

CHAPTER – ONE

INTRODUCTION

1.1 Background of the Study

Nepal is one of the least developed countries of the world. More than 90 percent of total population is still in the rural areas and most of them are not yet getting minimum physical facilities that are necessary for human being because of under development of those areas and poverty. In Nepal there are several kinds of financial institutions such as commercial banks, developments, rural development bank, finance companies, co-operatives involving in saving and credit activities etc. Most of the financial institutions are under regulation Nepal Rastra bank (NRB) the central Bank of Nepal.

Bank is a financial institution that deals with monetary transactions. The main function of bank is accepting deposits and advancing loan. Bank collects scattered money from public in the form of deposit by providing them certain percent of interest and distributes the accumulated fund to others, who are in need of money by charging certain percent of interest, which is usually higher than the interest that it gives to depositors. Bank can also be termed as an intermediary, who bridges the gap between the savers of funds and users of funds, Nowadays, bank provides financial as well as non-financial services to its customers. Bank is associated directly and indirectly with all the day- to-day transactions, so it is very important to know the precise meaning of bank. Financial companies occupies quite an important place in the frame work of every economy because it provides capital for the development of industry, trade and business investing the saving collected as deposits. Besides that these companies render a numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each and every country are influenced by such kind of business in that country,

In Nepalese context commercial banks have comparatively good performance among the public limited companies. The nature of bank fund and its payment depends upon day-to-day operation. Therefore, its operation of fund raising and investments of funds are of short-term nature. As long term, investments are associated with higher risk. Banks are confined to make short-term investments only. R W Goldsmith

suggests that significance 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. There are different types of securities as treasury bills, long term government bonds long term corporate bonds, common stocks etc. among these securities this study concerns with common stocks. Common stocks represent a commitment on the part of a corporation to pay periodically whatever its board of directors deems appropriate as a cash dividend.

In present global scenarios , Joint venture are mode of trading through partnership among nations and also sort of negotiations between groups of industries and traders to achieve mutual exchange of goods and services for sharing comparative advantages. Nepal is a member of WTO and agreed for global partnership for the financial activities. This incorporates accessibility of multinational companies and others financial institutions in its home land. In this regards, creation of portfolio is one instrumental tool to enhance strength of financial institutions.

Investment in two and more than two assets is normally called portfolio. A portfolio is a combination of investment assets. Portfolio is holding securities and investment in financial assets like bond, stock. Portfolio means the risk of holding in securities owned by an investor or institution. (Oxford dictionary of financial and banking new edition 1997) a portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment assets is called portfolio. Portfolio theory deals with the selection of optimum portfolios; that is portfolio that provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return. (Weston and Copeland, 1992) According to Weston & Brigham, “A portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment assets is called a portfolio.” (Weston & Brigham, 1982:245).According to Raymond Brockington, “The term ‘portfolio’ simply means collection of investments. For an investor through the stock exchange the portfolio will be a collection of shareholding in different companies. For a property, investor has portfolio will be a collection of buildings. To a financial

manager within an industrial company has portfolio will be a collection of a real capital projects. It will be apparent that the actual of the components of a portfolio depends on the population of opportunities from which the selection has been made” (Relly and Brown; 2004:148)

1.2 Statement of the Problem

Due to the lack of the information and poor knowledge individual investors are manipulated or exploited by the financial institution or the market intermediaries to such an extent that investing in common stock is intolerable hazardous. Nevertheless, investors are responsible to make rational investment decision rather than switching blame to others. For this purpose, knowledge is essential. Investor’s attitude and perceptions also plays a vital role in rational decision. Previous research shows that in Nepal most of the investors invest their funds in single security rather they can be benefited by investing in portfolio of securities through diversification of risk. Not only public but also even most of the university graduates and postgraduates in commerce or business administration cannot perfectly analyze the risk and return in stock market investment. There are no any separate institutions, which give such valuable information that accelerates the stock investment and market efficiency.

Government policy is less encouraging proper investment situations. Some plans and policies are not implemented. There are no strong commitment towards increasing public investment in policy makers and government. Investors are the bases for any company they are the sources of revenue as a customer for the stockbrokers and financial institutions and ultimately they are the backbone of economic development of the nation. However, any above body has no any effective program to develop investor’s knowledge.

People feel more risk in stock investment than its real risk that may due to lack of proper knowledge about the stocks he/she is trading in due to the false presentation of stock prices in the secondary market. To build their confidence unbiased analysis and information about it is necessary. Unavailability of a simple and clear way or technique to analyze risk and return of individual stock and portfolio is therefore being a major weakness to increase stock investment and stock market efficiency as well.

This study will be helpful to investors regarding the risk return statistics association with investment. Analysis of comparative study among various banks will be benefited for them to know about the position of financial performance. Risk return analysis and portfolio theory will create awareness to utilize their scarce resources with optimization. The customers financing agencies and stock traders are interested in the performance of the banks and they can identify as to which bank they should invest. This study will be helpful to know about the portfolio management taken by Nepalese investors and financial institution. Considering the above in mind, following problems are identified which are to be researched.

- i. What is the market price of Nabil Bank Limited (NABIL)?
- ii. What is the market price per share of Himalayan Bank Limited. (HBL)
- iii. What is the market price per share of Everest Bank Limited. (HBL)
- iv. What is the Portfolio Analysis of selected Bank.

1.3 Objective of the Study

The main and basic objectives of this study are to find out the condition of portfolio management, and to estimate an optimal portfolio among the common stock investment of five selected commercial Banks. The basic objective of the study is to estimate the portfolio on common stock investment of commercial banks in Nepal.

The other objectives of the study are as follows:

- i. To evaluate the market price of Nabil Bank Limited (NABIL)
- ii. To evaluate the market price per share of Himalayan Bank Limited. (HBL)
- iii. To evaluate the market price per share of Everest Bank Limited (EBL)
- iv. To find out the Comparative Risk and Return Status of selected three banks
- v. To find out the Correlation Between three Banks

1.4 Significance of the Study

Investment decision depends upon two factors i.e. risk and return. The return is defined as the reward for bearing the risk. Return is the most important outcome from an investment. Return from stock can be of holding period return, return from speculation or from short sell, capital gain and dividend gain etc. However, return to investor is ever followed by risk, which is known as the occurrence of unfavorable outcomes and is ever harmful for the business. Many times, investor blindly invest

their money with the hope of getting good return in their investment able funds but due to the many reasons they lose their hard earning while investment made without analyzing the risk and return involved in the stocks. Other hand the increasing number of the bank and financial institution has created a competitive environment in financial sectors. Those, to get the maximum return from a minimum level of risk, the investor should diversify its investment by the means of portfolio with analysis the risk and return. Therefore, our focus of the study is to measure and analysis the financial performance of Joint Venture Banks, their risk & return, and portfolio patterns etc. to make sound investment decision.

As discussed above main target of the study is that potential investor who wants to invest in security but repel by imaginary or unreal risk. Therefore, the study will be more significant for exploring and increasing stock investment. Study not only used a partial fulfillment of TU course of MBS but it also will provide little contribution to Nepalese stock market development.

During the period of last decade due to political conflict, investors were skeptical to invest. After the political change in 2063, BS people participation in security investment and stock trading is increasing. This situation indicates that there is a high potentially in stock investment. These potentialities can change into fruitful investment by increasing transparency, increasing information flow and developing analytical power of public sector investors that ultimately increase national economic health. This study will give information about Nepalese capital market by analyzing risk and return and their portfolio will definitely contribute to increase the analytical power if the investors in capital market.

1.5 Limitation of the Study

This study is simply a partial study for the fulfillment of MBS degree. Hence, this study is not far from several limitations of its own kind, which weaken the heart of the study. It has certain limitations. This study has employed secondary data published by and collected from selected banks. Therefore, the consistency of findings and conclusions are dependent upon the reliability of secondary data and information.

- Among the various commercial banks, only three commercial banks are taken under study.
- NABIL ,HBL and EBL are selected for this study.

- The study covers a period of six fiscal years, which will be tabulated and processed for drawing conclusion.
- The study concentrates only on those factors, which are related with common stock and available in the form required for analyzing the different issues.
- The accuracy of the research work will be dependent on data provided by concerned bank differential coverage of data limits the study.

1.6 Organization of the Study

This research work has been organized in five chapters as mentioned below:

Chapter I: Introduction

The first chapter deals with introduction. This includes background of the study, statement of problem, objectives of the study, significance of the study, limitation of the study.

Chapter II: Review of Literature

The chapter second presents review of available literature, which consists of conceptual framework from book, reports, article journal, previous thesis etc.

Chapter III: Research Methodology:

Third chapter incorporates the research methodology used in the study, which includes research design, sources of data population and samples, methods of data collection and analysis.

Chapter IV: Presentation and Analysis of Data:

The fourth chapter deals with analysis of data collected from different sources. Based on the data analysis of analysis of investors' preferences will be made using statistical and non-statistical tools. This chapter also includes major findings of the study.

Chapter V: Summary, Conclusion and Recommendations:

The fifth chapter includes summary, conclusion and offers suggestions for further improvement. And finally

Bibliography

Annexes

CHAPTER - TWO

REVIEW OF LITERATURE

Review of Literature consists of study of past research studies and relevant information that they used and induced. It is an advancement of existing knowledge and in-depth study of subject matters. It starts with a search of a suitable topic and continuous throughout the volumes of similar or related subjects. This chapter with about review of literature; deals with the review of the financial system and investment opportunity. The more details are in descriptive manner, for this study, various books, journal and articles as well as the past thesis review were taken into consideration. During the review of this research, in depth study and theoretical investigation regarding portfolio's aspects and their present application and potentialities also are made.

2.1 Theoretical Review

History tells us that it was the merchant who first evolved the system of banking by trading in commodities than money. Reviewing the history, we can find that present day banker has three ancestors of particular note. One the merchant and two other were lender and the goldsmith. Lending and borrowing are almost as old as money itself. However, modern banking sowed its se in medieval Italy. The bank of Venice, founded in 1157A.D. was the first public banking institution. Subsequently bank of Barcelona 1401 and bank of Genoa 1407 were established. The Lombard migrated to England and other parts of Europe from Italy are regarded for the development and expansion of the modern banking. Ancestors Geoffrey couter says that the merchant goldsmith and moneylenders are the ancestors of modern banking.

Though bank of England was established in 1694 as a joint stock bank and later on it became the first bank in the world in 1844, the growth of bank accelerated only after the introduction of banking act 1833 in united kingdom as it allows to open joint stock commercial banking system development in the lending countries of the world.

Though the modern banking system is a very recent origin in Nepal to compare to other developing nations, some operations alike to banking were known and have been practiced even in ancient times.

Prior to the establishment of the Nepal bank limited, there was no organized financial institution in Neola. During the prime ministers ship of Ranoddip Singh around 1877 AD a number of economic and financial reforms were introduced. The establishment of the “Tejarath adda” fully subscribed by the government in the Katmandu valley was one of them. In the overall development of the banking, system in Nepal the “Tejarath adda” may be regarded as the father of modern banking institution and for quite a long time it tended a good service to government servants as well as to the public. However, the installation of “Kausi tosha khana” as a banking agency during the regime of king Prithvi Narayan Shah could also claim to be regarded as the first step towards initiating banking development in Nepal.

2.1.1 Concept of Bank

A Bank is a financial institution, which plays significant role in the development of a country. It facilitates the growth if trade and industry of national economy. However, Bank is a resource for economic development, which maintains the self-confidence of various segment of society and extends credit to the people. "A bank is a business organization that receives and holds deposits of fund from other, makes loans or extend credits and transfer funds by written orders of depositors". (Encyclopedia, vol.3, 1981)

In Nepal, Banking transaction took place only after the establishment of Nepal Bank Limited in 1994 B.S. being only bank at that time; it performed the activities of central bank to some extent. The central bank was essential to establish but no activity was done until 2007 AD. The country, then, realized to established under-Nepal Rastra Bank Act2012. Before that, the credit need of people for commercial and other purpose was mostly performed by the unorganized market of private moneylender. (Nepal Rastra Bank, central office, KTM)

In short, the term bank in the modern times refers to an institution having the following features:-

- 1) It deals with money; it accepts deposits and advances loans.
- 2) It also deals with credit; it has the ability to credit; the ability to expand its liability.

- 3) It is a commercial institution; it aims at earning profit.
- 4) It is a unique financial institution that creates demand deposits that serve as a medium of exchange and as a result, the bank manages the payment system of the country.

2.1.2 Concept of Commercial Bank

Commercial institutions are that financial institution, which deals in accepting deposits of people and institution and giving loans against securities. They provide working capital needs of trade industry and even to agricultural sector. Moreover, commercial bank also provides technical and administrative assistance to trade, industries and business enterprise.

Commercial banks are the heart of the financial system. They hold the deposits of many persons, government establishment, and business units. They make funds available through their-lending and investing activities to borrowers, individuals, business firms and government establishment units.

Therefore, commercial banks are those banks who pool together the savings of community and arrange for their productive use .They supply the financial needs on modern business by various means. Commercial banks are restricted to invest their funds in corporate securities. Their business is confined to financing the short-term needs of trade and industry, they cannot finance in fixed assets. A part from financing, they also render service like collection of bill, and cheques, safekeeping of valuable, financial advising, etc to their customers.

However, central bank is the main bank of the any nation that directs and controls all the banks whose existence is in the country. In Nepal, Nepal Rasta Bank is the central bank of the country. All the commercial bank performs their function under rules, regulations and directives provided by Nepal Rastra Bank. Nepal is under developed country having a low per capital income and GDP, As a result, many economic problems such as inflation, devaluation of money trade, trade deficit, budget deficit etc. arise. For the sake of removing these problems, many JVBs are being incorporate in our country by sharing Nepali and foreign investment toward making more profit by using the funds in profitable sector.

2.1.3 Function of Commercial Bank

Commercial banks are the most important types of financial institution for the nation in terms of aggregate assets. Traditional functions of commercial banks are only concerned with accepting deposits and providing loans. However, modern commercial banks work for overall development of trade commerce, services and agriculture also. The business of banking is very broad in modern business age. The number and variety of services provided by bank will probably expand. Recent innovation in banking includes the introduction of credit cards, accounting services for business firms, factoring leasing; participating in the Euro dollar market and lock-box is banking. The main functions of commercial banks are as follows.

1. Accepting deposits:

According to Sir. Johan Padget.

"It is fair deduction that no persons or body, corporate or otherwise, can be banker who does not.

- (a) Take deposits A/C.
- (b) Issues and pay cheques
- (c) Collect cheques from his customers.

Here, all functions are related with the acceptance of deposits; therefore, accepting deposits by bank is the oldest function of bank. A bank accepts deposits in three forms Viz current, saving and fixed A/C. Saving deposit is one of the deposits collected from small depositors and low-income depositors. The bank usually pays small interests to depositors against their deposits. Current account is also known as demand deposits. Under this, any amount may be deposited. There are no restriction regarding number and amount of withdrawals as contrary to saving A/C. The bank does not pay any interest on such account but charge small amount on the customers having current account. A fixed deposit is one where a customer is requested to keep a fixed amount with the bank for specific period, generally by those who do not need money for stipulated period. The bank pays a higher rate on such deposits.

2) Advancing Loans:-

The second major-function of a commercial bank is to provide loans and advances from the money which it receives by way of deposits for the development of industry,

trade and commerce, services and agriculture also. The main purpose of commercial bank is to boost up the development pace of communities as well as that of economy as a whole.

3) Agency Services:-

A bank also performs number of services on behalf of the customers. The following bank under agency services:

- Dealing with (lie transaction of foreign exchange business.
- Serving as an agent of correspondent on behalf of the customer.
- Issuing letter of credit, circulate notes, bank notes, traveler's cheques etc.
- Purchase and sale of different kinds of securities, remittance of funds.
- Collection and payments of cheques, promising notes, coupons, dividend and other type of bonds etc.
- Keeping valuable; articles in safe custody.
- Providing financial advising to various persons and bodies whenever required.

4) Creating money :-

The major function of commercial banks that separates it from other financial institution is the ability to create and investing activities. The power of commercial banking system to create money is a great economic significance as it results in the elastic credit system that is necessary for economic progress at a relatively steady growth rate.

2.1.4 Brief Introduction of Selected Bank

A) BRIEF INTRODUCTION OF HIMALAYAN BANK LIMITED

The establishment of the joint venture bank has given a new horizon to the financial sector of Nepal. The study courses on the financial performance of only HBL Bank Ltd. HBL is a joint venture bank with Habib Bank Limited of Pakistan which was established in 1993 under the company act 1964. This is the first joint venture bank with maximum share holding by the Nepalese private sector which is managed by Nepali chief executive. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits. As a 22nd annual report 4000 million authorized

capital. Among Total shares 20% owned by Habib Bank, Pakistan, 15 % by general public & 65% by other Financial Institutions.

It has large number of branches all over the Nepal i.e. 43 branches & more than this counter service, that are providing smooth network of banking.

Equity Participation

Habib Bank, Pakistan	20%
Financial Institutions	65%
Public Sector	15%

Capital Structure

Authorized Capital Rs 4000.00 million (40,000,000 ordinary shares of Rs 100 each)

Issued Capital Rs 2898.00 million (28,980,000 ordinary shares of Rs 100 each)

Paid up Capital Rs 2898.00 million (28,980,000 ordinary shares of Rs 100 each)

Legacy of Himalayan lives on in an institution that's known throughout Nepal for its innovative approaches to merchandising and customer service. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking were first introduced by HBL. Other financial institutions in the country have been following their lead by introducing similar products and services. Therefore, HBL stand for the innovations that it brings about in this country to help the Customers besides modernizing the banking sector. With the highest deposit base and loan portfolio amongst private sector banks and extending guarantees to correspondent banks covering exposure of other local banks under the credit standing with foreign correspondent banks. The most recent rating of HBL by Bankers' Almanac as country's number 1 Bank easily confirms our claim.

Himalayan Bank was established in 1993 as joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits.

Corporate Social Responsibility holds one of the very important aspects of HBL. Being one of the corporate citizens of the country, HBL has always promoted social activities.

Many activities that do a common good to the society have been undertaken by HBL in the past and this happens as HBL on an ongoing basis. Significant portion of the sponsorship budget of the Bank is committed towards activities that assist the society.

Himalayan bank's vision

Himalayan Bank Limited holds of a vision to become a Leading Bank of the country by providing premium products and services to the customers, thus ensuring attractive and substantial returns to the stakeholders of the Bank.

Himalayan bank's mission

The Bank's mission is to become preferred provider of quality financial services in the country. There are two components in the mission of the Bank; Preferred Provider and Quality Financial Services; therefore, we at HBL believe that the mission will be accomplished only by satisfying these two important components with the Customer at focus. The Bank always strives positioning itself in the hearts and minds of the customers.

Himalayan bank's objective

To become the Bank of first choice is the main objective of the Bank.

b) GENERAL INTRODUCTION OF EVEREST BANK LIMITED (EBL)

Punjab National Bank (PNB), our joint venture partner (holding 20% equity) is the largest nationalized bank in India having presence virtually in all important centers. Owing to its performance during the year 2012-13, the Bank earned many laurels & accolades in recognition to its service & overall performance. Recently, PNB was awarded with "IDRBT Banking Technology Excellence Award" under Customer Management & Intelligence Initiatives. The Bank also bagged "Golden Peacock Business Excellence Award 2013" by Institute of Directors. Similarly, the Bank was recognized as 'Best Public Sector Bank' by CNBC TV 18. The bank has now more than 6,000 branches and 7000 ATMs spread all across the India. As a joint-venture partner, PNB has been providing top management support to EBL under Technical Service Agreement.

Everest bank limited was established in 1994 in joint venture with pan jab national bank limited of India. Despite the cut-throat competition in the Nepalese banking

sectors, Everest bank has been able to maintain a lead in the primary banking activities loans and deposits. Legacy of Everest lives on in an institution that is known throughout Nepal for its innovative approaches to merchandising and customer services. Products such as premium saving account, EBL proprietary card and millionaire deposit scheme besides services such as ATMs and Tele banking were first introduced by EBL. Therefore, the banks stand for the innovations that we bring about in this country to help our customers besides modernizing the banking sector. Hence, it is celebrating its 15 the anniversary successfully in the competitive market.

Vision

-) To position it as a progressive & customer friendly bank providing financial and other related services.
-) To cater to various segments of society using advanced technology.
-) To be committed to excellence in corporate values.

Mission

-) To provide excellent professional services & improve its position as a leader in the field of financial related services.
-) To build & maintain a team of motivated and committed workforce with high work ethos.
-) To use the latest technology aimed at customer satisfaction & act as an effective catalyst for socio-economic developments.

Awards

-) The bank has been conferred with the "Best Managed Commercial Bank" by ASIAN PAINT NEWBIZ Award 2013.
-) The bank adjudged as "Number 1 Bank" under CAMELS (along with Customer Base & Branch Network) rating conducted by KAROBAR national daily (a leading business media house of Nepal).
-) The bank has been conferred with "Bank of the Year 2066/67, Nepal" by the Banker, a publication of financial times, London.
-) The bank was bestowed with the "NICCI Excellence award" by Nepal India chamber of commerce for its spectacular performance under finance sector.

Pioneering Achievements

-) EBL was one of the first banks to introduce Any Branch Banking System (ABBS) in Nepal.

-) EBL introduced Mobile Vehicle Banking system to serve the segment deprived of proper banking facilities through its Birtamod Branch, which was the first of its kind.
-) EBL introduced branchless banking system first time in Nepal to cover unbanked sector of Nepalese society through biometric machine.
-) EBL is first bank that has launched e-ticketing system in Nepal where customers can buy yeti airlines ticket through internet.
-) EBL introduced online payment of Mobile/PSTN/ADSL/NCELL bill or from the counter as well.
-) EBL is the first bank to introduce agro-specialized branch "KRISHI UDHYAM BIKASH SAKHA" at Rajbiraj.
-) EBL introduced Cash Deposit Kiosk for the first time in Nepal through which the Customers can deposit Cash conveniently.

Mr. PK Mohapatra Director (PNB India)

Dr. Rakesh Gupta Director (PNB India)

Mr. Nabin Bhakta Shrestha Public Director

Mr. Shivasharan K.C. Public Director

c) BRIEF INTRODUCTION OF NABIL BANK LIMITED.

Nabil bank Limited, the first foreign joint bank of Nepal, started operation in July 1984 under a technical service agreement with Dubai Bank Limited, which later merged with Emirates Bank International Limited, Dubai. Today, 50% of Nabil shares are owned by N.B (international) Limited, 9.67% by Rastriye Beema Sanstha, 0.33% by Nepal Stok Exchange Limited and the remaining 40% by Nepalese public.

Nabil was incorporated with the objective of extending international standard modern banking service to various sectors. Pursuing its objective today Nabil provides a full range of commercial banking service through its 18 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. The bank has Branches outside Kathmandu i.e. Nepalgunj, Bitwal, Bhairahawa, Bhalwadi, Pokhara, Birgunj, Alau, Biratnagar, Ithari and Dharan. In the kathmandu Valley, the bank has its Head Office in Kamaladi and branches at Kantipath, New Road, Jorpati and Lalitpur and a counter at Thamel. In addition to the above, Nabil is the first bank with

a present at the international and domestic terminals of Tribhuvan Airport, Kathmandu.

Nabil has been a pioneer in introducing many innovative products and marketing concept in the domestic banking sector- computerized banking environment, issuance of credit cards and advanced financial products like consortium financing. Nabil 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. The success story of Nabil soon paved the way for the establishment of many other commercial banks and financial institutions.

Mission: Their mission is to be the bank of 1st choice. Bank of the 1st choice is a clear reflection that of success is the strong mutually beneficial partnerships built with all their stakeholders. To achieve this mission they live by a set of core values, C.R.I.S.P.; Customer Focused, Result Oriented, Innovative, Synergistic and Professional.

Vision: Nabil is moving ahead with a vision to be the bank of the first choice. The bank of first choice of deposit and lending customers in meeting all their financial requirement of shareholders whenever they look for investment opportunities, of regulators as a shining example of a model bank and the Bank of 1st choice of banking professionals, as the preferred employer in the industry.

Objective: The objective of Nabil Bank is to be a bank of first choice.

Nabil bank has focused on customer satisfaction by providing highly acclaimed services. It is concerned to be "The Bank of the first choice" through its values of always being customer focused, result oriented, innovative, synergetic and professional. Nabil bank is focusing on Communities with their three pillar approach to great corporate citizenship firmly in place. Health-Education-Sport is the three pillars in which they have forged partnerships to add values to our country. Nabil has been constantly focusing to invest in the priority sector prescribed by the regulator and they plan to extend their reach to customers of all strata of society, in urban, semi-urban and rural areas through network expansion and 'creative' product delivery, both on the deposit and lending side.

At a time when competition in the industry is more intense than ever, and local as well as foreign market penetration, risk management and revenue generation, Nabil bank is focusing to Surge ahead to remain the "Bank of 1st choice". **Branches of Nabil are:** Kantipath Branch, Tripureshwore Branch, New Road Branch, Jorpati Branch, Birgunj Branch, Alau Branch, Biratnagar Branch, Lalitpur Branch, Ithari Branch, Butwal Branch, Pokhara Branch, Bhairahawa Branch, Nepalgunj Branch, Lakeside Pokhara Branch, Exchange counter- (Tribhuvan Int'l Airport, Ktm), Dharan Branch, Bhalwadi Branch, Maharajgunj Branch, Birtamode Branch, Heteuda Branch, Narayangadh Branch, Baglung Branch, Tulsipur Branch, Ghorahi Branch, Dhangadi Branch and Mahendranagar Branch.

Board of Directors (BOD)

▪ Mr. Satyendra Pyara Shrestha	Chairman
▪ Mr. Mohiuddin Ahmud	Director
▪ Mr. Suriya Gupta	Director
▪ Mr. Shanbhu Prasad Poudya	Director
▪ Mr. Dayaram Gopal Agrawal	Director
▪ Mr. Milan Bikram Shah	Director
▪ Mr. Abdul Awal Mintoo	Director
▪ Mr. Suraj Lal Mehta	Director
▪ Mr. A.P Bazgain (Professional)	Director

Products and services under "loan service" of Nabil Bank are: Working capital, Fixed capital import, Bills discounting facility under supplier credit, Export loan, Hire purchase, Project finance, Consortium/Syndication loan, Mortgage loan, Loan against deposit and government securities, Housing finance, Auto finance, Nabil property and Personal finance. **Service under "trade finance service" are:** Import LC, Export LC, Forward contract, Bid bond, Performance bond, Counter G'tee, Advance Payment G'tee and shipping indemnity. **Deposit services of Nabil Bank are:** Current, Call, Time, Normal saving, Provident fund, retirement fund, Cards and ATMs, Master card local, Master card int'l, VISA local, Diners card, For Travel (against passport facility), VISA electron/ ATM card, Nabil Prepaid card and Acquiring business. **Clean bills services of Nabil Bank are:** Clearing, Bills purchase and Bills collection.

Remittance services of Nabil Bank are: SWIFT transfer, Western Union, E-Remittance (Qatar, Doha), Travelers' Cheque, Bank draft, Mail transfer, Managers' Check and Anywhere Branch Banking. **E-Banking services of Nabil Bank are:** Nabil Net and Nabil Tele **Other services of Nabil Bank are:** U.S Visa fee, Safe Deposit locker and Balance Certificate and Advance Payment certificate. **Award and Achievement:** The Banker', the publication of the Financial Times, London has Honored the Nabil Bank as "Bank of the Year 2004" and it is a matter of prestige to be a leading bank of the country.

2.1.6 Portfolio Management

Portfolio management is the process of selecting a bundle of securities that provides the investing the organization a maximum yield for a given level of risk or alternatively ensuring minimum level of risk for given level of return. It can be also taken as risk and return management. Its aims to determine an appropriate asset mix which attains optimal level of risk and return. Various books, which are either dependent or independent deals with theoretical aspects of risk, return and portfolio, are taken into consideration in this chapter. Major focus is on the investment of common stock and its impact on individual risk, return and portfolio.

2.1.7 Common Stock

“Common stock is an ownership share in a corporation. Therefore, the common stockholders are true owners of a corporation. Each share of common stock represents a fractional ownership interest in the firm. For example, One share of common stock in a corporation that has 100 shares outstanding would represent 1/1,000 ownership interest. The return on common investment comes from either of two sources-the periodic receipt of dividend and capital gains. Common stock holders enjoy a No. of rights such, as is dividend right. Assets right, preemptive right, voting right etc. Common stock is the recipient of the residual income of the corporation. Common stock holders are an uncertain position about dividend, Capital gain and residual claim. Therefore, common stock holder must bear greatest risk. Common stock is suitable for the investor who wants to take high risk and return for a long period too. “Common stocks are traded in stock exchanges and over the counter market (OTC)” (Thapa, Bhattarai and Basnet; 2006: 9).

“Common stocks are easier to describe than fixed-income securities such as bonds, but they are harder to analyze. Fix-income usually has a limited life and an upper dollar limit on cash payments to investors. Common stocks have neither. Although the basic principles of valuation apply to both, the role of uncertainty is larger for common stocks. So much so, that often dominates all other elements in their valuation.

The great advantage of the corporate form of organization is the Limited Liability of its owners. Common stocks are generally “fully paid and no assessable”, meaning that common stockholders may lose their initial investment but no more. That is, if the corporation fails to meet its obligations, the stockholders cannot be forced to give the corporation the funds that are needed to pay off the obligations. However, as a result of such as a failure, it is possible that the value of a corporation’s shares will be negligible. This outcome will result in the stockholders’ having lost an amount equal to the price to buy the shares” (Sharpe and Alexander; 2003: 457).

“Common stock represents ownership of a firm. Owners of the common stock of a firm share in the company’s profits, the investor receives high rates of return and can become wealthy. In contrast, the investor can lose money if the firm does not do well or even goes bankrupt, as the once formidable K-Mart, Enron, W.T. Grant, and Interstate Department Stores all did. In these instances, the firm is forced to liquidate its assets and pay off all its creditors. Notably, the firm’s preferred stockholders and common stocks all the advantages and disadvantages of ownership and is a relatively risky investment compared with fixed-income securities” (Rely and Brown; 2004: 83)

“Common stock has one important investment characteristic and one important speculative market characteristic. Net worth tends to increase irregularly but persistently over the decades as their net worth builds through the reinvestment of undistributed earnings. However, most of the time common stocks are subject to irrational and excessive price fluctuations in both directions, as consequences of the ingrained tendency of most people to speculate or gamble, i.e. to give way to hope, fear and greed” (Western and Brigham; 1999).

“Common stockholders of a corporation are its residual owners, their claim to income and assets comes after creditors and preferred stockholders have been paid in full. As

a result, a stockholders return on investors is less certain than the return to lenders or to a preferred stock holder. On the other hand, the shares of a common stock can be authorized either with or without par value. The par value of a stock is merely a stated figure in the corporate charter and is of little economic significance. A company shouldn't issue stock at price less than par value because stock holders who bought stocks for less than par value would be liable to creditors for the difference between the below par price they paid and the par value" (Horne and James; 1997: 560).

2.1.8 Investment

The common definition of investment is, "the sacrifice of certain present value for future value" (Sharp and Alexander, 1999; 217). Investment is not a gamble rather it is the systematic and scientific way of using the excess fund to get the maximum return at minimum level of risk. Investment made to obtain some expected profit. Investment forgives the present return for future return. Present investment is contribution to the future return. Investment is not gambling rather than it is systematic and scientific way of using excess fund from income to gain expected return with lower level of risk. While investing future return one should not forget that the amount s/he investing i.e. capital, a collective form of surplus. The surplus is that part of money deducting all the expenses from income. A person spends his/her years in capital formation process. That is why each one should be rational while investing. Since most of investors are risk averters, they require additional unit of return for bearing one more level of risk. People always try to reduce the risk factor. Common definition say us that contribution of present value for future return is investment or it's a search of certainty within the uncertainty. An investment is a commitment of money that expects to generate additional money. Every investment entitles some degree of risk; it required a present sacrifice for a future uncertain benefit. The motivating factor of investment is collective form of saving, expectation of future return and wealth position maximization.

2.1.9 Return

Return is the main motivating force of the investment or return is the reward of investment. In return, there have two factors one is capital gain and another is regular

gain or ordinary gain. Capital gain means difference between the ending and beginning price. Regular gain means annually cash receipt.

Total return = Capital gain + regular gain (ordinary gain)

Capital gain = ending price – beginning price

Regular gain = dividend or interest.

a) Single Period Rate of Return

The rate of return is the speed at which the investor's wealth increases or decreases. This rate of return depends upon the future cash flows that include cash receipt (dividend) and capital gains. And the investors make investment for high rate of return at minimum risk. Thus, the investor's single period rate of return can be defined as the total return that the investor receives during the holding period of the shares as a percentage of the purchase price at the beginning of the holding period. The rate of return over the holding period is called holding period rate of return (HPR) which can be calculated as:

$$\text{HPR \%} = [(\text{ending price} - \text{beginning price} + \text{cash receipt}) / \text{beginning price}] * 100$$

HPR in Rs. = Capital gain + Cash Receipt

b) Required Rate of Return

When setting the required rate of return on an investment an investor must consider the real rate of return, expected inflation and risk. Because consumption is foregone today, investor is entitled to a rate of return that compensate for differ consumption in future. Required rate of return is the rate of return demanded by an investor forgoing the present utility and satisfaction. If investors postponed his satisfaction for uncertain future, investment should compensate his satisfaction. The compensation, e demand on behalf of future uncertainty over the risk free risk, is required rate of return. The capital market determines required rate. The required rate of return is the minimum rate of return that an investor expects from his investment. It is function of real rate of return and risk.

c) Expected Rate of Return

Expected rate of return is the return one expects by his/her investment. Suppose one invested Rs 100 in security of Nepal Ban Limited and he/she thinks that it will generate year-end dividend of Rs 5 with ending price of Rs 110 then its total return

will be Rs 15 and expected return will be 15%. The expected rate of return should be higher than required rate of return. Expected return is the hypothetical rate of return. The expected rate of return based upon the expected cash receipt over the holding period and expected year-end selling price of the securities. Of course, an investor has expected return must be reasonable. Most expectation based on history. Reasonable conclusions about future returns could be reached by looking at the past, tempered with the understanding that these returns. Even if your expectations are reasonable, however, there are the possibilities that your investment's actual return will be different from the expectation. This is risk, we must take as an investor and it includes the possibility of losing original investment. Risk is greater when the variation is greater in return.

e) Expected Rate of Return Based on Historical Data

During this research, it is assumed that history repeats itself. The future cash flows will base on the historical cash flow. The expected rate of return will be the average of historical rate of returns. In term of holding period return, the expected rate of return for any specific securities is the expected rate of return taken from its historical return. However, the simple arithmetic averaging ignores the compounding effects that result if the first period returns reinvested. In addition, the result of the arithmetic average, return distorted if there are large differences in the rate of return across period. Large difference in the periodic rates of return over longer investment horizons will; because the arithmetic rate of return to be misleading. The geometric rate of return does not suffer from this defect. The geometric mean rate of return HPR defined as the rate of return that would make the initial investment equal to the ending investment value.

2.1.10 Risk

Risk is the potential variability in future cash flows. Therefore, it is defined as variability of returns in a period. The wider the range of possible events that can occur, the greater the risk, that means higher the variability higher the risk and vice versa.

Risk and uncertainty are the integral part of investment. Risk is a situation where the possible consequences of the decision are known. However, uncertainty is a situation

sphere the probabilities cannot be eliminated. However, risk and uncertainty are used interchangeably.

“Risk is defined in Webster’s dictionary as a ‘hazard: a peril: exposure to loss or journey’, thus for most, risk refers to the chance that some unfavorable event will occur. If u invest in speculative stock (or, really, any stock), you are taking a risk in the hope of making an appreciable return” (Weston, Basely and Brigham; 1995: 182-183).

“Although there is difference in the specific definitions of risk and uncertainty, for our purposes and in most financial literature the two terms are used interchangeably. In fact, one way to define risk is the uncertainty of future outcomes. And alternative definitions might be the probability of an adverse outcome. Subsequently, in our discussion of portfolio theory, we will consider several measures of risk that are used when developing the theory” (Relly and Brown; 2004: 210-211).

2.1.11 The Range

“The range (maximum return-minimum return) is known as one of the traditional way of measuring risk. It simply shows the difference between the best possible return and the worst possible return but does not provide information about the distribution of the rates of return between the extremes.” (Cheney and Moses; 1992: 41) The range is one of the traditional methods of measuring risk, which simply communicates the difference between the best possible returns and the worst possible return; it does not provide information about distribution of the rates of return between the extremes.

The Range = Best possible Rates of return-worst possible rate of return.

The degree of risk of an underlying security is reflected in the magnitude of the differences. The smaller the difference the lower will be degree of risk” (Pokharel: 2004:11).

“Another measure risk is the range of returns. It is assumed that a larger range of expected returns, from the lowest to the highest return, means greater uncertainty and risk regarding future expected returns” (Relly and Brown; 2004: 211).

2.1.13 Standard Deviation (SD)

Standard deviation measures the risk as variability of return. “Standard deviation is a statistical measure of the variability of a set of observations. It is the measure of total

risk. Smaller the variance, lower the risky of the stock and vice-versa. The risk or standard deviation is denoted by the symbol sigma (σ). The square root of the variance of the rate of return is called the standard deviation (σ) of the rate of return” (Thapa, Bhattarai and Basnet, 2006: 121-122).

2.1.14 Coefficient of Variation (CV)

Standard deviation is obsolete measure of return where as coefficient of variation is relative measure of return. Risk is measured by standard deviation. And risk per unit of expected return is measured by coefficient of variation is denoted by CV. Greater the CV the greater relative risk of the investment. Coefficient of variation is calculated to compare the variability in returns of two alternative investments. Hence, it is useful to compare the investments having different expected return and different level of risk (Horne and Wachowicz; 2001:94).

2.1.15 Portfolio Analysis and Diversification

a) Portfolio Analysis

Investors undertake investment with the target of making some expected rate of return. For making more return, they diversify their investment across different securities rather than invest in one stock. Risk diversification creates an efficient investment thereby reducing the variability of return around the expected return. The reduction in risk will occur only if the stock returns within the portfolio do not move precisely together over time- that is, if they are not perfectly correlated.

A portfolio is collection of investment securities. Portfolio theory deals with the selection of optimal portfolio; that is, portfolios that provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return.(Western and Copeland, 1992:302).“A portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment assets is called a portfolio.”(Western and Brigham, 1982; 245). In simple words, portfolio means the list of holdings in securities owned by an investor or institution, which provides maximum return at minimum risk. So an investor should always have good knowledge of portfolio analysis as it considers the future return and risk and helps to develop a portfolio that provides the maximum return at given level of risk.

Portfolio theory deals with the selection of optimum portfolio. Only the optimum portfolio provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return in order to develop the optimum portfolio, which is the main objective of portfolio announces, the investor should have good knowledge of portfolio management. It is concerned with efficient management of investment in financial assets including equity shares, preference share and debentures of the companies. It is the process involves a logical set of steps common to any decisions. It is just an attempt made by the investor to gain maximum return at lower risk and largely depends on the correct decision of them, which cannot be always ensured. The objectives of portfolio management are:

Primary Objectives

-) To maximize return
-) To minimize risk.

Secondary objectives

-) Regular return.
-) Safety or security of an investment.
-) Appreciation of capital.
-) Liquidity.
-) Marketability.
-) Tax planning – capital gain tax, income tax and wealth tax.

The main objective of portfolio construction is to diversify the risk by combining securities of low risk with securities of high risk to obtain the highest expected return for a given level of risk. One of the well-said proverbs “never keep all the eggs in a same basket” supports this. So diversification plays an important role in designing efficient portfolios (that is portfolios whose return is maximize for a given level of risk or, equivalently, portfolios whose risk is minimized for a given level of return.). Diversification simply means spreading the risk among the various companies, industries and asset class. It reduces the portfolio risk thereby eliminating the unsystematic risk, which is not rewarded. There are two types of risk attached with investment; systematic and unsystematic risk. The investors are only rewarded for systematic risk that is market risk, which is unavoidable. It is important to investors as

it protect them from business risk, financial risk and the volatility. There are different types of diversification risk management techniques that help in reducing portfolio risk. They are simple

2.1.16 Types of Diversification:

I. Simple diversification

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

II. Superfluous diversification across quality rating categories

It is investing in only same qualified and same rated securities such as NEPSE has rated security in various grades, A, B, C and so on and in this portfolio, investor will make in same category security.

III. Markowitz's Diversification

It may be defined that combining assets, which are less then perfectly positively correlated in order to reduce portfolio risk without sacrificing portfolio return. It can sometimes reduce the risk below the un-diversifiable level. There is a natural trade off between risk and return in the market but at any given level of expected return, Markowitz diversification can reduce risk more than simple diversification. Applying diversification to a collection of potential investment assets with a compute is Markowitz portfolio analysis. It is a scientific way to manage a portfolio and its result is quite interesting.

a) Expected Portfolio Return

Since each security's future may be considered as a random variable, the return of a portfolio also can be thought as a random variable depended on expected returns of the individual securities that make up the portfolios. The expected return of portfolio is a weighted sum of the expected returns of the individual securities weight being the proportion of funds invested in individual securities. The portfolio weights are % of the total dollar amount available to be invested in the portfolio and sum to the expected portfolio return can be calculated as:

$$E(r_p) = \sum_{i=1}^n W_i E(r_i) \dots \dots \dots (5.1)$$

$$= W_1 E(r_1) + W_2 E(r_2) + \dots \dots \dots + W_n E(r_n) \dots \dots \dots (5.1a)$$

Where,

$E(r_p)$ = Expected rate of return of portfolio

W_i = The fraction of the total value of the portfolio invested in the i th asset or stock

$E(r_i)$ = The expected return from the i th assets or stock”

(Thapa, Bhattarai and Basnet; 2006: 149)

b) Portfolio Risk

Portfolio risk is a function of the proportional invested in the components. The riskiness of the components is correlation of returns on the component securities. It is measured by standard deviation. The risk of a portfolio is not a simple weighted average of the standard deviation of the individual securities. It depends on the investment weight on individual security. Risk on individual security and correlation between given securities.

“Portfolio risk is measured by statistical tool standard deviation and variance. It is a function of the proportions invested in the components. The riskiness of the components and the correlation of returns on the components securities are computed by using the following equations:

$$\text{Var}(r_p) \text{ or } \sigma_p^2 = \sum_{i=1}^n \sum_{j=1}^n W_i W_j \text{cov}_{ij} \text{ or } = \sum_{i=1}^n \sum_{j=1}^n W_i W_j \text{cov}_{ij} W_i W_j P_{ij} \quad i \quad j.$$

Where,

σ_p = Standard deviation of portfolio’s return

W_i = Proportion of investment in asset i

W_j = Proportion of investment in asset j

Cov_{ij} = covariance of the return between asset i and asset j

P_{ij} = Correlation co-efficient between asset i and asset j

(Thapa, Bhattarai and Basnet; 2006: 150)

2.1.17 Correlation Coefficient and Portfolio Risk

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

$$\text{Correlation coefficient (} \rho_{ij} \text{)} = \frac{\text{cov}(r_i, r_j)}{\sigma_i \sigma_j}$$

Where,

ρ_{ij} = Correlation coefficient between assets i and j

σ_i = Standard deviations of return for asset i

σ_j = Standard deviation of return for asset j

The correlation coefficient between -1 and $+1$, if the value of correlation is 1 , it is perfectly positively correlated. It indicates that the return on two assets move together exactly the same way. In additional, the value of correlation -1 means perfectly negatively correlated which indicates that the return on two assets move together perfectly opposite way. If the value of correlation 0 means that, there is no relationship between two assets return.”(Thapa; 2005: 38-39)

2.1.18 Systematic Risk and Unsystematic Risk

“Systematic risk is market related risk. It is also called market risk or un-diversifiable risk. For example; inflation, interest rates war etc. Unsystematic risk is non-market related risk. It is also called non-market risk or company unique risk or company specific risk or diversifiable risk. For example, winning a new contract, an industrial dispute, and the discovery of a new technology, Labor strikes etc. The systematic risk is rewarded in the form of risk premium. The unsystematic risk is not rewarded because it can be reduced to zero.” (Thapa, Bhattarai and Basnet; 2006: 183)

“Systematic risk has its source factors that affect al the marketable assets and thus can’t be diversified away. The sources of systematic risk are market- pervasive. The measure if systematic risk permits an investor to evaluate an asset required rate of

return relative to systematic risk of the stock. Unsystematic (company specific/unique) risk can be reduced through diversification. The relationship among total risk, systematic risk and unsystematic risk are shown below:

$$\text{Total risk} = \text{Systematic Risk} + \text{Unsystematic Risk}$$

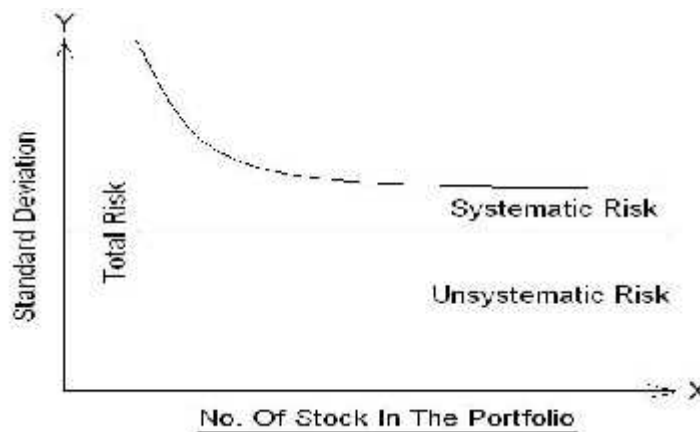
$$\text{While Systematic Risk} = (\rho_{ij}) (\sigma_{jm}) \text{ and unsystematic Risk} = (\sigma_{ij}) (1 - \rho_{jm})$$

In this equation ρ_{jm} is the correlation between the return of given stock (i) and the return on market portfolio.” (Upadhyaya; 2001: 11)

The relationship between systematic risk and unsystematic risk are shown in given figure

Figure: 2.1

Relation between Systematic risk and Unsystematic risk



(Source: Thapa, Bhattarai and Basnet; 2006: 183)

2.1.12 Beta Co-efficient

Beta Coefficient is defined as a comparative measure of the sensitivity of an assets return to changes in the return on the market portfolio. It tells is how much systematic risk a particular asset has relatively to an average assets. The tendency of a stock to move up and down with the market reflected in its beta coefficient, β . Therefore, beta is a key element of the CAPM; mathematically the beta coefficient of a stock is the stock’s co-variance with the market portfolio divided by the variance of the market portfolio. (Kothari, Shaken and Stoan; 1995:117).

2.1.13 Portfolio Performance Evaluation

Risk and return should be considered by giving important priority when considering a portfolio performance. Due to absence of either risk or return, we cannot measure their performance of portfolio effectively. There are various methods applied to measure the portfolio performance. Among them, one of the important techniques that are Sharpe's Portfolio Performance Measure is considering here in this study:

2.1.14.1 Sharpe's Performance Measure

William Sharpe developed it. Sharpe's measure divides average portfolio excess return over the sample period by the standard deviation of return over that period.

The Sharpe's measure of portfolio performance (designated S_i) is stated as

$$S_i = \frac{r_i - R_f}{i}$$

Where,

S_i = Sharpe's index of portfolio performance.

r_i = average return on portfolio 'i' during a specified time period.

R_f = average risk free rate during the same period.

i = standard deviation of portfolio 'i'

(Thapa, Bhattarai and Basnet; 2006: 421-424)

2.2. Review of Journals and Articles

Very limited numbers of journals are available in management and it is further hard to find any journals in the subject matter of finance in context of Nepal. In the Nepalese context, there are very limited numbers of articles can be found relating to management of commercial banks of Nepal. Specially, it is rare in the case of this research topic. However, there are available some independent-studies which are related to the Nepalese Stock Market, Portfolio management and Shareholders democracy are summarized below in detail

Pradhan (1993), carried out a study on the topic of "Stock Market Behavior in a small capital market: a case in Nepal" in 1993, the study was based on the data collected for 17 enterprises from 1983 through 1990. One of the major objectives, which are related to this study, was "To access the stock market behavior in Nepal."

Pradhan has summarized the following findings:

- Dividend per share and Market price per share was positively correlated.
- Higher the earning on stocks, larger the ratio of dividends per share to market price per Share.
- There are positive relationship between dividend payment and liquidity.

Chopra (2046 B.S.), in his article “The Role of Foreign Bank in Nepal” conclude that the joint venture banks are already playing a dynamic and vital role in the economic development of the country and this will undoubtedly increase with time.

Shrestha (2055 B.S.) has given a short foretaste on the “Portfolio Management in Commercial Bank, Theory and Practice”. Shrestha has highlighted the following issues in his article.

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

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

In view of above aspects, following strategies are adopted:

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

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

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

In this study, Shrestha has presented two types of investment analysis techniques i.e. fundamental analysis and technical analysis to consider any securities such as equity, debentures bond and other money and capital market instruments. He has further suggested that the banks having been international net work can also offer assess to global financial market. He has also point out the required skilled work force research and analysis and proper management information system in any type of commercial banks to get success in portfolio management and customer's confidence. (Shrestha; 2055: 13)

Dr. Shrestha (Ph.D.), (2000), in his article "Commercial Banks Comparative Performance Evaluation" concluded that the Joint Venture Banks are new operationally more efficient, having superior performance while comparing with local banks that are operating in Nepal. Better performance of joint venture banks is due to their sophisticated technology, modern banking method and skill. Their better performance is also due to the government's branching policy in rural areas. Local banks are efficient and expertise in rural sectors but having number of deficiencies. Thus, local banks are facing growing constraints of socio-economic, political system on one hand spectrum and that of the issues and challenge of joint venture banks commanding significant banking business on other spectrum.

2.2 Review from Previous Thesis

Upadhyaya, (2001), has undertaken a study entitled "*Risk and Return on Common Stock Investment of Commercial Banks in Nepal*". The main objective of the study was to assess the risk associated with returns on common stock investment of the

listed commercial banks based on selective financial tools. Others objectives of his research were to evaluate common stocks in terms of risk and return, to assess the risk compensating returns, and to analyze the volatility of common stocks and other relevant variables as an affecting factor in portfolio construction of common stocks.

In order to achieve the objectives, he has analyzed risk and return of individual bank, systematic risk and unsystematic risk and portfolio among the sample banks.

The major findings of his study are:

In general, most people see stock market investment as a black art that they know little about. Many people have unrealistically optimistic or pessimistic expectations about stock market investment or perhaps a fear of the unknown. Due to the lack of information and poor knowledge, Nepalese individual investors cannot analyze the securities as well as market properly.

He further stated, “Expected return on the common stock of Nepal Grind lays Bank now renamed, as SCBNL is maximum (i.e. 127.84%) which is very high rate of return. In reality, this rate exists only due to the effect of unrealistic annual return because of the issue of bonus share and increase in share price at the same. Similarly, expected return of the CS of Nepal SBI Bank Ltd. is found minimum. In the context of industries (or sector), expected return of “Others” sector is highest (i.e. 15.5 %). Manufacturing and production sector is the least performer.” He also revealed, “Common stock of Nepal Grind lays Bank Limited now renamed as Standard Chartered Bank Nepal Ltd is most risky and of SBI is least risky. This proves the proverb ‘high risk – high return’. Regarding the market volatility, EBL’s common stock is more volatile which has beta value of 3.941 and NABIL’s common stock is least volatile, which has beta value of 0.875. Others are also volatile. All the stocks of commercial banks are over-priced. NGBL stock has maximum difference of expected rate of return and required rate of return.”

Upadhyaya further summarized, “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.”

According to him, “The correlation of returns between most of the banks is nearer to +1. It is not favorable to construct a portfolio. Only the correlation between NABIL’s CS return and NBBL and EBL CS return is found negative. Investor can reduce risks

through holding the CS of NABIL and NBBL or EBL. Portfolio between the CS of NGBL and BBC is very advantageous as far as risk reduction is concerned. Here, portfolio standard deviation is less than individual standard deviation. Hence the portfolio approach of investment is better way to get the maximum return”.

Basnet: (2002), Conducted a study on “Portfolio Management of Joint Venture Banks in Nepal” is based on study of four joint venture banks. They are Nepal Bangladesh Bank Ltd., Standard Chartered Bank Ltd., Himalayan Bank Ltd. and Everest Bank Ltd. The general objective of this study is to identify the situation of portfolio management of joint venture banks in Nepal.

The major findings of this study are given below:

-) Among the selected bank on ratios of Everest Bank Ltd. Are more consistent among the four joint venture banks.
-) SCBNL is not investing its fund on NRB bond after 1997 and no government securities after 1998.
-) HBL is not investing its fund in NRB bond after 1997 and investing very high amount of fund on government securities.
-) NBBL is investing very high amount of its fund in government securities. EBL is not investing its fund on NRB bond after 1997 but is investing high amount of fund on government securities.
-) SCBNL is providing very high amount of its loans & advances to the private sector. It has also given the second priority to foreign bills purchase and discount.
-) HBL is providing very high amount of its loans & advances to the private sector in increasing trends. It has also given the second priority to foreign bills purchase and discount.
-) NBBL is providing very high amount of its loans & advances to the private sector. It has also given the second priority to government securities by providing very low amount of loans to the foreign bills purchase and discount.
-) EBL is providing very high amount of its loans & advances to the private sector and has given the second priority to the foreign bills purchase and discount. It is not providing amount of loans & advances to government enterprises.

Khaniya (2003), Conducted study on “Investment Portfolio Analysis of Joint Venture Banks” has been done in 2003. The study based on five joint venture banks and they are NABIL, SCBNL, HBL, NBBL and EBL. The general study of the present study is to identify the current situation of investment portfolio of joint venture banks in Nepal.

The major findings of her study are below:

-) SCBNL and HBL have better position. NBBL and NABIL have a low position in the industry. But Everest Bank has a very low position in the industry because of having lowest mean return on shareholders’ fund resulting from the negative returns in the fiscal years 1995/96 and 1996/97.
-) SCBNL has the highest mean return and EBL has the lowest return. Except EBL, all other four banks i.e.; NABIL, SCBNL, HBL and NBBL have good performance.
-) Among other joint venture banks, SCBNL has the highest return and EBL has mean return than industry average. SCBNL and EBL mobilizes the funds in investment title is higher than the standard ratio.
-) NABIL, SCBNL & HBL are investing low amount of deposits on loans and advances which is lower than industry average and NBBL & EBL have invested a high amount of deposits to loans and advances title which is higher than industry average.
-) SCBNL has the highest EPS and EBL has the lowest EPS. Similarly, HBL also has above mean EPS than industry average and that of NBBL is lower than industry average.
-) Himalayan Bank has the lowest beta coefficient among the five joint venture banks which means that the systematic risk of Himalayan bank is the lowest among the JVBs. The portfolio return of NBBL is 94%. This return is the average capital gain yield and dividend yield.
-) The coefficient of correlation between loans and advances in private sector and portfolio return of joint venture banks come out to $r_{xy} = -0.6$. Therefore, it indicates that there is negative correlation between loans and advances in private sector and portfolio return of five JVBs in Nepal.

Joshi, (2004), has conducted a study entitled “*Risk and Return Analysis of common stock of five listed Commercial Banks.*” The major objectives of the study are to calculate and analyze the risk and return of banking sector, to evaluate common stock of listed commercial banks and to analyze whether the common stock of commercial banks are correctly priced or not etc.

The major findings of his study are summarized below:

-) Regarding the market capitalization of selected companies, SCBL has the maximum market capitalization and NBBL has the minimum market capitalization.
-) Regarding the market capitalization of the inter industry, Banking sector has 65%, Insurance & Finance has 14%, Manufacturing & Processing sector has 13%, Hotel sector has 7%, Trading sector has 1% and Other sector has negotiable proportion of share in over all market capitalization.

Joshi further concludes that the considering return, the return of SCBL is maximum (i.e.73.30%) but its risk also maximum but if risk is taken into account for consideration, NABIL has the minimum risk of 43.82%. In industry wise analysis, the expected return of finance and insurance has a maximum expected return (i.e. 27.70%), while other sector has a minimum expected return (i.e.16.61%). If the risk is assessed in term of C.V., Banking sector has minimum C.V. like 1.66, which indicates that it is better to invest on the shares of banking sector.

Theme of Joshi’s study is summarized as below:

-) As analyzing the Coefficient of variation, he suggests that the banking industry is the best one for investment. Similarly, while analyzing individual securities, SCBL is the best for investment due to highest return and lowest C.V.
-) Based on the findings and conclusion of the study, it is recommended to the investor that if they wish to generate higher return, then they should bear higher risk and invest in the shares of SCBL. But if they are risk averters and they want to invest in single assets, then they can invest in the share of NABIL or HBL because these two stocks have lower risk than that of portfolio risk.

-) Portfolio analysis shows that the portfolio investment can reduce risk significantly. Thus, portfolio investment is recommended to receive high return at minimum risk.

Pokharel, (2005), has under taken a study entitled “Risk & Return on Common Stock Investment of commercial banks, with reference to six commercial banks.” Among various objectives of his study, some majors basic objectives of his research are to analyze, whether the common stock of commercial banks are correctly priced or not, by analyzing the required rate of return and to study systematic and unsystematic risk associated with securities of the commercials banks.

Majors finding of his study are given below:

-) Among the six commercials banks, NABIL bank has highest expected rate of return on common stock (i.e.14.03percentage) and NIB bank has negative expected rate of return o common stock (i.e.-3.9698%). Similarly, The common stock of BOKL is most risky asset, which has highest standard deviation (i.e.52.15%) and HBL’s stock is less risky due to lowest standard deviation (i.e.19.49%).
-) Regarding the market capitalization of six selected companies, SCBNL has the maximum market capitalization (i.e.31.36%) and the market capitalization of BOKL is low by 7.11%.
-) Considering the different investment sectors, the expected return of other sector is maximum by 34.53% and the processing sector has very low expected return (-12.076%). Similarly, considering coefficient of variation of different sectors, the trading sector has maximum by 18.49 units, which indicate that to earn 1 unit of return, the investor has to bear 10.49 units of risk. The coefficient of variation on manufacturing & processing is -3.1349 and -3.28 (negative) respectively.
-) On the basis of required rate of return and expected rate of return, the study shows that RRR of NABIL , NABIL, SCBNL, HBL, EBL & BOKL is 0.0175, -0.0677, -0.0174, -0.0099, -0.0526, and -0.0903 respectively. The ERR of NABIL , NABIL, SCBNL, HBL, and BOKL is -0.0396, 0.1403, 0.2264, 0.1158, 0.1312 and 0.0021 respectively. As his study shows that the common stock of NABIL is overpriced and rest of all’s common stocks are under priced.

At the end of study, Mr. Pokharel recommended that before making investment decision, the investor should visit and discussion with investment Companies, with export and researchers because sharing experience, idea and view of export will provide grater help. He also advises that the investors need to diversify their investment to reduce risk. Proper construction of portfolio never takes any considerable loss.

Mainali, (2005), has performed another study entitled “Risk and Return Analysis on common stock investment”. In his study, he has performed an analysis of risk and return on common stock investment with special reference to banking industry. In this study, his writs, the main objective of the study is to determine whether the shares of selected commercial banks are over-priced, under-priced or correctly valued by analyzing the risk and return. His others objectives are evaluate the common stock, to analyze the risk and return and to provide relevant suggestion to concerned authority based on analysis of data. His major findings on his study are given below in details:

-) Among the selected commercials banks, he writs that the SCBNL has highest (i.e.32%) market capitalization which indicates that the size of the stock market of SCBNL is grater one.
-) Regarding the expected rate of return among the selected commercial banks, the highest expected rate of return of SBI is 19.9% and lowest expected return on common stock of NBBL is -27.99%. So, it indicates that the investment in SBI will earn best return.
-) Among the selected banks, the highest C.V. on common stock of NABIL is 12.23 and lowest C.V. common stock of SCBNL is 3.0191. It indicates NABIL stock is more risky and SCBNL stock is less risky than other. Similarly, bet coefficient of SBI is highest (i.e.3.30) and the NABIL has lowest beta coefficient (i.e.0.5831). So, it means C.S. of SBI is most aggressive stock and C.S. of NABIL is most defensive stock than other.
-) At the last, he writs at major finding of his study that the correlation between NABIL and SBI is in negative. It indicates making portfolio investment in these two stocks will minimize risk without loosing considerable return.

Aryal (2008) has conducted a study on "Portfolio Analysis on Common Stock Investment of Joint Venture Banks In Nepal".

The objectives of the study are as follows:

- To evaluate the common stocks of selected commercial Banks in terms of risk and return.
- To examine systematic and unsystematic risk associated with stock.
- To determine whether the share of listed commercial banks in Nepal are over-priced, under priced or correctly priced.

Major Findings of the Study

From the presentation and analysis of data, the following points are major findings as mentioned below:

- ❖ According to above calculation the expected return of NABIL is the highest among sample banks that is 56.06% and HBL has lowest one that is 17.95%. Moreover, NBBL, SCBNL and EBL have 32.99%, 44.68% and 46.08% respectively expected rate of return.
- ❖ On the basis of S.D NBBL has highest value that is 0.6205 and lowest one is of NABIL that is 0.1219. In addition, HBL, EBL and SCBNL consist of 0.1283, 0.1353 and 0.2892 respectively.
- ❖ Considering the beta coefficient of mentioned banks, the beta coefficient of HBL is lowest 0.1384, and EBL, NBBL and SCBNL have one (1), 1.2944 and 2.0024 are betas Co-efficient of these three banks respectively. Among them NBBL has highest Beta Co-efficient, that indicates that the return of NBBL is more volatile than that of market.
- ❖ The systematic risk of HBL is the highest one among the mentioned joint venture bank of Nepal i.e. 0.9465 and the lowest is 0.7213 of the NBBL. In the case of unsystematic risk, the NBBL has the highest i.e. 0.2787 and the lowest are 0.0535 of HBL, AS we know that unsystematic risk is diversifiable risk and could be eliminated through diversification.
- ❖ Considering the market capitalization of five sample banks, the market capitalization of NABIL, HBL, EBL, NBBL and SCBNL 26.77%, 21.95%, 13.08%, 03.18% and 35.02% respectively in the fiscal year 2006/07. The SCBNL has capitalized greater amount of money in the market i.e. Rs.13487050000 and the lowest amount that is capitalized by NBBL is Rs. 1223870000.

- ❖ Considering the market risk and return, the expected return is 5.55% and S.D. of market is 28.67% where coefficient of variation of the market is 5.1659.
- ❖ From the analysis of required rate of return and expected rate of return, it was found that NABIL, SCBL, under priced likewise in cases of HBL's is correctly priced and EBL and NBBL's & stocks are over priced.
- ❖ While creating the portfolio between the two assets of all the sample banks, the optimal portfolio of NABIL and EBL gives, the maximum expected return that is 62.37% where as, the portfolio of NABIL & EBL gives the lowest expected return that is 3.37%.
- ❖ Correlation between NABIL & HBL is found 0.9942, which is highest between mentioned banks under the study and the correlation of SCBL & NBBL is 0.5839 that is the lowest correlation. However, all the banks are positively correlated but they are neither perfectly correlated nor negatively correlated.
- ❖ Considering the Sharpe's performance measure, the portfolio of HBL & NBBL has the best performance because of the highest risk premium return per unit of total risk that is (1.4015) and the portfolio of NABIL&EBL is worst due to the lowest risk premium return per unit that is (-0.0185).

Kunwar (2009) has conducted a research on "*Profit Planning of Nabil Bank Ltd*".

The objectives of his research are:

1. To find out the relationships between total investment loan and advances, deposit, net profit and outside assets.
2. To identify the investment priority sectors of commercial Bank
3. To assess the impact of investment on profitability.
4. To analyze and forecast the trend and structure of deposit utilization and its projection for five years of Commercial Bank
5. To provide suggestion and possible guidelines to improve investment policy and its problems.

The major findings of his research are as follows:

1. The bank is able to maintain good liquidity and financial position.

2. Credit and advance to fixed deposit ratio, total deposit ratio, total assets is in fluctuating, little fluctuating and not fluctuating trend which indicates the high contribution made by lending and investing activities.
3. The Debt to equity ratio indicates that the bank is highly leveraged because the claim of the outsiders exceeds than those of the owners over the bank assets.
4. The Debt to assets ratio of the bank is high. On an average 92% of assets are financed through debt capital which implies that the bank has riskier debt financing position. Total assets to net worth of bank are increasing trend which is good for the bank.
5. Net profit to gross income ratio of the bank is in increasing and decreasing trend, it was highest in the year 2006. Interest income play dominant role in total income.
6. The bank has the better profitability position.
7. Return on loan advances ratio indicates contribution in return is decreasing by loan and advance. It has normal earning capacity in loan and advance and assets utilization.
8. The research shows the better profitability in the coming last years. It represents high expectation of company in market and high demand of shares.

Joshi (2013) has conducted a study on "Risk And Return Analysis On Common Stock Investment"

The objectives of his research are:

-) To estimate risk and return of a common stock and their portfolio
-) To analyze risk and return relationship of individual stock with that of market
-) To examine risk and return in common stock of listed commercial
-) To provide information to the investors on investing in stocks

The major findings of the study are as follows.

-) NABIL's common stock is yielding the highest rate of return with 72.89% whereas it is the lowest 48.07% in case of SBI. The other banks rates of return are 67.85%, 61.83% and 51.00% of EBL, NICB and NIB respectively.

- J The selected commercial banks average return is 60.33% which is higher than NIB and SBI whereas NABIIIL, NICB and EBL are higher rate of return than average of five commercial banks.
- J NABIL's common stock consists of the highest 75.75% risk which is the riskiest whereas EBL's stock is the least risky as is consist of only 42.41% risk.
- J The higher risk of common stock may have greater possible return.
- J With the coefficient of Variance analysis it is clearly depicted that there is the highest percentage of per unit risk for SBI whereas it is the lowest for EBL.
- J NABIL's stock is more aggressive i.e. market sensitive, to the market changes as evaluated by the highest beta coefficient of 1.3221. Similarly, SBI's stock is also sensitive to the market with beta coefficient of 1.1672. However, the stocks of NIB, NICB and EBL are defensive type to market and their respective beta coefficient are 0.1963, 0.8652 and 0.7349 i.e. means this securities are less affected by market changes.
- J The first hypothesis is based on the test of significance of single means (i.e. Banks return and market return). The study was found that the null hypothesis is accepted at 5% level of significance, which means average return of commercial banks is equal to market return.
- J The second hypothesis is based on the test of significance of different means (i.e. different commercial banks return). The study was found that the null hypothesis is accepted at 5% level of significance, which means there is no significant difference between the average return of common stock of listed commercial banks.
- J Average return of common stock of selected commercial banks is equal to the market return- hypothesis 1 i.e. evaluated by t-test.
- J There is no significant difference in average return of common stock of selected commercial banks – hypothesis 2 i.e. evaluated by F-test.

2.4 Research Gap

Risk, return and portfolio are the most important part of finance because they can strong impact on investment. Thus, it is not very new concept. Many researchers have done research on this aspect. As long as researcher knows, no specific research has yet been able to go in-depth of the topic and has successfully accomplished the specified objectives of the research work. All of the previous research on this topic has been based on only showing the risk and return analysis of the stocks of commercial banks. Hence, this research will fulfill the prevailing research gap by

calculating the portfolio risk, return and market price of different companies and estimating the optimal portfolio among the common stock on the basis of all relevant data and information of the latest ten fiscal year of six Nepalese joint venture banks, which are the major concern of public share holders and others stakeholders. Furthermore, the portfolio performance has also been evaluated with using Sharpe index of portfolio performance measure, which has not been calculated on other studies.

CHAPTER - THREE

RESEARCH METHODOLOGY

This chapter presents all the necessary steps to be followed throughout this research work in order to achieve and accomplish the objective of the study. Research methodology discussed in this chapter helps to guide the research study providing different issues and aspects. It systematically solves the various sequential steps to adopt by a researcher in studying problem with the objectives in view. This chapter is to outline the nature and sources of data, sample selection & classification of variables, techniques and steps adopted in interpreting and analyzing the data. It also focuses on how to collect required data, what is the population and sample, and what techniques to be adopted to analyze and interpret.

3.1 Research Design

Research design is the conceptual structure within which research is performed. Research design is an overall framework or plan, which specifies the sources and types of information relevant to the research problem. In this study, the research is based on recent historical data, which are collected from various secondary sources. The research study covers the data of six fiscal years up to 2006/07. It relates with the study of risk, return and portfolio analysis of commercial banks that based on available information.

This study is more analytical, empirical and less descriptive. Analytical in the sense that all the available data are analyzed by using various statistical tools and techniques, such as, standard deviation, coefficient of variation and regression model etc. All the data used in this study have been taken from related sources. The study is purely empirical due to purely historically data. The Risk, return and portfolio are main subjects of the study that follow the numerical data. For explanation of result, description has been also followed.

3.2 Population and Sample

At the present, there are twenty-five Commercial Banks operated in the market out of which 19 banks shares are traded in the stock market, it is not possible to study all of

them regarding the study topic. So, out of them five banks are taken under study. This study is based on the portfolio analysis on common stock investment of five selected commercial banks in NEPAL. That's why it implies the study of 20% population out of total number of the commercial Banks in Nepal i.e. NABIL, HBL and EBL,

3.3 Nature and Source of Data

This research study is mainly based on secondary data. Published annual report of the concern banks are taken as the basic source of data. Similarly, related books, magazine, journals, articles, reports and data from Nepal Stock Exchange, Nepal Rastra Bank banking directive and financial statistics and related website etc. Previous related studies to the subject are also counted as the source of information.

3.4 Data Collection Techniques

Almost the data, which are necessary for the research is, collected from secondary sources. However, during the study period, informal opening survey has also been taken with the individual investor, related bank officials, SEBO/N (Security Board of Nepal) and NEPSE (Nepal Stock Exchange) staffs. The information has also been collected by financial documents provided by commercial banks, NRB (Nepal Rastra Bank), trading manual published by NEPSE, NEPSE periodical articles, related Websites and previous research reports.

3.5 Data Analysis Tools

3.5.1 Market Price of Stock (P)

Among the various major data of this study, market price of stock is the most important tools because without market price, we cannot further calculation. There are three types of prices of the share, i.e. High price, low price & closing price of each year, which are summarized and published by Nepal Stock Exchange. For the analysis, single one is needed. Therefore, two approach either average price (i.e. average of high and low price) or closing price can be used. It is denoted by symbol of "P".

It may be very closer result if it is used average price that represents the price of whole year but it is very difficult to obtain the real average. To get the real average, volume and price of each transition of the stock and the duration of the time of each

transaction in the whole year are necessary. But, it is very hard and difficult to include all the information. In this regard, it is very difficult to use average price as a market price of stock. Thus, the closing price of each year is used as the market price of the stock (MPS).

3.5.2 Dividend (D)

Dividend is a portion of net earning which are paid out to the shareholders as a reward for their investment. Normally there are two types of dividend i.e. cash dividend and stock dividend. If a company declares only the cash dividend, it is easy to calculate dividend amount. But, if company declares the stock dividend (Bonus Share), it is difficult to obtain the amount that really shareholders have gained. In such condition, they get extra numbers of shares as a dividend and simultaneously the price of stock declines due to increased numbers of outstanding stocks. So to get the real amount of dividend, there is no model or formula developed yet. But in this study, model is used which has been developed by considering practical and theoretical aspect after several discussing with NEPSE staffs & investors.

In case of stock dividend;

Total dividend = cash dividend + stock dividend % × Par Value of per Share

Where,

PVS = Par Value / Share

Symbolically “D” denotes Dividend

3.5.3 Return on Common Stock Investment (R_j)

Return is the income received in an investment plus any change in market price, usually expressed as a % of the beginning market price of the investment. It is denoted by

“R_j”

Symbolically,

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

Where,

R = Return on common stock investment.

D_t = Cash dividend received at 't' period.

P_t = Price of stock at 't' period.

P_{t-1} = Price of stock at 't-1' period.

3.5.4 Expected Return on Common Stock: $E(R_j)$

One of the main objectives of the study is to determine the expected return on common stock investment. Thus, Expected return is one of the main tools to measure the performance of the company.

Expected rate of return is the average rate of return on common stock, which is calculated by the arithmetic mean of historical returns.

Symbolically

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

Where,

\bar{R}_j = Expected rate of return on stock 'j'.

n = Number of years that the return is taken.

ϕ = Sign of summation.

3.5.5 Standard Deviation (\dagger)

Standard deviation is the statistical measurement of the variability of a distribution of return around its mean .it is the square root of the variance and measures the total risk on stock investment. Sigma sign denote it (\dagger).

Symbolically,

$$\dagger_j \times \sqrt{\frac{(R_j - \bar{R}_j)^2}{n}}$$

Where,

\exists_j = Standard deviation of returns on stock 'j' during the period n.

3.5.6 Co-efficient of Variation (CV)

The Co-efficient of Variation is defined as the standard deviation divided by the mean of expected return. It is used to standardize the risk per unit of return. In other word, it is the ratio of standard deviation of returns to the mean of that distribution. It gives the result regarding the unit of risk to bear for earning 1 unit of return.

Symbolically,

$$C.V. = \frac{\sigma_j}{R_j}$$

3.5.7 Beta (S)

Market sensitivity of stock is explained in terms of beta coefficient. Higher the beta, greater the sensitivity and reaction to the market movement. Logically, the systematic risk is covariance between the returns of an individual asset or portfolio and the returns of the market portfolio. The measure of systematic risk is represented by beta. It is an index of systematic risk, which cannot be eliminated through the means of diversification. It measures the sensitivity of a stock's return on the market portfolio.

Symbolically,

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

Where,

S_j = Beta co-efficient for stock 'j'.

$Cov(R_j, R_m)$ = Covariance between returns on stock j return of market.

σ_m^2 = Variance of market return.

$$Cov(R_j, R_m) = \frac{\sum (R_j - \bar{R}_j)(R_m - \bar{R}_m)}{n - 1}$$

An asset or a portfolio with a beta greater than 1 is considered to be aggressive (more risky than the market). An asset or portfolio with a beta less than 1 is considered to be defensive (less risky than the market). Beta coefficient of market is always equal to 1.

3.5.8 Correlation Co-efficient (ρ_{ij})

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

Symbolically,

$$\rho_{ij} = \frac{Cov_{ij}}{\sigma_i \sigma_j}$$

Where,

σ_i and σ_j are standard deviations of returns for assets I and j.

ρ_{ij} = Correlation co-efficient of assets i and j.

There are various cases of correlation and risk conditions, which are presented as follows:

- Perfectly positive correlation ($\rho_{ij} = +1$):

Return on two perfectly positive correlated stocks would move up and down together and a portfolio of two such stocks would be exactly as risky as the individual stocks. Thus, the diversifications cannot reduce risk if the portfolio consists of perfectly positive correlated stocks.

- Perfect negative correlation ($\rho_{ij} = -1$):

Returns on two perfectly negative correlated stocks would move perfectly together but in exactly opposite direction. In this condition, risk can be eliminated. Perfect negative correlation almost never found in the real world.

- No relationship between return ($\rho_{ij} = 0$):

When the correlation between two stocks is exactly 0, there is no relationship between the returns of the two stocks. In such case, some risk can be reduced.

- Intermediate risk ($\rho_{ij} = +0.5$):

Most stocks are positively correlated but not perfectly. On average the returns on two stocks would lie on the range of +0.4 and +0.75. Under this condition, combining stocks in portfolios reduces risk but does not eliminate it.

3.5.9 Portfolio Risk & Return

A portfolio is a combination of investment assets. Portfolio theory deals with the selection of optimal portfolios, i.e. portfolios that provide the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return. Portfolio management is related to the efficient portfolio investment in financial assets.

3.5.9.1 Portfolio Return (R_p)

The expected return on portfolio, \bar{R}_p , is simply the weighted, is simply the weighted average of the expected returns on the individual assets in the portfolio with the weights being the fraction of the total portfolio invested in each asset.

$$\bar{R}_p = \sum_{i=1}^n W_i \bar{R}_i$$

In case of two assets case:

$$\bar{R}_p = W_A \bar{R}_A + W_B \bar{R}_B$$

3.5.9.2 Portfolio Risk (σ_p)

Portfolio risk is measured by a statistical tool standard deviation. It is a function of the proportions invested in the components, the riskiness of the components and correlation of return on the component securities. The portfolio risk is computed by using the following equations:

In case of two assets:

$$\sigma_p = \sqrt{W_A^2 \sigma_A^2 + W_B^2 \sigma_B^2 + 2W_A W_B \rho_{AB} \sigma_A \sigma_B}$$

3.5.10 Risk Minimizing Portfolio

It is the ratio of two assets, which minimize risk (σ_p):

Formula:

$$W_A = \frac{\sigma_B^2 \rho_{AB} - \sigma_A \sigma_B \rho_{AB}}{\sigma_A^2 + \sigma_B^2 - 2\sigma_A \sigma_B \rho_{AB}}$$

Where,

W_A = weighted of stock A that minimize the portfolio risk of stock A&B.

σ_A = Standard deviation of stock A.

σ_B = Standard deviation of stock B.

3.5.11 Systematic Risk

Systematic risk refers to that portion of total variability in return caused by factors affecting the prices of all securities. Systematic risk is market related risk or non-diversifiable risk which is due to economy wide factors. Systematic risk is external to an industry and, of business and is attributed to board forces out of the business. Unlike systematic risk it is the risk that can be diversify away. Due to this character of this risk it is said to be relevant risk to be concerned.

We can sort out systematic risk out of total risk by using this tool mentioned below:

Total risk = Systematic risk + Unsystematic.

$$\sigma_j^2 = \beta_j^2 \sigma_m^2 + \sigma_e^2 \dots\dots\dots(i)$$

$$\text{Portion of systematic risk} = \frac{\text{SystematicRisk}}{\text{TotalRisk}}$$

$$\beta_j^2 = \frac{\sigma_j^2 - \sigma_e^2}{\sigma_m^2}$$

Where,

σ_j^2 = Variance of stock J.

σ_m^2 = Variance of market.

β_j^2 = Square of beta of stock J.

3.5.12. Unsystematic Risk

Unsystematic risk, which is also called diversifiable risk, is that component of total risk that is unique to the firm and may be eliminated by diversification. The unsystematic risk can be removed by holding a wide range of well-diversified portfolio where the returns on such well-diversified portfolio will vary due to the effects of market-wide or economy wide factors.

Portion of unsystematic risk will simply be (1- portion of systematic risk).

3.5.13 Sharpe's Portfolio Performance Measure (S_P)

It was developed to evaluate a portfolio's performance, considering both return and risk simultaneously which measures the reward to total volatility trade off. Sharpe's Performance Measure can be defined by this equation:

$$S_P = \frac{\bar{R}_j - R_{Krf}}{\sigma_j}$$

Where,

S_P = Sharpe's Portfolio Performance Measure for portfolio 'J'

R_j = Average/ Expected return from portfolio 'j'

σ_j = Standard deviation of returns for portfolio 'J'

R_{Krf} = Risk free rate of return.

CHAPTER – FOUR

DATA PRESENTATION AND ANALYSIS

The presentation of data is the basic organization and classification of the data for analysis. After data collection is completed, the data will be in the raw form. It has to be arranged so that it makes some sense. Different types of data require different methods to present. There are a number of methods, which can be used to simplify the data. The easiest way to understand data is by examining it in charts, graphs and tables. The first and foremost part of presentation is to re-arrange the data. Almost all possible data are collected from NEPSE and SEBON. However, some of the data are also collected from concerned sources. The data were in unorganized form, which was one of the grey areas of present study. However, they are simplified for the analysis purpose. First they are summarized and presented in tabulated form and thereafter they are analyzed in terms of risk, return, and co-efficient of variation, beta calculation, correlation and co-variance. Finally, the minimum risk portfolio weight is calculated by various correlated assets and tried to find out the optimum solution of the study as to constructing portfolio that will result in maximum return at its same level of risk or minimum risk at its same level of return. This chapter is sub-divided in to nine parts and each part gives the clear presentation and analysis figure and facts of the calculation. As the study has been taken special reference to five listed Banks, the common stock of each bank is which are listed in NEPSE are analyzed here individually. It is already known that there are 23 commercial banks operated in Nepal till date. The names of Banks that are included under study are as follows:

4.1 Comparative Market Price of Nabil Bank Limited

Comparative Market Price shown in table as well as calculation of total dividend per share of the NABIL Bank Limited in different fiscal years. The calculation is made based on data available in secondary markets as shown in the table.

Table: 4.1 Calculation of total dividend and comparative Market Price in different fiscal Year

Fiscal Year	High MPS	Low MPS	Closing MPS	DPS	Stock Dividend (%)	Total Dividend
2009/10	2466	2246	2384	30	70	100
2010/11	1375	970	1252	30	30	60
2011/12	1585	781	1355	40	60	100
2012/13	2000	1101	1815	40	65	105
2013/14	2800	1788	2535	45	65	110
2014/15	2578	1564	1910	6.84	36.84	43.68

Source: NEPSE; website <http://www.nepalstock.com> Annual report of 2014/15

Figure : 4.1 Calculation of total dividend and comparative Market Price in different fiscal Year

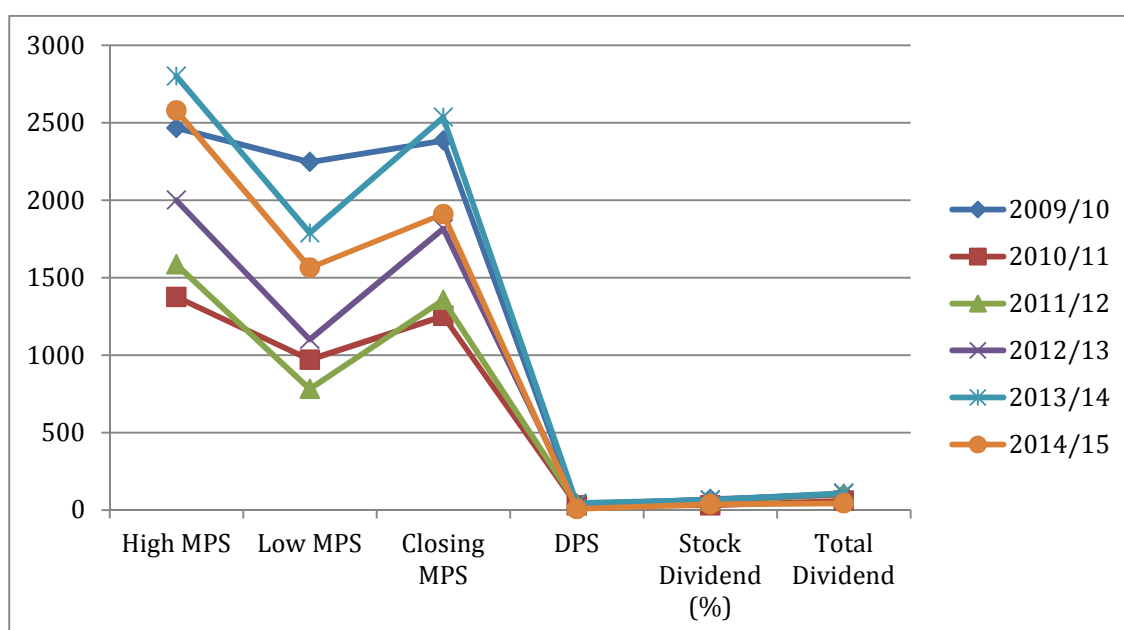


Table 4.1 and 4.1 shows that graphical presentation it is shown that the movement of MPS of common stock of NABIL, is sharply decreased in the year 2010/11. From the year 2011/12, the closing Market price per share of NABIL bank is in increasing trend gradually. It indicates that the growth of Nabil Bank is in increasing trend.

4.1.1 Calculation of Expected Rate of Return, Standard Deviation and Co-efficient of Variance of NABIL Bank.

Expected rate of return (\bar{R}), Standard deviation (), and coefficient of variation are the main required calculations that are calculated in Table No.4.2. Year-end price and dividend per shares are used to calculate to realize rate of return for different each fiscal years.

Table 4.2 Calculation of Expected Rate of Return, Standard Deviation and Co-efficient of variance

Fiscal Year	Closing MPS	Dividend per Share	Deviation From Mean (31.97)	Square of Deviation
2009/10	2384	30	-1.97	3.8809
2010/11	1252	30	-1.97	3.8809
2011/12	1355	40	8.03	64.4809
2012/13	1815	40	8.03	64.4809
2013/14	2535	45	13.03	169.7809
2014/15	1910	6.84	-25.13	631.5169
Total		$\sum (D)=191.84$		$\sum (D2)= 938.0214$

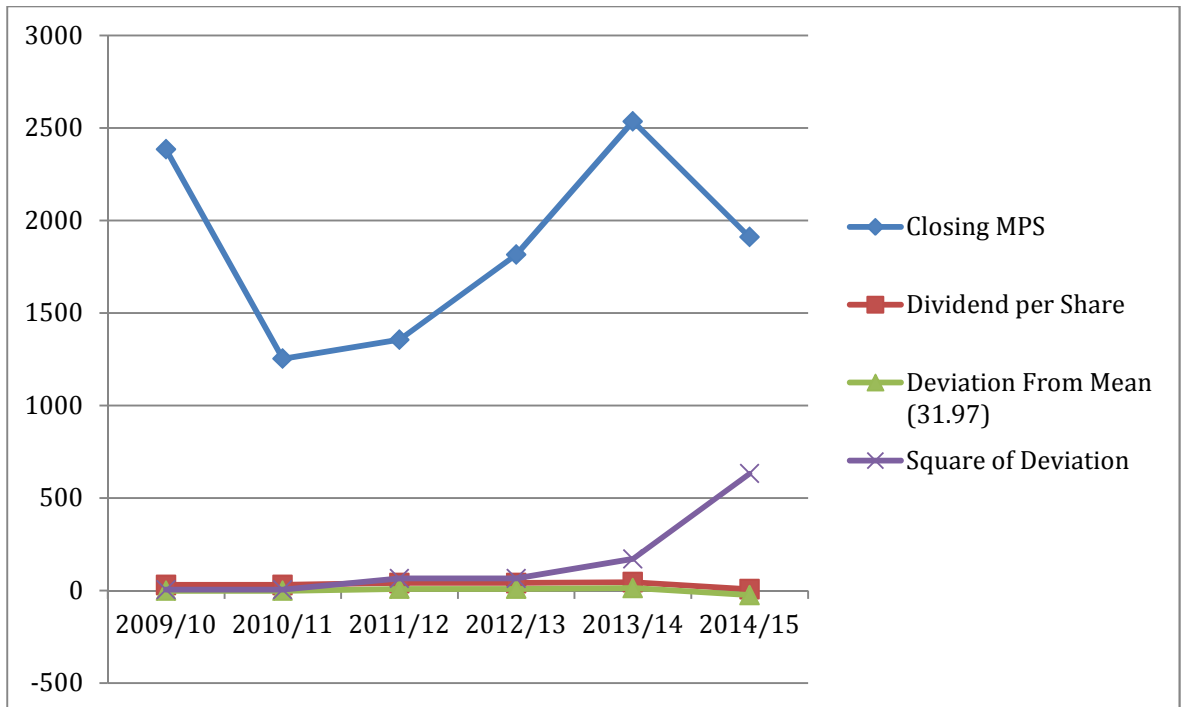
Expected rate of Return or Mean (M) = $\sum (D) / N=191.84/6=31.97$

Variance(V) = $\sum (D2)/N=938.0214/6= 156.34$

$$\# \text{ Standard Deviation (SD)} = \sqrt{(V)} = \sqrt{(156.34)} = 12.50$$

$$\# \text{ Co-efficient of Variation (C.V}_n) = \frac{\sigma_n}{M} = 12.50/31.97 = 0.39$$

Figure 4.2 Calculation of Expected Rate of Return, Standard Deviation and Co-efficient of variance



Above table 4.2 and figure 4.2 shows that the expected rate of return of NABIL is 31.97%, which is the sum of single rate of return divided by no. of observations where standard deviation of NABIL is 12.50% which is due to the variation in single period rate of return. Likewise, coefficient of variation of NABIL bank is 0.39 which means for earning one (1) unit of return the investors has to bear 0.39 unit of risk where variance is 156.34.

4.1.2 Calculation of Co-variance, Correlation and Beta of NABIL Bank

Calculation of Co-variance, Correlations and Betas Co-efficient of the NABIL Bank for each fiscal year. These calculations are shown in table and secondary data are used to predict desirable result.

Table 4.3 Calculation of Co-variance, Correlation and Beta

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	Average Return
Return On Market Index (MI) (%)	21.32	-47.48	8.22	33.94	39.67	-24.65	5.17
Return on Stock (RS) (%)	30	30	40	40	45	6.84	31.97
Closing MPS(MPS)	2384	1252	1355	1815	2535	1910	
Deviation (D=MI-Avg. Return)	16.15	-52.65	3.05	28.77	34.5	-29.82	
Square of above Deviation (Sq)	260.8225	2772.0225	9.3025	827.7129	1190.25	889.2324	
Deviation From Stock (S)	-1.97	-1.97	8.03	8.03	13.03	-25.13	
Multiple of D & S(M)	-31.8155	103.7205	24.4915	231.0231	449.535	749.3766	

$$\# \text{ Co-variance (CV) } = (M)/N-1 = 1526.3312/6-1 = 305.266$$

$$\# \text{ Variance(V) } = (sq)/N-1 = 5949.3428/6-1 = 1189.868$$

$$\# \text{ Corr. (R}_{mi}, R_{mps}) = \frac{Cov(R_{MI}, R_{MPS})}{\sigma_{MI} \sigma_{MPS}} = 305.266/12.50*34.494$$

$$= 305.266/431.175 = 0.707$$

$$\# \text{ Beta}(S_n) = CV/V = 305.266/1189.868 = 0.2565$$

From above table 4.3. and figure 4.3 calculation, beta coefficient of NABIL is 0.2565 that is less than 1. Here; Beta is less than one (1) means that the stock of NABIL is less volatile than the market that is Stock seems to be a defensive. Covariance and

correlation coefficient of NABIL are (305.266) and (0.707) respectively that shows that it is positive correlated variables.

4.2 Market Price per Share of Himalayan Bank Limited. (HBL)

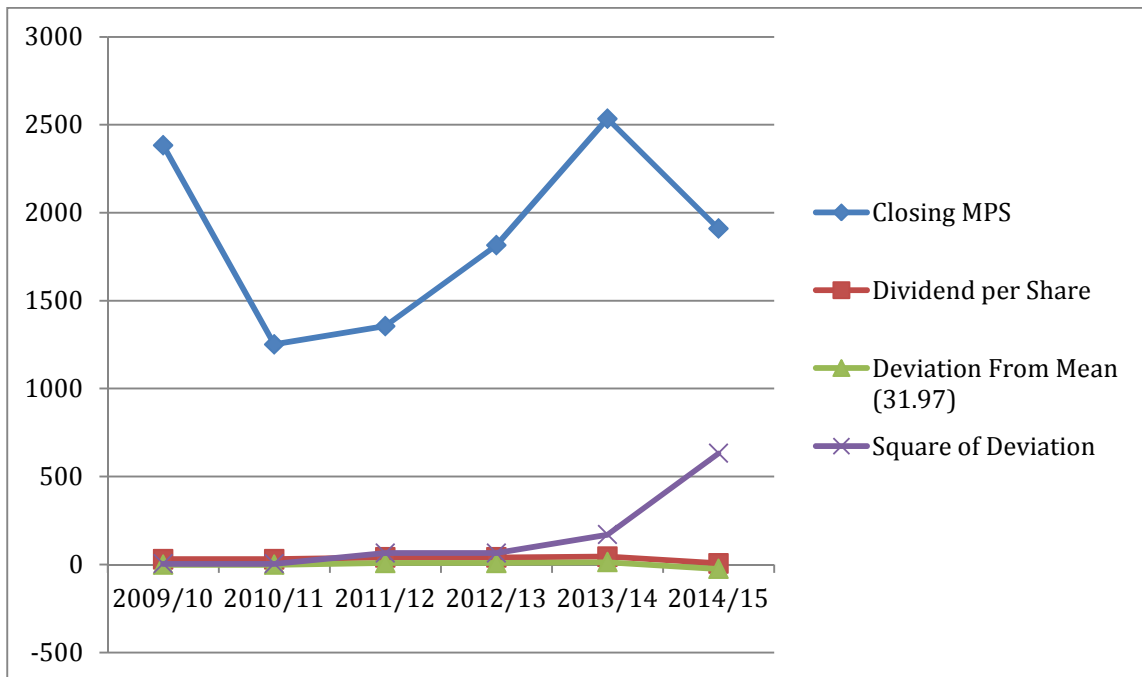
Comparative Chart shown regarding market price per share (MPS) and dividend per share (DPS) of HBL. The data is taken from secondary market, which used for the calculation of desirable result of the study.

Table 4.4 Comparison of Market Price per Share and Dividend in different fiscal years

Fiscal Year	High MPS	Low MPS	Closing MPS	DPS	Stock Dividend (%)	Total Dividend
2009/10	1067	712	816	11.84	36.84	48.68
2010/11	1188	521	575	16.84	36.84	53.68
2011/12	850	438	653	13.42	28.42	41.84
2012/13	923	668	700	10	15	25
2013/14	1020	600	941	6.05	21.05	27.10
2014/15	1004	680	813	7.11	42.11	49.22

Source: NEPSE; website <http://www.nepalstock.com>, Annual Report of HBL 2014/15

Figure 4.3 Comparison of Market Price per Share and Dividend in different fiscal years



From the above table 4.4 and diagram 4.3 , it can be concluded that the movement of price of share of HBL is in increasing decreasing trends. Rs.941 is the highest MPS of HBL in 2013/14 during the review period but from the fiscal year, 2013/14 MPS of HBL is decreased again than of previous year. However, it is slightly increased from fiscal year 2013/14. The portion of highest stock dividend paid by HBL is 42.11 per share in 2014/15.

4.2.1 Computation of Expected Rate of Return, Standard Deviation and Co-efficient of Variation

Calculation of expected rate of return, standard deviation and coefficient of variance: Calculation is made based on information s and data available in the secondary markets.

Table 4.5
Calculation of Expected rate of return, Standard deviation and
Coefficient of Variance

Fiscal Year	Closing MPS	Dividend per Share	Deviation From Mean (10.88)	Square of Deviation
2009/10	816	11.84	0.96	0.9216
2010/11	575	16.84	5.96	35.5216
2011/12	653	13.42	2.54	6.4516
2012/13	700	10	-0.88	0.7744
2013/14	941	6.05	-4.83	23.3289
2014/15	813	7.11	-3.77	14.2129
Total		Σ (D)= 65.26		Σ (D2)= 81.211

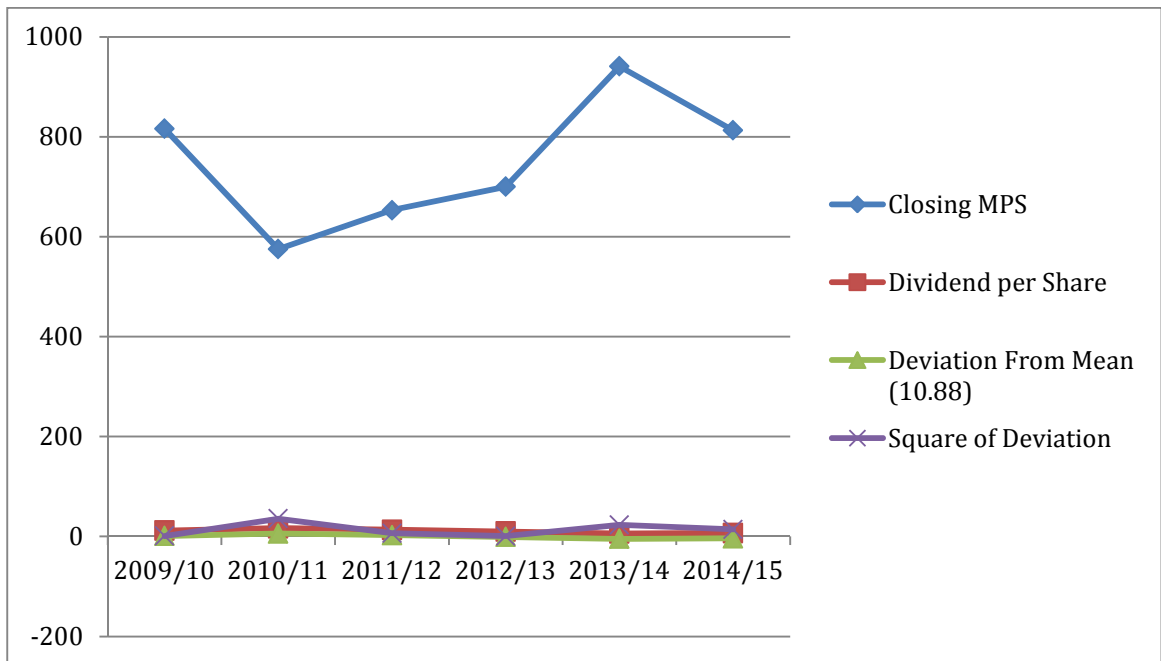
Expected rate of Return or Mean (M) = $\Sigma (D) / N = 65.26 / 6 = 10.88$

Variance(V) = $\Sigma (D2) / N = 81.211 / 6 = 13.54$

Standard Deviation (SD) = $\sqrt{(V)} = \sqrt{(13.54)} = 3.68$

Co-efficient of Variation (C.V_n) = $\frac{\sigma_n}{M} = 3.68 / 10.88 = 0.34$

Figure 4.4 Calculation of Expected rate of return, Standard deviation and Coefficient of Variance



The table 4.5 and figure 4.4 shows that the Expected Return on common stock of HBL is normal i.e. 10.88% and Standard Deviation on return from mean return are also normal that is 3.68%. Similarly, the co-efficient of variation is 0.34 indicates that to earn One (1) unit of return, the investors should bear 0.34 of risk. Thus, it is profitable asset.

4.2.2 Calculation of Co-variance, Correlation and Beta of HBL

Since Expected Rate of Return, Standard Deviation and Co-efficient of Variation is calculated in previous table. Using these calculated data now, we calculate Co-Variance, Correlation and Beta Co-efficient for different fiscal year of HBL.

Table 4.6 Presentation of calculation of Co-variance, Correlation and Beta coefficient

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	Average Return
Return On Market Index(MI) (%)	15.56	-29.53	13.57	7.20	34.43	-13.60	4.60
Return on Stock (RS) (%)	11.84	16.84	13.42	10.00	6.05	7.11	10.88
Closing MPS	816.00	575.00	653.00	700.00	941.00	813.00	
Deviation (D=MI-Avg Return)	10.96	-34.14	8.96	2.59	29.83	-18.21	
Square of above Deviation (Sqr)	120.14	1165.35	80.32	6.73	889.56	331.44	
Deviation From Stock (S)	0.96	5.96	2.54	-0.88	-4.83	-3.77	
Multiple of D & S	10.56	-203.57	22.79	-2.27	-143.96	68.57	

$$\# \text{ Co-variance (CV)} = (M)/N-1 = -247.88/6-1 = -49.58$$

$$\# \text{ Variance(V)} = (sq)/N-1 = 2593/6-1 = 518.71$$

$$\# \text{ Corr. (R}_{m_{mi}}, R_{mps}) = \frac{Cov(R_{MI}, R_{MPS})}{\sigma_{MI} \sigma_{MPS}} = -49.58/3.68*22.77$$

$$= -49.58/83.79 = 0.592$$

$$\# \text{Beta}(S_n) = CV/V = -49.58/1189.868 = 0.09$$

As we know that beta is the index of systematic risks, which normally use stimulate by market forces and cannot be diversified. HBL has beta of -0.09, which indicates that it is very defensive asset, which seem to less volatile than market. Co-variance is -47.58 indicates the lower than perfectly Negative correlation of HBL with market and therefore it is a high risk asset. The correlation of HBL is that is less than one (1).

4.3 Market price per share of Everest Bank Limited (EBL)

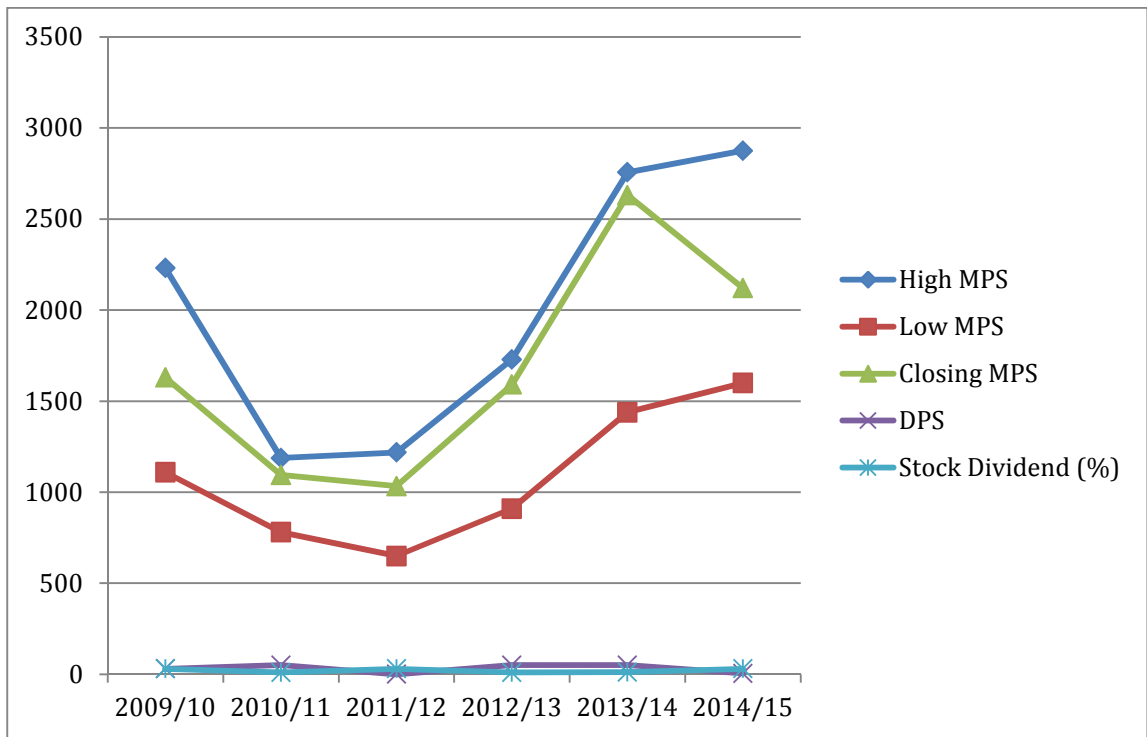
Presentation and calculation of Market Price Per Share (MPS), Dividend Per Share (DPS) and Total dividend for the different Fiscal Year of Everest Bank Limited.

Table 4.7 Presentation in Table the calculation of DPS, MPS and Total dividend for Everest Bank Limited for the different Fiscal years

Fiscal Year	High MPS	Low MPS	Closing MPS	DPS	Stock Dividend (%)	Total Dividend
2009/10	2231	1109	1630	30	30	60
2010/11	1188	781	1094	50	10	60
2011/12	1218	650	1033	0	30	30
2012/13	1729	910	1591	50	10	60
2013/14	2756	1439	2631	50	12	62
2014/15	2875	1600	2120	5	30	35

Source: NEPSE; website <http://www.nepalstock.com>, Annual Report of EBL 2014/15

Figure 4.6 Presentation in Table the calculation of DPS, MPS and Total dividend for Everest Bank Limited for the different Fiscal years



From the above table 4.7 and 4.6 figure graphical Presentation, it is concluded that the movement of closing MPS of EBL is fluctuate in both increasing and decreasing trends during the period. Which has the highest closing MPS in year 2013/14 and the lowest in fiscal year 2011/12 during the period however; it is slightly increasing from fiscal year 2012/13. During the period, the lowest closing MPS of EBL is Rs. 1033 in the fiscal year 2011/12 and the highest is Rs. 2631 in the fiscal year 2013/14.

4.3.1 Computation of Expected rate of return, Standard deviation and Co-efficient of variation of the Everest Bank Limited

These calculations are made under the modality desirable form and using financial formulas. For which data are used from previous calculations.

Table 4.8 Calculation of Expected Rate of Return, Standard Deviation, and Co-efficient of Variation

Fiscal Year	Closing MPS	Dividend per Share	Deviation From Mean (30.83)	Square of Deviation
2009/10	1630	30	-0.83	0.6889
2010/11	1094	50	19.17	367.4889
2011/12	1033	0	-30.83	950.4889
2012/13	1591	50	19.17	367.4889
2013/14	2631	50	19.17	367.4889
2014/15	2120	5	-25.83	667.1889
Total		185		2720.8334

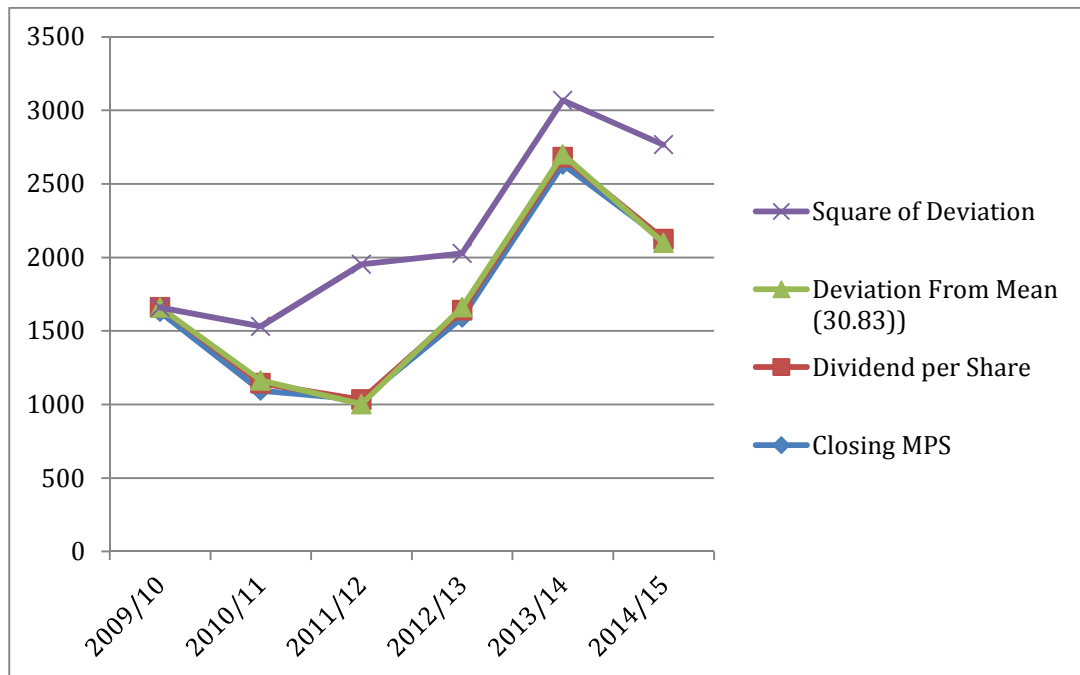
Expected rate of Return or Mean (M) = $\sum (D) / N = 185/6 = 30.83$

Variance(V) = $\sum (D^2) / N = 2720.83/6 = 453.47$

Standard Deviation (SD) = $\sqrt{V} = \sqrt{453.47} = 21.29$

Co-efficient of Variation (C.V_n) = $\frac{\sigma_n}{M} = 21.29/30.83 = 0.69$

Figure 4.7 Calculation of Expected Rate of Return, Standard Deviation, and Co-efficient of Variation



The above 4.8 and figure 4.7 shows that expected rate of return of EBL is 30.83% and Standard deviation on return is 21.29%, Co-efficient of Variation is 0.69 likewise, Variance is 453.47.

4.1.3.2 Calculation of Co-variance, Correlation and Beta of EBL

Co-Variance, Correlations and Beta Co-efficient are calculated for each fiscal years of Everest Bank Limited. The calculations are shown is table 4.9 below

Table 4.9 Calculation of Co-variance, Correlation and Beta

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	Average Return
Return On Market Index(MI) (%)	14.55	-32.88	-5.58	54.01	65.37	-19.42	12.68
Return on Stock (RS) (%)	30.00	50.00	0.00	50.00	50.00	5.00	30.83
Closing MPS	1630.00	1094.00	1033.00	1591.00	2631.00	2120.00	
Deviation (D=MI-Avg Return)	1.88	-45.56	-18.26	41.34	52.70	-32.10	
Square of above Deviation (Sqr)	3.52	2075.26	333.25	1708.58	2776.76	1030.09	
Deviation From Stock (S)	-0.83	19.17	-30.83	19.17	19.17	-25.83	
Multiple of D & S	-1.56	-873.14	562.86	792.25	1009.99	829.12	

$$\# \text{ Co-variance (CV)} = (M)/N-1 = 2319.53/6-1 = 463.91$$

$$\# \text{ Variance(V)} = (sq)/N-1 = 7927.45/6-1 = 1585.49$$

$$\# \text{ Corr. (R}_{m_{mi}}, R_{mps}) = \frac{Cov(R_{MI}, R_{MPS})}{\sigma_{MI} \sigma_{MPS}} = 463.91/0.69*39.82$$

$$= 463.91/27.47 = 16.89$$

$$\# \text{Beta}(S_n) = CV/V = 463.91/1585.49 = 0.29$$

From above table 4.9 is found that beta coefficient of EBL is less than one (1). This indicates that the stock of EBL is defensive. Co-variance and correlation coefficient of EBL are 463.91 and 16.89 respectively that indicates that the stock of EBL is positively correlated.

4.4 Comparative Risk and Return Status

According to the analysis of the return from the section 4.1, a comparative analysis of risk and return is performed in this section. The portion of systematic risk and unsystematic risk also has been included in this section. The Expected return, standard deviation of returns, coefficient of variation of each bank for the fiscal year 2009/10 to 2014/15 is given below:

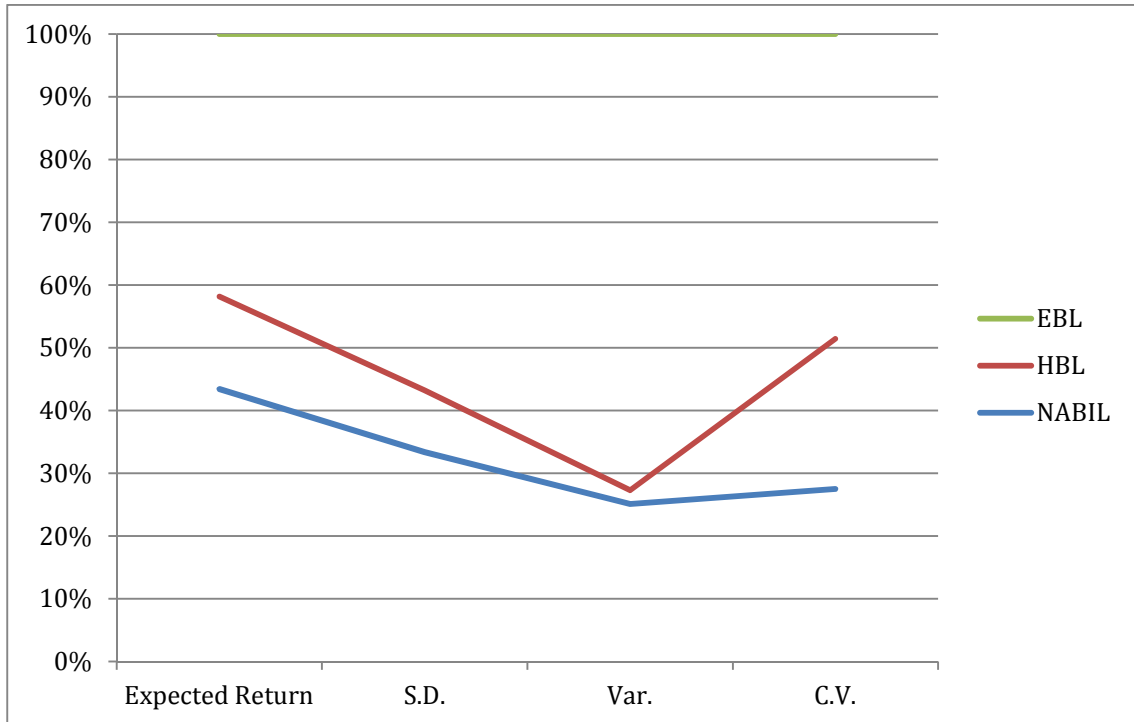
Table 4.10

Expected Return, Standard Deviation, Variance and Coefficient of Variation of each bank that taken under research study.

Name of Bank	Expected Return	S.D.	Var.	C.V.	Remarks
NABIL	31.97	12.50	156.34	0.39	Medium S.D and Highest Return.
HBL	10.88	3.68	13.54	0.34	Lowest S.D and Lower Return
EBL	30.83	21.29	453.47	0.69	Medium Return and Highest S.D.

Figure 4.9

Expected Return, Standard Deviation, Variance and Coefficient of Variation of each bank that taken under research study.



As the comparison, chart shown investors obtain highest Expected Return from Nabil Bank Limited, which is 31.97%.The lowest Expected Rate of Return is of HBL that consists of 10.88% Likewise, Everest Bank Limited Provided 30.83.

Risk is underlying factor of the security and associated factor of return. The risk factors of commercial banks are hidden along with standard deviation,which is 3.68 to 21.29.The standard deviation of the NABIL, HBL, EBL, are 12.50%, 3.68%, and 21.29% respectively.These indicators and comparison shown us most risky assets are of Everest Bank Limited, which consists of 21.29% standard Deviation. However, Himalayan Bank Limited is least risk consisting Assets.

Risk and return are one of the major determinants of investment. Therefore, an investor does not invest on the ground of one of them. They compare risk and return taking the degree of return in term of risk, which we measure as Co-efficient of variance (CV). This helps to rank the investment alternatives. The alternative with lower CV is preferable for investment. The calculation shows C.V among the

commercial banks. On which basis Himalayan Bank Limited is least C.V consisting assets so these securities are more preferable among the other studied in this research work. That is (0.34). Everest Bank Limited Hold highest C.V among the studied joint Venture Bank that is (0.69).However, investors must give attention to the standard deviation of assets. Further knows that the expected return and standard deviation from any security is the object of choice for any investor. Ultimately, most investor is risk averter and they prefer highest return with low risk. Co-variance is the tools that show how the return of market and individual stock vary. Therefore, investor should concentrate about both risk and return but it is difficult to say that which security is best for investment point of view, for that purpose C.V. gives clear design about risk for any security per unit of return.

4.5 Movement of Market Capitalization

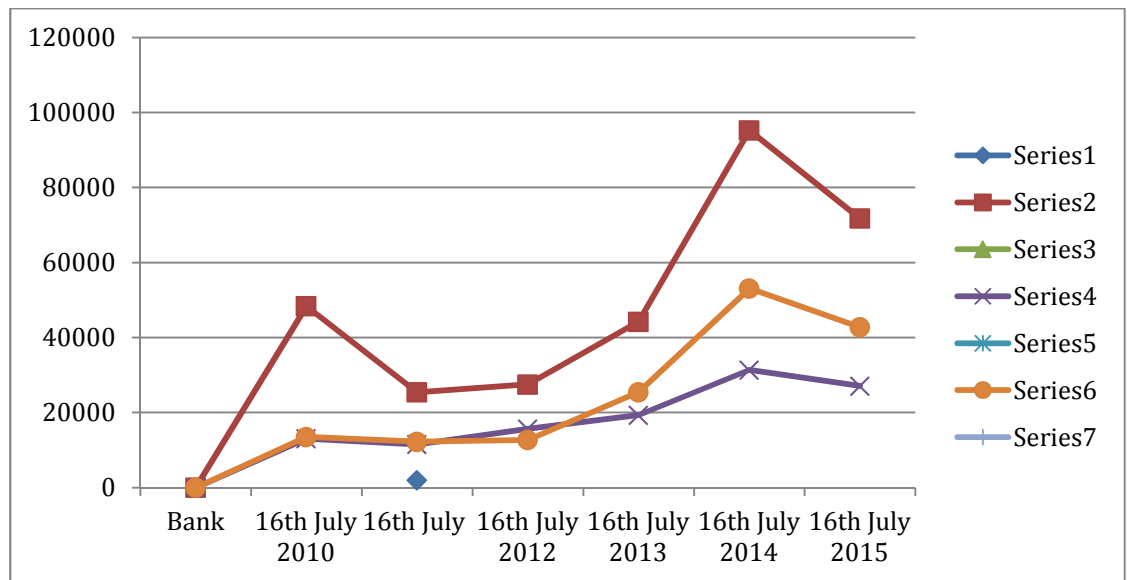
Market capitalization movement denotes the changed values of the company from year to year. Thus, it is trying to compare market value of each bank by considering their year-end market capitalization amount from the fiscal year 2009/10 to 2014/15.

Table 4.11 Comparative Movement of Market Capitalization (Rs in million)

Bank	16th July 2010	16th July 2011	16th July 2012	16th July 2013	16th July 2014	16th July 2015
NABIL	48389.70	25412.71	27503.38	44228.67	95256.53	71771.19
HBL	13056	11500	15672	19320	31360.71	27094.85
EBL	13536.62	12248.53	12722.80	25473.92	53077.47	42768.62

Source: NEPSE website <http://www.nepalstock.com>, Annual Report SEBO/N (2014/15)

Figure : 4.10 Comparative Movement of Market Capitalization (Rs in million)



According to above presentation, normally, NABIL has the highest market capitalization in every year than others banks. However, there is seemed more fluctuation in such value between current year and following year in each bank and most of the bank has the highest market capitalization in the fiscal year 2013/14.

4.6 Analysis of Market Risk and Return

There is only one stock market exist in Nepal namely Nepal Stock Exchange Limited (NEPSE). Overall market movement is represented by the market index i.e. NEPSE index. All the trading of stock is traded in Nepal Stock Exchange Limited. In this section, risk and return of each industry will compare with market risk and return.

Table 4.12 Calculation of Market Returns, Expected Return, S.D. and C.V. of Market

Fiscal Year	NEPSE Index	$R_m \times \frac{NI_t \cdot Z \cdot NI_{tZ}}{NI_{tZ}}$	$R_m \cdot Z \bar{R}_m$	$(R_m \cdot Z \bar{R}_m)^2$
2009/10	477.73	-	-	-
2010/11	362.85	-0.2405	-0.4222	0.1782
2011/12	389.74	0.0741	-0.1076	0.0116
2012/13	518.33	0.3299	0.1482	0.0220
2013/14	1036.11	0.9989	0.8172	0.6679
2014/15	961.23	-0.0723	-0.2540	0.0645
Total		$R_m = 1.0902$		$(R_m \cdot Z \bar{R}_m)^2$ =0.9442

$$\# \text{ Expected Return } (\bar{R}_m) = \frac{\sum R_m}{n} = 1.0902 / 6 = 0.1817 = 18.17\%$$

$$\# \text{ Standard Deviation } (\dagger_m) \times \sqrt{\frac{(R_m \cdot Z \bar{R}_m)^2}{n \cdot Z1}} = \sqrt{\frac{0.9442}{6-1}} = 0.4345$$

$$\# \text{ Co-efficient of Variation (C.V.)} = \frac{\dagger_m}{R_m} = \frac{0.4345}{0.9442} = 0.1925$$

$$\# \text{ Variance (V)} = 0.0370$$

The NEPSE Index is very high in 2013/14 i.e.1036.11 and the lowest is 362.85 in 2010/11 during the period in this study. From the fiscal year 2009/10 to 2011/12, NEPSE index looks in decreasing trend. However, in subsequent years, the NEPSE Index starts to increase

its value and reach up to Rs.1036.11 at fiscal year 2013/14. The year wise realized return of market is shown below. From the above diagram, we can see that the realized

returns of the market is in negative trend in 2010/11 and 2014/15. It is in positive trend in fiscal year 2011/12 to 2013/14.

4.6.1 Analysis of Market Sensitivity

Market sensitivity is explained by beta co-efficient of selected sample banks. Higher beta is the greater sensitivity and higher beta will be the reaction to the market movement. Beta measure the systematic risk that cannot be eliminated through the means of diversification.

The beta of common stock of HBL is most defensive because the Beta coefficient of HBL is the lowest than other sample banks under this study period i.e. 0.09, which mean that if market return is increased by 1%, then HBL stock return will rise by 0.09. The Beta coefficient of NABIL and EBL are also greater. Thus, their common stocks are also known as aggressive.

4.7 Portfolio Analysis

The main objective of portfolio is reduction of unsystematic risk, from which the investor can get optimum return in certain degree of risk by constructing efficient portfolio. In making portfolio investment, the total available fund is divided into proper amount or proportion for different securities that means. The total weighted of a portfolio is equal to 100%. In this chapter, co-variance of the returns of the given two stocks and proportion of stock i.e. the optimal weight is calculated to minimize the risk and to find the risk and return of the portfolio assets. Table 4.23 shows the portfolio risk, returns, and co-variance between two banks respectively. Details of that calculation are shown in appendix-XIV to appendix-XXVIII respectively.

Table 4.13 Portfolio Risk and Returns and Co-variance between banks

S.N	Portfolio	Weight	Co-variance	\bar{R}_P	\dagger_P
1.	NABIL & HBL	$W_n = 2.2629$ $W_h = -$ 1.2629	0.1149	0.3408	0.6974
2.	NABIL & EBL	$W_n = 2.9250$ $W_e = -$ 1.9250	0.1910	0.0337	0.5123
3.	HBL & EBL	$W_h = -1.2896$ $W_e =$ 2.2896	0.1082	0.5711	0.6570

Risk can be decreased by using diversification method or forming an optimal portfolio of each bank. Diversification can only reduce risk but cannot increase return. Portfolio return is simply the average of weighted of high return individual's security returns. Hence, average of high return is also high. According to table 4.23, portfolio return between NABIL and EBL is very high i.e. 31.97 and 30.83% respectively. Likewise, the lowest portfolio returns is 10.88% in EBL.

4.8 Correlation Between Banks

Correlation between the returns of the two securities plays vital role to risk minimization because some risk can be reduced when stocks will be positively correlated but not perfectly. Correlation between each bank is presented below in Table 4.23

Table 4.14 Correlation Co-efficient Among the Stock of Different Banks

BANK	NABIL	HBL	EBL
NABIL	0.707	0.592	16.89
HBL	0.592	0.707	16.89
EBL	16.89	0.592	0.707

As mentioned in above table 4.22, The NABIL and HBL are highly positively correlated i.e. 0.707 and the lowest correlation co-efficient is 0.592 between HBL and EBL. However, there is no negative correlation. It neither seems between individual bank and perfect correlation. The meaning is that each bank is positively correlated from 0.592 to 16.89, which indicates while making portfolio some risk can be reduced.

4.8 Major Findings of the Study

From the presentation and analysis of data, the following points are major finding as mentioned below:

- i. The movement of MPS of common stock of NABIL, is sharply decreased in the year 2010/11. From the year 2011/12, the closing Market price per share of NABIL bank is in increasing trend gradually. It indicates that the growth of Nabil Bank is in increasing trend.
- ii. The expected rate of return of NABIL is 31.97%, which is the sum of single rate of return divided by no. of observations where standard deviation of NABIL is 12.50% which is due to the variation in single period rate of return. Likewise, coefficient of variation of NABIL bank is 0.39 which means for earning one (1) unit of return the investors has to bear 0.39 unit of risk where variance is 156.34.
- iii. Covariance and correlation coefficient of NABIL are (305.266) and (0.707) respectively that shows that it is positive correlated variables.
- iv. The movement of price of share of HBL is in increasing decreasing trends. Rs.941 is the highest MPS of HBL in 2013/14 during the review period but from the

fiscal year, 2013/14 MPS of HBL is decreased again than of previous year. However, it is slightly increased from fiscal year 2013/14. The portion of highest stock dividend paid by HBL is 42.11 per share in 2014/15.

- v. The Expected Return on common stock of HBL is normal i.e. 10.88% and Standard Deviation on return from mean return are also normal that is 3.68%. Similarly, the co-efficient of variation is 0.34 indicates that to earn One (1) unit of return, the investors should bear 0.34 of risk. Thus, it is profitable asset.
- vi. HBL has beta of -0.09, which indicates that it is very defensive asset, which seem to less volatile than market. Co-variance is -47.58 indicates the lower than perfectly Negative correlation of HBL with market and therefore it is a high risk asset. The correlation of HBL is that is less than one (1).
- vii. This study concluded that the movement of closing MPS of EBL is fluctuate in both increasing and decreasing trends during the period. Which has the highest closing MPS in year 2013/14 and the lowest in fiscal year 2011/12 during the period however; it is slightly increasing from fiscal year 2012/13. During the period, the lowest closing MPS of EBL is Rs. 1033 in the fiscal year 2011/12 and the highest is Rs. 2631 in the fiscal year 2013/14.
- viii. The expected rate of return of EBL is 30.83% and Standard deviation on return is 21.29%, Co-efficient of Variation is 0.69 likewise, Variance is 453.47.
- ix. This research indicates that the stock of EBL is defensive. Co-variance and correlation coefficient of EBL are 463.91 and 16.89 respectively that indicates that the stock of EBL is positively correlated.
- x. As the comparison, chart shown investors obtain highest Expected Return from Nabil Bank Limited, which is 31.97%. The lowest Expected Rate of Return is of HBL that consists of 10.88% Likewise, Everest Bank Limited Provided 30.83.
- xi. The standard deviation of the NABIL, HBL, EBL, are 12.50%, 3.68%, and 21.29% respectively. These indicators and comparison shown us most risky assets are of Everest Bank Limited, which consists of 21.29% standard Deviation. However, Himalayan Bank Limited is least risk consisting Assets.
- xii. The NABIL and HBL are highly positively correlated i.e. 0.707 and the lowest correlation co-efficient is 0.592 between HBL and EBL. However, there is no negative correlation. It neither seems between individual bank and perfect correlation. The meaning is that each bank is positively correlated from 0.592 to 16.89, which indicates while making portfolio some risk can be reduced.

CHAPTER – FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Finance is mainly concern with the efficient flow of funds. In addition, investor tries best to provoke highest rate of return bearing lower level of risk. To trade of between risk and return, financial market plays vital role. Stock market one of the parts of capital markets has greatest attraction not only for the professional or institutional investors but also for the individual or private investors. Financial market classified as money market and capital market transit the fund from surplus unit to deficit unit. Although Nepalese financial market is not developed financial securities are high in demanded compared to its supply.

An investment is an assertion of money that expects to inflame additional money. Investment is a scientific method of using excess income bearing lower level of risk. It requires a present sacrifice for a future uncertain benefit. Saving and increment in the wealth position is the motivating factors of investments. Portfolio theory explores how risk averters construct portfolios in order to optimize expected returns for a specified level of risk. The theory quantifies the benefits of diversification. Each portfolio maximizes possible expected return for a given level of risk on the efficient frontier. Investors should not hold optimal portfolios on the efficient frontier and adjust their total market risk. Portfolio theory provides a broad context for understanding the interactions of systematic risk and reward.

Financial system is a set of institutional array through which surplus transferred to deficit units. Primary market denotes the market mechanism for the original sale of securities by an issuer to public. It is the only market in which the corporate or government issuer is directly involved in the transaction and receives direct benefits from the issue. Secondary market is simply a place where already outstanding securities are traded between investors. The markets create the price and allow for liquidity. Investment rationalities are the pre considerations are to be taken in

selection of investment alternatives. Investor does not invest in the entire investment alternative. Investment rationalities are investment objectives, investment horizon, and risk and return analysis, demand and supply in the market, taxes and investment strategies, bull and bear market and analysis.

The objective of portfolio management is to analyze different financial assets and delineate efficient portfolios and safety through precaution, risk minimization, generating income, marketability, liquidity etc. the objectives of this research are to understand portfolio investment, risk and return analysis and to find out optimal portfolio among the security traded in the NEPSE and to suggest remedies for existing problems. This research focuses on the effective use of liquidity in the best portfolio in NEPSE.

This study is to find out some certain clues about the theoretical aspects and their practical implication of portfolio theory developed with some limitations and assumption. Data of selected banks for last six years (2009/10 to 2014/15) were used for this research. This research is based on the secondary data.

Risk and return of sample banks are analyzed with the help of expected rate of return, standard deviation, variance and coefficient of variation. Market sensitivity was analyzed with the help of covariance with market, beta of the stock and correlation with market. Various portfolio set were developed having negative correlation to each other. Thus, the focus of the study is portfolio management regarding how an individual investor can get the maximum return at certain level of given risk. How the optimum portfolio is constructed from the securities listed in NEPSE. Three listed commercial banks are chosen as sample. The sampling is made based on personal judgments and data availability so the method used is purposive method of sampling.

The research is totally based on the historical data so it is a historical research. It covers the data from the fiscal year 2009/10 to 2014/15.

In order to achieve the objective of the study, the research has been designed based on secondary data collected from NEPSE, SEBON and concerned banks by using financial tools. Moreover, for clear understanding some graphs have been used and are interpreted in simple manner. It is empirical, descriptive and analytical study.

5.2 Conclusion

The conclusion of this research work may be important information for those who are directly or indirectly concerned with the common stock investment. From the analysis of various financial indicators and statistical tools of all the sample banks, the following conclusions are concluded through this research study.

NABIL has the highest rate of return i.e. 31.97 % and HBL has the lowest among studied rate of return i.e. 10.88 %.HBL's stock is the less risky assets and EBL stock is the most risky assets. Beta coefficient of EBL is the highest i.e. 0.29Which is less than 1. Thus, it indicates that the return of EBL is less volatile that means every 1 % change in market return leads to 0.29 change in EBL stock return. Regarding the market capitalization of three sampled Banks, NABIL is in the highest position with Rs. 71771.19 millions and HBL is the lowest position with Rs. 27094.85 Million. Correlation co-efficient between NABIL & EBL is the highest one that is 0.707, which is about near of perfectly positively correlation (1) and correlation co-efficient between HBL & EBL is the lowest that is only 0.592, which means common stock of such banks are less correlated. Portfolio performance evaluation measures the financial better position of created portfolio between mentioned sample banks by making comparison among them. Three models are used to measure this performance, according to that model mentioned in research methodology. Various results are to be found which is presented in chapter 4 and showing in major findings parts.

5.3 Recommendations

Based on proceeding chapter of this study the following recommendations are made to related people as well as company: The finding of this study may provide significant information for those who are concerned directly or indirectly with the stock market activities. Thus, based on the analysis and findings of this study, the following recommendations are presented separately for investors and institution to overcome the weakness and inefficiency as well as to improve present stock performance.

1. Risk and return play vital role on common stock investment of banking sector. Therefore, it is suggested to analyze risk and return with sincerely before investing in this sector. According to the analysis of individual common stock of Joint Venture Bank, Investors should invest their money in common stock of NABIL due to the higher expected return (i.e. 31.97 %) and defensive type of stock.
2. Investors need to diversify their fund to reduce the risk. Proper construction of portfolio will reduce considerable potential loss, which can be defined in term of the risk but portfolio construction is dynamic and difficult job. Thus, investor should be selected the stocks that have higher return and negative correlation or near to zero correlation between different companies and sector. The portfolio revision is also necessary at certain interval time to get best return at lower risk. According to the study, the portfolio between EBL & NABIL is recommended to construction due to lowest risk as well as higher return.
3. Government should amend the rules and a regulation regarding to the stock market in time-to-time that ensures the protection of an individual investor's right. Such amendment is essential to make the act effectiveness with the pace of time and need to follow the implementation and supervision of rules and regulation to make sure the objective is achieved.
4. Before making an investment decision in stock, it is recommended to visit and discuss with investment companies, with individual expert and researchers. Investor should make their investment decision because of reliable information or financial parameters of the related bank rather than imagination.
5. The financial institutions and companies should provide the real financial statements. The data provided by NEPSE and the company itself are different in some cases. It creates confusion to potential investors about the actual financial condition of the company. They should publish their annual reports and information timely and accurately, which will help to the investors to take the investment decision on their common stock.

6. BIBLIOGRAPHY

- 7.
8. Agrawal, U. (2007, 15Sep-14 Oct). Stock Watch. The Boss Magazine. Pp. 101-101
9. Aryal, M. (1995). *The General Behavior of Stock Market*. An Unpublished Master's Degree Thesis, Kathmandu Central Department of Management, Tribhuvan University.
10. Brigham, E.F. & Gapenski, L.C. (1995). *Intermediate Financial Management*. New York: The Dryden Press
11. Francis J.K. (1983). *Management of Investments*. New York: Mc Graw Hill.
12. Gautam, R.R, & Thapa, K. (2005) *Capital Structure Management*. Kathmandu: Asmita Books Publishers & Distributors
13. Gitaman, L.J. (1998) *Principles of Managerial Finance*. New York: Harper & Row Publishers, Inc
14. Gupta, S.C. (1999) *Fundamental of statistics*. New Delhi: Himalayan Publishing
15. House.
16. Pandey, I.M. (1992). *Financial Management*. New Delhi: Vikas Publishing House Pvt. Ltd.
17. Pandey, S. (2001). *Public Response to primary Issue of share in Nepal*. An Unpublished Master's Degree Thesis, Central Department of Management, Tribhuvan University.
18. Pandey, S. (2006, March). *IPO funding via financial institution: Not a very healthy Practice*. New Business Age. Pp. 49-50.
19. Paudel, N. (2006). *Public Response to IPO in Nepal*. An Unpublished Master's Degree Thesis. Central Department of Management, Tribhuvan University.
20. Pokhrel, N. (2007, March). *Systematise Margin lending*. **New Business Age**.pp.55-56.
21. Pradhan, S. (1992). *Basic of Financial Management*. Kathmandu: Educational Enterprises Pvt. Ltd
22. Security Board of Nepal (2008/2009) Kathmandu: *Annual report*.

23. Shrestha S.K. (1996). *Public Response to Primary Issue of Share in Nepal*. An Unpublished master's degree thesis. Central Department of Management, Tribhuvan University.
24. Shrestha, M.K. (1980). *Financial management theory and practice*. Kathmandu: Curriculum Development Centre.
25. Wolf, H.K. & Pant, P.R. (2005) *Social Science Research and Thesis Writing*. Kathmandu: Budha Academic Publishers and Distributors
- 26.
27. **Websites**
28. www.hbl.com.
29. www.nrb.org.np
30. www.ebl.com
31. www.nabilbank.com