RISK AND RETURN ANALYSIS: A COMPARATIVE STUDY OF COMMERCIAL BANKS IN NEPAL

A dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's Degree

by

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March, 2021

Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "**RISK AND RETURN ANALYSIS: A COMPARATIVE STUDY OF COMMERCIAL BANKS IN NEPAL''** The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

……

Umesh Kumar Chaudhary

March, 2021

Report of Research Committee

Mr Umesh Kumar Chaudhary has defended research proposal entitled "**RISK AND RETURN ANALYSIS: A COMPARATIVE STUDY OF COMMERCIAL BANKS IN NEPAL**" successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor **Prof. Dr. Bal Krishna Shrestha** and submit the thesis for evaluation and viva voice examination.

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Approval Sheet

We have examined the dissertation entitled "**RISK AND RETURN ANALYSIS: A COMPARATIVE STUDY OF COMMERCIAL BANKS IN NEPAL**" presented by Mr Umesh Kumar Chaudhary for the degree of **Master of Business Studies.** We hereby certify that the dissertation is acceptable for the award of degree.

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Acknowledgement

As the partial fulfillment of the MBS degree, I have prepared this report. During the course, I worked with sincerity, honesty and diligence, as far as possible. However, beside my continual efforts, I also got unforgettable support from different people and parties. I am extremely grateful and overwhelmed by their support while completing my work.

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Umesh Kumar Chaudhary

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Abbreviations

ADB	Agricultural Development Bank
AGM	Annual General Meeting
BOK	Bank of Kathmandu Limited
BPS	Book-value Per Share
CEO	Chief Executives Officer
CV	Coefficient of Variation
DPS	Dividend per Share
EBL	Everest Bank Limited
EPS	Earning Per Share
GDP	Gross Domestic Product
IMF	International Monetary Fund
MBL	Machhapuchre Bank Limited
MPS	Market Price of Share
NABIL	Nabil Bank Limited
NBL	Nabil Bank Limited
NBL	Nepal Bank Limited
NEPSE	Nepal Stock Exchange
NIBL	Nepal Investment Bank Limited
NICB	Nepal Industrial & Commercial Bank Limited
NPV	Net Present Value
NRB	Nepal Rastra Bank

ABSTRACT

Risk, in simple wont, is an uncertainly, Risk and uncertainties are the .facts of life so to the common stockholders. Technically, their meaning' are different. Risk, simply in investment, means a chance of happening some unfavorable event or danger of losing some value. Risk suggests that a decision maker known the possible consequences of a decision and their relative livelihoods at the limes he makes decision. In other, uncertainty is simple a lack of definite outcomes, its anything that could happen-any unknown event, which may be favorable, or unfavorable on the other hand. Uncertainty involves a situation about which the likelihood of the possible outcomes is not known. The trouble arises from the fact that despite different interpretation of uncertainty and risk, people often use them interchangeably. Although it is quite clear what precisely these two terms mean, authorities in the field of finance do agree that the risk is the product of uncertainty. Return better known or reward from an investment includes both current income and capital gain or loss that arises by the increase or decrease of the security price. Return is the income received on an investment plus any change in market price. Usually expressed as a percent of beginning price of the investment, the overall rate of return can be decomposed into two parts as capital appreciation and dividend. Capital appreciation is the difference between ending value and beginning value of an investment. Return is defined as the dividend yield plus the gain or loss. The relationship between different levels of return on their relative frequencies is called a probability distribution. The findings and results will be helpful to evaluate the strength and weakness of the sampled banks and industry. The recommendation is made to take a corrective action and decisions.

CHAPTER- 1

INTRODUCTION

1.1 Background of the study

Generally, risk and return analysis is concerned to identify the sustainable position of financial sector. Risk and return is the basic concept in the corporate finance and it guides the other modern theories and principal as well as it assists in taking various financial and qualitative financial decisions. The relationship between risk and return can be defined by the investors' perception about risk and the demand for compensation. No investor will take any investment position in risky assets unless they are convinced of adequate compensation for the percept risks. Risk has been defined as the chance that the actual return deviation from the expected returns and risk is the percept fact of life that is the product of uncertainty and it magnitude depend upon the degree of variability in future's uncertain cash flows. Risk and return is an indication of opportunity of losing investment value. It is insensible to talk about returns without talking about risks because investment decision involves the tradeoff between risk and return and the tradeoff between these two variables is positive. There is positive relation between risk and return (Pokharel, 1999).

Common stockholders of a company are its ultimate owners. Collectively they own the company and it is assumed that ultimate risk is associated with ownership. So the common stock is risky security. Investor invests in common stock for higher return. But their expected return may or may not change in realities. This uncertainty is major risk to investors in stock market investment. The return is income received on an investment, which is expressed as dividend, plus any change in market price of share and usually expressed in percent. Both market price of share and dividend are uncertain figures. So, the actual figure of return on investment in common stock may differ substantially from the expected return.

The market price of share of a company is driven both by fundamental business values and stock market sentiment. For a given business, it is always worth attempting to identify which of those is driving its share price (Van Home, 1998),

Generally investors are risk averse. They always seek higher return for more risk as risk premium. So the primary problem of investment is to identify the security, which has low risk and high return. Although, return cannot be increased substantially, risk

can be reduced by diversification can eliminate the unsystematic risk, which is not explained by general market movement. Systematic risk, which is associated with change in return on the market as a whole, cannot be avoided with change in return on the market as a whole, cannot be avoided by the diversification. In Nepalese contest, the institutional set up of securities market began along with the securities exchange center (now Nepal Stock Exchange Ltd.) in 1976. In spite of considerable development there are still more potentialities to be explored for the development of stock market in Nepal. Most of the potential investors and the shareholder public themselves are unknown or least understood about risk-return behavior of stock. Most of the Nepalese investors are finding to visit in single security due to lack of information and poor knowledge, market intermediates exploit investors. So, many investors are afraid to invest in stocks.

People participation in securities investment and its dynamic trading plays a vital role in overall economic development. For this propose potential investors must be able to analyze risk and return of individual stock and portfolio as well. This will increase their confidence and ultimately increase stock investment and increase the degree of market efficiency, which is essential to spreading economic development of the nation (Poudel, 2002).

Investment in its simplest from means employing money to generate more money in future. It is the sacrifice of current rupees for future rupees. The sacrifice takes place in the present and is certain. But the reward comes later and is an uncertain. Return is the primary motive of investment, but it always entails some degree of risk. Buying common stocks, bonds, deposited money into bank account, buying a piece of land, gold or silver are some example of investment. All these examples involve sacrifice of current rupees in expectation of future return. Hence, they are investment. The main objective of investment is to maximize the wealth of an investor.

Real investment means investment on real assets like land buildings, factory etc. financial investment means on financial asset like share, debentures, warrants and convertibles etc. The term risk and return is closely associated with investment. Investment simply means sacrificing current funds for future returns, bearing certain risk. The investment may be on fixed assets like land, building or precious metals and collectibles or something else. But here as a student of finance, I have focused the

term investment as sacrificing current fund on financial assets like shares, debenture, warrants, convertibles etc. for the long term return. Investment can be made on real assets or financial asset. Investment on real assets is known as real investment and investment on financial assets is known as financial investment (Ghimire, 2001).

Investors invest their fund on the securities of certain companies for the long run future returns. The return is defined as the reward for bearing the risk. Return is the most important outcome from an investment. It measures the investor's rate of wealth accumulation i.e. increase or decrease per period. Risk is defined as the occurrence of unfavorable outcomes, which is ever harmful for the business. Risk is inseparable from return. It ever creates uncertainty. Some of the factors that create investment uncertainty such as interest rate risk, purchasing power risk, bull-bear market risk, management risk and so on. Thus, risk is virtually every decision. Assessing risk and incorporating the same in the final decision is an integral part of financial analysis.

The objectives in decision making are not to eliminate or valid risk often it may be neither feasible nor necessary to do so. But to properly assets it and determine whether it is worth bearing. Investor generally does not invest their money in the only on risky asset. The investor should invest their money in portfolio of many assets. It will help to the investor to minimize the risk. Therefore, an investor is concerned with the portfolio risk, which is the sum of the relevant risk of individual assets included in portfolio.

Some stocks are riskier than other and even in years when the overall money into one stock goes down. The nature of bank fund and its payment depends upon day to day operation. Therefore, it’s Operation of fund raising and investment of funds is of short-term nature. As long-term investments are associated with higher risk, banks are confined to make short-term investment only; the significant of commercial banks is greater in countries, of comparatively lower level of economic development.

The shares of commercial banks in the net issues of all financial institution are much higher in such countries in the ones with higher stage of economic development. In Nepal foreign joint venture banks perform better than Nepalese ones do. Because they have higher management efficiency and they can manage risk properly. Specifically, Nepalese banks have a high degree of internal firm specific risk. At the same time they have to bear more social obligation and government intervention than foreign

banks. However, Nepalese bank has high potentialities to increase their performance by changing their risk attitude and by improving their internal management.

A systematic, investment process should be followed to win the stock market. Investment process describes how an investor should go about making decision with regard to what marketable to invest in, how extensive the investment should be, and when the investment should be made (Bhalla, 1997).

1.2 Statement of the problems

Investors should make rational investment decision. For this purpose, knowledge for analysis of common stock is essential. Investor's attitude and perceptions are also considerable for rational investment decision. Many investors are manipulated and exploited by the financial institution and other market intermediaries since they are unknown about norms of security market. Not only general public but also the university graduates and post graduates cannot analyze risk and return while making stock investment decision. In the context of Nepal, investors are also facing the problems of lack of the institutions to provide adequate information about the investment options. After the emergence of NEPSE in 1993 AD, these type of problem somehow has been solved, but another problem to the Nepalese people is they feel more risk in stock investment than as its real risk, it keeps them in dilemma, whether they should invest in stock or not and this all conditions makes them to not utilize their funds as a result investors are not benefited nor the national economy as well.

Further, theory says that the stock price in market is guided by the intrinsic value which is calculated by aid of company's result of financial performance such as dividend, required rate of return and growth. In the efficient market condition stock price is equal to the intrinsic value since the buyer and the seller are fully aware of the facts and figures of the company. Therefore, market price and financial performance are correlated but condition here is totally different from that. Courage and faith are intermediate factor to invest in common stock because there are several questions, which may be arising in the mind of the investors at the time of the investment. More specifically the research problems are:

i. What is the position of risk and return of sample commercial banks?

ii. What are the effects of risk and return policy of sample banks?

iii. What is the sensitivity of the stock price of sample commercial banks?

1.3 Objectives of the study

This study has undertaken to focus on risk and return analysis of financial securities like common stock of sample commercial banks of Nepal. So, the major objectives of this study are as listed below:

i. To examine the position of risk and return of the sample commercial banks.
ii. To assess the effect of risk and return policy of sample banks.
iii. To examine sensitivity of the stock price of commercial banks.

1.4 Rationale of the study

In the context of developing country like Nepal, commercial banks play a vital role in stabilizing the national economy and growth by performing various financial activities like generating employment and fund, investing in industrial and other sectors.

This study could have significant impact in suggesting ways to have a sustainable role for banks in national development by minimizing the risks they are subject to. The study will attempt to find ways to strengthen the banking sector by avoiding and managing risks and strong banking sector in turn will have positive impact on the economic development.

The significance of my project stems from the very nature of the financial statements i.e. they are usually lengthy, bulky documents which have a huge array of numbers not readily understandable. Financial statement analysis is the process of examining relationships among financial statement elements and making comparisons with relevant information. It is a valuable tool used by investors and creditors, financial analysts, and others in their decision-making processes related to stocks, bonds, and other financial instruments. The goal in analyzing financial statements is to assess past performance and current financial position and to make predictions about the future performance of a company. Investors who buy stock are primarily interested in a company's profitability and their prospects for earning a return on their investment by receiving dividends and/or increasing the market value of their stock holdings. Creditors and investors who buy debt securities, such as bonds, are more interested in liquidity and solvency: the company's short-and long-run ability to pay its debts.

Financial analysts, who frequently specialize in following certain industries, routinely assess the profitability, liquidity, and solvency of companies in order to make recommendations about the purchase or sale of securities, such as stocks and bonds. Analysts can obtain useful information by comparing a company's most recent financial statements with its results in previous years and with the results of other companies in the same industry. This research is summarizing all that data into a form, which is easily understood by all the relevant parties.

1.5 Limitations of the study

Despite every attempt to bring forward this research work to a fully furnished and recommendable version, it will still be limited by various reasons and as a master's degree thesis this study also has certainly limitations. This research is subject to certain limitations as stated below:

i. The study covers the relevant data and information only for five years i.e. fiscal year 2014/15 to2018/19.
ii. Variation in data published from different sources (Figure Published by NEPSE and company differ to some degree).
iii. This study focuses only on analysis of risk and return leaving other components.
iv. The study is basically concerned only with the risk and return of the sample commercial banks i.e. other aspects of the bank have not been taken under consideration.
v. Reliability of the reviews that have been used to build the theoretical framework might also be questionable.

1.6 Chapter plan

Correlation Coefficient between Returns of Three Sample Banks The report has been divided into five different chapters by the researcher for the systematic presentation of the report. Each chapter deals with different aspects of the entire report. The chapter so divided is as follows:

Chapter - I: - Introduction

This chapter will deal on general historical background of development of banks in Nepal, statement of the problem, objective of the study, significance of study & limitation of study.

Chapter- II: - Review of literature

This chapter will deal with literature review covering risks, its implication in banking sector and management of risk and includes brief review of previous research works so far.

Chapter- III: - Research methodology

This chapter will be consisting of the research design; source of data collection & procedure, period covered, tools used and research variables.

Chapter IV: Results and discussion

This chapter will be making presentation & analysis of data collected from various sources by using various financial & statistical tools. It then gives the major findings of the data analysis.

Chapter V: Summary and conclusion

This chapter presents the brief background of the study, objectives, literature review and methodologies. Major findings are summarized. Conclusion includes theorization based on tending's and. finally. The recommendations based on those findings are stated.

CHAPTER: 2

LITERATURE REVIEW

This part includes the Review of previous studies, articles and conceptual framework for the related studies. More analysis is not sufficient to present real framework of the study. So review of related materials should cleat with the research of clear vision, past study and knowledge that provides foundation to the present day. Review of literature includes the following topics:

2.1 Conceptual Review of the literature

Various books relating to theoretical aspect of risk and return are taken into consideration.

2.1.1 Concept of Commercial Bank

The concept of commercial bank evolved from the concept of commerce. The name commercial implies that banks devote most of their resources to meeting the financial needs of business firms. The commercial sectors development of a country is largely development upon services of commercial banks. The commercial bank is that financial institution which deals in accepting deposits of persons and institution, and giving loans against securities. These bank are also provides technical and administrative assistance to industries, trade and business as well as a growing list of newer and more innovative services, such as investment advice security underwriting and financial planning. The commercial banks accept the deposit from unproductive sectors and channelize them in the productive sector. They provide the working capital required by trade and industry in their day to day transactions. Apart from financing they also render services like collection of bills and cheque, safe keeping of valuables, finance advising etc. to their customers. In recent years, however, commercial banks have significantly expanded their offerings of financial services to consumers and units of government. Commercial banks "borrow money" with one hand at a low rate of interest and lend it with the other at a higher rate of interest. The difference between the borrowings and lending rate is the margin of profit of the bank. Although these banks are truly inspired with the objective of gaining profit, these commercial banks are established to accelerate common people's economic welfare and facility to provide the banking services to the public and the state. The

success of such a bank depends upon the confidence that it creates in the minds of the public.

In this context, commercial bank is established with a view to provide short-term debt necessary for trade and commerce of the country along with other ordinary banking business such as collecting the surplus in the forms of deposit lending debts by discounting valuable goods in security acting an agent of the client etc. In the same way, principally commercial banks deposits and provide loans primarily to business firm. According to the Bank and Financial Institutional Act 2063, under section 47 relating to section 31, Bank and financial institutions is classified under four categories according to paid up capital. The "A" classes financial institutions are called bank which should have to hundred cores paid up capital for national level and other "B", "C" and "D" classes of financial institutions are called non-bank financial institutions such as development banks respectively. They also should maintain the paid up capital by doubling for existing capital provision (Baral, 2010).

Commercial banks have played at very significant role in creating banking habit among the people, widening area and business communities and the government in varies ways .These hunks are controlled and regulated by central bank of the tuition In Nepal, Nepal Rasta Bank as a central hank, control and regulates all the commercial banks in the country.

2.1.2 Banking Development in Nepal

Nepal has proven history of money and coins from the period of Lichhivi as -Monnank-, the coin issued by king Mandev is available. The practice of issuing coins and its management was continued in latter times. TejarathAdda is one of the important institutions which helped for the development of banking system in the country. This was established by Rana Prime minister Ranodweep Singh for distribution of loan to the public in security of gold or other valuables in 1987 BS (Aryal, 2015).

In Nepal, organized banking system is a relatively recent phenomenon. The process was started with establishment of Nepal Bank Ltd in 1994 B.S. (1937 A. D.). This is the first financial institution of the nation. Integrated and speedy development of the country is possible only when the competitive banking services reaches nooks and corners of the country. Keeping this in mind, government set up Rastriya Banijya

Bank in 2097-10-10 B.S. (1966 A. D.) as a fully government owned commercial bank. Nepal Industrial Development Corporation And Agricultural Development Bank were established to facilitate development activities by providing loan and equity capital in 2013 B.S. and 2024 B.S. respectively. After the declaration of free economy and privatization policy, HMG encouraged the foreign bank for joint venture in Nepal. As a result, Nepal Arab Bank Ltd. (2041 BS), Himalayan Bank Ltd. (2049 BS), Nepal SBI Bank Ltd. (2050 BS), Nepal Bangladesh Bank Ltd. (2050 BS), Everest Bank Ltd. (2051 BS), Bank of Kathmandu Ltd. (2055 BS), Nepal Industrial and commercial Bank Ltd. (2055 BS), Machhapuchchhre Bank Ltd. (2056 BS), Kumari Bank Ltd. (2056 BS), Laxmi Bank Ltd. (20580 etc were established. These commercial banks have played a very significant role in creating banking habit among the people, widening area, and business communities and the government in various ways (Aryal, 2015).

2.1.3 Investment

In general sense, investment means to pay out money to get more but in the broadest sense, investment a present commitment for the future benefits. While the commitment takes place with certainty, the future benefits are shrouded in uncertainty. The uncertainty creates risk to investors and they desire to minimize return by minimizing such risk. Therefore, taking decision about proper investment is crucial to the investor and it requires a specific investment decision process, analysis of securities, identification of overpriced, underpriced securities, making appropriate investment strategies as well as construction of efficient portfolio.

Investment is concerned with the management of an investor's wealth, which are the sum of current income and the present value of all future income. The term investment is conceptualized as income, saving or other collected fund. It covers wide range of activities. T is commonly known fact that an investment is possible only when there are adequate saving. Therefore both saving and investment are interrelated.

"Investment is a commitment of funds made in the expectation of some positive rate or return. If the investment is property undertaken the return will be comminute with the risk the investor assumes". Return risk and time are the elements of investment (Fisher and Jordan, 1995).

2.1.4 Common Stock

The study is focused on the common stock investment that's why light is thrown on it. It is sources of long term financing and an ownership security. Common stock certificates are legal documents that evidence ownership or equality in a company that is organized as a corporation, and they are also marketable financial instruments.

Common stock is recipient of the residual income of the corporation. Through the right to vote, holders of common stock have legal control of the corporation. An element of high risk is involved with common stock investment due to its low priority of claims at liquidation. When investors buy common stock they receive certificate of ownership as a proof to their being part of the company. The certificate states the number of shares purchased and their value per share" (Bhalla, l 997).

Common stock holders of a corporation are its residual owners, their claim to income and asset comes after creditors and preference shareholders have been paid in full. As a result, a stockholders return on investment is less certain than the return to lender or to preference stock holder. On the other hand, the share of the common stock can be authorized either with or without par value. The par value of the stock is merely a stated figure in the corporate character and is of little economic significance. A company should not issue stock at a price less than par value because stock holders who bought stock for less than par value would be liable to creditors for the difference between the below pre price they paid and the par value (Van Horne, 1997).

2.1.5 The Return of Common Stock

The concept of return has different meaning to different investors. Some investors seek near term cash flows and five less value to more distant return. Such an investor might purchase the stock of other from that pays a large cash dividend.

Return better known or reward from an investment includes both current income and capital gain or loss that arises by the increase or decrease of the security price. Return is the income received on an investment plus any change in market price. Usually expressed as a percent of beginning price of the investment, the overall rate of return can be decomposed into two parts as capital appreciation and dividend. Capital appreciation is the difference between ending value and beginning value of an investment. Return is defined as the dividend yield plus the gain or loss. The relationship between different levels of return on their relative frequencies is called a

probability distribution. We could formulate a probability return over the previous period but we la H i w that history never repeat itself exactly.

For investors, return is considered as the main attraction to invest in a risky security as a stock (equity) accepting a varying degree of risk tolerance. "The return from holding an investment over some period says a year is simply and cash payments received due to ownership plus the change in market price dividend by the beginning price. Thus the return comes from source, income and price appreciation.

For common stock, we can define, one period (single period) return as:

$$\text{HPR or Simple 'R'} = \frac{(Pt - Pt - 1) + Dt}{Pt - 1}$$

Where,

R = Annual rate of return

Pt = Price of a stock at time t

Pt-1= Price of stock at time t-1

Dt = Cash dividend received at time

Above formula can be used to determine both actual one period return (when based on historical figure) as well as expected one period return (when based on expected dividends and prices). The return in the parenthesis is the number of the above equation represents the capital gain or loss during the period.

The simple arithmetic means:

$$\overline{HPR} = \sum_{t-1}^{n} \frac{HPRt}{n}$$

The Geometric mean

Where HPR, is the individual period return, is the number of period and represents the product (or the result 01 multiplication) (Cheney and Moses, 1996).

$$\overline{HPR}\ g = \sum_{t=1}^{n}(1 + HPRt)\ \frac{1}{2} - 1$$

2.1.6 The Risk on Common Stock

Risk

In the basic sense, risk can be defined as the chance of loss. Assets having greater chances of loss are viewed as more risky than those with lesser chances of loss. More formally, the term risk is used interchangeably with uncertainty to refer to the variability of expected returns associated with a given asset. Generally, Investors are mostly interested in the project yielding higher returns in less risk. Therefore, it is the investors required risk premium that establishes a link between risk and return.

In a market dominated by rational investor higher risk will command by rational investor's higher risk will be commanded by rational premium and the trade-off between the two assumed linear relationships 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 and return relation in the market (Loric, Dodd and Kimpton, 1985).

Risk defines most generally is the probability of the occurrence of unfavorable outcomes. But risk had different meaning in the different context in our context; two measure developments from the probability distribution have been used as initial measure of return and risk. There are the mean and the standard deviation of the probability distribution (Weston and Brigham, 1982).

There are many ways to measure risk. The following three models are commonly used (Van Horne, 1998).

Risk, in simple word, is an uncertainty. Risk and uncertainties arc the facts of life so to the common stockholders. Technically, their meanings are different. Risk, simply in investment, means a chalice of happening some unfavorable event or danger of losing sonic value. Risk suggests that a decision maker known the possible consequences of a decision and their relative livelihoods at the times he makes decision.

In other, uncertainty is simple a lack of definite outcomes, its anything that could happen-any unknown event, which may be favorable, or unfavorable on the other hand. Uncertainty involves a situation about which the likelihood of the possible outcomes is not known. The trouble arises from the fact that despite different interpretation of uncertainty and risk, people often use them interchangeably. Although it is quite clear what precisely these two terms mean, authorities in the field of finance do agree that the risk is the product of uncertainty.

"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 uncertainty cash flows, and it is measure in term of standard deviation. In project analysis, the project risk indicates the probability of return is being less than exceed value-higher the probability of such loss or less return, higher the project risk" (Pradhan, 1992).

Assets having greater chances of loss are viewed as move risky than those with lesser chances of loss. More systematically, the term risk is used interchangeably with certainty to refer to the variability of return associate with a given asset. For example, a government bond that guarantees its holder $100 interest after 30 days has no risk, since there is no variability associated with return. In equivalent investment in a firm's common stock that may earn over the same period anywhere from $0 to $100 is very risky due to high variability of return. The more certain returns from an asset, the less variability and therefore the less risk.

2.1.7 Relationship between Risk and Return

The expected return from any investment proposal will be linked in fundamental relationship to the degree of risk in the proposal. In order to be acceptable a higher risk proposal must offer a higher forecast return than lower risk proposal (Hampton, 1996).

"The observe difference in both the levels and variability of the rate of return across securities are indicative of the underlying risk and relation in the market" (Loric, Dodd and Kempton, 1985).

Generally, there is a positive relationship between rate or 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.

2.1.8 Portfolio

Investors rarely place their entire wealth into a single asset or investment rather they construct a portfolio or a group of investments. Therefore, it is needed to extend analysis of risk and return to include portfolio. A combination of two or more

securities or assets is portfolio. Portfolio management is related to the efficient portfolio investments in financial assets. It has following two types of objective.

Primary Objective

i. To minimize risk
ii. To maximize return.

Secondary objectives:

i. Regular return
ii. Safety of investment
iii. Stable income
iv. Tax benefit
v. Appreciation of capital

The expected return on the portfolio is simply a weighted average of the expected returns of the individual securities that they are included in the portfolio. The weighted are equal securities (the weight must sum to 100% or I).

2.1.9 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 are portfolios to some extent. 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.

Unsystematic risk is 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, 1995).

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

Total risk (o) = Systematic Risk + Unsystematic Risk

2.2 Reviews of Journals

Shrestha (1995) conducted a study in the title of "Shareholder's Democracy and Annual General meeting feedback" is reviewed here he prefers to consider this book as assemblage of opinions which he had express in different occasions of various annual general meeting where he has critically analyzed the situation of common stock investors and the situations that is not improving till date. The content of the book have been divided into two parts. The first part includes views on the rights of the shareholders regarding how they can exercise them in democratic perspective, whereas the second part consists of feedback and the issues raised by shareholders at different annual general meeting of the public limited companies and financial institutions.

Writer has found the overall shareholders democracy in terms of the protection of their interest, is basically focused on the payment of satisfactory wealth by appreciating the value or share they hold.

"In many cases the existing authoritarian mentality of management seems to have not considered the shareholders in deciding managerial plans and policies. Top level decision often by pass the interest of shareholders. As the management lacks serious concerns about the protection of shareholders rights and expectations. The annual general meeting has become a plate-form for shareholders to express their Opinions and grievance in front of the management and board of directors.

Elton (1999) conducted a study entitled "Expected Return, Realized Returns and Assets Pricing Tests". In this paper he points out the fundamental issues in finance like that what the factors are that affect expected return on assets, the sensitivity of expected return to those factors, and the reward for bearing this sensitivity. There is a long history of testing in this area and it is clearly one of the most investigated assess in finance.

In order to reduce overall risk, it is the best to follow diversification of assets that are not related. "The technical term for this is not putting all your eggs in one basket". In that way if u trip, you won't break all the eggs. The creation of a portfolio by combining two assets that behave exactly the same way cannot reduce the portfolio's overall risk below the risk of the least risky asset.

Fluctuations expose you to wide uncertainty in your overall returns and even to the risk of permanent loss of principal. CAPM is an effective model in finance but it is not far off from argument. It has also got it good points as well as bad points.

It tells us where to invest, how to invest and what discount rate to use for project cash flows. Not only that, it is a disarmingly simple model. The expected return of a security depends upon a simple statistics. The relationship between risk and return is linear. Calculation of portfolio risk trivial at the sometime, the CAPM is revolutionary. It tells us that the variance of a project is not a factor in determining the appropriate risk adjusted rate. It turns financial research from roll-up-your sleeves fundamental analysis into a statistical problem. In short, the CAPM turned Wall Street on its head.

Poudel (2001) also carried out another study in a topic of "Investing in shares of Return and Risk elements". The study was based on the data collected for eight banks from mid July 2001. The main objectives of the study was to determine whether the shares of commercial banks in Nepal are over or under priced by analyzing risk and return characteristics of the individual shares.

Pagario's (2001) has a study on How Theories of Financial Intermediation of Corporate Risk-Management Influence Bank's Risk-Taking Behavior. This paper has based on the relation of risk taking and risk management behavior from both a corporate finance and banking prospective. That data set covers the period from 1986-94, 1986-90 and 1991-94 but overall time of study is 9years. In this study, the researcher has used mathematical tools that are the model beta, standard deviation, total risk (systematic and unsystematic), interest rate risk. The main objective of the study is to examine the rationales for risk taking and risk management behavior for both corporate finance and banking sectors. After combining the theoretical insights from the corporate finance and banking literatures related hedging and risk taking, the paper reviewed empirical tests on these theories to determine which of these theories are best supported by the data.

Managerial incentives appear to be the most consistently supported rationale for describing hoe banks manage risk, in particular, moderate/high level of equity ownership reduced bank risk while positive amounts of stock option grants increase bank risk taking behavior. The empirical results suggest he gable risks such as interest

rate risk represents only one dimension of the risk management problems. This implies empirical tests of theory of corporate of risk management need to consider individual sub-components of total risk and the bank's ability to trade these risks in a competent financial market.

Berkovitz and Brien's (2002) in their research paper "How Accurate is values-At-Risk Models at Commercial Banks?" have focused on the first direct evidence on the performance of value-at-risk model for trading firms. The results shows that the VAR forecasts for six large commercial banks have exceeded nominal coverage levels over the past two years and for some banks, we substantially removed VARs from the lower range of trading P & L, While such conservative estimates higher levels of capital coverage for trading risk, the reported VARs are less useful as a measure of actual portfolio risk.

They have used standard deviation, mean, correlation coefficient, VAR correlation coefficient, Beach Mark Model and portfolio model. To a certain extent, the study is limited by the fact that banks only forecast a single percentage of the portfolio distribution. Significantly more could be learned about the empirical performance of internal valuation models if density forecasts were recorded.

Density forecast evaluation techniques describes in Diebold, Gunther and Tay (1998) and Berkovitz (2001) which provides researchers with substantially more information to assess the dimensions in which models need improvements and those in which models do well. Banking and financial service are among the fasted growing industries in developed world and are also emerging as cornerstones for other developing and underdeveloped nations as well. Bank primary function is to trade risk. Risk cannot be avoided by the bank but can only be managed. There exist two types of risk. The first is the diversifiable risk of the firm specific, risk which can be mitigated by maintaining an optimum and diversified portfolio. This is due to the fact when one sector does optimum and diversified portfolio. Thus depositors must have the knowledge of the sectors in which three banks have make the lending. The second is un-diversifiable risk and it is correlated across borrower, countries and industries. Such risk is not under control of the firm and bank.

Kupper (2003) has made a study to identify the different types of risk and prescribes the method to handle those risks. The study has identified three types of risk in the banking business (i.e. credit risk, market risk and operation risk). According to his

study, credit risk has almost 70 percent of shares in total banking risks. The typical credit risk share of total capital is 80 percent in Wholesale Banking, 50 percent on Personal Banking and 10 percent on financial market.

He has presented the role of a bank's risk management function in the context of the need to break the vicious cycle of risk. The cycle refers to the process by which a bank assumes uneconomic risks and by definition, key large losses. As a consequence, the risk appetite of the bank is reduced, lending and trading risks are foregone and the bank loses market share. In turn, the bank adopts an aggressive marketing strategy to regain market share and the cycle starts over. He has vicious cycle describes the risk taking practices observed in the industry time and time again.

Shrestha (2010) highlighted the different aspect of risk. As per his view as the effective risk management central to good banking, the tradeoff between risk and return is one of the term and concludes effective credit risk management allows a bank to reduce risk and potential Net Profit. It also offers the benefits once the banks have understand their risk and their costs, they will be able to determine their most profitable business. Thus price products must be charged according to their risks. Therefore, the bank must have an explicit credit risk strategy and supported by organizational charges, risk measurement techniques and fresh credit process and system. There are four crucial areas that management should focus on:

i. Credit sanctioning and monitoring process
ii. Approaches to collateral
iii. Risk arise from new business opportunity
iv. Concentration on correlated risk factors

As part from these, the bank management should regularly review all assets quality issues including portfolio composition, big borrower exposures and development in risk management policy and process. Author is hopeful that the bankers adopt good risk management practices and will be able to reap both strategic and operational benefits.

Rana (2013) described in article, "Risk management in banks: Touch and challenging". Based on the global, regional and our in-country experience of the last few years, it is obvious that success/sustainability or failure of banks largely depends on how well various risk are managed under a highly competitive, challenging and fast-changing business environment. The saying "survival of the fittest" appears true

for banking business under this kind of environment. Accordingly, banks have a lesson to learn from the past and manage the risks in line with the changing business and risk environment.

Banking business by nature involves tradeoff between risk and return. Over-emphasis on return at the cost of increased level of risk beyond a limit is not appropriate from the risk management prospective. Similarly, from a business perspective, inability to take calculated risk for achieving best returns is also not a good situation. The ideal situation is to manage the business by achieving best returns and at the same time to manage the risks well. Banks should continuously strive for a fine balance between risk and return.

Proper risk management helps in keeping the bank's financial results and reputation intact. It also helps in ensuring stake holder's expectations e.g. shareholders get return on investment, employees get reward in line with their contribution and regulatory requirements are met as prescribed. If the banks fail to manage their risks properly, it not only impacts the related banks and their stakeholders but also the country's economy.

In line with the importance of risk management, banks are expected to have a well-defined Risk Management Framework approved by their boards. The framework ideally covers policies, procedures, roles, responsibilities, accountability, monitoring and reporting mechanisms including independent checks and control. Similarly, banks should have a setup that coordinates overall risk management activities across the banks. Such roles can be performed by a dedicated manager, separates department or a committee depending on the size and complexity of the business. The risk management function should be independent of the day-to-day business and operational activities.

The risk management process follows four simple steps i.e. Risk identification, Risk Assessment, Risk Mitigation and Control and Risk Monitoring. These steps not necessarily follow an order; rather they occur simultaneously in real-life situations. A bank manager may have to be involved in any steps of risk management at any time. Similarly, these steps are supplementary and inter-related with each other in supporting the complete risk management process.

Hence, the importance of risk management is manifold in banking business; we have been witnesses to the past and have seen banking failures and subsequent regulatory

stringencies. It is a must for the banks to have an effective framework and system of risk management and the Board and Senior Management need to play a supporting role and must maintain an oversight in this matter. Monitoring, reporting and control, including independent audit reviews need to be in place. Risk management culture needs to be embedded among all staff members so that it becomes a state of mind and a way of life.

Yimka (2016) attempts to investigate risk management and financial performance of selected ten commercial banks in Nigeria. The study examines the role of credit risk management in value creation process among commercial banks in Nigeria. The study reviews the concepts, theories, legal acts and standards relating to the credit risk management and then develops a conceptual model with four antecedents to credit risk, such as antecedents are loan and advance loss provision, total loan and advances, nonperforming loan and total asset on accounting Return on Equity (ROE) and Return on Asset (ROA). The panel data come from ten commercial banks listed on Nigeria Stock Exchange (NSE) between 2006 and 2015. The results reveal that credit risk management has significant effect on financial performance of commercial banks and further recommend that maintaining minimum level of non-performing loans vis-à-vis provision for loans and advances will enhance financial performance through its positive effect on return on equity.

Based on the analysis and findings thereof, the study concludes that the credit risk management measures considered in this study is relevant in determining financial performance of banks as financial institutions. Reduced share of non-performing loans and advances in provision for loans and advances losses enhances financial performance via increased return on equity. More proportion of total loans and advances that turn out to be non-performing dwindling return on equity and reduces financial performance. Financial performance is enhanced when increased portion of total assets goes into loans and advances. Increased provision for loan and advances limits financial performance. Therefore, the study concludes that credit risk management has significant effect on financial performance of the banks. At the 5 percentage level of significance, overall effect on financial performance of the credit risk management measures in the study is found to be significant. Based on the findings summarized above, and the conclusion thereof, the researchers therefore recommend that, banks maintain minimum level of non-performing loans vis-a-vis

provision for loans and advances; minimize provision for loan and advances losses as a share of total loans and advances that would enhance return on equity and strengthen their financial performance; maintain proper proportion of total assets that goes into loans and advances.

Prabhu (2018) Stock Market is one of the most important sectors in the financial system, marking an important contribution to economic development. Stock Market is a place where buyers and sellers of securities can enter into transactions to purchase and sell shares, bonds, debentures etc. Today long-term investors are interested to invest in the Stock market rather than invest anywhere.

Stock Market is the mitigation of risk through the spreading of investment across multiple entities, which is achieved by the group of a few small investments into a large bucket. Stock Market is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed portfolio at a relatively low cost.

Kandel (2018) in his research study found that there is a positive relationship between risk and return. Most of the investors are risk averter. It suggests to constructing appropriate portfolio instead of investment in a single security which would be able to reduce unsystematic or diversifiable risk. The secondary data which was collected from NEPSE website (www.nepalstock.com), previous studies, NRB publications and publication of selected commercial banks, website of security board of Nepal (SEBO), Journals and internet. Both quantitative and qualitative analysis has been analyzed by using scientific methods. After the analysis of risk and return of sample bank and based on the past data of their last five fiscal years i.e. (FY-2012/13 to FY-2017/18), it is concluded that all the commercial banks are very much risky with fluctuated rate of return. From the findings of beta coefficient of each sample bank, the C.S. of NABIL is seems very much volatile than NIBL stock. It was also found that both selected banks have a high proportion of unsystematic risk.

Dang (2019) in his study finds that increasing bank equity is not always the best strategy to be accompanied by absolute benefits, increasing returns and reducing risks for banks but is a trade-off instead. More precisely, banks with larger capital buffers tend to take less risk but are less profitable. In addition, the study also finds

a non-linear relationship revealing that bank risk mitigates the effect of bank equity on profitability. Most estimations show strong robustness checked by some alternative techniques. Based on the findings, the study provides some important policy implications to improve the performance of the banking system in Vietnam as well as in other emerging countries.

2.3 Reviews of previous 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.

Upadhyaya (2001) *"Risk and Return on Common Stock Investment of Commercial Banks in Nepal".* This study has taken eight commercial of banks with covering five years period 1994/95 to 1998/99. The main objectives of the study were to assess the risk associated with returns on common stock investment of the listed commercial banks on the basis of selective financial tools to evaluate common stocks of listed commercial banks in terms of risk and return and analyze the volatility of common stocks and other relevant variables as an affecting factor in portfolio construction of common stocks.

This study found the various finding but there are some important findings are given below:

i. Common stock of Nepal Grind lays Bank Ltd. is most risky and of SBI is least risky. This proves 'high risk high return'.
ii. Regarding the market volatility, EBL's common stock is more volatile which has beta value of 3.941 and NIBL's common stock is least volatile which has beta value of 0.875. Others are also volatile.
iii. All the stocks of commercial banks are overpriced. NGBL stock has maximum difference of expected rate of return and required rate of return.
iv. Most of the Nepalese private investors invest in single security. Some of the investors use their fund in two or more securities. But it is found that they don't make any analysis of portfolio before selecting. They invest their fund in

different securities on the basis of expectation and assumption of individual security rather than analysis of the effect of portfolio.

v. Portfolio standard deviation is less than individual standard deviation. So the portfolio approach of investment is better way to get the maximum return.

Paudel (2002) studied entitled *"Investing in Shares of Commercial Banks in Nepal"*: An assessment of Risk and Return Elements is found to be relevant in the context of the study. This study conducted with the objective of whether the shares of commercial banks were correctly priced by analyzing the realized rates of returns and the required rates of return using CAPM.

The study was based on the data of shares of seven sample commercial banks from Mid July 1996 to mid-July 2001. For the purpose of analyzing risk characteristics of the shares of those commercials banks, standard deviation, the coefficient of variation, the correlation coefficient between the returns of individual bank's share and the return on market portfolio and the beta coefficient were used. Average return on the 91-days Treasury bill was taken as a proxy of the risk free rate of return.

On the basis of this study, it was found that the shares of BOK offered the highest realized rate of return. It was also found that none of the share prices were in equilibrium. Based on the standard deviation of the returns on shares, the share of EBL could be considered as high-risk security and the standard deviation of the returns on shares of HBL was the lowest one. On the basis of CV, the shares of BOK had the lowest risk per unit of return, the highest being with the shares of NABIL. It was also observed that the systematic risk was negative with the shares of NABIL. Therefore, the total risk on the returns on shares of NABIL was due to company specific characteristics rather than market pervasive. Returns on all the shares expect NABIL had positive correlation with the returns on market. Most of the shares appeared to be defensive as beta coefficients are less than one. Only the return on shares of BOK had beta coefficients of greater than one, indicating that the share was more risky than the market.

This study concluded, "The shares of commercial banks in Nepal are heavily traded in the stock market and therefore, these shares play a key role in the determination of stock exchange indicators. All the shares produced higher rate of return than the return on market portfolio. However, risk-return characteristics do not seem to be the same for all the shares reviewed". The study further concludes, "Most of the shares

fall under the category of defensive stocks, except the shares of BOK. From the analysis, it appears that none of the shares are correctly priced".

Mishra (2002) analyzed "Risk and Return on common stock investment of commercial Banks in Nepal" with special reference to five listed commercial banks. The major objective of this study was to promote and protect the interest of the investor by regulation the issuance sales and distribution of securities and purchases, sale or exchange of securities. He also intends to supervise and monitor the activities of the stock exchange and of other related firms carrying on securities business. In addition he tried to render contribution to the development of capital market by making securities transactions fair health, efficient and responsible.

It was noticed that there is a positive correlation between risk and return character of the company. Nepalese capital market being inefficient, the price index itself is not sufficient to give the information about the prevailing market. Situation and the company proper regulation should be introduced so that there is more transparency in issuance, sales and distribution of the securities. Investors do not have any idea about the procedures of the securities issuance. Neither company nor the stock brokers transmit any information to the investors about the current market situation and hence it becomes difficult for common investors to invest in the securities.

Both government authorities and the stock exchange regulator body should try to promote healthy practices so that the stock brokers do not give false information to the investors for their personal benefit which is a common practice in Nepal. Investors should get regular information about the systematic Risk (Beta), Return on Equity and P/E Ratio of various listed companies in some way; it is given in economic times for the companies listed in Nepal Stock Exchange. Security exchange Board of Nepal should make this mandates that it is easier for the investors to calculate risk and return of portfolio and transparency is increased.

Shrestha (2003) has studied on *"Risk and return analysis on common stock investment of banking sectors in Nepal"*. The main objective of the study was to analyze the systematic and unsystematic risk associated with security. The study covered the date of 6 years period from 1996-2001.

In the study, the researcher has used analytical tools like return of common stock expected return, standard deviation, beta coefficient, CAPM, coefficient of

determinants and hypothesis testing (t-test). The major findings of this study are NBBL's common stock is yielding the highest realized rate of return with 71.80 percent whereas it is the lowest 28.60 percent in case of NIB Ltd. The banking industry average 47.55 percent the commercial banks NBBK, BOKL and EBL, rate of return 71.80 percent, 67.60 percent, and 65.60 percent respectively. All the commercial banks required rate of return is less than expected rate of return which means that they are all underpriced. Therefore, it will be beneficial to the investors who are going to purchase the shares of these companies. It was found from the study that the common stock investment in banking sectors is beneficial instead of other financial sectors.

Tamang (2003) has studied on "Risk and return analysis of commercial banks in Nepal". The main objective of the study is to determine whether the share of commercial banks are correctly priced or not analyzing the rate of return using capital asset pricing model and also to measure the systematic and unsystematic risk of the commercial banks. This study has used mathematical tools like market model, single period return, expected rate of return, standard deviation, coefficient of variation, beta coefficient. The study has taken the five years data from 1996-2001. The major finding of the study is that the rate of return of Nepal Arab Bank Ltd is the highest one among the shares of commercial banks that is 95.59 percent and Bank of Kathmandu has the lowest of 35.81 percent. Nepal Arab Bank has the highest unsystematic risk but the total risk or variance of Nepal Bangladesh is the highest of 10 percent. From the study, it was also found that the shares of Nepalese commercial banks are heavily traded in Nepse but none of these shares are correctly priced.

Thapa (2003) studied entitled *"Analysis of Risk and Return on Common Stock Investment of Insurance Companies".* The relevant objective of the study was to analyze risk and return and other relevant variables that help in making decisions.

The study is based on secondary data of five insurance companies covering five years data commencing from 2053/54 to 2057/58. The major findings of the study were as;

i. Because of the higher expected return associated with the common stock, Nepalese investors are attracted towards it.
ii. The standard deviation which measures the risk of an asset shows that most of the companies are risky. As higher risk must be associated with higher return, it is so only in the case of Everest Insurance Company and Himalayan General

Insurance Company where as united Insurance Company are premier Insurance Company are providing higher return at lower risk.

iii. The beta coefficient, which is the measure of systematic risk, reveals that Nepal Insurance Company has highest beta and premier Insurance Company has least beta.

Manandhar (2003) in her study "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 BOKL 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 NEBL, other banks other banks common stocks are more volatile (aggressive with market stocks). All banks in the study are said to be underpriced. Capital Structure of BOKL is most risky and Capital Structure is least risky.

Followings are the findings of study:

i. 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.

ii. One of the most important things to consider when choosing investment strength is the balance between risk and return that you are comfortable with

iii. Investors should diversify their fund to reduce risk with the help of optimal portfolio concept.

iv. 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.

Khadka (2004) in his study "Analysis of Risk and Return on selected Nepalese Commercial Banks listed in NEPSE" with special reference to 7 listed commercial banks is also relevant to this study. The main objective of the study is to analyze the

risk, return and other relevant variables that help in making decision about investment on securities of the listed commercial banks. This study will also target to determine whether the share of commercial banks are correctly priced or not by analyzing the required rate of return using the CAPM. He has addressed the following findings in risk return behavior from the analysis of different stock.

The share of Bangladesh Bank offered highest realized rate or return. Amongst them NABIL bank is the lowest having 5.23% which is less than required rate or return. NBL, which is hard hit by the events (Return = -0.8809), the ranking of the bank is placed as the highest return earner. The study showed that the realized rate or returns of the Samples banks do not have the same features being within the range of 5.23% to 16.12%. Return on the average tock is 5.51% over the period. All the shares under review generated higher rate of return than the market portfolio except Nabil Bank Ltd. The prices of shares of banks under review except Nabil Bank Ltd. are underpriced. The unsystematic risk of NBL is the highest one amongst the shares under review which is 95.59% and SCB of Nepal has the lowest one being 45.14%. The negative correlation coefficient of NBL (-0.21) revealed that the return on the bank goes down if the market goes up. The rest of the shares moved in the direction the market moves.

On the basis of finding, He has concluded that in Nepalese capital market, the contribution of real sector is negligible. Though the shares of commercial Banks of Nepal are heavily traded in NEPSE, none of the share NAB1L Bank will have positive trend towards the equilibrium. He outlined following Recommendations:

i. Adoption of comprehensive and Advance Regulatory framework.
ii. Awareness campaign for the investor.
iii. Regular publication of financial information.
iv. Improvement in the infrastructure facilities.
v. Effective use of banking system.
vi. Deregulation of foreign exchange.

Lamichhane (2006) has studied on *"Risk and return analysis of commercial banks of Nepal"*. The main objective of the study is to analyze the risk and return of the listed commercial banks by analyzing their systematic risk, unsystematic risk average and year and return and risk premium. The study has covered the data of 10 years period

from 1995/96 to 2004/05. This study has used the financial tools such as capital asset pricing model (CAPM) risk premium and statistical tools such as expected rate of return, standard deviation, coefficient of variation, beta coefficient and correlation coefficient to measure and analyze the risk and return of the commercial banks of Nepal.

The study found that among the sampled banks EBL, has the highest and NIB has the lowest return, whereas EBL has the highest and HBL has the lowest standard deviation i.e. risk. The coefficient of variation of NABIL is the highest and that of HBL is the lowest. According to CAPM theory, all the sampled commercial banks are underpriced. This study also analyzed that the systematic risk of NABIL, HBL, NIB and EBL is 0.0859, 0.0946, 0.2097 and 0.1932 respectively whereas the unsystematic risk is 0.296, 0.1329, 0.2097 and 0.3263 respectively.

This study analyzed and concluded that the coefficient of variation of banking sector is lower than that of capital market which shows that the banking sector is less risky than other sectors and it is beneficial for the investors to invest in the shares of banking sectors, Among the commercial banks, the stock of HBL is less risky whereas that of EBL, is most risky. But it is also concluded that none of the share price are at equilibrium as all the sampled banks average rate of return is more than the required rate of return.

Although a number of articles and research works have been published and conducted about commercial banks, these studies are not related with the risk and return of commercial banks based on the common stock prices. Realizing the gap of this part, this topic has been selected for the study and will be helpful for the students, commercial banks, researcher and investors to explore the matters regarding the risk and return of the commercial banks of Nepal. It may encourage for the further study to cover the aspects not covered by this thesis.

Pamane and Vikpossi (2010) "*An Analysis of the Relationship between Risk and Expected Return in the BRVM Stock Exchange: Test of the CAPM"*One of the most important concepts in investment theory is the relationship between risk and return. This relationship drives the theoretical foundation of many investment models such as the well-known Capital Asset Pricing Model which predicts that the expected return on an asset above the risk-free rate is linearly related to the non-diversifiable risk measured by its beta. This study examines the Capital Asset Pricing Model (CAPM)

and test it validity for the WAEMU space stock market called BRVM (BOURSE REGIONALE DES VALEURS MOBILIERES) using monthly stock returns from 17 companies listed on the stock exchange for the period of January 2000 to December 2008. Combining Black, Jensen and Scholes with Fame and Macbeth methods of testing the CAPM, the whole period was divided into four sub-periods and stock's betas used instead of portfolio's betas due to the small size of the sample. The CAPM's prediction for the intercept is that it should equal zero and the slope should equal the excess returns on the market portfolio. The results of the study refute the above hypothesis about the slope and offer evidence against the CAPM for all the sub-period and even for the whole period. The tests conducted to examine the nonlinearity of the relationship between return and betas support the hypothesis that the expected return-beta relationship is linear. Additionally, this paper investigates whether the CAPM adequately captures all-important determinants of returns including the residual variance of stocks. The results demonstrate that residual risk has no effect on the expected returns of stocks for the whole period and the entire sub –periods except for the last period of 2003-2008 which shows that returns are affected by non-systematic risks during that specific period, justifying the fact that the operating activities of the firms have an impact on their stocks returns Keywords: CAPM, beta, BRVM stock exchange, risk, expected return.

Gupta (2011) has conducted a study on *"Risk and Return Analyze of Commercial Bank of Nepal"* by taking five banks as sample. Analytical tools like rate of return, standard deviation, coefficient of variance, correlation coefficient and optimal weight have been used. According to this study, the main objectives are to analyze portfolio of risk and return and the correlation between returns of commercial banks and also to describe the risk and return that directly affects the commercial banks. The major findings of the study are generally public have least understanding about the risk of the investments which may be due to poor education, lack of adequate information, etc., that may obstruct the development of stock market. The study covered five years period.

Tichareva (2012) this research analysis *"Risk adjusted performance measures in a South African Property Finance Business".* This is performed through the application of the Trey nor, Sharpe and Jensen measures, which are risk adjusted performance measures in finance, to banking. Conclusions are drawn on whether risk adjusted

performance measures lead to materially different results on ranking of performance when compared with traditional measures such as return on equity and return on assets. The research also discusses the strategic decisions that would result from using risk adjusted performance measures. The study contrasts risk adjusted performance measures with non-risk adjusted traditional performance measures in a Property Finance business within the banking sector in South Africa. Following a literature review, the research proposes that risk adjusted performance measures, when compared with traditional non-risk based performance measures such as return on equity and return on assets, lead to different results on performance ranking of business units or activities within a business unit. Both quantitative and qualitative approaches to research are undertaken. We chose Ned bank Corporate Property Finance as a case study because of the simplicity for the researcher to access financial data for the quantitative part of the research and interviewees for the qualitative part of the research. The key findings in this research are that there are differences in performance rankings between traditional measures of performance and risk adjusted measures. Business activities that perform better on non-risk adjusted basis are not necessarily the best performing on a risk adjusted basis. Hypothesis testing also shows that the differences in performance rankings are material.

Linn (2015) has studied *"Risk and Return in Equity and Options Markets"* about the relationship between prices of risk in options and equity markets within the context of a specific model, what we observe in the data rarely fits any single option pricing model with perfect precision. There seems to be little consensus on a single option pricing model with superior performance above all others. The purpose of this thesis is to empirically investigate the risk-return relation in options markets directly, without resorting to the use of option pricing models based upon relative pricing of options in terms of their underlying. Options markets provide a rich cross-section of data with which to study how investors price assets because they vary across firms, strikes and maturity. As a result, options data provides additional and complimentary information beyond the information contained in stocks. Using these facts, in this thesis I empirically investigate the risk-return relationship across stock option, index option and equity markets. In Chapter I of the thesis I empirically show how to use options data to better estimate the cross-sectional price of market-wide volatility risk. I furthermore compare the price of volatility implicit in the cross-section of stock

returns with the price implicit in the cross-section of option returns. In the same chapter I exploit the fact that options can be used to study the term structure properties of risk and return by examining the volatility risk and return tradeoff in options of different times to maturity. In Chapter II, based upon the paper "Pricing Kernel Monotonicity and Conditional Information," co-authored with Sophie Shive and Tyler Shumway, I use data on index options and the underlying index to extract estimates of stochastic discount factors. We propose a new method for non-parametrically estimating the stochastic discount factor. Our method improves upon existing methods by aligning information sets available to investors at each time in our sample and taking these into consideration in our estimation scheme. Empirical results suggest that this may be the solution to a well-known anomaly in the literature whereby non-parametric estimates of the pricing kernel tend to be non-monotonic in market returns.

Bhattacharya (2016) *"Risk and Return Profile Analysis of selected Mutual Fund Product of Indian Mutual Fund Industry"* Mutual fund is an investment vehicle which well known for diversification of risk. The core of mutual fund lies in the basket of securities in which the corpus of a fund is invested. Professionals are employed to minimize the risk at an expected level of return. The level of risk of a scheme depends on the securities in which the corpus is invested. The present study attempted to access the risk associated with 25 selected equity diversified mutual fund schemes from five different fund houses. These fund houses are the leading players of the Indian mutual fund industry in terms of Asset under Management.

Poudel, (2018) conduct a study on *"Risk and Return on Common Stock of Commercial Banks in Nepal"* with the objective of:

i. To analyze return associated with common stock investment in banking sector.
ii. To examine the common stock price in terms of overpriced, underpriced or equilibrium by analyzing the risk and return of individual shares.
iii. To examine the risk and return of individual shares in sample commercial banks.
iv. To examine that how the investor diversify the risk.

Major Findings:

i. Expected return of NABIL is highest i.e. 55.38% and HBL has lowest expected rate of return i.e. 6.35%.
ii. SCBNL has 24.84% expected rate of return and 28.89% as standard deviation. NABIL also has maximum standard deviation of 77.67%.
iii. Expected rate of return and standard deviation cannot give the appropriate comparison. So, we have to consider Coefficient of Variation.
iv. Coefficient of variation of NBBL is highest i.e. 645.48 concludes as most risky assets. Similarly HBL has also CV of 446.77 and resulted as risky assets.
v. Expected rate of return of market 3.6% and standard deviation is 55.38% with C.V. of 187.77. Standard deviation is the segregate the total risk and here NBBL has variance of 0.6033 where systematic risk is 0.2103 and unsystematic portion is 0.1709. Similarly, NABIL has second large portion of total risk where systematic risk is 0.2103 and unsystematic risk is 0.0667. As we know that unsystematic risk is diversifiable risk and could be eliminated through diversification.

2.4 Research Gap

Large numbers of research are available bearing the same topic, "Risk and Return Analysis of common stock in commercial Banks in Nepal ". The present researcher tries to draw insights from them. However, the researcher will sustain gap by covering the relevant data and information. This study has taken five years latest data 2014/15 to 2018/19. Moreover, the researcher has selected three commercial banks of Nepal as sample banks NABIL Bank Limited, Nepal Investment Bank ltd and Nepal Bank limited. Previous researches had deviation.

CHAPTER: 3

RESEARCH METHODOLOGY

Research methodology is the systematic way of solving research problems and which ultimately refer to the overall research process. It includes all the procedures from theoretical framework to the collection and analysis of the data. As most of the data are quantitate the research is based on the specific models. It is composed of both parts of technical aspect and logical aspect, on the basis of historical data. Research is systematic and organized effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought out activities of gathering recording, classifying, analyzing and interpreting the data with the purpose of finding answer to the problem. Thus the entire process by which we attempt to solve problems is called research.

3.1 Research Design

Research design is necessary for each research work. It is a plan, structure and for collecting, analyzing and evaluating data after identifying the research problem. It is a process of collecting, evaluating, verifying and synthesizing post evidence systematically and objectively to reach a conclusion.

This research belongs to risk and return analysis so that this research will be based on recent historical data, which will cover the five years period data F/Y20014/l5 to 2018/19. It will deal with the common stocks of commercial banks on the basis of available information. As the title of the study suggests, it is more analytical and empirical but less descriptive

3.2 Population and Sample

This study is based on the comparative study of risk and return on the basis of common stock investment of three commercial banks listed in NEPSE. Population is all the listed companies in NEPSE. There are a total of 27 commercial banks registered under Nepal. For this, study three commercial banks Nepal Investment Bank Limited (NIBL), Nabil Bank limited (NABIL) and Nepal Bank Limited (NBL) are taken on the basis of convenience sampling.

3.3 Sources of Data

This study is mainly based on secondary data. The supplementary data and Information is obtained from unpublished official records of concerned banks booklets, journals, articles and related website. Financial reports of commercial banks are also collected. Besides, the secondary data are also collected.

3.4 Data collection and processing procedure

All the data necessary for the research is collected from secondary sources. Data related to market prices of shares (MPS), market capitalization, movement of NEPSE index and etc. will be taken from the trading report published by NEPSE, other relevant data will be collected from individual bunks, Security Board of Nepal and from their web sites,

The collection procedure is summarized below: -

1. Financial document and summary sheets provided by companies.
2. Trading manual published by Nepal Stock Exchange Limited. Related URL
4. Materials published in Newspapers and Magazines.
5. Other related journals, periodicals, books and booklets.
6. Central library T.U.

3.5 Tools and Techniques Used

The study employs various financial tools and statistical tools to analyze the data collected from various sources.

1. **Statistical Tools**

   Proper statistical tools are used and results are presented and interpreted. Some of the statistical tools used are mentioned below:-

   i. Standard Deviation ()
   ii. Coefficient of Variation (C.V)

2. **Financial Tools**
   i. Earnings Per Share (EPS)
   ii. Dividend Per Share (DPS)
   iii. Holding Period Rate of Return (HPR)

3.6 Factors for Analysis

The factors that are used for analysis of risk and return are as follows:

3.6.1 Market Price of Shares (MPS)

Market value in the secondary market is determined by the supply and demand factors and reflects the opinion of investors and trader concerning the values of the stock closing price is used as market price of stock because it is very different to obtain and include these all information and average of high and low price may not be reliable and representative information.

3.6.2 Dividend per Share (DPS)

Dividend is the part of earning that is distributed to the shareholders as a part of their investment. Dividend is return to equity capital that consist price of time and price of risk taking by the investors. The total amount of dividend out of earning available to the shareholder if distributed, the common stock's portion is said Dividend per share (DPS). Symbolically DPS can be expressed as follows:

$$\text{DPS} = \frac{\text{Dividend Paid}}{\text{No. of Common Shares Outstaning}}$$

Dividend is relevant during computation of rate of return, which is reward to the shareholders for their investment, which can be given in different for, for investment, which can be given in different form.

Total dividend amount = Cash Dividend + Stock Dividend % x Next Year MPS

The various financial and statistical tools used are as follows:

3.6.3 Holding Period Return (HPR)

Holding period return indicates the summation of price appreciation and dividend gain. Here price appreciation means gain on capital investment.

$$\text{HPR or Simple Rj} = \frac{(Pt - Pt - 1) + Dt}{Pt - 1}$$

Where,

R = Annual rate of return

P_t = Price of a stock at time t.

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

D_t = Cash dividend received at time t.

3.6.4 Expected Rate of Return

One of the main aims of the study is to determine the expected return on the investment is CS. Expected rate or return is the arithmetic mean of the post years returns.

Expected Rate of Return (Rj) = $\sum Rj / n$

Where,

Rj = Expected rate or return on stock j.

n = Number of years that the return is taken.

$\sum$ = sign of summation.

3.6.5 Standard Deviation

Standard deviation is a statistical measure it is widely used to measure risk of a single asset. The standard deviation represents a large dispersion of return and is a high risk and vice versa.

$$\sigma_j = \sqrt{\frac{\sum[R_i - E(R_j)]^2}{n - 1}}$$

If data is probability distribution

$$\sigma_j = \sqrt{\sum_{t=1}^{n} [R_i - E(R_j)]^2 P_j}$$

Where, ˆ

σ_j = Standard deviation on of return stock j during the time period

P_j = Probability distribution of the observation.

Rj = Probability distribution of the observation.

E (Rj) = Expected rate or return on stock j.

3.6.6 Coefficient of Variation (C.V.)

It is the relative measurement of risk and return. It measures the risk per unit of return. It provides a more meaningful basis for comparison when the expected returns on two alternatives are not the same. The higher coefficient of variation, higher the risk.

$$C.V. = \frac{\sigma_j}{E(R_j)}$$

Where,

C.V. = Coincident of variation of stock.

OJ = Standard deviation of return on stock j.

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

3.6.7 Methods of Analysis and Presentation

All the methods of analysis and presentation are applied as simple as possible. Proper financial and statistical tools are used and results are presented in table and also shown in diagram. Interpretation is made in very simple way detail of calculation which cannot be shown in the main body part, are presented in appendices at the end, summary, conclusion and recommendation are presented finally.

CHAPTER: 4

RESULTS AND DISCUSSION

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 Investment of Commercial Banks'. Detail data of MPS, EPS, PIE ration and dividend of each bank and NEPSE index and their interpretation and analyses 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 a special reference to the listed commercial banks. The analysis of data consists of organizing tabulating and assessing financial and statistical result from different tables and diagrams are drawn to make the result more simple and understandable.

4.1 Data Presentation and Analysis

The study is focused on analyzing the common stock of listed commercial banks separately as the scope of the study concentrated only on listed commercial banks of Nepal. There are currently 27 commercial banks in operation in Nepal. Among them 3 commercial banks are taken as a sample for the study. They are Nepal Investment Bank Ltd. (NIBL), Nabil Bank Ltd. (NBL) and Nepal Bank Ltd. (NBL). Common stock of each listed commercial banks, their risk and return are analyzes are included in this Study.

4.1.1 Nepal Investment Bank Ltd. (NIBL)

Introduction

NIBL, Previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50 % of the capital of NIBL) was credit Agricole Indosuez a subsidiary of one of the largest banking group in the world.

With the decision of credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 500/0 shareholding of credit Agricloe Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of banks AGM, NRB and company Register'S office with the following shareholding structure

i. A group of companies holding 50 % of the capital.
ii. Rastriya Banijya Bank holding 15 % of the capital.
iii. Rastriya Bima Sansthan holding 15 % of the capital.
iv. The remaining 20 % being held by the general public (which means that NIBL is a company listed on the Nepal Stock Exchange)

4.1.1.1 Analysis of Total Dividend of NIBL

Total dividend of the selected commercial banks is calculated on the basis of next year market price, cash dividend per share and stock dividend percentage of the respective commercial bank. The bank which provides the highest total dividend refers to the maximum gain dividend financial institution in comparison to the sampled bank. It is elaborated by the following table and chart that represents the total dividend.

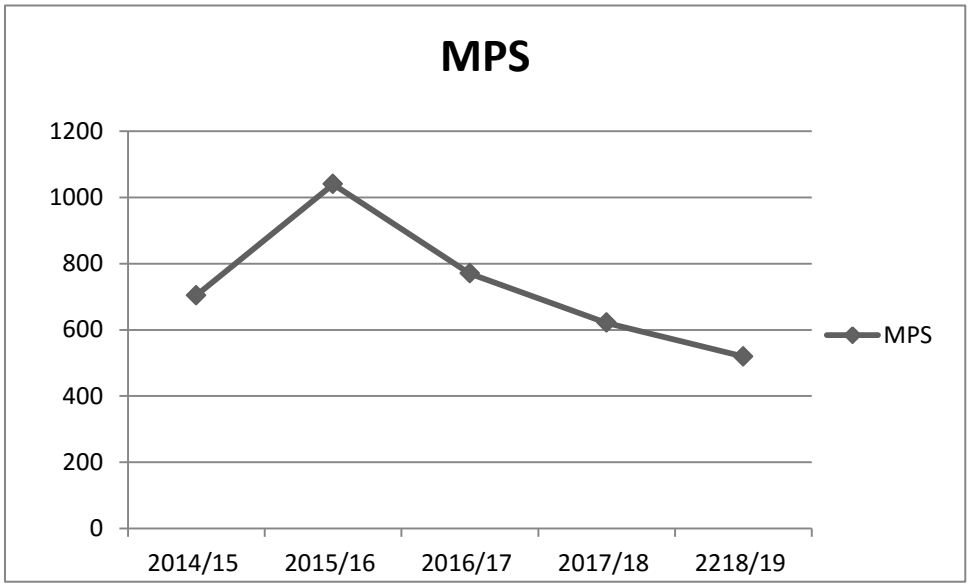
Table 4.1 MPS, Dividend, EPS and P/E Ratio of NIBL

Fiscal Year	Closing MPS	Cash DPS (%)	Stock Dividend (%)	Total Dividend	EPS (%)	P/E Ratio
2014/15	704	34.7	1.74	12.25	30.92	22.8
2015/16	1040	41	20	249	29.30	35.5
2016/17	770	40	15	155.5	29.31	26.3
2017/18	621	40	18	151.78	35.7	17.4
2018/19	519	19	10.5	73.495	26.4	19.6

Data Source: Annual Report of NIBL

According to table 4.1, NIBL has paid stock dividend whereas cash dividend every year. Highest total dividend is paid in the year 2016/17 that is 155.5. PIE ratio of NIBL is maximum in the year 2015/16 i.e. 35.5 and minimum in the year 2017/18 i.e. 17.4. The Closing MPS of NIBL is maximum of Rs.1040 in the year 2015/16 and minimum of Rs.519 in the year 2018/19.

Figure 4.1 Year and Price movement of the Common Stock of NIBL



Data Source: Annual Report of NIBL

Figure 4.1 shows the trend line of market price in several year of NIBL. It can be seen that there is fluctuation of market price from year 2014/15 to till 2018/19, and the trend line shows the rapid growth after 2014/15 to 2018/19. There is minimum price in the year 2018/19 i.e. Rs.519 and maximum in the year 2015/16 i.e. Rs.1040.

4.1.1.2 Expected Return (Rj), Standard Deviation (σj) and Coefficient of Variation (C.V.) of C.S. of NIBL

The following table shows the calculation of expected return, standard deviation and coefficient of variation of the selected commercial banks:-

Table 4.2 Expected Return, S.D. and C.V. of C.S. of NIBL

Fiscal Year	Closing MPS	Total Dividend	Rj = $\frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$	$(R_j - \bar{R}_j)$	$(R_j - \bar{R}_j)^2$
2013/14	960	-	-		
2014/15	704	46.95	-0.2178	-0.31	0.096
2015/16	1040	249	0.8310	0.7388	0.55
2016/17	770	155.5	-0.1101	-0.2023	0.041
2017/18	621	151.78	0.0036	-0.0886	0.0078
2018/19	519	73.5	-0.0459	-0.1381	0.0191
Total			0.4608		$\sum(R_j - \bar{R}_j)^2$ =0.7098

Data Source: Annual Report of NIBL

Where,

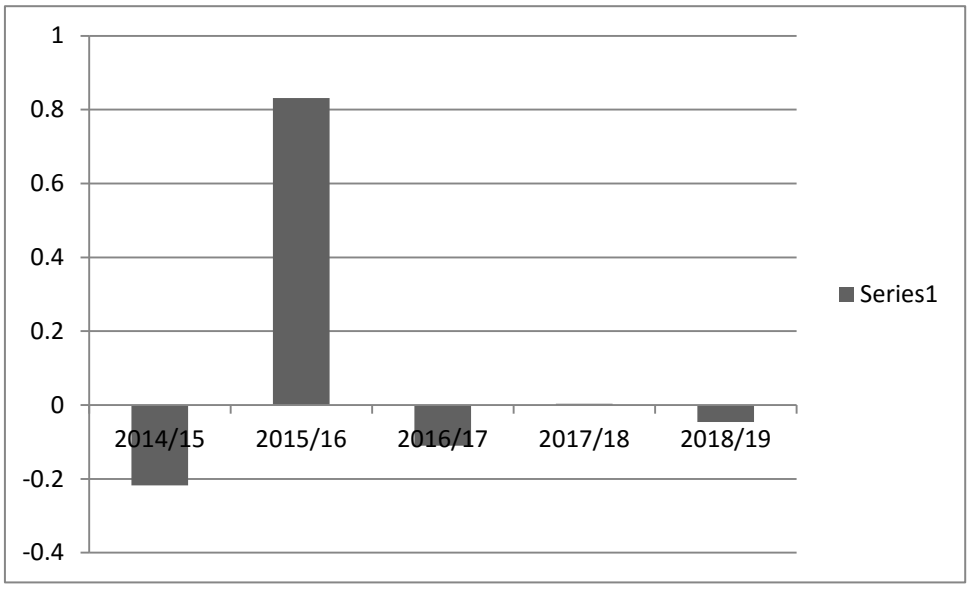
Expected Return ($\bar{R}_j$) = $\frac{\sum R_j}{N} = \frac{0.4608}{5} = 0.0922$

Standard Deviation (σ_j) = $\sqrt{\frac{\sum(R_j - \bar{R}_j)^2}{n-1}} = \sqrt{\frac{0.7097}{5-1}} = 0.4212$

Coefficient of Variation (C.V) = $\frac{\sigma_j}{\bar{R}_j} = \frac{0.4212}{0.0922} = 4.57$

Expected return of NIBL is 0.0922 with the total risk (measured by S.D) of 0.4212. The C.V. of NIBL is 4.57 which denote that to get per unit return 4.57 risk must be sacrifice.

Figure 4.2 Annual Rate of Return of C.S. of NIBL



Data Source: Annual Report of NIBL

The Figure 4.2 Shows that the annual rate of return of C.S. of NIBL in several years. The rate of return is maximum on 2015/16 i.e. 0.8310 which shows highest return profitable while the return is negative in the year 2014/15 i.e. -0.2178.

4.1.2 Nabil Bank Limited.

Introduction

Nabil Bank Limited is the nation's first private sector bank, commencing its business since July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 118 points of representation. In addition to this, Nabil has presence through over 1500 Nabil Remit agents throughout the nation.

Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business. Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes

international standard banking software that supports the E-channels and E-transactions.

Nabil is moving forward with a Mission to be "1st Choice Provider of Complete Financial Solutions" for all its stakeholders; Customers, Shareholders, Regulators, Communities and Staff. Nabil is determined in delivering excellence to its stakeholders in an array of avenues, not just one parameter like profitability or market share. It is reflected in its Brand Promise "Together Ahead". The entire Nabil Team embraces a set of Values "C.R.I.S.P", representing the fact that Nabil consistently strives to be Customer Focused, Result Oriented, Innovative, Synergistic and Professional.

4.1.2.1 Analysis of Total Dividend of Nabil Bank

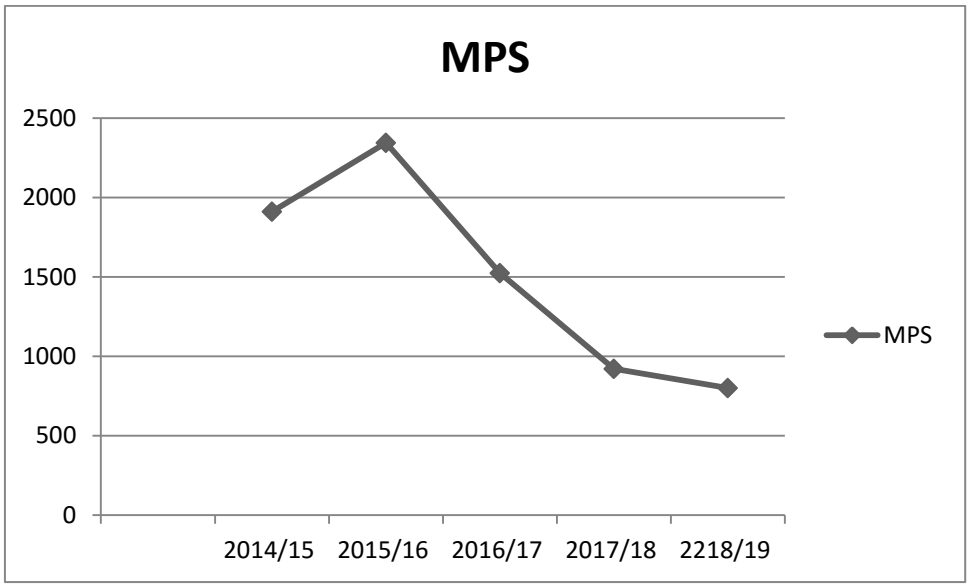
Table 4.3 MPS, Dividend, EPS and P/E Ratio of Nabil Bank

Fiscal Year	Closing MPS	Cash DPS (%)	Stock Dividend (%)	Total Dividend	EPS (%)	P/E Ratio
2014/15	1910	36.84	30	609.84	57.24	33.37
2015/16	2344	45	30	748.2	59.27	39.55
2016/17	1523	48	30	504.9	59.86	25.44
2017/18	921	34	12	144.52	51.84	18.60
2218/19	800	34	12	130	50.57	15.82

Data Source: Annual Report of Nabil Bank

Table 4.3 shows that, Nanil bank is paying cash and stock dividend every year. Highest total dividend is paid in the year 2015/16 i.e. Rs.748.2 and lowest is in the year 2018/19 i.e. Rs.130. *PIE* ratio of Nanil Bank is maximum in the year 2015/16 i.e. 39.55 and minimum in the year 2018/19 i.e. 15.82. *PIE* ratio is in increasing trend from starting year 2016/17 to 2018/19. The closing MPS of is maximum of Rs.2340 in the year 2015/16and minimum of Rs.800 in the year 2018/19.

Figure 4.3 Year and Price movement of the Common Stock of Nabil Bank



Data Source: Annual Report of Nabil Bank

Figure 4.3 shows the trend line of market price in several year of Nabil Bank. It can be seen that there is fluctuation of market price from year 2014/15 to till 2018/19, and the trend line shows the rapid growth after 2014/15 to till 2018/19. There is minimum price in the year 2018/19 i.e. Rs.800 and maximum in the year 2015/16 i.e. Rs.2344.

4.1.2.2 Expected Return (Rj), Standard Deviation (σj) and Coefficient of Variation (C.V.) of C.S. of NABIL Bank

Table 4.4 Expected Return, S.D. and C.V. of C.S. of NABIL Bank

Fiscal Year	Closing MPS	Total Dividend	$Rj = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$	$(R_j - \bar{R}_j)$	$(R_j - \bar{R}_j)^2$
2013/14	2535	-	-		
2014/15	1910	609.84	-0.00598	-0.044	0.001936
2015/16	2344	748.2	0.61895	0.582	0.339
2016/17	1523	504.9	-0.1349	-0.1724	0.0297
2017/18	921	144.52	-0.3004	-0.338	0.1143
2018/19	800	130	0.0098	-0.028	0.000784
Total			0.18747		$\sum(R_j - \bar{R}_j)^2$ =0.48542

Data Source: Annual Report of NABIL Bank

Where,

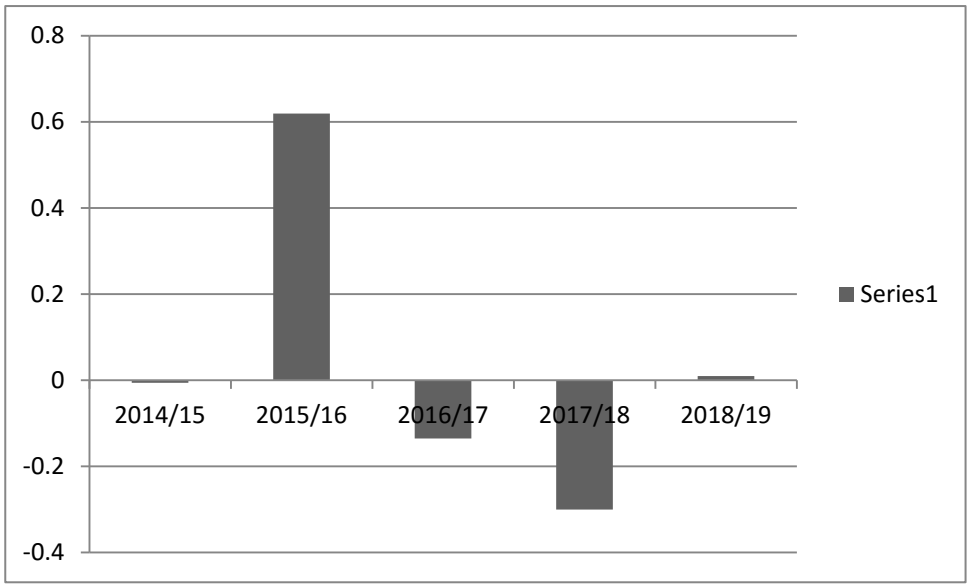
Expected Return $(\bar{R}_j) = \frac{\sum R_j}{N} = \frac{0.18747}{5} = 0.03749$

Standard Deviation $(\sigma_j) = \sqrt{\frac{\sum(R_j - \bar{R}_j)^2}{n-1}} = \sqrt{\frac{0.48542}{4}} = 0.3484$

Coefficient of Variation (C.V) $= \frac{\sigma_j}{\bar{R}_j} = \frac{0.3484}{0.03749} = 9.292$

Expected return of Nabil Bank is 0.03749 with the total risk (measured by S.D) of 0.3484. The C.V. of Nabil Bank is 9.292 which denote that to get per unit return 9.292 risks must be sacrifice.

Figure 4.4 Annual Rate of Return of C.S. of NIBL



Data Source: Annual Report of Nabil Bank

The Figure 4.2 Shows that the annual rate of return of C.S. of Nabil Bank in several years. The rate of return is maximum on 2015/16 i.e. 0.61895 which shows highest return profitable while the return is negative in the year 2017/18 i.e. -0.3004.

4.1.3 Nepal Bank Limited (NBL)

Introduction

Nepal Bank Limited, The first bank of Nepal was established in November 15, 1937 A.D (Kartik, 30, 1994). It was formed under the principle of Joint venture (Joint venture between govt. & general public). NBL's authorized capital was Rs.10 million & issued capital Rs.2.5 million of which paid-up capital was Rs.842 thousand with 10 shareholders. The bank has been providing banking through its branch offices in the different geographical locations of the country. Ownership is 51 percent Government of Nepal 49 percent General public. Total branch of Nepal bank limited was 175 Number of staff 2297 (As of August17, 2019).

4.1.3.1Analysis of Total Dividend of Nepal Bank Limited

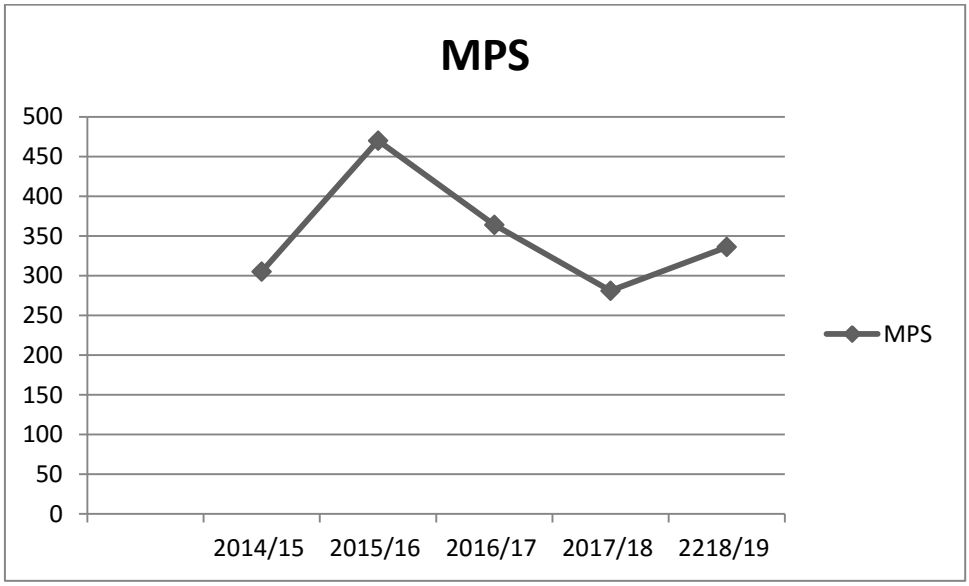
Table 4.5 MPS, Dividend, EPS and P/E Ratio of NBL

Fiscal Year	Closing MPS	Cash DPS (%)	Stock Dividend (%)	Total Dividend	EPS (%)	P/E Ratio
2014/15	305	-	-		7.48	40.78
2015/16	470	-	-		44.59	10.45
2016/17	364	-	-		38.77	9.39
2017/18	281	-	-		39.98	7.03
2218/19	336	-	15		26.99	12.45

Data Source: Annual Report of NBL

According to table 4.5, NBL has paid stock dividend is paid in the year 2018/19 that is 15. P/E ratio of NBL is maximum in the year 2014/15 i.e. 40.78 and minimum in the year 2017/18 i.e. 7.03. The Closing MPS of NBL is maximum of Rs.470 in the year 2015/16 and minimum of Rs.281 in the year 2017/18.

Figure 4.5 Year and Price movement of the Common Stock of NBL



Data Source: Annual Report of NBL

Figure 4.5 shows the trend line of market price in several year of NBL. It can be seen that there is fluctuation of market price from year 2014/15 to 2018/19, and the trend line shows the rapid growth after 2014/15 to 2018/19. There is minimum price in the year 2017/18 i.e. Rs.281 and maximum in the year 2015/16 i.e. Rs.470.

4.1.3.2 Expected Return (Rj), Standard Deviation (σj) and Coefficient of Variation (C.V.) of C.S. of NBL

Table 4.6 Expected Return, S.D. and C.V. of C.S. of NBL

Fiscal Year	Closing MPS	Total Dividend	$Rj = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$	$(R_j - \bar{R}_j)$	$(R_j - \bar{R}_j)^2$
2013/14	459				
2014/15	305		-0.336	-0.36	0.13
2015/16	470		0.541	0.52	0.27
2016/17	364		-0.23	-0.255	0.065
2017/18	281		-0.23	-0.255	0.065
2018/19	226	50.4	0.38	0.355	0.13
Total			0.125		$\sum(R_j - \bar{R}_j)^2$ =0.66

Data Source: Annual Report of NBL

Where,

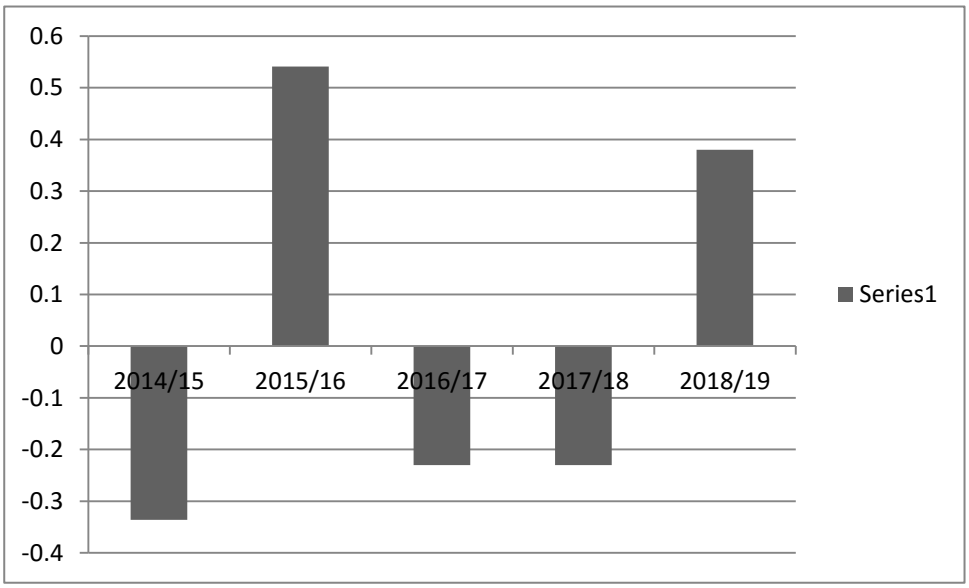
Expected Return $(\bar{R}_j) = \frac{\sum R_j}{N} = \frac{0.125}{5} = 0.025$

Standard Deviation $(\sigma_j) = \sqrt{\frac{\sum(R_j - \bar{R}_j)^2}{n-1}} = \sqrt{\frac{0.66}{5-1}} = 0.41$

Coefficient of Variation (C.V) $= \frac{\sigma_j}{\bar{R}_j} = \frac{0.41}{0.025} = 16.4$

Expected return of NBL is 0.025 with the total risk (measured by S.D) of 0.41. The C.V. of NBL is 16.4 which denote that to get per unit return 16.4 risk must be sacrifice.

Figure 4.6 Annual Rate of Return of C.S. of NBL



Data Source: Annual Report of NBL

The Figure 4.6 Shows that the annual rate of return of C.S. of NBL in several years. The rate of return is maximum on 2015/16 i.e. 0.541 which shows highest return profitable while the return is negative in the year 2017/18 i.e. -0.336.

4.1.4 Inter Bank Comparison

According to the result from analysis part, a comparative analysis of return, total risk and risk per unit performed here. Expected return, standard deviation of return and coefficient of variation of each bank for the year 2014/15 to 2018/19 are given in the table 4.7.

Table 4.7 Expected Return, S.D., and C.V. of each Inter Bank

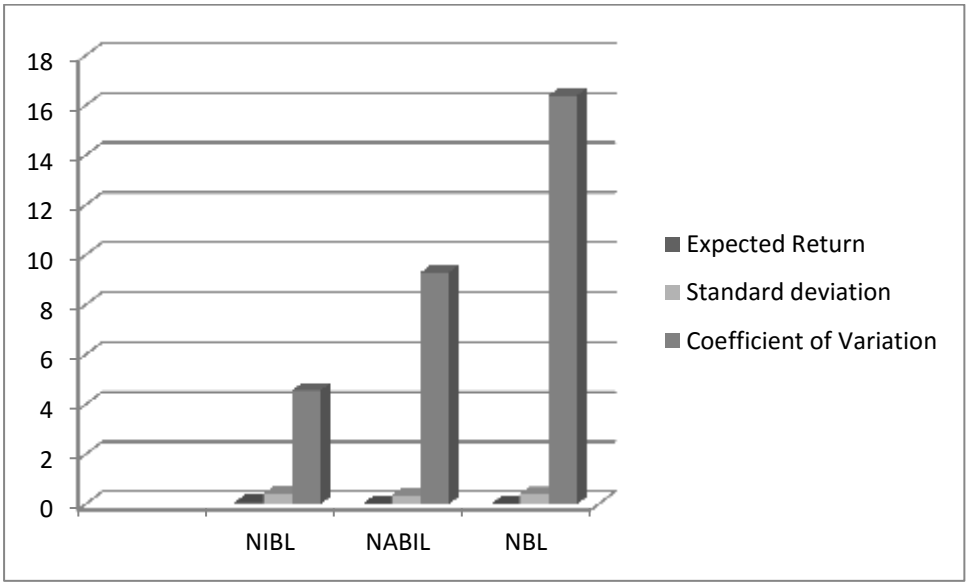
Bank	Expected Return	Standard deviation	Coefficient of Variation	Remarks		
				Return	Risk	C.V.
NIBL	0.0922	0.4212	4.57	Highest	Highest	Lowest
NABIL	0.03749	0.3484	9.292		Lowest	
NBL	0.025	0.41	16.4	Lowest		Highest

Source: Table 4.2, table 4.4 and table 4.6

The table 4.7 shows the overall return and risk of the individual banks. Here, the investor can get the highest return from NIBL i.e. 0.0922 and lowest return from NBL i.e. 0.025. Total risk (measured by standard deviation) is observed maximum of NIBL i.e. 0.4212 and minimum of NABIL i.e. 0.3484. This means that quantitative of total risk is very high in NIBL. Higher the C.V. higher the risk and C.V. of NBL is highest i.e. 16.4 than that of other commercial banks. So common stock of NBL is more risky than that of other banks. For the risk takers investment in NIBL is beneficial whereas for the risk divers' individuals investment in common stock of NIBL are found satisfactory.

To make the comparison effective and easier the above mentioned data are presented on the chart:

Figure 4.7 Expected Return, S.D., and C.V. of each Commercial Bank



Source: Table 4.2, Table 4.4 and Table 4.6

Figure 4.7 clarify the expected return, standard deviation and coefficient of variation of each individual bank. It is showing the comparison of these banks in terms of risk and Return.

4.1.5 Market Risk and Return

In Nepal there is only one stock market, NEPSE. Overall market movement is represented by market index (i.e. NEPSE Index). The market return, its S.D. and C.V. is calculated here.

Table: 4.8 Market Expected Return, S.D and C.V of Market Index

Year	Closing Price NEPSE	Market Return(R_m)	$(R_m-\bar{R}_m)$	$(R_m-\bar{R}_m)^2$
2013/14	518	-	-	-
2014/15	1036.11	1	0.8451	0.7142
2015/16	961.23	-0.7	-0.8549	0.7309
2016/17	1718.15	0.7874	0.6325	0.4
2017/18	1582.67	-0.0789	-0.2338	0.0547
2018/19	1212.36	-0.234	-0.3889	0.1513
Total		0.7745		$\sum(R_m - \bar{R}_m)^2 = 2.0511$

Sources: NEPSE Annual Report of FY 2014/15 to 2018/19

Table 4.8 shows the year end price of NEPSE in different year where the market price is higher in the year 2016/17 i.e. 1718.15 and lowest market price in the year 2013/14 i.e. 518.

Where,

Expected Return $(\bar{R}_m) = \frac{\sum R_m}{N} = 0.1549$

Standard Deviation $(\sigma_m) = \sqrt{\frac{\sum(R_m - \bar{R}_m)^2}{N-1}} = 0.7161$

Coefficient of variation (CV) $= \frac{\sigma_m}{\bar{R}_m} = 4.6229$

Expected return of NEPSE is 0.1549 with the total risk (measured by S.D) of 0.7161. The C.V. of NEPSE is 4.6229 which denote that to get per unit return 4.6229 risk must be sacrifice.

4.2 Results of the Study

This study enables investors to keep the returns they can expect and the risk they may take into better perspective. We know that Nepalese stock market is in effect of openness and liberalization in national economy. But Nepalese individual investors cannot analyze the securities as well as market properly because of the lack of information and poor knowledge about the analysis of securities for investment.

i. The expected return of NIBL is 0.0922 and the expected return of NABIL and NBL is 0.03749 and 0.025 respectively. So that, on the basis of expected NIBL bank is the perfect bank because it has higher expected return.
ii. The standard deviation of NIBL is 0.4212 and the standard deviation of NABIL and NBL is 0.3484 and 0.41 respectively. So that, on the basis of standard deviation ANBIL bank is the perfect bank because it has lower standard deviation.
iii. Coefficient of variance of NBL is higher than that of other commercial banks. So common stock of NBL is more risky than the others investment but NIBL has lowest C.V. then other banks so common stock of NIBL investment id lower risky. Therefore investor should prefer common stock of NIBL.
iv. Most of the investors invest only keeping the return in the mind but they are found unable to calculate the risk factors of the security and most of Nepalese private investors invest in single security.

4.3 Discussion

Risk and return is getting considerable attention in financial management. Central focus of finance is tradeoff between risk and return and major part stock market had greatest glamour, not only for the professional or institutional investors but also for the individual or private investors. Development in the field of finance has led to the application of many new concepts models to deal with various issues related to financial management.

The relationship between risk and return is described by investor's perception about risk and their demand for compensation. No investor will like to invest in risky and their demand for compensation. Hence, risk plays a central role in the analysis of investment. Investors often ask about an investment like to know if the risk will

command higher premium and the tradeoff between the two assumes a linear relationship between risk and premium.

Common stock is the most risky security and life blood of stock market. Because of higher expected return an investment in common stock of a corporate firm neither ensures an annual return nor ensures the return of principal. Therefore investment in the common stock is very sensitive on the ground of risk. Dividend to common stock holders are paid only if the firm makes an operative profit after tax and preference dividend. Common stock has attracted more investors in Nepal. Rush in the primary market during the primary issue is one of the examples. Private C.S. holders are the passive owners of the company. But private investor plays a vital role in economic development of the nation by mobilizing the dispersed capital indifferent form in the society.

The main objective of the study is to analyze the risk and return of Nepalese commercial bank. The study is focused on the common stock of sampled commercial banks. Hence, sampled banks are taken as reference to analyze the risk and return in common stock investment. While analyzing the risk and return, brief review of related studies has been performed. Scientific methods are used in data analysis; Tables, graphs and diagram are used to present the data and results more clearly. Both quantitative and qualitative analysis has performed by using statistical tools as well as personal judgment. Secondary data are collected from the NEPSE, NRB, SEBON and other related banks. Other subjective types of information are collected through the decision with private investors, financial executives companies and officials of NRB, SEBON and NEPSE.

CHAPTER: 5

SUMMARY AND CONCLUSION

In this chapter, the effort has been made first to present summary of major findings and conclusion drawn from the analysis. Last step proceeds with the implications.

5.1 SUMMARY

The main objective of the study is to analyze the risk and return of Nepalese commercial bank. The study is focused on the common stock of sampled commercial banks. Hence, sampled banks are taken as reference to analyze the risk and return in common stock investment. While analyzing the risk and return, brief review of related studies has been performed. Scientific methods are used in data analysis; Tables, graphs and diagram are used to present the data and results more clearly. Both quantitative and qualitative analysis has performed by using statistical tools as well as personal judgment. Secondary data are collected from the NEPSE, NRB, SEBON and other related banks. Other subjective types of information are collected through the decision with private investors, financial executives companies and officials of NRB, SEBON and NEPSE. Finding and analysis are summarized and conclusions are drawn as follows.

Risk and return is getting considerable attention in financial management. Central focus of finance is tradeoff between risk and return and major part stock market had greatest glamour, not only for the professional or institutional investors but also for the individual or private investors. Development in the field of finance has led to the application of many new concepts models to deal with various issues related to financial management.

The relationship between risk and return is described by investor's perception about risk and their demand for compensation. No investor will like to invest in risky and their demand for compensation. Hence, risk plays a central role in the analysis of investment. Investors often ask about an investment like to know if the risk will command higher premium and the tradeoff between the two assumes a linear relationship between risk and premium.

Common stock is the most risky security and life blood of stock market. Because of higher expected return an investment in common stock of a corporate firm neither

ensures an annual return nor ensures the return of principal. Therefore investment in the common stock is very sensitive on the ground of risk. Dividend to common stock holders are paid only if the firm makes an operative profit after tax and preference dividend. Common stock has attracted more investors in Nepal. Rush in the primary market during the primary issue is one of the examples. Private C.S. holders are the passive owners of the company. But private investor plays a vital role in economic development of the nation by mobilizing the dispersed capital indifferent form in the society.

5.2 Conclusion

This study enables investors to put the return they can expect and the risks they may take into better perspective. We know that Nepalese commercial banks as well as stock market are effects of openness and liberalization in national economy growth. But Nepalese individual investors cannot analyze the securities as well as market properly because of the lack of information and knowledge about the analysis of securities for investment.

Risk is the variability of return. This is measured in the terms of standard deviation. Standard deviation is only the measures of unsystematic risk, which is not defined by the market. On the basis of SD common stock of NIBL most risky since it has high SD and CV of NIBL is least risky because of its lowest SD on the other hand, we know that of CV is more rational basis of investment decision. This measures the risk per unit of return. On the basis of CV common stock of NIBL is the best among all banks and NBL has lowest risky per return.

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 reduced totally. If the correlation between the returns of two stocks is highly positive risk reduction is not so significant. So, portfolio between the CV of same industry cannot reduce risk properly. The portfolio construction of the common stock of these banks will not reduce any risk, which is not favorable as portfolio construction is concerned.

5.3 Implication

From the above analysis of the various risks and return analysis of sample commercial banks, following recommendations are made to these banks in respect to different risk and return analysis:

i. NBL have higher risk than other banks and the expected return is higher of NIBL bank than other banks.
ii. Investors have to focus their mind both on risk and return before investing their fund.
iii. Investor should diversify their fund to reduce with the help of different analytical tools. That is doing not put all your eggs in one basket.
iv. The stock prices of all sample commercial banks are changeable. It is affected by the risk factor, information of stock price etc.
v. It would be better to shareholder analyze their risk attitude, needs and requirements before making investment secession in the stock.
vi. Common stock of NIBL is the best investment opportunity for the investors.
vii. Nepalese investors are requested to develop an appropriate basis for their investment on common stock as per the requirement. They are recommended to invest their fund by performing multiple analyses.
viii. As risk and return are positively correlated they are requested to assess these factors as an important and recommended to analyze these factors with different financial tools and techniques.
ix. All investors are recommended to put adequate consideration on risk and return factors while making investment on common stocks of commercial banks. They are requested to follow not only a few factors like market price per share, goodwill and image of commercial banks, dividend policy and market rumor etc.

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Appendix: 1

MPS, Dividend, EPS and P/E Ratio of NIBL

Fiscal Year	Closing MPS	Cash DPS (%)	Stock Dividend (%)	Total Dividend	EPS (%)	P/E Ratio
2014/15	704	34.7	1.74	12.25	30.92	22.8
2015/16	1040	41	20	249	29.30	35.5
2016/17	770	40	15	155.5	29.31	26.3
2017/18	621	40	18	151.78	35.7	17.4
2018/19	519	19	10.5	73.495	26.4	19.6

Appendix: 2

Expected Return, S.D. and C.V. of C.S. of NIBL

Fiscal Year	Closing MPS	Total Dividend	$Rj = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$	$(R_j - \bar{R}_j)$	$(R_j - \bar{R}_j)^2$
2013/14	960	-	-		
2014/15	704	46.95	-0.2178	-0.31	0.096
2015/16	1040	249	0.8310	0.7388	0.55
2016/17	770	155.5	-0.1101	-0.2023	0.041
2017/18	621	151.78	0.0036	-0.0886	0.0078
2018/19	519	73.5	-0.0459	-0.1381	0.0191
Total			0.4608		$\sum(R_j - \bar{R}_j)^2$ =0.7098

Appendix: 3

MPS, Dividend, EPS and P/E Ratio of Nabil Bank

Fiscal Year	Closing MPS	Cash DPS (%)	Stock Dividend (%)	Total Dividend	EPS (%)	P/E Ratio
2014/15	1910	36.84	30	609.84	57.24	33.37
2015/16	2344	45	30	748.2	59.27	39.55
2016/17	1523	48	30	504.9	59.86	25.44
2017/18	921	34	12	144.52	51.84	18.60
2218/19	800	34	12	130	50.57	15.82

Appendix: 4

Expected Return, S.D. and C.V. of C.S. of NABIL Bank

Fiscal Year	Closing MPS	Total Dividend	$Rj = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$	$(R_j - \bar{R}_j)$	$(R_j - \bar{R}_j)^2$
2013/14	2535	-	-		
2014/15	1910	609.84	-0.00598	-0.044	0.001936
2015/16	2344	748.2	0.61895	0.582	0.339
2016/17	1523	504.9	-0.1349	-0.1724	0.0297
2017/18	921	144.52	-0.3004	-0.338	0.1143
2018/19	800	130	0.0098	-0.028	0.000784
Total			0.18747		$\sum(R_j - \bar{R}_j)^2$ =0.48542

Appendix: 5

MPS, Dividend, EPS and P/E Ratio of NBL

Fiscal Year	Closing MPS	Cash DPS (%)	Stock Dividend (%)	Total Dividend	EPS (%)	P/E Ratio
2014/15	305	-	-		7.48	40.78
2015/16	470	-	-		44.59	10.45
2016/17	364	-	-		38.77	9.39
2017/18	281	-	-		39.98	7.03
2218/19	336	-	15		26.99	12.45

Appendix: 6

Expected Return, S.D. and C.V. of C.S. of NBL

Fiscal Year	Closing MPS	Total Dividend	$Rj = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$	$(R_j - \bar{R}_j)$	$(R_j - \bar{R}_j)^2$
2013/14	459				
2014/15	305		-0.336	-0.36	0.13
2015/16	470		0.541	0.52	0.27
2016/17	364		-0.23	-0.255	0.065
2017/18	281		-0.23	-0.255	0.065
2018/19	226	50.4	0.38	0.355	0.13
Total			0.125		$\sum(R_j - \bar{R}_j)^2$ =0.66

Appendix: 7

Expected Return, S.D., and C.V. of each Inter Bank

Bank	Expected Return	Standard deviation	Coefficient of Variation	Remarks		
				Return	Risk	C.V.
NIBL	0.0922	0.4212	4.57	Highest	Highest	Lowest
NABIL	0.03749	0.3484	9.292		Lowest	
NBL	0.025	0.41	16.4	Lowest		Highest

Appendix: 8

Market Expected Return, S.D and C.V of Market Index

Year	Closing Price NEPSE	Market Return(R_m)	$(R_m-\bar{R}_m)$	$(R_m-\bar{R}_m)^2$
2013/14	518	-	-	-
2014/15	1036.11	1	0.8451	0.7142
2015/16	961.23	-0.7	-0.8549	0.7309
2016/17	1718.15	0.7874	0.6325	0.4
2017/18	1582.67	-0.0789	-0.2338	0.0547
2018/19	1212.36	-0.234	-0.3889	0.1513
Total		0.7745		$\sum(R_m - \bar{R}_m)^2 = 2.0511$