CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Nepal is one of the least developed countries in the world. The Nepalese economy is dominated by agricultural sector. Industrialization is the most essence for rapid economic development for a developing country like Nepal. As Nepal is an agricultural landlocked country, it has to be faced several difficulties for industrialization. Economic status of Nepal is not satisfactory. So, speedy development of the country is possible when it reinforces in upgrading its economic condition. For this, development in agriculture sector alone is not sufficient, industrial sector also should be promoted. The major problem of an underdeveloped economy is an inadequate degree of capital formation, which is the result of insufficient saving made by the community.

So, to strengthen the Nepalese economy the agricultural as well as industrial sector should be promoted in balance. Although Nepal is an agricultural country the industrial sector should be given priority because economic prosperity cannot be possible without industrialization. Import substituting industries are essential for reducing Nepal's adverse trade balance. All manufacturing industries help toward import substituting industries have attracted foreign direct investment. Their contribution to employment generation in the manufacturing sector is significant. They have saved precious foreign exchange by reducing the need for imports. They have a lion's share in the contribution of manufacturing sector to GDP. So for the rapid economic development of Nepal, development in agriculture sector alone is not sufficient, it is essential to develop industrial sector also. This will also helps to minimize the problem of unemployment.

Capital formation also affects the economy of any nation. It is important to accelerate the economic growth of a country. This depends on the saving and investment propensity of the people. But in the developing country like Nepal the saving capacity is very low and thus investment. Inadequate degree of capital formation is an important feature of developing countries. Insufficient saving made by the community is the main cause of

inadequate capital. In this situation the financial institutions like bank can be the best medium to collect the scattered saving and utilize it to in a productive manner.

The study of performance of listed commercial banks and returns to investors occupies an important role in the development of capital market. Development and expansion of capital market are essential for the rapid economic growth of the country. Capital market helps economic development by mobilizing long term capital needed for productive sector. It is vital to long term growth and prosperity of the economy since it provides the channel through which needed funds can be raised (Shrestha, 1993: 32).

Bank is a financial institution, which plays significant role in the development of the country. It helps the growth of agriculture, trade, commerce and industry of the national economy. The business in banking is one of collecting funds from the community and extending credit for useful purpose. Banks have plays pivotal role in moving money from lenders to for useful purpose. Banking is a profit seeking business not a community charity. As a profit seeker, it is expected to pay dividends and otherwise add to the wealth of its shareholders.

Banking institutions are inevitable for the resource mobilization and the all-round development of the country. They have resources for economic development and they maintain economic confidence of various segments and extend credit to people.

Banking concept existed even in the ancient period, when the gold smiths and enc reach people used to issue receipt to the common on people against the promise to safe keeping of their valuable items on the presentation of the promise to safe keeping of their valuable items on the presentation of the receipt the depositors would get back their gold and valuable after paying a small amount for enc safe keeping and saving.

Financial sector reform plays a crucial role in the economic growth of a country. It works as the lubricator for the economic engine. As the apex financial intuition of the country,

Nepal Rastra Bank (NRB) has the biggest role to play and the commercial banks need to have correct diagnosis and surgical operation.

In this domain, security market is the base whereby financial transaction relating to share takes place. The history of security market is not that long. In Nepalese context, the concept of security market began with the setup of "Nepal Stock Exchange (NEPSE)" former known as "Securities Exchange Centre" in 1976. This is the only stock market in Nepal. Inspite of considerable development of stock market there is lot more to be done for the development of stock market in Nepal. Many investors are still afraid to invest in securities because of inadequate knowledge in this field and most investors are exploited form market intermediaries. For this purpose potential investors must be able to analyze risk and return of individual stock to increase market efficiency and consequently speed of the economic development. NEPSE has adopted 'open – outcry' system for trading. Transactions of securities are conducted on the open auction principle on the trading floor. The buying broker with the highest bid will post the price and his code number on the buying column, while the selling broker with the lowest offer will post the price and code number on the selling column on the quotation board. The market makers quote their bid and offer price on their own board before the training starts on the stock exchange floor. Once the bid and offer price matches, contracts between the buying and selling brokers, or between the brokers and market makers, are concluded on the floor (Sharpe, Alexander & Bailey, 1999:47).

Financial performance and stock market are interrelated to each other. Rationally speaking, financial performance of the company should govern the stock price of any company. Say, a company doing good in financial indicators ought to do well in the stock market. Hence, in a simpler language, financial performance and stock market are interlinked and positively correlated.

Analyzing the present scenario of Nepal Stock Exchange, we find that the substantial portion of stock trading is of commercial banks. It is normally seen that the investors feel comfortable in investing in commercial banks stocks rather than stocks of other

manufacturing companies and sectors. This may be because of the higher credibility that the bank posses in the economy. Further, the overall economy is affected adversely by the existing insurgency leading to lack of economic activities thereby decreasing the business volume and increasing a sense of insecurity amidst investors. This is reflected in stock market. Practically and realistically, stock market is said to be mirror of the economy. However, the concept does not follow literally in the Nepalese market as coincident in developed economy. This is because of relatively less informative and awareness of individual in the stock market. It can be inferred herein that the Nepalese stock market is inherent asymmetrical stock where the information prevailing in the environment effect minuscule to the share prices.

The index of Nepal Stock Exchange is fluctuating. This means that the momentum of stock price is fluctuating. As a matter of common fact, Nepalese Stock Market is composite market consisting of every single sock operating either in the primary market or in the secondary market. The methodology used to calculate the stock exchange index is value weighted. This is to say that Nepal stock index is calculated taking in the account the number of shares traded in the market. 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. Based on the aforementioned proposition, in the stock price and the index calculated provided the capital gain insight to the individuals. Generally speaking, Nepal Stock Exchange and the index of commercial banking sector are highly correlated. This means that as the sector index of commercial banks goes 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 Nepal Stock Exchange.

1.1.1 Profile of the Concerned Banks

Himalayan Bank Limited (HBL)

Himalayan Bank Limited (HBL) was incorporated in 1992 by the distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited. It is one of the largest commercial banks operations 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.

HBL has always been committed to providing a quality service to its valued customers. All customers are treated with utmost courtesy as valued clients. The bank, wherever possible, offers tailor and facilities of its clients, based on the unique needs and requirement of different clients. To further extend the reliable and efficient services to its valued customers.

Everest Bank Limited (EBL)

Everest Bank Limited (EBL: A joint venture with Punjab National Bank India) has been established with objective of expending professionals banking services to various sections of society in the kingdom of Nepal and thereby contributes in the economic development of the country. The bank had come into formal operation from 18th October 1994. EBL is joint venture with "Punjab National Bank (PNB)", one of the largest commercial bank in India. PNB has a century old tradition of successful banking and is known for its financial strength and has laid down modern banking system procedure. PNB is providing the top management service to EBL under technical services agreement signed between the two institutions. EBL operated with the objectives of providing the full range of quality banking services to both the business community and the common man.

1.2 Focus of the Study

Investors do not make investments without knowing what the company is doing and 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. Investors have to be careful enough before making investment otherwise the wrong investment in share is possible. However, in the context of Nepalese Capital Market, there are often irrational investors undertaking investment activities without proper investigation of pros and cons of securities. Hence,

the thesis understudies the importance of financial performance and its relevancy in the stock market.

The analysis of securities is to make good investment decisions in the selection and valuation of assets portfolio. 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, the procedures taken to avoid risk, types of information available and investor's ability to analyze and select profitable securities.

Investors have to make decisions for which financial analysis is a must. Financial analysis provides insight about what company has done in terms of liquidity, profitability, turnover, assets growth, capital structure, dividend payments and so on. As such, any investors while taking investment decision has to be fully informed about the financial performance of the company. Therefore, this study is focused on the financial analysis of company, which helps investors to understand a company's current situation, where it may be going, what factors affect it, and how those factors affect it. Analysis has focused to determine certain characteristics of securities, identify mispriced securities and movement of market. Thus, this research gives a feedback to the interested investors regarding the investment in common stocks of joint venture banks.

1.3 Statement of the Problem

In the context of Nepal, current state of political, economic and social turmoil every little aspect of these three external environments should be closely monitored. Banks role towards the economic development has already been considered as indispensable moreover, being the intermediary in collection of numerous scattered funds from different parts of the country; commercial banks have contributed a great deal in economic upliftment so far. As the caterer of the country's capital requirement, commercial banks has made it possible for the government and private sector to launch different commercial and development projects as well as for investors to invest in securities. Unfortunately, unstable political situation has adversely impacted on economic bases. Due to instable political scenarios back by unclear policies and catalyzed by unrest

and turmoil, people are resistant to invest their fund in their own investment. The situation has further worsened since the insurgency started last decade. With respect to this situation it is very important that the investors should invest their resources in the best possible ways.

Commercial banks shares are highly traded in Nepal Stock Exchange. The commercial banks occupy a lion's share of the stock trading any fluctuation in their price is directly reflected in the index. Sometimes investors feel due to lack of information on any key financial parameters on the basis of which investment decision is to be made. Taking the case of securities market in Nepal, stock exchange history shows how some investors fail because of their lack of power to make financial analysis. Success or failure of public limited companies depends much on their investment performance. Failure is the example of investment in Necon Air and Indreyani Soyabean while success example is the investment in share of most joint venture bank like Standard Chartered Bank, Himalayan Bank, Everest Bank, NABIL Bank etc.

Due to many internal or external factors, share market has been sometimes bearish and sometimes bullish. In the time of bullish, investors would be happy and at bearish time they become more skeptical. Due to this, the investors hold shares at the time of selling and vice-versa. Most of the investors are least familiar with the financial activities. They do not have the idea of financial analysis. Awareness regarding the financial activities, investment policy, making portfolio, etc is very little. Some of the investors having neither theoretical knowledge of risk and return nor they take services of expert which has made the securities market unbalanced and unfair. If any bank or financial institution issues primary shares, it is observed that the demand of initial public offering is very high. Rational decision making to invest in common stock is lacking in the investors, this has led them to bear huge losses. Therefore, it has become necessary for the investors to acquire knowledge regarding financial performance of the company before investing.

Despite the rational reasoning that the financial performance governs the stock price in the market, the practical figure is somewhat different. In case of Nepal, the investors

normally invest in the common stock in an adhoc bases, without even analyzing the actual situation. The rumor about the company also affects the stock price movements.

The problem specially relates to financial performance and stock price of commercial banks in Nepal have been presented briefly as under:

- What are the existing situations of financial position of joint venture banks in Nepal?
- What factors influence share price of commercial bank in Nepal?
- How the stock price is affected by the financial performance?

These are the burning issues that has influenced researcher to carry out the study. For this there is great need of such institutions, which can give valuable information that accelerates the stock investment and market efficiency.

Moreover, in context of Nepal the information regarding the financial activities of the listed companies does not reflect at the share price movement. In this regard, the market is tilted towards asymmetrical market.

1.4 Objective of the Study

The main objective of the study is to analyze financial performance of the company and its relationship with stock price in making decision about investment on securities of the selected listed commercial joint venture banks. The specific objectives of the study are:

- To analyze the financial performance of Himalayan Bank Limited and Everest Bank Limited.
- To examine effect of financial performance on share price of Himalayan Bank Limited and Everest Bank Limited.

1.5 Significance of the Study

The people's participation in security investment and stock trading is increasing unexpectedly. The recent trend and people's attitude towards common stock investment

shows that there is a high potentiality in stock investment. It is important to increase financial and economic activities of the nation. The analysis of financial performance of the joint venture commercial banks is significant managerial decision from the viewpoint of investors. It influences the shareholders to gain full information on the performance of the company, make sound judgment and helps in significant forecasts of investment decisions. Consequently, financial analysis enables investors to select the right kind of security for investment depending upon the comparative analysis of which company doing the best. Investors can form a correct opinion on predicting the riskiness of securities and likely the investors can take full advantage by buying them at low price and selling them when the price rises.

Thus, this study has tried to fulfill the aforementioned analytical need before purchasing or selling stock in the secondary share market. The study may also help for interested researchers in the area of investment on common stock.

Apart from above, this study will be a matter of interest for academicians, students and practioners.

1.6 Limitation of the Study

Despite ample efforts on the part of the researcher, this study is also not free from limitations. The present study is subject to following limitations.

- Only two commercial banks are taken as the sample of the study among 25 commercial banks of Nepal.
- Only five years data are covered by the study.
- Due to constraint of time, limited books, thesis, annual reports of these banks, magazine and articles are reviewed.
- NEPSE is taken as basic sources of data.

1.7 Chapter Plan of the Study

The present researcher has been organized into the following chapters.

Chapter 1: Introduction

This chapter introduced the subject matter of the research and includes background, statement of the problem, importance of the study, objective of the study, limitation of the study and finally the organization of the study.

Chapter II: Review of Literature

This chapter throws the light on theoretical framework, review of empirical studies, review of journals and thesis and finally research gap.

Chapter III: Research Methodology

This 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 analysis.

Chapter IV: Presentation and Analysis of Data

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

Chapter V: Summary, Conclusion and Recommendation

This is the final chapter of the present study that summarizes and conclusion. At the end of the study, bibliography and appendices have also been incorporated.

CHAPTER - II

LITERATURE REVIEW

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 so 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” (Joshi, 2001:89).

Scientific research must be based on the past knowledge. The previous studies cannot be ignored because they provide the foundation to the present study. In other words, there has to be continuity in research. A careful review of literature helps the researcher in avoiding any duplication of work done earlier. It enables the researcher in discovering important variables relevant to the area of the present research.

“The main reason for a full review of research in the past is to know the outcomes of those investigations in area where similar concepts and methodologies had been used successfully. In this connection a review of previous related research projects will help the researcher to formulate a satisfactory structure for the project” (Joshi, 2001,P: 89).

The primary sources of the literature review are all kinds of published materials which are relevant to the areas of interest including thesis, dissertations, business reports, books, articles and government publications. Review should be made in terms of objectives, methodology, findings gap, deficiencies etc.

2.1 Theoretical / Conceptual Reviews

In this chapter, an attempt has been made to review basic literatures pertaining to concept, importance, measurement technique of financial performance, security pricing, role of financial performance to affect the stock price and relation between stock price

and financial performance. The relevant literature and articles were reviewed from international and national publications as well as unpublished report available from different libraries and institutions.

This sub-chapter aims to describe some theoretical terms that are relevant to this study. In this section an attempt has been made to explain how the present research differ from previously conducted researcher, in the concerned field and adds new dimension.

2.1.1 Financial Performance

Profit is a lifeline of an organization. Every organization which is established as a commercial view of point aims to earn maximum profit for its survival and growth. Profit is an indicator of sound financial performance of any organization, but it is not the sole indicator. A financial performance of an organization also refers to its earning capacity, generating and mobilization of its capital funds, utilization of its overall physical facilities. In other words, financial performance is that managerial activity which has concern with the planning, organizing, controlling and administrating of financial resources of an organization (Pandey, 1995:103). Moreover, it is basically concerned with analysis of various items of financial statement of an organization to ensure its comparative strength and weakness by using different tools and techniques.

Financial performance is a process of identifying the financial strength and weakness of the firm by properly establishing relationship between the item of balance sheet and the profit and loss statements. It is also a study of relationship among various financial factors in a business as disclosed by a single set of statements and a study of the trend of these factors as shown in a series of statements. By establishing a strategic relationship between the items of a balance sheet and other operative data, the financial analysis unveils the meaning and significance of such items. Thus, financial performance analysis is required to take managerial and financial decisions. (Van Horn, 1977:120)

Unlike other non bank financial companies, commercial banks do not produce any physical goods they produce loans and financial innovations to facilitate trade and

industries. Their nature of assets and liabilities are different than other companies. That is why analysis of financial statement of commercial banks differs from that of other companies.

Balance sheet, profit and loss account and accompanying notes are the most widely used financial statement of banks. The major components of assets side of the balance sheet are loans, advances and investments, commission earned, exchange income, interest paid on deposits and borrowings are the major components of the profit and loss account. Because of the structure of balance sheet and profit and loss account of the commercial banks relevant, reliable and comparative information is needed to evaluate the financial performance.(Panday,2004:18)

Review of Accounting Statements

The analysis of a company's accounting statements is not an end in itself. Instead, it is a means to identify financial aspects of company that have direct relevance to understanding the intrinsic values and risks of the company's securities. The analyst will want to obtain access to a wide range of financial information about the company under reviews. Much of that information is found in the three primary accounting statements issued by the company in its annual report: the balance sheet, the income statement and the statement of cash flows.

Balance Sheet

As the name implies, the balance sheet list balances that is, it has the characteristics that
Total Asset = Total liabilities + Capital

Hence, the balance sheet is a statement of the financial position at a specific point in time regarding assets, liabilities and stockholder's equity to balance debt and ownership position. The Balance Sheet is a statement of resources at the disposal of the firm and how they are put to use. In other words, the acquired assets at the disposal of the firm and liabilities that the firm has incurred and remains indebted to others.

Furthermore, a Bank's balance sheet lists sources of Bank funds (liabilities) and uses to which they are put (assets) Bank obtain funds by borrowing and by issuing other liabilities such as securities and loans. Banks make profits by charging an interest rate in their holdings of securities and loans that is higher than the expenses on their liabilities.(Rana,2004:19)

Balance sheet has two sides:

a. Assets:

An asset of the firm refers to the economic resources owned by the firm. Assets represent the company's economic resources. An asset is an item that has potential to generate economic benefits (that is, cash inflows) for the company in the future. For example, plant and equipment can produce goods and services that can be sold to customers for cash.

Other assets in the bank's balance sheet consist of items such as premises and fixed assets, other real estate owned (collateral seized on defaulted loans), investments in unconsolidated subsidiaries, intangible assets (i.e. goodwill and mortgage servicing rights) and other (i.e. deferred taxes, prepaid expenses, and mortgage servicing fees receivable). These accounts generally a small part of the bank's overall assets.

Loans are the major items in a bank's balance sheet and generate the largest flow of revenue income. Howe ever, loans are also the least liquid asset item and the major source of credit and liquidity risk for most banks. Loans are categorized as commercial and industrial loans, loans secured by real estate, individual or consumer loans, and other loans. (Rana,2006:75)

b. Liabilities:

A bank's liabilities consists of various types of deposit accounts and other borrowing used to fund the investments and loans on the asset side of the balance sheet. Liabilities vary in terms of their maturity, interest payments, check-writing privileges, and deposit insurance coverage. A bank acquires funds by issuing (selling) liabilities, which are

consequently also referred to as sources of funds. The funds obtained from issuing liabilities are used to purchase income-earning assets.

Current accounts are transaction accounts held by individuals, business firms, corporations, and other institutions that pay no explicit interest. Saving deposits are all saving accounts other than current accounts. In saving accounts and current accounts some minimum balance should be kept. The major categories of time deposits are fixed deposit. Fixed deposits are fixed maturity instruments. Although the size, maturity, and rates on these FDs are negotiable, most banks issue standardized FDs. (Rana,2006:75)

Deposits can be separated as foreign from domestic deposits on the balance sheet but it is not generally practiced in Nepal. Foreign deposits are generally large and held by corporations with a high level of international transactions activities. The liabilities described above are all deposit liabilities, reflecting deposit contracts issued by banks in return for cash. However, banks not only fund their assets by issuing deposits but borrow in various markets for purchased funds, since the funds generated from these purchases are not deposits; they are subject to neither reserve requirements nor deposit insurance premium payments. The banks can also borrow funds from other bank for certain period; generally short term of 2/4 days and these transactions can be rolled over each day if the contemporary is willing. Some banks in search of stable sources of funds with low withdrawal risk have begun to issue subordinated notes and debentures, often in the five- to seven years range. These notes are especially attractive because they are subject to neither reserve requirements nor deposit insurance premiums, and some can serve capital for the bank to satisfy NRB regulations regarding minimum capital requirements. Banks facing temporary liquidity crunches can borrow from the central Bank's discount window at the discount rate. Since this rate is not market determined and usually lay below government security rates, it offers a very attractive borrowing opportunity of a Bank with deficient reserve as the reserve maintenance period comes to an end.(Maharajan,2005:22)

Some Bank separate core deposits from purchased funds on their balance sheets. The stable deposits of the bank referred to as core deposits. These deposits are not expected to be withdrawn over short periods of time and are therefore a permanent source of funding or the Bank. Core deposits generally are defined as demand deposits, current accounts, and saving accounts. Purchased funds are more expensive and/or volatile sources of funds are more likely to be immediately withdrawn or replaced as rates on interest to be paid. These items consists of accrued interest, deferred taxes, dividends payable, and minority interest in consolidated subsidies and other miscellaneous claims. .(Maharajan,2005:22)

Income Statement or Profit & Loss Account

Profit and loss account is a statement that shows the results of operation for a period of time. It is also called income statement. It is a summary of revenues, expenses and net income (loss) of an organization for a particular period time. So, it reflects the earning capacity and profitability of an organization.

The determination of the net income of a business enterprise for a certain period of time is the central feature of accounting. Business is primarily conducted for the purpose of earning income and therefore the net income is the most significant figure produced by the accounting process to measure the degree of attainment of the objective. (Panday, 1995:103)

The income statement provides a review of the factors directly concerned with the determination of the net income; the revenue realized from the sales of goods or services and the cost incurred in the process of producing the revenue. These costs are cost of sales and selling, general and administrative expenses. They are deducted from the revenue to determine the income from regular operations. In addition, they may be income from other sources and other deductions from income. (Mayer, 1974:15)

In this statement, revenue of a certain period are compared with the expenses, the differences being either net profit or net loss for the period. Hence, it can be say that income statement is the "Score Board" of the firm's performance during the particular period of time. The generally accepted convention is to show one year's events in the profit and loss account. Analysis of profit and loss for several years may reveal desirable or undesirable trends in the profit earning capacity of an organization.

As income statement shows the net result of the business operations, banks have to be efficient to prove their viability depending upon their income generating power and cost minimizing strategy. The income statement reflects the earning capacity of the bank. The success or failure of bank largely depends on the differences between income and expenditures. The major determining factor of bank's soundness is supposed to be a net income though there are other factors too are equally important. The success is the measure of the excess of income over expenditure while failure is the cause of the excess of income over expenditures over income. Interest income by nature should be sufficient to cover interest expenses plus other overhead costs of the bank's revenues and expenses. Revenues are the interest received from loan values supplied to the customers. Expenses are the paying interest to depositors. Generally, commercial banks earn profit by mobilizing deposits of the customers. (Panday, 1995:104)

The major sources of bank income are interest earning assets held by the bank such as loans which generate interest income. Besides, commission and discount, exchange fluctuations gain, investment in securities, shares and debentures and other operating incomes and are sources of bank's income. Expenditures on the other hand are produced by interest bearing liabilities such as deposit liability. Moreover, staff expenses, exchange fluctuation loss, other expenses, interest on debentures and borrowings from other banks are sources of expenditures.The net intrest incomeis defined as : (Panday, 1995:103)

Statement of Cash Flows

Analysts are concerned with the amount of cash that a company generates. In the long run, a company can afford to make payments to its security holders only if it produces surplus cash flow from its operations. Even profitable companies may find themselves

facing cash shortage that, in the extreme, can lead to bankruptcy. In the short run, decreasing cash balance may be recharged by borrowing or through the sales of assets. However, those strategies may adversely affect the company's future profitability.

The statement of cash flows shows how a company's cash balance changed from one year to next. It assists the analyst in evaluating the company's ability to meet its obligations for cash, its needs for future external financing, and the effectiveness of its financing and investing strategies. The statement of cash flows is divided into three parts:

- Cash flow from operating activities
- Cash flow from investing activities
- Cash flow from financing activities

Construction of the statement of cash flows begins with a comparison of balance sheets from one period to another. Each activity of the corporation is classified into operating, investing or financing categories and identified as either an inflow or an outflow. For example, an increase in inventory constitutes an operating outflow of cash, whereas an increase in long-term debt represents an inflow of financing cash.

Cash flows from operating activities are obtained by adding the company's operating cash inflows to net income and subtracting the operating cash outflows from it. Cash from investing activities are primarily calculated from changes in the property, plant and equipment accounts. Cash flows from financing are associated with raising or reducing capital through debt or refinancing and the payment of dividends.

Closely related to these measures of cash flows is a company's free cash flow, which takes two forms. First there is free cash flow to the firm, determined as:

After-tax operating income
+ Depreciation, amortization and deferred taxes
- Increase in working capital
- Investments in fixed assets

= Free cash flow to the firm

After-tax operating earnings are equal to operating earnings times the quantity (1 – tax rate), EBIT (1-t), or equivalently EAT + tI. The increase in working capital represents an increase in the amount of current assets relative to current liabilities and hence is short-term in nature. Investment in fixed assets is long-term because it involves spending on items such as property, plant, and equipment. Thus, free cash flow to the firm is the cash generated by the company's debt and equity holders. Note that it is equivalent to the sum of cash flows from operating activities, cash flow from investing activities, and the after-tax cost of any interest and preferred stock dividend payments. The second type of free cash flow is free cash flow to equity, defined as:

Net Income
+ Depreciation, amortization and deferred taxes
- Increase in working capital
- Investments in fixed assets
- Principal repayments
+ New debt issued

= Free cash flow to the firm

Free cash flow to equity represents cash flow generated by the company's operations that remains after the company has covered all its financial obligations; working capital needs, and fixed asset needs. It is what is left for the company to pay out as dividends, although most companies do not use the entire amount for this purpose. Note that it is equal to the sum of cash flow from operations, cash flow from investing, cash flow from financing, and dividends. It is equal to free cash flow to the firm less principal repayments plus new debt issued.(Srivastav,1993:56)

Additional Financial Statement Information

The balance sheet, income statement, and statement of cash flows contain much of the financial statement information required by the analyst. However, considerable detail

about the financial performance of the company also can be found in other parts of a company's annual report. Thus, as part of her research, the analyst will want to examine;

- Notes to the financial statements
- Management discussion and analysis
- Auditor's report

The notes to the financial statements contain supplement information regarding particular accounts, such as the company's method of valuing inventory and a list of its long-term debts outstanding. They present information regarding major acquisitions or divestiture, officer and employee retirement and stock option plan, leasing arrangements, legal proceedings, and changes in accounting procedures, among other issues.

Management discussion and analysis provide as interpretation by the company's senior officers of financial trends and significant events affecting the company, particularly as they affect the company's liquidity, financial resources, and result of operations. In preparing this report, corporate management of some firms are more forthcoming than others. Consequently, the value of the report to the analyst varies widely among companies.(Sidgel,2002:22)

The auditor's report presents the opinion of the company's independent auditor regarding the "fairness" of the company's financial statements. In the vast majority of cases, the auditor issues an unqualified opinion, stating that during the accounting period the company's financial statements fairly present, in all material respects, the financial position, results of operations, and the cash flows in conformance with Generally Accepted Accounting Principles (GAAP). A qualified opinion, indicating material departures from GAAP, is a rarity and may signal serious problem with the company's disclosures. The mere threat that the auditor might issue a qualified opinion is usually sufficient to prevent a company from releasing intentionally incorrect reports. Note, however, that an unqualified opinion is related merely to the fairness of the disclosures; it does not imply any endorsement on the part of the auditor as to the quality of the

company's business operations of the value of the company's securities. (Alexander and Sharpe, 2002:295-304)

2.1.2 Importance of Financial Performance

Financial performance provides insight about what company has done in terms of liquidity, profitability, turnover, asset growth, capital structure, dividend payments and so on. As such, any investors while taking investment decision has to be fully informed about the company for the following reasons☹Kafle,2008:26)

a. Gain Full Information on the Performance of the Company

Investor makes financial analysis to have strong backing of useful financial information necessary for making meaningful financial decision. Sometimes investors fail due to lack of information decisions is to be made. Taking the case of securities market in Nepal, stock exchange history shows how some investors fail because of their lack of power to make financial analysis. Success or failure of public limited companies depends much on their investment performance. Failure is the example of investment in Necon Air and Indreyani Soyabean while success example is the investment in shares of most joint venture banks like Standard Chartered Bank, Nabil Bank, Himalayan Bank etc.

b. Make Sound Judgment

Investors can form correct opinion with the help of analysis to make investment decision as correctly as possible. The power to make proper judgment is not possible without strong backing of financial analysis. At present, some investors are very conscious to make investment analysis even in our growing stock market. Investors gradually know when to beat the market. The rational investors have been successful enough to make a line of demarcation between returns from good securities compared to other portfolios not providing return for a long period.

c. Help in Sound Forecasting

Investors can project results as correctly as possible with the help of financial analysis. They can know about how the company can do in the future becomes of their analytical

power supported by financial information. At present, investors in Nepal have been able to make forecast of investment decisions. Sometimes, investors fail because they are not able to make right kind of prediction in the selection of best securities.

d. Selection of Good Security

Financial analysis enables investors to select the right kind of security for investment depending upon the comparative analysis of which company doing the best various comparative parameters should be considered to make distinction between what constitutes sound investment and what constitute not sound investment decision. Investable funds are limited so investors have to select best securities that provide promising return.

e. Help in Risk Analysis

Investors can form a correct opinion on predicting the risky securities. According to analysis of risk, investors can determine the rate of return with the help of financial analysis. Power to forecast rise and fall of security price is necessary to manage risk according to the needs of investors.

2.1.3 Measurement Technique of Financial Performance

Ratio Analysis

The term ratio refers to the numerical or quantitative relationship between two items/variables. Ratio analysis is the major tool of financial analysis. A ratio analysis helps to study the bank's financial position and performance. In other words, a ratio shows the relationship between two figures in the balance sheet. This enables to determine the efficiency and performance of the firm. A ratio analysis helps to study the bank's financial position and performance.

The relationship between two accounting figures, expressed mathematically, is known as a financial ratio (if simply as a ratio). Ratio is used as an index of yardstick for evaluating the financial position and performance of the firm. It helps in making decision as it helps establishing relationship between various figures and variables.

The absolute accounting figures presented in the financial statements do not provide meaningful understanding of the performance and financial position of a firm. An accounting figure 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. In other hand, a single ratio by itself does not indicate favorable or unfavorable condition of a firm until and unless it is compared to some appropriate standard. So, ratio by itself is not a conclusion, as they are only means and not an end (Shrestha, Poudel and Bhandari, 2005: 183).

Similarly, another simple and most widely used tool is percentage. The term "percent" means out of hundred or per hundred. Percentage also establishes the relationship between two figures but it establishes the relationship in terms of hundred. By calculating percentage of different figures of concerned banks we can easily make qualitative judgement about their financial performance and meaningful conclusions and recommendations can be drawn on that basis. In this study work, ratio and percentage are frequently used to analyze the data. On the basis of these tools liquidity position, deposit utilization, deposit structure, investment structure, fund structure, income and expenditure structure etc. of the two selected banks are analyzed.

Earnings per Share (EPS)

To know the earning capacity and to make comparison between concerned banks earning per share is calculated. EPS is defined as the result received by dividing the earning available to common shareholders by the total number of common stock outstanding.

$$Earnings\ per\ Share = \frac{Earnings\ Available\ to\ Common\ Shareholder's}{Number\ of\ Common\ Shares\ Outstanding}$$

Dividend Yield (DY)

Dividend yield reflects percentage relationship between dividend per share and market value per share. It is calculated by:

$$Dividend\ Yield = \frac{Dividend\ per\ Share}{Price\ of\ Stock}$$

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. It is calculated by:

$$Price\ Earning\ Ratio = \frac{Price\ of\ Stock}{Earnings\ per\ Share}$$

Market Value Ratios

One final group of detail ratios that warrants some attention is Market Value Ratios. These ratios attempt to measure the economic status of the organization within the market place. Investors use these ratios to evaluate and monitor the progress of their investments.

Book Value per Share

Book Value per Share expresses the total net assets of a business on a per share basis. This allows us to compare the book values of a business to the stock price and measure differences in valuations. Net Assets available to shareholders can be calculated as Total Equity less Preferred Equity.(Thapa,koirala 2064:2.7). Book Value per Share is calculated by:

$$Book\ Value\ per\ Share = \frac{Net\ Assets\ Available\ to\ Common\ Shareholders}{Outstanding\ Common\ Shares}$$

Liquidity Ratios

Liquidity is a prerequisite for the very survival of a firm. 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. Liquidity Ratios help us to understand if we can meet our obligations over the short-run. The liquidity position neither should be high nor low for 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,Brigham,1996:94)

Current Ratio

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 and 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. The ratio is calculated by:

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

Acid Test or Quick Ratio

Since certain current assets (such as Inventories) may be difficult to convert into cash, we may want to modify the Current Ratio. Also if we use the LIFO (Last In First Out) Method for inventory accounting, our current ratio will be understated. Therefore, we will remove certain current assets from our previous calculation. This new ratio is called the Acid Test or Quick Ratio; i.e. assets that are quickly converted into cash will be compared to current liabilities. The Acid Test Ratio measures our ability to meet current obligations based on the most liquid assets. Liquid assets include cash, marketable securities, and accounts receivable. The Acid Test Ratio is calculated by:

$$Acid\ Test\ or\ Quick\ Ratio = \frac{Liquid\ Assets\ (i.e. Current\ Assets - Stocks)}{Current\ Liabilities}$$

Leverage Capital Structure Ratio

a. 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. This ratio is calculated by:

$$Return\ on\ Equity = \frac{Net\ Income}{Average\ Shareholders\ Equity}$$

b. Total Shareholder's Equity to Total Assets Ratio

This ratio exhibits the relationship between shareholder's equity and total assets. The ratio shows the proportion of used in financing total assets. Here, shareholders equity or net worth refer to paid up capital, reserves, share premium, P/L balance and general loan loss provision. This ratio is calculated by:

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

c. Debt 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 owners' 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 would involve a trade-off between return and risk. This ratio can be calculated by:

$$Debt\ Equity\ Ratio = \frac{Total\ Debt}{Net\ Worth}$$

Profitability Ratios

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 of the company should be evaluated in terms of the firm's investment in assets and in terms of capital contributed by creditors and owners.

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.

Return on Equity

Return on equity is a measure of how well management has used the capital invested by shareholders. Return on Equity tells us the percent for each dollar (or other monetary unit) 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. Return on Equity is calculated by:

$$Return\ on\ Equity = \frac{Net\ Income}{Average\ Shareholders\ Equity}$$

Components of Return on Equity

Return on Equity has three ratio components. The three ratios that make up Return on Equity are:

a. Profit margin:

Profit Margin measures the percent of profits you generate for each dollar of sales. Profit Margin reflects your ability to control costs and make a return on your sales. Management is interested in having high profit margins. Profit Margin is calculated by:

$$Profit\ Margin = \frac{Net\ Income}{Sales}$$

b. Assets Turnover

Assets Turnover measures the percent of sales you are able to generate from your our assets. Asset Turnover reflects the level of capital we have tied-up in assets and how much sales we can squeeze out of our assets. A high asset turnover rate implies that we can generate strong sales from a relatively low level of capital. Low turnover would imply a very capital-intensive organization. Asset Turnover is calculated by:

$$Assets\ Turnover = \frac{Sales}{Average\ Assets}$$

c. Financial Leverage

Financial Leverage is the third and final component of Return on Equity. Financial Leverage is a measure of how much we use equity and debt to finance our assets. As debt increases, financial leverage increases. Generally, management tends to prefer equity financing over debt since it carries less risk. The financial Leverage Ratio is calculated: by:

$$Financial\ Leverage = \frac{Assets}{Shareholder\ Equity}$$

Return on Assets

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

$$Return\ on\ Assets = \frac{Net\ Income}{Average\ Total\ Assets}$$

Return on assets is often modified to ensure accurate measurement of returns. For example, we may want to deduct out preferred dividends from Net Income or maybe we should include operating assets only and exclude intangibles, investments, and other assets not managed for an overall rate of return.

Turnover Ratios

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 generally reflects that assets are managed well(Weten,Bisley, Brigham, 1996:P 97).

a. Total Assets Turnover

Assets turnover is the relationship between sales and assets. The firm should manage its assets efficiently to maximize sales. The firm should 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. It is calculated by:

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

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. It is calculated by:

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

2.1.4 Securities Pricing

Securities pricing is perhaps one of the poorly understood issues among investors. Securities pricing is complex because a large number of variables directly or indirectly affect the price formation process. The influence of individual's judgment and environmental factors has increased further complexities on it. Although securities prices are determined by the supply of, and the demand for securities the role of brokers, market makers, and other actors of market mechanism is most crucial while creating demand and supply of securities.

Price of stock changes according to the fluctuation in buying and selling orders, when a buy order is offset with a sell order, the trade is executed and it passes through certain procedures within a definite time period. Investors revise their orders periodically as per their perception and rationale.

Most investors analyze securities depending upon the various theories on share price behavior. Such theories have the most influencing role in share price formation. It is therefore, necessary and relevant to have a brief discussion of such theories.

Theories on Share Price Behavior

How do securities markets form prices? It is the most studied but least understood issue in finance. Many scholars have studied in the price formation system of sock exchange and developed their theories on share price behavior. Following section gives a brief description of these major theories (Shrestha, 2000:35).

a. Conventional Theory

The conventional theory of share price behavior assumes that the market is inefficient and securities are not correctly priced. In inefficient market, one can gain by selling the overpriced security and buying the under-priced one. The major analytical tools commonly used by the followers of conventional approach are fundamental analysis and technical analysis.

b. Technical Analysis

Technical Analysis is based on the assumption that price of securities is determined by the supply of and demand for securities. 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. Many recent stock prices are analyzed to identify emerging trends similar to the past ones. Matching of these emerging trends with the past ones is done in the belief that these patterns repeat themselves. Thus by identifying the emerging trends, the analysts hope to predict the future price. 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.

c. Fundamental Analysis

Fundamental analysis begins with the identification of true or intrinsic value of financial assets. This true value is the present value of all cash flows that the owner expects to receive. 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 sock is known as overpriced whereas the stock that has a true value greater than its current market price is known as under priced. Security analysts study companies earning and their management, the economic outlook the firm's competition, market conditions, and many other factors to determine the real value of securities.

Early works dealing with securities analysis (like Graham and Dodd: 1934) put forward the idea that the intrinsic of fundamental value of any security is equal to the discounted cash flow that security gives title to, and the actual price fluctuates around these fundamental values. In other words, price of security is the present value of the expected future cash flows as expressed in the following equation:

$$Present\ Value\ per\ Share = \sum Future\ Cash\ Flows\ /(1+K)^1$$

Where,

K= Risk adjusted discounted rate

T=Time Period

Although this method seems to be sweet and easy, there arise mainly three difficulties in its implementation. The first difficulty is to estimate the pattern of future income. Since, future is uncertain, various unseen factors spoil our estimation. So in a world of uncertainty, there is very low chance of accurate estimation. The second difficulty is the determination of discounting rate. The appropriate discounting rate varies with individual's perception towards risk and return. The third difficulty is to estimate the terminal value of asset that will be at the end of the period. Therefore, if the future cash flow was certain and the discounting factor was same for all investors, the value of a security would be equal for all investors.

Empirical works like Cowles (1993) Gaham and Dodd (1934) Le Ray (1989) raised an awkward question for the proponents of fundamental analysis. If the fundamental analysis worked, why did new entrants into the business of fundamental analysis, realizing two facts, not compete trading gains away? That is what is supposed to occur in other competitive industries, so why not in financial markets? (Pratten, 1994: 19) Such works have logically weakened the validity of fundamental analysis theory.

The Efficient Market Theory

Market efficiency has evolved from the notion of perfect competition, which is mostly a theoretical concept. In efficient stock market, the price of share fully reflects the available information and the rationally of investors. The role of information is therefore, decisive in this regard. Investors are supposed to react instantaneously and rationally once they receive any price sensitive information. In lack of pertinent information, rumors and whims play a significant role on share price information. And stock market becomes like a gambling casino. Therefore in inefficient stock market, the speculative behavior of some of the investors plays a major role in share price formation(Patten,1994:18).

On the theoretical base of efficient market theory, Fama (1965) presented the concept of efficient market hypothesis (EMH). The EMH implies that investors can forecast returns that they estimate a probability distribution for each company's profits and dividends for each year stretching into the distant future (Pratten, 1994:18). As identified by Fama, efficient market hypothesis existed at three levels: weak, semi-strong and strong.

Weak efficient market hypothesis stipulates that historical price and volume data for securities contain no information, which can be used to earn trading profit above a naïve buy and hold investment strategy.

The Capital Assets Pricing Model (CAPM)

Sharpe showed the relationship between expected return and unavoidable risk. He pointed out that there were two types of opportunities for an investor. The first was risk free securities whose return over the holding period was known with certainty. The treasury security was regarded as risk free rate (R_f). The second investment opportunity was the market portfolio of common stocks. Return of market portfolio (R_m) was represented by all available stocks weighted according to their market values outstanding.

Risk associated with individual stock was another important factor affecting stock return. Sharpe divided risk into two parts: Systematic and Unsystematic. He did not consider unsystematic risk on the ground that it could be avoided by constructing a well-diversified portfolio. As a measure of systematic risk, Beta (β) was considered in his model.

The relationship of Beta (β), Risk Free Rate and Market Return is shown as follows in CAPM model:

$$R_i = R_f + (R_m - R_f)$$

Where,

R_i = Return from Security I

R_f = Risk Free Rate of Return

R_m= Return from Market Portfolio

Under the assumption of CAPM, all securities lie along the security market line. The CAPM graphically represents the tradeoff of systematic risk for return that investors expect and entitle to receive (Francis, 1999:277). The rational forces of demand and supply can be expected to move towards CAPM, but because of market imperfections, an asset's risk return characteristics never lie exactly on CAPM (Francis, 1999:278).

Various empirical tests supported the validity of CAPM and this theory was regarded as having predictive power. Although price in developed securities markets follow CAPM model, its validity in under developed security markets like NEPSE is yet to be tested.

In recent years, many critics from various angles have criticized CAPM model. They have not only criticized CAPM but have suggested their model claiming to be more realistic than CAPM. Stephen Ross developed arbitrage- pricing theory (APT) as an alternative theory of assets pricing. This model, in some ways, is less complicated and requires fewer assumptions than CAPM. Holmstram and Tirole (2001) suggested liquidity – based asset pricing model (LAPM). McNulty and friends (2002, 115) have suggested their new model: Market Derived Capital Pricing Model (MCPM). This model is based on the traded price of equity options on a company's share. Which means it incorporates the market's best estimates of the future price volatility of that company's share rather than using the historical data as in the CAPM.

The Valuation Model

As discussed earlier, the fundamental principle of valuation says that the value of stock is the present value of expected future cash flows, which include dividends and cash realized at the final year by sales of the stock. If the stock is hold for infinite period, the cash flow is the stream of dividends. Williams (1938) and Gordon (1962) hypothesized that the value of stock (V_0) equals to the present value of the infinite stream of dividends

to be received by the stock's owner (Francis, 1999:455). The appropriate discounting rate for firms is the risk-adjusted cost of capital (K).

$$V_0 = \frac{d_1}{(1+k)^1} + \frac{d_2}{(1+K)^2} + \ldots\ldots\ldots\ldots\ldots\ldots\ldots + d\infty/(1+k)^{\infty}$$

If the dividends grow at some constant rate (g), future dividends are related to current dividends and then equation can be written as:

$$V_0 = \sum_{t=1}^{\infty} D_0 (1+g)^t / (1+k)^t$$

Since d_0 is constant, we can write $\sum d_0 x = d_0 \sum x$ then equation can be written as:

$$V_0 = \sum_{t=1}^{\infty} D_0 (1+g)^1 / (1+k)^1$$

2.1.5 Role of Financial Performance in Securities

a. It Helps to Determine Security Characteristics

Financial analysis helps to estimate a security's future sensitivity to major factor and unique risk to determine the risk of portfolio. Analysis of dividend policy and likely future earnings and cash flows may lead to better estimates that can be obtained by simply extrapolating last year's values.

b. It Helps to Identify Mispriced Securities

This process entails identifying situations in which the financial analysts estimate of such things as a firm's future earnings and dividends:

- Differ substantially from consensus (i.e. average) estimates of others.
- Are viewed as being closer to the correct values then the consensus estimates.
- Are not yet currently reflected in the market price of the firm's estimates.

Two different approaches may be taken in the search for mispriced securities using fundamental analysis. The first approach involves valuation, wherein the "intrinsic" or "true" value of security is determined by discounting the cash flows the investors to receive from owing the asset. After this determination has been made, the intrinsic value is compared with the securities current market price. If the market price is substantially

greater than the intrinsic value, then the security is overpriced or overvalued. It the market price is substantially less than the intrinsic value, the analyst sometimes estimates a securities expected return over a specific period given its current market price and intrinsic value. The estimate is then compared with the “normal” or “fair” return for securities with similar attributes.

A security intrinsic value may be determined in great detail using estimates of all major factors that influence security returns (for example, gross domestic product of the economy, industry sales, firm sales and expenses and capitalization rates). Shortcuts may be taken whereby for example, an estimate of earnings per share is multiplied by a “justified” or “normal” P/E ratio to determine the intrinsic value of a share of common stock.

A second approach involves estimating only one or two financial variables and comparing these estimates directly with consensus estimates. For example, next year’s earnings per share for stock may be estimated. If the analysts estimate substantially exceeds the consensus of other analysts estimates, the stock may be an attractive investment because the analyst expects the actual earnings to provide a pleasant surprise for the market when announced. At the time, the stock’s price is expected to increase; resulting in the investor’s receiving a greater- than-normal return. Conversely, when an analyst’ estimates of earnings per share is substantially below that of the other analyst, the analyst expects the market to receive an unpleasant surprise. The resulting decrease in the stock’s price will lead to a smaller-than-normal return.

At an aggregate level, an analyst may be more optimistic about the economy than the consensus of other analysts. This view would suggest that a larger-than-normal investment in stocks be taken; offsets perhaps by a smaller-than-normal investment in stocks should be taken, offset perhaps by a smaller-than-normal investment in fixed income securities. Conversely, a relatively pessimistic view would suggest a smaller-than-normal investment in stocks; offset perhaps by a larger-than-normal investment in fixed-income securities. The analyst might agree with the consensus view on both the

economy and the individual characteristics of specific but feel that the consensus view of the prospects for a certain group of securities in a particular industry is in error. In this case, a larger-than-normal investment may be made in stocks from an industry that the analyst thinks has strong prospects. Conversely, a smaller- than-normal investment would be made in stocks from an industry that the analyst thinks has weak prospects.

Whenever the analyst feels a mispriced security has been identified, he or she should recognize that it is possible that the security is correctly priced and that something has been overlooked in the analysis. Indeed, in an efficient market, this is precisely what will have happened.

c. Conveying Advice on Beating the Market

Financial analysis can be used to "beat the market" that means they help to show how to make abnormally high returns by investing in the stock market. It seems logical that any such prescription in print for long is unlikely to allow the investors to continue to beat the market consistently. Just because someone asserts that an approach worked in the past does not mean, in fact, that it has worked. Moreover, even if it did work in the past, as more and more investors apply it, prices will be driven to levels at which the approach will not work in the future. Although individuals should be skeptical when others tell them how to use financial analysis to beat the market, individuals can try to understand the market using financial analysis.

To understand and estimate the risk and return of individual securities as well as groups of securities (such a industries), one must understand financial markets and the principles of valuation.

2.1.6 Relation between Stock Price and Financial Performance

Financial performances carefully evaluate the prospects for companies, industries, and the economy in the search for mispriced securities. Financial performance is widely used to evaluate the banks performance as expected by investors. It represents the investor's judgment or expectations about the growth in the bank's performance. In other words, it

measures how the market is responding towards the earning performance of the concerned banks. Most commercial banks have able to satisfy investors to take their position in the market, while a few have negative performance, which depicts that, they are unable to create an impact in the market. This has led the market price of such banks share to decline significantly.

If an undervalued security is found, then it will be purchased. However, the act of purchasing the security tends to push its price up toward intrinsic value, thereby making it no longer undervalued. Consequently, financial analysis tends to result in security prices that reflect intrinsic values and hence it tends to make markets efficient. Financial analysis is not conducted on all securities all the time. As result, not all the prices of all securities reflect the intrinsic values all the time.

Pockets of opportunities may arise from time to time leading to the possibility of added benefits from financial analysis. The implication is that investors should engage in financial analysis only the most skillful analyst to search for mispriced securities because the market would be nearly, but not perfectly, efficient. Skilled investors can earn abnormally high gross returns, but after the costs of gathering and processing information and making the requisite trades are taken into consideration, their net return will not be abnormal.

Financial analysis helps to determine relevant characteristics of securities. This reason is appropriate even in a perfectly efficient market. Because investors differ in their circumstances portfolios should be tailored to accommodate such differences. Success in this task generally requires estimation of certain securities characteristics, thereby justifying the use of financial analysis.

2.2. Review of Journals

A number of studies have been conducted to answer the straight forward question of whether the financial performance affects the trading activity and the price movements in securities market or not. But such studies differ in their area of emphasis and conclude in

their own manner. However, this section of this chapter aims to present the crucial part and theme of the some research works conducted previously.

Pettit's (1972), in his article entitled, "*Dividend Announcements, Security Performance and Capital Market Efficiency*", Pettit has attempted to offer evidence about the validity of the efficient market's hypothesis by estimating the speed and accuracy with which market prices react to announcements of changes in the level of dividend payments. In addition, the nature of his investigation is such that it provides evidence on the hypothesis that changes in dividend levels convey important information to market participation.

For the analysis purpose Petit collected approximately 1000 dividend announcement dates of dividend changes, investments relatives, dividend data, quarterly earning information and daily price from different sources. Six hundred twenty-five were taken and categorized accordingly on the basis of their earnings and dividend performance. The research covered a period of four and a half years i.e. from January 1964 to June 1968. After that, performance value and performance index were calculated for each dividend earning class for a period surrounding the dividend announcement date.

The results of the research support that substantial formation is conveyed by announcements of dividend changes. Moreover, the results imply that the dividend announcement of dividend changes. Moreover, the results imply that the dividend announcement, when forthcoming, may convey significantly more information than the information than the information implicit in an earnings announcement.

Joseph Aharony and Itzhak Swary (1980), they have stated in their study entitled "*Quarterly Dividend and Earning Announcements and Stockholders Returns"* a sample of 149 industrial firms was selected from those listed on the New York Stock Exchange. Stockholders of the companies did not change their dividend earned on average, only normal returns over the 20 days surrounding the announcement dates whereas the stock holders of the companies that announced dividends increase realized on average, positive abnormal returns over the same period. Furthermore, stockholders of companies that reduced their dividends, sustained on average negative abnormal returns during the 20 days surrounding the announcement dates.

Mitchell and Mulherin's (1994), they have stated in their study entitled, "*The Impact of Public Information on the Stock Market*" they have 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. They argue some research is concerned with firm specific news, while other studies analyze macroeconomic announcements. Some articles note the joint patterns of news and market activity, while others more directly study the actual relation between the news stories and market activity. Thus, they have tried to contribute to this 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.

2.3 Review of Nepalese Studies and Thesis

Although no specific studies are undertaken on the financial performance and share price of Nepalese security market, there exist some literature on share price and financial performance. The review of these available literatures is accomplished in this section.

Pradhan (1993), in his study, "*Stock Market Behavior in a Small Capital Market*", he collected the data of 17 enterprises from the year 1986 to 1990. His research study was carried out to examine the relationship of market equity, market value to book value, price earnings, and dividends with liquidity, profitability, leverage, asset turnover and interest coverage. Using statistical tools like regression model, he found a positive

correlation between dividends per share to market price per share. He indicated that stocks with large price-earning ratio were with lower liquidity, profitability, assets turnover, and interest coverage but higher leverage. Stocks paying higher dividend had higher liquidity, lower leverage, high earning, high turnover and high interest coverage were more variable for the stocks paying higher dividends.

Adhikari (1999), in his study, "*Corporate Dividend Practices in Nepal*", he attempted to examine the relationship between dividend and stock prices. The study of relationship between dividends and stock prices was accomplished by collecting data on market price per share, dividend per share, retained earning per share and lagged earning price ratio of 22 companies for the period of 1992 to 1997. Out of 22 companies were from non-finance sectors. He observed the relationship of dividend payout ratio with current ratio, earning before tax to total assets ratio, turnover ratio and interest coverage ratio was positive. Dividend payout ratio was negatively related with quick ratio and earning before tax to net worth ratio. Lastly the conclusion of the study was there is positive relationship between dividends and stock prices in the sampled companies. The relationship between dividends and stock prices is in conformity with the relationship as assumed in the developed capital market.

Shrestha (2000), on her study, "*Nepalese Stock Market: A Study of Banking Sector Stocks and Market Efficiency"*, she had examined the efficiency of the stock from banking industry. Secondary data were analyzed in this study by using run test and constructing banking sector index. The study showed a positive correlation between the run from the stocks of various banks. Lastly, the market efficiency was graded to its weakest form.

Sherpa (2001), on his study*," Corporate Information Disclosure and Its Effect on Share rice*", in Nepal he analyzed the main objective of the study is o highlight the corporate disclosure practice in Nepal and develop the information disclosure index. Analysis of both primary and secondary data showed that most of the companies scarcely disclosed information other than the statutorily required. Such statutory requirements were

generally confined to financial information only. Management and strategic information were rarely disclosed. Among the sector wise disclosure status, status of finance companies was found to be the best. The regression analysis indicated that the association between market price of share and disclosure score was positively and statically significant at 0.01 level of significant. Lastly the conclusion of the study is that the company having greater disclosure score had the higher prices of stock.

Sigdel (2002), he studied on a topic,*" Technical Analysis on Common Stock of listed Joint Venture Commercial Bank"*. The major objective of the study was concerned with analyzing the common stocks of joint venture commercial banks through technical analysis approach. He had used primary data collection procedure through questionnaire method and interview method. Investors have lack of knowledge on investment analysis process and about the right time when investment should be made. The confidence of investors in Nepalese stock market is relatively low due to frequent fluctuation in market price of shares. Lastly the relationship between the stock market activity and economic growth is very weak indeed.

Shrestha, Manandhar and Poudel (2002), in their papers aimed at determining the extent of financial distress in Nepalese enterprises, indicating how financial ratios deteriorate as the firm moves into financial distress, pointing out concessions to be made by various stakeholders in the restructuring process, and analyzing legal framework concerning financial distress in Nepal. The study used both, primary as well as secondary data. The study was made for the years 1996-97, 1997-98 and 1998-9. Data were analyzed by forming portfolios on net profit ratio, and return on equity to indicate their relationship with various measures of liquidity turnover, operating expenses, labor productivity ratio and coverage ratios.

Poudel (2002), in his study, "*Investing in Shares of Commercial Banks in Nepal: and Assessment of Return and Risk Elements*". An attempt has been made in this paper to determine whether the shares of commercial banks in Nepal are correctly priced by analyzing the realized rates of returns and the required rates of return using the Capital

Asset Pricing Model (CAPM) and trace their future price moments when striving towards equilibrium. For this, some theoretical models have been discussed to analyze return and risk characteristics of those shares. The correlation coefficients between the returns on in individual shares and the return on market portfolio have been analyzed with the objective of decomposing the total risk into systematic and unsystematic components. To analyze the risk characteristics of the shares of joint- venture commercial banks has been analyzed. The sample period commenced on mid-July 1996 and ends in mid – July 2001. Statistical results suggest that analyzed shares here are not in equilibrium with most of shares being less risky than the market.

Subedi (2003), he studied on topic of "*A Study on Investor's Awareness in the Security Market in Nepal*". The main objective of the study was to make investor aware about stock market in Nepal. He had used primary as well as secondary research methodology. He identified that information deficiency in Nepalese capital market caused speculation on share price. He also has used the CML equation to evaluate stock price.

Pandey (2004), he studied on topic, "Listing, *Liquidity and Price Formation in Nepal Stock Exchange*". The main objective of the study was to examine the current status of listing, liquidity and share price formation in Nepal Stock Exchange. According to the nature of the study requires primary as well as secondary data are collected through questionnaire statistical tools as well as financial equations propositions models are used according to necessity. The major findings of the study were that companies listing in NEPSE are increasing but the percentage increase is decreasing. The percentage of listing of finance companies is found to be highest processing and manufacturing companies in second and bank manufacturing companies in second and bank, insurances hotels and other sectors covered third, fourth and fifth position respectively. Liquidity of the stock is measured by using market capitalization ratio, turnover ratio and value traded ratio the result so obtained from these model gives the liquidity of the security market is satisfactory. The listing requirement is not easy to meet and some of the companies are delisted by SEBOM, which are not able to disclose the required documents with specified period. Listing of securities is increasing. The price behavior of NEPSE stock of sample

companies is measure by using run test. Among the ten selected companies the price movement of most of the companies is not random. Lastly, the regression analysis between market price and EPS indicates that the relationship is satisfactory. MPS and DPS on most of the selected companies have negative relationship.

Maharjan (2005), he studied on topic, "A *Measurement of Risk and Return on Investment on Common Stock of Commercial Banks in Nepa*l". The main objective of the study is to examine the performance of Nepalese commercial banks under study in terms of profitability. To analyze portfolio attributes in relation to risk and return. More part of research is analytical rather than descriptive. The data is collected through annual reports of commercial banks; annual reports of NEPSE and periodicals of NRB are used as secondary data. Analysis of some profitability ratios includes EPS, DPS, ROA and ROE is done.

Neupane (2006), she studied on topic, *"A Study of Financial Performance Analysis of Himalayan Bank Limited"*. The objective of this study is to depict the financial status of Himalayan Bank Limited. She used secondary data for analysis. Major finding of the study is that liquidity position is strong enough to meet daily requirement. ROA is in decreasing trend which shows the banks inefficiency in utilizing its assets to generate more operating profit. ROE decreasing each year, Debt ratio of the bank is high. The bank seems to be successful in making investment in profitable sectors like loan and advances. Lastly the conclusion of the study is that financial position of the HBL from the year 1999 to the year 2004 the collection and loan investment are increasing satisfactory and there also improvement in the operating profit.

2.3 Research Gap

The above studies indicated the impact of dividends 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.

Different quantitative and qualitative factors affect the share price formation. Many studies documented that dividend is one of the most influencing factors in share price formation. The fundamental analysts say that the price of stock is the present value of the future cash flows and the price of stock must be equal to this value. The role of brokers and market markers are crucial in securities pricing. Another factor playing a major role in share price formation is information. Many studies have empirically proved that information plays a decisive role in share price formation.

Various studies have been conducted to examine the effect of listing on the performance of companies. Most of the studies revealed that listing increases the market price of stocks and helps to improve the performance of companies. There are different studies related to the financial performance company.

Since no studies of such type have been conducted in Nepal, the effect of stock price by the financial performance of the companies is not yet known. In this study, an attempt has been made to examine the effect of financial performance 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.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction

The prime objective of the study is to analyze the financial performance and stock price of two selected commercial banks i.e. HBL and EBL comparatively. To achieve the objective of the study an appropriate research methodology has to be followed. Hence, the detailed research methodology used in this study is highlighted in this chapter.

Research methodology describes the methods and process applied in the entire aspects of the 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 fact and figure. "Research is a systematic method of finding out solution to a problem where as research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view." (Kothari, 1989: 19) So, this chapter deals with the methodology used by the researcher to analyze and interpret the relevant data.

Research Methodology

- Is highly practical, with material organized in a logical progression directly related to the practicalities of research.
- Is easy to understand, with difficult procedures explained in a step-by-step manner.
- Contains sets of exercises to accompany each operational step to reinforce concepts and to help develop a research proposal. (Source: www.gogle.com)

3.2 Research Design

Research design is the overall scheme or program of research which guides the researcher in formulating, implementing and controlling of the study. It includes an outline of what the researcher will do from writing the hypothesis and their operational implications to

the final analysis of data. Hence, research design helps to carry out the research work smoothly.

The study aims at portraying accurately upon the financial performance and stock price of two commercial banks viz. HBL and EBL. Keeping in this mind descriptive cum analytical research design will be followed. “Descriptive research includes survey and fact finding inquiries of different kinds. The main purpose of descriptive research is description of the states of affairs as it exists at present. This method assumes that the researcher has no control over the variables; he/she only report what has happened or what is happening. On the other hand, in analytical research, the researcher has to use facts or information already available and analyze these to make a critical evaluation of the materials”.

3.3 Nature and Sources of Data

The present study is mainly conducted on the basis of secondary data but primary data is also forwarded for attaining the goal of the study when-ever needed. The study is basically based on secondary data. All the data required for the research is collected from the secondary source, mainly from the financial statement of the listed companies and trading report published by NEPSE. The other supplementary data and information have been obtained from the annual reports published by the concerned Banks to their shareholders. The data of different financial variables related to study is collected from:

- Annual Reports
- Publications of the concerned companies
- Nepal Stock Exchange Ltd.
- Newspapers and Magazines
- Security Board of Nepal
- Publication of Finance Ministry
- Central Library T.U., Shanker Dev Campus Library

3.4 Population and Sample

The collection or the aggregate of objects or the set of results of an operation is called population. A representative part of population which we select for the purpose of investigation is called a sample. At present there are twenty six commercial banks operating in Nepal. Hence, these all twenty three commercial banks constitute the population of this study. Among of them two commercial banks HBL and EBL are selected for the purpose of this study.

Out of various method of selecting a sample judgment sampling was followed in order to choose HBL and EBL among the available commercial banks in Nepal. Moreover the selection of these banks is also based on the advice of experts of relevant field, guide and my own interest.

3.5 Method of Data Analysis

In this research work, only descriptive tools are used to get meaningful result of the collected data and to meet the research objectives. For this purpose of study, the collected data are tabulated under various heads. Then the tabulated data are analyzed using various financial tools which are briefly discussed below:

3.5.1 Statistical Methods

Statistical methods are the mathematical techniques used to facilitate the analysis and interpretation of numerical data secured from groups of individual or groups of observation from a single individual. The deliberations provide detail descriptions and tabulation as well as objective analysis.

3.5.1.1 Arithmetic Mean

The arithmetic mean or average is the sum of total values to the number of observations in the sample. It represents the entire data which lies almost between the two extremes (Gupta, 1997: 75). For this reason an average is frequently referred to as measure of central tendency. In this study it is used in data related to dividend of sample companies over different years. It is calculated as:

$$\text{Mean } (X) = \frac{Sum\ of\ Total Values}{No. of\ Values\ (N)}$$

3.5.1.2 Standard Deviation (S. D)

The measurement of the scatter ness of the mass of figures in a series about an average is known as dispersion. The standard deviation is an absolute measurement of dispersion in which the drawbacks present in other measures of dispersion are removed. The high amount of dispersion reflects high standard deviation. The small standard deviation means the high degree of homogeneity of the observations. It is calculated for selected dependent and independent variables specified. It is the positive square root of mean squared deviation from the arithmetic mean. It is calculated as:

$$\text{Standard Déviation } (\sigma) = \sqrt{\frac{\sum (X - \overline{X})^2}{N-1}}$$

3.5.1.3 Coefficient of Variation (C.V)

The coefficient of variations reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviation is known as coefficient of standard deviation. The coefficient of dispersion based on standard deviation multiplied by 100 is known as the C.V. It is used for comparing variability of two distributions. Lower value of coefficient of variation is preferable since it denotes the lower degree of dispersion. It is calculated as:

$$\text{Coefficient of Variation (C.V.)} = \frac{\text{S.D.} \mid 100}{\overline{X}}$$

$$\text{Or, C.V.} = \frac{\pm \mid 100}{\overline{X}}$$

Where,

σ = Standard Deviation

$\overline{\varepsilon}$ = Mean

3.5.1.4 Correlation Analysis

Correlation is the tool which shows the degree of relation that one variable is related to another. "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. For example, changes in the value of advertisement are associated with the change in sales; similarly changes in price are accompanied by changes in quantity demanded". Here the Karl Pearson's coefficient of correlation has been used. Correlation is generally denoted by 'r'. The value of correlation coefficient always lies between ±1. If the value of r is '+1', it implies that there is perfect positive correlation between two variables, if the value of r becomes '-1', it indicates that there is perfect negative correlation between two variables and if the value r is '0', there is no relationship between the variables or they are uncorrelated. 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.The value of r can be derived by using the following formula:

$$r = \frac{Cov(X, Y)}{\sigma_x \sigma_y}$$

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

Where,

N= number of observations in series X and Y

∑X= sum of observations in series X

∑Y= sum of observation in series Y

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

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

∑XY= sum of product of observations in series X and Y

3.5.1.5 Coefficient of Determination (R^2)

The coefficient of determination is a measure of the degree of linear association or correlation between two variables, one of which happens to be independent and being dependent variable.

Coefficient of determination measures the percentage total variation in dependent variable explained by independent variable. Coefficient of determination can have value ranging from zero to one. If coefficient of determination is equal to 0.85 which indicates that the independent variables used in regression model explain 85% of the total variation in the dependent variable. A value of one can occur only if the unexplained variation is zero which simply means that all the data points in the scatter diagram fall exactly on the regression line.

3.5.1.6 Regression

The word regression as used in statistics has a much wider perspective without any reference to biometry. Regression analysis in the general sense means estimation or prediction of the unknown value of one variable from known value of the other variable. It is one of the very important statistical tools, which is extensively used in almost all sectors. It is specially used in business and economy to study the relationship between two or more variables that are related casually and for estimation of demand and supply curves, cost functions, production and consumption functions etc.

The regression is the average relationship between two or more variables. There are two types of variables in regression analyses viz, independent and dependent. A variable, which predicts, estimates and explains other variable is called independent, which is estimated or predicted or explained by other variable is called dependent variable.
In this research regression analysis is used to establish functional relationship between market price of shares and various independent variables.

i **Regression Constant (a)**

The value of the constant which is the intercept of the model indicates the average level of dependent variable when independent variable is zero. In other words, it is better to understand that 'a' (constant) indicates the mean or average effect on dependent variable if all the variables omitted from the model.

Regression equation is done by using following equation:

Single Regression Model:

MPS= A + b × variable

Multiple Regression Model:

MPS= A+ b_1+ b_2+ b_3+ b_4+ b_5 +b_6+ b_7 + b_8

Where,

b_1 = Earning per Share (EPS)

b_2 = Dividend per Share (DPS)

b_3 = Dividend Yield (DY)

b_4 = Return on Total Assets (ROTA)

b_5 = Return on Equity (ROE)

b_6 = Net Income to Fixed Assets (NI/FA)

b_7 = Net Income to Total Assets (NI/TA)

b_8 = Price Earning Ratio (P/E)

i. Regression Coefficients (b)

The regression coefficients of each independent variable indicated the marginal relationship between that variable and value of dependent variable, holding constant the effect of all other independent variables in the regression model. It describes how changes in independent variables affect the values of dependent variables estimate.

ii. Standard Error of Estimate (SEE)

With the help of regression equation perfect prediction is practically impossible. Standard error of estimate is a measure of reliability of the estimating equation, indicating the

variability of the observed points around the regression line, that is, the extent to which observed values differs from their predicted values on the regression line. The smaller the values of standard error of estimate, the closer will be the dots to the regression line and the better estimates based on the equation for this line. If standard error of estimate is zero, then there is no variation about the line and the correlation will be perfect. Thus, with the help of standard error of estimate, it is possible for us to ascertain how good and representative the regression line is as a description of the average relationship between two series.

iii. Application of SPPS Programming

The computation of correlation and regression without the aid of any devices are quite time consuming and monotonous. Therefore, a computer program called "A Statistical Program for Social Sciences (SPPS)" has been applied in this study. The results obtained from this programming are presented in the thesis understudy as and when necessary.

3.5.1.7 Test for Regression Model

Various tests are performed to determine the statistical significance of the regression model obtained by the use of statistical tools and the computer program SPPS, the test so performed are clearly stated below:

i. Joint Hypothesis Test (F-Test)

To test the validity of our assumption, we can also use F-test. The differences between two samples means can be studied through t – test whereas to examine the significance of the differences between more than two sample means at one and at the same time, F-test is used.

F-test, i.e., the technique of analysis of variance enables us to test or for the significance of the differences between more than two sample means. Using this technique, one will be able to make inferences about whether his regression equation provides statistically significant result or not. The hypothesis is generated as below:

Null Hypothesis: $H_0: \beta_1 = \beta_2 = \beta_3 = 0$ [There is a link between Independent and Dependent Variables]

Alternative Hypothesis: $H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$ [There is no link between Independent and Dependent Variables]

ii. Partial Hypothesis Test (T-Test)

To test the validity of our assumption, if sample size is less than 30, t-test is used. For applying t-test in the context of small sample, the 't' value is calculated first and compared with the table value of 't' at a certain level of significance for given degree of freedom. If the calculated value of 't' exceeds the table value (say $t_{0.05}$) we infer that the difference is significant at 5% level but if 't' value is less than the concerning table value of 't' the difference is not significant. The hypothesis is generated as below:

Null Hypothesis: $H_0: \beta_1 = 0$ [The Dependent Variables affect the Independent Variables]
Alternative Hypothesis: $H_1: \beta_1 \neq 0$ [The Dependent Variables do not affect the Independent Variables]

3.5.2 Financial Methods

The financial tool employed in the study basically represents 'ratio analysis'.

3.5.2.1 Ratio Analysis

Ratio analysis is a technique of analysis and interpretation of financial statement. To evaluate the performance of an organization by creating the ratio from the figures of different accounts consisting in balance sheet and income statement is known as ratio analysis.

i. Market Price per Shares (MPS)

Market price per share is the price at which the shares are traded in the stock market. This study has used year-end market price per share of each company over the study period, which is determined in the Nepal Stock Exchange Limited.

ii. Dividend per Share (DPS)

Dividend per share is the part of earning distributed to the common shareholders holding one share and calculated as:

$$DPS = \frac{Net\ profit\ that\ is\ distributed\ as\ Dividend\ (or\ Total\ Dividend)}{No.\ of\ Common\ Shares\ Outstanding}$$

iii. Earning per share (EPS)

To know the earning capacity and to make comparison between concerned banks earning per share is calculated.EPS is defined as the result received by dividing the earning available to common shareholders by the total number of common stock outstanding. It is calculated as:

$$EPS = \frac{Earning\ Available\ to\ Common\ Shareholders}{Number\ of\ Common\ Shares\ Outstanding}$$

iv. Dividend Yield (DY)

Dividend Yield is known as the rate f return as dividend. It is computed by dividing the year-end dividend per share by the beginning stock price per share of the year. It is calculated as:

$$DY = \frac{Dividend\ per\ Share}{Price\ of\ Stock}$$

v. 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. It consists of equity capital, retained earnings, reserves and surplus. Net worth per share is the book value of each share. It is calculated as:

$$NWPS = \frac{Net\ Assets\ Available\ to\ Common\ Shareholders}{Outstanding\ Common\ Shares}$$

3.5.2.2 Liquidity Ratios

Liquidity Ratios help us understand if we can meet our obligations over the short-run. Higher liquidity levels indicate that we can easily meet our current obligations. We can use several types of ratios to monitor liquidity.

i. Current Ratio (CR)

Current ratio reveals credit strength of the business. It measures short-term solvency, it indicates the availability of current assets in rupees for every one rupee of current liabilities. Current ratio is calculated as:

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

3.5.2.3 Profitability Ratio

i. Return on Equity (ROE)

Return on Equity tells us the percent returned for each dollar (or other monetary unit) invested by shareholders. Return on Equity is calculated by dividing Net Income by Average Shareholders' Equity (including Retained Earnings). It is calculated as:

$$ROE = \frac{Net\ Income}{Average\ Shareholders\ Equity}$$

ii. Return on Assets (ROA)

Return on Assets explains the contribution of assets to generating net profit. This ratio indicates efficiency to word of assets mobilization. In other words return on total assets ratio is an overall profitability ratio, which measures earning power and overall operation efficiency of a firm. It is calculated as:

$$ROA = \frac{Net\ Profit}{Total\ Assets}$$

3.5.2.4 Turnover Ratio

i. Total Assets Turnover

Assets turnover is the relationship between sales and assets. The firm should manage its assets efficiently to maximize sales. The total asset 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. It is calculated as:

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

ii. Fixed Assets Turnover

The fixed assets turnover ratio measures the efficiency with which the firm has been using its fixed assets to generate sales. It is calculated as:

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

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

This chapter deals with presentation and analysis of data collected from annual reports of the bank. The raw data collected has been organized and processed using various tools discussed in the previous chapter- "Research Methodology". In this chapter data and information are presented and analyzed using different financial and statistical tools in order to achieve the objectives of the study.

4.1. Analysis of Overall Performance of Companies

Performance of companies is a broad subject, which can be examined in various ways. The current owners of the company, the potential investors, employees, creditors, government, customers etc. analyze the performance in their own ways based on their own interest. Although it is not possible to fulfill the interest of all the stakeholders about the performance of the companies, this study tries to help more or less all of them by examining the performance of the joint venture banks listed in NEPSE Ltd. This study specifically provides higher attention to the investors to know about stock price and the analysis is also directed in the best of the stock price.

For the analysis of the performance of joint venture banks, market price per share, net worth per share, earning per share, dividend per share, return on total assets, return on equity and liquidity ratio are analyzed.

4.1.1. Market Price per Share (MPS)

Market price per share is the price at which shares are traded in the stock market. Those shares are transacted in the secondary markets, which are already issued to the public. Organized stock exchange centers are known as secondary market where trading of the stocks are conducted. 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. In an efficient market a set of information is fully and immediately reflected in market price. Market price per share of a company reflects the performance of the company. Performance evaluation thus could be defined as analysis of common stock. The demand of the stocks of better companies will be higher and market price per share of those companies also will be higher in the stock market.

The market price per share of listed companies is a good measure of performance. A higher market price per share indicates the better performance of the company and vice versa. Whether a market price per share is high or low is difficult to determine. For this, the financial analysis has to compare it with the book value per share and also with the market price share of other companies.

The market price per share of selected joint venture banks is presented in Table no. 4.1: the table shows,

Table 4.1

Market Price per Share of Sample Banks

Year	HBL	EBL
2003-2004	836	445
2004-2005	840	680
2005-2006	920	870
2006-2007	1100	137.9
2007-2008	1740	2430
Mean	**1087.2**	**1160.8**
S.D.	**380.2883**	**788.4451**
C.V.	**34.9787**	**67.9226**

Source: Annex 3

The average closing MPS of HBL during the period of study is 1087.2 with standard deviation of 380.2883 and a coefficient of variation of 34.9787. This implies that the share price of HBL is highly fluctuating in nature.

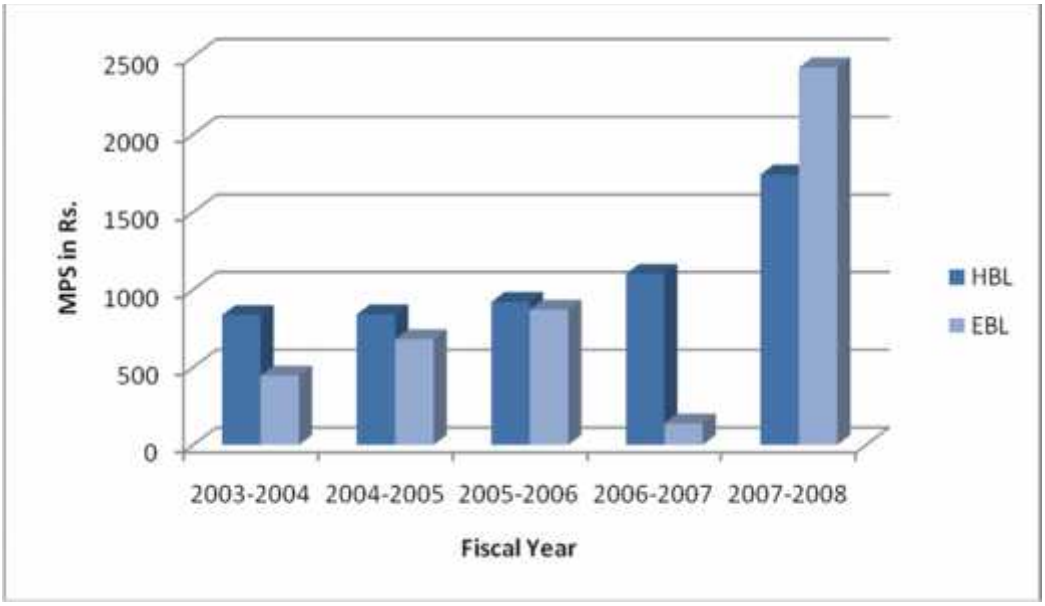
EBL has the closing MPS range between Rs. 2430 and Rs. 445 during the period of study. An average closing MPS of Rs. 1160.8 is noted during this period. The standard

deviation of the closing MPS is 788.4451. The C.V. of 67.9226 indicates that there is a fluctuation of 67.9% in the closing MPS of EBL during the period of the study, which is high.

From the table 4.1, it can be seen that the average closing MPS of EBL is the highest than that of HBL. Similarly, the standard deviation of EBL is highest and HBL is lowest. The coefficient of variation of these two banks shows that there is an above moderate level of fluctuations in the MPS.

Figure 4.1

Market Price per Share of Sample Banks



4.1.2. 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). This figure represents the asset value per share after deducting liabilities and preferred stock (Cheney and Moses, 1993:417). Book value is a historical cost amount. It represents the real or actual value of the common stock. Generally, market price of stock is greater than book value of the stock. This clearly

indicates that higher net worth per share is the signal of better companies. Therefore, the net worth per share is a good measure of performance of joint venture banks. The net worth per share of the banks under study is presented in table and graph as follows:

Table 4.2

Net Worth Per Share of Sample Banks

Year	HBL	EBL
2003-2004	836	445
2004-2005	840	680
2005-2006	920	870
2006-2007	1100	137.9
2007-2008	1740	2430
Mean	1087.2	1160.8
S.D.	380.2883	788.4451
C.V.	34.9787	67.9226

Source: Annex 3

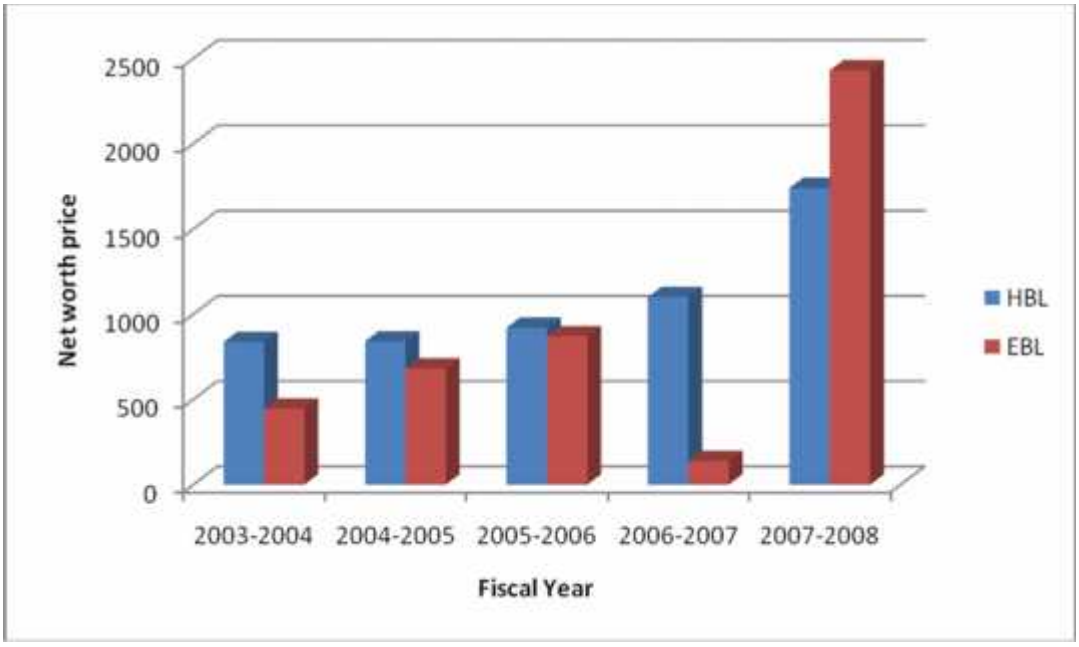
The average NWPS of HBL during the period of the study id Rs. 245.56 with standard deviation of 13.2030 and a coefficient of variation of 5.4043.

EBL within the period of study had an average NWPS of Rs. 210.38, ranging between Rs.150.1 and Rs. 292.73. The standard deviation is 54.9283 and the coefficient of variation shows that there is fluctuation of 26.11% in the NWPS of EBL during the period of study.

From the table 4.2, it can be seen that NWPS of HBL is the highest and that of EBL is the lowest. Similarly, the standard deviation of EBL is highest and HBL is the lowest. The coefficient of variation of these two banks shows that there is an above moderate level of fluctuations in the NWPS.

Figure 4.2

Net Worth per Share of Sample Banks



4.1.3. Earnings per Share (EPS)

Profit is the lifeblood of any company. Although the company can run without profit in short period, it cannot run and exist over the long period. Therefore, sufficient earning is necessary for the company to satisfy its owners. 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. Earnings per share are the amount available to the holders of each share. It is calculated by dividing the total earnings available to common shareholders by the total number of shares outstanding.

EPS is a good measure of performance because it integrates all the major financial ratios and provides holistic information. Overall financial model states EPS as follows:

EPS= Asset Turnover × Margin on Sales × Financial Leverage × Book Value per Share

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

EPS is the overall result of turnover, profitability, leverage and book value per share. It provides combined result of total assets turnover, return on sales debt and equity position in the capital structure, and the book value per share of the company. Higher EPS shows the better earning capacity of the company. The EPS is thus a good measure of performance of companies. A company with higher earnings per share not only can satisfy its existing shareholders and attract potential investors but also contribute to government, society and ultimately to the nation. The EPS of the banks under study are presented in table and graph as follows:

Table 4.3

Earnings per Share of Sample Banks

Year	HBL	EBL
2003-2004	49.45	29.9
2004-2005	49.05	45.58
2005-2006	47.91	54.22
2006-2007	59.24	62.8
2007-2008	60.66	78.4
Mean	53.262	54.18
S.D.	6.1521	18.1961
C.V.	11.5506	33.5845

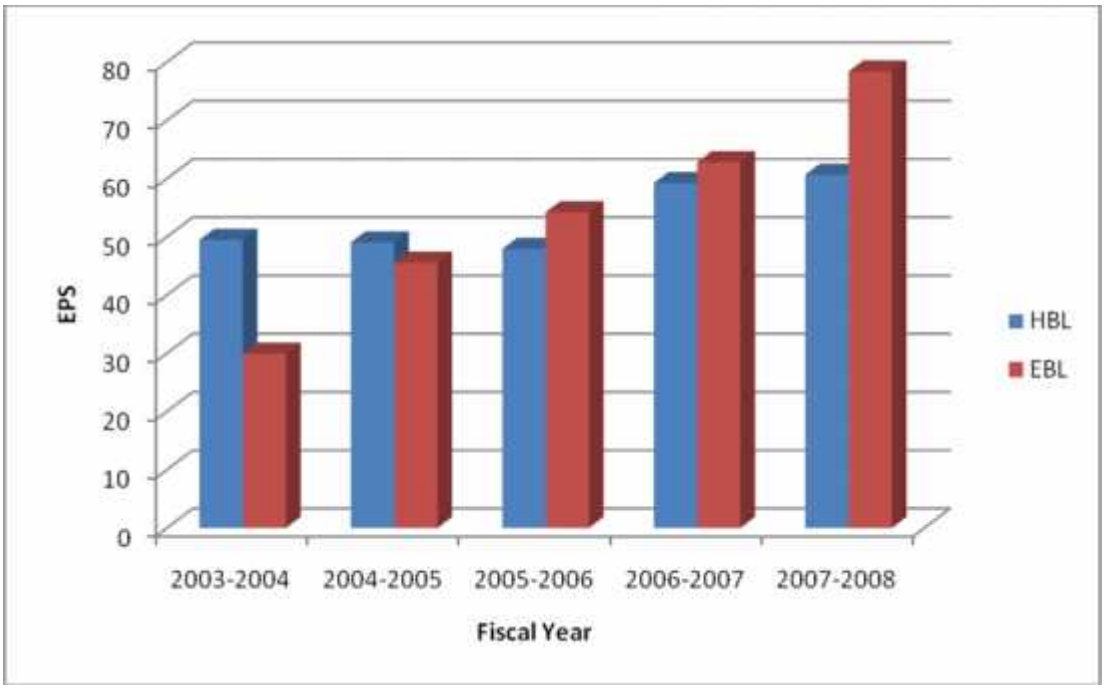
Source: Annex- 3

The average EPS of HBL during the period of study is Rs. 53.262 with standard deviation of Rs. 6.1521 and the coefficient of variation shows that there is fluctuation of 11.55%.
EBL has the EPS range between Rs. 78.4 and Rs. 29.9 during the period of study. An average EPS of Rs. 54.18 is noted during this period. The standard deviation of the EPS is Rs. 18.1961. The coefficient of variation shows that there is fluctuation of 33.58% in the EPS of EBL during the period of study.

From the table 4.3, it can be seen that average EPS of EBL is the highest than that of HBL. Similarly, the standard deviation of EBL is highest and HBL is the lowest. The coefficient of variation of these banks shows that there is an above moderate level of fluctuations in the EPS.

Figure 4.3

Earnings Per Share of Sample Banks



4.1.4. Dividend per Share (DPS)

Investors on the common stocks are attracted to the dividends because it is the return on their investment. Not all companies can provide higher dividends to the common stockholders. For this, they need larger amount of profit. From the total earnings available to common stockholders, the company 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 is the regular amount available to the holders of each common stock by the company. Evaluation of performance of listed companies in terms of dividend per share (DPS) is considered as an appropriate measure, which shows the company's earnings and dividend paying capacity.

DPS is the result of various ratios as follows:

$$\text{DPS} = = \frac{Sales}{Total\ Assets} \times \frac{Net\ Income}{Sales} \times \frac{\text{Total Assets}}{\text{Equity}} \times \frac{\text{Equity}}{\text{No. of Shares}} \times \frac{Dividend}{Net\ Income}$$

DPS includes dividend decision in earnings per share. Although the behavior of companies towards dividend payment is disappointing in Nepal, the joint venture banks, other financial institutions, and some other companies have brought greater revolution in this trend. They are competing for paying larger amount of dividends in recent years. The DPS of the banks under study are presented in table and graph as follows:

Table 4.4

Dividend per Share of Sample Banks

Year	HBL	EBL
2003-2004	1.32	20
2004-2005	0	20
2005-2006	11.58	0
2006-2007	30	25
2007-2008	15	10
Mean	11.58	15
S.D.	12.3323	7.6376
C.V.	106.5070	50.9175

Source: Annex 3

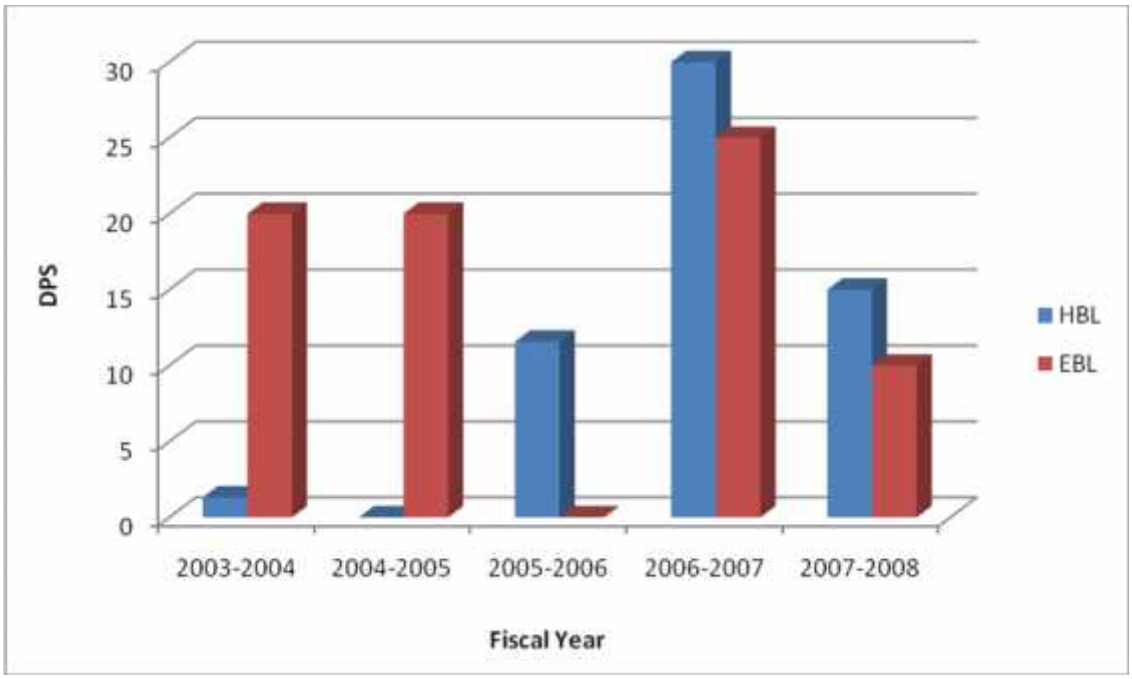
HBL has an average DPS of Rs. 11.58. The highest DPS is Rs. 30 whereas it has not paid dividend in the years 2003/2004. The standard deviation is 12.3323 and coefficient of variation is 106.50%. The C.V indicates that the DPS of HBL is quite fluctuating.

EBL paid the highest DPS of Rs. 25. No dividend was paid in the year's 2004/2005. An average DPS of Rs. 15 has been noted during the study period. The standard deviation of the DPS is 7.6376. The coefficient of variation is 50.92% which indicates that there is a moderate fluctuation during the period.

From the table 4.4, it can be seen that the EBL has the highest DPS and HBL has the lowest. The standard deviation of HBL is highest than that of EBL whereas, the coefficient of variation indicates that among these two banks under study during the period DPS of HBL is highly fluctuating in comparison of EBL.

Figure 4.4

Dividend per Share of Sample Banks



4.1.5. Price Earning Ratio (P/E Ratio)

The price earning ratio is widely used by the security analysts to value the firm's performance as expected by investors. It indicates investor's expectations about the firm's performance. Management is also interested in this market appraisal of the firm's performance and will like to find the causes if the P/E ratio declines.

P/E ratio reflects investor's expectations about the growth in the firm's earnings. Industries differ in their growth prospects accordingly; the P/E ratios for industries vary widely.

Price earning ratio is the ratio between market price per share and earning per share. It is also called earning multiplier. The price earning ratios of the banks under study are presented in table and graph as follows:

Table 4.5

Price Earning Ratio of Sample Banks

Year	HBL	EBL
2003-2004	16.91	14.88
2004-2005	17.13	14.92
2005-2006	19.2	16.05
2006-2007	18.57	22
2007-2008	28.69	31
Mean	20.1	19.77
S.D.	4.8973	6.9351
C.V.	24.3646	35.0789

Source: Annex 3

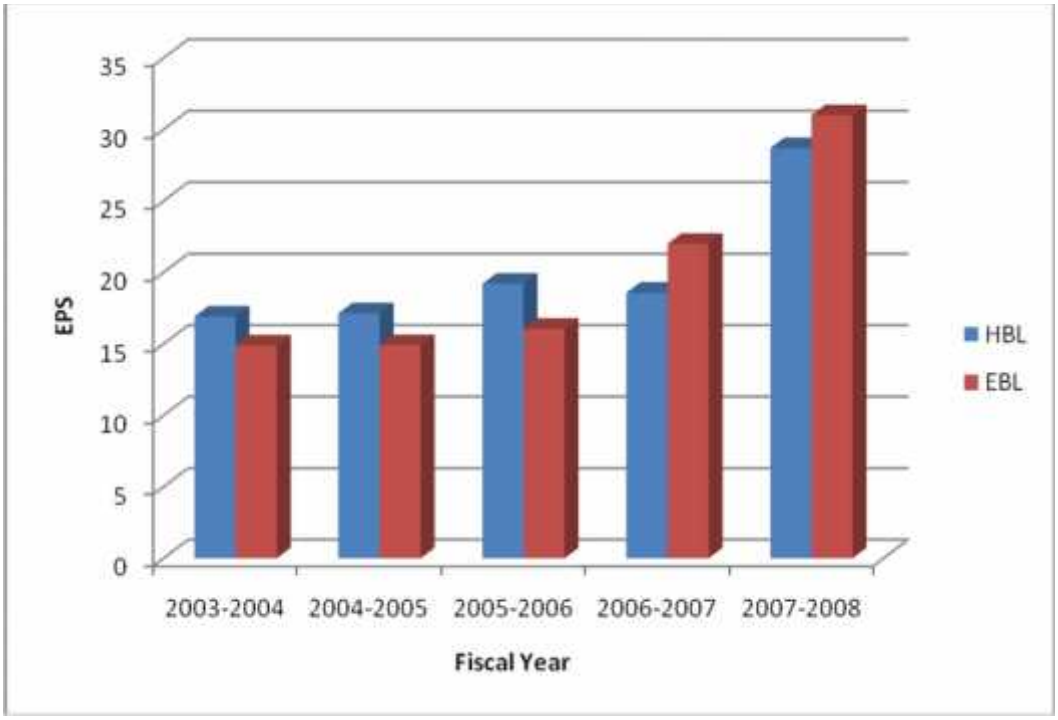
HBL has an average P/E Ratio of 20.1 ranging between 28.69 and 16.91 during the period of study. The standard deviation is 4.8973 and the fluctuation of 24.36% in the P/E Ratio is seen during this period.

The average P/E ratio of EBL is 19.77 ranging between 31 and 14.88 during the period of study. The standard deviation is 6.9351 whereas coefficient of variation is 35.08% which shows indicates that the bank has an average fluctuation in P/E Ratio during the period.

From the table 4.5, it can be seen that the HBL has the highest average P/E Ratio and HBL has the lowest. Similarly, the standard deviation of EBL is highest than that of HBL. The correlation of variation indicates that among the banks under study during period, EBL has highly fluctuating whereas; HBL has the low fluctuation of P/E Ratio.

Figure 4.5

Price Earning Ratio of Sample Banks



4.1.6 Dividend Yield

Dividend yield is the rate of return on the form of dividends. It is relative term, which is calculated by dividing dividend per share by market price per share. Only higher dividends or lower dividends do not matter to investors. So, it is essential to determine the rate of return on their investment. 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. The Dividend Yield of the banks under study is presented in table and graph as follows:

Table 4.6

Dividend Yield of Sample Banks

Year	HBL	EBL
2003-2004	0.16	4.49
2004-2005	0	2.49
2005-2006	1.26	0
2006-2007	2.73	1.81
2007-2008	0.86	0.41
Mean	1.002	1.93
S.D.	1.1227	1.8165
C.V.	112.0510	94.1202

Source: Annex 3

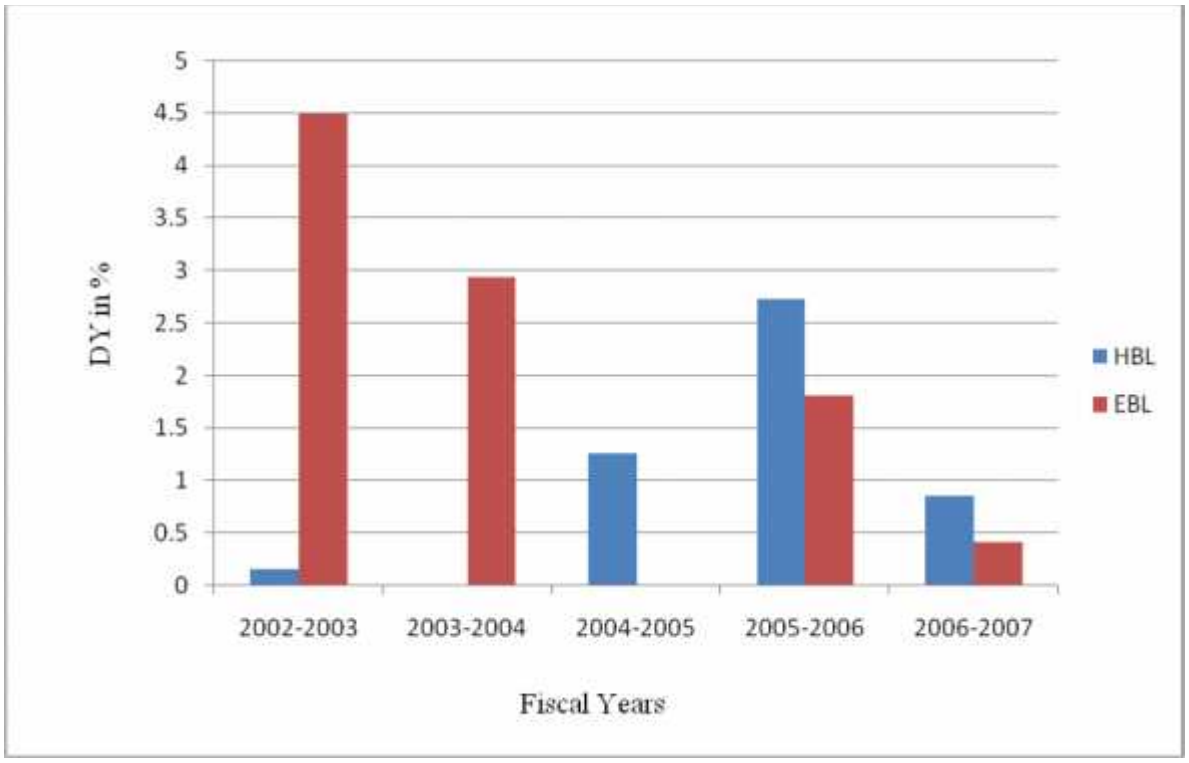
During the period of study, HBL has an average Dividend Yield of 1.002 with standard deviation of 1.1227. The DY range between 2.73% and 0% and the coefficient of variation shows that there is a fluctuation of 112.05%.

EBL has the DY range between 4.49% and 0% during the period of study. An average DY of 1.93% is noted during the period of study. The standard deviation of the DY is 1.8165. The coefficient of variation 94.1202 indicates that there is a fluctuation of 94.12% in the DY of EBL, during the period of study.

From the table 4.6, it can be seen that the average DY of EBL is the highest than that of HBL. The DY range of these two banks under study during the period is between 4.49% and 0%. The coefficient of variation of these banks shows a high level of fluctuation in the DY.

Figure 4.6

Dividend Yield of Sample Banks



4.2. Financial Tools

Financial analysis is the act of identifying the financial strength and weakness of the organization presenting the relationship between the items of balance sheet. For the purpose of this study, ratio analysis has been mainly used and with the help of it, data have been analyzed. Various financial ratios related to the financial performance and stock price of commercial banks are presented and discussed to evaluate and analyze the performance of HBL and EBL. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial

statements of concerned banks. The important and needed financial ratios, which are to be calculated for the purpose of this study, are mentioned below:

4.2.1. Liquidity Ratios

Liquidity ratios measure the firm's ability to meet current obligations. The failure of a company to meet its obligations due to the lack of sufficient liquidity may result in bad credit image and loss of creditors. An improved liquidity position is an indicator of better performance. Firm should always maintain an appropriate level of liquidity. The most common ratios, which indicate the extent of liquidity or lack of it, are current ratio. Current ratio is calculated by dividing current assets by current liabilities. As conventional rule, a current ratio of 2 o 1 or more is considered satisfactory. Howe ever, an arbitrary standard of 2 to 1 should not be blindly followed. Firms with less than 2 to 1 current ratio may be doing well, while firms with 2 to 1 or even higher current ratios may be struggling to meet their obligation. This is so because the current ratio is a test of quantity, not quality.

These ratios are presented in the table and graph as follows:

Table 4.7

Current Ratio of Sample Banks

Year	HBL	EBL
2003-2004	1.01	1.07
2004-2005	1.04	1.06
2005-2006	1.04	1.06
2006-2007	1.05	1.05
2007-2008	1.05	1.04
Mean	1.038	1.056
S.D.	0.0164	0.0114

C.V.	1.58	1.0797

Source: Annex 3

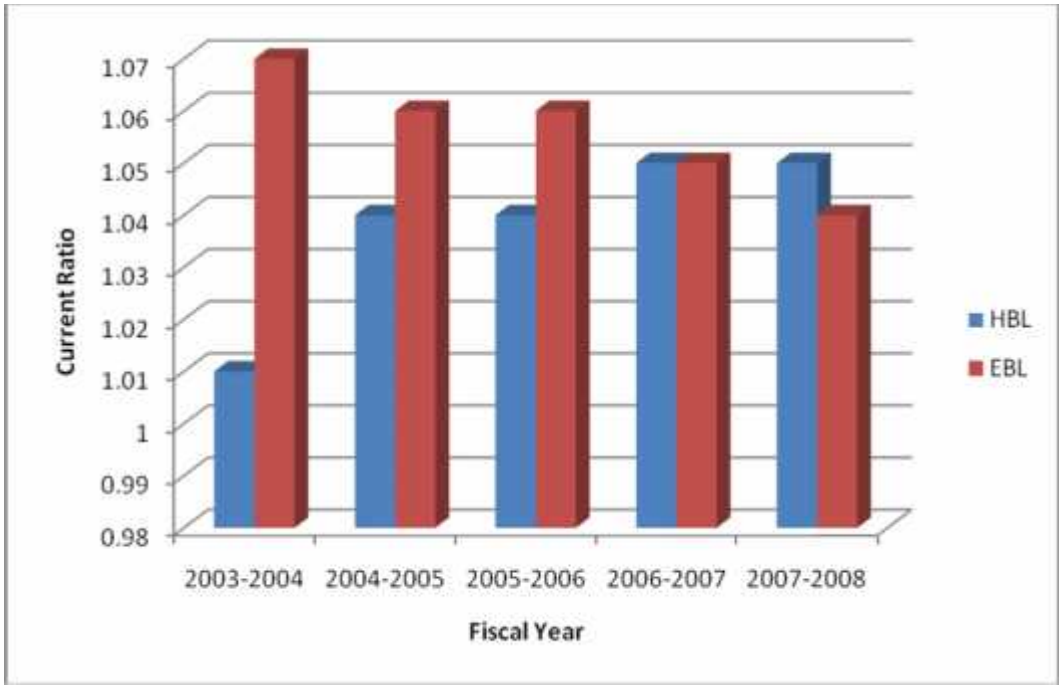
HBL has an average current ratio of Rs. 1.04. The highest current ratio is Rs. 1.05 in the years 2005-2006 and 2006-2007. The standard deviation is 0.0164 and coefficient of variation is 1.58% which indicates that the current ratio of HBL is moderate.

The average current ratio of EBL is Rs. 1.0797 with the standard deviation of 0.0114. The coefficient of variation is 1.08%, which indicates that there is low fluctuation than that CR of HBL.

From the table 4.7, it can be seen that the HBL has the highest current ratio than that of EBL during the time period of study. The coefficient of variation indicates that among these two banks under study during the period no banks have the highest fluctuation.

Figure 4.7

Current Ratio of Sample Banks



4.2.2. Return on Total Assets (ROTA)

The term investment may refer to total asset. Return on total assets helps to identify what percent of the total asset is earned within a specified period. The companies having higher ROTA is regarded as best performers. The ROTA of the banks under study is presented in table and graph as follows:

Table 4.8

Return on Total Assets of Sample Banks

Year	HBL	EBL
2003-2004	0.91	1.17
2004-2005	1.06	1.50
2005-2006	1.11	1.40
2006-2007	1.55	1.50
2007-2008	1.47	1.40
Mean	1.22	1.3940
S.D.	0.27622	1.3483
C.V.	22.6414	96.7217

Source: Annex 3

HBL has an average of ROTA of 1.22 ranging between 0.91 and 1.55 during the period of study. The standard deviation is 0.28 and the fluctuation of 22.64% in the ROTA is seen during this, period, which is very low.

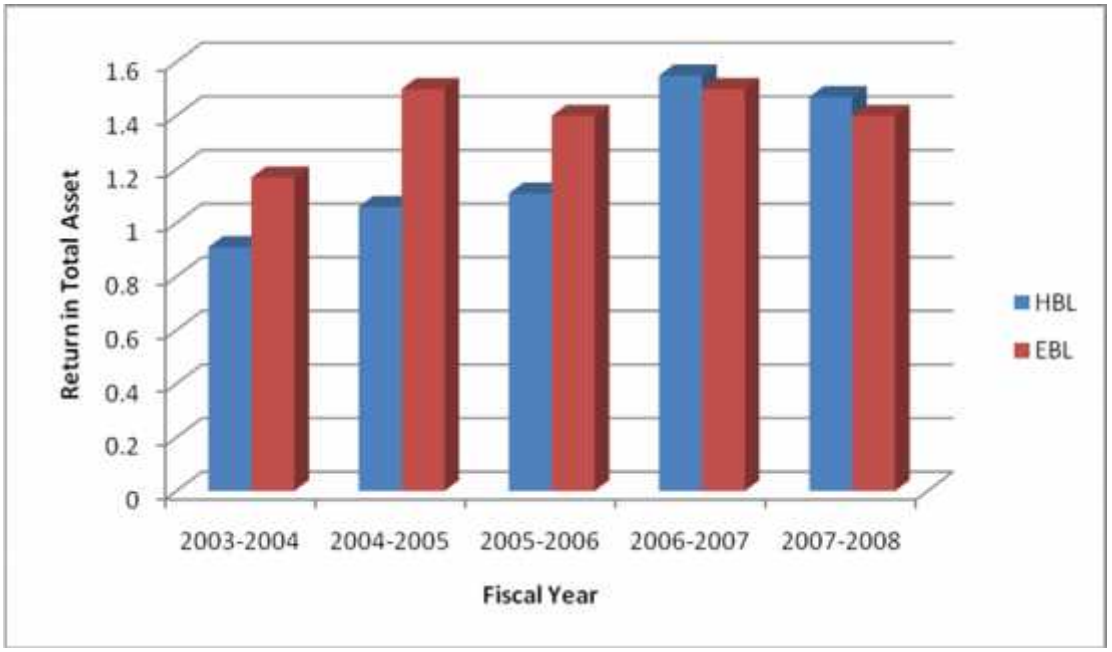
The average ROTA of EBL, during this period of study is 1.3940. It is within the range of 1.17 and 1.50. The standard deviation of ROTA is 1.3483 whereas; coefficient of variation is 96.72% indicates the high fluctuating nature of ROTA in EBL.

From the table 4.8, it can be seen that the EBL has the highest average ROTA than that of HBL. The coefficient of variation indicates that among these two banks under study

during period, HBL has the highest consistency in ROTA whereas the ROTA ratio of EBL is highly fluctuating.

Figure 4.8

Return on Total Assets of Sample Banks



4.2.3. Return on Equity (ROE)

Return on Equity indicates how well the firm used the resources of owners. The earning of a satisfactory return is the most desirable objective of a business. The ratio of net profit to owner's equity of company should be compared with the ratios for other similar companies and the industry average. This will reveal the relative performance and strength of the company in attracting future investments. The return on equity is net profit after taxes divided by shareholder's equity. The ROE of the banks under study is presented in table and graph as follows:

Table 4.9

Return on Equity of Sample Banks

Year	HBL	EBL
2003-2004	11.13	26.18
2004-2005	11.48	21.31
2005-2006	12	22.19
2006-2007	15.85	24.64
2007-2008	16.75	24.67
Mean	13.44	23.76
S.D.	2.65	2.06
C.V.	19.69	8.68

Source: Annex 3

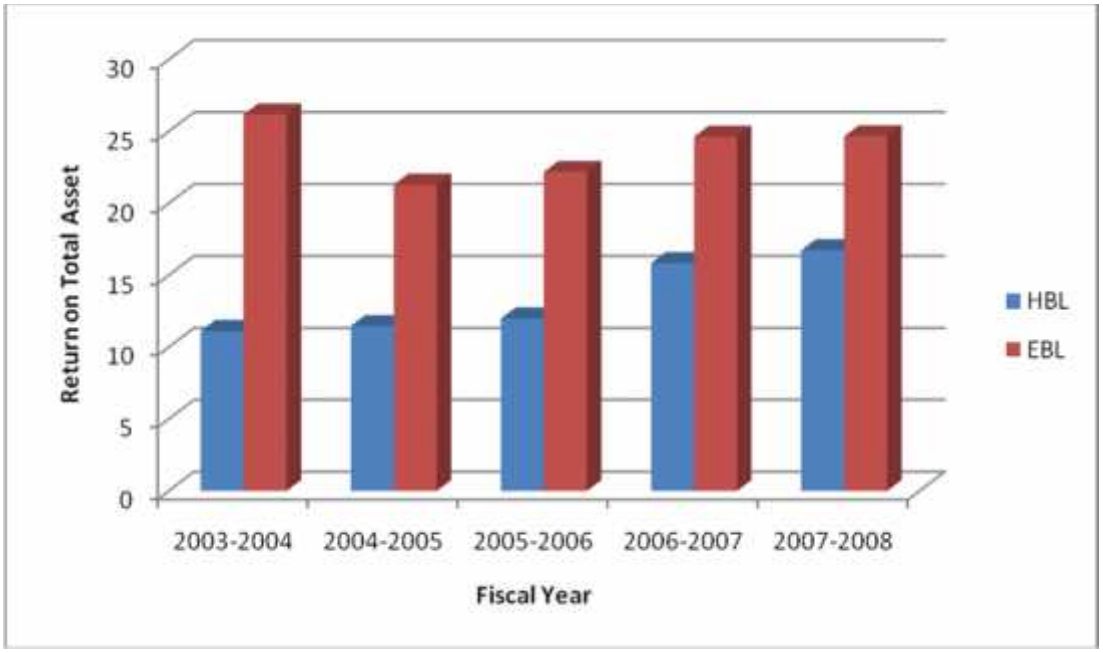
HBL has an average ROE of 13.22 ranging between 11.13 and 16.75 during the period of study. The standard deviation is 2.65 and the fluctuation of 19.69% in the ROE is seen during this, period, which is moderate.

The average ROE of EBL, during this period of study is 23.76. It is within the range of 21.31 and 26.18. The standard deviation of ROE is 2.06 whereas; coefficient of variation is 8.68% indicates that the bank has the low fluctuation in ROE during the period.

From the table 4.9, it can be seen that the EBL has the highest average ROE than that of HBL. The coefficient of variation indicates that among these two banks under study during period, HBL has the highest consistency in ROE whereas the ROE ratio of EBL is highly fluctuating.

Figure 4.9

Return on Total Assets of Sample Banks



4.3. Turnover Ratios

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. It involves a relationship between sales and assets. A proper balance between sales and assets generally reflects that assets are managed well.

4.3.1. Fixed Assets Turnover Ratio

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

Table 4.10

Fixed Asset Turnover of Sample Banks

Year	HBL	EBL
2003-2004	6.33	5.81
2004-2005	5.07	6.63
2005-2006	5.95	6.41
2006-2007	3.88	7.01
2007-2008	4.49	8.06
Mean	5.1440	6.7840
S.D.	1.0108	0.8354
C.V.	19.6507	12.3141

Source: Annex 3

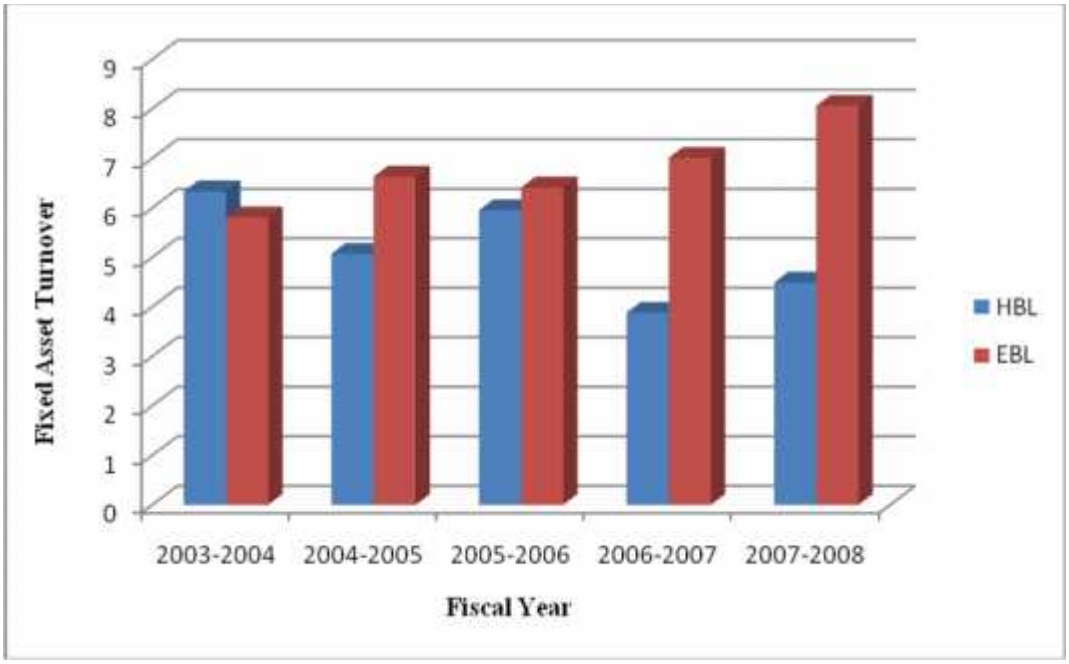
HBL within the period of study had an average Fixed Assets Turnover of Rs.5.1440 ranging between Rs. 6.33 and Rs. 3.88. The standard deviation is 1.0108 and the fluctuation of 19.65% in the Fixed Assets Turnover is seen during the period of study.

EBL has the Fixed Assets Turnover range between Rs. 5.81 and Rs. 8.06 during the period of study. An average Fixed Assets Turnover is Rs. 6.7840. The standard deviation of the Fixed Assets Turnover is Rs. 0.8354. The coefficient of variation of 12.3141 indicates that there is a fluctuation of 12.31% in the Fixed Assets Turnover of EBL.

From the table 4.10, it can be seen that average Fixed Assets Turnover if EBL is highest than that of HBL. Similarly, the standard deviation of HBL is the highest and EBL is the lowest. The coefficient of variation of these banks shows that there is an above low level of fluctuations in the Fixed Assets Turnover.

Figure 4.10

Fixed Assets Turnover of Sample Banks



4.3.2 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. The total assets turnover table is tabulated below:

Table 4.11

Total Assets Turnover of Sample Banks

Year	HBL	EBL
2003-2004	0.06	0.08
2004-2005	0.07	0.08
2005-2006	0.06	0.07
2006-2007	0.07	0.07
2007-2008	0.07	0.06
Mean	0.0660	0.0720
S.D.	0.0055	0.0084
C.V.	8.31	11.6203

Source: Annex 3

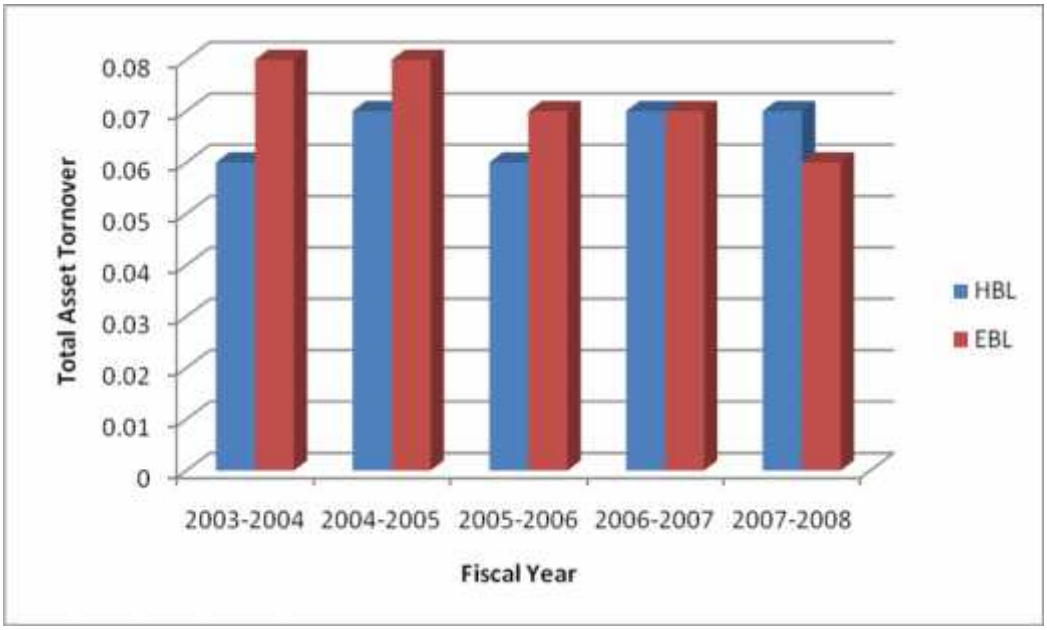
The average Total Assets Turnover of HBL during the period of study is Rs. 0.0660 with standard deviation of Rs. 0.0055. The coefficient of variation shows that there is fluctuation of 8.31% in Total Assets Turnover of HBL.

EBL has the Total Assets Turnover range between Rs. 0.06 and Rs. 0.08 during the period of study and the average of Total Assets Turnover of EBL is 0.07. The standard deviation of the Total Assets Turnover is Rs.0.0084. The coefficient of variation of 11.62% indicates that there is a fluctuation of 11.62% in the Total Assets Turnover of EBL.

From the table 4.11, it can be seen that average Total Assets Turnover of EBL is the highest than that of HBL. Similarly, the standard deviation of EBL is the highest and HBL has the lowest. The coefficient of variation of these two banks shows that there is a low level of fluctuations in the Fixed Asset Turnover.

Figure 4.11

Total Assets Turnover of Sample Banks



4.4. Correlation and Regression Analysis

Correlation analysis helps to describe the degree to which one variable is linearly related to another. In other words, correlation analysis gives the extent to which the two variables correlate and the direction along which they move. Therefore, this statistical tools is applied here to find the linear relationship between MPS and various financial tools like EPS, DPS, Dividend yield, P/E Ratio, NWPS, current ratio, return on total assets, return on equity, fixed assets turnover, total assets turnover and interest coverage.

Regression analysis objects the study of relationship between the financial variables and MPS. It determines what changes in the dependent variable is brought about by a unit change in the independent variable.

The coefficient of determination is also used in explaining the variation in MPS due to the variation in independent variables such as:

4.4.1 Correlation and Regression Analysis between MPS and EPS

Table 4.12

Correlation and Regression Analysis between MPS and EPS

Banks	Regression Model	a	b	See	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	-1656.968	51.522	242.6430	0.833	0.695	0.1364	0.0920	Significant
EBL		-1053.367	40.867	302.607	0.943	0.890	0.0492	0.0332	Significant

Source: Annex 4

Table 4.12 contains the different indicators helpful to analyze the simple correlation and regression between EPS and MPS of observed 2 joint venture banks. Where EPS is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is -1656.968, which shows that the average MPS would be Rs. -1656.968 if the EPS were zero. The result shows that the slope of the regression line (b) is 51.522, which indicates that positive correlation exists between EPS and MPS of HBL. One rupee increases in EPS causes Rs. 51.522 increase in MPS of the bank. The estimation of MPS may vary by Rs. 242.6430 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.695, which indicates that 69.5% of the variation in MPS is affected of determined by the explanatory variable EPS. The simple correlation coefficient (r) between EPS and MPS is 0.833, which indicates that there is a strong positive relationship between EPS and MPS of HBL. Similarly, the Probable Error (P. Er) of this bank is 0.0920; it is used to find out the significance of the obtained values. Here, since r is more than 6.P.E. (r) i.e. (0.0920×6=0.5520), we can say that the correlation is significant.

EBL

The regression constant or intercept coefficient (a) is -1656.968, which shows that the average MPS would be Rs. -1656.968 if the EPS were zero. The result shows that the slope of the regression line (b) is 40.867, which indicates that positive correlation exists between EPS and MPS of EBL. One rupee increases in EPS causes Rs. 40.867 increase in MPS of the bank. The coefficient of determination (r^2) is 0.890, which indicated that 89% of the variation in MPS is affected or determined by the explanatory variable EPS. The simple correlation coefficient (r) between EPS and MPS is 0.943, which indicates that there is a strong positive relationship between EPS and MPS of EBL. Similarly, the Probable Error (P. Er) of this bank is 0.0332. Here, since r is more than 6.P.E. (r) i.e. (0.0332×6=0.1992), we can say that the correlation is significant.

4.4.2 Correlation and Regression Analysis between MPS and DPS

Table 4.13

Correlation and Regression Analysis between MPS and DPS

Banks	Regression Model	a	b	SEe	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	932.078	13.396	396.88	0.428	0.183	0.3654	0.2464	Insignificant
EBL		1377.738	-14.463	894.971	0.183	0.034	0.4320	0.2914	Insignificant

Source: Annex 5

Table 4.13 contains the different indicators helpful to analyze the simple correlation and regression between DPS and MPS of observed 2 joint ventures banks. Where DPS is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is 932.078, which shows that the average MPS would be Rs. 932.078 if the DPS were zero. The result shows that the slope of the regression line (b) is 13.396, which indicates that positive correlation exists between DPS and MPS of HBL. One rupee increases in DPS causes Rs. 13.396 increase in MPS of the bank. The estimation of MPS may vary by Rs. 0.3654 as the standard error of the model for HBL. The coefficient for determination (r^2) is 0.183, which indicates that 18.3% of the variation in MPS is affected of determined by the explanatory variable DPS. The simple correlation coefficient (r) between DPS and MPS is 0.428, which indicates that there is a strong positive relationship between DPS and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.2464. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.2464×6=1.4781), we can say that the value of r is insignificant.

EBL

The regression constant or intercept coefficient (a) is 1377.73, which shows that the average MPS would be Rs. 1377.73 if the DPS were zero. The result shows that the slope of the regression line (b) is -14.463, which indicates that positive correlation exists between DPS and MPS of EBL. One rupee increases in DPS causes Rs. 14.463 decrease in MPS of the bank. The coefficient of determination (r^2) is 0.034, which indicates that 3.4% of the variation in MPS is affected or determined by the explanatory variable DPS. The simple correlation coefficient (r) between DPS and MPS is 0.183, which indicates that there is a strong positive relationship between DPS and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.2914. Since r is less than 6.P.E. (r) i.e. (0.2914×6=1. 7484), we can say that the value of r is insignificant.

4.4.3 Correlation and Regression Analysis between MPS and Dividend Yield

Table 4.14

Correlation and Regression Analysis between MPS and Dividend Yield

Banks	Regression Model	a	b	SEe	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	1014.864	72.192	429.548	0.208	0.043	0.4280	0.2887	Insignificant
EBL		1660.342	-71.490	715.891	0.618	0.382	0.2764	0.1864	Insignificant

Source: Annex 6

Table 4.14 contains the different indicators helpful to analyze the simple correlation and regression between Dividend Yield and MPS of observed 2 joint venture banks. Where Dividend Yield is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is 1014.864, which shows that the average MPS would be Rs. 1014.864 if the DY were zero. The result shows that the slope of the regression line (b) is 72.192, which indicates that positive correlation exists

between DY and MPS of HBL. One rupee increases in DY causes Rs. 72.192 increase in MPS of the bank. The estimation of MPS may vary by Rs. 0.428 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.043, which indicates that 4.3% of the variation in MPS is affected of determined by the explanatory variable DY. The simple correlation coefficient (r) between DY and MPS is 0.208, which indicates that there is a strong positive relationship between DY and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.2887. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.2887×6=1.7322), we can say that the value of r is insignificant.

EBL

The regression constant or intercept coefficient (a) is 1660.342, which shows that the average MPS would be Rs. 1660.342 if the DY were zero. The result shows that the slope of the regression line 9b0 is -271.490, which indicates that negative correlation exists between DY and MPS of EBL. One rupee increases in DY causes Rs. 271.490 decrease in MPS of the bank. The coefficient of determination (r^2) is 0.382, which indicates that 38.2% of the variation in MPS is affected or determined by the explanatory variable DY. The simple correlation coefficient (r) between DY and MPS is 0.618, which indicates that there is a strong positive relationship between DY and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.1864. Here, since r is less than 6.P.E. (r) i.e. (0.1864×6=1.1184), we can say that the correlation is insignificant.

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

Table 4.15

Correlation and Regression Analysis between MPS and Price Earning Ratio

Banks	Regression Model	a	b	SEe	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	-436.801	75.821	94.795	0.976	0.953	0.210	0.0142	Significant
EBL		-1064.687	112.569	127.878	0.990	0.980	0.0089	0.0060	Significant

Source: Annex 7

Table 4.15 contains the different indicators helpful to analyze the simple correlation and regression between P/E ratio and MPS of observed 2 joint venture banks. Where P/E ratio is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is -436.801, which shows that the average MPS would be Rs. -436.801 if the P/E were zero. The result shows that the slope of the regression line (b) is 75.821, which indicates that the positive correlation exists between P/E and MPS of HBL. One rupee increases in P/E causes Rs. 75.821 increase in MPS of the bank. The estimation of MPS may vary by Rs. 94.795 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.953, which indicates that 95.3% of the variation in MPS is affected of determined by the explanatory variable P/E. The simple correlation coefficient (r) between P/E and MPS is 0.976, which indicates that there is a positive relationship between P/E and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.0142. It is used to find out the significance of the obtained values. Here, since r is more than 6.P.E. (r) i.e. (0.0142×6=0.0852), we can say that the correlation is significant.

EBL

The regression constant or intercept coefficient (a) is -1064.687, which shows that the average MPS would be Rs. -1064.687 if the P/E were zero. The result shows that the slope of the regression line (b) is 112.569, which indicates that positive correlation exists between P/E and MPS of EBL. One rupee increase in P/E causes Rs. 112.569 increase in MPS of the bank. The coefficient of determination (r^2) is 0.980, which indicates that 98% of the variation in MPS is affected or determined by the explanatory variable P/E. The simple correlation coefficient (r) between P/E and MPS is 0.990, which indicates that there is a positive relationship between P/E and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.0060. Here, since r is more than 6.P.E. (r) i.e. (0.0060×6=0.0360), we can say that the correlation is significant.

4.4.5 Correlation and Regression Analysis between MPS and NWPS

Table 4.16

Correlation and Regression Analysis between MPS and NWPS

Banks	Regression Model	a	b	SEe	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	-298.725	17.861	344.991	0.619	0.383	0.2759	0.1861	Insignificant
EBL		-1718.649	13.687	274.308	0.954	0.909	0.0407	0.0274	Significant

Source: Annex 8

Table 4.16 contains the different indicators helpful to analyze the simple correlation and regression between NWPS ratio and MPS of observed 2 joint venture banks. Where NWPS ratio is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is -3298.725, which shows that the average MPS would be Rs. -3298.725 if the NWPS were zero. The result shows that the slope of the regression line (b) is 17.861, which indicates that the positive correlation exists between NWPS and MPS of HBL. One rupee increases in NWPS causes Rs. 17.861 increase in MPS of the bank. The estimation of MPS may vary by Rs. 344.991as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.383, which indicates that 38.3% of the variation in MPS is affected of determined by the explanatory variable NWPS. The simple correlation coefficient (r) between NWPS and MPS is 0.619, which indicates that there is a positive relationship between NWPS and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.1861. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.1861×6=1.1166), we can say that the correlation is insignificant.

EBL

The regression constant or intercept coefficient (a) is -1718.649, which shows that the average MPS would be Rs. -1718.649 if the NWPS were zero. The result shows that the slope of the regression line (b) is 13.687, which indicates that the positive correlation exists between NWPS and MPS of EBL. One rupee increases in NWPS causes Rs. 13.687 increase in MPS of the bank. The estimation of MPS may vary by Rs. 274.308 as the standard error of the model for EBL. The coefficient of determination (r^2) is 0.909, which indicates that 90.9% of the variation in MPS is affected of determined by the explanatory variable NWPS. The simple correlation coefficient (r) between NWPS and MPS is 0.954, which indicates that there is a positive relationship between NWPS and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.0274. It is used to find out the significance of the obtained values. Here, since r is more than 6.P.E. (r) i.e. (0.0274×6=0.1644), we can say that the correlation is significant.

4.4.6 Correlation and Regression Analysis between MPS and CR

Table 4.17

Correlation and Regression Analysis between MPS and Current Ratio

Banks	Regression Model	a	b	SEe	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	-12552.889	13140.741	361.471	0.568	0.322	0.3032	0.2045	Insignificant
EBL		71677.231	-66776.923	236.517	0.966	0.933	0.0300	0.0202	Significant

Source: Annex 9

Table 4.17 contains the different indicators helpful to analyze the simple correlation and regression between C.R and MPS of observed 2 joint venture banks. Where C.R is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is -12552.889, which shows that the average MPS would be Rs. -12552.889 if the C.R were zero. The result shows that the slope of the regression line (b) is 13140.741, which indicates that the positive correlation exists between C.R and MPS of HBL. One rupee increases in NWPS causes Rs. 13140.741 increase in MPS of the bank. The estimation of MPS may vary by Rs. 361.471 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.322, which indicates that 32.2% of the variation in MPS is affected of determined by the explanatory variable C.R. The simple correlation coefficient (r) between C.R and MPS is 0.568, which indicates that there is a positive relationship between C.R and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.2045. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.2045×6=1.2270), we can say that the correlation is insignificant.

EBL

The regression constant or intercept coefficient (a) is 71677.231, which shows that the average MPS would be Rs. 71677.231 if the C.R were zero. The result shows that the slope of the regression line (b) is -66776.923, which indicates that negative correlation exists between C.R and MPS of EBL. One rupee increases in C.R causes Rs. -66776.923 decrease in MPS of the bank. The estimation of MPS may vary by Rs. 236.517as the standard error of the model for EBL. The coefficient of determination (r^2) is 0.933, which indicates that 93.3% of the variation in MPS is affected of determined by the explanatory variable C.R. The simple correlation coefficient (r) between C.R and MPS is 0.966, which indicates that there is a positive relationship between C.R and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.0202. It is used to find out the significance of the obtained values. Here, since r is more than 6.P.E. (r) i.e. (0.0202×6=0.1212), we can say that the correlation is significant.

4.4.7 Correlation and Regression Analysis between MPS and ROTA

Table 4.18

Correlation and Regression Analysis between MPS and ROTA

Banks	Regression Model	a	b	See	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	-124.965	993.578	303.965	0.722	0.521	0.2142	0.1445	Insignificant
EBL		-1491.749	1902.833	860.868	0.325	0.106	0.3998	0.2697	Insignificant

Source: Annex 10

Table 4.18 contains the different indicators helpful to analyze the simple correlation and regression between ROTA and MPS of observed 2 joint venture banks. Where ROTA is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is -124.965, which shows that the average MPS would be Rs. -124.965 if the ROTA were zero. The result shows that the slope of the regression line (b) is 993.578, which indicates that the positive correlation exists between ROTA and MPS of HBL. One rupee increases in ROTA causes Rs. 993.578 increase in MPS of the bank. The estimation of MPS may vary by Rs. 303.965 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.521, which indicates that 52.1% of the variation in MPS is affected of determined by the explanatory variable ROTA. The simple correlation coefficient (r) between ROTA and MPS is 0.722, which indicates that there is a positive relationship between ROTA and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.1445. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.1445×6=0.8670), we can say that the correlation is insignificant.

EBL

The regression constant or intercept coefficient (a) is -1491.749, which shows that the average MPS would be Rs. -1491.749 if the ROTA were zero. The result shows that the slope of the regression line (b) is 1902.833, which indicates that positive correlation exists between ROTA and MPS of EBL. One rupee increases in ROTA causes Rs. 1902.833 increase in MPS of the bank. The estimation of MPS may vary by Rs. 860.868 as the standard error of the model for EBL. The coefficient of determination (r^2) is 0.106, which indicates that 10.6% of the variation in MPS is affected of determined by the explanatory variable ROTA. The simple correlation coefficient (r) between ROTA and MPS is 0.325, which indicates that there is a positive relationship between ROTA and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.2697. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.2697×6=1.6182), we can say that the correlation is insignificant.

4.4.8 Correlation and Regression Analysis between MPS and ROE

Table 4.19

Correlation and Regression Analysis between MPS and ROE

Banks	Regression Model	a	b	SEe	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	-592.478	125.013	218.886	0.867	0.752	0.1109	0.0748	Significant
EBL		-726.111	79.429	890.568	0.208	0.43	0.2549	0.1719	Insignificant

Source: Annex 11

Table 4.19 contains the different indicators helpful to analyze the simple correlation and regression between ROE and MPS of observed 2 joint venture banks. Where ROE is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is -592.478, which shows that the average MPS would be Rs. -592.478 if the ROE were zero. The result shows that the slope

of the regression line (b) is 125.013, which indicates that the positive correlation exists between ROE and MPS of HBL. One rupee increases in ROE causes Rs. 125.013 increase in MPS of the bank. The estimation of MPS may vary by Rs. 218.886 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.752, which indicates that 75.2% of the variation in MPS is affected of determined by the explanatory variable ROE. The simple correlation coefficient (r) between ROE and MPS is 0.867, which indicates that there is a positive relationship between ROE and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.0748. It is used to find out the significance of the obtained values. Here, since r is more than 6.P.E. (r) i.e. (0.0748×6=0.4488), we can say that the correlation is significant.

EBL

The regression constant or intercept coefficient (a) is -726.111, which shows that the average MPS would be Rs. -726.111 if the ROE were zero. The result shows that the slope of the regression line (b) is 79.429, which indicates that positive correlation exists between ROE and MPS of EBL. One rupee increases in ROE causes Rs. 79.429 increase in MPS of the bank. The estimation of MPS may vary by Rs. 890.568 as the standard error of the model for EBL. The coefficient of determination (r^2) is 0.43, which indicates that 43% of the variation in MPS is affected of determined by the explanatory variable ROE. The simple correlation coefficient (r) between ROE and MPS is 0.208, which indicates that there is a positive relationship between ROE and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.1719. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.1719×6=1.0314), we can say that the correlation is insignificant.

4.4.9 Correlation and Regression Analysis between MPS and NI/TA

Table 4.20

Correlation and Regression Analysis between MPS and NI/TA

Banks	Regression Model	a	b	SEe	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	-1214	34866.66	379.734	0.502	0.252	0.3345	0.2256	Insignificant
EBL		7501.429	-88064	324.085	0.934	0.873	0.0568	0.0383	Significant

Source: Annex 12

Table 4.20 contains the different indicators helpful to analyze the simple correlation and regression between NI/TA and MPS of observed 2 joint venture banks. Where NI/TA is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is -1214, which shows that the average MPS would be Rs. -1214 if the NI/TA were zero. The result shows that the slope of the regression line (b) is 34866.66, which indicates that the positive correlation exists between NI/TA and MPS of HBL. One rupee increases in NI/TA causes Rs. 34866.66 increase in MPS of the bank. The estimation of MPS may vary by Rs. 379.734 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.252, which indicates that 25.2% of the variation in MPS is affected of determined by the explanatory variable NI/TA. The simple correlation coefficient (r) between NI/TA and MPS is 0.502, which indicates that there is a positive relationship between NI/TA and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.2256. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.2256×6=1.3536), we can say that the correlation is insignificant.

EBL

The regression constant or intercept coefficient (a) is 7501.429, which shows that the average MPS would be Rs. 7501.429 if the NI/TA were zero. The result shows that the slope of the regression line (b) is -88064, which indicates that highly negative correlation exists between NI/TA and MPS of EBL. One rupee increases in NI/TA causes Rs. -88064 decrease in MPS of the bank. The estimation of MPS may vary by Rs. 324.085 as the standard error of the model for EBL. The coefficient of determination (r^2) is 0.873, which indicates that 87.3% of the variation in MPS is affected of determined by the explanatory variable NI/TA. The simple correlation coefficient (r) between NI/TA and MPS is 0.934, which indicates that there is a positive relationship between NI/TA and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.0383. It is used to find out the

significance of the obtained values. Here, since r is more than 6.P.E. (r) i.e. (0.0383×6=0.2298), we can say that the correlation is significant.

4.4.10 Correlation and Regression Analysis between MPS and NI/FA

Table 4.21

Correlation and Regression Analysis between MPS and NI/FA

Banks	Regression Model	a	b	See	r	r^2	S.E.(r)	P.E.(r)	Significant/ Insignificant
HBL	Y=a + bX	2166.444	-209.806	364.494	0.558	0.311	0.2078	0.3081	Insignificant
EBL		-5033.347	913.052	230.500	0.967	0.936	0.0286	0.0193	Significant

Source: Annex 13

Table 4.21 contains the different indicators helpful to analyze the simple correlation and regression between NI/FA and MPS of observed 2 joint venture banks. Where NI/FA is independent variable and MPS is the dependent variable. With the help of these indicators, we can come to the following conclusions:

HBL

The regression constant or intercept coefficient (a) is 2166.444, which shows that the average MPS would be Rs. 2166.444 if the NI/FA were zero. The result shows that the slope of the regression line (b) is -209.806, which indicates that the negative correlation exists between NI/FA and MPS of HBL. One rupee increases in NI/FA causes Rs. -209.806 decrease in MPS of the bank. The estimation of MPS may vary by Rs. 0.2078 as the standard error of the model for HBL. The coefficient of determination (r^2) is 0.311, which indicates that 31.1% of the variation in MPS is affected of determined by the explanatory variable NI/FA. The simple correlation coefficient (r) between NI/FA and MPS is 0.558, which indicates that there is a positive relationship between NI/FA and MPS of HBL. Similarly, the Probable Error (P.Er) of this bank is 0.3081. It is used to find out the significance of the obtained values. Here, since r is less than 6.P.E. (r) i.e. (0.3081×6=1.8486), we can say that the correlation is insignificant.

EBL

The regression constant or intercept coefficient (a) is -5033.347, which shows that the average MPS would be Rs. -5033.347 if the NI/FA were zero. The result shows that the slope of the regression line (b) is 913.052, which indicates that positive correlation exists between NI/FA and MPS of EBL. One rupee increases in NI/FA causes Rs. 913.052 increase in MPS of the bank. The estimation of MPS may vary by Rs. 230.500 as the standard error of the model for EBL. The coefficient of determination (r^2) is 0.936, which indicates that 93.6% of the variation in MPS is affected of determined by the explanatory variable NI/FA. The simple correlation coefficient (r) between NI/FA and MPS is 0.967, which indicates that there is a positive relationship between NI/FA and MPS of EBL. Similarly, the Probable Error (P.Er) of this bank is 0.0193. It is used to find out the significance of the obtained values. Here, since r is more than 6.P.E. (r) i.e. (0.0193×6=0.1158), we can say that the correlation is significant.

4.5 Multiple Regressions of MPS with Different Explanatory Variables

The MPS of the sampled commercial banks is especially determined by the use of statistical methods. In addition to it, the more appropriate method used herein is regression method. In order to get the clear vision of MPS of sampled commercial bank, a series of secondary data is used. The following table is the data abstracted and nonetheless, the data so abstracted reveals the MPS of sampled commercial banks in nation along with the other factors determining the MPS, like DPS, EPS, CR, ROTA, ROE, NI/FA, NI/TA, and P/E ratios. The variables so taken are based on the general hypothesis that the MPS is dependent upon a fore stated various factors. Various statistical analyses are stated below to show their interrelationship and dependency. The data table abstracted is given below:

Use of SPSS program has been done herein to find the regression of the aforementioned data. Irrespective of the sampled banks the MPS is taken as a dependent variable and the rest has been taken as independent variables. Running the regression analysis has yields in the following output:

Variables Entered/Removed

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

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
1					R Square Change	F Change	df1	df2	Sig. F Change
	0.986	0.980	0.975	9.70187	0.980	4088.272	8	1	.012

a. Predictors: (Constant), EPS, DPS, DY, ROTA, ROE, NI/FA, NI/TA, P/E

b. Dependent Variable: MPS

Table 4.22

Multiple Regressions of MPS with Different Explanatory Variables

S.N	Company	Year	MPS	DPS	EPS	NWPS	DY	CR	ROTA	ROE	NI/FA	NI/TA	P/E
1	HBL	2002/03	836	1.32	49.45	247.82	0.16	1.01	0.91	11.13	6.33	0.06	16.91
2	HBL	2003/04	840	0	49.05	246.93	0	1.04	1.06	11.48	5.07	0.07	17.13
3	HBL	2004/05	920	11.58	47.91	239.59	1.26	1.04	1.11	12	5.95	0.06	19.2
4	HBL	2005/06	1100	30	59.24	228.72	2.73	1.05	1.55	15.85	3.88	0.07	18.57
5	HBL	2006/07	1740	15	60.66	264.74	0.86	1.05	1.47	16.75	4.49	0.07	28.69
6	EBL	2002/03	445	20	29.9	150.1	4.49	1.07	1.17	26.18	5.81	0.08	14.88
7	EBL	2003/04	680	20	45.58	171.52	2.49	1.06	1.50	21.10	6.63	0.08	14.92
8	EBL	2004/05	870	0	54.22	219.87	0	1.06	1.40	22.19	6.41	0.07	16.05
9	EBL	2005/06	1379	25	62.8	217.67	1.81	1.05	1.50	24.64	7.01	0.07	22
10	EBL	2006/07	2430	10	78.4	292.73	0.41	1.04	1.40	24.67	8.06	0.06	31

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3078507.874	8	384813.484	4088.272	.012(a)
	Residual	94.126	1	94.126		
	Total	3078602.000	9			

a. Predictors: (Constant), EPS, DPS, DY, ROTA, ROE, NI/FA, NI/TA, P/E

b. Dependent Variable: MPS

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	-1782.367	87.274		-20.423	.031	-2891.292	-673.441
EPS	30.146	1.095	.661	27.521	.023	16.228	44.064
DPS	-14.734	1.308	-.268	-11.268	.056	-31.348	1.880
DY	142.473	11.166	.368	12.759	.050	.593	284.353
ROTA	-116.109	44.667	-.045	-2.599	.234	-683.655	451.437
ROE	-2.479	1.478	-.025	-1.677	.342	-21.254	16.297
NI/FA	9.467	4.899	.020	1.932	.304	-52.784	71.718
NI/TA	2463.985	1172.204	.031	2.102	.283	-12430.283	17358.253
P/E	62.464	1.133	.605	55.110	.012	48.062	76.865

a. Predictors: (Constant), EPS, DPS, DY, ROTA, ROE, NI/FA, NI/TA, P/E

b. Dependent Variable: MPS

From the aforementioned data and the calculated output using the statistical tool, i.e. regression method can be interpreted as follows:

The data basically reveals that the MPS of the sampled commercial banks is the dependent variables and the other variables as EPS, DPS, DY, ROTA, ROE, NI/FA, NI/TA and P/E ratios are taken as the independent variables. However, running the regression analysis, the data plots of Current Ratio (CR) has been excluded. One of the prominent reasons for such exclusion is that regression equation considers that there is dependency with the other ratios rather than the current ratios. As this case is related with the liquidity of the organization, exclusion of the current ratio in the regression analysis can be considered justifiable.

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 aforementioned variables, only 8 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 in Nepal. 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 commercial banks of the nation:

"MPS= -1782.367 + 30.146EPS – 14.734DPS + 142.473DY - 116.109ROTA - 2.479ROE + 9.467NI/FA + 2463.985NI/TA + 62.464P/E"

Where,

EPS= Earning per Share

DPS= Dividend per Share

DY= Dividend Yield

ROTA= Return on Total Assets

ROE= Return on Equity

NI/FA= Net Income to Fixed Assets

NI/TA= Net Income to Total Assets

P/E= Price Earning Ratio

The table further reveals the following:

Coefficient of determination, $R^2 = 0.980$

Adjusted Coefficient of determination, $R^2 = 0.975$

The intercept term, -1782.367 has no economic meaning in this instance since it lies far outside the range of observed data and obviously cannot be interpreted as MPS of the sampled commercial banks when all the independent variables taken on zero value. 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 so calculated on the basis of aforementioned MPS and related data can be further prosaically explained. 30.146, the coefficient of EPS, Earning per Share of the sampled commercial banks, indicates that when we hold constant the effect of all other commercial banks, indicates that when we hold constant the effect of all other variables, each Rs. 1 increase in EPS of commercial banks, will cause the yearly MPS to increase by Rs. 30.146.

Similarly, the coefficient of DPS indicates that for each rupee distributed as dividend per share, it will cause of declination of Rs. 14.734 in MPS. Likewise, the coefficient of the DY indicates that for each rupee of Dividend Yield will cause of inclination of Rs. 142.473 in MPS.

The coefficients of Return on Total Assets (ROTA) and Return on Equity (ROE) are negative, which means that the MPS will have negative relationship. The coefficients are - 116.109 and - 2.479 respectively. The relationship is unjustifiable. ROTA and ROE are two major profitability indicators of any financial institutions. Hence, 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. But the study has shown the negative figure so financial institutions are not in profitability position.

It is relevant to talk regarding other positive indicators of the regression equation namely NI/TA and P/E. The coefficients are positive and respectively 2463.985 and 62.464. NI/TA basically relates to the utilization of the assets of the assets in the sampled commercial banks. Higher be the utilization to the optimum level, higher be the profitability and vice versa. However, in the analysis, capital adequacy ratio has not been considered to ascertain the ceilings of lending as the scope is beyond the objectives. Last but not the least; the regression equation suggests that he NI/FA have positive relation with MPS. This can be interpreted from the standpoint of liquidity preference. Creation of fixed assets is normally done from the capital of any organization. Any expenditure towards the creation of fixed assets shall ultimately dilute the liquidity standing of equity in the company. Furthermore, the asset created gets depreciated and the realizable amount in the long run gets deteriorated. Hence, the investors might value per share. Regression equation states that the coefficient of NI/FA is positive by 9.467.

The coefficient of determination (R^2=0.980) indicates that 98% of the total variation in the commercial banks MPS has been explained by the regression model as a whole. The corrected coefficient of determination, 0.975 indicates that 97.5% of the total variance in the independent variables is explained by the regression model.

Test for the Regression Model

Various test are performed to determine the statistical significance of the regression model obtained by the use of statistical tools and the computer program, SPSS, the test so performed are clearly stated below:

4.6 Joint Hypothesis Test (F-Test)

This test is also known as F-test. The F-test for overall significance is based on the fact that for the regression equation to be statistically significant, at least one of the regression parameter must not be zero. The hypothesis is generated as below:

Null Hypothesis: $H_0: \beta_1 = \beta_2 = \beta_3 = 0$ [There is a link between Independent and Dependent Variables]

Alternative Hypothesis: $H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$ [There is no link between Independent and Dependent Variables]

From the table stated above,
We can get the value of F-statistics to be 4088.27,
Consulting the table for F-statistic, we get
$F_{\text{tabulated } 8,\ 1}$ at 5% level of confidence = 239
Here, the relation can be stated as under:
$F_{\text{calculated}} > F_{\text{tabulated}}$ Reject null hypothesis, i.e.

With 95% confidence level, it can be said that all the coefficient of the independent variables should not be simultaneously equal to zero. In other words, there is no link between independent and dependent variables.

4.7 Partial Hypothesis Test (T-Test)

Partial hypothesis, also known as T-Test, is the number of standard error contained in the regression coefficient. If an individual parameter is statistically significant, the true value of the parameter cannot be equal to zero. The hypothesis is generated as below:

Null Hypothesis: $H_0:\beta_1 = 0$ [The Dependent Variables affect the Independent Variables]

Alternative Hypothesis: $H_1:\beta_1 \neq 0$ [The Dependent Variables do not affect the Independent Variables]

Likewise, individual coefficients are taken into considerations and the hypothesis generation can be tabulated as below:

Variables	Hypothesis	$T_{calculated}$	$T_{tabulated\ (10,5)}$
EPS	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	27.521	2.228
DPS	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	-11.268	2.228
DY	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	12.759	2.228
ROTA	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	-2.599	2.228
ROE	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	-1.677	2.228
NI/FA	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	1.932	2.228
NI/TA	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	2.102	2.228
P/E	$H_0:\beta_1 = 0$ $H_1:\beta_1 \neq 0$	55.110	2.228

The absolute value of T-statistics for EPS, DY and P/E are greater than 2.228 which implies that the coefficient are significant means the probability of incorrectly rejecting the hypothesis that they are equal to zero is less than or equal to 5%.

The T-statistics for DPS, ROTA, ROE, NI/FA and NI/TA are less than 2.228 which implies that the coefficient is insignificant means there is more than 5% probability of erroneously rejecting the hypothesis that the coefficient is equal to zero.

4.8 Major Findings

- Among the two sample banks, the MPS of HBL and EBL are fluctuating in same nature. As during the period of study, HBL has the lowest average closing MPS of Rs. 1087.2 then that of EBL with Rs. 1160.8. And a coefficient of variation of HBL is the lowest relative variation by 34.98%, whereas EBL has the high variation in MPS, signified by C.V of 67.92%.
- Among two sample banks, the average net worth per share of HBL is the highest and that of EBL is the lowest which is Rs. 245.56 and Rs. 210.38 respectively but the fluctuation in the net worth is highest in case of EBL and lowest in case of HBL which coefficient of variation is26.11% and 5.4% respectively.
- The average EPS of the EBL is highest of Rs. 54.18 and HBL has the lowest EPS of Rs. 53.262 among these two banks. The highest fluctuation of the EPS is of HBL, the CV being 32.29%.
- Among these two sample banks, the average dividend per share (DPS) of EBL is the highest and that of HBL is the lowest which is Rs. 15 and Rs. 11.58 respectively, but the fluctuation in the DPS is highest in case of HBL which have C.V of 106.51% and the lowest in case of EBL which C.V is 50.92%.
- HBL has the highest average P/E Ratio of 20.1on the other hand EBL has the lowest average P/E Ratio of 19.77. The standard deviation of EBL is the highest then that of HBL which is 6.94 and 4.89 respectively. And coefficient of variation in case of HBL is the lowest and EBL has the highest which is 24.36% and 35.08% respectively.
- The average Dividend Yield (DY) of EBL is the highest and that of HBL is the lowest which is Rs. 1.93 and Rs. 1.002 respectively but the fluctuation in the DY is highest in case of HBL which is 112.05% and the lowest in case of EBL which CV is 94.12%.

- EBL has the highest average C.R of Rs. 1.056. On the other hand HBL has the lowest average C.R, which is 1.03. Relatively highest variation of the C.R is of EBL, which C.V is 1.58% and the lowest of the C.R is of HBL that is 1.07%.
- Among these two banks, the average Return on Total Assets (ROTA) of EBL is the highest and that of HBL is the lowest which is Rs. 1.39 and Rs. 1.22 respectively. And coefficient of variation in case of HBL is the lowest and EBL has the highest which is 22.64% and 96.72% respectively.
- EBL has the highest average ROE of Rs. 23.76. On the other hand HBL has the lowest average ROE, which is 13.44. Relatively highest variation of the ROE is of HBL, which C.V is 19.69% and the lowest of the ROE is of EBL that is 8.68%.
- EBL has the highest average Fixed Assets Turnover of Rs. 6.78 and HBL has the lowest average of Rs. 3.32. On the other hand EBL has the lowest relative variation of 12.31% whereas HBL has the highest variation which is 21.12%.
- Among these banks, the Total Asset Turnover of EBL is the highest during the period of study that is Rs 0.07 and HBL has the lowest average return of Rs. 0.04. The relative variation of Total Assets Turnover is highest in EBL and lowest in HBL respectively, which CVs are 11.62% and 10.65% respectively.
- Analysis of the simple correlation and regression between EPS and MPS of two sampled joint venture banks shows that positive and significant correlation exists between EPS and MPS of both the banks EBL and HBL respectively.
- Analysis of the simple correlation and regression between DPS and MPS of two sampled joint venture banks shows that negative and insignificant correlation exists between DPS and MPS of both the banks EBL and HBL respectively.
- Analysis of the simple correlation and regression between DY and MPS of two sampled joint venture banks shows that negative and insignificant correlation exists between DY and MPS of both the banks EBL and HBL respectively.
- Analysis of the simple correlation and regression between P/E and MPS of two sampled joint venture banks shows that positive and significant correlation exists between P/E and MPS of both the banks EBL and HBL respectively.
- Analysis of the simple correlation and regression between NWPS and MPS of two sampled joint venture banks shows that positive and significant correlation exists

between NWPS and MPS of EBL. Likewise, highly negative correlation exists between NWPS and MPS of HBL.

- Analysis of the simple correlation and regression between CR and MPS of two sampled joint venture banks shows that positive and significant correlation exists between DY and MPS of EBL. Likewise, highly negative correlation exists between CR and MPS of HBL.
- Analysis of the simple correlation and regression between ROTA and MPS of two sampled joint venture banks shows that negative and insignificant correlation exists between ROTA and MPS of both the banks EBL and HBL respectively.
- Analysis of simple correlation and regression between ROE and MPS of two banks shows that positive and significant correlation exists between ROE and MPS of HBL. Likewise, highly negative correlation exists between ROE and MPS of EBL.
- The Multiple Regression run in the thesis understudy suggest the following line of best fit: "MPS= -1782.367 + 30.146EPS – 14.734DPS + 142.473DY - 116.109ROTA - 2.479ROE + 9.467NI/FA + 2463.985NI/TA + 62.464P/E"
  - 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, DY, NI/FA, NI/TA and P/E. On the other hand, regression equation suggests that the MPS has negative relationship with DPS, ROTA and ROE.
- Joint Hypothesis Test (F- Test) for regression model suggest that, with 95% confidence level, it can be said that all the coefficient of the independent variables should not be simultaneously equal to zero. In other words, there is no link between independent and dependent variables.
- Partial Hypothesis Test (T-Test) for regression model suggest that:
  - The variables EPS, DY and P/E are significant and the probability of incorrectly rejecting the hypothesis that they are equal to zero is less than or equal to 5%.
  - The variables DPS, ROTA, ROE, NI/FA and NI/TA are insignificant means there is more than 5% probability of incorrectly rejecting the hypothesis that the coefficient is equal to zero.

- 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.
- On the basis of aforementioned analysis, it can be inferred that the most affected commercial bank amidst the sample selected is HBL.
- It is found essential that the investors are to be educated further to analyze the financial performances and its impact on the market price.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter consists of summary, conclusion and recommendation. After completion of analysis chapter one should have to enlist his/her finding and should make necessary suggestions on the basis of the study. The entire study has no meaning until and unless the researcher summarizes, concludes and provides his/her recommendation in the respective field.

5.1 Summary

The Nepalese economy is dominated by agricultural sector. Economic status of Nepal is not satisfactory. So, speedy development of the country is possible when it reinforces in upgrading its economic condition. The major problem of an underdeveloped economy is an inadequate degree of capital formation, which is the result of insufficient saving made by the community. The financial sector should be capable to push the economic status of the country. Mobilization of fund in to different profitable and development sector is possible only with the development of competent financial institutions in the country. Commercial banks are the most important financial institutions which accept deposits from general public and mobilize that fund in form of loan and advance and other investment. An efficient banking system plays an important role for resource mobilization and development of the country. Banks are the medium through which scattered saving transferred into productive areas that ultimately helps the economic development and industrialization of nation. In the modern economy, one cannot imagine trade and business in absence of a bank. In order to collect the scattered saving and put them into productive channels, financial institutions like banks are necessity.

Banks are the most important financial institution in an economy. They represent an effective medium for mobilization of financial resources. For the economic development, they create the strong and efficient market for capital. In the context of Nepal, the

financial system is dominated by the banking system in which commercial banks constitute an important part.

Securities market in recent years has become an integral part of economic development. Examples from the developed countries have proved that “securities market is the cause and economic development is the effect”. Securities market serves as a direct link between the suppliers and users of capital fund. It channelizes the hoarded saving of general public towards the productive investments. Therefore, a healthy and efficient securities market is essential for the economic development.

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. Pertinent studies on Nepalese securities market are still lacking. Furthermore, the country’s macro economic status and its dependency on the agri-output phenomenon is also one of the vital reasons. In absence of things stated ahead, the policy making body has been suffering the lack of information inputs.

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 joint venture banks. The specific objectives of this study are (1) to analyze the financial performance of Himalayan Bank Limited and Everest Bank Limited; (2) to examine effect of financial performance on share price of Himalayan Bank Limited and Everest Bank Limited and; (3) to provide appropriate suggestions based on the major findings.

Although many studies are already conducted in Nepal to examine the performance of a company or some companies, this study is based on small sample and examines the performance of sampled listed commercial banks whose financial statements are available. Besides, the study on financial performance of the company and its relationship with stock price is perhaps the first in Nepal. The data taken for the study is of secondary nature. The required secondary data are collected mainly from the annual reports of listed

companies and the web-page of NEPSE: www.nepalstock.com. The other sources of secondary data are the various publications of securities Board, Nepal; Nepal Stock Exchange Limited and Nepal Rastra Bank.

Among the 25 commercial banks, only two banks namely HBL and EBL have been taken as the sampled commercial banks to analyze the financial performance and their effect on share price.

Various statistical and financial analyses have been performed to satisfy the aforementioned objectives. Individual financial performance reflectors as MPS, EPS, DPS, DY, CR, ROTA, NWPS, ROE, NI/FA, NI/TA, P/E, etc have been analyzed. Similarly, simple regression amongst the individual explanatory variables has also been incorporated in the paper understudy accompanied by multiple regressions along with the relevant hypothesis testing. In short, the paper understudy analyzes the MPS of the captioned commercial banks and its relationship with different indicators.

5.2 Conclusion

The shares of commercial banks of Nepal are heavily traded in the stock market and therefore, these shares play a key role in determination of stock exchange indicators. This study tries getting the empirical result of the investment on shares of the commercial banks.

From the analysis it is found that common stock of sample banks are dependent mainly on the financial performance. However, the analyses are not exactly reflected in the share price. This may be due to lack of analysis in the movement and relationship of the MPS with reference to various variables. It can be inferred that the investors are still investing in the shares based on the rumor rather than financing on a realistic picture. The regression analysis suggests that EPS, DY, NI/FA, NI/TA and P/E are some of the prominent financial indicators which hold positive relationship with the share prices of the sampled banks. Likely, the indicators as DPS, ROTA and ROE hold negative relationship. It can be concluded that the share investors herein Nepal do not care much

about the Dividend Yield. Since the total returns signifies the accumulation of dividend yield and capital gain yield. It can be inferred that the investors of commercial banks focus mainly in the capital gain yield rather than dividend declaration of the sampled commercial banks. However, the line of best fit also states that there are problems of correlation and such implies that the investment in sampled banks do not have overall analytical and informative assessment before the investment are made.

The analysis further depicts that the share price of the sampled commercial banks do shows the impact caused by their financial performance. However, the extent of such impact is not to the mark.

The concluding remark is that investing in shares of commercial bank is risky in the sense that the fluctuation is seen in the dividend declaration and the MPS of the shares of the sampled commercial banks. Both these scenarios shall reduce the return on investment. Though lots of investors are attracted in trading these stocks, shares of banking sector has a key role in fluctuation of stock exchange index. The results of this study shows investment in common stock of sampled commercial banks lack analytical ability and the assessment of the financial performance is yet short in the investors. Last but not the least, efficient market hypothesis and true analysis are some of the key areas that the Nepalese investors are to think about.

5.3. Recommendations

The recommendation is based on the empirical findings of the study and observation of the MPS of sampled commercial banks and the empirical view of its impact by the financial performance. The following recommendations are made:

- It is recommended to carry out further research study on financial performance and its impact in the stock price furthermore to educate the investors regarding the relevancy of financial performance. There is a crying need of a separate body made up of financial experts and chartist to provide financial suggestions to public investors.
- The regulatory bodies are recommended to make effective control mechanism to stop excessive price fluctuation in the stock market. Furthermore, the regulatory bodies are

also recommended to publish disclosure notice addressing the potential investors for proper information flow.

- Investors are recommended not to invest too much, too fast 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 the following technical indicators:
    - Financial Performance of the companies.
    - Volume of Trading.
    - Analytical review of the securities.
    - Analysis of market information.
    - Assessment of quality of loan assets prevalent in the concerned banks.
    - Estimation techniques to forecast the most likely market share price.
- There is a limit to what can realistically be paid for the common stock. The investors are recommended to determine a value of share based on the fundamental earnings, dividend position and risks inherent in the company.

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ANNEX – 1

Balance Sheet of Sampled Banks

HBL					
FY	**2002-2003**	**2003-2004**	**2004-2005**	**2005-2006**	**2006-2007**
Current Assets	22536.46	24462.38	27548.87	28919.57	32945.08
Current Liabilities	22292.09	23437.85	26302.94	27694.21	31372.69
Total Assets	24197.97	24762.04	27418.15	29460.38	33519.13
Shareholder's Equity	1905.88	2291.93	2568.39	2885.59	2942.23
Fixed Assets	229.871	299.63	295.82	540.82	574.06
Net Profit	212.13	263.05	308.28	457.46	491.824
Net Income	900.18	1519.61	1760.67	2100.82	2576.92
MPS	836	840	920	1100	1740
EPS	49.45	49.05	47.91	59.24	60.6
DPS	1.32	0	11.58	30	15
DY	0.16	0	1.26	2.73	0.86
NWPS	247.82	246.93	239.59	228.72	264.74
P/E	16.91	17.13	19.2	18.57	28.69
ROE	11.13	11.48	12	15.85	16.75

EBL					
FY	**2002-2003**	**2003-2004**	**2004-2005**	**2005-2006**	**2006-2007**
Current Assets	7942.62	9490.2	11598.45	15807.15	21262.47
Current Liabilities	7420.73	8928.25	10899.9	14996.47	20231.05
Total Assets	8052.2	9608.56	11732.52	15959.28	21432.57
Fixed Assets	109.59	118.37	134.07	152.089	170.097
Net Profit	94.18	143.57	170.81	237.38	296.41
Net Income	635.3	785.1	858.96	1066.51	1370.71
MPS	445	680	870	1379	2430
EPS	29.9	45.58	54.22	62.8	78.4
DPS	20	20	0	25	10
NWPS	150.1	171.52	219.87	217.67	292.73
DY	4.49	2.49	0	1.81	0.41
P/E	14.88	14.92	16.05	22	31
ROE	26.18	21.10	22.19	24.64	24.67

ANNEX - 2

S. N	Company	Year	MPS	DPS	EPS	NWPS	DY	CR	ROTA	ROE	NI/FA	NI/TA	P/E
1	HBL	2002/03	836	1.32	49.45	247.82	0.16	1.01	0.91	11.13	6.33	0.06	16.91
2	HBL	2003/04	840	0	49.05	246.93	0	1.04	1.06	11.48	5.07	0.07	17.13
3	HBL	2004/05	920	11.58	47.91	239.59	1.26	1.04	1.11	12	5.95	0.06	19.2
4	HBL	2005/06	1100	30	59.24	228.72	2.73	1.05	1.55	15.85	3.88	0.07	18.57
5	HBL	2006/07	1740	15	60.66	264.74	0.86	1.05	1.47	16.75	4.49	0.07	28.69
6	EBL	2002/03	445	20	29.9	150.1	4.49	1.07	1.17	26.18	5.81	0.08	14.88
7	EBL	2003/04	680	20	45.58	171.52	2.49	1.06	1.50	21.10	6.63	0.08	14.92
8	EBL	2004/05	870	0	54.22	219.87	0	1.06	1.40	22.19	6.41	0.07	16.05
9	EBL	2005/06	1379	25	62.8	217.67	1.81	1.05	1.50	24.64	7.01	0.07	22
10	EBL	2006/07	2430	10	78.4	292.73	0.41	1.04	1.40	24.67	8.06	0.06	31

ANNEX - 4

Correlation Coefficient and Regression between MPS and EPS

	HBL					EBL				
Year	**EPS(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**EPS(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03	49.45	836	2445.30	698896	41340.20	29.9	445	894.01	198025	13305.50
2003-04	49.05	840	2405.90	705600	41202.00	45.58	680	2077.54	462400	30994.40
2004-05	47.91	920	2295.36	846400	44077.20	54.22	870	2939.81	756900	47171.40
2005-06	59.24	1100	3509.38	1210000	5924.00	62.8	1379	3943.84	1901641	86601.20
2006-07	60.66	1740	3679.64	3027600	105548.40	78.4	2430	6146.56	5904900	190512
Total	**266.31**	**5436**	**11890.28**	**6488496**	**238091.80**	**270.90**	**5804**	**16001.76**	**9223866**	**368584.50**

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	53.26	54.18
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.833	0.943
Coefficient of Determinations (r^2)	0.695	0.890
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.1364	0.0492
Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.0920	0.0332
b = $\frac{n \sum XY - \sum X \sum Y}{n \sum X^2 - (\sum X)^2}$	51.522	40.867
a = Y – b. X	-1656.97	-1053.367
Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	242.64	302.607

ANNEX - 5

	HBL					EBL				
Year	**DPS(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**DPS(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03	1.32	836	1.74	698896	1103.52	20	445	400	198025	8900
2003-04	0	840	0	705600	0	20	680	400	462400	13600
2004-05	11.58	920	134.11	846400	10653.60	0	870	0	756900	0
2005-06	30	1100	900	1210000	33000	25	1379	625	1901641	34475
2006-07	15	1740	225	3027600	26100	10	2430	100	5904900	24300
Total	**57.9**	**5436**	**1260.85**	**6488496**	**70857.12**	**75**	**5804**	**1525**	**9223866**	**81275**

Correlation Coefficient and Regression between MPS and DPS

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	11.58	15
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2}\sqrt{N \quad Y^2 Z(\quad Y)^2}}$	0.428	0.183
Coefficient of Determinations (r^2)	0.183	0.034
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.3654	0.4320
Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.2464	0.2914
b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	13.396	-14.463
a = Y – b. X	932.078	1377.738
	396.88	894.971

Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$		

	HBL					EBL				
Year	**DY(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**DY(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03	0.16	836	0.0256	698896	133.76	4.49	445	20.16	198025	1998.05
2003-04	0	840	0	705600	0	2.94	680	8.64	462400	1999.20
2004-05	1.26	920	1.5876	846400	1159.20	0	870	0	756900	0
2005-06	2.73	1100	7.4529	1210000	3003	1.81	1379	3.28	1901641	2495.99
2006-07	0.86	1740	0.7396	3027600	1496.40	0.41	2430	0.17	5904900	996.30
Total	**5.01**	**5436**	**9.8057**	**6488496**	**5795.36**	**9.65**	**5804**	**32.25**	**9223866**	**7489.54**

ANNEX - 6

Correlation Coefficient and Regression between MPS and Dividend Yield

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	1.002	1.93
The Correlation Coefficient (r) = $\frac{N \quad XY \; Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.208	0.618
Coefficient of Determinations (r^2)	0.043	0.382
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.4280	0.2764
Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.2887	0.1864
b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	72.192	-271.490
a = Y – b. X	1014.864	1660.342

	HBL					EBL				
Year	**P/E(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**P/E(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03	16.91	836	285.95	698896	14136.76	14.88	445	221.41	198025	6621.60
2003-04	17.13	840	293.44	705600	14389.20	14.92	680	222.61	462400	10145.60
2004-05	19.2	920	368.64	846400	17664.00	16.05	870	257.60	756900	13963.50
2005-06	18.57	1100	344.84	1210000	20427.00	22	1379	484	1901641	30338
2006-07	28.69	1740	823.12	3027600	49920.60	31	2430	961	5904900	75330
Total	**100.50**	**5436**	**2115.12**	**6488496**	**116537.50**	**98.85**	**5804**	**2146.62**	**9223866**	**136398.7**

Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	429.548	715.891

ANNEX - 7

Correlation Coefficient and Regression between MPS and P/E Ratio

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	20.1	19.77
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.976	0.990
Coefficient of Determinations (r^2)	0.953	0.980
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.0210	0.0089
Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.0142	0.0060

b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	75.821	112.569

	HBL					EBL				
Year	**NWPS(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**NWPS(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03	247.82	836	61414.75	698896	207177.52	150.1	445	22530.01	198025	66794.50
2003-04	246.93	840	60974.42	705600	207421.20	171.52	680	29419.11	462400	116633.60
2004-05	239.59	920	57403.37	846400	220422.80	219.87	870	32815.32	756900	191286.90
2005-06	228.72	1100	52312.84	1210000	251592	217.67	1379	47380.23	1901641	300166.93
2006-07	264.74	1740	70087.27	3027600	460647.60	292.73	2430	85690.85	5904900	711333.90
Total	**1227.80**	**5436**	**302192.65**	**6488496**	**1347255.12**	**1051.89**	**5804**	**217835.52**	**9223866**	**1386215.83**

a = Y – b. X	-436.801	-1064.687
Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	94.795	127.878

ANNEX - 8

Correlation Coefficient and Regression between MPS and NWPS

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	245.56	210.38
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.619	0.954
Coefficient of Determinations (r^2)	0.383	0.909
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.2759	0.0407

Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.1861	0.0274

	HBL					EBL				
Year	**NI/TA(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**NI/TA(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03	0.06	836	0.0036	698896	26.70	0.08	445	0.0064	198025	26.70
2003-04	0.07	840	0.0049	705600	47.60	0.08	680	0.0064	462400	47.60
2004-05	0.06	920	0.0036	846400	52.20	0.07	870	0.0049	756900	52.20
2005-06	0.07	1100	0.0049	1210000	96.53	0.07	1379	0.0049	1901641	96.53
2006-07	0.07	1740	0.0049	3027600	170.10	0.06	2430	0.0036	5904900	170.10
Total	**0.33**	**5436**	**0.0219**	**6488496**	**393.13**	**0.36**	**5804**	**0.0262**	**9223866**	**393.13**

b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	17.861	13.687
a = Y – b. X	-3298.725	-1718.649
tandard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	344.991	274.308

ANNEX -12

Correlation Coefficient and Regression between MPS and NI/TA

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	0.0660	0.0720
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.502	0.934
Coefficient of Determinations (r^2)	0.252	0.873

Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.3345	0.0568

	HBL					EBL				
Year	**NI/FA(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**NI/FA(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03		836	40.07	698896	5291.88		445	33.76	198025	2585.45
2003-04		840	25.70	705600	4258.80		680	43.96	462400	4508.40
2004-05		920	35.40	846400	5474		870	41.09	756900	5576.70
2005-06		1100	15.05	1210000	4268		1379	49.14	1901641	9666.74
2006-07		1740	20.16	3027600	7812.60		2430	64.96	5904900	19585.80
Total		**5436**	**136.16**	**6488496**	**27105.28**		**5804**	**232.91**	**9223866**	**41923.09**

Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.2256	0.0383
b = $\frac{n\sum XY-\sum X\sum Y}{n\sum X^2-(\sum X)^2}$	34866.667	-88064
a = Y – b. X	-1214	7501.429
Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2-a.\sum Y-b.\sum XY}{n-2}}$	379.734	324.085

ANNEX - 13

Correlation Coefficient and Regression between MPS and NI/FA

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	5.1440	6.7840
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2}\sqrt{N \quad Y^2 Z(\quad Y)^2}}$	0.558	0.967

Coefficient of Determinations (r^2)	0.311	0.936
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.3081	0.0286

	HBL					EBL				
Year	**CR(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	CR(X)	MPS(Y)	X^2	Y^2	XY
2002-03	1.01	836	1.0201	698896	844.36	1.07	445	1.1449	198025	476.15
2003-04	1.04	840	1.0816	705600	873.60	1.06	680	1.1239	462400	720.80
2004-05	1.04	920	1.0816	846400	956.80	1.06	870	1.1239	756900	922.20
2005-06	1.05	1100	1.1025	1210000	1155	1.05	1379	1.1025	1901641	1447.95
2006-07	1.05	1740	1.1025	3027600	1827	1.04	2430	1.0816	5904900	2527.20
Total	**5.19**	**5436**	**5.3883**	**6488496**	**5656.76**	5.28	5804	5.5765	9223866	6094.30

Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.2078	0.0193
b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	-209.806	913.052
a = Y – b. X	2166.444	-5033.347
Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	364.494	230.500

ANNEX - 9

Correlation Coefficient and Regression between MPS and CR

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	1.038	1.056
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.568	0.966

Coefficient of Determinations (r^2)	0.322	0.933

	HBL					EBL				
Year	**ROTA(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**	**ROTA(X)**	**MPS(Y)**	**X^2**	**Y^2**	**XY**
2002-03	0.91	836	0.8281	698896	760.76	1.17	445	1.3689	198025	520.65
2003-04	1.06	840	1.1236	705600	890.40	1.50	680	2.25	462400	1020
2004-05	1.11	920	1.2321	846400	1021.20	1.40	870	1.96	756900	1218
2005-06	1.55	1100	2.4025	1210000	1705	1.50	1379	2.25	1901641	2068.50
2006-07	1.47	1740	2.1609	3027600	2557.80	1.40	2430	1.96	5904900	3402

Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.3032	0.0300
Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.2045	0.0202
b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	13140.741	-66776.923
a = Y – b. X	-12552.889	71677.231
Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	361.471	236.517

ANNEX - 10

Correlation Coefficient and Regression between MPS and ROTA

Total	**6.1**	**5436**	**7.7472**	**6488496**	**6935.16**	**6.97**	**5804**	**9.7889**	**9223866**	8229.15

Here,

	HBL	**EBL**

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	1.22	1.394
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.722	0.325
Coefficient of Determinations (r^2)	0.521	0.106
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.2142	0.3998
Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.1445	0.2697
b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	993.578	1902.833
a = Y – b. X	-124.965	-1491.749
Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	303.965	860.868

ANNEX - 11

Correlation Coefficient and Regression between MPS and ROE

Year	ROE(X)	MPS(Y)	X^2	Y^2	XY	ROE(X)	MPS(Y)	X^2	Y^2	XY
2002-03	11.13	836	123.88	698896	9304.68	26.18	445	685.39	198025	11650.10
2003-04	11.48	840	131.79	705600	9643.20	21.10	680	445.21	462400	14348
2004-05	12	920	144	846400	11040	22.19	870	492.39	756900	19305.30
2005-06	15.58	1100	242.74	1210000	17138	24.64	1379	607.13	1901641	33978.56
2006-07	16.75	1740	280.56	3027600	29145	24.67	2430	608.61	5904900	59948.10
Total	**66.94**	**5436**	**922.97**	**6488496**	**76270.88**	**118.78**	**5804**	**2838.73**	**9223866**	**139230.06**

Here,

	HBL	EBL
Mean (Y)	1087.2	1160.8
Mean (X)	13.4360	23.7560
The Correlation Coefficient (r) = $\frac{N \quad XY\ Z \quad X \quad Y}{\sqrt{N \quad X^2 Z f \quad X A^2 \sqrt{N \quad Y^2 Z(\quad Y)^2}}}$	0.867	0.208
Coefficient of Determinations (r^2)	0.752	0.43
Standard Error of Correlation Coefficient S.E. (r) = $\frac{1-r^2}{\sqrt{n}}$	0.1109	0.2549
Probable Error (P.E) = $\frac{1-r^2}{\sqrt{n}} \times 0.6745$	0.0748	0.1719
b = $\frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$	125.013	79.429
a = Y – b. X	-592.478	-726.111
Standard Error of Estimate (See) = $\sqrt{\frac{\sum Y^2 - a.\sum Y - b.\sum XY}{n-2}}$	218.886	890.568

ANNEX – 3

Financial Indicators of the Sampled Banks under the period of studies

Market Price per Share of Sample Banks

Year	*HBL*	*EBL*
2002-2003	836	445
2003-2004	840	680
2004-2005	920	870
2005-2006	1100	137.9
2006-2007	1740	2430
Mean	1087.2	1160.8
S.D.	380.2883	788.4451
C.V.	34.9787	67.9226

Sources: Annual Report of Respective Bank

Net Worth per Share of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	247.82	150.1
2003-2004	246.93	171.52
2004-2005	239.59	219.87
2005-2006	228.72	217.67
2006-2007	264.74	292.73
Mean	245.56	210.38
S.D.	13.2030	54.9283
C.V.	5.4043	26.1101

Sources: Annual Report of Respective Bank

Earnings per Share of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	49.45	29.9
2003-2004	49.05	45.58
2004-2005	47.91	54.22
2005-2006	59.24	62.8
2006-2007	60.66	78.4
Mean	53.262	54.18
S.D.	6.1521	18.1961
C.V.	11.5506	33.5845

Dividend per Share of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	1.32	20
2003-2004	0	20

2004-2005	11.58	0
2005-2006	30	25
2006-2007	15	10
Mean	11.58	15
S.D.	12.3323	7.6376
C.V.	106.5070	50.9175

Sources: Annual Report of Respective Bank

Dividend Yield of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	0.16	4.49
2003-2004	0	2.49
2004-2005	1.26	0
2005-2006	2.73	1.81
2006-2007	0.86	0.41
Mean	1.002	1.93
S.D.	1.1227	1.8165
C.V.	112.0510	94.1202

Sources: Annual Report of Respective Bank

Current Ratio of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	1.01	1.07
2003-2004	1.04	1.06
2004-2005	1.04	1.06
2005-2006	1.05	1.05
2006-2007	1.05	1.04
Mean	1.038	1.056
S.D.	0.0164	0.0114
C.V.	1.58	1.0797

Sources: Annual Report of Respective Bank

Return on Total Assets of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	0.91	1.17
2003-2004	1.06	1.50

2004-2005	1.11	1.40
2005-2006	1.55	1.50
2006-2007	1.47	1.40
Mean	1.22	1.3940
S.D.	0.27622	1.3483
C.V.	22.6414	96.7217

Sources: Annual Report of Respective Bank

Return on Equity of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	11.13	26.18
2003-2004	11.48	21.31
2004-2005	12	22.19
2005-2006	15.85	24.64
2006-2007	16.75	24.67
Mean	13.44	23.76
S.D.	2.65	2.06
C.V.	19.69	8.68

Sources: Annual Report of Respective Bank

Price Earning Ratio of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	16.91	14.88
2003-2004	17.13	14.92
2004-2005	19.2	16.05
2005-2006	18.57	22
2006-2007	28.69	31
Mean	20.1	19.77
S.D.	4.8973	6.9351
C.V.	24.3646	35.0789

Sources: Annual Report of Respective Bank

Fixed Asset Turnover of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	6.33	5.81

2003-2004	5.07	6.63
2004-2005	5.95	6.41
2005-2006	3.88	7.01
2006-2007	4.49	8.06
Mean	5.1440	6.7840
S.D.	1.0108	0.8354
C.V.	19.6507	12.3141

Sources: Annual Report of Respective Bank

Total Assets Turnover of Sample Banks		
Year	*HBL*	*EBL*
2002-2003	0.06	0.08
2003-2004	0.07	0.08
2004-2005	0.06	0.07
2005-2006	0.07	0.07
2006-2007	0.07	0.06
Mean	0.0660	0.0720
S.D.	0.0055	0.0084
C.V.	8.31	11.6203

Sources: Annual Report of Respective Bank