STOCK PRICE ANALYSIS IN SECONDARY MARKET OF NEPAL

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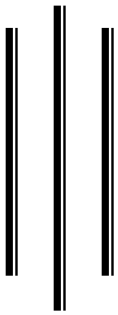

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RECOMMENDATION

This is to certify that the Thesis

Submitted by

ROMAN KUMAR SHRESTHA

Entitled:

STOCK PRICE ANALYSIS IN SECONDARY MARKET OF NEPAL

(With Reference To BOK & EBL)

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

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Asso. Prof. Shashi Kant Mainali	Prof. Dr. Kamal Deep Dhakal	Asso. Prof. Prakash Singh Pradhan
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VIVA-VOCE SHEET

We have conducted the viva-voce of the thesis presented

By
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And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for the

Degree of Master's in Business Studies (M.B.S.)

Viva-Voce Committee

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ABBREVIATIONS

AGM	Annual General Meeting
BOK	Bank of Kathmandu
BVPS	Book Value Per Share
CAPM	Capital Assets Pricing Model
CV	Coefficient Variation
DPR	Dividend Payout Ratio
DPS	Dividend Per Share
DY	Dividend Yield
EBL	Everest Bank Limited
EPS	Earning Per Share
EY	Earning Yield
GDP	Gross Domestic Product
IPO	Initial Public Offering
MOLJ	Ministry of Law & Justic
MVPS	Market Value Per Share
NEPSE	Nepal Stock Exchange
NRB	Nepal Rastra Bank
NWPS	Net Worth Per Share
P/E	Price Earning
ROE	Return on Equity
SEBON	Security Board of Nepal
T. U.	Tribhuvan University

CHAPTER-I

INTRODUCTION

1.1 General Background

The continuing trust to the private sector is the process of national development has helped in establishing many banks, financial institutions and industries under joint venture agreements. Capital formation is one the most important factor for overall economic development. Until and unless the position of capital formation is strong in a country the country can't be developed. Because of low income, low saving and low investment, our country is lagging behind. In this situation the Banking and Financial system play an important role in order to mobilize the scattered saving and -utilizing it for the enlistment of national economy.

Economic status is growing very slowly and Nepal is known as a very poor country over the world. Therefore Industrialization is considered essential for economic development of the country these days. In Nepal, the industrial revolution took place after the establishment of Biratnagar Jute Mills in 1936 A.D. In 1937 A.D., first Industrial Act was formulated, which was a favorable step to promote Industries and Capital Market in Nepal.

Capital is the lifeblood of the business organizations. Every business enterprise requires short term, intermediate and long term capital for the smooth operation and expansion of the organizational activities. Among these types of fund, the long term funds plays highly significant role for future growth and prosperity of the organizations. Most business organizations gather long term funds from financial market.

Financial Market is the place where the financial instruments are traded. Financial instruments include share, bond, debenture etc. It is a means to transfer funds from

savers to those in need of funds. Financial experts have mentioned it as a brain of the entire economic system. The failure of the financial market obstructs the progress of the whole economy.

Financial markets can be defined as the centers or arrangements, which provide facilities for buying and selling of financial claims and services. Specifically, financial market chiefly refers to money market and capital market. It facilitates the transfer of funds from the savers to those who wish to invest in capital goods.

Money Market can be defined as short term financial market, which facilitates liquidity and marketability of securities. It is the market for short term marketable instruments having less than one year maturity period. Money markets are sometimes defined as organized and unorganized money markets. The organized or formal money markets provide an institutional mechanism for the transactions of short term securities and commercial banks, finance companies and other saving/credit unions are the players in the money market. Local merchants, indigenous bankers and relatives come under the informal or the unorganized sector.

The development of efficient market requires the development of institutions, instruments and operating procedure that aids widening and deepening of the market and allocation of short term resources with minimum transactions costs and delays. Capital Markets also play a vital role in the national economy. Capital market facilitates the allocation of funds between the savers and borrowers. This allocation will be optimum if the capital market has efficient pricing mechanism. If the capital market is efficient, the current share price of the company fully reflect the available information and there will be no question of the share price being over or under priced. Capital market is concerned with the long term finance. The funds collected in the market are raised and traded by long term financial instruments such as equities and bonds.

Capital Markets are the markets meant for long-term securities issued by the Government or a Corporation. Capital means typically involve financial assets that have life spans of greater than one year. For example, the shares issued by Kumari Bank are traded in the capital market whereas the treasury bills issued by the Nepal Rastra Bank are traded in the money market.

The history of capital market in Nepal dates back to the era of Rana Prime Minister Juddha Samsher Rana. The first public floatation of shares in the securities market was initiated by Biratnagar Jute Mills Ltd. in 1937. There were very few Companies in Nepal issuing shares to the general public until another company act came into operation 1951. There were only two financial Institution, Nepal Industrial Development Corporation and Agriculture Development Bank in existence to finance industrial and agricultural projects along with the two domestic commercial Banks.

Capital Market is the market, which provides the mechanism for channeling current savings into investment in productive facilities that is for allocating the country's capital resources among alternative uses. In effect, the capital market provides an economy's link with the future, since current decisions regarding the allocation of capital resources are a major determining factor of tomorrow's output. Till about two decades ago, a large part of household saving was either invested directly in physical assets or put in Bank deposits and Government small saving schemes. It is only since the restoration of Democracy in 1990, that the equity market has started to play a role in this intermediation process.

1.2 Statement of the Problem

Basically stock price is determined by demand and supply. Both the qualitative and quantitative factors determine the stock price. However, to specify exactly what factors do determine stock price is a controversial/unpredictable issue.

Share price is the function of the several factors. The stock price fluctuates time to time and stock exchanges react to the environmental changes. However, for some environmental changes, the stock exchanges have no effect. This study will try to identify the determinants of stock price and find out the degree of affection of those determinants.

More specifically, this study is expected to answer the following research questions.

- What is the relationship between EPS & DPS & MVPS of Sample Banks?
- What is the effect of EPS & DPS on MVPS of sample commercial banks?
- What are the factors affecting the stock price?
- What is the trend of major financial indicators like EPS, DPS, Earning Yield, Dividend Yield and DPR of sample commercial banks?

1.3 Objectives of the Study

Thus, the present study will be very much important to the investors, planners, researchers, student and policy makers to get a deep insight into the concerned field of the study. Therefore, this study aims to identify the factors responsible for determinants of stock price and their relationship with the stock price, so that it will give a better insight into the stock price.

Furthermore, this study is proposed to meet the following objectives.

- To analyze the relationship between EPS, DPS & MVPS of sample banks.
- To evaluate the effect of EPS & DPS on MVPS of sample commercial banks.
- To examine and analyze the factors affecting the stock price.
- To analyze the major financial indicators like EPS, DPS, Earning Yield, Dividend Yield and DPR of sample commercial banks.

1.4 Focus of the Study

NEPSE is an organized stock exchange for trading stocks (shares) in secondary market. Although small investors can invest their money by purchasing shares of companies in primary market (during initial public offering) or in the secondary market, they (general public or investors) lack effective knowledge of capital market and its mechanism. The price of the stock is the function of several factors.

Investing in stock is highly risky as being ownership capital. It represents only a final claim while in liquidation. Stock price is determined by a number of factors. Some factors are quantitative whose effect can be quantified whereas other factors are qualitative whose effect on share price can't be quantified. This study focuses to the sensitivity of stock price on NEPSE with special focus to Commercial Banks towards various factors. In other words, this study intends to determine the factors affecting the price (i.e. market value) of the stock.

1.5 Limitations of the Study

This study tries to explore the factors determining the stock price in Nepal Stock Exchange. Both primary and secondary data are analyzed. However, this study may face the following limitations during the course of research.

- This study has been based on secondary sources of data i.e. annual reports of commercial banks, Nepal Rastra Bank, SEBON, NEPSE, government publications, other related journals and news papers.
- The study is only concerns about stock price analysis of sample commercial banks.
- Among the various commercial banks in Nepal the study is only concerned on two insurance companies.
- The study covers a period of five fiscal years which will be processed for drawing conclusion.

- The study concentrates only on those factors which are related with common stock and available in the form required for analyzing the different issues.

1.6 Organizations of the Study

The research will be divided into five chapters.

Chapter -I - Introduction

It introduces background of study, statement of problem, objective of the study, significance of the study, limitations of the study and organization of the study.

Chapter - II - Review of Literature

It includes pilot studies and textual concepts with regard to conceptual framework on investment, risk, return and portfolio along with the review of major books, journal, research work and thesis etc.

Chapter - III - Research Methodology

This chapter includes research design, population & sample, sources and types of data, data processing technique and method & tools of data analysis.

Chapter - IV - Presentation and Analysis of Data

This chapter deals with the presentation and analysis of data. It analyses the data and interprets the results using different financial and statistical tools, table, chart and graphs.

Chapter - V - Summary, Conclusion and Recommendation

This is the last chapter of the study. It summarizes the result of analysis and suggestive framework.

Besides these, bibliography and annexure are presented at the end of the thesis. Similarly acknowledgements, table of contents, list of tables, list of figures, abbreviations are included in the front part of the thesis report.

CHAPTER – II

REVIEW OF LITERATURE

Review of literature means reviewing research studies and other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further research can be conducted. The literature review may also serve as a kind of bibliographic index and guide for the readers. It also demonstrates where the current study fits into the scheme of things. The objective of reviewing the literature is to develop certain expertise and knowledge in one's area. This chapter is divided into mainly two parts.

1. Conceptual / theoretical review
2. Review of related studies

    - Review of Journal and Articles
    - Review of Thesis

2.1 Conceptual Framework

2.1.1 Capital Market

Capital Market is the market where the transaction of long term finance is made. The fund collected in this market are raised and traded by long term financial instrument such as equities and bonds.\

2.1.1.1 Security Market

A security market can be defined as a mechanism for bringing together buyers and sellers of financial assets. In order to, facilitate trading. It means the market where the securities are treated. Security market can be distinguished in to.

- Primary and secondary market
- Money and Capital Market

Primary Market

Security offered for the first time to the general public through the primary securities market. The issuer may be a brand new company. It is also known as New Issue Market (NIM).

Secondary Market

"The secondary market is not keeping pace with the growth of the primary market. This is mainly due to lack of the needed efforts on the concerned authority to devise suitable package of measure to encourage the growth of broker network in the country's growing stock exchange". *(Shrestha; 2000: 18)*

2.1.1.2 Money Market

Money market is also called short term financial market which is the set of supplying short term debt or working capital needed for industries, business or incorporated etc. The instruments of money market are inter-bank deposited, government securities, banker's acceptance, certificate of deposited and commercial papers issued by non financial institutions.

2.1.2 Common Stock

It is an ownership share in a corporation. Common stock certificates are legal documents that evidence ownership in a company that is organized as a corporation they are also marketable financial instrument. Sole proprietorship and partnership are other forms of business organizations, but only corporations can issue common stocks.

Common stock is the recipient of the residual income of the corporation. Through the right to vote, holders of common stock have a legal control over the corporation. An element of risk is also involved in equity ownership due to its low priority of claim at liquidation. Common stockholders have limited liability. Common equity provides a cushion for creditors if losses occur on dissolutions. The equity-to-total-assets ratio is an indicator of the degree by which the amounts realized on the liquidation may decline from the stated book values before creditors suffer losses.

Common stock has one important investment characteristic and one important speculative market price tends increase irregularly but persistently over the decades as their net worth builds through the reinvestment of undistributed earnings. However, most of the time common stocks are subject to irrational and excessive price function in both directions, as the consequence of the ingrained tendency of most people to speculative or gamble, i.e. to give way to hope fear and greed.

Of all the forms of securities common stock appears to be the most romantic while fixed income investment revenue may be more important to most of the investor. Common stock seems to the capture their interest the most. The potential reward and penalties associated with common stock make them on interesting even exciting proposition, no wonder, and common stock investment is a favorite's topic for conversation in parties and gets together. *(Fisher, & Jordan; 2000: 103)*

Common stockholders of a corporation are its residual owners, their claim to income and assets comes after creditors and preferred stock holders have been paid full. As a result, stockholders return on investment is less certain than the return to lender or to a preferred stockholder. On the other hand, the share of a common stock can be authorized either with or without par value. The par value of a stock is merely a stated figure in the corporate charter and is of little economic significance. *(Van Horne; 1997: 160)*

Common stock holders of a corporation are its residual owners, their claim to income and assets comes after creditors and preferred stock holders have been paid in full. As a result, a stockholders return on investment is less certain than the return to lenders or to preferred stockholders. On the other hand, the shares of a common stock can be authorized either with or without par value. The par value of a stock is merely a stated figure in the corporate charter and is of little economic significance. A company should not issue stock at a price less than par value because stockholders who bought stock for less than par value would be liable to creditors for the difference between the below par price they paid and the par value. Common stock holders are entitled certain right, which are as follows. *(Van Horne; 1997: 165)*

- Control through voting right
- Preemptive right
- Limited liability
- Right to income and distribution of additional shares
- Residual right

2.1.2.1 Common Stock Values

Common stock values are either denoted by par value, book value or market value. These three terms are different and their rupee amount differs.

a. Par Value

The face value of one stock established at the time the stock is initially issue known as par value. Generally common stock carry Rs100 par value.

b. Book Value

The sum of the cumulative R/E and other entries such as common stock and capital contribution in excess of par value under stock holders equity is the book value of the equity.

c. Market Value

The value of share in secondary market traded between investors and traders is the market value. Market value is the consequence of demand and supply.

2.1.3 Return on Common Stock

The meaning of return has different meaning to different investors. The rate of return from capital investment is a concept that has different meaning to different investors. Some competitive seek near term cash inflow and give less value to more distant returns. Return can be expressed by cash dividend or capital gain or loss. Some investors measure return using financial ratios. Single holding period return may be defined as all possible future cash flows that can be earned holding securities up to holding period. It can be also defined as the changes in the value plus any cash distribution expressed as a percentage of the beginning of the period of investment value. An investor can obtain two kind of income from the investment is a share or bonds.They are as follows;

- Income from price appreciation or losses from price depreciation. It is called capital losses and gain.
- Cash flows income from cash dividend or coupon interest payment.

Return shows financial position of any organization. The company position of any Organization may be better if it has higher return. Return is rewards for an investor from his or her organization. Investors always want to maximize expected return subject to their tolerance for risk. Return is motivating forces and it is the key method available to investors in capering investment alternatives. Realized rate of return and expected rate of return which are often used in language of investment. Realized rate of return is after the fact return that was earned or it is the historical return.

The return on investment can be measured as the total gain and losses expressed on the behalf of owner over the given period of time. It is commonly stated as the change in value plus any cash distribution expressed as percentage of the beginning period investment value. The expression for calculating the rate of return (Ks) earned any assets over the period (t) is commonly defined as; *(Bhattarai; 2008: 102)*

Total Return = Capital Gain + Regular Gain (Ordinary Gain)

Capital Gain = Ending Price - Beginning Price

Regular Gain = Dividend Or Interest

2.1.3.1 Single Period Rate of Return

The investment return is defined as the after tax increase in the value of the initial investment. The increase in value can come from to sources direct cash payment to the investor or an increase in the market value of the investment relative to the original purchase price. The rate of return over the holding period, or HPR is computed as.

$$\text{HPR} = \frac{\text{Endng Price} - \text{Begnning Price} + \text{Cash Receipt}}{\text{Begnning price}}$$

2.1.3.2 Required Rate of Return

When setting the required rate of return on an Investment, an investor must consider the real rate of return, expected inflation and risk. Because consumption is foregone today, the investor is entitled to a rate of return that compensated for this deferred consumption since the investor expects to receive an increase in the real goods purchase later, and assuming for the moment, zero inflation and risk, the required rate could equal to the real rate of return, in which case it would represent the pure time value of money. The capital markets determine this real based upon

the supply of money to be invested relative to the demand for borrowed money. *(Cheney and Moses; 1995: 33)*

The required rate of Return is the minimum rate of return that an investor expects from his/her investment in risky assets. It is the function of real rate of return and risk. The required rate of return is the return on risk free assets.

2.1.3.3 Expected Rate of Return

If an investment is to be made, the expected rate of return or the expected holding period return, should be equal to or greater than the required rate of return for that investment. The expected rate of return is based upon the expected cash receipt (e.g. divided and interest) over the holding period and the expected ending or selling price. The expected rate of return is unknown future return. The investor has forecast possible outcomes each based upon a possible state of the economic. Each economic state will result in a different expected rate of return. Subjective probabilities are assigned to each out come. The overall expected rate of return, E (HPR) can be calculated as a weighted average of the three forecasts. *(Cheney and Moses; 1995: 35)*

2.1.4 Risk on Common Stock

Risk, in simple word, is an uncertainty. Risk and uncertainties are the facts of life so to the common stock holder. Technically, their meanings are different. Risk, simply in Investment, means a chance of happening some unfavorable event or danger of losing some value. Risk suggests that a decision maker knows the possible consequences of a decision and their relative livelihoods at the times he makes decision.

The practice is to translate the uncertainty into a mathematical value which represents the uncertainty into a mathematical value which represent the best estimate of all uncertainty value. But risk is treated differently. Although risk arises

from uncertainty, its magnitude depends upon the degree of variability in uncertain cash flows, it is measured in terms of standard deviation. In project analysis the project risk indicated of the probability of return being less than the expected value higher the probability of such loss or less return, higher the project risk. *(Pradhan; 1993: 244)*

Risk is defined in Webster's dictionary as a „hazard: a peril: exposure to loss or journey", thus for most, risk refers to the chance that some unfavorable event will occur. If u invest in speculative stock (or, really, any stock), you are taking a risk in the hope of making an appreciable return. *(Weston & Brigham; 1982: 182)*

2.1.4.1 Sources of Risk

Financial risk is an umbrella term for multiple types of risk associated with financing, including financial transactions that include company loans in risk of default. Risk is a term often used to imply downside risk, meaning the uncertainty of a return and the potential for financial loss

a. Interest Rate Risk

Interest rate risk is potential variability of return caused by changed in the market interest rate. If market interest rates rise, then investment's values and market price will fall and vice versa. The variability of return that results is interest rate risk. This interest rate risk affects the price of bond and stock etc.

b. Purchasing Power Risk

It is the variability of return an investor suffers because of inflation. Economists measure the rate of inflation by using a price index. The percentage change in the consumers price index is a widely followed measure of the rate of inflation.

c. Bull-Bear Market Risk

Bull bear risk arise from the variability in market return resulting from alternating bull and bear market forces. When a security index arises fairly consistently from a low point, called a though, for a period of time, this upward trend is called a bull market. The bull market ends when the market Index reached a peak and starts a downward trend. The period during which the market declined to the next through is called a bear market.

e. Management Risk

Though many top executives earn princely salaries, occupy luxuries offices and wield enormous power within their organization, they are mortal and capable of making a mistake or a poor decision. Furthermore errors made by business managers can harm those who invested in their firm forecasting management errors is difficult work that may not be worth the effort and, as a result, impacts a needlessly skepticism with informed insight as they endeavor to analyze subjective management risks.

f. Default Risk

Default risk is that portion of an investments total risk that results from changed in the financial integrity of the investment.

g. Liquidity Risk

Liquidity risk is that portion of an assets total variability of return which results from the price discounts given or sales commissions paid in order to sell the asset without delay.

h. Call Ability Risk

That portion of a securities total variability of return that derives from the possibility that the issue may be called is the call ability risk. Call ability risk commands a risk premium that comes in the form of a slightly higher than average rate of return. This additional return should increase as the risk that the issue will be called increases.

i. Convertibility Risk

Convertibility risk is that portion of the total variability of return from a convertible preferred stock that reflects the possibility that the investment may be converted into the issuer's common stock at a time harmful to the investors best interests.

j. Political Risk

Political risk arises from the exploitation of a politically weak group for the benefit of a politically strong group, with the efforts of various group to improve their relative positions increasing the variability of return from the affected assets*. (Frank & Keith: 2004)*

k. Industry Risk

An industry may be viewed as a group of companies that complete with each other to market a homogeneous product. Industry risk is that portion of an investments total variability of return caused by events that effect the products and firms that make up an industry. The stage of the industry's life cycle, international tariffs and or quotas on the products produced by an industry, product or industry related taxes, industry wide labor union problems, environmental restrictions. Raw materials availability and similar factors interact and affect all the firms in an industry simultaneously. *(Cheney and Moses; 1995: 33)*

2.1.5 Stock Market

Stock market, as any other markets is a mechanism created to bring the buyers and sellers together with or without particular place or location since market can exist even without location or place; however, time, price, product and its unit are fundamentals for the market to subsist. The stock market is said a forward-looking market and stock prices reflect anticipations about future economic activities. Various instruments of the securities are the products exchanged per unit of their respective price within given time frame. Stock market facilitates the exchange of financial securities which helps to mobilise the internal and external financial resources. The companies can collect the funds from the market by issuing various instruments of securities, i.e., equities, corporate bonds etc. Similarly, the state can issue and sell the government bonds in the securities market and pull the funds from the market for financing the short term budgetary deficit and for the long term development appetite. Nonetheless, the selling of securities is possible only if individual and institutional investors could make easy come back into the markets, for whom stock market provide ample opportunities for the long term capital investment and short term speculative venture, for which liquidity and lucrative market are the fundamentals. So, the safeguarding the interests of the investors is equally important together with overall development and management of the market for attracting more number of the investors in which assertive role and need of strong, free, and independent market regulator is often highly acknowledged. *(Fisher & Jordan, 2000)*

The role of stock market as the part of financial market in economic developmental process is highly emphasised by modern economic growth theories. The capital market development is positively correlated with economic growth with feed-back effects, but the strong link is from economic growth to capital market suggesting that financial development follows economic growth and at the same time economic growth determines financial institutions to change and develop. However, financial

liberation as a special case of capital market development which determines equity market liberalisation the impact of financial structure on the economic growth and concluded that in the countries with inflexible judicial system, the impressive impact on economic growth is generated by the development of the financial and banking system whereas in the countries with greater flexibility of judicial system, the development of the capital market has shown a robust influence on economic growth. Stock market development has a greater effect on economic growth for Denmark, Finland, France, Germany, Greece, Netherlands, Italy, Portugal, and Spain compared to other countries. Nevertheless, causal relationship is claimed to exist between stock price movement and economic growth in the short run indicating that the stock markets act as a leading indicator of economic growth . A study on the effects of different components of financial system on economic growth in Taiwan, Korea and Japan underscored the positive effects of stock market development on economic growth.

As far as the development of the stock market in Nepal is concerned it is still in infant stage in which one can not expect its strong association with economic growth, as it is evidenced by the various empirical studies, through assisting in capital formation vis-à-vis mobilisation of small savings from the household sector. One of the crucial factors in this context is the institutional strengthening and capacity building of the Securities Board of Nepal (SEBON).

The further improvement of Nepalese stock market is critical in the sense that without it, the funding in long term development activities from internal source seems to be far-flung. The number of urban households especially with easy money has recorded a substantial increase during last few decades, seems to have been attracted in the absence of the incentives to invest in stock market to unproductive spending and luxurious consumption largely that is evidenced by the mushrooming growth of super stores selling foreign goods in city centres such as Kathmandu, Pokhara and in other urban areas. Part of the remit money from abroad could have

been mobilised in the country to the stock market; however, at present the bulk of it are largely, for sure, spent in lavish consumption and unproductive areas contributing in aggravating the country's adverse balance of payments further by way of increasing total import values. So far there are no evidences in the country that remit money has been invested in stock market.

2.1.6 Role of SEBON on Security Market

The Government of Nepal established securities Board of Nepal (SEBON) on June 7, 1993 as an apex regulator of Securities Markets in Nepal. It has been regulating the market under the Securities Act, 2006. The functions, duties and powers of SEBON as per the Act are as follows (www.sebon.gov.np).

- To offer advice to Government on matters connected with the development of the capital market.
- To register the securities of corporate bodies established with the authority to make a public issue of its securities.
- To regulate and systematize the issue, transfer, sale and exchange of registered securities.
- To give permission to operate a stock exchange to any corporate body desirous of doing so, subject to this Act or the rules and bye-rules framed under this Act.
- To supervise and monitor the functions and activities of stock exchange
- To inspect whether or not any stock exchange is executing its functions and activities in accordance with this Act or the rules and bye-rules framed under this Act. In addition, to suspend or cancel the license of any stock exchange, which is not found to be doing so.
- To issue licenses to conduct the business of dealing in securities, subject to this Act, or the rules and the bye-rules framed under this Act, to companies or institutions desirous of conducting the business of dealing in securities.
- To supervise and monitor the functions and activities of securities-dealers

- To grant permission to operate collective investment schemes and investment fund programs, and to supervise and monitor them
- To approve the bye-rules concerning transactions in securities framed by stock exchanges and institutions engaged in the business of dealing in securities, and, for the purpose of making necessary provisions concerning the development of the capital market and protecting the interests of investors investing in securities, issue orders to have necessary alterations made in such bye-rules of stock exchange and institutions engaged in the business of dealing in securities.
- To systematize the task of clearing accounts related to transactions in securities.
- To supervise whether or not security dealers are behaving in the manner prescribed in this Act, or the rules and the bye-rules framed under this Act, while conducting business of dealing in securities, and suspend the license to conduct the business of dealing in securities in case any securities dealer is not found to be behaving accordingly.
- To make or ensure necessary arrangements to regulate the volume of securities transacted and the procedure of conducting such transactions in order to ensure the promotion, development and clean operation of stock exchanges.
- To make necessary arrangements to prevent insider trading or any other offenses relating to transactions in securities in order to protect the interest of investors in securities.
- To review or make arrangement for reviewing the financial statements submitted by the corporate bodies issuing securities and security dealers, and issue directives deemed necessary in that connection to the concerned corporate body.
- To systematize and make transparent the act of acquiring the ownership of a company or gaining control over its management by purchasing its shares in a single lot or in different lots.
- To establish coordination and exchange cooperation with the appropriate agencies in order to supervise and regulate matters concerning securities or companies.

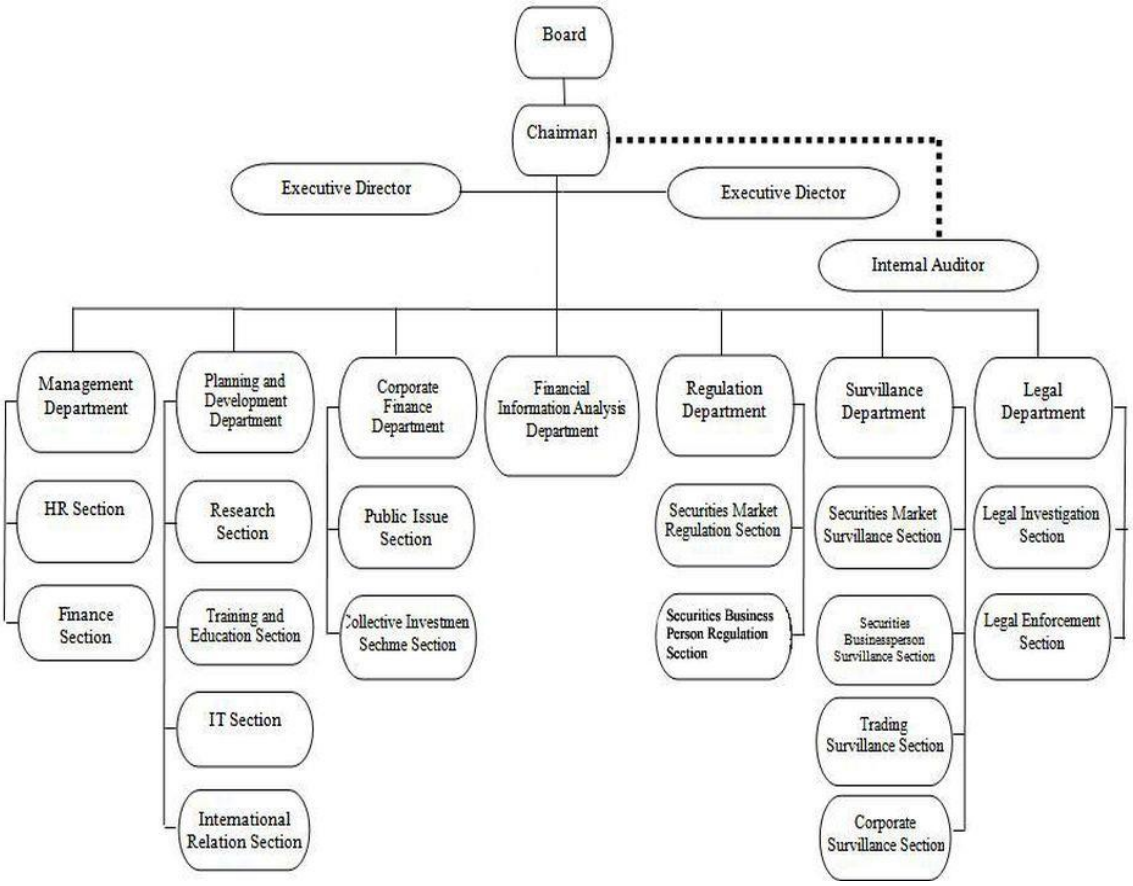
- To discharge or arrange for discharging such other functions as are necessary for the development of securities and the capital market.

The Governing Board of SEBON is composed of seven members including one full time chairperson appointed by the Government for tenure of four years. Other member of the Board includes;

- Joint secretary of Ministry of Finance,
- Joint secretary of Ministry of Law,
- Justice and Parliamentary Affairs, representative from Nepal Rastra Bank,
- Representative from Institute of Chartered Accountants of Nepal,
- Representative from Federation of Nepalese Chambers of Commerce and Industries, and
- One member appointed by the Government from amongst the experts pertaining to management of securities market, development of capital market, financial or economic sector.

Figure: 2.1

Organization Structure of SEBON



Source: www.sebon.gov.np

There are seven departments and sixteen sections in the organization of SEBON. Under the Management Department, there are two divisions namely Human Resources Section and Finance Section. There are also four sections under the Planning and Development Department namely Research Section, Training Section, Information Technology Section and International Affairs Section. There are also two sections under the Corporate Finance Department namely, Public Issue Section and Collective Investment Scheme Section. Likewise, Under the Regulation Department, there are two sections namely, Stock Exchange Regulation Section and Market Intermediaries Regulation Section. There are also four sections under the Surveillance Department namely, Stock Exchange Surveillance Section, Market Intermediaries Surveillance Section, Trading Surveillance Section and Corporate

Surveillance Section. Finally, under Legal Department, there are two sections Research and Investigation Section and Enforcement Section.

The major financial sources of SEBON are the government grant, transaction fee from the stock exchange and registration fee of corporate securities. Other financing sources include registration and renewal of stock exchange and market intermediaries and the income from mobilization of its revolving fund.

2.1.7 Role of NEPSE on Security Market

The history of securities market began with the floatation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937. Introduction of the Company Act in 1964, the first issuance of Government Bond in 1964 and the establishment of Securities Exchange Center Ltd. in 1976 were other significant development relating to capital markets. *(Shrestha, 1999)*

Securities Exchange Center was established with an objective of facilitating and promoting the growth of capital markets. Before conversion into stock exchange it was the only capital markets institution undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other financial services. Nepal Government, under a program initiated to reform capital markets converted Securities Exchange Center into Nepal Stock Exchange in 1993. *(www.nepalstock.com)*

Members of NEPSE are permitted to act as intermediaries in buying and selling of government bonds and listed corporate securities. At present, there are 50 member brokers who operate on the trading floor as per the Securities Exchange Act, 1983, rules and bylaws. *(SEBON, 2012)*

Besides this, NEPSE has also granted membership to issue and sales manager securities trader (Dealer). Issue and sales manager works as manager to the issue

and underwriter for public issue of securities whereas securities trader (Dealer) works as individual portfolio manager.

2.1.7.1 Securities Available For Trading

A. Shares

- Equity Shares
- Preference Shares

B. Debentures

C. Government Bonds

2.1.7.2 Trading System

NEPSE operates on the 'NEPSE Automated Trading System '(NATS), a fully screen based automated trading system, which adopts the principle of an order driven market. Purchase & Sell of Physical Share certificates is done through NATS. The Automated Trading System was started from 24 August 2007 (www.nepalstock.com).

2.1.7.3 Market Timings

Trading on equities takes place on all days of week (except Saturdays and holidays declared by exchange in advance). On Friday only odd lot trading is done. The market timings of the equities are (Nepal Stock Exchange-Wikipedia, 2012).

Market Open: - 12:00 Hours
Market Close: - 15:00 Hours

Odd Lot Trading is done on Fridays. For Odd Lot Trading Market Timings are;

Market Open: - 12:00 Hours
Market Close: - 13:00 Hours

Note:- The exchange may however close the market on days other than schedule holidays or may open the market on days originally declared as holidays. The exchange may also extend, advance or reduce trading hours when it deems fit necessary.

2.1.7.4 Index-based Circuit Breakers

NEPSE has implemented index-based circuit breakers with effect from 2064/6/4 (21 September 2007). In addition to the circuit breakers, price range is also applicable on individual securities. The index-based circuit breaker system applies at 3 stages of the NEPSE index movement of 3%, 4% and 5%. These circuit breakers when triggered bring about a trading halt in all equity. *(Nepal Stock Exchange-Wikipedia, 2012)*

- In case of 3% movement either way, there would be a market halt for 15 minutes if the movement takes place during first hour of trading i.e. 13:00 hours. In case this movement takes after 13:00 hours there will be no trading halt at this level and market shall continue trading.
- In case of 4% movement either way, there would be a market halt for half an hour if the movement takes place before 14:00 hours. In case this movement takes after 14:00 hours there will be no trading halt at this level and market shall continue trading.
- In case of 5% movement in either way, trading shall be halted for the remainder of the day.

2.1.7.5 Price Range

Price Range is applicable on individual securities. The trading of the individual securities are not halted but allowed to trade within the price range. *(Nepal Stock Exchange-Wikipedia, 2012)*

- The price band is 10% of previous close on either way

- During the ATO session, the range is 5% on either way of Previous Close Price. After the band is 2% on either way of the Last traded price till it reaches to 10% of the previous close.

2.1.7.6 Trading Location

The trading can be done either from NEPSE's trading floor or from the broker's office. NEPSE uses sophisticated technology through brokers can trade remotely from their office located inside the Kathmandu valley. This remote trading facility was started from 1 November 2007. *(Nepal Stock Exchange-Wikipedia, 2012)*

2.1.7.7 Order Matching Rules

The system adopts principle of order driven market. The best buy order is matched with the best sell order. An order may match partially with another order producing multiple trades. For order, matching the best buy order is the one with the highest price and the best sell order is the one with the lowest price. This is because the system views all buy orders available from the point of view of the sellers and all sell orders from the point of view of the buyers in the market. So, of all buy orders available in the market at any point of time, a seller would obviously like to sell at the highest possible buy price that is offered. Hence, the best buy order is the order with the highest price and the best sell order is the order with the lowest price. *(Nepal Stock Exchange-Wikipedia, 2012)*

2.1.7.8 Settlement

NEPSE has adopted a T+3-settlement system. Settlement will be carried out based on paper verses payment. The trading is done at "T" and at T+1; the buying brokers have to submit bank vouchers for settlement with covering letter. At T+2, the selling brokers must submit share certificate with covering letter. At T+3, NEPSE prepares billing for payment and this will be forwarded to the bank.

Once the settlement is done the buying, brokers with the consultation of the clients must decide and present the purchased shares if they want to record it as blank transfer. This must be completed within T+5. (*Nepal Stock Exchange-Wikipedia, 2012)*

2.1.8 Role of government & Future of the Stock Market

The future of Nepalese stock market largely depends on the positive role of the government. Government of Nepal without debate should have supportive role in the development of stock market like in other developed markets. It can support in amending and revising securities act and in giving more functional autonomy to the market regulator which will strengthen the functioning of SEBON.

- Government has a greater role on development of stock market and on stock market reform in the country. Government of Nepal has to be well aware on the role and significance of stock market in terms of the effective mobilisation of funds, and it should give high priority in its reform and development. Government has to entrust SEBON for its special business of regulating stock market and provide functional autonomy in its operation and thereby making accountable in its assigned role and responsibilities.
- Government should not take unnecessary long time to approve amendment in Securities Act so as to handover the rights of making rules and regulations to SEBON and until then it should speed up the enactment of process of securities related acts and regulations. Government should help to create an environment suitable for professionalising SEBON in its regulatory business without delay.
- Government should help to bring coordination between banking regulator, insurance regulator and stock market regulator for the balanced and sustainable development of the financial market of the country.
- Government should help to establish basic infrastructure such as central depository system of securities, online reporting system, credit rating agency, and full automation of the stock exchange.

- Government should have to rationalise the tax provisions relating to stock market and stock investment as well; and government should set fiscal policy favourable to stock market growth and development.
- Government can play a significant role to bring the institutional investors like Employees Provident Fund, Citizen Investment Trust, retirement and pension funds, and insurance companies into stock market with suitable policy and guidelines of investment working together with SEBON. It is also necessary to develop bond market and mutual funds industry so as to attract institutional investors into the stock market. It is almost impossible to open secondary market for Non-resident Nepalese and foreign institutional investors without the necessary policy guidelines and coordination of responsible agencies including government and central bank. In short, government has a greater role to play ahead in the process of growth and development of the stock market in the country. On the other SEBON leadership is equally responsible to take the lead role for generating visionary mission and driving the things in right direction to happen successfully. *(Shrestha & Bhandari, 2006)*

2.1.9 Issues of Securities Market in Nepal

The securities market in Nepal is still at a nascent stage and has failed to show impacts on the overall national economy. Small market size has made it vulnerable to manipulation and price rigging, low turnover ratio indicates that the market is highly illiquid. Dominance of equity instruments has restricted the participation of risk averter types of investors in the market. There are also the various lapses in legal as well as institutional framework of the market. The major issues of the market are briefly dealt below. *(Bajracharya & Bhattarai, 2005)*

1. Structural deficiency in formulation of regulation

As per the provision of Securities Act, SEBON prepares regulations and issued with the approval of the Ministry of Finance (MOF), which is also the reporting authority of the SEBON. At present, there is only one stock exchange which is in the ownership

of government. By the authority of government, the responsibility for the management of stock exchange goes to MOF being the reporting ministry of SEBON, the MOF official chairing the NEPSE board would have conflict of interest while approving the rules and regulations related to NEPSE functioning.

2. SEBON's structure is not broad based and the conflict of interest is not properly balanced

As per the provision of Securities Act, the governing board of SEBON comprises of seven members representing various government and private sector agencies, which also includes a full-time Chairman appointed by the Government. Other members of the Board are joint secretary from Ministry of Finance, joint secretary from Ministry of Law, Justice and Parliamentary Affairs, a representative from Nepal Rastra Bank (the central bank), a representative from Institute of Chartered Accountants of Nepal, a representative from Federation of Nepalese Chambers of Commerce and Industries, and a member appointed by the Government of Nepal amongst market experts (SEBON, Annual Report, 2005/06). However, if we look at the governing structure of securities regulator of other countries, in most of the cases we can find at least two full time members from the legal and accounting field. This is important in view of the securities regulators responsibilities requiring frequent inputs from these fields.

The other deficiency in structure is that there is no restriction for the board members to be involved in the listed companies as board member or chief executives or to play other key roles. SEBON being a quasi-judiciary agency, can penalize the listed companies in case of violation of laws, and if the member is from that particular company being penalized, may defend against the action of SEBON resulting to a situation of conflict of interest, which may hamper be effective regulatory function of SEBON

3. Inadequacy in securities market legal Framework

As visualized by the Act, many rules and regulations have to be developed for the implementation of the Act. It is often heard in the media that the licensing of stockbrokers has been hindered due to lack of stockbroker regulation. Besides, there is also a lack of basic legal infrastructure for the operation of mutual funds in the market. The trust act is also very important for the operation of central depository system of securities and development of bond market. Recently, it was highlighted in the newspapers that a company could not issue rights shares on time with the provision of rights renouncement as enabled by the new provision made in the Companies Act, 2006 and Securities Act, 2006, because SEBON could not give proper modality for rights renouncement as per the provision of the acts. This also shows the deficiency in the legal framework.

4. Slow process of enactment of laws

It is noted that the enactment of securities laws has taken near about a decade. The securities act was prepared considering the suggestions of the capital market study report of ADB conducted in 1995 and submitted by SEBON to the parliament in 1999 (SEBON, Annual Report, 2000/2001). This act was passed in 2005 in the form of ordinance (SEBON, Annual Report, 2005/06). Later in 2006, this ordinance has been approved by the parliament and issued as Securities Act, 2006. Not only the act, also the enactment of regulations is also taking unusually long time. SEBON submitted some regulations related to stock exchange and broker dealer to MOF after the issuance of Ordinance (SEBON, Annual Report, 2005/06), however, they were not approved by the MOF. Later, when the Ordinance was passed in the form of Act, these regulations were again submitted to MOF (Gorkhapatra, June 8, 2007). All these indicate the slow rule making process, which in view of the dynamic nature of capital market is very embarrassing. Such type of delay may be attributed to the fact that either the lawmakers do not understand the technical nature of market and/or

the regulator does not have sufficient capability to convince the lawmakers as well as the government about the importance of particular law to be issued.

5. Lack of Institutional Infrastructures

The Central Depository System of Securities (CDS), which is very important from the aspect of market efficiency, has not been established. Absence of CDS is one of the reasons why the process of clearing and settlement and ownership transfer has not been efficient and transparent. Similarly, the markets also lacks

in the services of institutions like Credit Rating Agencies, which in view of the development of bond market is very important. Lack of alternative trading mechanism such as OTC markets and third and fourth markets is the other prominent issue of the market. The securities, which do not meet the listing criteria of stock exchange or are de-listed from the stock exchange, have no avenue for trading due to lack of such trading arrangements.

6. Efficiency of Stock Exchange

It is usually heard in the market and read in the newspaper that the services provided by the stock exchange are very inefficient. Companies are often complaining about the delay in listing. It has even been published in the newspapers in the past that the debentures listing of Himalayan Bank Limited had taken months because NEPSE could not develop appropriate criteria for listing and trading of such instruments. A study of SEBON on performance of issue manager for the period between the fiscal year 1993/94 to 2002/03, published in SEBON Journal Volume II reveals that out of 74 issues, only 12 were listed timely.

The trading of stocks in the floor of NEPSE is still carried out through open-out- cry system, which has been obsolete from most exchanges in the world. Due to lack of automated trading system of securities, the trading has not able to gain confidence in terms of efficiency and transparency. The trading facility is limited only in

Kathmandu valley and there is no any provision for providing this facility to the people in other parts of the country. This has also hindered in increasing public participation in the securities markets.

7. Efficiency of stock broking services

Currently, there are 50 stockbrokers in the stock market, out of which about 49 are actively involved in the trading. Lack of easy entry and exit mechanism for stockbrokers in the market has limited their number and put constraint in providing fair and competent services. They are not concerned with expanding their services out of the valley and mostly are found to be taken this business as a secondary business. Questions on their professionalism are often raised and the media time to time has also highlighted their involvement in manipulative trading. They are often blamed for not being well equipped to provide investment counselling services to the investors. They are also lagging behind in keeping updated records of trading. In the fiscal year 2005/06, SEBON and NEPSE, on their joint on-site inspection of stockbrokers, found many brokers not keeping updated records of securities transactions and transaction orders for which they were suspended from trading securities. *(SEBON, Annual Report, 2011/12)*

8. Absence of institutional investors

The market is dominated by individual investors and most of them are not making informed investment decisions rather driven by market rumours. Because of lack of institutional investors in the market, there is no pressure for the issuers to make timely and regular disclosure. The price formation process of the market is also not fair as the market is lacking the role of such investors in stabilizing the price of securities in case of unusual ups and downs. The role of institutional investor in the market is known to add up new instrument through collective investment schemes, play role in stabilization of the securities prices, make rational analysis of information and pressurise the issuer for the regular flow of credible information. 3.9 Information

disclosure Information is an important element of securities market. Investors can make rational investment decision if there is sufficient information. The institutions disseminating information are issuing companies and stock exchange. Issuing companies have to prepare prospectus at the time of public issue. After listing they have to disclose periodic and other material information (Securities Act, 2006). However, specific format of the prospectus has not been prescribed yet to confirm the requirement of the Securities Act, 2006 and Companies Act, 2006. In lack of specific standards the listed companies under the same group do not have uniformity in corporate disclosure. The credibility of the information has always been questionable in case of many companies as evident from the issues raised by the newspapers from time to time on the professionalism of accountants and auditors. Also there is no any mechanism within the securities regulator for the review of corporate information to test the reliability. *(Securities Act, 2006)*

Stock exchange has to receive and disclose the price sensitive information, periodic information and other information of the listed companies and also provide the trading information. Timely disclosure of market information such as ask and bid prices, trading amount and price, traded companies, actual demand and supply of securities, types of transaction etc. helps investors to make rational decision and to determine the time to enter the market and exit from it. However, only the information on price and quantity of traded securities is available in the market.

9. Securities instruments

The diversity in securities market instruments attracts the investors of various risk preferences providing the choices in the investment alternatives. But in case of Nepalese securities market, it is mostly dominated by risky instrument (equity share), which constitutes more than 80 percent of the total paid up value of the securities listed in the stock exchange and the rest consisting of preference shares,

debentures/bonds and mutual funds. Recently government securities was listed in the stock exchange, however, these securities are mostly held by institutions and free float securities are not in the hands of individuals resulting in limited or no trades. Lack of benchmark interest rate provided by government securities market and the trustee mechanism, the corporate bonds issue practice has still not been popular. So, the market has not become attractive to risk averter and risk neutral investors.

2.1.10 Eligibility for Trading of Securities and Challenges

Listing means registration of securities that are floated by corporate sector to raise funds for the establishment and operation of a company. The importance of listing cannot be overemphasized with few words. The company by means of listing arranges liquidity on the floated securities. The Securities and Exchange Board of India (SEBI) guideline defines listing as admission of the securities of a public limited company on a recognized stock exchange which provides a forum for the purchase and sale of securities. If the listed company is in need of additional fund, it can raise such required fund from the market. Besides, listing also facilitates to value the securities daily on the trading floor. The listing has several advantages like the investor gets periodic reports of the listed companies which help them to know company performance, the transaction of listed companies are reported in daily newspapers and they are able to know the intrinsic value of their investment. *(Securities and Exchange Board of India, 1972)*

If all other things remain constant, the investors attempt to sell higher volume of securities at higher prices and tend to buy less number of securities at higher prices. If the market price of the particular securities increases beyond the intrinsic value of the securities then the investors holding that securities starts to sell, which in turn, increases the selling pressure. The increased selling pressure due to overvaluation of securities or over pricing reduces the demand and ultimately the price will come

down and equals the intrinsic value of the securities. In the same way, if the securities are priced below the intrinsic value or net value the demand for such securities increases and the increased demand and lower supply of securities increases the market price, which again levels up with the intrinsic value of the securities. In fact, transactions are be made at the price where both the bid and ask price matches. Therefore, Capital Assets Pricing Model (CAPM) assumes that capital market has to be in a state of equilibrium; if not, the market will move towards the equilibrium position. Over-pricing and under-pricing are temporary phenomena; the market price should equal the intrinsic worth of the securities. It is the listing that facilitates occurrence of such situation in the market. (S*hrestha, 2002)*

Price is also a function of information and investors' perception. If the investors perceive that the particular company will do better in future and also if the present situation is far better than the forecast situation then such investors may be ready to pay higher price as compared to others. In this situation the investors cannot be blamed as being irrational. They are rational but, the prevailing economic situation and quality of information affects their decisions as some investors trade on the basis of asymmetric information.

2.1.10.1 Listing Provision

Different stock exchanges incorporated in different countries have their own listing criteria depending on their geo-political and economic status. Stock exchange provides the opportunity to invest when people have surplus funds and to exit when they are in need of funds and also want to minimize the risks and maximize the return. CAPM assumes that if there exists several financial instruments having different rate of returns, but the same level of risks, investors prefer the high rate yielding securities. On the other hand if there exists the same rate yielding securities with different risk levels, the investors prefer less risky instruments because the investors are risk averse. Therefore, Securities Exchange Act 1983 of Nepal has made

provision for listing considering the fact of giving exit to the investors. Section 8 of Securities Exchange Act, 1983 prohibits securities trading without being listed. This means that all the securities of public limited company must be listed in the stock exchange to make them eligible for trading. The listing by-laws has clearly spelled out that all issued and allotted securities should be listed under the section 11 of the Act. The Act has defined the term "issue" as all the issue made by issuing announcement or by private placement to sell the securities. It has a wide coverage indicating all transactions before listing are void. However, the securities listing by-laws spell out the minimum requirements to be eligible for listing, which includes minimum number of shareholders to be 500, the minimum paid up capital to be Rs.2.5 million above others. Besides this, several information and documents along with dues should be submitted. Now the question can be raised- What will happen to the securities of those companies, which do not meet such criteria as Nepal does not have over-the-counter (OTC) market. It reveals that some of the existing public limited companies are violating the existing laws by trading without being listed on the exchange. In other words, listing is not compulsory but the transactions of securities without listing is against the prevailing laws of the country. In fact, this is the major weakness of our legal enforcement regime. *(Securities Exchange Act, 1983).*

2.2 Legal Provisions

2.2.1 Provisions of Revenue to SEBO

As provisioned in the Securities Laws, SEBO receives securities registration fees from the issuer and licensing and renewal fees from the securities businesspersons and stock exchange.

A. Licensing and Renewal Fee for Stock Exchange

As per the provision of Rule 12, sub-rule 1 and annex 2 of Securities Exchange Regulation, 1993, a company applying to operate stock exchange should pay to SEBO Rs.0.2 million as licensing fee. The annual renewal fee for the stock exchange is Rs.0.05 million.

B. Licensing and Renewal Fee for Securities Businesspersons

Rule 28, sub-rule 1 and annex 12 of Securities Exchange Regulation has made provision regarding the licensing and renewal fees for the securities businesspersons as presented in Table 2.1.

Table: 2.1

Licensing and Renewal Fees for Securities Businesspersons

S.N.	Particulars	Licensing Fees (Rs.)	Annual Renewal (Rs.)
1	Stock Broker	2,500	1,500
2	Market Maker/ Securities Dealer	5,000	3,000
3	Issue Manager	10,000	5,000
4	Other functions relating to securities transaction	10,000	5,000

Source: Security Exchange Regulation Act 1993, Rule 28, sub-rule 1

The securities businesspersons should renew their licenses for the coming fiscal year before the expiry of the current fiscal year. In this regard, rule 34, sub-rule 2 of the Regulation states that the securities businesspersons not being able to renew their

licenses within the stipulated period should pay additional 25% of renewable fees as penalty.

C. Securities Registration and Issue Approval Fee

Rule 17, sub-rule 1 and annex 5 of the Securities Exchange Regulation, 1993, has made provisions for securities registration and issue approval fees as presented in Table 2.2.

Table: 2:2

Securities Registration And Issue Approval Fees

S.N.	Amount of Issue	Approval Fees
1	Up to Rs. 50,00,000	0.25%
2	Rs. 50,00,001 to 1,00,00,000	0.20%
3	Rs. 1,00,00,001 & above	0.15%

Source: Security Exchange Regulation Act 1993, Rule 17, sub-rule 1

2.3 Review of Related Studies

2.3.1 Review of Journals &Articles

Shrestha (2005*),* published an article on *"Revenue Structure in Nepalese Securities Markets"* SEBO has a dual role of regulating and developing the securities market in the country. Nepal's accession to the World Trade Organisation has added greater challenges in the securities markets, as it should be opened to foreign investors and foreign securities businesspersons. Fulfilling more roles and responsibilities with limited resources can seriously compromise the potential of a thriving capital market.

Due to low level of income from the securities market, SEBO has no alternative than to depend on government funding to carry out its regulating and market development roles. However, in the long term, SEBO can not rely only on government grant and would have to look for other alternatives to provide SEBO

with greater operational and financial autonomy. Additional roles and responsibilities of SEBO would justify such increment in resources.

If we see the practice of Indian securities markets, the stock exchanges contribute, on average, 5 percent of the total listing fees to Securities Exchange Board of India (SEBI) every year. Additionally, stock brokers provide service fee at the rate of 0.01 percent of the turnover if the turnover is more than Rs. 10 million in case of corporate securities and 0.001 percent of the turnover in case of government securities. Similarly, mutual fund managers pay service fee to SEBI based on net assets value of the fund managed. We find similar practices in the other securities markets too. In this context, SEBO's share on market revenue should be increased, which can be done by increasing licensing and renewal fees of market intermediaries, allocating some portion of listing fees and trading commissions to SEBO and bringing securities services like underwriting and registrar to the securities within the ambit of SEBO's regulation and making provisions for charging some fees for such services.

Shrestha (2010), published an article on *"Stock return and Trading Volume in Nepal"* the proper understanding of stock returns and trading volume helps to understand the portfolio management and investment management services. The relationship between stock returns and trading volume form the basis of profitable trading strategies, and this affects the efficiency of market. Stock returns and trading volume are two major pillars, around which entire stock market revolves.

The Jarque-Bera statistic of stock returns and trading volume data series are significant. Thus, the stock returns, trading volume and return volatility data series are not normally distributed. Augmented Dickey-Fuller statistics and Philips-Perron test reported that the stock returns, trading volume and volatility series are considered as stationary. This series need not be subjected to be co integration analysis. There is a positive contemporaneous relationship between stock returns

and trading volume. There is an asymmetric V-shaped relationship between positive and negative stock returns and trading volume.

Mainali (2011), published an article on *"Problems & Prospects of Stock Market in Nepal"* the stock market development is unable to show significant positive impact on the national economy. Small number of listed companies, low market capitalization ratio, characterizes Nepalese stock market, low value traded ratio, low turnover ratio, high volatility, high concentration, illiquid and risky market. The correlation results indicate that there is positive relationship of GDP with stock market. Regression results show the positive but insignificant relationship of stock market variables with GDP. The finding based on regression analysis is not consistent with the findings of Demurguc-Kunt and Levine (1995), and Levine and Zervos (1998). The inconsistent findings may be due to the factor like small size of market relative to GDP. The increasing number of listed companies, market capitalization ratio, turnover ratio, and value-traded ratio indicate that the stock market is developing steadily. The results of primary data analysis indicate that the poor co-ordination among SEBON, NEPSE, NRB and Insurance Board; insufficient information of stock market; unavailability of CSD service; poor institutional strengthening of SEBON; low instrument diversification; mal-practices on stock transaction; frequent changes on policies; poor attention of government for its development are the major problems of Nepalese stock market. Furthermore, the survey results underscore the importance of political stability in the development of stock market in Nepal.

2.3.2 Review of Thesis

Sharma (2008), conducted a study on *"Problem & Prospects of Primary and Secondary Market in Nepal"* had the main objective of to study and analyze problem and prospects of primary and secondary market in Nepal. The other objectives of the study are as follows.

- To specify the state of primary and secondary market
- To identify the problems and prospects of primary and secondary market
- To access the past and present behaviors of business operation in the NEPSE

To achieve the objectives of the study the researcher used differents financial as well statiscicla tools like growth rate, percentage changes, average, trend analysis, hypothesis and present the data table in the dirrerents table figure, Pie charts and graphs.

The major findings of this study were as follows.

- Performances of many listed companies especially in the manufacturing sector are poor.
- There is no tax benefit in investing in secondary market
- The price and liquidity in the secondary market affect the growth of primary market
- People are shoeing great trust and faith in the stock market and large numbers of people investing in share in a very positive sign though the price of share are increasing

Manandhar (2009) conduct a study on the topic "A *Study on Security Price and Risk & Return Analysis of Listed Commercial Bank in Nepal*" the main objective of the study was to analyze the risk return and other relevant variables that help in making decisions about investment on securities of the listed commercial banks. The other specific objectives of this study were as follows;

- To evaluate common stock of listed commercial bank in terms of risk and return and to perform sector wise comparison on the basis of market capitalization.
- To identity whether the share of commercial banks are overpriced, under priced or at equilibrium price.
- To identify the correlation between returns of commercial banks.
- To construct optimum portfolio from listed common stock.
- To make relevant suggestion and practical idea and materialize recommendations based on findings.

The major Findings of the study were;

- Among all the securities common stock is known to be must risky security.
- Higher the risk higher will be the return.
- Most of investors attached to common stock securities because of its higher expected returns.
- As for the investors it is important to analyze each investment, company to pentagonal returns with the risk and average the potential returns form an investment should compensate for the level of risk undertaken.

Gyawali (2010) has conducted a research work on the topic *"Risk and Return on Common Stock"* He used secondary data analysis with five commercials banks. The major objectives of the studies were as follows.

- To determine the risk, return and other relevant factors that directly affect the investment in common stock.
- To evaluate the common stock of the listed commercial banks in terms of risk and return to perform sector wise comparison on the basic of market capitalization.

This study used market prices of stock and dividend per share as well as statistical tools to analysis the data. The major findings of the study were;

- Among five commercial banks standard chartered bank and Himalayan bank is the continuous dividend payer.
- Among sample banks Nepal Bangladesh bank ltd it has lowest expected return.
- Bangladesh bank is high risky and standard bank is low risky.

Maharjan (2011), conducted a research on *"A study on stock market in Nepal with concentrate to problems and prospects"* the main objective of the research was to deal with the analysis of the stock market in Nepal, which will bring revolution in the development of the capital market. The basic objective of this study was to highlights of the following aspects of stock market.

- To analyze the trend of the stock market
- To study the procedure a practice the primary and secondary market
- To analyze the problem of the stock market

To achieve the objectives of the study the researcher used differents financial as well statiscicla tools like growth rate, percentage changes, average, trend analysis, hypothesis and present the data table in the dirrerents table figure, Pie charts and graphs.

Major findings of the study were as follows;

- Capital market in Nepal is confined to equity market only; Debt transaction is negligible in Nepal Stock Exchange.
- Turnover as well as market capitalization are very small relative to its GDP. Besides, NEPSE is not integrated into world markets.
- The actors of financial market are loosely tied together from legal provisions, which are not effectively implemented. As the financial institutions predominate the market, it has not been able to diversify.
- The result has been poor, security to investors, particularly minority shareholders, who are not fully aware of the risk and return consideration.

Dhamala (2012), has conducted research on *"Determinants of share price in Nepalese Financial Market"* the basic objective of the study are to examine whether MPS of listed companies, especially for selected companies under the study and to what extent the risk is involved in the investment of common stocks of those. In pursuance of the basic objectives, the following specific objectives are set.

- To examine and evaluate the relationship of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- To identify whether stocks are equilibrium priced or not.

To achieve the objectives of the study the researcher used differents financial as well statiscicla tools like Correlation analysis, growth rate, percentage changes, hypothesis testing and present the data table in the dirrerents table figure, Pie charts and graphs.

Major findings of the study were as follows;

- The same financial indictor that has significant role in determining MPS for one company is not significant for another company.
- There is no uniformity in the relationship of MPS with various financial indicators of the sampled companies.
- MPS of financial institutions has higher positive correlation with major financial indicators such as EPS, NWPS and DPS and such relationship in significant.
- The market price of share in Nepal is not indicative of a company's financial performance in stock market.

Gautam (2013), conduct a research on *"Equity Right Issue and the Efficiency of the Nepalese Stock Market".* The objectives of this thesis were as follows.

- To analyze whether Nepalese investors are well known about right issue.

- To test whether shares prices fully reflect all the information accompanying right issue announcement.
- To find out whether Nepalese investors use available information regarding the right issue announcement to maximize their wealth.

To achieve the objectives of the study the researcher used different financial as well statistical tools like growth rate, average, trend analysis, correlation, regression and present the data table in the different table figure, Pie charts and graphs.

Major findings of the study were as follows.

- Most of the investors buy share from both primary and secondary market.
- Most of the Nepalese investors invest in common stock mainly for dividend and capital gain.
- Most of Nepalese investors collect information regarding the right share issue through the magazines and newspaper.
- Few of the Nepalese investors perform company analysis to make investment in common stock.
- Majority of the Nepalese investors making trading of shares daily.

Research Gap

Research gap refers to the gap between previous research and this research. Many research studies have been conducted by the different students, experts and researcher about Nepalese stock market. There have been fund numerous research studies on Nepalese securities market & SEBON some studies are related to NEPSE Index some others are related to IPO, problems and propects of stock market, determinants of stock price but the study on 'Security Price Analysis in Secondary Market of Nepal' has not been found yet.

The financial and statistical tools used by most of the researchers were ratio analysis, correlation and regression analysis. This study includes different tools Hypothesis testing, correlation analysis, trend analysis as specific tools. Thus the research study made on “Security Price Analysis in Secondary Market of Nepal" will be an effort to eveluate the security market price with the help of various related financial as well as statistical tools and techniques. The study can be beneficial to all the concerned parties and people as well.

CHAPTER - III

RESEARCH METHODOLOGY

Research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view. (Kothari, 1990: 81) Research methodology describes the methods and process, which has been applied in the entire aspect of the study. So in this study Research Methodology has been paid due attention to achieve the objectives of the study. A focus is given to the research design, sources of data, population and sample, method of analysis, tools defined about certain financial indicators, test of hypothesis and statistical tools used.

3.1 Research Design

The research design of this study will be more descriptive as well as analytical using the various phenomena related and influencing the dividend decision and market price of stock. For this purpose secondary data and information are obtained from different reliable sources and primary data are obtained through questionnaire survey. This study is carried out by using quantitative analysis method. Mostly, secondary data has been used for analysis; hence, research design of this study is based on descriptive and analytical method.

3.2 Sources of Data

Mainly the study is conducted on the basis of secondary data. The data relating to the dividend and share price are obtained from Nepal Stock Exchange. The supplementary data and information are obtained from annual reports of BOK and EBL and Banking and financial statistics of Nepal Rastra Bank.

3.3 Population and Sample

The population of this study is all commercial banks operating in Nepal nowadays, there are 31 commercial banks are operating in Nepal. The sample consists of two selected bank. The sample consists 6.45% of the total population. Judgmental sampling method is to be used while selecting sample organizations for this study. The selected sample bank for the analysis are as follows.

1. Everest Bank Limited.
2. Bank of Kathmandu Limited.

3.4 Data Analysis Tools

Various financial and statistical tools to be used in this study. The analysis of data will be done according to pattern of data available. Mainly the analysis will be done by using financial tools and simple statistical analysis.

3.4.1 Financial Tools

Financial analysis is the process of identifying the financial strengths and weaknesses of the organization by properly establishing relationships between the items of the balance sheet and the profit and loss account.

a. Earnings per Share (EPS)

EPS is calculated to know the earning capacity and to make comparison between concerned banks. EPS in defined as the result received by dividend net profit after taxes by no of common stock outstanding.

$$\text{EPS} = \frac{Net\ Profit\ Afert\ Tax}{No.of\ Common\ Stock\ Outstanding}$$

b. Dividend per Share (DPS)

DPS indicates the part of earning distributed to the shareholders on per share basis and calculated by dividing the total dividend to equity shareholders by the total no. of equity shares.

$$\text{DPS} = \frac{Total\ Divident}{No.of\ Common\ Stock\ Outstanding}$$

c. Dividend Pay-out Ratio (DPR)

DPR is calculated to indicate percentage of the profit on share that is distributed as dividend.Using following DPR can calculate;

$$\text{DPR} = \frac{Divident\ Per\ Share}{Earning\ Per\ Share}$$

And, Retention Ratio = 1- DPR

d. Price Earnings Ratio (P/E Ratio)

PE Ratio reflects the price currently paid by the market for each rupee of currently reported earnings per share. It is calculated dividing the market value per share by earning per share.

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

e. Earning Yield

Earning Yield and Dividend Yield both are expressed in terms of the market value per share. Earning Yield and Dividend yield are two important profitability ratios from the point of view of the ordinary shareholders. The earning yield may define as the ratio of earning per share to the market value per ordinary share and earning yield is calculated as;

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

f. Dividend Yield

The dividend yield reflects percentage relationship between dividend per share and market value per share. It is calculated through dividing the dividend per share by the market value per share.

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

g. Market Value per Share to Book Value per Share Ratio

This ratio indicates the price the market is paying for the price that is reported from the net worth of the banks or other words it is the price of the outsiders are paying for each rupee reported by the balance sheet of the banks. It is calculated by the dividing the market value per share.

$$\text{MVPS to BVPS} = \frac{Market\ Value\ Per\ Share}{Book\ Value\ Per\ Share}$$

3.4.2 Statistical Tools

Statistical tools are used to analyze the relationship between two variables and to find how these variables are related.In this study, following statistical tools are used.

a. Arithmetic Mean or Average

The mean or average value is a single value within the range of the data that is used to represent all the values in the series. Since an average is somewhere within the range of the data, it is also called a measure of central value. It is calculated by;

$$\text{Mean } (\overline{X}) = \frac{\sum X}{N}$$

Where,

$\overline{X}$ = Arithmetic Mean

$\sum X$ = Sum of values of all items, and,

N = Number of items

b. Standard Deviation

The standard deviation is the measure that is most often used to describe variability in data distributions. It can be thought of as a rough measure of the average amount by which observations deviate on either side of the mean. Denoted by Greek letter's (read as sigma), standard deviation is extremely useful for judging the representatives of the mean. Standard deviation is calculated as;

$$\text{Standerd deviation}(\sigma) = \sqrt{\frac{\sum(\mathbf{X}-\bar{\mathbf{x}})^2}{n-1}}$$

Where,

$\boldsymbol{\sigma}$ = Standerd deviation

$\sum(\mathbf{X}-\bar{\mathbf{x}})^2$ = Sum of squares of the deviations measured from arithmetic average.

n = Number of items

c. Coefficient of Variation

The coefficient of variation is the ratio of standard deviation to the mean for a given sample multipled by 100 and used to measure spread. It can also be thought of as the measure of relative risk.The larger the coefficient of variation, the greater the risk relative to the average. Mathematically,

$$CV = \frac{\sigma}{\overline{X}} \times 100$$

Where,

Cv = Cofficient of Variation

$\boldsymbol{\sigma}$ = Standerd Deviation

$\overline{X}$ = Arithmetic Mean

d. Coefficient of Correlation

Correlation is a statistical tool design to measure the degree of association between two or more variables.In other word if the changes in one variable affects the changes in other variable,then the variable are said to be co-related when it is used to measure the relationship between two variables, then it is called simple correlation.The coefficient of correlation measures the degree of relationship between to sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the tudy because of the simplisity and suitable for the nature of data. The result of coefficient of correlation is always lie between +1 and -1.The formula for the calculation of coefficient of correlation between X and Y is given below.

$$r = \frac{\sum x_1 x_2}{\sqrt{\sum {x_1}^2 \sum {x_2}^2}}$$

Where,

r = Correlation coefficient

$\sum x_1$ = $X_1 - \overline{X}_1$

$\sum x_2$ = $X_2 - \overline{X}_2$

Now, Correlation coefficient between dependent variable (X_1) and joint effect of the independent variable (X_2) & (X_3) on (X_1);

$$X_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2 r_{12}\ r_{23}\ r_{13}}{1 - r_{23}^2}}$$

e. Independent t-test

In order to answer whether the average value of DPS, EPS, MVPS, BVPS etc. are significantly different or not between these two sample banks, independent t- test has been applied.

Null hypothesis (H_0); $\mu_1=\mu_2$ i.e. there is no significance difference between the average value of two sample banks.

Alternative Hypothesis (H_1); $\mu_1\neq\mu_2$ i.e. there is significance difference between the average value of two sample banks.

Test statistic under H_0;

$$t = \frac{(\bar{X}_1-\bar{X}_2)}{\sqrt{S^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}}$$

Where,

$\bar{X}_1$ = Sample mean value of X_1 series

$\bar{X}_2$ = Sample mean value of X_2 series

n_1 = No of X_1 series

n_2 = No. of X_2 series

$S^2 = \frac{n_1 s_1^2 + n^2 s_2^2}{n_1 + n_2 - 2}$

s_1^2 = Variance of X_1 series $(\boldsymbol{\sigma}_1)^2$

s_2^2 = Variance of X_2 series $(\boldsymbol{\sigma}_2)^2$

Level of significance: Level of significance $\propto$ = 5%

Critical Value: Tabulated or critical value of t at $\propto$ % level of significance for $(n_1 + n_2 - 2)$ degree of freedom obtain from t tables.

Decision: If calculated 't' is less then or equal to tabulated value of 't' it falls in the accept region and the null hypothesis is accepted and if calculated 't' is greater then tabulated 't' null hypothesis is rejected.

f. Regression Analysis

Regression analysis is a mathematical measure of the average relationship between two or more variables in terms of original units of data. There are two types of variables in regression analysis – dependent variable and independent variable, the variable whose value is influenced or is to be predicted is called dependent variable whereas the variable which influences the value or is used for predication is called independent variable. The dependent variable is also known as regressed or explained variable while the independent variable is called as regress or predictor or explanatory variable.

A line of regression is the line, which gives the best estimate to the value of one variable for any specified value of the other variable. Thus the line of regression is the line of best fit. The term best fit is interpreted in accordance with principle of Least Squares which consists in minimizing the sum of squares of the residuals or the errors of estimate, i.e. deviation between the given observed values of the variables and their corresponding estimate values as given by the line of best fit. If we have two variables X and Y, we shall have two regression lines, Minimizing the sum of squares of error parallel to y-axis gives the equation of the line of regression equation of Y to X and minimizing the sum of squares of the errors parallel to x-axis, gives the equation of the line of regression of X onY.

Regression equation of Y on X is given by

In Y = a + b X ..... (i)

Where,

Y= Dependent variable

X= Independent variable

a = Intercept of the line

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

To find the answer of research problem, the collected data are necessary to present and analyze by processing. This chapter will present the data on table & figure.The main objective of the study is to present data and analyze them with the help of various financial and statistical tools.

4.1 Stock Price Analysis

Table: 4.1

Analysis of DPS & EPS with MVPS of EBL

FY	MVPS	DPS	EPS (Rs.)	MVPS to EPS (Times)	MVPS to DPS (Times)
065/66	2455	519	99.99	24.55	4.73
066/67	1630	358	100.16	16.27	4.55
067/68	1094	153	83.19	13.15	7.15
068/69	1033	477	88.55	11.67	2.17
069/70	1591	255	91.88	17.23	6.24

Source: Annual Report of EBL from 2063 to 2068 & Appendix II & III

Figure: 4.1

Trend of MVPS to EPS & DPS Ratio of EBL

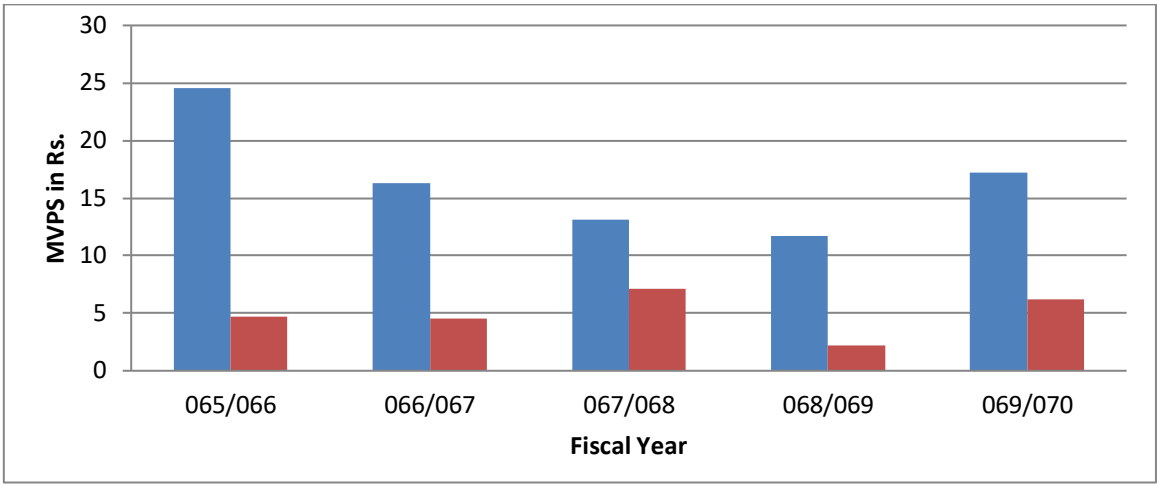


Table 4.1 shows that the relation of MVPS with DPS & EPS, MVPS is decreasing each year during the fiscal year except the fiscal year 2069/070 but MVPS to DPS ratio is fluctuating each year during the study period this ratio is 4.73 times in the fiscal year 2065/066 it means the MVPS is 4.73 times greater than the DPS. The highest MVPS to DPS ratio is 7.15 times in the fiscal year 2067/068 and that of lowest is 2.17 times in the fiscal year 2068/069.

The MVPS to EPS ratio is decreasing with MVPS from the fiscal year 2065/066 to 2069/070 and increases in the fiscal year 2069/070. The MVPS to EPS ratio is 24.55 times in the fiscal year 2065/066 it means the MVPS is 24.55 times greater than the EPS. The MVPS to EPS ratio is decreases and increases with the MVPS so it is clear that there is direct impact of EPS on MVPS.

Figure: 4.2

Trend of MVPS of EBL

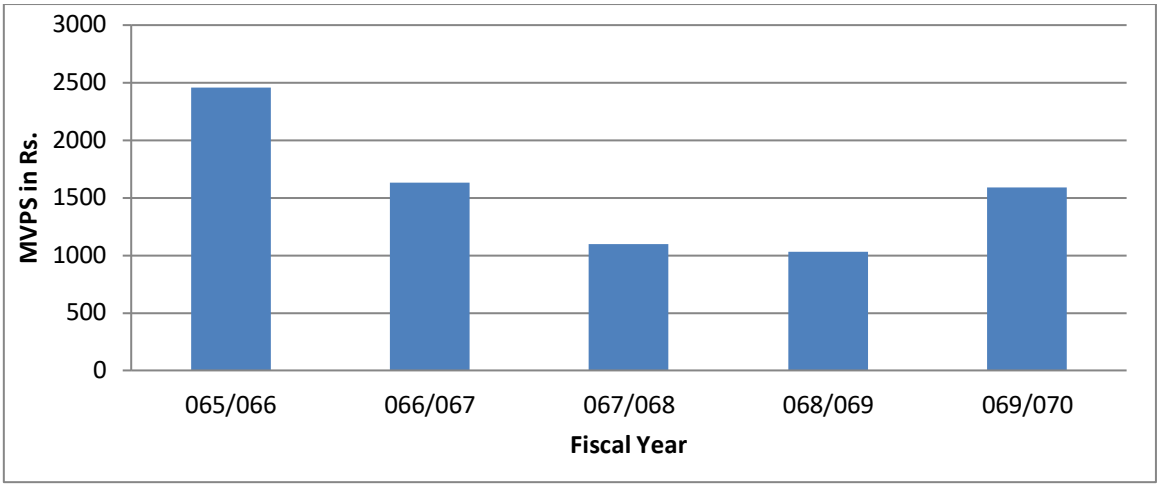


Figure 4.2 shows the trend line of Closing market price of EBL, the closing MVPS of EBL is highest in the year 2065/066 i.e. Rs. 2455 and minimum in the fiscal year 2068/069 i.e Rs. 1033 and the market price of EBL is decreases from the fiscal year 2065/066 to 2068/069 but in the fiscal year 2069/070 the market price is increases from Rs. 1033 to Rs. 1591.

Table: 4.2

Analysis of DPS & EPS with MVPS of BOK

FY	MVPS	DPS	EPS (Rs.)	MVPS to EPS (Times)	MVPS to DPS (Times)
065/66	1825	343	54.68	33.37	5.32
066/67	840	101	43.08	19.50	8.32
067/68	570	130	44.51	12.81	4.38
068/069	628	49	37.88	16.58	12.82
069/070	553	80	36.64	15.09	6.91

Source: Annual Report of BOK from 2064 to 2069 & Appendix IV &

Figure: 4.3

Trend of MVPS to EPS & DPS Ratio of BOK

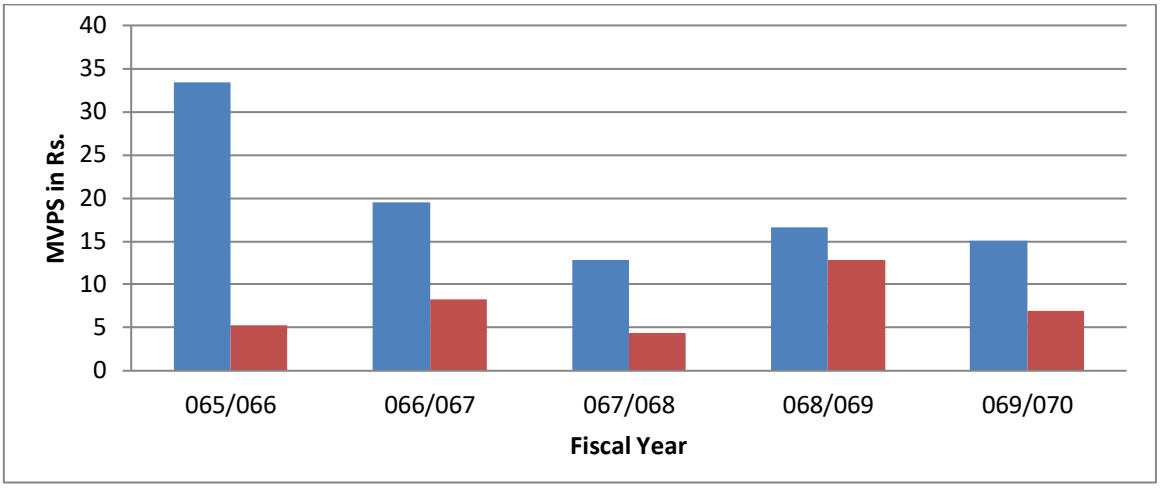


Table 4.2 shows that the relation of MVPS with DPS & EPS, MVPS is decreasing up to the fiscal year 2067/068 and increase in the fiscal 2068/069 again decrease in the fiscal year 2069/070 but MVPS to DPS ratio is fluctuating each year during the study period this ratio is 5.32 times in the fiscal year 2065/066 it means the MVPS is 5.32 times greater than the DPS. The highest MVPS to DPS ratio is 12.82 times in the fiscal year 2068/069 and that of lowest is 4.38 times in the fiscal year 2067/068.

The MVPS to EPS ratio is decreasing with MVPS from the fiscal year 2065/066 to 2067/078 and increases in the fiscal year 2068/069 and again decrease in the fiscal year 2069/070. The MVPS to EPS ratio is 33.37 times in the fiscal year 2065/066 it means the MVPS is 33.37 times greater than the EPS. The MVPS to EPS ratio is decreases and increases with the MVPS so it is clear that there is direct impact of EPS on MVPS of BOK.

Figure: 4.4

Trend of MVPS of BOK

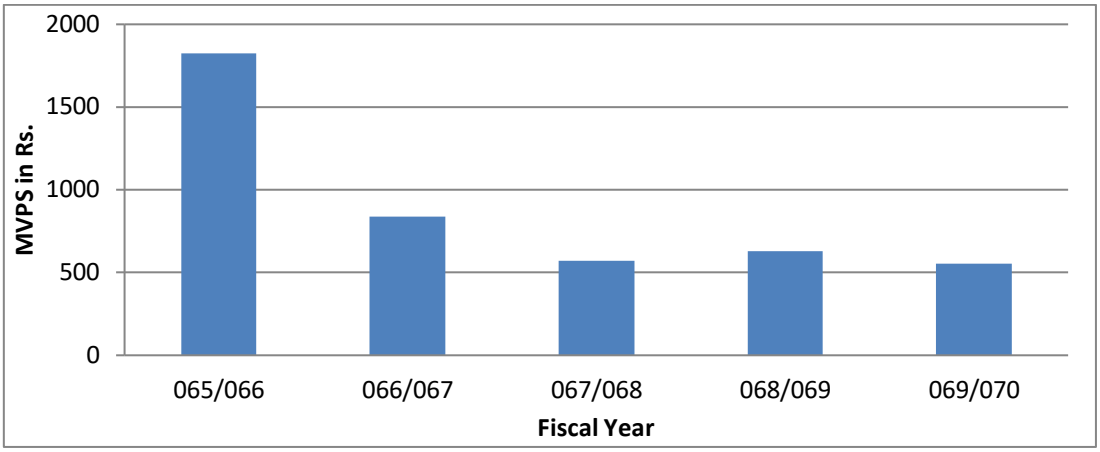


Figure 4.4 shows the trend line of Closing market price of BOK, the closing MVPS of BOK is highest in the year 2065/066 i.e. Rs. 1825 and minimum in the fiscal year 2069/070 i.e Rs. 553 and the market price of BOK is decreases from the fiscal year 2065/066 to 2067/068 but in the fiscal year 2068/069 the MVPS of BOK is increase to Rs. 628.

4.2 Analysis of Major Financial Indicators Related to Stock Price

4.2.1 Earnings Per Share (EPS)

Earnings per share refer the rupee amount earned per share of common stock outstanding. It measures the profitableness of the shareholders investment. The earnings per share show the profitability of the banks on a per share basis. The higher earning indicates the better achievements in terms of profitability of the banks by mobilizing their funds and vice versa. In other words, the EPS indicates the strength and weakness of the bank.

Earnings per share are computed to know the earning capacity and to make comparison between concerned banks. This ratio can be computed by dividing the earning available to common shareholders by the total number of common stocks outstanding.

Table: 4.3

Earnings per Share

(In Rs.)

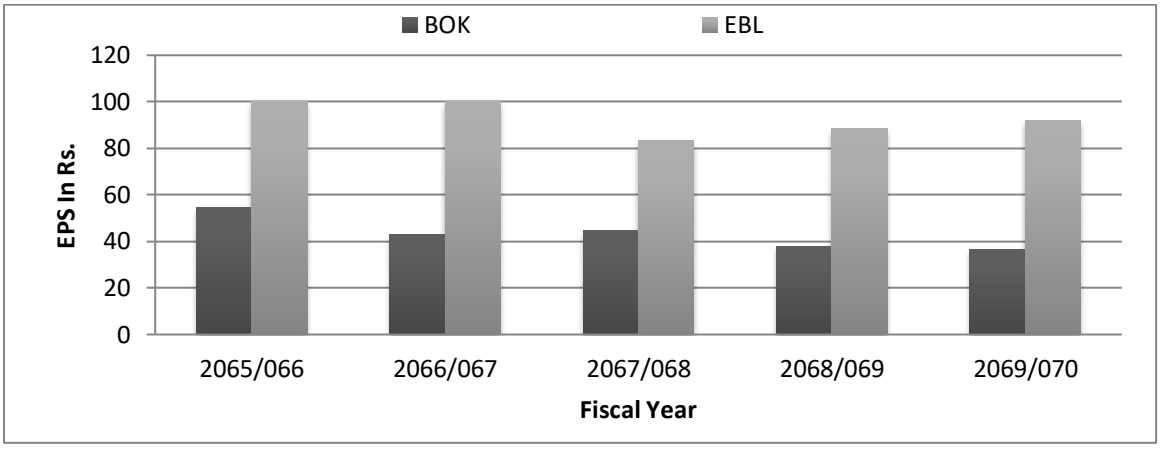
Year	BOK	EBL
2065/066	54.68	99.99
2066/067	43.08	100.16
2067/068	44.51	83.18
2068/069	37.88	88.55
2069/070	36.64	91.88
Mean	43.36	92.75
SD	7.15	7.37
C.V	16.50%	7.95%

Source: Annual Reports of Sample Banks from 2065/066 to 2069/070

Table 4.3 shows the EPS of the concerned banks from 2065/066 to 2069/070. Normally, the performance and the achievement of business organization are measured in terms of its capacity to generate earning. Higher earnings show higher strength while lower earnings show weaker strength of business organization.

Figure: 4.5

Earnings per Share of Sample Banks



In the fiscal year 2066/067, the table shows that the EPS of EBL is highest over the study period, which amount to Rs. 100.16 and the BOK highest EPS is Rs. 54.68 in the fiscal year 2065/066. The EPS of BOK has fluctuating trend over the study period and it reached to Rs.36.64 in the fiscal year 2069/070. But the EPS of EBL is in increases each year than previous year except the fiscal year 2067/068. In comparisons to BOK, EBL has higher EPS each year during the study period. Comparing to BOK with the average value of Rs.43.36 the EBL is better with the average value of Rs.92.75. The Standard Deviations of BOK, and EBL are Rs.7.15 and Rs. 7.37 Respectively, it means BOK has less variability in compare to EBL. The CV of EPS of BOK and EBL are 16.50% and 7.95% respectively which indicate that BOK is more variable than EBL. EBL is more consistent or less variable than BOK.

4.2.2 Dividend Per Share Analysis

Dividend per share indicates the portion of earning distributed in the shareholders on per share basis. It gives financial soundness of the company. Only financially strong companies can distribute dividend. It attracts investors to invest in shares of stock and maintains goodwill. It is an investment in shares of stock and maintains goodwill. It is calculated by dividing the total dividend to equity share holders by the number of ordinary share outstanding.

Table: 4.4

Dividend per Share of Sample Banks (In % of Par Value Rs. 100)

Year	BOK			EBL		
	Cash	Stock	Total	Cash	Stock	Total
2065/066	7.37	40	47.37	30	30	60
2066/067	15	15	30	30	30	60
2067/068	16.75	18	34.75	50	10	60
2068/069	21.32	5	26.32	0	30	30
2069/070	0.74	14	14.74	50	10	60
Mean	12.24	18.40	30.64	32.00	22.00	54.00
SD	8.16	13.01	11.92	20.49	10.95	13.42
CV	66.69%	70.71%	38.92%	64.04%	49.79%	24.85%

Source: Annual Reports of Sample Banks from 2065/066 to 2069/070

Figure: 4.6

Dividend per Share of Sample Banks

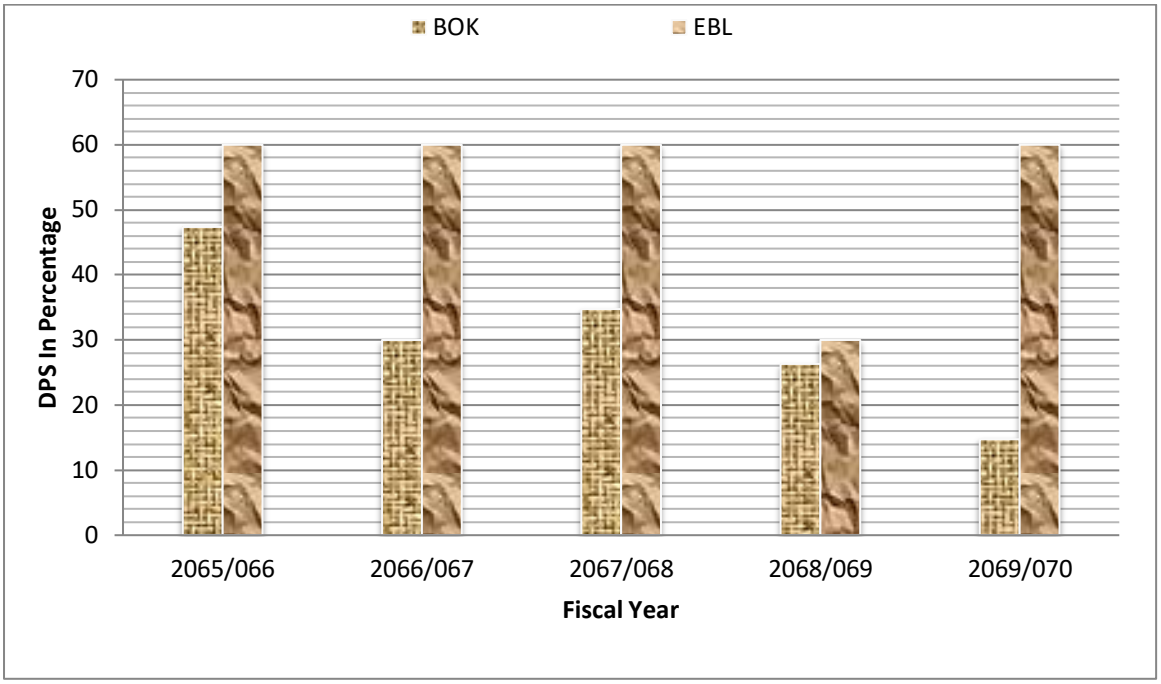


Table 4.4 shows the dividend per share of the concerned banks from the year 2065/066 to 2069/070. BOK has pain cash dividend 7.37% and stock dividend 40% in the fiscal year 2065/066 and the cash dividend rate is increase up to fiscal year 2068/069 but decrease to 0.74% in the fiscal year 2069/070. Similarly, the EBL paid 30% cash & 30% stock dividend in the fiscal year 2065/066 after that the cash dividend is increase but stock dividend is fluctuating each year. In the fiscal year 2069/070 EBL has not paid any cash dividend. The total dividend of BOK is fluctuating each year and BOK has not any stable dividend but EBL has stable dividend policy.

Comparing to BOK with the average value of 30.64% the EBL is better with the average value of 54%. The Standard Deviations of BOK and EBL are 11.92 % and 13.42% respectively, it means BOK has less variability in compare to EBL. The CV of DPS of BOK and EBL are 38.92% and 24.85% respectively which indicate that BOK is more variable than EBL. EBL is more consistent or less variable than BOK.

4.2.3 Dividend Payout Ratio (DPR)

DPR is the proportion of earnings paid in the form of dividend. This ratio reflects what percentage of profit is distributed as dividend and what percentage of profit is retained as reserve and surplus for the growth of the company. It is calculated by dividing by EPS.

Table: 4.5

Dividend Payout Ratio

(DPR in %)

Year	BOK	EBL
2065/066	13.48	30.00
2066/067	34.82	29.95
2067/068	37.63	60.11
2068/069	56.28	0.00
2069/070	2.02	54.42
Mean	28.85	34.90
SD	21.34	23.89
C.V	73.98%	68.46%

Source: Annual Reports from 2065/066 to 2069/070 and Appendix-I

Figure: 4.7

Trend of Dividend Payout Ratio (DPR in %)

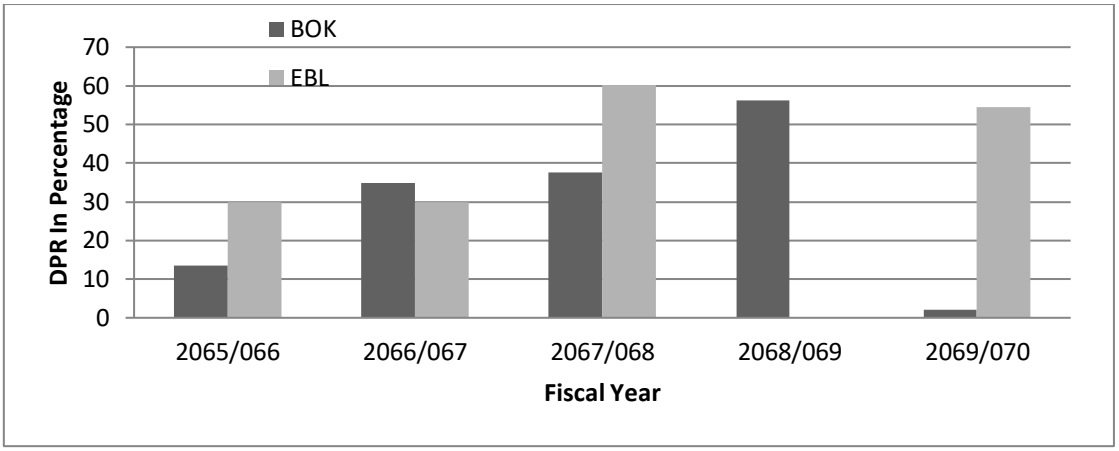


Table 4.5 and Figure 4.7 show the dividend payout of the concerned banks from the year 2065/066 to 2069/070. In the year 2068/069, BOK applied moderate dividend policy and paid dividend 56.28%,

but in this fiscal year EBL has not paid any cash dividend. EBL is paid 60.11% cash dividend in the fiscal year 2067/068. The dividend payout ratio of BOK is increases each year than previous year except the fiscal year 2069/070. In the fiscal year 2069/070 BOK is paid only 2.20% of cash dividend. Similarly the dividend payout ratio of EBL is fluctuating each year during the study period.

Comparing to BOK with the average value of 28.85% the EBL is better with the average value of 34.90%. In average both the banks are adopted the moderate dividend policy. The Standard Deviations of BOK and EBL are 21.34% and 23.89% respectively, it means BOK has less variability in compare to EBL. The CV of DPR of BOK and EBL are 73.98% and 68.46% respectively which indicate that BOK is more variable than EBL. EBL is more consistent or less variable than BOK.

4.2.4 Price Earnings Ratio (P\E Ratio)

P\E ratio indicates the price currently paid by the market for each rupee \ dollar of currently reported earnings per share (EPS). It is also called the earning multiplier. It is the ratio between market price per share and earnings per share. The higher the P\E ratio implies the market share price of a stock given the earning per share and the greater confidence of investors in the firm's future. It is calculated by the dividing market price per share (MVPS) by earning per share (EPS). The P\E ratio measures investment's expectation and market appraisal of the performance of the firm.

Table: 4.6

Price Earnings Ratio

(In Times)

Year	BOK	EBL
2065/066	33.37	24.55
2066/067	19.50	16.27
2067/068	12.81	13.15
2068/069	16.58	11.67
2069/070	15.09	17.32
Mean	19.5	16.6
SD	8.1	5.0
C.V	41.8%	30.1%

Source: Annual Reports of sample banks from 2065/066 to 2069/070

Figure: 4.8

Price Earnings Ratio

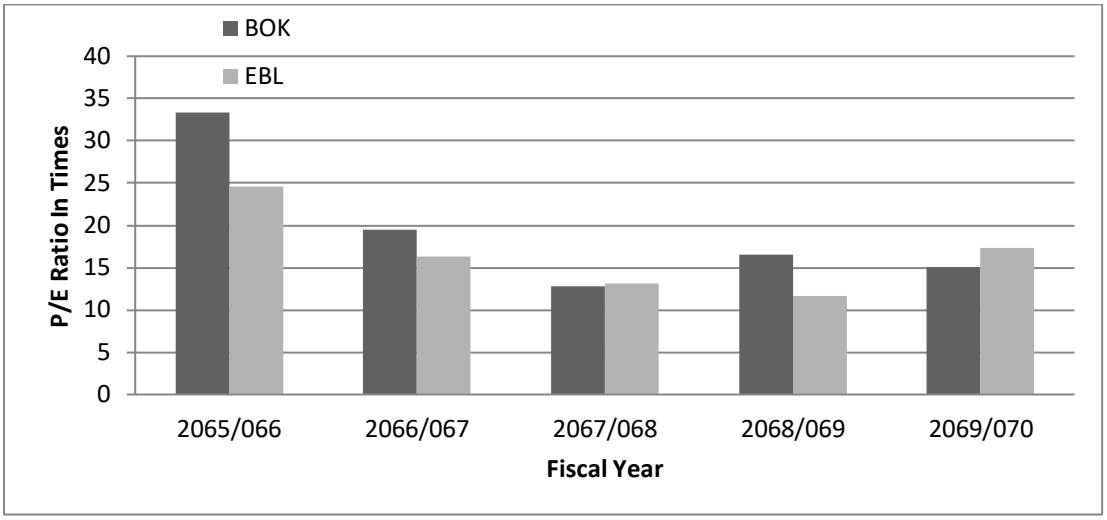


Table 4.6 depicts the price earnings ratio of the sample banks. This helps to classifying the relationship between earning per share and market price per share. BOK has the highest PE Ratio of 33.37 times and EBL has 24.55 times in the fiscal year 2065/066. In all fiscal year except the fiscal year 2069/070, price earnings ratio of BOK is higher than EBL. A high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. However, the P/E ratio doesn't tell us the whole story by itself. It's usually more useful to compare the P/E ratios of one company to other companies in the same industry, to the market in general or against the company's own historical P/E.

Comparing to BOK with the average value of 19.5 times the EBL is better with the average value of 16.6 times. The Standard Deviations of BOK, and EBL are 8.1 and 5 times respectively, it means BOK has more variability in compare to EBL. The CV of PE ratio of BOK and EBL are 41.8% and 30.1% respectively which indicate that BOK is more variable than EBL. EBL is more consistent or less variable than BOK.

4.2.5 Dividend Yield (DY)

The dividend yield reflects the percentage relationship between dividend per share and market value per share. It measures the dividend in relation to market value of the investors as a percentage of market prices per share in the stock market. It is

calculated by dividing the cash dividend per share (DPS) by the market price per share (MVPS). This ratio highly influences the MVPS because a small change in DPS can bring effective changes in the market value per share.

Table: 4.7

Dividend Yield Ratio

(In Percentage)

Year	BOK	EBL
2065/066	0.40	1.22
2066/067	1.79	1.84
2067/068	2.94	4.57
2068/069	3.39	0.00
2069/070	0.13	3.14
Mean	1.73	2.16
SD	1.46	1.76
C.V	84.40%	81.77%

Source: Annual Reports from 2065/066 to 2069/070 and Appendix-II

Figure: 4.9

Dividend Yield Ratio

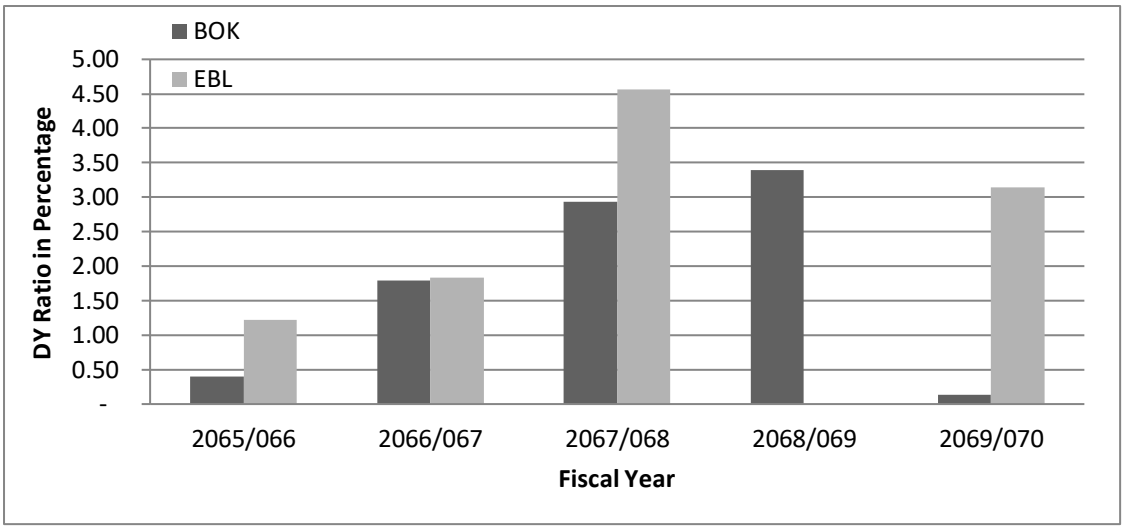


Table 4.7 and Figure 4.9 shows dividend yield analysis for the year 2065/066 to 2069/070. Dividend yield highly influences the market value per share because a

change in dividend per share can bring effective change in the market value of the share. Therefore, before allocation of dividend to share holders the impact on market scenario and price fluctuation is to be studied and evaluated for the long run survival of the bank.

In the year 2065/066, the data related to dividend yield of BOK is 0.40% and EBL is 1.22% acquire the shareholders. The highest dividend yield ratio of BOK is 3.39% and EBL is 4.57% in the fiscal year 2068/069 & 2067/068 respectively. The dividend yield ratio of EBL is greater than BOK in each fiscal year except the fiscal years 2068/069.

Dividend Yield Ratio of BOK is increases each year than previous year except the fiscal year 2068/070. Comparing to BOK with the average value of 1.73% the EBL is better with the average value of 2.16%. The Standard Deviations of BOK and EBL are 1.46% and 1.76% respectively, it means EBL has more variability in compare to BOK. The CV of DY ratio of BOK and EBL are 84.40% and 81.77% respectively which indicate that BOK is more variable than EBL. BOK is less consistent or more variable than EBL.

4.2.6 Earning Yield (EY)

Earning Yield and Dividend Yield both are expressed in terms of the market value per share. Earning Yield and Dividend yield are two important profitability ratios from the point of view of the ordinary shareholders. The earning yield may define as the ratio of earning per share to the market value per ordinary share.

Table: 4.8

Earning Yield Ratio

(In Percentage)

Year	BOK	EBL
2065/066	3.00	4.07
2066/067	5.13	6.14
2067/068	7.81	7.60
2068/069	6.03	8.57
2069/070	6.63	5.77
Mean	5.72	6.43
SD	1.81	1.73
C.V	31.59%	26.96%

Source: Annual Reports from 2065/066 to 2069/070 and Appendix-III

Figure: 4.10

Earning Yield Ratio of Sample Banks

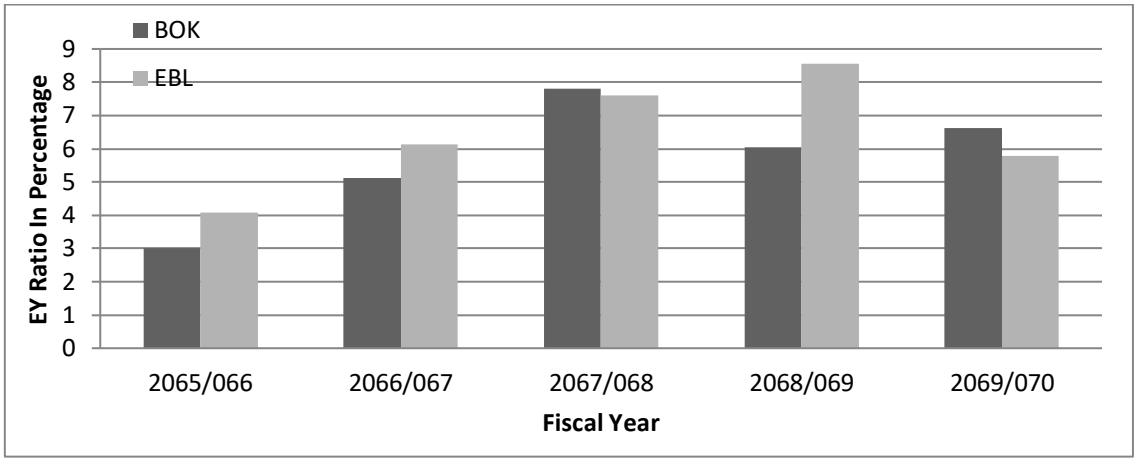


Table 4.8 and Figure 4.10, shows the earning yield ratio of BOK and EBL from 2065/066 to 2069/070. Both the banks have fluctuating rate of earning yield ratio. The highest earning yield ratio of BOK is 7.81% and EBL is 8.57% in the fiscal year 2066/067 & 2067/068. The earning yield ratio of EBL is greater than BOK in each fiscal year except in the fiscal year 2067/068 & 2069/070. Comparing to BOK with the average value of 5.72% the EBL is better with the average value of 6.43%. The Standard Deviations of BOK and EBL are 1.81% and 1.73% respectively, it means BOK

has more variability in compare to EBL. The CV of EY ratio of BOK and EBL are 31.59% and 26.96% respectively which indicate that BOK is less variable than EBL. EBL is more consistent or less variable than BOK.

4.2.7 Market Value per Share to Book Value per Share Ratio

This ratio measures the market situation in the competitive open market with respect to book value per share (BVPS) of the firm. This ratio indicates the price, the market is paying for the share that reported form the banks, or in other words, it is the price of the outsiders, are paying for each rupee reported by the balance sheet of the banks.

Table: 4.9
Market Value per Share to Book Value per Share Ratio

(In Times)

Year	BOK	EBL
2065/066	18.25	24.55
2066/067	8.4	16.3
2067/068	5.7	10.94
2068/069	6.28	10.33
2069/070	5.53	15.91
Mean	8.83	15.61
SD	5.39	5.70
C.V	61.00%	36.55%

Source: Annual Reports from 2062/063 to 2069/070 and Appendix-IV

Figure: 4.11

Market Value per Share to Book Value per Share Ratio of Sample Banks

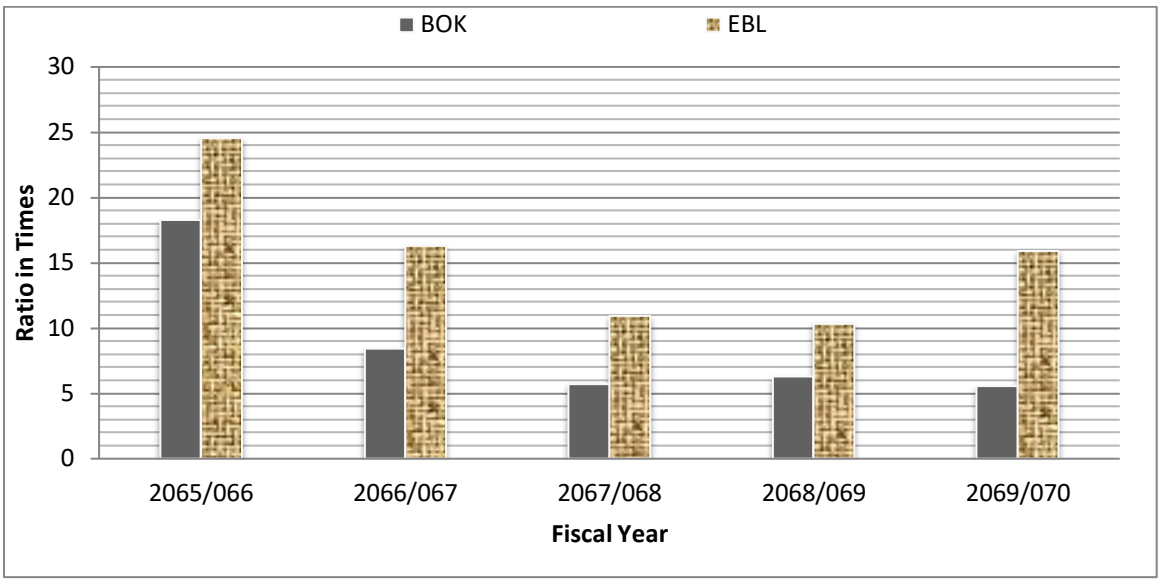


Table 4.9 & Figure 4.11 show that both the banks have decreasing trend of market value per share to book value per share ratio from the fiscal year 2065/066 to 2067/068 after that the ratio is increases up to the fiscal year 2069/070. The highest ratio of BOK is 18.25 times and EBL is 24.55 times in the fiscal year 2065/066. The market value per share to book value per share ratio of EBL is greater than BOK in each fiscal year. Comparing to BOK with the average value of 8.83 times the EBL is better with the average value of 15.61 times. The Standard Deviations of BOK and EBL are 5.39 times and 5.70 times respectively, it means EBL has more variability in compare to BOK. The CV of market value per share to book value per share ratio of BOK and EBL are 61% and 36.55% respectively which indicate that EBL is less variable than BOK. EBL is more consistent or less variable than BOK.

4.2.8 Correlation Analysis

The coefficient of correlation measures the degree of relationship between to sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the tudy because of the simplisity and suitable for the nature of data. The result of coefficient of correlation is always lie between +1 and -1.

Table: 4.10

Correlations between DPS & MVPS of Banks

Variables	R	Relationship	r^2	t-cal	t-tab	Remarks
EBL	-0.1519	Negative	0.0230	0.2662	2.201	Insignificant
BOK	-0.2637	Negative	0.0695	0.4416	2.201	Insignificant

Source: Appendix VII, VIII

The purpose of computing is to find out the relationship between DPS and MVPS is going to same direction or opposite direction. The values of coefficient of correlation (r) of EBL is -0.1519 which shows that there is a negative correlation between DPS and MVPS, therefore the value of coefficient of determination (r^2) is 0.0230 which shows that 2.30% of the total variation in dependent variable (MVPS) is explained by independent variable (DPS). The calculated 't' value of EBL is less than the tabulated value i.e. and 0.2662 < 2.201 therefore it reveals that the relationship between DPS and MVPS is insignificant.The insignificant in the correlation coefficient might be because of the small sample size.

The values of coefficient of correlation (r) between DPS & MVPS of BOK is -0.2637 which shows that there is a negative correlation between DPS and MVPS, the value of coefficient of determination (r^2) is 0.0695 which shows that 6.95% of the total variation in dependent variable (MVPS) is explained by independent variable (DPS). The calculated 't' value of BOK is less than the tabulated value i.e. and 0.4416 <

2.201 therefore it reveals that the relationship between DPS and MVPS is insignificant.

Table: 4.11

Correlations between EPS & MVPS of Banks

Variables	R	Relationship	r^2	t-cal	t-tab	Remarks
EBL	0.8113	Positive	0.6583	4.1113	2.201	Significant
BOK	0.9035	Positive	0.8164	8.5194	2.201	Significant

Source: Appendix IX & X

The values of coefficient of correlation (r) between EPS & MVPS of EBL is 0.8113 which shows that there is a positive correlation between EPS and MVPS, therefore the value of coefficient of determination (r^2) is 0.6583 which shows that 65.83% of the total variation in dependent variable (MVPS) is explained by independent variable (EPS). The calculated 't' value of EBL is more than the tabulated value i.e. and 4.1113 > 2.201 therefore it reveals that the relationship between EPS and MVPS is significant.

The values of coefficient of correlation (r) between EPS & MVPS of BOK is 0.9035 which shows that there is a positive correlation between EPS and MVPS, the value of coefficient of determination (r^2) is 0.8164 which shows that 81.64% of the total variation in dependent variable (MVPS) is explained by independent variable (EPS). The calculated 't' value of BOK is more than the tabulated value i.e. and 8.5194 > 2.201 therefore it reveals that the relationship between EPS and MVPS is significant.

Table: 4.12

Correlations between DPS & EPS of Banks

Variables	R	Relationship	r^2	t-cal	t-tab	Remarks
EBL	-0.1371	Negative	0.0188	0.223	2.201	Insignificant
BOK	0.0993	Positive	0.0098	0.1721	2.201	Insignificant

Source: Appendix V & VI

The purpose of computing is to find out the relationship between DPS and EPS is going to same direction or opposite direction. Table 4.5 describes the relationship between DPS and EPS during the period of study. The coefficient of correlation (r) between DPS and EPS of EBL is -0.1371. This figure shows the negative association between DPS and EPS. It means DPS and EPS both move towards opposite direction. The coefficient of determination (r^2) is 0.0188 it shows that 1.88% of the variation in the dependent variable (i.e. DPS) has been explained by the independent variable (i.e. EPS). The calculated 't' value of EBL is less than the tabulated value i.e. -0.1372 < 2.201, therefore it reveals that the relationship between DPS and EPS is insignificant.

The coefficient of correlation (r) between DPS and EPS of BOK is 0.0993. This figure shows the positive association between DPS and EPS. It means DPS and EPS both move towards same direction. The coefficient of determination (r^2) is 0.0098 it shows that 0.098% of the variation in the dependent variable (i.e. DPS) has been explained by the independent variable (i.e. EPS). The calculated 't' value of BOK is less than the tabulated value i.e. 0.1721 < 2.201, therefore it reveals that the relationship between DPS and EPS is insignificant.

4.2.8.1 Multiple Correlation Analysis

Correlation coefficient between total DPS, EPS and MVPS measures the degree of relationship between DPS, EPS & MVPS.

Table: 4.13

Comparative Analyses of Multiple Correlations between DPS, EPS & MVPS

Banks	R	r^2	t-cal	t-tab	Remarks
EBL	0.8291	0.6874	4.5940	2.201	Significant
BOK	0.9203	0.8470	10.4151	2.201	Significant

Source: Appendix XI

Table 4.5 describes the relationship between DPS, EPS & MVPS during the period of study. The coefficient of correlation (r) between DPS, EPS& MVPS of EBL & BOK are 0.8291 & 0.9203 respectively. This figure shows the high degree of positive association between DPS, EPS& MVPS of EBL and BOK. It means DPS, EPS & MVPS of EBL & BOK move towards same direction.

The coefficient of determination (r^2) of EBL & BOK are 0.6874 & 0.8470, it shows that 68.74% & 84.70% of the variation in the dependent variable (i.e. MVPS) has been explained by the independent variable (i.e. DPS & EPS).

The calculated value of 't' of EBL & BOK are 4.5940 & 10.4151 respectively, which are greater than the tabulated value of 't' therefore, true value of 'r' is significant. It reveals that there is significant relationship between the DPS, EPS & MVPS.

The regression line have been developed to show the degree of relationship between DPS on MVPS & EPS on MVPS and to estimate further figure of concern variables.

4.2.9 Regression Analysis

The regression line have been developed to show the degree of relationship between DPS on MVPS & EPS on MVPS and to estimate further figure of concern variables.

Regression equation of Y on X is given by

In Y = a + b X ..... (i)

Where,

Y= Dependent variable (MVPS)

X= Independent variable (EPS & DPS)

a = Intercept of the line

4.2.9.1 Simple Regression of MVPS on EPS

This analysis test dependency of market price per share on earning per share. Dependency of MVPS on EPS is shown as follows.

Table: 4.14

Simple Regression Analyses of MVPS on EPS

Variables	Constant (a)	Coefficient (b)	t-cal	t-tab
EBL	4276.95	62.80	4.1113	2.201
BOK	2068.79	68.08	8.5194	2.201

Source: Appendix IX & X

The regression constant of EBL 4276.95 implies that when EPS is zero, MVPS is 4276.95. The coefficient for EPS -62.80 implies that when EPS increases by RS.1, MVPS decreases by RS. 62.80 and vice versa. From this analysis it is clear that there is direct and negative impact of EPS on MVPS if EPS is increases MVPS will be decrease and vice versa.

The regression constant of BOK 2068.79 implies that when EPS is zero, MVPS is 2068.79. The coefficient of EPS -68.08 implies that when EPS increases by RS.1, MVPS decrease by RS. 68.08 and vice versa. From this analysis it is clear that there is direct and negative impact of EPS on MVPS if EPS is increases MVPS will be decrease and vice versa.

4.2.9.2 Simple Regression of MVPS on DPS

This analysis test dependency of market price per share on dividend per share. Dependency of MVPS on DPS is shown as follows.

Table: 4.15

Simple Regression Analyses of MVPS on DPS

Variables	Constant (a)	Coefficient (b)	t-cal	t-tab
EBL	1424.67	4.23	0.2662	2.201
BOK	886.43	17.41	0.4416	2.201

Source: Appendix VI & VIII

The regression constant of BOK 886.43 implies that when DPS is zero, MVPS is 886.43. The coefficient for DPS is -17.41 implies that when DPS increases by RS.1, MVPS decrease by RS. 17.41 and vice versa. From this analysis it is clear that there is direct and negative impact of DPS on MVPS if DPS is increases MVPS will be decrease and vice versa.

The regression constant of EBL 1424.67 implies that when DPS is zero, MVPS is 1424.67. The coefficient for DPS is 4.23 implies that when DPS increases by RS.1, MVPS increase by RS. 4.32 and vice versa. From this analysis it is clear that there is direct and positive impact of DPS on MVPS if DPS is increases MVPS will be increase and vice versa.

4.2.9.3 Regression of Market Price per Share on DPS & EPS

To find the dependency of market price per share on the dividend per share and earnings per share this analysis is tested. How does affects MVPS of sample banks are analyze below.

Table: 4.16

Multiple Regression Analyses of MVPS on DPS & EPS

Variables	Constant (a)	Regression Coefficient	
		b1	b2
EBL	2850.81	4.23	62.80
BOK	1477.61	17.41	68.08

Source: Appendix VI, VI, IX & X

The above table represents the linear relationship between MPS with DPS & EPS of sample banks.. The constant 'a' is 2850.81 of EBL & 1477.61 of BOK.

In case of EBL the eta coefficient of DPS & EPS are 4.23 & 62.80 respectively. It indicates that one rupees increase in DPS leads to 4.23 increase in MVPS and one rupees increase in EPS leads to 62.80 rupees increases in MVPS.

In case of BOK the eta coefficient of DPS & EPS are 17.41 & 68.08 respectively. It indicates that one rupees increase in DPS leads to 17.41 increase in MVPS and one rupees increase in EPS leads to 68.08 rupees increases in MVPS.

4.2.10 Hypothesis Test (Independent t-test)

In order to test whether the average value of DPS, EPS and MVPS, are significantly different or not between these two sample banks, independent t- test has been applied. For this study some set of null and alternative hypothesis have been formulated and tested.

H_0: There is no significance difference between the average values of DPS of two sample banks.

H_1: There is significance difference between the average values of DPS of two sample banks.

H_0: There is no significance difference between the average values of EPS of two sample banks.

H_1: There is significance difference between the average values of EPS of two sample banks.

H_0: There is no significance difference between the average values of MVPS of two sample banks.

H_1: There is significance difference between the average values of MVPS of two sample banks.

Table: 4.17

Independent t-test (T-Distribution)

Tested Variable	Mean ± SD		Degree Of Freedom	Level Of Significance	Calculated t -Value	Tabulated t - Value	Decision
	BOK	EBL					
DPS of Sample Banks	12.24 ± 8.16	32.00 ± 20.49	(5+5-2)=8	∝=5%	1.7919	2.306	H_0 Accepted
EPS of Sample Banks	43.36 ± 7.15	92.75 ± 7.37	(5+5-2)=8	∝=5%	9.6198	2.306	H_0 Accepted
MVPS of Sample Banks	883.2 ± 538.8	1560.6 ± 570.48	(5+5-2)=8	∝=5%	0.010	2.306	H_0 Accepted

Source: Appendix XII, XIII and XIV

From the above table 4.13, it is found that the tabulated value of t-distribution is greater then calculated value in terms of DPS & MVPS by considering the test

statistic. So, null hypothesis H_0 is accepted and alternative hypothesis H_1 is rejected, it means there is no significant difference between the mean value of DPS and MVPS of sample banks. In other words, both the banks are in the same position with respect to DPS and MVPS but in case of EPS it is found that the tabulated value of t-distribution is less then calculated value So, null hypothesis H_1 is accepted and alternative hypothesis H0 is rejected, it means there is significant difference between the mean value of EPS of sample banks.

4.3 Analysis of Primary Data

4.3.1 Higher the Earnings (EPS), Higher the Share Price

The responses of the respondents for the effect of EPS to the market price of share were found as shown in table 18.

Table: 4.18

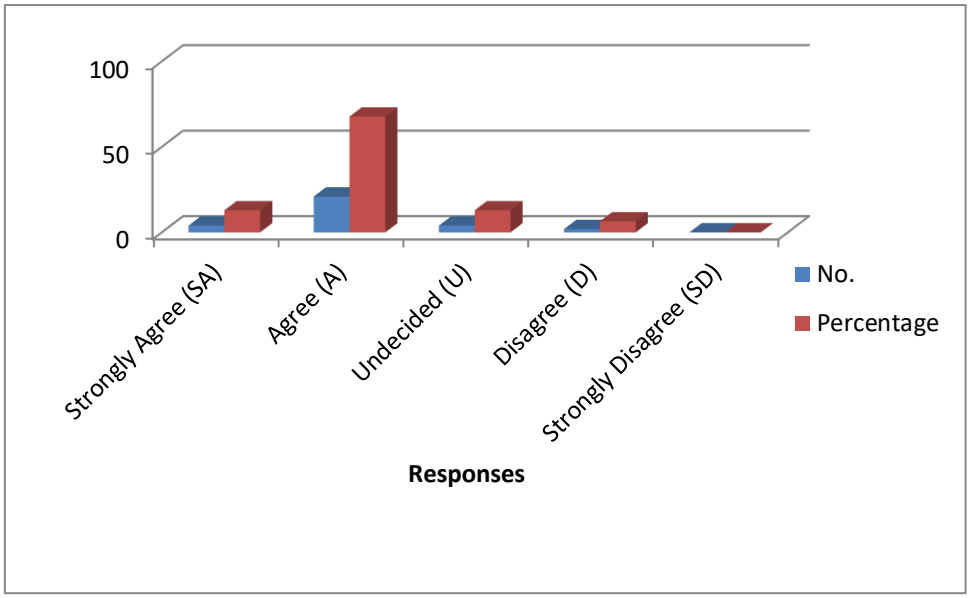
Higher the Earnings (EPS), Higher the Share Price

S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	4	12.90
2	Agree (A)	21	67.74
3	Undecided (U)	4	12.90
4	Disagree (D)	2	6.45
5	Strongly Disagree (SD)	0	0.00
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.12

Higher the Earning (EPS), Higher the Share Price



Form the primary responses it is found that 80.64 % of the respondents were agree that the increased earnings increases the share price in the market. Only, 6.45% were disagreed and 12.90 % were undecided with the statement.

4.3.2 Higher the Cash Dividend, Higher the Share Price

The responses of the respondents for the affect of cash dividend to the market price of share were found as shown in table 19.

Table: 4.19

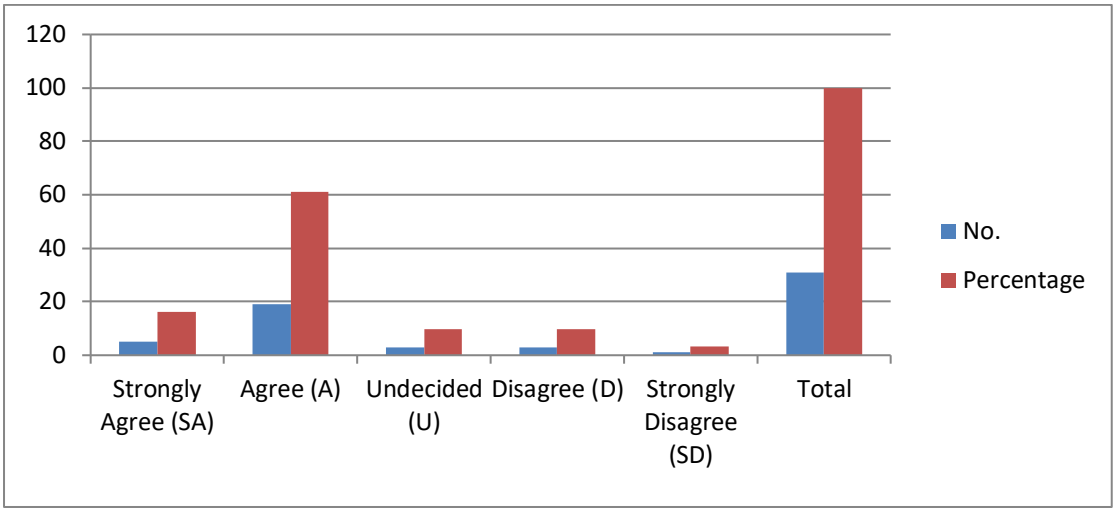
Higher the Cash Dividend, Higher the Share Price

S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	5	16.13
2	Agree (A)	19	61.29
3	Undecided (U)	3	9.68
4	Disagree (D)	3	9.68
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.13

Higher the Cash Dividend, Higher the Share Price



Form the primary responses it is found that 77.42 % of the respondents were agree that the increased cash dividend increases the share price in the market. Only, 12.91% were disagreed and 9.68 % were undecided with the statement.

4.3.3 Higher the Retention Ratio, Better the Share Price

The responses of the respondents for the affect of retention ratio to the market price of share were found as shown in table 20.

Table: 4.20

Higher the Retention Ratio, Better the Share Price

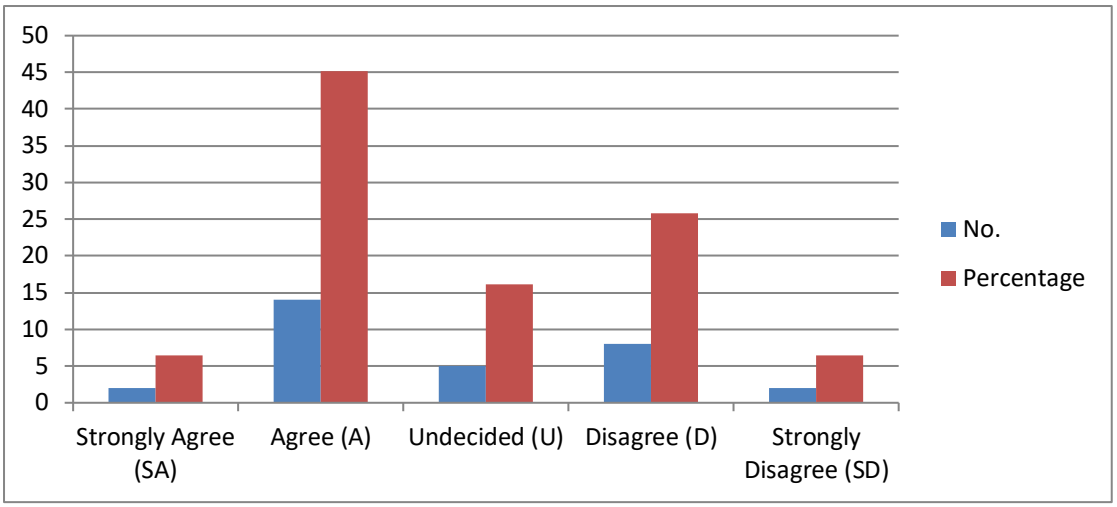
S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	14	45.16
3	Undecided (U)	5	16.13
4	Disagree (D)	8	25.81
5	Strongly Disagree (SD)	2	6.45

	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.14

Higher the Retention Ratio, Better the Share Price



Form the primary responses it is found that 51.61 % of the respondents were agree that the increase in retention ratio increases the share price in the market. Only, 32.62% were disagreed and 16.13 % were undecided with the statement.

4.3.4 Stock Dividend Increases the Share Price

The responses of the respondents for the affect of stock dividend to the market price of share were found as shown in table 21.

Table: 4.21

Stock Dividend Increases the Share Price

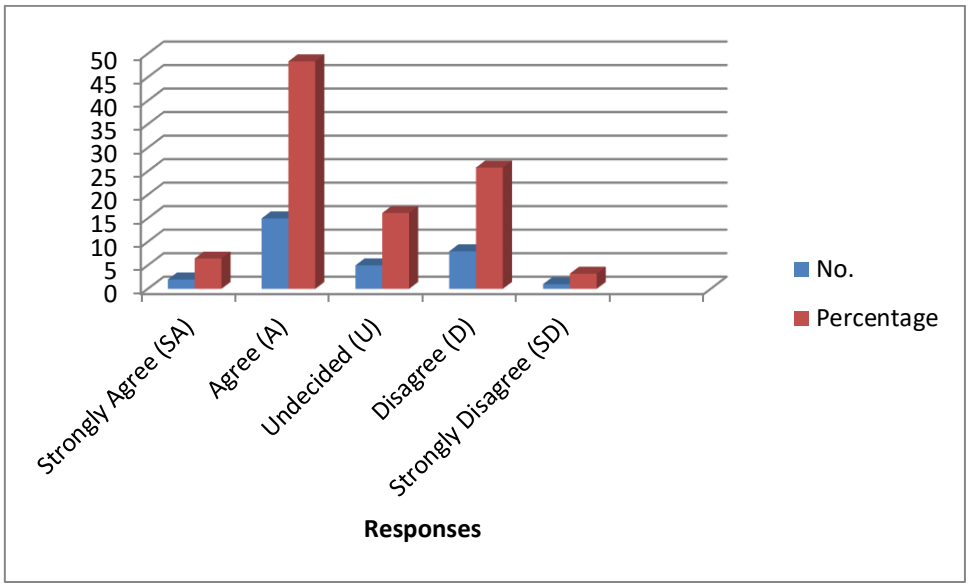
S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	15	48.39
3	Undecided (U)	5	16.13
4	Disagree (D)	8	25.81
5	Strongly Disagree (SD)	1	3.23

	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.15

Stock Dividend Increases the Share Price



Form the primary responses it is found that 54.84 % of the respondents were agree that the stock dividend increases the share price in the market. Only, 29.04% were disagreed and 16.13 % were undecided with the statement.

4.3.5 Lower Personal Tax Rate Reduces the Share Price

The responses of the respondents for the affect of personal tax rate to the market price of share were found as shown in table 22.

Table: 4.22

Lower Tax Rate Reduces the Share Price

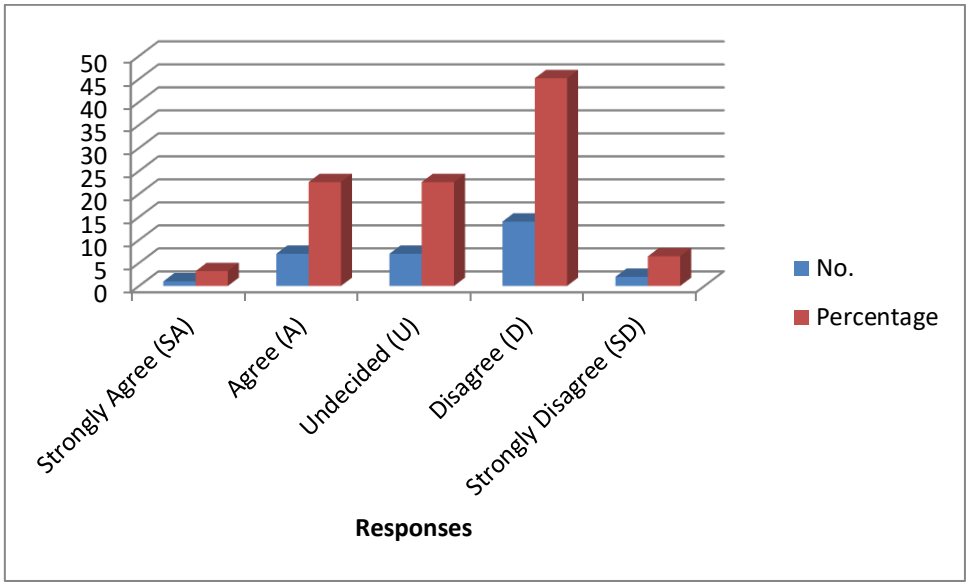
S. No	Responses	No.	Percentage
1	Strongly Agree (SA)	1	3.23
2	Agree (A)	7	22.58
3	Undecided (U)	7	22.58

4	Disagree (D)	14	45.16
5	Strongly Disagree (SD)	2	6.45
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.16

Lower Tax Rate Reduces the Share Price



Form the primary responses it is found that 25.81 % of the respondents were agree that the lower tax rate decreases the share price in market. Whereas, 51.61% were disagreed and 22.58 % were undecided with the statement.

4.3.6 Instability of the Government Causes Fall In the Share Price

The responses of the respondents for the affect of the instability of the government to the market price of share were found as shown in table 23.

Table: 4.23

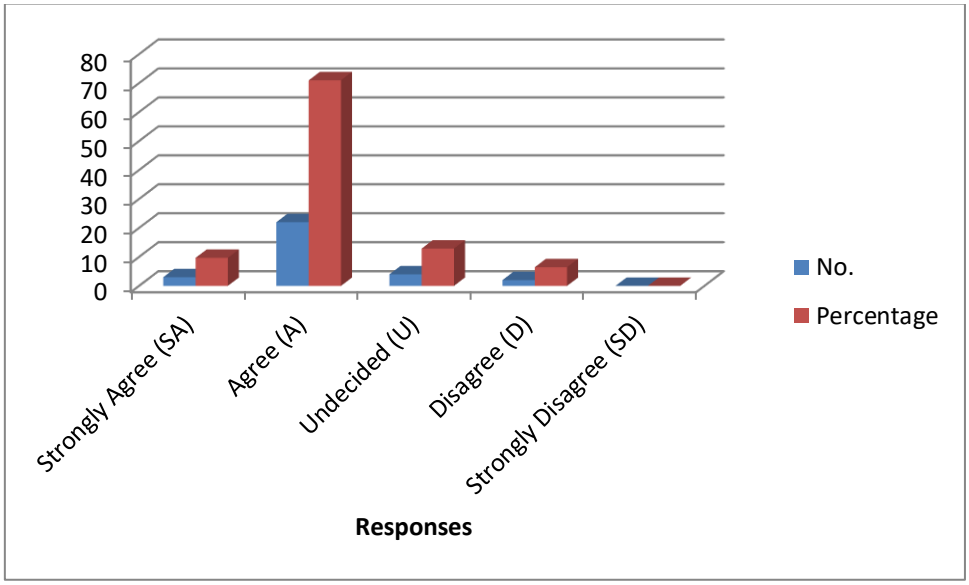
Instability of Government Reduces the Share Price

S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	3	9.68
2	Agree (A)	22	70.97
3	Undecided (U)	4	12.90
4	Disagree (D)	2	6.45
5	Strongly Disagree (SD)	0	0.00
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.17

Instability of Government Reduces the Share Price



Form the primary responses it is found that 80.65 % of the respondents were agreed that instability of government causes fall in the share price in market. Whereas, 6.45% were disagreed and 12.90 % were undecided with the statement.

3.7 Better the National Economy, Better the Share Price

The responses of the respondents for the affect of national economy to the market price of share were found as shown in table 24.

Table: 4.24

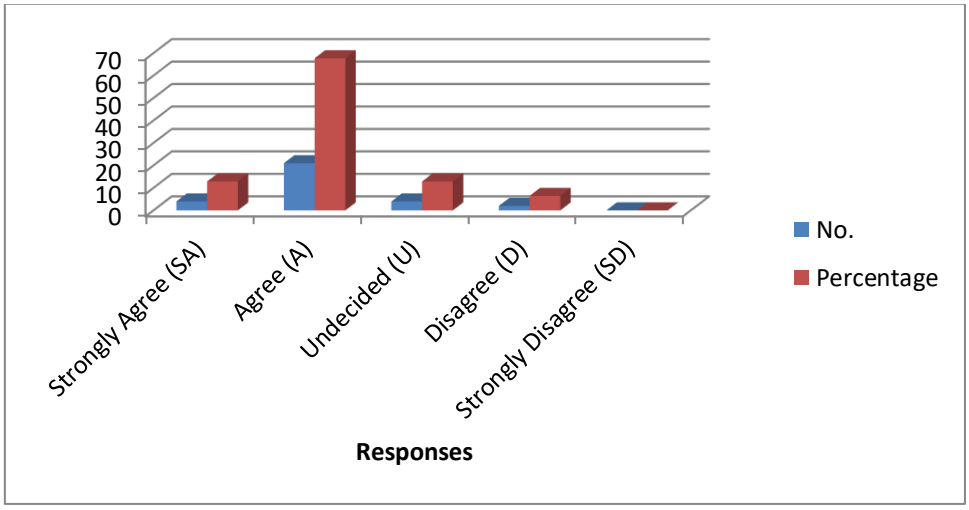
Better the National Economy, Better the Share Price

S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	4	12.90
2	Agree (A)	21	67.74
3	Undecided (U)	4	12.90
4	Disagree (D)	2	6.45
5	Strongly Disagree (SD)	0	0.00
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.18

Better the National Economy, Better the Share Price



Form the primary responses it is found that 80.64 % of the respondents were agreed that better national economy affect positively the share price in market. Whereas, 6.45% were disagreed and 12.90% were undecided with the statement.

4.3.8 Higher the Market Liquidity, Lower the Share Price

The responses of the respondents for the affect of market liquidity to the market price of share were found as shown in table 25.

Table: 4.25

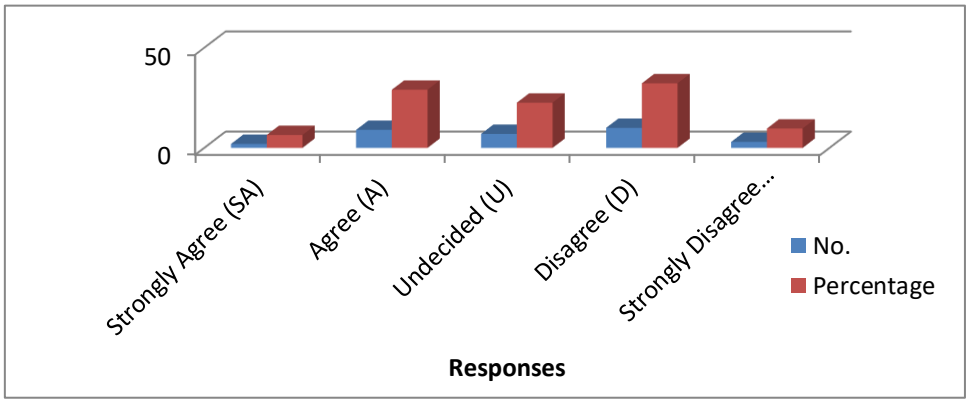
Higher the Market Liquidity, Lower the Share Price

S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	9	29.03
3	Undecided (U)	7	22.58
4	Disagree (D)	10	32.26
5	Strongly Disagree (SD)	3	9.68
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.19

Higher the Market Liquidity, Lower the Share Price



Form the primary responses it is found that 35.48% of the respondents were agreed that higher market liquidity affect negatively the share price in market. Whereas, 41.94% were disagreed and 22.58% were undecided with the statement.

4.3.9 Higher the Risk, Higher the Share Price

The responses of the respondents for the affect of risk to the market price of share were found as shown in table 26.

Table: 4.26

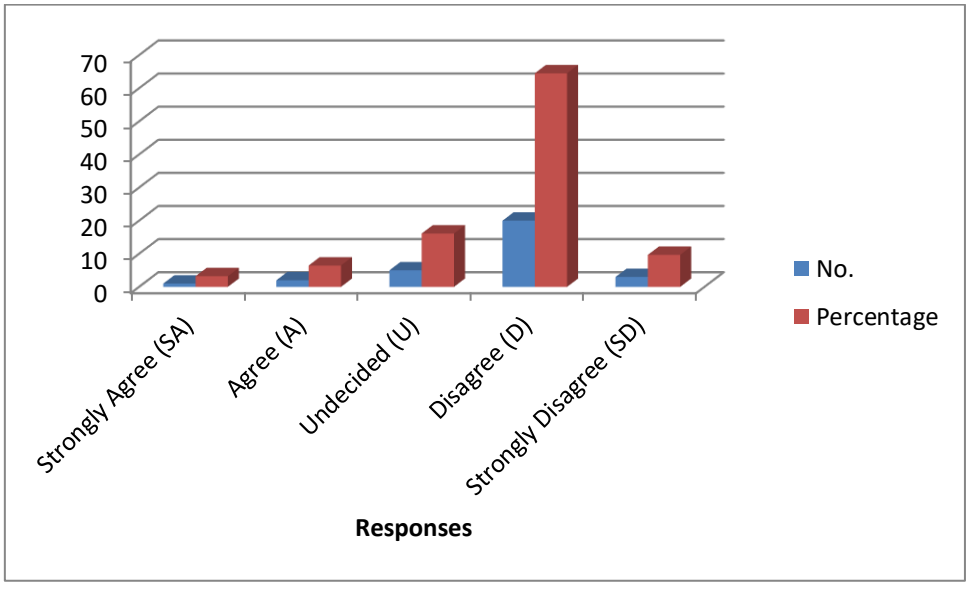
Higher the Risk, Higher the Share Price

S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	1	3.23
2	Agree (A)	2	6.45
3	Undecided (U)	5	16.13
4	Disagree (D)	20	64.52
5	Strongly Disagree (SD)	3	9.68
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.20

Higher the Risk, Higher the Share Price



Form the primary responses it is found that 9.68% of the respondents were agreed with higher the risk, higher the share price. Whereas, 74.2% were disagreed and 16.13% were undecided with the statement.

4.3.10 Share Price Increases With Change in Management

The responses of the respondents for share price increases with change in management were found as shown in table 27.

Table: 4.27

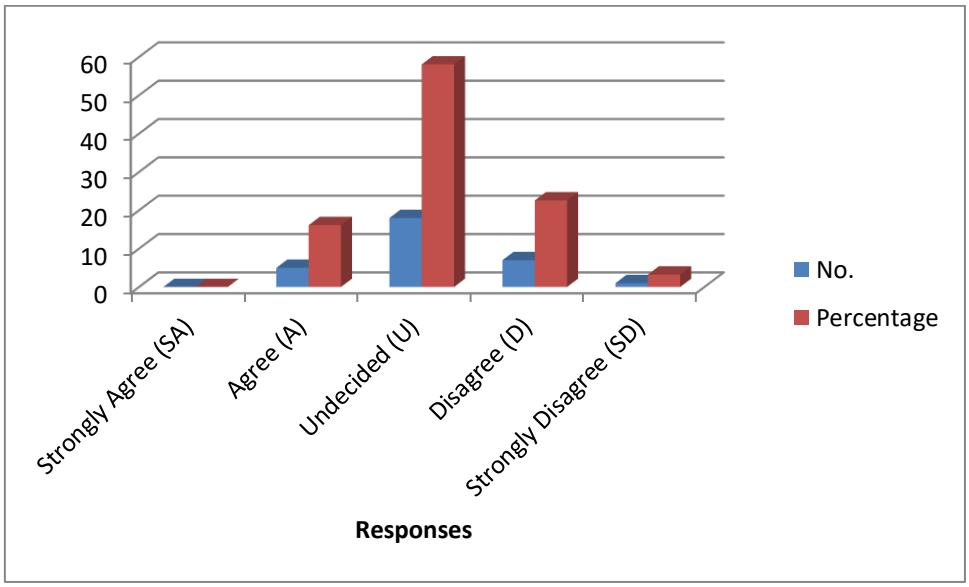
Share Price Increases with Change in Management

S. No.	Responses	No.	Percentage
1	Strongly Agree (SA)	0	0.00
2	Agree (A)	5	16.13
3	Undecided (U)	18	58.06
4	Disagree (D)	7	22.58
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Source: Opinion Survey, 2070

Figure: 4.21

Share Price Increases with Change in Management



Form the primary responses it is found that 16.13% of the respondents were agreed with share price increases with change in management. Whereas, 25.81% were disagreed and 58.06% were undecided with the statement.

4.4 Major Findings

The major findings of the study derived from the analysis of financial as well as statistical tools of BOK and EBL are as follows.

- The MVPS to EPS ratio is decreases and increases with the MVPS so it is clear that there is direct impact of EPS on MVPS.
- It is finding that there is direct and negative impact of EPS on MVPS of both banks, if EPS is increases MVPS will be decrease and vice versa.
- It is finding that there is direct and positive impact of DPS on MVPS of EBL, if DPS is increases MVPS will be increase and vice versa.
- It is finding that there is direct and negative impact of DPS on MVPS of BOK, if DPS is increases MVPS will be decrease and vice versa.
- The coefficient of correlation (r) between DPS and EPS are -0.0993 and -0.1371 and the relationship between DPS & EPS are negative and insignificant of both banks.
- The coefficient of correlation (r) between EPS and MVPS are 0.8113 and 0.9035 and the relationship between EPS & EPS is positive and significant of both banks.
- The values of coefficient of correlation (r) of BOK and EBL are -0.2637 and -0.1519 respectively which shows that there is a negative correlation between DPS and MVPS and it is found that the relationship between DPS and MVPS is insignificant of both banks.
- The coefficient of correlation (r) between DPS, EPS& MVPS of EBL & BOK are 0.8291 & 0.9203 respectively ant the relationship between DPS, EPS& MVPS of EBL & BOK is significant.

- From the hypothesis test it is found that the null hypothesis H_0 is accepted and alternative hypothesis H_1 is rejected in case of DPS & MVPS but in case of EPS null hypothesis H_1 is accepted and alternative hypothesis H_0 is rejected.
- Dividend Yield Ratio of BOK is increases each year than previous year except the fiscal year 2068/070. Comparing to BOK with the average value of 1.73% the EBL is better with the average value of 2.16%.
- The earning yield ratio of EBL is greater than BOK in each fiscal year except in the fiscal year 2067/068 & 2069/070. Comparing to BOK with the average value of 5.72% the EBL is better with the average value of 6.43%.
- Comparing to BOK with the average value of MVPS 8.83 times the EBL is better with the average value of 15.61 times. The CV of market value per share to book value per share ratio of BOK and EBL are 61% and 36.55% respectively which indicate that EBL is less variable than BOK.
- It is finding that 9.68% of the respondents are agreed with higher the risk, higher the share price.
- It is finding that 77.42 % of the respondents are agreeing that the increased cash dividend increases the share price in the market.
- 51.61% of the respondents are agreeing that the increase in retention ratio increases the share price in the market.
- It is finding that that 16.13% of the respondents were agreed with share price increases with change in management and 9.68% of the respondents were agreed with higher the risk, higher the share price.

CHAPTER - V

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

5.1 Summary

A stock market or equity market is the aggregation of buyers and sellers (a loose network of economic transactions, not a physical facility or discrete entity) of stocks (shares) these are securities listed on a stock exchange as well as those only traded privately. The stock market is one of the most important sources for companies to raise money. This allows businesses to be publicly traded, or raise additional financial capital for expansion by selling shares of ownership of the company in a public market. The liquidity that an exchange affords the investors gives them the ability to quickly and easily sell securities. This is an attractive feature of investing in stocks, compared to other less liquid investments. Some companies actively increase liquidity by trading in their own shares. The financial system in most western countries has undergone a remarkable transformation.

One feature of this development is disintermediation. A portion of the funds involved in saving and financing, flows directly to the financial markets instead of being routed via the traditional bank lending and deposit operations. The general public interest in investing in the stock market, either directly or through mutual funds, has been an important component of this process.

A share price is the price of a single share of a number of saleable stocks of a company, derivative or other financial asset. In layman's terms, the stock price or the value of a company is the present value of its future cash flows. The higher the cash flows (revenues, collection of accounts receivables, etc) the higher the stock price. This is because investors care about the cash flows and what those flows mean to them in the present. Cash flows are crucial in determining the value of a stock since

the ability to pay dividends depends on it as much as it does on the bottom line of the company.

Any change in dividend policy has both favorable and unfavorable effects on the firm's stock price. Higher the dividend means the immediate cash flows to investors, which is good but lower future growth is bad. Thus, the dividend policy should be optimal which balances the opposing forces and maximizes the stock price. The dividend policy affects financial structure, the flow of funds, corporate liquidity and investor's attitude; it is related to overall financing decision as dividend payout reduces the amount of retained earnings that are paid to shareholders in return to their investment. So the purpose of this study is to make comparative analysis of dividend policy of selected banks..

To fulfill the research objectives the study is divided into five chapters. In the first chapter, describes the major issues to be investigated along with the general background, brief profiles of the sample banks statement of problem, objectives, significance of the study, limitation of the study and organization of the study. Second chapter is devoted to theoretical analysis and brief review of related and pertinent literature available. It includes a discussion on the conceptual framework and review of the major studies in general. The third chapter describes the research methodology employed in the study. This chapter deals with the research design, source of data, methods of analysis, analysis of financial indicators and variables, test of hypothesis, definition of statistical tools etc. The Fourth Chapter deals with the presentation and analysis of data to indicated quantitative factors on dividend policy using statistical tools and techniques. This chapter also includes the major findings. The Fifth Chapter states summary, conclusion and recommendations, compares them with other empirical evidence to the extent possible and provides some suggestions.

5.3 Conclusions

The above mentioned major findings led this study conclude that the sample banks have got sufficient earnings but EBL is paying high dividend and BOK is paying low dividend. Other things remaining the same, dividend per share is not more stable than the dividend payout ratio. That's why dividend per share and other variable have been highly fluctuated. Another interesting conclusion is that market price of share is attracted by dividend. Lastly, the sample banks have not clearly defined dividend policy.

Adequate knowledge and information regarding the capital market is lacking in Nepalese investors. This is precisely the reason why they are cheated by the concerned companies and the NEPSE shows rather irrational behavior. From the secondary data analysis it is revealed that, pricing behavior differs company to company. Even though, DPS, BPS and EPS jointly have significant effect on the share price, individually they do not have consistent relationship with MVPS. It means that there may be other major factors influencing and determining the share price significantly.

Whereas analysis of primary data (from view point of respondents) summarizes, company performance (EPS, BPS, DPS, risk), information disclosed, timely AGM, other political and economic factors such as political stability, national economy, peace, strikes demand and supply situation of the share, cease-fire etc. are the some important factors having significance influence on the share price. Similarly, other relevant factors, interest rate, tax rate, seasonal factors, day of the week effect, gold price, global economy, value of US$, cost of equity, market liquidity, size of the firm and change in management do not have significant effect .

The study concludes that the Nepalese stock market is in infancy stage. There is a gap between the theory and practice of investment in Nepalese stock market due to lack of proper study/analysis of stock market professionalism is lacking. In spite of the

several constraints, the NEPSE has been growing gradually. The commercial banking sector is the best performer among the listed companies. We can't undermine the truth that with the presence of peace and political stability, the capital market gets far better soon.

5.3 Recommendations

The recommendation is based on the empirical findings of the study and observation of the MVPS with DPS and other variables of sampled commercial banks and the empirical view of its impact of dividend on share price by the financial performance. The following recommendations are made.

- From the secondary data analysis it is revealed that, pricing behavior of differs company to company. Even though DPS, EPS & MVPS jointly have significant effect on the share price, individually they do not have consistent relationship with MVPS. It means that there may be other major factors influencing and determining the share price significantly. So, it is recommend considering these other factors to stable the share price.

- The sample banks have great fluctuation in DPS, EPS, DPR, Dividend Yield, Share Price and PE Ratio. The fluctuations should be controlled and the consistency in the variables has become most necessary.

- Whereas analysis of primary data (from view point of respondents) summarizes, company performance (EPS, BPS, DPS, risk), other political and economic factors such as political stability, national economy, peace, strikes are the some important factors having significance influence on the share price. Similarly, other relevant factors, interest rate, tax rate, market liquidity, size of the firm and change in management do not have significant effect.

- The DPS analysis shows that there is not any consistency of dividend policy in all the sample banks. Therefore, these banks need to create somehow paying

reasonable DPS every year, it is because higher DPS creates positive attitude of shareholders & investors as the psychological value of shareholders is also valued as the assets of banks.

- Further studies can be conducted by using others organization as sample, by using other sophisticated tools and techniques, by using other aspects as well.

BIBLIOGRAPHY

Books

Adhikari, P. R. (2011). *Investment Management.* Kathmandu. Asmita Books Publishers & Distibutors.

Bajracharya, S. & Bhattarai, R. (2005). *Corporate Financial Management.* (2nd Edition). Kathmandu: Buddha Academic Publication.

Bhattarai, R. (2005). *Investment Theories & Practices,* Kathmandu: Buddha Academic Publishers & Distributers.

Cheny. J. M & Mosses, E. A. (1995). *Fundamental of Investment.* St. Paul: West Publication Company.

Fisher, D. E. & Jordan, R. J. (2000). *Security Analysis and Portfolio Management.* (6th Edition). New Delhi: Hall of India Pvt. Ltd.

Frank, K. R. & Keith, C. B. (2004). *Investment Analysis & Portfolio Management.* (7th Edition). London: Thomson south- Western Publication

Kothari, C. R. (1999). *Research Methodology Methods & Techniques.* New Delhi: Vishwa Prakashan.

Oskooe, V. (2010). *Investment Management: Securities Analysis & Portfolio Management,* New Delhi: S. Chand & Company.

Pradhan, K. (2003). *Fundamental of Investment,* Kathmandu: Pinacal Books Publications.

Pradhan, S. (1993). *Basic of Financial Management.* Kathmandu: Educational Enterprises.

Shrestha M. K. & Bhandari D. B. (2006). *Financial Market & Institutions,* Kathmandu: Asmita Books Publisher & Distributers.

Shrestha, M. K. (1999). *Capital Market in Nepal,* Kathmandu: Asmita Books Publisher & Distributers.

Thapa K, (2007). *Financial Institutions and Markets.* Kathmandu, Asmita Publishers & Distributors

Van Horn, J. C. (1997). *Financial Management & Policy.* New Delhi: Prentice Hall of India.

Weston, J .F. & Brigham, E. F. (1996). *Essentials of Managerial Finance.* Forth Worth: The Dryden Press.

Weston, J. F. & Brigham, E. F. (1982). *Essentials of Managerial Finance.* Forth Worth: The Dryden Press.

Journals/Articles

Mainali, R. (2011). *Problems & Prospects of Stock Market in Nepal,* SEBON Journal, Kathmandu: SEBON, V-11, V: 17.

MOLJ (1983). *Securities Exchange Act (1st and 2nd Amendment),* Ministry of Law & Justice, Kathmandu: MOLJ.

MOLJ (1993). *Securities Exchange Regulation (2nd Amendment),* Kathmandu: Ministry of Law & Justice, Kathmandu: Nepal Gazette.

NEPSE (1996). *Securities Listing Bye-Laws,* Nepal Stock Exchange Ltd., Kathmandu: NEPSE.

NEPSE (2007-2011). *Annual Report,* Kathmandu: Nepal Stock Exchange.

SEBON (2000). *Securities Registration and Issue Approval Guidelines,* Securities Board of Nepal, Kathmandu: SEBON.

SEBON (2007-2011). *Annual Report,* Kathmandu: Securities Board of Nepal.

Shrestha, M. K. (2005*). Revenue Structure in Nepalese Securities Markets,* SEBON Journal, Kathmandu: SEBON, V-5, II: 21.

Shrestha, S. (2010). *Stock return and Trading Volume in Nepal,* SEBON Journal, Kathmandu: SEBON, V-9, VIII: 10.

Thapa, K. (2007). *Nepalese Stock Market: Regulation and Development,* SEBON Journal, Kathmandu: SEBON, V-7, VI: 19.

Thesis

Dhamala, R. (2012). *Determinants of share price in Nepalese Financial Market,* Kathmandu: Shanker Dev Campus, T. U.

Gautam, G. (2013). *Equity Right Issue and the Efficiency of the Nepalese Stock Market,* Kathmandu: Shanker Dev Campus, T. U.

Gyawali, D. (2010). *Risk and Return on Common Stock,* Kathmandu: Shanker Dev Campus, T. U.

Maharjan, T. (2011). *A study on stock market in Nepal with concentrate to problems and prospects,* Kathmandu: Shanker Dev Campus, T. U.

Manandhar, K. (2009). A *Study on Security Price and Risk & Return Analysis of Listed Commercial Bank in Nepal,* Kathmandu: Shanker Dev Campus, T. U.

Sharma, S. (2008). *Problem & Prospects of Primary and Secondary Market in Nepal,* Kathmandu: Shanker Dev Campus, T. U.

Websites

www.nrb.org.np

www.sebon.com

www.nepse.com

www.investopedia.com

www. investorwords.com

QUESTIONNAIRE

What is your opinion in the following statement?

1. **Higher the Earnings (EPS), Higher the Share Price**
   - Strongly Agree ( )
   - Agree ( )
   - Undecided ( )
   - Disagree ( )
   - Strongly Disagree ( )
2. **Higher the Cash Dividend, Higher the Share Price**
   - Strongly Agree ( )
   - Agree ( )
   - Undecided ( )
   - Disagree ( )
   - Strongly Disagree ( )
3. **Higher the Retention Ratio , Better the Share Price**
   - Strongly Agree ( )
   - Agree ( )
   - Undecided ( )
   - Disagree ( )
   - Strongly Disagree ( )
4. **Stock Dividend Increases the Share Price**
   - Strongly Agree ( )
   - Agree ( )
   - Undecided ( )
   - Disagree ( )
   - Strongly Disagree ( )

5. **Lower Personal Tax Rate Reduces the Share Price**

- Strongly Agree ( )
- Agree ( )
- Undecided ( )
- Disagree ( )
- Strongly Disagree ( )

6. **Instability of the Government Causes Fall In the Share Price**

- Strongly Agree ( )
- Agree ( )
- Undecided ( )
- Disagree ( )
- Strongly Disagree ( )\

7. **Better the National Economy, Better the Share Price**

- Strongly Agree ( )
- Agree ( )
- Undecided ( )
- Disagree ( )
- Strongly Disagree ( )

8. **Higher the Market Liquidity, Lower the Share Price**

- Strongly Agree ( )
- Agree ( )
- Undecided ( )
- Disagree ( )
- Strongly Disagree ( )

9. **Higher the Risk, Higher the Share Price**

- Strongly Agree ( )
- Agree ( )
- Undecided ( )
- Disagree ( )
- Strongly Disagree ( )

10. Share Price Increases With Change in Management

- Strongly Agree ( )
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- A
- gree ( )
- Undecided ( )
- Disagree ( )
- Strongly Disagree ( )

Appendix I

Calculations of Dividend Payout Ratio of Sample Banks

Year	DPS		EPS		DPR	
	BOK	EBL	BOK	EBL	BOK	EBL
2065/066	7.37	30	54.68	99.99	13.48	30.00
2066/067	15	30	43.08	100.16	34.82	29.95
2067/068	16.75	50	44.51	83.18	37.63	60.11
2068/069	21.32	0	37.88	88.55	56.28	0.00
2069/070	0.74	50	36.64	91.88	2.02	54.42
Mean					28.85	34.90
S.D					21.34	23.89
C.V					73.98	68.46

Appendix II

Calculations of Dividend Yield Ratio of Sample Banks

Year	DPS		MVPS		DY	
	BOK	EBL	BOK	EBL	BOK	EBL
2065/066	7.37	30	1825	2455	0.40	1.22
2066/067	15	30	840	1630	1.79	1.84
2067/068	16.75	50	570	1094	2.94	4.57
2068/069	21.32	0	628	1033	3.39	0.00
2069/070	0.74	50	553	1591	0.13	3.14
Mean					1.73	2.16
SD					1.46	1.76
CV					84.40	81.77

Appendix III

Calculations of Earning Yield Ratio of Sample Banks

Year	EPS		MVPS		EY	
	BOK	EBL	BOK	EBL	BOK	EBL
2065/066	54.68	99.99	1825	2455	3.00	4.07
2066/067	43.08	100.16	840	1630	5.13	6.14
2067/068	44.51	83.18	570	1094	7.81	7.60
2068/069	37.88	88.55	628	1033	6.03	8.57
2069/070	36.64	91.88	553	1591	6.63	5.77
Mean					5.72	6.43
S.D					1.81	1.73
C.V					31.59	26.96

Appendix IV

Calculations of Market Value per Share to Book Value per Share Ratio

Of Sample Banks

Year	BVPS		MVPS		DY	
	BOK	EBL	BOK	EBL	BOK	EBL
2065/066	100	100	1825	2455	18.25	24.55
2066/067	100	100	840	1630	8.4	16.3
2067/068	100	100	570	1094	5.7	10.94
2068/069	100	100	628	1033	6.28	10.33
2069/070	100	100	553	1591	5.53	15.91
Mean					8.83	15.61
S.D					5.39	5.70
C.V					61.00	36.55

Appendix V

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & EPS of BOK

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY
2065/066	7.37	54.68	54.32	2989.90	402.99
2066/067	15.00	43.08	225.00	1855.89	646.20
2067/068	16.75	44.51	280.56	1981.14	745.54
2068/069	21.32	37.88	454.54	1434.89	807.60
2069/070	0.74	36.64	0.55	1342.49	27.11
N = 5	$\sum$**X = 61.18**	$\sum$**Y = 216.79**	$\sum X^2$ **=1014.97**	$\sum Y^2$ **=9604.31**	$\sum$**XY =2629.45**

Dividend per Share,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 12.24

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 8.16

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 66.69

Earnings per Share,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 43.36

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 7.15

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 16.50

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.0993

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 0.1712$$

Regression Line,

Y- $\bar{Y}$ = $r_{xy} \times \frac{\delta_Y}{\delta_X} (X - \bar{X})$

Y- 43.36= -0.0993 × $\frac{7.15}{8.16} (X - 12.24)$

Y = 44.43 -0.09X

Appendix VI

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & EPS of EBL

Year	DPS (X)	EPS (Y)	X^2	Y^2	XY
2065/066	30.00	99.99	900.00	9998.00	2999.70
2066/067	30.00	100.16	900.00	10032.03	3004.80
2067/068	50.00	83.18	2500.00	6918.91	4159.00
2068/069	0.00	88.55	0.00	7841.10	0.00
2069/070	50.00	91.88	2500.00	8441.93	4594.00
N = 5	**$\sum X$ = 160**	**$\sum Y$ = 463.76**	**$\sum X^2$ =6800**	**$\sum Y^2$ =43231.98**	**$\sum XY$ =14757.50**

Dividend per Share,

Mean ($\bar{X}$) = $\frac{\sum X}{N}$ = 32

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 20.49

Coefficient of Variation (CV) = $\frac{\delta}{\bar{X}}$ = 64.04

Earnings per Share,

Mean ($\bar{Y}$) = $\frac{\sum Y}{N}$ = 92.75

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 7.37

Coefficient of Variation (CV) = $\frac{\delta}{\bar{Y}}$ = 7.95

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.1371

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 0.2227$$

Regression Line,

Y- $\bar{Y} = r_{xy} \times \frac{\delta_Y}{\delta_X}(X - \bar{X})$

Y- $92.75 = -0.1371 \times \frac{7.37}{20.49}(X - 32)$

Y = 94.33 – 0.05X

Appendix VII

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & MVPS of BOK

Year	DPS (X)	MVPS (Y)	X^2	Y^2	XY
2065/066	7.37	1825.00	54.32	3330625.00	13450.25
2066/067	15.00	840	225.00	705600.00	12600.00
2067/068	16.75	570.00	280.56	324900.00	9547.50
2068/069	21.32	628.00	454.54	394384.00	13388.96
2069/070	0.74	553.00	0.55	305809.00	409.22
N = 5	**$\sum X$ = 61.18**	**$\sum Y$ = 4416**	**$\sum X^2$ =1014.97**	**$\sum Y^2$ = 5061318.00**	**$\sum XY$ = 49395.93**

Dividend per share,

Mean ($\bar{X}$) = $\frac{\sum X}{N}$ = 12.24

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 8.16

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 66.69

Market Value per Share,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 883.20

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 538.77

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 61.00

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = -0.2637

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 0.4416$$

Regression Line,

Y- $\bar{Y} = r_{xy} \times \frac{\delta_Y}{\delta_X}(X - \bar{X})$

Y- 883.20 = -0.2637× $\frac{538.77}{8.16}(X - 12.24)$

Y = 886.43 – 17.41X

Appendix VIII

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between DPS & MVPS of EBL

Year	DPS (X)	MVPS (Y)	X^2	Y^2	XY
2065/066	30.00	2455.00	900.00	6027025.00	73650.00
2066/067	30.00	1630	900.00	2656900.00	48900.00
2067/068	50.00	1094.00	2500.00	1196836.00	54700.00
2068/069	0.00	1033.00	0.00	1067089.00	0.00
2069/070	50.00	1591.00	2500.00	2531281.00	79550.00
N = 5	**$\sum X$ = 160**	**$\sum Y$ = 7803**	**$\sum X^2$ =6800**	**$\sum Y^2$ =13479131**	**$\sum XY$ =256800**

Dividend per share,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 32

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 20.49

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 64.04

Market Value per Share,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 1560.60

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 570.48

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 36.55

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = 0.1519

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 0.2662$$

Regression Line,

Y- $\overline{Y} = r_{xy} \times \frac{\delta_Y}{\delta_X}(X - \overline{X})$

Y- $1560 = 0.1519 \times \frac{570.48}{20.49}(X - 32)$

$$Y = 1424.67 + 4.23X$$

Appendix IX

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between EPS & MVPS of EBL

Year	EPS (X)	MVPS (Y)	X^2	Y^2	XY
2065/066	99.99	2455	9998	6027025	245475.5
2066/067	100.16	1630	10032.03	2656900	163260.8
2067/068	83.19	1094	6920.576	1196836	91009.86
2068/069	88.55	1033	7841.103	1067089	91472.15
2069/070	91.88	1591	8441.934	2531281	146181.1
N = 5	**$\sum X$ = 463.77**	**$\sum Y$ = 7803**	**$\sum X^2$ =43233.64**	**$\sum Y^2$ =13479131**	**$\sum XY$ =737399.3**

Dividend per share,

Mean ($\overline{X}$) = $\frac{\sum X}{N}$ = 92.95

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 7.37

Coefficient of Variation (CV) = $\frac{\delta}{\overline{X}}$ = 7.94

Market Value per Share,

Mean ($\overline{Y}$) = $\frac{\sum Y}{N}$ = 1560.60

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 570.48

Coefficient of Variation (CV) = $\frac{\delta}{\overline{Y}}$ = 36.55

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = 0.8113

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 4.1113$$

Regression Line,

Y- $\bar{Y} = r_{xy} \times \frac{\delta_Y}{\delta_X} (X - \bar{X})$

Y- $1560.60 = 0.8113 \times \frac{570.48}{7.37} (X - 92.95)$

$Y = 4276.95 - 62.80X$

Appendix X

Calculation for Mean Value, Standard Deviation, Coefficient of Variation & Correlation between EPS & MVPS of BOK

Year	EPS (X)	MVPS (Y)	X^2	Y^2	XY
2065/066	54.68	1825	2989.902	3330625	99791
2066/067	43.08	840	1855.886	705600	36187.2
2067/068	44.51	570	1981.14	324900	25370.7
2068/069	37.88	628	1434.894	394384	23788.64
2069/070	36.64	553	1342.49	305809	20261.92
N = 5	**$\sum X$ = 216.79**	**$\sum Y$ = 4416**	**$\sum X^2$ =9604.31**	**$\sum Y^2$ =5061318**	**$\sum XY$ =205399.5**

Dividend per share,

Mean ($\bar{X}$) = $\frac{\sum X}{N}$ = 43.36

Standard Deviation (δ_X) = $\sqrt{\frac{1}{n}\left[\sum X^2 - \frac{(\sum X)^2}{n}\right]}$ = 7.15

Coefficient of Variation (CV) = $\frac{\delta}{\bar{X}}$ = 16.50

Market Value per Share,

Mean ($\bar{Y}$) = $\frac{\sum Y}{N}$ = 883.2

Standard Deviation (δ_Y) = $\sqrt{\frac{1}{n}\left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}$ = 538.77

Coefficient of Variation (CV) = $\frac{\delta}{\bar{Y}}$ = 61

Correlation (r_{xy}) = $\frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2 \times n\sum Y^2 - (\sum Y)^2}}$ = 0.9035

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 8.5194$$

Regression Line,

Y- $\bar{Y} = r_{xy} \times \frac{\delta_Y}{\delta_X} (X - \bar{X})$

Y- $883.2 = 0.9035 \times \frac{538.77}{7.15} (X - 43.36)$

Y = 2068.79 – 68.08X

Appendix XI

Multiple Correlations

Let,

Independent Variable (X_a) = DPS

Independent Variable (X_b) = EPS

Dependent Variable (X_c) = MVPS

Now, Correlation coefficient between dependent variable (X_c) and joint effect of the independent variable (X_a) & (X_b) on (X_c);

For EBL,

$$r_{c.ab} = \sqrt{\frac{r_{ac}^2 + r_{bc}^2 - 2r_{ac}\ r_{ab}\ r_{bc}}{1 - r_{ab}^2}} = 0.8291$$

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 4.5940$$

For BOK,

$$r_{c.ab} = \sqrt{\frac{r_{ac}^2 + r_{bc}^2 - 2r_{ac}\ r_{ab}\ r_{bc}}{1 - r_{ab}^2}} = 0.9203$$

T-value,

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} = 10.4151$$

Appendix XII

Calculation for Independent t-test of DPS

Year	DPS of BOK (X_1)	DPS of EBL (X_2)	$X_1 - \bar{X}_1$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)$	$(X_2 - \bar{X}_2)^2$
2065/066	7.37	30.00	-4.87	23.72	-2.00	4
2066/067	15.00	30.00	2.76	7.62	-2.00	4
2067/068	16.75	50.00	4.51	20.34	18.00	324
2068/069	21.32	0.00	9.08	82.45	-32.00	1024
2069/070	0.74	50.00	-11.50	132.25	18.00	324
Total	61.18	160.00		266.37		1680.00

For DPS of BOK,

Mean ($\bar{X}_1$) = $\frac{\sum X_1}{N_1}$ = 12.24

S.D (σ or,s_1) = $\sqrt{\frac{\sum(X_1-\bar{X}_1)^2}{n-1}}$ = 8.16

For DPS of EBL,

Mean ($\bar{X}_2$) = $\frac{\sum X_2}{N_2}$ = 32

S.D (σ or,s_2) = $\sqrt{\frac{\sum(X_2-\bar{X}_2)^2}{n-1}}$ = 20.49

For Independent t-test,

Test statistic under H_0,

t = $\frac{(\bar{X}_1 - \bar{X}_2)}{\sqrt{s^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}}$ = $\frac{(12.24-32)}{\sqrt{304.02\left(\frac{1}{5}+\frac{1}{5}\right)}}$ = 1.7919

$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2 - 2}$

$= \frac{5 \times 8.16^2 + 5 \times 20.49^2}{5+5-2}$

= 304.02

Appendix XIII

Calculation for Independent t-test of EPS

Year	EPS of BOK (X_1)	EPS of EBL (X_2)	$X_1 - \bar{X}_1$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)$	$(X_2 - \bar{X}_2)^2$
2065/066	54.68	99.99	11.32	128.14	7.24	52.4176
2066/067	43.08	100.16	-0.28	0.08	7.41	54.9081
2067/068	44.51	83.18	1.15	1.32	-9.57	91.5849
2068/069	37.88	88.55	-5.48	30.03	-4.20	17.64
2069/070	36.64	91.88	-6.72	45.16	-0.87	0.7569
Total	216.79	463.76	-	204.73	-	217.31

For DPS of BOK,

Mean $(\bar{X}_1) = \frac{\sum X_1}{N_1} = 43.36$

S.D $(\sigma \text{ or}, s_1) = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{n-1}} = 7.15$

For DPS of EBL,

Mean $(\bar{X}_2) = \frac{\sum X_2}{N_2} = 92.75$

S.D $(\sigma \text{ or}, s_2) = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{n-1}} = 7.37$

For Independent t-test,

Test statistic under H_0,

$$t = \frac{(\bar{X}_1 - \bar{X}_2)}{\sqrt{S^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}} = \frac{(43.36-92.75)}{\sqrt{65.98\left(\frac{1}{5}+\frac{1}{5}\right)}} = 9.6198$$

$$S^2 = \frac{n_1 s_1^{\,2} + n_2 s_2^{\,2}}{n_1+n_2-2}$$

$$= \frac{5\times 7.15^2 + 5\times 7.37^2}{5+5-2}$$

= 65.89

Appendix XIV

Calculation for Independent t-test of MVPS

Year	EPS of BOK (X_1)	EPS of EBL (X_2)	$X_1 - \bar{X}_1$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)$	$(X_2 - \bar{X}_2)^2$
2065/066	1825.00	2455.00	941.80	886987.24	894.40	799951.36
2066/067	840.00	1630.00	-43.20	1866.24	69.40	4816.36
2067/068	570.00	1094.00	-313.20	98094.24	-466.60	217715.56
2068/069	628.00	1033.00	-255.20	65127.04	-527.60	278361.76
2069/070	553.00	1591.00	-330.20	109032.04	30.40	924.16
Total	4416.00	7803.00		1161106.80		1301769.20

For DPS of BOK,

$$\text{Mean } (\bar{X}_1) = \frac{\sum X_1}{N_1} = 883.20$$

$$\text{S.D } (\sigma \text{ or, } s_1) = \sqrt{\frac{\sum(X_1-\bar{X}_1)^2}{n-1}} = 538.77$$

For DPS of EBL,

Mean ($\bar{X}_2$) = $\frac{\sum X_2}{N_2}$ = 1560.60

S.D (σ or,s_2) = $\sqrt{\frac{\sum(X_2-\bar{X}_2)^2}{n-1}}$ = 570.48

For Independent t-test,

Test statistic under H_0,

t = $\frac{(\bar{X}_1-\bar{X}_2)}{\sqrt{S^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}}$ = $\frac{(883.20-1560.60)}{\sqrt{384825.34\left(\frac{1}{5}+\frac{1}{5}\right)}}$ = 1.7266

S^2= $\frac{n_1 s_1^2+n_2 s_2^2}{n_1+n_2-2}$

= $\frac{5\times538.77^2+5\times570.48^2}{5+5-2}$

= 384825.34