alternative as being represented by a probability distribution of expected returns over same holding period.
- Investors maximize one period expected utility and passers utility curve, which demonstrates diminishing marginal utility of wealth.
- Individual estimates risk on the basis of the variability of expected returns.
- Investors base decisions solely on expected return and variance of returns only.
- For a given risk level, investors prefer high returns to lower returns. Similarly, for a given level of expected return, investor prefer less risk to more risk.

2.1.2 The Capital Assets Pricing Model (CAPM):

The capital assets pricing model is developed by William Sharpe, John Lintner and Jack Treynor in mid of 1960. This theory stats that; Treasury bill is risk free assets. The return on Treasury bills is fixed and is unaffected by the market environment. Therefore, it has beta coefficient is zero. Beta coefficient zero means, there is no systematic risk *(The part of total risk which can't control by organization and external environment create such risk)*. There are so many riskier assets in the market. The Portfolio that contains all these risky assets is known as market portfolio. It has beta coefficients of 1. Beta coefficient 1 denotes market risk. Beta is a relative measure of the sensitivity of an assets return to changes in the return on the market portfolio. Mathematically, the beta coefficient of a security is the security covariance with the market portfolio divided by the covariance of the market portfolio. Rational investors take risk but want sufficient compensation for assuming risk. Therefore, they demand additional return from the riskier portfolio than from risk free assets.

The difference between the return on the market and interest on treasure bills is termed the market risk premium. The treasure bills have a beta of 0 and a risk premium of 0. The market portfolio has a beta of 1 and a risk premium is the difference between return on market portfolio and return on Treasury bill ($r_m - r_f$). This gives us two benchmarks for the expected risk premium. The CAPM specifies the relation ship between risk and required rate of return on assets when they are held in well-diversified portfolios. In a competitive market, the expected risk premium varies in direct proportion to beta. It is an important instrument used to analyze the relationship between risk and rates of return. Therefore, the appropriate riskiness of an individual stock is its contribution to the riskiness of well-diversified portfolio. So the required rate of return on asset i can be express as follows;

$r_i = r_f + \beta_i (r_m - r_f)$

Where,

r_i = Require rate of return

r_f = Risk free rate of return

$\wp_i$ = Beta coefficient of assets i

r_m = Market return

2.2 Portfolio Risk and Return:

Portfolio analysis estimates the expected return and the risk of the holding securities on the portfolio basis. Portfolio return is a weighted average of the expected return of individual securities. Portfolio risk is the variability of the returns of the portfolio. It is measured by variance and standard deviation of the portfolio return.

2.2.1 Portfolio Returns:

The returns of portfolio depend on the expected rate of return of each security contained in the portfolio and the amount invested in each security. The portfolio return is the weighted average expected return of the individual stock in portfolio, with weights being proportion of investment on each security in the portfolio. The portfolios expected return may be defined in equation as follows:

$R_p = W_1R_1 + W_2R_2 + \ldots\ldots\ldots\ldots + W_nR_n$

Where,

R_p = Expected portfolio return

W_1 = Weight of stock 1

R_1 = Expected return for stock 1

W_2 = Weight for stock 2

R_2 = Expected return for stock 2.

2.2.2 Portfolio Risk:

The portfolio risk is measured by variance or standard deviation of the portfolio. The riskiness of the portfolio expresses the extended to which the actual return may deviate from the expected return. The variance of returns from portfolio made up of two assets is defined by following equation:

$$\sigma_p^2 = W_1^2\sigma_1^2 + W_2^2\sigma_2^2 + 2Cov(r_1 r_2)W_1W_2$$

Where,

σ_p^2 = Variance of the portfolio's rates of return

W_1 = Weight for assets 1

σ_1^2 = Variance for assets 1

W_2 = Weight for assets 2

σ_2^2 = Variance for assets 2

Cov (r_1r_2) = covariance of return between assets 1 and 2.

2.2.3 Assumptions of the CAPM:

The CAPM have some assumptions which are given below:

- Investors evaluate portfolios by looking at the expected returns and standard deviations of the portfolio over a one period horizon.
- Investors are never satiated, so when given a choice between two portfolios with identical standard deviations, they will choose the one with the higher expected return.

- Investors are risk averse, so when given a choice between two portfolios with identical expected returns, they will choose the one with the lower standard deviation.
- Individual assets are infinitely divisible, meaning that an investor can buy a fraction of a share if he or she so desires.
- There is a risk free rate at which an investor may either lend money or borrow money.
- Taxes and transaction costs are irrelevant.

To these assumptions the following ones are added:

- All investors have the same one period horizon.
- The risk free rate is the same for all investors.
- Information is freely and instantly available to all investor.

-Investors have homogeneous expectations, meaning that they have the same perceptions in regard to the expected returns, standard deviations, and covariance of securities.

2.2.4 Arbitrage Pricing Theory (APT):

Arbitrage pricing theory was developed by Stephen A. Ross. The name arbitrage pricing theory arises from the assumption that investor will arbitrage away any differences in the expected return on assets that have the same risk. The basic assumption of APT is not that investors that investors are mean variance maximizes but rather that returns are affected by systematic factors and the return on any assets over time is called the return generating process.

The APT is said to be superior on the ground that is more general than CAPM. The CAPM assumes that the rate of return on a security is influenced by only one factor that is the rate of return on a marketable security is a linear function of the movement of a set of economic factors common to all securities. The random rate of return under APT model is a linear function on K factors as follows:

$R_j = E(R_j)\, b_{j1}F_1 + b_{j2}F_2 + \ldots\ldots\ldots\ldots + b_{jk}F_k + e_j$

Where,

R_j = Random rate of return on stock j.

$E(R_j)$ = Expected rate of return on stock j.

b_{jk} = Sensitivity of stock j's return on stock k^{th} factors.

F_k = Mean zero k^{th} factor common to the return of all assets under consideration.

e_j = Random error term including the unique effect on return.

The F_k is the mean zero random variable of k^{th} factor and it is the result of the deviation of realized value from the expected value. e_j is the unique or unsystematic risk which can be eliminated through diversification and dose not affect the stock rate of return.

The name of Arbitrage refers to the market condition where two or more securities of identical factor sensitivities are priced differently providing opportunities to make profit by selling overpriced securities short and buying under priced securities long. Such transaction are called arbitrage and they allow market participants to make profit without investment and without assuming any risk through short selling and buying long for the amount equivalent to the short selling. Such opportunities rarely exist in an efficient market and any one can benefit from arbitrage transactions. Otherwise, prices will continue to change until the expected return from such transaction is zero. Therefore, the expected arbitrage profit is zero in long run if the market function is efficient. The APT is based on one pricing theory and causes no investment, on risk, on return.

Stephen states that if no arbitrage opportunities exist in the market, the assets pricing is a function of risk free rate and a set of relevant factors related risk premium. It is, therefore, true that the APT is not different from the CAPM which also states that the return on a security is equal to the risk free rate and risk premium for the market

related factor. The market rate of return is in fact, influenced by various economic factors, such as inflation, GDP, Tax law etc. Hence accounting of market rate of return does reflect the consideration of many economic factors that influence all assets in the market. Given this argument, we can say that there should not be significant difference in expressing the rate of return either using only the market rate of return or using specially all the factors affect the market. We can see that the APT logic is not much different from the logic used in CAPM. Similar to CAPM, only the set of systematic risk is priced in the above model and not price is assigned for the diversifiable risk. The risk premium .for the systematic risk of each factor is determined as the market price per unit of risk multiplied by the degree of factors systematic risk.

2.2.5 Finance Companies in Nepal:

There are some important books for studying in which mentioned about the establishment, growth and development of Finance companies. Among them one of the most useful book is “Finance companies in Nepal” written by Prof. M K Shrestha “Finance companies have to established, organized, managed and operated with a professional team of mixing innovative ideas with money and experience”

Economic liberalization policy of the government has encouraged the establishment and growth of finance companies in the country within a short span of time. In a situation when the existing financial institutions, especially commercial banks are unable to supply credit timely and carry capital market activities, finance companies have come timely to meet the individual credit needs, undertaken merchant banking functions and also curtail the operations of *Upahar* and *Dhukuti* programs.

There is a clear explanation about the function of finance companies in this book, one of important things to be considered by finance companies is they have to generate income from fee based activities rather than always depending upon fund base activities. These include a broad range of merchant banking functions such as project planning, corporate counseling, loan syndication through underwriting and bridge

financing, issue management, individual investment portfolio management, mutual fund, venture financing, lease mergers, acquisitions, brokerage and management consultancy service etc. This provides simple answer to have a clear line of distinctions between finance company and commercial bank. Finance companies deals with individuals directly or through capital market to fulfill their individual credit needs and while commercial banks because of their bigger sizes in terms of resource deal more within institutional credit needs like developing business. The recycling of funds from individual to individual is done by finance company such as catering of the individual needs for timely financing.

He further explain about the role and function of Nepal Rastra Bank towards the finance company is given as, “After finance company registered and applying license with NRB, a high level technical committee has been constituted for more serious and detail study and analysis of feasibility report submitted by finance companies under the management and leadership of NRB’s deputy governor to accomplish the objectives of creating a more competitive environment in a financial sector. Based on the recommendations of these high level committee, policy, framework and guideline, it will be published to help and direct the establishment and regulation of finance companies in the country. The recommendations of this committee will also help to determine basic eligibility criteria to be applied while issuing to new finance companies and also in monitoring to those already established and started operations.

2.3 Review of seminar paper:

There is one of the very important seminar paper published about the establishment, growth and development of finance companies, presented by L.P. Bhanu Sharma, the General Manager of Shree Investment Finance Company Ltd. tilted “Role of Finance Company in the National Economy”. This seminar paper focused about the way of promotion of the finance company.

The promotion of finance company is very challenging act to the executive of the companies. The executive of Finance Company are engaged in promotion of their

business activities on an individual basis using individual company resources. Promotion can be done in various ways through media advertisement, highlight product lunching, and dissemination information about operational performance etc. In this way, the finance companies promote their activities on their own suitable way by disseminating company specific details and about their future scheme for general public. They also motivate people for saving money in recognized institution.

Sharma suggests that how finance company can promote itself in systematic way. For this he emphasis Finance Companies Promotion Committee (FCPA) should be constituted as a body for promotion of finance companies in the lines with the banking promotion committee. The FCPA will be engage in direct promotion of finance companies by instituting a mass awareness movement in the initial stage and to be subsequently followed by other promotional activities. The major activities of the FCPA will include the following

- Creating a core team to conduct detail study of the existing laws, regulations, directives policies and procedures concerning finance companies and the fiscal laws in the countries.
- Including a comprehensive mass awareness movement with the sole objective of explaining and convincing the general public about the finance companies by dissemination of the basic information concerning finance companies.

In his seminar paper he explained the current interest rate structure practices among the finance companies. He explain about the role of Nepal Rastra Bank is given below;

Nepal Rastra Bank directives prescribed no spread interest rate between the deposit interest rate and lending interest rate and no floor or ceiling rates have been fixed, accordingly, the decision regarding interest rates on the deposit as well as loans and advances have been left to the judgments of the individual companies, thus creating the ground for market determined competitive interest rates. Although there are many

financial institutions are establishing and operating, the society is doing limited banking activities, in this scenario finance companies are comparatively a new in the country and they have to compete with other very well accepted financial institutions including commercial banks and are practically made to fight against the prevailing mass psychology that is tiding against finance companies.

2.4 Review of Previous Thesis:

Khaniya (2007)

She has done her thesis on the subject "Investment Portfolio Analysis of Joint venture Bank" on 2007.

Her Major Objective:

- This study mainly focused towards the investment structure, investment decision process of Nabil Bank Ltd. as compare to the other joint venture banks.
- This study tries to analyze the trend of investment process of Nabil Bank in various sectors as compare to the other banks.
- The existing investment situation of Nabil Bank Ltd. and its investment strategy in future has carefully observed and analyzed in this research work.

Her Main Findings:

- Existing situation of portfolio management of Nabil bank and other joint venture bank in Nepal.
- Investment to total deposit ratio.
- Investment portfolio analysis of joint venture banks in Nepal.
- Profitability situation of joint venture banks and compare with each other.
- Loan and advance portfolio analysis of joint venture banks in Nepal.
- Risk and return analysis of joint venture banks in Nepal.
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Gautam (2008)

He has done his research work titled "Share Price Behavior of Listed finance Company in Nepal" in 2008.

His Major Objective:

- He is tried to find out the existing situation of financial market in Nepal.
- He states that stock market behavior is the backbone of investment sector of the country.
- By promoting the stock market in sizeable economic sector gives raise the economic developments by mobilizing swing into productive sector by making suitable investment for investment environment different element like price trend, NEPSE index, and volume of stock trended, rate of listing and signaling factor should be analyzed.

His Main Findings:

- The price of common stock in primary market is par value but in secondary market may be any price. The long securities processing cycle has restricted to the development of securities market. The investors have to wait for long time for the securities in hand. This long time has restricted them to take many opportunities. Low price and low trading volume of companies have directly related to market value of firm. Due to lack of sound dividend policy, most of the companies have not been able to maximize the value of the firm in a secondary market. Lack of sufficient information disseminates to investor and lack of transparency has another problem that exists in Nepalese stock market. It mainly affects position of the company market information system and corporate governance of the country.
- Taking about the capital market in Nepal there is no way to justify that it is perfect. Being an imperfect market the floor price of the listed company's share cannot represent their true value. The option remained are

undervalued or overvalued stocks. There might exit situations where stocks are too overvalued and undervalued.

- He further states that, investors invest their money with the hope of getting good return in their invested fund but due to many reasons they lose their hard earning while investment made without analyzing the stock. Many times investors blindly invest their funds by just reading the prospectus availed by the issuing companies and many times they purchase share any analysis. So the study is focused to stock price behavior of financial companies trading at NEPSE.
- Hence, this study covers the effect of price trend, volume of stock traded, market behavior and impact of signaling factor on NEPSE index.

Shrestha (2009)

Shrestha has done research work titled, "Performance of Listed Finance Companies and Return to Investment" in 2009.

His Major Objective:

- The main objective of this study is to analyze the performance of listed finance companies and return to investors. Mainly this study deals with the following issues;
- How is the performance of financial sectors in terms of market price per share, net worth per share, earning per share and dividend per share?
- What are the returns to investor in terms of dividend yields, capital gain yields, and total yields?
- Do the companies with higher liquidity are providing higher returns to their investor? Is there any relation of liquidity with dividend yield, capital gain yield and total yield?
- Are the investors getting higher returns from companies whose earnings position is good? Is there any relation of earnings with dividend yield, capital gain yield and total yield?

- What relationship exists between the turnover and returns to investors? Do the companies with higher turnover provide higher dividend yield, higher capital gain and higher total yield on the stocks of the companies?
- Are the companies with higher leverage having higher returns to investors? Is there any relation of leverage with dividend yield, capital gain yield and total yield?
- How does the interest coverage affect the returns to investors? Is there any relation of interest coverage with dividend yield, capital gain yield, and total yield?

His Main Findings:

- Finally he concluded that the average market price per share of large finance companies is higher than that of small companies. The difference in the mean value of market price per share computed for large and small companies in each of the year is not significant. The growth rate of average market price per share in large companies is higher than that in small companies.
- The market price per share value of all the small companies is not clear as their prices are fluctuating. Some ratios of large companies like earning per share and dividend per share is higher than small companies. However total yield and average capital gain is higher in small finance companies. He concluded that higher dividend yields have lower leverage, higher earnings, higher fixed assets turnover, lower assets turnover and higher interest coverage ratio.

Joshi (2010)

Joshi has done research work titled, “Investment Problems in Choice of Optimum Portfolio of Stock in Nepal” in 2010.

His Major Objective:

- The main objective of this study was to identify the investor's problems in choice of optimum portfolio of stocks in NEPSE, which concluded that portfolio management is a new concept for Nepalese investor.
- He want to know due to lack of sufficient information proper investment is possible or not?.
- His study also wants to know whether proper investment needs huge information internal as well as external or not?

His Main Findings:

- The stock market of Nepal is also in growing stage. There is only one stock exchange center which is located in Kathmandu. Traditional cry system for trading stock, limited number of security broker, infancy investor, lack of opportunity of invest and many other reasons are there, which is acting as barrier of NEPSE.
- Lack of financial tools only three stock portfolio were constructed and analyzed. Investor does not know which stock is preferable, how to formulate the portfolio. Even many stock brokers do not give the information to the investor.
- Investor are purchasing and selling their stocks mostly on pressure of broker.
- Due to lack of sufficient information the decision for purchase and sell of stocks becomes very difficult job. It needs special knowledge as well as adequate skills to analyze portfolio.

Pandey (2011):

Pandey has done research work titled, "Financial Analysis of Finance Company with Reference of Credit Portfolio" in 2011.

His Major Objective:

- The main objectives of this study was to identify the risk and return situation of the insurance companies common stock which concluded that
- Poor education and lack of adequate source of information are the major constrains for the development of the stock market in Nepal.
- Among all securities common stock is known as very risky security.
- When risk and return compared to different industries, finance and insurance is best as per highest expected return with higher degree of risk whereas trading industry has minimum return and risk.

His Main Findings:

- There is no significant difference between the portfolio return of insurance companies stock and overall market portfolio.
- Market sensitivity is measured by beta coefficient which cannot be reduced by diversification.
- General public invest their funds in different securities on the basis of expectation and assumption rather than analysis.
- The proper selection of portfolio approach is better way to get success in stock market.

2.5 Research gap:

The research gap is identified by the review of literature has justified the need of this study. From the above study it is found the gap that research of analysis the portfolio performance of listed finance companies has not been held yet in Nepalese context. So it is assumed that this study is one of the most demanded and most valuable researches under the financial sector in Nepal.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the details of the procedure and the methodology which employed in this study. The research methodology is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of fact and figure. It consists of research design, data collection procedures, and data processing procedures and data analysis technique.

This study is more analytical and imperial. It covers quantitative methodology using statistical and financial tools. The study is mainly based on secondary data obtained from NEPSE, NRB and various finance companies.

3.1 Research Design:

"Research design is a plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variables." This research work is based on recent historical data (2010- 2011), which deals with the common stock price and dividend per share of the listed finance companies. For portfolio analysis market price is most important so as to fulfill the requirement, the six years NEPSE indices are also taken into account. Present study based on the descriptive and analytical research design. Descriptive research design describes with the general pattern of Nepalese investors (corporate) and condition of their portfolio performance. The analytical research designs analyze the collected facts and information and critically evaluate it.

3.2 Population and Sample:

Population refers to the entire group of the people, events or things of interest that the researcher wishes to investigate. For this study, Population is all the listed finance companies which are fall under the Group "A" of Nepal Stock Exchange. A sample is a collection of items or elements from population. So a sample is only a portion or

subset of population. Out of 39, Group "A" finance companies, 7 companies are taken as sample on the basis of simple random sampling method.

Name of The Companies (Sample)	Symbol	Share Listed
Butwal Finance Limited	BFL	696,721
Goodwill Finance CO. Limited	GFCL	500,000
Capital Merchant Banking & Finance Ltd.	CMBF	2000,000
Nepal Finance Ltd.	NFC	1568,818
Shree Investment and Finance Co. Ltd.	SIFC	672,000
United Finance Ltd.	UFL	750,000
World Merchant Banking & Finance Ltd.	WMBF	720,000

3.3 Types of Data:

There are two types of data available for research work. They are as follows;

3.3.1 Primary Data:

The data which the investigator directly collected from field work is called primary data. Primary data are the original data which first time collected by researcher according to their requirement.

3.3.2 Secondary Data:

The data which are already collected by others (not researcher) and obtained from some published and unpublished sources are called secondary data. Secondary data is easy to collect and it also save the time and cost of researcher.

3.4 Sources of Data:

3.4.1 Primary Sources:

The data can be collected from the primary sources by using Observation Method, Focus group Discussion Method, Participatory Method, Survey Method, Questionnaire Method and Interview Method. In this study, questionnaire method and interview method are used to obtain the necessary information.

3.4.2 Secondary Sources:

The sources of secondary data are books, journals, articles, previous research work etc. In this study, the secondary data are collected from annual and trading report of NEPSE, annual report and journal of NRB, annual report of various finance companies and computer data bank (Internet).

3.5 Data Processing Technique:

Collected raw data are simplified in order to interpret the findings by presenting in form of tables, diagrams and chart. Data are processed through financial and statistical tools.

3.6 Tools and Technique of Analysis:

On the basis of historical data both financial and statistical tools are used to analysis of different variables.

3.6.1 Financial Tools:

Financial tools consists risk and return analysis (HPR; Market risk and return; Beta coefficient; Portfolio risk and return; Required rate of return on security i under (CAPM) and Total risk (systematic and unsystematic risk)

3.6.2 Statistical tools:

Statistical tools consists, Arithmetic mean; Variance; Standard deviation; correlation coefficient; Tools for hypothesis testing (t- test)

3.7 Data Analysis Formulas:

There are many statistical and financial formulas which are using to find out result in this research work; which are as follows:

3.7.1 Risk and Return analysis of Individual stock:

$$\text{Single period rate of return (HPR or } r_t) = \frac{\text{Ending price - begnning price + Cash dividend}}{\text{Begnning price}}$$

$$\text{Expected return for i stock } (\bar{r}_i) = \frac{r_i}{n}$$

Where, n = no. of observations.

r_i = Summation of annual return.

$$\text{Variance } (\sigma_i^2) = \frac{(r_i - \bar{r}_i)^2}{n}$$

$$\text{Standard deviation } (\sigma_i) = \sqrt{\frac{(r_i - \bar{r}_i)^2}{n}}$$

Variance and standard deviation measures risk.

3.7.2 Risk and Return Analysis of Market:

$$\text{Annual return on market } (r_m) = \frac{\text{Endind NEPSE Index - Beginning NEPSE Index}}{\text{Beginning NEPSE Index}}$$

$$\text{Expected return on market } (\bar{r}_m) = \frac{r_m}{n}$$

Variance on market return $\sigma_m^2 = \frac{\sum (r_m - \bar{r}_m)^2}{n}$

Standard deviation $\sigma_m = \sqrt{\frac{\sum (r_m - \bar{r}_m)^2}{n}}$

3.7.3 Market Sensitivity Analysis:

Market sensitivity of stock i is explained by its beta coefficient.

Covariance between i stock and market, $Cov_{r_j r_m} = \frac{\sum (r_i - \bar{r}_i)(r_m - \bar{r}_m)}{n}$

Correlation between i stock and market $\rho_{im} = \frac{Cov(r_i, r_m)}{\sigma_i \sigma_m}$

Beta coefficient i stock and market $\beta_{im} = \frac{Cov(r_i, r_m)}{\sigma^2_m} = \frac{\rho_{im} \sigma_i \sigma_m}{\sigma_m^2}$

3.7.4 Analysis of Diversifiable and Undiversifiable Risk:

Diversifiable risk: Diversifiable risk is the portion of the total risk that can be diversifiable away. This is also called unsystematic risk or avoidable risk or company specific risk or non market risk. It is caused by events particulars to the firms so this types risk differ from one company to another. For examples labor strike, management errors, investors, advertising campaigns, shift in consumer taste and law suits etc. The formula of diversifiable risk is as follows;

Unsystematic risk = Total risk σ_i^2 - Systematic risk

Undiversifiable risk: The portion of total risk of an individual security caused by market factors that simultaneously affects the prices of all securities is called market risk or undiversifiable risk or unavoidable risk or systematic risk or beta risk. It can not diversify away. It stems from factors, which systematically affects all firms. Such

as war, inflation, recession, high interest rates, depression and long term changes in consumption in the economy. The formula of undiversifiable risk is as follows;

Systematic risk = $\beta_{im}\sigma_m^2$

The percentage of total risk that is systematic can be measured by the coefficient of determination ρ_{im}^2. The formula is;

$$\text{Undiversifiable Proportion} = \frac{\text{Systematic risk}}{\text{Total risk}} = \frac{\beta_{im}^2\sigma_m^2}{\sigma_i^2} = \rho_{im}^2$$

3.7.5 Portfolio analysis:

CAPM Model: The relevant risk for an individual asset is systematic risk because unsystematic risk (non market risk) can be eliminated by diversification. The relationship between an assets return and its systematic risk can be expressed by the CAPM which is also called security market line (SML). The SML equation is;

$$K_i = r_f + \beta_i(r_m - r_f)$$

Where, K_i = Require rate of return on i security

r_{f_i} = Risk free rate of return

r_m = Expected market return

β_i = Beta on i security

Portfolio risk and return analysis: The expected return on a portfolio is simply the weighted average of the expected returns on the individual assets in the portfolio with the weights being the fraction of the total portfolio invested in each asset. In two securities portfolio (government risk free portfolio and risky market portfolio), the expected portfolio return is;

$$\bar{r}_p = r_f w_{rf} + r_m w_m$$

The expected risk on this portfolio is a function of the proportions invested in the components and the riskiness of the components and correlation of returns on the component securities

It is measured by variance (σ_p^2) or standard deviation (σ_p) and calculated by using following formula. For two security (risky and risk free) portfolio;

$$\sigma_p \text{ X } \sqrt{w_{rf}^2 \sigma_{rf}^2 + w_m^2 \sigma_m^2 + 2 w_{rf} w_m \rho_{rf\,m} \sigma_{rf} \sigma_m}$$

$$= \sqrt{0 + w_m^2 \sigma_m^2 + 0} = w_m \sigma_m$$

Where,

w_{rf} X Invesement weight on risk free asset
w_m X Investment weight on market portfolio
σ_{rf} X Standard deviation of risk free asset X0
σ_m X Standard deviation of market portfolio
$\rho_{rf\,m}$ X Correlation between risk free and market portfolio X0

The equation of the capital market line (CML) is;

$$\bar{r}_p \text{ X } r_f + \frac{r_m - r_f}{\sigma_m} \sigma_p$$

CML describes the relationship between portfolio risk and portfolio return.

3.7.6 Portfolio Performance Evaluation:

The portfolio performance of the organization can be evaluated by following method;

Sharpe's Portfolio Performance Measure: It was derived by William Sharpe. Sharpe® measured divides average portfolio excess return over the same period by the standard deviation of return over that period. The formula is;

$$S_i \; X \; \frac{\bar{r}_i - R_f}{\exists_i}$$

Where,

s_i X Sharpe`s index of portfolio performance
$\bar{r}_i$ X Average return on portfolio i during a specific time period
R_f X Average risk free rate
$\exists_i$ X Standard deviation of portfolio i

Treynor's Portfolio Performance Measure: Treynor`s measure gives excess return per unit of risk over systematic (beta) risk.

$$T_i \quad X \quad \frac{\bar{r}_i - R_f}{\wp}$$

Jensen's Portfolio Performance Measure: Michael Jensen developed this formula. This is based on CAPM. The version of CAPM which is used to compute portfolios expected rate of return is given by;

$$E(r_i) = R_f + \wp (r_m - R_f)$$

Where,

$E(r_i)$ X The expected return on portfolio i
R_f X One period risk free rate of return
$\wp$ X Beta for portfolio i
r_m X Expected return on market portfolio.

S_i, T_i and E_{fr_i} Is greater means greater portfolio performance and vice versa.

3.8 Research Hypothesis:

In order to fulfill the objectives of the research work, following hypothesis is formulated for testing;

There is significant difference between population (market) and sample return.

i. e. H_o : Average return of common stock of listed finance companies is equal to market return.

H_1 : Average return of common stock of listed finance companies is not equal to market return.

3.9 Limitation of the Methodology:

The study aimed to analyzing portfolio performance of listed finance companies in Nepal. As per topic of the study both primary and secondary data are employed. To cover the objectives of the study, secondary data is not sufficient so primary survey also conducted in order to know the view of the related personnel and portfolio managers about the portfolio performance of the Nepalese organization.

In this study sample has taken on the basis of random sampling method. For the sample 17.95% of population has taken in secondary data and 38.45% sample has taken for primary data.

The primary data is collected through questionnaire and interview with the personnel of the finance companies. The validity of the study more depends on the primary information provided by higher level personnel.

Analysis of the portfolio performance is a vague and difficult realistic analysis of the current practice. So to make it easy portfolio theory is used to analyze. Portfolio theory is not free from biasness because of its assumption.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter is the focal part of the study. The main objective of this chapter is to analyze and elucidate the collected unprocessed data through simplification and systematic presentation. This chapter presents the analysis and interpretation of the collected data related to portfolio analysis.

As stated earlier in the chapter three, this study consists of primary as well as secondary data. Secondary data obtained from NEPSE trading and annual report, NRB annual report and annual report of finance companies. Similarly primary data obtain through primary sources i.e. questionnaire and interview method. Secondary data helps to analyze the condition and trend of finance companies. Likewise primary data helps to describes companies' situations. The requirement of the topic doesn't fulfill by only the secondary data hence primary data has taken into consideration. Data collected from different sources are also tasted with sophisticated statistical tools. Data presented and analysis reveals portfolio risk and return of finance companies securities.

This chapter includes the presentation and analysis of the quantitative as well as qualitative data and information to achieve the stated objectives of the study

4.1 Presentation and Analysis of Secondary Data:

This section provides interpretation and analysis of secondary data concern with portfolio analysis required variables are analyzed using financial and statistical tools as follows:

4.1.1 Analysis the Common Stock risk and return of Finance Companies:

Single period rate of return is the change in value of common stock plus cash dividend per share expressed as s percentage of the beginning period of investment value. Table 4.1.1 (b) shows the calculated holding period return (HPR) of different finance companies.

The expected rate of return for assets i is the weighted average rate of return. The formula which is used to calculate average or expected return is given below. Table 4.1.1(c) reveals the calculation of expected rate of returns of sample companies.

Table 4.1.1-a : Closing price & Cash dividend of Finance Companies

Years	2006	2007	2008	2009	2010	2011
BFL (B)						
Closing Price	100	105	115	125	120	200
Cash Dividend		14.5	8.1	13.07	15.07	12.62
GFCL (G)						
Closing Price	170	185	190	195	165	220
Cash Dividend		9.55	12.58	16.72	14.98	18.45
CMBF (K)						
Closing Price	100	110	118	132	153	507
Cash Dividend		15	17.12	18.52	18.55	13.13
NFC (N)						
Closing Price	545	455	360	295	263	460
Cash Dividend		35.75	42.15	69.12	17.37	25.36
SIFC (S)						
Closing Price	120	145	171	200	200	345
Cash Dividend		24.79	21.29	34.88	25.59	34.67
UFL (U)						
Closing Price	95	105	115	125	154	416
Cash Dividend		1.14	4.65	13.4	21.18	34.97
WMBF (W)						
Closing Price	100	111.27	131.73	122.27	125.82	300
Cash Dividend		11.27	31.73	22.27	25.82	32.24

Source: Respective Finance Companies

- Single Period rate of return $\int r_t A = \frac{\text{Ending price - Begnning price } \Gamma \text{ cash dividend}}{\text{Begnning price}}$

$$= \frac{r_{t\Gamma 1}\ Zr_t\ \Gamma D_{t\Gamma 1}}{r_t}$$

Table 4.1.1-b : Calculation of Finance companies HPR

Year	Particulars	Name of Company						
		BFL	GFCL	CMBF	NFC	SIFC	UFL	WMBF
2007	Beginning price	100	170	100	545	120	95	100
	Ending Price	105	185	110	455	145	105	111.27
	Cash dividend	14.5	9.55	15	35.75	24.79	1.14	11.27
	HPR, %	19.50	14.44	25.00	-9.95	41.49	11.73	22.54
2008	Beginning price	105	185	110	455	145	105	111.27
	Ending Price	115	190	118	360	171	115	131.73
	Cash dividend	8.1	12.58	17.12	42.15	21.29	4.65	31.73
	HPR, %	17.24	9.50	22.84	-11.62	32.61	13.95	46.90
2009	Beginning price	115	190	118	360	171	115	131.73
	Ending Price	125	195	132	295	200	125	122.27
	Cash dividend	13.07	16.72	18.52	69.12	34.88	13.4	22.27
	HPR, %	20.06	11.43	27.56	1.14	37.36	20.35	9.72
2010	Beginning price	125	195	132	295	200	125	122.27
	Ending Price	120	165	153	263	200	154	125.82
	Cash dividend	15.07	14.98	18.55	17.37	25.59	21.18	25.82
	HPR, %	8.06	-7.70	29.96	-4.96	12.80	40.14	24.02
2011	Beginning price	120	165	153	263	200	154	125.82
	Ending Price	200	220	570	460	345	416	300
	Cash dividend	12.62	18.45	13.13	25.36	34.67	34.97	32.24
	HPR, %	77.18	44.52	281.13	84.55	89.84	192.84	164.06

- Expected return for i stock $\bar{r}_i$ X $\frac{r_i}{n}$ X $\frac{r_1 \Gamma r_2 \Gamma r_3 \text{ -------- } r_n}{n}$

Where,

n X no. of observation

r_n X HPR for period n

r_i X Summation of annual return for i security

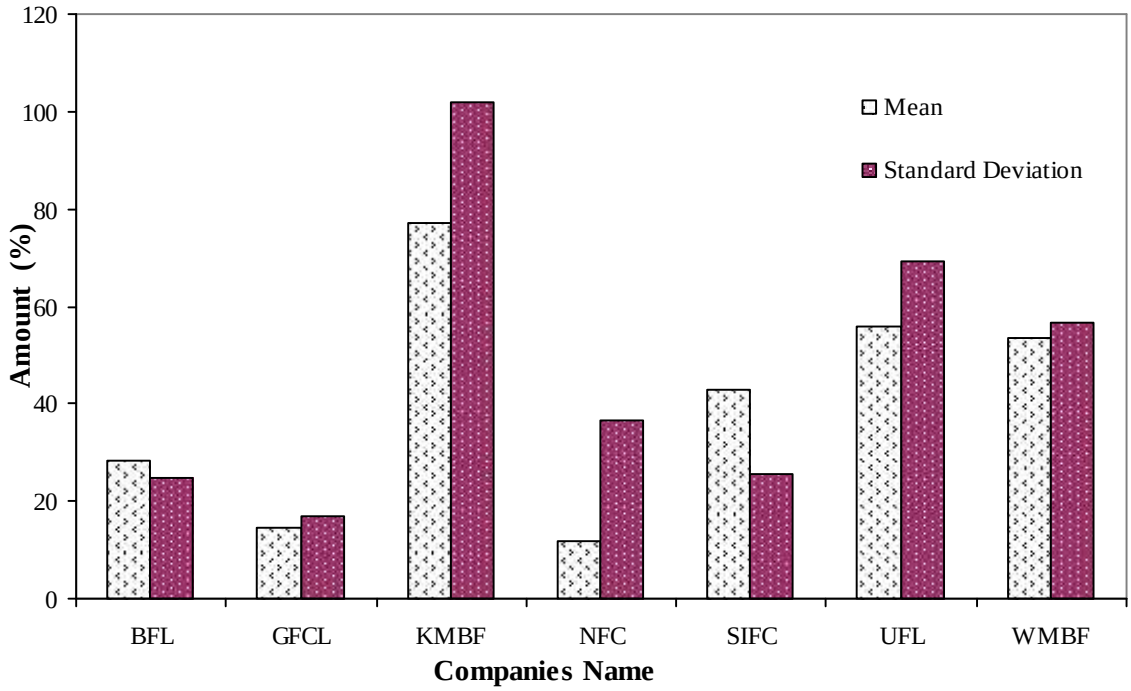
- Variance σ_i^2 X $\frac{\sum (r_i - \bar{r}_i)^2}{n}$

S.D. σ_i X $\sqrt{\frac{\sum (r_i - \bar{r}_i)^2}{n}}$

Table 4.1.1-c : Finance Companies Risk and Return

Year	Yearly return of Companys(r_i)						
	BFL	**GFCL**	**CMBF**	**NFC**	**SIFC**	**UFL**	**WMBF**
2007	19.50	14.44	25.00	-9.95	41.49	11.73	22.54
2008	17.24	9.50	22.84	-11.62	32.61	13.95	46.90
2009	20.06	11.43	27.56	1.14	37.36	20.35	9.72
2010	8.06	-7.70	29.96	-4.96	12.80	40.14	24.02
2011	77.18	44.52	281.13	84.55	89.84	192.84	164.06
Mean , $\bar{r}_i$ (%)	28.41	14.44	77.30	11.83	42.82	55.80	53.45
Variance, σ^2_i	613.41	285.65	10392.71	1341.63	649.54	4795.00	3202.16
Standard Deviation, σ_i (%)	24.77	16.90	101.94	36.63	25.49	69.25	56.59

Figure 4.1.1-a : Risk and Return of Finance Companies



The above table 4.1.1 (b), shows the finance companies annual rate of return, which are fluctuating year by year. The highest returns were observed in year 2011 of all finance companies. The lowest return is not occurred in the same year of all sample finance companies. The stock returns of BFL, GFCL and SIFC have lowest in year 2010. CMBF and NFC have lowest stock returns in year 2008. UFL and WMBF have lowest returns in year 2007 and 2009 respectively.

Table 4.1.1(c), describes the expected return (mean value) and risk (standard deviation, variance) of sample finance companies. Looking at the return, CMBF has highest return (77.30%) and NFC has lowest return (11.83%). Looking at risk again CMBF has highest standard deviation (101. 94%) and variance (10392.71) but GFCL has lowest standard deviation (16.90%) and variance (285.65). If considering both risk and return BFL and SIFC performing well i.e. $\bar{r}_i$ (28. 41) > σ_i (24.77) and $\bar{r}_i$ (42.82) > σ_i (25.49). GFCL, CMBF, UFL and WMBF are average performer. The stock performance of NFC is poor.

From the above table and figure, it was found that B, G, S and W are dominant assets which lie on efficient frontier but stocks K, N and U are dominated assets which lie on inefficient frontier.

4.1.2 Analysis of Market Risk and Return:

NEPSE is one and only stock market of Nepal. Overall market movement is represented by market index i.e. NEPSE index. For calculation of annual market return, market portfolio return, its standard deviation and variance following formula is using.

Annual return on market $r_m = \frac{\text{Endind NEPSE Index - Beginning NEPSE Index}}{\text{Beginning NEPSE Index}}$

Expected return on market $\bar{r}_m = \frac{r_m}{n}$

Variance on market return $\sigma_m^2 = \frac{\sum (r_m - \bar{r}_m)^2}{n}$

Standard deviation $\sigma_m = \sqrt{\frac{\sum (r_m - \bar{r}_m)^2}{n}}$

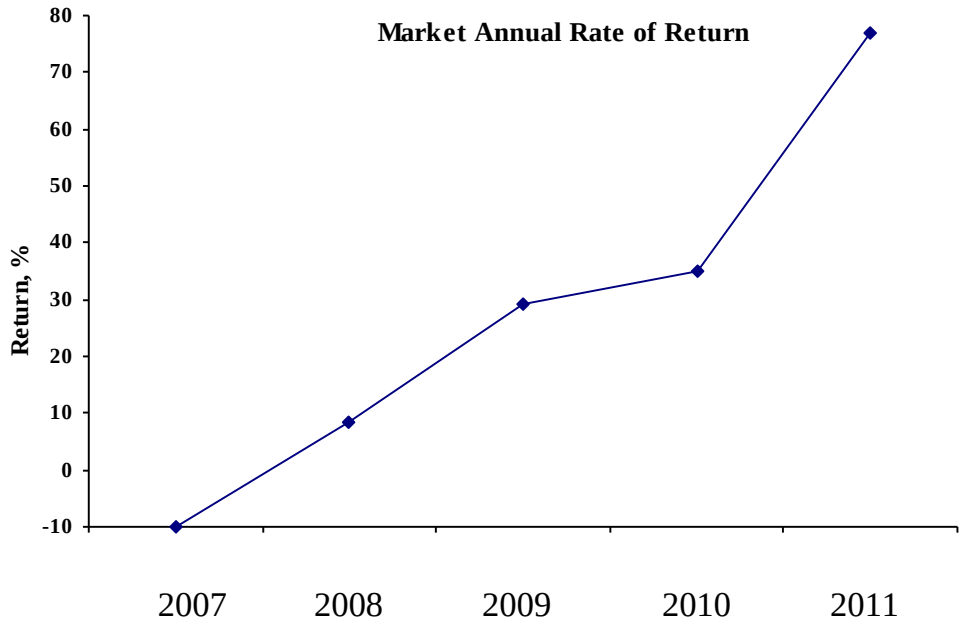
Remarks: No of year (n) is 5 years

Table 4.1.2-a : Calculation of Market Mean, Variance & Standard deviation

Year	NEPSE Index	r_m (%)	$(r_m - \bar{r}_m)$	$(r_m - \bar{r}_m)^2$	Remarks
2006	227.54	-	-	-	
2007	204.86	-9.97	-37.82	1430.40	
2008	222.04	8.39	-19.47	378.96	
2009	286.6	29.08	1.22	1.49	
2010	386.8	34.96	7.11	50.53	
2011	683.9	76.81	48.96	2396.74	
Mean, $\bar{r}_m$		(%)	27.85		
Std Dev, σ_m (%)			29.18		
Variance, σ^2_m			851.63		

Source: NEPSE

Figure 4.1.2-a : Market annual rate of return



From the above table and figure, it is shown that the market annual rate of return is increasing trend. In the year 2007 it is negative after that it is running upward. In this way market return is 27.85 % and market risk is 29.18 % which leads by mean and standard deviation.

4.1.3 Market Sensitivity Analysis:

Market sensitivity of stock i is explained by its beta coefficient. Beta coefficient β_i measures of how much systematic risk a stock has relative to an average risky asset (market) when investor holds large portfolios. It measures the responsiveness of security to movements in the market portfolio.

The beta coefficient of market β_m is always equal to 1.

For calculation market sensitivity of stock we should find out the correlation between Market and Finance companies stock and compare company's stock beta with market beta i.e. 1. For this following formula must consider.

Covariance between i stock and market, $\mathrm{Cov}(r_j r_m) = \dfrac{(r_i - \bar{r}_i)(r_m - \bar{r}_m)}{n}$

Correlation between i stock and market $\rho_{im} = \frac{Cov(r_i, r_m)}{\sigma_i \sigma_m}$

Beta coefficient i stock and market $\beta_{im} = \frac{Cov(r_i, r_m)}{\sigma_m^2} = \frac{\rho_{im} \sigma_i \sigma_m}{\sigma_m^2}$

Calculation is shown in following table.

Table 4.1.3-a : Calculation of co variance, correlation and beta

Year	**2007**	**2008**	**2009**	**2010**	**2011**	**Total**
r_B	19.50	17.24	20.06	8.06	77.18	142.04
r_G	14.44	9.50	11.43	-7.70	44.52	72.19
r_K	25.00	22.84	27.56	29.96	281.13	386.49
r_N	-9.95	-11.62	1.14	-4.96	84.55	59.16
r_S	41.49	32.61	37.36	12.80	89.84	214.09
r_U	11.73	13.95	20.35	40.14	192.84	279.01
r_W	22.54	46.90	9.72	24.02	164.06	267.25
r_M	-9.97	8.39	29.08	34.96	76.81	139.27
$(r_B - \bar{r}_B)(r_M - \bar{r}_m)$	336.89	217.44	-10.21	-144.67	2387.89	2787.35
$(r_G - \bar{r}_G)(r_M - \bar{r}_M)$	-0.13	96.07	-3.68	-157.38	1472.49	1407.37
$(r_K - \bar{r}_K)(r_M - \bar{r}_M)$	1977.93	1060.20	-60.81	-336.48	9978.96	12619.79
$(r_N - \bar{r}_N)(r_M - \bar{r}_M)$	823.99	456.46	-13.07	-119.36	3559.87	4707.89
$(r_S - \bar{r}_S)(r_M - \bar{r}_M)$	50.18	198.65	-6.68	-213.42	2301.77	2330.50
$(r_U - \bar{r}_U)(r_M - \bar{r}_M)$	1666.96	814.68	-43.35	-111.30	6708.81	9035.80
$(r_W - \bar{r}_W)(r_M - \bar{r}_M)$	1169.03	127.43	-53.46	-209.20	5415.08	6448.88

Table 4.1.3-b : Companies beta coefficient, covariance and correlation

S.No.	Finance Company	Cov (r_i r_m)	$\rho_{i,m}$	$\beta_{i,m}$
1	BFL (B)	557.47	0.77	0.65
2	GFCL (G)	281.47	0.57	0.33
3	CMBF (K)	2523.96	0.85	2.96
4	NFC (N)	941.58	0.88	1.11
5	SIFC (S)	466.10	0.63	0.55
6	UFL (U)	1807.16	0.89	2.12
7	WMBF (W)	1289.78	0.78	1.51

From the above table 4.1.3-b it is seen that U stock correlation coefficient(ρ_U) with M (market i.e. +1) is highest (0.89) so it is most market sensitive than others. The lowest correlation with market is 0.57, which is belonging to stock G. Looking at the correlation coefficient it was found that stocks B, K, N, U and W are highly correlated and stock S and G average correlated with market.

If considering beta(β), stock K has highest beta of 2.96 and stock G has lowest beta of 0.33. Stocks B, G and S are defensive assets because their beta value is less than market beta (β_m =1) but stocks K, N, U and W are aggressive assets because of their greater beta value.

4.1.4 Calculation of Diversifiable and Undiversifiable Risk:

Diversifiable risk: Diversifiable risk is the portion of the total risk that can be diversifiable away it is also called unsystematic risk. It is caused by events particulars to the firms so this types risk differ from one company to another. Labor strike, management errors, investors, advertising campaigns, shift in consumer taste and law suits etc are the diversifiable risk. The formula of diversifiable risk is as follows;

$$\text{Unsystematic risk} = \text{Total risk } \sigma_i^2 - \text{Systematic risk}$$

Undiversifiable risk: The portion of total risk of an individual security caused by market factors that simultaneously affects the prices of all securities is called market risk or undiversifiable risk it is also called systematic risk which can not diversified away by construction of optimum portfolio. War, inflation, recession, high interest rates, depression and long term changes in consumption in the economy are the example of undiversifiable risk. The formula is as follows;

Systematic risk = $\beta_{im}\sigma_m^2$

The percentage of total risk that is systematic can be measured by the coefficient of determination ρ_{im}^2. The formula is;

$$\text{Undiversifiable Proportion} = \frac{\text{Systematic risk}}{\text{Total risk}} = \frac{\beta_{im}^2\sigma_m^2}{\sigma_i^2} = \rho_{im}^2$$

Table 4.1.4-a : Calculation of Systematic Risk and Unsystematic Risk

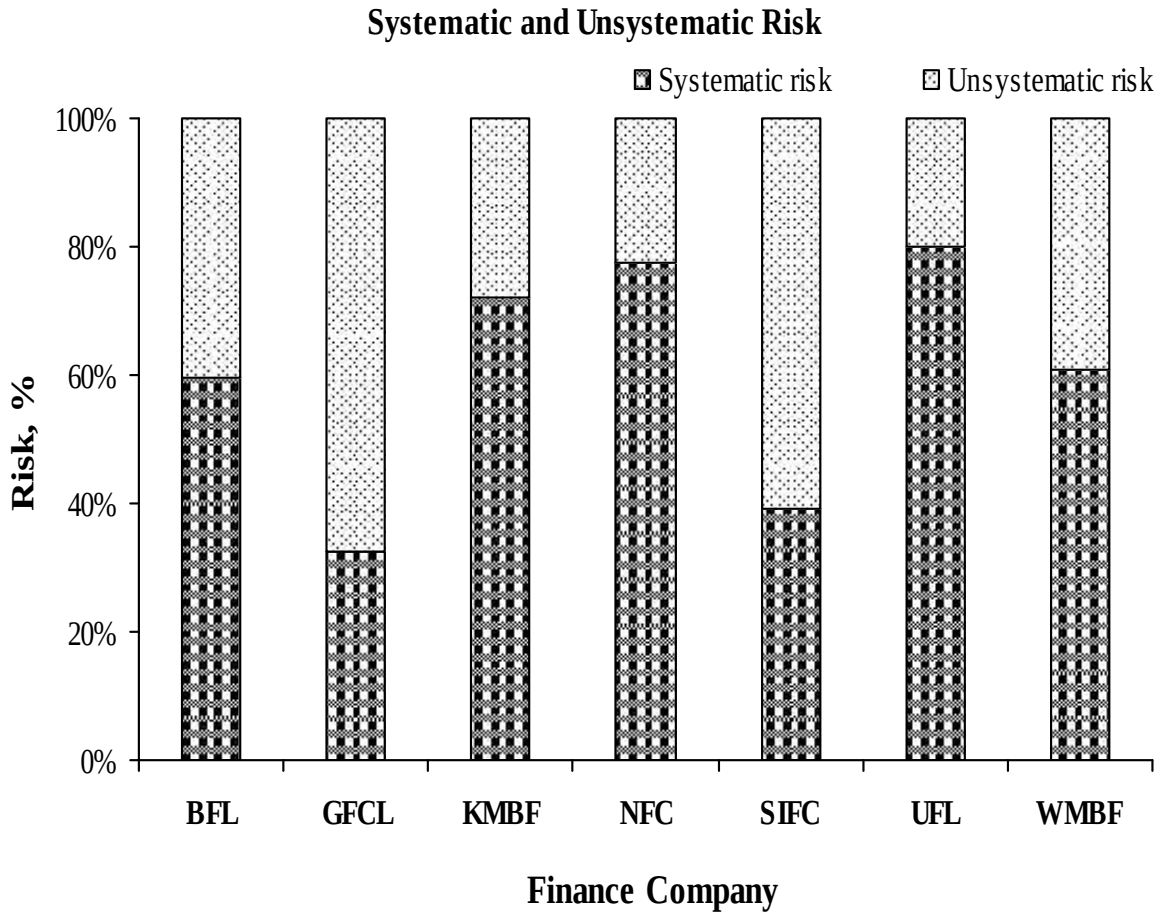
Finance Companies	Total Risk (σ_i^2)	Systematic risk	Unsystematic risk	Coefficient of determinants
BFL	613.41	364.92	248.49	0.59
GFCL	285.65	93.03	192.62	0.33
CMBF	10392.71	7480.24	2912.47	0.72
NFC	1341.63	1041.03	300.60	0.78
SIFC	649.54	255.10	394.44	0.39
UFL	4795.00	3834.81	960.19	0.80
WMBF	3202.16	1953.35	1248.81	0.61

From the above table 4.1.4 it is observed that stock K has highest total risk (10392.71%) and stock G has lowest total risk (285.65%). Coefficient of determination shows the portion of systematic risk (undiversifisble risk) on total risk. Here, stock U posses' highest systematic risk (80%) on total risk and remaining (20%) is unsystematic (diversifiable) risk. In case of stock U only 20% risk can be diversified through construction of optimum portfolio. Similarly stock G has lowest

coefficient of determination (33%). Construction of optimum portfolio can diversified remaining 67% risk on total risk for stock G.

Portion of systematic and unsystematic risk on total risk is clearly shown on below figure.

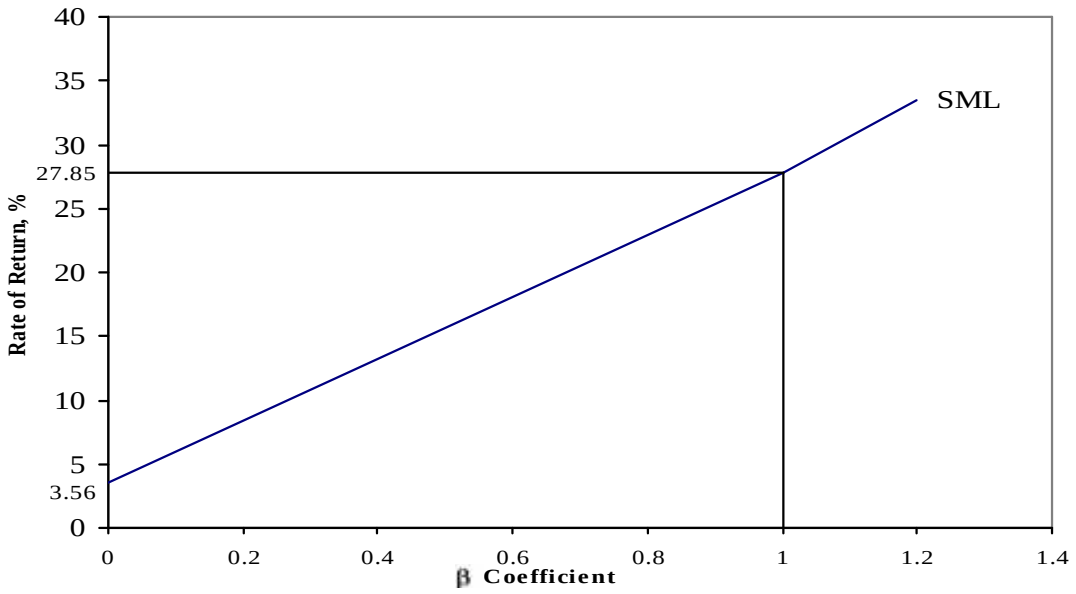
Figure 4.1.4-a : Part of systematic and unsystematic risk on total risk



4.1.5 Portfolio Analysis:

-Security Market Line (SML): SML describes the linear relationship between the require rate of return on individual assets their covariance with the market portfolio i.e. represented by beta.

Figure 4.1.5-a : Security market line



The equation of the SML is;

$$K_i = r_f + (r_m - r_f)\beta_i$$

$$= 3.56 + (27.85 - 3.56)\beta_i$$

$$= 3.56 + 24.29\beta_i \quad \ldots\ldots\ldots\ldots\ldots (1)$$

Remarks: Risk free rate (r_f = 3.56%) is taken from NRB issued 90 days T- bill rate which is published on date 2065-5-23.

Table 4.1.5-a : Calculation of Require Rate of Return

Companies Name	$\bar{r}_i$, %	$\beta_{i,m}$	K_i, %	Evaluation	
BFL (B)	28.41	0.65	19.46	$K_i < \bar{r}_i$	Underpriced
GFCL (G)	14.44	0.33	11.59	$K_i < \bar{r}_i$	Underpriced
CMBF (K)	77.30	2.96	75.55	$K_i < \bar{r}_i$	Underpriced
NFC (N)	11.83	1.11	30.42	$K_i > \bar{r}_i$	Overpriced
SIFC (S)	42.82	0.55	16.85	$K_i < \bar{r}_i$	Underpriced
UFL (U)	55.80	2.12	55.10	$K_i < \bar{r}_i$	Underpriced
WMBF (W)	53.45	1.51	40.35	$K_i < \bar{r}_i$	Underpriced

From the above table 4.1.5-a it is seen that stock K has highest require rate of return as 75.55% with highest beta 2.96. Stock G posses lowest require rate of return11.59% and its beta is also lowest of 0.33. From the above scenario we can say that highest beta means highest require rate of return and vice versa. So require rate of return is depends on its beta coefficient.

From table it seems that only N stock is overpriced because its require rate of return is higher than expected rate of return. Remaining all are underpriced with lower require rate of return. So, for the investor of N stock may take short strategy (selling decision) and investors of other assets have long position strategy (purchase decision) is beneficial.

-Portfolio Risk and Return: Previous analysis of risk and return are based on the investment in single security i.e. Held on isolation which shows the many Nepalese private investor placed their entire wealth in single assets. If they construct portfolio or group of investment in such kind of assets which are negatively correlated, they can reduce unsystematic risk dramatically without losing their return.

The analysis is based on two assets portfolio, risk free assets (investment in government securities) and risky assets (market portfolio). The portfolio risk and return can be calculated following formula.

- Portfolio expected return , $\overline{r_p}$ X r_f w_{rf} Γ r_m w_m

- Portfolio risk , σ_p = w_m ∃ $_m$

Where, w_{rf} = Investment weight on risk free assets (government securities)

W_m = Investment of risky assets (market portfolio)

Table 4.1.5-b : Calculation of Portfolio Risk and Return

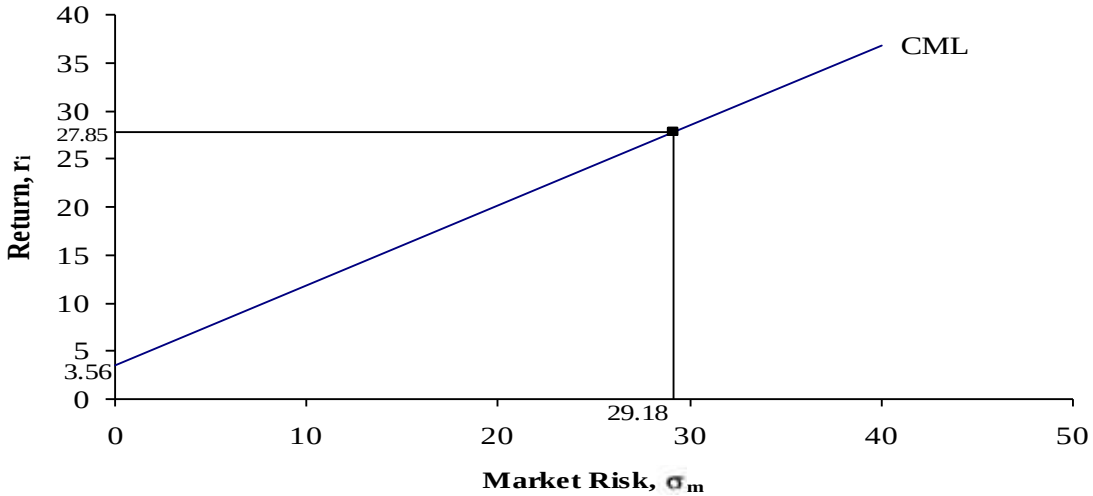
Finance Comp.	r_f (%)	$\bar{r}_m$,%	W_{rf}	W_m	$\bar{r}_p$,%	σ_p (%)
BFL	3.56	27.85	0.501	0.499	15.67	14.55
GFCL	3.56	27.85	0.497	0.503	15.77	14.67
CMBF	3.56	27.85	0.038	0.962	26.93	28.07
NFC	3.56	27.85	0.095	0.905	25.53	26.40
SIFC	3.56	27.85	0.571	0.429	13.97	12.51
UFL	3.56	27.85	0.989	0.011	3.83	0.32
WMBF	3.56	27.85	0	1	27.85	29.18

Source: "Annual report, 2011" of respective finance company

From the above table 4.1.5-b it is observed that UFL has invested highest amount of total investment on risk free securities 98.9% and only 1.1% invest on risky assets but WMBF invest its whole amount on market portfolio. So UFL has lowest portfolio return (3.83%) and risk (0.32%) likewise WMBF has highest portfolio return (27.85%) and risk (29.18%).

Capital market line CML also describes the relationship between portfolio risk and return. This is shown in below figure:

Figure 4.1.5-b : Capital market line



The CML equation is:

$$\bar{r}_p \quad X \quad r_f \Gamma \frac{r_m - r_f}{\exists_m} * \exists_p \ \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$= \quad 3.56 \Gamma \frac{27.85 - 3.56}{29.18} * \exists_p$$

$$= \quad 3.56 + 0.8324 * \sigma_p \ \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

From the above result there is less risk premium (0.8324%) per unit.

4.1.6 Portfolio Performance Evaluation through Various Method:

The portfolio performance of the organization can be evaluated by following methods;

Sharpe's Portfolio Performance Measure: It was derived by William Sharpe. Sharpe's measured divides average portfolio excess return over the same period by the standard deviation of return over that period. The formula is;

$$S_i \ X \ \frac{\bar{r}_i - R_f}{\exists_i}$$

Where,

s_i X Sharpe`s index of portfolio performance

$\bar{r}_i$ X Average return on portfolio i during a specific time period

R_f X Average risk free rate

$\pm_i$ X Standard deviation of portfolio i

Table 4.1.6-a : Portfolio performance evaluation by Sharpe measure

Finance comp.	r_f (%)	$\bar{r}_i$ (%)	σ_i (%)	Sp.	Ranking
BFL	3.56	28.41	24.77	1.00	2nd
GFCL	3.56	14.44	16.90	0.64	6th
CMBF	3.56	77.30	101.94	0.72	5th
NFC	3.56	11.83	36.63	0.23	7th
SIFC	3.56	42.82	25.49	1.54	1st
UFL	3.56	55.80	69.25	0.75	4th
WMBF	3.56	53.45	56.59	0.88	3rd

From the above table 4.1.6-a it is found that Sp of stock S is highest (1.54) and N stock has lowest one with (0.23). So we can say that among all sample finance

companies SIFC has best portfolio performance and NFC has poor portfolio performance. The second rank is stock B with (Sp = 1), W is third position (Sp = 0.88), stocks U, K and G is 4th, 5th and 6th position respectively.

Treynor's Portfolio Performance Measure: Treynor's measure gives excess return per unit of risk over systematic (beta) not a total risk (σ_i) like Sharpe measure. So its result is slightly different than Sharpe measure.

$$T_i \quad X \quad \frac{\bar{r}_i - R_f}{\beta_i}$$

Table 4.1.6-b : Portfolio performance evaluation by Treynor's measure

Finance comp.	r_f	$\bar{r}_i$	$\beta_{i,m}$	T_i	Ranking
BFL	3.56	28.41	0.65	37.96	2nd
GFCL	3.56	14.44	0.33	32.91	4th
CMBF	3.56	77.30	2.96	24.88	5th
NFC	3.56	11.83	1.11	7.48	7th
SIFC	3.56	42.82	0.55	71.73	1st
UFL	3.56	55.80	2.12	24.62	6th
WMBF	3.56	53.45	1.51	32.94	3rd

Table 4.1.6-b shows Treynor's portfolio performance evaluation which is based on beta coefficient of the companies. From above table S stock performance is best performance with (T_i = 71.73) and Stock N performance is worse with (T_i = 7.48). According to Treynor's measure B, W, G, K and U is 2nd, 3rd, 4th, 5th and 6th position.

Jensen's Portfolio Performance Measure: Michael Jensen developed this formula. This is based on CAPM. The version of CAPM which is used to compute portfolios expected rate of return is given by;

$E(r_i) = R_f + \beta_i (r_m - R_f)$

Where,

$E(r_i)$ = The expected return on portfolio i
R_f = One period risk free rate of return
β_i = Beta for portfolio i
r_m = Expected return on market portfolio.

Table 4.1.6-c : Portfolio performance evaluation by Jensen's measure

Finance comp.	r_f (%)	$\bar{r}_m$	$\beta_{i,m}$	$\bar{r}_i$	α_p	$\frac{\alpha}{\beta}$	Ranking
BFL	3.56	27.85	0.65	28.41	8.95	13.76923	2nd
GFCL	3.56	27.85	0.33	14.44	2.85	8.636364	4th
CMBF	3.56	27.85	2.96	77.30	1.74	0.587838	5th
NFC	3.56	27.85	1.11	11.83	-18.59	-16.7477	7th
SIFC	3.56	27.85	0.55	42.82	25.96	47.2	1st
UFL	3.56	27.85	2.12	55.80	0.69	0.325472	6th
WMBF	3.56	27.85	1.51	53.45	13.10	8.675497	3rd

According to table 4.1.6-c stock S has highest performance and stock N has poorest performance. Likewise B, W, G, K and U are 2^{nd} 3^{rd} 4^{th} 5^{th} and 6^{th} position respectively.

All portfolio performance evaluation method is different but the purpose is same. Due to the different formula the result is little bit different.

4.2 Presentation and Analysis of Primary data:

This section interprets and analyze of primary data which is directly collected from the study areas. For fulfill the requirements of the topic only the secondary data is not sufficient so to cover the objectives of the study, primary data has been conducted. For

primary data collection, interview and questionnaire methods are applied. Appendix -1 reveals important information as to analyze the portfolio performance of the listed finance companies. For this multiple choice some questions and one open end question were prepared related to portfolio analysis and asked to respondents. The 100% of questionnaire are collected during the research period. For get information 15 higher level personnel of finance companies are taken as a sample. The following analysis is based on their opinions.

4.2.1 Application of Portfolio Management:

Regarding the systematic application of portfolio management, the respondents were asked that whether the portfolio management of finance companies in Nepal is systematically applied. 27% of the respondents said yes, 60% said no and 13% said that don't know. From the table 4.2.1 it is clear that portfolio management is not so systematically applied in Nepalese finance companies. The data is showing bellow,

Table 4.2.1-a : Application of portfolio management

S.N.	Research Variables	No. of respondents	% of respondents
a.	Yes	4	27
b.	No	9	60
c.	I don't Know	2	13
	Total	15	100

Source: Field Survey 2011

4.2.2 Diversification Technique Analysis:

Respondents were asked which diversification technique you used for reducing the portfolio risk in your organization. Most of them (67%) are called diversification across industry and others are said simple diversification technique. Based on their

answer we can say that Markowitz diversification, simple diversification across quality rating and superfluous diversification are not in practicing in Nepal. Table no. 4.2.2 shows the collected data.

Table 4.2.2-a : Diversification technique analysis

S.N.	Research Variable	No. of respondents	% of respondents
a.	Simple diversification	5	33
b.	Superfluous diversification	0	0
c.	Diversification across industry	10	67
d.	Simple diversification across quality raring	0	0
e.	Markwitz diversification	0	0
	Total	15	100

Source: Field Survey 2011

4.2.3 Basis of Portfolio Selection Practice:

Regarding the question whether the process of determining the division of your portfolio among the available assets. The 53% are said experience, 27% said scientific way and remaining 20% said competitors move. From their view we can say that most of the investor invests their fund on the basis of past experience.

Table 4.2.3-a : Basis of portfolio selection practice

S.N.	Research Variable	No. of respondents	% of respondents
a.	Scientific way	4	27
b.	Experience	8	53

c.	Competitor move	3	20
	Total	15	100

Source: Field Survey 2011

4.2.4 Major Objectives of Portfolio Management:

Regarding the major objectives of the portfolio management, the respondents were ranked the minimization of risk is in 1st rank then maximization of return, regular return and then after easy marketability. From their view it may conclude that the main objective of portfolio management is reducing risk.

Table 4.2.4-a : Major objectives of portfolio management

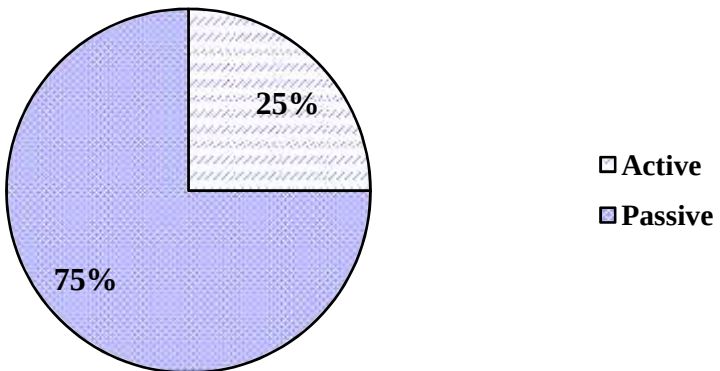
S.N.	Research variable	ranks
a.	Maximizing return	2nd
b.	Minimize risk	1st
c.	Regular return	3rd
d.	Easy marketability	4th

Source: Field Survey 2011

4.2.5 Portfolio Strategy Study:

Investors were asked that which portfolio strategy they should follow to achieve better result in present scenario. About 75% respondents were replied that passive strategy and 25% said active strategy. Following figure shows their view.

Figure 4.2.5-a : Portfolio strategy study



Field Survey 2011

4.2.6 Time Horizon for Portfolio:

Regarding the time horizon of portfolio, the investors (respondents) were asked that which time horizon is most plausible for their portfolio. The 20% of respondents were said 1year (short term), 47% said 2-5 years and 20% said 5-10 years that's way 13% said above 10 years (long term). From the research we can say that mainly Nepalese finance companies put their portfolio time horizon 2-5 years (medium terms).

Table 4.2.6-a : Time horizon for portfolio

S.N.	Research variable	No of respondents	% of respondents
a.	1 year	3	20
b.	2-5 years	7	47
c.	5-10 years	3	20
d.	Above 10 years	2	13
Total		15	100

Source: Field Survey 2011

4.2.7 Stock Bond mix Analysis:

At the question of which stock bond mix is appropriate for their portfolio. Among the all 40% of respondents in favour of (75%-25%), 20% are favour of (50%-50%) and (90%-10%), 13% in (25%-75%) and 7% in (10%-90%) stock bond mix which is clearly shown in table 4.2.7

Table 4.2.7-a : Stock bond mix analysis

S.N.	Research variable	No. of respondents (Corporate investors)	% of respondents
a.	10-90	1	7
b.	25-75	2	13
c.	50-50	3	20
d.	75-25	6	40
e.	90-10	3	20
	Total	15	100

Source: Field Survey 2011

4.2.8 Portfolio Revision method:

In the question of revision of portfolio method that which method they use to revise their portfolio. Most of them said that they revise their portfolio on the basis of past experience. The following table has shown their view clearly.

Table 4.2.8-a : Portfolio revision method

S.N.	Research variable	No. of respondents (Corporate investors)	% of respondents
a.	Using scientific method	2	13
b.	Using past experience method	12	80
c.	Randomly	1	7
	Total	15	100

Source: Field Survey 2011

4.2.9 Portfolio Performance Evaluation:

In the question of portfolio performance evaluation is necessary if yes which method they are employing for evaluation. Most of the respondents said that portfolio performance evaluation is necessary. Only few of them are using the systematic evaluation (Sharpe's measure and Treynor's measure) and others are relying on conventional method.

4.2.10 Activities for Betterment the Present Conditions of Nepalese Finance Companies:

The investors (respondents) were asked that what is the present condition of Nepalese finance companies and what steps should be taken for the betterment of existing situation. Moreover the same, they notify the conditions and some prominent suggestions are as follows:

Conditions:

- Nepalese capital market still is in growing stage. There is lack of skilled and professional manpower.
- The capital market is limited in small boundaries.
- There is lack of resources and sophisticated technology.
- Poor information and communication system.
- Transaction system is difficult and time consuming.
- Investors have less knowledge of investment education and unknown the value of financial assets.

Suggestions:

- The role of market players in the stock market should made effective in promoting capital market in allover the country.
- Special training and development program should be provided to make skilled and professional manpower.
- Sophisticated technology should be adopted to save time and cost.
- Information and communication system should be making prompt.

- The basic knowledge and benefits of portfolio management should be provided to the investors.

- For the long term economic development, financial assets investment is required rather than real assets investment so the general awareness program about investment should be conducted to all types of investors by government and related organization.

4.3 Testing of Hypothesis:

H_o: μ = 27.85% i.e. Average return of common stock of listed finance companies is equal to market return.

H_1: $\mu \neq$ 27.85% i.e. Average return of common stock of listed finance companies is not equal to market return.

Under H_0, t – test statistics is:

$$t = \frac{\bar{x} - \mu}{s / \sqrt{n}} \quad \text{----------(i)}$$

Where,

$\bar{x}$ = Average return of the common stock of 7 listed finance companies i.e. 40.58%

(It is assumed that these listed seven companies represent the whole finance companies)

μ = Average market portfolio return = 27.85%

s = Sample standard deviation = $\sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$ = 23.83%

n = No. of sample observations = 7

Hence,

$$t = \frac{40.58 - 27.85}{23.83/\sqrt{7}} = 1.413$$

The tabulated value of 't' for 6(7-1) degree of freedom at level of significant 5% and 1% are 2.447 and 3.707 respectively.

Decision

Since the calculated value of t at the level of significant 5% and 1% are greater than calculated value of t, the null hypothesis H_o is accepted. In other words, we conclude that the average return of listed finance companies may be equal to market return.

4.4 Major Findings of the Study:

In chapter four it is trying to find out the risk and return of listed finance companies on individual security as well as portfolio securities through financial and statistical tools. From the above analysis the following major findings are observed.

- Investment on security is easy task but to earn higher and stable return from the security is challenging. For enjoy more return by bearing lower risk the deep knowledge of investment is required. Without proper analysis of individual security, portfolio security and overall market, it is almost impossible to beat the stock market. General knowledge about political, economic and technological trend is more advantageous.

- Stocks have greater volatility risk than other investments. Stocks take a random and unpredictable path. Obviously, stock market in undoubtedly risky in the short term.

- The higher risk of common stock may have greater possible return i.e. finance companies stock providing higher return for risk.

- The holding period return of finance companies fluctuating year by year. In year 2011 all sample companies earned higher returns.

- CMBF expected rate of return (77.30%) and risk (101.94%) is higher in comparison to other companies. NFC has lowest expected return (11.83%) and GFCL has lowest risk (16.90%).

- Expected market return (27.85%) is lower in comparison to market risk (29.18%). So market is risky place to investment.

- UFL stock is highly correlated (0.89) with market in comparison to other companies.

- GFCL is more defensive assets due to lowest beta (β_G = 0.33<1) but CMBF stock is most aggressive asset due to highest beta (β_K = 2.96 > 1).

- Coefficient of determination of UFL (80%) is highest and GFCL has lowest (33%). UFL and GFCL can erase (20%) and (67%) respectively risk through well diversification.

- After using CAPM six finance companies stocks are under priced and NFC stock is over priced. NFC stock should sell and the investor may buy other stocks.

- WMBF portfolio return (27.85%) and risk (29.18%) is equal to market return and risk because of 100% investment on risky assets. UFL stock has lowest return (3.83%) and risk (.32%).

- After portfolio performance evaluation SIFC (Sharpe measure, Treynor measure and Jensen measure) SIFC has best performance but NFC held lowest position.

- After primary research it is observed that portfolio management is not systematically applied in Nepalese finance companies.

- It is found that to reduce portfolio risk most of investors use diversification across industries technique.

- Most of Nepalese investors select their portfolio on the basis of past experience.

- It is found that the major objective of portfolio management is reducing risk.

- In Nepalese context, it is found that passive portfolio strategy is more suitable than active strategy to achieve better result.

- Generally Nepalese finance companies prefer their portfolio time horizon 2- 5 years i.e. medium terms.

- It is found that 75%-25% stock bond mix is selected by majority corporate investors.

- Nepalese investors revise their portfolio time to time by their past experience.

- It is observed that corporate investors think portfolio evaluation is necessary but lack of proper information and specific knowledge they depends on conventional method.

- In Nepal, the capital market is not in advance stage. There exist many problems like lack of skilled manpower, new technology and good information and communication system so the stock transaction is time consuming. Thus, the investors are less interested to invest their capital in various sectors.

- It is found that for effective portfolio performance of finance companies, the stock market should be developed. Computer base technology and information system should be adopted. Training and development program should be organized. General awareness program about investment should be conducted to all types of investors.

- Test of hypothesis helps to find out the validity of assumption a representative sample which is selected from the population. To conclude this research and test of hypothesis, the t- test method is applied which is based on the test of significance of different average returns (i.e. finance companies returns and market returns) has been executed to test whether overall returns of common stocks of finance companies is equal to market or not. Hence, over the study period, it was found that the null hypothesis is accepted i.e. the average returns of the listed finance companies is equal to market portfolio returns.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

This research attempts to analyze the portfolio performance of listed finance companies in Nepal. This chapter presents conclusion derived from the analysis of the study. Summary has been presented in first section. The second section has been designed for the conclusions draw from the study and the last section recommendation tries to erase the weakness and drawbacks of the present condition portfolio management in financial institutions in Nepal.

5.1 Summary:

Effective portfolio performance is challenging task for the financial institutions due to various factor. To exist today's competitive environment the institutions need to manage their portfolio in proper way. Portfolio management helps to reduce risk and increase the returns. Financial institutions are the backbone of the nation for the economic development. Finance companies collected and mobilized their investing funds in different sectors. They explore and innovative new business opportunities like venture, financing and managing investment plans. Finance companies invest their fund on the basis of portfolio management for various reasons like minimize risk, maximize returns, regular returns, increase market share and market growth, and tax saving and for the safety of the investors. But the central focus is to given the finance to trade off between risk and return. In Nepal like other sectors, capital market facing uncertainty. It is passing through transition phase with various inconsistence and hindrance.

The main objective of the present study is to examine and study the existing situation of portfolio management of the finance companies. As per the requirement of the study both secondary as well as primary types of study has done with analytical and descriptive way. Secondary data obtained from annual report of respective finance companies, NEPSE, SEBON, economic survey, monthly and quarterly bulletin of the

NRB and NEPSE. Primary data collected through questionnaire and interview to the higher level of personnel of the finance companies. For secondary data analysis 'A' Group seven listed finance companies are taken as a sample and primary analysis is based on the view of 15 higher level personnel of the finance companies.

The sample companies are taken into consideration to analyze the risk and return of individual stock and portfolio with the helps of secondary data. For this financial and statistical tools are used. Information are tabulated and presented as per the requirement of the study. From the analysis it is found that those institutions who manage their portfolio well and their share price less volatile character these companies' performance is better. Inconsistence nature share price indicates higher risk and poor performance. Diversification of portfolio helps to reduce a part of risk is called unsystematic risk.

5.2 Conclusion:

This study aims to know the risk and return of individual investment as well as portfolio investment of listed finance companies in Nepal. From the study we draw the following conclusions.

- After analysis we conclude that in Nepalese market the risk of security is higher than return of security i.e. the share price is volatile character.
- Finance companies have enough unsystematic risk that means there is no effectively portfolio is considering in listed finance companies.
- The companies who pay higher dividend rate and relatively stable share price their performance showing good either more unsystematic risk.
- For the portfolio securities selection in Nepal this study concluded that technical analysis does not work effectively but fundamental analysis is considering which does not match with international market because there is technical analysis is effectively applied.

- Due to the transition phase Nepalese capital market facing unstable and uncertain condition an also lack of expertise and sophisticated technology it is limited on small boundaries and performance is not so good.

5.3 Recommendation:

Management of portfolio and proper diversification is complex task in practically. But by improving the present scenario, portfolio management and well diversification is possible and can reduce some what risk of organizations. From this study we found the major conditions of the finance companies in Nepal. On the basis of such findings the following recommendations are proposed in order to solve the problems of finance companies (corporate investors) related with portfolio management.

- Every organization and financial institutions are established to mobilize resources, create employment opportunities with overall economic development of the nation. The main objective of these institutions is to make optimum return at the lower level of risk. For this organizations structural reform is necessary with external environment (Political, social and economic environment) analysis.

- Capital market should be systematically developed to increase financial investment alternatives through general awareness towards financial assets investment rather than real assets investment.

- NEPSE index plays major for creating investment prosperity. So, for removing stock market difficulties transaction facilities, investor's interest and investment facilities should be manage in effective way by formulating investors' protection act.

- With out analysis of the individual securities, portfolio securities, industry and overall market trend, it is almost impossible to beat stock market. So, for this information about trails and tribulation of stock market should be gathered and analyzed.

- In Nepal, there is limited area of financial investment so the financial investment area should make wide. For this, boundary of money market securities (T- bill, certificated deposit, commercial paper and repurchase agreement), capital market securities (various types of bonds, debenture equity and preference share) and derivative securities (option, warrants and convertible) should be expanded and create sufficient investment opportunities. With out developing investment opportunities, it is difficult to make optimum portfolio by finance companies.

- It is found that the process of determining the division of portfolio by finance companies (corporate investors) on the basis of past experience without analyzing future uncertainties. So the corporation should use scientific analysis with experience to determine division of portfolio.

- Due to immature stock market and uncertainties the corporate investors prefers passive portfolio strategy rather than active strategy. But this is the result of lack of effective rules and regulations, proper information and skilled and knowledgeable manpower. So, theoretical as well as practical knowledge and skill development program should be conducted for corporate personnel.

- For improve portfolio performance computer based technology, prompt information and communication system should be adopted. The necessary information about the financial market should be disseminating time to time.

- Signaling factor plays major role for making rational investment decision. So investor should analyze impact of signaling factors before making investment decision.

- The study of stock market behavior should be done in periodic manner so that proper results can be drawn for betterment of the stock market.

- NEPSE should lunch monthly and quarterly news letter for provide information about the capital market activities. It should call regular meeting to all listed companies for discuses about mutual benefit and further steps.

- Periodic research and analysis of stock exchange should e carried out for betterment the investment decisions.

- Reliability of financial information has significant role in investment decision. In order to ensure the reliability of information regarding performance of listed companies, international standard securities analysis and rating agency is needed in Nepalese securities market. This will avoid investors' confusions and they will feel protected.

- The SEBON an apex body for monitoring and regulating the Nepalese stock market regulatory regimes up to international standards.

- In Nepalese capital market, there is regarded as "White collar crime" inside the trading process. It has been appeared due to lack of appropriate legal provisions, ethical guidelines, adequate regulation and enforcement. For prevent such crime the regulation are strictly implemented.

- Stock market (NEPSE) appointed broker for making easy the stock exchange process. But some brokers of NEPSE are involved in scandalous activities. The investor should aware so that brokers can cheat them easily. The legal provisions related to broker should be clearly define, provision of civil and criminal fees and penalties are made against the fraud and scandals activities. NEPSE should supervise regularly its overall activities.

- Overall study shows that portfolio is not properly diversifying by Nepalese finance companies due to lack of adequate knowledge and information. But the investor should diversify their fund to reduce risk with the help of portfolio analysis by inspiring the fact "Don't put your all egg in one basket" i.e. if basket falls down all egg may destroy.

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Appendix-1

Questionnaire:

INSTRUCTION:

Please tick (Ĕ) in appropriate place and put your view in following questions.

Name: ……

Address: …….

Position: …….

Experience: …….Years …….

Institution: ……..

Year of establishment: ……

1. Do you think portfolio management of finance companies in nepal is systematically applied?

   A) yes b) no c) i don't know

For your organization, which diversification technique generally do you adopt to reduce risk?

A) simple diversification

B) superfluous diversification

C) diversification across industries

D) simple diversification across quality rating

E) markowitz diversification

In which basis do you determine the division of your portfolio among the available assets?

A) Scientific way b) experience c) competitor's move

Which objectives mainly fulfilled by portfolio management? Ranked according to their importance?

A) Maximize return

B) Minimize risk

C) Regular return

D) easy marketability

Which portfolio strategy do you follow to achieve better result?

a) active strategy b) passive strategy

Which time horizon is plausible for your portfolio?

a) 1 year b) 2-5 years c) 5- 10 years d) more than 10 years

Which long term stock- bond mix is appropriate for your portfolio?

a) 10 – 90 b) 25 – 75 c) 50 – 50 d) 75 Z 25 e) 90 Z 10

Do you revise your portfolio? If yes, how do you revise your portfolio?

a) using scientific method b) using experience c) randomly

Do you think portfolio performance evaluation is necessary? If yes which method are you employing?

a) sharpe's measure b) treynor's measure

c) jensen's measure d) any other (…….)

In your opinion, what is the present condition of nepalese finance companies and what are the major steps should adopt for the betterment of the existing situation?

Appendix - 2

List of "A" Group Finance companies in NEPSE, 2007

1	Alpic Everest Finance Company Limited
2	Annapurna Finance Company Limited
3	Api Finance Limtied
4	Arun Finance Limited
5	Bhajuratna Fin.And Sav. Co. Ltd.
6	Birgunj Finance Ltd
7	Butwal Finance Ltd
8	Capital Mer. Bank And Fin
9	Central Finance Co. Ltd.
10	Citizen Investment Trust
11	Civil Merchant bittya sanstha
12	CMB Finance Limited
13	Crystal Finance Limited
14	Everest Finance Ltd,
15	Fewa Finance Co. Ltd.
16	General Finance Ltd.

17 Goodwill Finance Co. Ltd.

18 Gorkha Finance Ltd.

19 Guheyshwori Mer. Bank. Fin

20 Hama Merchant & Finance Ltd.

21 Himalayan Finance Limited (Bittiya Sanstha)

22 ICFC Finance Limited

23 IME Financial Institution

24 Imperial Financial Inst. Ltd.

25 International Leasing And Fin. Co.

26 Janaki Finance Ltd.

27 Kaski Finance Limited

28 Kathmandu Finance Limited.

29 Kuber Merchant Finance Limited

30 Lalitpur Finance Ltd.

31 Lord Buddha Finance Limited

32 Lumbini Finance Ltd.

33 Maha Laxmi Finance Ltd.

34 Multipurpose Finance Co. Ltd.

35 Narayani National Finance Co. Ltd.

36 Nava Durga Finance Co.Ltd.

37 Nepal Aawas Finance Limited

38 Nepal Express Finance Limited

39 Nepal Finance Ltd.

40 Nepal Housing And Merchant Fin.

41 Nepal Share Markets Ltd.

42 Nepal Shree Lanka Merchant Bank

43 NIDC Capital Markets Ltd.

44 Om Finance Ltd.

45 Paschimanchal Finance Co. Ltd

46 Patan Finance Ltd.

47 Peoples Finance Limited.

48 Pokhara Finance Ltd.

49 Prabhu Finance Company Limited

50 Premier Finance Co. Ltd

51 Progressive Finance Limited

52 Prudential Finance Company Limited

53 Reliable Finance Limited

54 Royal Mer. Bank. And Fin

55 Sagarmatha Merchant Banking And Finance Limited

56 Samjhana Finance Co. Ltd.

57	Seti Bittiya Sanstha Limited
58	Shikhar Finance Limited
59	Shree Investment Finance Co. Ltd
60	Shrijana Finance(Bittiya Sa
61	Siddhartha Finance Limited
62	Standard Finance Ltd.
63	Subha Laxmi Finance Co. Ltd.
64	Suryadarshan Finance Company Limited
65	Swastik Merchant Finance Co. Ltd.
66	Union Finance Ltd.
67	Unique Finance Limited
68	United Finance Ltd
69	Universal Finance Ltd.
70	Valley Finance Limtied
71	World Merchant Bank Ltd
72	Yeti Finance Limited
73	Zenith Finance Limited

Appendix -3

Amount of investment by Finance Companies in year 2011 in risk free (r_f) and risky assets (r_m)

Name of company	Total investment amount	Amount of (r_f)	Amount of (r_m)	Weight for r_f	Weight for market
BFL	125325000	62825000	62500000	0.501	0.499
GFCL	104889933	52180000	52709933	0.497	0.503
CMBF	197177000	7500000	189677000	0.038	0.962
NFC	178636167	17050000	161586167	0.095	0.905
SIFC	35000000	20000000	15000000	0.571	0.429
UFL	32860000	32500000	360000	0.989	0.011
WMBF	59327000	0	59327000	0.000	1.000

Appendix – 4

Average Return of Listed Finance Companies

Finance Companies	$\bar{r}_i$
BFL	28.41
GFCL	14.44
CMBF	77.30
NFC	11.83
SIFC	42.82
UFL	55.80
WMBF	53.45
Mean	40.58

$\bar{x} X \frac{\bar{r}_i}{n}$ = 40.58%

n = No. of observation = 7

Appendix- 5

Five year profit (%) trend of sample finance companies:

Name of Co.	2006	2007	2009	2010	2011
BFL	7.82	5.54	7.76	10.24	9.05
GFCL	4.66	7.42	8.25	14.44	16.28
CMBF	10.60	19.80	16.94	18.25	17.04
NFC	12.75	19.50	32.93	18.13	20.21
SIFC	12.92	12.92	17.20	14.26	20.39
UFL	2.57	7.22	11.55	16.24	20.84
WMBF	16.09	22.12	11.21	14.59	11.04

Appendix- 6

Closing Price of Different Finance Companies in Different Years