

# CHAPTER I

## INTRODUCTION

### 1.1 General Background

Nepal is a developing country struggling with current state of Nepalese economy. The economy is characterized by unutilized natural resources, mass poverty illiteracy, miserable agriculture, deficit trade and so on. Although agriculture is the main livelihood, scientific method of agriculture has not yet been implemented. Although it is one of the richest countries in the world in terms on natural resources, it could not utilize effectively. Its economy is unbecoming not because of lack of resources but inefficient utilization of resources. Therefore, the proper plan and strategy should be developed for the efficient utilization of resources to enhance the growth of economy. The natural resources available here have remained unutilized due to various reasons. The living standard of people is very low poverty, misery and conflict are existed all around. While the country has been moving towards a market oriented economy since early 1990's, frequent changes in government have hampered the realization of policy reform and delayed the implementation of development projects. It not only depends on availability of fund to fulfill the need of government and businesses but also of individuals. The private domestic investment is very essential for the economic growth as well as for employment generation for the developing country. The healthy economy can be made only through resource mobilization which is possible by the efficient collection of the scattered capital of the people and transfer of these capitals to the firms and Individuals who are in need to make investment on productive sector. Resource mobilization won't be fruitful only by collecting the scattered resources and making investment. For this, proper investment should be made for its productivity. Here investment management plays significant role.

In today's market, consumers are treated as king and consumers are now quality oriented and they prefer quality goods. Technological changes have made easier to give men new and surprising materials to the market. Organizations that do not have new technology can't compete in the market. But technologies are very costly, so an organization should raise enough money to get the new technologies. Business

institution if it is sole generally does not dare to get the funds financed because it is very risky for a single person to bear unlimited liability, single person rarely has enough money to invest also. So business organizations are generally limited companies with many shareholders or sometime partnership firm. Partnership firms also many times can't manage funds so in modern business, public limited companies are one and only one the alternate for investing huge amounts, advent of security market has successfully served the public limited companies to raise funds and then invest on the business. Every shareholder has limited liability up to his ownership amount only or the amount of shares he holds. rest of the financing may be from financial institutions like Banks, Finance Companies etc.

Investment is differentiated with gambling, as it is the systematic and scientific way of using the excess fund to get the maximum return at minimum level of risk. Present investment is contribution to the future return. Investment is systematic and scientific way of using excess fund from income to gain expected return bearing lower level of risk. Common definition says that contribution of present value for future value is investment or it is search of certainty within the uncertainty. an investment is a commitment of money that expects to generate additional money. Every investment entails some degree of risk. It requires a present sacrifice for a future uncertain benefit. What motivates a person or an organization to buy securities, rather than spending their money immediately? The most common answer is 'saving'. Another motivating issue is desire to increase wealth ie. make money grow. Sometimes, the desire to become wealthy can make you willing to take big risks. the simplest meaning of the investment is to employ available fund to generate more money in future. When investors make an investment, they expect the positive returns for bearing the certain level of risk. The simplest meaning of the investment is to employ available fund to generate more money in future. When investors make an investment, they expect the positive returns for bearing the certain level of risk. No one can get return without bearing risk. The investors said to be rational only when they earn maximum return at minimum risk. So risk and returns are the key factors to be considered while making investment. In order to minimize the risk at the given rate of return, rational investors invest in collection of investment securities called portfolio. Investors should have sound knowledge of portfolio management. Investment made in

securities with different risk and return characteristics helps to diversify the risk by compensating loss occurred in one security by the return in another security. Portfolio is a financial tool of diversifying the risk.

A portfolio is usually defined as a combination of assets or a collection of securities. Portfolio means "Specialized a collection of company shares and other investments that are owned by a particular person or organization" (*Cambridge Advanced Learner's Dictionary 3<sup>rd</sup> Edition*). A Portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment assets is called portfolio. A portfolio is a collection of investment securities, portfolio theory deals with the selection of optimal portfolios, that is portfolios that provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return (Wesron& Copeland, 1992:62)

### **Major Activities Performed by Finance Companies.**

#### **1) Fund Based Activities.**

- Leasing and hire purchase
- Bill discounting
- Loans
- Floating mutual funds.

#### **2) Non-funds Based Activities.**

Investment management, portfolio management, services for individuals and corporation , insure management, underwriting, trust receipt, arranging trading market for buying and selling securities, private placement of shares and debentures, etc.

In practice, most of the finance companies are funds based. Finance companies are also important player in "Nepali Capital Market" investing over 10% of their funds in shares and government bonds.

Under the present regulatory regime the NRB's non-banking operation unit supervises the finance companies in perspective of their activities as deposit taken and lender. The finance companies have to be registered with the security bond and Nepal

Stock Exchange. They have to provide related financial information to central bank regularly.

The main activity of Finance company is to approve deposit and invest same amount as loan. However, it has also been investing in the following activities.

- Government securities
- Share and debentures of company
- Stock in trade.

To eliminate the risk and enjoy the return the investor should follow the systematic investment process. The investment process describes how an investor makes decisions about what securities to invest in, how extensive these investments should be, and when they should be made. A five-step procedure for making the decision forms the basis of the investment process.

The first step of the investment process is to set the investment policy. It involves determining the investor's objectives and the amount of his or her investable wealth. Investor's objectives should be stated in terms of both risk and return. The second step of the investment process is to perform security analysis. It involves examining a number of individual securities (or groups of securities) within the broad categories of financial assets. The purpose for conducting such examinations is to identify those securities that currently appear to be misplaced. The third step of the investment process is construction of portfolio. Construction of portfolio involves identification of specific securities in which to invest, along with the proportion of investible wealth to be put into each security. The fourth step of the investment process is portfolio revision, which involves both realizing that the currently held portfolio is not optimal and specifying another portfolio to hold with superior risk-return characteristics. The investor must balance the cost of moving to the new portfolio against the benefit of the revision. And the fifth step is portfolio performance evaluation. It involves determination of the actual performance of a portfolio in terms of risk and return, and compares the performance with that of an appropriate "Benchmark" portfolio.

The behavior of stock price and the relationship between risk and return in financial market has long been of interest to researchers. Many interesting and exemplary researches have been carried out to this regard in the developed capital market. In

recent year finance companies with new financial instruments and innovation are highly needed in the country. This will provide investment opportunities to the small and medium savers. Financial sector is the dynamic part of economy that collects unused funds and mobilizes it in needed areas. It is very important for trade industry and commerce. One of the leading sectors, stock market has become a global phenomenon even in the least develop country like Nepal that plays vital role in the development of national economy. In the capitalistic market, stock market is not only for the justification for encouragement on the ideological background but also required for the natural expansion and or progress of the development of financial sector of a nation.

The roles of finance companies have been instrumental in the overall economic development of the country. They help to pool and utilize resources, reduce costs and risks, expand and diversify opportunities, increase the allocate efficiency of resources; promote the productivity and economic growth. These are the main part of economy of the nation.

## **1.2 Statement of Problem**

Recent trend shows that the general proper are interested to invest their small money on the common stock of financial institutions like commercial banks and financial companies. But due to lack of proper information about market status and situation and poor knowledge, market intermediaries take advantage of investors. Sometimes they think that investing in common stocks is intolerably hazardous. Due to this, many investors afraid of investing into stocks. This is the main problem that does not allow gearing up the capital market of the nation. The main problem for the individual investors are lack of proper information about market whereas the problem for financial sector to enhance the goodwill among the public due to frequent collapse of some finance companies being unable to utilize public funds properly. The investors are responsible to make rational investment decision. For this rational analytical knowledge is essential. The investor's attitude and perception also plays a vital role in making decision regarding whether the investment should be made or not.

In Nepal collapses of some of the finance companies due to improper mobilization of public funds create real investor hesitation while investing in common stock. previous

research shows that most of investors invest their funds in a single security rather they can be benefited by investing in portfolio of securities and achieving diversification of risk. The main problem is that the general public can't perfectly analyze the risk and return of the common stock and market situation. So this study deals with the risk and return analysis of common stock of financial companies. Common stock does not guarantee for annual nor does it ensure forth return of price of stock thus is considerably risky. Hence it needs courage and at the same time faith of invest in common stock. In most of the time which can be generated through proper evaluation with giving view to the prevailing market atmosphere. The present study seeks to explore the answers to the following questions.

- How far the extent of the volatility of the mean return of the common stock and the relationship among the market price of share, DPS and EPS is maintained?
- How the investment decisions are to be taken?
- To what extent there is systematic risk in relation to total risk?
- What are the criteria for evaluation that the stock they are holding will give them a favorable return?
- Does the risk and return of common stock investment of financial companies vary significantly?
- Would portfolio construction within the finance companies be profitable?
- How can investors diversify the risk within the financial companies?

These are the burning issues that have influenced researcher to carry out this study. Investment on common stock is the main sources of fund for the companies. The investors are the sources of revenue as a customer for the stock stockbrokers and financial institutions and ultimately they are the backbone of economic development of the nation. So every policy and plan of financial institutions and government also have to encourage them to invest on common stock. For this there is great need of such institutions, which can give valuable information that accelerates the stock investment and market efficiency.

### **1.3 Focus of the Study**

Risk and return of common stock is the major factors, which help in making decisions about investment on securities of the companies. So the study is based on the risk and return of common stock investment: special reference to finance companies in Nepal. There are 79 listed finance companies in Nepal. But it is not possible to cover all the finance companies. So 10 finance companies have been chosen. The study is focused on the risk and return of common stock followed by 10 chosen companies, which will represent all the finance companies of Nepal.

#### **1.4 Objectives of the Study**

The main objective of the study is to analyze the risk, return and other relevant variables of common stock investment of Nepalese Finance Companies that help in making decisions about investment on securities of the companies. The specified objectives of the study are as follows;

- To analysis the movement of market price of common stock in terms of risk and return and to execute sector wise comparison of the basis of market capitalization.
- To analyze common stock of finance companies in terms of risk and return.
- To determine whether the shares of finance companies in Nepal are overpriced or under priced by analyzing the risk and return characteristics of the individual shares.
- To analyze the systematic and unsystematic risk associated with security under study.
- To calculate risk and return on different portfolios.

#### **1.5 Significance of the Study**

Open economic policy of the government encouraged the establishment of the finance companies. As a result, the people's participation in security investment and stock trading is increasing unexpectedly. The recent trend and people's attitude towards common stock investment shows that there is a high potentiality in stock investment, which results an increase in economic activity. It is important to increase financial and economic activities of the nation.

The analysis of risk and return is a significant managerial decision from the viewpoint of investors. It influences the shareholders risk and return. Consequently, the risk and return analysis influences the market price of the stock, by making it at an appropriate level. Thus this study has tried to fulfill the need in this aspect. The study may also help for interested researchers in the area of investment on common stock and risk and return management. Apart from above this study will be a matter of interest for academicians, students and practitioners.

## **1.6 Limitations of the Study**

This study is basically based on secondary data. Similarly this study covers a period of 6 years i.e. from fiscal year 2061/062 to 2066/067. Therefore, there are some limitations of this study, which are as follows;

- In this study NEPSE is taken as basic sources of data
- The study is based on the performance of finance companies for the period of 6 years started from fiscal year 2061/062 to 2066/067.
- Financial and time constraints; this study will be fully based on the student's financial resources and is to be completed within the limited time.
- The research result is based upon the secondary data only.

## **1.7 Organization of the Study**

The report will be presented in five chapters;

### **Chapter 1: Introduction**

It introduces background of study, statement of problem, objective of study, significance, scope of the study and limitation of the study.

### **Chapter 2: Review of literature**

It includes pilot studies and textual concepts with regard to conceptual framework on industrial.

### **Chapter 4: Data presentation and analysis**

It analyses the data and interpret the result using different financial and statistical tools.

### **Chapter 5: Summary, conclusion and recommendation**

It summarizes the result of analysis and suggestive framework.

Introduction, Review of Literature, Research Methodology, Presentation & Data Analysis and Summary Conclusion & Recommendations.

## **CHAPTER II**

### **LITERATURE REVIEW**

The review of literature is a crucial aspect of planning of the study. Basically it is a "Stock Taking" of available literature in one's field of research. "The purpose of reviewing the literature to develop some expertise in one's area to see what new contribution can be made, and to receive some ideas for developing a research designs. The previous studies can't be ignored because they provide the foundation to the present study. The present study is simply the continuity in the H7BN research design."

#### **2.1 Conceptual Framework**

##### **2.1.1 Concept of Investment on Common Stock**

"Investment, in its broadest sense, means the sacrifice of current dollars for future dollars. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain."

There are basically three concepts of investment.

1. Economic Investment: ie. and economist's definition of investment.
2. Investment is a general or extended sense, which is used by "the man of the street."
3. The sense in which it is going to be very much interested namely financial investment.

Investment can be made on real assets. Investment on real assets is known as real investment and on financial assets is known as financial investment. Real investment means investment on real assets like lands, buildings and factory etc. Financial investment means the investment on financial assets like shares, debentures, warrants, convertibles etc.

"Real investment generally involves some kind of tangible assets such as land, machinery or factories. Financial investment involves contracts written on pieces of paper such as common stocks and bonds. In primitive economies, most investment is of the real variety, where as in modern economy, much investment is of the financial variety."

"An investment is the current commitment of money or other sources in the hope of reaping future benefits."

### Setting Investment Decisions

The ultimate decisions to be made in investment are;

- 1 What securities should be held?
- 2 How much amount should be allocated to each?

These decisions are normally made in two steps. First, estimates are prepared of the return and risk associated with available securities over a forward holding period. This step is known as security analysis. Second, return-risk estimates must be compared in order to decide how to allocate available funds among these securities on a continuing basis. This step comprises portfolio analysis, selection and management.

This alternative investment falls into eight major categories.

1. Equity Securities
2. Short-Term Debt Securities
3. Intermediate & Long-Term Debt Securities
4. Hybrid Securities
5. Derivative Securities
6. Real Assets
7. International Investment
8. Other Investment Alternatives

Among various investment alternative, the present study concerns with only the common stock investment.

The review of the study is based on the common stock investment. Therefore, main focus is given on it.

➤ **Common Stock**

"Common stock represents equity or an ownership position in a corporation. It is a residual claim, in the sense that creditors and preferred shareholders must be paid as scheduled before common stockholders can receive any payment. In bankruptcy, common stockholders are in the principle entitled only to any value remaining after all claimants have been satisfied. Thus, risk is the highest with common stock and so must be in its expected return, when investors buy common stock, they receive certificate of there being part owners of the company. The certificate states the number of shares purchased and their par value."

"The true owners of the business firms are the common stockholders, who invest their money in the firm only because of their expectation of future returns. A common stockholder is sometimes referred to as a residual owner since in essence they receive what is left after other claims on the firm's income and assets have been satisfied. As a result of this generally uncertain position, the common stockholder expects to be compensated with adequate dividends and, ultimately capital gains."

"Common stock is the first security of corporation to be issued and the event of bankruptcy, the last to be retired". When investors buy common stock, they receive certificate of ownership as a proof of this being part owners of the company. The certificate states the number of share purchased and their par value."

As owners, common stockholders are entitled to certain rights and privileges. There are controls, preemptive right, liquidation rights and right to income and distribution of additional shares. Similarly, the common stock values are quite different and in some cases, the dollar amounts of these values are not related for an individual stock. The common stock values include par value, book value and market value.

➤ **Security Market**

A security market can be defined as a mechanism for bringing together buyers and sellers of financial assets in order to facilitate trading. Security market exists in order to bring together buyers and sellers of securities. It means the market where the securities are traded. One of the main functions is "Price Discovery" i.e. to cause prices to reflect currently available information. Security market can be distinguished into two sections;

- 1 Primary and Secondary Market
- 2 Money and Capital Market

➤ **Primary and Secondary Market**

Securities offered for the first time to the general public through the primary securities markets. The issuer may be a brand new company or one that has been in business for many years. It is also known as **Initial Public Offering (IPO)**.

The Secondary Market is not keeping pace with the growth of the primary market. This is mainly due to lack of the needed efforts on the concerned authority to devise suitable package of measures to encourage the growth of broker networks in the country's growing stock exchange.

➤ **Money and Capital Market**

Money Market is also called short term financial market which is the set of supplying short term debt or working capital needed for industries, business or incorporated etc. The instruments of money market are government securities, inter-bank deposits, banker's acceptance, certificate of deposit and commercial papers issued by non-financial institutions.

Capital Market is the market where the transaction of long-term finance is made. The funds collected in this market are raised and traded by long-term financial instruments such as equities and bonds. From the capital market, the maturity preference of lender and borrower is adjusted. The lender can immediately get cash in case of need and borrower also receives long-term credit.

### 2.1.2 Market Price of the Share

Market price of share as the output of the demand and supply interaction is the most influencing factor in determining the price of the stock. In relation to the interacting forces of demand and supply ie. Market price is determined at given time and the prices and volumes of its past transaction are meaningful indication of probable relationship of future supply and demand pressure. And such relationship is the most important element in determining the probable direction of the price movements. If the demand exceeds the supply the price will rise and if the supply exceeds the demand the price will fall.

### 2.1.3 Profit Maximization or Wealth maximization

In the past, profit maximization was regarded as the only objective of business firms but in modern time, a firm has multiple objectives though some objectives may receive priority over other objectives. It is a rational behavior of the firm to maximize the profit. The financial manager should select the alternative having maximum monetary return. Profit maximization objective is short run objective where as wealth maximization objective is long run objective of the firm. When the time period is short and uncertainty is not much, profit maximization and wealth maximization are almost same. The wealth of the shareholders is measured by the share price of the stock. The share price depends on the timing of returns, cash flow and risk. Generally the value or wealth can be expressed more explicitly in following ways.

$$W = \frac{A_1}{(1+K)} + \frac{A_2}{(1+K)^2} + \frac{A_3}{(1+K)^3} + \dots + \frac{A_n}{(1+K)^n} - C$$
$$= \sum_{t=1}^n \frac{A_t}{(1+K)^t} - C$$

Where;

$A_1, A_2, A_3, A_n$ , = Stream of benefit expected to occur a course of action is adopted.

C = Cash out lay or cost of action

K = Discount rate

W = Value or worth

But the value of the company does not increase itself, there are a number of factors that may contribute to increase the value. The value is represented by the market price of the company's common stock, which in turn reflects the firm's investment strategy, and dividend decisions. So, to maximize of the stock, the financial manager should consider following factors.

- 1 Project earning per share
- 2 Timing of the earning stream
- 3 Use of debt
- 4 Dividend policy

Hence, the wealth maximization principal implies that the fundamental objective of a firm should be to maximize the market value of its shares.

### 2.1.4 Stock Valuation

Financial managers use different analytical techniques for valuing common stock. The stockholder expects regular earnings in the form of dividends and capital gain by upward movement of the stock price. To maximize the stock price stock valuation model can be used as important tools. Mainly three basic models are used to value stock.

#### Stock Valuation Model

S.N.	Model	Valuation Model
1	NAVAM	$NW = TA - (CL + LTD)$
2	DVM	$P_o = \sum_{t=1}^n \frac{D_t}{(1+K_e)^t}$
3	EVM	$P_o = P/E \text{ ratio} \times \text{EPS}$

*Source: Richard Pike & Neale (1996). "Corporate Finance and Investment Decision and Strategies" India: Prentice Hall pp. 76*

Where;

NVAM = Net asset value model

DVM = Dividend value model

EVM = Earning valuation model

NW = Net worth

TA = Total assets

CL = Current liabilities

LTD = Long term debt

$P_0$  = Value of the stock today

$D_1$  = Dividend expected in year 1

$K_e$  = Cost of equity capital

$t = 1, 2, 3, n$  yrs

P/E = Price earning ratio

EPS = Earning per share

### **2.1.5 The Expected Rate of Return on Common Stock**

Theoretically, if an investment is to be made, the expected rate of return or the expected holding period return should be equal or greater than the required rate of return for that investment. Actually, return on a typical investment consists of two components. The basic component is the periodic cash receipt (or income) on the investment, either in the form of interest or dividends. The second component is the change in the price of the asset- commonly called the capital gain or loss.

The element of return is the difference between the purchase price at which the asset can be or is sold; therefore it can be a gain or loss. Thus, the cash payoff to owners to common stocks comes in two forms;

- 1 Cash Dividend
- 2 Capital Gain (Loss)

Some definitions are, "The single period rate of return concept is important because it measures the speed at which the investor's wealth increased or decreased. An investment's single period rate of return, denoted  $R$ , is simply the total return an

investor would receive during the investment period of holding period stated as percent of the investment's price at the start of the holding period.

$$R = \frac{\text{Ending wealth} - \text{Beginning wealth}}{\text{Beginning wealth (or purchase price)}}$$

An investor can obtain two kinds of income from an investment in a share of stock or a bond;

- 1 Income from price appreciation (or losses from price depreciation) sometimes called capital gains or losses. This quantity is denoted by  $(P_t - P_{t-1})$
- 2 Cash flow income from cash dividend or coupon interest payments, represented by the convention  $D_t$

The sum of these two sources of income (or loss) equals the change in the invested wealth during any given holding period.

For common stock, we can define one period return as;

$$R_j = \frac{D_t + (P_t - P_{t-1})}{P_{t-1}}$$

Where;

$R_j$  = Actual (expected) return when it refers to a particular times period in the past (future)

$P_t$  = Market price at end of period t

$P_{t-1}$  = Price at end of period t-1

$D_t$  = Cash flow income (dividend) received during the t<sup>th</sup> yrs

$P_t - P_{t-1}$  = Income from price appreciation (or losses from price depreciation), called capital gain or loss.

Above formula can be used to determine both actual one period return (when based on historical figures), a well as expected one period returns (when based on expected dividend & prices). The term in parentheses in the number of above equation represents the capital gain or loss during the period.

"If investors are risk averse, they must be compensated for taking on risk. Thus, the market to yield a higher expected return than risk less to hold risky securities prices. Thus, in a market dominated by risk-averse investors there must be a positive relationship between risk and expected return to achieve equilibrium. The expected return on a risk less security (eg. Treasury Bill) is the risk free rate.

The expected return on risky securities can be thought of as this risk free rate plus a premium for risk.

$$R_s = R_1 + \text{Risk Premium}$$

Where;

$R_s$  = Expected return in a security

$R_1$  = Risk free rate

Annualized rate of return over several periods can be calculated in two ways. The first one is simply to take the arithmetic average of the annual holding period return (HPR) over a period and the second one, which also takes in to account the compounding effects of cash receipts over different time intervals, is the geometric mean rate of return.

➤ **Simple Arithmetic Mean**

$$\text{HPR} = \sum_{t=1}^n \frac{\text{HPR}_t}{n}$$

➤ **The Geometric Mean**

$$\text{HPR}_g = \sum_{t=1}^n (1 + \text{HPR})^{\frac{1}{n}} - 1$$

Where;

HPR = Holding period return

n = Number of periods

$\text{HPR}_g$  = Geometric mean holding period return

### **2.1.6 Risk on Common Stock**

Risk is an uncertainty. Risk and uncertainties are the facts of life so to the common stockholders. Technically, their meanings are different. Risk means a chance of happening some unfavorable event or danger of losing some value. Risk suggests that a decision maker knows the possible consequences of a decision and their relative likelihoods at the times they make decision.

The practice is to translate the uncertainty into a mathematical value which represents the uncertainty into a mathematical value which represents the best estimate of all uncertain value, But risk is treated differently, although risk arises from uncertainty, its magnitude depends upon the degree of variability in uncertain cash flows & it is measured in terms of standard deviation. In project analysis, the project risk indicates the probability of returns being less than the expected value higher the probability of such loss or less returns, higher the project risk.

Basically risk is the possibility or chance of meeting danger or suffering loss. "There may be investors who behave somewhat differently. Theoretically, we expect three distinct behaviors of investors;

- 1 To bear more risk
- 2 To Avoid risk and
- 3 To be indifferent to risk.

A particular behavior depends upon whether the utility of wealth to an individual investor increases decreases or remains unchanged as wealth increases. In reality, rational investors do not assume more and more risk just for the sake of increasing little more wealth as the size of their wealth increases.

### **2.1.7 Relationship between Risk and Return**

The relationship between risk and return is described by investors' perception about risk and their demand for compensation. Those investors who can tolerate higher levels of risk should be regarded with higher level of return. This statement is supported by the most empirical studies of historical risk return relationship. No investors like to invest in risk security unless he is assured of adequate compensation for the assumption of risk. Therefore, it is the investors required risk premium that

establishes a link between risk and return. In a market dominated by rational investors, higher risk will command higher premium & the tradeoff between the two assumes a linear relationship between risk and risk premium.

"The observe difference in both the levels and variability of the rates of return across securities are indicative of the underlying risk return relation in the market."

Generally, there is a positive relationship between rate of return and risk. It means an investor can usually attain more return by selecting dominant assets that involve more risk. While it is not always true that a riskier asset will pay a higher average rate of return, it is usually. The reason is that investors are risk averse. As a result, high-risk assets must offer investors high returns to induce them to make the riskier investment. Naturally, investors are likely to prefer more return and less risk. It mean investors will not choose an investment that guarantee less return when investments promising higher returns in the same level of risk class are readily available.

### **2.1.8 Systematic Risk and Unsystematic Risk**

Systematic and unsystematic risks are the terms frequently used in the portfolio context. Combining securities that are not perfect positively correlated helps to reduce the risk of a portfolio to some extent. How much risk reduction is reasonable to expect and how many different security holding in portfolio would be required? Answer to the question will be explained in following paragraphs:

In the case of single stock, the risk of a portfolio is the standard deviation of that stock. As the randomly selected stocks held in the portfolio are increased, the total risk of the portfolio is reduced. Such a reduction is at a decreasing rate. Thus a substantial proportion of the portfolio risk can be eliminated with a relatively moderate amount of diversification.

Systematic risk has its source factors the affect all the marketable assets and this cannot be diversified way. Systematic risk is due to the risk factor that affects the overall market such as changes in national economy, tax reform by the government or changes in the world energy situation. The sources of systematic risk are market pervasive. The measure of systematic risk permits an investor to evaluate an assets required rate of return relative to the systematic risk of the stock. In other words over an investor who holds a well diversified portfolio will be exposed to this type of risk.

Unsystematic risk is risk unique to a particular company or industry. It is independent of economic, political and other factor that affect all securities in systematic manner. A wild cat risk may affect only one company a new competitor may begin to produce essentially the same product or a technological breakthrough can make an existing product absolute. "For most stocks, unsystematic risk accounts for between 60 to 70 percent of stocks total risk or standard deviation (*Van Horne and Wachowicz; 1997:91*).

The relationship among systematic, unsystematic and total risk are shown below.

Total risk ( $\sigma_j$ ) = Systematic risk + Unsystematic risk

Systematic Risk and Unsystematic Risk can be written as

$$\text{Systematic Risk (SR)} = \frac{\text{Cov}_{j,m}}{\sigma_m}$$

Where,

SR = Systematic Risk

COV<sub>j, m</sub> = Covariance of Stock j and Market Return

$\sigma_m$  = Standard Deviation of Market

Unsystematic Risk (USR)

$$\text{USR} = \sigma_j - \frac{\text{COV}_{jm}}{\sigma_m}$$

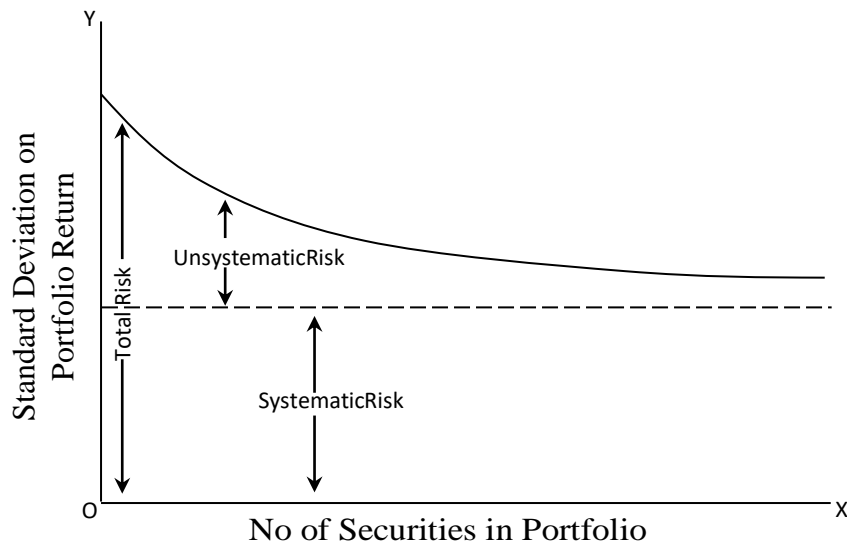
$\sigma_j$  = Standard Deviation of Stock j

$$\text{Proportion of SR} = \frac{\text{SR}}{\text{TR}}$$

Where,

TR = Total Risk

Proportion of USR = 1 - Proportion of SR



Where,

$$\text{Systematic risk} = \sigma_j \rho_{jm}$$

$$\text{Unsystematic risk} = \sigma_j (1 - \rho_{jm}).$$

Here,  $\rho_{jm}$  is the Correlation coefficient between the return of given stock (j)k and the return on market portfolio. However by diversification, unsystematic risk can be reduced and ever eliminated if diversification is efficient. Therefore, not all the risk involved in holding a stock is relevant since part of their risk can be diversified away. The important risk of stocks is its unavoidable systematic risk. Investor will be compensated for bearing this systematic risk. They should not however expect the market to provide may extra compensation for bearing avoidable risk. It is the large that lies behind Capital Assets Pricing Model (CAPM).

### 2.1.9 Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model provides us a means by which to estimate required rate of return on a security. This models was developed by William F. Sharpe and John Linter in the 1960's and it has had important implications for finance ever since. And on the basis of price and divided data, expected return can be calculated with comparison of these two returns investors can analyzed whether the stock is under priced or overpriced. Based on the behavior of the risk adverse investors, there is implied on equilibrium relationship between risk and expected return to provide a return on common stock with its unavoidable risk. This is simply the risk that cannot

be avoided by diversification. The greater the unavoidable risk of security, the greater the return that investor will expect from the security (*Van Horne; 1997:64*).

“CAPM is the model that describes the relationship between risk and expected return. In this model, a security's expected (required) return is the risk free rate plus a premium based on the systematic risk of the security.

This model is expressed as:

$$E(R_j) = R_f + [E(R_m) - R_f] \beta_j$$

Where,

$E(R_j)$  = Required rate of return for stocks j

$R_f$  = Risk free rate

$E(R_m)$  = Expected return for market portfolio

$\beta_j$  = An index of systematic risk of stock j (beta coefficient)

“Beta measures the sensitivity of a stock's returns to change in the returns on the market portfolio. The beta of a portfolio is simply a weighted average of the individual stock betas in the portfolio” (*Van Horne, 1997:100*).

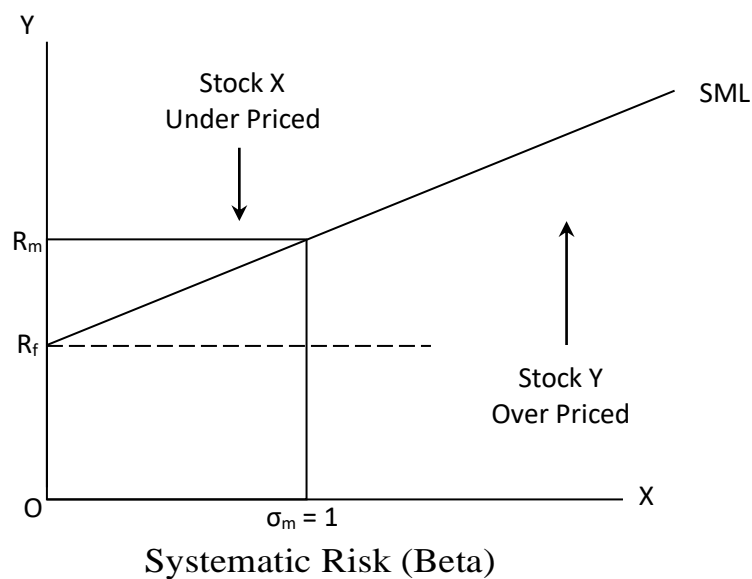
If beta is one (i.e.  $\beta=1$ ) then the required return is simply the average return for all situations, that is the return on market portfolio, otherwise, the higher the beta, the higher the risk premium and the total required return. However, a relatively high beta does not guarantee a relatively high return. The actual return depends partly on the behavior of the market, which acts as a proxy for general economic factors.

“The major implication of the CAPM is that the expected return of an asset will be related to a measure of risk for that asset known as beta ( $\beta$ ). The exact manner in which expected return and beta are related is specified by the CAPM. The model provides the intellectual basis for a number of the current practices in the investment industry” (*Sharpe; 1995: 261*).

The CAPM states that the expected risk premium on each investment is proportional to its beta. This means that each investment should lie on the sloping security market line connecting treasury bills and market portfolio. CAPM is the predominant model used for estimating equity risk and return. Comparison between the expected rate of

return and required rate of return indicates whether the stock is under priced or overpriced. And when these two return are equal then it is said table market equilibrium i.e. all the stocks lie on the Security Market Line (SML).

SML is the graphical representation of the CAPM, which shows the relationship between risk and required rate of return. The SML clearly shows that returns are the increasing function, in fact at linearly increasing function of risk. Further, it is only market risk that affects return. The investor receives no added return for bearing the diversifiable risk. If stocks are under priced it lies above the SML and if they are overpriced then it lies below the SML. The following diagram shown the SML with over priced and the under priced stocks.



Above figure clarifies that stock X is under priced relative to the security market price while stock Y is overpriced. As a result tock X is expected to provide a rate of return greater than that required based on its systematic risk. In contact stock Y is expected to provide a lower return than that required to compensate for its systematic risk. Investors seeing the opportunity for the superior return by investing in stock X will rush.

This situation would drive the price up and expected return comes down. It would continue until the market price was seen that the expected return would row lies on the SML. In the case of stock Y, investors holding this stock will start to sell it, recognizing that they could obtain a higher return for some amount of systematic risk

with other stocks. This selling pressure would drive market price down and its expected return goes up until the expected return matches on the SML. When the expected return for these two stocks returns to SML, market equilibrium will again prevail (*Van Horne and Wachowicz; 1995: 107*).

Under the CAPM, each investors hold the market portfolio and is concerned with its standard deviation because this will influence the slope of the SML and hence the magnitude of his/her investment in the market portfolio.

“The CAPM is sometimes used to estimate the required rate of return for my firm with publicly traded stock. The CAPM is based on the promise that the only important risk of firms is systematic risk, or the risk that returns firm expose to general stock market movements. The CAPM is not concerned with so-called unsystematic risk, which is specific to an individual firm, because investors can avoid that type of risk by holding diversify portfolio (*Madura; 2001: 118*).

Investor appears to be concerned principally with risk that they cannot eliminated by diversification. If this is not so, we find that stock price increases. Whenever two companies merge to spread their risk and we should find that investment companies which invest in the share of other firm are more highly valued that than the shares they hold. But we do not observe either phenomenon. Mergers under taken just to spread risk don't increase stock prices and investment companies are no more highly valued than the stocks held. The CAPM model captures these ideas in simply way. That's way many financial mangers find it is the most convenient for coming to decision with slippery motion of risk. And it is why economist often uses the CAPM to demonstrate important ideas in finance even when there are other ways to prove thee ideas.

## **2.2 Review from Thesis**

However risk and return is not a new concept for financial analysis, in context of Nepal and its very slow growing capital market, few studies are made regarding this topic. Some studies related to the topic of risk and return has been conducted for the fulfillment of master degrees in T.U. In this study only relevant subject matters are reviewed which are as follows.

- Bhatta, (1995) has conducted his master's thesis on “Assessment of the Performance of Listed Companies in Nepal”, He has taken 10 listed companies' data from 1990 to 1995.

Bhatta's research objectives are to analysis the performance of listed companies in terms of risk and return i.e. expected rate of return and company specific risk, required rate of return and internal rate of return, systematic risk and diversification of risk through portfolio context.

Bhatta made financial and statistical analysis which include MPS, ERR, SD, CV, T-test, Z-test and correlation.

Bhatta has addressed the following finding from his studies.

A highly significant positive correlation – ship has been address between risk and return character of the company Investors expect higher risk Nepalese capital market is not efficient one so the price does contain all the information relating to market and company itself. Neither investor's analyses the overall relevant information of the stocks nor does the member of stock exchange try to disseminate the information. So, the market return and risk both may not show high priced stocks. Investors of Nepal have not yet practiced to invest in portfolio of securities. An analysis of the two securities portfolio shows that the risk can be totally minimizes if the correction is perfectly negative. In this situation, the risk can totally be diversified, but when there is perfectly positive correlation – ship between the returns of the two securities, the risk is not diversified.

On the basis of his findings concluded:

“An analysis of risk and return show that many companies have higher unsystematic or specified risk. There is a need of expert institution which will provide consultancy services to the investors to maximize their wealth through rational investment decision”. Bhatta recommended the following points to improve the market efficiency. Developed institutions to consult investors for risk minimization. Establish an information channel in Nepal stock exchange and Make proper amendment on trading rules.

- Pandey, (2000) entitle of “*Risk and Return Analysis of Common Stock Investment*”. In her study, she has taken 7 listed insurance companies data from 2049 to 2056.

She focused on following objectives: -

- To understanding and identify problems faced by an individual investor and insurance company.
- To calculate the risk and return of the common stocks and their portfolio.
- To analyze the volatility of different stock of insurance companies and other variables that should be considered while deciding investment in stocks.

Pandey has used following methodology;

- Study design.
- Population & Sample
- Secondary data collection techniques.
- Data Analysis tool included: - MPS, DPS, Expected return and Hypothesis testing.

Pandey obtained following findings from the study in terms of risk and return is as follows:-

Although overall objective of his study is about investment in common stock, it is mainly concentrated on the risk and return trade off economically Nepal is backward; it is economic performance is not satisfactory. Generally Public are rest understood about the stock market and have fake conceptual thoughts about its risk. Poor education and lack of adequate Source of information are the major Constraints for the development of stock market of Nepal.

Based on market capitalization, size of NIC is the biggest one. Expected return on the common stock of NLGI is maximum (i.e. 65.39%). This high rate of return is due to unrealistic annual return in 2050\51. Expected

return on common stock of HGI and EIC is lowest with negative value. In overall industrial sector, expected return of finance and industrial sector is highest. . Overall, market expected return is 50%. Annualized return is unexpectedly high in FY 2050\51 and then declines in the preceding Years. This is all about return.

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.

In Nepal, however, in terms of the volume of transaction the situation of the capital market, according to NEPSE sources has remained quite optimistic, in aggregate, commercial banks occupy large percentage of traded amount whereas insurance sector is being low responsive towards its trading Though it is difficult to estimate the exact volume of business potential in insurance, one can have a rough idea by looking at the insurance depth compared to the potentials in the business, the figure is too low, which is also agreed by both the insurance board and insurance companies they accuse government for not doing enough to realize the potentials. Premium collection per capital of population is quite less not even a dollar.

Pandey has recommended which are related to the study are as follows:-

- One of the study most important things to consider when choosing an investment strategy is the balance between risk and return that you are comfortable with.
- Having all of your egg in one basket can be a risky proposition. It is better to invest in mutual funds; however having all investment in on type of mutual fund still exposes investors to the risk of that asset class. The best way to diversity against market risk is to hold different asset classes in your portfolio that behave differently (not highly correlated). The institution is that an asset with a low correlation to the tangency portfolio is desirable.

- Stock market investment is a risky job. To win the stock market, investors should always be clear to his own strengths, weaknesses, needs desires risk taking capabilities and how to react on different and ever changing market conditions This is one game where self Knowledge, superior forecasting ability, sound understanding on the information of stock market can give a winning edge to the investor.
- In most countries, an organization publishes updated information periodically informing the public about its economic condition in Nepal, it is lacking.
- There should be an institution to analyze the information provided by the companies“ sand to process them to make them understandable by general investors.
- There is complete absence of sensitive index of stock prices and government is not much concerned to conduct a survey of investors in Nepal.

Whatever be the drawbacks, stock market investment is important to improve the lives of people and to push the economic state of the country. So, we along with government, regulating authority, the stock exchange listed companies etc should understand their perspective roles and should give proper attention to play their roles with sincerity.

- Sapkota, (2001) entitled "*Risk and Return Analysis in Common Stock Investment*" had the main objective to analyze the risk and return of the common stock in Nepalese stock market. This study is focused on the common stock of commercial bands. Mr. Sapkota found that the banking sector is the biggest one in terms of market capitalization and turnovers. Expected return on the common stock of Nepal Bank Ltd is maximum (i.e. 66.99%) and common stock of Nepal SBI Bank Ltd. is found minimum. Common stock of NBL is the most risky and common stock of Nepal SBI is the most risky and common stock of Nepal SBI is least risky. Mr. Sapkota has concluded that common stock of Nepal Bangladesh Bank is the best one for investment. On the other hand, portfolio return between

the common stock of Nepal Grind lays Bank and Nepal SBL is 26.66 percent but portfolio standard deviation is only 14.97 percent, which is less than single stocks standard deviation.

Sapkota has recommended reducing the risk; investors should diversity this fund proper construction of portfolio never creates any considerable less. Private investors should try and work out their attitude towards the risk of various investment and GON needs to manage the trading of government securities in NEPSE."

- Manandhar, (2005) "A Study of Risk and Return analysis on Common Stock Investment" with special reference to six listed commercial banks. The main objective of the study is to evaluate common stock of listed commercial bank in terms of risk and return and to perform sector wise comparison on the basis of market capitalization, to identify whether the share of commercial banks are overpriced, under priced or at equilibrium price, to identify the correlation between returns of commercial banks, & to construct optimum portfolio from listed common stock.

Major findings of the study are as follows:

- The return is the income received on a stock investment, which is usually expressed in percentage. Expected return on the common stock of EBL is maximum (44.44%) which is very high rate of return. in reality this rate exists only due to effect of unrealistic annual return because of the issues of banks share and increase in share price. Similarly expected return of the CS of NIB is found minimum (24.21%).
- Risk is the variability of return which is measured in terms of standard deviation on the basis of S.D. common stock of NSBI is most risky since it had high S.D. and C.S. of NIBL is least risky because of its lowest S.D. on the other hand, we know that coefficient of variation is more rational basis of investment decision. Which measures the risk per unit of return on the basis of CV; CS of NIBL is the best among all

banks. NIBL has 1.4977 unit of risk per 1 unit of return. But CS of SBI has the highest risk per unit return i.e. 3.5495.

- Diversification of fund by making a portfolio can reduce unsystematic risk of individual security significantly. If investors select the securities for investment, which have highly negative correlation of returns, the risk can be returns of two stocks in highly positive, risk reduction is not so significant. So, portfolio between the C.S. of same industry cannot reduce risk properly. In this study, SBI and EBL have negative correlation between their returns, which is favorable with the viewpoint of the diversification. And all other banks have positive correlation among their returns. So, the portfolio construction among their returns. So, the portfolio construction of the common stock of these banks will not completely reduce any risk, which is not favorable as portfolio construction is concerned.
- Tiwari, (2007) conducted a research on the title of "*Risk and Return Analysis of Selected Finance Companies Listed in Nepal*" on the specific object to analysis the risk and return associated with the common stock of six finance companies. They are Kathmandu Finance Co. Ltd., Sanjhana Finance Co. Ltd., National Finance Co. Ltd., Citizen Investment Trust, Ace Finance Co. Ltd., and peoples Finance Co. Ltd. His research has been based on the collected data from the secondary source. Nepal Stock Exchange (NEPSE) Ltd is the main organization, which provides most of the data required for the study from year 1998 to 2002. For analyzing the data, he has used various statistical techniques of simple liner regression as well as other financial tools.

The major findings of his study were as follows:

- All the finance company have positive expected return as well as most of the finance company has the return near to the average.
- All the investment involved certain amount of risk (i.e. standard deviation) as well as most of the finance company have the risk less than the average.

- The value of beta suggests majority of finance company stock volatility is less than the market volatility and they are defensive stock.
  - Some finance companies securities have highest value of CV (3.49). Although many of the finance companies CV is less than the average CV (1.77) but not in acceptable level.
  - There is positive relationship between expected return and deferent measure of risk of the finance company.
  - The return of majority of finance companies has higher degree of positive correlation with the return of other companies.
  - The overall effect of portfolio on risk and return shows mixed result. It means the portfolio helps to increase the return in some case but in some case it has also decreased the result up to negative level. But in other hand, neatly in all case it has helped to decrease the level of risk up to some extent.
- Thapa, (2007) has carried out a research on title "Risk and Return in Stock Market Investment in Nepal: Issue and Challenges." Her major objectives of the study were to find out and analysis the risk and return as well as to examine the trend of risk, return, total paid up value, annual turnover and capitalization of twenty three companies out of listed companies. Five companies of each sector from Banking, Finance and Insurance sector; two of each from Hotel, Trading, Manufacturing and Processing and other companies, are included in this study. Her research has been based on the collected data from secondary source as well as some information primary source (2054/55 to 2062/63). For analyzing data, she has applied various statistical tools in her study to find out the risk and return. She has concluded with findings which are as follows:
- Most of the investors are found to be risk averters. They are investing in portfolio having more than four securities.
  - Most preferable sector for investors is banking and finance sectors.

- Stock brokers are major source of information to the investors which show they have a remarkable role in share market.
  - Increasing trends of share price and surplus money for investors are the influencing factors to buy share by investors.
  - Profitability and marketability has equal influence for motivation to invest.
  - The level of investor's satisfaction towards the present trading system (open outcry system) has found low. Most investors are not satisfied with it, because whim and rumors influenced every time. Thus, most of investors wish to have automation trading system.
  - The expected return of securities market as a whole by using NEPSE index is 11.72 percent. Banking and other sectors stand higher expected return than market, while Manufacturing and Processing, Finance, Insurance, Hotel and Trading sectors have lower the expected return compared to the market return.
  - In terms of CV, market has 2.70 CV. All sectors have found highest CV in comparison with market relative risk.
  - In comparison of market portfolio and average return of selected companies shows that there is no difference significantly.
  - The total paid of value of the all sectors expects trading is likely to decreasing in trends. The annual turnover of the all sectors is increasing trends. Likewise, the market capitalization of all sectors expected trading is likely to increasing trends.
- Manandhar, (2003) *“Analysis of Risk and Return analysis on Common Stock Investment”* with special reference to five listed commercial banks. The main objective of the study is to examine risk and return of common stock in Nepalese stock market, the study is focused on the common stock of commercial banks. In her findings “Banking industry is the biggest one in F/Y 057/058 in terms of market capitalization and turnover expected return of the common stock of BOK is maximum (i.e. 1.1267) due to effect

of unrealistic annual return and Capital Structure of NIBL is found minimum. In the context of industries, expected return on banking sector (i.e. 67.39) is highest and other sector is the least (0.65%). Expect NIBL, other banks other banks common stocks are more volatile (aggressive with market stocks). All banks in the study are said to be under priced. Capital Structure of BOK is most risky and Capital Structure is least risky.

Followings are the findings of Mrs. Manandhar's study:

Stocks have greater volatility risk than other investment, which take a random and unpredictable path. Stock market is risky in the short term and it is necessary to prepare the investors for it. One of the most important things to consider when choosing investment strength is the balance between risk and return that you are comfortable with Investors should diversify their fund to reduce risk with the help of optimal portfolio concept.

It is better to say something that is going up and sell something that is going down. Investor's attitude, perception and risk handling capacity also play essential role is rational investment decision.

- Manandhar, (2005) "*A Study of Risk and Return analysis on Common Stock Investment*" with special reference to six listed commercial banks. The main objective of the study is to evaluate common stock of listed commercial bank in terms of risk and return and to perform sector wise comparison on the basis of market capitalization, to identify whether the share of commercial banks are overpriced, under priced or at equilibrium price, to identify the correlation between returns of commercial banks, & to construct optimum portfolio from listed common stock.

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## **2.3 Review from Journals and Articles**

### **2.3.1 Review from Journals**

Enally and Ravenscraft (1999, June) in "*The performance of Hedge Funds: Risk Return, and Incentives*" journal of finance, have examined "Hedge funds may be enhancing returns by taking on extra risk. Many hedge funds use tools designed to reduce systematic rather than total risk. Though this is obviously true for short sellers and market neutral funds techniques such as short sales are employed by most hedge funds. Combination of incentives alignment and investment flexibility gives hedge funds a clear performance advantage over funds. Incentive funds are the most important and significant determinants of risk adjusted return. Using 2,4,6 and 8 year sample all ending in December 1995 with 547, 272, 150 and 79 hedge fund observations, main findings of this study are the average hedge fund sharp ratio is

higher than comparable mutual fund sharp ratio and this performance advantage increases when we match fund by reign Hedge funds achieve this sharp ratio superiority despite their higher total risk. In this study, the average total risk is higher for hedge funds. Thus, some of the characteristics that enhance hedge fund performance may not be appropriate for mutual funds that attract undiversified, risk-averse clients.

This hedge fund concluded that the Flexible investment options employed by hedge funds make it difficult to classify hedge funds, identify the correct benchmark, and thus measure relative performance. Standard deviation of returns measure of total risk may not fully capture the complex risk taking from hedge funds dynamic, highly levered strategies. Monthly incentive fees, therefore, contain an unknown reporting bias that may be as important as depreciation rates, common cost allocation, and transfer pricing issues in accounting profits.

Bowman (1988, Feb) in "*The theoretical relationship between systematic risk and financial variable*" examined the relationship between risk and financial variables. Systematic risk of levered firm is equals to the systematic risk of the same firm without leverage. There is no direct relationship between earning variability and market risk. Systematic risk is directly related to the accounting beta. There is no theoretical basis for relationship of dividend payout and beta. There is not only theoretical relationship between dividends and systematic risk but also size and growth of the firm and systematic risk.

This study shows that there is a theoretical relationship between systematic risk and firms accounting beta and systematic function are not a function of earning variability, dividends policies and size and growth of firm".

Mitchell and Pulvion (1987, Aug) in "Characteristics of Risk and return in Risk Arbitrage". Journal of finance, had to determine whether the returns to risk arbitrage reflect market inefficiencies or rewards for bearing rare-event risk over the 1963 to 1986 time period.

"Using a comprehensive sample of cash and stock-for-stock mergers, we examine returns generated from risk arbitrage. For constraints merger an investment in any merger cannot exceed 10 percent of total capital, sizes are limited by the liquidity of

the underlying securities. The index fund must have an adequate amount of cash reserves to undertake the investment.

In most market environments, risk arbitrage returns are uncorrelated with market returns however, during market downturns, the correlation between market returns and risk arbitrage returns increases dramatically. From this study suggest that risk arbitrage returns are similar to those obtained from writing uncovered index put options. Risk arbitrage may be better evaluated using a contingent claims analysis rather than a linear asset pricing model such as CAPM. However, this analysis shows that when measuring excess returns, the error associated with CAPM is significant only when the nonlinearity in returns is severe. This tends to be the case in time periods when cash, rather than stocks, is the predominant form of merger consideration. Although linear assets pricing models mark the true risk in risk arbitrage, they do not result in large errors when measuring excess returns".

### **2.1.2 Review from Nepalese Studies**

In the topic of finance very few independent studies can be found. However, the available independent studies which are related to the Nepalese stock market and about shareholders democracy, views expressed by different persons in their articles regarding risk and return of common stock of commercial banks are presented or reviewed here in the topic.

**Pradhan and Balampaki (2004)** conducted a study on “*Fundamental of Stocks Return in Nepal*” based on pooled cross sectional data of 40 listed companies in NEPSE Ltd and traded in the stock market. The study examines if dividend yield, capital gain yield and total yield are related to earnings yield, book to market ratio and cash flow yield. Pradhan and Balampaki have summarized the following results.

- Earnings yield and cash flow yield have significant positive impact on dividend yield, and an insignificant impact on book to market value, whereas, size has negative impact on dividend yield. In the case of earnings yield and cash flow yield, cash flow yield has been found to be more informative than earnings yield.

- Capital gain yield is positive influenced by earnings yield and size, whereas, the same is negatively influenced by book to market value and cash flow yield. Book to market value has been found to be statistically strong in predicting capital gain yield.
- Similarly, total yield is positively determined by earnings yield and size, whereas, the same is negatively determined by book to market value has been found to be more informative than other variables.
- The positive relationship exists among earnings yield, book to market value and cash flow yield. However, the size is negatively related to these three variables”.

**Sherestha, (1992)** entitled “*Shareholders Democracy and Annual General Meeting Feed Back*” critically analyzed the situation of common stock investors and the situation that is not improving till date.

Shrestha's study has been divided into two part. The first part includes view on the rights of the shareholders regarding how they can exercise them in democratic perspective and second part consists of feedback and the issues raised by shareholders at different annual general meeting of Public Limited Companies and financial institutions.

"In this study, he mentions that government is not interested in formulating separate act to protect the right of shareholders, although the size of shareholders population in Nepal has been growing constantly and, he has viewed the need of separate act regarding the protection of shareholders right. Company and other acts relating to financial and industrial sector has provisioned rights of the shareholders as:

- i. Voting right
- ii. Participation in general meeting
- iii. Right of getting information
- iv. Electing as a board of director
- v. Participation in the profit and loss of the company

- vi. Transferring shares
- vii. Proxy representation

The collective rights of the shareholders are:

- i. Amend the internal by laws
- ii. Authorize the sale of assets
- iii. Inter into merger
- iv. Change amount of authorize capital

In many cases of the existing authoritarian mentality of management seems to have not considered the shareholders in deciding the managerial plans and policies. Top level decision often bypasses the interest of shareholders. As the management lacks serious concern about the protection of shareholder's rights and expectations. The annual general meeting has become a platform for shareholders to express opinions and grievance in front of the management and board of directors. Many general meetings feedback reveal no serious response to the felling of shareholders. It reflects unwillingness of the management and board of directors to change their traditionally held activities towards shareholders.

**Ojha, (2000)** entitled "*Financial Performance and Common Stock Pricing*" concluded that: An investment in common stock of a corporate from neither ensures annual return nor ensure the return of principle. Therefore, investment in common stock is very sensitive on the ground of the risk. Dividend to common stockholders is paid only of the firm marker on operating profit after tax and performance dividend. The company can return the principal in case of its liquidation only to extent of the residual assets after satisfying to all of its creditors and preferential shareholders. Besides this, investor have to sacrifice the return on their investment in common stock, which could be earned investing fund elsewhere in the next best opportunity.

The Study focused on the financial performance where financial activities involved decision regarding

- Forecasting and planning of financial requirement.

- Investment decision
- Financial decision

Further, Ojha added that the stock price in Nepal is determined more by other factors rather than the financial performance of the concerned company.

### 2.3.3 Review from Foreign Context

- Financial economics is defined by Smith (1996) as "The application of economic theory to financial markets. It is a large body of theory including such well known models as 'Modern Portfolio Theory' of Markowitz (1952), The capital Asset Pricing Model (CAPM) of Sharpe (1964), The Efficient Market Hypothesis of Samuelson (1965), and Fama (1965) and The Option Pricing Model of Black and Scholes (1973). Although, these models are all included in Institute of Faculty Education Ltd. (1996), their acceptance or use is controversial." (*Howing Bhuse, 1997:421*)

Finance from the investor's perspective is explained as;

"Investor's whether they are individuals or institutions such as pension funds mutual funds, or cloolege endowments hold portfolios, that is they hold a collection of different securities. Much of the innovation in investment research over the past 40 years has been the development of theory of portfolio management and this module is principally an introduction to these new methods. It will answer the basic question what rate of return will investors demand to hold a risky security in their portfolio?" (*William N. Goetzmann 1999:26*)

"Returns management appears predictable to an econometrician or appear to deviate from the Capital Asset Pricing Model, but investor can neither perceive nor exploit this predictability. Return may also appear excessively volatile even though prices react efficiently to cash flow news."

Return is the main objective of investment and any investors want to make more money in the future. The main measurement tool of benefit, which is receive from a security, is the rate of return.

The investor return is a measure of growth in wealth resulting from that investment. This growth measure is expressed in percentage forms to make it comparable across large and small investors. Stock returns may be riskier or more volatile, but this concept is a difficult one to express simply. To do so, we borrow a concept from statistics, called standard deviation. It is a single measure, allowing us to quantify asset returns by risk, and it also provides the basis for investor decision about portfolio choice.

- In year 2004 Peter Byrne and Stephen Lee had different tools and techniques such as mean variance model, mean absolute deviation approach, lower partial movement and minimax model in their research and concluded that "Traditionally, the measure of risk used in portfolio optimization models is the variance. However, alternative measures of risk have many theoretical and practical advantages and it is peculiar therefore that they are not used more frequently. This may be because of the difficulty in deciding which measure of risk is best and any attempt to compare different risk measures may be a futile exercise until a common risk measure can be identified. To overcome this, another approach is considered comparing the portfolio holdings produced by different risk measures rather than the risk return trade off. In this way we can see whether the risk measures used produce asset allocations that are essentially the same or very different. The results indicate that the portfolio compositions produced by different risk measures vary quite markedly from measure to measure. These findings have a practical consequence for the investor or fund manager because they suggest that the choice of model depends very much on the individual's attitude to risk rather than any theoretical and/or practical advantages of one model over another." (*Peter Byrne and Stephen Lee, 2004:501*)
- In 1985 Gordon A. Alexander and Bruce G Resnick had focused for the risk averse investors, consideration of estimation of risk is important in selecting an expected utility portfolio. They have examined the tangency of portfolio by using Market Model to estimate the risk and drawn the

conclusion that "In the presence of a risk free asset, the efficient frontier is known to consist of linear combinations of risk free asset and tangency portfolio. If the Full Covariance Model is used, it has been shown elsewhere that the composition when estimation risk is ignored. It may be used as originally presented since there is little substantive difference in the tangency portfolio's composition when estimation risk is recognized relative to when it is ignored. Of course, it should be kept in mind that the location of the efficient frontier will shift, even though the tangency portfolio's composition is unaffected, when estimation risk is recognized. This means that the expected utility maximizing, risk averse investor will generally invest more in the risk free asset and less in the tangency portfolio when estimation risk is recognized relative to when it is ignored." (Gordon J. Alexander, Bruce G. Resnick, 1985:131)

#### **2.3.4 Liquidity Problem in Financial sector in Nepal**

Recently the Financial sector has faced serious liquidity problem. The liquidity problem has started since fiscal year 2066/67, when the majority government had taken the policy of showing the sources of fund when the amount deposited exceeds NPR1 million. Liquidity problem became more serious, when Central Bank (Nepal Rastra Bank) had banned to invest in real estate collateral and order to commercial bank to maintain 25% real estate loan of total loan exposure. After NRB policy against investment in real estate, financial institutions are facing more liquidity problem. Number Of land broker were in increasing trend before the NRB policy, people made the land broker job as main as well as side job. The price of land had been increasing sharply. Broker has become billionaire and millionaires in whole night. But in now a days the billionaires and millionaires land broker are listed in black list of financial institution. Some broker has changed their occupation and tries to find alternative work or business. The problem has been increasing due to lack of the government spending. The business man and Bankers has been demanding Government to announce the budget in proper time and address the current situation, which may help to prevent the country from economic default. For one -two years, the capital creation in the country has been very slow. The cash which has been withdrawn from one bank has not been deposited in another financial institution, which is serious problem for the financial institutions as well as whole economic system of the country. Number of

financial institution has been increasing rapidly since last three years. So Central bank is unable to monitor and control the institution. Governor directly announced that the NRB has not sufficient number of human resource for monitoring purpose in different public program. The result of lack of monitoring in financial institution, Nepal Bikas Bank and Samjhana finance has been undergoing in liquidation process. Similarly, the bankers have lost economic norms and values of financial principles. The case of Gurkha development bank, united bikas bank, Nepal share markets and peoples finance are the hot examples of financial crimes by bankers. The case of those institution, made general public undecided choosing the good performing financial institution. Among the different large depository institution of the country, the militarywelfare fund has started to withdraw money from some development bank and finance company. Similarly the central Access to Financial Services in Nepal

The Finance and Private Sector Development Unit of the South Asia Region of the World Bank has recently published a report named Access to Financial Services in Nepal. The report, as indicated in the Acknowledgements Section of the report, was prepared by a World Bank team led by Aurora Ferrari under the guidance of Mr. Kenichi Ohashi, Resident Representative of the World Bank in Nepal since the past five years, and Simon Bell. Mr. GuillemetteJaffrin and Mr. Sabin Shrestha were the major contributors; the team also included seven other experts, in addition to the editor, designer, administrative staffs etc. There were five report's peer reviewers, of which three were from the World Bank and one from the KFW. The findings of the report were discussed in the meetings and workshops held in Kathmandu and Washington between September-November, 2006.

The above account, especially given the quality and size of the manpower involved in the project, is sufficient to arouse the interest of the readers about the findings and its implications on the financial sector development of the country itself. But, unfortunately, after reading the report- it is better to escape several paragraphs if you have even elementary knowledge of Nepal's financial sector- it is easy to question the objective and the purpose as well, of the study. It is reported in the press, and confirmed by Mr. Sabin Shrestha, Senior Financial Sector Specialist of the World Bank, that the World Bank will provide a grant of US\$ 30 million to the Nepal Rastra Bank to increase financial services in rural areas. Available information, though

sketchy, indicates that the World Bank's previous loan and other assistance will be completed by June and the current unrequested and probably undesirable, grant will be the new medium for the World Bank's involvement in the financial sector. If this is the real purpose, there is, no doubt, that the World Bank, under the guidance of Mr. Ohashi, will be able to achieve what it wants, given the current fluid political situation. Otherwise, the first task for the Government of Nepal and the World Bank, if they have even marginal sense of responsibility, is to make transparent how the first assistance was used, and, secondly, why there is need for financial and other assistance even for the central bank of the country to perform its normal job.

The report is divided in four chapters, namely, (i) The supply of financial services; (ii) The demand for financial services; (iii) Constraints to the increased access for small businesses and low income households; and (iv) To make the financial sector work for small businesses and low income households. The findings of the report were disclosed in Kathmandu in a press conference on March 19, 2007. At that time, a major, if not the only, finding of the report that was forcefully, and repeatedly, mentioned is that the access of the Nepalese to financial services provided by institutions is limited, specially in the rural areas. It is a phenomenon common to all developing countries of the world in the early stage of development. In Nepal, it was identified by both the government and the central bank as early as 1970. As a result, the Nepal Rastra Bank at that time has implemented several measures to expand the offices of commercial banks in the rural areas, including the provision of compensating the loss of new branches of commercial banks for a few years. Several other measures were undertaken in the 1980's too. The experts involved in the current project, however, have completely ignored, or possessed only limited knowledge, the process of financial sector development in Nepal. This may lead one to conclude the rational for involving only expatriates in the project.

True, in 2005 there were 180 licensed financial institutions compared with 4 in 1980, though the number of deposit accounts per 1,000 people dropped from 113 in 2001 to 90 in 2005. The report did not analyze even briefly why the number of financial institutions increased so rapidly when the growth rate of other sectors was less than satisfactory and the services provided by them, in relative terms, had actually declined. The report is merely providing a statement of facts derived from the survey.

This statement is, of course, true, but teaches us nothing to help develop the programs. The report has failed to generate and then to unify the findings as it lacks appropriate research methodology.

It appears that the project was more useful to the experts involved, directly or indirectly, to educate themselves than to serve any other purpose that they or the sponsors have in mind. Simply as a statement of fact, one can learn much more from the writings of U TunWai and Mr. Anand G. Chandravarkar that was published in the Staff Paper of the International Monetary Fund in, to the best of my memory, the late 1960. The paper merely supports the findings of U TunWai and Mr. Chandavarkar with new data derived from the survey.

As far as the limited access of the Nepalese to the financial services is concerned, we hardly need any survey or statement; it is obvious from the time series data on the currency component of money supply, narrowly defined and published regularly by the Nepal Rastra Bank in its quarterly bulletin. It has not shown any improvement: in 1960 June the Nepalese used to hold 62.3 percent of money supply in currency, that is, notes and coins while in 2005 June it was 70 percent, and is reported to have gone up further in the current year. In other countries, including India the share of currency in money supply has consistently declined. It appears as a peculiar result, but this odd result must be studied from another angle.

Nepal used to have dual currency system, and still the Indian currency can be used to serve three out of four functions of money; it can't be used only as a medium of exchange. There is not enough study yet to understand the role of Indian currency in the economy, and without this any study to undertake the access to financial services in Nepal can not be fully completed. This helps to indicate that the study has been taken without proper identification of the problems of the financial sector of Nepal.

### **2.3.5 Present scenario of Nepali financial sector.**

The present scenario of Nepalese financial sector is in a stage of deterioration. The problem is mainly seen in the lower class financial institutions categorized as "Kha" or "Ga" by NRB.

A series of incidents rocked Nepalese financial market where many bad practices were seen. Most of the development banks and financial institutions director or

managerial level made bad practices with the peoples deposit. They had miss used the money for wrong purpose and in an unauthorized way.

The victim of the bad practice resulting in insolvency was Gorkha Development Bank at first. The managerial persons at managerial level had misused the deposits. Similarly, Samjhana Finance, United Finance, Nepal share markets, Vibor Development bank and I don't think the list will conclude here.

The main reason behind the banks going insolvency is considered to be its investment in Nepalese real estate sector which is in zero level. At times real estate sector had boomed at a peak level. People invested in it in large volume and so did the financial institutions but now the real state sector are at a low point.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Methodology**

The research methodology is the systematic way of solving research problems. Research methodology refers to the overall research process, which a researcher conducts during their study. It includes all the procedures from theoretical foundation to the collection and analysis of data. As most of the data are quantitative the research is based on the scientific models. It is composed of both parts of technical aspect and logical aspect on the basis of historical data. Research is systematic and organizational effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought out activities gathering, recording and analyzing and interpreting the data with the purpose of finding answer to the problem.

Research can be conducted on the basis of secondary data. In this study, all the data are secondary and those data are analyzed using appropriate financial as well as statistical tools. Outcomes are presented in simple way. In this study, the research design, data collection procedure and analysis are described serially. Detail research methods are described in the following headings.

##### **3.1.1 Research Design**

This study covers quantitative methodology in a greater extent and also uses the descriptive part based on both technical aspect and logical aspect. This research tries to perform a well designed quantitative research in a very clear and direct way using both financial and statistical tools as required by the study.

This research based on the secondary data. It covers the 6 years period from 2061/062 to 2066/067. The study is focused on common stocks of financial companies on the basis on available information. This research is analytical based as well as descriptive.

### 3.1.2 Population and Sample

The sampling data had been taken from among the total population of financial companies in Nepal. ie.79 all of them have been assumed as the population of the study and among them following Ten companies are taken as a sample of the study on the basis of judgmental sampling. They are;

Number of finance companies traded in the fiscal year 2061/067=79

Sample size of finance companies = 10

Selection of Sample Finance from  
the Population of the Listed Finance Companies

No of Finance Companies Traded=79 No of Sample Finance Companies=10	
S.No.	Sample Finance Companies
1	Nepal AawashBikashBittiya Company Limited (NABBCL)
2	Annapurna Finance Company Limited (AFCL)
3	Central Finance Limited (CFL)
4	Peoples Finance Limited (PFL)
5	Goodwill Finance Limited (GFL)
6	Nepal Finance Limited (NFL)
7	Standard Finance Limited (STFL)
8	Siddartha Finance Limited (SFL)
9	Om Finance Limited (OFL)
10	Butwal Finance Limited (BFL)

### 3.1.3 Number of data

The data used in this thesis are of 10 selected finance companies listed on NEPSE. It is taken of six fiscal years (ie.2061-067) for the analysis of all these finance Companies along with the data of Market of same years.

### **3.1.4 Source of Data**

In this study, the main source of data is secondary data. The data has been taken with NEPSE index is collected from NEPSE. The main source of data is annual trading report published by NEPSE, Securities Board and other concern finance company's annual report, journals and Nepal Rastra Bank's annual, quarterly publications and others.

### **3.1.5 Data Collection Technique**

This study depends only upon the secondary sources of data. The secondary data had been collected from published material of different organizations such as NEPSE, Central Bureau of Statistics, Nepal Rastra Bank, related websites etc. Most of the data were taken from trading reports of NEPSE and financial statement of the related companies under study. Some of these data are collected from NEPSE's web site [www.nepalstock.com](http://www.nepalstock.com) as well as other related web sites. The review materials are mainly collected from Central Library of TU, Kirtipur. Library of Central Department of Management TU, Kirtipur, Library of ShankerDev Campus and other public libraries.

### **3.1.6 Tools for Data Analysis**

#### **a) Market Price of Stock**

One of the major data of this study is market price of stock. As it is followed the market price of shares of companies, it can be obtained three types of prices high, low and closing. Among high, low and closing price, each year closing price has been taken as the market price of the stock which has specific time of span of one year and the study has focused in annual basis. To get the real average, volume and price of each transaction in the stock and duration of time of each transaction in the whole year are essential. Which is tedious and impossible too, considering the data availability and maintenance. Hence, the closing price is used as the market price of stock, which has a specific time span of one year and the study has focused in annual basis.

**b) Dividend**

Dividend is relevant during the computation of rate of return, which is a reward to the shareholders for their investment. If a company declares only the cash dividend, there are no problems to take the dividend amount. But if the company declares stock dividend (bonus share), it is difficult to obtain the amount that really shareholders has gained. In this case, they get extra numbers of shares as dividend and simultaneously price of the stock declines as result of increased number of stocks. To get a real amount of dividend there are no any model (Formula). So the model has been developed considering practical as well as theoretical aspect.

The model is in case of stock dividend.

**Total dividend amount**

Cash dividend + Stock Dividend% X next yrs MPS

Where;

MPS = Market Price per Share.

**c) Return on Common Stock Investment**

The rate of return on each stock was calculated by dividing the increment or decrement on the market price per share by the value of previous market price of the same stock. The market rate of return is also calculated by dividing the increment or decrement of NEPSE index by the previous NEPSE index. In other words, return on stock j ( $R_j$ ) is calculated as follows;

$$R_j = \frac{D_t + (P_t - P_{t-1})}{P_{t-1}}$$

Where;

$R_j$  = Realized rate of return on common stock j at time t.

$D_t$  = Cash dividend received at time t.

$P_t$  = Price of a stock at time t.

$P_{t-1}$  = Price of a stock at time t-1.

**d) Expected Rate of Return of Common Stock**

One of the major aims of the study is to determine the expected return on the investment in common stock. Generally, this rate is obtained by the arithmetic mean of the past years returns.

Symbolically,

$$\bar{R}_j = E(R_j) = \sum \frac{R_j}{n}$$

Where;

$\bar{R}_j = E(R_j)$  = Expected rate of return on stock j.

n = Number of years that the return is taken

$\sum$  = Sing of summation.

$R_j$  = Return on stock j.

**e) Standard Deviation (  $\sigma$  ).**

It is the statistical measure of the variability of a distribution of return around its mean. It is the square root of the variance and measures the unsystematic risk on stock investment.

Symbolically,

$$\sigma_j = \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n - 1}}$$

Where;

$\sigma_j$  = Standard deviation of returns on stock j during the time period n

**f) Co-efficient of Variation (CV)**

It is the ratio of standard deviation of returns to the mean of that distribution. It is a measure of relative risk.

Symbolically,

$$CV = \frac{\sigma_j}{R_j}$$

**g) Beta (  $\beta$  ).**

It is an index of systematic risk. It measures the sensitivity of a stock's return on the market portfolio.

$$\beta_j = \frac{\text{Cov}(R_j, R_m)}{\sigma_m^2}$$

Where;

$\beta_j$  = Beta co-efficient of stock j.

$\sigma_m^2$  = Variance of market return.

$$\text{Cov}(R_j, R_m) = \frac{\sum (R_j - \bar{R}_j)(R_m - \bar{R}_m)}{n}$$

**h) Correlation Co-efficient (  $\rho_{ij}$  ).**

The correlation is also a measure of the relationship between two assets. The correlation co-efficient can take on a value ranging from -1 to +1. Correlation and covariance are related by following equation.

$$\text{Cov}_{ij} = \sigma_i \sigma_j \rho_{ij}$$

$$\therefore \rho_{ij} = \frac{\text{Cov}_{ij}}{\sigma_i \sigma_j}$$

**i) t-Test | t |.**

In case of testing the significance of difference between two means of small samples ( $n \leq 30$ ), t-values are used to the t-distribution.

**Null Hypothesis:**  $H_0 : \mu_1 = \mu_2$  i.e. the samples have been drawn from normal populations with the same mean or the two population means do not differ significantly or there is no significant difference between two sample means  $\bar{X}_1$  and  $\bar{X}_2$ .

**Alternative Hypothesis:**  $H_1 : \mu_1 \neq \mu_2$  i.e. the samples have not drawn from normal populations with the same mean or the two population means do not

differ significantly or there is no significant difference between two sample means  $\bar{X}_1$  and  $\bar{X}_2$ .

**Test statistic:**

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

Where

$$\bar{X}_1 = \text{mean of first sample } \frac{\sum X_1}{n_1}$$

$$\bar{X}_2 = \text{mean of second sample } \frac{\sum X_2}{n_2}$$

$S^2P$  = an unbiased estimated of the common population variance  $\delta^2$  and its value is computed by the following methods.

Similarly:

$S^2P$  is combined (pooled) sample variation.

$$S^2P = \frac{n_1\sigma_1^2 + n_2\sigma_2^2}{n_1 + n_2 - 2}$$

**Level of significant:** Fix the level of significance  $\alpha = 5\%$  or other specified level along with the type of alternative hypothesis.

**Critical value:** Tabulated or critical value of t at  $\alpha\%$  level of significance for  $(n_1 + n_2 - 2)$  degree of freedom in a two tailed test if obtained from t-tables.

**Decision:** If calculated  $|t|$  is less than or equal to tabulated value of t it falls in the acceptance region and the null hypothesis is accepted and if calculated  $|t|$  is greater than tabulated t,  $H_0$  may be rejected at the adopted level of significance

## **CHAPTER IV**

### **DATA PRESENTATION AND ANALYSIS**

This chapter includes analysis of data collected and their presentation. In this chapter, the effort has been made to analyze "Risk and Return on Common Stock in Finance Companies". Detail data of MPS and dividend of each finance companies and each sector, NEPSE index of each sector and market is presented and their interpretation and analysis is done. With reference to the various reading and literature review in the preceding chapter, effort is made to analyze and diagnose the recent Nepalese stock market movement, with talking a special reference to the listed finance companies. Different tables and figures are drawn to make the result more simple and understandable.

- Expected return
- Standard Deviation
- Coefficient of variance
- Correlation analysis
- Analysis of market sensitivity

#### **4.1 Analysis of Individual Finance Companies.**

As the study has taken a special reference to listed finance companies, Common stock of listed finance companies is analyzed here separately. There are 79 Finance Companies, established up to now in Nepal, are in operation up to 2066/067. Among them the study has focused on the ten Finance companies as a sample.

Each company is introduced at appendixes at the end of the study their common stock's risk and return are analyzed and interpreted here. Name of the chosen ten finance companies are as follows;

##### **4.1.1 Nepal AawashBikashBittiya Company Limited (NABBCL)**

Nepal AawashBikashBittiya Company Limited has been registered under the Company Act, 2065 of Nepal (Formerly Company Act 2021).Initially this company

was established by the Government of Nepal with active participation by leading Banks and Insurance Company of Nepal. At present, the stakeholders of this company are public & private.

Objectives of NABBCL are as follows;

- To provide accessible and reliable financial service to the general public, by protecting and promoting the right and interest of all stake holders of the Finance.
- To provide financial services that help create opportunities for self employment for the lower and middle class, particularly in the rural region as well as urban region of Nepal.
- To ensure that all aspects of service and accounting meet international standards of good governance and transparency.
- We have fixed the target to be a Development Bank in upcoming 5 years.

Vision of NABBCL is as follow;

To improve the quality of life of the people of Nepal by providing access to quality financial products and services. We aim to develop a solid base of loyal clients. In particular we aim to reach out to the lower & middle class people of Nepal. To achieve this end we aim to be an economically viable financial institution that is active in developing sustainable communities. Economic stability supports the development of long-term peace and political stability that we endeavor to support.

Mission of NABBCL is as follow;

To mobilize resources and provide financial support service to the lower & middle class people of Nepal, for viable productive income generation enterprises enabling them to reduce their poverty and move into economic sustainability.

Authorized Capital	= Rs.	300,000,000.00
Issued Capital	= Rs.	167,678,900.00
Paid up Capital	= Rs.	167,628,900.00
Par Value per Share	= Rs.	100.00

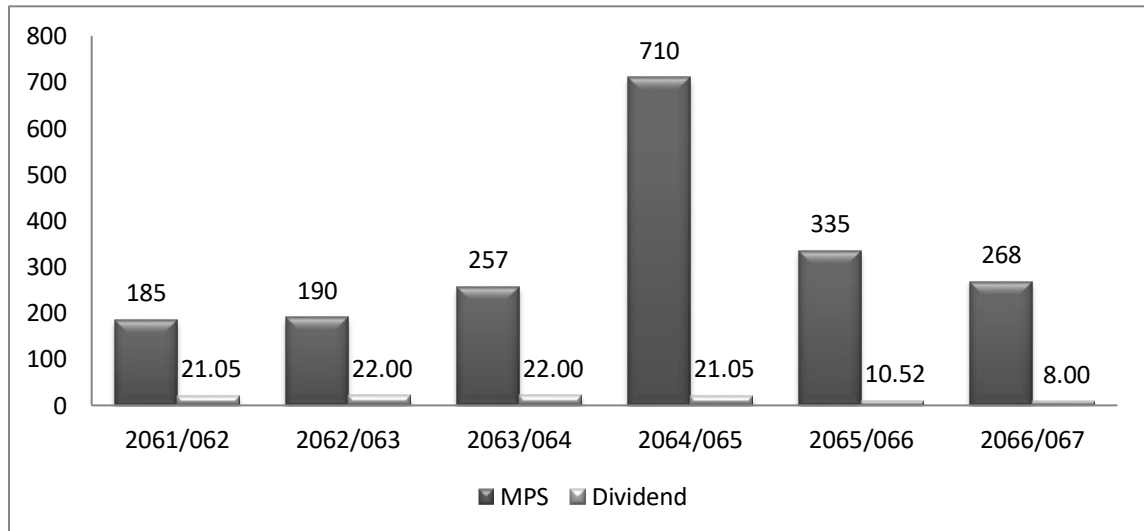
## Market Price per Share and Dividend of NABBCL

Table 4.1

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	190	165	185	1.05	20	21.05
2	2062/063	205	165	190	12	10	22.00
3	2063/064	257	171	257	12	10	22.00
4	2064/065	710	245	710	1.05	20	21.05
5	2065/066	686	245	335	0.52	10	10.52
6	2066/067	361	249	268	8		8.00

*Source: 17th and 18th NABBCL Annual Report.*

Chart 4.1



These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2064/065 and decreasing trend till now. Its dividend is equal due to the cash and stock bonus and decreasing trend in the year 2064/065.

## Statistical Analysis of the Common Stock of NABBCL

Table 4.2

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	185	21.05	0.0000	0.0000	0.0000
2062/063	190	22.00	0.1459	-0.2079	0.0433
2063/064	257	22.00	0.4684	0.1145	0.0131
2064/065	710	21.05	1.8446	1.4907	2.2222
2065/066	335	10.52	-0.5134	-0.8673	0.7522
2066/067	268	8.00	-0.1761	-0.5300	0.2809
Total			1.7694	0.0000	3.3117

*Source: Refer Table 4.1*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{1.7694}{5} = 0.3539 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{3.3117}{5-1}} = 0.9099 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation (CV}_j) &= \frac{\delta_j}{R_j} \\ &= \frac{0.9099}{0.3539} = 2.5711 \end{aligned}$$

Rate of return is in increasing trend till 2065/066 from 2061/062. It means upto 2065/066 return is positive then it is negative in 2066/067.

### **4.1.2 Annapurna Finance Company Limited (AFCL)**

Annapurna Finance Company Ltd. was started 17 years ago, incorporated on 6 Chaitra 2049 and commenced from 14 Ashwin 2050 B.S. The first finance company incorporated outside Kathmandu Valley; well managed by Management and Business Experts with smooth operation, sustained growth and running on Good Profit every year since the first year. Now, AFCL has been moved to its Head Office at Putalisadak, Kathmandu

The vision of AFCL is to be recognized by our customers and stakeholders as the best and most trusted financial institution by providing healthy financial services of high efficiency at a reasonable price for widespread customer satisfaction.

The mission of AFCL is being leader in providing healthy financial and its related services (Lending, Deposit and other financial and related services).

The values of AFCL are as follows:

- Help the Customer Succeed.
- Promote Team work and Mutual Cooperation.
- Maintain Ethical Standard and Integrity
- Continuous Organizational and Personal Improvement

Authorized Capital = Rs. 1,000,000,000.00

Issued Capital = Rs. 707,616,000.00

Paid up Capital = Rs. 704,287,400.00

Par Value per Share = Rs. 100.00

Its Shares listing date on stock exchange was

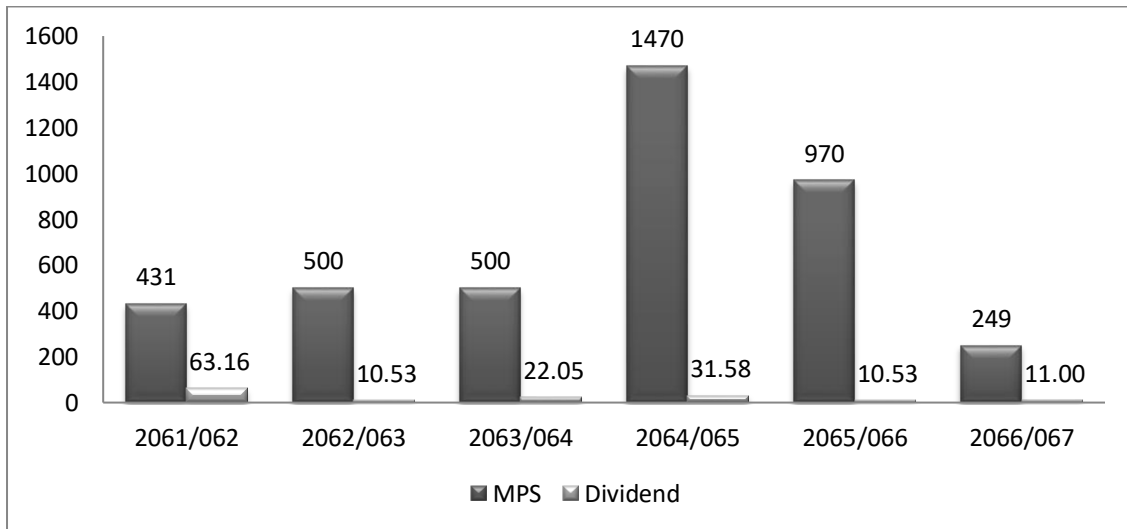
## Market Price per Share and Dividend of AFCL

Table 4.3

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	490	300	431	3.16	60	63.16
2	2062/063	627	400	500	0.53	10	10.53
3	2063/064	555	490	500	1.05	21	22.05
4	2064/065	1621	480	1470	1.58	30	31.58
5	2065/066	1836	848	970	0.53	10	10.53
6	2066/067	990	216	249	11		11.00

*Source: 17th AFCL Annual Report.*

Chart 4.2



*Source: Refer Table 4.3*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and increase near about three times in 2064/065 and decreasing trend till now. Its dividend is not equal in different year and decreasing trend.

## Statistical Analysis of the Common Stock of AFCL

Table 4.4

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	431	63.16	0.0000	0.0000	0.0000
2062/063	500	10.53	0.1845	-0.0489	0.0024
2063/064	500	22.05	0.0441	-0.1893	0.0358
2064/065	1470	31.58	2.0032	1.7698	3.1323
2065/066	970	10.53	-0.3330	-0.5664	0.3208
2066/067	249	11.00	-0.7320	-0.9654	0.9319
Total			1.1668	0.0000	4.4232

*Source: Refer Table 4.3*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) = E(R_j) &= \frac{\sum R_j}{n} \\ &= \frac{1.1669}{5} = 0.2334 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{4.4230}{5-1}} = 1.0515 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation (CV}_j) &= \frac{\delta_j}{\bar{R}_j} \\ &= \frac{1.0515}{0.2334} = 4.5059 \end{aligned}$$

Rate of return is in increasing trend till 2065/066 from 2061/062. It means upto 2065/066 return is positive then it is negative in 2066/067.

### **4.1.3 Central Finance Limited (CFL)**

Central Finance Limited (CFL) is a national level finance company duly approved by The Government of Nepal and Nepal Rastra Bank (the Central Bank of Nepal). The company started its operation from 2<sup>nd</sup> Baishak 2054 and located at KupaandolLalitpur. Established under the Finance Company Act 2042 and Company Act 2053, CFL has been performing its functions effectively under the guidance of Nepal Rastra Bank (Central Bank). The financial result of the company reflects its strong strength. The company was listed in Nepal Stock Exchange on 4<sup>th</sup> Chairta 2059. We are CFL - a diversified financial services company where speed, creativity, and responsiveness are the keys to our success.

#### **GAIN MARKET ADVANTAGE WITH US**

Transparency, accountability, information disclosures and stringent ethics practiced at CFL, have now become its hallmark. The aforementioned principles have not only proven to be winning formulae, but in the years have also helped us win investor's confidence. CFL helps people in diverse businesses and family offering them innovative financial products and solutions. And of course, helping them materialize their dreams.

In the years that CFL has been in business, it has provided financing solutions to small and mid-sized companies in both traditional commercial finance markets and in specialized niche markets such as housing and retail financing. Having long association with these industries, our knowledge of these industries runs deep. We now clearly understand the chain that links supply and distribution and the associated capital challenges.

Authorized Capital = Rs. 640,000,000.00

Issued Capital = Rs. 320,000,000.00

Paid up Capital = Rs. 146,165,600.00

Par Value per Share = Rs. 100.00

Its Shares listing date on stock exchange was

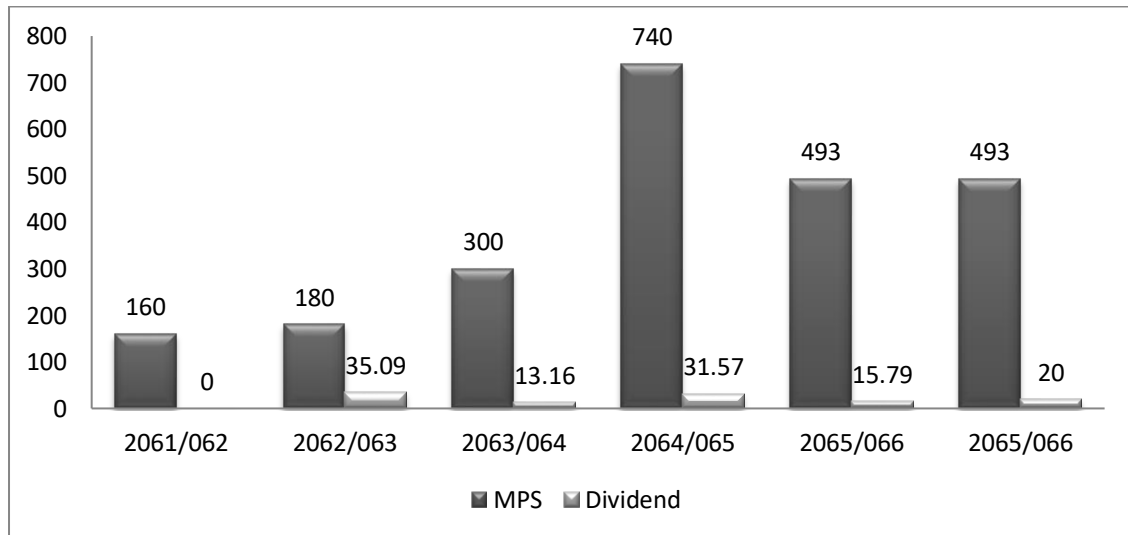
## Market Price per Share and Dividend of CFL

Table 4.5

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	165	130	160	-	-	-
2	2062/063	190	145	180	1.76	33.33	35.09
3	2063/064	306	180	300	0.66	12.50	13.16
4	2064/065	810	300	740	1.57	30.00	31.57
5	2065/066	977	430	493	0.79	15.00	15.79
6	2066/067	977	430	493	5.00	15.00	20.00

*Source: 13th and 14th CFL Annual Report.*

Chart 4.3



*Source: Refer Table 4.5*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and decreased 2066/067. Its dividend is equal in 2062/063 to 2064/065 and decreasing trend in the year 2065/066.

## Statistical Analysis of the Common Stock of CFL

Table 4.6

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	160	0	0.0000	0.0000	0.0000
2062/063	180	35.09	0.3443	-0.1325	0.0176
2063/064	300	13.16	0.7398	0.2630	0.0691
2064/065	740	31.57	1.5719	1.0951	1.1992
2065/066	493	15.79	-0.3124	-0.7892	0.6229
2066/067	493	20	0.0406	-0.4362	0.1903
Total			2.3842	0.0000	2.0991

*Source: Refer Table 4.5*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{2.3842}{5} = 0.4768 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{2.0992}{5-1}} = 0.7244 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation (CV}_j) &= \frac{\delta_j}{R_j} \\ &= \frac{0.7244}{0.4768} = 1.5192 \end{aligned}$$

Rate of return is in increasing trend till 2063/064 from 2062/063 and decreasing trend till 2065/066. is decreasing the way that its movement is in negative trend. The negative trend starts from the year It means upto 2065/066 return is positive then it is negative in 2066/067.

#### **4.1.4 Peoples Finance Limited (PFL)**

People's Finance Limited was established in 2049 B.S. under the Company Act 2021(which is now regulated by Bank and Financial Institution Act 2063), with a view and prime motive of extending professionalized and efficient financing services to various segments of the society.

The corporate office of the company is located at Tripureshwor, Kathmandu Metropolitan City. The post of Executive Chairperson is currently handled by Mr. ChhabilalBhusal.

We would like to express our sincere gratitude to our customers, shareholders, employees and other stakeholders for their support and co-operation for lending the company to the present height of achievement since its preamble stage.

We would also like to elucidate that People's Finance is committed to delivering quality service to customers, generating good returns to shareholders, providing attractive incentives to employees and serving the community through stronger corporate social responsibility endeavor.

The major visions/missions are; Promoting economic growth, Providing excellent customer services by providing professionalized quality services. Providing challenging career and learning opportunities to its employees.

Authorized Capital	= Rs. 1,000,000,000.00
Issued Capital	= Rs. 867,031,140.00
Paid up Capital	= Rs. 289,010,380.00
Par Value per Share	= Rs. 100.00

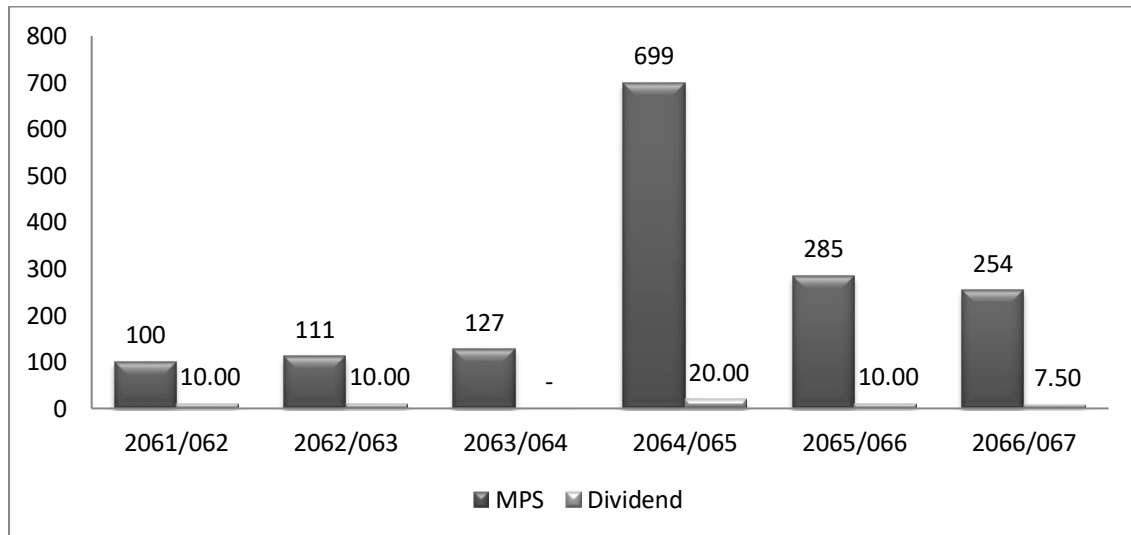
## Market Price per Share and Dividend of PFL

Table 4.7

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	115	99	100	10		10.00
2	2062/063	126	96	111		10	10.00
3	2063/064	139	115	127			-
4	2064/065	699	127	699		20	20.00
5	2065/066	1091	275	285		10	10.00
6	2066/067	305	180	254	7.5		7.50

*Source: 13th and 14th PFL Annual Report.*

Chart 4.4



*Source: Refer Table 4.7*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and decreased 2066/067. Its dividend is equal in 2062/063 to 2064/065 and decreasing trend in the year 2065/066.

## Statistical Analysis of the Common Stock of PFL

Table 4.8

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	100	10.00	0.0000	0.0000	0.0000
2062/063	111	10.00	0.2100	-0.6610	0.4369
2063/064	127	-	0.1441	-0.7269	0.5284
2064/065	699	20.00	4.6614	3.7904	14.3671
2065/066	285	10.00	-0.5780	-1.4490	2.0996
2066/067	254	7.50	-0.0825	-0.9535	0.9092
Total			4.3550	0.0000	18.3412

*Source: Refer Table 4.7*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{4.3550}{5} = 0.8710 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{18.3411}{5-1}} = 2.1413 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation (CV}_j) &= \frac{\delta_j}{\bar{R}_j} \\ &= \frac{2.1413}{0.8710} = 2.4585 \end{aligned}$$

Rate of return is in increasing trend till 2063/064 from 2062/063 and decreasing trend till 2065/066. is decreasing the way that its movement is in negative trend. The negative trend starts from the year It means upto 2065/066 return is positive then it is negative in 2066/067.

#### 4.1.5 Goodwill Finance Limited

Goodwill Finance Ltd., rendering significant impact in the financial sector since 15 years, has shifted its corporate office from current location, Dillibazar, to its own premises at Hattisar. The new building was inaugurated during a ceremony by the Governor of Nepal Rastra Bank, Dr. Yuba Raj Khatiwada who was the chief guest of the inauguration ceremony whereas among other distinguished guests were Ram ShantaShrestha, the Chairman of Nepal Financial Institution Company Association and JhapatBohora, chairman of Development bank association.

Goodwill Finance Ltd. operating from their own building is the result of customer's belief, enthusiasm and continuous support towards Goodwill Finance.

Considering the current customer base around Dillibazar, the preceding corporate office will continue its operation as one of the Branch of GFIL.

At present we are providing our services inside valley through our branches at Hattisar (Head Office), Dillibazar, Indrachowk, Taumadi (Bhaktapur), Kumaripati (Lalitpur) and outside valley through Itahari (Sunsari), Birtamode (Jhapa), Banke (Nepalgunj) and Ghorahi (Dang) branches.

Vision of GFL is to be the best financial service provider in the basis of operational excellence, while establishing a successful relationship with our customers.

Mission of GFL is To become a market leader in financial sector, known for its high profitability, customer centric quality products and outstanding services to its customers and high rate of significant and attractive returns to its stakeholders.

Authorized Capital	= Rs. 1,000,000,000.00
Issued Capital	= Rs. 647,955,000.00
Paid up Capital	= Rs. 294,709,900.00
Par Value per Share	= Rs. 100.00

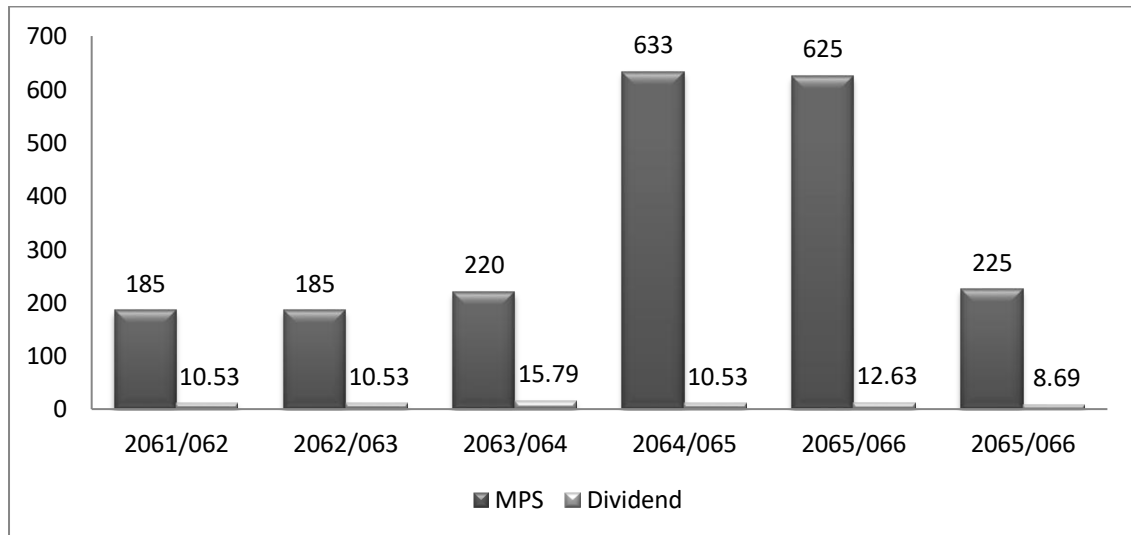
## Market Price per Share and Dividend of GFL

Table 4.9

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	187	180	185	10.53		10.53
2	2062/063	185	185	185	10.53		10.53
3	2063/064	220	160	220	5.79	10	15.79
4	2064/065	709	220	633		10.53	10.53
5	2065/066	1120	625	625	7.63	5	12.63
6	2066/067	724	225	225	6.89	1.8	8.69

*Source: 16th GFL Annual Report.*

Chart 4.5



*Source: Refer Table 4.9*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and increase near about three times in 2064/065 and decreasing trend till now. Its dividend is not equal in different year and decreasing trend.

## Statistical Analysis of the Common Stock of GFL

Table 4.10

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	185	10.53	0.0000	0.0000	0.0000
2062/063	185	10.53	0.0569	-0.2706	0.0732
2063/064	220	15.79	0.2745	-0.0530	0.0028
2064/065	633	10.53	1.9251	1.5976	2.5522
2065/066	625	12.63	0.0073	-0.3202	0.1026
2066/067	225	8.69	-0.6261	-0.9536	0.9094
Total			1.6377	0.0000	3.6402

*Source: Refer Table 4.9*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{1.6377}{5} = 0.3275 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{3.6402}{5-1}} = 0.9540 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation (CV}_j) &= \frac{\delta_j}{\bar{R}_j} \\ &= \frac{0.9540}{0.3275} = 2.9125 \end{aligned}$$

Rate of return is in increasing trend till 2065/066 from 2061/062. It means upto 2065/066 return is positive then it is negative in 2066/067.

#### 4.1.6 Nepal Finance Limited (NFL)

NFL is the first Finance Company of Private Sector in Nepal stabilized in 2049 B.S. Till Then NFL has been known as the most mature finance company in Nepal providing its products among the NFL Clients.

NFL, As the trend setter in the market has the initiation of innovating some of the very first products launched in Nepal like Hire purchase, Margin Lending which became very famous later on and has been a synonym in the market nowadays.

NFL, As a Leading Finance has its some of the most advance and technically developed Deposit Schemes with various Kinds of Account which has been very popular for many years and adopted very keenly in the market.

NFL, serving to our country to Remit foreign currency, is just a another step for the people living outside of Nepal to send their money from anywhere around the world.

The mission has always been a trend setter and looking forward for it in financial sectors.

- Expanding a huge financial market,
- Creating of Adaptable Financial Account for various clients,
- Creating and Re-defining New Products in the market,
- Enhancing More Technical and Efficient Services to its clients,
- Expanding More Branches,
- Updating with Equipments for better technical services
- Expansion of Modern way of banking through Internet and SMS

Authorized Capital = Rs. 240,000,000.00

Issued Capital = Rs. 187,750,000.00

Paid up Capital = Rs. 87,750,000.00

Par Value per Share = Rs. 100.00

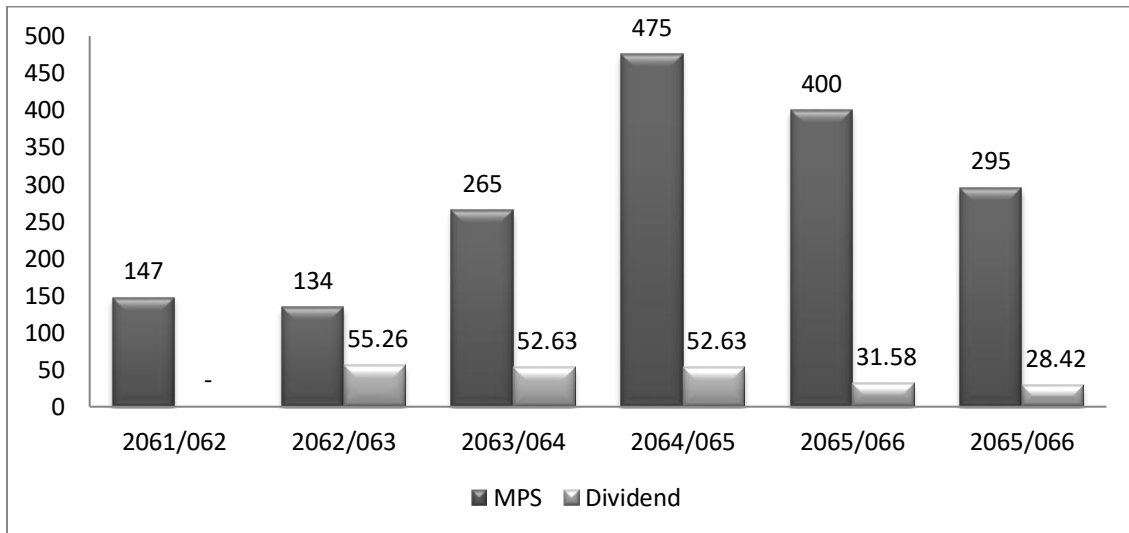
## Market Price per Share and Dividend of NFL

Table 4.11

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	164	132	147			-
2	2062/063	165	134	134	5.26	50	55.26
3	2063/064	314	134	265	2.63	50	52.63
4	2064/065	480	267	475	2.63	50	52.63
5	2065/066	750	400	400	1.58	30	31.58
6	2066/067	465	295	295	1.42	27	28.42

*Source: 17th and 18th NFL Annual Report.*

Chart 4.6



*Source: Refer Table 4.11*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and decreased 2066/067. Its dividend is equal in 2062/063 to 2064/065 and decreasing trend in the year 2065/066.

## Statistical Analysis of the Common Stock of NFL

Table 4.12

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	147	-	0.0000	0.0000	0.0000
2062/063	134	55.26	0.2875	-0.1857	0.0345
2063/064	265	52.63	1.3704	0.8972	0.8049
2064/065	475	52.63	0.9911	0.5179	0.2682
2065/066	400	31.58	-0.0914	-0.5646	0.3188
2066/067	295	28.42	-0.1915	-0.6647	0.4419
Total			2.3661	0.0000	1.8683

*Source: Refer Table 4.11*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{2.3661}{5} = 0.4732 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{1.8681}{5-1}} = 0.6834 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation (CV}_j) &= \frac{\delta_j}{R_j} \\ &= \frac{0.6834}{0.4732} = 1.4442 \end{aligned}$$

Rate of return is in increasing trend till 2063/064 from 2062/063 and decreasing trend till 2065/066. is decreasing the way that its movement is in negative trend. The negative trend starts from the year It means upto 2065/066 return is positive then it is negative in 2066/067.

#### 4.1.7 Standard Finance Limited (STFL)

Standard Finance Limited was originally promoted in 1995. Initial Public Offering was made in 2003 which diluted the promoters' share holding to 60%. Since the inception of the company, Standard Finance Limited has been reinventing itself as per requirement of the market and changing economic scenario. It has been a pioneer in Margin lending business in Nepal and continues to explore areas of services where it can add value to both the customers and shareholders.

STFL is focused on enhancing shareholders wealth and providing customers with value-added services.

STFL Commitment is focused on enhancing shareholders wealth and providing customers with value-added services.

The vision of Standard Finance Limited is to become a preferred financial service provider in the country that provides one stop solution to all the customers on their financial services needs, while maximizing the wealth of investors.

Mission statement of SFL incorporates the following:

- Constantly assess client needs to find profitable ways to meet their requirements through high quality offerings.
- Act in a manner that demonstrates stability and promotes trust in the bank.
- Build a system of human resource management that.
- Provides career development opportunities that increase the professionalism and technical proficiency of the employees.

Authorized Capital	= Rs.	5,000,000,000.00
Issued Capital	= Rs.	2,500,000,000.00
Paid up Capital	= Rs.	1,001,880,000.00
Par Value per Share	= Rs.	100.00

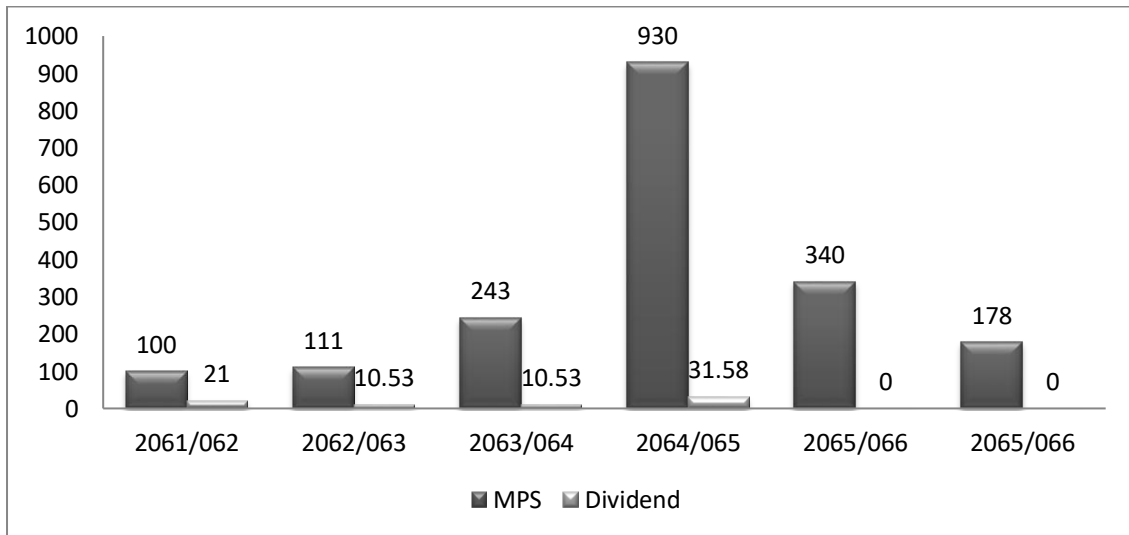
## Market Price per Share and Dividend of STFL

Table 4.13

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	123	100	100	21		21
2	2062/063	118	94	111		10.53	10.53
3	2063/064	280	108	243		10.53	10.53
4	2064/065	980	240	930		31.58	31.58
5	2065/066	1328	295	340			0
6	2066/067	334	168	178			0

*Source: 14th and 15th STFL Annual Report.*

Chart 4.7



*Source: Refer Table 4.13*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and decreased 2066/067. Its dividend is equal in 2062/063 to 2064/065 and decreasing trend in the year 2065/066.

## Statistical Analysis of the Common Stock of STFL

Table 4.14

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	100	21	0.0000	0.0000	0.0000
2062/063	111	10.53	0.2153	-0.4538	0.2060
2063/064	243	10.53	1.2841	0.6150	0.3782
2064/065	930	31.58	2.9571	2.2880	5.2349
2065/066	340	0	-0.6344	-1.3035	1.6992
2066/067	178	0	-0.4765	-1.1456	1.3124
Total			3.3456	0.0000	8.8307

*Source: Refer Table 4.13*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{3.3456}{5} = 0.6691 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{8.8306}{5-1}} = 1.4858 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation } (CV_j) &= \frac{\delta_j}{R_j} \\ &= \frac{1.4858}{0.6691} = 2.2206 \end{aligned}$$

Rate of return is in increasing trend till 2063/064 from 2062/063 and decreasing trend till 2065/066. is decreasing the way that its movement is in negative trend. The negative trend starts from the year It means upto 2065/066 return is positive then it is negative in 2066/067.

#### **4.1.8 Siddhartha Finance Limited (SFL)**

Siddhartha Finance Limited (SFL) is the first national level finance company, has been established at Bhairahawa (Rupandehi), the entry door of worldwide famous Lumbini, birthplace of Lord Siddhartha Gautam Buddha, with the keen purpose to make the country financially strong. SFL is inaugurated by former Prime Minister late Mr. Man Mohan Singh Adhikari on 25 th May, 1995.

SFL has been working from 25th of May, 1995 with permission from Nepal Rastra Bank. SFL is a fully fledged “C” category national level financial institution, the registered head office of the SFL, is located at Bhairahawa and branch offices at Kamaladi (Kathmandu), Parasi (Nawalparasi) & Chandrauta (Kapilbastu), rendering it's services to all levels of people for their individual as well as the overall development of the nation. SFL is conducting its entire financial service activities under the direct supervision of Nepal Rastra Bank.

Vision of SFL is full-fledged incorporated financial services mediator with a goal to provide the best financial services to its customers. SFL supports the entrepreneurs with required financial services right on time that helps to capitalize the opportunities created in the financial sectors.

Authorized Capital	= Rs.	600,000,000.00
Issued Capital	= Rs.	420,000,000.00
Paid up Capital	= Rs.	104,520,000.00
Par Value per Share	= Rs.	100.00

Its Shares listing date on stock exchange was

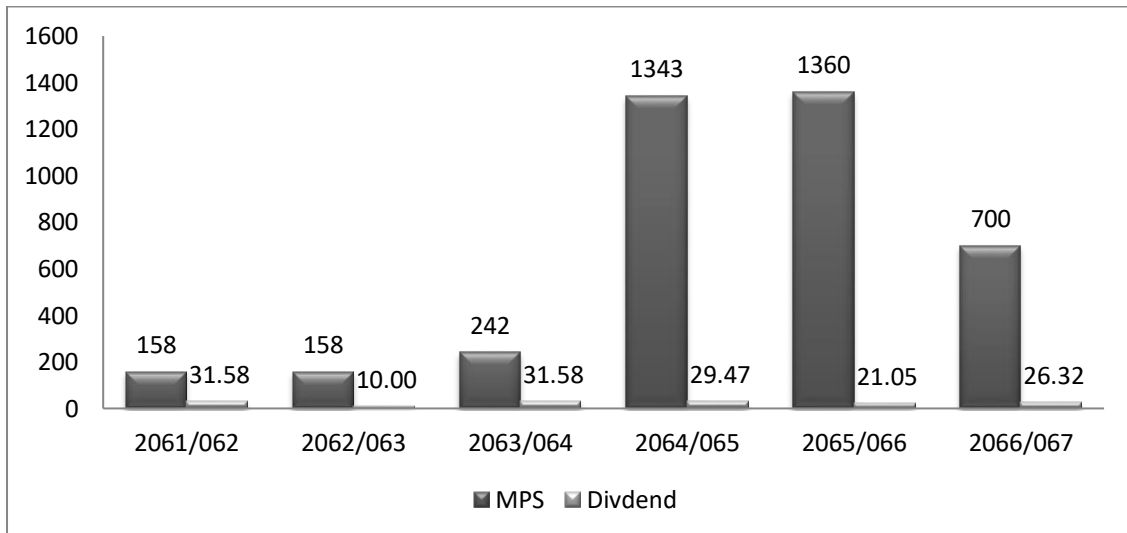
## Market Price per Share and Dividend of SFL

Table 4.15

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	165	120	158	1.58	30	31.58
2	2062/063	172	145	158	10		10
3	2063/064	242	150	242	1.58	30	31.58
4	2064/065	1343	252	1343	1.47	28	29.47
5	2065/066			1360	1.05	20	21.05
6	2066/067	700	700	700	1.32	25	26.32

*Source: 14th and 15th SFL Annual Report.*

Chart 4.8



*Source: Refer Table 4.15*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and decreased 2066/067. Its dividend is equal in 2062/063 to 2064/065 and decreasing trend in the year 2065/066.

## Statistical Analysis of the Common Stock of SFL

Table 4.16

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	158	31.58	0.0000	0.0000	0.0000
2062/063	158	10.00	0.0633	-0.9424	0.8882
2063/064	242	31.58	0.7315	-0.2742	0.0752
2064/065	1343	29.47	4.6714	3.6657	13.4372
2065/066	1360	21.05	0.0283	-0.9774	0.9553
2066/067	700	26.32	-0.4659	-1.4716	2.1657
Total			5.0286	0.0000	17.5216

*Source: Refer Table 4.15*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{5.0286}{5} = 1.0057 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{17.5214}{5-1}} = 2.0929 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation } (CV_j) &= \frac{\delta_j}{R_j} \\ &= \frac{2.0929}{1.0057} = 2.0810 \end{aligned}$$

Rate of return is in increasing trend till 2063/064 from 2062/063 and decreasing trend till 2065/066. is decreasing the way that its movement is in negative trend. The negative trend starts from the year It means upto 2065/066 return is positive then it is negative in 2066/067.

#### **4.1.9 OM Finance Limited (OFL)**

OFL is one of the pioneer & leading finance companies of the Pokhara. It was registered in 2054 B.S. by the group of highly reputed & skilled board of directors. In 29th Bhadra 2057 B.S. Nepal Rastra Bank provided the License as finance company, thus, OM finance started its operation from 1st Ashwin 2057 B.S.

The head office of this finance limited is situated in Newroad, Pokhara. From its starting phase, OFL is trying to bring motivation in the economic condition of the country, establish economic favor to every individual and utilize the freezed capital of the country, plan and invest in an ordered (step by step) manner & upgrade the economical policies of Nepal.

OFL is providing the cutting edge facilities to Pokhara Valley as per market demands to fulfill the basic to every level of customer demands. The services provided by the finance are trustworthy, protective and easy financial services. Famous and successful industrialists, businessmen, social workers and people having years of experience in financial sector of Pokhara.

OFL provide various services for online money transfers. There service is the best known, most secure and reliable online service in Pokhara city. Customer can send or receive money within minutes to/from other peoples around the globe. With the minimum charge you can transfer funds any where in this world. Recipients do not require a bank account to receive funds.

Authorized Capital	= Rs.	840,000,000.00
Issued Capital	= Rs.	210,000,000.00
Paid up Capital	= Rs.	148,050,000.00
Par Value per Share	= Rs.	100.00

Its Shares listing date on stock exchange was

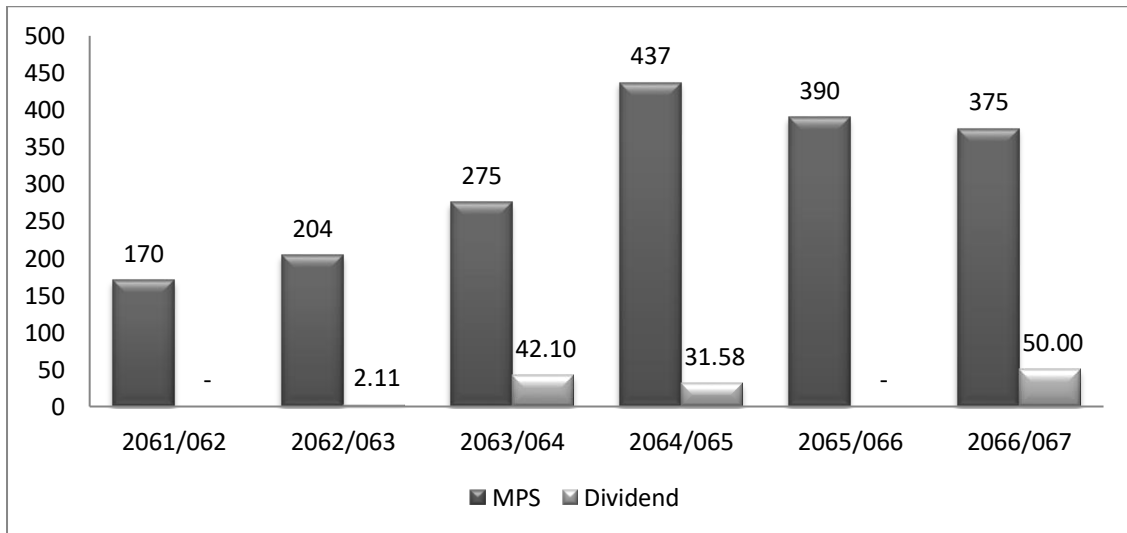
### Market Price per Share and Dividend of OFL

Table 4.17

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	170	150	170			-
2	2062/063	231	200	204	2.11		2.11
3	2063/064	275	200	275	2.1	40	42.10
4	2064/065	510	288	437	1.58	30	31.58
5	2065/066	471	390	390			-
6	2066/067	472	364	375	15	35	50.00

*Source: 10th OFL Annual Report.*

Chart 4.9



*Source: Refer Table 4.17*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and decreased 2066/067. Its dividend is equal in 2062/063 to 2064/065 and decreasing trend in the year 2065/066.

## Statistical Analysis of the Common Stock of OFL

Table 4.18

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	170	-	0.0000	0.0000	0.0000
2062/063	204	2.11	0.2124	-0.0782	0.0061
2063/064	275	42.10	0.5544	0.2638	0.0696
2064/065	437	31.58	0.7039	0.4133	0.1708
2065/066	390	-	-0.1076	-0.3982	0.1585
2066/067	375	50.00	0.0897	-0.2009	0.0403
Total			1.4528	0.0000	0.4453

*Source: Refer Table 4.17*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{1.4528}{5} = 0.2906 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{0.4454}{5-1}} = 0.3337 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation } (CV_j) &= \frac{\delta_j}{R_j} \\ &= \frac{0.3337}{0.2906} = 1.1484 \end{aligned}$$

Rate of return is in increasing trend till 2063/064 from 2062/063 and decreasing trend till 2065/066. is decreasing the way that its movement is in negative trend. The negative trend starts from the year It means upto 2065/066 return is positive then it is negative in 2066/067.

#### **4.1.10 Butwal Finance Limited (BFL)**

BFL came into existence in the year 2055 B.S. with the view to accelerate the pace of economic development through active participation in socio-economic activities. Since its inception, BFL has made its earnest efforts to contribute to the country by undertaking various integrated economic projects. Hence we feel proud to announce to our valued customers that BFL has completed five years of its successful operation so far.

BFL aims to achieve excellence in financial sectors by rendering services to all levels of people for their individual as well as the overall development of the nation. However, the accomplishment of this esteemed goal depends entirely on the dedication, devotion, skills and experience of our highly motivated staff members who are the assets of the company.

To achieve its goal, BFL has assembled the team of young and dynamic professional to look after the day to day operation. The process of forwarding the nation in the path of development by economic liberation and market oriented policies, Butwal Finance LTD has been established Butwal, the heart of LumbiniZone , with the purpose to make the country financially strong and empowered and also to turn the nation into modernization.

The Company has been working from 25th of Asadh 2055 with the permission from Nepal Rastra Bank on 7th Asadh 2055.

The objectives to provide facilities to the customers to undertake viable economic projects in order to improve quality of their life.

Authorized Capital	= Rs.	400,000,000.00
Issued Capital	= Rs.	200,000,000.00
Paid up Capital	= Rs.	82,735,618.75
Par Value per Share	= Rs.	100.00

Its Shares listing date on stock exchange was

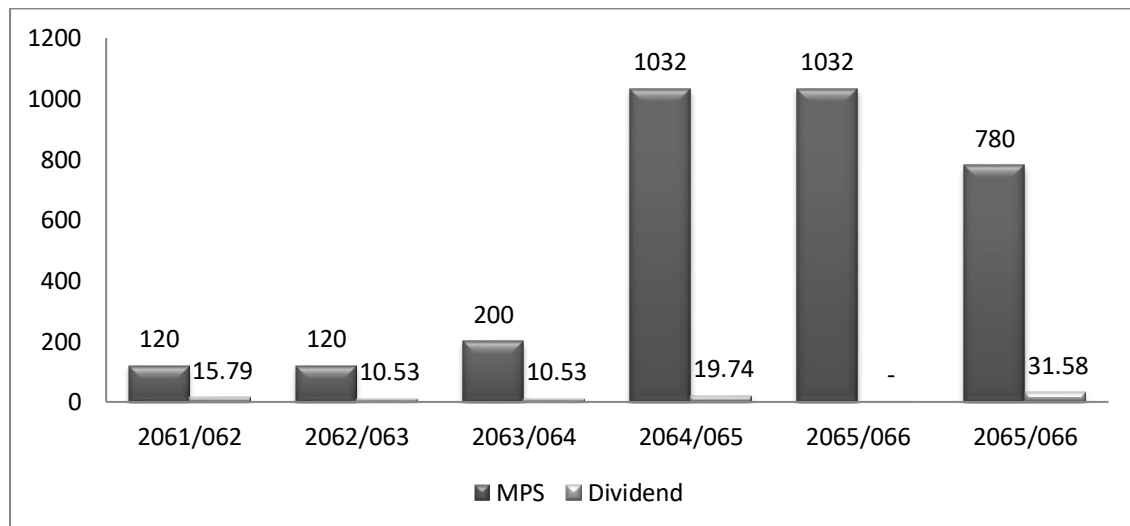
## Market Price per Share and Dividend of BFL

Table 4.19

S.N.	F/Y	Market Price Per Share (P)			Dividend Per Share		
		High	Low	Closing	Cash	Stock	Total
1	2061/062	125	114	120	0.79	15	15.79
2	2062/063	134	108	120	0.53	10	10.53
3	2063/064	219	115	200	0.53	10	10.53
4	2064/065	1032	200	1032	0.99	18.75	19.74
5	2065/066			1032			-
6	2066/067	780	780	780	1.58	30	31.58

*Source: 12th and 13th BFL Annual Report.*

Chart 4.10



*Source: Refer Table 4.19*

These table and chart shows that the year and price movement is slightly increasing trend between 2061/062 to 2063/064 and decreased 2066/067. Its dividend is equal in 2062/063 to 2064/065 and decreasing trend in the year 2065/066.

## Statistical Analysis of the Common Stock of BFL

Table 4.20

F/Y	MPS	Dividend	R	R- E(R <sub>j</sub> )	[R- E(R <sub>j</sub> )] <sup>2</sup>
2061/062	120	15.79	0.0000	0.0000	0.0000
2062/063	120	10.53	0.0878	-0.8897	0.7915
2063/064	200	10.53	0.7544	-0.2231	0.0498
2064/065	1032	19.74	4.2587	3.2812	10.7665
2065/066	1032	-	0.0000	-0.9775	0.9554
2066/067	780	31.58	-0.2136	-1.1911	1.4186
Total			4.8873	0.0000	13.9818

*Source: Refer Table 4.19*

We have,

$$\begin{aligned} \text{Expected Return } (\bar{R}_j) &= E(R_j) = \frac{\sum R_j}{n} \\ &= \frac{4.8873}{5} = 0.9775 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta) &= \sqrt{\frac{\sum (R_j - \bar{R}_j)^2}{n-1}} \\ &= \sqrt{\frac{13.9819}{5-1}} = 1.8696 \end{aligned}$$

$$\begin{aligned} \text{Coefficient of Variation } (CV_j) &= \frac{\delta_j}{\bar{R}_j} \\ &= \frac{1.8696}{0.9775} = 1.9127 \end{aligned}$$

Rate of return is in increasing trend till 2063/064 from 2062/063 and decreasing trend till 2065/066. is decreasing the way that its movement is in negative trend. The negative trend starts from the year It means upto 2065/066 return is positive then it is negative in 2066/067.

## 4.2 Comparison of Expected Return, Standard Deviation and Coefficient of Variance among Selected Ten Finance Companies

Here the summary of Expected Return, Standard Deviation and Coefficient of Variance of Common Stock of ten selected finance companies are presented in below table

### Expected Return, S.D. and C.V. of Ten Selected Finance Companies.

Table 4.21

SN	Name of Institute	Expected Return	Standard Deviation	Coefficient of Variation
1	NABBCL	0.3539	0.9099	2.5711
2	AFCL	0.2334	1.0516	4.5062
3	CFL	0.4768	0.7244	1.5192
4	PFL	0.8710	2.1413	2.4585
5	GFL	0.3275	0.9540	2.9125
6	NFL	0.4732	0.6834	1.4442
7	STFL	0.6691	1.4858	2.2206
8	SFL	1.0057	2.0929	2.0810
9	OFL	0.2906	0.3337	1.1483
10	BFL	0.9775	1.8696	1.9127

Source: Refer Calculated Values of 4.1.1 to 4.1.10

From the above table 4.21, it is clear that expected return of Siddhartha Finance Limited (SFL) has highest return ie. 100.57% and Annapurna Finance Company Limited (AFCL) has the lowest ie. 23.34%. CV of Annapurna Finance Company Limited (AFCL) is the highest ie. 4.5062 and OM Finance Limited (OFL) is the lowest ie. 1.1483, that mean the return of AFCL is more volatile and OFL is less volatile.

### 4.3 Comparison of Selected Finance Companies on the Basis of Market Capitalization

Market capitalization is the total value at specific time period. The market capitalization of listed securities of selected ten finance companies at the end of the fiscal year 2061/067 is Rs. 8,109.0077 Million and the market capitalization of the ten finance companies is presented below;

#### Market Capitalization of Ten Selected Finance Companies

Table 4.22

(Rs. in Million)

SN	Name of Institute	Market Capitalization	Percent
1	NABBCL	449.2455	5.5401
2	AFCL	1753.6756	21.6263
3	CFL	541.2511	6.6747
4	PFL	734.0864	9.0527
5	GFL	663.0973	8.1773
6	NFL	258.8625	3.1923
7	STFL	1783.3464	21.9922
8	SFL	731.6400	9.0226
9	OFL	549.2655	6.7735
10	BFL	644.5374	7.9484
Total		8109.0077	100.0000

Source: Refer [www.nepalstock.com/quote](http://www.nepalstock.com/quote)

The table 4.22 shows the total market capitalization at the end of the fiscal year 2066/067, on the basis of above table STFL is the biggest ie. Rs. 21.9922 and NABBCL is the smallest finance company ie. Rs. 5.5401 .

#### 4.4 Comparison of T-TEST between Selected Ten Finance Companies.

According to the age factor of selected finance companies, we can separate into two groups for t-test calculation. First one is below than 15 years (under Age) and another one is 15 or more than 15 years (Over Age).

**Table 4.23**

S.N.	Name of Institute	Age of Establishment	Under Age Group 1	Over AgeGroup 2
1	NABBCL	18		NABBCL
2	AFCL	17		AFCL
3	CFL	14	CFL	
4	PFL	14	PFL	
5	GFL	16		GFL
6	NFL	18		NFL
7	STFL	15		STFL
8	SFL	15		SFL
9	OFL	9	OFL	
10	BFL	13	BFL	

**Table 4.24**

Name of Institute	Returns of X1	$(X_1 - \bar{X}_1)$	$(X_1 - \bar{X}_1)^2$
CFL	0.4768	-0.1772	0.0314
PFL	0.8710	0.2170	0.0471
OFL	0.2906	-0.3634	0.1320
BFL	0.9775	0.3235	0.1047
<b>Total</b>	<b>2.6159</b>	<b>0.0000</b>	<b>0.3152</b>

We have,

$$\begin{aligned} \text{Expected Return } (\bar{X}_1) &= E(X_1) = \frac{\sum X_1}{n_1} \\ &= \frac{2.6159}{4} = 0.6540 \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation } (\delta_1) &= \sqrt{\frac{1}{n_1} \sum (X_1 - \bar{X}_1)^2} \\ &= \sqrt{\frac{1}{4} \times 0.3152} = 0.2807 \end{aligned}$$

**Table 4.25**

Name of Institute	Returns of X2	$(X_2 - \bar{X}_2)$	$(X_2 - \bar{X}_2)^2$
NABBCL	0.3539	-0.1566	0.0245
AFCL	0.2334	-0.2771	0.0768
GFL	0.3275	-0.1830	0.0335
NFL	0.4732	-0.0373	0.0014
STFL	0.6691	0.1586	0.0252
SFL	1.0057	0.4952	0.2453
Total	3.0628	0.0000	0.4067

We have,

$$\text{Expected Return } (\bar{X}_2) = E(X_2) = \frac{\sum X_2}{n_2}$$

$$= \frac{3.0628}{6} = 0.5105$$

$$\text{Standard Deviation } (\delta_2) = \sqrt{\frac{1}{n_2} \sum (X_2 - \bar{X}_2)^2}$$

$$= \sqrt{\frac{1}{6} \times 0.4067} = 0.2604$$

### Step-1

$H_0 : \mu = \mu_2$  (Average return of under age group of finance companies and over age of finance companies are equal)

$H_0 : \mu \neq \mu_2$  (Average return of under age group of finance companies and over age of finance companies are not equal)

### Step-2 Test Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2p \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$
$$= \frac{0.6540 - 0.5140}{\sqrt{0.2901 \left( \frac{1}{4} + \frac{1}{6} \right)}} = \frac{0.1400}{\sqrt{0.1209}} = 0.4027$$

Hence,

$S^2P$  is combined (pooled) sample variation.

$$S^2P = \frac{n_1 \sigma_1^2 + n_2 \sigma_2^2}{n_1 + n_2 - 2}$$
$$= \frac{4 \times 0.6540^2 + 6 \times 0.3189^2}{4 + 6 - 2} = 0.2901$$

### Step-3 Degree of Freedom

$$n_1 + n_2 - 2$$

$$= 4 + 6 - 2$$

$$= 8$$

Level of significance ( $\alpha$ ) = 5%

(Fix the level of significance( $\alpha$ ) = 5% unless or otherwise stated and specify whether the alternative hypothesis is one tailed or two tailed test.)

#### Step-4 Critical Value

The tabulated value of t at 5% level of significance for right tailed test and for 8 d.f. is 2.306

#### Step-5 Decision

Since, calculated value of t is less than tabulated value of t. So,  $H_0$  accept therefore the average return of under age group of finance companies and over age of finance companies are equal.

### **4.5 Major Findings of the Study**

Major findings of the study are summarized as below;

- Expected return, S.D. and C.V. of finances company are as below;

**Table 4.26**

SN	Name of Institute	Expected Return	Standard Deviation	Coefficient of Variation	Remarks
1	NABBCL	0.3539	0.9099	2.5711	Risky
2	AFCL	0.2334	1.0516	4.5062	Riskiest
3	CFL	0.4768	0.7244	1.5192	Average Risk
4	PFL	0.8710	2.1413	2.4585	Risky
5	GFL	0.3275	0.9540	2.9125	Risky
6	NFL	0.4732	0.6834	1.4442	Average Risk
7	STFL	0.6691	1.4858	2.2206	Risky
8	SFL	1.0057	2.0929	2.0810	Risky
9	OFL	0.2906	0.3337	1.1483	Average Risk
10	BFL	0.9775	1.8696	1.9127	Average Risk

*Source: Refer Calculated Values of 4.1.1 to 4.1.10*

- Systematic risk and unsystematic risk of companies are as follow;

**Table 4.27**

SN	Name of Institute	Systematic Risk	Unsystematic Risk
1	NABBCL	0.5223	0.3876
2	AFCL	0.6351	0.4165
3	CFL	0.4544	0.2700
4	PFL	0.8869	1.2545
5	GFL	0.6144	0.3396
6	NFL	0.4504	0.2330
7	STFL	0.6021	0.8837
8	SFL	0.5809	1.5120
9	OFL	0.1354	0.1982
10	BFL	0.4739	1.3957

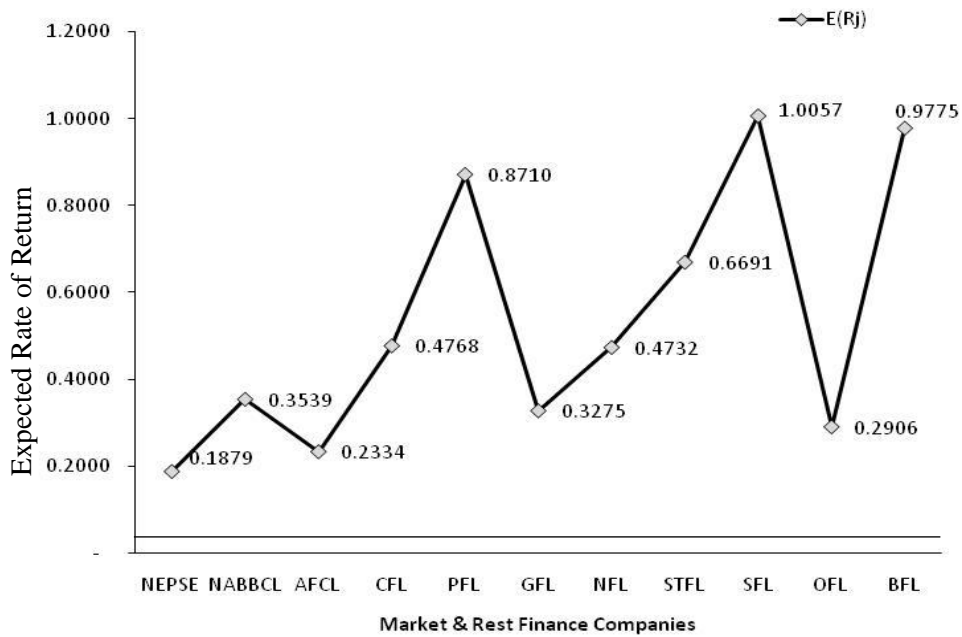
*Source: Refer Appendix Table*

- Portfolio management is a major board topic in investment analysis and management. Besides common stock there are other different kinds of securities having different characteristics are available in Nepalese capital market. They are preference share, corporate bonds, government bonds, T-Bill etc. Construction of portfolio with considering all available securities is essential to get a maximum return with minimum risk from stock market investment. This study has given only suitable example. Here only the portfolio of ten assets (ten types of common stocks) from same industry is illustrated but there are so many opportunities set of portfolio in the market.
- Comperison of Expected return of return of selected all finance companies with NEPSE.

Table 4.28

SN	Name of Institute	Expected Rate of Return
1	NEPSE	0.1879
2	NABBCL	0.3539
3	AFCL	0.2334
4	CFL	0.4768
5	PFL	0.8710
6	GFL	0.3275
7	NFL	0.4732
8	STFL	0.6691
9	SFL	1.0057
10	OFL	0.2906
11	BFL	0.9775

Chart 4.11



- Table 4.28 and Chart No 4.11 shows the comparison of expected rate of return of all selected finance companies with NEPSE. It shows expected rate of return of all finance companies are more than expected rate of return of NEPSE. Although AFCL is lower expected rate of return (ie. 23.34%) and SFL is higher expected rate of return (ie. 100.57%) than NEPSE. The rate of return of all companies is more in the sense that the movement of NEPSE and the return of finance companies are not correlated. The return of finance companies in Nepal are highly dependent upon speculation. The speculation increase the price of each finance companies share value so that shows higher return than market. The reality is different the proportion of these finance companies are very small in total market capitalization and these finance companies securities are low cap as compare to Blue Chip share and mid cap share in the stock exchange. The Nepalese financial market is driven by the speculation so these finance companies return higher than market but, if the Nepalese financial market reach towards efficient than their return (normal gain) will be very lower and low chances of capital gain.

- Correlation between each two companies are as follows;

**Table 4.29**

Companies	NABBCL	AFCL	CFL	PFL	GFL	NFL	STFL	SFL	OFL	BFL
NABBCL	1	0.9483	0.9883	0.9581	0.9259	0.7057	0.9825	0.9526	0.9178	0.9596
AFCL		1	0.9067	0.9570	0.9850	0.5974	0.9279	0.9723	0.7872	0.9660
CFL			1	0.9036	0.8827	0.7894	0.9885	0.9037	0.9663	0.9125
PFL				1	0.9358	0.4929	0.9041	0.9782	0.7681	0.9829
GFL					1	0.6307	0.9269	0.9819	0.7748	0.9733
NFL						1	0.8170	0.5868	0.9030	0.5885
STFL							1	0.9330	0.9544	0.9371
SFL								1	0.7881	0.9990
OFL									1	0.7997
BFL										1

## CHAPTER V

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary

- The price movement of individual company is higher as company with NEPSE except OFL has limited price movement shown by the SD. The overall market's return shown by the NEPSE index 18.79%. For the preceding 6 years on average. If we compare the individual companies return with market we can see the average rate of return for most finance companies is higher than overall market but the rate of return for AFCL is only 23.34% and for SFL company is massive of 100.57%
- The stock's price of listed finance company seems very volatile and return generated by the each finance company also fluctuated due to the fluctuation in price. The SD of each company shows the stock's return over the past Five years is very much volatile. The NABBL SD shows 90.99%. The SD of AFCL and BFL have 105.16% and 186.96%. This return fluctuation shows that the fluctuation of return in each finance company is higher.
- We can see clearly that the NEPSE Index is in increasing trend up to 2061/062 to 2064/065 and after that it is decreasing Massively. The prices of listed finance companies seem over valued in the sense that the return generated by them is only capital gain rather than normal gain. The capital gain generated in each company is manipulated increasing price. So after 2064/065 the prices of various finance companies are in decreasing trend. The closing price of each finance company is maximize in 2064/065 which year the NEPSE index was also highest. After that the price of each finance company decreased because that increased up to 2064/065 was only manipulated price so that has to decrease and do so by the market. The overall capitalization of NEPSE is also peak in 2064/065 but that decrease until 2066/067 (NEPSE Table 22)

- The systematic and unsystematic risk of the ten finance company shown that the component of unsystematic risk is higher than systematic risk ie. The stock price movement and stock's return is highly influenced by the external factors like political affection, increase in capital gain tax rate in 2065/066 to 15% affect the overall return of the market and humor of converting promoter's share into public share also affect the overall price. Therefore the company specific risk is much lesser than unsystematic risk. Among ten finance companies the unsystematic risk for SFL is the highest and lowest for OFL but the systematic risk for PFL is highest among all and it is lowest for OFL. With the analysis of systematic risk and unsystematic risk the price of PFL is much affected by the external factors where as PFL company's price is affected much higher by the internal factors.
- The correlation between ten companies with NEPSE is positive around 0.40 to 0.65 which shows that the stock exchange and ten finance company has around 50% positive relationship with NEPSE. On the other hand the correlation between each finance company with each other is almost highly positive which shows that these finance company have same risk and return characteristic overall. The correlation between each finance companies shown in Table 4.29
- As we noted earlier that correlation between all the finance companies with each other is highly positive so, portfolio between these company may not good. The highly positive correlated stock does not provide higher return with less risk.

## **5.2 Conclusion**

This study enables investors to put the returns they can expect and the risk they may take into better perspective because most of the people considered stock market investment as a black art that they have unrealistically optimistic or pessimistic expectations about stock market investments or perhaps a fear of the unknown. Nepalese stock market is in emerging stage and its development is accelerating since

the political change in 2046 B.S. which is the effect of open economy and liberalization in national economy. But, Nepalese individual investors cannot analyze the securities as well as market properly because of lack of information and poor knowledge about the analysis of securities investment.

- According to the return perspective the rate of return among ten finance companies seems good but the overall return performance of SFL is better than other finance companies which is 100.57% average during past six years. The worst return performer among ten finance companies is AFL which is only 23.34% on average during past six years.
- The risk is inherent in stock investment therefore the risk for each finance company is measured by SD. The SD of each finance company is higher as compare with the average return. It is highest for PFL which is 214.13%. it is very less 33.37% for OFL. The investment in finance company is riskier than commercial bank and development bank but the risk in finance companies listed in NEPSE are higher.
- The coefficient of variance measure the per unit risk of investment. It is more than one for each finance companies return, so CV shows that the risk is higher for each finance companies. Among them the CV of PFL is higher and OFL has lowest. So risk diversified investor can invest in OFL due to its lowest CV.
- The correlation between each finance companies with each other is highly positive except PFL and NFL has 0.4929 correlation with each other. The highly positive correlated stock suggest that portfolio investment made in these stock does not reduce risk so the investor can combine these finance company's stock with other stock listed in NEPSE because the NEPSE and these company has a correlation about 0.4 to 0.65.
- The investor will get risk adjusted excess return when they take systematic risk and stock will provide risk premium by taking risk. The systematic risk of PFL is higher among ten finance companies but this stock does not provide excess return for the investor as company with other 9 finance

companies. The systematic risk for OFL is least among all and It's CV is also less so this stock provided excess return to the investor. We can make the conclusion that the stock price of the ten finance company is highly influenced by external factors so, there is higher risk for investment made in finance companies in NEPSE.

### **5.3 Recommendations**

The focus of the study is to assess risk associated with return on common stock considering individual and private investors. The following facts are recommended on the basis of data analysis and major findings of this research.

- The portfolio investment made in Nepalese finance companies stock is not good because they have positive correlated with each other.
- The Nepalese investor generally does not make any fundamental and technical analysis before investing so before investing the fundamental and technical analysis is necessary so lack of these analysis price manipulation occurs during 2060/061 to 2064/065.
- The proper rules and regulation in security market also necessary to correct negative behavioral approach of trader. The establishment of rating agencies can provide correct information about the company so investor can immunize wrong investment.
- The performance of finance companies can be better, if the merger and acquisition made properly than better normal return can be expected because the Nepalese financial market is very small and financial resources mobilization is also small so almost 79 finance company is not necessary. Finally the merger between them can improve their competencies and ability of lending and portfolio investment and improve the overall return.
- Investors need to diversify their fund to reduce risk. Proper construction of portfolio will reduce considerable potential loss, which can be defined in terms of risk. For the portfolio construction select the stock that have

higher return with low risk and stock from different industries, this study suggests that similar stock cannot diversify the risk properly and some risk can be reduced by investing in constructing (ten assets) rather than investing in single / individual asset. So the construction of portfolio among the common stock of four assets i.e. BFL, SFL, PFL and STFL is recommended due to more expected rate of return with less risk.

- Before making investment decision, it is recommended to visit and discussion with investment companies, with individual expert and researchers. In case of Nepal NCM mutual fund is worthwhile for people. So, sharing experience, idea and view of experts will provide greater help. Different merchant banker provides information about how to create efficient portfolio. The BEED investment provides portfolio construction technique by paying very low fee.

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[www.sfl.com.np](http://www.sfl.com.np)

## Appendix

F/Y	0 (NEPSE)	1 (Nepal Awash)		2 (Annapurna)		3 (Central)		4 (People	
	R- E(Rj)	R- E(Rj)	[R- E(Rj)] <sup>2</sup>	R- E(Rj)	[R- E(Rj)] <sup>2</sup>	R- E(Rj)	[R- E(Rj)] <sup>2</sup>	R- E(Rj)	E
2061/062	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
2062/063	0.1605	-0.2080	-0.0334	-0.0489	-0.0078	-0.1325	-0.0213	-0.6610	-
2063/064	0.5795	0.1145	0.0664	-0.1893	-0.1097	0.2630	0.1524	-0.7269	-
2064/065	0.2199	1.4907	0.3279	1.7698	0.3893	1.0951	0.2409	3.7904	
2065/066	0.2199	1.4907	0.3279	1.7698	0.3893	1.0951	0.2409	3.7904	
2066/067	-0.5498	-0.5300	0.2914	-0.9654	0.5307	-0.4362	0.2398	-0.9535	
Sum of [R-E(Rj)] <sup>2</sup>			0.9802		1.1918		0.8527		
Cov1M			0.2451		0.2980		0.2132		
SD	0.4691		0.9099		1.0516		0.7244		
Correlation of Coefficients 1M			0.5740		0.6039		0.6272		
Unsystematic Risk			0.3876		0.4165		0.2700		
Systematic Risk			0.5223		0.6351		0.4544		
Beta of Coefficient			1.1134		1.3537		0.9685		

/Y	0 (NEPSE)		6 ( Nepal Finance)		7 (Standard)		8 (Siddhartha)		9 (Om)		10 (Butwal)	
	R- E(Rj)		R- E(Rj)	[R- E(Rj)] <sup>2</sup>	R- E(Rj)	[R- E(Rj)] <sup>2</sup>	R- E(Rj)	[R- E(Rj)] <sup>2</sup>	R- E(Rj)	[R- E(Rj)] <sup>2</sup>	R- E(Rj)	[R- E(Rj)] <sup>2</sup>
1/062	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2/063	0.1605		-0.1857	-0.0298	-0.4538	-0.0728	-0.9424	-0.1512	-0.0782	-0.0125	-0.8897	-0.0000
3/064	0.5795		0.8972	0.5199	0.6150	0.3564	-0.2742	-0.1589	0.2638	0.1529	-0.2231	-0.0000
4/065	0.2199		0.5179	0.1139	2.2880	0.5032	3.6657	0.8063	0.4133	0.0909	3.2812	0.0000
5/066	0.2199		-0.5646	-0.1242	-1.3035	-0.2867	-0.9774	-0.2150	-0.3982	-0.0876	-0.9775	-0.0000
5/067	-0.5498		-0.6647	0.3654	-1.1456	0.6298	-1.4716	0.8090	-0.2009	0.1104	-1.1911	0.0000
Sum of [R-E(Rj)] <sup>2</sup>				0.8452		1.1299		1.0902		0.2541		0.0000
Cov1M				0.2113		0.2825		0.2726		0.0635		0.0000
0.4691				0.6834		1.4858		2.0929		0.3337		1.0000
Correlation of Coefficients 1M				0.6590		0.4052		0.2776		0.4058		0.0000
Unsystematic Risk				0.2330		0.8837		1.5120		0.1982		1.0000
Systematic Risk				0.4504		0.6021		0.5809		0.1354		0.0000
Beta of Coefficient				0.9600		1.2834		1.2383		0.2886		1.0000