CHAPTER - I

INTRODUCTION

1.1 Background of the Study

The Nepalese economy is an agro based developing economy. About 81.3 percent of the total population of the country is based on agriculture (Census-2058 B.S). Low productivity of this sector is one of the least development countries in the world. Prospects for over economic development will be brighter only if the present structure of the economy, with predominant dependence on traditional agricultural can be gradually transformed though the process of industrialization. Industrial development can play highly meaningful role in replacing unemployment, substituting of imports though increased production and in bringing about a change in the balance of payment situation in favor of the country. The role of manufacturing industry in the Nepalese economy is not satisfactory because of modern economic situation. The reason for emphasizing industrialization in Nepal is that industrial development absorbs rural, unemployed persons to possible with reducing total agricultural border.

Globalization of economic and market has been one of the major instruments of change. Due to globalization, every sort of change occurring in one sector of the world affects the other. With the result of dynamics of global changes and development, securities markets are rapidly responding. Therefore, now-a-days securities market has become global phenomena and a basic concern of financial and economic condition of any nation. Securities market index is perceived as an indicator of investors' confidence to invest in securities, which obviously, represents economic pulses of the nation. As capital market is a crucial element in the national economy, its role in reinvigorating and boosting up the economic activities in the country holds significance. It helps to mobilize domestic resources as well as protect the interest of investors. Its role is to provide the best investment opportunity by transferring the funds from surplus saving to deficit saving through transaction of long-term financial securities cannot be ignored. Hence in a nutshell, for attainment of self-reliant

growth of national economy and smooth running of the economic activities of a nation, security market's role has become paramount importance.

No doubt, as capital deficient economy, Nepal requires huge amount of investment in productive activities for rapid economic development. Though a decade has passed since Nepal embarked on the path towards open market economy and liberalization policies, there are still a number of problems associated with it. Lack of proper commitment towards implementation of policies, rampant corruption, social and business insecurity and improper coordination between government and private agencies, among a host of other factors has marred the overall performance of Nepalese economy. Despite these shortcomings, capital market, no doubt is therefore the most important sector of the Nepalese economy. The capital market offers the opportunity for investors to invest in the long-term ventures and also imparts liquidity to the security holders' by converting the securities of investors into liquid cash before the maturity of project. The capital market renders very valuable service to the community by increasing the productive capacity of the country and thereby accelerating the pace of economic development. In short, the growth of economy is tied with the growth of capital market in the country (Simon, 1983:25).

In simple sense, securities market is a place where people buy and sell financial instruments. Although securities markets are concentrated in a few locations, they refer more to mechanism, rather than to physical locations designed to facilitate exchange of securities like government bonds, corporate bonds or debentures, ordinary shares, preference shares etc. Therefore, securities market can be defined as a mechanism for bringing together buyers and sellers of financial assets in order to facilitate trading.

There are many ways in which security markets can be distinguished such as:

- Primary & Secondary market
- Money market & Capital market

- Bond, Stock & Derivative market

Here, the main concern of our study on the secondary market. Therefore, other categories and types of markets are excluded (Rao, 1989: 65).

The amalgamation of money market and capital market is known as financial market. Money market is such mechanism, which provides working capital required for business and government. Capital market trades long-term instruments of capital.

The money market, which is a market for short-term financial assets that are close substitutes for money, facilities the exchange of money for new financial claims in the primary market as also for financial claims, already issued in the secondary market. It provides the mechanism for meeting the liquidity needs of the lenders and the short-term requirements of borrowers with the minimum of delay. When tight money conditions prevail, the money market rate fall, the fluctuations in the money market interest rates reflecting the demand for and supply of fund in a competitive market. This may not, however, be the case in the system of administered interest rates where interest rates are not permitted to reflect the true scarcity of finds in the money market. The development of an efficient money market requires the development of institutions, instruments and operating procedures that facilitate widening and deepening of the market and allocation of short-term resource with minimum transaction costs and the minimum of delays (Pandey, 1996:86).

Capital markets are the marketers meant for long-term securities issued by the government or a corporation. Capital market typically involves financial assets that have life spans of greater than one year. For example the shares issued by NCC bank are traded in the capital market whereas the Treasury bills issued by Nepal Rastra Bank (NRB) are traded in the money market (Bhattarai, 2005:112).

1.1.1 Evolution of Stock Market in Nepal

The history of security market in Nepal began with the fluctuation of shares of common stock by Biratnagar Jute Mills (BJML-the first ever joint venture company in Nepal) and then by Nepal Bank Limited (NABIL-the first ever bank in Nepal) in 1937 A.D. (1994 B.S.) under the Company Act, 1936 A.D. (1993 B.S.) At that time, the country was governed by the then autocratic Rana regime and the participation in the capital structure of the corporate organization was restricted mostly to the Rana family. As a result, the expansion and development of capital market was severely limited. The historic establishment of the central bank called Nepal Rastra Bank (NRB) in 1955 A.D. (2013 B.S.) heralded a radical change in the country's financial system and economy. Actually it is the NRB though HMG/N can issue and sell government securities like Treasury Bills, Treasury Bonds and National Saving Bonds etc in the financial market to raise the funds to provide goods, services and development infrastructures to the people. The first issue of the Government Bond came in 1964 A.D.

In order to bring about the institutional development of the capital market in Nepal, HMG/N took a genuine step in the right direction by establishing the Securities Exchange Center (SEC) in July, 1976 (2033/3/22). SEC was established with an objective of facilitating and promoting the growth of capital markets in Nepal. Before its conversion into Nepal Stock Exchange, it was the only capital market institution undertaking the jobs of brokering, underwriting, managing public issue and market making for government bonds and other financial services. It was a government enterprise to act as a sole market operator and regulator.

At first, SEC limited its activities to the trading of the government bonds and national saving certificates. From the fiscal year 1984/85, it acted as an issue manager for corporate securities and started to list and provides market for the corporate stocks too under the securities exchange act, 1983. Thus the SEC

served to promote the primary as well as secondary market for the government and corporate securities from the fiscal year 1984/85.

The restoration of democracy in Nepal in 1990 generated an unprecedented new wave of people's rising hopes and aspiration for accelerating the pace the economic development. HMG/N, under a program initiated to reform the capital market, converted and restructured SEC into the Nepal Stock Exchange (NEPSE) in 1993 and established Securities Board, Nepal (SEBO/N) on May 26, NEPSE opened its trading floor on 13th January 1994 through the licensed members. SEBO/N is a capital market developing and regulating the primary market whereas NEPSE is concerned with developing and regulating the secondary market. SEBO/N aims to promote and protect the interests of the investors by regulating the (primary) issue, sale and distribution of securities and by supervising and monitoring the activities of the stock exchange and corporate bodies carrying on securities business. NEPSE, on the other hand, aims to impart free marketability and liquidity to the government and corporate securities by facilitating their transactions in its trading floor through market intermediaries such as brokers and market makers etc.

The establishment of SEBO/N and NEPSE has immensely contributed to the development of primary as well as secondary market for corporate and government securities. Its impact on the development of capital market was positive and the response from the investors was enthusiastic. Immediately after their establishment, the rise in the stock prices and market liquidity for the securities were observed. The NEPSE index was as high as 352.62 in the year 1993-94. But this happy trend was short-lived and lasted for only one year. After that, Nepalese capital market is going through the ups and downs. When Sri-Ram sugar mills issued debentures, which are convertible into common stocks after five years, the response from the investing public was not encouraging. But the response was overwhelming and more than expected when Tare-gaun regency hotel and Nepal Industrial and Commercial (NIC) Bank issued shares of preferred and common stock. Necon Air and Ace

Finance Company issued the right shares for the first time in the history of capital market in Nepal. So with the development of the Nepalese stock market, different financial instruments can be expect to be floated in the capital market.

Presently in Nepal, NEPSE (Nepal Stock Exchange) is the only one secondary market (organized stock exchange) of the country for security transaction. Other forms of secondary market such, as OTC market, the third and fourth market are not initiated till date. At the end of fiscal year 2005/06 NEPSE has 27 stock brokers, 10 issue managers, 1 market maker, 2 securities dealers and 142 listed companies from different seven sectors (viz. Banking, finance, Insurance, Hotel, Manufacturing & Processing, Trading companies and other sector). Table 1.1 shows the sector wise distribution of listed companies with their paid-up values and their percentage at the end of Fiscal year 2007/08.

Table 1.1: Sector Wise Distribution of Listed Companies with their Paid Up Values and Their Percentage

S. No.	Sector	No. of listed Companies	No. of listed Co. in %	Paid up Values in millions (Rs.)	Paid up Values in %
1	Commercial Bank	17	10.56	4444.92	35.39
2	Development Bank	21	14.79	611.88	4.87
3	Finance Company	57	38.73	1415.89	11.27
4	Insurance Company	16	11.27	1047.48	8.34
5	Hotel	4	2.82	1552.88	12.36
6	Mfg. and Process Co.	21	14.79	2758.78	21.97
7	Trading Cos.	5	3.52	76.64	0.61
8	Hydropower	3	2.11	42.20	0.33
9	Others	2	1.41	651.60	5.19
	Total	146	100.00	12560	100.00

Source: www.nepalstock.com

1.1.2 A Brief Introduction of Sample Joint Venture Banks

In this section general introduction of the books under study is being attempted to finish for the easy reference of the samples to the research, which in supposed to be useful in the proper understanding of the research and its inferences in the wholesome concept.

a. NABIL Bank Limited (NABIL)

NABIL Bank Limited is the first joint ventures commercial bank incorporated in 1984 AD in Nepal. Initially Dubai Bank Ltd (DBL) invested 50% equity shares of NABIL Bank Limited. The shares owned by DBL were transferred to Emirates Bank International Ltd. (EBIL) Dubai. Later on EBIL sold in entire stock to National Bank Ltd; Bangaldesh (NBLB). NBLB is managing the bank in accordance with the technical services agreement signed between NBLB and the bank on June 1995. At present 17 branches the bank are in operation in the country. Authorized capital and paid-up capital of NABIL Bank Limited are Rs. 5,00,000,000.00 and Rest 491,654,400.00 and the listing date was Mangsir 9, 2042 BS (1986).

b. Standard Chartered Bank Nepal Limited (SCBNL)

Standard Chartered Bank Ltd. was incorporated in 1985 as a second foreign joint venture bank under the company Act. The foreign joint venture partner was ANZ Grind lays bank PLC that was managing three banks under joint venture and technical Services Agreement signed between it and Nepalese promoters. Now, the bank has its partner, Standard chartered, UK by the virtue of annexation of ANZ Grind lays Bank PLC by standard Chartered Banking Group. The Bank has to branches all over the country.

Authorized Capital and paid-up-capital of standard chartered Bank Nepal Limited are Rs. 339,548,800.00. The Listing date of Standard Chartered Bank Nepal Limited's Stock Exchange is Asadh 21, 2045 BS (1988)

c. Himalayan Bank Limited (HBL)

HBL was established in 1992, under the company Act. It is also joint venture bank and the foreign partner is Habib Bank Ltd. of Pakistan. This is the first joint venture bank managed by Nepalese chief executive. There are 14 branches of HBL are in operation.

Authorized capital and paid-up capital are Rs. 600,000,000.00 and 300,000,000.00. The listing date of this company was Ashadh 21, 2050 (1993 AD)

d. Everest Bank Limited (EBL)

Everest Bank Limited was established in 1992, under the company Act. It is also a foreign joint ventures bank and the foreign partner was united Bank of India Ltd. and was United Bank of India Ltd. and was managed from the very beginning till November 1996. Later on it handed over the management to the Punjab National Bank Ltd., India that holds 20% equity on the banks share capital. Altogether 12 branches of EBL are in operation.

Authorized capital, and paid-up capital of EBL are Rs. 400,000,000.00 and Rs. 264000000.00 respectively. The listing date was Chaitra 25, 2052 (1995 AD).

1.2 Statement of the Problem

It goes without saying that the stock market is of vital importance for the development of an economy. It is the cynosure of all the present and prospective investors all over the world. Actually, stock market index is now-a-days taken as an indicator of financial health of an economy. When a political party favoring economic liberalization, free market economy and privatization comes into the power, the news is generally greeted by the rise (however slightly) in the index of stock market. Whenever investors lose confidence on an economy in general and corporate stock in particular, stock price slumps.

The stock market is a part of parcel of corporate development. Corporate business is a business organization established under company act consisting of billion of rupees of smaller ownership and debt certificates of the small denomination.

Due to some limitation of sole trading and partnership like; unlimited liabilities, uncertain future, difficult to transfer ownership, people though about corporate firm collect its capital by issuing shares and debt certificates. The two types of shares are preference share capital and equity share capital.

The magnitude of preference share is very small in corporate firm. Equity or ordinary share comprises the largest category of securities in corporate firm of Nepal, listed with the stock exchange. That's why this study will analyze the price determination of common stock of secondary market in Nepal.

Corporate firms must have common equity to register. Common stock represents the ultimate ownership of firm in regard to the claim on assets and income. The Common stocks are firstly marketed by the capital raising companies through primary capital market and later on these stocks are negotiable in secondary capital market. The capital market provides investors good investment opportunity with fair return and instant liquidity with minimum risk of loss it helps to mobilize financial resources for the investment in development project and there by helps economic development of the country. The stock market also imparts liquidity to the securities holders. This offers an opportunity for investors to invest in long term venture, while market also enable to convert their securities into liquid cash before the maturity of the project. Furthermore they can invest their current income against their future income there by achieve there time preference of consumption. The liquid market also promotes the primary issuance of share because investors participated in the issuance of share markets can get back the fund easily. The primary market is positively and highly elastic with the stock price and liquidity in the secondary markets.

Hence, it is felt necessary to study stock market behavior in the context of smaller and under developed capital market. Thus, this study is conducted on the basic of secondary data on the topic of share price behavior of sampled Joint Venture Banks and Finance Companies in Nepal. As for there is found lack of study on this topic so there is essential to fulfill this objective. There are many current issues available in the capital market. But, some of the issues are explained below.

a. SEBO is lacking necessary legislative measure to review of the listed companies.
b. There is lack of disclosure of the operating result of the listed companies.
c. Corporate information is not disclosed on times and have different provision regarding information disclosure.
d. Delisting of securities provision is contradictory and impracticable in our country.
e. Nepalese securities market is lagging in the use of information technology.
f. In Nepal, there is found of restriction on foreign investment in the stock market.

In this perspective of these issues the research problem of the study is presented in the following Question forms:

a. How is the performance of the Joint Venture Banks and Finance Companies?
b. How is the trend of stock price behavior?
c. Do the performance and the stock price behavior of sampled companies correlate?
d. Whether the stock market is efficient or not?
e. What are the factors that affect the stock price?

1.3 Objectives of the Study

This study is attempts to address the afore-mentioned problems. It aims to study the share price behavior and efficiency of stock market in Nepal. The specific objectives of the study are:

This study is attempts to address the afore-mentioned problems. It aims to study the share price behavior and efficiency of stock market in Nepal. The specific objectives of the study are:

a. To measure the performance of selected Joint Venture Banks using appropriate indicators.
b. To analyze the trend of market prices and behavior of the stock market performing to the selected Banks.
c. To correlate and analyze the stock price behavior and performance.
d. To provide necessary suggestions for the improvement of stock price behavior.

1.4 Significance of the Study

Stock market facilitates the situation of country's economy. When stock market is booming the economy is good and market is declining the economy is bad. It also represents the countries policy towards industry. Economic policy as well as stock market policy is formulated by government rules and regulation of different sector. If the stock price change of the share is dependent on the past volumes, there exists a trend or pattern in the price movement, which are profitable to the security analyst. The study is confined to test whether the stock price changes of the individual securities are independent or independent. In the situation of independent behavior of stock price change, general or institutional investors such as mutual funds can easily drop their technical analysis function and shift to restrict their effort in acute fundamental analysis. When successive price changes show dependence, security analyst can just perform technical analysis and discern profitable patterns. In this way,

preciously being well informed about the price behavior of the market, investment analysis function becomes simple. Beside it, researchers, shareholders and financial institution may also benefit is one way or the other from this study by providing valuable information too.

1.5 Hypothesis of the Study

Following Hypothesis will be tested in the study.

Under Null Hypothesis: H_o: $\Uparrow_o = \Uparrow_1$

a. There is no significant difference between the Z value and MVS of selected companies in overall.
b. There is no significant difference between the Z value and MVS of selected companies separately.
c. There is no significant difference between the MVS and EPS of selected companies.
d. There is no significant difference between the MVS and profitability of selected companies.

Under Alternative Hypothesis: H_1: $\Uparrow_o \# \Uparrow_1$

a. There is significant difference between the Z value and MVS of selected companies in overall.
b. There is significant difference between the Z value and MVS of selected companies separately.
c. There is significant difference between the MVS and EPS of selected companies.
d. There is significant difference between the MVS and profitability of selected companies.

1.6 Limitations of the Study

The study has undertaken is subject to the following limitations:

a. The study has confined to the five commercial banks (NABIL, SCBNL, HBL and EBL) common stock and its yearly movement of prices in the secondary market. i.e. NEPSE.
b. The study covers the yearly data of the commercial banks and finance companies under study for four years and there changes in the market price. Those stocks yearly price changes are results of performance of joint effort of numerous stockholders and organized brokerage system.
c. The study is based on the secondary data made available to the public by the NEPSE and concerned joint-venture banks and finance companies.
d. The unavailability of various reference and resources with sophisticated computer programs are other main limitations.
e. The constraint of limited time and financial resources.
f. The unwillingness of authority at the banks to provide necessary data.
g. Lack of access to the specialized and tailored software of the field of capital market maker the study lengthy and tedious.
h. This study covers stock price data from 2003/04 to 2007/08.

1.7 Organization of the Study

This study will be divided into five chapters. They are as follows:

a. Introduction: This chapter covers background of the study, statement of problem, research hypothesis, objectives, significance of the study and limitation of study.

b. Literature Review: This chapter also focuses on review of literature. It contains the conceptual framework and past research literature on Nepal & Foreign context, unpublished thesis and journals.

c. Research Methodology: This chapter deals with the research methodology to be adopted for the study consisting research design, source of data, population and sample.

d. Presentation and Analysis of Data: The fourth chapter deals with presentation analysis and interpretation of data. It consists testing of

hypothesis, analysis of questionnaires, analysis of open-end opinions and major findings of the research.

e. **Summary, Conclusion and Recommendation**: The last chapter covers the summary, conclusion and Recommendation of our study.

CHAPTER - II
REVIEW OF LITERATURE

Review of literature is the important parts of the thesis. Studying the various old thesis, dissertation, newspaper, magazine and suggestion of the experts of relevant field has effectively done this study. For studying on share price behavior of joint venture banks in Nepal different available books in investment, capital structure and other financial areas give some idea about the study. So, in this section researcher has used many books, articles, old thesis paper, dissertation and suggestions of expert to make the concrete report.

2.1 Conceptual Review

Among the many review of concept are the clue parts itself because the study is focused and centralized till finishing the study. The growth of stock market and its regulation is not so old in the context of Nepal. The investment sector is getting flourished in recent years as other economic sector. Today most of the developed countries are boosting their economic activities by the help of theirs investment sectors. Present condition of the world shows that any types of global activities are influencing most of the investment sectors. The incidental in the one corner of the world brings the changes in whole world's stock market. As for example due to the September 11 terror its attack in US up on Iraq, most of the investment sector's indexes is affected.

2.1.1 Common Stock

Common stock refers the ownership stock from company point of view. It is one of the important sources of capital of the capital structure of the joint stock company. Common stock is also know as equal share represent ownership interest in the corporation. There are mainly two parties trades the stock i.e.

- Vendor or Company.
- Buyer or Stockholder.

Vendors companies issue the equity share in the securities market and purchasing companies purchase their stock to be an owner of the company. These kinds of issues may be in lumb sum basis or installment basis (Frank, 1986:67).

There are shares, which do not carry any special or preferential rights in the payment of annual dividend or repayment of capital. The rate of dividend on such shares is not fixed. Dividend on equity shares is paid out of the residual profits left after paying interest on debentures and preference shares dividend. Similarly, equity shareholders are paid at the time of winding up to receive what is left after all the prior claims have been sled. Therefore equity shareholders are the real risk bearers but they shares in the increasing profits of the company. They also enjoy voting right in the management and control of the company (Sharpe, Alexander and Bailey, 2001:81).

While issuing the equity share, company can achieve great advantages. i.e.

i. Permanent Capital

Equity shareholder provides the permanent capital to the company. There is no any obligation to return the money except at the time of liquidation of the company.

ii. No Obligation for Dividend

Equity shares do not impose an obligation to pay a fixed dividends are payable only if the company has adequate profit.

iii. Sources of Prestige

A company with substantial equity capital has a high credit standing. Creditors readily lend money to it because they regard equity capital as a safety shield.

iv. No Charge on Assets

For issuing equity shares, the company is not required to mortgage or pledge its assets. The assets remain free of charge for borrowing money in future (Sharma, 2002:162).

Common stockholder of a corporation are its residual owners, their claim to income and assets comes after creditors and preferred stockholders have been paid in full. As a result, a stockholder's return on investment is less certain than the return to a lender or to a preferred stockholder. On the other hand, the return to a common stock holder is not bounded on the upside, as are result to the others. A share of common stock can be authorized either with or without par value. The par value of stock is merely a stated figure in the charter and is of little economic significance. A company should not issue stock at a price less than par value, because stock holders who bought stock for less than par value would be liable for the difference between below the par price they paid and the par value (Van Horne, 1997:264).

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

Stock is the ownership interest of a corporation. Each share of stock is a fraction of the rights and privileges that belongs to the ownership of a business.

A stock certificate is evidence of that fractional ownership; it is tangible evidence, a certificate of title, to part of the company (Simon, 1983:105).

a. Value of the Common Stock

There are mainly three kinds of value of the common stock:

- Face Value.
- Book Value
- Market Value.

i. Face Value

The face value of the stock is mentioned in article of association and memorandum book of the company. The face value does not charges until there is a stock split or other such initiative by the board of directors the par value of new issue is Rs100 as directed by company act 1993.

ii. Book Value

It represents the assets value per share after entire obligation of the corporation is met. It is calculated by dividing the common stock on the B/S by number of equity shares outstanding.

iii. Market Value

This value is based on the market demand & supply. Market value is determined by the demand & supply factors and reflects the negotiation between investor and seller for the transaction the market value is influenced by many factors like economic & industry condition, expected earnings and dividends, speculations and other signaling effect like major events inside the country, Governments stability (Cheney & Mosses, 1995:417-418).

b. Type of Common Stock:

- On the basis of meeting the special needs.

- On the bases of their features.

On the basis of meeting the special needs.

Though, most of firms have only one type of common stock, in some instances classified stock is used to meet the special needs of the company. Generally, when special classification of stock is used, one type is designated class A another class B and so on.

i. Class A

Small & New established company seeks to obtain funds from outside sources frequently use different use different types of common stock. This stock had on voting rights for five years.

ii. Class B

The organizers of the company retained it. It had full voting rights for five years, but the legal terms stated that dividends couldn't be paid on the class B stock until the company had established its earning power by building up retained earnings to designated level, because of the use of classified stock in a conservatively absolute control during the crucial early stages of the firms development. At the same time, outside the original owners protected investors against excessive withdrawals of funds. As is often the case in such situations, the class B stock was also called founder's shares (Weston & Brigham, Ninth edition).

On the basis of their Features:

Common stock can be classified on the basis of theirs' features, among them some important are briefly explained below:

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

Blue Chip Stocks: Stocks of very large, well-established corporation have been dominant positions; strong balance sheets and size are called blue-chip stocks, for example stocks of IBM, Micro-Soft, American Express Company; Citicorp, etc.

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

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

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

Small Stocks: Stocks depending upon the capitalization norms are generally known as small or even blue chip stocks.

Treasury Stocks: If a corporation decides to buy its own stock, the acquired stocks are called treasury stocks (Cheney and Mosses, 1995).

In Nepal, growth stocks, income stocks, and speculative stocks are generally seen in practice enjoyed by the common shareholders.

c. Theories of Stock Price Behavior

Simply, stock price behaviour refers the fluctuation of the stock price in the secondary capital market, i.e. market value is more than book value, market value is less than book value and market value is more than book value due to the different internal and external causes, market value can change. When we try to study of Nepalese securities market it is necessary to study the other external factors of foreign countries due to the globalization, liberalization and modernization, all over the world has become within a boundary so effect of

one areas movement automatically lies upon others. Theory is code of conduct to explanation process is pushed further, from where a concrete theme can be derived.

Efficient Market Theories

Market efficiency may be defined in the context of number of areas, for instance organizational efficiency, investment efficiency, allocation efficiency, information efficiency and so on. The world 'Efficiency' as applied to securities market has unfortunately been used to represent a variety of logically distinct concept. In particular it may mean …(a) exchange efficiency (b) production efficiency and (c) information efficiency (Rubinstein, 1979). However, in this study it is concerned only with information efficiency in pricing the stocks. Efficient market theory contends that in free and perfect competitive market, stock price always reflects all the available information and adjust instantaneously every influx of new information in an efficient market security prices" fully reflect" available information (Fama, 1977:95).

The requirements for a security market to be an efficient market are as follows:

- Price must be efficient so that new inventions and better products will cause a firm's securities price to rise and cause investors to want to supply capital to the firm. (I.e. buy its stock)
- Information must be discussed freely and quickly across the national so all investors can react to new information.
- Transactions cost such as sales commissions on securities are ignored.
- Taxes are assumed to have no noticeable effect on investment policy.
- Every investor is allowed to borrow or lend at the same rate.
- Taxes are assumed to have no noticeable effect on investment policy.
- Every investor is allowed to borrow or lend at the same rate.
- Investors must be rational and able to recognize efficient assets so that they will want to invest money where it is needed most i.e. in the assets with relatively high returns (Bhalla, 1983:216).

This constitutes the world of the efficient market theory or more popularly the capital assets pricing model.

As efficient market is concerned with the pricing mechanism of securities market, it has two dimensions of price adjustment. One is the type of information reacting to and another is the speed and quality of adjustment of security to the information. As any random infusion of information instantaneously and correctly adjusted in prices, there will be no subsequent dependencies or lags that are profitable. Pricing not only should be instantaneous, but also should discount accuracy of information so that the prices fluctuate closely around its intrinsic value. So Keane pointed out, "it would be clearly an add interpretation of efficiency if a doubling in price of a share were regarded as an efficient reaction to new information, simply because the movement was instantaneous, if the information in fact warranted a substantial reduction in price (Kene, 1983:198). Agreeing with this, Francis and Taylor noted, Market efficiency refers to the ability of financial assets to quickly adjust and reflect all information that is relevant to value in its price (Francis, 1986:72). Therefore, it assumes, that any given time, the market correctly prices all securities. The result, or so the theory advocates, is that securities cannot be overpriced or under priced for a long enough period to profit there from.

Level of Market Efficiency

There are three levels of market efficiency depending upon type of information set impounded into the price. In other words, the forms of markets are determined on the basis of how publicly available information is reflected in the market price of shares. The statements that price reflect all available information represents the highest order of market efficiency. As Fame suggested, it is useful to distinguish three level of market efficiency.

Forms of Efficiency	Set of Information Reflected in Securities Price
Weak	Previous Price of Securities
Semi-Strong	All Publicly available Information
Strong	All information both Pubic and Private

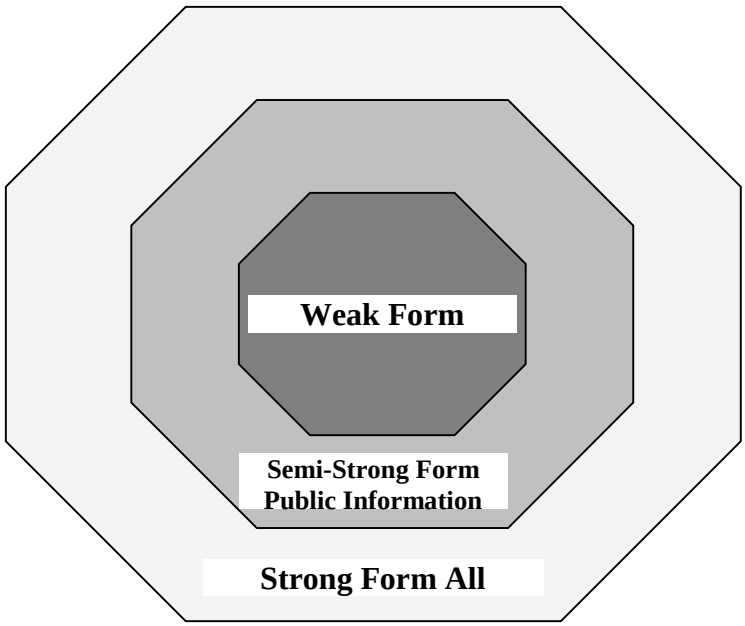
In an efficient market investors expect to make only normal profits and earn a normal rate of return on their investments. In such a market any new information immediately and fully reflected in price. New information is just that new, meaning a surprise. In a perfectly efficient market, price changes are close to random. (Sharpe, 1999:106). The efficient market hypothesis (EMH) has been subdivided into three categories, each dealing with a different type of information.

a. **Weak Form Market Efficiency:** Weak form market efficiency hypothesizes that today's securities prices fully reflect all information contained in historical security prices. This implies that no investors can earn excess returns by developing trading rules based on historical price or return information (Weston and Copland, 1996:94). If the pricing into the stock market has reflected all information found in the record of past prices and volume it is considered as weak from efficiency and participation of technical analysis approach in the market become futile.
b. **Semi-Strong Form Market Efficiency:** It says that security prices fully reflect all public available information. Thus, no investors could earn excess return using publicly available resources such as corporate annual reports, NEPSE price information or published investment advisory reports. It contains all publicly available data such as earning dividends; stock split announcements, new products development, financing difficulties and accounting changes. A market that quickly incorporates all such information into prices is said to be semi-strong efficient. If the semi-strong hypothesis is true, then only a few than what could be earned by using a naïve buy-and-hold strategy (Francis, 1997:608). If current prices of stock reflect not only all information found in the

record of past prices and volume but also other publicly available information the market is semi strongly efficient. In that the market even fundamental analysis of published accounting information has no value, because participants would have discounted it accurately and instantaneously when they are disclosed.

c. **Strong Form Market Efficiency:** The most stringent form of market efficiency is the strong form, which asserts that prices fully reflect all information, public and non-public (Jones, 1943:429). In such kind of market, no group or investors should be able to earn. Over a reasonable period of time, excess rates of return by using publicly available information in a superior manner. An extreme version of the strong form holds that all non-public information, including information that may be restricted to certain grips such as corporate insiders and specialists on the exchanges, is immediately reflected in prices. In effect, this version refers to monopolistic access to information by certain market participants (Ibid). The market where stock prices fully reflect all the available relevant information public as well as private, it is considered that the market held strong form of efficiency. In this market insider information cannot beat the market because no single participant has monopolistic access to that kind of information.

Figure 2.1: Level of Market Efficiency



These three hypotheses are not mutually exclusive; they differ only in the degree of market efficiency. It is notable point that a semi-strong efficient market encompasses the weak form of the hypothesis because price and volume data are part of the larger set of all publicly available information. Strong-form efficiency encompasses the weak and semi-strong forms and represents the highest level of market efficiency. It is true in order to the semi-strong and strong form hypothesis to be true.

The weak form of efficient market hypothesis stipulates that historical price and volume data for securities contain no information, which can be used to earn a trading profit above what could be attained with a native buy-and-hold investment strategy. The market is efficient in weak sense if shares prices fully reflect the information implied by all prior price movements. Price movements in effects are totally independent of previous movements, implying the absence of any price patterns with prophetic significance (Keane 1983:246). The weak from of Efficient Market Hypothesis (EMH) is popularly known as the random walk theory describes whether past price can predict future price. Fama argued; random walk theory implies the future path of price level of a security is no more predictable than the path of series of cumulated random numbers. The series of price changes has no memory; that is, the past can not be used to predict the future in any meaningful way, it means, that the current size and direction of price change are independent and unbiased outcome of previous price changes. Put it differently, prices appeared to follow a random walk, Implying that successive price changed is independent of one another (Fama, 1977:116).

Random walk model says that previous price changes. It means if we attempt to predict future price in absolute term using only historical price change information, we attempt to predict future price in absolute term using only historical price change information, we will not be successful i.e., successive price changes are independent. This independence implies that prices at any time will on the average reflect the intrinsic value because among other things,

different insights into future prospects of firm, professional investors and astute non professional will seize upon the short- term or random deviations from the intrinsic value and through their active buying and selling of the stock in question will force the price back to its equilibrium position. Finally, the efficient market theory holds that since price reflects all available information and since information arrives in a random fashion, there is little to be gained by any type of analysis whether fundamental or technical. It assumes that every piece of information has been collected and processed by thousands of investor and this information has been collected and processed by thousands of investor and this information (both old and new) is correctly reflected in the price. Returns cannot be increased by studying historical data, either fundamental or technical, since past data will have no effect on future prices (Fisher and Jordan, 2000:237).

Though the subject of market efficiency has been much concerned area of the study for the academicians and researchers in recent times, the advocates of the efficient market theory are matched by an equally eloquent opposing camp, which argues that the stock market is neither competitive nor efficient. The critics contend that one or more of the following factors cast their shadow over the efficiency and competitiveness of the stock market (Chandra, 1994:86).

- Information inadequacy: Information is neither freely available nor rapidly transmitted to all the participants in the stock market. In addition there is a calculated attempt by many companies to circulate "misinformation".
- Limited information processing capabilities: Human information processing capabilities are sharply limited. As Nobel Laureate Herbert Simon observed: "Every human organism lives in an environment which generates millions of new bits of information every second, but the bottleneck of perceptual apparatus certainly does not admit more than a thousand bits per second and possible much less."

- Irrational behaviors: In theory, it is generally assumed that investor rationality will ensure a close correspondence between market prices and intrinsic value. In practice, this may not be true. As J.M. Keynes argued. In point of fact all sorts of consideration enter into the market valuations, which are in no way relevant to the prospective yield. L.C. Gupta made a similar observation: our findings suggest that the markets evaluation process work haphazardly almost like a blind man firing a fun. The market seems to function largely on a 'hit-or- miss 'basis rather than on the basis of informed beliefs about the long – term prospects of individual enterprises (Gupta, 1981:20).
- Monopolistic influence: In theory, the market is regarded as highly competitive. In practice, powerful institutions and big operators wield great influence over the market. The monopolistic power enjoyed by them diminishes the competitiveness of the market.

Finally, due to these challenges posed by the critics of efficient market theory, there are many factors to point the finger at its reality validity and authenticity. This appears to be truer like relatively less developed capital market of Nepal. Nepalese capital market is yet to be efficient in terms of information as well as operations.

Market Prices of Shares Mostly as the Output of the Demand and Supply Interaction:

Stocks and shares mostly traded in the securities market are one of the assets into which money can be invested. The investment further is more attractive to a majority of individuals because it is also liquid in character. But what is the most influencing factor in determining the price of the stock is interaction of demand and supply. In relation to the interacting forces of demand and supply, Ackerman opines that, the price of a given stock is determined exclusively by the two forces demand and supply, converting one such stock at a given time that the prices and volumes of its past transaction are meaningful indication of

probable relationship of future supply and demand pressure, it is likely to encounter in the market that such relationship is the most important element determining the probable direction of price movement.

The supply and demand may be influenced by the rational as well as irrational factors and single factor may elicit varied conflict reaction from different sectors. If the demand exceeds the supply, the price will rise if the supply surpasses the demand price will fall.

These are the short conceptual frameworks about the theories of stock price behavior. On the following pages the more detailed explanation about technical analysis is discussed by reviewing the empirical evidences on the topic.

2.2 Review of Previous Studies

Since the technical analysis is probably the most controversial aspect of investment management, to date little empirical work has been conducted in this area. Certainly not nearly as much as has been done on the random walk. What little has been done the results of the works are inconsistent among them. However, some empirical studies that try to highlight about the subject matter are discussed below.

2.2.1 Context of Foreign Countries

A study carried out by Edwards and Magee in 1958, asserts the superiority of technical analysis (through charting tool), over fundamental security analysis stating that, it is useless to assign an intrinsic value to a stock certificate. One share of United State Steel, for example, was worth $261 in the early fall of 1929, but you could buy it for only it for only $22 in June 1932. By March 1937 it was selling for $126 and just one year later for $38 …This sort of thing this wide divergence between presumed value and actual value, is not the

exception; it is the rule; it is going on all the time. The fact is that the real value of share of U.S. steel common is determined at any given time solely, definitely and inexorably by supply and demand, which are accurately reflected in transactions consummated on the floor of the…. exchange. This quotation makes some strong assertions and articulates the spirit of technical analysis. Therefore, Edwards & Magee were in favor of technical analysis for analyzing the securities.

Harry V. Roberts (1959) in his article paper entitled "Stock market patterns and financial analyses" emphasized the importance of technical analysis stating that," a common and convenient name for analysis of stock, market pattern is technical analysis. Perhaps no one in the financial world completely ignores technical analysis-indeed, its terminology is ingrained in market reporting and some rely intensively on it. Technical analysis includes many different approaches, most requiring a good deal of subjective judgment in application. In part these approaches are purely empirical; in part they are based on analogy with physical processes, such as tides and waves." Roberts further argued that "the history of the market it self contains "Patterns" that give clues to the future, if only these patterns can be properly understood. Technical analysis theories maintain that only the patterns of the past need to be studied since the effect if everything else is 'reflected on the tape'."

Technicians assert that the study of past patterns of variables such as prices and volume will allow the investor to accurately identify times when certain specific stocks are either overpriced or under priced. Most technical analysts rely on charts of stock prices and volumes. Therefore Fama accepted the facts starting that, "Early studies found little evidence showing technical analysis to be useful in enabling investors to "beat the market." Agreeing with the usefulness of the technical analysis to forecast the future price, Fama pointed out that, Many proofs of the ability of technical analysis to" beat the market" were offered, but most committed at least one of the errors described earlier.

However, several recent studies have indicated that technical analysis may be useful to investors."

Gerge E. Pinches also carried out study on technical analysis and he argued that, " the tests of various trading strategies that have been carried out thus far do not adequately simulate the behavior of the technical analysts that we meet in actual practice. The test have been too simple, because they have been of one trading system or technical tool at a time, rather than testing various methods incorrectly and then somehow weighing the results of the various tools and reaching a consensus."

Another study conducted by Hulbert, Mark and Wittenberg showed the evidence suggesting that used technical analysis techniques are able to earn better rates of return than the naïve-buy-and hold strategy would have yielded over the same period."

Clifford A. Pistolese, based on his research studies of over more than 25 years on stock market investment published " a self teaching guide for the stock market investment published " a self teaching guide for the stock market investor using technical analysis" In this book he stated that, " A thorough understanding of technical analysis can mean the difference between handsome profit or only mediocre returns from investment in the stock market chart and correctly interpret past and present share price movements and trading volumes. Once you understand what is happening to a share's price you greatly increase your chances of taking the right action at the right time-thus making higher profits in the stock market." In this way Pistolese argued that technical analysis is one of the profitable approach to stock market strategy. According to him, "The forces of supply and demand result from two powerful emotions, demand result from the hope for profits, and supply results form the fear of loss. When these two opposing forces are not in balance, stock price move up if the demand side is greater and down if the supply side is greater. A chart showing the recent history of how these force have interacted to change the

price of the stock is a tool for analyzing what has been happening to the stock price recently and what may happen to it in the future."

2.2.2 Nepalese Context

2.2.2.1 Review from Journals and Articles

Rabindra Bhattarai (2007) in his article, *"Effect in the Nepali Capital Market"* Calendar effect, day effect, weekend effect and seasonal effect are common in the international stock market. Various researches have proved that there is variation in return and volatility among the days in a weak and seasons. A similar research conducted by Securities Research Center and Services (SRCS) Pvt. Ltd. has found that Nepali stock market too has been following similar trend. It has been found that the Nepali market is the most volatile on Sunday and this is the day of the week when the returns are the highest.

The study shows that the average Nepse index changed the highest (1.117 points) on Sunday and the lowest (0.094 points) on Wednesday. Similarly, daily returns also reached the highest on Sunday and the lowest on Wednesday. The volatility in index return is the highest on Sunday and lowest on Tuesday, a similar result has been found in the volatility of the daily change in the Nepse index. This is the highest on Sunday and the lowest on Tuesday.

Conducted for the Nepse index of 695 days covering three years (one year of royal rule and one year each year and after that), the study has excluded the Friday transactions during the one year period before the direct rule of the king.

The international studies in various stocks market have found varied results about the day effect. Hali Kymaz and Hakan Berument (2003) had, after studying major market indexes in the world for the period of 1988 through 2002, reached the conclusion that the highest volatility occurs on Mondays in Germany and Japan, on Fridays in Canada and the United States, and on Thursday in the United Kingdom. A similar study was made in the Chinese

stock market by Lei Gao and Gerhard Kling (2005) and the conclusion was that the highest return can be achieved in the months of March and April while within the week it is achieved on Fridays.

Chiaku Chukwuogor-NDU (2006) in his paper covering 1997-2004 examined the financial markets' trend such as the annual returns, daily returns and volatility of returns in 15 emerging and developed European financial markets. The study showed that seven of the European financial markets experienced negative returns on Monday and even others experience negative returns on Wednesday.

Hali Kymaz and Hakan Berument (2001) studied the day of the week effect on stock market volatility by using the S&P 500 market index during the period of January 1973 to October 1997. The findings showed that the day of the week effect is present in both volatility and return equations. While the highest and lowest returns are observed on Wednesday and Monday, the highest and lowest volatility are observed on Friday and Wednesday, respectively. (**New Business Age, July 2007, Page-58)**

Rabindra Bhattarai (2007) in his article, *"Big Bull Bang & Banks"* the past six months data of the market reveals that the stock prices are going up and making new highs every couple of days. The Nepse index that was 494.59 points in mid April 2007 went up 78 percent by the beginning of the October 2007 and it is approaching 900 marks. Increasing expectation of the investors towards the bonus and right shares from the financial institutions are pushing the market every day. Due to this, the investors are not heeding the warnings issued by the regulators. They are not carrying about the current fluid political situation either. Furthermore, the bull-run is leveraged by the automated trading system and manipulation by the well-known but not declared market scandals. The automated trading system has enabled the broker to increase the market price in the maximum range and executing the transactions in a small number of shares, thus creating an artificial scarcity of the shares.

Many of the commercial banks likely to declare bonus shares have been bringing their announcement out for the fiscal year 2006/07.

Nabil Bank in this regard became the first declared 20 percent bonus shares and 100 percent cash dividend as per the capital plan given to the Nepal Rastra Bank (NRB). Nabil has also become the first bank to hold AGM for the Fiscal year 2006/07 and second among the listed companies. Similarly, Standard Chartered Bank Nepal declared 50 percent bonus shares and 80 percent cash dividend. These two big banks and their big announcements gave big hit to the market to increase the Nepse index by more than 100 points in a week.

Nepal Investment Bank. Following a more aggressive capital plan strategy, declare a triangular benefit of 25 percent bonus shares, 5 percent cash dividend and 20 percent reight shares. And that hit notionally its share prices but also the whole market. The other declarations from the banks are 30 percent bonus share by NIC Bank Ltd., and 15 percent bonus and 20 percent right share by Siddhartha Bank Ltd.

Such a series of declarations of dividend, bonus shares, and right shares has been fueling the market which is likely to take Nepse index 900 beyond mark. Probably after the book closure of the companies and the Dashain festival, the index will hit that mark. After the book value closure of the companies bull is expected to slowly turn into the bear zone.

One brake has already been put in the market by the book closure of the Nabil Bank and now the Nabil shares will not cause the market to increase by so many points as before in the rest of the year. The book closure of the bi banks like Standard Chartered, Nepal Investment, Everest Bank, Himalayan Bank will put other brakes in the market and will turn to the bearish area.

But the finance companies and the development banks in the same period are not showing their response to the market expectations. Shares of some finance

companies are even trading at prices lower than in the past. (**New Business Age, October 2007, Page-46)**

Josheph Adhikari (2008) in his article, *"Contrarian Cometh"* during the four week period from February 4 to March 5, the Nepali stock market experienced considerable volatility. All major indices increased, except for Development bank (down by 343.5 points), Insurance (down by 31.08 points) and Hotel (down by 5.28 points). The surge of market remained bullish for the first week of the month till February 12 after which the benchmark index, Nepse, witnessed gradual decline from month's highest peak of 814.43 points to the support level of 751.81 points as on 27 Feb.

Though the market remained stagnant from 18 Feb. to 27 Feb. sporadic bubbles appeared with the sense of optimism and inclining market index by 21.07 points on March 3 from the good news of political settlement between the government and Madeshi Groups. However, the beginning of March has been directed towards declining trend.

The accompanying table shows the market performance of the ten indices.

Technically, an under-priced market has been visualized, as 30 days simple moving average (SMA) price dominated the chart. Still 200 days SMA plunked Nepse index into under-priced zone. However, the latest crossover of 200 days SMA inheriting fairly trended market should not be underestimated.

Throughout the month, finance companies and manufacturing sectors recorded top growths of 82.12 percent and 31.79 percent respectively. All major indices recorded huge losses (averaging 25.22 points) for the last four months. However, hotel and finance companies have shown triumphant growth compared to others for the same four months.

The trading floor remained open for 22 days during the month in review. Total of 99 companies were traded amounting to Rs. 1991513161. Total 2446727

shares were capitalization for the end of the month remained Rs. 245006.14, Average daily turnover for the month remained Rs. 90, 523, 32550.

The commercial banks remained the dominant, accounting for 49.01 percent of the total amount transacted for the month. Manufacturing and Processing, Hydropower, finance , Insurance and Trading sectors had 15.59 percent, 15.49 percent, 11 percent, 8.14 percent and 0.03 percent share respectively of total traded amount. (**New Business Age, Mach 2008, Page-68)**

Prathistha Bhurtel (2008) in his articles, *"Supply Pressure, Yet Overpriced"* the secondary market that opened for 21 days during this period witnessed a volatile pattern. Nepse started with 756.74 points and ended at 746.69 points, registering 10.05 points decline. Sensitive index for 'A' graded companies also posted a downturn of 4 points. The entire sectors rested in gloom this month. Only manufacturing and processing (up by 16.08) was an exception. Development bank rolled downhill with an enormous change of -73.39 points. Hydroelectricity plunged down by 55.15 points, finance was down by 27.23 points, insurance was down by 13.23 points, banking was down by 2.11 points and hotel was down by 1.94 points.

The month started with a downturn tracing the bearish pattern first week. Om March 17th, the market tried to gain the pace but again slipped down. This fluctuation continued the whole month.

For the first time Alpic Everest Finanace, Machhapuchhre Bank and Kist Merchant Banking and Finance traded their promoters' shares through secondary market. Siddhartha Insurance and Kuber Merchant Banking also posted their name in the trading list this month. Altogether 113 companies changed hands amounting to Rs. 1371,158,118 in the month. In total 1890389 shares traded from 16316 transactions. Market capitalization was 241,127.79 million at the end of the month remained Rs. 12,134,142.6.

The commercial bank accounted for 52% of the total amount transacted this month. Finance, development Banks, Hydroelectricity, Insurance and Trading had 22 percent, 12 percent, 11 percent, and 1 percent shares respectively of the total amount. (**New Business Age, April 2008, Page-65)**

The Securities Board of Nepal (Sebon) is keeping its eye open and carefully monitoring the capital market. “It is investigating current phenomenon in the market”, said Dr. Chiranjivi Nepal, chairman of Sebon “When we’ll have enough evidence, we’ll take action against those involved in malpractice”, he assured.

Nepse today dropped below 700 points. It lost 27.66 points to 298.81 points, after almost four months of bullish trend. It has been floating above 800 point mark for log. However Nepal telecom shares have pulled the Nepse down to below 700 points. Excluding NT shares, the Nepse is still around 900 point marks. NT shares were traded as low as Rs. 531 today, a loss of Rs. 69 per share in its minimum bidding price of Rs. 600. Some investors have even bided over Rs. 2500 per unit of the NT shares.

All major bull market go through three distinct stages and this particularly true of Nepse as well. According to the exports, the first is the ‘Sealth’ phase. This is when the bull market is flying under the rudder and most investors are unaware it has even started. The next stages are characterized by ‘disbelief’. The upward slope is easy to see on the trend will continue.

During the stage, the investing public is frozen with uncertainty. This stage of the bull market can carry on for years and it is often marked by deep corrections and long periods of consolidation. And it’s the time for correction, said Sebon,

“The Nepse index is decreasing as it is affected by rumours”, Sebon said, adding that the negative flow of information in the market regarding the share pull the Nepse down.

However, the regulator of the capital market is keeping its eye open and supervising the trading online. “the board is committed in controlling the illegal activities in the market and keep the market fair”, commits Sebon.

According to Sebon, the investors should not be nervous as the securities market in Nepal does not have any foreign investment and the current global financial crisis will not affect it. **(The Himalayan Times, November 26, 2008)**

2.2.2.2 Review of Thesis

There are few research studies conducted on stock market prices of Nepal as compared to the capital market elsewhere in the world. But most, if not all, of them are concentrated either to describe superficially the problems and prospects of the stock market in Nepal or to analyze the impact of certain financial variable on the stock market in Nepal or to analyze the impact of certain financial variable on the stock price.

Unfortunately, till date; no specific research studies have been performed on stock price movements using technical analysis approach in the Nepalese context. However, empirical works about stock price movements following fundamental approach and random walk, model have been deliberated. So in order to make this study more comprehensive and meaningful some studies related to stock market and its price behavior are consulted and reviewed on the following pages.

The study conducted by **Mohan Khatiwada (1996)** on *"A study on securities investment in Nepal"* tried to throw light on some aspects of market performance of securities in Nepal. In order to draw inference in relation to subject matter, he specified the objectives of study like analyzing the stock market performance, measuring the stock market in terms of size, liquidity and concentration and presenting a comparative analysis of money market in the face of new issue market etc along with other objectives. In the course of securities investment analysis his study period covers the duration of 3 years

(from 1993 to 1995) for primary and another 3 years (from 1994 to 1995) for secondary market. The study was organized in six different chapters; no any sophisticated analytical tools have been adopted in the study despite, the simple average, percentage, graphic presentations have been followed.

Khatiwada asserts that the security market has become unavoidable part of today's economic system, this study primarily enunciates the economic status of state, institutions involved in promoting the economic interest of the people by dint of securities market, legal aspects, method of issuing new securities, prerequisites of securities investment, primary and secondary market. He further asserts that in a strict sense, dwelling on the securities market in Nepalese context by considering the repercussions on the floor transaction and new issue of shares in the focus of the study. In this respect, whatever the focus of study and the reasons behind choosing research topic, the researcher should explain with clarification all the aspects of subject matter. It should be specific, analytical and understandable. But Khatiwada's study is jumbled together with various conglomerations.

Furthermore, legal provisions and historical development of the securities market have been brought forth by his study with a view to highlight the constraints of market. But his study keeps mum about other constraints of market. Only historical background and the legal aspects are not the constraints of market. Influencing factors like political, social, economic factors are not taken into consideration.

As Khatiwada indicates that the objective of this study is to evaluate the performance of securities market in Nepal. On this ground, he has done legal analysis, detailed description of primary market (in terms of securities Vs. money market, new issue market Vs. bank deposits, share ratio and market response) and secondary market (in terms of market performance in relation to stock trading, market price and market capitalization of share. In this regard, his study seems to be deviated from the objectives. Since the studying of

securities market without taking consideration of investors' awareness and their investment decision problem cannot be supposed as a rational study. Securities market should be analyzed from the viewpoint of investors and issues related to them. Surprisingly no such analysis has been brought into the limelight in his study.

Above all, Khatiwada's major findings of the study can be summarized as follows:

- Securities market of Nepal is in the dire need of modified legal provision.
- In comparison to the securities market, money market is seemed to be influencing i.e., money market has dominated the securities market.
- The shares issued in the primary market are oversubscribed which indicates that there is overwhelming response of public to new issue market.
- The performance of stock trading is poor due to various factors particularly the falling trend of share prices in the stock exchange.
- Market concentration is very high approximately 50% in the Nepalese market.

Similarly, **Bhatta (1997)** in his unpublished Dissertation on *"Dynamics of stock market in Nepal"* has tried to focus the behavior of stock prices in Nepalese stock market. He has asserted that in order to evaluate stock prices, the price earning information was not made available timely to the investors. The investors could not identify the good and bad stocks. The only speculative behavior of the investors regarding the future stock prices led to set the stock prices in the market, lack of value judgment to determine the stock price is the serious problem of the Nepalese stock market. This happened due to the inability of the regulatory bodies of the stock market to regulate market mechanism and failure to win the faith of investors. This problem can be solved only when the real determinants of stock prices are diagnosed and identified.

To a greater extent, his assertions may hold true but the extent of regulation of market mechanism by regulatory bodies solely might not be the factor to evaluate the stock prices. The historical trends or patterns of market prices should also be taken into account to predict future prices of shares. In such a condition, analysis of shares by means of technical tools becomes vital.

Bhatta further opined that financial parameters reflect all the firm's / industry's / economy's financial status, which is available from Balance sheet and profit and loss account. But the ground realities at least in Nepalese context are that most of the companies do not timely provide financial information. There is also practice of disseminating false financial information, therefore, am annual balance sheet and profit and Loss account are not much of help in understanding what's going on in the companies. So how can anyone know about a company's actual financial position? And it has become a common practice among companies to release two sets of figures prepared by chartered accountants-one showing financial status of the company as being sound, the other showing a loss. The first set of figure is used to secure loan while the other showing a loss. The first set of figure is used to secure loan while the other is meant to evade taxes. That's why his assertions in this regard completely fall in a mess.

While going through the findings of his study he has mentioned that trading of stock in terms of transactions, number of shares traded, value of shares traded are very low in the Nepalese market. But nowhere in the study Bhatta has justified this statement. How could he say that stock trading in terms of transaction, numbers of shares traded and values of share traded were low? Were they low in comparison to past figures or in comparison to other big and booming international stock market?

Besides these shortcomings in his study he noted under the backing of financial performance analysis and different statistical tools that Earning per share (EPS) and Return On Equity (ROE) have decisive effect on the market price of the

stocks. He finally concluded that stock market and economic activities move in similar direction. They influence each other. The development of the former is reflected in the latter. The stock market raises and mobilizes the invisible resources to finance the long-term large projects in the economy. The stock market can be regarded as a heart of an economy. It has been even a great role for the capital formation of the capital deficient economy like Nepal.

Pathak (2000) in his unpublished Dissertation entitled "*Protection of investors in the capital market of Nepal"* highlights how investors are safeguarded from concerned authorities, listed companies and associated investors organization and influenced to invest in the capital market for preserving the national economy. In this regard, he has stated that every thinker has to think about the future of the investors. If investors are protected, capital market is automatically protected. And if the capital market is supported from investors' side the national economy of the country will be automatically developed. No doubt, investors are protected form legal aspects, concerned authorities and listed companies, the national economy of the country will be automatically developed. For the development of economy the roles of other variables cannot be underestimated. Furthermore, even investors are protected if they lack the knowledge regarding the stock investment decision and market price behavior of stocks, it obviously does not help to boost up national economy. Thus, like the dictum "One can take horse into water but does not make him drink" the same perfectly implies with the investors.

As Pathak asserts that the study is conducted to observe the condition of the investors, their problems and measure taken by the listed companies, authoritative level and associated investors' organization to improve their position and the impact of such measures also on them. The investment behavior is particularly a cognitive attitude of investors and many more qualitative elements should be taken into account to evaluate investment problems related to investors. But nowhere in the study, Pathak has explained the investment behaviors (attitudes) of potential investors. Therefore studying

investor's protection in the capital market without disclosing their investment problem seems to be defective. That is what the study conducted by Pathak is found to be lacking. Thus his objective "to highlight all the protective matters needed to protect the investors" seems to be departed.

Similarly, Pathak has set out another objective of his study as analyzing the protection of the investors by empirically testing the reverent variables. He has analyzed quantitative variables such as Return On Equity (ROE), Dividend payout Ratio (DPR), Dividend Yield (DY), Retention Ratio, price-earning yield to know the position of sample companies and qualitative variables to analyze the protection of investors on the basics of responses accumulated from opinion leaders of focus group. Here the question arises that only knowing the financial status of particular company is satisfactory or unsatisfactory how it is justified that investors are protested? On the other hand, the qualitative variables are not only sufficient enough to depict a true analysis of investors' protection.

Finally, the study conducted by Pathak incorporates only the ROE, DY, Retention ratio, and price-earning yield, Since the study deals with the investors' protection in the capital market of Nepal it has nothing to do with the company's performance.

Sadakar Timilsina (1994) in his Dissertation entitled *"Dividend and stock prices: An empirical Study"* has made on attempt to provide some evidences concerning the dividends and stock covering 16 enterprises. He has set forth the objectives of his study as follows:

- To test relationship between dividend pre share and stock prices.
- To determine the impact of dividend policy on stock prices.
- To identify whether it is possible to increase the market value of stock changing dividend policy or pay out ratio.

Similarly, another study conducted by **Nava Raj Adhikari (1999)** on *"the corporate dividend practices in Nepal"* also examined the relationship between

dividend and stock. On the basis of dividend yield, dividend pay out ratio, dividend per share and earning per share analysis, he found out following results:

- The stocks with larger ratio of dividend per share to market price per share have higher liquidity.
- The stock with larger dividend per share to market price per share has lower leverage ratio.
- The study of relationship between dividend per share and profitability indicated that stocks with larger ratio of dividend per share to market price per share have higher earnings.
- The study of relationship between dividends and stock prices in the sample companies. The value of coefficient of dividends is observed to be higher for non-finance sector than for finance sector. Thus dividend pay out affects share price for finance and non-finance sector. Thus dividend pay out affects share price for finance and non-finance sector differently.

Mukti Aryal (1995) has studied stock market price behavior in the Nepalese context by taking the efficient random walk model. While going through the study conducted by him on "*the general behavior of stock market prices"*, one can have umpteenth instances of inconsistent with the research pattern. The reason behind this may be the first empirical work of this type conducted in the Nepalese context. Conceptually misinterpreted term is "to find the laws of price fluctuation in the stock market". So as far as the laws of price fluctuation is concerned, Louis Bachelier has already tested it in 1900 as random walk model. "The empirical evidence in the random walk model. "The empirical evidence in the random walk literature existed before the theory was established. The theory of efficient market hypothesis is popularly known as random- walk model. Thus the language "to find the laws of price fluctuation" seems to be inappropriate. Instead, Aryal should rather state the phrase as "to confirm the laws of price fluctuation" (whether it is random or non-random).

However, the researcher may not have the intention to deal with such an unsuitable language but mistakenly has laid emphases on the word "to find".

Discussing theoretically the movements of stock market prices as predicted by the random-walk model, developing the empirical probability distribution of successive price changes of individual common stock and a stock market as a whole and examining whether the successive price change of stock market are independent to each other or not are the objectives set out by Aryal in his study. In this respect, theoretical discussion on the movements of stock market price does not merely include the random walk model. As a part of research it can be reviewed from different approach, like the fundamental approach and technical approach. But the study keeps mum about these theories concerning stock price behavior. So far the empirical probability distribution of successive price changes is concerned, it has been computed for 21 common stocks after the arithmetic mean and standard deviation of the price change in natural log were calculated. The hypothesis of independence of the successive price changes are tested by using serial correlation analysis and run analysis. In this regard, the independence assumption can also be examined by mechanical reading rule like filter techniques, but Aryal's study lacks the dealing of such techniques and they have been sidelined, as a result of which the validity of the outcome can be questioned.

To recap, this study conducted by Aryal incorporates only the daily stock prices of 21 stocks out of 68 listed companies share for about eight month period. In order to draw inferences of the study, he applied serial correlation and run analysis and found correlation coefficient is mostly positive and departed from zero. Run tests also supported the correlation analysis.

Aryal concluded that the implication of his studies could be understood in two natures i.e. statistical and economic. He statistically opined that the characteristic feature of the stock market price movements with respect to distribution of price changes implies that the general shape is platikurtic due to

higher value of standard deviation for individual piece changes. Higher standard deviation is results of frequent price fluctuation. According to this device of measuring the risk, as he inferred, individual stock and aggregate market can be interpreted as highly risky game for investment. He further found that, the economic reason for higher values of standard deviation implies the inherent instability of market and changes in the economic environment.

Finally, he concluded that, today's price changes of an individual common stock are not unbiased and independent outcomes of yesterday's price changes of Bernoulli process.

Surya Chandra Shrestha (1996) made some criticisms on the work of Aryal stating that his study was encompassed with serious limitations. He alleged that Aryal's study did not cover the long enough study period and focus of the study was only on methodology for comprehensive test in short data series. And Shrestha conducted the research on the similar subject matter i.e. stock price behavior in Nepal" He set out the objectives of his study particularly to focus on the following propositions.

- To determine the serial correlation of the successive daily price changes of the individual stocks;
- To determine whether the sequence of price changes are consistent with the changes of the series of random numbers expected under the independent Bernoulli process;
- To determine the efficiency of the stock market through the theoretical model of efficient market hypothesis in Nepalese stock market; and
- To provide feedback policy inputs towards institutional development of efficient market.

He carried on his study taking daily closing price of 30 stocks out of all the listed securities in Nepal Stock Exchange (NEPSE) Ltd. 30 stocks as sample were drawn on the basis of higher number of transaction days for the fiscal year

1994/95.His study period covered about 4 and half years (i.e. from 1st Jan 1994 to mid July 1998). He also applied serial correlation and run analysis to test the prime hypothesis of random-walk model. Shrestha, under the auspices of presented data, facts and figure arrived at the following conclusion:

- The serial correlation coefficient of the daily price change for 1 & 2 lag days, and the runs of series of daily price changes lead to conclude that the successive price changes are not independent random variable for the 30 sample stocks listed in the stocks listed in the NEPSE. Therefore, the random walk theory is not a suitable description for the stock market price behavior in Nepal.
- The dependence in the series of price change observed implies that the price change in the future market will not be independent from the price change of previous days. It implies that the information of the price changes is helpful in predicting future price changes in a way that the speculation through technical analysis can make higher expected profit than they would be under naïve buy and hold policy (i.e. average market return)

In this way, Mr. Shrestha's conclusion of the study argues in favor of technical analysis method in predicting future price movement by studying the present & past price movements. On the other hand, once market does not attain the hypothesis of the independence of successive price changes, it indicates Nepalese stock market is not efficient even in weak sense in pricing shares. On this ground, mere help of technical analysis yields opportunities in a way to secure higher expected returns from investment on particulars stocks for investment. That's why it can be said that conclusion of Shrestha's study is one of the motivator for studying the price movement of shares applying technical analysis approach.

Similarly, focusing on the share price movement **Laxman Paudel (2001)** has also conducted the research. He on *"A study on share price movements of joint*

venture commercial banks in Nepal" has dealt with the influence of publicly available information on share price movements. He has studied the share price movements of 8 sample companies. He has set out the objective of his study is to examine how risky are the investments on commercial banks along with other objectives.

To examine the forms of EMH (Efficient Market Hypothesis) that Nepal stock exchange market comprised of, he set the prior that the Nepal stock Exchange is a weak form of market and the share price movements of sample banks randomly.

He has used the financial indicators and ratio analysis techniques to evaluate the overall financial position of sample companies. In addition to this, he has adopted statistical tools like least square equation. He has taken Market Value per share (MVPS) as independent variable and Book value per Share (BVPS) as dependent variable. Based on these analytical tools, he concluded that the ordinary least square equation of book value per share on market value per share reveals that the independent variable (i.e. BVPS). It obviously implies that Nepal Stock Exchange operates in a weak form of hypothesis, indicating that the market price of sample companies move randomly. The MVPS does not accommodate all the available historical information. In the words of Mr. Paudel, "from the study it is revealed that the publicly available information does not fully support the share price movement. Another issue in these regards is the transparency of facts and figures reflected in the financial return. In this regard, Mr. Paudel has rightly concluded that financial statement prepared by Nepalese commercial banks is yet be meet the international accounting standard.

Hari Darshan Sapkota (2005) made some criticisms on the work of Sapkota stating that his study was encompassed with serious limitations. He alleged that Sapkota's study did not cover the long enough study period and focus of the study was only on methodology for comprehensive test in short data series. The

research conducted “Stock Price Behavior of Listed Nepalese Finance Companies in Nepal”.

Bhesh Raj Sapkota (2007) in his unpublished Dissertation entitled *“Stock Price Behavior of Listed Joint Venture Banks in Nepal"* highlights how investors are safeguarded from concerned authorities, listed companies and associated investors organization and influenced to invest in the capital market for preserving the national economy. In this regard, he has stated that every thinker has to think about the future of the investors. If investors are protected, capital market is automatically protected. And if the capital market is supported from investors' side the national economy of the country will be automatically developed. No doubt, investors are protected form legal aspects, concerned authorities and listed companies, the national economy of the country will be automatically developed. For the development of economy the roles of other variables cannot be underestimated. Furthermore, even investors are protected if they lack the knowledge regarding the stock investment decision and market price behavior of stocks, it obviously does not help to boost up national economy. He set out the objectives of his study particularly to focus on the following propositions.

e. To measure the performance of selected Joint Venture Banks using appropriate indicators.
f. To analyze the trend of market prices and behavior of the stock market performing to the selected Banks.
g. To correlate and analyze the stock price behavior and performance.
h. To provide necessary suggestions for the improvement of stock price behavior.

2.3 Research Gap

There have been several researches done before in the topic Stock Market and Stock Market Prices. All of those researches have many useful findings and their own limitations.

Study on the behavior of stock market was only started from Mr. Pradhan in 1993. But, at that time the capital market in Nepal was very small. Mr. Aryal conducted a study in 1995 in Share Price Behavior based on 21 sample stocks. The time period was only eight months from the beginning day of organized Stock Market for eight months period. Now it is out of date. Till date market has experienced many ups and downs. Likewise, in 1997 Mr. Timilsina has conducted research on dividend and stock price and the study was carried out by the data for 16 enterprises from 1990 to 1994. On his study he used the equation model as developed by Friend and Puckett (1964), which was out of dated. Mr. Timilsina's study was based on 45 observations. The number of companies included in the sample was only 16 which were quite low. Studied on dividend conducted in the context of Nepal are based on secondary data only.

In 1997, Mr. Bhatta has conducted research on the topic Dynamics of Stock Market in Nepal. He only used secondary data and also unable to test with the suitable hypothesis with the recent phenomenon. In 1999, Mr. Shrestha carried out a study based on the data of randomly selected 30 stocks out of all listed securities mostly started from the commencing day of organized trading system on NEPSE. His study covers the period from 13th January 1994 to Mid July 1998. However, his study implies technical concept but not emphasis has been given on fundamentalism. His study remains silent to say whether the trading with the help of past information could earn profit in both bull and bear market.

In 2002, Mr. Dahal has conducted a research on Stock Market Behavior of listed joint stock companies in Nepal. He showed the monthly trend analysis of listed companies but unable to show the annual trend analysis. He also used t-test for King's visit to U.S. and PM's visit to India. It is thought that the visit of King and PM doesn't effect in Nepalese Stock Market. Likewise, in 2003 Mr. Paudel studied in the listed joint venture commercial banks in NEPSE and only took eight joint venture commercial banks as sample which was quite low and his study is confined to the technical approach. As in 2003, Mr. Baral conducted a research on stock price movement in Nepalese Securities Market

and he only uses the t-test of past data & he was unable to test with the recent phenomenon of that time. Thus, the current study us a supplement to overcome the weakness and limitations of previous studies.

These researches are helpful in different areas. The findings of previous researches are equally important. The main focus of the research will be to analyze the performance, growth and downfalls of the Stock Market. This will help to analyze whether the Stock Market is in increasing trend or in decreasing trend. By analyzing these aspects, focuses can be set on the weakness. So, that in future these weakness can be turned into the strength of the Stock Market. This will help to make the existence of the Stock Market more robust. Further more, by being able to point out the weakness, more investors can be made to contribute for the growth of Stock Market.

CHAPTER - III
RESEARCH METHODOLOGY

The purpose of this chapter is to discuss the research methodology such as research design, population and sample, data collection techniques, and analytical tools of the research study. It is widely accepted that research is simply the process of arriving at dependable solution to problems through the planned and systematic connection, analysis and interpretation of data. It is most important tool for advancement of knowledge and accomplishment of purposes. Thus research methodology is a way to solve systematically the research problem. It may be understood as science of studying how research is done scientifically. Research methodology, as a vital part of research study, describes the various sequential steps to be adopted by researcher in studying research problem along with the logic behind them (Kothari, 1990:89).

In order to draw inferences on security analysis especially through the technical analysis approach in Nepal Stock Exchange, the different measures have been adopted while collecting and interpretation the relevant data, facts and figures. With a view to systematize data collection and data interpretation, the simple statistical tools; however not sophisticated; have been used here. For our purpose the following steps provide useful procedural guidelines so for as Research Methodology is concerned (Pradhan, 1994:45).

3.1 Research Design

A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, research design is the plan, structure and strategy of investigation so as to obtain answer of the research question and to control the variance.

This study evaluates the share price behavior of joint ventures Banks in Nepal. It covers the data from the year 2002/03 to 2006/07. To accomplish the objective adopted the descriptive Vs analytical type of research design. Descriptive approach is utilized for conceptualization, problem identification, conclusion and recommendation of the research. On the other hand, analytical approach is adopted for the parametric and non-parametric test of the data. It described analyze all these facts that collected for the purpose of the study.

3.2 Nature and Sources of Data

This study based on the companies listed in the Nepal Stock Exchange. The population is all the listed companies. So the trading of this bank shares has not been lasted for more years. Therefore, we exclude this bank for our analysis purpose and only the following six companies have been considered as so far:

1. Standard Chartered Bank Limited.
2. Himalayan Bank Limited.
3. NABIL Bank Limited.
4. Everest Bank Limited.

3.3 Data Collection Procedure

In order to make the study more reliable and coherent both primary and secondary sources have been applied here while collecting data, facts and statistics. The primary sources were the descriptive, possibly subjective responses from the targeted groups or personnel regarding the prevailing practices about investment decision-making procedure. Thus the data collection from primary source was proved to be cumbersome and insufficient too. Due to this very reason, this study is mainly based on secondary data. The main sources of secondary data are monthly and annual reading reports, official records, and other relevant publications of Nepal Stock Exchange and Security Board of Nepal. From these sources the relevant historical data regarding the

market price, trading volumes and market index of share price are gathered for analysis purpose.

3.4 Data Processing Procedure

Data has been processed in such a manner that make clear picture about the position and condition of the finance companies.

According to the nature of data they are inserted in a systematic manner. They are scored in the tables, from the collected data for the five years, which have been shown in the annexes clearly.

3.5 Data Analysis Procedure

The main important task of researcher to analyze the data, which can fulfill the objective of the research, is to determine the impact of share price behavior of the six sampled companies it is divided into three ways:

i. Performance of the Companies
ii. Market Performance
iii. Overall Market Indicators

To find out and to achieve the objectives financial parameters are taken to solve it. For the convenience of data analysis SPSS software programmers is used. Ratio analysis is done for five individual sample companies and for the total performance Altman's Zeta model is used for the analysis of the data.

3.6 Method of Data Analysis

The main objective of this study is to know about the share price behavior of finance companies. To fulfill the objectives the researcher has used statistical tools for analyzing the data. The following financial and statistical tools have been used for the analysis of the secondary data.

3.6.1 Financial Tools

The following financial tools are used in this study:

i. Earning Per Share

Calculation made over years indicates whether or not the firm's earning power on per share basis has changed over that period.

EPS = Earning per share measure the profit available to the equity shareholders on per share basis.

ii. Dividend Payout Ratio

The dividend payout ratio (or simply payout ratio) is DPS (or total dividends dividend by EPs or profit after tax.

$$\text{Payout ratio} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

iii. Dividend Per Share

The net profit after taxes belong to shareholders. But the income, which they really receive, is the amount of earnings distributed as cash dividend.

$$\text{DPS} = \frac{\text{Earning Paid to Shareholders}}{\text{No. of Equity Shares Outstanding}}$$

3.6.2 Statistical Tools

Besides the financial tools, various statistical tools have been used to conduct this study. The result of analysis has been properly tabulated, compared, analyzed and interpreted. In this study, the following statistical tools are used to analyze the relationship between MVS and other variables.

i. Arithmetic Mean or Average ($\bar{X}$)

An average is the value, which represents a group of values. It depicts the characteristic of the whole group. It is an envoy of the entire mass of homogeneous data. Generally the average value lies some where in between the two extremes, i.e. the largest and smallest items. It is calculated as follows:

Arithmetic Mean ($\bar{X}$) = $\frac{x_1 \Gamma x_2 \Gamma x_3 ..... \Gamma x_n}{N}$

Or, ($\bar{X}$) = $\frac{x}{N}$

Where,

ε = Sum of the sized of the items

N = Number of items

ii. Standard Deviation (±)

Karl Pearson first introduced the concept of standard deviation. Standard deviation is the positive square root of the arithmetic average of the square of all the deviation measured from the arithmetic average of the series. The standard deviations measure the absolute dispersion of a distribution. The greater the amount of dispersion the greater the standard deviation, i.e. greater will be the magnitude of the deviation of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series. It is calculated as follows:

$$\sigma = \sqrt{\frac{\int X Z \bar{X} A^2}{n Z 1}}$$

iii. Coefficient of variation (C.V.)

It is the measurement of the relative dispersion developed by Karl Pearson. It is used to compare the variability of two or more series. The series with higher coefficient of variation is said to be more variable, less consistent, less uniform,

less stable and less homogenous. On the contrary the serious with les coefficient of variation is said to be less variable, more consistent, more uniform, more stable and more homogenous. It is denoted by C.V. and is obtained by dividend the standard by arithmetic means. Thus,

$$C.V = \frac{\sigma}{\bar{X}} \quad \text{i.e. } C.V. = \frac{\text{Standard Deviation}}{\text{Mean}}$$

iv. Regression Analysis

Regression is the measure of the average relationship between two or more variables in terms of the original units of the data. The functional relationship between the variables that is, to study the function relationship between the variables and there by provide a mechanism for prediction or forecasting.

In this research regression analysis is used only to functional relationship between market price of share and various independent variable.

Following regression equations have been developed and tested in the study:

$MVS = a + b_z + \Uparrow$

MVS = Market Value of Share

Z = Z value

$\Uparrow$ = Error term

Regression Constant (a)

The regression constant 'a' represents the average level of dependent variable when the independent variable has a value of zero. In other words, it is the intercept if the regression model. It indicates average effect on dependent variable if all the variables are omitted from the model.

Regression Coefficients (b)

"The regression coefficient 'b' which is the slope of the regression line represents the increment in the value of dependent variable for a unit change in the value of independent variable. In the words it represent the rate of change of dependent variable with respect to independent variable"

Standard Error of Estimate (SEE)

"Perfect prediction with the help of regression equation, is practically impossible standard error of estimate measures the variability or scatter of the observed values of 'y' around the regression line". If SEE has a value of zero this indicates that there is no variation and perfect estimation of dependent variable has been achieved. Moreover, zero value of SEE implies that there is perfect correlation between the variables.

T-Test Statistics

Test of significance for the regression coefficients.
In fitting regression equation of dependent variable y on independent variable x,

$Y = a + b_x$

To measure the reliability of the estimating equation standard error of estimate is obtained.
Set null hypothesis H_o: The significance level of regression does exist.
Alternative hypothesis H_1: The significance level of regression doesn't exist.

d.f.v = n-k-1 (k) = The independent variable number
= n-1-1
= n-2
v = n-2

$$t = \frac{\hat{b}\, Zo}{\text{s.e. of the coefficient}}$$

Decision Rule

If $t_{cal} < t_{tab}$, H_o is accepted that means the regression coefficient is insignificant.

If $t_{cal} < t_{tab}$, H_o is rejected which means the regression coefficient is significantly different than zero.

F-test Statistics (test of regression coefficient of regression model)

The significance of multiple correlation coefficient can be tested by testing for the over all significance of the regression process by analysis of variance. F-distribution is applied in testing (i) the equality of population variance (ii) the equality of several population means (iii) the significance of an observed sample correlation and (iv) the linearity of regression.

There is assumes that there is no relationship between the dependent variable and independent variable, taken collectively.

The following steps can be used to test whether the regression model is significant or not.

The Coefficient of Determination

"Coefficient of determination is the ratio of explained variation to total variation in the Y variable related to the X-variable. It is much useful and better measurement for interpreting the value of r" R2 can be obtained easily by squaring the correlation coefficient 'r'. R2 is always a positive number and its value lies between 0 and 1.

ix. Formulation of Hypothesis

Null hypothesis H_o: The regression level does exist.

Alternative hypothesis H_1: The regression level doesn't exist.

F-statistics

F test for the test of significance of regression coefficient is given by

$$F = \frac{\text{Regression}}{\text{Residual Variance}}$$

Degree of freedom = N-1, N= number of observation of sample size.

Decision

If calculated value of F is less than its critical (or tabulated value) null hypothesis H_o is accepted otherwise H1 is accepted.

Application of SPSS Programming

A computer program called statistical program for Social Sciences has been applied in this research. Since this is the age of computers, so, for the research work computers are extremely useful for the routine processing of large quantity of data.

SPSS is an extremely useful package to calculate descriptive statistics.

Z-Score Model

Altman employed multiple discriminate analysis to predict corporate (failure) bankruptcy, using various financial ratios.

$Z = 1.2x_1+1.4x_2+3.3x_3+0.6x_4+1.0x_5$

x_1= working capital to total assets

x_2= cumulative retained earnings to total assets

x_3= earnings before interest and taxes to total asset

x_4= market value of equity to book value of total liabilities

x_5= sales to total assets

This model is used by the researcher to represents the condition of the sampled finance companies and to know the future conditions.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

This chapter is the major part of the study and holds the most important pace in the whole of the project research. The first section of this chapter presents the introduction of the five selected sample joint venture banks of Nepal. This section deals with the collaboration of the data on using various statistical and financial tools, regression model with computer software SPSS and Beta model. In this chapter collected and essential data were analyzed to draw the conclusions regarding the stock price behaviour of five sample Banks in Nepal vis-à-vis various performance indicators. In this chapter, data is presented and analyzed in the following three sub-headings.

- Measurement of performance of the joint venture Banks.
- Analysis of market performance of the joint venture Banks.
- Overall performance of the sampled banks and collecting with market performance.

4.1 Performance of Sampled Joint Venture Banks

4.1.1 Profitability

This ratio represents the profitability of the company it represents the profitability ratio comments on the adequacy of profit in terms of the fund employed to produce profit from which the profit had been made. Profitability is calculated following formula:

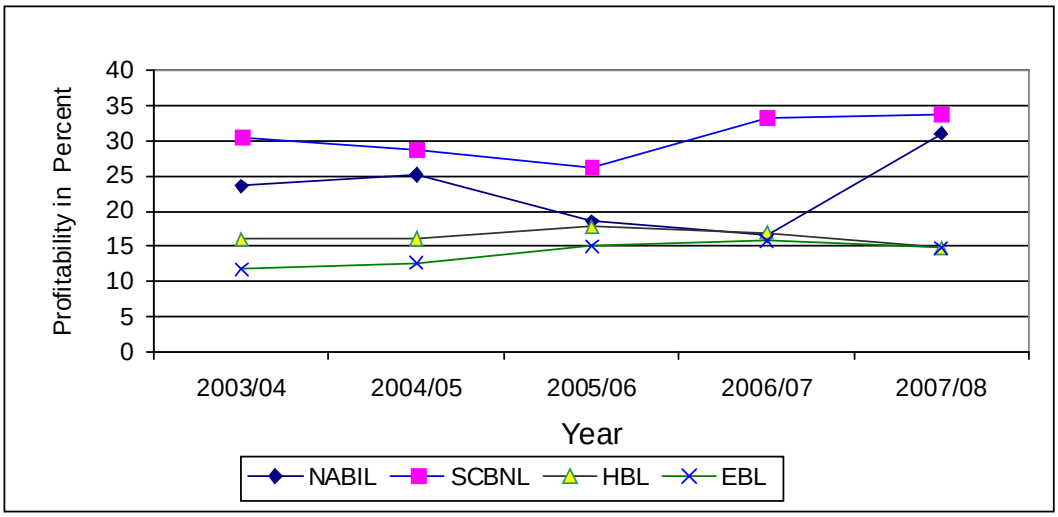
$$\text{Profitability} = \frac{\text{EAT}}{\text{Total Income}} \mid 100\%$$

Table 4.1: Profitability of the Sampled Banks

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	23.60	30.45	15.99	11.71
2004/05	25.14	28.72	16.07	12.67
2005/06	18.52	26.27	17.85	15.02
2006/07	16.57	33.24	16.94	15.81
2007/08	31.05	33.82	14.69	14.85

Source: Annual Report of Sampled Companies

Figure 4.1: Profitability of the Sampled Banks



Firstly, according to the calculation of profitability, **NABIL** profitability ratio is found to being fluctuating manner. Since the Fiscal Year 2003/04 and 2004/05 it was found at 23.60 and 25.14 (increasing trend respectively but in the fiscal year 2005/06, 2006/07 it was found at 18.52 and 16.57 in the declining manner, and in the fiscal year 2007/08 it has reached 31.05%. It can be concluded that the performance of NABIL Banks was Satisfactory in the recent fiscal year.

The second sampled Bank is **SCBNL**. Looking at the five years trend of the SCBNL since the fiscal year 2003/04 it seem to be slightly increasing indicating that the performance is satisfactory. But in the fiscal year 2002/03 and 2005/06 it was found at 28.72% and 26.27% in the declining manner. But after this fiscal year its ratio was found in a increasing trend. So, its performance in the recent year is satisfactory and according to the calculated value its ratio was found higher than other four-sampled company. So, it can be

concluded that the performance of the SCBNL was found to be the best compared to other four sampled Banks during the study period.

Thirdly, the **HBL** trend since 2003/04, 2004/05 and 2005/06 it was found at 15.99%, 16.07%, 17.85% in the increasing trend. But in the fiscal year 2006/07 and 2007/08 it was found at 16.94% and 14.69% in the declining manner. So, its performance in the recent year is slightly unsatisfactory.

Fourthly, **EBL** trend was found to be increasing trend. Since the fiscal year 2003/04, 2004/05, 2005/06 and 2006/07 was fond at 11.71%, 12.67%, 15.02%, 15.81% respectively in the increasing trend but in the fiscal year 2007/08 it was slightly decreased. So, EBL's performance was satisfactory.

So, in the end, it can say that by looking at the after all four sampled banks, SCBNL and NABIL banks performance was found to be better than other three sampled banks.

4.1.2 Earning Per Share

Earning Per Share is one of the ways of measuring the profitability of the common shareholder investment. It can be calculated by dividing net profit by total number of common share outstanding.

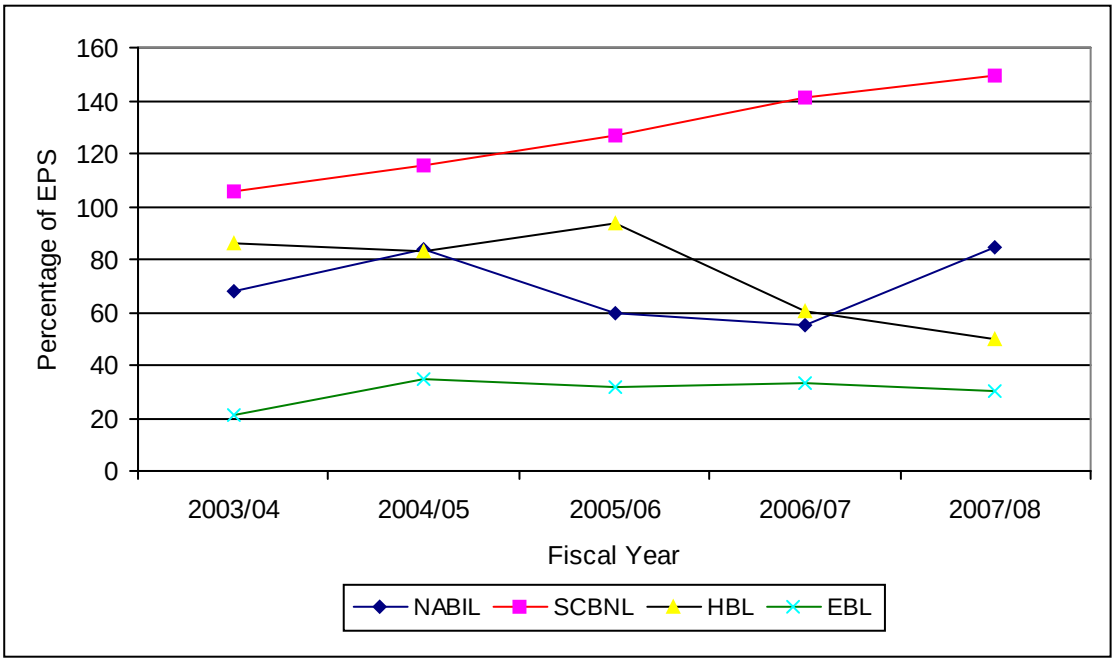
$$\text{Earning Per Share} = \frac{\text{Net profit after Z Preference Dividend}}{\text{No of Common Share Outstanding}}$$

Table 4.2: Earning Per Share

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	67.84	105.86	86.07	21.31
2004/05	83.79	115.62	83.08	34.85
2005/06	59.26	126.88	93.56	31.56
2006/07	55.25	141.13	60.26	32.91
2007/08	84.66	149.30	49.45	29.90
Mean	70.16	127.758	74.484	30.106
S.D.	13.6247	17.822	18.715	5.2415
C.V.	0.1942	0.1395	0.2513	1.742

Source: Annual Report of Sampled Banks

Figure 4.2: Earning Per Share



EPS of NABIL

EPS of NABIL has been fluctuating manner. EPS was 67.84 percent in the fiscal year 2003/04 than it was increased i.e. 83.79%, which shows better performance of the bank. But it was declined in the fiscal year 2005/06 and 2006/07 i.e., 59.26% and 55.25%. In the fiscal year 2007/08 its value was found 84.66, which shows better performance in the recent fiscal year.

EPS of SCBNL

Secondly, glancing at the EPS of the SCBNL, its trend since the fiscal year 2003/04 to 2007/08 (Whole study period) was found increasing trend. i.e., 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 was 105.86, 115.52%, 141.13% and 149.30% respectively. According to the comparison of the performance of the selective five sampled banks, SCBNL EPS was found to be higher than other companies. So, its performance on the basis of EPS is better than other four sampled Banks.

EPS of HBL

Thirdly, EPS of HBL was found fluctuating manner. In the fiscal year 2003/04 and 2004/05 was found 86.07 and 83.08 percent declined trend. But in the fiscal year 2005/06 its value was found 93.56 percent. So, in that fiscal year HBL's performance in terms of EPS was better. But it was found declined in the last two years i.e., 60.26 percent, and 49.45 percent. So, EPS of HBL is unsatisfactory.

EPS of EBL

According to above calculation EPS of EBL was found fluctuating manner. In the fiscal year 2003/04and 2004/05 was found 21.31 percent and 34.85 percent increasing trend. But in the fiscal year 2005/06 is value was found slightly decreased i.e. 31.56 percent. Again in the fiscal year 2006/07 it was found slightly increased. But in fiscal year it was decreased slightly i.e. 29.90. So, performance of EBL is not satisfactory.

4.1.3 Dividend Per Share

The amount of earning distributed and paid as cash dividend is consider for calculating the dividend per share. The objective of computing this ratio is to measure the profitability of the firm on the dividend per equity share basis.

Dividend per share is calculated by dividing earning paid to share holders by number of common share outstanding. All the interested investors are attracted towards the dividend so they like to know about the dividend paid by the companies.

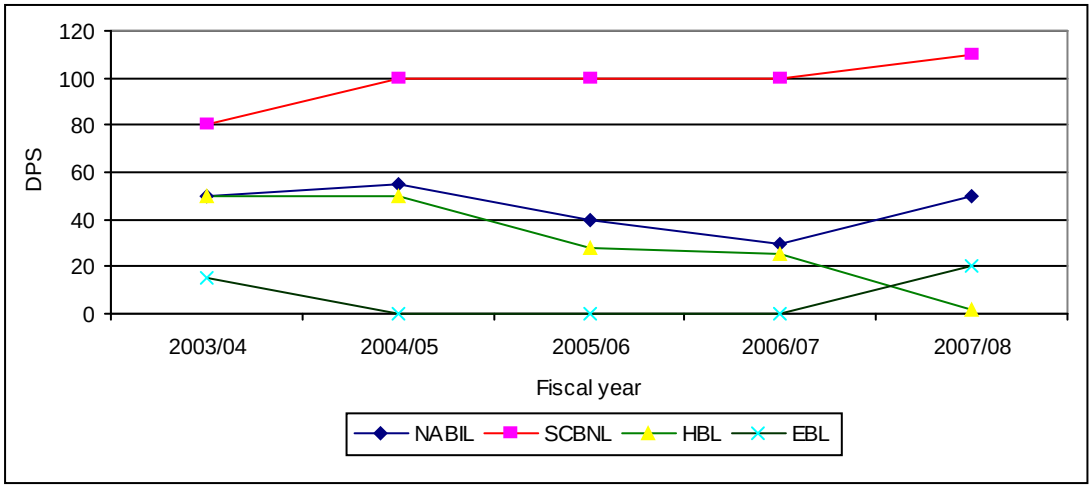
$$\text{DPS} = \frac{\text{Dividend}}{\text{No. of Shareholders}}$$

Table 4.3: Dividend Per Share

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	50.00	80.00	50.00	15.00
2004/05	55.00	100.00	50.00	0.00
2005/06	40.00	100.00	27.50	0.00
2006/07	30.00	100.00	25.00	0.00
2007/08	50.00	110.00	1.31	20.00
Mean	45	98	30.76	7
S.D.	10	10.96	20.32	9.7468
C.V.	0.222	0.112	0.6606	1.39

Source: Annual Report of Sample Banks

Figure 4.3: Dividend Per Share



DPS of NABIL

Looking at the calculated value of the **NABIL** during the Five years trend, it was found fluctuating manner. Since, Fiscal Year 2003/04 and 2004/05 was found 50.00 percent and 55.00 percent increasing trend. But in the Fiscal Year 2005/06 and 2006/07 it was found 40.00 percent and 30.00 percent decreasing trend. But in the fiscal year 2007/08 it was again reached to 50 percent. So, according to above calculation NABIL Banks performance was better than other three sampled Banks i.e., HBL and EBL.

DPS of SCBNL

According to above calculation SCBNL has better performance than other four banks. Its DPS was increasing trend during study period. In the fiscal year

2003/04 it was found 80.00 %, which has been reached 110% in the fiscal year 2007/08 which value was higher value than other four sample banks.

DPS of HBL

HBL's DPS ratio was decreasing trend. In the fiscal year 2003/04 it was found 50% but it was found 1.31 in the fiscal year 2007/08. So, it can be said that performance of HBL on the basis of DPS was found to be poor.

It can be concluded that SCBNL Bank's performance was found to be better on the basis of DPS and NABIL Bank's performance was satisfactory during study period.

4.1.4 Dividend Payout

The ratio measures the relationship between the earning belonging to the ordinary shareholders and dividend paid to them. It shows the ratio percentage between the net profit after the taxed and preference dividend and dividend paid to the equity shareholders.

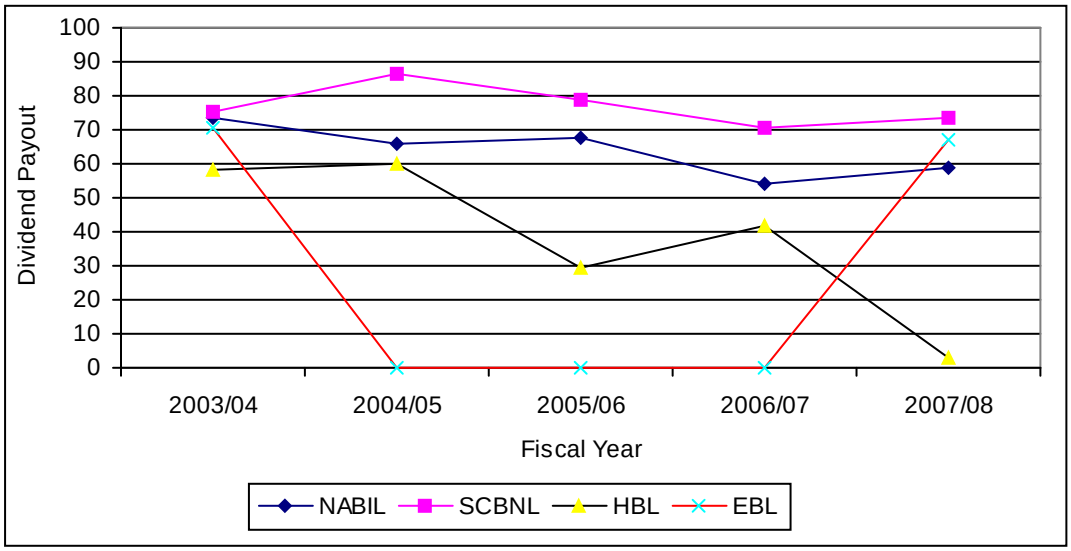
$$\text{Payout ratio} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

Table 4.4: Dividend Payout of Sample Banks

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	73.70	75.57	58.09	70.36
2004/05	65.64	86.49	60.19	0.00
2005/06	67.49	78.81	29.39	0.00
2006/07	54.30	70.86	41.49	0.00
2007/08	59.06	73.68	2.66	66.90
Mean	64.038	77.08	38.36	27.45
S.D.	7.54	6.00	23.615	37.61
C.V.	0.1177	0.0779	0.6156	1.370

Source: Annual Report of sample Banks

Figure 4.4: Dividend Payout of Sample Banks



Glancing at the **NABIL**, its trend was found to be a fluctuating manner. Since fiscal year 2003/04 to 2007/08 it was found 73.70%, 65.64%, 67.49%, 54.30%, 59.06% fluctuating manner. So, its performance during the fiscal year was satisfactory.

Secondly, working at the value of **SCBNL** its trend was found to be in also fluctuating manner. Since the fiscal year 2003/04to 2007/08, performance ratio of **SCBNL** is fluctuating trend. So, its performance ratio of **SCBNL** is fluctuating trend. So, its performance during the fiscal year was satisfactory.

Thirdly, Dividend payout ratio of **HBL** trend was found in a fluctuating manner. Since, the fiscal year 2003/04 and 2004/05 it was found 58.09%, 60.19% increasing trend. In the fiscal year 2005/06 and 2006/07 was found 29.39% and 41.49% increasing trend but in fiscal year 2007/08 was found 2.66%. So, performance in Dividend payout of **HBL** is not satisfactory.

Fourthly, in respect of **EBL**, in the fiscal year 2003/04 was found 70.36%. But after this fiscal year 2003/04 to 2006/07 its value is not given (available) and in the fiscal year 2007/08 was found 66.90%. So, it doesn't have regular trend. So, it cannot be said better on the basis of dividend payout ratio.

In the conclusion, it can be concluded that NABIL and SCBNL's performance was found to be better than other sampled Banks.

4.1.5 Growth in Net Profit of Sampled Banks

As far as Growth rate is concerned, other things remaining the same, faster-growing firm must relay more heavily on external capital. Thus, rapidly growing firms tend to use somewhat more debt then slower growing companies. Growth ratios measure how well the firm is maintaining its economic position in its industry.

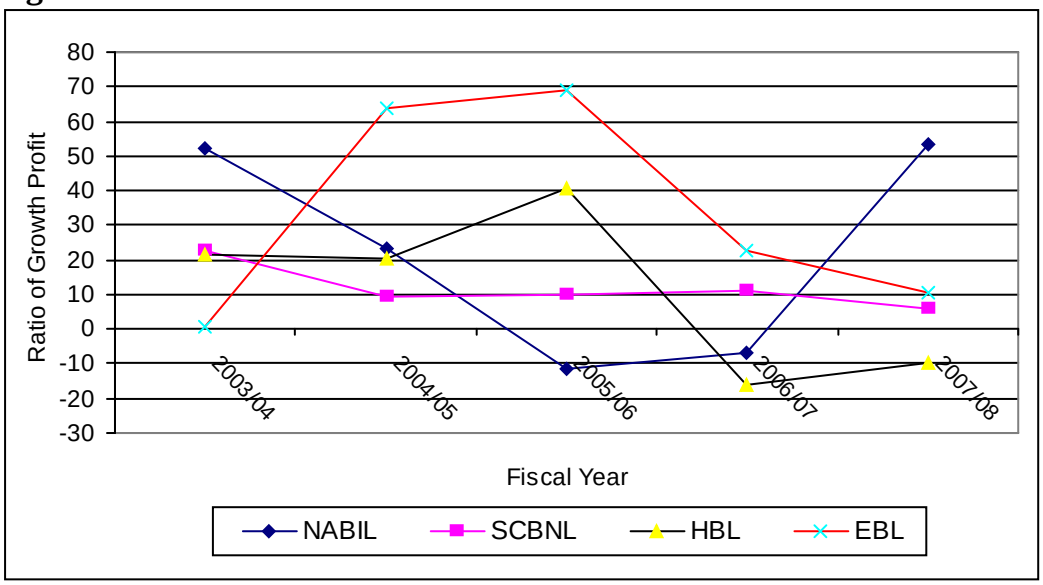
Table 4.5: Growth in Net Profit

(In Percent)

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	52.45	22.94	21.53	0.839
2004/05	23.51	9.22	20.65	63.51
2005/06	(11.47)	9.74	40.78	68.89
2006/07	(6.77)	11.23	(16.27)	22.43
2007/08	53.24	5.79	(9.74)	10.36

Source: Annual Report of sample Banks

Figure 4.5: Growth in Net Profit



While looking at the performance on the basis of growth in the net profit of **NABIL** its trend was found in a fluctuating manner. Since, fiscal year 2003/04 to 2005/06 its value has decreased in the negative value i.e. 52.45% to – 6.77%.

As in the fiscal year 2007/08 its value was found to positive. But while looking at the trend of the five years NABIL performance on the basis of growth in the net profit seemed to be not satisfactory (poor).

Again looking at the trend of the growth in NP of the **SCBNL** in the fiscal year 2003/04 to 2007/08 was found to be decreasing trend i.e. 22.94%, 9.22%, 9.74%, 11.23%, and 5.79%. Although looking trend of other banks it has positive performance. So, SCBNL performance is satisfactory compared to others.

Thirdly, **HBL** trend of growth in net profit from the fiscal year, 2003/04 to 2005/06 was found positive trend i.e. 21.53%, 20.65% and 4.78%, which represents satisfactory performance during fiscal period. But after these years 2006/07 and 2007/08, its value found to be negative. So, its performance for these two years can be said to be poor on the basis of the Net Profit growth ratio.

Fourthly, looking at the trend of growth in N.P. of the **EBL** in the fiscal year 2003/04 to 2007/08 was found positive i.e. 8.39%, 63.51%, 68.89%, 22.43% and 10.36% respectively. Although it was decreasing trend in Growth in Net profit but it was better performance then other four Banks.

In the conclusion, it can be concluded that EBL & SCBNL has better performance in terms of Growth in Net Profit than other sampled Banks

4.1.6 Lending/Deposit Ratio

Joint venture Bank is that institution which receives the saving from the public the usually in fixed deposit to pay some rate of interest, therefore, it draws money from the people who do not use it at the time and lend it to those who are in position to use in productive use.

So, it is a significant task of a company to utilize the deposit in proper way where it can earn more profit without the proper utilization of deposit.

While looking at the performance of the Joint Venture Banks it has been calculated the lending/deposit ratio to find out the performance of the sample company during the five years study period.

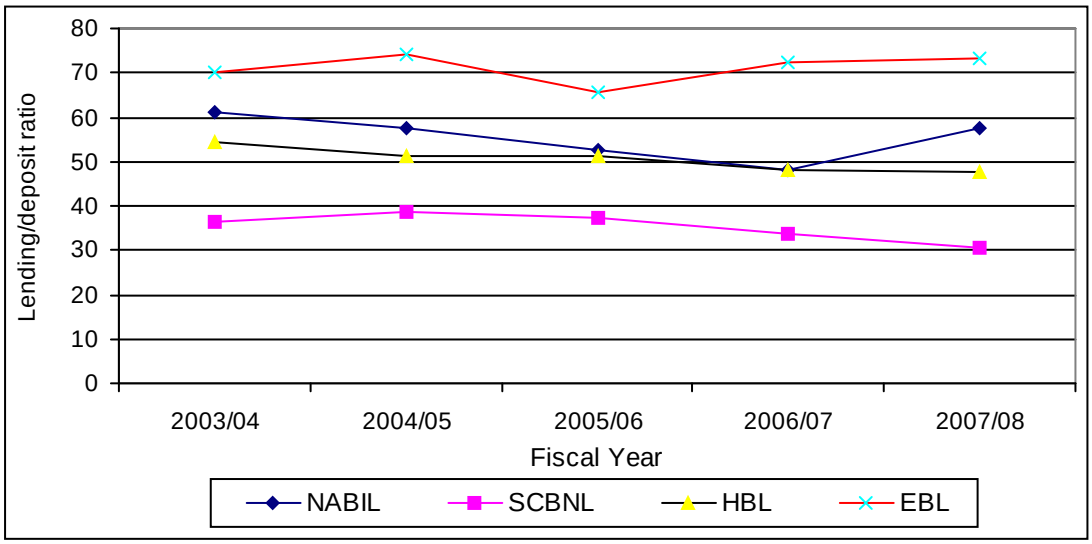
Table 4.6: Lending/Deposit Ratio

(In Percent)

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	61.17	36.47	54.31	70.03
2004/05	57.39	38.65	51.45	74.25
2005/06	52.56	37.35	51.42	65.71
2006/07	47.97	33.87	47.87	72.23
2007/08	57.68	30.37	47.61	73.32

Source: Annual Report of sampled Banks

Figure 4.6: Lending/Deposit Ratio



While looking at the **NABIL** C/D ratio it was found that in the fiscal year 2003/04 to fiscal year 2006/07 decreasing (declining) trend i.e. 61.17%, 57.39%, 52.56%, and 47.97% respectively, but in the fiscal year 2007/08 it was reached 57.68%, which shows better performance in that fiscal year.

Again, according to the above calculation of the C/D ratio, of the **SCBNL** was found to be slightly fluctuating. During the fiscal year 2005/06, and 2006/08 it

was found 37.35%, 33.87% and 30.37% declining manner, which shows in the recent years its value was showed found to be under utilization of resources.

Thirdly, **HBL** C/D ratio was found to be declining manner i.e. 54.31%, 51.14%, 47.87% and 47.61%. It indicates that the performance of the HBL was found to be unsatisfactory.

Fourthly, **EBL** C/D ratio trend was found in a fluctuating manner. During fiscal year 2003/04 and 2004/05 it was found 70.03% and 74.25% increasing trend, which indicated better performance of the Bank. But in the fiscal year 2006/07 and 2007/08 is 72.33% and 73.32% increasing trend. Above calculation shows better performance of the Bank than other sampled Banks.

4.1.7 Total Assets Turnover

Total assets turn over reflects the efficiency of management of investments in each of the individual asset items. The total assets turn over is a good summary measure of the efficiency of investments in all categories of assets.

The financial analyze relates total assets to obtain the assets turnover ratio. Higher the turnover ratio it is considered to best performance of the five sampled companies. In other words, it considered that utilization of resources by the sampled company appropriately.

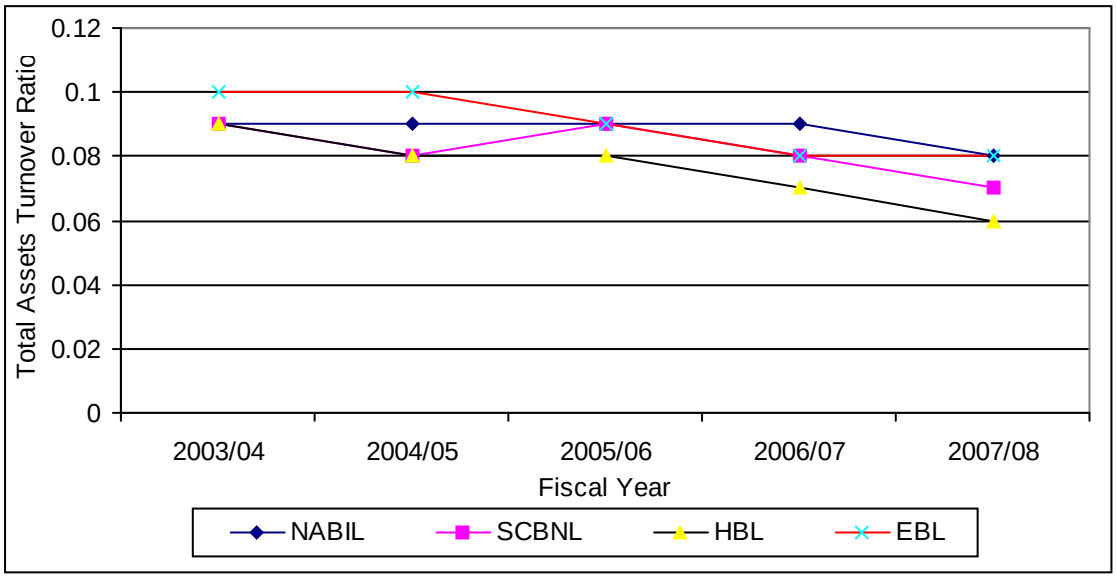
$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

Table 4.7: Total Assets Turnover

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	0.09	0.09	0.09	0.10
2004/05	0.09	0.08	0.08	0.10
2005/06	0.09	0.09	0.08	0.09
2006/07	0.09	0.08	0.07	0.08
2007/08	0.08	0.07	0.06	0.08

Source: Annual Report of Sample Banks.

Figure 4.7: Total Assets Turnover



Revenue to total asset ratio of **NABIL** was found constant in the fiscal year 2003/04 to 2005/07 i.e. 0.09. Then in the fiscal year 2007/08 it was found 0.08, which indicated the resource are not properly used.

Secondly, **SCBNL** according to the calculated value of revenue to total assets its value has decreased trend. Since, the fiscal year 2003/04 to 2007/08 i.e. 0.09, 0.08, 0.09, 0.08, and 0.07, which indicated that the performance of the company was in efficient.

Thirdly, **HBL** sales to total assets ratio trend was found in a decreasing trend since the fiscal year 2003/04 in its ratio was 0.09 fluctuated to 0.08, 0.08, 0.07 and 0.06 to the fiscal year 2004/05, 2005/06, 2006/07 and 2007/08. So, it can be said that the utilization of resources during the study period was not proper.

Fourthly, **EBL's** ratio was found to be better in the fiscal year 2003/04 and 2004/05 i.e., 0.10, 0.10 but in the last three fiscal years 2005/06, 2006/07 and 2007/08it was found decreasing trend i.e. 0.09, 0.08 respectively. So, its ratio is better than other then previous three sampled banks.

4.2 Market Performance

4.2.1 Market Capitalization

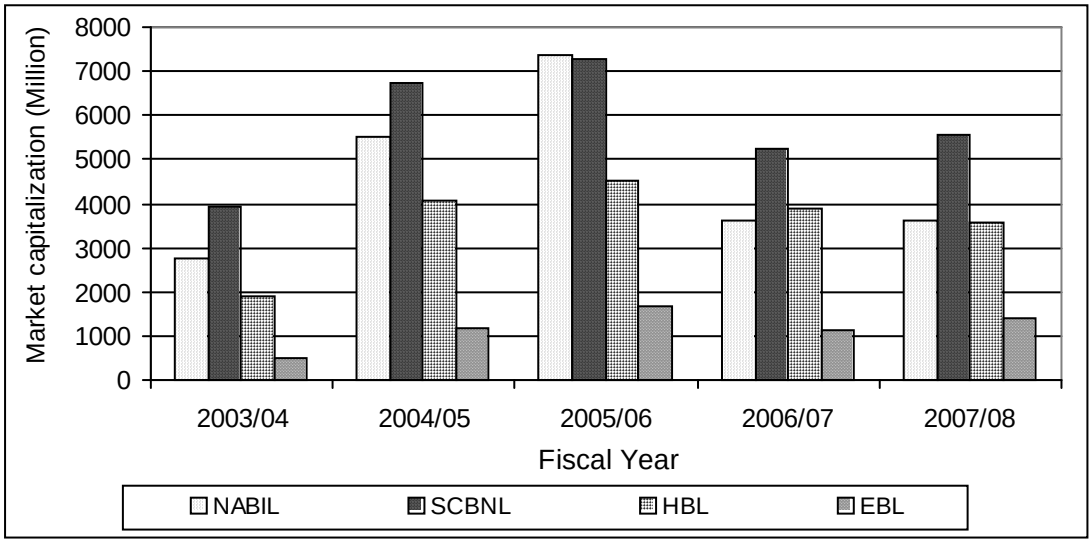
One of the major data of this study is market price of stock. Three price records are available (i.e. high, low and closing price of each year). So, to approach, either average price high and low or closing price can be used main argument of average price may be, it represents the price of whole year. But to get the real average volume and price of transportation in the whole year are essential. It is difficult to obtain and include these all information. Hence, the closing price used as market price of stock will have a specific time span of one year and the study focused in annual basis.

Table 4.8: Market Capitalization of Sampled Banks (in Million)

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	2749.60	3945.57	1920.00	482.01
2004/05	5499.20	6740.07	4080.00	1160.45
2005/06	7374.75	7279.95	4500.00	1656.45
2006/07	3613.63	5263.03	3900.00	1115.08
2007/08	3613.63	5568.62	3586.44	1401.75

Source: Annual Report of Sample Banks

Figure 4.8: Market Capitalization of Sampled Banks



According to above table **NABIL** since the fiscal year 2003/04 to 2005/06 it has found an increasing trend of the market capitalization, i.e., Rs. 2749.60 million to Rs. 7374.75 million. So, it indicated that market performance of the NABIL for the fiscal year 2003/04 was found to be sound. But after the fiscal year 2005/06 its value was found in the decreased manner i.e. Rs. 3613.63 million. So, its performance has found to be decreased during these study periods.

Secondly, **SCBNL** trend of the Market value of share from the fiscal year 2003/04 to 2005/06 found to be increased manner. So, its value Rs. 3945.57 million, 6740.07 million, Rs. 7279.95 million which represent higher value of share than other four sampled Banks. But after the fiscal year 2005/06 it decreased i.e., Rs. 5263.03 million and 5568.62 million. It represent that the market performance during these period found slightly decreased.

Thirdly, **HBL** market capitalization was 2003/04 to 2005/06 i.e., 1920.00 million, 4080 million and Rs. 4500.00 million. But in the fiscal year 2006/07 to 2007/08 its value represent decreased trend i.e., Rest 3900.00 million and 3586.44 million. During the period HBL performance found slightly decrease.

Market capitalization of the **EBL** in the fiscal year 2003/04 to 2005/06 it was found increased trend i.e., 482.01 to 1656.45 million. But in the fiscal year 2006/07 it was found 1115.08 decreased and in the fiscal year 2007/08 its value again reached to Rs. 1401.75 million. So, it shows Market capitalization of the EBL was found better in recent fiscal period. But in terms of other banks its performance is not satisfactory.

The reason for decreasing trend of market capitalization might be due to position of the Bank or due to economic situation of the country.

In the conclusion it can be said that market performance of the SCBNL was found to be better.

4.2.2 Dividend Yield

This ratio is closely related to EPS and DPS. It expresses in terms of the Market value per share the dividend yield for a stock relates the annual dividend to share price.

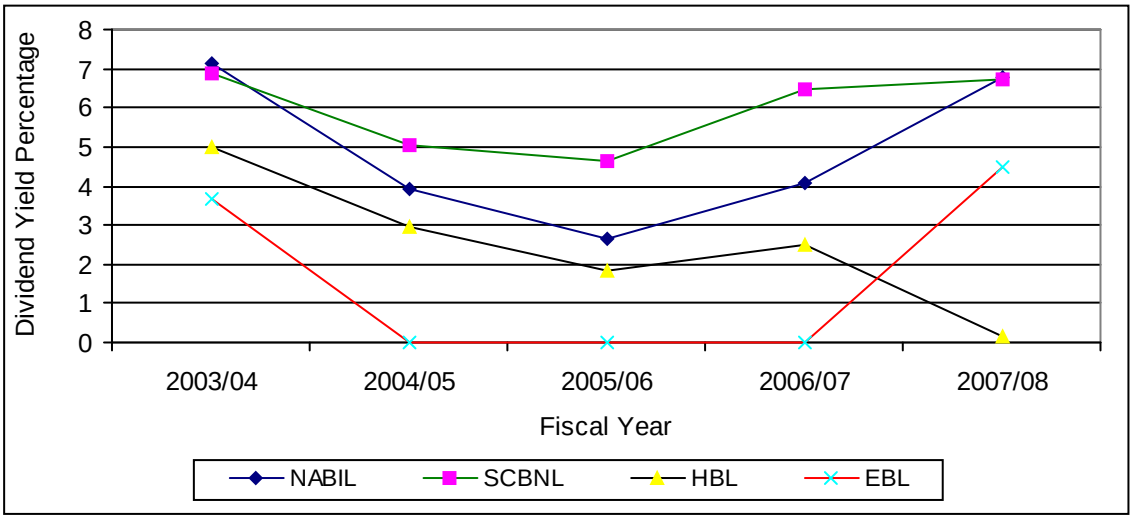
$$\text{Dividend Yield} = \frac{\text{DPS}}{\text{MVPS}}$$

Table 4.9: Dividend Yield

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	7.14	6.88	5.00	3.68
2004/05	3.93	5.04	2.94	0.00
2005/06	2.67	4.66	1.83	0.00
2006/07	4.08	6.45	2.50	0.00
2007/08	6.80	6.71	.16	4.49

Source: Annual Report of Sample Banks

Figure 4.9: Dividend Yield



Dividend Yield of NABIL

According to above data calculation **NABIL** since the fiscal year 2003/04 to 2005/06 its dividend yield ratio was found in the decreasing trend. So, the NABIL's Market performance during these fiscal years was found to be unsatisfactory. But in the fiscal year 2006/07 and 2007/08 it represented

increase in the Dividend yield ratio. So, its performance improved than in the previous year.

Dividend Yield of SCBNL

Secondly, Dividend yield of **SCBNL** its ratio since the fiscal year 2003/04 to 2005/06 was found in focused in a declining trend. The ratios of 6.88%, 5.04%, and 4.66% represented that market performance was found to be unsatisfactory. But in the fiscal year 2006/07 and 2007/08 it represented slightly increase in the Dividend yield ratio. So, its performance is better than other four sampled Banks.

Dividend Yield of HBL

HBL dividend yield ratio trend represented the fluctuated trend. As in the fiscal year 2002/04 to 2005/06 its same was found to be 5.00% and reached to 1.83%. But after this year in the fiscal year 2003/04 its yield ratio was found to be slightly increased i.e., 2.50%. But in the fiscal year 2007/08 its dividend yield again decreased i.e., 16% looking above calculation it can said that dividend yield of HBL Bank is Unsatisfactory.

Dividend Yield of EBL

According to above calculation EBL in the fiscal year 2003/04 was found 3.68%. Since, this fiscal year the ratio could not be calculated dividend yield ratio of last three years. So, its trend was found to be decline. And in the fiscal year 2007/08 it was found 4.49%. After looking this calculation it can be said that D.Y. of EBL is also unsatisfactory.

At the end it can say SCBNL has better performance and secondly NABIL Bank represented second performance during the study period.

4.2.3 MV/BV Market Value Vs Book Value

It is also relative measure of how the growth option for a company is being valued is a visits physical asset. So, higher the rate is considered to be good. A well-run company with strong management and organization that function efficient should have a market value greater then the historical book value of its physical assets.

$$\frac{M}{BRatio} = \frac{\text{Share Price}}{\text{Book Value Per Share}}$$

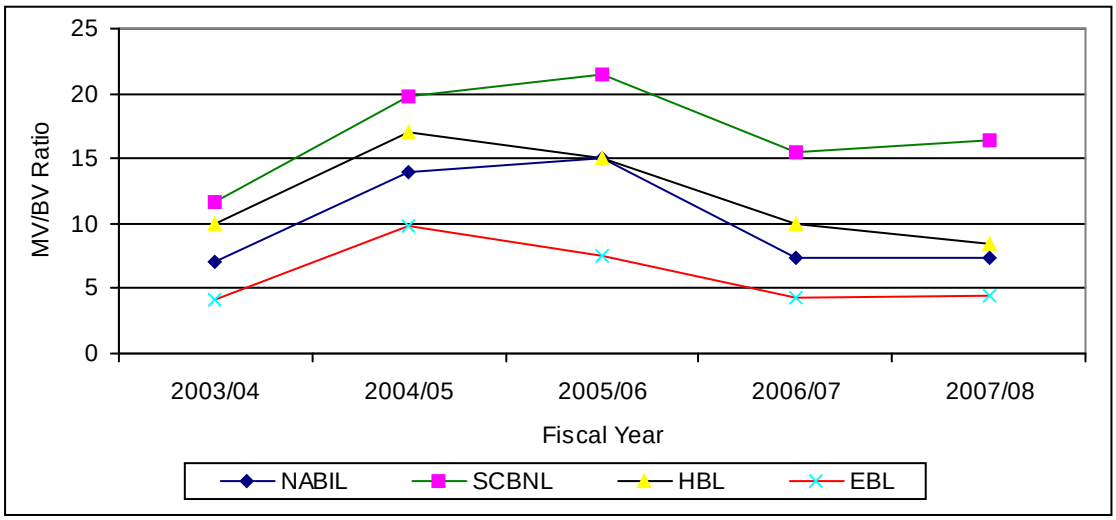
The market to book value ration is a relative measure of how the growth potion for a company is being valued vis-à-vis its physical assets. The greater the excepted growth and value placed on such, the higher this ratio. M/B ratios for established companies from a little as 5% as high as 8%. The former often is associated with a company, which earns less than what the financial market require, a harvest situation and the letter with a company, which earns substantially more through industry attractiveness and/ or competitive advantage.

Table 4.10: MV/BV Ratio

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	7	11.62	10.00	4.07
2004/05	14	19.85	17.00	9.80
2005/06	15	21.44	15.00	7.50
2006/07	7.35	15.50	10.00	4.30
2007/08	7.35	16.40	8.36	4.45

Source: Annual Report of sample Banks

Figure 4.10: MV/BV Ratio



NABIL

Glancing at the trend of NABIL since the fiscal year 2003/04 its MV/BV ratio was found in an increased trend. According to the above calculation MV/BV ratio in the fiscal year 2003/04, 2004/05 and 2005/06 was found 7%, 14%, and 15% respectively, which showed better performance for these fiscal years. But in the fiscal year 2006/07 and 2007/08 its value was found to be decrease up to 7.35%. So, NABIL Bank's performance is unsatisfactory in the recent fiscal year.

SCBNL

Secondly, the SCBNL is another sampled Bank during the study period. In the study during the fiscal year 2003/04 its MV/BV ratio was 11.62%, which showed higher value than other four sampled Banks. Thus, its market attractiveness was best during study period.

Again in the fiscal year 2004/05 and 2005/06 was also found increased manner i.e. 19.85% and 21.44%, which represented attractiveness of the bank. In the fiscal year 2006/07 and 2007/08 value was 15.50% and 16.40%, which indicated less than in previous year but it has placed higher than other four sampled banks.

In the conclusion it can be concluded that its value from the fiscal year 2004/05. 2007/08 represented higher than other dour sampled banks. So, it can be said that National Finance Company is more attractiveness than other four sampled banks.

HBL

Third sampled bank during study is HBL. During the fiscal year 2003/04, MV/BV ratio was 10.00%, which represented better than NABIL and EBL. Again in the fiscal year 2002/03 its value was 17%, which represented higher than previous year. So, it can said that there its value of stock has improved in the fiscal year. In the fiscal year 2003/04 its value was 15%.

During the fiscal year 2006/07 its value was 10%, which is higher than NABIL, and EBL but less than in the previous year.

In the fiscal year 2007/08 its value was 8.36%, which decreases then previous year. The reason may be due to essential harvest. But seemed to attractiveness bank.

EBL

During the study period of fiscal year 2003/04 its value was 4.07% and in the fiscal year 2004/05 its value was increased up to 9.80%, which indicate better performance during the period. But in the fiscal year 2005/06, and 2006/07 its value was found 7.50% and 4.30% decreased trend. So, its performance during these periods was unsatisfactory. In the fiscal year 2007/08 it value was found slightly increased i.e. 4.45%. But its performance is low than other three Banks i.e. NABIL, SCBNL and HBL.

4.2.4 The Overall Performance of the Sampled Banks

In the previous analysis it represented the performance of individual sampled companies. So, it helps to analyze, all comparison between the ratios of the individual sampled companies. But for the overall interpretation and analysis of

sampled company it is found to be essential. so to fulfill the essential of the study this 'Altman's Financial Ratio' is taken in the study period.

Academicians seem to be moving towards the elimination of ratio analysis as an analytical technique in assessing the performance of the business enterprises. Therefore to overcome the disadvantage of ratio analysis, it is necessary to prediction of corporate bankruptcy, Altman employed Z ratio.

Discrimination analysis is a flexible and practical means for evaluating new credit applications and monitoring exist account and assess honesty the firm's present condition. By doing so, importance of company's strength and weakness may be recognized and in the later case, changes in policies and action will usually be in order. If failure is unavoidable the firm's eveditors and stock holder's may be better off if a merger with a strong enterprise in negotiated before bankruptcy.

So, the Altman has found that five financial ratios able to discriminate rather effectively between bankrupt and non bankrupt companies beginning up to 5 years. The Sam however can be used to measure relative performance of companies.

The Z-scare model itself was the following.

Z = 1.2 |$_1$ Γ1.4 |$_2$ Γ3.3 |$_3$ Γ0.6 |$_4$ Γ0.999 |$_5$

|$_1$ = Working capital to total assets.

|$_2$ = Cumulative retained earnings to total assets.

x_3 = Earning before interest and taxed total assets.

x_4 = market value of equity to book value of total liabilities.

x_5 = Sales to total assets.

The Z ratio is the overall index of the multiple discriminate functions. Altman has calculated that the companies with Z scores below 1.81% known as bankrupt. Where as Z scares above 2.99% represent healthy firms. But

according to the above calculation, we found that all the sampled banks Z value is found to be less than 1.81%. So, according to the model assumption. It is concluded that all banks, which were taken as sample are found to be bankruptcy. In another words, it is found that its performance is not satisfactory condition.

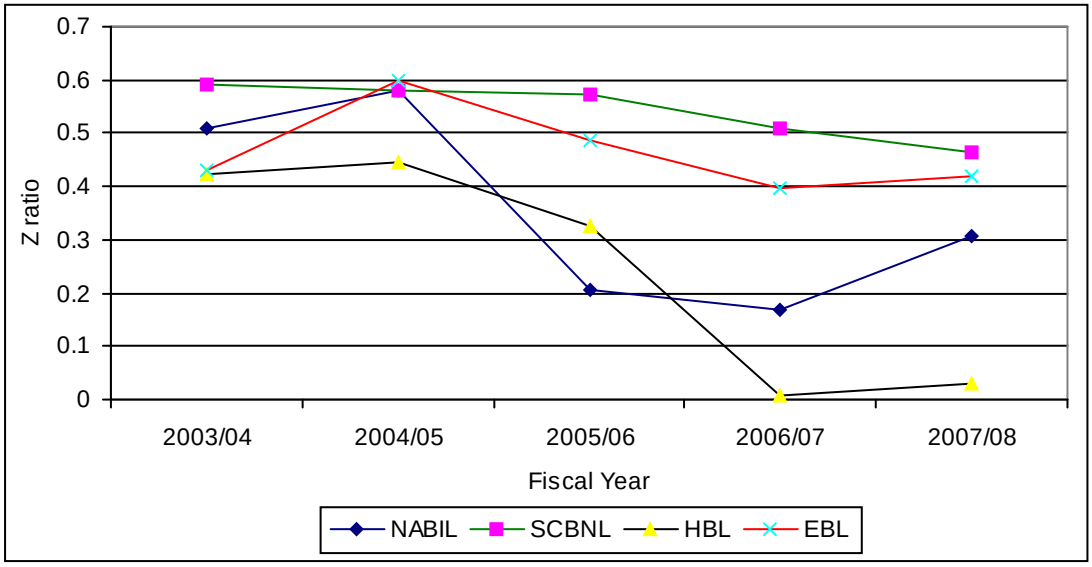
However, this model is appropriate for calculating the manufacturing companies only but we have used this model to measure the performance of the joint venture banks. Whether it is stable are not in near future. Since the major part of banks liability come under the near deposits, which is always highly surpassing the current assets of the bank at a particular time consequence the working capital of the banking companies comes to negative. In this light it can be expressed the prima fade evidence is that even the analysis may go well and even it such financial institutions. However, the exposure of such relative tools can be useful for analysis of corporate firms other than of banking nature. Even though the analysis did not hold good for banks in the cut off comparison as developed by the pioneers, but it is still useful for the inter-firm comparison to assess the relative strength and weakness of the individual banks. Following table represents the calculation of z values of the selected sampled joint venture banks of Nepal.

Table 4.11: Overall Performance of Selected Banks

Fiscal Year	NABIL	SCBNL	HBL	EBL
2003/04	0.5102	0.5911	0.4221	0.4312
2004/05	0.5789	0.5808	0.4452	0.5979
2005/06	0.2049	0.5741	0.3351	0.4857
2006/07	0.1672	0.51	0.0071	0.397
2007/08	0.3075	0.4659	0.0285	0.4176

Source: Annual report of Sampled Banks and SEBO/N

Figure 4.11: Overall Performance of Selected Banks



According to the above calculation of the Z value of the selected sample companies, we found Z value of **NABIL** in the fiscal year 2003/04 it was found 0.5102 and in the fiscal year 2004/05 it was found 0.5789 increasing trend. After this fiscal year, it was decreased up to 0.2049 and 0.1672 in the fiscal year 2005/06 and 2006/07 respectively which represented that the performance of banks during these fiscal years were not as good as compared to previous years. But in the fiscal year 2007/08 it was reached 0.3075, which indicated that it was improving compared to the previous year.

The Z value of the **SCBNL** it's calculation represented better than other four sampled banks. According to the above calculation in the fiscal year 2003/04 it value of Z was 0.5911, which is higher than other sampled banks. In this fiscal year SCBNL banks performance is found to be best. In the fiscal year 2004/05 it represented Z value of 0.5808, which indicated slight decrease in the performance of the company.

Similarly, in the fiscal year 2003/04, 2004/05 and 2005/06 it's was Z value was found 0.5741, 0.51 and 0.4659 decreasing trend. However, SCBNL has not meet Z score's satisfactory level but it has better score performance than other four sampled banks.

Thirdly, **HBL** is the one of the sampled bank during the study period. According to the calculation, in the fiscal year 2003/04 and 2004/05 it value was found 0.4221 and 0.4452 respectively which indicate better performance during these fiscal period. But after these years it has started to decrease. In the fiscal year 2005/06 and 2006/07 it was found 0.3351 and 0.0071 respectively.

Which represented worsening situate than in the previous year. In the fiscal year 2007/08 its value slightly increased to 0.0285%, which indicated the performance of NABIL banks is poor as well as fluctuating.

Fourthly, **EBL** calculated value at fiscal year 2003/04 was 0.4312%. In the fiscal year 2002/03 its z value was found 0.5971 increasing trend. So its performances in recent fiscal year are better than other three sampled companies. In the fiscal year 2005/06 and 2006/07 its value was 0.4857% and 0.397 respectively decreased trends. And its performance was found not to be good during this fiscal year. Again, in the fiscal year 2007/08 its value increased to 0.417, which represented better value than other three sampled banks i.e. NABIL and HBL.

4.3 Simple Regression Analysis

In this past, an attempt has been made to determine the statistical relationship between two variables, and to make estimation of one variable on the basis of other variables.

4.3.1 Simple Regression Analysis of Overall Z-value on Mps of Selected Banks

Null Hypothesis: H_0: « $_o$ = « $_{1,}$ The significance level of the regression between MVS and Z value of overall sampled company does exist.

Alternative Hypothesis: H_1: « $_o$ | « $_{1,}$ The significance level of the regression between MVS and Z value of overall sample company does not exists.

Table 4.12: Simple Regression Analysis of Overall Z-value on Mps of Selected Banks

a	b (Z)	r	R^2	SEE	F
395.5064 (1.627961)	(-426.1) (-.78763)	0.162061	0.02626	-0.01607	0.620359

Source: Appendix- Annual report and financial statistics of selected Banks

*Note: Value with ( ) are t. values represents and * denotes that the coefficient is significant at 5% level of significance.*

The above table shows the results of regression analysis of Z on MVS for the sampled companies. The regression coefficient 'b' of five-sample company is negative with a value of –426.1. This implies that one rupee increase in MVS leads to decrease the average of about –426.1 in Z value. But such result is unreasonable in practice.

However, the standard error of b explains that the value of b may vary by Rs. 44.16988. The regression constant (a) of sampled Banks is 395.5064, which indicate that MVS should not fall below that level if MVS is omitted.

'r' according to above table represents the correlation between market value of share and Z value, is .162061, i.e. poorly correlated. R^2 indicates the power of the equation to explain correlation, which it has calculated, was .026264, which represents the poor relationship between MVS and Z.

Since, the tabulated value of F is less than calculated value at 5% level of significance. So, H_o is accepted i.e. the significance level of regression between MVS and Z does exist.

Since, the calculated value of t is greater than tabulated value at 1%, 2% and 5% level of significance. It shows that the significance level of the regression between MVS and Z does exist.

4.3.2 Simple Regression Analysis of Z-value on MVS of Selected Banks

Table 4.13: Simple Regression Analysis of Z value on MVS of Selected Banks

Banks	a	b(MVS)	r	R^2	SEE	F
NABIL	0.305547 (1.079989)	4.75E-05 (0.180629)	0.103723	0.0108	-0.31899	0.0326
SCBNL	0.520656 (3.725018)	1.4E-05 (0.173204)	0.099503	0.0099	-0.3213	0.0299
HBL	-0.22869 (-0.75594)	.000395 (1.63197)*	0.68577	0.4703	0.293701	2.66*
EBL	0.280676 (9.015789)	.000307 (6.3565)*	0.96482	0.9309	0.907845	40.405*

Source: Appendix- Annual report and financial statistics of selected Banks

Note: Value with ( ) are t. values and * denotes that the coefficient is significant at 5% level of significance.

NABIL

Null Hypothesis: H_0: $\alpha_o = \alpha_1$, The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis: H_1: $\alpha_o \neq \alpha_1$, The significance level of the regression between MVS and Z value does not exists.

Table 4.14: Regression Analysis of Z value on MVS of NABIL

Bank	a	b(MVS)	r	R^2	SEE	F
NABIL	0.305547 (1.079989)	4.75E-05 (.180629)	0.1037	0.011	-0.31899	0.0326

The above table shows the summarized results of the regression analysis of Z on MVS. The regression coefficient (b) of NABIL is 4.75E-05. This implies that one Rupee increase in MVS leads to an increase in Z by 4.75E-05. The regression constant (a) of NABIL is .3056, which indicates that should not fall below that level even if MVS is omitted.

The estimation of MVS may vary by .000263 as the standard error of the model of NABIL explains it.

r is .1037, which represent poorly correlated and R^2 is .010759 it indicate i.e. poorly correlated.

Since, the tabulated value of F at 5% level of significance is greater than calculated value. So, Ho is accepted.

Since, the tabulated value of t at 5% level of significance is greater than calculated value. So, Ho is accepted i.e. it does not show the existence of regression.

SCBNL

Table 4.15: Regression Analysis of Z value on MVS of SCBNL

Bank	a	b(MVS)	r	R^2	SEE	F
SCBNL	.520656 (3.725018)	1.4E-05 (.173204)	.099503	.0099	-.3213	.0299

Null Hypothesis: H0: « o = « 1, The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis: H_1: « o | « 1, The significance level of the regression between MVS and Z value does not exists.

The above table shows the summarized results of the regression analysis of Z on MVS. The regression coefficient (b) of SCBNL is 1.4E-05. This implies that one Rupee increase in MVS leads to an increase in Z by 1.4E-05. The regression constant (a) of SCBNL is .520656, which indicates that should not fall below that level even if MVS is omitted.

The estimation of MVS may vary by 8.08E-05 as the standard error of the model of SCBNL explains it.

'r' is .09957, which represent poorly correlated and R^2 is .0099 it indicate i.e. poorly correlated.

Since, the tabulated value of F at 5% level of significance is greater than calculated value. So, Ho is accepted.

Since, the tabulated value of t at 5% level of significance is greater than calculated value. So, Ho is accepted i.e. it does not show the existence of regression.

HBL

Table 4.16: Regression Analysis of Z value on MVS of HBL

Bank	a	b(MVS)	r	R^2	SEE	F
HBL	-.22869 (-.75594)	.000395 (1.63197)*	.68577	.4703	.293701	2.66*

Null Hypothesis: H_0: « $_o$ = « $_{1,}$ The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis: H_1: « $_o$ | « $_{1,}$ The significance level of the regression between MVS and Z value does not exists.

The above table shows the summarized results of the regression analysis of Z on MVS. The regression coefficient (b) of HBL is .000395. This implies that one Rupee increase in MVS leads to an increase in Z by .000395. The regression constant (a) of HBL is –0.22896, which indicates that should not fall below that level even if MVS is omitted.

The estimation of MVS may vary by 0.302877 as the standard error of the model of HBL explains it.

r is 0.6858, which represent highly correlated and R^2 is 0.47028 it indicate i.e. power of equation to explain correlation is moderate correlated.

Since, the tabulated value of F at 5% level of significance is less than calculated value. So, H_0 is rejected i.e. it shows that existence of regression.

Since, the tabulated value of t at 5% level of significance is less than calculated value. So, H_0 is rejected i.e. it shows the existence of regression.

EBL

Table 4.17: Regression Analysis of Z value on MVS of EBL

Banks	a	b(MVS)	r	R^2	SEE	F
EBL	0.280676 (9.015789)	0.000307 (6.3565)*	0.96482	0.9309	0.907845	40.405*

Null Hypothesis: H_0: « $_o$ = « $_1$, The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis: H_1: « $_o$ | « $_1$, The significance level of the regression between MVS and Z value does not exists.

The above table shows the summarized results of the regression analysis of Z on MVS. The regression coefficient (b) of EBL is 0.000307. This implies that one Rupee increase in MVS leads to an increase in Z by 0.000307. The regression constant (a) of EBL is 0.280676, which indicates that should not fall below that level even if MVS is omitted.

The estimation of MVS may vary by 4.84E-05 as the standard error of the model of EBL explains it.

r is 0.964823, which represent highly correlated and R^2 is 0.93088 it indicate i.e. highly correlated.

Since, the tabulated value of F at 5% level of significance is less than calculated value. So, Ho is rejected i.e. it shows that existence of regression.

Since, the tabulated value of t at 5% level of significance is less than calculated value. So, Ho is rejected i.e. it shows the existence of regression.

4.3.3 Simple Regression Analysis of MVS on Z-Value, EPS and Profitability of Selected Banks

NABIL

Null Hypothesis H_o: $\alpha_0 = \alpha_1$, there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis: H_1 $\alpha_0 \neq \alpha_1$, there is significance different between MVS on Profitability, EPS and Z value.

Table 4.18: NABIL Regression between MVS on EPS and Z value

Dependent Variable	Intercept	Profitability	EPS	Z-value	F-test	R^2
MPS	1362.897 (1.4714)	-15.1853 (0.3859)			0.1489	0.0473
MPS	937.7812		1.0864 (0.064)		0.0041	0.0014
MPS	933.9264			226.3628 (0.18063)	0.033	0.0108

Source: Appendix- Annual report and financial statistics of selected Banks

Note: Value with ( ) are t. values and * denotes that the coefficient is significant at 5% level of significance

MVS on Profitability

The table represented the summarized result of regression analysis of MVS on profitability of the NABIL. The regression coefficient (b) of NABIL is –15.1853 with Negative value. This implies that one rupee increase in profitability to decrease MVS by 15.1853 on average. The regression constant (a) of NABIL is 1362.8973, which indicate that profitability should not fall below that level even if MVS is omitted. The estimation of MVS may very by 39.45 as the standard error of model for NABIL explains it.

'r' is .2175, which is shows medium level of correlation; R^2 is .0473, which explains the relationship between the power of equation is poorly.

Since, the tabulated value of F at 5% level of significance is greater than calculated value, it does not shows the existence of regression. So, Ho is accepted.

Since, so selected variable are not significant Ho is accepted.

NABIL Regression between MVS on EPS

The above table shows the result of regression analysis of MVS on EPS for the sampled banks. The regression coefficient (b) of NABIL is 1.0864, which implies that one rupee increase in EPS leads to the average of about 1.0864 increases in MVS.

The regression constant (a) of NABIL is 937.78:2 which indicate that MVS should not fall below that level if EPS is omitted from the model. The estimation of MPS may vary by Rs 461.3725 as the standard error of the model for NABIL explains it.

Since the r is found .37 represent very low correlation and R^2 is found 0.0041, which explain power of equation to explain relationship is poor.

Since the calculated value of F is less than tabulated value. So Ho is accepted i.e. there is not significant different between MVS and EPS.

Since, the tabulated value of F is greater than the calculated value, so H_o is accepted.

NABIL Regression between MVS and Z

The above table shows the summarized result of the regression analysis of MVS and Z. The regression coefficient (b) of NABIL is 226.36284. This implies that one rupee increase in leads to increase in MVS by 226.36284. The regression constant (a) of NABIL is 933.926, which indicate Z should not fall below that level even if MVS omitted.

The estimation of Z may vary by Rest 459.19866 as the standard error of the model of NABIL explain it r^2 is 0.108 it indicate i.e. power of the equation to explain correlation is highly correlated.

Since tabulated value of F is greater than calculated value so H_0 is accepted i.e. there does not existence of regression.

Since tabulated value of t is greater than calculated value so $H_0$is accepted. There does not existence of regression.

Again, the tabulated value of E is greater than the calculated value at 1%, 2%, and 5% level of significance so Ho is accepted.

SCBNL

Null Hypothesis: Ho: « 0 = « 1, there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis: H1 : « $_0$ | « $_1$, there is significance different between MVS on Profitability, EPS and Z value.

Table 4.19: SCBNL Regression between MVS on EPS and Z value

Dependent Variable	Intercept	Profitability	EPS	Z-value	F-test	R^2
MPS	3983.0722	-74.9794 (1.3412)			*1.799	0.3748
MPS	1230.2509		3.6471 (0.2964)		0.0879	0.0285
MPS	1310.85			707.8694 (0.1732)	0.03	0.0995

Source: Appendix- Annual report and financial statistics of selected Banks.

Note: Value with ( ) are t. values and * denotes that the coefficient is significant at 5% level of significance

MVS on Profitability

The above table shows the summarized result regression constant (a) of SCBNL is 3983.0722, which indicate that MVS should not fall that level. of regression analysis of MVS on profitability. The regression coefficient (b) of SCBNL is negative with value – 74.9794 implies that one rupee increase profitability leads to 74.9794 implies decrease MVS. Since, it is impracticable. The standard error of b explains the value of b may very by 55.905.

r is 0.61 which indicate high correlated R^2 is .3748 the power of evaluation is good.

Since, the calculated value of F is greater than the tabulated value. So H_0 is rejected. Three is existence of regression.

Again, the tabulated value of t is greater than the calculated value at 1%, 2% and 5% level of significance. So H_0 is accepted.

MVS on EPS

The regression coefficient (b) of SCBNL is negative with value 3.6471 implies that one rupee increase profitability leads to the average 3.6471 increase MVS able. The standard error of b explains the value of b may very by 438.54. The regression constant (a) of SCBNL bank is 1230.25, which indicate that MVS should not fall that level.

'r' is 0.16961 which indicate low correlated R^2 is .029 the power of evaluation is low .

Since, the calculated value of F is less than the tabulated value. So H_0 is accepted. Three is not existence of regression.

Again, the tabulated value of t is greater than the calculated value at 1%, 2% and 5% level of significance. So H_0 is accepted.

MVS on Z

The regression coefficient (b) of SCBNL is positive with value 707.87 implies that one rupee increase profitability leads to 74.9794 implies increase MVS. The standard error of b explains the value of b may very by 4086.92. The regression constant (a) of SCBNL bank is 1310.85, which indicate that MVS should not fall that level.

'r' is .0995 which indicate low correlated R^2 is .3748 the power of evaluation is low.

Since, the calculated value of F is less than the tabulated value. So H_0 is accepted. Three is not existence of regression.

Again, the tabulated value of t is greater than the calculated value at 1%, 2% and 5% level of significance. So H_0 is accepted.

HBL

Null Hypothesis: H_o : « $_0$ = « $_1$, there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis: H_1 : « $_0$ ≠ « $_1$, there is significance different between MVS on Profitability, EPS and Z value.

Table 4.20: HBL Regression Between MVS on Profitability, EPS and Z Value

Dependent Variable	Intercept	Profitability	EPS	Z-value	F-test	R^2

MPS	-1347.1350	156.6308 (0.9912) *			0.9824*	0.2467
MPS	161.9698		14.0329 (1.731) *		2.9952*	0.4996
MPS	912.237 (3.994)			1191.287 (1.632)*	2.6633*	0.4703

Source: Appendix- Annual report and financial statistics of selected Banks

Note: Value with ( ) are t. values and * denotes that the coefficient is significant at 5% level of significance

The above table represents the summarized results of the regression analysis of MVS on profitability of the **HBL**. The regression coefficient (b) of HBL is 156.6308, which implies that one rupee increase in profitability leads to 156.6308 increase MVS. The standard error of b indicates that it may vary by Rs. 8.158.03. The regression constant (a) of HBL is –1347.1350, which indicate that MVS does not fall below that level even if profitability is zero. But in practical MVS is always greater than zero.

'r' is .2467 which represent moderate correlation R^2 is .2467 which explain power equation to explain relationship is poor.

Since, tabulated value of F is greater than calculated value at 5%, 2% and 1% level of significant. So, there is existence of regression. Ho is accepted.

Since calculated value of F is less then tabulated value at 5%, 2% and 1% level of significant. So, there is existence of regression.

MVS on EPS

The above table represents the summarized results of the regression analysis of MVS on EPS of the HBL. The regression coefficient (b) of HBL is 14.0329, which implies that one rupee increase in EPS leads to 156.6308 increase MVS. The standard error of b indicates that it may vary by Rs. 8.11. The regression constant (a) of HBL is –1347.1350, which indicate that MVS does not fall below that level even if EPS is zero. But in practical MVS is always greater than zero.

'r' is 0.707 which represent high correlation R^2 is 0.499 which explain power equation to explain relationship is moderate.

Since, tabulated value of F is less than calculated value at 5%, 2% and 1% level of significant. So, there does not existence of regression. Ho is rejected.

Since calculated value of F is greater then tabulated value at 5%, 2% and 1% level of significant. So, there does not existence of regression.

MVS on Z

The above calculation shows the result of regression on analysis of MPs on z for the sampled banks. The regression constant (b) of HBL is positive with value 1191.2874 which indicate that one percent increase in z leads to increase on MPS by 1191.2874.

The regression constant of HBL is found to be 912.23724 that indicated MVS should not fall below that level even if Z is omitted from the model. The standard error of HBL indicated the MPS might vary by 729.97 as the standard error of model explains it. Since, the HBL's r is found 0.685766, represent high correlation and R^2 is found 0.4702756, which shows satisfactory (medium) explanatory power.

Since, tabulated value of F at 5% level of significance at 5% level of significance. So, H_0 is accepted. Since calculated value of F is at 5% level of significance. So, H_0 is accepted.

EBL

Null Hypothesis: H_o : « $_0$ = « $_1$, there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis: H_1 : « $_0$ ≠ « $_1$, there is significance different between MVS on Profitability, EPS and Z value.

Table 4.21: EBL Regression between MVS on Profitability, EPS and Z Value

Dependent Variable	Intercept	Profitability	EPS	Z-value	F-test	R^2
MPS	1009.3722	-29.0445 (-0.352)			0.1235	0.0398
MPS	-294.4446		29.7896 (1.354)*		1.8340*	0.3794

MPS	-808.2016			3027.822 (6.357) *	40.4051*	0.9309

Source: Appendix- Annual report and financial statistics of selected Banks

Note: Value with ( ) are t. values and * denotes that the coefficient is significant at 5% level of significance.

The above table represents the summarized result of the regression analysis of MVS on profitability of the sampled Banks. The regression coefficient (b) of EBL is –29.0445, which imply that one rupee increase in profitability leads to decrease MVS by r 29.0445. Since, it is unprofitable. The standard error of b explains the value of b may vary by Rs 82.64. The regression constant (a) of EBL is 1009.3722, which indicate that MVS should not fall below that level.

Since, tabulated value of F at 5% level of significance is greater than calculated value. So, Ho is accepted.

Since tabulated value of F at 5% level of significance at 5% level of significance is greater than calculated value. So, H_o is accepted.

MPS on EPS

The above table represent the summarized result of the regression analysis is of MPS on EPS of the sampled banks. The regression coefficient (b) of EBL is positive with the value 29.7896, which implies that one rupee increase in EPS leads to the average of about 29.7896 increases in MPS. However, the standard error of b explains that the value of b may vary by Rs. 21.997. The regression constant (a) of EBL is –294.4446. This means MVS of EBL is –294.4446. This means MVS of EBL should not go below that level, even if EPS is zero.

Since, r of EBL is .6160, which indicate medium correlation, and R^2 is .3794 so its power of explanation correlation is not strong.

Since, tabulated value of F at 5% level of significance is greater than calculated value. So, H_0 is accepted.

MVS on Z value

The above table represent the summarized result of the regression analysis MVS on Z of sampled banks. The regression coefficient (b) of EBL is positive with the value 3027.8218 increase in MPS. However the standard error of b explains that the value of b may vary by Rs 476.34. The regression constant (a) of EBL is negative –808.2016. This means MVS of EBL bank is 808.2016 which means MVS of EBL should not go below that level even if Z is zero.

Since, r of EBL is .964823, which indicates highly correlation, and R^2 is .93088 so its power of explanation correlation is high. Calculated value of F is greater than tabulated value. So, H_0 is rejected.

Since, calculated value of E is greater than calculated value. So, H_0 is rejected and selected variables are significance.

4.4 Major Findings

a. Testing the overall performance of the sampled banks and collating with market performances the hypothesis were set under F-statistics and T-statistics. Whether the significance level of regression between MVS and Z of sampled bank it was found the

relationship is not significance. i.e. Ho is accepted (of all the four sampled joint venture banks). In other words, the significance level of the regression between MVS and Z value does exist. (polled regression)

b. Under the F-statistics and T-statistics regression between Z value on MVS the individual bank. NABIL bank and Standard chartered bank was not found to be significant. In other word Ho is accepted under F-statistics and T-statistics i.e. there is no significant difference between Z and MVS.
c. For Himalayan and Everest found to be significant i.e. Ho is rejected. So there is a significant difference between MVS and Z.
d. Regression between MVS on profitability another hypothesis was set. Under the F-statistics and t-statistics at 5% level of significance of all the four sampled company. Under this test, NABIL and EBL was not found significant i.e. Ho is accepted on both statistics. In other words the significance level of the regression between MVS on profitability does exists.
e. HBL under F-statistics and T-statistics, Ho is rejected. i.e significance level of regression between MVS and profitability does not exists. But SCBNL under F-statistics, Ho is rejected i.e. significance level of regression between MVS and profitability doe not exist. As under t- statistics, Ho is accepted i.e. other words the significance level of regression between MVS and profitability does exist.
f. Regression between MVS and EPS hypothesis were set whether the significance level of regression between MVS on EPS does exit or not? Under the F-statistics and t-statistic it was found the significant i.e. Ho is rejected. In other words, the significance level of regression between MUS on EPS does not exist. HBL and EBL found to be significant. But NABIL and SCBNL under F-statistics and t-statistics Ho is accepted i.e. the significance level of regression between MVS on EPS does exist.

g. Regression between MVS on Z value were also set whether the significance level of regression between MVS on Z-value does exists or not? Under this test, NABIL and SCBNL was not found significant i.e. Ho is accepted on both statistics. In other words the significance level of the regression between MVS on Z-value does exists. But HBL and EBL under F-statistics and t-statistics, Ho is rejected in both statistics. i.e. the significance level of the regression between MVS on Z does not exists.

CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with the findings and conclusion drawn from the study of share price behavior of Joint Venture Commercial Banks in Nepal.

This chapter consists of three sections: the first section provides the summary of the study, the second section drawn the conclusion of the study and final section gives recommendations to solve the problems observed on the basis of findings.

5.1 Summary

Capital market is basically a place or platform where the funds take place from the savers to the borrowers. The firm obtains funds and utilized them for the purpose of attending defined objectives. To get higher rate of return in the market people has developed a concept to invest in the securities of the publicly quoted companies, where the major role is played by the level of understanding of investors getting involved in the market of speculation and for such knowledge about security market can be achieved through better analysis of the security. And the corporation to which the security belongs to. The long-run objective of the firm should be maximize the wealth of the shareholders. Maximizing the market value of shares of the company can maximizing the shareholder's wealth. Investors want to invest their surplus fund with the objective of maximizing the future return from such investment proposal.

All of these institutions have to follow the rules and regulations and run under SEBO securities Board, Nepal was established by HMG/N in 1993 as an apex regulator of the securities market under the securities Exchange Act 1983. Its objective is in line with the regulatory bodies of other countries such as to regularize and manage the securities market and protect investors invest.

Another aspect that comes into the forefront is the performance of NEPSE. NEPSE is a self regulatory organization which have authority to regulate some parts of the securities market like trading and market intermediaries activities. But NEPSE has not been able to develop as a self regulatory organization.

In spites of the overall unfavorable conditions, Joint Venture Banks are making progress but the growth rate is very nominal.

During the year 2001/02 Nepal Rastra Bank had come with a strict policy for loan provision. So during these period, Net profit declined.

Looking at the major indicator of securities market, market capitalization, annual turnover, number of listed companies and trading value and NEPSE index represent that the performance of Nepalese security market in not stable through it is improving slowly.

The investment decision largely depends on the information about the performance of the company. So, rational investor likes to analyze the performances, trends and market share of the sampled banks. So, the main objective of the study was to analyze the stock price and correlated with performance and measures the performance with appropriate tools.

Financial analysis has been carried out as series of statement to 5 years (i.e. 2003/04 to 2007/08) review and analyzed. Regression results are statically tested and analyzed. By this analysis, it helps to answered defined objectives of the sampled banks.

According to the nature objectives of the study only secondary data has been used to meet the objectives. As per the efficient market hypothesis, these levels of market exist and all the currently available information is captured in the semi-strong form of market. In the weak form of market, the behavior of stock prices shows definite position.

5.2 Conclusion

As per the data presentation and analysis the researcher came to the conclusion that:

a. Under the measurement of performance of banks ratio analysis tools are used to identify the performance of the sampled banks. During these study period and looking at the trend of the calculated value of profitability, EPS, DPS, dividend payout ratio, C/D, % growth in net profit and total assets turnover ratio. After the calculation of these ratios, the SCBNL, NABIL and HBL performance were found to be better than EBL.
b. Secondly, on the basis of analysis of market performance of the sampled companies trend of market capitalization, MVS/BVS ratio & dividend yield ratio tools are used. According to calculated value and trend SCBNL, NABIL and HBL were found to be better than EBL. In other words, during the sample years, the market performance of the SCBNL, NABIL and HBL were found to be in a better position.
c. Thirdly, looking at the overall performance of banks, zeta model is used to analyze the behavior of the sampled companies. As this model is used to know the bankruptcy of the manufacturing companies. Yet it can indicate the performance of the companies. But during the study it is taken to measure the efficiency of the sampled banks. According to Z value of the sampled companies SCBNL overall performance was found to be better than NABIL and HBL. In near future only these companies can exist.

5.3 Recommendations

Following recommendations are made to improve the finance and market performance.

a. The Nepalese capital market should be aware about the random fluctuation of MPS and make some systematic way of monitoring and evaluation of share price behavior.
b. To know the strength and weakness of all banks and financial companies there should be regular information disclosure at the right time when the investor want to invest. So that investor feels/interested towards investment in the capital market.
c. Development of securities markets depends crucially on the quality of financial information HMG/N has established Accounting Standards Board and Auditing Standing Board for improving accounting and auditing standards. These Boards have developed some accounting and auditing standards to be implemented in the country. So these standard should be perform strictly to the listed companies. So that, there is not available of worse situation of the sampled companies which is found in the research period.
d. Capital plays a vital role in the economic development of country Securities market provides mobility of the scattered saving. As the long term investment in the securities market are going to converted into short term investment. As outside the

Kathmandu there is lack of information about stock market stock exchange facility. So, there is most essential to expand the exchange facility to other region also.

e. NEPSE is still following the open out any system of trading, which are not scientific. So, on line trading system or an advanced electronic system of trading should be introduced to develop capital market.
f. The listed companies data, their performance, conduction of works, their productivity, their commitment to NEPSE should be updated and analyzed in time and again. If any company is found in doing works against NEPSE should immediately taken action on it.
g. SEBO and NEPSE are operation under the government ownership. So, due to this its was found gabs in the process of development. So, the owner of NEPSE should be privatizations and helps the SEBO to regulate the activities of capital market and market intermediaries.
h. There is a lack of investor protection against the default committed by brokers, loss of document in transit fire and circumstances occurred in the organization. So, investors should be compensated when events of loss occur.
i. Member of the stock exchange and other associates the working of the capital market should have reasonable background incorporate finance capital markets, economics and financial and engineering.
j. Full-fledged brokerage firms are yet to be developed in the markets. So, there should be clear provision regarding the entry and exit process of securities business persons in the securities market.
k. Finance companies should have direct approach to participate in participates in primary market and has direct access to the trading floor of NEPSE, like other market makers.

l. There must be a gradual effort to reflect true performance in the market. So, as to reduce the impact of volatile factors.

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APPENDIX – I

Name of the Banks	F.Y.	Profit after tax (Rs. in million)	No. of common shares outstanding	Dividend Yield (in %)	Market value of per share	Paid up value per share	Earning yield (in percent)	EPS (in Rs.)	DPS (in %)	Profitability (EAT/Total Income) in %	Sales/Total Assets	Operating Income (in Million)
NBL	2003/04	266.48	3927960	7.14	700.00	100	9.69	67.84	50.00	23.60	.09	1128.93
	2004/05	329.12	3927960	3.93	1400.00	100	5. 98	83.79	55.00	25.14	.09	1309.11
	2005/06	291.37	3927960	2.67	1500.00	100	3.95	59.26	40.00	18.52	.09	1573.31
	2006/07	271.63	4909950	4.08	735.00	100	7.52	55.25	30.00	16.57	.09	1639.11
	2007/08	416.25	4909950	6.80	735.00	100	11.52	84.66	50.00	31.05	.08	1340.51
SCBNL	2003/04	359.46	3395488	6.88	1162.00	100	9.11	105.86	80.00	30.45	.09	1180.43
	2004/05	392.59	3395488	5.04	1985.00	100	5.82	115.62	100.00	28.72	.08	1366.92
	2005/06	430.83	3395488	4.66	2144.00	100	5.92	126.88	100.00	26.27	.09	1640.26
	2006/07	479.21	3395488	6.45	1550.00	100	9.11	141.13	100.00	23.24	.08	1441.72
	2007/08	506.95	3395488	6.71	1640.00	100	9.10	149.30	110.00	33.82	.07	1499.21
HBL	2003/04	165.25	1200000	5.00	1000.00	100	8.61	86.07	50.00	15.99	.09	1033.61
	2004/05	199.38	2400000	2.94	1700.00	100	4.89	83.08	50.00	16.07	.08	1241.01
	2005/06	280.69	3000000	1.83	1500.00	100	6.24	93.56	27.50	17.85	.08	1572.92
	2006/07	235.02	3000000	2.50	1000.00	100	6.03	60.26	25.00	16.94	.07	1387.34
	2007/08	212.12	4290000	.16	836.00	100	5.91	49.45	1.31	14.69	.06	1443.54
EBL	2003/04	25.24	1200000	3.68	407.00	100	5.24	21.31	15.00	11.71	.10	215.50
	2004/05	41.27	1200000	0.00	980.00	100	3.56	34.85	0.00	12.67	.10	325.78
	2005/06	69.70	1440000	0.00	750.00	100	4.21	31.56	0.00	15.02	.09	446.12
	2006/07	85.33	1440000	0.00	430.00	100	7.65	32.91	0.00	15.81	.08	539.78
	2007/08	94.17	2632110	4.49	445.00	100	6.12	29.90	20.00	14.85	.08	634.08

APPENDIX – II

Name of the Banks	F.Y.	Total dep (in million)	Total lending (in million)	Lending dep. (L/d ratio)	Deposit Growth (in million)	Deposit Growth (%)	Lending growth (in million)	Lending Growth (%)	Growth interest profit (in million)	Growth in net profit in %
NBL	2003/04	9464.28	5788.93	61.17	726.52	8.32	564.86	10.81	91.68	52.45
	2004/05	12779.51	7334.76	57.39	3315.23	35.02	1545.83	26.70	62.64	23.51
	2005/06	15839.01	8324.44	52.56	3059.5	23.94	989.68	13.49	(37.75)	(11.47)
	2006/07	15506.44	7437.90	47.97	(332.57)	(2.099)	(886.54)	(10.65)	(19.74)	6.77
	2007/08	13447.65	7755.95	57.68	(2058.79)	(13.28)	318.05	4.28	144.62	53.24
SCBNL	2003/04	11165.16	4071.63	36.47	2635.13	30.89	(181.95)	(4.28)	67.08	22.94
	2004/05	12568.49	4857.17	38.65	1403.33	12.57	785.54	19.29	33.13	9.22
	2005/06	15430.05	5763.13	37.35	2861.56	22.77	905.96	18.65	38.24	9.74
	2006/07	15835.75	5364.00	33.87	405.7	2.63	(399.13)	(6.93)	48.38	11.23
	2007/08	18755.64	5695.82	30.37	2919.89	18.44	331.82	6.19	27.74	5.79
HBL	2003/04	9779.72	5311.66	54.31	2066.12	26.79	1088.6	25.78	29.27	21.53
	2004/05	14043.10	7224.73	51.45	4263.38	43.59	1913.07	36.02	34.13	20.65
	2005/06	17532.40	9015.35	51.42	3489.3	24.85	1790.62	24.79	81.31	40.78
	2006/07	18619.37	8913.73	47.87	1086.97	6.20	(101.62)	(1.13)	(45.67)	(16.27)
	2007/08	21007.37	10001.85	47.61	2388.00	12.83	1088.12	12.21	(22.9)	(9.74)
EBL	2003/04	1948.94	1364.89	70.03	824.04	73.26	493.21	56.58	.21	.839
	2004/05	3057.43	2270.18	74.25	1108.49	56.88	905.29	66.33	16.03	63.51
	2005/06	4574.51	3005.76	65.71	1517.08	49.62	735.58	32.40	28.43	68.89
	2006/07	5466.61	3948.48	72.23	892.1	19.50	942.72	31.36	15.63	22.43
	2007/08	6694.95	4908.46	73.32	1228.34	22.47	959.98	24.31	8.84	10.36

APPENDIX – III

F.Y.	Name of the Banks	TA	CA	CL	WC	RE	EBIT	Revenue (Sales)
2003/04	NABIL	12429.69	11961.95	11249.94	712.01	72.91	801.75	1128.93
2004/05		15314.74	14788.90	13977.29	811.62	108.5	927.7	1309.11
2005/06		18808.88	13161.68	17226.21	(4064.53)	26.17	1051.72	1573.31
2006/07		17629.25	13313.40	16384.73	(3071.33)	2.11	871.66	1639.11
2007/08		16562.63	13868.30	15135.42	(1267.12)	29.79	932.65	1340.51
2003/04	SCBNL	13448.55	12862.22	1903.72	958.5	123.69	921.33	1033.61
2004/05		17154.93	16650.32	15781.19	869.13	94.53	1019.64	1241.01
2005/06		19703.43	19224.18	18196.01	1028.17	99.64	1146.63	1572.92
2006/07		18443.10	18330.82	17150.05	1180.77	130.87	961.8	1387.34
2007/08		21000.50	20797.60	19569.38	1228.22	215.99	970.3	1443.54
2003/04	HBL	11231.55	10988.05	10698.75	289.3	54.04	784.02	1033.61
2004/05		15957.55	15605.42	15311.04	294.38	25.45	907.14	1241.01
2005/06		19544.34	17359.42	18747.46	(1388.04)	68.91	1167.7	1572.92
2006/07		20672.43	14165.33	19433.25	(5267.92)	119.53	927.17	1387.34
2007/08		23355.23	16881.45	21899.45	(5018.48)	122.49	914.15	1443.54
2003/04	EBL	2275.01	2077.32	2127.09	(49.77)	2.76	156.82	215.50
2004/05		3411.70	3334.59	2304.27	130.32	35.78	238.67	325.78
2005/06		5202.58	5049.85	4874.79	175.06	62.48	338.19	464.12
2006/07		6607.18	6359.66	6063.87	295.79	72.92	384.42	539.78
2007/08		8052.20	7836.89	7420.73	416.16	40.85	442.99	634.08

APPENDIX – IV

Fiscal Year.	Name of the Banks	X_1 (.012X_1)	X_2 (.014X_1)	X_3 (.033X_1)	X_4 (.006X_1)	X_5 (.012X)	$Z = X_1 + X_2 + X_3 + X_4 + X_5$
2003/04	NABIL	.069	.0082	.213	.13	.09	.5102
2004/05		.064	.0099	.200	.215	.09	.5798
2005/06		– .26	.019	.185	.188	.09	.2049
2006/07		– .209	.0002	.163	.123	.09	.1672
2007/08		– .092	.0025	.186	.131	.08	.3075
2003/04	SCBNL	.086	.013	.2216	.176	.09	.5911
2004/05		.061	.0077	.1961	.236	.08	.5808
2005/06		.063	.0071	.1920	.222	.09	.5741
2006/07		.077	.0099	.1721	.171	.08	.51
2007/08		.070	.0144	.1525	.159	.07	.4659
2003/04	HBL	.031	.0067	.2304	.064	.09	.4221
2004/05		.022	.0022	.1876	.1534	.08	.4452
2005/06		– .085	.0049	.1972	.138	.08	.3351
2006/07		– .306	.0081	.1840	.087	.07	.00715
2007/08		– .026	.0073	.1292	.092	.06	.0285
2003/04	EBL	– .026	.0017	.2275	.128	.10	.4312
2004/05		.046	.015	.2309	.206	.10	.5975
2005/06		.040	.017	.2145	.1242	.09	.4857
2006/07		.054	.015	.1920	.056	.08	.397
2007/08		.062	.0071	.1815	.087	.08	.4176

APPENDIX – V

EBL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.1989
R Square	0.0396
Adjusted R Square	-0.2806
Standard Error	286.8675
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	10166.2894	10166.2894	0.1235	0.5197
Residual	3.0000	246878.9106	82292.9702		
Total	4.0000	257045.20000			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	1009.3722	1164.9691	0.8664	0.4500	-2698.0829	4716.8274
Profitability	-29.0445	82.6351	-0.3515	0.7485	-292.0267	233.9376

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.6160
R Square	0.3794
Adjusted R Square	0.1725
Standard Error	230.5957
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	97522.0384	97522.0384	1.8340	0.2686
Residual	3.0000	159523.1616	53174.3872		
Total	4.0000	257045.20000			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-294.4446	670.2239	-0.4393	0.6901	-2427.3982	1838.5089
EPS	29.7896	21.9970	1.3543	0.2686	-40.2149	99.7940

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9648232
R Square	0.9308837
Adjusted R Square	0.907845
Standard Error	76.954552
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	239279.191	239279.191	40.40511	0.00787797
Residual	3	17766.00901	5922.003		
Total	4	257045.2			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-808.2016	224.567518	-3.5989249	0.03679	-1522.876371	-93.52689
Z	3027.8218	476.3346353	6.3565015	0.007878	1511.911004	4543.7326

HBL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.4967
R Square	0.2467
Adjusted R Square	-0.0044
Standard Error	372.3828
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	136229.9458	136229.9458	0.9824	0.5797
Residual	3.0000	416006.8542	138668.9514		
Total	4.0000	552236.8000			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-1347.1350	2582.4746	-0.5216	0.6380	-9565.7296	6871.1396
Profitability	156.6308	158.0267	0.9912	0.3947	-346.2812	359.3423

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.7068
R Square	0.4996
Adjusted R Square	0.3328
Standard Error	303.5008
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	275898.6800	275898.6800	2.9952	0.3265
Residual	3.0000	276338.1200	92112.7067		
Total	4.0000	552236.8000			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	161.9698	619.0083	0.2617	0.8105	-1807.9928	213.8824
EPS	14.0329	8.1084	1.7307	0.1819	-11.7716	39.8872

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.6857665
R Square	0.4702756
Adjusted R Square	0.2937008
Standard Error	312.26767
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	259703.5104	259703.5104	2.663323	0.201137373
Residual	3	292533.2896	97511.09652		
Total	4	552236.8			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	912.23724	228.406042	3.993927805	0.02812	185.3465956	1639.1279
Z	1191.2874	729.9694004	1.631968944	0.201187	-1131.803209	3514.378

SCBNL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.6122
R Square	0.3748
Adjusted R Square	0.1665
Standard Error	351.7764
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	222592.8918	222592.8918	1.7988	0.5197
Residual	3.0000	371239.9082	123746.6361		
Total	4.0000	593832.8000			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	3983.0722	1712.3542	2.3261	0.1025	-1466.4081	9432.5525
Profitability	-74.9794	55.9053	-1.3412	0.2724	-252.8952	102.9364

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.1687
R Square	0.0285
Adjusted R Square	-0.2954
Standard Error	438.5329
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	16899.4611	16899.4611	0.0879	0.7862
Residual	3.0000	576933.3389	192311.1130		
Total	4.0000	593832.8000			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	1230.2509	1584.0128	0.7767	0.4940	-3810.7896	6271.2914
EPS	3.6471	12.3031	0.2964	0.7862	-35.5070	42.8013

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.0995029
R Square	0.009900
Adjusted R Square	-0.320132
Standard Error	442.70132
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	5879.436115	5879.436115	0.03	0.87351834
Residual	3	587953.3639	195984.4546		
Total	4	593832.8			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	1310.85	2233.629066	0.586870066	0.598532	-5797.561199	8419.2613
Z	707.86944	4086.919987	0.173203644	0.873518	-12298.54618	13714.285

NABIL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.2175
R Square	0.0473
Adjusted R Square	-0.2703
Standard Error	450.6391
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	30243.3361	30243.3361	0.1489	0.5197
Residual	3.0000	609226.6639	203075.5546		
Total	4.0000	639470.000			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	1362.8973	926.2795	1.4714	0.2376	-1584.9401	4310.7348
Profitability	-15.1853	39.3493	-0.3859	0.7253	-140.4125	110.0419

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.0370
R Square	0.0014
Adjusted R Square	-0.3315
Standard Error	461.3725
Observations	5.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	1.0000	876.3100	876.3100	0.0041	0.9529
Residual	3.0000	638593.6900	212864.5633		
Total	4.0000	639470.0000			

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	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	937.7812	1205.7001	0.7778	0.4934	-2899.2982	4774.8606
EPS	1.0864	16.9315	0.0642	0.9529	-52.7973	54.9700

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.1037235
R Square	0.0107586
Adjusted R Square	-0.318989
Standard Error	459.19866
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	6879.777893	6879.777893	0.032627	0.868172339
Residual	3	632590.2221	210863.4074		
Total	4	639470			

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	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	933.92641	488.5612291	1.911585188	0.151889	-620.894928	2488.7477
Z	226.36284	1253.19466	0.180628635	0.868172	-3761.865616	4214.5913

EBL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.964823
R Square	0.930884
Adjusted R Square	0.907845
Standard Error	0.024522
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.024296	0.024296	40.40511138	0.00787797
Residual	3	0.001804	0.000601		
Total	4	0.0261			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.280676	0.031132	9.015789	0.002881057	0.181601321	0.379751
MVS	0.000307	4.84E-05	6.356502	0.00787779	0.000153519	0.000461

NABIL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.103723
R Square	0.010759
Adjusted R Square	-0.31899
Standard Error	0.210413
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.001445	0.001445	0.032626704	0.868172339
Residual	3	0.132821	0.044274		
Total	4	0.134265			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.305547	0.282917	1.079989	0.359231355	-0.59482087	1.205914
MVS	4.75E-05	0.000263	0.180629	0.868172339	-0.00078985	0.000885

SCBNL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.099503
R Square	0.009901
Adjusted R Square	-0.32013
Standard Error	0.062229
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.000116	0.000116	0.029999502	0.87351834
Residual	3	0.011617	0.003872		
Total	4	0.011734			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.520656	0.139773	3.725018	0.033690309	0.075836284	0.965475
MVS	1.4E-05	8.08E-05	0.173204	0.87351834	-0.00024301	0.000271

HBL

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.685766
R Square	0.470276
Adjusted R Square	0.293701
Standard Error	0.179757
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.086059	0.086059	2.663322634	0.201187373
Residual	3	0.096938	0.032313		
Total	4	0.182997			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-0.22896	0.302877	-0.75594	0.504625171	-1.19284846	0.734934
MVS	0.000395	0.000242	1.631969	0.201187373	-0.00037505	0.001165

Whole Sample Banks

Banks	Year	MVS	Profitability	EPS	Z
NIBL	2003/04	700	23.6	67.84	0.5102
	2004/05	1400	25.14	83.79	0.5789
	2005/06	1500	18.52	59.26	0.2049
	2006/07	735	16.57	55.25	0.1672
	2007/08	735	31.05	84.66	0.3075
SCBNL	2003/04	1162	30.45	105.86	0.5911
	2004/05	1985	28.72	115.62	0.5808
	2005/06	2144	26.27	126.88	0.5741
	2006/07	1550	33.24	141.13	0.5100
	2007/08	1640	33.82	149.30	0.4659
HBL	2003/04	1000	15.99	86.07	0.4221
	2004/05	1700	16.07	83.08	0.4452
	2005/06	1500	17.85	93.56	0.3351
	2006/07	1000	16.94	60.26	0.0071
	2007/08	836	14.69	49.45	0.0285
EBL	2003/04	407	11.71	21.31	0.4312
	2004/05	980	12.67	34.85	0.5979
	2005/06	750	15.02	31.56	0.4857
	2006/07	430	15.81	32.91	0.3970
	2007/08	445	14.85	29.90	0.4176

Whole
Z Value on MVS

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.162061
R Square	0.026264
Adjusted R Square	-0.01607
Standard Error	441.6988
Observations	25

ANOVA

	df	SS	MS	F	Significance F
Regression	1	121030.7	121030.7	0.620359	0.43895594
Residual	23	4487251	195097.9		
Total	24	4608281			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	395.5064	242.9459	1.627961	0.117156	-107.0648796	898.0777
MVS	-426.1	540.9903	-0.78763	0.438956	-1545.221863	693.0227