CHAPTER - I

INTRODUCTION

1.1 GENERAL BACKGROUND

Nepal is one of the least developed countries in the world. The rareness of capital has been the main cause for underdevelopment. Nepal launched plan for economic development more than four decade ago. Recently, it has adopted the path of economic development through liberalization. However, any strategy for economic development requires a steady supply of medium and long –term funds for productive investment for the mobilization of invest able resources. Capital market is in important intermediaries through which effectives budgeting of the deficit units for productive investment are made available. Capital market can be decomposed into securities market and non-securities market. Stock market is a major component of securities market.

Development and expansion of capital market are essential for the rapid economics growth of the country .Capital market helps economic development by mobilizing long-term capital needed for productive sector. The capital market was initiated in the country with the establishment of the Security Marketing Centre in 1976 in the government sector according to the industrial policy of that time. But there was no such plan or program for the development of the capital market until the sixth plan. For the first time, the activities and programs of the Security marketing Centre were set out and included the capital market in the Seventh Plan. However, the planned development of this sector was initiated only after the eight plans.

The main objectives of the capital market is to create opportunity for maximum number of people to get benefit from the return obtained by directing the economy

towards the productive sector by mobilizing the long-term capital .The objective can be fulfilled only by the rational and accountable behavior relating to the three factors of the capital market such as institution, mediator and investor.

Rational and high moral character and accountable behavior of institutions such as the government, central bank, stock exchange board, stock exchange; organized institutions for accumulating capital from the market; mediators in the form of manager for issuing security ; creator of market manager for investment security dealers such as brokers and investors in the form of government bondholders, ordinary shareholders, preference shareholders, debenture holders, and ordinary mutual fund until holders help to develop healthy capital market.(The Ninth plan:30)

Solving the problems of underdeveloped economic market and enlistment of economic growth of nation is widely depended on corporate success of its economic infrastructure. Manufacturing industries, financial institutions and capital markets are major components of this economic infrastructure. The corporate success or positive financial performance of every industry and every firm is almost necessary for overall development of economic market. This positive financial performance brings satisfaction to the investors, because every corporate organization is made up of public investment, which helps to increase the value of origination. The increments in the value of a corporate firm means, it makes investors to feel safer and the investment less risky. The corporate success and increased value of investment helps to increase the stock price because there is possibility to give sufficient dividend or investment .The offers and opportunity for investors to invest in the long-term risk again.

Strategic development of economic markets requires a steady supply of capital funds for productive investment. For the mobilization of unbeatable resources, capital market is an important intermediary through which effectives bridging of the deficit

units and surplus units can be insured. Capital market institution is engaged in mobilization of saving from surplus units and supply funds into the deficit units for productive investment. In this respects, 'Capital market plays a crucial role in mobilizing a constant flow of saving and channeling these financial resources for expanding productive capacity in the countries.' Capital market can be decomposed into securities market. One of the mechanisms of financing the industries from the external sources in modern time is the capital market through which the industrial enterprises with corporate organization collect the funds by issuing various forms of dividend like; those that reduce the assets of a corporation, such as cash dividend, those that neither decrease assets nor increase liabilities, such as stock dividend.

The stock market also imparts liquidity to the security holders. This offers an opportunity for investors to invest in the long-term venture, while market also enables them to convert their securities into liquid cash before the maturity of the projects. Furthermore they can invest their current income thereby achieve their time preference of consumption. The liquid stock market also promotes the primary issuances of share, because the investors are largely interested to participate in the issuances of share market for which they can back the funds easily.

A person buying a stock invests on faith, in the hope of receiving dividends. The common stock certificate makes no mention of ever repaying the principal or purchase price. Therefore, playing on stock is purely estimation like request the cards. Even the big players of stock market careful that to win in the game is a matter of chance.

In the countries like Nepal, where securities markets are in infancy stage and are handled by few players, including: promoters of company, markets makes and VIP shareholders, to pay a days prevailing price for a stock investment is sometimes

desperate. It is equally desperate to make investment decision relying on financial of companies.

There are some companies which were earning profits and were paying dividends during initial stage but from the day it raised money from public they continuously been showing operational losses even though increase was noticed in production and sales. This gave rise to the suspicion that some people may simply be trying to raise funds by manipulating performance data or intending to manipulate public funds. This requires immediate attention of Securities Board but no action was noticed so far.

Still, one has to forecast something to pay a roughly reasonable price for stocks. One such calculation is about the future dividends.

People just tend to capture shares of any company because they are forced to do so by the family, relative, and friends, other type of people do so just because of the goodwill of the company. If the company is going to open the branches on other districts, then also common people seem to be interested in capturing the shares. If the management and co-operation of the staff and mangers is highly effective, then also people want to invest in that type of company. So these non financing terms force them to buy the shares without knowing the actual financial position of that company. Each and every company that came in the market became successful in beating the capital from the market and the issue closed within the minimum predetermined time of 7 days with huge over subscribed to the extent of 19 times and became simply overpowering to the company concerned as well as the issue managers, which lead to delay in allotment of shares, refunding and distribution of share certificates to the allotters. But the public response varies from one business sector to another business sector. And, recently, companies have been facing problems in issuing their shares to the general public. Since the first quarter of 1995, the number of issuers and investing community remained limited in the absence of equity culture due to strong equation in

the minds of the average investors that the stock market is showing a downwards trend and is only approximate. The company which issues shares to the general public had predicted higher dividend and earning per share but most of them are failed to deliver. The mismanagement while payment list is open and delay in allotment of shares if oversubscribed tends to undermine investors confidence and thereby hinder the future growth of primary market .In the same way, other non-financial factors like strike in the company, lack of co-ordination, misbehave by the company staff, appointment to the non-experienced and untrained staff etc. can play negative roles on stock pricing of the company.

When people buy common stock, they give up current consumption in the hope of attaining increased future consumptions. They expect to collect dividends and eventually sell the stock at a profit. But the future earning as well as the life time stock prices do uncertain .Not know what lies ahead; investors are unable to plan life time consumption patterns with certainly, because the return from investment and timing of those returns are uncertain, they complete for the lack of certainty, by requiring an expected return sufficiently high to offset it.

Rational investors should buy a stock at a price at least not reducing his or her current net worth. For this some reasoning must be made that what maximum price for a stock of the considered company ought to be paid. What values a stock deserves could be paid for it. Value is an amount equivalent to the resent worth of future assets. For example, what could be expected from a stock? Two things:

  1- Dividend in future, but only if the company makes profits.
  2- Price from stock, which can be sold at some future date.

Then what relationship can be drawn between the dividends and stock prices? Just see the effects of bonus shares which is also a type of dividend; stock dividend.

There are different opinions of thought as regard to the effects of bonus issue. Some regard bonus issue to lease to increase, the market value of the firm by increasing the equity capital base without affecting the diluting of shares ownership. Others regard issues of bonus shares only conserve the cash consistent with the corporate firms motive to finance its growth and expansion from internal source there by enhancing the future market value. Generally bonus share issue does not change the ownership pattern but it affects the book value per share and the earning per share of the increased number of share as a result of bonus shares. (Shrestha, 1999: 35-38)

1.2 CAPITAL MARKET IN NEPAL

Capital market is known as long –term financial market and long-term funds of the firms are collected from the capital market. Hence, capital market is a long-term credit market. The meaning of capital market can be made clear from the following definition:

According to Peter S. Rose "The capital market is designed to finance long-term investments, financial instrument traded in the capital market have original maturities of more than one year ".

Capital is the lifeblood of any organization, without which it is covering to conduct the business activities. Capital structure is the combination or composition of long-term debt, preferred stock and common stock. Optimum capital structures decrease the cost of capital and increase the earning per share. A conscious financial analyst ever uses the low capital gearing. First business finance is that business activity, which is concerned with achievement and conservation of capital funds in meeting the financial needs of capital funds and overall objectives of business enterprises. This is the thinking of company's point of view.

As we know that invertors are the real owner of Joint stock company and they buys the share to established the company .In return Security board on Nepal (SEBON) protect the interest of the investors by regulating the securities market. For that, SEBON was established on 26th May 1993 under the provision of Security Exchange Act, 1993. Besides the regulatory role, it is also responsible for the development of security market of the country. (www.nepalstock.com.np)

His Majesty's Government, under a programmed initiated to reform capital markets, converted securities Exchange centre into Nepal stock Exchange in1993.Nepal stock exchange, in short NEPSE is a non–profit organization, operating under securities Exchange Act, 1983. (NEPSE 1, 2002\03:14)

In this respect, capital market plays a vital role in mobilization of constant flow of saving and changing these financial resources for expanding productive capacity in the country .Stock market is the medium through which corporate sector mobilize funds to finance the productive projects by issuing the shares in the market. Similarly the stock market provides the best investment opportunity to investor.

The organized stock is recent phenomenon in Nepal. The history of security market begins with the flotation of shares by Biratnagar just mill ltd. And Nepal bank ltd. In 1937. Moreover the introduction of the act in1951, the first issue of government bond in 1964 and the establishment of securities exchange center in 1976 were other significant development relating to the security market. Securities exchange center was establisher in 1976 with the objectives of facilitating and promoting the growth of capital market. Before conversion into a stock exchange it was the only capital market institution under taking the job of brokering, underwriting, managing the public issues, market making for government bonds and other financial services. (NEPSE, 2002\03: 10)

The basic objectives of NEPSE is to impart free marketability and liquidity of government bonds and corporate securities by facilitating transaction in its trading floor through market intermediaries, such as market makers and brokers. (NEPSE 1, 2002\03:14)

In the broad sense, capital market can be classified into two markets. First one is securities market and second one is non-securities market. Under the security market, share debenture bonds and stock are traded by the government and reputed organization whereas under non-security market financial institution market there are mainly two type of market, i.e.

        i- Primary Capital market

        ii – Secondary Capital market.

i-Primary Capital market : A Primary Capital market denoted the market for the original sale of securities by an underwriter to the public. The issuer receives cash may be invested in productive assets or retirement of debt.

A Primary market is the place where corporation and government issue new securities. All securities, where in money or capital markets, are initially issued in the primary market. This is the only market in which the company or government is directly involves in the transaction and receive direct benefits from an issue that company actually receives the proceeds from the sale of securities. Once the securities begin to trade among individuals, businesses, governments, or financial institutions, savers and investors, they become a part of the secondary market. (Bhattarai, 2007:11)

ii-Secondary Capital market : Markets, in which the exiting , already outstanding , securities are traded among investors are called secondary markets. Or we can say that after securities have been purchased from the primary market, they can be traded in the secondary markets. The secondary market comprises the organized security

exchange and a specialists facilities the transaction. The majority of all capital market transaction occurs in the secondary markets. To know more about this lets see this example:-If Mr. A decided to buy 1000 shares of Nabil Bank Limited, this would occur in the secondary market.

According to NEPSE annual report 2004\05 there are 135 different companies have listed there securities to make them eligible for trading of stock.

TABLE- 1.1

Summary Statistics of Secondary Market in Nepal

Fiscal Year	NEPSE Index	No. of listed Companies	No. of Traded Companies	Market Day per year
1997\98	163.35	101	68	237
1998\99	216.92	107	69	231
1999\2000	369.70	110	69	240
2000\01	348.43	115	67	231
2001\02	227.54	96	69	246
2002\03	204.86	108	80	238
2003\04	222.04	114	92	243
2004\05	286.67	125	102	236
2005\06	286.67	134	102	236
2006\07	683.95	135	116	232

Source: NEPSE index annual report 2006/2007

1.2 TRADING OF STOCK

INTRODUCTION OF NEPSE

In Nepalese practice, the trading of Securities viz. government bonds and listed corporate securities is done through Nepal Stock Exchange Limited (NEPSE), which

is a non-profit organization, operating under Securities Exchange Act, 1983. The basic objectives of NEPSE is to impart free marketability to the government bonds and corporate securities by facilitating transaction it its trading floor through market mediators, such as brokers, market makers, etc. NEPSE opened it's trading on 13th Jan. 1994 through licensed members. His majesty the Government, Nepal Rastra Bank, Nepal Industrial Development Corporation and licensed the Shareholder of the NEPSE (NEPSE, 2002/03:1)

*BOARD OF DIRECTORS OF NEPSE

According to securities exchange Act 1983, the board of directors of NEPSE consists of 9 directors. Six directors are nominated by HMG, two from the licensed member and the last one, generally manager of the NEPSE.

TABLE -1.2

Board of Directors NEPSE

S.N.	Name of the organization	No. of director	Post
1	Ministry of finance	1	Chairman
2	Securities board	2	Director
3	Nepal Rastra Bank	2	Director
4	Nepal Industrial Development Corporation	1	Director
5	Licensed member	2	Director
6	General manager	1	Director

Source: NEPSE index annual report 2004/2005

*TRADING SYSTEM OF NEPSE

In Nepal NEPSE has adopted an open out-cry system. It means securities are conducted on the open action principle on trading floor. The buying broker with the highest offer will post the price and his code number on the buying columns, while selling brokers with the lowest offer will post price and code number on the selling

column on the quotation board, The market quotes their offer and offer price match contracts between the buying and the selling brokers or between the brokers and market makers that are concluded on their floor. (www.nepalstock.com.np)

*TRADING DAYS AND HOURS OF NEPSE

NEPSE has fixed the trading days and hours which the brokers are allowed to enter the floor to make the transaction.

TABLE-1.3
Trading days and hours of NEPSE

Types of trading	Days	Trading Time
Regular trading	Sunday to Thursday	11 a.m.- 1 pm
Odd lit trading	Monday & Friday	2-3 Monday, 11-12 Friday

(Sources: NEPSE Index annual report 2005/2006)

*CAPITAL STRUCTURE OF NEPSE

The authorized and issued capital of the exchange is Rs.50 million. Of this Rs. 30.91 million is subscribed by HMG/N, Nepal Rastra Bank, Nepal Industrial Development Corporation and licensed members.

TABLE- 1.4
Capital Structure of NEPSE

S.N.	Share holders	Rs.(million)	Percentage
1	HMG	20.48	58.67
2	NRB	12.08	34.60
3	NIDC	2.14	6.13
4	MEMBER	0.21	0.60
Total		**34.91**	**100**

Source: NEPSE index annual report 2005/2006

*LISTING FEES OF NEPSE

The listing fees and the annual fees to be paid by the listed company are based on the Capital of the company. In order to enlist the securities the companies have to submit the application, above –mentioned documents and the listing and annual fees. The fees are based on the issued and paid up capital of the company. The table given below shows the listing and annual fees in case of common stocks.

TABLE-1.5
Listing Fee and Annual Fee for Listed companies

Paid- up Capital	Listing Fee(Rs.)	Annual Fee (Rs.)
Up to Rs. 10 millions	0.20 % or minimum Rs.15,000 /-	Rs. 15000 /-
Above Rs 10 million to Rs.50 millions	0.15 % or minimum Rs.45,000 /-	Rs. 25,000 /-
Above Rs.50 million to Rs.100 millions	0.10 % or minimum Rs.75,000 /-	Rs. 35,000 /-
Above Rs. 100 million	0.075 %or minimum Rs.1,00,000/-	Rs. 50,000 /-

Source: - NEPSE index annual report 2005/06

NEPSE has adopted an Open-Out-Cry system for the trading purpose. It means transactions of Securities are conducted on the open public sale principle on the trading floor. The buying broker with the highest tender will post the price and his code number on the buying column, while the selling broker with the lowest offer will post the price and code number on the selling column on the quotation board. The market quotes their offer and offer price on their own board before the floor starts. Once the tender and offer price match, contracts between the buying and selling brokers or between the brokers and market makers are concluded on the floor.

1.4 PROCESS OF TRADING OF STOCKS IN NEPAL

Figure-1.1

Process of   Trading of Stock in

| INVESTOR | | SELLERS |

BROKERS

Reduce the PRICE

Increase the PRICE

Within 7 days

Secondary Exchange Board

NIDC

CONCERNED COMPANY
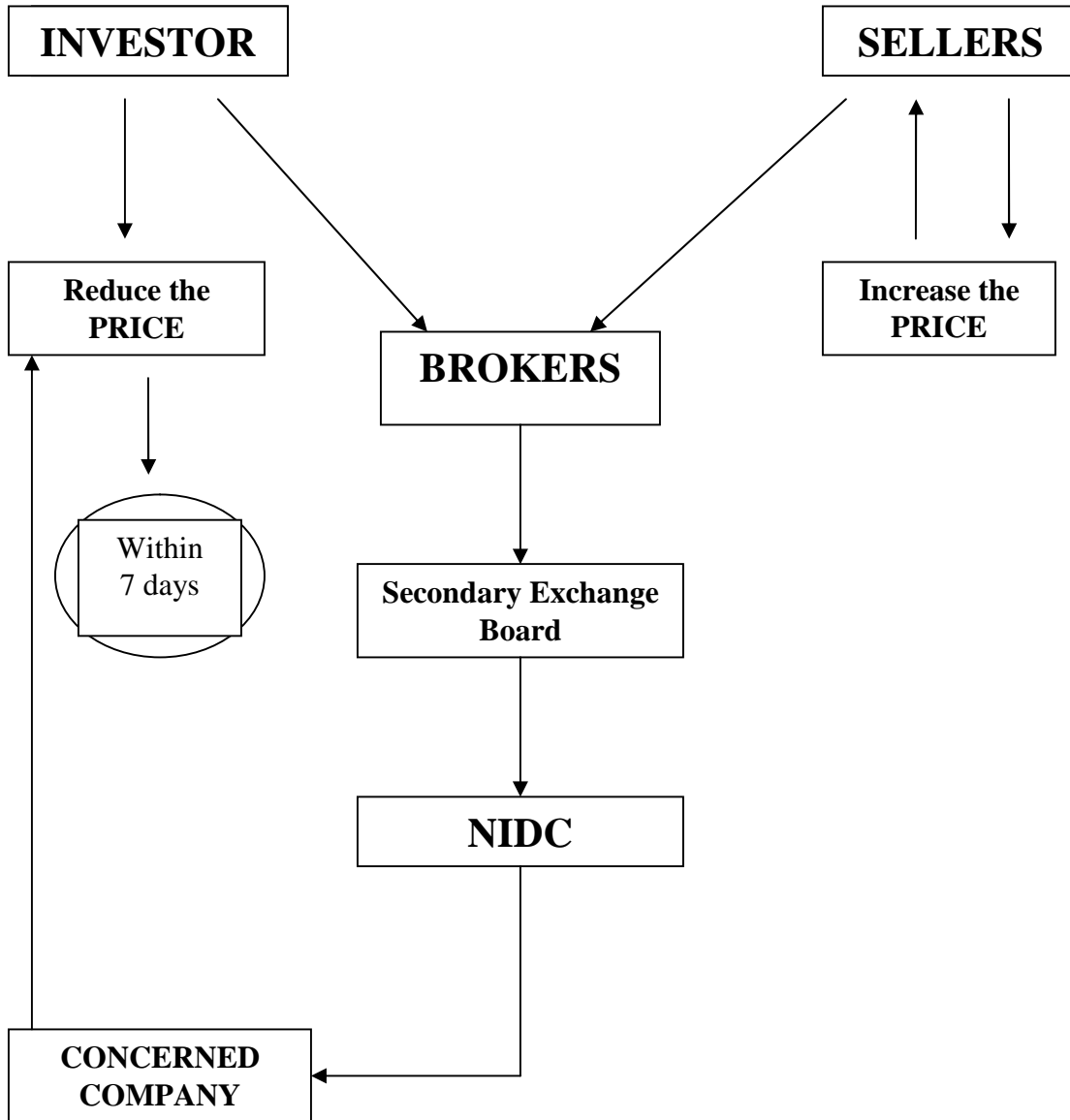
1.5 MARKET INDEX CALCULATION

Index as an indicator should indicate the real movement of the market. Indexes are constructed differently but every index should be an unbiased indication.

"Market index is a single figure obtained from averaging the price of selected securities, which reflects the overall investment performance of a particular market for financial assets for a particular point of time". (Françoise, 1986: 521)

Index can be constructed in various ways. Such as:

i) **Price weight:** It is calculated by summing the price of stocks that are included in the index, and dividing this sum by a constant.

ii) **Value weight:** It is calculated by multiplying price of the stock in the index and their respecting numbers of shares outstanding and then dividing the corresponding figure for the day the index was started.

iii) **Equal weight:** This is computed daily by multiplying the level of index on the previous day to the arithmetic mean of the daily price relative of the different individual stock which is included in the construction of the index.

1.6 RIGHTS OF THE STOCKHOLDER

Individuals who buy the stock become the owner of a corporation and as Stockholders. The corporation generally issues more than one type of stock, usually called classes of stock. They must clearly define the rights and privilege that belongs to each class. Following are the some basic rights of the Stockholder:-

❖ The rights to shares in the corporation earning. The owner of a share of stock

❖ has the right to share proportionately in the corporate earning that being

❖ distributed as a dividend to all holders of this class of stock.

❖ The right to vote, specially the right to elect by voting the member of the board of directors who make the policy.

❖ The right to transfer ownership. Stockholders have right to sell of their shares of Stock in any manner they want.

❖ The right to purchase any additional shares of stock. (Hampton, 1996: P 29-33)

Financial performance means the financial activities of the company directed towards achieving its value maximizing objectives .For better financial performance, effectives and efficient decision are necessary and those better financial activities contribute to excellent financial performance, which in turn results into growth of the origination. Financial activities involve decision regarding:

❖ Forecasting & planning of financial requirements.

❖ Investment decision.

❖ Financial decision.

Rational decision enhance financial performance of the company .The outcome is reflected in ROE, ROA, EPS, DPS and growth. More over, better performance reduces the associated risk, which aids to achieve high rating.

The stock market is the part and package of corporate development. Corporation business is a business organization established under Company Act consisting of billion of Rupees of smaller stockholders and holder of debt certificate of the small value, collected through the issue of shares and debentures.

1.8 STATEMENT OF THE PROBLEMS

Financial performance means the financial activities of the company directed towards achieving its value maximizing objectives. For better financial performance, effectives and efficient decision are necessary and those better financial activities contribute to excellent financial performance, which in turn results into growth of the organization. Financial activities involve decision regarding:

-Forecasting & planning of financial requirements

-Investment decision

-Financial decision

Rational decisions enhance financial performance of the company. The outcome is reflected in ROE, ROA, EPS, DPS and growth. Moreover, better performance reduces the associated risk, which aids to achieve high rating.

Theories say that the stock price in markets is guided by the intrinsic value which is calculated by the aid of company result of financial performance such as dividend (D), required rate of returns (K) and growth (g). In an efficient market stock price is used to be equal to the intrinsic value since facts and figures of the company. Therefore we can say that market price and financial performance positively correlated. However the degree of correlation depends upon the efficiency of the market in an efficient stock market like NYSE, AMEX, and Correlation between two variables is near to unity whereas in an inefficient market like NEPSE, correlation may not be close to +1. The relationship between stock price in market and financial performance can be presented more clearly with the help of following figure:

Figure 1.1

```
                    ┌──────────────────────────────────────────────┐
                    │ Surrounding Environment (Non-financial Factors) │
                    └──────────────────────────────────────────────┘
                          │                              │
                          ▼                              ▼
        ┌──────────────┐      ┌──────────────┐      ┌──────────────┐
        │  Bid Price   │ ───▶ │ Market stock │ ◀─── │  Quote price │
        └──────────────┘      │    price     │      └──────────────┘
               ▲              └──────────────┘             ▲
        ┌──────────────┐                           ┌──────────────┐
        │ Intrinsic    │                           │ Intrinsic    │
        │ Value        │                           │ Value        │
        │ Vo=D/(K-g)   │                           └──────────────┘
        └──────────────┘                                  ▲
               ▲                                          │
        ┌──────────────────────────────────────────────────────┐
        │                     Company                           │
        │                              Outcomes                 │
        │   ❖ Fin Performances          EPS                     │
        │   ❖ Forecasting and Planning  DPS                     │
        │   ❖ Investment Decision       ROE                     │
        │   ❖ Financing                 ROA                     │
        │   ❖ Decision                  Growth(g)               │
        │                               Rating (K)              │
        └──────────────────────────────────────────────────────┘
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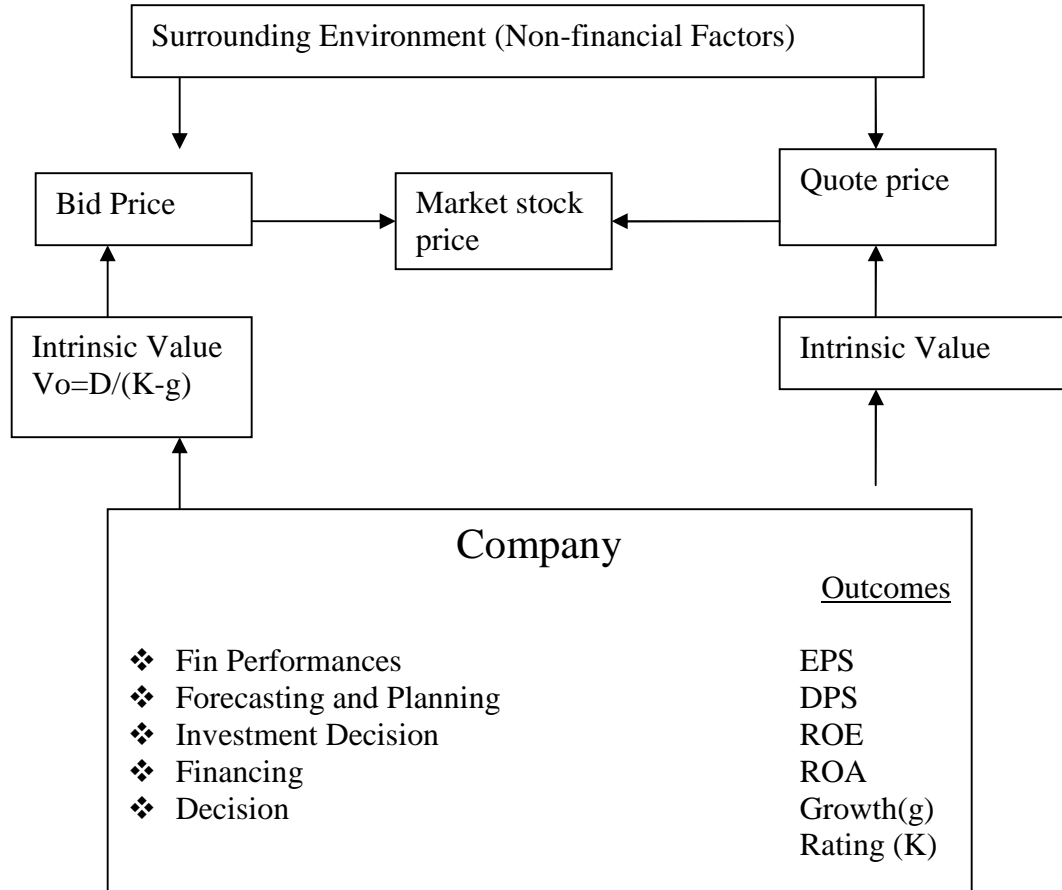
Relationship between financial performance and stock Price

Though these stated factors are the main causes of change in stock price, sometimes misleading and inadequate information can also influence the price resembling inefficient market situation for the short period. However, the situation will overcome through the capital gain or capital loss.

The theory of Security Market Line has also assumed that the intrinsic value and market price of stock is equal in the equilibrium stage. This can be shown in the SML graph.

Figure 1.2

Security Market Line
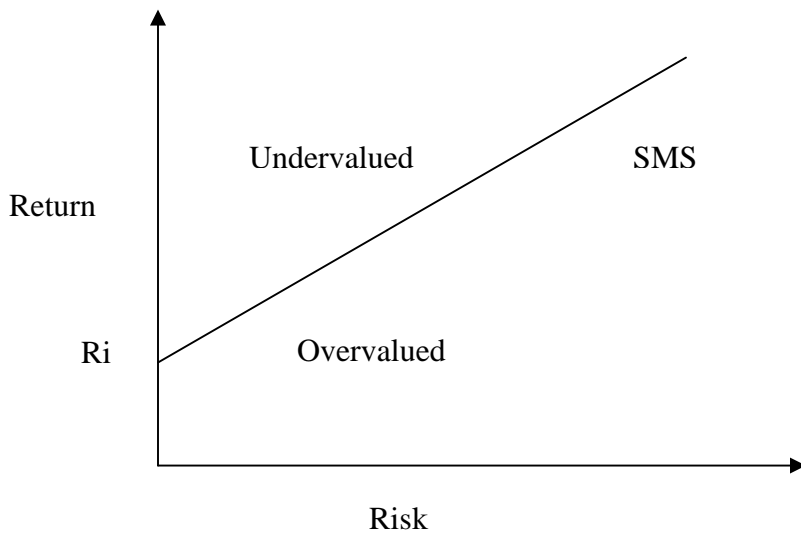
It assumes that all stocks remain in SML and if the case is not so they strive toward this line. If the required rate of return and expected rate of return are not equal then the intrinsic value and market value of stock will not be equal. Therefore, the location of expected rate of return above/under the SML is due to the stock being under/over valued. The over/under valued stock cause the onset of capital gain and capital loss, which remove the disequilibrium stage.

Whatever the theory has depicted is not applicable in Nepalese context. In Nepal, most of the investors do not know to interpret the information and so they cannot come to a rational decision regarding transaction of the stock. Therefore, the stock

price in Nepal is determined more by other factors rather than financial performance of the concerned company.

In this regard, we can take the case of Nepal Industrial and Commercial Bank as a latest example. The banking company issued shares at par and has not lasted six months but the share price has already risen to more than 500%. How is it possible in an efficient market?

A corporate firm overcomes the limitations of unlimited liabilities and limited capital as in the sole proprietorship and partnership firms. A corporate firm is a business entity established under Company Act consisting of billions of rupees of capital divided into millions of ownership and debt certificates of the small denomination, and the ownership certificates of common stock are compulsory to begin a corporate firm

These common stocks are firstly marketed by the capital raising companies through primary capital market. A common stock does not guarantee for annual return, nor it ensure for the return of price of stock.

Therefore, it needs a faith of investors upon stock certificates. But, how to rely on these stocks, what price could be paid for a stock? Greater the faith of investors in stock, higher will be a chance of emerging new companies in the country and rapid will be the economic growth.
Obviously, an average investor will simply plan the price to be paid for a stock based on;

1. Expected annual return in terms of dividends.
2. Expected worth of the stock in future time.

Both of these will be sure to be extent of financial performance of the company.

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But what could be said about the performances of Nepalese corporate firms: - About their financial performances, about stock prices? What is the correlation between the profitability indicators and their prices? What is the correlation between the DPS and their stock prices? What is the correlation between the net worth per share and their stock prices? Do the investors at least see the real financial performances while paying price for a stock? If not, what other factors might influence the prices of stock? What is the paradigm shift in this regard?

These are the burning issues regarding stock price determination which encouraged conducting the research study.

1.9 THEORETICAL FRAMEWORK SUMMARY

Figure-1.1

Financial Performance and Common Stock Pricing
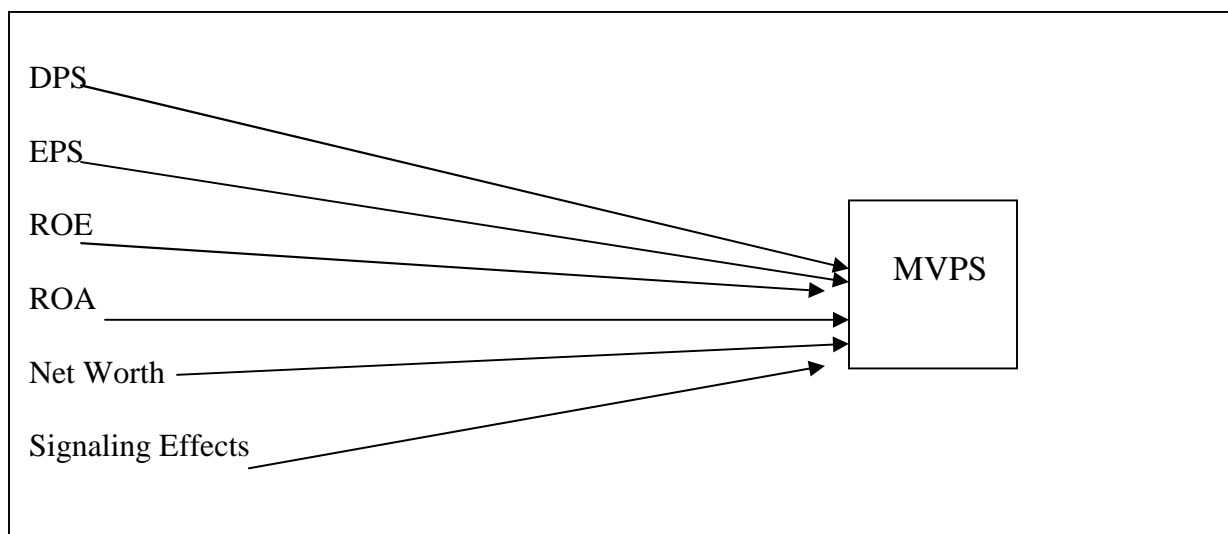
The model above summarizes that the market value per share is the accumulated effect of the changes in the financial performance indicators like DPS, EPS, ROE, ROA, Net Worth and finally Signaling Effects. In the more perfect market where the

system runs on the basis of demand and supply of the shares of the companies, the above mentioned variables have significant positive impact on the price of determination.

Talking about the profitability ratios like ROA, ROE and EPS, these ratios are highly where the company's net profit after tax is higher. ROA is higher when higher net profit can be earned with the same level of assets of same level of net profit can be earned with low employment of assets. Whatever be the cases, the increased profitability can enhance shareholders welfare by two ways; either through cash dividend or through capital gain. If the company has no profit balance in the balance sheet, it can not distribute the cash dividend as positive profit balance is the foremost condition for the dividend to be distributed. In that condition the shareholders can not be benefited by the immediate cash benefit. The next way they can be benefited is through capital gain. Capital gain/loss is the difference between the selling price and the purchase price of the share. The higher the price is over the investment, the more capital gain will be there. But the price to be higher, according to the stock price theories, there should have sufficient retained earning in the company, which further increases the size of net worth in the balance sheet. To have positive retained earning also, there should be positive profit balance in any particular year. In the perfect market condition, the increase in retained earning contributes one by one to the stock price. But in practice, it is determined by so many other factors other than the profitability.

In addition to the financial performances of the company, signaling effects do also have a great deal of effect on price determination. According to economics theory, the price is determined with the interaction of demand and supply of particular thing. Whatever be the quality of your product, if it does not have a good demand in the market, the price should have to come down to increase the existing demand. On the other hand, the demand is not only based on the quality of inherent other features. It

largely depends on the perception of people towards it. And perceptions are formed in so many ways other than the real attributes of the product. One of the main determinants is the market whim or rumors of signaling effect, which has a great impact on the demand formulation, and later on, on the price fixation.

1.11 OBJECTIVES OF THE STUDY

The main objective of the study is to examine the impact of financial performances on common stock pricing. The basic objective can be further elaborated as;

1. To study and examine the relation of financial performances and stock prices.
2. To examine the relation of dividends and stock price.
3. To examine and study the impact of the signaling effect & factors on stock price with the
   help of NEPSE index.
4. To point out suggestion to the stakeholders of stock market.
5. To analyze the trend of the Nepalese stock market.
6. To examine the stock market situation in Nepal.

1.12 LIMITATION OF THE STUDY

1. The study is based on 8 sample firms out of 135 firms sized population.
2. Financial performances represent profitability ratios and net worth per share.
3. Only ten year's observations covering from FY 1997/98 to 2006/07 or 2053/054 to 2063/064 are analyzed.
4. Generally report is based on the data of NEPSE office files and annual report of SEBON.
5. The study fully depends on secondary sources of data as well as primary data (Questionnaire and interviews)

6. The dependent variable is only the market value per share of common stock.

1.13 SIGNIFACTIONOF THE STUDY

The stock market is the part and package of corporate development. Corporation business is a business organization established under Company Act consisting of billion of Rupees of smaller stockholders and holder of debt certificate of the small value, collected through the issue of shares and debentures.

Firstly, the study is useful to the people who are interested to know about volume of stock traded, number of listed companies in NEPSE and also about the indicators trend of the stock market and it provides some indicators based on facts to the potential investors of corporate securities. Secondly, the study is assumed to be helpful to the financial managers of corporate firms to make financing and dividend decision. Thirdly, the analyses and finding will be very useful to university student of finance to know the practice in Nepal. What they study in books? Last but most importantly, the study will provide a literature to future researcher of this area and those people who are likely to be interested with rising share market in Nepal.

1.13 ORGANIZATION OF THE STUDY

This thesis has been divided into five chapters. They are:

Chapter I: Introduction
Chapter II: Review of Literature
Chapter III: Methodology
Chapter IV: Presentation and Analysis of Data
Chapter V: Summary of Findings, Conclusion and Recommendations

The first chapter deals with introduction covers all general background of capital market in Nepal, significance of the study, statement of the problem, theoretical framework summary chart, hypothesis, objectives, scope and the limitations of the study.

The second chapter focuses on review of literature. It contains the theoretical framework, and past research literature on the stock market behavior and its performance. This chapter is the basic guideline to this research work as the gap in the research has been identified in this step.

The third chapter deals and explains the research methodology adapted in the research study for data collection, interpretation and analysis. It consists of research design, sources of data, data collection procedure, population and sampling, research variables, and data processing procedure.

The fourth chapter which is most important deals with presentation, analysis, and interpretation of data. The main body of presentation includes the financial performances of selected 24 firms collected from the SEBON and NEPSE Records. The Primary data collected through questionnaires and interview method. In addition to this, it consists of testing of hypothesis, analysis of questionnaires, and analysis of open-end opinions and major findings of the research.

The final chapter covers the summary, conclusions and recommendations of the study that flows from the study offers suggestion for further important and conclusion of the study.

 Bibliography and appendix will be attached at the end of the study.

CHAPTER - II

REVIEW OF LITERATURE

This chapter highlights on the literature that is available in this topic. Especially the basic concern and aims of the study is to primarily focus on the relationship between stock price and financial performance between stock price and non-financial factors of listed companies in Nepalese Stock Exchange. But for simplicity, this chapter is divided into four parts; Theoretical framework of the study, and literature review relating to Nepalese stock market, conclusion of literature review, and research gap analysis.

2.1 THEORETICAL FRAMEWORK

In this Chapter, Some of the basic literature on the stock price behavior is reviewed. It includes literature regarding theories on the topic and review of the observed evidences of previous studies done. As for concerned few books, articles and research studies have been reviewed on this subject. The purpose of the literature review is to find out what research studies have been conducted in one's selected for developing a research design. Thus the previous studies cannot be unobserved because they provide the foundation to the present study.

2.1.1 CONCEPTUAL FRAMEWORK

Before getting into the core subject matter of stock price behavior of financial institution and commercial banks it is imperative to be acquainted with the general

concepts of the stock, share and other related matter and the general profiles of the companies. To know it better the following sub section will be examining the conceptual matters of the stock price and give an introduction of the companies under the study.

2.1.2 COMMON STOCK:

Common stock represents equity, or an ownership interest in the corporation. The ownership capital generally referred equity, when issued to the public for subscription in the form of divisible units of equal value is termed as common stock. The holders of common stocks, called shareholders or shareholders are the legal owners of a company. Unlike debt, once a corporation issues common stock, generally it has no compulsion to redeem the stock by purchasing it from the investor. These stocks are subject to issue and trading in primary and secondary market. The original issues takes place in primary market where it is generally issued with its face value and once the stock is listed in the stock exchange, the trading starts to take place and this particular market is called secondary market.

Stock is the ownership interest in a corporation. Each share of stock is a fraction of the rights that belongs to the owners of a business. A stock certificate is evidence of that fractional ownership; it is tangible evidence, a certificate of title, to part of the company. (Henderson, Trennepohl and Wert, 1984:98)

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 stockholder's return on investment is less certain than the return to a lender or to a preferred stockholder. On the other hand, the return to a common stockholder is not bounded on the upside as are returns to the others. A share of 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 should not issue stock at a price less than par value, because stockholders who bought stock for less than par value would be liable to creditors for the difference between the below par price they paid and the par value. (Van Horne, 1997:124)

Common Stocks are generally 'full paid and non-assessable', meaning that common stockholders may lose their initial investment, but not more.

2.1.3   COMMON STOCK VALUES

Par Value:

Par value is stated price in common stock certificates. The par value of the common stocks is the price randomly printed (face value) in each stocks certificate. Usually, the par value is being determined less than the present market value of the stocks. In modern times, some stocks are issued without par value. In the beginning, the par value is regarded to represent per share initial investment of the owners in the firm. In present time, the real importance of the par value is that the stockholder should not be given any dividend which reduces the worth per share of the company than the par value of the stock. In addition, if the firm is dissolved, the common stockholders are responsible toward the firm's creditors for the difference between par value and membership fee of the stock.

Book Value:

Book value is an accounting concept. The firm's book value of equity includes common stock, share premium and retained earning. It represents owners contribution to the firm, hence is known as the net worth of a firm. Book value is simply the amount per share of common stock to be received if all of the firm's assets are sold for their correct book value and all liabilities are paid. Book value per share is computed by dividing total book value by number of shares outstanding.

Market Value:

Market value of a security is the current price at which the stock is being traded in the market. This is the value, which is determined by the demand and supply factors and reflects the negotiation between investor and seller for the transaction. The market value is influenced by many factors like economic and industry conditions, expected earnings and dividend, and other signaling effects. Market value per share is expected to be higher than the book value and liquidation value per share for profitable and growing firms.

2.1.4 CLASSIFICATION OF COMMON STOCKS

Blue chip stock:
Stocks of very large, well established and of corporations have been dominant positions; strong balance sheets and size are called blue chip stocks, e.g., stocks of IBM, Micro-soft, American Express Company, Citicorp, etc.

Growth Stocks:
Stocks which price grows with the growth of corporation's earnings and dividends with a comparatively higher growth than the average price appreciation.

Income Stocks:
Stocks having stable cash dividends record are often called as income stocks.

Cyclical and Defensive stocks:
Stocks, which are influenced economic and industrial cycles, are called cyclical stocks whereas stocks, which are less susceptible to economic cycles, are called defensive stocks.

Speculative Stocks:

Stocks, which are viewed by investors with some speculative motives, are called speculative stocks.

Small stocks:

Stocks depending on the capitalization norms are generally known as small stocks.

Treasury Stocks:

If a corporation decides to buy back its own stock, the acquired stocks are called treasury stocks.

In Nepal, growth stocks, and speculative stocks are generally seen in practice and are common in the security market.

2.1.5 CHARACTERISTICS OF COMMON STOCKS & RIGHTS AND PRIVILEGES OF COMMON STOCKHOLDERS

The characteristics of common stocks are well studied in relation to the rights and privileges enjoyed by the common shareholders as owners. As we know that the common stockholders are the real owners of the company, and as such they have certain rights and privileges. These rights and privileges of common stockholders are established by the term of the charter and the laws of the state in which the company is registered. Here are some characteristics and rights of common stocks:-

Control of the Firm

Control in the context of a company means the power to determine the policies. The common stockholders have voting rights to elect the board of directors, which in turn, elects the management committee. The stockholders also have other voting rights on issues which have substantial effect on corporations, on issues which bring about

change in their ownership percentage, any contract or financial arrangement. In a small firm, the largest stockholders typically hold the position of president or Chairperson of the board of directors.

Preemptive right

A provision that gives the existing shareholder right to purchase new share at subscribed price on pro-rate basic. Common stockholders also have preemptive right. In this right, the stockholders are the first party to purchase any of new issued shares so that they would not lose their voting right, control and there is protection in the value of the shares being diluted. This right is substantiated by the use of rights offerings.

Right to Inspect the Firm's Book

A stockholder has the right to obtain information from management regarding the firms operation. But this right is not unlimited. It can be exercised to the extent that it does not have negative impact in the competitive position of the firm. This limitation is imposed in order to protect other stockholders interest.

Right to Transfer Share

A shareholder can sell his or her shares without taking permission from the management or other shareholders. The company continues to exist regardless of any changes in the ownership. In Nepal, share of listed company in NEPSE must be transferred through a stock broker. When ownership of the shares is transferred, the new shareholders are entitled to receive dividend on the share and has all the right and privileges associated with stock ownership.

Right to income and distribution of other shares:

As a matter of fact, shareholders have no right to receive income distribution from the corporation. As practice prevails, BOD declares cash dividends if enough financial resources are available. The dividends can be cash dividends, stock dividends, property dividends etc.

Quotations:

Given below is the quotation for a common stock taken from the famous wall street journal issued in the USA.

Hi	LO	Stock	Sym.	div	%	PE	100s	Hi	Lo	Close	Chg
40	27.25	Corn Weed	CWE	3.00	8.1		8690	37.5	36.53	6.5	− 2.5

The above is an example of question of common stock. It consists of bid and asks price volume and change. The highest price during the 52-weeks, i.e., in a year trading stood at Rs. 27.25. Each stock is assigned a trading symbol, e.g. the trading symbol for Corn Weed is CWE (Sym.) and that for American express Company in the NYSE is AXP. The dividend yield "Yield Div. %" is calculated by dividing the annual cash dividends based on the last quarter, semi annual or annual declaration, by the closing price. The price earning ratio (P/E Ratio) is calculated by dividing the closing price by most recent four quarter earning per share. The trading volume "VO 100s" gives the numbers of shares traded for the day. The net change (Net Chg.) indicates the change in the price from the previous day's closing.

The quotation may also include letters or symbols such as "pf" for preferred stock "wt" for warrant "rt" for rights and "vj" a company in bankruptcy or in insolvency or being re-organized under the bankruptcy norms.

2.1.6   INVESTMENT ANALYSIS OF COMMON STOCKS IN BRIEF

There are many mathematical models developed, which are used for the valuation of common stocks. In reality, there are many other non-financial factors (presented in analysis part), which determine the value/price of the stock. Hence, in the real complex and intricate world of security market, these models may not be justifiable; however, it can provide a useful framework for the analysis.

Mathematical valuation model gives a quantitative procedure which implies precision and accuracy but what the real world says that the valuation of common stock is an art rather than only being mathematical analysis and forecasting. Models are just tools for making decisions but not as a decision making in them.

What theory says is that the value of a common stock is determined by two prime factors, i.e., in future earnings the common stock can provide and the riskiness of the income stream. Hence, the valuation of common stock can be taken as function of income and the risk associated with the income as shown below:

Where, $\boxed{\mathbf{Vn = f \text{ (income, risk)}}}$

Vn= Intrinsic value of the common stock in period n.

Let's suppose an investor would estimate the price in one year, henceforth then, Vn = V1, i.e., Vn is the likely price at which the stock will be sold.

Basically, there are three models of stock valuation, which are based on different assumption of dividend growth and its relationship to the discount rate used to calculate present values. We will name these models as dividend discount model (DDM).

i) <u>Zero growth DDM</u>

$$\boxed{\mathbf{Vo = D/K}}$$

Where,

Vo = Intrinsic Value of stock or value at period t = 0

Dt = DPS in period t.

K = Investor's required rate of return consisting of risk free rate of return

and risk premium.

We can write the module considering the dividend as perpetuity: Vo = D/K

ii) Constant growth DDM

$$Vo = \frac{Do\ (1+g)}{K-g}$$

The above model holds the true under the assumption that the growth rate is less than the investor's required rate of return (g<K).

iii) Super Normal Growth DDM

$$Vo = \frac{Do\ \{(1+g2) + A + B\ (G1-G2)\}}{(K-g2)2}$$

Assumption:

G1>K

G2<K

Other Models:

Price earning model

$$V1 = M1 - E1$$

Where, V1 = Intrinsic value at end of year 1

M1 = Estimate of earnings multiplier or P/E ratio at end of year one.

E1 = Estimate of earnings per share at the end of year one.

2.1.7 INVESTMENT DECISION

After the completion of analysis, it is now time to make decision. The general mode of decision making is to compare the estimated expected return and estimated required holding period return.

Expected return; $E\,(HPR1) = \dfrac{V1 - Po + D1}{Po}$

Where, E (HPR1) = Expected holding period return over one year.

V1 = Value at the end of year 1.

Po = Price at the beginning of the year.

D1 = Dividend paid at the end of year.

Now, the estimated required return as suggested by CAPM

$E\,(RJ) = RF + Bi\,[E\,(Rm) - Rf]$

Where, E (Rj) = Expected required holding period return

Rf = Risk free return

Bi = Beta for the stock

E (Rm) = expected market return

Now the analyst should compare E(HPR) and E(Rj) and if E(HPR)>E(Rj), the analyst should invest for long term and if E(HPR)<E(Rj) should invest for short span.

2.1.8 FINANCIAL PERFORMANCE ANALYSIS

Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account. Financial analysis can be undertaken by management of the firm, or by parties outside the firm viz. owners, creditors, investors, and others. Investors, who have invested their money in the firm's shares, are most concerned about the firms' earnings. They restore more confidence in those firms that show steady growth in earnings. As such, they concentrate on the analysis of the firm's present and future profitability. They are also interested in the firm's financial structure to the extent it influences the firm's earnings ability and risk. (Pandey, 1999:36)

Net profit after tax (NPAT):

It is also called EAT (earning after tax) which is the earning after the obligation of corporate taxes are met.

Earning Per Share (EPS):

EPS are the per share profits after taxes and after preferred stock dividends that are available to stockholders. It can be calculated quarterly or for full year. EPS shows earning made by each share or the after tax and preferred dividend return on each share. Higher the EPS better it is and subsequently higher the stock price is expected.

EPS = Profit after taxes – preferred stock dividends
        No. of shares of common stock outstanding

Dividend per Share (DPS)

The above mentioned (EAT – preferred dividend) which is the earning available to the stockholders may be either retained fully i.e., ploughed back for further expansion or growth purpose in the form of bonus shares or may be partly retained and the rest may be distributed to the stockholders in the form of cash, if enough financial resources is available to the corporation, which is called dividend. This earning available to each share is called dividend per share. Usually all stockholders invest their funds in expectation of this income stream. The dividend may be in the form of cash dividend. Stock dividend, property dividend etc.

$$DPS = \frac{\text{Earning Per Share } (1-b)}{\text{No. of outstanding shares}}$$

Where, b = retention ratio.

Capital Gain

As seen in the stock market price of the shares of the corporation performing excellently is rising at a speedy rate. Lets suppose the market price of ABC bank today is Rs 400.00 and after the year the market price becomes Rs. 500.00 and the difference i.e., Rs 100 is the gain due to the valuation of the stock in the security market, which is termed as capital gain and is calculated as follows:

$$\text{Capital gain} = (P1 - Po)/Po * 100$$

Here, P1 = Rs. 500

Po = Rs. 400

Return on Investment (ROI)

The term investment refers to net assets. The conventional approach of calculating return on investment (ROI) is to divide PAT by investment. Investment represents pool of funds supplied by shareholders and lenders, while PAT represents residue income of shareholders; therefore, it is conceptually unsound to use PAT in the calculation of ROI. Also as discussed, PAT is affected by capital structure. It is, therefore, more appropriate to use following measurement:

ROI = ROA = Operating Profit/ Total Assets * 100

Return on Equity (ROE)

It is the rate of return earned by the equity shareholders of the company who are also the real owners.
ROE = Earning available to equity shareholders/ Shareholder's equity * 100

Price earning Ratio (P/E Ratio)

The reciprocal of the earning yield is called the price-earning ratio.
P/E Ratio = Market value per share / Earning per share

The price earning ratio is widely used by the security analysts to value, the firm's performance as expected by investors. Therefore, P/E ratio can be a yard stick measurement of stock pricing.

Earning Yield

Earning yield shows the return to stockholders as a percentage of current market value per share since the stockholders have to sacrifice their worth for prevailing market price per share, earning yield gives a good reflection of the current profit on stock investment.

Earning Yield = Earning per share / Market value per share * 100

Dividend Yield

Since the company is not legally liable to pay a specified dividend to common stockholders it may vary from company to company and year to year with in a company. The return what the stockholders get on their stock is indeed, the dividend yield.

Dividend Yield = Dividend per share / Market value per share * 100

2.1.9 NEPAL STOCK EXCHANGE (NEPSE)

Securities Exchange Center was established with objectives of facilitating and promoting the growth of capital markets. Before conversion in to Nepal Stock Exchange(NEPSE) it was the only capital markets institution undertaking the job of the brokering, underwriting, managing public issue, market making for government bonds and other financial service. His Majesty's Government under a program initiated to reform capital markets converted Securities Exchange Center in to Nepal Stock Exchange in 1993.

The basic objectives of NEPSE is to impart the free marketability and liquidity to the government and corporate security by facilitating transaction in its trading floor through member , market intermediaries such as broker , market makers etc. After the

restoration of democracy in 1990, the interim government in it short period has initiated banking reformation and has established Citizen Investment Fund. The establishment of NIDC capital market limited is also another major step to improve financial system in Nepal. His majesty's Government as an initiator to reform the capital market, converted Securities Exchange Center into Nepal Stock Exchange Limited (NEPSE). NEPSE is a non-profit organization, operating under securities exchange act 1983. NEPSE commenced its operating on 13th January 1994, with ownership among His Majesty's Government .The Nepal Rastra Bank and NIDC, and its licensed members. The ownership of different member is given below:

Table: 2.1

Shareholders of NEPSE

S.NO.	Shareholders	Investment (%)
1	HMG/N	58.67
2	NRB	34.60
3	NIDC	6.13
4	Other Members	0.60

Source: SEBON Annual Report 2005/06

The main objectives of NEPSE are to upgrade the infrastructure of the securities exchange so that it could handle the increased activity more efficiently.

In Nepal current market size of tradable securities is small; with it associated problems of stock availability and liquidity in order to develop stock market. NEPSE is responsible for the regulatory function under the supervision of Securities Board Nepal (SEBO/N)

The Stock exchange provides an organized market place for the investors to pay and sell securities freely. The market for these securities is an almost perfectly

competitive one because a large number of sellers and buyers participate .In stock exchange, there is active biding and two-way public sale trading takes place. Since the buying and purchasing activities are done through bargaining, the price of securities is determined by the basic laws of supply and demand. The stock exchange provides a public sale market in which member of the stock exchange participate to ensure continuity of the price and liquidity to investors.

2.1.10 SECURITIES BOARD NEPAL (SEBO/N)

Securities Board Nepal was established in May 26, 1993 under the provision of Securities Exchange Act. 1983. Since its establishment SEBO/N has been concentrating its efforts to improve the legal and statutory frameworks which are the bases for the healthy development of the capital market. As a part of its continuous effort to build a sound system, the Securities Exchange Act, 1983 was amended for the second time on Jan 30, 1997. This amendment smooth the way for establishing SEBO/N as an top regulatory body as it widen the horizon of SEBO/N by bringing market intermediaries directly under its authority and also made it compulsory for the corporate bodies to report to SEBO/N annually as well as semi-annually regarding their performance. Although the second modification in the act established direct relationship or SEBO/N with the market intermediaries and the listed companies, supremacy in its authority is yet to be established and clearly recognized.

In order to improve such a situation, SEBO/N focusing on the major areas where improvement is necessary, for that SEBO/N has also drafted a new Security and Exchange Act. Which has required improving inconsistencies observed in the present act and establishes SEBO/N as an apex regulator of the securities market?

General objectives of SEBO/N:

i) To promote and protect the interest of the investors of the investors by regulation the issuance, sale and distribution of securities and purchase, sale or exchange of securities.

ii) To supervise, look after and monitor the activities of the stock exchange and of corporate bodies carrying on securities business.

iii) To render contribution to the development of capital market by making securities transaction fair, healthy, efficient and responsible.

The main functions of SEBO are as follows:

i) To advice HMG on the issues related to development of capital market and the protection of the investors interest.

ii) To approve stock exchange for the operation and oversee them for healthy trading of securities.

iii) To register and regulate market intermediaries involved in the primary issues as well as in the secondary trading of securities.

iv) To regulate public issues of securities including the mutual and trust funds.

v) To monitor and supervise the securities transactions.

vi) To conduct researches and studies along the area of capital market.

vii) To conduct conferences, workshops, seminars and participate in such programs conducted at regional or international level and join the opportunity and exchanges with outside regulators.

2.2 REVIEW OF JOURNAL, ARTICALS , BOOK AND UNPUBLISHED THESIS OF STOCK MAREKT

This section here discusses about the review of international journals, Master's dissertation and Nepalese journals through Central library of TU, the library of SEBON and from different websites related to this thesis.

*<u>**REVIEW OF INTERNATIONAL JOURNALS**</u>

Huang has tested the overreaction hypothesis by examining the <u>Price behavior</u> following daily limit moves. The sample includes all listed firms on the Taiwan Stock exchange for the period 1991-1993. There are significant price reversals following the limit moves for the both the up-limits and the down- limit cases. The price reversals cannot be attributed to the size effects. When the size effects are adjusted for, the price reversals remain significant. ("Journal of Business Finance and Accounting", P-25, April/may 1998)

Abeysekera has examined whether the <u>Behavior of stock price on the Colombo Stock Exchange</u> (CSE) is consistent with the weak from of the Efficient Markets Hypothesis (EMH). Runs, Autocorrelation and Co-integration tests are applied to daily, weekly and monthly CSE index data for the period of January 1991- November 1996. Results of runs, correlation and co-integration tests powerfully reject the serial independence hypothesis, leading to the conclusion that the behavior of stock price in the CSE is not consistent with the weak form of the EMH. ("Journal of Business Finance and Accounting", P-28 March 2001)

Abraham, Seyyed and Alsakran has tested <u>The random walk Behavior and efficiency of the Gulf Stock Markets.</u> Their study renders inaccurate inferences in the presence of infrequent trading. As the observed index in thinly traded markets may

not represent the true underlying index value, there is a systematic bias toward rejecting the efficient market hypothesis. For the three emerging Gulf markets examined in these papers, correction for infrequent trading significantly alters the results of markets efficiency and random walk tests. The Beveridge-Neslon decomposition of index returns is done to estimate the underlying index. ("The Testing the Random walk Behavior and Efficiency of the Gulf Stock Markets", **The Financial Review**, August 2002)

Jan Melecky has considered the model, which describes <u>Dynamic of intrinsic value and actual price of</u> <u>stock in the markets</u>. The model construction is based on characterization market participant's behavior and on relationship between stock market and economical environment. His model respects different behavior of market participants at undervalued and overvalued markets. His aim is to contribute to study of processes, which influence the price dynamics at the stock markets. ("A model of Stock Price Behavior", Preprint Series in Mathematical Analysis, P-44, September 2004)

* <u>REVIEW OF JOURNAL AND ARTICALS IN NEPLAESE CONTEXT</u>

"Capital market is a crucial element in the national economy. Its role in reinvigorating and boosting the economic activities in the country holds significant. The strategic plan released by security board can, to a great extent, energize the investor's dealer's boom and boast soon after the beginning of securities trading through broker's numbers in the stock exchange floor. Though the market started to function quickly boosting the prices of share to an unexpected levels, it would not sustained.

There is and urgent need for proficient development of the markets standard and information dissemination system focusing mainly on corporate financial disclosure practices and transparency, corporate accounting and auditing securities markets regulation and corporate governance. To implement the above, security board has a

great responsibility as to reviewing and developing regulatory standard to make them a relevant with the need of issuers, investors along with promoting efficient capital formation," (Business age, April 1999:15)

"Return from investment in stock is not short run phenomenon". Investors have to learn few things before they make investment on stock. First of all they should know the financial health of that company. For example: if some body wants to invest in investment of banks share, he/she must see its balance sheet or at least paid-up capital, last year net profit, current years anticipated profit and calculate earning per share and price earning ratio. These two numbers would give a fair idea about company's health and then market price would judged through the discount factors based upon one of the sound company's data. Market price is equal to earning per share dividend by discount factor. EPS can derive by dividing total net profit after tax by total number of share and price earning ratio by dividing market price with capital gain and other. (Business age, July 2001:20)

"Share market place plays a fundamental role in channeling economy of an individual and a corporate region. On that account, it is a prolific zone of a country's financial system. In other words, share market is an important component of financial sectors that provides and facilitates an ordinary exchange of long-term economic allegations. The concept of provincial market has also emerged in the stock exchange. If we can't move with the universal expansion we should at least consider the regional components. Establishing Credit Rating Agency (CRA) and Central Depository System (CDS) of securities is another challenge. The ADB has clearly stated in its report that CRA and CDS are essential for the successful operation of the capital market. (The Rising Nepal: Jan 20, 2003)

One should analyze and develop varies alternatives to anticipate the best returns before making a decision. That however is not enough. Investors have to use their

own common sense to make a right decision. Considering the risk, investors also need to be gutsy while investment in stock. Starting the journey somehow and loss is part of the game. There may be some monetary loss in the beginning, but investors should not worry as they learn lesson in this way, which can prove to be an asset in the long seem. Start by playing safe and along the journey, be patient and try to develop a proper understanding of market language, investor's psychology and market behavior. (Business age, February 2007; 32)

* REVIEW OF BOOKS OF SROCK MARKET IN NEPAL

This section includes the previous studies and some of the basic literature on the financial performance Indicators and stock market behavior are reviewed. It includes literatures regarding theories on the topic and review of the empirical of previous studies. There are very few independent studies in Finance in Nepalese perspectives. On the core of concept of capital market and determination of the stock prices in stock market, very negligible studies have been made. Such research studies are made on shareholder's democracy and dividend policy etc. Even though these studies have been made many years ago, but these studies give some information about stock market. Some of the available studies are reviewed here.

* In 1993, **Prof. Dr. Radhe Shyam Pradhan** studied the Market behavior in Nepal and concluded that (Pradhan, 1994: 30-40)

- Larger stocks have larger PE ratios of market values of equity and smaller dividends. PE ratios and dividend ratios are more variable for smaller stocks where as market value to book value of equity is more variable for larger stocks.
- Larger stocks also have lower liquidity, higher leverage, lower profitability, lower profitability, lower assets turnover and lower interest coverage but these are more variable for smaller stocks than for larger stocks.

- Smaller dividends, lower profitability, lower assets turnover and lower interest coverage for larger stocks may be attributed to the fact that most of larger stocks are at their initial stage of operation.

- Stocks with larger market value to book values of equity have variable for stocks with larger PE ratios and lower dividend. PE ratios are more variable for stocks with larger market value to book value ratios and dividend ratios are more variable for stocks with smaller market value to book value.

- Stocks with larger market value to book value ratios have lower liquidity, higher leverage, lower earning, lower turnover and lower interest coverage. However, liquidity and leverage are more variables for stocks with larger market value to book value ratios; while earning, assets turnover and interest coverage are more variables for stocks with smaller market value to book value ratios.

- Stock with larger PE ratios have larger market value to book value of equity and smaller dividend ratios but these ratios of market value to book value of equity and dividend are more variable for smaller stocks than for larger stocks.

- Stocks with larger PE ratios have lower liquidity, higher leverage, lower profitability, lower assets turnover and lower interest coverage. However, liquidity, leverage, earning, turnover and interest coverage are all more variable for stock with smaller PE ratios as compared to larger ones.

- Stocks paying higher dividends have higher liquidity, lower leverage, higher earning, and higher turnover and higher interest coverage. However, liquidity and leverage ratios are more variable for stocks paying lower dividends while earnings, assets turnover and interest coverage are more variables for the stocks paying higher dividends.

*The other study by **Prof. Dr. Rahde Shyam Pradhan and Mr. Nabaraj Adhikari** entitled "Impact of Dividends on Share price in Nepal" leads to three important conclusions. First, dividend has positive impact on share price, i.e. paying dividends can increase share price. Second, dividends have comparatively more favorable

impact on the share price of the non-finance sector than to the share prices of finance sector. Third, past earnings have more impact than retained earning and dividends on share price of finance sector.

***Barel & Shrestha (2006)** in their research paper on "Daily Stock Price Behavior of Commercial Banks in Nepal" attempts to analyze the stock price behavior of commercial banks in Nepalese markets using the data set on daily stocks price during the fiscal year 2005\06. The study finds that there is a large variation in their stock prices of sampled banks in the fiscal year 2005/06. They are not doing well in Nepalese stock market. Most of the serial coefficient is significantly deviated from zero and statistically insignificant. It signifies that the successive price changes are dependent. Therefore, the Nepalese market is inefficient in pricing the shares. Runs test results also show that the percentage of deviation between the observed and actual number of runs in the series of price changes is significant. It is obvious that the successive price changes are not random. The results of serial correlation and run tests conclude that the proposition of random walk Hypothesis in Nepalese stock markets does not hold true. This conclusion corroborates with the conclusions of the past studies carried out in Nepalese context.

2.3   REVIEW OF PREVIOUS UNPUBLISHED THESIS

There are numerous thesis reports for the partial fulfillment of Master of Business Administration and Master of Business Studies. Among those researches, some of the relevant studies are reviewed here.

Shrestha (1999) has conducted research on "Stock Price Behavior in Nepal". This study has focused to examine the efficiency of the stock market in Nepal.

The main objectives of his study are to examine the serial correlation of the successive daily price change of the individual stocks and to provide feedback policy for the institutional development of efficient market. He also tries to find out whether the sequences of price change are consistent with changes of the series of random numbers expected under the independent Bernoulli process. This study attempts to determine the efficiency of the stock market through the theoretical model of efficient market. While conducting the study, all the companies listed in the stock exchange were considered as total population. Out of them, the companies that were existing and doing transaction in the NEPSE were considered as the sample for the study.

The main findings of his study were that the dependence in the series of price change observed imply that the price change in the future will not be independent from the price change of the previous days. It implies that the information of the past price changes is helpful in predicting future price change in a way that the speculation through technical analysis can make higher expected profit than under buy-and-hold policy i.e. average market return. Therefore, opportunities are available to sophisticated investors to earn higher return in the market.

The above mention study has recommended that, since the successive price change are not independent random variable for the sample stock listed in the Nepal stock exchange Ltd.(NEPSE).Therefore the random walk theory is not a suitable description for the stock market price behavior in Nepal.

Ojha (2000) has conducted a research on "Financial Performance and Common Stock Pricing ". The main objectives of his research were:
   • To Study and examine the difference of financial performance and stock prices.
   • To examine the relationship of dividends and stock price.
   • To explore the signaling effects in stock price.

Nepalese stock market is in immaturity stage. In general it is very new and just started to develop. Dominance of banking sector is prevalent in the market due to other industries including finance companies, insurance and manufacturing is not encouraging. Corporate firm with long history have a relatively stable profitability parameters that the firm established after the economic liberalization of 1990. Older firms have been issuing bonus share more times than the new one. Dividend per share is relatively more stable than the dividend payout ratio. That's why payout ratio and divined yields have been highly fluctuating. Due to lack of proper investment opportunities most of the investors have directed their saving towards the secondary stock market.

There is significant positive correlation between the dividends paid and stocks price of banking and manufacturing industries. All other industries have not a perfect correlation between the dividend paid and stock price. There is a positive correlation between the net worth per share and stock prices of banking, there is no perfect correlation between the net worth per share and common stock price. (Ojha, 2000: 75-82)

The main findings of his study were that the Nepalese stock market is in growing stage. In general, it is very new and just started to develop. Dominance of banking sector is prevalent in the market due to other industries including finance companies, insurance and manufacturing is not encouraging. Corporate firm with long history have a relatively stable profitability parameters than the firms established after the economic liberalization of 1990. Though the profitability factors as mentioned in the study are the major factors for the demand and the price determination of the stocks, but its not the whole as there are number of others supporting factors that plays a vital role for the pricing of the stocks in the secondary market (i.e. investment opportunities, government policies, companies performances, investors analysis etc.). The study misses to provide the needed importance to those kinds of supporting factors.

Aryal, (1995) has conducted research "The General Behavior of stock market price".

The main objectives of this study were to discuss the movement of stock market price and develop the empirical probability distribution of successive price change of an individual common stock and a stock market as a whole. This study is based on secondary information obtained from Nepal Stock Exchange (NEPSE). This study converts almost 8 months period (13 Jan 1994 to 13 Sept 1994) and took about 21 stocks listed in NEPSE. He has applied run test as statistical tools to analyze the data and get results. He has conducted that the assumption of independent, as

Predicted by random walk model of security price behavior, has been refuted at least for Nepalese context as the first approximation even in the rough way for early day of stock market operation. This rejection of hypothesis made clear that the knowledge of the past and now become useful in predicting the future movements of stock market prices. The investors, on the floor of stock exchanges for security, can make higher expected price in the future based on these on historical price series produced by general market fluctuation statistically implied , today's price change is positively depending upon yesterday price change. This implied that there is a sufficient lack of financial and market analysis who are sophisticate and superior in analyzing the general market fluctuations, predicting the occurrence of future potential and economic event that their eventual affects on price series.

Bhatta (1995) has conducted research, "A study on performance of listed companies in Nepal", concludes that:

1) Most of the companies yield and variation in price shows opposite behavior.

2) Relatively high priced companies, market book value ratio seem less than one which indicates the companies' failing market performance due to mainly inefficient management.

3) A high significant positive correlation has been addressed between risk and return character of the company. Investors expect higher return from those stocks which are associated with higher risk.

4) The Nepalese capital markets are not efficient one, so the stock prices do not contain all the information relating to the market and company itself. Neither investors analyze the overall relevant information of stocks nor do the information, so both the market return and risk may represent the reality.

Manandhar (1999) The study of the distributed lagged structure of dividend based on the 120 and 103 observation 0f 17 sample Nepalese corporate firms in Panel A and Panel B respectively and the analysis revealed the following facts about the dividend behavior.

❖ Significant relationship is found between change in dividend policy in terms of dividend per share and change in lagged earnings.

❖ In overall there is a positive relationship between changes in lagged consecutive earnings

❖ represented by ^ EPS (t, EPD (t-1) and dividend per share represented by ^ DPS (t).

❖ There is a relationship between distributed cover profits and dividend.

❖ It is found that when ^ EPS (t) > 0, in 35% of the cases, ^ DPS (t) <0.

❖ The difference is found significant between overall proportions of change in dividend and due.

❖ To increase and decrease in earning per share during the study period.

❖ In overall, increase in ^ EPS (t) has resulted to the increase in the dividend payment in 66.66% of the cases while decrease in EPS resulted decrease in dividend payments which came to equal to 33.33% of the cases. (Panel A).

❖ It is also found (Panel B) that in paying out dividend; corporate firms do take into Account the one year and two years lagged earnings.

❖ It is found that 38.8% of the cases, there is change in dividend payment as a result of increased in one and two years lagged earnings.

❖ There is change in dividend payment to the extent of 10.6% of the cases due to consecutive   decrease in lagged earnings.

❖ In overall, Nepalese corporate firms are found reluctant to decrease dividend either keeping dividend payment constant or higher to take the advantage of information contents and signaling effects of dividend relating to the firms' continued progress and performance, sound financial strength, favorable investment environment, lower risk, ability to maintain sustained dividend rate and finally to increase the market price of the stocks in the stock   market.

Suggestion:

Corporate firms are suggested to have their Bonus share issue plan. Bonus share issue should not be on adios basis as it adversely affects the earning per share. So, corporate firms have to assess the need for bonus share issue and see that whether it is realistic or not. Impact of bonus share issue on stock market and on stock price must be studied. Caution must be taken that additional equity capital capitalized by issuing the bonus share is effectively and profitably used.

Besides, bonus share issue must be capital adequacy requirement as required by policy directives and as demanded by business strength. In addition, issue of bonus share must be in consistent with the growth and expansion scheme of the corporate firms and justified by increased earnings and reduced risk in terms of investment return. Overall, corporate firms' bonus share issue plan must be directed towards the accomplishment of corporate goal.

2.4 RESEARCH GAP

There have been several researches done before in the topic Stocks Market and Stock Market Prices. All of those researches have many useful finding and their own limitations. There is still a great deal of opportunity remained for the researchers in this area to explore an identify new facts and figures about the immature stock market of Nepal. Study on behavior of stock market was only started by Mr. Pradhan in 1993. At that time the capital market in Nepal is very small. Nepal's stock exchange is still in an underdeveloped stage. The studies performed by different researchers have their weakness and drawbacks. This study is a supplement to overcome the weakness and limitation of previous studies. This study will analyze the share price behavior of common stocks in secondary market of Nepal. Usually the price of common stocks in primary market is par value. But in secondary market it may be any i.e. more, less or equal to par value. Stock price in secondary market is the main issue of the study. The price of the stock is largely influenced by the various market related factors. Therefore here the studies are made upon the market related factors and signaling factors that are the major cause of the fluctuation of the stock price. The study is based on stock price behavior of the listed companies in the securities market of Nepal and deals with annual changes in stock price. The past researchers have presented the data only up to FY 2004/05 but this research has included the data up to FY 2005/06.Till the date I have found following things in the area have been explored and identified by the researchers as per the easily available research reports:

❖ The stock market behavior immediately after dividend declaration.

❖ The bonus share issues and stock market responses.

❖ The pros and cons of stock market in Nepal.

❖ Legal requirements and their effectiveness in developing stock market of Nepal.

❖ Earning and dividend correlations in Nepalese firms.

❖ Impact of signaling effects on stock prices of Nepalese listed firms.

❖ Many others related and unrelated research reports in this regard.

But consulting the literatures available in T.U. library, Shankar Dev Campus Library, Nepal Commerce Campus Library, SEBON library, NEPSE library and many web URLs what I found was there still many things to be done in the field of investors' interest. Researchers are still unaware about the type of stock market prevails in Nepal. The correlation between the financial performances indicators and stock prices and the appropriateness of decisions made on such indicators and etc. I found one research work very close to the research I have done. But the number of Sample size was very less (17 listed firms with 5 years figure up to 2001/02), which has covered only profitability aspect of the correlation study. Because of that I thought of conducting research work on the similar topic with an intensive coverage both in terms of number of firms and time.

CHAPTER - III
RESEARCH METHODOLOGY

3.1 Introduction

In the previous chapter review of the available literature has been done and now it has been attempted to present a basic frame of Methodology in which the research will be conducted. Research Methodology is the main body of the study. Since the study mainly covers and deal with the method, which are used in the period of research. In this regard ,this chapter explain not only talk of the research method but also consider the logic behind the methods, which are used in the context of our research study, So, Research design, Population and sample, Data collection procedure, Research variable are basically explained in this chapter.

3.2 RESEARCH DESIGN

A research design is a plan for the collection and analysis of data. It present a serious of guide posts to enable the researcher to progress in the right direction in order to achieve the goal. This research has attempted two core aspects of the market price determination of common stock. Firstly, correlation between the financial performances and common stock price has been tested. Secondly, non-financial factors which are known as signaling effects have been identified. Therefore, this study includes both correlation study as well as exploratory study to identify the exact circumstances of the stock market. Correlation study is done in case of the quantitative analysis where quantitative data are sufficiently available. This is done to identify whether there is a sufficient strong correlation between the variables under study prevail or not. Exploratory research is done to identify other factors affecting stock price which are beyond the financial performances

3.3 POPULATION AND SAMPLE

The analysis of stock market of the selected banking and financial companies and their pricing behavior largely depends on the number of such companies listed in the Nepal Stock Exchange (NEPSE) to date. Till date 135 firms are listed to NEPSE. Only 8 Commercial Bank which have been regularly submitting the financial statements since last 10 years are taken as samples. In this way, this study covers all firms, meeting the requirement of latest 10 years' undisrupted submission of annual reports in the SEBON, as the samples of the study. Number of total firm is as follows:

TABLE-3.3
Total Population and Sample

S.N.	Sector	Total Population	Sample Considered
1	Commercial Bank	15	8
2	Development Bank	16	-
3	Finance Company	53	-
4	Insurance Company	16	-
5	Hotel	4	-
6	Manufacturing& Processing Company	21	-
7	Trading Company	5	-
8	Other Company	5	-
	Total	**135**	**8**

(Source: SEBO Annual report of FY 2006\07)

Total Population = 135, Samples drawn = 8

In this Study of "Financial Performance Indicator and stock market Behavior" only eight companies have been taken as sample for study.

The named of the sampled companies are as followed:

1. Nepal Bangladesh Bank Limited
2. Himalayan Bank Limited
3. Standard Chartered Bank Nepal Ltd.
4. Nabil Bank Limited
5. Nepal Investment Bank Limited (Indosuez)
6. Everest Bank Limited
7. Nepal SBI Bank Limited
8. Bank of Katmandu
.

3.4 SAMPLING PROCEDURE

For the research work only 8 companies has been taken as sampling companies companies out of total population. Out of 8 from commercial banks, which covers 53.33% of total listed commercial banks sector?

3.5 SOURCE OF DATA

The main source for the data collection was the central office of Nepal Stock Exchange (NEPSE), Securities Board office, Thapatali, Katmandu and economic survey published by Ministry of finance. The main source of data is annual report of the SEBO\N. Beside annual report various bulletin available, journals, articles and other publications published by different financial institution and other useful resources are also taken into consideration. The research is mainly based on secondary data. The required data will be collected through the corporate office of the security board Nepal (SEBO/N)

*Primary Data: Primary data will be collected through questionnaire and direct interview of the concerned person in the office.

*Secondary Data: The secondary source of data is the annual report of the securities Board Nepal. Different books from library, periodicals, newspaper cutting, company's magazines etc. Guideline and unpublished thesis, Research work that directly related to financial performances and stock market would from secondary data for the purpose of the study. Significant information will also be collected from Internet and various web-sites like www.sebonp.com , www.nepalstock.com , www.nrb.org.np etc.

3.6 DATA COLLECTION PROCEDURE:

Primary and secondary, both types of data are used in this research. All quantitative analysis and hypothesis testing are based on the financial statements of the selected firms. Those financial statements were extracted from the website of NEPSE (nepalstock.com).

Intensive and structured interviews were conducted with outstanding shareholders, potential investors, and financial managers of the company, NEPSE authority and other related parties with stock market.

Views and opinions of those stockholders were collected through the interviews.

3.7 RESEARCH VARIABLES

Major market behavior tools such as NEPSE index, ROA, ROE, EPS, DPS and MVPS are considered as research variable. A relationship between the independent variables (predictors) and dependent variables has been shown in this research work. Independent variables are financial performances and signaling effects. Financial performances for the purpose of the study have been defined in terms of ROA, ROE, EPS, DPS, Net worth, etc. Signaling effects represent the views, attitudes, opinions,

etc. of the stockholders. Market value per share (MVPS) is the only one dependent variable for this study. Following is the brief description of the variables:

ROA (Return on Assets):

Return on assets is the percentage of net profit after tax on total assets of the company. Net profit after tax is the profit to the company after deducting all expenses including non-operating expenses and taxes. Similarly, a total asset is the total of assets side of the balance sheet which includes current assets, operating assets and fictitious assets. The purpose to calculate ROA is to identify how efficiently and effectively the assets of the company are utilized or exploited. The higher the ROA is to identify how efficiently and effectively the assets of the company are utilized or exploited. The higher the ROA, the better it is considered to be because it is the representative return of all the stakeholders of the company including creditors.

Symbolically, $ROA = NPAT / TA * 100$

Where, ROA = Return on Assets

NPAT = Net profit after tax

TA = Total assets

ROE (Return on Equity):

It is the rate of return earned by the equity shareholders of the company who are also the real owners. Since they are the ultimate stakeholders of the company, the success or failure of the company finally is measured in terms of their return. Even if the ROA of the company comes lower, ROE can be higher due to the high use of the debt capital because it leads to the leverage effect.

ROE = Earning available to equity shareholders / shareholders' equity $* 100$.

EPS (Earning Per Share):

It is the rupees return earned by a share of the company. High amount of total profit does not mean a higher EPS all the time; rather it can be higher even if the company has low total profit. If the two companies are having equally net profit after tax or earning after preferred dividend are met, the company which has less number of shares will have higher EPS because it is allocated over less number of shares.

EPS = Earning available to equity shareholders / No. of outstanding shares * 100

DPS (Dividend per Share):

It is the cash dividend earned by one share of the company. Generally, there is a positive correlation between profitability and DPS of the company. Out of total profit earned, one portion is retained within the company for the growth, which is called retained earning and the rest is distributed among the shareholders, which is called dividend declared.

DPS = Total amount of dividend declared / No. of outstanding shares * 100.

BVPS (Book Value per Share)

It is the book value of assets per share after settling all liabilities and preferred stocks of the company. If the company retains hundred percent of its earning, its BV will be increased equally by the amount of profit it earns. Therefore, to increase the book value, there must be retention of profit in the organization. It is also called net worth of the company.

BVPS = Total net worth / No. of outstanding shares

Signaling Effects:

Signaling effects are the change in market value per share of the company due to the effect other than the financial performance of the company. These are happened when positive or negative rumors regarding the future price of the shares are spread in the stock market. Generally, when some special events are occurred in an economy which could have significant impacts on the smooth running of the business operations, these effects are even becoming more vital.

3.8 ANALYSIS TOOLS

The data are analyzes on the basis of different statistical, financial and accounting analytical tools. Statistical tools such as measure of central tendency (Mean, Mode),Correlation, Regression analysis are used to identify the average figures, degree of relationship and trend line study of the variable under study respectively. Collected data are stratified, tabulated and analyzed in an appropriate and purposive way. Hypotheses are tested on the basis of Pearson's Correlation Coefficient. Therefore; $R.R^2$, Se, Per, Regression co-efficient, t-statistic and p-value have been calculated to accept or reject the null hypothesis. Beside these statistical models, other simple financial tools, such as ratio analyses have been applied. Signaling effects have been analyzed in a descriptive way.

To compute the value of R, R^2, Se, PER, Regression coefficient (a and b), t-statistic and probability value, a computerized SPSS program model has used, which output are presented in the annex for the detail study.

CHAPTER – IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

Data presentation and analysis is the one of the important part of the research work. This research was mainly undertaken with a purpose to study and examine the relationship between financial performance and stock pricing in Nepalese stock market. In this section the study tries to find out the proof from mathematical calculation for the theoretical statement. To fulfill this core objective, two kinds of information have been acquired. Firstly, the financial position of selected firms and secondly, signaling effects covering the views and attitudes of outstanding shareholders, potential shareholders, financial managers of the company, market makers, and regulators. The basic objectives of this chapter is to analyzes and expose the collected data following the conversion of unprocessed data to an understandable presentation. Thus, this chapter presents the analyses and interpretation of the data related to stocks prices, NEPSE index, and sector wise number of listed companies.

Analysis has been classified into four main parts to generalize the facts of the information.

1. Financial performance of selected firms:

Under this, profitability ratios and other financial indicators have been presented in tabular form by industry and also by individual firm and these key indicators have been explained. Firstly, it is tried to compare the correlation of different financial indicators of a firm with the market price of the shares of the same firm. In this way, five performance indicators of twenty four firms each from different industries are

presented and their graphical and tabular presentations are also made. Tabular presentations are done to identify the figure to figure comparison with the market price in the passage of time. Graphical presentations, which are done on the percentage growth basis, are done to understand the trend of growth of individual variables and the trend of MVPS and the relative study between the independent variables (ROE, ROA, EPS, DPS, and BVPS) and dependent variable (MVPS)

2. Statistical Analyses and Hypothesis Testing:

Under this sub-unit, Statistical tools including Correlation (R), Co-Efficient of Determination (R2), Standard Error (PER), Regression coefficient (a and b), t-statistic and prob. Value (P), have been applied to test the pre-stated hypothesis.

3. Excerpts of Interviews and Questionnaires:

Under this, the views & opinions of different stakeholders have been presented in a descriptive way. These inputs are collected from two types of data collection methods, namely, interview and questionnaires, interviews are taken to the experts of the same field so that more and more information regarding share market could be explored. It might not reflect sufficient information but due to the time limitation and the technicality of the study, this had to be done. To cover the common investor's opinion, questionnaires are distributed and collected, which incorporates both Yes/No questions and Open – end opinions.

4. Signaling Effects (Non-financial factors affecting stock prices):

This part deals with the factors affecting stock prices other than the financial performances. It is quite known that stock price determination is the outcome of the interaction of demand and supply of the stock of any company. On the other hand,

especially in the country where there is high chance of information manipulation, demand is again the result of subjective judgment of the investors regarding present and future performances of the company. So, I have tried to disclose the variables that are quite influencing in determining prices of the stocks in Nepalese stock market. It is tried to conclude the effect of signaling effects from the interviews of experts and investors, questionnaires methods from the investors.

4.1 Financial Performances of Selected Banks:

Table4.1.1

Nepal Bangladesh Bank Limited

INDICATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	200
Return on Assets (ROA)	2.20	1.72	1.90	1.99	0.59	0.60	0.02	0.0
Return on Shareholder's Equity (ROE)	33.39	33.35	35.18	33.40	10.50	10.46	0.40	0.7
Earning Per Share(EPS)	52.65	71.10	111.48	82.81	18.27	19.86	0.73	1.2
Dividend Per Share (DPS)	15.77	15.47	0.00	5.04	0.00	0.00	0.00	0.0
Book Value Per Share (BVPS)	157.69	213.23	336.75	249.88	175.36	190.02	182.42	18
Market Value Per Share(MVPS)	253.00	616.00	1502.0	1100.00	510.00	360.00	290.00	26

Source: Annual Reports (1997/98-2006/07), SEBON

Observing the above table – 4.1.1, it is found that ROA of Nepal Bangladesh Bank is decreasing year by year and it reaches negative in the year 2005/06 and in 2006/07. ROE is also increasing in that period up to1999/00 and the trend of ROE is decreasing up to -40.45 in the year 2006/07. Similarly, we found EPS also increasing in the period of three years and that it also decreases as same to other. DPS of NBB is not so good. Now observing BVPS and MVPS; we found that it is also increasing from Rs. 157.69 in the year 1997/98 to Rs.336.75 in the year 1999/00 and similarly MVPS also increase for the first three years up to 1502 and that it decrease year by year. That means, there is a positive co-relation between profitability and stock prices in that particular period. After the almost all profitability ratios (ROA, ROE and EPS) started decreasing (ROA to -14.63%, ROE to -40.45% and EPS to Rs.-4.31 per share). The MVPS also decreased to Rs. 199.00 per share in the latest year, i.e. in 2005/06 showing highest value in year 1999, i.e. Rs. 1502 per share where profitability ratios excluding ROA also increasing. In this way, we found a positive correlation between profitability of a bank and the market value per share. MVPS is also increasing in the years where high amount of dividends were paid, for example during 1997/98 to 1999/00, there is a relative increment in DPS, where MVPS also found to be increasing. And in the last four five years, since there have been no dividend paid by the bank, the market price of the shares also not found to be very much fluctuating. Similarly, BVPS in our study was Rs. 157.69 in the first year, and then it became highest in the year 1999/00, i.e. Rs. 336.75. Therefore, one can see the very positive correlation between BVPS and MVPS. But the rate of change in MVPS is much higher than the change in BVPS.

TABLE – 4.1.2

HIMALAYAN BANK LIMITED

ATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
n Assets	1.56	1.48	1.26	1.44	1.14	0.91	1.06	1.11	1.55
on Shareholder's	35.41	36.63	37.90	33.39	28.96	27.51	30.75	32.98	35.16
Per Share	113.32	86.07	83.08	93.56	60.26	49.45	49.05	47.91	59.24
d Per Share	110.00	50.00	50.00	57.50	35.00	25.00	20.00	31.58	35.00
alue Per Share	320.05	234.99	219.19	240.20	220.02	247.81	246.93	239.59	228.72
Value Per Share	755.00	1000.00	1700.00	1500.00	1000.00	836.00	840.00	920.00	1100.00

(Source: Annual Reports (1997/98-2007), SEBON)

From the TABLE-4.1.2, we can find that the profitability ratios and market price are showing a negative correlation in initial four years of the study. Then also, there has been a positive but not a strong relationship we found from the table. But we can find a significant positive correlation between DPS and MVPS except in the year 1998/99. There has been also strong positive correlation between BVPS and MPVS except in year 1999-2000, where there was a negative behavior.

TABLE - 4.1. 3
STANDARD CHARTERED BANK NEPAL LTD.

INDICATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2
Return on Assets	2.85	2.76	2.33	2.22	2.60	2.41	2.27	2
Return on Shareholder's Equity	29.01	33.27	36.68	38.74	38.79	37.03	35.96	3

Earning Per Share	129.62	105.86	115.62	126.88	141.13	149.30	143.55	143.9
Dividend Per Share	70.00	80.00	100.00	100.00	100.00	120.00	110.00	120.0
Book Value Per Share	445.00	318.19	298.88	327.50	363.86	403.15	399.25	422.3
Market Value Per Share	840.00	1162.00	1985.00	2144.00	1550.00	1640.00	1745.00	2345

Source: Annual Reports (1997/98-2007), SEBON

We see that there is almost negative correlation between profitability ratios and MVPS. In case of DPS also, it is not showing a strong positive correlation as in many years, Even if the DPS are constant, MVPS has increased. But, in case of SCBN Ltd, we find the very strong relationship of MVPS with its BVPS except in year 1998/99. The MVPS growth is much closer to growth in ROA than other two profitability ratios. The DPS, BVPS and MVPS growth are moderately positively correlated.

TABLE-4.1.4

NABIL BANK LIMITED

INDICATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2001/02	2003/04	2004/05
Return on Total Assets	1.59	2.19	2.19	1.59	1.53	2.43	2.73	3.06
Return on Shareholder's Equity	21.10	30.36	33.44	27.41	16.57	29.16	31.92	34.33
Earning Per Share	44.50	67.84	83.79	59.26	55.25	84.66	92.61	105.49
Dividend Per Share	30.00	50.00	55.00	40.00	30.00	50.00	65.00	70.00
Book Value Per Share	210.92	223.45	250.53	216.18	233.00	267.00	301.37	337.00
Market Value Per Share	430.00	700.00	1400.00	1500.00	700.00	740.00	1000.00	1505.00

Source: Annual Reports (1997/98-2007), SEBON

From the TABLE-4.1. 4, we see that there is a strong correlation between profitability and MVPS except in year 1998-2000. But there is not significant correlation between DPS and MVPS as growth in MVPS is less affected by growth in DPS. But there is a very strong correlation between BVPS and MPVS. The growth rate of MVPS is also positively correlated with the growth rate of DPS. But the rate of growth of MVPS is not that much strongly correlated with the growth rate in BVPS. But the correlation of direction of change in BVPS is highest in all three cases.

TABLE-4.1. 5

NEPAL INVESTMENT BANK LIMITED (Indosuez)

INDICATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Return to total asset	2.82	1.47	1.94	.65	1.27	1.33	1.42
Return on Shareholder's Equity	34.49	16.69	17.71	12.02	20.12	16.71	20.26
Earning Per Share	69.33	33.75	53.68	33.17	35.55	39.56	51.70
Dividend per share	50.00	30.00	25.00	0.00	20.00	15.00	12.5
Book Value Per Share	272.04	273.63	303.10	275.96	307.95	216.24	200.80
Market Value Per Share	600.00	822.00	1401.00	1150.00	685.00	795.00	940.00

Source: Annual Reports (1997/98-2006/07), SEBON

From the TABLE-4.1.5, we can observed that there is not a powerful correlation between profitability indicators and MPVS as in the initial years the profitability ratios are decreasing whereas the MVPS is increasing in the first three up to year 1999/00. Similarly, DPS growth also not so good, MVPS and DPS shows same relation. We found more close positive correlation of ROE growth with MVPS growth than other profitability indicators. The growth rate of DPS is not closely

related to MVPS growth rate. But this seems to be strong in case of BVPS growth rate and MVPS growth rate.

TABLE-4.1. 6

EVEREST BANK LIMITED

INDICATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Return on Total Assets	1.76	1.11	1.21	1.34	1.29	1.17	1.49	1.40
Return on Shareholder's Equity	49.19	17.39	20.35	21.82	15.83	14.80	18.30	19.90
Earning Per Share	21.14	21.31	34.85	31.56	32.91	29.90	45.58	54.22
Dividend Per Share	0.00	15.00	0.00	0.00	0.00	20.00	20.00	20.00
Book Value Per Share	42.98	122.57	171.30	144.62	150.74	150.10	171.53	219.88
Market Value Per Share	194.00	407.00	980.00	750.00	430.00	445.00	680.00	870.00

Source: Annual Reports (1997/98-2006/07), SEBON

Seeing the TABLE-4.1.6, it is found that there is a strong positive relationship between MVPS and BVPS then the profitability and DPS. But the direction of change is not one to one but some how weak. We can conclude that the correlation between profitability growth rate and MVPS growth rate is weaker in the initial years of study, but it is becoming stronger in the later years up to 2006/07, especially in the latest years. The correlation of growth rate of DPS and MVPS is weak. But the correlation of growth rate is case of BVPS over the years.

TABLE-4.1.7
NEPAL SBI BANK LIMITED

INDICATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/
Return on Total Assets	1.43	0.35	0.98	0.17	0.58	0.64	0.72	0.56
Return on Shareholder's Equity	22.49	5.22	22.26	5.24	7.29	8.55	9.71	8.33
Earning Per Share	49.17	13.98	41.74	8.69	9.61	11.47	14.26	13.44
Dividend Per Share	20.01	10.00	15.01	0.00	0.00	8.00	0.00	0.00
Book Value Per Share	218.65	267.66	187.54	165.73	131.88	134.03	146.80	159.5
Market Value Per Share	440.00	562.00	562.00	1500.00	401.00	255.00	307.00	335.0

Source: Annual Reports (1997/98-2006/07), SEBON

From the TABLE-4.1.7 above, it is seen that there is a negative correlation between the change in profitability ratios and change in MVPS. But it is not that meaningful; the conclusion is there is a weak correlation between profitability and MVPS. Again there is not that strong correlation between change in DPS and change in MVPS. This relationship is also not that strong in case of BVPS and MVPS in comparison to other banks. The rate of growth is much closer to profitability than other indicators in case of Nepal SBI Bank Ltd. The correlation is poor in case of DPS and it is moderated in case of BVPS.

TABLE-4.1.8

BANK OF KATHMANDU LIMITED

INDICATORS	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Return on Total Assets (ROA)	-0.99	1.54	1.51	1.05	0.15	1.10	1.34
Return on shareholder's Equity (ROE)	-27.33	43.34	27.68	24.71	3.25	22.84	30.03
Earning Per hare(EPS)	-10.85	24.67	40.73	27.97	2.00	17.72	27.50

Dividend Per Share (DPS)	0.00	7.49	32.74	0.00	10.00	5.00	10.00	1
Book Value Per Share (BVPS)	39.71	56.93	147.15	270.72	171.83	192.52	218.38	2
Market Value Per Share(MVPS)	153.00	285.00	998.00	850.00	254.00	198.00	295.00	4

Source: Annual Reports (1997/98-2006/07), SEBON

The TABLE-4.1.8 above shows the positive correlation between profitability and MVPS change. The correlation between DPS and MPVS is not that predictable or strong. But the correlation between BVPS and MVPS is quite strong. It can be said that the correlation is strongest in case of rate of change in BVPS and rate of change in MVPS. And it is followed by DPS and MVPS growth rate change. The relation is some how weak between growth rate of profitability and rate of growth in MVPS. But this is more powerful than many other banks under study.

Finding of above financial performance of banking (Table 4.1.1 to 4.1.8)

Banks, with a long history, have a relatively more stable ROA, ROE, EPS and DPS than the banks established after the economic liberalization of 1990. For example, Bank of Katmandu, Nepal Bangladesh Bank, etc. have a high fluctuation in the variables of profitability in comparison to those of Standard Chartered Bank Nepal Limited, NABIL Bank Limited and Nepal Indosuez Bank Limited. TABLE – 4.1.1to TABLE 4.1.8 shows a decrease in ROE and EPS of some banks. This decrease is merely due to the issue of bonus shares. It is, therefore, not because of the poor profit performance. Older banks have been paying more dividend than the new one. It means newly started banks are ploughing back their profits to expand the capital. A decrease in Earning Yield and Dividend Yield as indirectly reflected by the TABLES – 4.1.1to 4.1.8 does not owe to decrease in profits. Instead, it is an outcome of highly increased MVPS or owing to an increase in MVPS without increasing EPS. It is better to say that capital gains are abnormal instead of supernormal gains. Capital gains are ranging from 0% to 144% to   -44% to +62%. Therefore, it is almost impossible to apply growth model for stock valuation. Only due to the issue of bonus shares net worth per share has decreasing. Otherwise, it is in increasing trend. The gap between net worth per share and MVPS is widening. MVPS is even 4 times greater than the net worth per share. There is a dramatic appreciation in MVPS from the year 1999 to 2000. All the banks under the study have paid up value per share Rs.100. Of course, there is an impact of bonus issue upon MVPS. Immediately after bonus issue, MVPS have been decreasing but the effect is not proportionate. Older banks have been issuing bonus shares more times than the new one. Since DPS are relatively stable, the payout ratio has been fluctuating.

4.2.   STATISTICAL MODEL SUMMARY AND HYPOTHESIS TESTING

This research has been conducted to test hypothesis that whether the financial performances and common stock market values of Nepalese corporate firms are

correlated or not. Therefore, regarding the hypothesis testing, correlation research design has been followed. To make the understanding precise and simpler, the hypothesis testing research variables are presented as follows:

Financial performances and common stock pricing

Independent Variables (X)   Dependent Variables (Y)

(Predictors or Constant)

FIGURE – 4.2.1.1
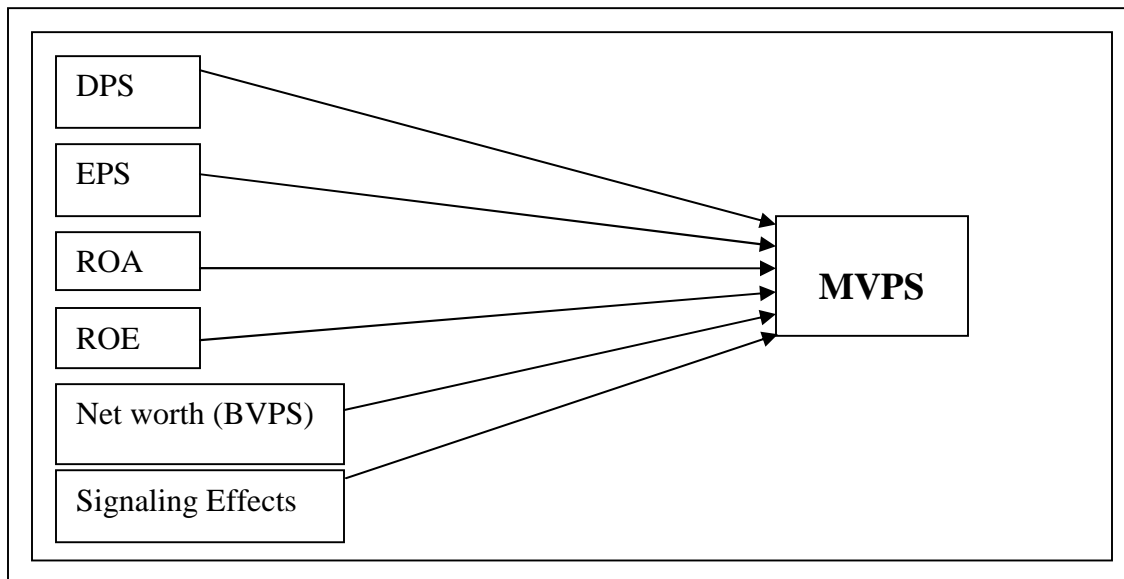
STATISTICAL TOOLS:

Person's Correlation Coefficient   = r

Co-efficient of Determination   = r^2

Standard error of estimate   = Se

Probable error   = P.E.

Constant (Intercept) of Regression = a

Slope   = b

T-statistic   =t

Probability Value (Prob. Value)

Concept of Probable Error

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation co-efficient significance of relationship has been tested by using the probable error (P.E.) and it is denoted by the following model :-

Probable Error (P.E.) = $0.6745 * \dfrac{1-r^2}{n}$

Where,

r= the value of correlation co-efficient

n= number of pairs of observation

If r< P.E., it is significant, i.e. there is no evidence of correlation

If r> P.E., it is significant

If P.E. <r<6 P.E., nothing can be conclude

Ho: There is no significant correlation between MVPS and (ROA, ROE, EPS, DPS, BVPS)

H_1: There is significant correlation between MVPS and (ROA, ROE, EPS, DPS, BVPS)

If r>6P.E. There is Correlation or relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS)

If r<6P.E. There is no Correlation or relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS)

(We accept null hypothesis and reject alternatives hypothesis)

BANKWISE (MODEL SUMMARY)

Below summary of the statistical model has been extracted from the Computer-SPSS Programmed. Before the test of hypotheses, it is worthy to mention that owing to the limitation of time and availability of data (sample size which is only of 8 firms), the study may not reflect hundred percent true pictures of Nepalese stock market. But it is tried to minimize the deficiencies of the study to the possible extent. The probability values of our study are a bit higher because standard error of the estimate is too high which shows the greater degree of dispersion of the market value per share.

4.2.1 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of Nepal Bangladesh Bank

TABLE-4.2.1

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1\ (ROA)}$	0.399	0.159	0.1794	1.0763	Insignificant	1.230	2.306	Insignificant
$r_{yx2\ (ROE)}$	0.622	0.387	0.1311	0.7845	Insignificant	2.248	2.306	Insignificant
$r_{yx3(EPS)}$	0.887	0.787	0.0045	0.2726	Nothing Conclude	5.429	2.306	Significant
$r_{yx4(DPS)}$	0.006	0.000	0.2133	1.2798	Nothing Conclude	-0.016	2.306	Insignificant
$r_{yx5(BVPS)}$	0.587	0.345	0.1397	0.8383	Insignificant	2.053	2.306	Insignificant

<u>**Interpretation of Correlation by using Probable Error**</u>

The Statistical table 4.2.1 clear demonstration that the degree of relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS) of NBB.The correlation coefficient recorded of NBB in MVPS with all financial indicator seems to be positive relationship.

From the above table 4.2.1, we can clearly see that the correlation of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.399, 0.622, 0.887, 0.006 & 0.587 respectively in NBB. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 39.9%, 62.2%, 88.7%, 0.6% & 58.7% respectively cause to increase 100% value of MVPS. Thus there is high degree correlation of EPS with MVPS. There is moderate correlation of ROE & BVPS with MVPS. There is low degree of correlation of ROA & DPS with MVPS in the case of NBB.

As same 'r' is less than 6 P.E. in case of ROA, ROE and BVPS. This states that there is no correlation between MVPS with ROA, ROE, BVPS .In case of EPS and DPS the value of 'r' is not lies between(P.E. $< r <$ 6P.E.). So nothing can be concluding.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is stronger for NBB with ROE, EPS and BVPS (i.e. greater than 25%) and very week is ROA (i.e. less than 25%) in case of DPS it doesn't prediction power to the MVPS.

Coefficient of determination (r^2) are 0.159, 0.387, 0.787, 0.000 and 0.345 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 15.9%, 38.7%, 78.7%, 0.0% and 34.5% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.} < t_{tab.}$ value of't' in case of ROA, ROE, DPS and BVPS .Which indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and

ROA, ROE, DPS& BVPS are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

The $t_{cal.} > t_{tab.}$ Value of 't' in case of EPS at 5% level of significant there H_1 is accepted. Which means MVPS and EPS are significantly correlated which can be recognized as a positive indicators of the development of commercial banking sector in our country.

Regression Analysis of MVPS with ROA,ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H_o):- =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H_1):- =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= 556.068+34.679 ROA

The regression constant is 556.068 implies that when ROA is zero, MVPS is 556.068. The constant for ROA is +34.679 implies that when ROA increased by Rs. 1, MVPS is also increased by Rs. 34.679 and vice versa.

*MVPS on ROE

MVPS on ROE= 396.795+11.461 ROE

The regression constant is 396.795+implies that when ROE is zero, MVPS is 396.795. The constant for ROE is +11.461 implies that when ROE increased by Rs. 1, MVPS is also increased by Rs. 11.461 and vice versa.

*MVPS on EPS

MVPS on EPS= 196.083+9.419 EPS

The regression constant is 196.083implies that when EPS is zero, MVPS is 196.083. The constant for EPS is +9.419 implies that when EPS increased by Rs. 1, MVPS is also increased by Rs. 11.461 and vice versa.

*MVPS on DPS

MVPS on DPS= 530.762-0.375 DPS

The regression constant is 556.068 implies that when DPS is zero, MVPS is 556.068. The constant for DPS is -0.375 implies that when DPS decreased by Rs. 1, MVPS is also decreased by Rs. -0.375 and vice versa.

*MVPS on BVPS

MVPS on BVPS= 386.751+1.221 BVPS

The regression constant is 386.751that when BVPS is zero, MVPS is 386.751. The constant for BVPS is +1.221 implies that when BVPS increased by Rs. 1, MVPS is also increased by Rs. 1.221 and vice versa.

4.2.2 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of Himalayan Bank Limited

TABLE-4.2.2

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1\ (ROA)}$	0.324	0.105	0.1909	1.145	Insignificant	0.969	2.306	Insignificant
$r_{yx2\ (ROE)}$	0.116	0.013	0.2105	1.263	Insignificant	-0.033	2.306	Insignificant
$r_{yx3(EPS)}$	0.141	0.020	0.2090	1.254	Insignificant	0.403	2.306	Insignificant
$r_{yx4(DPS)}$	0.036	0.001	0.2131	1.278	Insignificant	-0.103	2.306	Insignificant
$r_{yx5(BVPS)}$	0.287	0.082	0.1958	1.175	Insignificant	-0.848	2.306	Insignificant

The correlation coefficient recorded of HBL in MVPS with all financial indicators seems to be positive relationship.

From the above table 4.2.2, we can clearly see that the correlation 'r' of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.324, 0.116, 0.141, 0.036 & 0.287 respectively in NBB. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 32.4%, 11.6%, 14.1%, 3.6% & 28.7% respectively cause to increase 100% value of MVPS. There is low degree of correlation of ROA, ROE, EPS and DPS with MVPS in the case of HBL. (i.e. up to 0.59)

As same 'r' is less than 6 P.E. in case of ROA, ROE, EPS, DPS and BVPS. This states that there is no correlation between MVPS with ROA, ROE, EPS, DPS and BVPS.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is very week on ROA, ROE, EPS, DPS and BVPS (i.e. less than 25%).

Coefficient of determination (r^2) are 0.105, 0.013, 0.020, 0.001 and 0.082 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 10.5%, 1.3%, 2.0%, 0.1% and 8.2% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.} < t_{tab.}$ value of 't' in case of ROA, ROE, DPS and BVPS at 5% level of significantly. This indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and ROA, ROE, EPS, DPS& BVPS are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

Regression Analysis of MVPS with ROA,ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H_o):-   =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H_1):-   =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= 470.087+515.419 ROA

The regression constant is 470.087 implies that when ROA is zero, MVPS is 470.087. The constant for ROA is +515.419 implies that when ROA increased by Rs. 1, MVPS is also increased by Rs. 515.419 and vice versa.

*MVPS on ROE

MVPS on ROE= 1434.977+ (-9.2) ROE

The regression constant is 1434.977 implies that when ROE is zero, MVPS is 1434.977. The constant for ROE is -9.2 implies that when ROE increased by Rs. 1, MVPS is also increased by Rs. -9.2 and vice versa.

*MVPS on EPS

MVPS on EPS= 976.010 +2.321 EPS

The regression constant is 976.010 implies that when EPS is zero, MVPS is 976.010. The constant for EPS is +2.321 implies that when EPS increased by Rs. 1, MVPS is also increased by Rs. 2.321 and vice versa.

*MVPS on DPS

MVPS on DPS= 1163.037+ (-0.527) DPS

The regression constant is 1163.037implies that when DPS is zero, MVPS is 1163.037. The constant for DPS is -0.527 implies that when DPS decreased by Rs. 1, MVPS is also decreased by Rs. -0.527and vice versa.

*MVPS on BVPS

MVPS on BVPS= 2028.649 + (-3.613) BVPS

The regression constant is 2028.649 that when BVPS is zero, MVPS is 2028.649. The constant for BVPS is -3.613implies that when BVPS increased by Rs. 1, MVPS is also increased by Rs.-3.613 and vice versa.

4.2.3 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of Standard Charted Bank

TABLE-4.2.3

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1 (ROA)}$	0.285	0.081	0.1960	1.176	Insignificant	-0.840	2.306	Insignificant
$r_{yx2 (ROE)}$	0.049	0.002	0.2129	1.277	Insignificant	-0.137	2.306	Insignificant
$r_{yx3(EPS)}$	0.713	0.508	0.1049	0.629	Nothing Conclude	2.877	2.306	Significant
$r_{yx4(DPS)}$	0.741	0.550	0.0959	0.576	Nothing Conclude	3.125	2.306	Insignificant
$r_{yx5(BVPS)}$	0.648	0.420	0.1237	0.742	Insignificant	2.408	2.306	Insignificant

Interpretation of Correlation by using Probable Error

The Statistical table 4.2.3 clear demonstration that the degree of relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS) of SCBL.The correlation coefficient recorded of SCBL in MVPS with all financial indicator seems to be positive relationship.

From the above table 4.2.3, we can clearly see that the correlation of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.285, 0.049, 0.713, 0.741 & 0.648 respectively in

SCBL. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 28.5%, 4.9%, 71.3%, 74.1% & 64.8% respectively cause to increase 100% value of MVPS. Thus there is high degree correlation of EPS and DPS (i.e. 0.7 to 0.999) with MVPS. There is moderate correlation of BVPS with MVPS. There is low degree of correlation of ROA & ROE with MVPS in the case of NBB.

As same 'r' is less than 6 P.E. in case of ROA, ROE and DPS. This states that there is no correlation between MVPS with ROA, ROE, DPS .In case of EPS and BVPS the value of 'r' is not lies between(P.E. $<$ r $<$ 6P.E.). So nothing can be concluding.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is stronger for SCBL with EPS, DPS and BVPS (i.e. greater than 25%) and very week is ROA & ROE (i.e. less than 25%). Coefficient of determination (r^2) are 0.081, 0.002, 0.508, 0.550 and 0.420 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 8.1%, 0.02%, 50.8%, 50.0% and 42.0% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.} < t_{tab.}$ value of 't' in case of ROA, ROE. This indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and ROA, ROE, are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

The $t_{cal.} > t_{tab.}$ Value of 't' in case of EPS, DPS and BVPS at 5% level of significant there H_1 is accepted. Which means MVPS and EPS are significantly correlated which can be recognized as a positive indicators of the development of commercial banking sector in our country.

Regression Analysis of MVPS with ROA, ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H_o):- =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H_1):- =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= 7378.192+ (-2039.257) ROA

The regression constant is 7378.192implies that when ROA is zero, MVPS is 7378.192. The constant for ROA is -2039.257 implies that when ROA increased by Rs. 1, MVPS is also increased by Rs. -2039.257and vice versa.

*MVPS on ROE

MVPS on ROE= 3152.883+ (-23.966) ROE

The regression constant is 3152.883implies that when ROE is zero, MVPS is 3152.883.The constant for ROE is -23.966implies that when ROE increased by Rs. 1, MVPS is also increased by Rs. -23.966and vice versa.

*MVPS on EPS

MVPS on EPS= -4583.418 + 49.261 EPS

The regression constant is -4583.418 implies that when EPS is zero, MVPS is -4583.418. The constant for EPS is + 49.261 implies that when EPS increased by Rs. 1, MVPS is also increased by Rs. 49.261 and vice versa.

*MVPS on DPS

MVPS on DPS= -3158.515+51.095 DPS

The regression constant is -3158.515implies that when DPS is zero, MVPS is -3158.515. The constant for DPS is +51.095 implies that when DPS decreased by Rs. 1, MVPS is also decreased by Rs. 51.095 and vice versa.

*MVPS on BVPS

MVPS on BVPS= -3220.839+13.968 BVPS

The regression constant is -3220.839that when BVPS is zero, MVPS is -3220.839. The constant for BVPS is +13.968 implies that when BVPS increased by Rs. 1, MVPS is also increased by Rs. 13.968 and vice versa.

4.2.4 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of Nabil Bank Limited

TABLE-4.2.4

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1\ (ROA)}$	0.444	0.197	0.1713	1.028	Insignificant	1.403	2.306	Insignificant
$r_{yx2\ (ROE)}$	0.451	0.204	0.1698	1.019	Insignificant	1.430	2.306	Insignificant
$r_{yx3(EPS)}$	0.784	0.615	0.0821	0.493	Significant	3.574	2.306	Significant
$r_{yx4(DPS)}$	0.939	0.882	0.0252	0.151	Significant	7.745	2.306	Significant
$r_{yx5(BVPS)}$	0.814	0.662	0.0721	0.433	Significant	3.960	2.306	Significant

Interpretation of Correlation by using Probable Error(P.E.)

The Statistical table 4.2.4 clear demonstration that the degree of relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS) of NBB.The correlation coefficient recorded of NBB in MVPS with all financial indicator seems to be positive relationship.

From the above table 4.2.4, we can clearly see that the correlation of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.444, 0.451, 0.784, 0.939 & 0.814 respectively in Nabil. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 44.4%, 45.1%, 78.4 %, 93.9% & 81,4% respectively cause to increase 100% value of MVPS. Thus there is high degree correlation of EPS, DPS and BVPS with MVPS (i.e. 0.7 to 0.999). There is low degree of correlation of ROA & ROE with MVPS in the case of Nabil.

As same 'r' is less than 6 P.E. in case of ROA, ROE. This states that there is no correlation between MVPS with ROA, ROE. In case of EPS, DPS and BVPS the value of 'r' is not lies between(P.E. < r < 6P.E.). So nothing can be concluding.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is stronger for NBB with EPS, DPS and BVPS (i.e. greater than 25%) and very week is ROA and ROE (i.e. less than 25%).

Coefficient of determination (r^2) are 0.197, 0.204, 0.615, 0.882 and 0.662 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 19.7%, 20.4%, 61.5%, 88.2% and 66.2% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.} < t_{tab.}$ value of 't' in case of ROA and ROE. This indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and ROA and ROE are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

The $\mathbf{t_{cal.} > t_{tab.}}$ Value of 't' in case of EPS, DPS and BVPS at 5% level of significant there H_1 is accepted. Which means MVPS and EPS, DPS and BVPS are significantly correlated which can be recognized as a positive indicators of the development of commercial banking sector in our country.

Regression Analysis of MVPS with ROA,ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H_o):- =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H_1):- =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= -730.361+970.275 ROA

The regression constant is -730.361implies that when ROA is zero, MVPS is -730.361. The constant for ROA is +970.275 implies that when ROA increased by Rs. 1, MVPS is also increased by Rs. 970.275 and vice versa.

*MVPS on ROE

MVPS on ROE= -1408.093+100.373 ROE

The regression constant is -1408.093implies that when ROE is zero, MVPS is -1408.093. The constant for ROE is +100.373 implies that when ROE increased by Rs. 1, MVPS is also increased by Rs. 100.373 and vice versa.

*MVPS on EPS

MVPS on EPS= -1414.723+34.213 EPS

The regression constant is -1414.723implies that when EPS is zero, MVPS is -1414.723. The constant for EPS is +34.213 implies that when EPS increased by Rs. 1, MVPS is also increased by Rs. 34.213 and vice versa.

*MVPS on DPS

MVPS on DPS= -867.526+38.927 DPS

The regression constant is -867.526implies that when DPS is zero, MVPS is -867.526. The constant for DPS is +38.927 implies that when DPS decreased by Rs. 1, MVPS is also decreased by Rs. +38.927 and vice versa.

*MVPS on BVPS

MVPS on BVPS= -2739.555+15.030 BVPS

The regression constant is -2739.555that when BVPS is zero, MVPS is -2739.555. The constant for BVPS is +15.030 implies that when BVPS increased by Rs. 1, MVPS is also increased by Rs. 15.030 and vice versa.

4.2.5 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of IBL (Indosuez)

TABLE-4.2.5

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1\ (ROA)}$	0.065	0.004	0.2124	1.275	Insignificant	-0.185	2.306	Insignificant
$r_{yx2\ (ROE)}$	0.164	0.026	0.2078	1.246	Insignificant	0.461	2.306	Insignificant
$r_{yx3(EPS)}$	0.348	0.121	0.1875	1.125	Insignificant	1.049	2.306	Significant
$r_{yx4(DPS)}$	0.263	0.069	0.1986	1.191	Insignificant	-0.772	2.306	Insignificant
$r_{yx5(BVPS)}$	0.092	0.009	0.2114	1.268	Insignificant	-0.262	2.306	Insignificant

Interpretation of Correlation by using Probable Error

The Statistical table 4.2.5 clear demonstration that the degree of relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS) of IBL .The correlation coefficient recorded of IBL in MVPS with all financial indicator seems to be positive relationship.

From the above table 4.2.5, we can clearly see that the correlation of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.065, 0.164, 0.121, 0.069 & 0.009 respectively in IBL. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 6.5%, 16.4%, 12.1%, 6.9% & 0.9% respectively cause to increase 100% value of MVPS. There is low degree of correlation of ROA, ROE, EPS, and DPS & BVPS with MVPS in the case of IBL.

As same 'r' is less than 6 P.E. in case of ROA, ROE, EPS, DPS and BVPS. This states that there is no correlation between MVPS with ROA, ROE, EPS, DPS and BVPS.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is very week for IBL with ROA, ROE, EPS, DPS and BVPS. (i.e. less than 25%)

Coefficient of determination (r^2) are 0.004, 0.026, 0.121, 0.069 and 0.009 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 0.04% , 2.6% , 12.1% , 6.9% and 0.09% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.} < t_{tab.}$ value at 5% level of significant of 't' in case of ROA, ROE, EPS, DPS and BVPS .Which indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and ROA, ROE, EPS, DPS& BVPS are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

Regression Analysis of MVPS with ROA,ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H_o):- =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H_1):- =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= 1083.580 - 41.566 ROA

The regression constant is 1083.580 implies that when ROA is zero, MVPS is 1083.580. The constant for ROA is - 41.566 implies that when ROA decreased by Rs. 1, MVPS is also increased by Rs. 41.566 and vice versa.

*MVPS on ROE

MVPS on ROE= 917.792+3.937 ROE

The regression constant is 917.792implies that when ROE is zero, MVPS is 917.792The constant for ROE is +3.937 implies that when ROE increased by Rs. 1, MVPS is also increased by Rs. 3.937 and vice versa.

*MVPS on EPS

MVPS on EPS= 566.812+9.409 EPS

The regression constant is 566.812 implies that when EPS is zero, MVPS is 566.812. The constant for EPS is +9.409 implies that when EPS increased by Rs. 1, MVPS is also increased by Rs. 9.409 and vice versa.

*MVPS on DPS

MVPS on DPS= 1161.307- 5.606 DPS

The regression constant is 1161.307implies that when DPS is zero, MVPS is 1161.307. The constant for DPS is - 5.606 implies that when DPS decreased by Rs. 1, MVPS is also decreased by Rs. 5.606 and vice versa.

*MVPS on BVPS

MVPS on BVPS= 1250.169 - 0.913 BVPS

The regression constant is 1250.169 that when BVPS is zero, MVPS is 1250.169. The constant for BVPS is - 0.913 implies that when BVPS decreased by Rs. 1, MVPS is also increased by Rs. 0.913 and vice versa.

4.2.6 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of Everest Bank Limited

TABLE-4.2.6

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1\ (ROA)}$	0.047	0.002	0.2129	1.277	Insignificant	0.134	2.306	Insignificant
$r_{yx2\ (ROE)}$	0.097	0.009	0.2114	1.268	Insignificant	-0.277	2.306	Insignificant
$r_{yx3(EPS)}$	0.911	0.829	0.0365	0.219	Nothing conclude	6.234	2.306	Significant
$r_{yx4(DPS)}$	0.721	0.520	0.1024	0.614	Nothing conclude	2.943	2.306	Insignificant
$r_{yx5(BVPS)}$	0.885	0.783	0.0463	0.278	Nothing conclude	5.366	2.306	Insignificant

<u>Interpretation of Correlation by using Probable Error</u>

The Statistical table 4.2.6 clear demonstration that the degree of relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS) of EBL. The correlation coefficient recorded of EBL in MVPS with all financial indicators seems to be positive relationship.

From the above table 4.2.6, we can clearly see that the correlation of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.047, 0.097, 0.911, 0.721 & 0.885 respectively in EBL. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 4.7%, 9.7%, 91.1%, 72.1% & 88.5% respectively cause to increase 100% value of MVPS. Thus there is high degree correlation of EPS, DPS and BVPS with MVPS. There is low degree of correlation of ROA & ROE with MVPS in the case of EBL.

As same 'r' is less than 6 P.E. in case of ROA and ROE. This states that there is no correlation between MVPS with ROA and ROE. In case of EPS, DPS and BVPS the value of 'r' is not lies between (P.E. < r < 6P.E.). So nothing can be concluding.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is stronger for EBL with EPS, DPS and BVPS (i.e. greater than 25%) and very week is ROA and ROE. (i.e. less than 25%)

Coefficient of determination (r^2) are 0.002, 0.009, 0.829, 0.520 and 0.783 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 0.02%, 0.09%, 82.9%, 52.0% and 78.3% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.}$ < $t_{tab.}$ value of 't' in case of ROA and ROE.Which indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and ROA and ROE are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

The $t_{cal.}$ > $t_{tab.}$ Value of 't' in case of EPS, DPS and BVPS at 5% level of significant there H$_1$ is accepted. Which means MVPS and EPS, DPS and BVPS are significantly correlated which can be recognized as a positive indicators of the development of commercial banking sector in our country.

Regression Analysis of MVPS with ROA,ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H_o):- =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H_1):- =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= 635.230 +161.865 ROA

The regression constant is 635.230 implies that when ROA is zero, MVPS is 635.230. The constant for ROA is +161.865 implies that when ROA increased by Rs. 1, MVPS is also increased by Rs. 161.865 and vice versa.

*MVPS on ROE

MVPS on ROE= 1000.332 - 6.409 ROE

The regression constant is 1000.332 implies that when ROE is zero, MVPS is 1000.332. The constant for ROE is - 6.409 implies that when ROE decreased by Rs. 1, MVPS is also decreased by Rs. 6.409 and vice versa.

<u>*MVPS on EPS</u>

MVPS on EPS= -445.245 + 31.546 EPS

The regression constant is -445.245 imply that when EPS is zero, MVPS is -445.245. The constant for EPS is + 31.546 imply that when EPS increased by Rs. 1, MVPS is also increased by Rs. + 31.546 and vice versa.

<u>*MVPS on DPS</u>

MVPS on DPS= 377.932+ 34.183 DPS
The regression constant is 377.932implies that when DPS is zero, MVPS is 377.932. The constant for DPS is + 34.183 imply that when DPS increased by Rs. 1, MVPS is also increased by Rs. 34.183 and vice versa.

<u>*MVPS on BVPS</u>

MVPS on BVPS= -603.356 + 8.672 BVPS

The regression constant is -603.356 that when BVPS is zero, MVPS is -603.356. The constant for BVPS is + 8.672 imply that when BVPS increased by Rs. 1, MVPS is also increased by Rs. 8.672 and vice versa.

4.2.7 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of SBI Bank Limited

TABLE-4.2.7

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1\ (ROA)}$	0.066	0.004	0.2124	1.275	Insignificant	0.188	2.306	Insignificant
$r_{yx2\ (ROE)}$	0.059	0.003	0.2127	1.276	Insignificant	0.166	2.306	Insignificant
$r_{yx3(EPS)}$	0.069	0.005	0.2122	1.273	Insignificant	0.195	2.306	Significant
$r_{yx4(DPS)}$	0.352	0.124	0.1868	1.121	Nothing conclude	1.062	2.306	Insignificant
$r_{yx5(BVPS)}$	0.113	0.013	0.2105	1.263	Insignificant	0.332	2.306	Insignificant

Interpretation of Correlation by using Probable Error

The Statistical table 4.2.7 clear demonstration that the degree of relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS) of SBI.The correlation coefficient recorded of SBI in MVPS with all financial indicator seems to be positive relationship.

From the above table 4.2.7, we can clearly see that the correlation of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.066, 0.059, 0.069, 0.352 & 0.113 respectively in SBI. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 6.6%, 5.9%, 6.9%, 35.2% & 11.3% respectively cause to increase 100% value of MVPS. There is low degree of correlation of ROA, ROE, EPS, DPS and BVPS with MVPS in the case of SBI.

As same 'r' is less than 6 P.E. in case of ROA, ROE, EPS and BVPS. This states that there is no correlation between MVPS with ROA, ROE, EPS and BVPS .In case of DPS the value of 'r' is not lies between(P.E. < r < 6P.E.). So nothing can be concluding.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is very week is ROA, ROE, EPS, DPS and BVPS. (i.e. less than 25%)

Coefficient of determination (r^2) are 0.004, 0.003, 0.005, 0.124 and 0.012 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 0.4%, 0.3%, 0.5%, 12.5% and 1.2% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.} < t_{tab.}$ value at 5% level of significances of 't' in case of ROA, ROE, EPS,DPS and BVPS .Which indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and ROA, ROE, EPS, DPS& BVPS are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

Regression Analysis of MVPS with ROA,ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H$_o$):-   =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H$_1$):- =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= 570.984 +53.941 ROA

The regression constant is 570.984 implies that when ROA is zero, MVPS is 570.984. The constant for ROA is +53.941 implies that when ROA increased by Rs. 1, MVPS is also increased by Rs. +53.941 and vice versa.

*MVPS on ROE

MVPS on ROE= 573.325 + 3.317 ROE

The regression constant is 573.325 implies that when ROE is zero, MVPS is 573.325. The constant for ROE is + 3.317 imply that when ROE increased by Rs. 1, MVPS is also increased by Rs. 3.317 and vice versa.

*MVPS on EPS

MVPS on EPS= 574.718 + 1.831 EPS

The regression constant is 574.718 implies that when EPS is zero, MVPS is 574.718. The constant for EPS is + 1.831 implies that when EPS increased by Rs. 1, MVPS is also increased by Rs. 1.831 and vice versa.

*MVPS on DPS

MVPS on DPS= 512.970 + 9.661 DPS

The regression constant is 512.970 implies that when DPS is zero, MVPS is 512.970. The constant for DPS is + 9.661 imply that when DPS decreased by Rs. 1, MVPS is also decreased by Rs. 9.661 and vice versa.

*MVPS on BVPS

MVPS on BVPS= 424.394 + 1.095 BVPS

The regression constant is 424.394 that when BVPS is zero, MVPS is 424.394. The constant for BVPS is + 1.095 implies that when BVPS increased by Rs. 1, MVPS is also increased by Rs. 1.095 and vice versa.

4.2.8 Relationship of ROA, ROE, EPS, DPS, BVPS with MVPS of Bank of Katmandu

TABLE-4.2.8

Variable	r	r^2	P.E	6P.E	Remarks	t-cal.	t-tab.	Remark
$r_{yx1 \, (ROA)}$	0.489	0.239	0.1623	0.974	Insignificant	1.578	2.306	Insignificant
$r_{yx2 \, (ROE)}$	0.308	0.095	0.1930	1.158	Insignificant	0.915	2.306	Insignificant
$r_{yx3(EPS)}$	0.815	0.664	0.0717	0.430	Nothing conclude	3.975	2.306	Significant
$r_{yx4(DPS)}$	0.618	0.383	0.1316	0.789	Insignificant	2.24	2.306	Insignificant
$r_{yx5(BVPS)}$	0.316	0.100	0.1917	1.152	Insignificant	0.943	2.306	Insignificant

Interpretation of Correlation by using Probable Error

The Statistical table 4.2.8 clear demonstration that the degree of relationship between MVPS and (ROA, ROE, EPS, DPS, BVPS) of BOK .The correlation coefficient recorded of BOK in MVPS with all financial indicator seems to be positive relationship.

From the above table 4.2.8, we can clearly see that the correlation of MVPS with (ROA, ROE, EPS, DPS, BVPS) 0.489, 0.308, 0.815, 0.618 & 0.316 respectively in BOK. Which shows that the increase in the value of (ROA, ROE, EPS, DPS, BVPS) by 48.9%, 30.8%, 81.5%, 61.8% & 31.6% respectively cause to increase 100% value of MVPS. Thus there is high degree correlation of EPS with MVPS (0.70- 0.999). There is moderate correlation of DPS with MVPS. There is low degree of correlation of ROA, ROE & BVPS with MVPS in the case of BOK.

As same 'r' is less than 6 P.E. in case of ROA, ROE, DPS and BVPS. This states that there is no correlation between MVPS with ROA, ROE, DPS and BVPS. In case of EPS the value of 'r' is not lies between (P.E. $<$ r $<$ 6P.E.). So nothing can be concluding.

Coefficient of Determination 'r^2' with MVPS

The predication of MVPS is stronger for BOK with EPS and DPS (i.e. greater than 25%) and very week is ROA, ROE and BVPS. (i.e. less than 25)

Coefficient of determination (r^2) are 0.239, 0.095, 0.664, 0.382 and 0.100 respectively which indicates that change in MVPS is due to change of ROA, ROE, EPS, DPE and BVPS are 23.9%, 9.5%, 66.4%, 38.2% and 10.0% respectively and remaining variable is due to the effect of other factors.

Test of Hypothesis (t-test)

In case of t-test the calculated value of $t_{cal.}$ $<$ $t_{tab.}$ value of 't' in case of ROA, ROE, DPS and BVPS .Which indicates that the relationship is not statistically significant and there Ho is accepted. The acceptance of null hypothesis shows that MVPS and ROA, ROE, DPS& BVPS are not significantly correlated. Such a situation a healthy indicator for the commercial banking sector in our country.

The $t_{cal.} > t_{tab.}$ Value of 't' in case of EPS at 5% level of significant there H_1 is accepted. Which means MVPS and EPS are significantly correlated which can be recognized as a positive indicators of the development of commercial banking sector in our country.

Regression Analysis of MVPS with ROA,ROE, EPS, DPS and BVPS

Regression equation of market price on (ROA, ROE, EPS, DPS & BVPS) by using the method of t-test (MVPS = a + b (ROA, ROE, EPS, DPS & BVPS)

Null Hypothesis (H_o):- =0, that is population correlation coefficient is zero. In other words the variable are insignificantly correlated in the population i.e., 'r' is significant of correlation in the population.

Alternatives Hypothesis (H_1):- =0, that is population correlation coefficient is not zero. In other words the variable are significantly correlated in the population i.e., 'r' is significant of correlation in the population.

*MVPS on ROA

MVPS on ROA= 315.851 + 247.746 ROA

The regression constant is 315.851 implies that when ROA is zero, MVPS is 315.851. The constant for ROA is + 247.746 imply that when ROA increased by Rs. 1, MVPS is also increased by Rs. 247.746 and vice versa.

*MVPS on ROE

MVPS on ROE= 433.864 + 6.505 ROE

The regression constant is 433.864 implies that when ROE is zero, MVPS is 433.864. The constant for ROE is +6.505 implies that when ROE increased by Rs. 1, MVPS is also increased by Rs. 6.505 and vice versa.

*MVPS on EPS

MVPS on EPS= 284.400 + 7.390 EPS

The regression constant is 284.400 implies that when EPS is zero, MVPS is 284.400. The constant for EPS is +7.390 implies that when EPS increased by Rs. 1, MVPS is also increased by Rs. 7.390 and vice versa.

*MVPS on DPS

MVPS on DPS= 275.024 + 22.558 DPS

The regression constant is 275.024 implies that when DPS is zero, MVPS is 275.024. The constant for DPS is + 22.558 imply that when DPS decreased by Rs. 1, MVPS is also decreased by Rs. 22.558 and vice versa.

*MVPS on BVPS

MVPS on BVPS= 262.786 + 1.796 BVPS

The regression constant is 262.786 that when BVPS is zero, MVPS is 262.786. The constant for BVPS is +1.796 implies that when BVPS increased by Rs. 1, MVPS is also increased by Rs. 1.796 and vice versa.

4.3 EXCERPTS OF INTERVIEWS AND QUESTIONNAIRES

Annex -1 reveals important information as to outlook of investment decision of investors. In the course of acquiring first hand to justify the study on the topic primarily, interviews and questionnaire methods have been used.

4.3.1 EXCERPTS OF INTERVIEWS

While taking interview with a senior official of NEPSE about the investors' awareness in investment decision, it was learnt that the reason behind frequently swing in the market price of shares is due to lack of institutional investors who can properly analyze and study the market trends before making their investment decisions. According to the official, Nepalese stock market is dominated by retailing investors come forward to act in bullish manner. He emphasized that stability cannot be fully achieved unless rational and institutional investors come forward to participate in the secondary market. However, he agreed on the fact that lately the investors have become more sensitive and professional at least in comparison to investors in 1990s when market was at the nascent stage.

While conducting the informal discussion with many investors in the stock market, they claimed that though they made investment decision after analyzing performances of the companies, they got less than the expected return from their investment. They accused brokers and NEPSE officials for joining hands for price manipulation. They also shared the experience of sharp wealth devaluation in the past days. It was learnt that unprecedented swings in the Nepal Stock Exchange market index caused uproar among investors.

In this way, it was seen in the Nepalese Stock Exchange, investors and officials were at loggerheads' over the cause of stock market slack, blaming each other for the volatility of stock prices. Though, they have different theories to offer over the price fluctuations, the effort improve the domestic stock market should be done from all quarters.

4.3.2 QUESTIONNAIRE ANALYSIS

Another measure applied to garner information relevant to the topic was questionnaire method. A number of questions were put up by means of 100 copies of questionnaire. Categorically, the questions raised through this means were of three types, namely, Yes/No questions, Multiple Choice questions. 80% of the questionnaires were collected during study period. The questionnaires were distributed to find out the first hand information from the investors of secondary stock market. Their responses have been analyzed as follows:

a.   **Preferred sector of investment**

In the questions regarding their preferred sector of investment, 60% of investors are interested in banking sector. From the table 4.3.2.1, it is clear that most of the investors, i.e., 60% are attracted by banking industry performance.

TABLE – 4.3.2.1

Sector wise preference for investment

S. N.	Research Variable	No. of respondents	% of investors
A	**Banking**	48	60
	Total	48	**60**

Source: Field Survey

b. Investors' Awareness

When investors were asked whether they are aware or not about the financial performances of companies, 50% replied that they are moderately known about the financial performances of the companies they have interested or planned to invest upon. 30% replied that they are not at all knowledgeable, 10% were very

much known and rest 10% has little knowledge regarding their companies' performance.

TABLE – 4.3.2.2

Investors' awareness regarding financial performance of companies

S.N.	Research Variable	No. of respondents	% of investors
A	**Very much**	**8**	10
B	**Moderately**	**40**	50
C	**Little**	**8**	10
D	**Not at all**	**24**	30
	Total	**80**	**100**

Source: Field Survey

c. Investors' Satisfaction

Regarding the satisfaction of the investors, 67.5% replied that they are not satisfied. Only 20% of the respondents are satisfied. Remaining 12.5% said that they are unknown about the fact. The table 4.3.2.3 gives the fact regarding investors' satisfaction:

TABLE-4.3.2.3

Investors' satisfaction from the return on their investment

S.N.	Research Variable	No. of respondents	% of investors
A	**Yes**	**16**	20
B	**No**	**54**	67.5
C	**Don't Know**	**10**	12.5
	Total	**80**	**100**

Source: Field survey

d. Reasons for owning shares

Investors were asked for their purpose behind owning the shares that if they were interested with dividend, capital gain, social status, marketability or above all, 40% said that they are more interested in dividend income, 30% replied in favor of capital gain, 20% in favor of social status, and remaining 20% in above all. The following table describes their reasons behind owning the shares.

TABLE-4.3.2.4

Reasons for owning the shares of the companies

S.N.	Research Variable	No. of respondents	% of investors
A	**Dividend**	**32**	40
B	**Capital Gain**	**24**	30
C	**Social Status**	**16**	20
D	**Marketability**	**0**	0
E	**Above all**	**8**	10
	Total	**80**	**100**

Source: Field survey

e. Interest in the management of the companies

When they were asked whether they want to have any role in the management, 57.5% were not interested for a role, 30% replied in favor of the role, and remaining 12.5% replied that they have no idea regarding this.

TABLE-4.3.2.5

Investors' seeking role in management of the companies

S.N.	Research Variable	No. of respondents	% of investors
A	Yes	24	30
B	No	46	57.5
C	No Idea	10	12.5
	Total	80	100

Source: Field survey

f. Bases of decision for investment

Regarding the investment decision making procedures, 12.5% of the respondents replied that they made decision on the basis of market index, 12.5% replied that they made decision on the basis of company's profitability, 20% replied that they made on the basis of market price trend, 35% made on the basis of dividend declared, 5% made on the basis of friends opinion, and remaining 15% said that they made decision on the basis of market whim.

TABLE-4.3.2.6
Bases of decision for investment

S. N.	Research Variable	No. of respondents	% of investors
A	Market Index	10	12.5
B	Profitability	10	12.5
C	Market price trend	16	20
D	Dividend	28	35
E	Advice of Friends	4	5
F	Market Whim	12	15
	Total	80	100

Source: Field Survey

g. Factors influencing the stock price

They made mixed reaction in this part; 25% of them gave their views as dividend as the influencing factor, 15% said company's profit, 35% said rumors, 10% said Net worth, and remaining 15% said other as the main determinants of stock price.

TABLE-4.3.2.7
Factors influencing the stock price

S. N.	Research Variable	No. of respondents	% of investors
A	**Dividend**	**20**	25
B	**Profitability**	**12**	15
C	**Rumors**	**28**	35
D	**Net worth**	**8**	10
E	**Others**	**12**	15
	Total	**80**	**100**

Source: Field Survey

4.4 NON-FINANCIAL FACTORS AFFECTING STOCK PRICES

After consulting various people involved in this field like investors, broker, employees of Security Exchange Board and company manager, we find basic five factors that affect the stock prices. These are:

- High Liquidity
- Expectation of bonus shares
- Inadequate public awareness
- Speculation
- Manipulation of stock prices

Lack of Public Awareness:

Behavior of Nepalese investors in the field of security market is quite irrational. Most of investors do not give any attention to the financial performance of concerned organization. And even if they get the information, they lack the accurate or even appropriate interpretation.

From my research, I have found that most of the investors themselves decide about the selling/buying price on the judgmental basis. Such activities facilitate the brokers to have inappropriate benefits from the investors. The people in Nepalese security market invest their fund in expectation of capital gain. They do not consider anything about dividend yield of their investment. Value of stock is nothing but a present value of expected dividends. An expectation of better growth in future dividend is the only cause of capital gain. But in Nepalese practice, capital gain is realized not due to future expectations of dividend but due to the high marketability of the stocks.

Most of the investors do not use the fundamental and technical tools in analyzing financial information and interpreting the result there of for making rational investment decision. Instead, their investment decision is based on rumor and mere expectation regarding future benefits, basically, bonus shares.

Such irrational behaviors of Nepalese investors have made the market quite inefficient. At present if an investor thoroughly follows the theory, he/she can not sustain in this market. For example, theory says when stock is overvalued it should not be kept for long time. But in Nepalese corporate world, it is not applied. 5 years back stock price of NB Bank had already been overvalued.

Unless investors start giving proper attention to the financial performance of concerned organization, demand for stock is not affected by the financial performance indicators, rather a high degree of imperfection in the market still will prevail. This

brings a very insignificant impact on stock prices due to any major or minor changes in the financial performance indicators.

High Liquidity:

Banks have been able to collect sufficient amount of deposit from public but not been able to recognize proper investment sectors to mobilize their funds. This has led a high liquidity in the national economy, which later resulted into lower interest rate for investors.

Thus investors are seeking alternative investment opportunity where they can employ their savings at least to earn minimum rate of return. In such situation, banking is the only sector, which is reporting better return on investment each year. However, they too are unable to offer adequate dividend, which can justify their share prices in the market. But the trend is already established.

Considering only the positive aspect of these joint venture banks, people are trying to invest their idle fund in the stocks of banking sector. So, the demand for stocks of banking sector is very high which has resulted in to over valuation of stock prices.

Expectation of Bonus Share:

Most of the investors think that the company will grant them bonus share and this will recover excess payment. People say that now value of their stock is Rs.1900. After the declaration of bonus share of 1:1 it will be Rs.3800 (1900*2). Thus, they are interpreting the information very differently. Though their expectation about bonus share may be right but they thinking of getting benefit by bonus share are wrong. Bonus share is just an alteration in books of account. The company's assets before

and after bonus share issue will remain the same; only change is that reserve or retained earnings are transferred to paid up capital.

Since bonus is given out of stockholders' share of reserves and retained earning, declaration of bonus stock decreases the price of stock by the equal value of bonus shares. Bonus stock can be regarded as the split of stock. However, there may be signaling effect and stock price may decrease by more/less than the value of bonus shares.

But, Nepalese investors think that they will get benefit equal to market price of share by declaration of bonus share. That is after declaration of bonus shares; they will have the share value double to their previous share value.

Thus the behavior of Nepalese investors has made the market quite inefficient. Price of stock in NEPSE after declaration of bonus share will not decrease as theory says. Therefore, expectation of bonus share is one of the important causes of increase in stock price of NB Bank.

Speculation:

Investment made by public in Nepalese security market is like speculation. Speculation is a short period investment in anticipation of fluctuation in the stock market in order to gain heavily in a limited time. Because of small size of Nepalese stock market, financial information is not readily available to the potential investors, so the investors are prone to speculation.

Generally, active investors speculate by taking a long and short position as per circumstances. Since, speculators make investment decision based on limited information and analysis, stock price in market is not reflecting financial performance of concerned company.

Manipulation on stock price:

Nepalese security market is strongly affected by some parties who are holding large number of stocks. They may raise the rumor that the stock price will rise in future and that the irrational investors believing it gives rise to demand, and supply being controlled by these party take advantage of increasing price of stock.

In Nepal, management of the organization may manipulate the financial information and so can directly/indirectly speculate in the stock price to fluctuate non-financial.

CHAPTER – V

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This is the final chapter of the thesis that involves summary, conclusion and recommendations. Summary refers the short from of whole study, conclusion draw from the analysis provides the cause of Financial Performance Indicator and Share Market Behavior in Nepalese Securities market and recommendation suggest the improvement to be made in stock market for its development. Generally, study is related with the market price of securities in the secondary stock market. There is no any market price behavior in the primary market but there are high market price behaviors in the secondary market due to exchange process. The various statistical tools and financial tools were adopted as test methodology.

5.2 SUMMARY AND FINDINGS

As we know the effective mobilization of saving closely depends upon the industrialization and economic wealth of a country. Stock market is the main milestone for every people' saving mobilization. This research work was approved to study and analyze the relationship between the financial performance (profitability, dividends and net worth) and common stock market values (MVPS). Besides, the study made an attempt toward the impact of bonus issue and signaling effects upon the stock prices. This study attempts to establish legalization about the public response on stock market in the context of Nepal.

The main objectives of this research was to examine the relation of financial performances and stock prices and it was study the prices trend, with the help of NEPSE index, volume of stock traded, rate of listing of new companies in Nepal stock exchange, impact of signaling factor on NEPSE index and to measure the relationship of financial indicator (ROA, ROE, EPS, DPS and MVPS), these are the important factors for stock market.

All the literatures reviewed (including books, researches, journals, daily papers and materials found on different internet sites) have suggested that, of course, there ought to be a correlation between the financial indicators and common stock values.

This study has been used for Correlation research design base. Financial data were extracted from the websites of Nepal Stock Exchange, SEBON Publications, different company's Annual Reports and NEPSE records. Structured intensive interviews were conducted to derive some in-depth insights regarding the stock market performances. As a sample 8 firm out of 135 total listed companies in Nepal were selected for the research study. These samples are taken on the basis of availability of information in the SEBON, which includes the companies which have been regularly submitting the Annual Reports from last 10 years. In this way, I have taken all the firms meeting my study requirements in terms of data availability for 10 years. The study had assumed three main hypotheses relating to the correlation test between the independent variables (DPS, EPS, ROE, ROA and Net worth per share). To compute the value R, R2, Per, T, P, etc. Computer software – SPSS program was used.

Analyses of financial indicators have shown that Nepalese Stock market is still in its infancy stage. Financial indicators are not much stable. Growth rates are not only super normal but also abnormal. Potential investors are highly attracted by banking.

Tests of hypotheses suggested that, in case of banking, there is a perfect correlation between the financial performances and stock prices, rather it is too weak. Investors

do not buy the shares analyzing the financial position of the firm. The role of signaling effect is very dominant in fluctuate the share prices in Nepalese stock market. Investors of the stock market are not showing rational behaviors. Stock investors are showing their investment behavior in such a manner that it is almost impossible to fit a theory or prescription for pre-determining the market value of stocks.

Findings and conclusions of the study are summarized in following key points:

1. Nepalese stock market is in immaturity stage. In general, it is very new and has just started to develop.
2. Dominance of banking sector is prevalent in the market due to which NEPSE index is going up.
3. Essentially, investors and sellers of stocks are not aware with the financial parameters such as DPS, EPS, ROA, ROE, and BVPS etc.
4. Corporate firms with a long history have a relatively stable profitability parameters than the firms established after the economic liberalization of 1990.
5. Dividend per share is relatively more stable than the Dividend payout ratio. That's why payout ratio and dividend yields have been highly fluctuating.
6. Capital gains are not only supernormal, moreover those are abnormal. Therefore, the cash dividend has a minor role in stock price determination. Most of the investors make security transactions for speculative purpose instead of normal returns.
7. Investors could base their investment decision depending upon the credit rating computed by such agency.
8. Due to lack of proper investment opportunity, most of the investors have directed their savings towards the secondary stock market. This factor has created a bulk demand for stocks.
9. People have a misunderstanding that the issuance of bonus shares and right shares, which actually decrease the net worth per share

Findings of Test of Hypotheses:

a. There is a significant positive correlation between the profitability parameters (EPS, ROE, and ROA) and the stock prices of banking sector only and other have not such perfect correlation between these variables. b. There is a moderate positive correlation (6* per>R>) between the financial parameters (DPS, EPS, ROE, ROA, BVPS) and stock prices.

c. There is a strong existence of non-financial and intangible intervening variables (signaling effects) in stock price movement.

5.3 CONCLUSIONS

An investment in common stock of a corporate firm neither ensures an annual return nor ensures the return of principal. Therefore, investment in common stock is very sensitive on the ground of risk. Dividends to common stockholders are paid only if the firm makes an operating profit after tax and preference dividend. The company can return the principal in case of its liquidation only to the extent of the residual assets after satisfying to all of its creditors and preference shareholders. Besides this, the investors have to sacrifice the return on their investment in common stocks, which could be earned investing the fund elsewhere in the next best alternative.

Therefore, a rational investor of common stock needs to consider at least one of the following three factors:

1. Profitability of the corporation
2. Net assets value per share
3. Opportunity cost of the fund.

Nepalese stock market is an imperfect stock market. Limited bulk investors, VIP shareholders, brokers, underwriters and the firms are dominating the whole stock market. Their union, intention and rumors highly affect to the market price of their

targeted corporations. Some of the firms under those have a market value per share less than the book value per share. Whereas in case of banking it is in some cases, 10 times greater than the book value per share.

Stock market in Nepal has not been properly analyzed and understood by many investors in Nepal and because of this there is high degree of imperfection in the market. It is quite obvious that if any degree of imperfection prevails in any system that leads to a manipulation or an arbitrage opportunity to the players. Therefore, even if the investors are well known about the theory and concepts of the stock market, they fail in the reality because of the malpractices prevailed in the system. There are so many examples where investors failed when they based their decisions on the theoretical knowledge of the stock market. Stock market in Nepal required an overall restructuring because there is a huge gap between the generalized theories of stock prices and the reality so happening here in Nepal. Stock market behaves generally in response to the whims and rumors spread by the major players of the market in most of the times than the actual financial performances of the companies shown by the indicators.

5.4 RECOMMENDATIONS

Based on the research work, the researcher has reached the following recommendations:

To Investors

In Nepalese contest the main weakness of the investors is lack of education and sufficient information about stock market and its nature. They should seek their right towards accurate and timely information, as well as for protection. Similarly, investors should be alert to utilize the opportunities through short term speculation. So, they are suggesting raising their voice and complaining about the misconduct of relevant company of NEPSE, SEBON as well as of Government. They are

encouraged to improve their level of knowledge and make the investment opportunities fruitful. Investors should make their investment decisions based on financial parameters of the company. They should not rush over the rumors. All the stakeholders of the Nepalese stock market should realize that our stock market is in its infancy stage. There are many arbitrage opportunities prevail in our system. Therefore, if sufficient concern is not paid by every stakeholder of our financial system, it is sure that the same indecisive situation may last even for coming many years.

To Brokers

Brokers are suggested not only at their interest but also be sincere and cooperate with investors. Since they have greater level of practical knowledge they should provide rational and accurate advice to their clients/investors and promote professionalism.

To SEBO/N & NEPSE

Security Board and Security Exchange Centre should attempt to make aware to the investors regarding the factors which ought to be considered for making less risky and rational investment. The authorities related to the stock market should have effective packages and programs to educate and train to the stakeholders who directly involve in security transactions. This can be done by; 1) publishing daily national news related the matters of stock investment more frequently, 2) disseminating the recent information and knowledge through mass media, 3) conducting programs like seminars, workshops, trainings, round table talks, etc. which develop a skill and awareness among the investors and market makers, 4) NEPSE can expand its service to regional and local level so that it gives the equal opportunities to all potential investors, 5) Perfect markets require that all information concerning further risks and return of securities be readily available to all investors by NEPSE

To Listed companies

Listed companies are requested to purpose the accurate and timely information to concerned authorities as well as to investors. They should conduct timely AGM, and fulfill the requirement of concerned authorities. They should not provide publicity to attract the potential investors.

To Government

Government should formulate as well as implement effective rules and regulation, code of conduct, for the gradual development of capital market. For this purpose national as well as international stocks expert should consulted. Similarly, it should encourage independent rating agencies so that the investors will have a confident picture of financial health and future prospects of organization. NEPSE should be given authority to encourage the concerned body to organize programs, seminars time to time to create awareness among the investors.

To Further researcher

Research is an ongoing process. Study of security is a vast field of study. Through this research, the researcher has tried to explore the factors affecting share price of commercial banks, which is I believe more specific factors. Similarly, they can even carry out research based on primary source. The other relevant factors for example can be impact of CEO charisma, Research, inflation, oil/energy price etc that affect the share price. At last I strongly suggest to further researchers on this area to take more samples, if possible the whole population, and more intensive primary data based research to generalize the facts about the market value per share of common stocks. But it requires a great deal of effort to collect the data of other corporate firms that are not included in this research.

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ANNEXURE - 1

i. Current Ratio Times

NABIL

Fiscal year	2002/03	2003/04	2004/05	2005/06	2006/07
Current Assets	13868307	14244337	14971801	18133814	22829535
Current Liabilities	12997476	12961180	13451753	16896957	19765831
Ratio	1.067	1.099	1.113	1.0732	1.155

SCBNL

Fiscal year	2002/03	2003/04	2004/05	2005/06	2006/07
Current Assets	17084409	20093715	19322679	21472350	22025802
Current Liabilities	17594654	20740829	18895638	21888227	23283089
Ratios	0.971	0.9688	1.0226	0.981	0.946

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Current Assets	16297019	18602009	21326260	23153115	2777553
Current Liabilities	19083160	18733141	19422823	20991038	1920853
Ratio	0.854	0.993	1.098	1.103	1.446

ii. Cash and Bank balance to Total Deposit Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and Bank Balance	1144767	970486	559380	556176	1383821
Total Deposit	13447661	14119032	14586608	19347399	23342850
Ratio	8.51	6.87	3.83	2.87	5.93

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and Bank Balance	1512304	2023164	1111117	1276241	2021021
Total Deposit	18755635	21161442	19335095	23061032	24647021
Ratio	8.06	9.56	5.75	5.53	8.21

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and Bank Balance	1979209	2001184	2014471	1717352	1757341
Total Deposit	21007379	22010333	54814012	26490852	30048418
Ratio	9.42	9.092	8.12	6.84	5.85

iii. Cash and Bank Balance to Current Assets Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and Bank Balance	1144767	970486	559380	556176	1383821
Current Assets	13868307	14244337	14971801	18133814	22829535
Ratio	8.25	6.81	3.74	3.07	6.06

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and Bank Balance	1512304	2023164	1111117	1276241	2021021
Current Assets	17084409	20093715	19322679	21472350	22025802
Ratio	8.85	10.07	5.529	5.94	9.18

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and Bank Balance	1979209	2001184	2014471	1717352	17581910
Current Assets	16297019	18602009	21326260	23153115	2777553
Ratio	12.14	10.76	9.45	7.42	6.33

iv. Investment on Government Securities to Current Assets Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Got. Securities	3588772	3672626	2413939	2301462	4808348
Current Assets	13868307	14244337	14971801	18133814	22829535
Ratio	25.87	25,78	16.12	12.69	21,06

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Got. Securities	6581348	7948217	7203066	8635875	7107937
Current Assets	1708440	20093715	19322679	21472350	22025802
Ratio	38.52	39.56	37.28	40.22	32.27

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Got. Securities	3347102	3431728	5469729	5144312	6454873
Current Assets	16297019	18602009	21326260	23153115	2777533
Ratio	20.54	18.45	25.65	22.22	23.24

v. Loan and Advances to Current Assets Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	7755951	818992	10586170	12922543	15545778
Current Assets	13868307	14244337	14971801	18133814	22829535
Ratio	55.93	57.50	70.71	71.26	68.11

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Current Assets	17084409	20093715	1932679	21472350	22025802
Ratio	33.34	31.90	42.14	41.61	47.68

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	10844599	12919631	13451168	15761977	16997997
Current Assets	16297019	18602009	21326260	23153115	27775533
Ratio	66.54	69.45	63.07	68.08	61.20

vi. Loan and Advances to Total Deposit Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	7755952	8189993	10586170	12922543	15545779
Total Deposit	13447661	14119032	14586608	19347399	23342285
Ratio	57.67	58.00	72.57	66.76	66.61

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Current Assets	18755635	21161442	19335095	23061032	24647021
Ratio	30.36	30.30	42.12	38.75	42.61

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	10844599	12919631	13451168	15761977	16997797
Current Assets	21007379	22010333	24814012	26490852	30048418
Ratio	51.62	58.70	54.21	59.50	56.57

vii. Total Investment to Total Deposit Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Investment	6031175	5835948	4269657	6178533	8945310
Total Deposit	13447661	14119032	14586608	19347399	23342285
Ratio	44.85	41.33	29.27	31.93	38.32

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Investment	10216199	11360328	9702553	12847536	13553233
Total Deposit	18755635	21161442	19335095	23061032	24647021
Ratio	54.47	53.68	50.18	55.71	55.10

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Investment	10175435	9292103	11692342	10889031	11822985
Total Deposit	21007379	22010333	24814012	26496852	30048418
Ratio	48.44	42.22	47.20	41.10	39.35

viii. Loan and Advances to Total Working Fund Ratio (Rs. in 000)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	7755952	8189993	10586170	12922543	15545779
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	46.82	48.91	61.60	57.87	57.04

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	27.24	21.11	37.19	34.67	36.73

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	10844599	12919631	13451168	15761977	16997997
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	44.82	50.21	46.60	51.54	49.53

ix. Investment on Government securities to Total Working Fund Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Govt. Securities	3588772	3672626	2413939	2301462	4808348
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	21.67	21.93	14.04	10.31	17.64

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Govt. Securities	6581348	7948218	7203066	8644855	7107937
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	31.47	33.62	32.90	33.54	24.85

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Govt. Securities	3347102	3431729	5469729	5144313	6454873
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	13.82	13.34	18.94	16.82	18.81

x. Investment on Share and Debenture to Total Working Fund Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment on S& D	22220	22220	440282	104192	286957
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	0.13	0.13	2.56	0.47	1.053

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment on S& D	11195	11195	13348	15348	44943
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	0.05	0.05	0.06	0.06	0.06

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment on S& D	34266	34266	39909	39909	73424
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	0.14	0.13	0.14	0.13	0.21

xi. Return Total Working Fund Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	416236	455311	518336	635263	673959
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	2051	2.72	3.01	2.84	2.47

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	506932	537800	539204	658756	691668
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	2.424	2.27	2.46	2.55	2.42

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	212132	263052	308277	457458	491823
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	0.88	1.02	1.06	1.50	1.43

xii. Total Interest Earned to Total Outside Assets Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1017872	1001616	1068746	1309998	1587749
Total Outside Assets	13787127	14025942	14853403	19101076	24491089
Ratio	7.38	7.14	7.20	6.86	6.50

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1001359	1042175	1058677	1189603	1411942
Total Outside Assets	6722023	17770570	17845761	21782954	24055870
Ratio	14.90	5.86	5.93	5.46	5.87

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1201233	1245895	1446468	1626474	1775583
Total Outside Assets	21020034	22211734	25143510	26651008	29616709
Ratio	5.71	5.61	5.75	6.10	6.10

xiii. Return on Loan and Advances (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	416236	455311	518336	635263	673959
Loan and Advances	7755951	8189992	10586170	12922543	15545778
Ratio	5.37	5.56	4.90	4.92	4.33

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	506932	537800	539204	658756	691668
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Ratio	8.9	8.41	6.62	7.37	6.6

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	212132	263052	308277	457458	491823
Loan and Advances	10844599	12919331	13451168	15761977	16997997
Ratio	1.96	2.03	2.30	2.90	2.89

xiv. Total Interest Earned to Total working fund Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1017872	1001616	1068746	1309998	1587749
Total Working Fund	16562624	16745486	17186331	22329971	2723393
Ratio	6.15	5.98	6.22	5.87	5.83

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1001359	1042175	1058677	1189603	1411982
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	4.81	4.41	4.83	4.61	4.94

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1201233	1245895	1446468	1626474	1775583
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	4.96	4.84	5.01	5.32	5.17

xv. Total Interest Paid to Total Working Fund Ratio (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Paid	317348	282948	243545	347161	555710
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	1.91	1.10	1.42	1.55	2.04

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Paid	255154	275809	254127	303198	413055
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	1.22	1.2	1.16	1.20	1.44

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Paid	554128	491543	561964	648842	167411
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	2.31	1.91	1.95	2.12	2.24

xvi. Return on Equity Ratio (ROE) (%)

NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	416236	455311	518336	635263	273959
Equity Capital	1165221	1479880	1656875	1873203	2055115
Ratio	35.72	30.77	31.30	33.91	32.79

SCBNL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	506932	537800	539204	658756	691668
Equity Capital	13689	1495739	1582415	1754139	2116353
Ratio	37.03	35.96	33.89	37.55	32.68

HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	212132	263052	308277	457458	491823
Equity Capital	1905883	2291928	2568395	2885593	2146538
Ratio	11.13	11.47	12	15.85	22.91

xvii. Sample Calculation of Growth Rate of Total Deposit of NABIL, SCBNL and HBL

Growth rate is calculated from

$D_n X D_o (1 \Gamma g)^{n Zl}$

D_n XTotal deposit of n^{th} year.

D_o XTotal deposit of initial year.

G   = Growth rate.

N   = Number of year.

$D_{2006/07} = 23342$

$D_{2002/03} = 13448$

$N = 5$

$D_{2006/07} = D_{2002/03} (1+g)^{n-1}$

Or, $23342 = 13448(1+g)^{5-1}$

Or, $1.735 = (1+g)^4$ Or, $1+g = (1.735)^{1/4}$ $g = 0.1477$ or 14.77%

Growth rate of other banks are calculated and fed in the corresponding tables according to the above formula.

Other growth ratios are same as above methods.

i. Calculation of Correlation Between Total Deposit and Loan & Advances of NABIL

(Rs. in Million)

Year	Total Deposit (X)	X^2	Loan & Advances (Y)	Y^2	XY
00/01	13447.66	180839559.48	7755.95	60154760.40	104299378.58
01/02	14119.03	199347008.14	8189.99	67075936.20	115634714.51
02/03	14586.61	212769191.29	10586.17	112066995.27	154416333.18
03/04	19347.40	374321886.76	12922.54	166992040.05	250017550.40
04/05	23342.29	544862502.44	15545.78	241671275.81	362874105.04
N =5	**84842.99**	**1512140148.11**	**55000.43**	**647961007.73**	**987242081.71**

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \; \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 987242081.71 - 84842.99 \times 55000.43}{\sqrt{5 \times 1512140148.11 - (84842.99)^2} \; \sqrt{5 \times 647961007.73 - (55000.43)^2}}$$

$$= \frac{4936210408.55 - 4666400932.49}{19035.96 \times 14654.61} = \frac{269809476.06}{278964569.78} = 0.97$$

$r^2 = 0.9409$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1 - 0.9409)}{\sqrt{5}} = 0.6745 \times 0.0264 = 0.0178$$

$6 P.E. = 6 \times 0.0178 = 0.1068$

ii. Calculation of Correlation Between Total Deposit and Total Investment of NABIL

Year	Total Deposit (X)	X^2	Total Investment (Y)	Y^2	XY
00/01	13447.66	180839559.48	6031.16	36374890.95	104299378.58
01/02	14119.03	199347008.14	5835.95	34058312.40	115634714.51
02/03	14586.61	212769191.29	4269.66	18229996.52	154416333.18
03/04	19347.40	374321886.76	6178.53	38174232.96	250017550.40
04/05	23342.29	544862502.44	8945.31	80018571.00	208804020.16
N =5	84842.99	1512140148.11	31260.63	206856003.82	833171996.83

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \cdot \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 554125318.95 - 84842.99 \times 31260.63}{\sqrt{5 \times 1512140148.11 - (84842.99)^2} \cdot \sqrt{5 \times 206856003.82 - (31260.63)^2}}$$

$$= \frac{2770626594.74 - 2652245318.48}{19035.96 \times 7553.35} = \frac{118381276.26}{143785268347} = 0.82$$

$$r^2 = 0.6724$$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1 - 0.6724)}{\sqrt{5}} = 0.6745 \times 0.1465 = 0.0988$$

$$6 P.E. = 6 \times 0.0988 = 0.5928$$

iii. **Calculation of Correlation Between Outside Assets and Net Profit of NABIL**

(Rs. in Million)

Year	Outside Assets (X)	X^2	Net Profit (Y)	Y^2	XY
00/01	13787.13	190084953.64	416.24	173255.74	5738754.99
01/02	14025.94	196726992.88	455.31	207307.20	6386150.74
02/03	14853.40	220623491.56	518.34	268676.36	7699111.36
03/04	19101.08	364851257.17	635.26	403555.27	12134152.08
04/05	24491.09	599813489.39	673.96	454222.08	16506015.02
N =5	86258.64	1572100184.64	2699.11	1507016.64	48464184.19

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 48464184.19 - 86258.64 \times 2699.11}{\sqrt{5 \times 1572100184.64 - (86258.64)^2}\sqrt{5 \times 1507016.64 - (2699.11)^2}}$$

$$= \frac{242320920.95 - 232821557.81}{20492.63 \times 499.89} = \frac{9499363.14}{10244060.81} = 0.93$$

$r^2 = 0.8649$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1 - 0.8649)}{\sqrt{5}} = 0.6745 \times 0.06042 = 0.0408$$

$$6 P.E. = 6 \times 0.0408 = 0.2448$$

iv.   Calculation of Correlation Between Total Deposit and Loan & Advances of SCBNL

Year	Total Deposit (X)	X^2	Loan & Advances (Y)	Y^2	XY
00/01	18755.6	351774031.81	5695.82	32442365.47	106828749.42
01/02	21161.4	447806542.87	6410.24	41091176.86	135649909.15
02/03	19335.1	373846092.01	8143.21	66311869.10	157449779.67
03/04	23061	531811104.66	8935.42	79841730.58	206059988.68
04/05	24647	607475594.88	10502.6	110305446.97	258858778.13
N =5	**106960**	**2312713366.23**	**39687.33**	**329992588.98**	**864847205.06**

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\ \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 864847205.06 - 106960 \times 39687.33}{\sqrt{5 \times 2312713366.23 - (106960)^2}\ \sqrt{5 \times 329992588.98 - (39687.33)^2}}$$

$$= \frac{4324236025.30 - 4244956816.80}{11096.18 \times 8653.25} = \frac{79279208.50}{96018019.59} = 0.83$$

$$r^2 = 0.6889$$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1 - 0.6889)}{\sqrt{5}} = 0.6745 \times 0.1391 = 0.0938$$

$$6 P.E. = 6 \times 0.0938 = 0.5628$$

v. Calculation of Correlation Between Total Deposit and Total Investment of SCBNL

(Rs. in Million)

Year	Total Deposit (X)	X^2	Total Investment (Y)	Y^2	XY
00/01	18755.64	351774031.81	10216.20	104370742.44	191611369.37
01/02	21161.44	447806542.87	11360.33	129057097.71	240400941.68
02/03	19335.10	373846092.01	9702.55	94139476.50	187599774.51
03/04	23061.03	531811104.66	12847.54	165059284.05	296277505.37
04/05	24647.02	607475594.88	13553.23	183690043.43	334046730.87
N =5	106960.23	2312713366.23	57679.85	676316644.14	1249936321.79

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5(1249936321.79) - 106960.23 \times 57579.85}{\sqrt{5(2312713366.23) - (106960.23)^2}\sqrt{5(676316644.14) - (57579.85)^2}}$$

$$= \frac{6249681608.95 - 6169450022.37}{11096.18 \times 7390.41} = \frac{80231586.58}{82005319.63} = 0.98$$

$r^2 = 0.9604$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \left(\frac{1 - r^2}{\sqrt{N}} \right)$$

$$= 0.6745 \left(\frac{1 - 0.9604}{\sqrt{5}} \right) = 0.6745 \times 0.0177 = 0.0119$$

$$6 P.E. = 6 \times 0.0119 = 0.0714$$

vi. Calculation of Correlation Between Outside Assets and Net Profit of SCBNL

(Rs. in Million)

Year	Outside Assets	X^2	Net Profit	Y^2	XY

	(X)		(Y)		
00/01	6722.02	45185552.88	506.93	256978.02	3407593.60
01/02	17770.57	315793158.12	537.80	289228.84	9557012.55
02/03	17845.76	318471149.98	539.20	290736.64	9622433.79
03/04	21782.95	474496910.70	658.76	433964.74	14349736.14
04/05	24055.87	578684881.46	691.67	478407.39	16638723.60
N =5	**88177.17**	**1732631653.14**	**2934.36**	**1749315.63**	**53575499.68**

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 53575499.68 - 88177.17 \times 2934.36}{\sqrt{5 \times 1732631653.14 - (88177.17)^2}\sqrt{5 \times 1749315.63 - (2934.36)^2}}$$

$$= \frac{267877498.40 - 258743560.56}{29798.41 \times 368.93} = \frac{9133937.84}{10993527.4} = 0.83$$

$$r^2 = 0.6889$$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1 - 0.6889)}{\sqrt{5}} = 0.6745 \times 0.1391 = 0.0938$$

$$6P.E. = 6 \times 0.0938 = 0.5628$$

vii.   Calculation of Correlation Between Total Deposit and Loan & Advances of HBL

<div align="right">(Rs. in Million)</div>

Year	Total Deposit (X)	X^2	Loan & Advances (Y)	Y^2	XY

00/01	21007.38	441310014.46	10844.60	117605349.16	227816633.15
01/02	22010.33	484454626.71	12919.33	166909087.65	284358716.68
02/03	24814.01	615735092.28	13451.17	180933974.37	333777466.89
03/04	26496.85	702083059.92	15761.98	248440013.52	417642819.76
04/05	30048.42	902907544.50	16997.99	288931664.04	510762742.68
N =5	**124376.99**	**3146490337.87**	**69975.07**	**1002820088.74**	**1774358379.16**

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 1774358679.16 \, 0 - 124376.99 \times 69975.07}{\sqrt{5 \times 3146490337.87 - (124376.99)^2}\sqrt{5 \times 1002820088.74 - (69975.07)^2}}$$

$$= \frac{8871791895.80 - 8703288581.64}{16211.60 \times 10843.89} = \frac{168503314.16}{17579607.10} = 0.96$$

$r^2 = 0.9216$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1 - 0.9216)}{\sqrt{5}} = 0.6745 \times 0.0351 = 0.0236$$

$6P.E. = 6 \times 0.0236 = 0.1416$

viii. Calculation of Correlation Between Total Deposit and Total Investment of HBL

(Rs. in Million)

Year	Total Deposit (X)	X^2	Total Investment (Y)	Y^2	XY
00/01	21007.38	441310014.46	10175.44	103539579.19	213759334.75

01/02	22010.33	484454626.71	9292.10	86343122.41	204522187.39
02/03	24814.01	615735092.28	11692.34	136710814.68	290133841.68
03/04	26496.85	702083059.92	10889.03	118570974.34	288524994.56
04/05	30048.42	902907544.50	11822.99	139783092.54	355262169.18
N =5	**124376.99**	**3146490337.87**	**53871.90**	**584947583.16**	**1352202527.55**

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5(1352202527.55) - 124376.99(53871.90)}{\sqrt{5(3146490337.87) - (124376.99)^2}\sqrt{5(584947583.16) - (53871.90)^2}}$$

$$= \frac{6761012637.75 - 6700424767.58}{16211.60(4749.35)} = \frac{60587870.17}{76994562.46} = 0.79$$

$$r^2 = 0.6241$$

Calculation of Probable Error (P.E.)

$$P.E. = 0.6745 \left(\frac{1 - r^2}{\sqrt{N}}\right)$$

$$= 0.6745 \left(\frac{1 - 0.6241}{\sqrt{5}}\right) = 0.6745(0.1681) = 0.1134$$

$$6P.E. = 6(0.1134) = 0.6804$$

ix. Calculation of Correlation Between Outside Assets and Net Profit of HBL

(Rs. in Million)

Year	Outside Assets (X)	X^2	Net Profit (Y)	Y^2	XY
00/01	21020.03	441841661.20	212.13	44999.14	4458978.96

01/02	22211.73	493360949.59	263.05	69195.30	5842795.58
02/03	25143.51	632196095.12	308.28	95036.56	7751241.26
03/04	26651.01	710276334.02	457.46	209269.65	12191771.03
04/05	29616.71	877149511.22	491.82	241886.91	14566090.31
N =5	**124642.99**	**3154824551.16**	**1732.74**	**660387.56**	**44810877.15**

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \cdot \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 44810877.15 - 124642.99 \times 1732.74}{\sqrt{5 \times 3154824551.16 - (124642.99)^2} \times \sqrt{5 \times 660387.56 - (1732.74)^2}}$$

$$= \frac{224054385.75 - 215973894.49}{15435.28 \times 547.31} = \frac{8080491.26}{8447883.10} = 0.96$$

$r^2 = 0.9216$

Calculation of Probable Error (P.E.)

$$\text{P.E.} = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1 - 0.9216)}{\sqrt{5}} = 0.6745 \times 0.0351 = 0.0236$$

$6\text{P.E.} = 6 \times 0.0236 = 0.1416$

ANNEXURE – 3

i. Trend Value of Total Deposit of NABIL

<div align="right">(Rs. In Million)</div>

Fiscal Year (t)	Total Deposit (y)	x = (t-2005)	X^2	xy
2002/03	13447.66	-2	4	-26895.32
2003/04	14119.03	-1	1	-14119.03
2004/05	14586.61	0	0	0.00
2005/06	19347.40	1	1	19347.40
2006/07	23342.29	2	4	46684.58
N = 5	**84842.99**	**0**	**10**	**25017.63**

$$a = \frac{y}{N} = \frac{84842.99}{5} = 16968.60$$

$$b = \frac{xy}{x^2} = \frac{25017.63}{10} = 2501.76$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$$Y_c = 16968.60 + 2501.76x$$

Year	x = (t-2003)	Trend Value $Y_c = 16968.60 + 2501.76x$
2002/03	-2	11965
2003/04	-1	14466.80
2004/05	0	16968.60
2005/06	1	19470.40
2006/07	2	21972.20
2007/08	3	24474
2008/09	4	26975.80
2009/10	5	29477.60
2010/11	6	31979.40
2011/12	7	34481.20

ii. Trend Value of Total Investment of NABIL

(Rs. In Million)

Fiscal Year (t)	Total Investment (y)	x = (t-2005)	X^2	xy
2002/03	6031.18	-2	4	-12062.36
2003/04	5835.95	-1	1	-5835.95
2004/05	4269.66	0	0	0
2005/06	6178.53	1	1	6178.53
2006/07	8945.31	2	4	17890.62
N = 5	31260.63	0	10	6170.84

$$a = \frac{y}{N} = \frac{31260.63}{5} = 6252.13$$

$$b = \frac{xy}{x^2} = \frac{6170.85}{10} = 617.09$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 6252.13 + 617.09x$

Year	x = (t-2003)	Trend Value $Y_c = 6252.13 + 617.09x$
2002/03	-2	5017.95
2003/04	-1	5635.04
2004/05	0	6252.13
2005/06	1	6869.22
2006/07	2	7486.31
2007/08	3	8103.40
2008/09	4	8720.49
2009/10	5	9337.58
2010/11	6	9954.67
2011/12	7	10571.76

iii. Trend Value of Net Profit of NABIL

(Rs. In Million)

Fiscal Year (t)	Net Profit (y)	x = (t-2005)	X^2	xy
2002/03	416.24	-2	4	**-832.48**
2003/04	455.31	-1	1	**-455.31**
2004/05	518.34	0	0	**0**
2005/06	635.26	1	1	**635.26**
2006/07	673.96	2	4	**1347.92**
N = 5	**2699.11**	**0**	**10**	**695.39**

$$a = \frac{y}{N} = \frac{2699.11}{5} = 539.82$$

$$b = \frac{xy}{x^2} = \frac{695.39}{10} = 69.54$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 539.82 + 69.54x$

Year	x = (t-2003)	Trend Value $Y_c = 539.82 + 69.54x$
2002/03	-2	400.74
2003/04	-1	470.28
2004/05	0	539.82
2005/06	1	609.36
2006/07	2	678.90
2007/08	3	748.44
2008/09	4	817.98
2009/10	5	887.52
2010/11	6	957.06
2011/12	7	1026.60

iv. Trend Value of Total Deposit of SCBNL

(Rs. In Million)

Fiscal Year (t)	Total Deposit (y)	x = (t-2005)	X^2	xy
2002/03	18755.64	-2	4	-37511.28
2003/04	21161.44	-1	1	-21161.44
2004/05	19335.10	0	0	0
2005/06	23061.03	1	1	23061.03
2006/07	24647.02	2	4	49294.04
N = 5	106960.23	0	10	13682.35

$$a = \frac{y}{N} = \frac{106960.23}{5} = 21392.05$$

$$b = \frac{xy}{x^2} = \frac{13682.35}{10} = 1368.24$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 106960.23 + 1368.24x$

Year	x = (t-2003)	Trend Value $Y_c = 106960.23 + 1368.24x$
2002/03	-2	104223.75
2003/04	-1	105591.99
2004/05	0	106960.23
2005/06	1	108328.47
2006/07	2	109696.71
2007/08	3	111064.95
2008/09	4	112433.19
2009/10	5	113801.43
2010/11	6	115169.67
2011/12	7	116537.91

v. Trend Value of Total Investment of SCBNL

<div align="right">(Rs. In Million)</div>

Fiscal Year (t)	Total Investment (y)	$x = (t-2005)$	X^2	xy
2002/03	10216.20	-2	4	-20432.4
2003/04	11360.33	-1	1	-11360.33
2004/05	9702.55	0	0	0
2005/06	12847.54	1	1	12847.54
2006/07	13553.23	2	4	27106.46
N = 5	57679.85	0	10	8161.27

$$a = \frac{y}{N} = \frac{57679.85}{5} = 11535.97$$

$$b = \frac{xy}{x^2} = \frac{8161.27}{10} = 816.13$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 11535.97 + 816.13x$

Year	$x = (t-2003)$	Trend Value $Y_c = 11535.97 + 816.13x$
2002/03	-2	9903.71
2003/04	-1	10719.84
2004/05	0	11535.97
2005/06	1	12352.10
2006/07	2	13168.23
2007/08	3	13984.36
2008/09	4	14800.49
2009/10	5	15616.62
2010/11	6	16432.75
2011/12	7	17248.88

vi. Trend Value of Net Profit of SCBNL

(Rs. In Million)

Fiscal Year (t)	Net Profit (y)	x = (t-2005)	X^2	xy
2002/03	506.93	-2	4	-1013.86
2003/04	537.80	-1	1	-537.8
2004/05	539.20	0	0	0
2005/06	658.76	1	1	658.76
2006/07	691.67	2	4	1383.34
N = 5	2934.36	0	10	490.44

$$a = \frac{y}{N} = \frac{2934.36}{5} = 586.87$$

$$b = \frac{xy}{x^2} = \frac{490.44}{10} = 49.04$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 586.87 + 49.04x$

Year	x = (t-2003)	Trend Value $Y_c = 586.87 + 49.04x$
2002/03	-2	488.79
2003/04	-1	537.83
2004/05	0	586.87
2005/06	1	635.91
2006/07	2	684.95
2007/08	3	733.99
2008/09	4	783.03
2009/10	5	832.07
2010/11	6	881.11
2011/12	7	930.15

vii. Trend Value of Total Deposit of HBL

<div align="right">(Rs. In Million)</div>

Fiscal Year (t)	Total Deposit (y)	x = (t-2005)	X^2	xy
2002/03	21007.38	-2	4	-42014.76
2003/04	22010.33	-1	1	-22010.33
2004/05	24814.01	0	0	0
2005/06	26496.85	1	1	26496.85
2006/07	30048.42	2	4	60096.84
N = 5	**124376.99**	**0**	**10**	**22568.6**

$$a = \frac{y}{N} = \frac{124376.99}{5} = 24875.40$$

$$b = \frac{xy}{x^2} = \frac{22568.6}{10} = 2256.86$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 24875.40 + 2256.86x$

Year	x = (t-2003)	Trend Value $Y_c = 24875.40 + 2256.86x$
2002/03	-2	20361.68
2003/04	-1	22618.54
2004/05	0	24875.40
2005/06	1	27132.26
2006/07	2	29389.12
2007/08	3	31645.98
2008/09	4	33902.84
2009/10	5	36159.70
2010/11	6	38416.56
2011/12	7	40673.42

viii. Trend Value of Total Investment of HBL

(Rs. In Million)

Fiscal Year (t)	Total Investment (y)	x = (t-2005)	X^2	xy
2002/03	10175.44	-2	4	-20350.88
2003/04	9292.10	-1	1	-9292.1
2004/05	11692.34	0	0	0
2005/06	10889.03	1	1	10889.03
2006/07	11822.99	2	4	23645.98
N = 5	53871.9	0	10	4892.03

$$a = \frac{y}{N} = \frac{53871.9}{5} = 10774.38$$

$$b = \frac{xy}{x^2} = \frac{4892.03}{10} = 489.20$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 10774.38 + 489.20x$

Year	x = (t-2003)	Trend Value $Y_c = 10774.38 + 489.20x$
2002/03	-2	9795.98
2003/04	-1	10285.18
2004/05	0	10774.38
2005/06	1	11263.58
2006/07	2	11752.78
2007/08	3	12241.98
2008/09	4	12731.18
2009/10	5	13220.38
2010/11	6	13709.58
2011/12	7	14198.78

ix. Trend Value of Net Profit of HBL

(Rs. In Million)

Fiscal Year (t)	Net Profit (y)	$x = (t-2005)$	X^2	xy
2002/03	212.13	-2	4	-424.26
2003/04	263.05	-1	1	-263.05
2004/05	308.28	0	0	0
2005/06	457.46	1	1	457.46
2006/07	491.82	2	4	983.64
N = 5	1732.74	0	10	753.79

$$a = \frac{y}{N} = \frac{1732.74}{5} = 346.55$$

$$b = \frac{xy}{x^2} = \frac{753.79}{10} = 75.38$$

The Equation of the Straight Line Trend is;

$$Y_c = a + bx$$

$Y_c = 346.55 + 75.38x$

Year	$x = (t-2003)$	Trend Value $Y_c = 346.55 + 75.38x$
2002/03	-2	195.79
2003/04	-1	271.17
2004/05	0	346.55
2005/06	1	421.93
2006/07	2	497.31
2007/08	3	572.69
2008/09	4	648.07
2009/10	5	723.45
2010/11	6	798.83
2011/12	7	874.21