

# STOCK PRICE BEHAVIOR OF JOINT VENTURE BANKS IN NEPAL

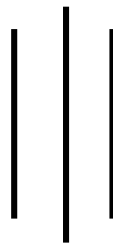


By:

HARINDRA BAHADUR BUDHATHOKI

Roll No: 14

T.U. Regd. 11387 - 91



A Thesis

Submitted to:

Office of the Dean

Faculty of Management

TRIBHUVAN UNIVERSITY

In Partial Fulfillment of the Requirement for the Master of  
Business Studies (MBS)

Mahendra Multiple Campus

Dharan, Sunsari

Nepal

2009

**TRIBHUVAN UNIVERSITY**  
**FACULTY OF MANAGEMENT**  
**MAHENDRA MULTIPLE CAMPUS**  
**DHARAN, NEPAL**

**RECOMMENDATION**

This is to certify that the thesis:

*Submitted by*

**HARINDRA BAHADUR BUDHATHOKI**

*Entitled*

**Stock Price Behaviour of Joint Venture Banks in Nepal**

has been prepared as approved by this Department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

.....  
*Thesis Supervisor,*

**Mr. Khagendra Adhikari**

.....  
**Chairperson, Research  
Committee**

**Prof. Tara Bahadur Niraula**

.....  
*Campus Chief,*

**Mahendra Multiple Campus**

**Mr. Surya Kumar Rai**

Date:.....

**TRIBHUVAN UNIVERSITY**  
**FACULTY OF MANAGEMENT**  
*MAHENDRA MULTIPLE CAMPUS*  
*DHARAN, NEPAL*

VIVA-VOCE SHEET

*We have conducted the viva-voce examination of the thesis presented by*

**Harindra Bahadur Budhathoki**

*Entitled*

**Stock Price Behaviour of Joint Venture Banks in Nepal**

and found the thesis to be the original work of the student written according to  
the prescribed format. We recommend this thesis to be accepted as partial  
fulfillment of the requirements for Master of Business Studies (M.B.S.)

**Viva-voce Committee:**

Chairperson, Research Committee: .....

Prof. Tara Bahadur Niraula

Member (Thesis Supervisor): .....

Mr. Khagendra Adhikari

Member (External Expert): .....

Member: .....

Member: .....

*Date:* .....

**TRIBHUVAN UNIVERSITY**  
FACULTY OF MANAGEMENT  
*MAHENDRA MULTIPLE CAMPUS*  
*DHARAN, NEPAL*

DECLARATION

I hereby declare that the work reported in this thesis entitled **Stock Price Behaviour of Joint Venture Banks in Nepal** submitted to Mahendra Multiple Campus, Tribhuvan University is my original work. It is done in the form of partial fulfillment of the requirements for the Master of Business Studies (M.B.S.) under the supervision and guidance of **Mr. Khagendra Adhikari**, Lecturer, Mahendra Multiple Campus.

**Harindra Bahadur Budhathoki**

Researcher

Roll No. 14

Mahendra Multiple Campus

Date: .....

## ACKNOWLEDGEMENT

My indebtedness and gratitude goes to the many individuals, who have assisted to shape this thesis in the present form. First of all, my gratitude goes to all the teachers and Staffs of the Mahendra Multiple Campus, T.U., Dharan, whose sound theoretical knowledge provided me the basis for the preparation of the thesis.

I would like to express my great sense of gratitude to my respected research supervisor **Mr. KHAGENDRA ADHIKARI**, of Mahendra Multiple Campus, T.U. Dharan, for this invaluable supervision, constructive comments and suggestions, which gave the final shape of this thesis.

I am also thankful to my colleagues **Mr. Nabin Shakya**(**Bishnu memorial higher sec. school**), **Mr. Bishwo Mohan palikhe**, **Mr. Rajan Shrestha**(**blast times**) **Mr. Nabin Ghimire**, **Mr. Bhupraj Rijal**(**MMC**), **Mr. Narendra Rai** (**MMC**) for their effort and support in this research work.

I am indebted to all staffs of Selected Commercial Banks, NEPSE and Security Board of Nepal for providing necessary data, information and congenial environment for preparing this thesis.

I am grateful and proud to my respected Father **Mr. RANTA BAHADUR BUDHATHOKI** whose inspiration and financial support helped me to achieve this success. At this moment, I must not forget my Sisters Miss. **BABITA BUDHATHOKI** and Miss. **PABITRA BUDHATHOKI** for their great support in every steps of my study period. And my special thanks also to *Miss. Gita Bhujel* from *Ratna Photocopy udyog* Dharan-7, Buddhamarga.

**Harindra Bahadur Budhathoki**

Researcher

Roll No. 14

Mahendra Multiple Campus

# TABLE OF CONTENTS

	Page No.
<i>Recommendation</i>	<i>i</i>
<i>Viva-voce Sheet</i>	<i>ii</i>
<i>Declaration</i>	<i>iii</i>
<i>Acknowledgements</i>	<i>iv</i>
<i>Table of Contents</i>	<i>v</i>
<i>List of Tables</i>	<i>viii</i>
<i>List of Figures</i>	<i>ix</i>
<i>Abbreviations</i>	<i>x</i>
<b>CHAPTER - I</b>	
<b>INTRODUCTION</b>	<b>1-17</b>
1.1 Background	1
1.1.1 Primary Market	4
1.1.2 Secondary Market	4
1.1.3 Evolution of Stock Market In Nepal	8
1.1.4 A Brief Introduction of Sample Joint Venture Banks	11
1.2 Statement of the Problem	13
1.3 Objectives of the Study	15
1.4 Hypothesis of the Study	15
1.5 Significance of the Study	16
1.6 Limitations of the Study	16
1.7 Organization of the Study	17
<b>CHAPTER - II</b>	
<b>REVIEW OF LITERATURE</b>	<b>18-45</b>
2.1 Conceptual Review	18
2.1.1 Common Stock	18
2.2 Review of the Previous Studies	32
2.2.1 Context of Foreign Countries	32
2.2.2 Nepalese Context	34

2.3 Research Gap	45
<b>CHAPTER - III</b>	
<b>RESEARCH METHODOLOGY</b>	<b>46-55</b>
3.1 Research Design	46
3.2 The Population and Sample	47
3.3 Data Collection	47
3.4 Data Processing Procedure	48
3.5 Data Analysis Procedure	48
3.6 Method of Data Analysis	48
3.6.1 Financial Tools	49
3.6.2 Statistical Tools	50
<b>CHAPTER – IV</b>	
<b>DATA PRESENTATION AND ANALYSIS</b>	<b>56-100</b>
4.1 Performance of Sampled Joint Venture Banks	56
4.1.1 Profitability	56
4.1.2 Earning Per Share	58
4.1.3 Dividend Per Share	61
4.1.4 Dividend Payout	63
4.1.5 Growth in Net Profit of Sampled Banks	64
4.1.6 Landing/Deposit Ratio	66
4.1.7 Total Assets Turnover	68
4.2 Market Performance	70
4.2.1 Market Capitalization	70
4.2.2 Dividend Yield	72
4.2.3 MV/BV Market Value Vs Book Value	75
4.2.4 The Overall Performance of the Sampled Companies	78
4.3 Simple Regression Analysis	82
4.3.1 Simple Regression Analysis of Overall Z-value on Mps of Selected Banks	82
4.3.2 Simple Regression Analysis of Z-value on MVS of	

Selected Banks	83
4.3.3 Simple Regression Analysis of MVS on Z-value, EPS and Profitability of Selected Banks	89
4.4 Major Findings of the Study	99

*CHAPTER – V*

<b>SUMMARY, CONCLUSION &amp; RECOMMENDATION</b>	<b>101-105</b>
<u>5.1 Summary</u>	<u>101</u>
<u>5.2 Conclusion</u>	<u>103</u>
<u>5.3 Recommendations</u>	<u>103</u>

**BIBLIOGRAPHY**



## **LIST OF TABLES**

	Page No.
Table 1.1: Sector wise Distribution Of Listed Companies With Their Paid Up Values And Their Percentage	10
<b>Table 4.1: Profitability of the Sampled Banks</b>	<b>57</b>
<b>Table 4.2: Earning Per Share</b>	<b>59</b>
<b>Table 4.3: Dividend Per Share</b>	<b>61</b>
<b>Table 4.4: Dividend Payout of Sample Banks</b>	<b>63</b>
Table 4.5: Growth in Net Profit	65
<b>Table 4.6: Lending/Deposit Ratio</b>	<b>67</b>
<b>Table 4.7: Total Assets Turnover</b>	<b>69</b>
<b>Table 4.8: Market Capitalization of Sampled Banks</b>	<b>70</b>
Table 4.9: Dividend Yield	73
<b>Table 4.10: MV/BV Ratio</b>	<b>75</b>
<b>Table 4.11: Overall Performance of Selected Banks</b>	<b>80</b>
Table 4.12: Simple Regression Analysis of Overall Z-value on Mps of Selected Banks	82
Table 4.13: Simple Regression Analysis of Z value on MVPS of selected banks	83
Table 4.14: Regression Analysis of Z value on MVPS of NBL	84
<b>Table 4.15: Regression Analysis of Z value on MVPS of SCBNL</b>	<b>84</b>
<b>Table 4.16: Regression Analysis of Z value on MVPS of HBL</b>	<b>85</b>
<b>Table 4.17: Regression Analysis of Z value on MVPS of EBL</b>	<b>86</b>
<b>Table 4.18: Regression Analysis of Z value on MVPS of BOKL</b>	<b>87</b>
<b>Table 4.19: Regression Analysis of Z value on MVPS of NBL</b>	<b>89</b>
<b>Table 4.20: SCBNL Regression between MVPS on EPS and Z value</b>	<b>91</b>
Table 4.21: HBL Regression Between MVPS on Profitability, EPS and Z Value	93
Table 4.22: EBL Regression Between MVPS on Profitability, EPS and Z Value	95
Table 4.23: BOKL Regression Between MVPS on Profitability, EPS and Z Value	97

## LIST OF FIGURES

	Page No.
Figure 4.1: Profitability of the Sampled Banks	57
Figure 4.2: Earning Per Share of Sampled Banks	59
Figure 4.3: Dividend Per Share of Sampled Banks	61
<b>Figure 4.4: Dividend Payout of Sample Banks</b>	<b>63</b>
Figure 4.5: Growth in Net Profit of Selected Banks	65
Figure 4.6: Lending/Deposit Ratio of Sampled Bank	67
Figure 4.7: Total Assets Turnover Ratio of Sampled Banks	69
Figure 4.8: Market Capitalization of Sampled Banks	71
Figure 4.9: Dividend Yield Ratio of Selected Banks	73
Figure 4.10: MV/BV Ratio of Selected Banks	76
Figure 4.11: Overall Performance of Selected Banks	80

## ABBREVIATIONS

C. L.	–	Current Liability
C.A.	–	Current Assets
CV	–	Coefficient of Variation
DPR	–	Dividend Payout Ratio
DPS	–	Dividend Per Share
DY	–	Dividend Yield
E.Y.	–	Earning Yield
EBL	–	Everest Bank Limited
EMH	–	Efficient Market Hypothesis
EPS	–	Earning Per Share
F. Y.	–	Fiscal Year
HBL	–	Himalayan Bank Limited
HMG/N	–	His Majesty Government of Nepal
i. e.	–	That is
L.A.	–	Liquid Assets
Ltd.	–	Limited
M.B.S.	–	Master of Business Studies
MVPS	–	Market Value Per Share
<b>NABIL</b>	–	<b>NABIL Bank Limited</b>
NEPSE	–	Nepal Stock Exchange Ltd.
<b>NIAT</b>	–	<b>Net Income After Tax</b>
OTC	–	Over-the-Counter
P.E.	–	Price Earning Ratio
ROE	–	Return on Equity
S.D.	–	Standard Deviation
S.E.C	–	Security Exchange Center
SCBNL	–	Standard Chartered Bank Limited
SEBO	–	Security Board Nepal
S.E.	–	Standard Error
T.A.	–	Total Assets
Vol.	–	Volume

# **CHAPTER - I**

## **INTRODUCTION**

### **1.1 General Background**

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, facilitates 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 funds 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 markets 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 Primary Market**

It is the market in which securities are sold at the time of their initial issuance. In other words, a market for newly issued securities is called primary market. Corporations and Governmental bodies issue new securities in primary market. These securities can be offered by the method of public flotation or private placement.

Primary market is new issue market of securities. The primary market deals with those securities, which have been made available to the public for the first time. The growth of primary market is encouraging since many public companies including joint venture banks have been successful to tap capita through the flotation of securities to the general people. According to Henderson, there are following important functions of primary market.

- ) Organization
- ) Undervaluing
- ) Distribution

The new issues in primary market facilitate of raising long-term funds and these can be classified as "initial issues" and further this voice issues. Initial issues are capital issues offered for the first time by a new company. When existing companies raise issues, it is called further issues. The interplay of these functions helps to transfer resources from the source of supply to demand.

### **1.1.2 Secondary Market**

It is the market in which securities are traded that has been issued at some previous points of time. In other words, where outstanding securities are traded is referred to as the secondary or more popularly, the stock market. Thus secondary market deals with previously issued shares mainly traded through stock exchange, Over-the-Counter (OTC) market or direct dealing. In Nepal, there is only one stock exchange called Nepal Stock Exchange Limited. This

stock exchange constitutes a market where securities issued by government and corporate sectors are traded or transferred from one hand to another at a fair price through market creators i.e., dealers and brokers.

Without the secondary market, primary would not function well. Savers (Investors) would be reluctant to invest in new securities if they had to hold these securities to maturity or incur large search costs in finding a broker when they are ready to sell. The existence of well-functioning secondary market where investors come together to trade the existing securities assures the purchasers of primary securities that they can quickly sell their securities if the need arises. Thus the primary and secondary markets are complementary, not competitive, to each other in the sense that one without other is incomplete. In summary, secondary markets are indispensable to the proper functioning of the primary markets. The latter, in turn, are indispensable to the proper functioning of the economy (Mahat, 1991:201).

Secondary market is that market where there is trading of outstanding securities of private business organizations and government. Investors can purchase and sell outstanding securities of companies in secondary market. In growth of primary market, there is also contribution of secondary market. Secondary market accelerates the liquidity of securities.

Stock is traded in two different kinds of markets: stock exchange and OTC market. New York Stock of Exchange (NYSE) is an example of organized stock exchange market. Securities trading in primary and secondary market can be divided as follows:

#### **i. Share**

Capital market refers to the links between lenders and borrowers of fund arranging a fund transfer process to seek each other benefit. The lenders and borrowers coming together in capital market play effective financial intermediary role to activate both primary and secondary market through the



use of various long- term capital market instruments like common stock, bonds, preferred stock, convertible issues and many more like that people invest money through primary market and secondary market. In general, there are trading three types of securities in capital market.

### **Ordinary Shares:**

Ordinary share provides possession of company to shareholders. Common shares are mostly risky than bonds and preference shares. Common stockholder have attraction in investing due to their voting right, enjoying large amount of dividend, to earn capital profit from stock price rise.

However, all investors do not attract towards common stock due to uncertain in dividend and refunding of principal at the end while liquidation is preceded.

### **Preference Shares:**

Preference shares are those shares, which have fixed dividend and right of acquiring principal before ordinary shares at the time of liquidation. It is hybrid between the bond and common stock because preferred stock has fixed dividend which similar to bond and payment of principal after bond which like ordinary shares.

### **ii. Bonds**

Bonds are issued with coupon rate. Interest is paid a coupon rate semi- annually or annually. Bonds are generally issued with some certain maturity period. Principal is returned at maturity period. There is different type of bonds due to variable terms, conditions and features of bond to each other's. Bond may be distinguished according to their repayment provision, type of security pledged, time of maturity and technical factor.

Secondary market is that market where there is trading of outstanding securities of private business organizations and government. Investors can purchase and sell outstanding securities of companies in secondary market. In growth of

primary market, there is also contribution of secondary market. Secondary market accelerates the liquidity of securities.

The importance of financial market needs no exaggeration at all in today's world of economic liberalization and free market economy where even the financial superpowers like US and Europe are desperately vying each other for attracting the much needed capital and foreign investment regarded as the life blood of any business venture. Business firms need tremendous amounts of capital to finance their operations and productive activities. For the growth, development and expansion of their business, they must invest capital in amounts beyond their capacity to save in any reasonable period of time. Ploughing back of profits will not be always sufficient. And it is the financial market from which the business firms can raise the needed capital. Likewise, governments must borrow large amounts of money to provide the goods, services and development infrastructures demanded of them by their people. The financial market provides the forums or means for the governments to raise the needed funds by issuing and selling securities. On the other hand, it provides golden opportunities for the investors to invest on these securities and earn a return thereby enhancing their prospects of wealth maximization. This is how the financial markets serve to channel the funds from the savers to borrowers, from investors to entrepreneurs and from surplus units to deficit units of an economy.

Thus the financial market helps to collect the scattered savings and scarce resources from different parts of the country (surplus units) and channel these funds into the productive sectors (deficit units) like industries and agriculture. This is how it mobilizes the domestic financial resources and plays a crucial role for the economic growth and development of a country. On one hand, it provides lifeblood and dynamism to the country's economy while on the other hand; it provides liquidity for the investors to convert the securities into cash at a fair price whenever such a need arises. Otherwise, as explained earlier, savers would be reluctant to invest their hard earned money in the securities if they

had to hold these securities to maturity of incur a large search costs in finding a broker to sell them. Furthermore, security holders can obtain secured loans from commercial banks against these financial assets as collaterals.

### **1.1.3 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 2005/06.

**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	15	10.56	4444.92	35.39
2	Development Bank	21	14.79	611.88	4.87
3	Finance Company	55	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	142	100.00	12560	100.00

Source: [www.nepalstock.com](http://www.nepalstock.com)

#### **1.1.4 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 is 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; Bangladesh (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).

#### **e. Bank of Kathmandu Limited (BOKL)**

Bank of Kathmandu is the latest joint venture bank listed in NEPSE. It was established in 2050 B.S. in collaboration with the Siam Commercial Bank PLC, Thailand under the Company Act. The Siam commercial Bank has diluted and reduced in its equity to 25% by selling 20% to Nepalese citizen in 1998 of its 50% initial holding. The bank has 7 branches in operation.

Authorized capital and paid-up capital of BOKL are Rest 1,000,000,000.00 and Rest 233,649,800.00 respectively. The listing date was Shrawan 2, 2054 (1997 A.D.)

## **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 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?
- b. How is the trend of stock price behavior?
- c. Do the performance and the stock price behavior of sampled banks 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:

- 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 Hypothesis of the Study**

Following Hypothesis will be tested in the study.

Under Null Hypothesis:  $H_0: \hat{\mu}_0 = \hat{\mu}_1$

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

## **1.5 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.

## **1.6 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, EBL and BOKL) 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 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.

- 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 their 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 lump 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 settled. Therefore equity shareholders are the real risk bearers but they share in the increasing profits of the company. They also enjoy voting right in the management and control of the company (William F. Sharpe & Gordon J. Alexander and Jessery V. 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. Small of Prestige**

A company with substantial equity share is generally quite low. i.e. Rs. 10 equity shares have a wide appeal. The company can mobilize huge funds from investors belonging to different income groups.

#### **vii. 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, are called 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 word '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 Fama suggested, it is useful to distinguish three level of market efficiency.

<b>Forms of Efficiency</b>	<b>Set of Information Reflected in Securities Price</b>
Weak	Previous Price of Securities
Semi-Strong	All Publicly available Information
Strong	All information both Public and Private

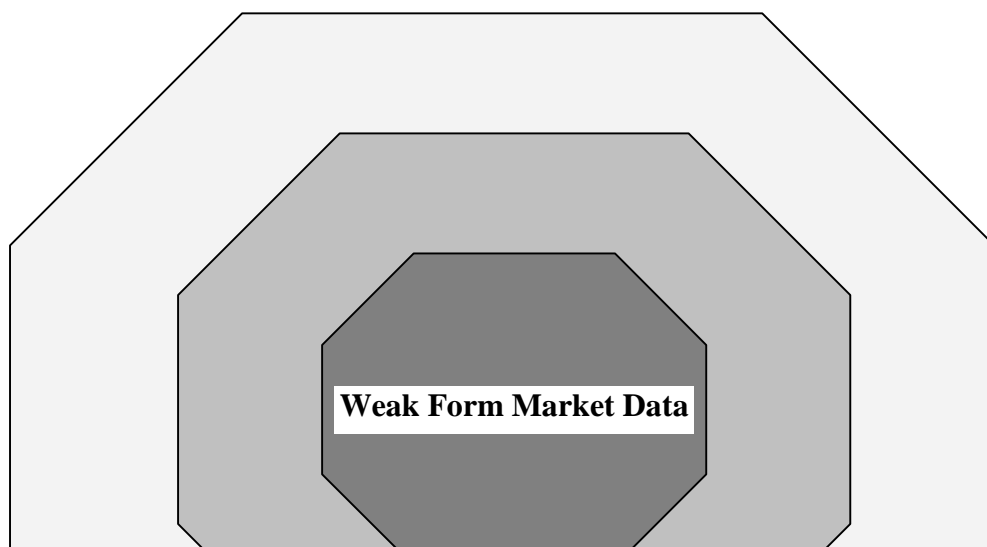
In an efficient market investors expect to make only normal profits and earn a normal rate of return on their investments. In such a market any new information immediately and fully reflected in price. New information is just that new, meaning a surprise. In a perfectly efficient market, price changes 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 form 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, NSE 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 form 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 changes are 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 possibly 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 considerations 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 market's evaluation process works haphazardly almost like a blind man firing a gun. 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 the 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 Pistoiese 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**

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** 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** 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, an 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** 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 relevant 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 basis 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 protected? 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** in his Dissertation entitled "Dividend and stock prices: An empirical Study" has made an 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 per 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** 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** 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** 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 1<sup>st</sup> 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 particular 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** 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 to meet the international accounting standard.

### **2.3 Research Gap**

In this way, many researchers have studied about the stock market of Nepal from different angles. Obviously the conclusion that they present is also varied according to focus, size of the sample and the methodology they followed but none of the researchers have studied about the "Technical Analysis of common stocks" in Nepalese context. It is therefore, a pioneering study, a contribution to knowledge on a vital aspect concerning investment decision and in order to overcome the different of past works and to fill up the research gap.

## **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 2003/04 to 2005/06. 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 The Population and Sample**

This study based on the companies listed in the Nepal Stock Exchange. The population is all the listed companies. Only five joint venture commercial banks have issued their shares to the general public and Nepal industrial and commercial bank's share were listed with the Nepal Stock Exchange just four years ago. 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 five banks have been considered as so far:

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

### **3.3 Data Collection**

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 five 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 Yield Ratio**

The ratio is closely related to EPS and DPS

$$\text{Dividend Yield Ratio} = \frac{\text{Dividend Per Share}}{\text{Market Value Per Share}}$$

### **iv. Earning Yield Ratio**

The ratio is defined as the ratio of earning per share to market value per ordinary share.

$$\text{Earning Yield} = \frac{\text{Earning Per Share}}{\text{Market Value Per Share}}$$

### **v. Asset Turnover Ratio**

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

## vi. 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.

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

Return on shareholders' Equity (ROE)

### 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:

$$\text{Arithmetic Mean } (\bar{X}) = \frac{x_1 + x_2 + x_3 + \dots + x_n}{N}$$

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

Where,

$\Sigma x$  = Sum of the sized of the items

N = Number of items

#### i. Standard Deviation ( $\sigma$ )

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:

$$= \sqrt{\frac{\sum fX^2 - \frac{(\sum fX)^2}{n}}{n-1}}$$

### ii. 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 series with less 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 dividing the standard deviation by arithmetic means. Thus,

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

### iii. 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 functional relationship between the variables and thereby provide a mechanism for prediction or forecasting.

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

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

$$MVS = a + b_z + \hat{\uparrow}$$

MVS = Market Value of Share

Z = Z value

$\hat{\uparrow}$  = 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 of 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 other words it represents 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  $H_0$ : 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

$$= n-1-1$$

$$= n-2$$

$$v = n-2$$

$$t = \frac{\hat{b} Z_0}{\text{s.e. of the coefficient}}$$

### **Decision Rule**

If  $t_{\text{cal}} < t_{\text{tab}}$ ,  $H_0$  is accepted that means the regression coefficient is insignificant.

If  $t_{\text{cal}} > t_{\text{tab}}$ ,  $H_0$  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" R<sup>2</sup> can be obtained easily by squaring the correlation coefficient 'r'. R<sup>2</sup> is always a positive number and its value lies between 0 and 1.

### **ix. Formulation of Hypothesis**

Null hypothesis H<sub>0</sub>: The regression level does exist.

Alternative hypothesis H<sub>1</sub>: 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<sub>0</sub> is accepted otherwise H<sub>1</sub> 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:

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

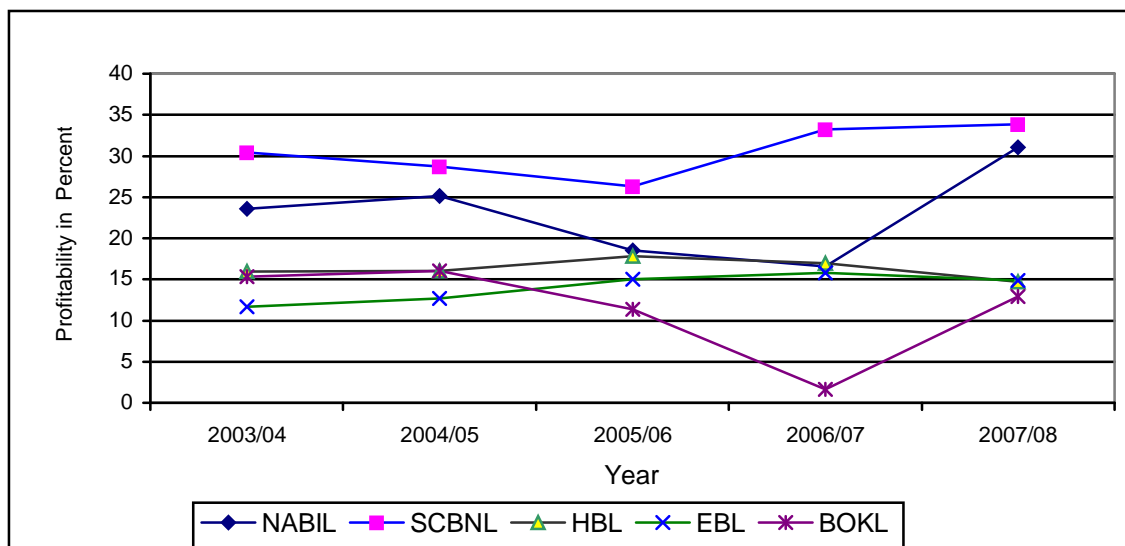
**Table 4.1: Profitability of the Sampled Banks**

Fiscal Year	NABIL	SCBNL	HBL	EBL	BOKL
-------------	-------	-------	-----	-----	------

2003/04	23.60	30.45	15.99	11.71	15.33
2004/05	25.14	28.72	16.07	12.67	16.00
2005/06	18.52	26.27	17.85	15.02	11.37
2006/07	16.57	33.24	16.94	15.81	1.63
2007/08	31.05	33.82	14.69	14.85	12.91

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 be fluctuating. 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 seems to be slightly increasing indicating that the performance is satisfactory. But in the fiscal year 2004/05 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 an 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 companies. 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 found 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.

Lastly, **BOKL** ratio from the fiscal year 2003/04 is fluctuating manner. In the fiscal year 2003/04 and 2004/05 it was found 15.33% and 16% increasing ratio but in fiscal year 2005/06 and 2006/07 it was found 11.37% and 1.63% declining manner. In the fiscal year 2006/07 performance of BOKL is very poor. But in the fiscal year 2007/08 it has increased 12.91%. So, performance of BOKL is not satisfactory. It has unable to sustain its performance.

So, in the end, it can say that by looking at the after all five 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.

$$\text{Earning Per Share} = \frac{\text{Net profit after ZPreferenceDividend}}{\text{No of CommonShareOutstanding}}$$

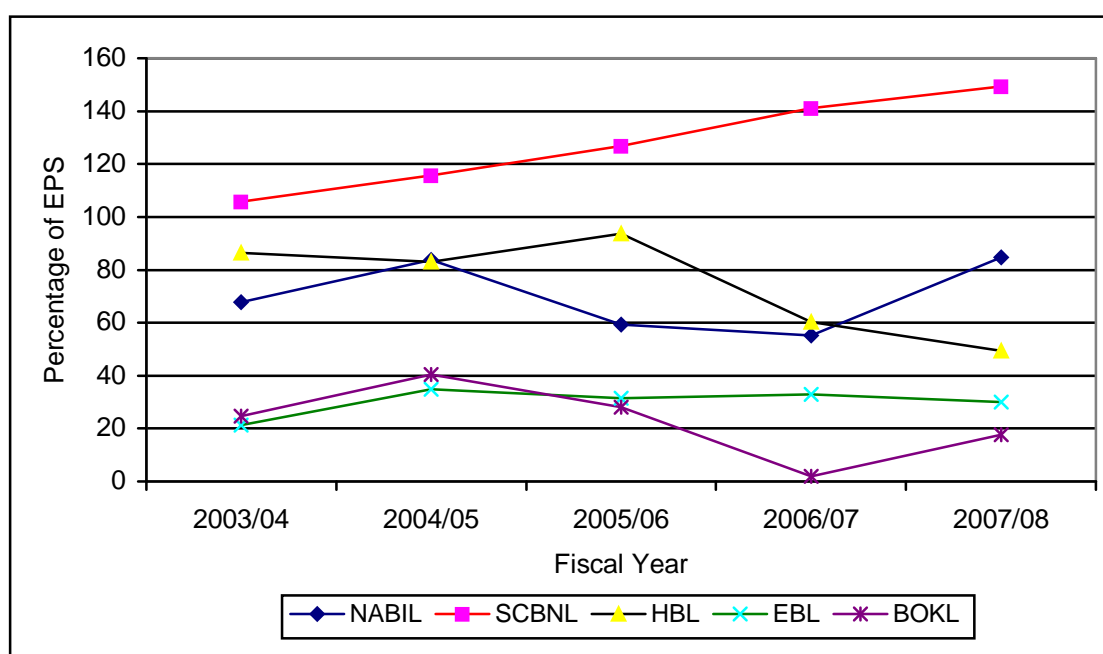
**Table 4.2: Earning Per Share**

Fiscal Year	NABIL	SCBNL	HBL	EBL	BOKL
-------------	-------	-------	-----	-----	------

2003/04	67.84	105.86	86.07	21.31	24.67
2004/05	83.79	115.62	83.08	34.85	40.43
2005/06	59.26	126.88	93.56	31.56	27.97
2006/07	55.25	141.13	60.26	32.91	2.00
2007/08	84.66	149.30	49.45	29.90	17.72
Mean	70.16	127.758	74.484	30.106	22.558
S.D.	13.6247	17.822	18.715	5.2415	14.135
C.V.	0.1942	0.1395	0.2513	1.742	0.6266

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 2004/05 (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 2003/04 and 2004/05 was found 21.31 percent and 34.85 percent increasing trend. But in the fiscal year 2005/06 its 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.

#### **EPS of BOKL**

EPS of BOKL has been fluctuating. It is particularly worrying that the trend of EPS is declining which raises questions about its recent performance. EPS was 24.67 percent in 2003/04 but it declined to abysmal 2.00 percent in 2004/05. Compared to 2006/07 and 2007/08 the trend appears to be decreasing. Hence, it can be said that BOKL's performance on the basis of EPS is declining. Therefore, except SCBNL and NABIL Banks, EPS was declining for other three sampled banks.

#### **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.

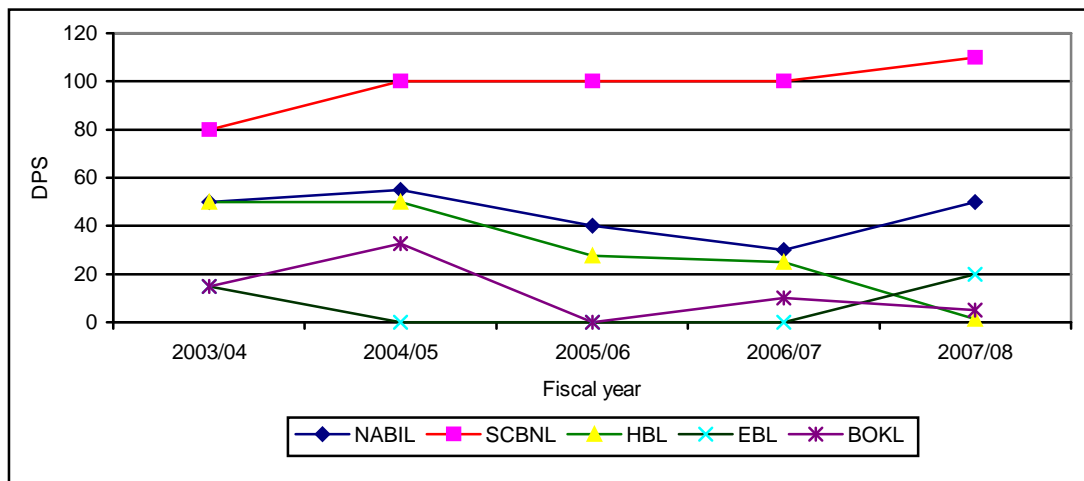
$$DPS = \frac{\text{Dividend}}{\text{No. of Shareholders}}$$

**Table 4.3: Dividend Per Share**

Fiscal Year	NABIL	SCBNL	HBL	EBL	BOKL
2003/04	50.00	80.00	50.00	15.00	14.98
2004/05	55.00	100.00	50.00	0.00	32.74
2005/06	40.00	100.00	27.50	0.00	0.00
2006/07	30.00	100.00	25.00	0.00	10.00
2007/08	50.00	110.00	1.31	20.00	5.00
Mean	45	98	30.76	7	12.54
S.D.	10	10.96	20.32	9.7468	12.595
C.V.	0.222	0.112	0.6606	1.39	1.0044

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, EBL and BOKL.

#### **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.

#### **DPS of BOKL**

According to above calculated value of BOKL bank in the fiscal year 2003/04 and 2004/05 was found 14.98 and 32.74%, which was satisfactory performance. But in the fiscal year 2007/08 it was not given any dividend. In the fiscal year 2007/08 it was not given any dividend. In the fiscal year 2006/07 and 2007/08 it was found 10% and 5% decreasing trend. So, DPS of BOKL was not satisfactory during study period.

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.

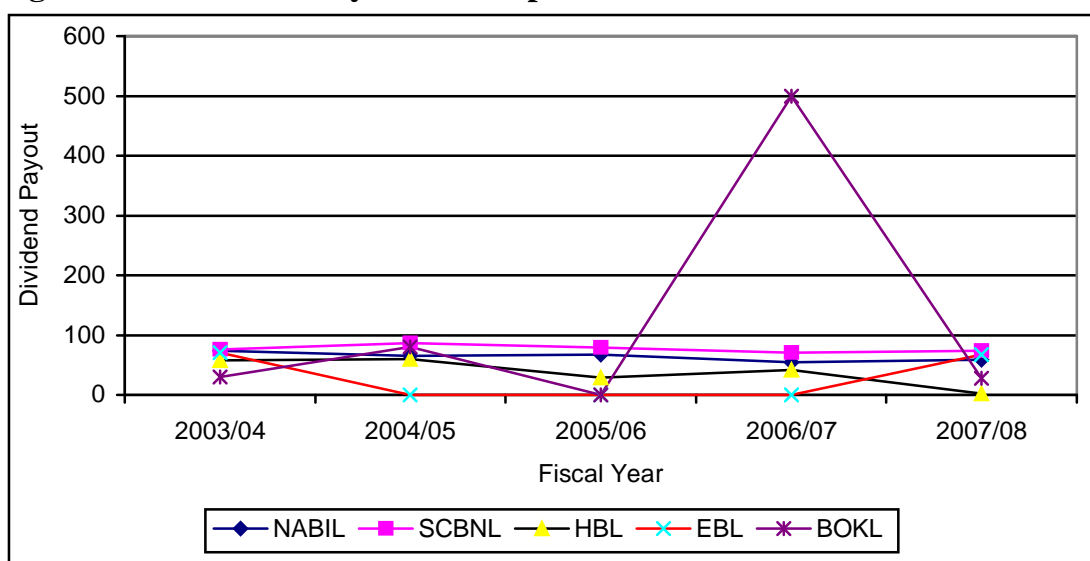
$$\text{Payout ratio} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

**Table 4.4: Dividend Payout of Sample Banks**

Fiscal Year	NABIL	SCBNL	HBL	EBL	BOKL
2003/04	73.70	75.57	58.09	70.36	30.36
2004/05	65.64	86.49	60.19	0.00	80.37
2005/06	67.49	78.81	29.39	0.00	0.00
2006/07	54.30	70.86	41.49	0.00	499.57
2007/08	59.06	73.68	2.66	66.90	28.22
Mean	64.038	77.08	38.36	27.45	127.704
S.D.	7.54	6.00	23.615	37.61	209.88
C.V.	0.1177	0.0779	0.6156	1.370	1.64

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 2003/04 to 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 2007/08 it was found 58.09%, 60.19% increasing trend. In the fiscal year 2003/04 and 2007/08 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 2005/06 to 2007/08 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.

Fifthly, **BOKL** dividend payout ratio was found in a fluctuating manner. Since, in the fiscal year 2003/04 and 2007/08 was found 30.36% and 80.37% increasing trend. In the fiscal year 2005/06 its value is not available. In the fiscal year 2006/07 it was reached 499.57% better position. But in the fiscal year 2007/08 it was reached 28.22% so the performance of **BOKL** in terms of D.Y. was not satisfactory.

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 rely more heavily on external capital. Thus, rapidly growing firms tend to use somewhat more debt than slower growing companies. Growth ratios measure how well the firm is maintaining its economic position in its industry.

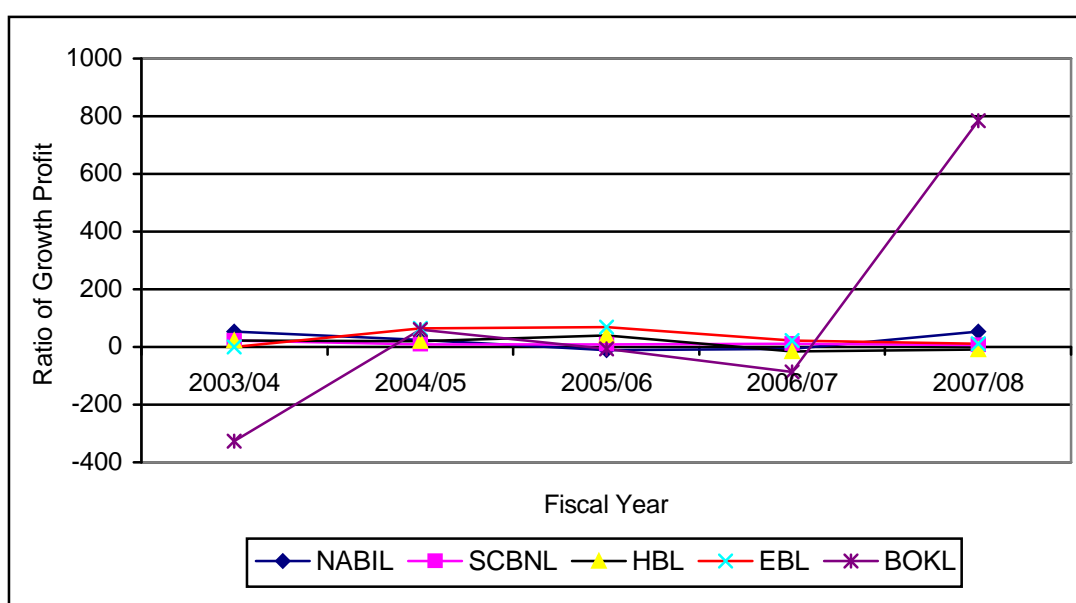
**Table 4.5: Growth in Net Profit**

(In Percent)

Fiscal Year	NABIL	SCBNL	HBL	EBL	BOKL
2003/04	52.45	22.94	21.53	0.839	(327.65)
2004/05	23.51	9.22	20.65	63.51	59.06
2005/06	(11.47)	9.74	40.78	68.89	(7.58)
2006/07	(6.77)	11.23	(16.27)	22.43	(85.86)
2007/08	53.24	5.79	(9.74)	10.36	785.02

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 than other four Banks.

Lastly, **BOKL's** growth in Net Profit trend was found in a fluctuating manner as its value in the fiscal year 2003/04, 2005/06 and 2006/07 found negative, which is poor performance. But in the fiscal year 2004/05 it was found 59.06% value and in the fiscal year 2007/08 it has progressed and represented its value at 785.02%, which can be considered as better during performance during this fiscal year.

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.

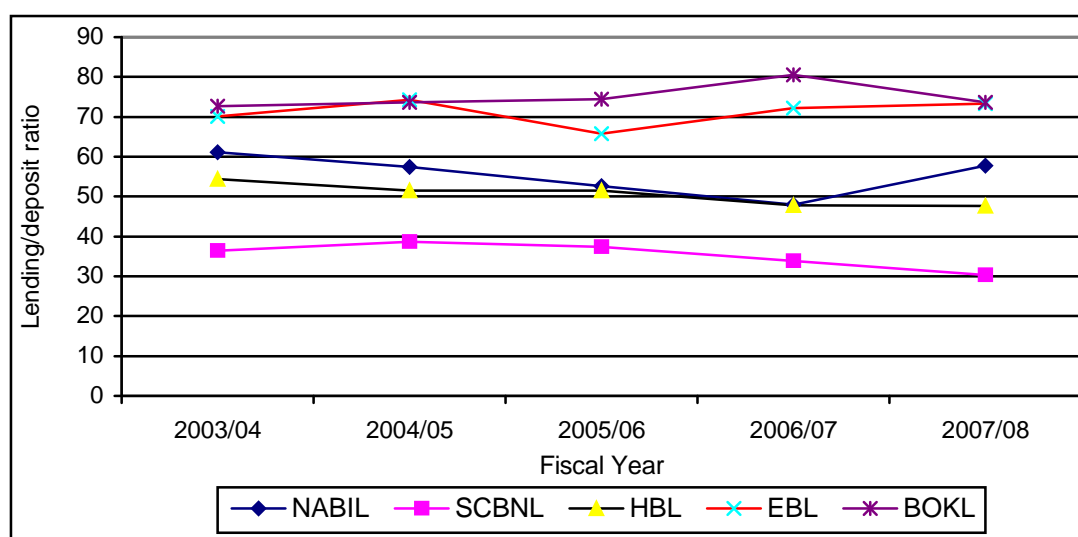
While looking at the performance of the Joint Venture Banks it has been calculated the lending/deposit ratio to find out the performance of the sample company during the five years study period.

**Table 4.6: Lending/Deposit Ratio**

	(In Percent)				
<b>Fiscal Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>HBL</b>	<b>EBL</b>	<b>BOKL</b>
2003/04	61.17	36.47	54.31	70.03	72.65
2004/05	57.39	38.65	51.45	74.25	73.58
2005/06	52.56	37.35	51.42	65.71	74.36
2006/07	47.97	33.87	47.87	72.23	80.61
2007/08	57.68	30.37	47.61	73.32	73.62

*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 2003/04, and 2007/08 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 three sampled Banks.

Lastly, while looking at the **BOKL** C/D ratio it was found that in the fiscal year 2003/04, 2004/05, 2005/06 and 2006/07 it was found 72.65%, 73.58%, 74.36% and 80.61 increasing trend, which indicated better performance. But in the fiscal year 2007/08 it was found 73.62%. At the end, it can said that the best performance on the basis the C/D ratio except BOKL and EBL other 6 three sampled Bank was found to be unsatisfactory.

#### 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.

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

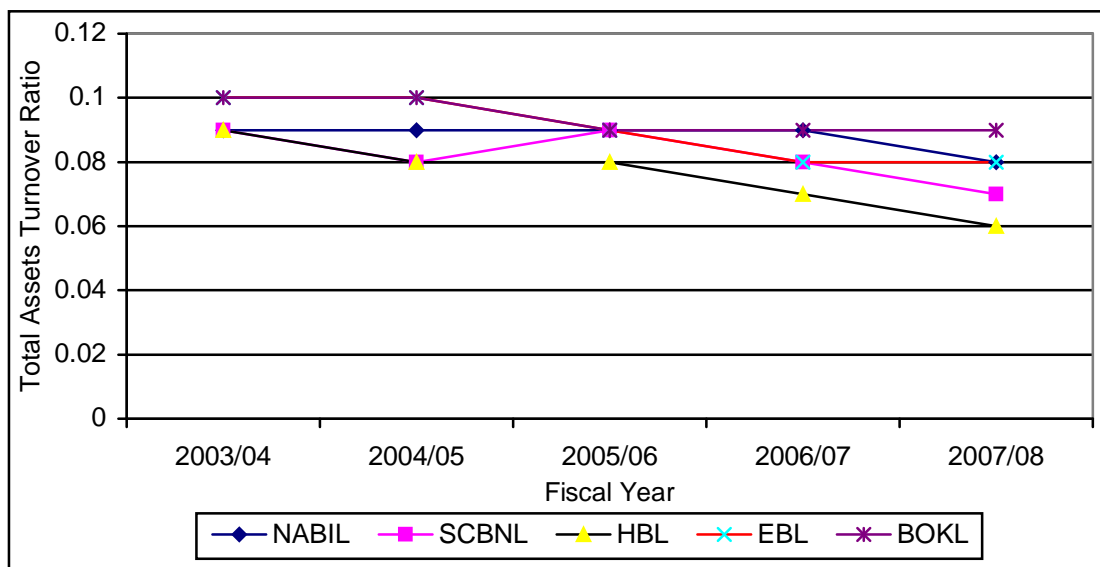
**Table 4.7: Total Assets Turnover**

<b>Fiscal Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>HBL</b>	<b>EBL</b>	<b>BOKL</b>
2003/04	0.09	0.09	0.09	0.10	0.10
2004/05	0.09	0.08	0.08	0.10	0.10
2005/06	0.09	0.09	0.08	0.09	0.09

2006/07	0.09	0.08	0.07	0.08	0.09
2007/08	0.08	0.07	0.06	0.08	0.09

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 2006/07 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 2007/08 it was found decreasing trend i.e. 0.09, 0.08 respectively. So, its ratio is better than other then previous three sampled banks.



Lastly, **BOKL's** ratio was found to be better in the fiscal year 2003/04 and 2004/05 i.e. 10 percent, but in the last three fiscal years it was slightly decreased trend in the utilization of the resources. So, in the conclusion according to the trend of the revenue to total assets ratio, BOKL has utilized resources properly.

## 4.2 Market Performance

### 4.2.1 Market Capitalization

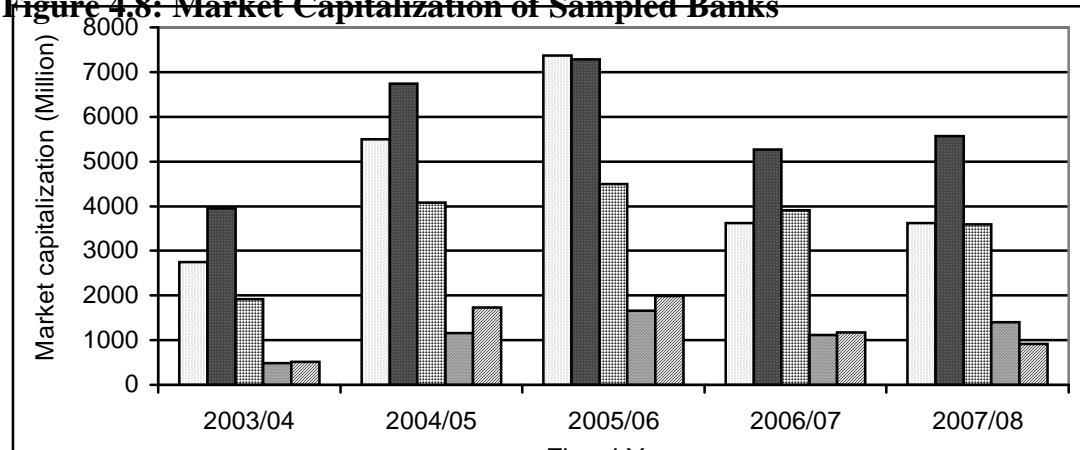
One of the major data of this study is market price of stock. Three price records are available (i.e. high, low and closing price of each year). So, to approach, either average price high and low or closing price can be used main argument of average price may be, it represents the price of whole year. 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	BOKL
2003/04	2749.60	3945.57	1920.00	482.01	513.57
2004/05	5499.20	6740.07	4080.00	1160.45	1732.73
2005/06	7374.75	7279.95	4500.00	1656.45	1986.03
2006/07	3613.63	5263.03	3900.00	1115.08	1177.49
2007/08	3613.63	5568.62	3586.44	1401.75	917.89

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 2005/06 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.

Lastly, Market capitalization of **BOKL's** was found Rs. 513.57 Million, 1732.73 Million and Rs. 1986.03 million in the fiscal year 2003/04, 2004/05 and 2005/06 respectively. But it started to decrease from fiscal year 2004/05 to fiscal year 2007/08 i.e., 1177.49 and 917.89 million. So, the market performance of the BOKL was found decreased and indicated poor performance.

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.

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

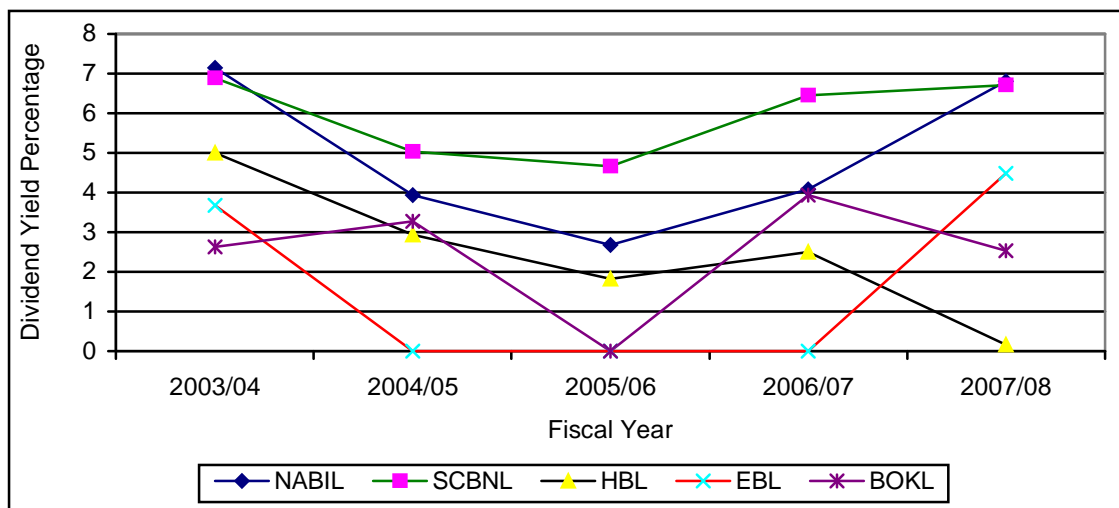
**Table 4.9: Dividend Yield**

<b>Fiscal Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>HBL</b>	<b>EBL</b>	<b>BOKL</b>
2003/04	7.14	6.88	5.00	3.68	2.63
2004/05	3.93	5.04	2.94	0.00	3.28
2005/06	2.67	4.66	1.83	0.00	0.00
2006/07	4.08	6.45	2.50	0.00	3.94

2007/08	6.80	6.71	.16	4.49	2.53
---------	------	------	-----	------	------

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 2003/04 to 2005/06 its same was found to be 5.00% and reached to 1.83%.

But after this year in the fiscal year 2005/06 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 be 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.

#### **Dividend Yield of BOKL**

Lastly, BOKL Bank's ratio in the fiscal year 2003/04 to 2004/05 was found 2.63 and 3.28 increasing trend. In the fiscal year 2005/06 the ratio could not be calculated. In the fiscal year 2006/07 it was found 3.94% increasing ratio. But in the fiscal year 2007/08 it was decreased to 2.53%. So, Dividend yield of BOKL is fluctuating manner, which was not good.

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 than the historical book value of its physical assets.

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

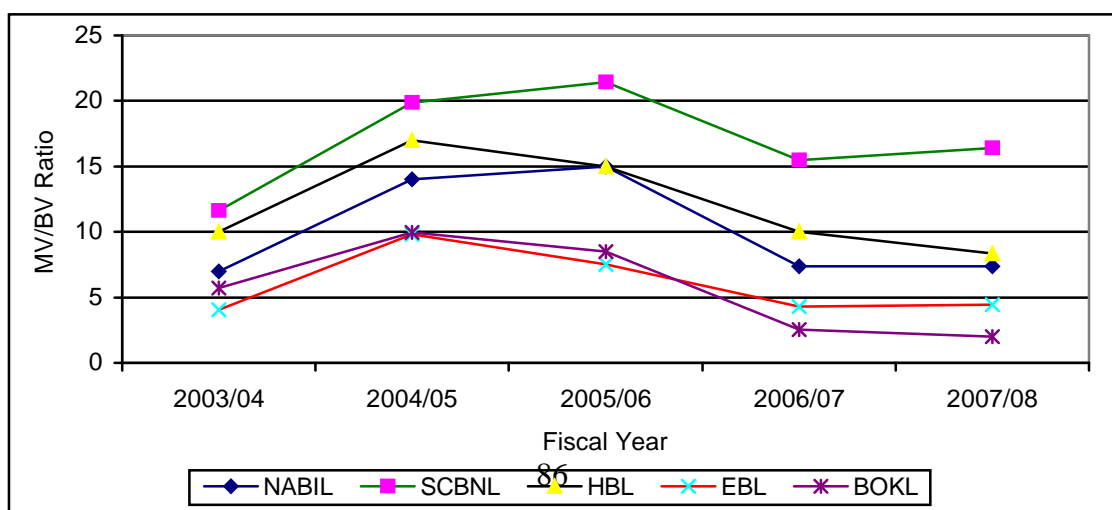
The market to book value ratio is a relative measure of how the growth portion for a company is being valued vis-à-vis its physical assets. The greater the expected growth and value placed on such, the higher this ratio. M/B ratios for established companies from a little as 5% as high as 8%. The former often is associated with a company, which earns less than what the financial market require, a harvest situation and the latter 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	BOKL
2003/04	7	11.62	10.00	4.07	5.7
2004/05	14	19.85	17.00	9.80	9.98
2005/06	15	21.44	15.00	7.50	8.50
2006/07	7.35	15.50	10.00	4.30	2.54
2007/08	7.35	16.40	8.36	4.45	1.98

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. 2005/06 represented higher than other four 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, EBL and

BOKL. Again in the fiscal year 2004/05 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 2005/06 its value was 15%.

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

### **BOKL**

The fifth sampled Bank during study period is BOKL. IN the fiscal year 2003/04 and 2004/05 its value was 5.7% and 9.98% increased trend. But from this fiscal year BOKL's performance was found to be decreased trend. In the fiscal year 2005/06, 2006/07 and 2007/08 its value was 8.50%, 2.54% and 1.98, which indicates unsatisfactory performance than other sampled banks. It shows that it cannot be said to be attractive than other four sampled banks.



#### 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.

$$Z = 1.2 |_1 \Gamma 1.4 |_2 \Gamma 3.3 |_3 \Gamma 0.6 |_4 \Gamma 0.999 |_5$$

$|_1$  = 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 scores 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.

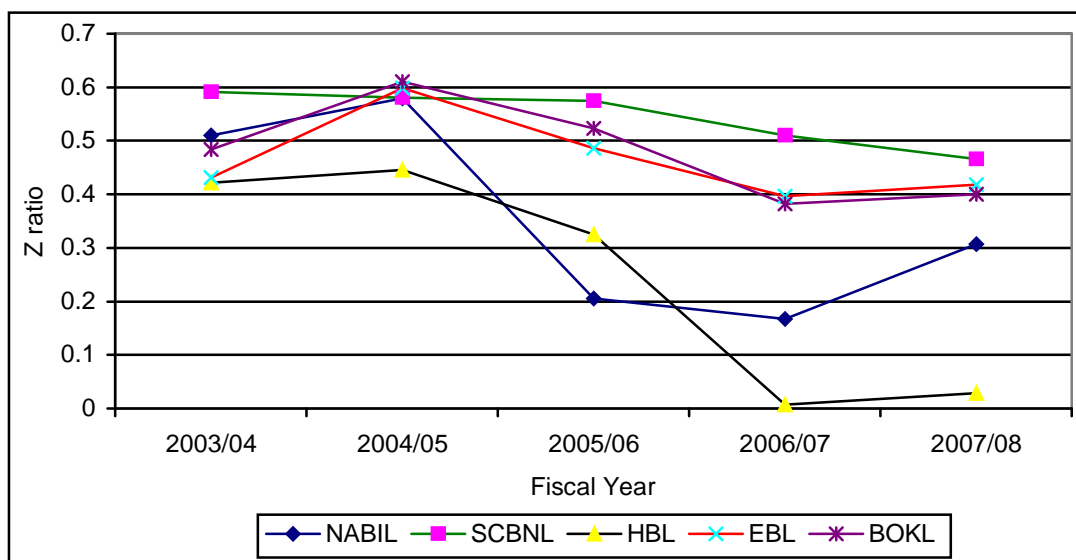
**Table 4.11: Overall Performance of Selected Banks**

<b>Fiscal Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>HBL</b>	<b>EBL</b>	<b>BOKL</b>
2003/04	0.5102	0.5911	0.4221	0.4312	0.4833
2004/05	0.5789	0.5808	0.4452	0.5979	0.611
2005/06	0.2049	0.5741	0.3351	0.4857	0.5238

2006/07	0.1672	0.51	0.0071	0.397	0.3817
2007/08	0.3075	0.4659	0.0285	0.4176	0.4005

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 2005/06, 2006/07 and 2007/08 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 2004/05 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, HBL and BOKL.

Lastly, **BOKL** calculated value of z was found better since the fiscal year 2003/04 its value was 0.4383%. In the fiscal year 2004/05 its z value was 0.6111%. So, its performances in this fiscal year are better than other sampled companies. In the fiscal year 2005/06 and 2006/07 its value was 0.5238% and 0.3817, which decreased than previous year. And in the fiscal year 2007/08 its value was 0.4005% slightly increased than last fiscal year.

In the conclusion, it can be said that from the sample taken SCBNL, EBL and BOKL were found to be the better than other two 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:  $H_0: \beta_0 = \beta_1$ , The significance level of the regression between MVS and Z value of overall sampled company does exist.

Alternative Hypothesis:  $H_1: \beta_0 \neq \beta_1$ , 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 <sup>2</sup>	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<sup>2</sup> 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,  $H_0$  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 <sup>2</sup>	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*
BOKL	0.366284 (9.782411)	.000226 (3.75338)*	0.907985	0.8244	0.765915	14.088*

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:  $H_0: \rho = 0$ , The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis:  $H_1: \rho \neq 0$ , The significance level of the regression between MVS and Z value does not exist.

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

Bank	a	b(MVS)	r	R <sup>2</sup>	SEE	F
NABIL	0.305547	4.75E-05	0.1037	0.011	-0.31899	0.0326

	(1.079989)	(.180629)				
--	------------	-----------	--	--	--	--

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,  $H_0$  is accepted.

Since, the tabulated value of t at 5% level of significance is greater than calculated value. So,  $H_0$  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**

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

Null Hypothesis:  $H_0: \beta_0 = \beta_1$ , The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis:  $H_1: \beta_0 \neq \beta_1$ , 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,  $H_0$  is accepted.

Since, the tabulated value of t at 5% level of significance is greater than calculated value. So,  $H_0$  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**

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

Null Hypothesis:  $H_0: \beta_0 = \beta_1$ , The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis:  $H_1: \beta_0 \neq \beta_1$ , 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**

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

Null Hypothesis:  $H_0: \beta_0 = \beta_1$ , The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis:  $H_1: \beta_0 \neq \beta_1$ , 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,  $H_0$  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.

## BOKL

**Table 4.18: Regression Analysis of Z value on MVS of BOKL**

Banks	a	b(MVS)	r	$R^2$	SEE	F
BOKL	0.366284 (9.782411)	0.000226 (3.75338)*	0.907985	0.8244	0.765915	14.088*

Null Hypothesis:  $H_0: \beta_0 = \beta_1$ , The significance level of the regression between MVS and Z value does exist.

Alternative Hypothesis:  $H_1: \beta_0 \neq \beta_1$ , 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 BOKL is 0.000226. This implies that one Rupee increase in MVS leads to an increase in Z by 0.000226. The regression constant (a) of BOKL is 0.363284, which indicates that should not fall below that level even if MVS is omitted.

The estimation of MVS may vary by 6.02E-05 as the standard error of the model of BOKL explains it.

'r' is 0.908, which represent highly correlated and  $R^2$  is 0.8244 which explain power of relationship is good and the fit is sound.

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.

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

#### NABIL

Null Hypothesis  $H_0: \beta_0 = \beta_1$ , there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis:  $H_1: \beta_0 \neq \beta_1$ , there is significance different between MVS on Profitability, EPS and Z value.

**Table 4.19: Regression Analysis of Z value on MVS of NABIL**

Dependent Variable	Intercept	Profitability	EPS	Z-value	F-test	R <sup>2</sup>
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 vary by 39.45 as the standard error of model for NABIL explains it.

'r' is .2175, which is shows medium level of correlation; R<sup>2</sup> 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 show the existence of regression. So,  $H_0$  is accepted.

Since, so selected variable are not significant  $H_0$  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  $H_0$  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  $H_0$  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  $H_0$  is accepted.

### SCBNL

Null Hypothesis:  $H_0: \beta_0 = \beta_1$ , there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis:  $H_1: \beta_0 \neq \beta_1$ , there is significance different between MVS on Profitability, EPS and Z value.

**Table 4.20: SCBNL Regression between MVS on EPS and Z value**

Dependent Variable	Intercept	Profitability	EPS	Z-value	F-test	R <sup>2</sup>
MPS	3983.072 2	-74.9794 (1.3412)			*1.799	0.374 8
MPS	1230.250 9		3.6471 (0.2964 )		0.0879	0.028 5
MPS	1310.85			707.8694 (0.1732)	0.03	0.099 5

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. There 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 vary 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. There 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 vary 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. There 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:  $H_0 : \beta_0 = \beta_1$ , there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis:  $H_1 : \beta_0 \neq \beta_1$ , there is significance different between MVS on Profitability, EPS and Z value.

**Table 4.21: HBL Regression Between MVS on Profitability, EPS and Z Value**

<b>Dependent Variable</b>	<b>Intercept</b>	<b>Profitability</b>	<b>EPS</b>	<b>Z-value</b>	<b>F-test</b>	<b>R<sup>2</sup></b>
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.  $H_0$  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.  $H_0$  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:  $H_0 : \sim_0 = \sim_1$ , there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis:  $H_1 : \sim_0 \neq \sim_1$ , there is significance different between MVS on Profitability, EPS and Z value.

**Table 4.22: EBL Regression between MVS on Profitability, EPS and Z Value**

<b>Dependent Variable</b>	<b>Intercept</b>	<b>Profitability</b>	<b>EPS</b>	<b>Z-value</b>	<b>F-test</b>	<b>R<sup>2</sup></b>
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,  $H_0$  is accepted.

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

### **BOKL**

Null Hypothesis:  $H_0 : \sim_0 = \sim_1$ , there is no significance different between MVS on Profitability, EPS and Z value.

Alternative Hypothesis:  $H_1 : \sim_0 \neq \sim_1$ , there is significance different between MVS on Profitability, EPS and Z value.

Table 4.23: BOKL Regression Between MVS on Profitability, EPS and Z Value

<b>Dependent Variable</b>	<b>Intercept</b>	<b>Profitability</b>	<b>EPS</b>	<b>Z-value</b>	<b>F-test</b>	<b>R<sup>2</sup></b>
MPS	229.0539	25.1525 (0.7273) *			0.5289*	0.150
MPS	41.1482		21.0946 (2.247) *		5.0473*	0.792
MPS	-1234.9991			3649.3899 (3.7534) *	14.088*	0.908

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 result of regression analysis of MVS on profitability. The regression coefficient (b) of BOKL is positive as its value 25.1525. This implies that one rupee increase in profitability leads to an increase in MVS by 25.1525 on average. However, standard error of b indicates that it may vary by Rs. 34.59. This means MVS does not fall below that level even if profitability is zero. \* Regression constant (a) of BOKL is 299.0539.

'r' is .3871 which indicate it is moderate correlation  $R^2$  is .1499 which explains power of education to explain relationship is poor.

Since, calculated value of F is less than tabulated value at 5% level of significance. So,  $H_0$  is accepted i.e. it does not show the existence of regression.

Since, the tabulated value of E is greater than calculated value. So, selected variable are significant.

### **MPS on EPS**

The above table represent the result of regression analysis is of MVS on EPS of BOKL Banks. The regression coefficient (b) of BOKL Banks is positive with the value 21.0946. This implies that one rupee increase in EPS leads to an increase in MVS by 21.0946 on average. However, standard error of b indicated that it might vary by Rs. 9.3895. The regression constant (a) of BOKL is found 41.1482 that imply MVS does not fall below that level even if EPS is zero.

'r' is .7920 which implies that high correlation.  $R^2$  is .627, which explains the power of relationship between them is strong.

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

### **MPS on Z value**

The above table represents the summarized result of regression analysis of Z on MVS for BOKL Banks. The regression coefficient (b) of BOKL is positive with a value of 3649.389874. This implies that one percent increase in Z leads to an increase MVS by 3649.389874 on average. The regression constant (a) of BOKL is  $-1234.999091$ , which indicate the Z, is unavailable. The estimation of MVS may vary by Rs. 972.296 as the standard error of the model for BOKL explain it.

Since BOKL's 'r' is found .907984808 represent high correlation and  $R^2$  is found .824436, which shows high explanatory power.

Since, the tabulated value of F at 5% level of significance is less than the calculated value. So,  $H_0$  is rejected.

Since, the tabulated value of t at 5% level of significance is less than the calculated value. So,  $H_0$  is rejected.

#### 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 five 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, Everest, and Bank of Kathmandu 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 five 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 and BOKL 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, EBL and BOKL 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, EBL and BOKL 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 Conclusions**

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 then EBL and BOKL.
- 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 and BOKL. 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. Regulation should promote transparency of trading.
- f. Regulation should aim to ensure the proper management of large exposures, default risk and market description.

- g. 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.
- h. Investors have lost their confidence on the secondary market not only because the existing few listed companies are not performing well but also due to fear of internal invest that could be affect. So, the economy of our country should be improved.
- i. 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.
- j. Rating agencies should be independent and encouraged so that potential investors have a clear concept of the financial health and future prospects of organization.
- k. 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.
- l. 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.
- m. 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.
- n. 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.
- o. 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.

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

## BIBLIOGRAPHY

- Adhikari, Nabaraj (2003), “**Corporate Dividend Practices in Nepal**”, An Unpublished Master’s Degree Thesis, Central Department of Management, T.U.
- Adhikari, Surya Mohan (2005), “**Stock Price Behaviour of Nepalese Stock Market**”, An Unpublished Master’s Degree Dissertation, Sankar Dev Campus, T.U.
- Alexander, Sidney S. (1961), “**Price Movements in Speculative Markets: Trends or Random Walks**”, Industrial Management Review, Vol. II, No. 2, 7-26.
- Amihud, Yakov; Haim Mendelson and Uno Jan (1999), “**Number of Shareholders and Stock Prices: Evidence from Japan**”, The Journal of finance, Vol. LIV, No.3, June, 27-49.
- Archer, Sephen H., and Charles A.D. Ambrosio (editors), (1976), “**The Theory of Business Finance, A Book of Reading**”, Macmillan publishing company, New York.
- Aryal, Mukti, (1995), “**The General Behaviour of the Stock Market Prices**”, An Unpublished Master’s Degree Dissertation, Central Department of Management, T.U.
- Atje, Raymond and Boyan Jovanovic (1993), “**Stock Market and Development**”, European Economic Review, April.
- Balampaki, Surya Bahadur (2002), “**Fundamentals of Stock Returns in Nepal**”, An Unpublished Master’s Degree Thesis, Central Department of Management, T.U.
- Basil, Taylor (1969), “**Investment: Art Science or What?**”, Lloyds Bank Review, Vol. 20, No.91, January.

- Bernstein, Peter L. (1987), **“Liquidity, Stock Markets, and Market Makers”**, Financial Management, Vol. 16, No.2, summer, 54-63.
- Bhalla, V. K. (1983), **“Investment Management: Security Analysis and Portfolio Management”**, S. Chand and Co., New Delhi.
- Bhatta, Bharat Prasad (1997), **“Dynamics of Stock Market in Nepal”**, An Unpublished Master’s Degree Thesis, Central Department of Economics, T.U.
- Bhattari, Anjani Raj (1990), **“Share Market in Nepal”**, An Unpublished Master Degree Thesis, Sankar Dev Campus, T.U.
- Bombay, London, and New York Stock Exchanges, **“Journal of Financial and Quantitative Analysis”**, Vol. XII, No. 3, September, 391-413.
- Brigham, Eugene F. and Louis C. Gapenski (1985), **“Intermediate Financial Management”**, The Dryden Press, New York.
- Cheney, John M. and Edward A. Moses (1992), **“Fundamentals of Investment”**, West Publishing Company, New York.
- Conrad, Jennifer, Bradford Cornell and Wayne R. Landsman (2002), **“When is Bad News Really Bad News?”**, The Journal of Finance, Vol. 57, No.6, December, 2507-2531.
- Conrad, K. and D.J. Juttner (1973), **“Recent Behaviour of Stock Market Prices in Germany and Random Walk Hypothesis”**, Kyklos, Vol. 26, No. 4, 576-599.
- Copeland, Thomas E., and Fred J. Weston (1979), **“Financial Theory and Corporate Policy”**, Addison-Wesley Publishing Company, New York.
- Damodaran, Aswath (1993), **“A Sample Measure of Price Adjustment Coefficient”**, The Journal of finance, Vol. 48, No. 1, March, 387-397.

- Dhakal, Ajaya P. (1993), **“Corporate Financial Disclosure of Nepalese Companies”**, The Nepalese Management Review, Vol. IX, No. 1, summer, 85-93.
- Dreman, David N. (1977), **“Psychology and the Stock Market: Investment Strategy Beyond Random Walk”**, York: Amacom, American Management Association, New York.
- Easley, David, Soeren Hvidkjaer and Mureen O’Hara (2002), **“Is Information Risk a Determinant of Asset Returns?”** The Journal of Finance, Vol. 57, No. 5, October, 2185-2219.
- Easterwood, Cinitia M., Jonh C. Easterwood and Stacy R. Nutt (1999), **“New Evidence on Serial Correlation in Analyst Errors”**, Financial Management, Vol. 28, No. 4, winter, 106-117.
- Edwards, Robert D., and Magee (1966), **“Technical Analysis of Stock Trends”**, Mass John Magee, Sprigfield.
- Elton, Edwin J., and Martin J. Gruber (1975), **“International Capital Markets”**, North-Holland Publishing Company, Amsterdam.
- Fama, Eugene F., and M.E. Blume (1966), **“Filter Rules and Stock Market Trading”**, Journal of Business, Vol. 39, No. 1, January, 226-241.
- Fama, Eugene Fredaric (1965), **“Efficient Capital Market: II”**, Journal of Finance Vol. XXXVIII, No. 1, 55-59.
- Fama, Eugene Fredaric (1965), **“The Behaviour of Stock Market Prices”**, Journal of Business, Vol. 37, No. 40.
- Fama, Eugene Fredaric (1976), **“Foundations of Finance”**, Basic Black well, New York.
- Fischer, Donald E., and Jordan, J. Ronald (1995), **“Security Analysis and Portfolio Management”**, Prentice Hall of India Pvt. Ltd, New Delhi.

- Francis, Jack Clark and Richard W. Taylor (1992), **“Theory and Problems of Investments”**, Mc Grow Hill Book Company, New York.
- Gaige, Fredrick, H. (1975), **“Regionalism and National Unity in Nepal”**, Vikas Publishing House, Delhi.
- Goldman, Barry and Avraham Beja (1980), **“On Dynamic Behaviour of Prices in Disequilibrium”**, The Journal of Finance, Vol. 35, No. 2, May, 235-247.
- Gorton, Gary and James Dow, (1997), **“Stock Market Efficiency and Economic Efficiency: Is There a Connection?”**, The Journal of Finance, Vol. 52, No. 3, July, 1087-1116.
- Groth, John C. (1979), **“Security-Relative Information Market Efficiency Some Empirical Evidence”**, Journal of Financial and Quantitative Analysis, Vol. XIV, No. 3, September, 573-591.
- Gupta, O. P. (1979), **“The Random Walk Theory of Stock Market Price Behaviour: A Survey”**, Review of Commerce Studies, Vol.8, No.2, March, 51-75.
- Harris, Robert S. and Robert M. Conroy (1999), **“Stock Splits and Information: The role of Share Price”**, Financial Management, Vol. 28, No. 3, Autumn, 28-40.
- Haugen, Robert A. (1996), **“Finance from New Perspective”**, Financial Management, Vol.25, No.1, spring, 86-97.
- Hiraheifer, David (2001), **“Investor Psychology and Asset Pricing”**, The Journal of Finance, Vol. 56, No. 4, August, 1533-1577.
- Howe, Keith M. and Thomas D. Berry (1994), **“Public Information Arrival”**, The Journal of Finance, Vol. 49, No. 4, September, 1331-1345.



- Huffman, Greory W. (1992), **“Information, Asset Prices and The Volume of Trade”**, The Journal of Finance, Vol. 49, No. 4, September, 1575-1589.
- Hughes, Patricia J. and Michael J. Brennam (1991), **“Stock Price and the Supply of Information”**, The Journal of Finance, Vol. 46, No. 5, December 1665-1685.
- Jennergrtn, L. P., and P. E. Korsvold (1975), **“The Non-Random Character of Norwegian and Swedish Stock Market Prices”**, International capital market, North Holland publishing company, Amsterdam.
- Jones, Charles Parkers (1943), **“Investment: Analysis and Management”**, second edition, John wiley, New York.
- Keane, Simon M. (1983), **“Stock Market Efficiency: Theory, Evidence and Implication”**, Heritage Publishers, New Delhi.
- Kemp, A. G. and Gavin C. Reid (1971), **“The Random-Walk Hypothesis and The Recent Behaviour of Equity Prices on Britain”**, Economica, Vol. XXXVIII, No. 149, 28-5.
- Khambata, D. (2000), **“Impact of Foreign Investment on Volatility and Growth of Emerging Stock Market”**, Multinational Business, Vol. 8, No.4, 50-59.
- Kim, E. and Singal V. (2000), **“Stock Market Openings: Experience of Emerging Economics”**, Journal of Business, Vol. 73, No.2, 25-66.
- King, B. F. (1996), **“Market and Industry Factors in Stock Price Behaviour”**, Journal of Business, Vol. 39, No.1, 139-190.
- Kui, Ng Bocy (1989), **“The Development of Capital Markets in SEACEN Countries”**, Seacen center Publication, Kualalampur, Malaysia.

- Levin, R. I. And D. S. Rubin (1995), **“Statistical for Management”**, Prentice- Hall of India Pvt. Ltd., New Delhi.
- Levy, Robert A. (1966), **“Conceptual Foundation of Technical Analysis”**, Financial Analysts Journal, Vol. 22, No. 4, July-August.
- Mahat, R.S. (1981), **“Capital Market Financial Flows and Industrial Finance In Nepal”**, Sajha Prakashan, Kathmandu.
- Malkiel, Burton G. (1981), **“A Random Walk Down Wall Street”**, W. W. Norton & Company, New York.
- Pandey, I. M. (1991), **“Financial Management”**, Second edition, Vikas Publishing House, New Delhi.
- Pandey, L.M. and Ramesh Bhat, **“Efficiency Market Hypothesis: Understanding and Acceptance in India”**, Reprinted in O.P. Gupta, *Ibid.*, 279-293.
- Pradhan, Radhe S. (1993), **“Stock Market Behaviour in Small Capital Market: A Case of Nepal”**, The Nepalese Management Review, Vol. IX, No.1, Summer.
- Pradhan, Radhe S. (1994), **“Financial Management Practice in Nepal”**, Vikash Publishing House, New Delhi.
- Pratten, Cliff (1994), **“The Stock Market”**, Cambridge University Press, *India*.
- Rao, N. Krishna (1988), **“Stock Market Efficiency: The Indian Experience”**, Stock Market Efficiency and Price Behavior: The Indian Experience (1989), 203-218.
- Reilly, Frank K. (1986), **“Investment”**, The Dryden Press/CBS Publishing Japan Ltd.

- Robert, Tanpest Hanson (1965), **“The Creation of Risk Aversion by Imperfect Capital markets”** American Economic Review, Vol. 62, No. 9, 41-49
- Ross, Levin and Sara Zervas (1998), **“Stock Markets, Banks and Economic Growth”**, The American Economic Review, Vol. 88, No. 3, June, 554.
- Rubinstein, M. E. (1975), **“Securities Market Efficiency in an Arrow-Debreu Economy”**, American Economic Review, Vol. 65, No. 8, December.
- Sharma, J.L. and Kennedy Robert (1977), **“A comparative Analysis of Stock Price Behaviour on the Bombay, London, And New York Exchanges”**, Journal of Financial and Quantitative Analysis, Vol. 3, No. 12, September.
- Sharma, N. H. (1996), **“A Relation of Secondary and New Issue Market”**, Banihya Sansar, Issue 9, Vol. 14, Central Department of Management, T.U., Kathmandu.
- Sharma, P. K. and A. K. chaudhary (2000), **“Statistical Methods”**, Khanal Book Prakashan, Minbhawan, Kathmandu.
- Sharpe, William F. (1991), **“Mutual Fund Performance”**, Journal of Business, Vol. XLVI, No.5, December, 1575-1617.
- Sharpe, William F., Gordon J. Alexander and Jeffery V. Bailey (2004), **“Investment”**, Sixth Edition, Prentice Hall of India, New Delhi.
- Shiller, Robert J. (1981), **“Use of Volatility Measures in Assessing Market Efficiency”**, The Journal of Finance, Vol. 36, No. 2, Summer, 291-304.

- Shrestha, Chandra Kumari (2004), “**Nepalese Stock Market: A Study of Banking Sector Stocks and Market Efficiency**”, an unpublished Master Degree Thesis, Public Youth Campus, T.U.
- Shrestha, Krishna (2007), “**Stock Market Efficiency In Context of Nepal**” an unpublished Master Degree Thesis, Public Youth Campus, T.U.
- Shrestha, M. K. (1992), “**Capital Market In Nepal: Changing Dimension and Strategies**”, The Nepalese Management Review, Vol. VIII, No. 1, Central Department of Management, Kirtipur, 13-27
- Shrestha, Surya Chandra (2003) “**Stock Price Behaviour in Nepal**”, an unpublished Master’s degree (MBA), thesis, Public Youth Campus T.U.
- Teweles, Richard J., Edward S Bradley and Ted M Teweles (1992), “**The Stock Market**”, Sixth Edition, Johl Wiley and Sons Inc, New York.
- Thomas, R. D. and Morse Dale (1986), “**Efficient Capital Markets and Accounting: A Critical Analysis**”, Prentice Hall Inc, New Jersey.
- Timilsina, Sadakar (1997), “**Dividend and Stock Prices: An Empirical study**”, An unpublished Master Degree Thesis, Sankar Dev Campus, T.U.
- Upadhayay, Basu Dev (2005), “**Share Price Behaviour in Nepal**”, An unpublished Master’s degree (MBA) Thesis, Central Department of Management, T.U.
- Van Horne, James C (2001), “**Financial Management and Policy**”, Prentice Hall of India Pvt. Ltd., New Delhi.
- Weston, J. F. and Thomas E, Copeland (1990), “**Managerial Finance**”, Ninth edition, The Dryden Press, Orlando, Florida.