CHAPTER - I
INTRODUCTION

1.1 Background of the Study

Capital formation affects the economy of any nation. Capital is an important constituent to accelerate the economic growth of a country. For the establishment, operation, growth and existence, Corporations need massive amount of capital. And the problem of underdeveloped country like Nepal is rareness of capital. Nepal where saving capacity remains very low and thus investment, capital formation is a big blow to the economic growth. In this situation the financial institution like bank and Capital market can be the best medium to collect the scattered saving and utilize it in a productive manner.

Financial intermediation between borrowers and savers is done by commercial banks. This credit market enables debt financing for investments. An alternative method of intermediation is through equity financing (Tuladhar, 1996:2).

Economic growth in a modern economy hinges on an efficient and effective financial sector that pools domestic savings and mobilizes capital for productive projects. Absence of effective capital market could leave most productive projects which carry developmental agenda unexploited (CBL Economic Review, 2009). It is vital to long term growth and prosperity of the economy since it provides the channel through which needed funds are raised.

Capital market is the place where financial instruments like share, bonds, debenture etc. are traded having maturity greater than one year. It is the mechanism through which public saving is channelised to industrial and business enterprises. For the mobilization of unbeatable resources, capital market is an

important intermediary through which effective bridging of the deficit units and surplus units can be insured. Capital market mobilizes saving from surplus units and supply fund into the deficit units for investment. So, capital market is important in mobilizing a constant flow of saving and channelizing these financial resources for expanding productive capacity of the country thus speeding economic development.

Capital market helps in diffusing stresses on the banking system by matching long-term investments with long-term capital. It encourages broader ownership of productive assets by small savers. It enables them to benefit from economic growth and wealth distribution, and provides avenues for investment opportunities that encourage a thrift culture critical in increasing domestic savings and investment ratios that are essential for rapid industrialization. Capital market also provides equity capital and infrastructure development capital that has strong socio-economic benefits. Moreover, capital market promotes public-private sector partnerships to encourage participation of private sector in productive investments. It assist the public sector to close resource gap, and complement its effort in financing essential socio-economic development, through raising long-term project based capital. It also attracts foreign portfolio investors who are critical in supplementing the domestic savings levels.

Securities market and non-securities market together make the capital market. Security market refers to the market for securities where securities like government bonds, corporate bonds or debentures, ordinary shares, mutual funds and certificates are bought and sold as other commodity. Security market is a mechanism created to facilitate the exchange of financial securities or assets by bringing together buyers and sellers of securities (Sharpe,1998). Securities market is further subdivided into the primary and secondary market. The former market denotes the market for newly issued securities to the public whereas the latter

market refers to the market for secondhand securities, traded previously in the primary market (Francis, 1991). The secondary market ensures the liquidity to the securities. This offer an opportunity for investors to invest in the long term venture, and while market also enables them to convert their securities into liquid cash whenever needed before maturity. The liquid stock market also promotes the primary issuance of new securities because the investors are largely interested to participate in the issuance of share market for which they can back the fund easily which makes investor's investment less risky and more attractive.

Bank helps in the growth of agriculture, trade, commerce and industry by funding them and thus development of a country. Commercial banks have inevitable role in moving money from lenders to borrowers for useful and productive purposes. It is the institution which helps in collecting scattered funds from the community as saving and extending credit to the needed one for useful and productive purpose. Banks are taken as the resource mobilizing agent for economic development and it maintains economic confidence of various segments and extends credit to people. The state of banking sector is intricately related to the growth of the capital market. Usually, the banking sector plays a competitive role in the development of capital markets. The study of performance of listed commercial banks and returns to investors occupies an important role in the development of capital market.

The corporate success or positive financial performance of every organization is vital for overall development of economic market. This positive financial performance brings satisfaction to the investor, because every corporate organization is build up of investment from public. The increment in the value of corporate organization means favourable environment for investor to feel safe and less risky because good performance leads to good profit thus giving sufficient dividend to the investor on their investment.

Financial performance and stock market are interlinked and positively correlated. Rationally speaking, financial performance of the company should govern the stock price of any company. Stock market is said to be a mirror of the economy. However, the view does not follow literally in the Nepalese market. This is because of relatively less informative and awareness of individual in the stock market.

Nepal stock index is calculated taking in the account the number of shares traded in the market. The index of Nepal Stock Exchange is fluctuating. In the context, the fluctuation in the index implies the fluctuation of the price and its capital gain provided that the investors hold the stock in the same proportion as existing in the market.

It is normally seen that the investor feel comfortable in investing commercial banks stock rather than stocks of other manufacturing companies. This may be because of the higher credibility that the bank possesses in the economy. NEPSE and commercial banking sector index are highly correlated. This means that the sector index of commercial banks go on increasing, the NEPSE also increases simultaneously. This is due to the large number of trading of stocks of banking sector. Thus banking sector is the dominating sector in NEPSE.

1.1.1 Profile of the Concerned Banks
Himalayan Bank Limited (HBL)
Himalayan Bank Limited (HBL) was incorporated in 1992 in partnership with Employees Provident Fund and Habib Bank Limited. It is one of the largest commercial bank in operation which was commenced from January, 1993. It is the first commercial bank of Nepal with maximum share holding by the Nepalese private sectors. Besides commercial activities, the Bank also offers industrial and merchant banking. Himalayan Bank was listed on NEPSE on 05/07/1993 and has 16,000,000 listed shares.

Bank of Kathmandu Limited (BOK)

BOK started its operation in March 1995 with the objective to stimulate the Nepalese economy and take it to newer heights. (BOK) has today become a landmark in the Nepalese banking sector by being among the few commercial banks which is entirely managed by Nepalese professionals and owned by the general public. The vision of BOK is to become a significant contributor to the economic development of Nepal by distinguishing the bank as an efficient, competitive, safe and top quality financial institution. Bank of Kathmandu was listed on NEPSE on 17/07/1997 and has 11,821,571 listed shares.

Kumari Bank Limited (KBL)

Kumari Bank Limited, came into existence as the fifteenth commercial bank of Nepal by starting its banking operations from Chaitra 21, 2057 B.S (April 03, 2001) with an objective of providing competitive and modern banking services. The bank has been able to get recognition as an innovative and fast growing institution striving to enhance customer value and satisfaction by backing transparent business practice, professional management, corporate governance and total quality management as the organizational mission. Kumari Bank was listed on NEPSE on 29/07/2004 and has 11,858,374 listed shares.

Laxmi Bank Limited (LBL)

Laxmi Bank was incorporated in April 2002 as a commercial bank. Following the merger with Hisef Finance Ltd., a decade old first generation finance company, its office in Hattisar, Kathmandu was converted to that of Laxmi Bank. This office was converted to a full branch and to corporate office in October 2005. Laxmi Bank is committed to excellence in delivery of entire gamut of financial services in order to achieve sound business growth and maximize stakeholder values by embracing team spirit, progressive technology and good corporate governance. The bank is the first in South Asia to have implemented SWIFTNet, the advanced

version of the SWIFT technology, which is used for speedy and secure payment and messaging services. Laxmi Bank was listed on NEPSE on 20/04/2004 and has 16,135,105 listed shares.

1.2 Focus of the Study

Rational investors do not make haphazard investments without studying how the company is performing in terms of various fundamental indicators like earning, dividends, growth, sales, size of assets etc. Investigation before investment is the starting point of financial analysis regarding performance of common stock. In the context of Nepal, the situation is different, majority of investors are irrational and undertaking investment activities without proper analysis of pros and cons of securities and company. Hence, this thesis effort will understudy the importance of financial performance and its relevancy in the stock market.

The scope and depth of analysis will depend on a number of factors such as investment objectives, the quality of the securities, the degree of risk the investors is willing to assume, types of information available and investors ability to analyze and select profitable securities. Any investors while taking investment decision has to be fully informed about the financial performance of the company. Financial analysis provides insight about what company has done in terms of liquidity, profitability, turnover, assets growth, capital structure, dividend payments and so on. Therefore, this study helps investors to understand company's financial position and gives a feedback to the interested investors regarding the investment in common stocks of commercial banks.

1.3 Statement of the Problem

Many companies from private sector are emerging in the Nepalese Stock Market as a result of economic liberalization and globalization polices adopted by Nepal. Although Nepal's capital market history is short, the concept of capital market is

growing rapidly within a short period of time and institutions like banks, insurance and finance companies, airlines, manufacturing companies, hotel and various other service sectors are floating their common stocks in the market.

Bank role towards the economic development has already been considered as inevitable. Commercial bank has played a vital role for the government and private sector to lunch different commercial and development projects.

There are eight different sectors listed in NEPSE but commercial bank occurs nearly an half paid up capital value of common stock among other sector; any fluctuation in its price directly reflected in the stock market index. In Nepalese stock market, stock price is determined more by other factors rather than the financial performance of the concerned company. Financial performance means the financial condition of the company directed towards achieving its value maximizing objective. Financial performance of the company is reflected in ROE, ROA, EPS, DPS and growth. Sound performance reduces the associated risk. Theoretically stock price in market is guided by the intrinsic value which is calculate by the aid of company result of financial performance such as dividend, required rate of returns and growth.

Most of the investors in Nepal are not aware of the financial position of the companies on which they are investing their money. They do not analyze the financial indicators of the company before they invest their funds in primary and secondary market. Investors normally invest in the equity share in ad hoc bases, eventhough; the financial performance governs the stock price in the market. Some of the investors have neither theoretical knowledge of risk and return nor take service of the expert which has made the stock market unbalance and unfair.

What theories depict is not applicable in NEPSE. The major problem of Nepalese stock market is that movement of share price is irregular and haphazard. The

market price of the stock dose not seems to be in accordance with the financial indicators like NWPS, EPS, DPS, BVPS, etc. Instead, in determination of the market price of share, there has been major influence of rumors than the strength of the company. The major problem of Nepalese capital market is that due to the dubious and haphazard movement of share prices, the investors are confused on investing their funds.

In an efficient market, the market price fully reflects all the historical information publicly available. An average investor will simply plan the price to be paid for a stock base on expected annual return in terms of dividend and expected worth of stock in future time.

To study and disclose these issues, the following questions have been raised:
- What are the existing situations of financial position of commercial banks?
- What factors influence MPS of commercial bank in Nepal?
- How the MPS is affected by the financial performance indicators?

1.4 Objective of the Study

The main objective of the study is to analyze the financial performance and its relationship with stock price in making decision about investment on stock of commercial banks. The specific objectives of the study are:
- To examine the impact of financial performance indicators on stock pricing of commercial banks namely HBL, BOK, KBL and LBL.
- To study financial indicators of HBL, BOK, KBL and LBL.
- To provide appropriate suggestions and recommendations.

1.5 Significance of the Study

The stock market is the part and package of the corporate development. Corporate business is the structure build up with the investment of stockholders and holders

of debt certificate collected through the issue of the share and debenture. The people participation in security investment and stock trading is increasing. In this condition, the analysis of financial performance of the commercial banks is significant from the point of view of investor because it is seen that in Nepal people mainly invest in the stock of commercial banks. The study helps the investor to know the performance of the company and examine the relation of stock price and the financial performance. It enables the investor to gain full information on the performance of the company, make sound judgment and helps in significant forecasts of investment decisions analytically. And also, form a correct opinion on prediction the riskiness of the securities and take full advantage by buying stock at low price and selling them at high price. The study is also supposed to be useful to the university student of finance and general public, who has the interest in the stock market, to know the practice in Nepal regarding stock market. The study may also help interested researcher in the area of investment on common stock.

1.6 Limitation of the Study

The limitations of the study are as follows:

- The study is based on only four commercial banks (two banks listed on NEPSE before 2060 B.S. and another two listed after 2060 B.S.) out of twenty six commercial banks.
- Only five years data are covered by the study.
- The dependent variable is only the market price per share.
- The study is mainly based on secondary data.
- Limited books, thesis, annual reports of selected banks, magazine and articles are reviewed due to constraint of time and resources.

1.7 Organization of the Study

This study has been broadly divided into five chapters which are as follows:

Chapter - I: Introduction

Chapter - II: Review of Literature

Chapter - III: Research Methodology

Chapter - IV: Data Presentation and analysis

Chapter - V: Summary, Conclusion and Recommendations

The first chapter includes background, capital market in context of Nepal, focus of the study, statement of the problem, objectives of the study, significance of the study and finally limitation of the study.

The second chapter throws the light on theoretical/conceptual framework, review of empirical studies, review of journals, published books and unpublished thesis and finally research gap.

The third chapter introduces the research methodology used in the present research and explains the nature of research, nature and sources of data, population and sample, data gathering procedure, tools for data analysis.

The fourth chapter is the main part of the research and in this part data have been systematically presented, analyzed and interpreted.

And finally the fifth chapter consists of summary of the major findings of this thesis report and conclusions and recommendation of the study with bibliography and appendices.

CHAPTER - II
REVIEW OF LITERATURE

This chapter deals with the review of literature to make the basic knowledge for the study. Review of literature means reviewing research studies or other relevant propositions in the related area of the study sot that all the studies their conclusions and deficiencies may be known and further research can be done. "The purpose of literature review is to develop some expertise in one area, to see what new contribution can be done and to receive some ideas for developing a research design. It is done to know the outcomes of those investigations in area where similar concepts and methodologies had been used successful. In this connection a review of previous related research projects will help the researcher to formulate a satisfactory structure for the project" (Joshi, 2001:89).

2.1 Conceptual Review

2.1.1 Capital Market, NEPSE and SEBO

Capital market is the market for long-term funds where securities such as common stock, preferred stock, and bonds are traded. Capital markets include primary markets, such as IPOs that are placed with investors through underwriters, and secondary markets, in which all subsequent trading takes place (Farlex Financial Dictionary). Investors purchase securities in the capital markets in order to extract a return and earn profit on the securities. Capital market connects the monetary sector with the real sector and therefore facilitates growth in the real sector and economic development. Capital market increases the proportion of long-term saving that is channeled to long-term investment. Capital market enables contractual savings industry (pension and provident funds, insurance companies, medical aid schemes, collective investment schemes, etc.) to mobilize long-term savings from small individual household and channel them into long-term

investments. It fulfils the transfer function of current purchasing power, in monetary form, from surplus sectors to deficit sectors, in exchange for reimbursing a greater purchasing power in future. In this way, capital market enables corporations to raise capital/funds to finance their investment in real assets (CBL Economic Review, 2009). By raising capital directly from the public, they lower the cost of capital. Capital market also allow for wider ownership among the public, thereby distributing risks and wealth amongst smaller investors. For investors, they provide an effective vehicle for making investment choices which suit their own preferences of risk and returns based on available information.

The history of capital market in Nepal dates back to 1936 in which year the shares of Biratnagar Jute Mills Ltd. were floated. In 1937, Tejarath was set up to facilitate loans to government employees and was converted in Nepal Bank Ltd. HMG Nepal introduced the company Act in 1964 and the first issue of government bonds made in the same year through Nepal Rastra Bank to collect the developmental expenditures. HMG announced the Industrial Policy in 1974 and under this policy an institution named Securities Marketing Center (SMC) was established to deal in government securities-development bonds and national savings bonds, and corporate securities of few companies. Then Securities Exchange Centre (SEC) was established in 1976 with an objective of facilitating and promoting the growth of capital market. It was the only capital market institution in Nepal. Securities Exchange Act came into force in 1984. Since then, SEC started to operate under this act. The purpose of this act was to provide systematic and favourable market environment for securities ensuring and protecting the interest of individuals and institutional investors as well as to increase the public participation in various firms and companies (Gurung, 1999). Before conversion into stock exchange it was the only capital markets institution undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other financial services.

The interim government (1990/91) initiated financial reform program and two indirect investment vehicles – Citizen's Investment Fund and NIDC Capital Markets Ltd. were established with collective investment schemes in the corporate sector. Then, due to the world whim of privatization and economic liberalization, the operation of SEC was felt to change to make it compatible with the changing economic system. In 1994, the Government of Nepal with the technical assistance of IRIS Centre at the University of Maryland under the USAID sponsored Economic Liberalization Project established a stock market by converting Securities Exchange Center into Nepal Stock Exchange.

NEPSE is a non-profit organization operating under securities Exchange Act 1983. NEPSE opened its trading on 13th January 1994, with the ownership among HMG of Nepal (58.67%), NRB (34.60%), NIDC (6.13%) and other licensed holder (0.60%) (SEBO Annual Report 2006/007). The basic objectives of NEPSE are to impart free marketability and liquidity to the government bonds and corporate securities by facilitating transactions in its trading floor through market intermediaries like brokers, market maker, etc. and to upgrade the infrastructure of the securities exchange so that it could handle the increased activity more efficiently (NEPSE, 2002/03:14). It provides an organized market place for the investor to buy and sell securities freely. Securities, especially shares, are traded in a specific lot of certain face value on NEPSE trading floor. It has fixed the board lot of 10 shares if the face value is Rs. 100 and 100 shares if the face value is Rs. 10. The transaction of less than 10 shares is permitted only on odd lot trading hours -Monday and Friday from 2.00 P.M. to 3.00 P.M. (NEPSE 2000). NEPSE has adopted a T+3 systems which mean that settlement of transactions should be done within 3 working days following the transactions day. The rate of brokerage on equity transaction ranges from 1 percent to 1.5 percent depending on the trading amount.

NEPSE is responsible for the regulatory function under the supervision of Security Board Nepal (SEBO/N). In the beginning of the 2007/08, NEPSE replaced the old open-out-cry system of securities trading with automated trading system (ATS). The Securities Exchange Act 2063 and new regulations formulated under the act have further ensured the efficiency of trading. With the new measures in place, it can now suspend the whole market trading. The new measures also require brokers to post clearly shares they want to buy or sell and place orders for transactions on a priority basis. NEPSE has started providing real-time information to investors from 28 November 2007 through WAN system which facilitates investors to check share prices online from anywhere during the trading hour. Brokers can also find about top-gainers, top-losers, imposition of a trading halt, resumption of trading and even place orders without being present in the trading floor.

NEPSE extended the trading hours by one hour from 19 December 2007 due to an increasing trading pressure. The trading floor had been opening from 12 pm to 2 pm since NEPSE started in 1994, but now the trading floor will remain open till 3 pm (NEPSE Newsletter, 2008).

SEBO was established on 26th May 1993 under the provision of Securities Exchange Act, 1983 with the objectives to promote and protect the interest of the investors by regulating the issuance, sale and distribution of securities and purchase, sale or exchange of securities and to contribute for the development of capital market by making security transaction fair, healthy, efficient and responsible (ibid.). It is an apex regulator of the securities market in Nepal. It registers the securities and approves the public issues. Securities businesspersons - brokers, issue mangers, market makers, and securities dealers must get license from SEBO and membership from NEPSE for securities business. It is mandatory for the securities businesspersons to submit their annual report along with their

financial statements and trading report to SEBO within 4 months after expiry of each FY (SEBO, 2001).

2.1.2 Commercial Bank

A bank is a financial institution that trade money. It accepts deposit from the public as fixed deposit, current account deposit and saving account deposit. The bank gives money in the form of loans and advances to the needy persons. It gives the facilities transfer of funds, collecting customer's funds, purchase of shares, collecting dividend and purchase and sell foreign exchange etc.

The commercial bank is a financial institution that accepts the demand and time deposit from the business, institution and individuals and engaged in both business and consumer lending. It uses funds raised from the public deposits providing loans to different sectors with the prime objectives of profit maximization. Moreover, commercial bank provides technical and administrative assistances to industries, trade businesspersons. Commercial banks are among the base pillar of economic development of any nation. Especially in the developed countries, the operations of commercial banks record the economic pulses of the economy. Commercial banks have played the vital role in giving a direction financing the requirements of trade and industry in the country.

Commercial bank helps to promote secondary as well as primary security markets. Initial public offering (IPO), underwriting and security collateral loans are the examples. Not only in the highly developed industrial and non-industrial economics of the world where in a way the commercial and industrial activities are paralyzed in the absence of banks keeping their doors open, even in the developing countries most economic activities, particularly in the economy's organized sector, are bank based (Sinkey, 1988: 12-14).

The history of banking sector in our country is not of far time interval. With an establishment of Nepal Bank Ltd, in 1937, the commercial banks history was opened. At that time 51% government and 49% by public held equity in general. After then, Rastriya Banijya Bank came in existence in 1966 as the second commercial bank but with 100% government ownership. After 1980, many foreign joint venture banks were introduced in Nepal. It happened only when the government applied the financial liberalization policy. Twenty six commercial banks have started their operation till now so far. Many of new banks registered to open even today.

2.1.3 Common Stock

Common stock is the basic form of ownership in a company. The common stocks are issued by the firms to raise ownership capital and investors buy them with expectation that they received a share profit called dividend periodically. The common stocks legally represent the equity of business firm, and the holders are the owners who share all the profits and losses of the business. Common stockholders of the corporation are its residual owners, their claim to income and assets come after creditors and preferred stockholders have been paid to full. Unlike, debt, once a corporation issues common stock; generally it has no obligation to redeem the stock by purchasing it from the investor. Usually common stock is issued with the perpetual life. These stocks are subject to issue and trading in primary and secondary market. The original issue takes place in primary market and generally issues 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. Each share of stock is a fraction of the rights and privileges that belongs to the owners of a business. (Henderson, Trennepohl and Wert, 1984 :98). As a result, a stockholder's return on investment is less certain than the return to a lender or to a preferred stockholder. If the corporation comes to its demise in bankruptcy, all bills must be paid before common stockholders are free to divide up whatever assets remain, if any, from the bankrupt operation.

2.1.4 Common Stock Values

Par Value

When the stock is initially issued at a price as mentioned in article and memorandum of the company is called par value. The face value doesn't change until there is a stock split or other action initiative by the board of directors (Mosses and Cheney, 1995:417). In Nepal, the par value of new issue is usually Rs.100, as directed by Company Act 1993.

Book Value

It is calculated by dividing the total common equity on the balance sheet by the number of common shares outstanding. It represents the asset value per share after entire obligation of the corporation is met. Book value gives picture of the assets of the corporation, but has no real relation to stock prices (Francis, 1983:40). Book Value of Equity = Cumulative Retained Earnings + Capital Contributed in Excess of Par + Common Stock

Market Value

This is the value of stock on secondary market determined by the market mechanism or market forces, i.e. demands and supply 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 market and company risk considerations (Mosses and Cheney, 1995:418). Market value per share of common stock is the function of the current and expected future dividend of the company and the perceived risk of the stock on the part of investors (Vanhorne & Wachowicz, 2000:546).

Since the common shareholders are the owner of the organization and have least priority to claim in liquidation, the share price is highly volatile and very sensitive to the environmental factors. The market price of share gives the value of shares,

and the value of the organization. Since the market price of shares is very much sensitive to the environmental forces, the shares price increases if there is favorable environment and vice versa.

Common stockholders invest money with expectation of getting high return. The return from common stock is usually comes from the capital gain earned. That's why price for common stock can be more volatile (Gitman, 1991:573).

2.1.5 Characteristics of Common Stocks

Claim on Income

As a matter of fact, the common stock holders have a claim to residual income, which are earnings available for ordinary shareholders after paying expanses, interest charges, taxes and preferred dividend if any. As practice prevails, Board of Director declares cash dividends if enough financial resources are available. The dividends can be cash dividends, stock dividends, property dividends etc.

Right to Control

The common stockholders have voting rights to elect the Board of Directors, which in turn, elects the management committee. Shareholders are able to participate in the management of the company through their voting right and right to maintain proportionate ownership. The stockholders also have voting rights on issues which have substantial effect on corporations, on issues which brings about change in their ownership percentage, any contract or financial arrangement.

Preemptive Right

The law grants the shareholders the right to purchase new shares in proportions to their current ownership. Thus the preemptive right entitles stock holder to maintain his proportionate share ownership in the company. The shareholders option to purchase a stated numbers of new shares at a specified price during a given period is

called preemptive rights which can be exercised at a subscription price which is generally much below than the correct market price of share (Francis, 1983:39).

Limited Liability

The common stockholders' liability is limited to the amount of their investment in shares. If a stockholder has already fully paid the issue price of shares purchased, he has nothing more to contribute in the event of financial distress or liquidation. The limited liability feature of share encourages unwilling investors to invest their funds in the company which helps company to raise funds (Pandey, 1995:906).

Dividend

The profit of a firm which is shared to its stockholders is called dividend. Shareholders buy shares of firm with the hope of sharing profit earned by firms. The sole motive of stockholders is to receive return on their investment; nothing pleased them more than knowing the firm's earning and more profits means more dividends coming in. Dividend can be Cash Dividend or Stock Dividend (Bonus Share). When payment is made in cash to stockholders it is known as cash dividend. When cash dividend is declared the cash account and reserves account of the firm will be reduce, thus both the total assets and the net worth of the firm are reduced in case of distribution of cash dividend. Stock dividend or Bonus share represents a distribution of share in addition to cash dividend to the existing stockholders. This practice has the effect of increasing the number of outstanding shares of company, which are distributed proportionately to the stockholders of the firm.

Stock Split

A stock split is a method commonly used to lower the market price of a firm's stock by increasing the number of shares belonging to each shareholder. When a stock is split, a specified number of new shares are exchanged for given number of

outstanding shares. Stock split has no effect on the firm's capital structure (Gautam & Thapa, 2062:9.6).

Stock Repurchases

Buying back the issued share from the market by the firm is termed as stock repurchase. Stock is repurchase for a number of reasons like to obtain shares to be used in acquisitions, to have shares available for employee stock option plans, to achieve a gain in the book value of equity when shares are selling below their book value, or merely to retire outstanding shares.

2.1.6 Common Stock Valuation, Risk and Return

2.1.6.1 Common Stock Valuation

There are many mathematical models developed for the valuation of common stocks. In reality, there are many other non-financial factors which also determined the value or 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 frame work for the analysis. Valuation of common stock can be taken as function of income and the risk associated with the income (Bhattarai, 2006:313-317).

1. Dividend Discount Model (DDM)

This is a method of calculating the value of stock based on the cash flows (dividend) that the investor expects to receive in the future from owning an asset. The future cash flows are discounted at a risk-adjusted rate of return to find the real value of the stock. The basic objective of valuation is to identify the mis-priced stock to create an efficient portfolio.

a) Zero Growth Model

Under zero growth, it is assumed that the dividend paid per share in the past will continue forever in the future also. Under this condition the share will be valued as under:

$$P_0 = \frac{D_0}{K}$$

Where,

P_0 = intrinsic value of stock;

D_0 = expected dividend per share i.e. $D_0 = D_1 = D_2 = D_3 \ldots \ldots D_\infty$;

K = Investor's required rate of return

b) Constant Growth Model

It assumes that the dividend will grow at a constant rate forever in the future. If the past year dividend was D_0 and the coming dividend will grow at a constant rate *g* then the dividend would be D_1 i.e. $D_0 (1+g)$. The above model holds true under the assumption that the investor's required rate of return is greater than dividend growth rate (K>g).

$$P_0 = \frac{D_1}{K - g} = \frac{D_0 (1+g)}{K - g}$$

Where,   g = expected growth rate in the cash dividends

D_1 = cash dividend expected

Constant growth rate,

$g = b \, x \, r$ (where, b = retention ratio & r = internal rate of return)

c) Super Normal Growth Model

This model is also known as multiple growth model, variable growth model or non-constant model. It assumes that dividend of stock will grow at a constant rate after a certain period of time.

$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} + \ldots \ldots \ldots + \frac{D_n}{(1+K)^n} + \frac{P_n}{(1+K)^n}$$

Where, P_n = Price of share at the end of the non-constant period.

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2. Fundamental Analysts' Price Earning Ratio

This model is called price earning ratio model. Fundamental analysts estimate the value of stock by multiplying the expected earning per share and the normal price earning ratio for the stock.

$$P_t = EPS_t \times P/E \text{ ratio}$$

Where, P_t = market price per share at time t

EPS_t = earning per share at time t,

P/E ratio = price earning per share

a) Zero Growth

This model assumes the DPS and EPS remain fixed forever. If company pays all its earning as dividend, P/E ratio or earning multiplier will be:

$$M = \frac{1}{K}$$

where, M = earning multiplier

Therefore, $P_0 = M \times EPS$

b) Constant Growth

In this model dividend is expected to grow at a constant growth rate forever. The equity multiplier or price earning ratio under this model will be as follows :

$$M = \frac{(D_0/E_0)(1+g)}{(K-g)}$$

Therefore, $\quad P_0 = M \times EPS$

2.1.6.2 Risk

Whenever we are in a situation where the outcome is unknown, we are exposed to risk, or uncertainty. Risk in a financial analysis is the variability of return. The deviation between the expected and actual return brings variability in the retrun and the variability is termed as risk. Investing in stocks, bonds, real estate, or gold bullion also exposes us to risk. The most important aspect of risk is the overall risk

of the firm as viewed by investor in the market place. The overall risk significantly affects investment opportunities and the owner's wealth. The total risk of security can be viewed as consisting of two parts:

Total Security Risk= Non-Diversifiable Risk + Diversifiable Risk

Diversifiable Risk

Diversifiable risk relates to event that affect individual companies, such as strikes, product development, new patents, regularity actions, loss of a key account and so on. Because these events occur somewhat independently, they can be largely diversified away so that negative events affecting one firm can be offset by positive events for other firms.

Non-Diversifiable Risk

It includes general economic conditions, the impact of monetary and fiscal policy, inflation, international incidents, political events, and other events that affect all firms simultaneously. Non-Diversifiable Risk, which is also called systematic risk, is attributable to market factors that affect all firms. The only relevant risk is non-diversifiable risk, which reflects the contribution of an asset to the risk of the portfolio.

Beta Coefficient (ß)

It is used to measure non- diversifiable risk. It is an index of the degree of movement of an asset's return in response to a change in the market return. The beta coefficient for an asset can be found by examining the asset's historical returns relative to the return for the market. The market return is the return on the stock portfolio of all traded securities. The beta coefficient for the market is considered to be equal to 1; all other betas are viewed in relation to this value. Asset betas may take on values that are either positive or negative. The majority of coefficient falls between 0.5 and 2.

Using beta coefficient, to measure non-diversifiable risk is given as below.

$$K_j = Rf + [\beta_j (K_m - Rf)]$$

Where,

K_j = required return on asset j

Rf = risk-free rate of return

β_j = beta coefficient fot the asset j

K_m = market return.

$(K_m - Rf)$ = the market risk premium required to encourage investors to invest in the market portfolio as opposed to investing in some risk-free security.

$\beta_j (K_m - Rf)$ = the risk premium for the stock in question. This premium is greater than or less than the market risk premium depending on the size of β_j, which measures how the returns on stock j move in relation to the returns for the market (Pinches, 1990:189).

2.1.6.3 Return

The return from investing in any financial asset comes from one of two sources: (1) income from interest, dividends, and so forth; and (2) capital gains or losses – that is, the difference between the beginning and ending market values. For common stocks, these returns are cash dividends received during the period and capital appreciation or loss.

Return can be risk-free rate of return, required rate of return and expected rate of return. Risk free return is the return, such as the return on treasury bills, which is a nominal and consists of real rate of return and an inflation premium. Consumption is forgone today; the investor is entitled to a rate of return that compensated for this differed consumption. So, an investor must consider the real rate of return, expected inflation and risk which is called required rate of return. The expected return is based upon the expected cash receipts over the holding period and the

expected ending or selling price. This return should be equal to or greater than required rate of return for the investment (Pinches, 1990: 157). For any period we can define the return on stock as:

$$K = \frac{D_1 + P_1 - P_0}{P_0}$$

Where,

K = return on stock

D_1 = cash dividend expected 1 year from now

P_0 = price today right after the receipt of cash dividend D_0

P_1 = the price 1 year from now right after receiving the dividend D_1

2.1.7 Financial Performance Analysis

Financial performance indicators provide insight about what company has done in terms of liquidity, profitability, turnover, asset growth, capital structure, earning, and dividend payment and so on. Financial performance 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. It shows the position of a company (Pandey, 1997:36). Any investor while taking investment decision has to be fully informed about the company to gain full information on the performance of the company, to make sound judgment, for sound forecasting, for the selection of good security and for the risk analysis. Moreover, financial analysis enables investors to select the right kind of security for investment depending upon the comparative analysis of which company doing the best. Financial information also allows knowing about how the company can do in the future.

The term ratio refers to the numerical or quantitative relationship between two items/variables. The relationship between two accounting figures, expressed mathematically, is known as a financial ratio or simply a ratio. It helps in decision

making by providing meaningful understanding of the performance and financial position of a company. The absolute accounting figures presented in the financial statements conveys meaning when it is related to some other relevant information. Therefore, the relationship between two accounting figures must be expressed mathematically which is known as financial ratio. Ratio by itself is not a conclusion until and unless compared to some appropriate standard. With the help of these tools liquidity position, deposit utilization, deposit structure, investment structure, fund structure, income and expenditure structure etc. of the selected banks are analyzed. Following are some important financial ratios:

Earnings Per Share (EPS)

To know the earning capacity and to make comparison between concerned banks, earning per share is calculated. EPS is the per share profit after taxes and after preferred stock dividends that are available to shareholders.

$$\text{EPS} = \frac{\text{Earning available to Common Stockholders}}{\text{No.of Share Outstanding}}$$

Dividend Per Share (DPS)

Earning available to stockholders after deducting preferred dividend from earning after tax may be either retained fully or may partly retained and rest may be distributed to the stockholders in a form of cash. This earning available to each share is called DPS.

$$\text{DPS} = \text{EPS (1-b)}$$

Dividend Yield (DY)

Dividend yield reflects percentage relationship between dividend per share and market value per share.

$$\text{Dividend Yield} = \frac{\text{DPS}}{\text{MPS}}$$

Price Earnings Ratio (P/E Ratio)

Price earnings ratio reflects the price currently paid by the market for each rupee of currently reported earnings per share. The price earning ratio is widely used by the security analysts to value, the firm's performance as expected by investors.

$$\text{P/E Ratio} = \frac{\text{MPS}}{\text{EPS}}$$

Book Value per Share (BVPS)

Book Value per Share expresses the total net assets of a business on per share basis. This allows us to compare the book values of a business to the stock price and measure differences in valuations. Total equity less preferred equity give total book value.

$$\text{BVPS} = \frac{\text{Total Book Values}}{\text{No. of Share Outstanding}}$$

Liquidity Ratios

The liquidity ratios measure the ability of a firm to meet its short-term obligation and reflect the short-term financial strength/solvency of a firm. The liquidity position neither should be high nor low to maintain sound financial position for the firm. A high degree of liquidity is bad, as idle assets cannot earn profit. Whereas lack of sufficient liquidity can make the firm failure to meet its short-term obligation, which creates bad credit image, loss of creditor's confidence, or even in lawsuits resulting in the closure of the company (Western, Besley and Brigham, 1996:94).

a) Current Ratio (CR)

Current ratio is the ratio of current assets to current liabilities. Current assets refer to cash and other nearness to cash assets which can be converted into cash within accounting period such as cash and bank balance, investment in treasury bills,

money at call or placement, loans and advances, bills purchased and discount, inter-branch account, other short-term loans, receivable and prepaid expenses etc. Whereas current liabilities are those short-term obligations which should be pay within a year, which refers to tax provisions, bank overdrafts, deposit liabilities, bills payable, staff bonus, inter-branch reconciliation, provisions and accrued expenses etc.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Leverage Ratios

a) Debt to Equity Ratio

This ratio shows the percentage of debt in compare to equity (net worth). This ratio indicates the lenders contribution for each rupee of the owner's contribution. A high ratio shows that claims of creditors are greater than those of owners and vice-versa. There is a need to strike a proper balance between the use of debt and equity. The most appropriate debt-n-equity combination would involve a trade-off between return and risk.

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Shareholder's Equity}}$$

b) Total Debt Ratio

This ratio measures the portion of total debt used in financing total assets. Total debt refers to short and long term borrowings, debenture/bonds, bank borrowing, deferred payment arrangement for buying capital equipments, and public deposits and other interest bearing loan.

$$\text{Total Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Profitability Ratio

Earning profit is the major business of any commercial banks and to earn profit is essential for very survival of any firm. Without making sustainable profit the firm cannot stand in the market in the long run. So, making sufficient profit is the most for the commercial banks too. The profitability ratios are calculated to measure the operating efficiency of the company. Besides management of the company, creditors and owners are also interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get reasonable return on their investment. This is possible only when the company earns enough profits.

a) Return on Equity (ROE)

Return on equity is a measure of how well management has used the capital invested by shareholders. Return on Equity tells the percent for each rupee by shareholders. Return on Equity is one of the most widely used ratios for publicly traded companies. It measures how much return management was able to generate for the shareholders.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

b) Return on Assets (ROA)

Return on Assets measures the net income returned on each dollar of assets. This ratio measures overall profitability from investment in assets. Higher rates of return are desirable.

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

Turnover Ratio

Turnover ratios indicate the speed with which assets are being converted or turned over into sales. Turnover ratios are employed to evaluate the efficiency with which the firm manage and utilize its assets. A proper balance between sales and assets reflects that assets are managed well (Western, Besley and Brigham, 1996:97).

a) Total Assets Turnover

Assets turnover is the relationship between sales and assets. The firm should manage its assets efficiently to maximize sales. Total assets turnover indicates the efficiency with which the firm uses all its assets to generate sales generally; the higher the firm's total asset turnover, the more efficiently its assets have been utilized.

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

b) Fixed Assets Turnover

The fixed assets turnover ratio measures the efficiency with which the firm has been using its fixed assets to generate sales. Generally, high fixed assets turnover are preferred since they indicate a better efficiency in fixed assets utilization.

$$\text{Fixed Assets Turnover} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

2.1.8 Share Price Behaviour

How do securities market form prices? It is the most studied but least understood issue in finance. Simply stock price behavior refers the movement of stock price in the secondary market. Many scholars have studied in the price formation system of stock exchange and developed their theories on share price behavior. Here brief descriptions of these theories are given:

Efficient Market Theory

An efficient market is one where information is widely and cheaply available to all investors, and where all relevant and ascertainable information is already reflected in security prices. This theory states that prices react quickly and unambiguously to new information. By unambiguously we mean that sometimes the price may overreact while other times it may under react, but on net the magnitude of the reaction will be 'on target' (Pinches, 1990:194). The efficient market is one where shares are always correctly priced and when it is not possible to out perform the market consistently. An initial and very important premise of an efficient market is that there are large numbers of knowledgeable and profit maximizing independent buyers and sellers, new information is generated randomly and the investors adjust the information rapidly (Reilly, 1986:43). The testing of efficient market hypothesis indicates that stock prices react quickly to new information, there are no abnormal returns after transactions costs based on using past price data, there are few abnormal returns after transactions costs based on using all publicly available information and there may be abnormal returns after transactions costs when private information is employed. The requirement for a securities market to be an efficient market are : Price must be efficient so that new investors and better product will cause a firm's securities price to rise and cause investors to want to supply capital to the firms, Investors must be rational and able to recognize efficient assets so that they will want to invest money where it is needed most, every investor is allowed to borrow or lend at the same rate, information must be discussed freely and quickly across the national so all investors can react to new information and taxes are assumed to have no noticeable effect on investment policy.

Fundament Analysis Theory

Fundamental analysis approach involves working to analyze different factors such as economic influences, industry factors, government action, firm's financial

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statement, its competitor and pertinent company information like earnings, dividends and management in order to calculate an intrinsic value for firm's securities. This true value is the present value of all cash flows that the owner expects to receive.

The objective of fundamental security analysis is to appraise the intrinsic value of security. The intrinsic value is the true economic work of financial assets. The fundamentalist maintain that any point of time every stock has an intrinsic value which should in principle be equal to that present value of the future stream of income from that stock discount at an appropriate risk related rate of interest (Bhalla, 1983:283).

A new piece of news is released, securities intrinsic values will change and the securities market price will adjust towards the new values. On the basis of such a study fundamentalists project a company's future profits and earning capacity with reasonable accuracy, what the price of a company's share ought to be. This estimated price is termed as intrinsic value. The intrinsic value of the stock is generally away from its present market value. Thus, there is difference presents them with an opportunity to make profit. Once the true value is identified, it is compared with the market price to find whether the stock is correctly priced. If the true value is less than current market price, the stock is known as overpriced and is indication to the fundamentalists to sell whereas the stock that has a true value greater than its current market price is known as under priced and is indication to the fundamentalists to buy (Francis, 1986:603).

Fundamental analysis uses different models like Top-Down versus Bottom-Up forecasting, probabilistic forecasting econometric models, financial statements analysis etc. to estimate the value of security (Sharpe, Alexander and Bailey, 2001:850). Although this method seems to be sweet and easy, there arise mainly

three difficulties in its implementation. The first is to estimate the pattern of future income. Since, future is uncertain, various unseen factors spoil our estimation. The second is the determination of discounting rate and the third difficulty is to estimate the terminal value of asset that will be at the end of the period.

Technical Analysis Theory

It is an alternative approach to predict stock price behavior in the literatures of investment management. Technical analysis is market-oriented philosophy and it concentrate on the force of supply of and the demand for share as reflected in the actions of market rather than the intrinsic worth of share. It involves the study of stock market price in an attempt to predict future price movement of a particular firm. The past prices are examined in order to identify the recurring trends or patterns in price movement (Fisher & Jordan, 2000:509). Many recent stock prices are analyzed to identify emerging trends similar to the past one. Thus by identifying the emerging trends, the analysts hope to predict the future price. Therefore, the patterns or trend in price is the basis of technical analysis. "The technician usually attempts to predicts short-term price movements and thus makes recommendations concerning the timing of purchases and sales of either specific stock or groups of stocks (such as industry) or stock in general. It is sometimes said that fundamentals analysis is designed to answer the question 'What' and technical analysis to answer the question 'When' (Sharpe, Alexander and Bailey, 2001:844)". Technical analysts discern past pattern or trends, which they believe to repeat in the future and recommend for the timely holding and disposing mechanism, which is profitable. Technical analysts are often called chartists because of their reliance upon graphs and charts of stock price movement. They record the historical financial data on charts and graphs and carefully analyze the trend to predict the future price.

2.2 Review of Articles

Pettit (1972) in his article entitled *"Dividend Announcements, Security Performance and Capital Market Efficiency"* attempted to offer evidence about the validity of the Efficient Market Hypothesis by estimating the speed and accuracy with which market prices react to announcements of changes in the level of dividend payments. About 1000 dividend announcement, dates of dividend changes, investments relatives, dividend data, quarterly earning information and daily price from different sources. The study starts from January 1964 and ends on June 1968. Performance value and performance index were calculated for cash dividend earning class for a period surrounding the dividend announcement date. The result support that substantial formation is conveyed by announcements of dividend changes and the dividend announcement, when forthcoming, may convey significantly more information than the information implicit in an earnings announcement.

Mitchell and Mulherin (1994) held a study on *"The Impact of Public Information on the Stock Market"* and studied the relation between the number of news announcements reported daily by Dow Jones and company and aggregate measures of securities market activity including trading volume and market returns. They have a belief that much of the disagreement regarding the news-market relation is due to the differing emphasis of the various studies. Thus, they have tried to contribute to the debate by relating aggregate measures of market activity such as trading volume and market returns to the broad sample of macroeconomic and firm specific news announcement released by Dow Jones and Company. They found that the number of news and stories and market activity is directly related and share common-day-of-the-week patterns. They also noted that the relation between news and market activity remain significant in regression that control for the day of the week. The result was also robust even after the inclusion of non-information sources of market activity.

Nishat and Irfan (2001) conducted a study on *"Dividend Policy and Stock Price Volatility in Pakistan"* to determine the impact of dividend policy on stock price risk in Pakistan. A sample of 160 listed companies in Karachi Stock Exchange is examined for a period from 1981 to 2000. The empirical estimation is based on a cross-sectional regression analysis of the relationship between stock price volatility and dividend policy after controlling for firm size, earning volatility, leverage and asset growth. Both the dividend policy measures (dividend yield and payout ratio) have significant impact on the share price volatility. The relationship is not reduced much even after controlling for the above mentioned factors. This suggests that dividend policy affects stock price volatility and it provides evidence supporting the arbitrage realization effect, duration effect and information effect in Pakistan. The responsiveness of the dividend yield to stock price volatility increased during reform period (1991-2000). Whereas payout ratio measure is having significant impact only at lower level of significance. In overall period the size and leverage have positive and significant impact on stock price volatility. The size effect is negative during pre reform period (1981-1990) but positive during reform period. The earning volatility impact is negative and significant only during reform period. Although the results are not robust enough as in the case of developed markets but are consistent with the behaviour of emerging markets.

Joshi (2008) on a study entitled *"Monthly Seasonality in Nepalese Stock Market: Implication for Investors"* found that the mean return is positive for the first eight calendar months and negative for the rest of calendar months. In addition, the month with highest average return is the Kartik month which corresponds to the mid-October to mid November of the Gregorian calendar and the month with the lowest mean return is the Poush which corresponds to the mid December to mid January of the Gregorian calendar. Moreover, Aasar and Kartik are the only two months with more than 80 percent of the positive returns for the given sample

period whereas Jestha and Falgun have less than 50 percent of positive return. The standard deviation which means the volatility (risk) of stock return is highest for the Falgun and lowest for the Aswin. These imply the non-existence of risk return trade off. The overall results show that we could observe Kartik effect in Nepalese stock market.

There are at least two reasons for the existence of Kartik effect. The first is the compulsory information release as per the legislation. Company Act (2063) requires that every public company to conduct its Annual General Meeting (AGM) within the one year from the date of operation and six months (after the completion of fiscal year) thereafter. While Banking and Financial Institution Act (2063) requires that licensed banking and financial institution to carry out an audit of financial statements within the five months from the end of the fiscal year. The second may be due to the cultural (non economic) influences on the stock market. The great festival Dashain and Tihar which falls mostly on the Ashwin and Kartik induces good mood and optimism among the investors and hence drives up the market during these months.

The general implication for the investors is that they should buy a market portfolio at the end of Chaitra because the markets are at low and they almost rise in the next eight months with the greatest rise in the Kartik followed by Aasar and sell the portfolio at the end of Kartik to obtain handsome profits. The investor should then invest in a risk free assets (such as treasury bills) from the beginning of Mangsir to the end of Chaitra.

Investment in share has traditionally been done by rating the institutions on the Basis of price earning ratio or dividend. Hardly do investors compare current assets with current liabilities or take a look at the debt equity ratio. Unless investors are analyzing the intricate financial details of corporate institutions before making decision the market cannot develop smoothly.

Martani, Mulyono and Khairurizka (2009) held a study on *"The effect of financial ratios, firm size & cash flow from operating activities in the interim report to the stock return"* with an objective of examining the value relevance of accounting information in explaining stock return. The study uses profitability, liquidity, leverage, market ratio, size and cash flow as proxies of accounting information. The samples of the study are listed companies in manufacturing industries that actively trading on 2003-2006 in Indonesia Stock Market.

The study found out that the result of regression on market adjusted return suggests that NPM (Net profit margin), ROE, DER, and PBV (price to book value) have positive effect. In contrast, CR (Current Ratio), TATO and CFO/Sales have negative correlation. The higher the firm's NPM, the higher market adjusted return and abnormal return that can be resulted by firm's stock, because a higher NPM means higher profit obtained from every dollar revenue earned by the firm. ROE (Return on equity), has significant positive correlation with return. Therefore, it can be concluded that investor will pay attention on NPM and ROE. ROE has positive correlation with stock price. Liquidity ratio in both market adjusted return and abnormal return has insignificant effect on stock return. The debt to equity ratio (DER) has positive correlation with stock return but not statistically significant. Total assets turnover (TATO), has negative correlation with return. Cash flow from operation/Sales (CFO/Sales) has positive but insignificant correlation with both independent variables.

Based on regression result, it can be concluded that financial ratios, firm size, and cash flow from operating activities altogether affect market adjusted return and abnormal return. The variables which are consistently significant on adjusted return and abnormal return are profitability ratios (NPM and ROE), TATO, and market value ratio (PBV). It shows that from investors' point of view financial ratios are useful in making decision on investment. This research also exposes that

the movement of stock price is affected much by factors other than firm's financial performance.

Obeidat (2009) conducted a study on *"The Internal Financial Determinants of Common Stock Market Price: Evidence from Abu Dhabi Securities Market"* with objectives to investigate the separate effect of each of EPS, DPS, and BVPS, on a common stock market price and to determine the entire effect of EPS, DPS, and BVPS as a whole on a common stock market price.

All listed companies in the Abu Dhabi Securities Market are included in the study except those companies which were listed after the starting of year 2002. Four hypotheses are under consideration in this study. The simple linear regression method was used to test the first three hypotheses based on t-test, while the multiple linear regression method was used to test the last hypothesis based on F-test. Moreover, the correlation method is used to support the findings.

Based on the data analysis, the study finds that EPS has a significant effect on the common stock market price. In more details, the study finds that stockholders and investors are highly interested in EPS as one important financial indicator, so they take with their consideration, the value of EPS in determining the price they are willing to pay to acquire that stock, and the price they accept instead of that stock when they need to sell the stock. The analysis finds insignificant effect of DPS on the common stock market prices. In general, most stockholders in Arab Stock Exchanges are more interested with capital earnings than dividends. Also, a significant effect of BVPS on the common stock market prices in Abu Dhabi Securities Market. Furthermore, entire three independent internal financial factors (EPS, DPS, and BVPS) have a significant effect on the common stock market prices in Abu Dhabi Securities Market.

Share investment has traditionally been guided by the investor's returns. Most earnings of investors here have been in the forms of dividends rather than capital gains, though high dividend is often seen in corporate finance theory as a wasteful use of scares capital. With the commercial bank becoming the only potential investment destination, with other stock market participants hardly making profit and even if they did failing to meet investor's expectations. Demand for shares of commercial banks outpaced supply and their prices boomed. Investment in the past was done on whim. Investment are made more in an impulse rather than through market study and credit rating. 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 banks share, he/she must see its balance sheet or at least paid-up capital, last year net profit, current years anticipated profit and calculated earning per share and price earning ration. These two numbers would give a fair idea about company's health and then market price would judged through the discount factors based upon on of the sound company's data. Market price is equal to earning per share divided by discount factor. EPS can derive by dividing total net profit after tax by total number of share and price earning ration by dividing market price with capital gain and other (New Business Age, July 2001:20).

2.3 Review of Previous Thesis

Ojha (2000), conducted a research *"Financial Performance and Common Stock Pricing"*. The main objectives of his study were:

- To study and examine the difference of financial performance and stock prices.
- To examine the relationship of dividends and stock price and
- To explore the signaling effects in stock price.

His major findings of the study were:

- There is significant positive correlation between the dividends paid and stock price of banking and manufacturing industries, all other industries have not a perfect correlation between the dividend paid.

- There is a positive correlation between the NWPS and stock prices of banking

- Nepalese stock market is in growing stage, 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.

- Profitability factors are not the whole determination of stock price, there are number of others supporting factors that plays a vital role in stock pricing.

Neupane (2004), conducted a study on *"Determinants of Stock Price in NEPSE"* and concluded his study with following major findings:

- In Nepal Stock Exchange DPS, BVPS and EPS individually do not have consistent relationship with the MPS among the listed companies.

- The pricing behavior varies from one company to another but EPS, BVPS and DPS jointly have significant effect in MPS. So, there may be other major factors affecting the share price significantly.

- NEPSE is in its primary stage and stock brokers lack professionalism to create investing opportunities.

- Manufacturing and processing, trading and hotel sector have week performance as compared with financial sector.

Regmi (2006), conducted a study *"The Role of Financial Indicators in Determining Share Price in Nepalese Financial Market".* The objectives of the research were:

- To determine role of financial indicators in share price.
- To examine and evaluate the relationship of MPS with various financial indicators like NWPS, EPS, DPS, ROE, etc.
- To analyze the market trends of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- To find out whether stocks of the sampled companies are equilibrium priced or not.

The major findings his study were:

- NABIL's MPS is positively correlated with all financial indicators but these values are not statistically significant at either 5% or 10% level of significance. NABIL's MPS has negative correlation with all financial indicators.
- For all other banks the correlation coefficient of MPS with other financial indicators are both positive and negative and are statistically significant at either 5% or 10% level of significance.
- Relationship with all financial indicators of MPS for NFCL is positively correlated and the relationship is statistically significant at 5% level of confidence with EPS and at 10% level of confidence with NWPS and DPS.
- For other Finance companies, the correlation coefficient of MPS with other financial indicators is both positively and negatively correlated and the relationship is statistically significant for KFL and UFCML and for others it is insignificant.

Devkota (2008), conducted a research *"Stock Price Determinants in Nepal Stock Exchange"*, to identify the prime determining factor of share pirce fluctuation of commercial banks as the major objective. The other objectives were:

- To examine and evaluate the relationship between MPS with the various financial indicators like EPS, BPS, DPS etc.
- To analyze the market trends of MPS with financial indicators. To conduct the opinion survey of potential investors regarding various aspects of share behaviours in Nepal.

The major findings of his research were as follows:

- DPS of BOK is much volatile in comparison to MPS, BPS and EPS. MPS of has positive correlation with DPS, BPS and EPS. This indicates that they directly affect the share price of BOK.
- BPS and EPS are positively correlated in the case of EBL whereas DPS is negatively correlated. This indicates that increase in DPS of this bank don't contribute on the increase of share price rather it decreases it. But increase in BPS and EPS increase the share price and vice versa. DPS is much volatile in comparison with MPS, BPS and EPS.
- The correlation between MPS and other indicators are found to be insignificant for most of the banks. It shows that they individually influence very less but jointly they influence a lot. There can be other factors which influence the share price of the organization.
- Dividend pattern plays a great role on share price movement. Higher the DPS, more will be the Share Price. Most of the investors like to analyze the Dividend pattern of the company before they invest in their shares.

Joshi (2008) conducted a research *"A Thesis on Financial Performance Indicators and Stock Market Behaviour"*. The main objectives of study were:

- To examine the impact of financial performance on common stock pricing.
- To study and examine the relation of financial performance and stock price.
- To examine the relation of dividends and stock price.
- To explore the signaling effect on the stock price determination.
- To point out suggestion to the stockholders of stock market.

The major findings were as follows:

- There is not significant positive correlation between the profitability parameters (ROA, ROE, and DPS) and the stock prices of the commercial bank.
- There is a significant positive correlation between the dividend paid and stock prices of commercial bank.
- There is a significant positive correlation between the Book value per share (Net worth) and stock prices of commercial bank.
- There is a moderately positive correlation between financial performance indicators and stock price of commercial bank.
- Basically investors and sellers of stocks are not aware with the financial parameters such as DPS, EPS, ROA, ROE, BVPS etc., stocks are not traded because of good financial parameters but because of non-financial factors such as lack of other investment opportunity, Expectation of bonus shares, right shares, rumors, speculations, and like.

Acharya (2009), conducted a research on *"Determinants of Stock Price in Nepalese Commercial Banks"*. This research was conducted with the following objectives:

- To identify factors affecting share price.
- To analyze correlation among various financial indicators.

- To identify qualitative factors affecting the stock price listed in NEPSE.
- To draw the conclusion regarding the factors that plays the crucial role and gives necessary suggestions and recommendation to the all concerned.

The major findings of the study were:

- The MPS has high correlation with EPS and is significant at 0.01 level of significance. The correlation of MPS with EPS, DPS and BVPS is significant at 0.01 level of significance.
- The market price per share has high degree of positive relationship with EPS in all sample banks and MPS largely depends on EPS.
- The simple regression analysis of MPS on DPS shows that regression coefficient (b) is positive for SCBNL, BOK, NBL, NIBL, HBL, MBL and NICBL and negative for remaining banks SBI and EBL.
- The simple regression analysis of MPS on BVPS shows that regression coefficient (b) of SCBNL, BOKL, NBL, SBI, EBL, KBL, MBL and NICBL are positive and negative for NIBL and HBL.
- Earnings, book value, dividend payment, growth rate, and risk associated with the company information disclosed and political stability is the major factors affecting the share price in NEPSE.

2.4 Research Gap

The above studies indicated the impact of earning, dividends, book value and other external factors on share price in Nepal and the share appreciation are the main motivating factors for investors to invest in securities. Nepalese companies scarcely disclose information other than that statutorily required. Such statutory requirements were generally confined to financial information only.

Earlier studies and researches on the stock price movements in NEPSE were carried out on the apparent approach by taking the most common indicators in consideration like EPS, DPS & BVPS. In this study, an attempt has been made to examine the effect of financial performance indicators on the company's stock price. Since the financial performance includes the various aspects of operation, it cannot be measured in term of a single attribute. Therefore, the performance is evaluated by analyzing the different ratios. So, this study tries to analyze the relationship of Liquidity ratio, Turnover ratio, Leverage ratio, Profitability ratio, DY, P/E ratio, EPS, DPS and NWPS with MPS of selected commercial banks.

CHAPTER - III
RESEARCH METHODOLOGY

3.1 Introduction

Research Methodology is the main body of the study. This chapter explains not only about the research method but also consider the logic behind the methods which are used in the context of our research study. It is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of data. So, Research Design, Nature and Source of Data, Universe and Sampling, Data collection procedure and Data Analysis are basically explained in this chapter.

3.2 Research Design

Research design is a plan for the collection and analysis of data. It present a guide posts to enable to move in the right direction to achieve the objective of the study and formulating, implementing and controlling of the study. Research design is a logical and systematic planning and directing of a piece of research. It is the specification of methods and procedures for acquiring information needed.

This research has attempted to study and explore two area viz. financial performance indicators and market price of common stock of selected commercial banks (HBL, BOK, KBL and LBL). On this background, mainly statistical and analytical study will be followed along with descriptive study. Correlation study of financial indicators and common stock price will be undertaken to identify whether there is a correlation between the variables under study or not.

3.3 Nature and Source of Data

The present study will mainly be conducted on the basis of secondary data and primary data where ever necessary. All the data required for the research will be

collected from the secondary source, mainly financial statement of the listed companies and trading report published by NEPSE. The other supplementary data and information will be obtained from the annual reports published by the concerned Banks and from NEPSE Ltd., Newspapers and Magazines, Journals, Security Board of Nepal, Publications of Finance Ministry and concerned company, Central Library T.U., Shanker Dev Campus Library, Internet websites, etc.

3.4 The Universe and Sampling

The collection or the aggregate of objects or the set of results of an operation is called Universe/Population and a representative part of universe which is selected for the purpose of investigation is called a sample.

At present there are twenty six commercial banks operating in Nepal. Hence, these all twenty six commercial banks constitute population of this study. Among all listed commercial banks four commercial banks, two which started trading before 2060 B.S. and two which started trading after 2060 B.S., are selected for the purpose of this study and constitute the sample. Judgment sampling was followed in order to choose HBL, BOK, KBL and LBL among the available commercial banks in Nepal.

3.5 Data Processing

All the collected data and information from various sources have been properly synthesized, arranged, tabulated and calculated to serve the objective of the study.

3.6 Method of Data Analysis

The data collected from various sources leads to the logical conclusion, only if the appropriated tools and techniques are used to analyze it. The collected data has no meaning if such data are not analyzed. In this study only financial tools and statistical tools will be used to get meaningful result of the collected secondary

data and to meet the research objectives. For this purpose data will be analyzed using various financial and statistical tools.

3.6.1 The Financial Tools

a. Liquidity ratio

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Total Cash to Total Deposit Ratio} = \frac{\text{Total Cash}}{\text{Total Depositss}}$$

b. Leverage Ratio

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Shareholder's Equity}}$$

$$\text{Total Debt ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

c. Profitability Ratio

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

d. Turnover Ratio

$$\text{Fixed Assets Turnover} = \frac{\text{Net Income}}{\text{Fixed Assets}}$$

$$\text{Total Assets Turnover} = \frac{\text{Net Income}}{\text{Total Assets}}$$

e. Other Ratios

$$\text{Earning Per Share} = \frac{\text{Earning available to common stockholders}}{\text{No. of Share Outstanding}}$$

$$\text{Dividend Per Share} = \frac{\text{Total Dividend}}{\text{No. of Share Outstanding}}$$

$$\text{Dividend Yield} = \frac{\text{DPS}}{\text{MPS}}$$

$$\text{Net Worth Per Share} = \frac{\text{Net Assets Available to Common Stockholders}}{\text{No. of Share Outstanding}}$$

$$\text{Price Earning Ratio} = \frac{\text{Market Price per Share}}{\text{Earning per Share}}$$

3.6.2 The Statistical Tools

1. Correlation Coefficient

Correlation may be defined as the degree of linear relationship existing between two or more variables. Two variables are said to be correlated when the change in the value of one variable is accompanied by the change of another variable. If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values are inversely proportional, the correlation is said to be negative, but the correlation coefficient always remains within the limit of +1 to -1. The Karl Pearson correlation coefficient (between two variables, say X and Y) is given by:

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

Where,   n = No. of observations in series X and Y

$\sum X$ & $\sum Y$ = sum of observation in series X & Y

$\sum X^2$ = sum of squared observations in series X

$\sum Y^2$ = sum of squared observations in series Y

$\sum XY$ = sum of product of observations in series X and Y

The value of correlation coefficient always lies between +1 to -1. When r = +1 there is perfect positive correlation and when r = -1, there is perfect negative correlation between two variables. Close the value of r to 1, closer will be the

relationship between two variables and nearer the value of r to 0, lesser will be the relationship.

2. Coefficient of Determination (R^2)

The coefficient of determination is the way to measure the contribution of independent variables in predicting the dependent variable. Coefficient of determination measures the percentage of total variation in dependent variable explained by independent variables. It is given by the square of the correlation coefficient.

3. Regression Analysis

3.1 Simple Regression

The regression line is the line which gives the best estimate of one variable for any given of the other variable. There are two types of variable in regression analyses; independent and dependent variables. In case of two variables X and Y, we will have two regression lines i.e. lines is called the regression equation and also estimating equations. Since there are two regression lines, there are two regression equations.

X and Y are the independent and dependent variable respectively. Regression equation of Y on X is:

$$y = a + bx$$

We shall get the normal equation for estimating "a" and "b" as

$$\sum Y = na + b \sum X$$

$$\sum XY = a\sum X + b \sum X^2$$

Where,　　　X = the value of independent variable

　　　　　　Y = the value of dependent variable

　　　　　　a = Y-intercept

$$n = \text{no. of pairs of observations.}$$

$$b = \text{slope of the trend line/coefficient of regression}$$

3.2 Coefficient of Regression (b)

The coefficient 'b' which is the slope of line of regression of y on x is called the coefficient of regression of y on x. It represents the increment in the value of the dependent variable y for a unit change in the value of the independent rate of change. The 'b' is calculated as follows:

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

3.3 Multiple Regressions

Multiple regression equation describes the average relationship between one dependent variable with two or more than independent variables which is used to forecast the value of dependent variable.

$$MPS = a + b_1X_2 + b_2X_3 + b_3X_4 + b_4X_5 + b_5X_6 + b_6X_7 + b_7X_8 + b_8X_9 + b_9X_{10}$$

Where, $X_2, X_3, X_4, X_5 \ldots\ldots\ldots X_{10} =$ independent variables i.e. EPS, NWPS, DPS, DY, P/E ratio, NI/FA, NI/TA, ROE, ROA, etc.

a = regression constant (i.e. point of interception on Y-axis).

$b_1, b_2, b_3 \ldots\ldots\ldots b_9 =$ regression coefficient

3.4 Standard Error of Estimate (SEE)

The standard error of the estimate measures the variability of the actual values from its predicted values. The standard deviation around the line of regression is called standard error of the estimate. The standard error of estimate can be used to determine whether statistically significant relationship exists between the dependent and given independent variables and also make inferences about the predicted values. The lesser the value of the standard error of estimate the better is the model fitted. If standard error of estimate is zero, then there is no variation about the line and the correlation will be perfect.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

The purpose of this chapter is to present, interpret and analyze the available data from the annual report of selected commercial banks. Data and information are presented and analyzed using different financial and statistical tools in order to achieve the objectives of the study. The interpretations were recorded, explained and elaborated in the chapter accordingly.

4.1 Analysis of Financial Performance Indicators

Ratio analysis is a widely used tool of financial analysis. It is defined as the systematic use of ratio to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined.

For the analysis of the performance of HBL, BOK, KBL and LBL, MPS, EPS, NWPS, DPS, DY, P/E, ROA, ROE, Turnover ratio, Leverage ratio and Liquidity ratio are analyzed.

4.1.1 Liquidity Ratio

For analyzing the financial performance of the organization, liquidity ratio is one of the powerful tools. Whether the company is able to meet its current obligation is judge by liquidity ratio. A high liquidity ratio of the organization shows its higher financial strengths.

4.1.1.1 Current Ratio

The ratio of current assets and current liabilities is current ratio which measures the organization liquidity position or short term solvency. The proportion of

current ratio 2:1 is considered satisfactory i.e. if the current assets are decreased by half; the organization can meets its current obligation.

Table 4.1

Current Ratio

Year	HBL	BOK	KBL	LBL
2004-2005	1.05	1.03	1.08	1.16
2005-2006	1.06	1.08	1.09	1.12
2006-2007	1.06	1.07	1.08	1.08
2007-2008	1.08	1.04	1.12	1.08
2008-2009	1.07	1.08	1.11	1.09
Mean	1.06	1.06	1.10	1.11
S.D.	0.0122	0.0235	0.0187	0.0346
C.V.	1.16	2.21	1.70	3.12

Source: Annual Reports and Annex-1

HBL has an average current ratio of 1.06, standard deviation of 0.0122 and CV of 1.16% which indicates that the current ratio of HBL is moderate. The lowest ratio is 1.05 in the year 2004-2005 and the highest current ratio is 1.08 in the years 2007-2008. BOK has an average current ratio of 1.06, standard deviation of 0.0235 and CV of 2.21%. KBL has an average current ratio of 1.10, standard deviation of 0.0187 and CV of 1.70%. LBL has an average current ratio of 1.11, standard deviation of 0.0346 and CV of 3.12%. The highest ratio is 1.16 in the year 2004-2005 and the lowest ratio is l.08 in the year 2006-2007 and 2007-2008.

Figure 4.1

Current Ratio of HBL, BOK, KBL and LBL
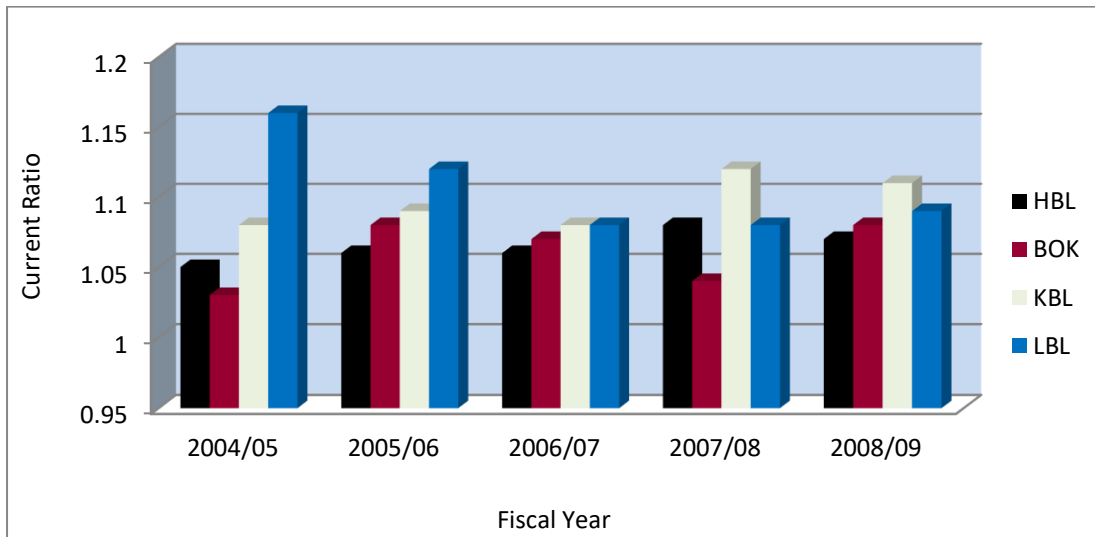
From Table 4.1 and Fig. 4.1, it seems that all four banks under study are below normal standard of current ratio 2:1. LBL has the highest current ratio and HBL and BOK have the lowest current ratio. The current ratio of LBL and KBL is fluctuating more then that of HBL and BOK.

4.1.1.2 Cash and Bank Balance to Total Deposit Ratio (CBB/T dep.)

This ratio measures the capital of bank to meet unexpected demand made by depositors. This ratio is measured dividing total cash and total deposit in saving and current account. Total cash means cash in hand. Similarly, total deposit includes current deposit, saving deposit and fixed deposit. High ratio means greater ability to meet their all types of deposits. Greater the total cash may be harmful as it affects their profitability position.

Table 4.2

Cash and Bank Balance to Total Deposit

Year	HBL	BOK	KBL	LBL
2004-2005	8.12	8.28	7.07	15.39
2005-2006	6.49	6.95	5.02	5.06
2006-2007	5.85	10.62	6.37	4.60
2007-2008	4.55	9.10	7.31	11.34
2008-2009	8.79	12.07	11.31	11.42
Mean	6.76	9.40	7.42	9.56
S.D.	1.73	1.10	2.35	4.62
C.V.	25.59	21.25	31.70	48.35

Source: Annual Reports and Annex-1

HBL has 8.12 ratio percent in 2004/05 which shows that they keep 8.12 percent of total deposit in cash and remaining other used for investment. In 2005/06, the ratio percent is 6.49. In 2006/07, the ratio percent is 5.85. In 2007/08 the ratio percent is the lowest i.e. 4.55. In 2008/09, the ratio percent is 8.79 which is the highest. The average ratio percent is 6.67 with standard deviation of 1.73 and CV of 25.59. This shows the fluctuating trend. In 2008/09 the ratio percent is 12.07 which shows that they keep 12.07 percent cash and rest on investment. In 2004/05 the ratio percent is 8.28. In 2005/06 the ratio percent is 6.95 which is the lowest. In 2006/07 the ratio percent increased to 10.62 and again decreasing to 9.10 in 2007/08. The average ratio percent is 9.40 with std. deviation of 1.10 and of C.V. 21.25%. The trend of Cash and Bank Balance to Total Deposit ratio of KBL is also fluctuating. In 2008/09, the ratio percent is 11.31. In 2004/05, ratio percent is 7.07 decreasing to 5.02 in 2005/06 and increasing to 6.37 and 7.31 in 2006/07 and 2007/08 respectively. The average ratio percent is 7.42 with std. deviation of 2.35 and of C.V. 31.70%. LBL has average ratio percent of 9.56, standard deviation of 4.62 and C.V. of 48.35%. The highest ratio percent is 15.39 in 2004/05 and the lowest 4.60 ratio percent in 2006/07. The ratio percent increased to 11.34 and 11.42 in 2006/07 and 2008/09 respectively. BOK and LBL are holding more cash with

them in comparison to HBL and KBL. All four banks ratios are fluctuating. But there is high fluctuation in ratio percent of LBL then other three banks.

Figure 4.2

Cash & Bank Balance to Total Deposit ratio
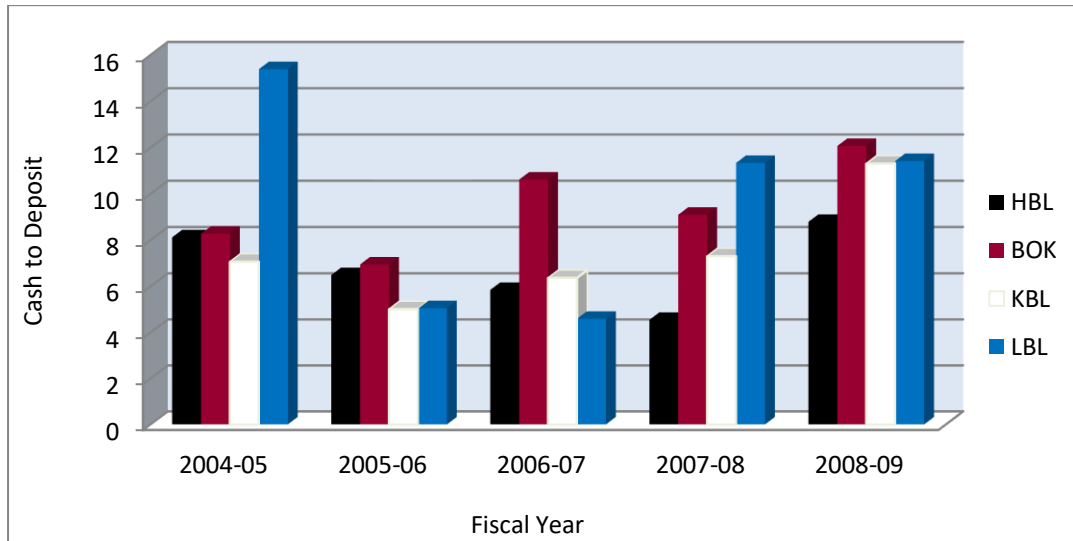
Table 4.2 and Fig. 4.2 show that BOK and LBL are holding more cash with them in comparison to HBL and KBL. All four banks ratios are fluctuating. But there is high fluctuation in ratio percent of LBL then other three banks.

4.1.2 Leverage Ratio

Leverage ratio is also termed as solvency ratio or capital structure ratio. This ratio measures the long term financial position of an organization.

4.1.2.1 Total Debt to Total Assets Ratio (TD/TA)

This ratio measures the financial soundness of creditors. A low debt ratio measures the sufficient caution against the liquidation. Owners are interested in a high debt ratio because it signifies their earning on the one hand and enables them to maintain their control over the corporation on the other hand.

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Table 4.3

Total Debt to Total Assets Ratio

Year	HBL	BOK	KBL	LBL
2004-2005	95.93	92.69	91.36	83.16
2005-2006	94.00	93.16	90.41	86.95
2006-2007	93.60	93.08	91.39	89.93
2007-2008	93.05	92.43	90.98	90.89
2008-2009	92.07	91.50	91.23	92.67
Mean	91.93	92.57	91.07	88.72
S.D.	2.47	0.67	0.41	3.74
C.V.	2.68	0.72	0.44	4.21

Source: Annual Reports and Annex-1

In average HBL is utilizing 91.93% of total assets in total debt. The trend shows the ratio has 2.47 standard deviation and 2.68% C.V. The ratio percent is high in 2004/05, i.e. 95.93 and low in 2008/09, i.e. 92.07. In average BOK is utilizing 92.57% of total assets in total debt with standard deviation of 0.67 and 0.72% of C.V. The ratio percent is high in 2005/06, i.e. 93.16 and low in 2008/09, i.e. 91.50. In average KBL is utilizing 91.07% of total assets in total debt with standard deviation of 0.41 and C.V. of 0.44%. The ratio percent is high in 2004/05, i.e. 91.36 and low in 2005/06, i.e. 90.41. In average LBL has 88.72% of total assets in total debt with standard deviation of 3.74 and C.V. of 4.21%. The ratio percent is low in 2004/05, i.e. 83.16 and high in 2008/09, i.e. 92.67.

Figure 4.3

Total Debt to Total Assets
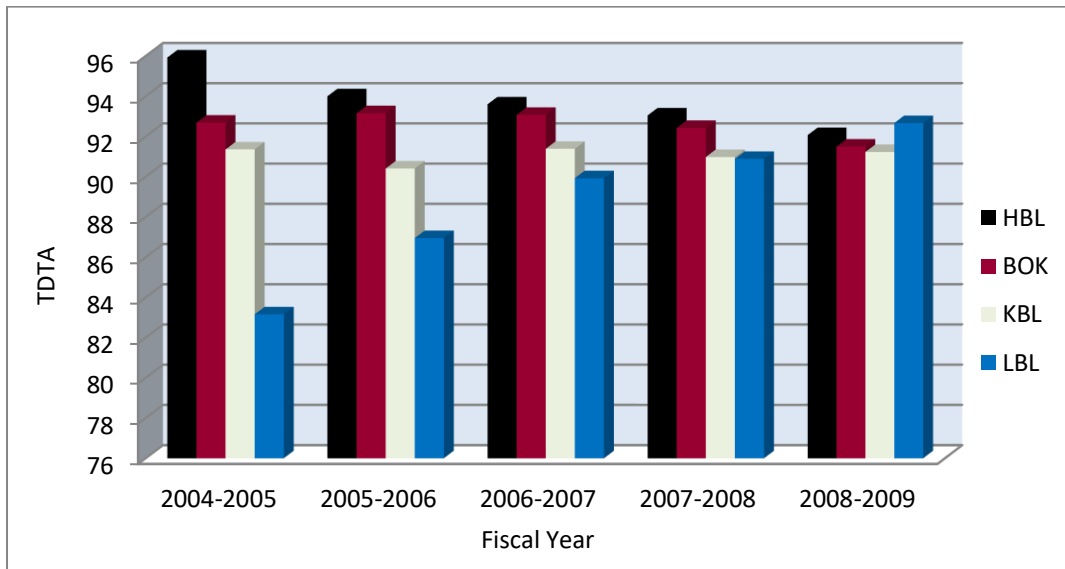
From Table 4.3 and Fig. 4.3 we can conclude that HBL, BOK and KBL are highly leveraged in comparison to LBL as HBL, BOK and KBL have optimum use of debt to finance total assets. The fluctuation is high in HBL and LBL then BOK and KBL.

4.1.2.2 Total Debt to Total Equity Ratio

The contribution of debt capital and equity capital is total debt to total equity ratio. A high debt to equity ratio is unfavourable as banks cannot earn enough surpluses to pay interest to creditors. Similarly, low ratio is also unfavourable from the view point of owners.

Table 4.4

Total Debt to Total Equity Ratio

Year	HBL	BOK	KBL	LBL
2004-2005	17.06	12.68	10.58	4.94
2005-2006	15.68	13.62	9.43	6.67
2006-2007	14.62	13.81	10.62	8.93
2007-2008	14.57	12.20	10.02	9.98
2008-2009	11.06	10.77	10.41	12.65
Mean	14.60	12.62	10.21	8.63
S.D.	2.22	1.23	0.55	2.98
C.V.	1.16	2.21	1.70	3.12

Source: Annual Reports and Annex-1

Total debt to total equity ratio of HBL is 17.06 in 2004/05 which shows that the total debt of HBL is around 17 times of shareholders equity. Similarly, the data shows the ratio is in decreasing trend ranging from 17.06 in 2004/05 to 11.06 in 2008/09 and the average ratio is 14.60, standard deviation 2.22 and C.V. 1.16%. The highest ratio of BOK is 13.81 in 2006/07 which shows that the total debt is around 14 times of shareholders equity. In 2008/09 the ratio is 10.77 which is the lowest . The average ratio is 12.62 with standard deviation 1.23 and C.V. 2.21%. Total debt to total equity ratio of KBL is 10.62 in 2006/07 which shows that the total debt of KBL is around 10 times of shareholders equity. In 2004/05 the ratio is 10.58, 10.02 in 2075/08, 10.41 in 2008/09 and 9.43, the lowest, in 2005/2006. The average ratio is 10.21, standard deviation is 0.55 and C.V. is 1.70%. Total debt to total equity ratio of HBL is 12.65 in 2008/09 which shows that the total debt of HBL is around 12 times of shareholders equity. Similarly, the data shows the ratio is in increasing trend ranging from 4.94 in 2004/05 to 12.65 in 2008/09. The average ratio is 8.63, standard deviation is 2.98 and C.V. is 3.12%.

Figure 4.4

Total Debt to Total Equity
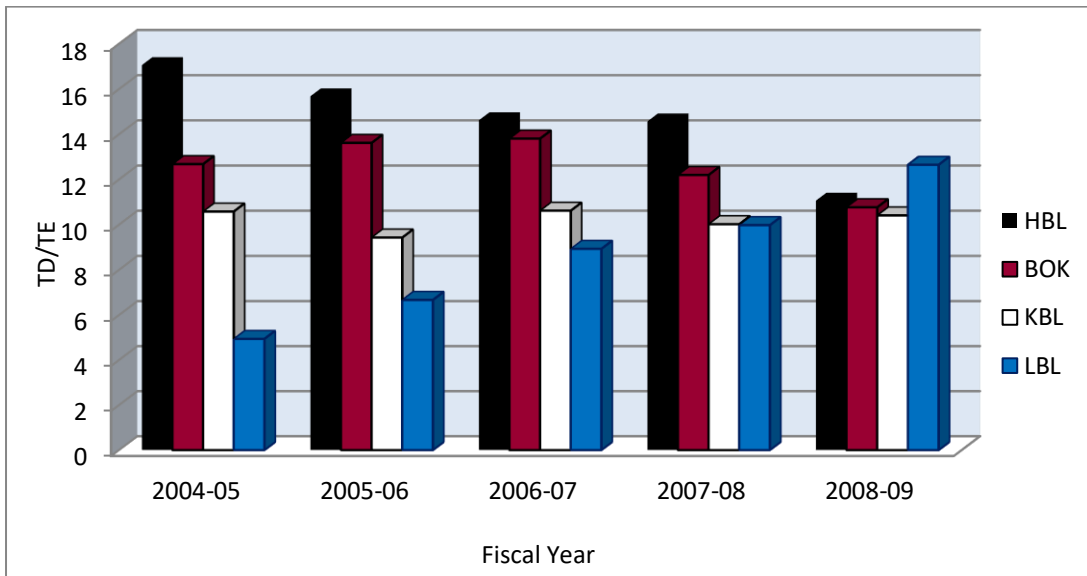
Table 4.4 and Fig. 4.4 show that capital structure of HBL is highly leveraged in comparison to BOK, KBL and LBL. The fluctuation is less in HBL and KBL in comparison to BOK and LBL.

4.1.3 Turnover ratio

Turnover ratios are employed to evaluate the efficiency with which the firm manages and utilize its assets. These ratios indicate the speed with which assets are being converted or turned over into sales. A proper balance between sales and assets generally reflects that assets are managed well.

4.1.3.1 Fixed Assets Turnover Ratio

Fixed Asset Turnover shows its efficiency of utilizing fixed assets. It is calculated by net income divided by Fixed Assets.

Table 4.5

Fixed Assets Turnover Ratio

Year	HBL	BOK	KBL	LBL
2004-2005	5.95	7.94	6.02	1.89
2005-2006	3.88	8.00	7.27	2.82
2006-2007	3.77	3.18	4.18	3.73
2007-2008	3.35	3.04	4.38	3.93
2008-2009	3.07	4.02	5.55	5.05
Mean	4.00	5.24	5.48	3.48
S.D.	1.14	2.67	1.26	1.19
C.V.	28.39	50.92	23.08	34.28

Source: Annual Reports and Annex-1

HBL has an average Fixed Assets Turnover of Rs.4.00 ranging between Rs. 5.95 and Rs. 3.07. The standard deviation is 1.14 and CV of 28.39% in the Fixed Assets Turnover is seen during the period of study. BOK has an average Fixed Assets Turnover ratio of Rs. 5.24 ranging between Rs. 8.00 to Rs. 3.04. The standar deviation is 2.67 and CV is 50.92% during the period of study. An average Fixed Assets Turnover of KBL is Rs 5.48. The highest turnover is Rs. 7.27 in 2004/05 and the lowest is Rs. 4.18 in 2006/07. The standard deviation is 1.26 and CV is 23.08 which indicates that there is a fluctuation of 23.08% in the Fixed Assets Turnover of KBL. LBL Fixed Assets Turnover ranges from Rs. 1.89 in 2004/05 to Rs. 5.05 in 2008/09. LBL has an average Fixed Assets Turnover of Rs. 3.48 and standard deviation 1.19 and CV 34.28%.

Figure 4.5
Fixed Assets Turnover
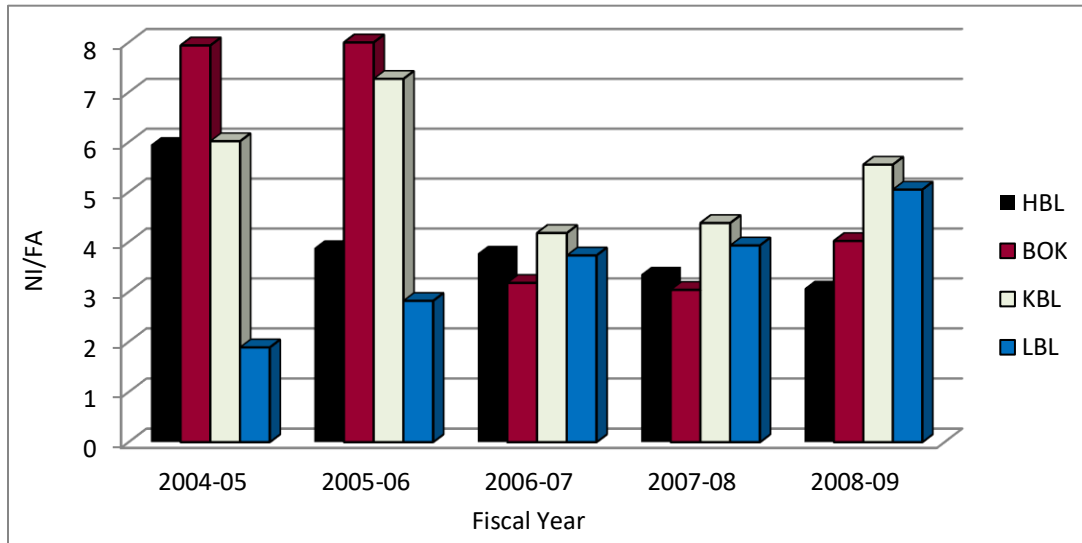
From the table 4.5 and fig. 4.5, it can be seen that average Fixed Assets Turnover of KBL is highest than that of HBL, BOK and LBL. BOK has the highest variability and that of KBL has the lowest.

4.1.3.2 Total Assets Turnover

Total assets turnover shows the firm's ability in generating sales from all financial resources committed to total assets. Total assets turnover is calculated by dividing the net income by total assets.

Table 4.6
Total Assets Turnover

Year	HBL	BOK	KBL	LBL
2004-2005	0.0642	0.0767	0.0673	0.0617
2005-2006	0.0713	0.0722	0.0742	0.0679
2006-2007	0.0646	0.0697	0.0664	0.0609
2007-2008	0.0672	0.0723	0.0647	0.0633
2008-2009	0.0744	0.0819	0.0742	0.0680
Mean	0.0683	0.0731	0.0694	0.0644
S.D.	0.0044	0.0051	0.0045	0.0034
C.V.	6.46	6.96	6.51	5.26

Source: Annual Reports and Annex-1

The average Total Assets Turnover of HBL during the period of study is Rs. 0.0683. The turnover is ranging from Rs. 0.0642 to Rs. 0.0744 with standard deviation of Rs. 0.0044. The CV shows that there is fluctuation of 6.46% in TATO of HBL. BOK's Total Assets Turnover ranges from 0.0697 to Rs. 0.0819. The average TATO is Rs. 0.0731 with standard deviation Rs. 0.0051 and CV 6.96%. KBL's Total Assets Turnover begin with Rs. 0.0647 to Rs. 0.0742 and has the CV of 6.51%. The average TATO is Rs. 0.0694. LBL's Total Assets Turnover ranges from Rs. 0.0609 to Rs. 0.0680 and has an average of Rs. 0.0644 turnover .The standard deviation is Rs. 0.0034 and CV is 5.26%.

Figure 4.6

Total Assets Turnover
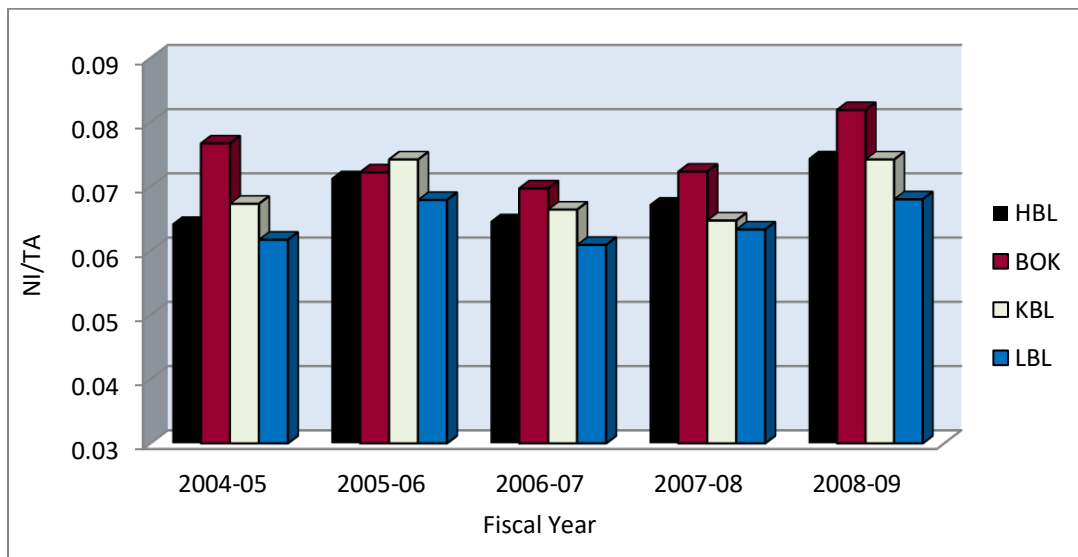
From this it can be concluded that average Total Assets Turnover of BOK is the highest than that of HBL, KBL and LBL. Similarly, the standard deviation and fluctuation is low in LBL and high in BOK.

4.1.4 Profitability Ratios

Surplus of any organization represents its sustainability. The surplus is the ultimate output of organization as it measures the firm's operational efficiency.

Any organization should have in surplus to pay dividend to their shareholders and have to bear all other obligations.

4.1.4.1 Return on Assets (ROA)

The relationship of profit and asset is return on assets. It indicates the earning power and shows how efficiently the organization utilizes its assets. The companies having higher ROA is regarded as best performers.

Table 4.7

Return on Assets (ROA)

Year	HBL	BOK	KBL	LBL
2004-2005	1.11	1.42	0.01	0.83
2005-2006	1.55	1.65	1.15	0.79
2006-2007	1.47	1.80	1.43	0.95
2007-2008	1.76	2.04	1.16	1.13
2008-2009	1.91	2.25	1.41	1.22
Mean	1.56	1.83	1.03	0.98
S.D.	0.3045	0.3248	0.5630	0.1889
C.V.	19.52	17.75	58.65	19.28

Source: Annual Reports and Annex-1

HBL has 1.11, 1.55, 1.47, 1.76 and 1.91 ROA during the period of 2004/05 to 2008/09 respectively. The highest profit ratio is in 2008/09 and the lowest in 2004/05. The average ROA of HBL is 1.56 and C.V is 19.52%. BOK has an average ROA of 1.83. BOK has 1.42, 1.65, 1.80, 2.04 and 2.25 ROA ratio during period of study respectively with the standard deviation 0.3248 and C.V. 17.75%. The average ROA of KBL is 1.03, standard deviation is 0.5630 and C.V. is 58.65%. ROA is highest in 2006/07 (i.e. 1.43) and lowest in 2004/05 (i.e. 0.01). LBL has an average ROA of 0.98. It has 0.83, 0.79, 0.95, 1.13 and 1.22 ROA respectively. The standard deviation is 0.1889 and C.V. is 19.28%.

Figure 4.7

Return on Assets
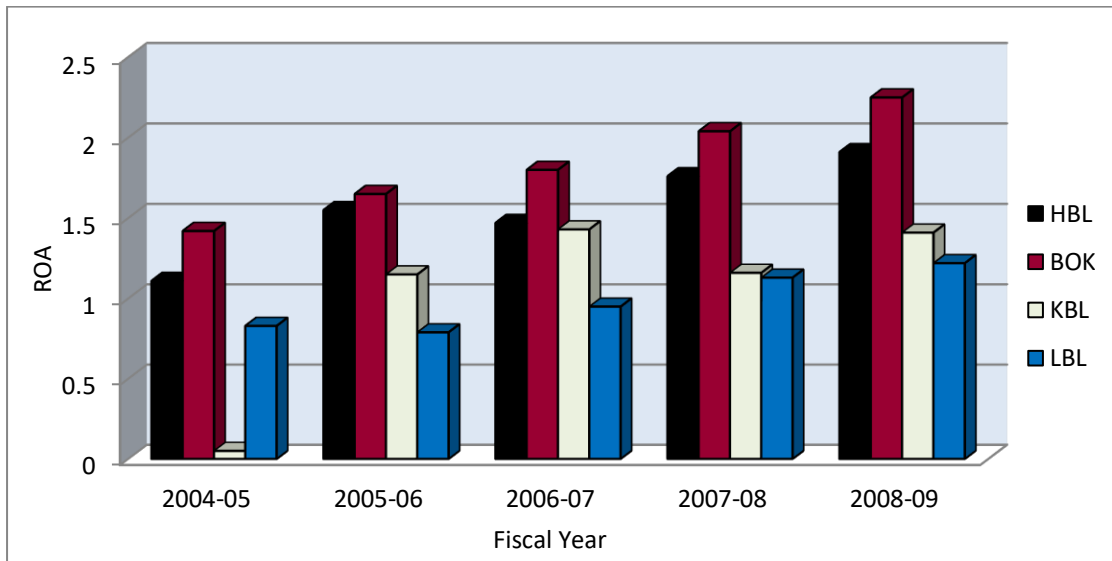
From the table 4.7 and fig. 4.7, it can be seen that BOK has the highest average ROA followed by HBL and KBL respectively and LBL has the lowest average ROA. ROA of KBL is highly fluctuating in comparison to HBL, BOK and KBL. In other words, the ROA of HBL, BOK and LBL is more consistent than compared to KBL.

4.1.4.2 Return on Equity (ROE)

This ratio measures the profitability position of firm with respect to equity investment. It provides information to management and investors about the rate of return earned on invested equity. It is good for the organization to be the return of equity high.

Table 4.8

Return on Equity

Year	HBL	BOK	KBL	LBL
2004-2005	19.10	19.40	13.12	4.11
2005-2006	25.90	24.10	12.00	5.21
2006-2007	22.91	26.72	16.60	7.59
2007-2008	25.30	26.94	12.82	10.38
2008-2009	24.13	26.51	16.09	14.03
Mean	23.47	24.73	14.13	8.26
S.D.	2.70	3.20	2.08	4.02
C.V.	11.50	12.92	14.69	48.73

Source: Annual Reports and Annex-1

HBL has 19.10, 25.90, 22.91, 25.30 and 24.13 ROE from 2004/05 to 2008/09 respectively. The ROE is highest in 2005/06 and lowest in 2004/05. The average ROE of HBL is 23.47. The standard deviation is 2.70 and C.V. is 11.50%. During 2004/05 to 2008/09, ROE of BOK is 19.40, 24.10, 26.72, 26.94 and 26.51 respectively. The highest ROE is observed in 2007/08 and the lowest in 2004/05. The average ROE of BOK is 24.73. The standard deviation is 3.20 and CV is 12.92%. During 2004/05 to 2008/09, ROE of KBL is 13.12, 12.00, 16.60, 12.82 and 16.09 respectively. The highest ROE is recorded in 2006/07 and the lowest in 2005/06. The average ROE of KBL is 14.13 with standard deviation of 2.08 and C.V. of 14.69%. During study period, LBL has 4.11, 5.21, 7.59, 10.38 and 14.03 ROE ratio respectively. The average ROE is 8.26.The trend of ROE is increasing trend. The highest ROE is in 2008/09 and the lowest in 2004/05. The standard deviation and C.V. are 4.02 and 48.73%.

Figure 4.8

Return on Equity

ROE / Fiscal Year

Legend: HBL, BOK, KBL, LBL
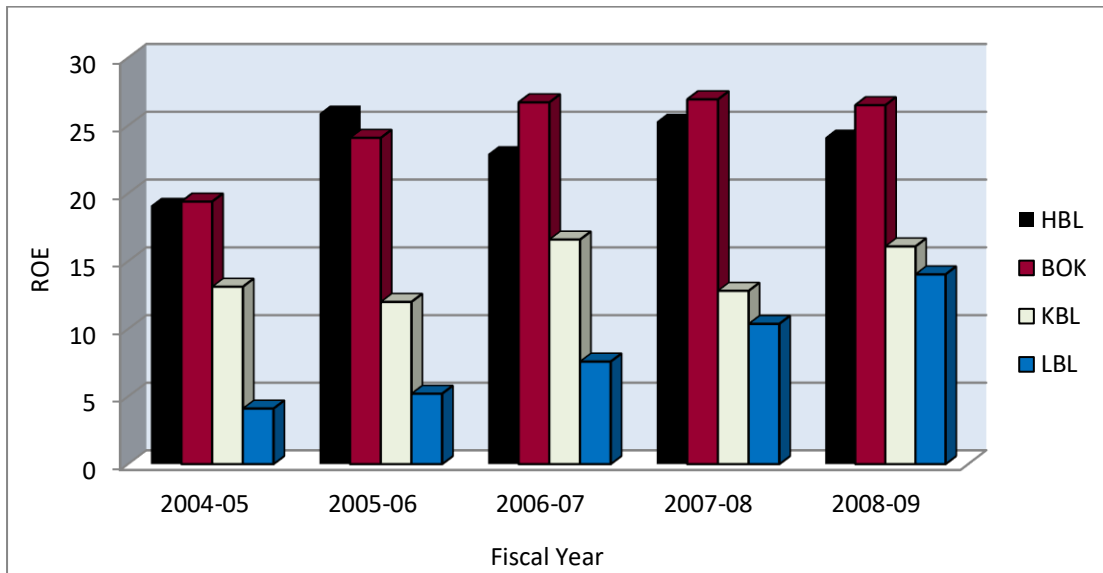
By it, we can conclude that HBL and BOK have the high average ROE than KBL and LBL. It shows that HBL and BOK are able to generate more return on equity to the shareholders than KBL and LBL. ROE of LBL is highly fluctuating in comparison to HBL, BOK and KBL.

4.1.5 Market Price per Share (MPS)

Market price per share is the price at which shares are traded in the stock market. Market value in the secondary market is determined by supply and demand factors and reflects the consensus opinion of investors and traders concerning the value of the stock.

A higher market price per share indicates the better performance of the company and vice versa. The financial analysis has to compare it with the book value per share and also with the market price share of other companies.

Table 4.9

Market Price per Share

Year	HBL	BOK	KBL	LBL
2004-2005	920	430	369	285
2005-2006	1100	850	443	368
2006-2007	1760	1375	830	664
2007-2008	1980	2350	1005	1113
2008-2009	1760	1750	700	1062
Mean	1504	1351	669.40	698.40
S.D.	464.20	751.17	264.98	382.54
C.V.	30.86	55.61	39.59	54.77

Source: Annual Report of NEPSE

From 2004/05 the closing MPS of HBL is Rs. 920, Rs. 1100, Rs. 1760, Rs. 1980 and Rs.1760. The average closing MPS of HBL during the period of study is 1504 with standard deviation of 464.20 and C.V. of 30.86%. BOK has the closing MPS range from Rs. 430 to Rs. 2350 during 2004/05 to 2008/09. An average closing MPS of Rs. 1351 is noted during this period. The standard deviation of the closing MPS is 751.17. The C.V. of 55.61% indicates that there is a fluctuation of 55.61% in the closing MPS of BOK during the period of the study, which is high. KBL has closing MPS Rs. 369, Rs.443, Rs.830, Rs. 1005 and Rs.700 during study period. The average closing MPS is Rs.669.40. The standard deviation is 246.98 and C.V. is 39.59%. LBL has closing MPS Rs. 285, Rs.368, Rs.664, Rs.1113 and Rs.1062. The average closing MPS is Rs. 698.40. The standard deviation is 382.54 and C.V. is 54.77%.

Figure 4.9

Market Price per Share
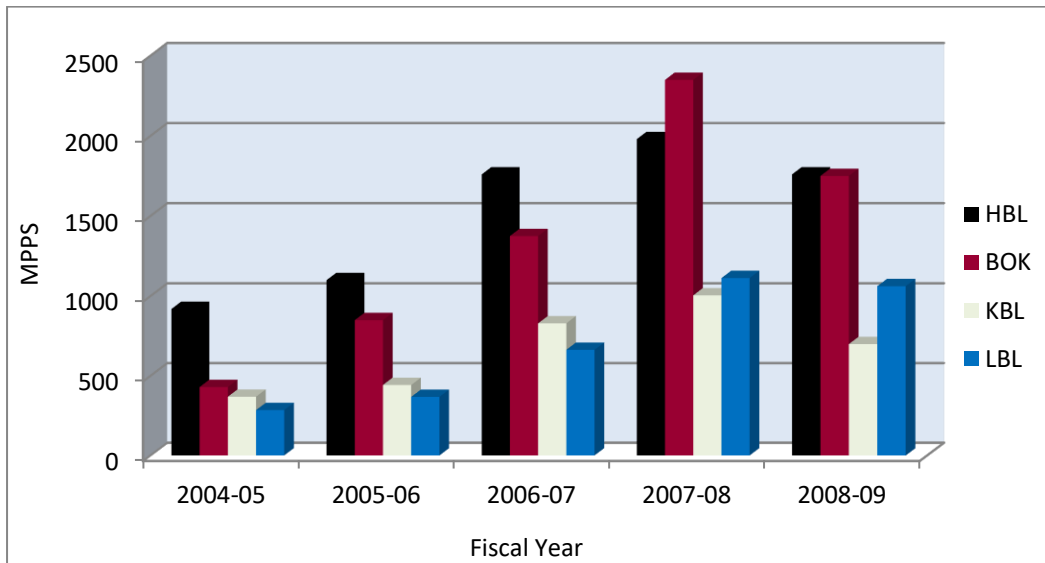
From the table 4.9 and fig. 4.9, it can be seen that the average closing MPS of HBL is the highest and KBL is the lowest. All four banks closing MPS is in increasing trend expect in 2008/09.

4.1.6 Net Worth per Share (NWPS)

Net worth is the owner's equity in the company. It is also known as book value of the company. The book value per share is computed by dividing the amount of total shareholder's equity, which is called net worth, by the number of shares outstanding (Weston and Brigham, 1996:675). It represents the real or actual value of the common stock. The higher net worth per share is the signal of better companies.

Table 4.10

Net Worth per Share

Year	HBL	BOK	KBL	LBL
2004-2005	239.59	213.60	141.11	98.87
2005-2006	228.72	230.67	149.22	106.40
2006-2007	264.74	162.81	148.69	115.66
2007-2008	247.95	222.51	128	125.44
2008-2009	256.52	206.25	137	122.24
Mean	247.50	207.17	140.80	113.72
S.D.	14.09	26.45	8.82	11.04
C.V.	5.69	12.77	59.59	9.71

Source: Annual Reports and Annex-1

An average NWPS of HBL during the period of the study is Rs. 247.50 with standard deviation of 14.09 and CV of 5.69%. The average NWPS of BOK is Rs. 207.17, ranging between Rs.162.81 and Rs.222.5. The standard deviation is 26.54 and C.V. shows that there is fluctuation of 26.45% in the NWPS. The NWPS of KBL ranges between Rs.128 and Rs.149.28. The average NWPS is Rs.140.80. The standard deviation is 8.82 and C.V. is 59.59% which shows the high fluctuation in NWPS. LBL has average NWPS of Rs.113.72 during the period of study. The standard deviation is 11.04 and C.V. is 9.71%.

Figure 4.10

Net Worth per Share
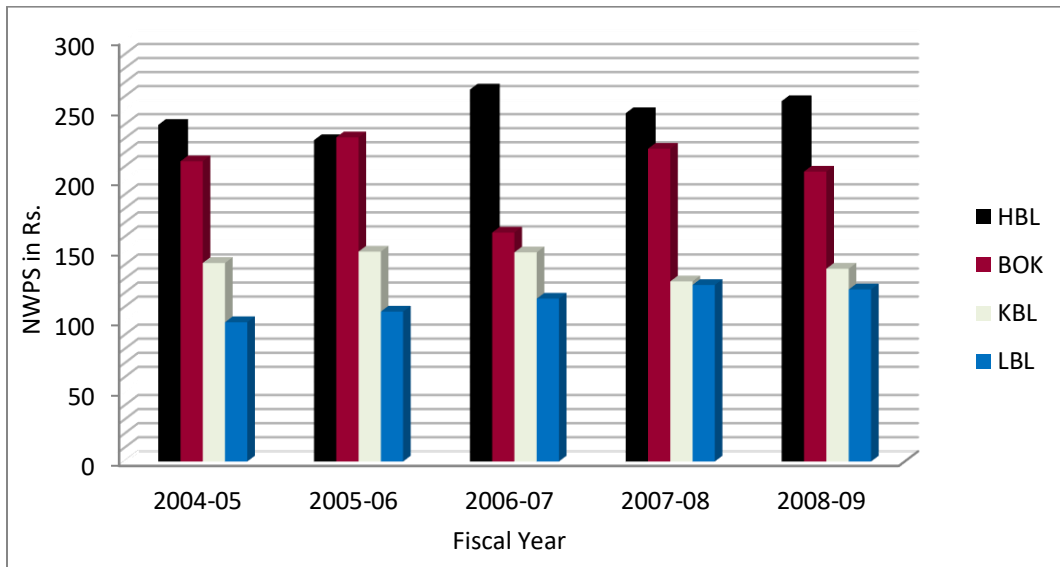
Table 4.10 and fig. 4.10 show that NWPS of HBL is the highest and LBL is lowest. KBL has the highest fluctuation in NWPS in compare to HBL, BOK and LBL.

4.1.7 Earning Per Share (EPS)

Earnings per share are the amount available to the holders of each share. Earnings of the shareholders are the residual amount that remains after deducting all the expenses, interest, taxes and dividends to preferred shareholders from the revenue. EPS is a good measure of performance because it integrates all the major financial ratios. Overall financial model states EPS as follows:

$$\text{EPS} = \frac{\text{Sales}}{\text{Total Assets}} \quad \frac{\text{Net Income}}{\text{Sales}} \quad \frac{\text{Total}}{\text{Assets}} \quad \frac{\text{Equity}}{\text{No. of Shares}}$$

Higher EPS shows the better earning capacity of the company. An organization with higher earnings per share satisfies its existing shareholders and can attract potential investors.

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Table 4.11

Earning Per Share

Year	HBL	BOK	KBL	LBL
2004-2005	47.91	30.1	17.58	4.34
2005-2006	59.24	43.67	16.59	5.8
2006-2007	60.66	43.5	22.7	10.75
2007-2008	62.74	59.94	16.35	16.45
2008-2009	61.9	54.68	22.04	20.7
Mean	58.50	46.38	19.05	11.60
S.D.	6.06	11.54	3.07	6.95
C.V.	10.36	24.88	16.13	59.94

Source: Annual Reports and Annex-1

During the five years period, EPS of HBL are Rs. 47.91, Rs.59.24, Rs.60.66, Rs.62.74 and Rs.61.90. The EPS show the increasing trend except in 2008/09. The average EPS is Rs.58.50, standard deviation is 6.06 and C.V. is 10.6%. BOK has EPS of Rs.30.10, Rs.43.67, Rs.43.5, Rs.59.94 and Rs.54.68 during study period. It has an average EPS of Rs.46.38 and C.V. of 24.88%. KBL has an average EPS of Rs. 19.05, ranging between Rs.16.35 and Rs.22.70. The standard deviation is 3.07 and CV is 16.13%. LBL's EPS ranges between Rs.4.34 and Rs.20.70 with an average value of Rs.11.60. The standard deviation is Rs.6.95 and C.V. is 59.94%.

Figure 4.11
Earning per Share
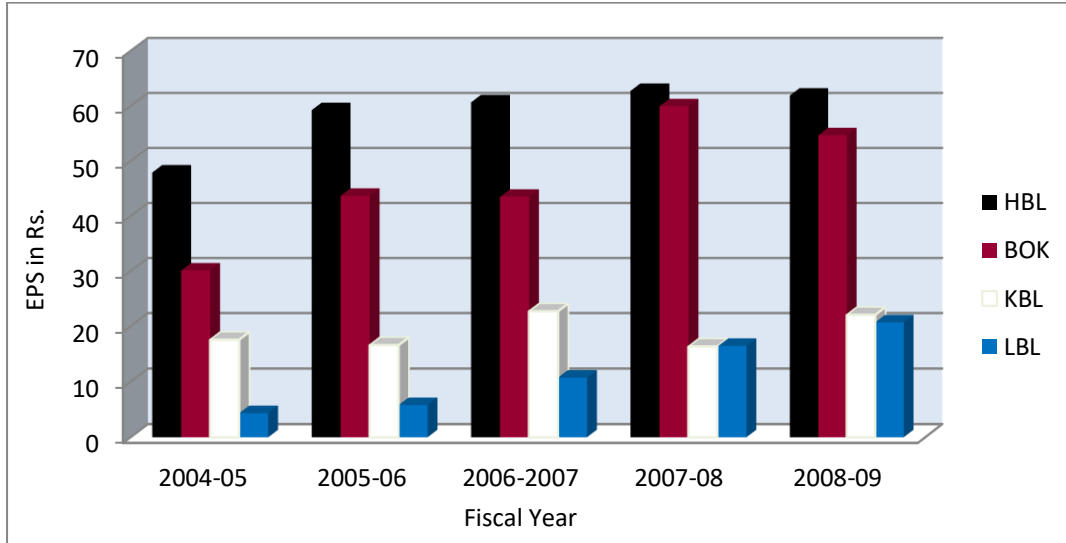
Higher average EPS of HBL and BOK indicates that they are able to earn more profit per share to the common shareholders than that of KBL and LBL. Similarly, LBL has the highest variability in EPS than that HBL, KBL and BOK.

4.1.8 Price Earning Ratio (P/E Ratio)

P/E ratio reflects investor's expectations about the growth in the firm's earnings. The price earning ratio is widely used by the security analysts to value the firm's performance as expected by investors.

Table 4.12
Price Earning Ratio

Year	HBL	BOK	KBL	LBL
2004-2005	19.2	14.29	20.99	65.69
2005-2006	18.57	19.46	26.71	63.44
2006-2007	28.69	31.61	36.56	64.18
2007-2008	31.56	39.21	61.47	67.66
2008-2009	28.43	33.37	31.76	51.31
Mean	25.29	27.59	35.50	62.46
S.D.	5.98	10.34	15.63	6.44
C.V.	23.64	37.47	44.04	10.31

Source: Annual Reports and Annex-1

HBL has 19.2, 18.57, 28.69, 31.56 and 28.43 P/E ratio in 2004/05 to 2008/09 respectively. The average P/E Ratio is 25.29 and the standard deviation is 5.895 and C.V. is 3.64% in the P/E ratio. BOK has an average P/E ratio of 27.59 ranging between 14.29 and 39.21 during study period. The standard deviation is 10.34 and C.V. is 37.47%. The average P/E ratio of KBL is 35.50. The P/E ratio is the highest in 2007/08 and the lowest in 2004/05. The standard deviation is 15.63 and CV is 44.04%. LBL has P/E ratio ranging between 51.31 to 67.66 and CV of 10.31%. The average P/E ratio is 62.46 and standard deviation is 6.44.

Figure 4.12

P/E Ratio
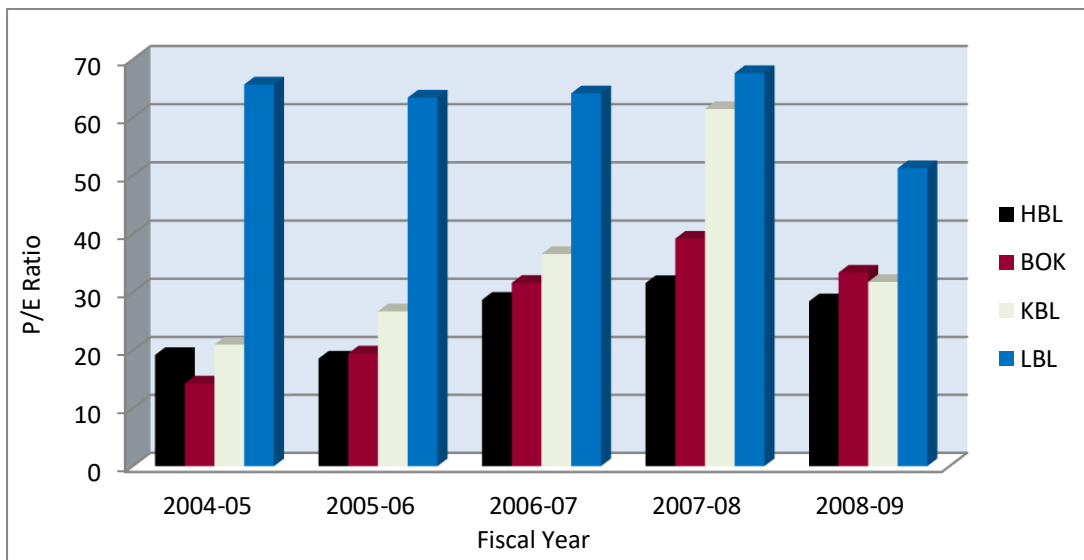
From the table 4.12 and fig. 4.12, it can be seen that LBL has the highest average P/E ratio and the lowest C.V. where as KBL has the lowest average P/E ratio and the highest C.V. The average P/E ratio and C.V. of HBL and BOK lies between LBL and KBL.

4.1.9 Dividend per Share (DPS)

Dividend per share is the amount available to the holders of each common stock by the company. Of the total earnings available to common stockholders, the organization may retain some earnings for planned investment and distribute

remaining amount to common stockholders, or the company may distribute dividends at fixed amount or constant payout ratio as per its dividend policy. Dividend per share (DPS) is considered as an appropriate measure, which shows the organization's earnings and dividend paying capacity. DPS includes dividend decision in earnings per share.

Table 4.13

Dividend per Share

Year	HBL	BOK	KBL	LBL
2004-2005	11.58	15.00	0.00	0.00
2005-2006	30.00	18.00	1.05	0.00
2006-2007	15.00	20.00	1.05	0.00
2007-2008	25.00	2.11	0.53	1.05
2008-2009	12.00	7.37	0.55	0.26
Mean	18.71	12.50	0.64	0.26
S.D.	8.32	7.53	0.88	0.46
C.V.	44.45	60.27	137.11	176.27

Source: Annual Reports and Annex-1

HBL has paid Rs.11.58, Rs.30.00, Rs.15.00, Rs.25.00 and Rs.12.00 during 2004/05 to2008/09 respectively. It has paid an average DPS of Rs. 18.71 to its shareholders. The standard deviation is 8.32 and C.V. is 44.45%. which indicates moderate fluctuation. BOK has paid Rs.15.00, Rs.18.00, Rs.20.00, Rs.2.11 and Rs.7.37 as Dividend to its shareholders during 2004/05 to 2008/09 respectively. The average dividend paid is Rs.12.50. The C.V indicates that the DPS of BOK is fluctuating more than average. KBL does not paid dividend in 2004/05. The highest dividend paid is Rs.1.05 in 2005/06 and 2006/07 and the lowest is Rs.053 in 2007/08. The average DPS is Rs.0.64. The C.V. of 137.11% shows that the DPS of KBL is very highly volatile. LBL paid an average DPS of Rs.0.26. The DPS is highest in 2007/08 and lowest in 2008/09. No dividend is paid during 2004/05, 2005/06 and 2006/07. The standard deviation is 0.46 and C.V. is 176.27% which is very high.

Figure 4.13

Dividend per Share
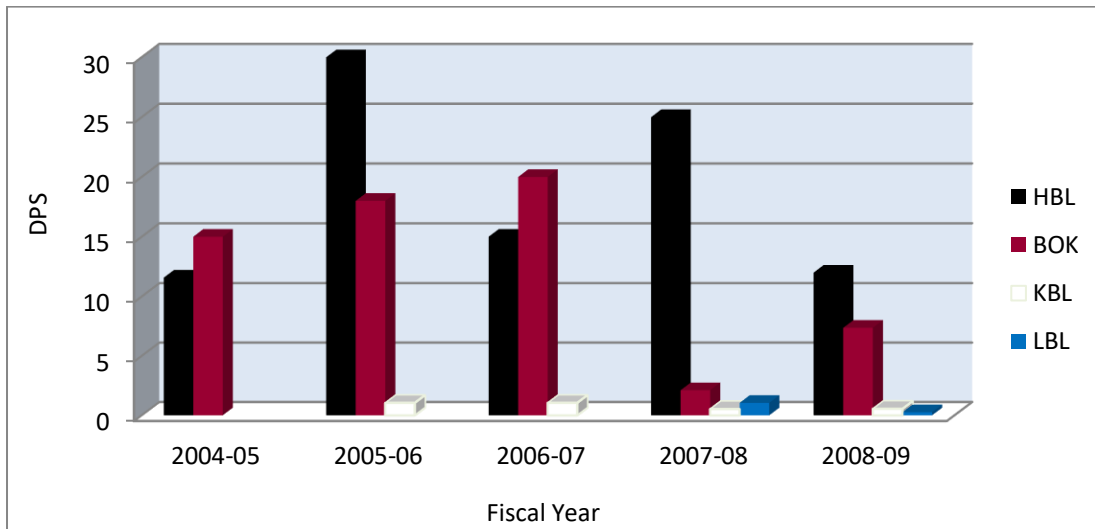
From table 4.13 and fig. 4.13 it we can conclude that HBL and BOK are paying dividend to shareholders regularly. The fluctuation of HBL and BOK is in around average level. But KBL and LBL are not paying dividend regularly. KBL and LBL have very low average DPS than HBL and BOK. The volatility of DPS in KBL and LBL is very high.

4.1.10 Dividend Yield (DY)

It is relative term, which is calculated by dividing dividend per share by market price per share. Dividend yield is an appropriate measure which helps to decide whether to make investment or not in a common stock. Sometimes, lower dividends also produce higher yield and higher dividends also produce lower yield. Therefore, dividend yield helps to investors to know the rate of return in the form of dividends.

Table 4.14

Dividend Yield

Year	HBL	BOK	KBL	LBL
2004-2005	0.0126	0.0349	0.00	0.00
2005-2006	0.0273	0.0212	0.0028	0.00
2006-2007	0.0085	0.0145	0.0013	0.00
2007-2008	0.0126	0.0009	0.0005	0.0009
2008-2009	0.0068	0.0042	0.0008	0.0002
Mean	0.0136	0.0151	0.0011	0.0002
S.D.	0.0081	0.0137	0.0011	0.0008
C.V.	59.68	90.45	99.25	355.00

Source: Annual Reports and Annex-1

During the period of study, HBL has an average Dividend Yield percent of 1.36 with standard deviation of 0.81. The DY percent ranges between 2.73 and 0.68 and the coefficient of variation shows that there is a fluctuation of 59.68%. BOK has DY range between 3.49% and 0.09% during the period of study. An average DY of 1.51% is noted during the period of study. The standard deviation of the DY is 0.11. The CV is 90.45%, which indicates that there is a fluctuation of 90.45% in the DY. KBL has an average DY of 0.11%. The DY ranges between 0.00% and 0.28% during 2004/05 to 2008/09. The standard deviation is 0.11 and C.V. is 99.25%. During the year 2004/05, 2005/06 and 2006/07, DY is 0.00%. in 2007/08 and 2008/09 DY are 0.09% and 0.02% respectively. The average DY of LBL is 0.02% with standard deviation of 0.08 and CV 355.00%.

Figure 4.14

Dividend Yield
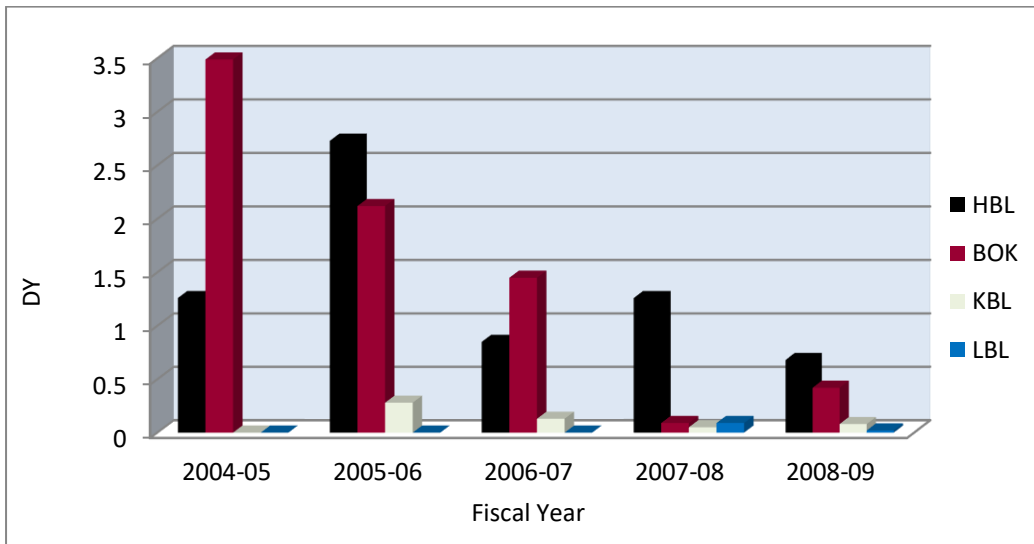
From the table and figure it is seen that HBL and BOK have high average DY in comparison to KBL and LBL. The DY of LBL is fluctuating very highly in comparison to HBL, BOK and KBL. HBL has less fluctuation among all banks taken for study.

4.2 Simple Correlation and Simple Regression Analysis

Correlation analysis gives the extent to which the two variables correlate and the direction along which they move. Therefore, correlation coefficient is applied here to find the linear relationship between MPS and financial tools taken under study. Regression analysis is a statistical tool used to study the relationship between the financial indicators and MPS. It determines what changes in the dependent variable is brought about by a unit change in the independent variable. The model for simple regression analysis is:

$$MPS = a + bX$$

Where,   MPS = dependent variable

          X = independent variables (i.e. EPS, NWPS, P/E ratio, DPS, DY, CR, TCTD, TDTA, ROA, ROE, TATO, FATO, etc.)

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4.2.1 Correlation & Regression Analysis between MPS and Current Ratio

Table 4.15

Correlation & regression analysis between MPS and CR

Bank	r	r²	Regres. const. (a)	Regres coeff. (b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remarks
HBL	0.846	0.716	-35163.50	12515.87	285.41	2.753	2.306	Significant
BOK	0.083	0.007	-1467.64	2659.09	864.38	0.144	2.306	Insignificant
KLB	0.627	0.393	-9359.00	9150.00	238.29	1.395	2.306	Insignificant
LBL	0.811	0.658	10692.73	-9036.44	258.15	2.405	2.306	Significant

Source: Annex-2

Where,

r :   Coefficient of Correlation,

r^2 :   Coefficient of Determination,

t_{cal} :   Student's t-value,

t_{table} :   Tabulated value of Student's t-distribution (at 95% level of significance, $n_1+n_2 - 2$ i.e. 5+5-2= 8 df),

const. (a):   Y-intercept of Regression equation (MPS – dependent intercept),

coeff.(b):   Slope of the line (Variable Intercept) or regression coefficient,

SEE: Standard Error of Estimate

The simple correlation coefficient between MPS and CR of HBL, BOK, KBL and LBL is 0.846, 0.083, 0.627 and 0.811 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with CR. The correlation coefficient of BOK is the lowest and that of HBL is the highest. Similarly, $t_{Cal.}$ of HBL, BOK, KBL and LBL is 2.753, 0.144, 1.395 and 2.405 respectively. In case of HBL and LBL, $t_{Cal.}$ is greater than $t_{tab.}$, we can say that the correlation is significant at 0.05 level of significance (2-tailed) and in case of BOK and KBL, $t_{Cal.}$ is less than $t_{tab,}$ correlation is insignificant.

The regression constant (a) of HBL, BOK, KBL and LBL is -35163.50, -1467.64, -9359.00 and 10692.73 respectively, which shows that an average MPS would be Rs. -35163.50, Rs.-1467.64, Rs.-9359 and Rs.10692.73 if the CR is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is 12515.87, 2659.90, 9150 and -9036.44 respectively, which indicates that the positive correlation exists between CR and MPS of HBL, BOK and KBL and negative correlation exist between CR and MPS of LBL. One percent increase in CR leads to 12515.87 percent, 2659.90 percent and 9150 percent increase in MPS of HBL, BOK and KBL and -9036.44 percent decrease in MPS of LBL. Since the standard error of estimate is 285.41, 864.38, 238.29 and 258.15, the estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs. 285.41, Rs.864.38, Rs.238.29 and Rs.258.15 respectively. The coefficient of determination ($r2$) is 0.716, 0.007, 0.393 and 0.658 respectively of HBL, BOK, KBL and LBL. It indicates that nearly 71.60%, 0.7%, 39.3% and 65.8% change in MPS of HBL, BOK, KBL and LBL is explained respectively by CR and remaining 28.4%, 99.3%, 60.7% and 34.2% changes is due to other factors.

4.2.2 Correlation & Regression Analysis between MPS and CBB/Tdep.

Table 4.16

Correlation & regression analysis bet. MPS and CBB/Tdep.

Bank	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	t$_{Cal.}$	t$_{tab.}$	Remark
HBL	0.456	0.208	2338.05	-123.38	477.13	0.887	2.306	Insignificant
BOK	0.509	0.259	-447.95	191.30	746.73	1.024	2.306	Insignificant
KLB	0.225	0.051	481.06	25.40	298.09	0.401	2.306	Insignificant
LBL	0.094	0.009	624.38	7.74	439.72	0.163	2.306	Insignificant

Source: Annex-2

The simple correlation coefficient between MPS and CBB/Tdep. of HBL, BOK, KBL and LBL is 0.456, 0.509, 0.225 and 0.094 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with CBB/Tdep. Similarly, HBL, BOK, KBL and LBL have **t_Cal.** less than **t_tab.**, we can say that the correlation is insignificant at 0.05 level of significance (2-tailed).

The regression constant (a) of HBL, BOK, KBL and LBL is 2338.05, -447.95, 481.06 and 624.38 respectively, which shows that an average MPS would be Rs. 2338.05, Rs.-447.95, Rs.481.06 and Rs.624.38 if the CBB/Tdep. is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is -123.38, 191.30, 25.40 and 439.72 respectively, which indicates that the positive correlation exists between CBB/Tdep. and MPS of BOK, KBL and LBL and negative correlation exist between CBB/Tdep. and MPS of HBL. One percent increase in CBB/Tdep. leads to 191.30 percent, 25.40 percent and 439.72 percent increase in MPS of BOK, KBL and LBL respectively and -123.38 percent decrease in MPS of HBL. Since the standard error of estimate are 477.13, 746.73, 298.09 and 439.72, the estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs. 477.13, Rs.746.73, Rs.298.09 and Rs.439.72 respectively. HBL, BOK, KBL and LBL have the coefficient of determination (r^2) of 0.208, 0.259,0.051 and 0.009 respectively. It indicates that 20.80%, 25.90%, 5.10% and 0.90% change in MPS of HBL, BOK, KBL and LBL is explained respectively by CBB/Tdep. and remaining 79.20%, 74.10%, 94.90% and 99.10% change is due to other factors.

4.2.3 Correlation and Regression Analysis between MPS and TD/TA Ratio

Table 4.17

Correlation & Regression Analysis between MPS & TD/TA Ratio

Bank	r	r^2	Regres. const. (a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.821	0.674	26533.79	-267.04	305.99	2.491	2.306	Significant
BOK	0.478	0.229	51113.86	-537.56	761.71	0.943	2.306	Insignificant
KLB	0.206	0.042	-11607.51	134.80	299.41	0.365	2.306	Insignificant
LBL	0.906	0.820	-7530.54	92.75	187.18	3.702	2.306	Significant

Source: Annex-2

The simple correlation coefficient between MPS and TD/TA of HBL, BOK, KBL and LBL is 0.821, 0.478, 0.206 and 0.906 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with TD/TA. The correlation coefficient of LBL is the highest and that of KBL is the lowest. In case of HBL and LBL, $t_{Cal.}$is greater than $t_{tab.}$, we can say that the correlation is significant at 0.05 level of significance (2-tailed) and in case of BOK and KBL, $t_{Cal.}$is less than $t_{tab,}$ the correlation is insignificant.

The regression constant (a) of HBL, BOK, KBL and LBL is 26533.79, 51113.86, -11607.51, and -7530.54 respectively, which shows that an average MPS would be Rs.26533.79, Rs.51113.86, Rs.-11607.51 and Rs.-7530.54 if the TD/TA is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is -267.04, -537.56, 134.80 and 92.75 respectively, which indicates that negative correlation exists between TD/TA & MPS of HBL and BOK and positive correlation exist between TA/TD & MPS of KBL and LBL. One rupee increase in TD/TA leads to Rs.267.04 and Rs.537.56 decrease in MPS of HBL and BOK respectively and Rs134.80 and Rs.92.75 increase in MPS of KBL and LBL respectively. Since the SEE are 305.99, 761.71, 299.41 and 187.18; the estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.305.99, Rs.761.71, Rs.299.41 and Rs.187.18

respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.674, 0.229, 0.042 and 0.820 respectively. It indicates that 67.40%, 22.90%, 4.20% and 82% change in MPS of HBL, BOK, KBL and LBL is explained respectively by TD/TA and remaining change is due to other factors.

4.2.4 Correlation and Regression Analysis between MPS and NI/TA

Table 4.18

Correlation & Regression Analysis between MPS & NI/TA

Bank	r	r^2	Regres. const.(a)	Regres coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.155	0.02	387.22	16341.51	529.50	0.280	2.306	Insignificant
BOK	0.016	0.00	1539.35	-2526.09	867.26	0.272	2.306	Insignificant
KLB	0.516	0.267	2588.99	-27836.29	262.04	0.317	2.306	Insignificant
LBL	0.180	0.03	-608.46	20305.54	434.51	1.044	2.306	Insignificant

Source: Annex-2

The simple correlation coefficient between MPS and NI/TA of HBL, BOK, KBL and LBL is 0.155, 0.016, 0.516 and 0.180 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with NI/TA. Similarly, $t_{Cal.}$ of HBL, BOK, KBL and LBL is 0.208, 0.272, 0.317 and 1.044 respectively. Since, HBL, BOK, KBL and LBL have $t_{Cal.}$ less than $t_{tab.}$, we can say that the correlation is insignificant at 0.05 level of significance (2-tailed).

The regression constant (a) of HBL, BOK, KBL and LBL is 387.22, 1539.35, 2588.99, and -608.46 respectively, which shows that an average MPS will be Rs.387.22, Rs.1539.35, Rs.2588.99 and Rs.-608.46 if NI/TA is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is 16341.51, -2526.09, -27836.29 and 20305.54 respectively, which indicates that the negative correlation exists between NI/TA and MPS of BOK and KLB and positive correlation exist between NI/TA and MPS of HBL and LBL. One rupee increase in NI/TA leads to

Rs. 16341.51 and Rs. 20305.54 increase in MPS of HBL and LBL respectively and Rs.2526.09 and Rs.27836.29 decrease in MPS of BOK and KBL respectively. The estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.529.50, Rs.867.26, Rs.262.04 and Rs.434.51 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.02, 0.00, 0.267 and 0.03 respectively. It indicates that 2.00%, 0.00%, 26.70% and 3.00% change in MPS of HBL, BOK, KBL and LBL is explained respectively by NI/TA and remaining change is due to other factors.

4.2.5 Correlation and Regression Analysis between MPS and NI/FA

Table 4.19

Correlation & Regression Analysis between MPS & NI/FA

Banks	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remarks
HBL	0.805	0.648	2821.31	-328.10	318.18	2.348	2.306	Significant
BOK	0.871	0.758	2708.00	-259.17	426.46	3.068	2.306	Significant
KLB	0.853	0.727	1648.23	-178.62	159.84	2.827	2.306	Significant
LBL	0.890	0.792	-295.48	285.27	201.67	3.375	2.306	Significant

Source: Annex-2

The simple correlation coefficient between MPS and NI/FA of HBL, BOK, KBL and LBL is 0.805, 0.871, 0.853 and 0.890 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with NI/FA. The $t_{Cal.}$ of HBL, BOK, KBL and LBL is 2.348, 3.068, 2.827 and 3.375 respectively. Since, HBL, BOK, KBL and LBL have $t_{Cal.}$ greater than $t_{tab.}$, we can say that the correlation is significant at 0.05 level of significance (2-tailed).

The regression constant (a) of HBL, BOK, KBL and LBL is 2821.31, 2708.00, 1648.23 and -295.48 respectively, which shows that an average MPS will be Rs.2821.31, Rs.2708, Rs.1648.23 and Rs.-295.48 if NI/TA is zero. Similarly, the

regression coefficient (b) of HBL, BOK, KBL and LBL is -328.10, -259.17, -178.62 and 285.27 respectively, which indicates that the negative correlation exists between NI/FA and MPS of HBL, BOK and KBL and positive correlation exist between NI/FA and MPS LBL. One rupee increase in NI/FA leads to Rs. 328.10, 285.27 and 178.62 decrease in MPS of HBL, BOK and KBL respectively and Rs.285.27 increase in MPS of LBL respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.674, 0.229, 0.042 and 0.820 respectively. It indicates that 67.40%, 22.90%, 4.20% and 82% change in MPS of HBL, BOK, KBL and LBL is explained respectively by TA/TD and remaining change is due to other factors.

4.2.6 Correlation and Regression Analysis between MPS and ROA

Table 4.20

Correlation & Regression Analysis between MPS & ROA

Bank	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.756	0.571	-287.58	1148.45	351.04	1.999	2.306	Significant
BOK	0.865	0.749	-2315.96	2001.61	434.66	2.991	2.306	Significant
KLB	0.641	0.411	370.37	289.76	234.74	1.448	2.306	Insignificant
LBL	0.963	0.928	-1243.03	317.66	118.65	6.211	2.306	Significant

Source: Annex-2

The simple correlation coefficient between MPS and ROA of HBL, BOK, KBL and LBL is 0.756, 0.865, 0.641 and 0.963 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with ROA. The correlation coefficient of LBL is the highest and that of KBL is the lowest. Similarly, $t_{Cal.}$ of HBL, BOK, KBL and LBL is 1.999, 2.991, 1.448 and 6.211 respectively. Since, HBL and LBL have $t_{Cal.}$ greater than $t_{tab.}$, we can say that the correlation is significant at 0.05 level of significance (2-tailed) and that of BOK and KBL have $t_{Cal.}$ less than $t_{tab.}$, it can be said that correlation is insignificant.

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The regression constant (a) of HBL, BOK, KBL and LBL is -287.58, -2315.96, 370.37 and -1243.03 respectively, which shows that an average MPS will be Rs. -287.58, Rs. -2315.96, Rs.370.37 and Rs. -1243.03 if ROA is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is 1148.45, 2001.61, 289.76 and 317.66 respectively, which indicates that the Positive correlation exists between ROA and MPS of HBL, BOK, KBL and LBL. One rupee increase in ROA leads to Rs. 1148.45, Rs. 2001.61, Rs. 289.76 and Rs. 371.66 increase in MPS of HBL and LBL respectively. The estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.351.04, Rs.434.66, Rs.234.74 and Rs.118.65 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.571, 0.749, 0.411 and 0.928 respectively. It indicates that 57.10%, 74.90%, 41.10% and 92.80% change in MPS of HBL, BOK, KBL and LBL is explained respectively by ROA and remaining change is due to other factors.

4.2.7 Correlation and Regression Analysis between MPS and ROE

Table 4.21

Correlation & Regression Analysis between MPS & ROE

Bank	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.493	0.243	-485.58	84.78	466.46	0.980	2.306	Insignificant
BOK	0.853	0.728	-3611.96	200.65	452.25	2.835	2.306	Signifcant
KLB	0.365	0.133	10.79	46.62	284.86	0.679	2.306	Insignificant
LBL	0.930	0.864	-31.94	88.38	162.83	4.368	2.306	Significant

Source: Annex-2

The simple correlation coefficient between MPS and ROE of HBL, BOK, KBL and LBL is 0.493, 0.853, 0.365 and 0.930 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with ROE. The $t_{Cal.}$ of HBL, BOK, KBL and LBL is 0.980, 2.835, 0.679 and 4.368 respectively. Since, BOK and LBL

have $t_{Cal.}$ greater than $t_{tab.}$, the correlation is significant at 0.05 level of significance and since, HBL and KBL have $t_{Cal.}$ less than $t_{tab.}$, the correlation is insignificant. The regression constant (a) of HBL, BOK, KBL and LBL is -485.58, -3611.96, 10.79 and -31.94 respectively, which shows that an average MPS will be Rs. -485.58, Rs. -3611.96, Rs.10.79 and Rs. -31.94 if ROE is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is 84.78, 200.65, 46.62 and 88.38 respectively, which indicates that the positive correlation exists between ROE and MPS of HBL, BOK, KBL and LBL. One rupee increase in ROE leads to Rs. 84.78, Rs. 200.65, Rs. 46.62 and Rs. 88.38 increase in MPS of HBL and LBL respectively. Since the standard error of estimate are 466.46, 452.25, 284.86 and 162.83; the estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.466.46, Rs.452.25, Rs.284.86 and Rs.162.83 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.243, 0.728, 0.133 and 0.864 respectively. It indicates that 24.30%, 72.80%, 13.30% and 86.40% change in MPS of HBL, BOK, KBL and LBL is explained respectively by ROE and remaining change is due to other factors.

4.2.8 Correlation and Regression Analysis between MPS and NWPS

Table 4.22

Correlation & regression analysis between MPS & NWPS

Bank	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.732	0.535	-4463.04	24.11	365.33	1.86	2.306	Insignificant
BOK	0.048	0.002	1632.59	-1.36	866.38	0.083	2.306	Insignificant
KLB	0.55	0.302	2994.51	-16.51	255.54	1.141	2.306	Insignificant
LBL	0.973	0.947	-3135.97	33.72	101.28	7.353	2.306	Significant

Source: Annex-2

The simple correlation coefficient between MPS and NWPS of HBL, BOK, KBL and LBL is 0.732, 0.048, 0.550 and 0.973 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with NWPS. Similarly, $t_{Cal.}$ of HBL, BOK, KBL and LBL is 1.86, 0.083, 1.141 and 7.353 respectively. In case of LBL, $t_{Cal.}$ Is greater than $t_{tab.}$, we can say that the correlation is significant at 0.05 level of significance (2-tailed) and likewise, HBL, BOK and KBL have $t_{Cal.}$ less than $t_{tab.}$, the correlation is insignificant.

The regression constant (a) of HBL, BOK, KBL and LBL is -4463.04, 1632.59, 2994.51 and -3135.97 respectively, which shows that an average MPS will be Rs. -4463.04, Rs. 1632.59, Rs.2994.51 and Rs. -3135.97 if NWPS is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is 24.11, -1.36, -16.51 and 33.72 respectively, which indicates that the Positive correlation exists between NWPS and MPS of HBL and LBL and negative correlation exists between NWPS and MPS of BOK and KBL. One rupee increase in NWPS leads to Rs. 24.11 and Rs. 33.72 increase in MPS of HBL and LBL and Rs. 1.36 and Rs. 16.51decrease in MPS of BOK and KBL respectively. Since the standard error of estimate are 365.33, 866.38, 255.54 and 101.28; the estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.365.33, Rs.866.38, Rs.255.54 and Rs.101.28 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.535, 0.002, 0.302 and 0.947 respectively. It indicates that 53.50%, 0.20%, 30.20% and 94.70% change in MPS of HBL, BOK, KBL and LBL is explained respectively by NWPS and remaining change is due to other factors.

4.2.9 Correlation and Regression Analysis between MPS and EPS

Table 4.23

Correlation & regression analysis between MPS & EPS

Bank	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.829	0.687	-2209.78	63.49	299.83	2.567	2.306	Significant
BOK	0.995	0.912	-1530.28	62.13	256.98	5.584	2.306	Significant
KLB	0.236	0.056	280.90	20.39	297.29	0.422	2.306	Insignificant
LBL	0.965	0.931	83.21	53.08	116.00	6.364	2.306	Significant

Source: Annex-2

The simple correlation coefficient between MPS and EPS of HBL, BOK, KBL and LBL is 0.829, 0.995, 0.236 and 0.965 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with EPS. The correlation coefficient of LBL is the highest and that of KBL is the lowest. Similarly, $t_{Cal.}$ of HBL, BOK, KBL and LBL is 2.567, 5.584, 0.422 and 6.364 respectively. Since, HBL, BOK and LBL have $t_{Cal.}$ greater than $t_{tab.}$, we can say that the correlation is significant at 0.05 level of significance (2-tailed) and since, KBL has $t_{Cal.}$ less than $t_{tab.}$, it can be said that correlation is insignificant.

The regression constant (a) of HBL, BOK, KBL and LBL is -2209.78, -1530.28, 280.90 and 83.21 respectively, which shows that an average MPS will be Rs. -2209.28, Rs.-1530.28, Rs.280.90 and Rs. 83.21 if EPS is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is 63.49, 62.13, 20.39 and 53.08 respectively, which indicates one rupee increase in EPS leads to Rs.63.49, Rs.62.13, Rs.20.39 and Rs.53.08 increase in MPS of HBL, BOK, KBL and LBL respectively. Since the standard error of estimate are 299.83, 256.98, 297.29 and 116; the estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.299.83, Rs.256.98, Rs.297.29 and Rs.116 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.687, 0.912, 0.056 and 0.931 respectively. It

indicates that 68.70%, 91.20%, 5.60% and 93.10% change in MPS of HBL, BOK, KBL and LBL is explained respectively by EPS and remaining change is due to other factors.

4.2.10 Correlation and Regression Analysis between MPS and DPS

Table 4.24

Correlation & regression analysis between MPS & DPS

Bank	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.005	0.00	1508.78	-0.26	536.00	0.008	2.306	Insignificant
BOK	0.764	0.584	2303.51	-76.23	559.16	2.054	2.306	Insignificant
KLB	0.271	0.073	565.10	163.10	294.54	0.487	2.306	Insignificant
LBL	0.762	0.580	530.51	640.80	286.24	2.036	2.306	Insignificant

Source: Annex-2

The simple correlation coefficient between MPS and DPS of HBL, BOK, KBL and LBL is 0.005, 0.764, 0.271 and 0.762 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with DPS. The $t_{Cal.}$ value of HBL, BOK, KBL and LBL is 0.008, 2.054, 0.487 and 2.036 respectively. The $t_{Cal.}$ value of HBL, BOK, KBL and LBL is less than $t_{tab.}$ value, the correlation is insignificant at 0.05 level of significance.

The regression constant (a) of HBL, BOK, KBL and LBL is 1508.78, 2303.51, 565.10 and 530.51 respectively, which shows that an average MPS will be Rs.1508.78, Rs.2303.51, Rs.565.10 and Rs.530.51 if DPS is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is -0.26, -76.23, 163.10 and 640.80 respectively, which indicates one rupee increase in DPS leads to Rs.0.26 and Rs.76.23 decrease in MPS of HBL and BOK and Rs.163.10 and Rs.640.80 increase in MPS of KBL and LBL respectively. Since the standard error of estimate are 536, 559.16, 294.54 and 286.24; the estimation of MPS of HBL,

BOK, KBL and LBL may vary by Rs.536, Rs.559.16, Rs.294.54 and Rs.286.24 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.00, 0.584, 0.073 and 0.580 respectively. It indicates that 0.00%, 58.40%, 7.30% and 58.00% change in MPS of HBL, BOK, KBL and LBL is explained respectively by DPS and remaining change is due to other factors.

4.2.11 Correlation and Regression Analysis between MPS and P/E Ratio

Table 4.25

Correlation & Regression Analysis between MPS & P/E Ratio

Banks	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.985	0.969	-429.32	76.45	93.72	9.754	2.306	Significant
BOK	0.976	0.953	-606.16	70.94	187.16	7.838	2.306	Significant
KLB	0.913	0.833	120.23	15.47	125.08	3.867	2.306	Significant
LBL	0.367	0.135	2061.41	-21.82	410.86	0.684	2.306	Insignificant

Source: Annex-2

The simple correlation coefficient between MPS and P/E ratio of HBL, BOK, KBL and LBL is 0.985, 0.976, 0.913 and 0.367 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with P/E ratio. Similarly, $t_{Cal.}$ of HBL, BOK, KBL and LBL is 9.754, 7.838, 3.867 and 0.684 respectively. Since, HBL, BOK and KBL have $t_{Cal.}$ greater than $t_{tab.}$, we can say that the correlation is significant at 0.05 level of significance (2-tailed) and since LBL has $t_{Cal.}$ less than $t_{tab.}$, the correlation is insignificant.

The regression constant (a) of HBL, BOK, KBL and LBL is -429.32, -606.16, 120.23 and 2061.41 respectively, which shows that an average MPS will be Rs.-429.32, Rs.-606.16, Rs.120.23 and Rs.2061.41 if P/E ratio is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is 76.45, 70.94, 15.47 and -21.82 respectively, which indicates that the positive correlation exists between

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P/E ratio and MPS of HBL, BOK and KBL and negative correlation exists between P/E ratio and MPS of LBL. Since the standard error of estimate are 93.72, 187.16, 125.08 and 410.86; the estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.93.72, Rs.187.16, Rs.125.08 and Rs.410.86 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.969, 0.953, 0.833 and 0.135 respectively. It indicates that 96.90%, 95.30%, 83.30% and 13.50% change in MPS of HBL, BOK, KBL and LBL is explained respectively by DPS and remaining change is due to other factors.

4.2.12 Correlation & Regression Analysis between MPS & Dividend Yield

Table 4.26

Correlation & Regression Analysis between MPS & DY

Banks	r	r^2	Regres. const.(a)	Regres. coeff.(b)	SEE	$t_{Cal.}$	$t_{tab.}$	Remark
HBL	0.564	0.318	3564.89	-141.77	395.08	1.83	2.306	Insignificant
BOK	0.968	0.938	2155.21	-53117.92	216.59	6.716	2.306	Significant
KLB	0.205	0.042	724.21	-50754.14	299.46	0.363	2.306	Insignificant
LBL	0.747	0.559	537.07	733322.37	293.48	1.948	2.306	Insignificant

Source: Annex-2

The simple correlation coefficient between MPS and DY of HBL, BOK, KBL and LBL is 0.564, 0.968, 0.205 and 0.747 respectively. It shows that MPS of HBL, BOK, KBL and LBL is positively correlated with DY. Similarly, $t_{Cal.}$ of HBL, BOK, KBL and LBL is 1.83, 6.716, 0.363 and 1.948 respectively. Since, BOK has $t_{Cal.}$ value greater than $t_{tab.}$ value, the correlation is significant at 0.05 level of significance and that of HBL, KBL and LBL have $t_{Cal.}$ less than $t_{tab.}$, the correlation is insignificant.

The regression constant (a) of HBL, BOK, KBL and LBL is 3564.89, 2155.21, 724.21 and 537.07 respectively, which shows that an average MPS will be

Rs.3564.89, Rs.2155.21, Rs.724.21 and Rs.537.07 if DY is zero. Similarly, the regression coefficient (b) of HBL, BOK, KBL and LBL is -141.77, -53117.92, -50754.14 and 733322.37 respectively, which indicates that the positive correlation exists between DY and MPS of LBL and negative correlation exists between DY and MPS of HBL, BOK and KBL. One rupee increase in DY leads to Rs.141.77, 53117.92 and 50754.14 decrease in MPS of HBL, BOK and KBL and Rs.733322.37 increase in MPS of LBL respectively. The estimation of MPS of HBL, BOK, KBL and LBL may vary by Rs.395.08, Rs.216.59, Rs.299.46 and Rs.293.48 respectively. The coefficient of determination (r^2) of HBL, BOK, KBL and LBL is 0.318, 0.938, 0.042 and 0.559 respectively. It indicates that 31.80%, 93.80%, 4.20% and 55.90% change in MPS of HBL, BOK, KBL and LBL is explained respectively by DY and remaining change is due to other factors.

4.3 Multiple Regression Analysis

In order to get the clear vision of MPS of sampled commercial banks, a series of secondary data is used. The variables (i.e. CR, TD/TA, NI/TA, NI/FA, ROA, ROE, EPS, DPS, P/E ratio, NWPS and DY) taken are based on the general hypothesis that the MPS is dependent upon the stated variables. Various statistical analyses are stated below to show their interrelationship and dependency.

the MPS is taken as a dependent variable and the rest has been taken as independent variables. Running the regression analysis using SPSS program has yields in the following output:

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	EPS, DPS, P/E, DY, NWPS, ROE, ROA, CR, TD/TA, NI/TA, NI/FA		Enter

Model Summary

Model	r	r^2	Adjusted r Square	SEE	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	0.985	0.971	0.931	157.577	0.971	24.207	11	8	0.000

a. Predictors: (Constant), EPS, DPS, P/E, DY, NWPS, ROE, ROA, CR, TD/TA, NI/TA, NI/FA

b. Dependent Variable: MPS

ANOVA

	Model.	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6611823.157	11	601074.83	24.207	0.000
	Residual	198645.043	8	24830.63		
	Total	6810468.200	19			

a. Predictors: (Constant), EPS, DPS, P/E, DY, NWPS, ROE, ROA, CR, TD/TA, NI/TA, NI/FA

b. Dependent Variable: MPS

Coefficients

	Unstand. Coeff.		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Const.)	4268.662	6623.26		0.644	0.537	-11004.60	19541.92
EPS	16.634	22.60	0.581	0.736	0.483	-35.470	68.748
DPS	1.088	17.173	0.017	0.063	0.951	-38.514	40.69
P/E	21.244	6.434	0.635	3.302	0.011	6.407	36.08
NWPS	1.367	5.21	0.263	0.263	0.800	-10.639	13.372
DY	-210.358	146.51	-0.361	-1.436	0.189	-548.220	127.504
ROA	-20.518	198.66	-0.017	-1.03	0.920	-478.628	437.592
ROE	52.371	31.54	0.658	1.661	0.135	-20.359	125.10
NI/FA	26.520	69.60	0.076	0.381	0.713	-133.980	187.02
NI/TA	-1589.50	14500.49	-0.361	-0.11	0.915	-35027.70	31848.70
TD/TA	-16.571	41.95	-0.074	-0.395	0.703	-113.297	80.154
CR	-3759.73	3054.62	-0.186	-1.231	0.253	-10803.70	3284.232

The regression method can be interpreted as follows:

The data basically reveals that the MPS of the sampled commercial banks is the dependent variable and the other variables as EPS, DPS, P/E ratio, DY, NWPS, ROA, ROE, NI/FA, NI/TA. TD/TA and CR are taken as the independent variables.

As a matter of common fact that the MPS of any commercial bank operating in Nepal is determined by various other influencing factors, but in the calculation cited above, i.e. of dependency of MPS with the independent variables, only 11 influencing factors are taken in account in order to persist simplicity and to avoid the errors that may occur while calculating. Moreover, the data used are non-contrived and the extent of the interference when analyzing the data is minimal. However, the result so produced using the statistical tool may not be accurate and may not catch up to the point of accuracy but still it gives a rough idea to MPS

trend of the sampled commercial banks that are most commonly used in the stock operation. The above table of output can further be precisely explained as under:

Interpretation of Output

The coefficient table stated in the output gives the regression line of the MPS of the sampled commercial banks combined as:

"MPS= 4268.662+ 16.634EPS + 1.088DPS + 21.244P/E+ 1.367NWPS − 210.358DY − 20.518ROA+ 52.371ROE + 26.520NI/FA − 1589.502NI/TA − 19.571TD/TA − 3759.735CR"

The intercept term, 4268.662 reveals that MPS will be Rs. 4268.662 when all the independent variables taken as zero value. The coefficient of each independent variables indicates the marginal relationship between that variable and the MPS of the sampled commercial banks, holding constant the effect of all other variables in the regression equation.

The coefficient of EPS of 16.634 of the sampled commercial banks indicates that when we hold constant the effect of all other variables, each Rs. 1 increase in EPS will increase MPS by Rs.16.634. The coefficient of DPS indicates that for each rupee distributed as dividend per share, it will cause of increment of Rs. 1.088 in MPS. The coefficient of P/E is 21.244 which indicates each Rs. 1 increase in P/E will increase MPS by Rs.21.244. Similarly, the coefficient of the NWPS indicates that for each rupee increase in NWPS leads to Rs.1.367 increment in MPS. Likewise, the coefficient of the DY indicates that for each rupee of Dividend Yield will cause declination of Rs. 210.358 in MPS.

The coefficients of Return on Assets (ROA) is -20.518 which means that the MPS will have negative relationship with ROA i.e. one percent increase in ROA leads to 20.518 percent decrease in MPS. Similarly, Return on Equity (ROE) has the

coefficient of 52.371, which means that the MPS will have positive relationship i.e. one percent increase in ROE will increase MPS by 52.371 percent. Higher be their profitability indicators, higher be the return and higher be the return of financial institutions, higher will be the net worth, which ultimately gestures to higher MPS.

NI/FA has positive coefficient of 26.520 which reveals that there is positive relationship between MPS and NI/FA. One percent increase in NI/FA makes 26.520 increment in MPS. The coefficient of all remaining variables, NI/TA, TD/TA and CR are negative meaning the relation is negative. Each one rupee increase in NI/TA, TD/TA and CR individually cause the declination of MPS by Rs. 1589.502, Rs. 16.571 and Rs. 3759.735 separately.

The multiple correlation coefficient of 0.985 indicates that there is highly positive correlation between MPS and independent variables. The coefficient of determination (R^2=0.971) indicates that 97.10% of the total variation in the sampled commercial banks' MPS has been explained by the regression model as a whole.

4.4 Major Findings

- Among four sample banks, LBL has the lowest MPS of Rs.285 and BOK has the highest MPS of Rs.2350 during the period of study. The variability in MPS of BOK is the highest (55.61%) HBL and KBL are fluctuating in same.
- The average NWPS of HBL is the highest and that of LBL is the lowest (i.e. Rs.247.50 and Rs.113.72 respectively). KBL has highest fluctuation, 59.59% and average NWPS of Rs.140.80. HBL has the lowest fluctuation, 5.69%.
- LBL has the highest average P/E Ratio of 62.64 and on the other hand HBL has the lowest average P/E Ratio of 25.29. CV of KBL, 44.04%, shows that it has the highest variability in P/E ratio. Similarly, LBL has the lowest

variability. BOK has also high fluctuation of 37.47% during five years period.

- The average EPS of HBL is the highest and that of LBL is the lowest. BOK has also high average EPS. The CV of LBL is the lowest and HBL is the highest. The least CV of HBL indicates that it has lowest fluctuation in EPS as compared to other sample banks.

- The HBL is paying the highest average DPS of Rs.18.71 with CV of 44.45%. Then comes BOK which is paying average DPS of Rs.12.50 with CV of 60.27%. KBL and LBL are paying DPS inconsistently with CV of 137.11% and 176.21% respectively.

- An average DY of BOK is the highest and that of LBL is the lowest which is Rs. 1.51 and Rs. 0.02 respectively. Similarly HBL and KBL have average DY of Rs.1.36 and Rs.0.11. The fluctuation is seen high in LBL with CV of 355% and low in HBL with CV of 59.68%.

- HBL and BOK have same average CR of 1.06. But, HBL has fluctuation of 1.16% and BOK has 2.21%. Similarly, KBL and LBL have almost same average CR i.e. 1.10 and 1.11 respectively. The CV of KBL is 1.70% and that of LBL is 3.12%.

- BOK has the highest average TD/TA ratio of 92.57% and that of LBL has the lowest ratio of 88.72%. HBL and KBL has almost equal ratio i.e. 91.91% and 91.07%. LBL has the highest CV, 4.21%, and KBL has the lowest CV, 0.44%, in comparison to the sampled banks.

- BOK and HBL have high average TD/TE of 1.83 and 1.56 respectively. LBL and KBL have low TD/TE of 0.98 and 1.03 respectively. KBL has the highest CV, 58.65%, and BOK has the lowest CV, 17.75%. HBL and LBL has almost same CV, i.e. 19.52% and 19.28%.

- The liquidity position of LBL and BOK (9.56% & 9.40%) is high in comparison to HBL and KBL (6.76% & 7.42%). The LBL has the highest

variability in cash reserve position and the BOK has the lowest variability i.e.48.35% & 21.25%.

- HBL has the highest average Fixed Assets Turnover of Rs. 14.60 and LBL has the lowest average of Rs. 8.63. Between these two lies the FATO of BOK and KBL. On the other hand HBL has the lowest relative variation of 1.16% whereas LBL has the highest variation which is 3.12%.

- Among these banks, the Total Asset Turnover of BOK is the highest during the period of study that is Rs 0.073 and LBL has the lowest average return of Rs. 0.064. Between these two lies the TATO of HBL and KBL. The relative variation of TATO is highest in BOK and lowest in LBL, which CVs are 6.96% and 5.26% respectively.

- Simple correlation analysis shows that MPS of HBL has positive and significant correlation with CR, TD/TA, NI/FA, ROA, EPS and P/E ratio and positive but insignificant correlation with CBB/Tdep., NI/TA, ROE, NWPS, DPS and DY ratio.

- Simple correlation analysis shows that MPS of BOK has positive and significant correlation with NI/FA, ROA, ROE, EPS, P/E, DY ratio and positive but insignificant correlation with CR, CBB/Tdep., TD/TA, NI/TA, NWPS and DPS.

- Simple correlation analysis shows that MPS of KBL has positive and significant correlation with NI/FA and P/E ratio and positive but insignificant correlation with CR, CBB/Tdep., TD/TA, NI/TA, ROA, ROE, NWPS, EPS, DPS and DY ratio.

- Simple correlation analysis shows that MPS of LBL has positive and significant correlation with CR, TD/TA, NI/FA, ROA, ROE, NWPS, EPS and DY and positive but insignificant correlation with CBB/Tdep., NI/TA, DPS and P/E ratio.

- Simple regression equation suggests MPS of HBL has positive relation with CR, NI/TA, ROA, ROE, NWPS, EPS and P/E ratio and on the other hand, MPS has negative relation with CBB/Tdep., TD/TA, NI/FA, DPS and DY ratio.

- Simple regression equation suggests that MPS of BOK has positive relation with CR, CBB/Tdep., ROA, ROE, EPS and P/E ratio and on the other hand, MPS has negative relation with TD/ TA, NI/FA, NWPS, DPS and DY ratio.

- Simple regression equation suggests that MPS of KBL has positive relation with CR, CBB/Tdep., TD/TA, ROA, ROE, EPS, DPS and P/E ratio and on the other hand, MPS has negative relation with NI/FA, NWPS and DY ratio.

- Simple regression equation suggests that MPS of LBL has positive relation with CBB/Tdep., TD/TA, NI/TA, NI/FA, ROA, ROE, NWPS, EPS, DPS and DY and on the other hand, MPS has negative relation with CR and P/E ratio.

- The multiple regression suggest the following line of best fit:

- "MPS= 4268.662+ 16.634EPS + 1.088DPS + 21.244P/E + 1.367NWPS – 210.358DY – 20.518ROA + 52.371ROE + 26.520NI/FA – 1589.502NI/TA – 19.571TD/TA – 3759.735CR".

- The coefficient of each independent variable indicates the marginal relationship between that variable and the MPS of the sampled commercial banks, holding constant the effect of all other variables in the regression equation.

- The regression equation suggests that the MPS have positive relationship with EPS, DPS, P/E, NWPS, NI/FA and ROE. On the other hand, regression equation suggests that the MPS has negative relationship with DY, ROA, NI/TA, CR and TD/TA.

- It is inferred that the financial performance do affect the share price of the sampled commercial banks. However, the extent of such effect is not to the mark. The correlation between MPS and financial indicators are found to be

significant for most of the sampled Banks. It shows that the indicators like EPS, DPS, P/E, CR, NI/TA, ROE, ROA, etc. either increases or decreases MPS. Similarly, they individually influence very less but jointly they influence a lot. There can be other factors which influence the share price of the organization.

- It is found essential that the investors are to be educated further to analyze the financial performances and its impact on the market price of share.

CHAPTER - V
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Financial Institutions make possible the collection and mobilization of fund into different profitable and development sectors. Banks are the medium through which scattered saving transferred into productive areas that ultimately helps the economic development and industrialization of nation. Likewise, Securities/stock market serves as a direct link between the suppliers and users of capital fund. Therefore, a healthy and efficient securities/stock market is essential for the economic development.

Investors invest their savings in the common stock of companies through Primary and Secondary Markets. A rational investor would purchase equity shares with an anticipation of good returns in future. The return could be in the form of capital gains, dividends or growth in terms of share holding. The decision is mostly guided by the financial performance of the institution and other developments taking place in the market, the entire economy and the financial system. The general understanding that share prices fluctuate with the financial performance of the institution may not always be true in the developing countries. Nepalese securities market is small in size as compared to developed securities markets. Its competitive position in the global market is very poor. One of the prominent reasons behind its slow growth is lack of research and development. The market imperfection, mainly due to distorted flow of information, lack of awareness of the investor, lack of skills to analyze the financial health and unhealthy market competition may lead to spurious decision while purchasing equity shares.

This study mainly aims to examine the financial performance of the company and its relationship with stock price in making decision about investment on securities of the listed commercial banks in NEPSE. The specific objectives of this study are (1) to analyze the financial performance of HBL, BOK, KBL and LBL; (2) to examine effect of financial performance on share price of HBL, BOK, KBL and LBL; (3) to provide appropriate suggestions and recommendations based on the major findings.

Among all listed commercial banks, only four banks namely HBL, BOK, KBL and LBL have been taken as the sampled commercial banks to analyze the financial performance and their effect on share price.

MPS of these banks has been analytically tested here to compare with other financial indicators like EPS, DPS, NWPS, P/E ratio, DY, CR, TD/TA, NI/TA, NI/FA, ROA, ROE, etc. For such analysis secondary data has been gathered from the different sources and different financial tool (ratio analysis) and statistical tools (standard deviation, coefficient of variation, simple correlation, simple and multiple regression, etc.) have been used to analyze these.

5.2 Conclusion

This study examines the relationship between share prices and financial performance indicators of commercial banks. It shows how share price is affected by different financial indicators. It is assumed that good relation between share prices and these indicators would mean that stock market is efficient in fixing prices. Therefore this study has primarily focused on establishing interrelationship between market price of the equity share and the financial performance indicators. MPS of the sampled banks is significantly highly positively correlated with EPS except KBL. The simple correlation and regression analysis point out that except EPS there are other financial indicators like P/E ratio, ROA, NI/FA, ROE,

CBB/Tdep. and CR which hold positive relationship with the share prices of the most of the sampled banks. Similarly, DPS, DY, TD/TA, NI/TA, NWPS, etc. show mixed effect on sampled banks. HBL and BOK have negative relation with DPS & TD/TA where as KBL and LBL have positive one. Except LBL all other three sampled banks have negative relation with DY. NWPS is positively correlated with MPS of HBL and LBL but negatively related with MPS of BOK and KBL. The multiple regression analysis reveals that joint influence of financial indicators is much more in MPS than taken individually. The risk per units of return for investors and total risk are different in different sampled banks which have been shown by the standard deviation and CV respectively. The effect of financial indicators on MPS is high in case of LBL and low in case of KBL. Moderate effect of financial indicators is seen on MPS of HBL and BOK.

MPS of the sampled commercial banks do shows the impact caused by their financial performance indicators. However, the extent of such impact is not to the mark and the analysis are not exactly reflected in the share price. The investing in shares of commercial bank is risky in the sense that the fluctuation is seen in the dividend and the MPS of the shares of the sampled commercial banks.

The reputed and established commercial banks have very good trend of their financial performance whereas new banks are penetrating their market. The investors are positive towards the shares of these banks.

It can be concluded that investors in Nepal do not care much about the Dividend and other financial ratios. The investors of commercial banks focus mainly in the capital gain yield rather than dividend. The investors generally tend to earn profit from share and they think that EPS and DPS are prime factor to be analyzed and to be considered on investing their savings on Share Price. Due to the inadequate knowledge regarding the share market among Nepalese investors, capital market

of Nepal has not been well developed yet. Also, results of this study shows investment in common stock of sampled commercial banks lack analytical ability and the assessment of financial performance is yet short in the investors.

5.3 Recommendations

The following suggestions can be recommended on the basis of the findings of the study:

- A separate department in NEPSE/SEBO or an independent organization is recommended which analyze, inform and create the awareness in the potential investors about share and share market.
- The companies should provide updated reports to the investors periodically informing actual financial position of the company.
- The Nepalese stock market (NEPSE/SEBO) are recommended to take effective initiatives to control random fluctuation of MPS and establish the system of regular monitoring and evaluation of stock market.
- Investors are recommended not to invest too much, too fast their hard money on the basis of rumors and hearsay. People invest without doing the necessary study and preparation on acquiring the essential methods and skills of investment.
- Before making investment decisions in securities, it is recommended to analyze financial performance of the companies, volume of trading, analytical review of the securities, analysis of market information and estimation techniques to forecast the most likely MPS. The investors are recommended to determine a value of share based on the fundamental earnings, dividend position and risks inherent in the company.
- The ultimate objective of any firm is to maximize the wealth position of its investors, which largely depends upon the proper trends of EPS, DPS, BVPS and other dominant variables. This reality should be well imparted to the

investors in order to make them rational in the field of investment for which the public companies themselves should frequently launch their well-designed awareness campaigns.

- For the clear and absolute result regarding the financial indicators and its effect on share price, a population study of whole share market for a longer study period is recommended. This only gives the factual information about the actual determinants of share price.

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ANNEXURE
ANNEX-1

Five Year's Financial Summary of HBL

(In million)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Current Assets	27548.87	28919.57	32945.08	35449.46	38368.13
Current Liabilities	2630.95	27334.21	31012.64	32802.54	35700.44
Cash & Bank Bal.	2014.47	1717.35	1757.34	1448.14	3048.53
Total Debt	26302.95	27694.21	31372.64	32802.54	35700.44
Total Assets	27418.16	29460.39	33519.14	36175.32	39320.32
Fixed Assets	295.82	540.82	574.06	726.09	952.20
Shareholders' Equity	2568.40	2885.59	2942.23	3195.47	3119.88
Net Income	1760.68	2100.83	2154.27	2430.94	2926.64
Net Profit	308.28	457.46	491.82	635.87	752.84
MPS	920	1100	1760	1980	1760
EPS	47.91	59.24	60.66	62.74	61.90
DPS	11.58	30	15	25	12
NWPS	239.59	228.72	264.74	247.95	256.52
P/E	19.20	18.57	28.69	31.56	28.43
DY	0.0126	0.0273	0.0085	0.0126	0.0068
CR	1.05	1.06	1.06	1.08	1.07
CBB/Tdep.	8.12	6.49	5.85	4.55	8.79
TD/TA	95.93	94.00	93.60	93.05	92.07
TD/TE	17.06	15.68	14.62	14.57	11.06
NI/FA	5.95	3.88	3.77	3.35	3.07
NI/TA	0.0642	0.0713	0.0646	0.0672	0.0744
ROA	1.11	1.55	1.47	1.76	1.91
ROE	19.10	25.90	22.91	25.30	24.13

Source: Annual Reports of Respective Banks

Five Year's Financial Summary of BOK

(In million)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Current Assets	9433.35	12167.58	14249.25	16851.58	20078.96
Current Liabilities	9136.39	11238.60	13362.34	16179.85	18554.42
Cash & Bank Bal.	740.52	728.70	1315.90	1440.47	2182.11
Total Debt	9136.39	11438.60	13562.34	16379.85	18754.42
Total Assets	9857.13	12278.33	14570.10	17721.93	20496.01
Fixed Assets	95.23	110.75	320.85	387.27	417.04
Shareholders' Equity	720.74	839.73	981.98	1342.07	1741.59
Net Income	756.03	885.91	1016.26	1281.32	1677.93
Net Profit	139.53	202.44	262.39	361.50	461.73
MPS	430	850	1375	2350	1750
EPS	30.10	43.67	43.50	59.94	54.68
DPS	15	18	20	2.11	7.37
NWPS	213.60	230.67	162.81	222.51	206.51
P/E	14.29	19.46	31.61	39.21	33.37
DY	0.0349	0.0212	0.0145	0.0009	0.0042
CR	1.03	1.08	1.07	1.04	1.08
CBB/Tdep.	8.28	6.95	10.62	9.10	12.07
TD/TA	92.69	93.16	93.08	92.43	91.50
TD/TE	12.68	13.62	13.81	12.20	10.77
NI/FA	7.94	8.00	3.18	3.04	4.02
NI/TA	0.0767	0.0722	0.0697	0.0723	0.0819
ROA	1.42	1.65	1.80	2.04	2.25
ROE	19.04	24.10	26.72	26.94	26.51

Source: Annual Reports

Five Year's Financial Summary of KBL

(In million)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Current Assets	7348.61	8918.34	11728.99	14804.60	18290.73
Current Liabilites	6789.83	8146.43	10892.68	13271.36	16513.61
Cash & Bank Bal.	443.37	389.63	672.11	933.84	1776.30
Total Debt	6789.83	8146.43	10892.68	13671.36	16913.61
Total Assets	7431.59	9010.28	11918.31	15026.60	18538.57
Fixed Assets	82.98	91.93	189.32	222.00	247.83
Shareholders' Equity	641.76	863.85	1025.63	1364.88	1624.95
Net Income	499.82	668.18	791.95	972.38	1375.83
Net Profit	84.20	103.67	170.26	174.93	261.44
MPS	369	443	830	1005	700
EPS	17.58	16.59	22.70	16.35	22.04
DPS	0.00	1.05	1.05	0.53	0.55
NWPS	141.11	149.22	148.69	128.00	137.00
P/E	20.99	26.71	36.56	61.47	31.76
DY	0.00	0.0028	0.0013	0.0005	0.0008
CR	1.08	1.09	1.08	1.12	1.11
CBB/Tdep.	7.07	5.02	6.37	7.31	11.31
TD/TA	91.36	90.41	91.39	90.98	91.23
TD/TE	10.58	9.43	10.62	10.02	10.41
NI/FA	6.02	7.27	4.18	4.38	5.55
NI/TA	0.0673	0.0742	0.0664	0.0647	0.0742
ROA	0.01	1.15	1.43	1.16	1.41
ROE	13.12	12.00	16.60	12.82	16.09

Source: Annual Reports

Five Year's Financial Summary of LBL

(In million)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Current Assets	3696.38	5080.02	8323.35	1249.06	1813.87
Current Liabilites	3177.20	4526.16	7718.30	11538.64	16689.15
Cash & Bank Bal.	469.54	225.12	350.40	1238.16	1832.78
Total Debt	3177.20	4526.16	7718.30	11538.64	17039.15
Total Assets	3820.77	5205.19	8582.69	12695.02	18386.41
Fixed Assets	124.39	125.17	140.02	204.40	247.73
Shareholders' Equity	643.57	679.03	864.39	1156.38	1347.27
Net Income	235.58	353.51	522.27	804.07	1250.54
Net Profit	26.47	35.39	65.58	120.03	189.00
MPS	285	368	664	1113	1062
EPS	4.34	5.80	10.75	16.45	20.70
DPS	0.00	0.00	0.00	1.05	0.26
NWPS	98.87	106.40	115.66	125.44	122.24
P/E	65.69	63.44	64.18	67.66	51.31
DY	0.00	0.00	0.00	0.0009	0.0002
CR	1.16	1.12	1.08	1.08	1.09
CBB/Tdep.	15.39	5.06	4.60	11.34	11.42
TD/TA	83.16	86.95	89.93	90.89	92.67
TD/TE	4.94	6.67	8.93	9.98	12.65
NI/FA	1.89	2.82	3.73	3.93	5.05
NI/TA	0.0617	0.0679	0.0609	0.0633	0.0680
ROA	0.83	0.79	0.95	1.13	1.22
ROE	4.11	5.21	7.59	10.38	14.03

Source: Annual Reports

ANNEX-2

Appendix 1

- **Calculation of Correlation and Regression between MPS and EPS of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.829	0.687	0.583	299.8314

a Predicators: (constant), EPS

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	-2209.77	1453.14		-1.521	0.226
	EPS	63.49	24.74	0.829	2.567	0.083

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS and DPS of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.005	.000	-0.333	536.0043

a Predicators: (constant), DPS

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	1508.78	946.023		2.325	0.103
	DPS	-0.256	32.226	-0.005	-0.008	0.994

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS & NWPS of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.732	0.535	0.381	305.3293

a Predicators: (constant), NWPS

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	-4463.038	3212.984		-1.389	0.259
	NWPS	84.778	86.472	0.493	0.980	0.399

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS and P/E of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.985	0.969	0.959	93.7156

a Predicators: (constant), P/E

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	-429.324	910.072		-2.119	0.124
	P/E	76.446	7.837	0.985	9.754	0.002

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS & ROE of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.493	0.243	-0.010	466.4648

a Predicators: (constant), ROE

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	-485.578	2040.009		-0.238	0.827
	ROE	84.778	86.472	0.493	0.980	0.399

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS & ROA of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.756	0.571	0.428	351.0442

a Predicators: (constant), ROA

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	-287.576	910.072		-0.316	0.773
	ROA	1148.446	574.634	0.756	1.999	0.140

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS and CR of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.846	0.716	0.622	285.4056

a Predicators: (constant), CR

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant				-2.119	0.124
	CR			0.846	2.753	0.071

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS & TDTA of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.821	0.674	0565	305.9909

a Predicators: (constant), TD/TA

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	26533.791	10048.639		2.641	0.078
	TD/TA	-267.041	107.198	-0.821	-2.491	0.088

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS & NI/TA of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.155	0.024	-0.301	529.5010

a Predicators: (constant), NI/TA

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	387.221	4106.416		0.094	0.931
	NI/TA	16341.514	59988.033	0.155	0.272	0.803

Dependent variable: MPS

- **Calculation of Correlation and Regression between MPS and DY of HBL**

Model Summary

Model	R	R square	Adjusted R^2	Std. Error of Estimate
1	0.564	0.318	0.091	442.6517

a Predicators: (constant), DY

Coefficients

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig.
		B	Std. Error			
1	Constant	1942.650	420.400		4.621	0.019
	DY	-32348.854	27350.665	-0.564	-1.183	0.322

Dependent variable: MPS

Appendix - 2

Correlation Coefficient and Regression between MPS and EPS

	HBL	BOK	KBL	LBL
$r = \dfrac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2}\ \sqrt{n\sum Y^2 - (\sum Y)^2}}$	0.829	0.955	0.236	0.965
Coefficient of Determination (r^2)	0.687	0.912	0.056	0.931
$t = \dfrac{r}{1-r^2} \times \sqrt{n-2}$	2.567	5.584	0.422	6.364
$a = Y - b\,X$	-2209.77	-1530.28	280.89	82.21
$b = \dfrac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	63.49	62.12	20.39	53.08
$SEE = \sqrt{\dfrac{\sum Y^2 - a\sum Y - b\sum X}{n-2}}$	299.831	256.983	297.293	116.004

Correlation Coefficient and Regression between MPS and DPS

	HBL	BOK	KBL	LBL
$r = \dfrac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2}\ \sqrt{n\sum Y^2 - (\sum Y)^2}}$	0.005	0.764	0.271	0.762
Coefficient of Determination (r^2)	0.00	0.584	0.073	0.580
$t = \dfrac{r}{1-r^2} \times \sqrt{n-2}$	0.008	2.054	0.487	2.036
$a = Y - b\,X$	1568.78	2303.50	565.09	530.57
$b = \dfrac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	-0.256	-76.225	163.996	604.802
$SEE = \sqrt{\dfrac{\sum Y^2 - a\sum Y - b\sum X}{n-2}}$	536.004	559.162	294.535	286.243

Correlation Coefficient and Regression between MPS and ROE

	HBL	BOK	KBL	LBL
$r = \dfrac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2}\ \sqrt{n\sum Y^2 - (\sum Y)^2}}$	0.493	0.853	0.365	0.930
Coefficient of Determination (r^2)	0.243	0.728	0.133	0.864
$t = \dfrac{r}{1-r^2} \times \sqrt{n-2}$	0.980	2.835	0.679	4.368
$a = Y - b\,X$	-485.578	-3611.95	10.79	-31.936
$b = \dfrac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	84.778	200.653	46.62	88.376
$SEE = \sqrt{\dfrac{\sum Y^2 - a\sum Y - b\sum X}{n-2}}$	466.464	452.254	284.86	162.834

Correlation Coefficient and Regression between MPS and NI/FA

	HBL	BOK	KBL	LBL
$r = \dfrac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2}\ \sqrt{n\sum Y^2 - (\sum Y)^2}}$	0.805	0.871	0.853	0.890
Coefficient of Determination (r^2)	0.648	0.758	0.727	0.792
$t = \dfrac{r}{1-r^2} \times \sqrt{n-2}$	2.348	3.068	2.827	3.375
$a = Y - b\,X$	2821.306	2708.004	1648.233	-295.482
$b = \dfrac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	-328.998	-259.168	-178.619	285.270
$SEE = \sqrt{\dfrac{\sum Y^2 - a\sum Y - b\sum X}{n-2}}$	318.180	426.461	159.836	201.669

Correlation Coefficient and Regression between MPS and TD/TA

	HBL	BOK	KBL	LBL
$r = \dfrac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2}\ \sqrt{n\sum Y^2 - (\sum Y)^2}}$	0.821	0.478	0.206	0.906
Coefficient of Determination (r^2)	0.674	0.229	0.042	0.802
$t = \dfrac{r}{1-r^2} \times \sqrt{n-2}$	2.491	0.943	0.365	3.702
$a = Y - b\,X$	26533.791	51113.86	-11607.50	-7530.53
$b = \dfrac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	-267.041	-537.558	134.801	92.752
$SEE = \sqrt{\dfrac{\sum Y^2 - a\sum Y - b\sum X}{n-2}}$	305.990	761.710	299.409	187.184

Correlation Coefficient and Regression between MPS and CR

	HBL	BOK	KBL	LBL
$r = \dfrac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2}\ \sqrt{n\sum Y^2 - (\sum Y)^2}}$	0.846	0.083	0.627	0.811
Coefficient of Determination (r^2)	0.716	0.007	0.393	0.658
$t = \dfrac{r}{1-r^2} \times \sqrt{n-2}$	2.753	0.144	1.395	2.405
$a = Y - b\,X$	2338.045	-1467.636	-9359.00	10692.70
$b = \dfrac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	-123.379	2659.091	9150.00	-9036.44
$SEE = \sqrt{\dfrac{\sum Y^2 - a\sum Y - b\sum X}{n-2}}$	477.133	864.381	238.285	258.149

Note: *SPSS version 17.1* programme is used to calculate correlation and regression values between dependent and independent variables of all four banks. All other calculation are done accordingly for the remaining three banks.