## CHAPTER-I INTRODUCTION

### 1.1 General Background

The world is being narrow village due to globalization; liberalization and privatization. Investment made in one corner of the world ultimately affects the whole world. To be dynamic and competitive is now essential for each organization. Nepal's membership on WTO and its liberated economy attract the foreign investment in various sectors such as industry, agriculture, education, health security market etc.

Development of any country would be a daydream unless an adequate amount of capital is invested and mobilized in productive sectors like industries and businesses. In fact, the developed economics of the world are the results of substantial investment in such productive sectors. In order to boost up the economy of any country, it is extremely essential to have a mechanism through which small amounts of savings can be collected and transferred into efficient uses. Hence, securities market plays such roles and thus contributes to the nation's economic development.

The history of security market in Nepal started with the issuance of ordinary shares by Biratnagar Jute mills in 1936. Eight thousand ordinary shares of hundred rupees each were issued for the first time in the history of corporate security. The enactment of Nepali Company Act 1936 paved the way for the establishment of public limited companies. As a result number of public limited companies reached to 67 by 1955. Obviously, the development of corporate securities moved forward along with the growth of public limited companies. Later on, Treasury bill came into existence in 1962 as a first government security. Since then, it has grown in number and volume of issuance over the years. The history of government bond dated back to 1964 when the government issued development bonds. Afterwards the government began to issue various kinds of bonds like national saving bonds, land compensation bonds etc. After that the enactment of new company act 1964 added a new dimension in the growth of corporate securities. The new act widened the definition of securities and embodied preference shares as corporate securities. The establishment of Securities Exchange center Ltd. In 1976 can be taken as the most remarkable event in the history of securities market. It was established with an aim of facilitating and promoting the growth of securities market. Its function was to undertake the job of brokering, underwriting and managing of public issues. However, it confined itself mostly in trading government securities during its initial periods. There was no secondary market for the corporate securities in Nepal till 1984. However, the enactment of security exchange act 1983 and its execution in 1984 become the next remarkable event to ameliorate the prevailing situation of security market. As per the provisions laid down in the act, security board was established in 1993 with the objective of promoting and protecting the interest of investor by regulating the securities market. Beside this regulatory role, it has made a number of contributions for the development of securities market in the country. The amendment in the securities exchange act in

1962 has widened the horizon of security board and added a number of responsibilities to be played as a main regulatory body of the securities market. It supervises and monitors the activities of stock exchange so as to ensure the fair, healthy and efficient transactions of securities. Moreover, it registers and regulates market intermediaries involved in the primary issues as well as in the secondary trading of the securities. In the year 1993, securities exchange center Ltd. Was converted into Nepal stock exchange (NEPSE) and then it started to work under the jurisdiction of security board. The primary objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitation transactions in its trading floor through market intermediaries such as brokers, market makers etc. Moreover, it has been empowered to promulgate various byelaws in order to ensure orderly and fair transactions of securities. Accordingly, the securities listing byelaws 1996 made by it can be taken as the most important byelaw, which prescribes the terms and conditions for listing and disclosure requirements for listed companies. At present, securities of 247 companies are listed in the NEPSE.

After the above historical background, it is appropriate to address about how securities are brought into existence in the primary and secondary markets.

After getting the approval of security Board, a corporation can issue securities as per prevailing rules and regulation. Investment bankers or underwriters purchase now issues from now issuers and arrange for their resale to the investing public. "In the absence of investment bankers in Nepal, these activities are carried out mostly by finance companies. At present, ten institutional dealers are working as dealers for primary issues. These primary dealers help issuing companies in the registration of securities, preparing necessary informational documents and establishing distribution network." ${ }^{1}$ Therefore, their roles are of great significance in the primary market. Later on, to enter into the secondary market, it is mandatory for the issuing companies to have their securities listed in the NEPSE within three months of the closure of offering. Corporate bodies not listing their securities are followed up through correspondence and other means of persuasions. However, government securities are exempt form the listing requirement.

There are a number of advantages to trading in the secondary market to an investor. First, it provides liquidity to the holding of securities. As a result, sudden demands of fund can be met. Second, it guards against unfair trading as it operates under certain rules and regulations. Third, investors obtain opportunities to improve their portfolio returns by dropping low return yielding securities and holding high return yielding securities. Fourth, investors can have easy access to information about concerned companies as each listed company is legally bound to disclose price sensitive information. Hence, it is obvious that information lays an important role in the continuous price formation process of the stocks in the secondary market. In general, price of the stocks is determined by buy and sells orders that follow from investor's demand and supply preferences. Investors' demand, to a large extent, depends upon the information concerning with company's future prospects. Since future is uncertain, investors use past and current information in assessing prices of stock while trading in the secondary market.

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## INTRODUCTION OF COMMERCIAL BANKS

An institution which accepts deposits, makes business loans, and offers related services. Commercial banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. These institutions are run to make a profit and owned by a group of individuals, yet some may be members of the Federal Reserve System. While commercial banks offer services to individuals, they are primarily concerned with receiving deposits and lending to businesses. Some examples of commercial banks in Nepal are Nepal Investment Bank, Himalayan Bank, Nabil Bank, Nepal SBI Bank, Laxmi Bank, Kumari Bank, Standard Chartered Bank, Everest Bank etc. Some joint venture banks under commercial bank's introductions are as follows.

## 1. Standard Chartered Bank

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint venture operation. Today the bank is an integral part of Standard Chartered Group who has $75 \%$ ownership in the company with $25 \%$ shares owned by the Nepalese public. The bank enjoys the status of the largest international bank currently operating in Nepal. With 15 points of representation and 16 ATMs across the country and with around 350 local staffs.

## 2. Nepal Investment Bank

Nepal Investment Bank Ltd. Previously Nepal Indosuez Bank Ltd. Was established in 1986 as a joint venture between Neplease and French parterns. The French partner (holding $50 \%$ of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world. NIB is managed by a team of experienced bankers and professionals having proven track recorde, can offer you what you're looking for. We are sure that your choice of a bank will be guided among other things by its reliability and professionalism.

## 3. Himalayan Bank

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Himalayan Bank holds of a vision to become a leading bank of the country by providing premium products and services to the customers, thus ensuring attractive and substantial returns to the stakeholders of the Bank. All branches of HBL are integrated into Globus (developed by Temenos), the single Banking software where the bank has made substantial investments. This has helped the Bank provide services like ABBS facility, Internet Banking, and SMS Banking.

## 4. Nabil Bank

Nabil Bank started operating in July 1984. The main aim of Nabil Bank of Nepal was to extend the services of international standard of modern banking in every sector of the society. Nabil Bank is a commercial bank, which has 19 branches in the county. The head office of the bank is located at kathmandu. However it also has branches in Biratnagar, Birjung, Pokhara , Nepalgunj and Butwal. Many new branches are opening shortly.

## 5. Nepal SBI Bank

Nepal SBI Bank is the first Indo-Nepal joint venture in the financial sector sponsored by three institutional promoters, namely State Bank of India, Employees Provident Fund and Agriculture Development of Nepal through a Memorandum of Understanding signed on $17^{\text {th }}$ July 1992. NSBL was incorporated as a public limited company at the Office of the Company registration on April 28, 1993 under Regn. No. 17-049/50 with an Authorized capital of Rs. 12 Crores and was licensed by Nepal Rastra Bank on July 6, 1993 under licensed no. NRB/I. pa./7/2049/50. NSBL commenced operation with effect from July 7, 1993 with one full-fledged office at Durbar Marg Kathmandu with 18 staff members.

## INTRODUCTION OF JOINT VENTURE BANKS

An agreement between two or more banks to undertake the same business strategy and plan of action is joint venture banks. A business undertaken by two or more individuals of companies in an effort to share risk and use difference in practice is joint venture. A joint venture operates like a partnership and is usually taxed like one. A key difference between a joint venture and a partnership is the fact that a joint venture, when it involves companies, does not necessitate the merging of all the companies operation and interests, rather they co operate for purpose of joint venture only. Some examples of joint venture banks are Himalayan Bank, Everest Bank, Nepal Bangladesh Bank, Nabil Bank etc

## SEBON INTRODUCTION

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

- 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, and 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 make arrangements 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 chairman appointed by the Government for tenure of four years. Other members of the Board include 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.

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 section 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 section 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.

### 1.2 Statement of the Problem

As stated earlier, information has decisive role in the formation of share prices in the secondary market. Therefore, it is right of shareholders and prospective investors to obtain complete information timely without the loss of content. Moreover, disseminated information should be accurate and reliable too. Keeping this fact in mind, most of the countries have made provisions on corporate information disclosure in order to protect and promote the interest of investors. In Nepal securities exchange act 1983 has laid down some provision concerning with information disclosure. It is mandatory for the listed companies to submit their annual report along with the financial statements to SEBO within 4 months after the expiry of the fiscal year and semi-annual report to SEBO within sixty days after the completion of each six months period time. Securities Exchange Regulation -1993 and securities listing
byelaw -1996 have also specified some provision about the disclosure requirement for the listed companies. Similarly, company act-1997 has stipulated some regulatory provisions on the financial reporting issues and holding annual general meeting of the company. The section 83 of this act has laid down some provision relating with the preparation of annual accounts and reports. The sub section 5 of the 83 articulates that annual accounts and reports must be made available to those shareholders who are interested to acquire it.

Security Board, as a main regulatory body, informs the listed companies regarding the provisions related with information disclosure and follow up the listed companies through regular correspondence and issuance of public notice. Though the board plays a regulatory role, some listed companies have been delaying to provide any information for a long time. This fact has been proved when the security board issued a public notice mentioning the names of such 23 listed companies. Likewise, the trend of submission of financial statements and annual reports to SEBO lends support that many companies are reluctant in providing information to their investors. For instance, only 98 companies out of 149 listed companies submitted their financial statements and annual reports of the fiscal year 2001/2006 to SEBO. Similarly, delays in conducting annual general meeting has been a normal function of company management without taking seriously how much and to what extent company's shareholders are interested to know about what is happening in their companies both in operational and financial terms. ${ }^{2}$

This kind of Nepalese investment environment has created confusion among investors and thus calls for a research to find whether the disclosure of information affects the share price or not.

Besides the above research problem, it is found that numerous research works regarding the impact of information on share price have been conducted in the developed capital markets. Attempts have been made in finding the relationship between informational variables like dividend, earning on common stock market prices. Furthermore, information is classified into firm specific and macro economic information and the effect of each type of information on market volume and price volatility has been observed. However, such empirical researches are rare in the context of Nepalese capital markets. Therefore, this research is undertaken with an aim of finding the relationship between informational variables and share price. Some research problems of this study are as follows:

1. Does dividend declaration convey any information to investors?
2. Is there any relationship between informational variables like dividend, earning etc. on share price?
3. Is there any role of informational variable like directives of Nepal Rastra Bank (NRB) in the price volatility of shares?

### 1.3 Objectives of the Study

[^1]The general objective of this research is to analyze the impact of information on common stock's market price. The specific objectives are as follows:

1. To examine the impact of dividend declaration on share price.
2. To analyze the effect of EPS on share price.
3. To examine the impact of ROE on share price.
4. To examine the impact of Nepal Rastra Bank's directives on Share price.

### 1.4 Formulation of Hypothesis

In the light of the objectives of the study, following hypotheses have been developed for this research.
Null Hypothesis: $\mathrm{H}_{0}: \mu_{1}=\mu_{2}$, i.e. There is no significant relationship in the mean share price before and after dividend declaration.
Alternative Hypothesis: $\mathrm{H}_{1}: \mu_{1} \not \#_{2}$, i.e. There is significant relationship in the mean share prices before and after dividend declaration.

Null Hypothesis: $\mathrm{H}_{0}: \mu_{1}=\mu_{2}$, i.e. There is no significant relationship in the mean share prices before and after the issuance of NRB's directives.

Alternative Hypothesis: $\mathrm{H}_{1}: \mu_{1}=\mu_{2}$, i.e. There is significant relationship in the mean share prices before and after the issuance of NRB's directives.

### 1.5 Importance of the Study

Since the market price of share is the function of information, this research will be beneficial to know how well share prices absorb information in the Nepalese capital market. In other words, this research helps to know how Nepalese investors react to the information disseminated to capital market. This research, in fact, will help to determine the relationship between earning, ROE, DPS etc. and share price.

### 1.6 Limitations of the Study

This research being one-man study will be conducted within the boundary of certain limitations or constraints. Such limitations are briefly mentioned below:

- There may be different form of information affecting share price. However, this research will consider only firm specific information like dividend declaration, earning and ROE. Moreover, directives of NRB are taken into consideration as macro economic information.
- The study assumes that no other important information flowed into the Nepalese capital market during the dates surrounding dividend declaration and issuance of NRB directives, and volatility in share price of the sampled companies is due to dividend declaration or NRB's directives.
- Only secondary data will be analyzed.
- The analysis will do covering the years only from 2061 to 2066.
- The reliability of this research is fully dependent on the accuracy of the data provided by the corresponding organization.
- Limited studies of joint venture banks under commercials banks only.
1.7 Organization of the Study

This study has broadly dividend into five chapters.

## Chapter I: Introduction

It incorporates general background, statement of the problem, and objective of the study, theoretical framework, research hypothesis, importance of the study, limitations of the study.

## Chapter II: Review of Literature

This chapter deals with various literatures that are closely related to this study.

## Chapter III: Research Methodology

It deals with research design, population and sample, data collection procedure, data analysis procedure, financial and statistical tools used in the study.

## Chapter IV: Analysis and Interpretation of Data

This chapter analyses the data and interprets the results so obtained.

## Chapter V: Summary, Conclusion and Recommendations

This summarizes the result of analysis and provides the suggestions and recommendations for the improvement in future.

## CHAPTER-II

## REVIEW OF LITERATURE

Literature review is an act of stocktaking available literatures in one's chose field of study. This helps the researcher to explore what sort (kind) of research studies have already been conducted in his or her field of study and thus reduces the probability of duplication. Moreover, it is useful for exploring what areas of research are still left to be conducted.

This chapter therefore deals with the pervious studies that are relevant to this research. This chapter is primarily designed as per the type of literature reviewed and consists of four major headings: Conceptual review, Review of theories relating to share price and dividend, Review of journals, and Review of thesis.

### 2.1 Conceptual Review

### 2.1.1 Money Market

The money market is created by a financial relationship between suppliers and demand market of short-term funds, which have maturities of one year or less. The money market is not as actual organization housed in some certain location, such as a stock market, although the majority of money market transactions are made in marketable securities, which are short-term debt instruments, such as treasury bills, commercial paper, and negotiable certificates of deposit issued by government, business, and financial institutions respectively.

The money market exists because certain individuals, businesses, government, and financial institutions have temporarily idle funds that they wish to place in some type of liquid asset or short- term, interest-earning instrument. At the same, other individuals, businesses, governments, and financial institutions find themselves in need of seasonal or temporary financing. The money market thus brings together these suppliers and demand markets of short-term liquid funds.

Securities Market is concerned; it is an important constituent of capital market. It has a wide term embracing the buyers and sellers of securities and all the agencies and institutions that assist the sales and resale of corporate securities (Rough, 1966:50).

The development of a sound securities market with its constituent financial institution is one of the mechanisms which enable the efficient transformation of savings from the hands of surplus spending units to those of deficit spending ones who can use them more productivity and/ or have loss/ risk aversion (Rough, 1966:56).

Market capitalization is the market value of listed share. In other words, it is the product of closing market price and the number of listed share of a company or companies. (NEPSE)

Relative market capitalization and the number of listed companies can measure stock market size. The market capitalization ratio is determined by dividing the value of all shares listed on a national exchange by the host country's gross domestic product (World Bank, 1995).

Market liquidity or the ability to buy and sell securities easily- also is indicated by two measures. One is the total value of shares traded on the stock exchange divided by GDP. The second measure of liquidity is the turnover ratio, the value of total shares traded divided by market capitalization. Thus, turnover, by capturing trading relative to the size of the stock market, complements the total value ratio, which compares trading to the size of the economy (World Bank, 1995).

Market concentration is determined by computing the share of market capitalization for the ten largest stocks on the exchange. Gross Domestic product (GDP) is the value of all goods and services produced in one year.

### 2.1.2 Capital Markets

Capital market refers to the links between lenders and borrowers of funds, arranging of funds-transfer process to seek each other's benefit (Philips, 1979:220). These lenders and borrowers coming together in the capital market play effective financial intermediary role to activate capital market play effective financial intermediary role to activate both primary and secondary market through the use of various long term capital market instruments like common stock, bonds, preferred stock, convertible issues and many more like that. The participants in the capital market are small business, large business and government. Funds flowing into the capital market are available by lenders for terms longer than those flowing in the money market.

Capital market consists of the various suppliers and users of long-term finance. As it is differentiated from the money market which embraces short-term finance. The capital market serves as a link between suppliers and users of finance. It is a mechanism for the mobilization of public savings and channeling them in productive investment. In this way, an important constituent of the capital market is the securities market. It has a wide term embracing the buyers and the sellers of securities and all those agencies and institutions that assist the sale and resale of corporate securities (Gupta, 1978:88).

Primary markets are absolutely vital to capitalistic economies if they are to function properly, since they serve to channel funds from savers to borrowers. Furthermore, they provide an important allocative function by channeling the funds to those who can make the best use of them-presumably, the most productive. In fact, the primary function of a capital market is to allocate resources optimally. A securities market with the lowest possible prices for transactions services (Jones, 1988:20).

The capital market is a financial relationship created by a number of institutions and an arrangement that allows the supplies and demanders of long-term funds-funds with maturities of more than one year-to make transactions. Included among long-term funds are securities issue of business and government. The backbone of the capital market is formed by the various securities exchanges that provide a forum for debt and equity transactions. The smooth functioning of the capital market, which is enhanced through the activities of investment bankers, is important to the long-run growth of business (Gitman, 1988:170).

Some organizations and individuals have more money than they currently need, and are thus, often described as lenders. Others need many more than they have and are required to borrow from others, and are thus called as borrowers. It would be reasonable to suppose that surplus units and deficit units would be aware of each other's existence and that the surplus unit would be willing to allow the deficit unit to use their surplus to their mutual advantages. To protect the interests of both, an exchange would take place with somewhat understanding. Such an exchange may be called direct external finance and internal finance. The indirect external finance involves a third unit, usually called financial intermediary that accepts money from surplus units and release to deficit units. The other type of finance is that where the financing is carried out within the same economic unit.

Financial intermediaries are participants in the finance market, along with individual and commercial companies, individuals and of course, various agencies of government. The term finance market is used to refer to short-term, medium term and long term market for the funds. Thus bonds company debt and equity issues, short and medium term government debt etc.
Thus the capital market includes:

- Activities relating to the organization distribution and trading in of securities
- Organization which facilitates this activities
- Individuals and institutions which buy and sell securities and
- Rules, regulations, customs and practices that control the organization and conduct of business in the market.

The capital market may be studied under two headings i.e. Primary Market and Secondary Market

### 2.1.3 Primary Market vs. Secondary Market

### 2.1.3.1 Primary Market

The Primary market is concerned with the floatation of shares and distribution of shares to the general public. It consists of companies issuing securities to the buyer of new securities and various intermediaries that help in the disposal of new securities. Issue managers, underwriters; stockbrokers, stock exchange etc. are the important constituents of the new issue market. Stock exchange provides facilities of trading in listed securities. It is the market where various securities are brought and sold for investment or speculative purchase. So that is concerns with the sale of new issued securities in the market. But it is one of the most integral parts of the new issue market and the change of one certainly affects the others.

The Primary market is the initial market, because it is concerned with the creation of new financial claims. It provides an organization, which may be used by deficit units to raise funds from surplus units. In Nepal, it is controlled by the stock exchange authorities and is closely related to the secondary market. And the secondary market is less likely to be effective if there is no primary market to feed it.

There are three ways in which a company may raise capital in the primary market.

## I. Public Issue-

This involves sale of securities to the public. It is by far the most important mode of issuing securities.

## II. Right Issue-

This is a method of raising further funds from existing shareholders by offering additional securities to them on a preemptive basis. It involves the offer of additional shares to existing shareholders. These are offered in proportion of existing shareholdings. Each existing shareholder receives one right for each share owned. The right states the terms of the option to purchase new shares, specifying the number of shares required to purchase each new share, the subscription price for new share, and the expiry date of the option.

## III. Private placement

It involves selling securities privately to a single investor or to a small group of investors. In the United States private offerings are made under an exemption from SEC registration. Section 4(2) of the Securities Act of 1933 allows the unregistered sale of securities by an issue so long as it is not a public offering. In general, the provisions set forth in Section 4 (2) require that private placements be sold to a limited number of sophisticated investors who are buying for investment purposes.

These right issue and private placement are primary issue but these are not public issue.

### 2.1.3.2 SECONDARY MARKET

### 2.1.3.2.1 Stock Exchange

Stock Exchange also called stock Market, or Bourse (in continental Europe), is an organized market for the sale and purchase of securities such as shares, stocks, and bonds. In developed capitalist countries, the stock exchange has important functions: as a ready market for securities, it ensures their liquidity and thus encourages people to channel savings into corporate investment; and as a pricing mechanism, it allocates capital among firms by determining prices that reflect the true investment value of a company's stock (the present worth of the stream of expected income per share).

Trading is done in various ways. It may occur on a continuous auction basis, it may involve brokers buying from and selling to dealers in certain types of stock or it may be conducted through specialists in a particular stock. Membership requirements of the exchanges of different countries vary mainly with respect to the number of members, the degree of bank participation, and the rigors of the eligibility requirements. They also differ in the degree to which government participates in their management. The London stock exchange, for example, functions as an independent institution, free from government legislation In the United states, stock exchanges, although not subject to direct government participation in their operation, are subject to rather specific legislative regulation. In Europe, it is quite common for the members of the exchanges to be appointed by a government official and to have semi governmental status.

Market for the sale and purchase of securities of corporations and municipalities and in some cases of certificates representing commodities of trade.

Originally, stock exchanges were free to anyone who wished to buy or sell: it was probably with this function in view that some of the older exchanges notably the Paris Bourse were established in buildings erected at public expenses. It was quickly discovered however, that in order to enforce bargains some formal organization was necessary. Membership in stock exchanges therefore came to be limited on the general basis used by clubs or other association. The stock exchange plays an important role in the capitalistic economy. Investment bankers make the initial sales of corporate securities. Thereafter, stock exchange provides markets for the securities, enabling the original investor to sell their securities as the need arises and thus encouraging original investment.

The leading stock exchanges in the world are the New York stock exchange, the London stock exchange and the Tokyo stock exchange. A further important exchange of a much less regulated sort is the National Association of Securities Dealers Automated Quotation (NASDAQ) system. This is a computerized market linking dealers throughout the United States and to some extent Europe. NASDAQ is the second largest and fastest growing US stock exchange and facilitates the trading of over the counter (OTC) securities-as well as the shares of large companies. The example of NASDAQ illustrate a general trend towards increased
competition and the use of computerized trading system to replace the traditional stock exchange floor where dealers and brokers meet and trade in open outcry. The London stock exchange has been entirely computer-based since the reorganization or Big Bang in 1987, with dealers able to see all prices on screen instantaneously. In contrast, the New York stock exchange from new computerized trading floor. There has also been increased competition for the traditional nation exchange from new computerized trading systems produced by commercial companies. With the arrival of high-speed computers and advance in information technology, the cost of providing a centralized market for shares via computer screens has reduced dramatically.

By using alternative trading system it is sometimes possible to reduce transaction costs and also avoid some of the regulation that formal stock exchange inevitably impose. Similarly there is lot of competition in between the stock exchange of different countries. For example, it is possible to buy and sell French shares on the London market, using the stock exchange automated quotation international (SEAQ international) system. SEAQ international has been dramatically successful in capturing market share from the domestic stock exchange of many countries to the extent that for some countries a larger proportion of trades take place in London than on their own exchanges.

As competition between exchanges has developed, the trading system of stock exchange has divided into two broad categories. First some leading exchange for example London use the market maker system. Under this system market makers continuously quote the prices at which they are prepared to buy and sell each share. Investor are able to see these prices and the stock exchange rules specify that all trades should take place at the best prices for investor (that is, the highest price if you are selling and the lowest price if you are buying). All the prices are visible on computer screen and market markets are committed to honoring their prices for trades up to a certain size (the normal market size or NMS). For trades above the NMS market makers prices are indicative only and negotiation with the market makers will finalize the prices. The perceived advantages of the system are immediate execution of orders and price certainty at any point in time.

The second type of trading is the auction system, whereby all buy and sell orders from investor are collected together and matched against each other, with the price being set to attempt to clear the market. A leading example of auction-based system is the Paris bourse. Auction can be continuous, usually operated, by computer or batch auction, which occur once or twice a day. The advantages or such a system is cheapness (as no one have to pay for the service provided by market makers), although it may not be possible to trade immediately or at a known price.

Stock exchange around the globe are developing rapidly and facing competition both from each other and from new high-tech entrants. It seems likely that there will be a continued trend towards concentration of share trading in a few leading centers, with domestic stock exchange in some countries becoming increasingly irrelevant. Within Europe for example their have been moves to develop a plan European stock exchange, although to some extent this is already exists in the form of SEAQ international. Individual countries seem loath to give up their domestic stock exchange although as financial markets are now so liberalized and as information technology develops further there is nothing to stop individual investor using whichever stock exchange system is the cheapest or most efficient.

### 2.1.4 ROLE OF STOCK EXCHANGE

Stock exchange is the market where second hand securities are bought and sold for investment or speculative purposes. It provides facilities of trading in listed securities. In the recent years, the authorities are increasingly recognizing the role of the stock exchange (Sur, 1980:40). Stock exchange is not and has at no time been the private concern of a few individuals. Nor have their activities been limited to the cyclical booms and slumps, which attracted so much popular attention. The stock exchanges as the market for securities gives everybody assess to a number of difference opportunities for capital investment. The function of the stock exchange is to provide equal opportunities for as many buyers and sellers of securities as possible. From a general economic point of view the stock exchange constitute the core of the capital market. It has puts its finger on the pulse of the economy and gives its diagnoses to the public in the form of quotation (Franfurter, 1972:60).

Investment is the lifeblood of economic development. It is evident that stock exchange will continue to fulfill there. Vital functions in the national economy. So long as private enterprises exist. We know that the stock exchange is the place where stocks and shares are bought and sold.
The substantial competition in innumerable buyers and sellers determines the prices with a measure of precision that cannot be obtained in other unorganized market to such as the property market where activity are of a spasmodic nature.

The stock exchange is intricately interwoven in the fabric of the nation's economic life. W.T. C. says- "Without the stock exchange, the savings of the community the sinews of economic progress and productive efficiency would be used much less completely and much more wastefully than they are now". The task of mobilizing and distribution of savings could be attempted in the old days by a much less specialized institution than the stock exchange. But as business and industry expanded and the economy assumed a more complex nature the need for a permanent finance sector arouse. Investors wanted liquidity the facility to convert their investments into cash at any given time. The answer was a market for investments and thus was how the stock exchange centre came into existence.

This institution plays a notable part in the economic life of the country acting as a free market for securities, where prices are determined by demand and supply. The function of a stock exchange is not only to provide a market for securities but also assist in the raising of funds for government and industry. Thus, free and active markets in stock and shares have become a prerequisite for the mobilization and distribution of a nation's savings as to support modern business (Stock Exchange, pp.40-48).

In this way, we can say that the stock exchange has a vital role to play in helping industries to raise necessary finance. They have a supremacy importance function to perform in developing a stock capital and to enable government to raise loans. Their servicing is indispensable in the operations by the authority for the regulation of the country's credit play. It is generally thought that a stock exchange serves only to those who have money to invest and securities to sell. This is an understatement for a stock exchange
benefits the whole community in a variety of ways. By enabling procedures to raise capacity it indirectly gives employment to millions of people and helps consumers to get goods needed by them.

### 2.1.5 HISTORICAL BACKGROUND OF NEPALESE PRIMARY MARKET

The record of historical growth in Nepal provides merely primary stage of capital markets. The vanshavalies and chronicles have very little to say regarding how government of that time look on the relationship between economic development and capital market. The political negligence and fundamental economic domination can be said to be responsible for having no historical base for the growth of capital market.

During the Rana regime, which is said to be most dark ages in the history of Nepal, the irresponsible habit of promoting selfinterest in disregard to larger interest of the society as a whole created total bankruptcy in nation's financial resources? The ideas of promoting investment, technological innovation and industrial development were not given priorities. As a result of the exploitative mentality, the capital markets were not developed.
During the Rana regime no effort was made for change or development. They had a closed economy. Thus, through there was some development. They had a closed economy. Thus, through there was some development it was not due to the will of the rulers but only because of the time. But during the period of Juddha Samsher, and idea to develop capital market in the interest of Rana family was managed through a part of potential Indian investors. Company act was promulgated and numbers of public limited companies were formed under the sole monopoly of Rana family. Anyhow capital market got signals of development under the permit of Ranas share concentration investment policy. At the same time, Tejarath was found to facilitate loans to government employees. The time of booms in the growth of point stock companies simply bought only bubble companies stimulated under abnormal situations of war and host of privileges and facilities provided by the then Rana Government. But, after a war, number of these industries collapsed one after another in such a way that there was a serious set back on the growth of capital markets. Some new hopes came under the new era of elected government but it was soon put into dustbin through political changes of inefficiency.

Afterwards, the Panchayat government came to further economic development by various slogans of people's participation, regionalism, basic needs, industrial development, trade promotion, resource mobilization etc. There were so many proposals to develop capital market. But Securities Marketing center was found only during 1970 AD to start the capital market development. Immediately after that, Securities Exchange Act was passed by Rastriya Panchayat to facilitate securities transactions. The name of the center has been changed to Securities Exchange Center.

For the first time in 1937 AD Nepal Bank Ltd as a commercial bank was established by the initiative of Udyog Parishad. The main objective of this institution was to rate habit of savings and turns these into investment. It has been helping a lot in promoting of industries and commercial development of the country. Later on another commercial bank named Rastriya Banijya Bank was established in 1964 AD. After the adoption of liberalized economy in the country these financial institutions are responsible for
mobilizing the public deposits to business enterprises by offering attractive interest rates and by providing better and reliable services to the depositors.

In the context of the development of capital market, Nepal Industrial Development Corporation (NIDC) has also played a vital role. To rate an industrial environment, this corporation was established in 1961 AD. The main objective was to develop industries in modern way to provide necessary financial and technical help, to provide loan and facilities to the industrialization in the private sector. Since its establishment, the fixed capital needs of the companies have been met by NIDC and provides up to 85 percent of the fixed capital needs of industrial organization. Besides granting direct long-term loans it also participates in the equity shares of industrial enterprises. Also it gives guarantees on industrial loan provided by commercial banks.

The immense activities done by NIDC can be great to help foster the capital market in Nepal. One thing essential for the rapid growth of capital market is to persuade business firms to convert themselves into public limited companies. Companies requiring large amount of funds should be asked to raise at least a part of their financial needs by issuing shares in the market.

The commercial factor faced by the economy is the lack of public confidence in enterprises. The confidence of investors in business can be enhanced if NIDC and commercial bands \& other financial institutions underwrite the shares issued by public companies.

Employee's Provident Fund, which was established in 1962 AD, also cannot be neglected as it has contributed a lot in the growth of capital market. It has been mobilizing the employee's savings to commercial banks, from where the funds finds their way to business enterprises investment in the government's development bond and at the same time providing loan to various corporations are some other activities undertaken.

Securities Exchange Center (SEC) was established in Nepal in 1976 AD, to promote the public savings and to mobilize capital funds for industrial investments. In a real sense, the establishment of this center has made possible the development of capital market in Nepal because prior to this there was no special institution in Nepal dealing with securities. This center managed to issue public shares and debentures of 23 corporate bodies for rising about Rs. 500 million from Public.

Securities Exchange Center has listed following commercial banks.

| S. No. | Name of Company | Stock Synbol |
| :---: | :--- | :--- |
| 1. | NABIL BANK | NABIL |
| 2. | NEPAL INVESTMENT BANK | NIB |
| 3. | STANDARD CHARTERED BANK | SCB |


| 4. | HIMALAYAN BANK | HBL |
| :---: | :---: | :---: |
| 5. | NEPAL SBI BANK LIMITED | SBI |
| 6. | NEPAL BANGLADESH BANK | NBB |
| 7. | EVEREST BANK | EBL |
| 8. | BANK OF KATHMANDU | BOK |
| 9. | NEPAL INDUSTRIAL AND CO. BANK | NICB |
| 10. | MACHHACHUPUCHHRE BANK LTD | MBL |
| 11. | LAXMI BANK | LBL |
| 12. | KUMARI BANK | KBL |
| 13. | LUMBINI BANK | LUBL |
| 14. | NEPAL CREDIT AND COMM BANK | NCCB |
| 15. | SIDDHARTHA BANK LIMITED | SBL |
| 16. | NMB BANK LIMITED | NMB |
| 17. | BANK OF ASIA NEPAL LIMITED | BOAN |
| 18. | CITIZENS BANK INTERNATIONAL LTD | CZBIL |
| 19. | KIST BANK LIMITED | KIST |
| 20. | DCBL BANK LIMITED | DCBL |
| 21. | GLOBAL BANK LIMITED | GBL |
| 22. | PRIME COMMERCIAL BANK LIMITED | PCBL |
| 23. | SUNRISE BANK LIMITED | SRBL |
| 24. | AGRICULTURE DEVELOPMENT BANK LIMITED | ADBL |

In 1993 AD, remarkable development took place in the capital market. Under a program initiated to reform the capital market the Securities Exchange Center was converted into the Nepal Stock Exchange in order to increase marketability to government bonds and corporate securities. Nepal stock Exchange opened its trading floor in $13^{\text {th }}$ January, 1994 providing membership to 5 market makers and 25 brokers. The members are permitted to act as intermediaries in buying and selling of shares of listed companies. At present, there are 23 brokers. The number of listed companies increased from 63 in 1992/93 to 99 in 1994/95 and the market value from 4,000 millions to 12,963 millions respectively. After opening the trading floor to brokers and market makers the total annual turnover rose from 70 million in 1992/93 to 21,681.14 million in 2008/09 (NEPSE Report).

The earliest records of securities dealing in Nepal are meager and obscure. In those days there was no remarkable movement or industrial development. Still it is on the rudimentary stage. No attempts were made to mobilize private savings and use them to productive sector. There was no media or market mechanism that facilitated the transfer of funds from surplus spending. Units (the units whose current income is less than current expenditure) became obvious. Except for a brief period starting from 1963 AD until the end of the Second World War, no attempt was made to collect funds for the industries through the floatation of securities. It is specially the stocks in the market. In the absence of the development of corporate security market, the securities floated in the market are the government securities. Through them the government assembles the funds directly from the surplus spending units via the financial intermediaries. So far the government has the virtual monopoly over the security market. The resort to security market by the government has been in the form of borrowing. It is through the insurance of mainly the development bonds to meet the budgetary expenses. The first series of development bond was floated on Feb 12, 1964. It carried 6\% rate of interest and had the maturity period of 5 years. Since then the government has been floating the development bonds each year. Till now it has floated 26 issues of such bonds. The interest rate was ranging from $5 \%$ to $15.5 \%$ and with the maturity period varying the fiscal year 1965/66 amounted to Rs. 7.5 million. In 1970-71 it was equivalent to Rs. 3 million and it reached Rs. 300 million in 1976-77. From the very beginning of SMC, over the counter market for government bond was started. Despite resistance due to the level of awareness about financial assets from investors, it was able to carry transactions of government bond with turnover of Rs. 787 million is 1992-93 as against Rs. 372 million in 1980-81.

Securities Board Nepal acronym SEBO/N was established on May 26, 1993 after the first amendment in the Securities Exchange Act became effective. The same Act mandated SEBO/N to act as a securities market regulator and developer. Accordingly, Securities Exchange Centre (SEC), a government enterprise previously acting as a socio market operator and regulator, was restructured into present form of Nepal Stock Exchange. Another major event of restructuring was the creation of the SEBO/N as a separate government regulator.

The securities market witnessed interesting ups and downs from its establishment to date. SEBO/N's regulatory interventions were targeted to discipline the market and consolidate its position and central securities market regulator. The developmental initiatives particularly undertaken through educational and research activities were targeted to nurture the existing market.

### 2.1.6 GUIDELINES IN ISSUE OF SHARES

### 2.1.6.1 Principle steps in Public Issue

There is not any rule of thumb regarding the steps in public issue. But the company, which desire to offer its shares to the public, should receive permission from the concerned authorities.

The major steps that have been followed to issue securities in Nepal are:

## I. Appointment of the issue Manager

Appointment of the issue manager is the first step for the public issue. When the company needs and wants to go to the public then they should draft its prospectus as a legal requirement. In this prospectus company should mention the brokerage of shares and new issue manager.

## II. Drafting Prospectus

The issue managers or company itself may draft prospectus. It contains:
Full personal details of directors of the company and the sponsors auditors, bankers and brokerage of shares and also of the managing agent if any.

Date of incorporation of the company information about capital structure including authorized and issued capital, voting rights, loan, capital, mortgages in force and other borrowings.

Objective of the company, summary of principal, provisions of the company's articles of association with particular reference to the voting power of directors.

Extensive commentary on company's operations including minimum three years financial positions and list of subsidiaries and their business etc. if the company is already in operation.

Qualification share required for the board of directors and sales or remuneration applicable to them and shares or cash received as remuneration by the promoters of the company.

Total number of directors in the board and the member of directors to be elected form among the general public shareholders.
The number of shares offered to the public for subscription provision for reserving the shares for the employees or any shares and minimum number of shares, which must be subscribed prior to the allotment and the advance payment to be made on each share along with the application.

The assets purchased with the proceeds of the sales of shares the name of persons selling them and particulars of arrangement where payment is in the form of shares or debenture in lieu of cash and the loans raised through the sale of debenture.

Estimation of the income and expenditure of the company at least for the three years of operation and highlights of the balance sheet and profit and loss account for the previous years.

Information about the application for shares place of application submission and the banker for money deposit.
Shares or cash received or to be received as remuneration by promoters of the company and whether any funds of a promoters or a directors are involved in the purchase or intended purchase of assets by the company and whether any promoters or directors are involved in the purchase or intended purchase of assets by the company and whether any promoter or director is a partner in any firm or is connected with any other company, and other necessary details.

## III. Filling of the prospectus with the Registrar of Companies:

The prospectus contains information about the company and the proposed security issue to the investing public. The draft prospectus signed by the investing public. The draft prospectus signed by the directors and application form along with the article and memorandum of association must be forwarded to the company Registrar, along with required documents by the company act.

## IV. Application for the public issue to the Securities Board of Nepal

Once the office of the company registrar approves the prospectus, it should be submitted to the Securities Board of Nepal along with issue fees to get approval for new issue.

## V. Appointment of under writer:

As underwriter agrees to subscribe to a given number of shares in the event the public do not subscribe to them. The underwriter, in essence, stand as a guarantee for public subscription in consideration for the underwriting commission. The principal underwriters are the banks finance companies insurance companies etc. The most common practice now is to go to for consortium under writing, they underwrite an arrangement whereby the public issue. Underwriting of shares is optional for the company. Normal practical of Nepal is that a few company show desire to underwrite its share because it increases issue cost.

## VI. Appointment of the banker:

The banker to the issue collects money on behalf of the company along with the application form and it manages the primary market of initial offering.
VII. Printing of Prospectus and application form and dispatch.

After completion of all the activities to take approvals the next step of new issue is printing of prospectus and application form. The quantity of the prospectus and application form depends upon the issue size and the nature of the company. But it should be sufficient to distribute.

## VIII. Promotion

Although, the promotional campaign typically commences with the filing of the prospectus to the concerned authorities but when the company release announcement of the issue it actually started. Public brochure investment forum broker forum can be held and advertisement may also release in newspapers and periodicals to generate interest among potential investors. The announcement of the issue must be made at least 15 days before the opening of subscription list.

The announcement of the issue will specify when the subscription would open and when it would close and the application collection center. During the period the subscription is kept open the collection center will collect the application form from the investors. When the issue is over subscribed the issue will be closed. But subscription must be made open for minimum of seven working days and maximum of 30 days for once.

## IX. Allotment of shares

If the issue is under-subscribed or just fully subscribed the company may allot the shares applied for by the applicants after securing the formal approvals from the concerned authorities. If the issue is over subscribed the frequency distribution of applications of different size categories is prepared and on the basis of this an alternative patterns of allotment are prepared and allotted. The guiding principal is that the allotment should be titled in favor of the smaller application.

When the allotment is completed company will distribute allotment letters and then after share certificates.

### 2.1.6.2 Investing in Primary Market

Primary market provides opportunities for picking up shares at relatively low price to the general public. Newly formed companies offer their shares for subscription at par values, whereas existing companies may price their new issue with a little premium. But the premium will certainly be less than the market price of the shares.

This is the main reason why price issue is so popular with the investors. But investing in public issue is also risky investment. If the selection for subscription is wrong, the company will be collapsed and investor will loose the investment.

Public issues are generally given widespread, nation wide publicity through advertisement in newspaper and magazines well before the date fixed for opening of the issue. These advertisements, along with the other highlights of the issue and risk factors as perceived by the management, give the name of issue manger and application collection center.
The subscription list is required to be kept for minimum period of seven days and maximum of 30 days. Since most of the public issues are oversubscribed, the subscription list is usually closed immediately after seven days. Any individuals interested to invest should submit their application form and the stipulated application money to any one-collection center or to issue manger. Application sent by post with the bank draft should reach to the issue manager before the allotments of the share but the bank draft should be drawn within the period during which the subscription remains open.

### 2.1.6.3 Analyzing a company before subscribing

Rules and regulations alone would not be able to protect the interest of investors. Investors themselves should be able to analyze and evaluate on following aspects of the company.

## Management

A company can be only as good or bad, as it management. It is management that provides the main driving force behind corporate performance. So investor should evaluate the company's management. Companies run by traditional management and some foreign companies with so-called professional management's have poor record of performance. But companies run by professional management are good whether this is national or foreign management. Full personnel details of the promoters and directors of the company will be on prospectus. On the basis of these investors can evaluate the management of the company.

## Size of the company

Large companies generally offer better investment opportunities than the smaller one. This is so because large companies can use of economies of scale, which smaller companies cannot. The former are thus able to reduce costs, and establish a clear competitive edge over smaller companies. Large companies, by virtue of their higher productions, generally occupy a stronger and more dominant position in the market. Since large companies normally generate larger surplus. As a result, investment in large companies is generally safer and more stable than in smaller companies. This does not mean smaller companies would not able to have good performance. There is not any rule-of-thumb to identify small and large companies but equity capital may be the good basis of calculating large and small companies.

## Growth of the company

Growing companies provide excellent investment opportunities. As a company grows and expands its profit also grow.

Growth does not come by accident; companies have to plan for growth. They have to identify growth product and areas and prepare detailed plans for implementation of expansion cum diversification projects.

## Company's Environment

Companies are inextricably linked to their industrial, commercial and economic environments. Each and every company can't keep themselves all for from these environmental influences. In an advanced environment, even the most profitable and well-managed companies' find the going rough, where as a favorable environment usually gives a boost to even the most sluggish and mismanaged companies.

Inflation being a persistent and nation wide problem affects the working and performance of all companies. However, the nature and extend of its impact on each company varies considerably. Some companies are adversely affected by it, whereas others are not able to cope with it effectively but actually thrive on it.

## Retained Profit and Reserve

After deduction of all expenses including taxes, the net profits of the company are split into two parts-divided and retained profits. Dividend is that portion of the profits which is distributed to shareholders, whereas retained earning is the portion that is retained by the company and added to its reserves. The figures for retained profit and reserves of any company can be obtained by a cursory glance at its balance sheet and profit and loss account.

Retained profit is important because it not only increases the reserves of a company, but also provides the company with funds required for growth and expansion. All growth companies maintain a high level of retained profit. So if you are looking for all growth company to invest in, you should examine its retained profit figures. Companies that have no intention of expanding are not likely to retain large portion of their profits.

Reserves constitute the accumulated retained profits of a company. It is important to compare the size of a company's reserves with the size of its equity capital. This will indicate whether the company is in position to issue bonus shares. As a rule, companies whose reserves is double the amount

### 2.1.7 Information

Information has a value in decision-making and in updating the level of knowledge. It brings clarity and creates an intelligent human response in mind. In other words, information, simply, can be defined as the facts that are told, heard or discovered about somebody or something. Information must be transferred through communication from the "source to the destination without the
loss of content. In this research, the term 'information disclosure' has been used to refer to the dissemination of information regarding the firm's performance and policy to the existing shareholders, prospective investors and other concerned parties. Moreover, it also refers to the announcements or promulgation of laws, by-laws, regulations and directives by the concerned government agencies to the participants of the capital market. In short, term information has been used in this research to indicate those informational variables that have certain influences on the share price. Investment information can be classified into two groups: firm specific information and macro-economic information. Firm specific information is that information that is disseminated by the concerned firm to the participants in the capital market. For example: A declaration of dividend, offering of right shares, stock splits, holding annual general meetings are some forms of firm-specific information. Macro economic information, on the other hand, is concerned with the overall situation of the country's economic environment. Announcement of new policy, promulgation of new laws and bye-laws, issue of new directives, legalization of tax are some forms of macro economic information.

The process of information dissemination plays a significant role in the development of fair and competent capital market. Investors can examine and assess performance of firms only after knowing the detail information about them. A rational investor does not buy stocks of any company unless he or she gets convinced of its strengths and its likelihood of growth and prosperity. To examine the company's overall position, s/he should gather as much information as available and possible in that company. Disclosure of information is advantageous for both investors and the company. Timely disclosure of authentic and qualitative information enhances the company's goodwill and thereby new investors may opt to purchase the shares of the company.

### 2.1.8 Security Markets and Common Stocks

"A securities market is a place where people buy and sell financial instruments." ${ }^{3}$ In other words, "An organized security market is a place where, or a system through which, securities are created and transferred. ${ }^{.4}$ A security market does not have to have a physical location. This is because securities can also be traded in over-the-counter using a system of computer screens and telephones.

Securities market can also be classified according to the maturity of the securities traded in. They are money markets and capital markets. Money markets deal in securities with less than or equal to one year to maturity, whereas capital markets deal in securities with more than one year to maturity. Money market is created by a financial relationship between suppliers and demanders of short-term funds. Short-term debt instruments like Treasury bill, commercial paper, and negotiable certificates of deposit issued by government or financial institutions etc. are traded in the money market. On the other hand, long-term debt instruments like stocks, bonds, and debenture etc. are traded in the capital market.

[^2]Securities market can also be divided into primary and secondary markets. "The primary market is the new issue market where an investment bank brings a new company to flotation; its shares are issued on the primary market as an initial public offering." 5 In other words, "Primary market is the only market in which the corporate or government issuer is directly involved in the transaction and receives direct benefit from the issue that is, the company actually receives the proceeds from the sale of securities." ${ }^{\circ 6}$ On the other hand, the secondary market is the market in where existing securities are subsequently traded. "Secondary markets are those in which financial securities already outstanding are exchanged among investors." ${ }^{, 7}$ The secondary market can be viewed as a "used" or "pre-owned" securities market. The secondary markets comprise the organized securities and the over-the-counter (OTC) market. The organized securities exchanges are centralized auction markets, whereas the OTC markets consist of a loosely organized, decentralized network of negotiated markets. The majority of all capital market transactions occur in the secondary market.

The proceeds from sales of securities in the secondary market do not go to the original issuer but to the seller or owner of the securities. The function of the secondary market is to provide liquidity for securities purchased in the primary markets.

The term 'security' means 'piece of paper' that serves as evidence of rights. ${ }^{8}$ It may be transferred to another investor, and with it will go all its rights and conditions. More formally, security means a legal representation of right to receive future benefits under stated conditions.

In other words, security is a claim against real resources either in the form of an income stream or in the form of physical capital or assets. Securities may be of various kinds such as treasury bills, debentures, bonds, preferred stocks, common stocks etc. Among them, common stock is the most popular form of security.

Common stocks, often called equity shares, represent an ownership interest in a corporation. As owners, common stockholders are entitled to certain rights and privileges like voting and preemptive rights. As owners rather than creditors, they receive no priority in the distribution of assets resulting from a liquidation of the corporation. Typically, after assets are sold and liabilities and preferred stocks are satisfied, common stockholders get residual cash if any available. Form this view point, common stocks are riskier than bonds and preferred stocks.

There are three terms that are generally associated with the common stocks. They are par value, book value and market value. Par value or face value of the common stocks is the value established at the time of initial issuance. Book value of common stocks means asset value after deduction liabilities and preferred stock. On the other hand, market value of common stocks represents a

[^3]consensus opinion of buyers and sellers when they are traded freely on one or more stock exchanges. Market value or market price of common stocks in the market is determined by the supply and demand factors. It is influenced by many other factors including economic and industry conditions, expected earning and dividends, and market and company risk considerations.

### 2.1.9 Efficient Market Theories and Information

An efficient market is defined as one in which the prices of securities fully reflect all known information quickly and accurately. The efficient market concept assumes that all known information is reflected in the price, including not only past information, but also current information as well as events that have been announced but have not yet transpired. For instance, if many investors believe that dividends this year will decline, prices will reflect this belief before the actual decline occurs. This concept assumes that an efficient market can exist if the following events occur.

1. A large number of rational profit maximizing investors exist who actively participate in the market by analyzing, valuing and trading stocks. One participant alone cannot affect the price of a security.
2. All investors obtain information without cost and have access to information at approximately the same time.
3. Information is generated in random fashion such that announcement are basically independent of one another.
4. Investors react quickly and accurately to the new information, causing stock prices to adjust accordingly.
5. Furthermore, this concept stated that price changes due to information are independent of one another and move in a random fashion. The piece change occurring today is independent of the one yesterday because it is based on investors' reaction to new independent information coming into the market today. ${ }^{9}$

According to Prof. Eugene Famma, ${ }^{10}$ there are three hypotheses of market efficiency. They are briefly explained below:

## a. Weakly Efficient Market Hypothesis

Weakly efficient markets are defined as markets where past prices provide no information that would allow a trader to earn a return above what could be attained with a naïve buy-and-hold strategy. The movements of future prices are independent of previous prices. Therefore, it is related to random walk hypothesis of price movements. Furthermore, this hypothesis stipulates that price of the stocks have absorbed only the stock market information but not the public information. Thus, technical analysis that relies on the past history of price and volume information is of little or no value. The implication of this hypothesis is that knowing and using the past sequence of price information is of no value to an investor.
b. Semi Strong Efficient Market Hypothesis

This hypothesis specifies that market is efficient for prices to reflect all publicly available information. Consequently, only those insiders who have access to valuable information could earn a profit larger than what could be earned by using a naïve buy-and-

[^4]hold strategy. It also states that current prices of the stocks reflect not only stock market information but also publicly known and available data such as earnings, dividends, and stock-split announcements, new product developments, financing difficulties and accounting changes.

## c. Strongly Efficient Market Hypothesis

The strong form of efficient market hypothesis states that stock prices immediately adjust to and reflect all information, public or other wise. In general, no investors can earn excess return through a superior ability to analyze publicly available information. In other words, investors who transform public information into private information do not gain by doing so.

At the extreme, the strong form holds that even those investors with monopolistic access to information cannot gain by using this information. In short, this hypothesis asserts that stock prices fully reflect all public and nonpublic information, and there by no investor can earn abnormal returns.

### 2.1.10 Information Content of Dividend

"Dividends refer to that portion of a firm's net earnings which are paid out to the shareholders." ${ }^{11}$ Generally, dividends are paid in cash. Therefore it reduces the cash balance of the firm. The policy made by the firms about the dividend payment affects the financial structure, the flow of funds, corporate liquidity, and investors' attitudes.

On other hand, it is asserted that dividends are important in stock price formation because they have informational value. The payments of dividends convey to shareholders that the company is profitable and financially strong. Furthermore, an increase in payout ratio signals to shareholders a permanent or long they increase in firm's expected earnings, whereas a dividend reduction signals a poor earning forecast. Accordingly, the price of share may be affected by changes in dividend policy. "In an uncertain world in which verbal statements can be ignored or misinterpreted, dividend action does provide a clear-cut means of making a statement that speaks louder than thousand words."12

In has been found that signaling effect of dividend announcement is particularly noticeable for the companies that initiate dividend for the first time and for the companies those omit dividends. Because of the signaling effect on share price, it is also found that corporations are always reluctant to cut dividends.
Although the focus of this research is to analyze the signaling effect of dividend, studies relating to dividend and share prices are deemed relevant to some extent and presented in the following section of this chapter.

[^5]
### 2.1.11 Fundamental Analysis

We study the fundamental factors that affect the price of security. All external and internal factors will have great impact on market price. Political, economic, legal, socio-cultural, technological environment from the external forces and management techniques from the internal will also have the impact on market price. Specially, economic factors such as GDP, trade balance, consumer confident, consumer price index, product price index, consumer credit, personal income, non-farm payroll etc. will change the price of market. Therefore, we should consider the change in fundamental factors.

### 2.1.12 Review of Theories Relating to Share Price and Dividend

Herein, an attempt is made to present some theories that are related to share price and dividend.

### 2.1.12.1 Walters Study

Professor James E. Walter the relationship between dividend and share price in 1966 and presented a share price valuation model by arguing that the choice of dividend policies almost always affect the value of the firm. Accordingly to him payment of earning in the form of dividends is relevant in the formation of share price. But he suggested that the relationship between firm's internal rate of return and cost of capital is the main determinant to decide whether dividends should be distributed or not.

## Assumptions of the Walter's model are

1. Retained earning is one and only source of financing i.e. the firm does not issue debt or new equity.
2. All earnings of the firm are either distributed as dividends or reinvested internally.
3. The firm's rate of return ( r$)$ and cost of capital (k) remain constant.
4. There is no change in values of earning per share and dividend per share.
5. The firm has perpetual life.

The formula for determining the market price per share is given below.

$$
P=\frac{D P S}{K}+\frac{r(E P S-D P S) / K}{K}
$$

Where:

```
\(\mathrm{P}=\) Market price of share
EPS = Earning per Share
DPS = Dividend per share
\(\mathrm{r}=\) Internal rate of return
\(\mathrm{K}=\) Cost of capital
```

According to this model, there are three kinds of firms.

## a. Growth Firms

If the firms' internal rate of return exceeds the opportunity cost, the relation between dividend and stock price is negative. This implies that higher payments of dividends will result lower stock prices. The firms will maximize the value per share if they follows a policy of retaining all earrings for internal investment such firms are called growth firms.

## b. Normal Firms

If the firm's internal rate of return is equal to cost of capital, there is no role of dividends on stock prices. Such firms are usually termed as normal firms.

## c. Declining Firms

If the firm's internal rate of return is less than the cost of capital, such firm is known as declining firm and there exists positive relationship between stock prices and dividend. Hence payment all earning as dividend is the optimal decision to maximize the market price per share.

### 2.1.12.2 G ordon's Study

Myron J. Gordon studied the relationship between dividend and stock prices, and developed the most popular dividend capitalization model, which states that dividend policy of firm affects stock prices. In addition to Walter's model, he suggested that dividend policy does affect the value of share even when internal rate of return equals the capitalization rate. This view is based on
the assumption that rational and risk-averse investors prefer present dividend to future capital gains. In other words, bird-in-thehand argument does apply here in case of rational investors. Thus, this argument suggested that an increase in dividend payout ratio lead to increase in the stock prices for the reason that investors consider the dividend yield less risky than the capital gain.

This model relies on the following assumption.
a. The firm is an all equity firm.
b. No external financing is available i.e. the only source of financing new investment is retained earnings.
c. The internal rate of return ' r ' and the appropriate discount rate ' $k$ ' are constant.
d. There are no taxes on corporate income.
e. The retention ratio ' $b$ ', once decided upon, is constant. Thus, the growth rate $g=b$. $r$ is constant forever.
f. The discount rate k must be greater that growth rate g .
g. The firm and its stream of earning are perpetual.

Based on the above assumptions, formula provided by Gordon for determining market value of a share, which is a simplified version of original formals, can be expressed symbolically as:

$$
P=\frac{E P S(1-b)}{K e-b \times r}
$$

Where: $\mathrm{P}=$ Price of share
EPS = Earning per share
$\mathrm{b} \quad=$ retention ratio;
1-b $=$ dividend payout ratio
$\mathrm{Ke}=$ capitalization or cost of capital
$\mathrm{B} \times \mathrm{r} \quad=$ growth rate
In the conclusion, Gordon suggested that share price and dividends have negative relationship for growth firms and positive relationship for declining firms. Moreover, he concluded that share value remains constant regardless of changes in dividend policies in the case of normal firms.

### 2.1.12.3 Modigliani and Miller's A pproach

Modigliani and Miller argued that, under a prefect market situation, the dividend policy of a firm is irrelevant, as it does not affect the value of the firm. They suggested that the vale of firm or shareholders wealth depends on the firm's earning which result from its investment policy. According to them, it can be concluded that dividend decision affects share price but not the shareholders'
wealth. This implies that decrease in share price after dividend payment is offset by dividend amount received by the shareholder. Thus, the wealth of shareholders i.e. dividend plus terminal price remains unchanged.

The assumptions underlying MM's hypothesis are given below:

- The firm operates in perfect capital markets where investors behave rationally, information is freely available to all and transactions and flotation cost do not exit.
- There are no taxes.
- The firm has a fixed investment policy, which is not subject to change.
- Risk of uncertainty does not exit. This means that investors are able to forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time periods. Thus, $\mathrm{r}=\mathrm{k}=\mathrm{k}_{1}$ for all t .


## Review Model

A number of studies have been conducted to answer the straight forward question of whether the information affects the trading activity and the price movements in securities market or not. But such studies differ in their area of emphasis and conclude in their own manner. However, this section of this chapter aims to present the crucial part and theme of the some research works conducted previously.

### 2.1.12.4. M itchell and M ulherin's Study

In the article entitled "The Impact of Public Information on the Stock Market". They have studied the relation between the number of news announcements reported daily by Dow Jones and company and aggregate measures of securities market activity including trading volume and market returns. They have a belief that much of the disagreement regarding the news-market relation is due to the differing emphasis of the various studies. They argue some research is concerned with firm specific news, while other studies analyze macro economic announcements. Some articles note the joint patterns of news and market activity, while others more directly study the actual relation between the news stories and market activity. Thus, they have tried to contribute to this debate by relating aggregate measures of market activity such as trading volume and market returns to the broad sample of macro economic and firm-specific news announcements released by Dow Jones and company.

For the analysis purpose they collected the number of announcement transmitted per day by Dow Jones and Company across the Broad Tape and in the wall street Journal. The data covered 2011 business days during 1983 to 1990. Likewise, they recorded trading volume, and calculated the absolute value of market returns and the sum of the absolute value of individuals firm's returns
from the New York Stock Exchange, American Stock Exchange and over the counter. Their principal analysis was based on the correlation and regression coefficients. The news announcements were classified or stratified into three categories according to the importance given by Dow Jones and Company. Then, they calculated correlation and regressions coefficients between the news announcements and market activity. To assess the robustness of their research result, they also considered non-information sources of market activity.

They found that the number of news stories and market activity is directly related and share common-day-of-the-week patterns ${ }^{13}$. They also noted that the relation between news and market activity remains significant regressions that control for the day of the week. The result was also robust even after the inclusion of non-information sources of market activity.

### 2.1.12.5 Pettit's Study

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

This research was mainly based on the following assumption.
a) In an efficient market, current prices fully reflect all published, widely available information. This implies that the return from a security in one period is independent of all information available in the previous period. This is because the security's price already reflects the effect of this information. Announcement of changes in dividends would be immediately and un-basely reflected in the security's price resulting in one time actual return that exceeds (if a dividend increase) or falls short of (if a dividend decrease) the expected return. In this kind of a market, no trader, relying on publicly available information, can consistently make a return that exceeds the equilibrium risk adjusted return.
b) A market that is inefficient would be characterized by firms with abnormal returns that tend to exist over a period of time after the announcement, implying either that it takes considerable time for the information to be disseminated across the market, or that there is a tendency to either systematically understate or overstate the effects of such information on the price of the security. Abnormal security performance prior to dividend announcement may imply that the market is inefficient. The market would be considered to be inefficient if the apparent anticipation effect was the result of purchase or sales by investors who have access to relevant information that has, for some reason, been withheld from the rest of the market, or the unique ability of some investors to use publicly available information to predict more accurately

[^6]announcement to be made. The market would not be considered inefficient, however, if the apparent anticipation effect were the result of previous announcement that are related to or correlated with the favorable or unfavorable news conveyed by dividend announcements.
c) Mr. Pettit has used market model to explain the effect of dividend announcement and the efficiency with the effect is impounded into the price of the security. Mathematically, the market model can be explained as below:
$\mathrm{R}_{\mathrm{it}}=\alpha_{\mathrm{i}}+\beta_{\mathrm{i}} \mathrm{R}_{\mathrm{mt}}+\mathrm{u}_{\mathrm{it}}$
Where, $R_{i t}$ is the investment relative of the $i^{\text {th }}$ security in the time period $t, R_{m t}$ is investment relative of the market, and $u_{i t}$ a random error term incorporating the effect of factors that effect only the $i^{\text {th }}$ security. The slope coefficient $\beta_{i}$ serves as relative measures of the risk of holding the $\mathrm{i}^{\text {th }}$ security. Since the first two terms on the right hand side of the equation above supply a conditional expected return for the $i^{\text {th }}$ security, the difference between the actual return in period ' $t$ ' and conditional expected return in period ' $t$ ', is given by:
$\delta_{i t}=R_{i t}-\left(\alpha_{i}+\beta_{i} R_{m t}\right)$
Where, $\delta_{\text {it }}$ serves as a measure of the risk adjusted abnormal performance of the security. In an efficient market, the value of $\delta_{\text {it }}$ would be determined by information coming into the market that is unique to the $\mathrm{i}^{\text {th }}$ firm.

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

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

### 2.1.12.6 Berry and Howe's Study

The article entitled "Public Information Arrival" attempted to investigate the rate of public information flow to see whether identifiable patterns exists that shed light on market volume and volatility relationships. In other words, Berry and Howe conducted a research to explore the patterns of information arrival and to see the impact of such information on volume and price of the securities. Their study differs from the study of Mitchell and Mulherin in that it included not only firm specific and industry information, but also macro economic, political and international stories relevant to US financial markets. Furthermore, they
emphasized the intraday arrival of public information and drew special attention to intraday patterns and their relation to measures of aggregate market activity such as trading volume and price volatility.

The data source was all news release sent by Reuters's News Service over their North American Securities News Wire during a year time period, from May 1990 to April 1991. The database included all informational events, not only firm-specific information, over than full 24 hour day. They selected the Reuter's. News because it provides market participants with a timely source of information on news stories that influence financial markets.

In the first part their analysis; they documented the general patterns of public information, with an emphasis on the intraday arrival of information. Overall, they found that informational arrival is non-constant, displaying seasonality and distinct intraday patterns. For examples: they found that informational arrival exhibits an inverted an inverted U-shape pattern across trading days, with Monday and Friday containing the fewest observation. The second part of their analysis focused on the relation between the public information variables and measures of intraday market activity. Herein, they suggested a positive, moderate relationship between public information and trading volume, but an insignificant relationship with price volatility.

### 2.1.12.7 Aharony and Itzhak Swary's Study

An empirical study conducted by Joseph Aharony and Itzhak Swary attempted to resolve the empirical issue as to whether quarterly dividend announcements convey useful information beyond that provided by quarterly earning numbers. In the article entitled, "Quarterly Dividend and Earning Announcement and Stockholders' Returns", they presented their objective, research methodology and an empirical result altogether with its implications.

A sample of 149 industrial firms was selected from those listed on the New York Stock Exchange. Quarterly earning per share, quarterly dividend per share, declaration dates of dividends and earnings daily rates of return, and standard and Poor's Industrial Common Stock Price Index were obtained from different sources. The study was conducted for the period from $1^{\text {st }}$ January 1963 to $31^{\text {st }}$ December 1976.

The research study was primarily based on the market for measuring abnormal performance surrounding the announcement dates of the sampled firms. They also formulated a null hypothesis stating that announcement of quarterly dividends and earnings have no systematic effect on corresponding stock prices. To test the hypothesis, t-statistic was used.

The first analysis part of this research showed that stockholders of companies that did not change their dividend, earned, on average, only normal returns over the 20 days surrounding the announcement dated whereas the stockholders of the companies that announced dividend increases realized, on average, positive abnormal returns over the same period. Furthermore, stockholders of
companies that reduced their dividends, sustained, on average, negative abnormal returns during the 20 days surrounding the announcement dates.

The next analysis part of this research reveled that announcement quarterly dividend changes provided information beyond that already provided by corresponding earning numbers. Hence, the researchers came to suggest that changes in quarterly dividend provided a signaling device that is at least as effective as quarterly earning numbers.

### 2.1.13 Review of Nepalese Unpublished Theses and Studies

Here an attempt is made to explain briefly the related previous research studies conducted in the context of Nepal. It became almost difficult to explore thesis that are similar to this kind because of differing emphasis of each thesis. However, following theses are reviewed.

### 2.1.13.1 Sherpa's Study

The primary objective of Mr. Sherpa's study was to obtain an insight on corporate information disclosure with special reference to Nepalese stock market and its listed companies. To attain the mentioned objective, the following specific objectives were set.
a) To highlight the corporate disclosure practice in Nepal.
b) To identify the extent of disclosure of the item of information and to develop the information disclosure index.
c) To check the quality of corporate disclosure on Nepalese listed companies measured by company characteristics namely asset size, number of shares outstanding and earning margin.
d) To see the relationship between corporate information disclosure and stock prices.

His research study began with the construction of disclosure index for which he collected 59 information items, classified according to their importance and calculated mean value after the collection of primary data. Thereafter, he selected 33 listed companies, used their annual reports and calculated disclosure scores, which was followed by the use of various statistical tools like regression, correlations, etc. to attain the mentioned objective. From the detailed analysis, he found that most of companies do not disclose adequate and qualitative information on their annual reports, and most of disclosed information consisted of only financial information that is statutorily required. Furthermore, he found positive relationship between disclosure scores and variables like earning margin, asset size etc. The important finding of his research is that there is positive relationship between market price of share and disclosure score. In other words, the company having greater disclosure score had the higher prices of stock.

### 2.1.13.2 Dhungana's Study

The general objective of the research conducted by Mr. Dhungana was to assess corporate dividend practices in Nepal. However, he also attempted to examine the relationship between dividend and stock prices. Hence, it becomes clear that he used dividends as informational variables to see the effect of it on share price.

The study of relationship between dividends and stock prices was accomplished by collection data on market price per share, dividend per share, retained earning per share and lagged earning price ratio of 22 companies for the period of 1997 to 2002. Out of 22 companies, 13 companies were from finance sector and remaining 9 companies were from non-finance sectors. The analysis of data was made by using the regression model.

His research analysis revealed that there is a positive relationship between dividends and stock prices in the sampled companies. Overall, this study suggested that the relationship between dividend and stock prices is in conformity with the relationship as assumed in the developed capital markets.

### 2.1.13.3 K hatiwada's Study

The main concern of the research conducted by Mr. Khatiwada was to see the impact of dividend announcement on shareholder's return and stock prices. He collected the data of five commercial banks and accomplished his empirical research by using the models developed by Joseph Aharony and Itzhak Swary. He calculated abnormal returns of the shareholders for the months surrounding the dividend announcements and performed t-tests. Finally, his research concluded that announcement of dividend and earning did not affect the shareholder's return in average as t-test revealed it. However, results of the samples companies were not consistent. He also found that shareholders of the company providing a constant rate of dividend did not realize abnormal returns, which was consistent with the result of Itzhak and Swary. An important result drawn by this research was that announcement of dividend did not have any impact on stock prices in general.

### 2.1.13.4 G autam's Study

While reviewing Mr. Gautam's thesis, it becomes clear that he was extremely eager to find the relationship between dividend and stock price in the underdeveloped capital markets like that of Nepal. However, the general objective of his research was to make overall review regarding dividend policy of joint venture banks. To be more precise, his all specific objectives are given below:

1. To identify what type of dividend policy is followed and find out whether the followed policy is appropriated or not.
2. To examine the impact of dividend on share price.
3. To reflect or identify the relationship between DPS and other financial indicators.
4. To know if there is any uniformity among DPS, EPS and DPR of the three commercial banks sampled.

He collected all the relevant data of the three commercial banks and used various statistical analytical tools like correlation and regression. After that, the researcher concluded that there was positive relationship between EPS and MPS as reveled by correlation coefficient. Furthermore, he found that the relationship between dividend of last year and current share price was positive for all the sampled companies.

### 2.1.13.5 Rajbhandari's Study

The main objective of her research was to find out the appropriate dividend policies and practices in Nepal. Following specific objectives were set to attain the general objectives.

1. To examine the relationship between dividend and market price of the stock.
2. To analyze the relation between dividend policy and market price of the stock.
3. To identify the appropriate dividend policy followed by the banks and insurance companies.

She selected three commercial banks and insurance companies as sample for her research study. Thereafter, she accomplished her research analysis with an aid of statistical tools like multiple regression analysis, correlation etc. After the detailed analysis, she came to conclude that the relationship between market price per share and last year's dividend was positive for the three sampled companies, while it was negative for the rest three companies. Similarly, her research result showed that the relationship between earning per share and market price pre share was not consistent for all the sampled companies. This is because of the positive relationships found for some companies and negative for others.

### 2.1.13.6 Pradhan's Study

A study on stock market behavior was conducted by Radhe Shyam Pradhan in the year 2003. For the study, he collected the data of 17 enterprises from the year 1996 to 2000 . His research study was carried out to meet the following objectives.

* To assess the stock market behavior in Nepal.
* To examine the relationship of market equity, market value to book value, price earnings, and dividends with liquidity, profitability, leverage, assets turnover and interest coverage.
- After using statistical tools like regression model, he presented the following findings:
- The stock with larger ratio of dividend per share to market price per share have lower leverage ratio.
- The leverage ratio of dividends per share to market price per share has higher liquidity.
- The liquidity position of stock paying lower dividends is also more variable as compared to the stock paying higher dividends.
- The stocks with larger ratio of dividend per share to market price per share have higher earnings.
- There is positive relationship between the ratios of dividends per share and interest coverage.
- The dividend per share and market price per share are positively correlated.
- The dividend payout and profitability has positive relationships.
- There is positive relationship between dividend payout and turnover ratios.
- Asset turnover, earning and interest coverage are more variable for the stocks paying higher dividends.


### 2.1.13.7 Timilsena's Study

A study entitled "Dividend and Stock Prices" was carried out by using the data for 16 enterprises from 2000 through 2004.
The objectives of this study were as follows:

1. To test the relationship between dividends per share and stock prices.
2. To determine the impact of dividend policy on stock prices.
3. To identify whether it is possible to increase the market value of the stock by changing dividend policy or payout ratio.

He used simultaneous equation model developed by Friend and Puckett to explain the price behavior. The findings of his study were as follows:

- The relationship between dividend per share and stock prices is positive in the sample companies. Dividend per share affects the share prices variedly in different sector.
- Changing the dividend policy or dividend per share might help to increase the market price of shares.
- The relationship between stock prices and entrained earnings per share is not prominent.
- The relationship between stock prices and lagged earning price is negative.


### 2.1.13.8 K unwar's Study

A research study conducted by Mr. Kunwar primarily aimed to analyze dividend policy adopted by two Nepalese insurance companies for the period of 1994 to 1999 . However, he also attempted to examine the influence of financial indicators on share price.

The study was solely based on the analysis of secondary data. He accomplished his research analysis by using the statistical tools like multiple regression, correlation etc. The findings of his study were not consistent since he found negative relationship between MPS and DPS for one sampled company and positive relationship for the next. Similarly, the relationship between EPS and MPS was also contradictable. Furthermore, it is found that an increase in return on shareholders equity leads to increase in the market price of the shares.

### 2.1.14 Research Gap:

Even though several studies have been carried out in different parts of the world covering different aspects of securities market, there is still lack of research on the growth of securities market. The above studies conducted by various researchers' tools only few years' data. But this study covers the period from 2061 to 2066.
This study tries to trace out the impact of dividend declaration on share price. Furthermore analyze the effects of various financial signals like EPS, DPS and ROE on share price. Similarly, examine the impact of Nepal Rastra Banks' directives on share price movement in secondary market in Nepal.

## CHAPTER-III RESEARCH METHODOLOGY

Research methodology refers to the various sequential steps to be adopted by researcher in studying a problem with certain objectives in view. In other words, "It is a way to systematically solve the researcher problem." ${ }^{14}$ This chapter, therefore, deals with the following aspects of methodology.

* Research Design
* Population and Sample Sources of Data
* Data Collection Procedure
* Data Processing
* Data Analysis Procedure
* Analysis Tools


### 3.1 Research Design

The primary objective of this research is to examine the impact of information on share price of five joint venture banks. In order to achieve the objective, both descriptive and analytical research designs have been followed. This study focuses on the informational variables like dividend declaration, earning per share, return on shareholders' equity etc. and tries to determine their impact on share price. Thus, historical data have been used to achieve research objectives.

### 3.2 Population and Sample

[^7]The population for this study comprises of 24 commercial banks that are enlisted in the Nepal Stock Exchange. The sample consists of five joint venture banks namely Nepal Investment Bank Ltd., Nepal Standard Chartered Bank Ltd., Himalayan Bank Ltd., Nepal SBI Bank Ltd., and NABIL Bank Ltd. Which have been selected randomly.

### 3.3 Source of Data

This research is primarily based on the secondary data. Therefore, secondary sources have been used for reference as well as for analysis and interpretation. Secondary sources used in this research are listed below:

1. Balance Sheet, and Profit and Loss Account, Annual report of Security Board and its other publications.
2. Annual Report of Nepal Stock Exchange and its other publications.
3. Broker's Daily Market Report.
4. Books, Magazines, Newspapers and Journals.
5. Annual and periodic Publications of Nepal Rastra Bank.
6. Theses.

### 3.4 Data Collection Procedure

Since this study has been conducted to examine the effect of dividend declaration, NRB directive, earnings and ROE on share price, various data are essential to complete this study. With the view of obtaining data, the researcher made several visits to the sampled banks, brokers, stock exchange and security board.

To acquire daily market price of the shares of the sampled companies, the researcher made visits to Annapurna Securities Service Pvt. Ltd. (i.e. Broker no.13) and to Primo Securities Pvt. Ltd. (i.e. Broker No. 16). Their support become fruitful in obtaining all the market prices required for the period studied.

Similarly, another visit to SEBO/N was made by the researcher easier to obtain financial information of the sampled banks. Likewise, this researcher obtained annual and periodic reports from Nepal Rastra Bank Central Office, Baluwatar. Similarly, visits to Public Youth Campus, Tribhuvan University and Shankar Dev Campus are worthier for the reference materials.

### 3.5 Data Processing

Data obtained from the various sources can not be directly used in their original form. Further, they need to be verified and simplified for the purpose of analysis. Data, information, figures and facts so obtained need to be checked, rechecked, edited and tabulated for computation.

According to the nature of data, they have been inserted in meaningful tables, which have been shown in annexes. Homogeneous data have been sorted in one table and similarly various tables have been prepared in understandable manner and odd data are excluded from the table for the research work.

### 3.6 Data Analysis Procedure

This sub-section of the chapter describes how data are analyzed in order to fulfill the objectives of the study.
In order to examine the impact of dividend declaration on share price, following procedures have been followed. First of all, dividend declarations dated of the five sampled companies were obtained. Thereafter, market prices of the shares of the sampled companies for 15 trading days before and after the date of dividend declaration were obtained. As an additional step, share prices or the trading days before the date of dividend declaration have been arranged in a reverse order so as to form pairs with the share prices of the trading days after the date of dividend declaration. After this, a statistical tool called paired $t$-test is used to examine whether there is significant relationship in the mean share prices after the date of dividend declaration or not. Furthermore, an attempt is made to find the relationship between market price per share (MPS) and dividend per share (DPS) with an aid of statistical tools like correlation and regression.

In order to analyze the impact of NRB's directive on share price, same process as described above has been followed. However, correlation and regression analyses are excluded in this case. On the other hand, correlation and regression analysis are considered best in determining the effect of earning per share (EPS) and return on shareholder's equity (ROE) on market prices of the shares of the sampled companies.

### 3.7 Data Analytical Tools

The researcher has used mostly the statistical tools for analyzing the data of this research. However, some financial terms are also frequently used in this study. These are described as follows:

### 3.7.1 Earning Per Share (EPS)

EPS refers to the income available to the common shareholders on per share basis. In is obtained by dividing earning available to common shareholders by number of outstanding equity shares.

Mathematically it can be expressed as:
$E P S=\frac{\text { Earning available to common shareholders }}{\text { No.of equity shares outstsnding }}$
Since investing, in a general sense, is the employment of capital in the expectation of monetary gain, investors favor high EPS. As a result, share price of the company having higher EPS increase in the market.

### 3.7.2 Dividend per Share (DPS)

Dividend refers to that portion of firm's net earnings, which are paid out to share holders. But however, DPS can be defined as the ratio of earning paid to shareholders to number of equity shares outstanding. It can be expressed mathematically as:

$$
\text { DPS }=\frac{\text { Dividend paid to shareholders }}{\text { No. of equity shares outstanding }}
$$

The net profit after deduction of preference dividend belongs to equity shareholders. They may not claim their all ownership of profit. But they receive only that portion of the net profit which the company distributes as dividend. Dividend may be distributed in the form of cash or bonus share. Generally, it is argued that dividend distribution is the important factor in determining the price of shares. High dividend is preferred by shareholders. But for a company, the decision on how much dividend to distribute to shareholders largely depends upon the availability of investment opportunities.

### 3.7.3 Return on Shareholders' Equity (ROE)

ROE can be defined as the ratio of net profit after taxes to shareholders equity (net worth). Therefore, it can be written as:

$$
\text { Re turn on Equity }(R O E)=\frac{\text { Net profitAvailableto Common Stockholders }}{\text { Shareholders' equity }}
$$

It is important to see the profitability of the owner's investment. It reflects the extent to which the objective of business has been accomplished. The ratio is of great interest to present as well as prospective shareholders and also of great significance to management, which has the responsibility of maximizing the owners' welfare. But in this research, the ration has been calculated and used for analyzing its relationship with market price of shares.

### 3.7.4 Arithmetic Mean

"The most popular and widely used measure of representing the entire data by one value is arithmetic mean. It is the ratio of sum of observation and the total no. of observation. Arithmetic mean may either be simple arithmetic mean." ${ }^{15}$ Simple arithmetic mean in case of individual observations can be calculated easily by using the following formula:
$\bar{x}=\frac{\sum x}{n}$
Where
$\bar{x}=$ Arithmetic mean
$\sum x=$ Sum of all values of the variables X i.e. $\mathrm{x}_{1}, \mathrm{x}_{2}, \ldots \ldots . . \mathrm{x}_{\mathrm{n}}$
$\mathrm{n}=$ Number of observation

### 3.7.5 K arl Pearson's C oefficient of C orrelation

"Correlation analysis is the statistical tool that we can use to describe the degree to which one variable is linearly related to another."
Karl Pearson's coefficient is a (one) measure of linear relation between two variables. It is denoted by symbol ' $r$ ' and computed by using the following formula:
$r=\frac{n \sum X Y-\sum X \sum Y}{\sqrt{n \sum X^{2}-\left(\sum X\right)^{2}} \sqrt{n \sum Y^{2}-\left(\sum Y\right)^{2}}}$
Where:
$\mathrm{n}=$ number of observation in series X and Y
$\sum \mathrm{X}=$ sum of observation in series X
$\sum \mathrm{Y}=$ sum of observation in series Y
$\sum X^{2}=$ sum of square of observation in series X
$\sum \mathrm{Y}^{2}=$ sum of square of observation in series Y
$\sum X Y=$ sum of the product of observation in series $X$ and $Y$

[^8]The " r " can be interpreted as below:
When $r=+1$, it means there is perfect positive relationship between the variables.
When $r=-1$, this implies that there is perfect negative relationship between the variables.
When $r=0$, it means that there is no relationship between the variables. However, $r=0$ does not always mean that variables are uncorrelated; they may be related in some other form such as logarithm, exponential etc.
It should be noted that the value of ' $r$ ' always lies between +1 and -1 .

### 3.7.6 Coefficient of Determination $\left(\mathbf{R}^{\mathbf{2}}\right.$ )

"Coefficient of determination gives the percentage variation in the dependent variable that is accounted for by the independent variable. In other words, the coefficient of determination gives the ratio of the explained variance to the total variance. It is a much useful and better measure for interpreting the value of r." Coefficient of determination can be obtained easily by squaring the correlation coefficient ' $r$ '. Therefore $\mathrm{R}^{2}$ is always a positive number and its value lies between 0 and 1 .

### 3.7.7 Regression Analysis

Regression analysis is a statistical tool that is frequently used to find a average relationship between two or more variable that are related causally. In other words, regression analysis attempts to establish the "nature of relationship- that is, to study the functional relationship between the variables and thereby provide a mechanism for predicting or forecasting."

### 3.7.8 Regression C onstant ( $\alpha$ )

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

### 3.7.9 Regression Coefficient (b)

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

### 3.7.10 Standard Error of Estimate (SEE)

Since estimation with the help of regression equation is practically impossible, standard error of estimate thus explains how inaccurate the estimation might be. It measures the dispersion about a regression line. If SEE has a value of zero, this indicated that there is no variation and perfect estimation of dependent variable has been achieved. Moreover, zero value of SEE implies that there is perfect correlation between the variables.

### 3.7.11 Paired t-Test

The paired t-test is a widely used statistical tool in order to test the difference of means for pairly dependent samples. Two samples are said to be dependent when the elements in one sample are related to those in the other in any significant or meaningful manners. When samples are dependent they comprise of the same number of elementary units.

The $t$-test based on paired observation is defined by the following formula:

$$
t=\frac{\bar{d}}{S} \times \sqrt{n}
$$

Where,
$\bar{d}=$ The mean of the difference between the two samples
$S=$ Standard deviation of the differences
$\mathrm{n}=$ No. of observations
The values of $S^{2}$ can be calculated by using the following formula:
$S^{2}=\frac{1}{n-1}\left[\sum d^{2}-\frac{\left(\sum d\right)^{2}}{n}\right]$
It should noted that ' t ' is based $\mathrm{n}-1$ degrees of freedom. The computed value of ' t ' is compared with tabulated value at any level of significance and hereby decision of rejecting or accepting null hypothesis is made.

### 3.7.12 Application of SPSS Programming

The computation of correlation and regression without the aid of any devices are quite time consuming and tedious. Therefore, a computer program called "a statistical program for social sciences (SPSS)" has been applied in this research. The results obtained from this programming are presented in the annexes.

## CHAPTER-IV

## PRESENTATION AND ANALYSIS OF DATA

Generally, a research process starts with the identification of the research problem, which is then followed by various sequential steps such as formulation of objectives, literature review, research methodology, data presentation and analysis etc. Finally, the process ends in the major findings and conclusions that are made on the basis of research analysis. Accordingly, this chapter is designed with an aim of presenting and analyzing all the available data relevant to this study. The chapter being the crucial part of the study will enable us to draw the major finding and conclusion. The chapter consists of five major headings:

* Analysis of Dividend Declaration and Share Price.
* Analysis of NRB's Directives and Share Price.
* Correlation Analysis
* Simple Regression Analysis
* Multiple Regression Analysis


### 4.1 Analysis of Dividend Declaration and Share Price

In order to determine the effect of dividend declaration on share of the sampled companies, a well-known statistical tool called paired't-test' is applied. The use of paired $t$-test will enable us to analyze whether there is significant difference in the mean share prices after the date of dividend declaration or not.
The analysis for each bank is performed separately as below:

### 4.1.1 Standard Chartered Bank Nepal Ltd. (SCBL)

Table: 1
Data on Dividend Declaration and Share Price for SCBL

The price of within after the

| 2061-09-24 | Share Price In Rs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Before | 1550 | 1540 | 1550 | 1540 | 1545 | 1542 | 1541 | 1540 | 1535 | 1530 | 1520 | 1520 | 1520 | 1521 | 1525 |
| After | 1545 | 1571 | 1570 | 1580 | 1601 | 1635 | 1650 | 1640 | 1650 | 1655 | 1660 | 1655 | 1650 | 1650 | 1650 |
| 2062-09-23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1730 | 1730 | 1730 | 1731 | 1733 | 1737 | 1735 | 1735 | 1750 | 1735 | 1740 | 1735 | 1732 | 1730 | 1730 |
| After | 1730 | 1730 | 1730 | 1730 | 1730 | 1730 | 1730 | 1730 | 1730 | 1732 | 1732 | 1732 | 1732 | 1733 | 1733 |
| 2063-08-06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 2405 | 2400 | 2430 | 2446 | 2200 | 2310 | 2400 | 2400 | 2400 | 2400 | 2411 | 2410 | 2420 | 2441 | 2500 |
| After | 2515 | 2535 | 2535 | 2535 | 2535 | 2535 | 2535 | 2525 | 2505 | 2515 | 2540 | 2535 | 2550 | 2575 | 2600 |
| 2064-09-17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 2500 | 2535 | 2550 | 2575 | 2575 | 2575 | 2600 | 2700 | 2742 | 2740 | 2745 | 2715 | 2710 | 2695 | 2690 |
| After | 2690 | 2690 | 2691 | 2681 | 2675 | 2685 | 2685 | 2685 | 2685 | 2687 | 2687 | 2682 | 2680 | 2695 | 2705 |
| 2065-08-19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 8250 | 7650 | 8150 | 8155 | 8450 | 8350 | 8100 | 7938 | 8300 | 8550 | 8805 | 8605 | 8700 | 8700 | 8010 |
| After | 5692 | 6241 | 6572 | 6720 | 6750 | 6745 | 6745 | 6526 | 6693 | 6301 | 6130 | 6060 | 5895 | 5778 | 5770 |
| 2066-08-10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 4990 | 4921 | 4715 | 4900 | 5100 | 5090 | 5090 | 5050 | 4999 | 5050 | 5000 | 4950 | 4850 | 4550 | 4425 |
| After | 4651 | 4651 | 4700 | 4850 | 4998 | 5043 | 4951 | 5000 | 4950 | 4950 | 4950 | 4999 | 5000 | 4875 | 4972 |

share
SCBL 15 days
declaration of dividend is moving sometimes high and sometimes low. It is generally believed that price will increase in future after making the dividend paid. Market price in 2065 after dividend payment is declining but in 2061, 2063 and 2066 market price is increased. Market price is constant in 2064. All these explained information is of day 1.The following days follows the same options.

The following hypothesis is developed and tested.
$\mathrm{H}_{0}$ : There is no significant relationship in the mean share price before and after the data of dividend declaration.
$H_{1}$ : Share prices are increased or decreased immediately after the date of dividend declaration.

Table: 2
Presentation of $t$-values for SCBL

| Date of Dividend <br> Declaration | Computed t-value | Tabulated t-value | Remarks |
| :--- | :--- | :--- | :--- |
| $2061-09-24$ | -7.225 | 2.145 | Significant |
| $2062-09-23$ | 2.234 |  |  |
| $2063-08-06$ | -1.968 |  | Significant |
| $2064-09-17$ | 7.657 |  | Significant |
| $2065-08-19$ | 0.165 |  | Insignificant |
| $2066-08-10$ |  | Significant |  |

The above table reveals that computed $t$-value for the first three dates of dividend declaration is greater than tabulated value of $t$ at the level of $5 \%$ for 14 degrees of freedom. This implies that there is significant difference in the mean share prices after dividend declaration. In other words, share prices have increased or decreased significantly after the three dates of dividend declaration. The computed t -value for the date 2061-09-24 is -7.225 , which indicates that share prices have increased significantly after dividend declaration. However, computed $t$-value for $2064-09-17$ and $2066-08-10$ are -1.968 and 0.165 , which is less than tabulated value i.e. 2.145 at the $5 \%$ level of significance. This shows that there is in effect of dividend declaration on share prices of SCBL.

The important thing that is to be noted here is that the positive significant value of $\mathrm{t}^{\prime} \mathrm{t}^{\prime}$ represents a decrease in share price whereas a negative value indicated an increase in share price. Generally it is argued that share prices decline immediately after dividend declaration. From the above analysis, it is found that there are three cases of share price decreases among six cases. Hence, this finding, on average, supports the above arguments.

## Nepal Investment Bank Ltd (NIBL)

Table: 3
Data on Dividend Declaration and Share Price for NIBL
The share
NIBL
days after
NIBL
days after

| 2061-09-29 | Share Price In Rs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Before | 815 | 790 | 775 | 765 | 760 | 762 | 760 | 761 | 760 | 760 | 762 | 760 | 760 | 745 | 760 |
| After | 750 | 790 | 790 | 791 | 791 | 791 | 793 | 770 | 765 | 765 | 770 | 770 | 770 | 770 | 750 |
| 2062-09-29 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1150 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1147 | 1155 | 1163 | 1162 | 1154 | 1000 | 1050 |
| After | 1000 | 1031 | 1031 | 1035 | 1040 | 1060 | 1070 | 1070 | 1075 | 1175 | 1178 | 1185 | 1195 | 1196 | 1200 |
| 2063-09-22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 787 | 800 | 790 | 800 | 785 | 785 | 770 | 776 | 783 | 790 | 795 | 800 | 805 | 815 | 815 |
| After | 801 | 802 | 800 | 800 | 790 | 790 | 780 | 765 | 780 | 790 | 790 | 790 | 810 | 820 | 821 |
| 2064-07-28 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1400 | 1480 | 1470 | 1430 | 1430 | 1445 | 1456 | 1450 | 1435 | 1135 | 1135 | 1025 | 1070 | 1150 | 1235 |
| After | 1135 | 1120 | 1135 | 1175 | 1165 | 1235 | 1280 | 1290 | 1268 | 1268 | 1230 | 1195 | 1225 | 1275 | 1265 |
| 2065-07-22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 2920 | 2929 | 2774 | 2720 | 2500 | 2750 | 2780 | 2650 | 2660 | 2675 | 2642 | 2605 | 2940 | 2000 | 2040 |
| After | 2120 | 2162 | 2280 | 2490 | 2400 | 2375 | 2350 | 2380 | 2350 | 2350 | 2350 | 2473 | 2550 | 2750 | 2791 |
| 2066-5-21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 3400 | 3300 | 3281 | 3155 | 3120 | 3150 | 3156 | 3156 | 3156 | 2100 | 2541 | 2495 | 2525 | 2466 | 2460 |
| After | 2470 | 2400 | 2380 | 2358 | 2352 | 2300 | 2280 | 2230 | 2285 | 2255 | 2230 | 2211 | 2150 | 2150 | 2175 |

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the
declaration of dividend is moving sometimes high and sometimes low. It is generally believed that price will increase in future after making the dividend paid. Market price in 2065 and 2066 after dividend payment is increasing but in 2061, 2062, 2063 and 2064 market price is decreased. All these explained information is of day 1.The following days follows the same options.
$H_{0}$ : There is no significant difference in the mean share prices before and after dividend declaration.
$\mathrm{H}_{1}$ : Dividend declaration affects share price.

Table: 4
Presentation of $t$-values for NIBL

| Date of Dividend <br> Declaration | Computed t-value | Tabulated <br> t-value | Remarks |
| :--- | :--- | :--- | :--- |
| $2061-09-29$ | -1.416 |  | Insignificant |
| $2062-09.29$ | 1.082 | 2.145 |  |
| $2063-09-22$ | -1.189 |  | Insignificant |
| $2064-07-28$ | 1.992 |  | Insignificant |
| $2065-07-22$ | 1.935 |  | Insignificant |
| $2066-05-21$ | 6.935 |  | Significant |

The above table depicts the summarized results of paired $t$-test in case of NIBL. The computed $t$-value for the year 2061, 2062, 2063, 2064 and 2065 are $-1.416,1.082,-1.189,1.992$ and 1.935 respectively. Whish calculative values are less than tabulated $t$ value. These figures indicate that shares prices of NIBL have insignificant. On the other hand, a calculated $t$ value for 2066-05-21 is 6.935 . These figures are greater than tabulated value of $t$ at the $5 \%$ level of significance. It suggests that share prices have decreased significantly after dividend declaration.

The above results of NIBL indicate that dividend announcements are not important in the formation of share prices of it. Moreover, it is revealed that there only one case of share price decreases among six cases. This finding, on average, does not support the fact that share prices decline immediately after dividend declaration.

### 4.1.2 Nepal SBI Bank Ltd. (NSBL)

Table: 5
Data on Dividend Declaration and Share Price for NSBL

The share
NABIL
days after

| 2061-12-20 | Share Price In Rs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Before | 258 | 255 | 255 | 250 | 250 | 250 | 250 | 256 | 257 | 245 | 242 | 240 | 241 | 241 | 240 |
| After | 245 | 245 | 251 | 255 | 257 | 257 | 260 | 262 | 263 | 260 | 265 | 270 | 270 | 269 | 269 |
| 2062-12-17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 387 | 405 | 418 | 425 | 435 | 440 | 455 | 419 | 422 | 426 | 426 | 426 | 427 | 427 | 442 |
| After | 460 | 460 | 455 | 460 | 450 | 450 | 462 | 464 | 475 | 475 | 470 | 475 | 470 | 343 | 346 |
| 2063-09-22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 366 | 369 | 364 | 365 | 365 | 365 | 365 | 366 | 373 | 385 | 385 | 385 | 388 | 387 | 393 |
| After | 401 | 400 | 400 | 401 | 401 | 403 | 406 | 407 | 407 | 407 | 406 | 405 | 405 | 404 | 400 |
| 2064-12-19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 690 | 690 | 711 | 700 | 715 | 700 | 705 | 706 | 700 | 695 | 695 | 685 | 685 | 680 | 714 |
| After | 740 | 715 | 705 | 705 | 705 | 705 | 712 | 715 | 730 | 749 | 765 | 780 | 760 | 750 | 735 |
| 2065-11-10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1840 | 1770 | 1000 | 1102 | 1020 | 1250 | 1300 | 1295 | 1300 | 1230 | 1200 | 1200 | 1210 | 1275 | 1290 |
| After | 1224 | 1275 | 1301 | 1282 | 1340 | 1350 | 1334 | 1290 | 1290 | 1290 | 1280 | 1250 | 1201 | 1205 | 1200 |
| 2066-09-11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1425 | 1290 | 1252 | 1200 | 1244 | 1230 | 1230 | 1206 | 1152 | 1137 | 1120 | 1080 | 1080 | 1050 | 1050 |
| After | 1132 | 1160 | 1165 | 1280 | 1300 | 1311 | 1295 | 1290 | 1275 | 1320 | 1320 | 1330 | 1385 | 1399 | 1441 |

price of
within 15 the
declaration of dividend is moving sometimes high and sometimes low. It is generally believed that price will increase in future after making the dividend paid. Market price in 2061, 2062, 2063, 2064 and 2066 after dividend payment is increasing but in 2065 market price is decreased. All these explained information is of day 1.The following days follows the same options.
$\mathrm{H}_{0}$ : There is no effect of dividend declaration on share prices.
$H_{1}$ : Share prices have increased or decreased immediately after the date of dividend declaration.

Table: 6
Presentation of $t$-value for NSBL

| Date of Dividend <br> Declaration | Computed <br> t-value | Tabulated t-value | Remarks |
| :--- | :--- | :--- | :--- |
| $2061-12-20$ | -3.057 |  |  |
| $2062-12-17$ | -1.767 |  | 2.145 |
| $2063-09-22$ | -10.613 | -3.882 |  |
| $2064-12-19$ | 0.175 | Insignificant |  |
| $2065-11-10$ | -2.326 |  |  |
| $2066-09-11$ |  | Significant |  |

As revealed by the above table, the computed value of $t$ for 2063-09-22 is -10.613 . Hence the absolute value of the $t$ for the date is highly greater than tabulated value at $5 \%$ level of significance for 14 degree of freedom. This figure indicates that share price of NSBL have increased significantly after dividend announcement. Similarly, the computed $t$-value for the four dates are also negative and their absolute value are greater than tabulated values, which shows that share prices have increased significantly after the declaration of dividend. In contrast the t-value for 2062-12-17 and 2065-11-10 which are less than tabulated value. This implies that there is no significant difference in the mean share prices before and after dividend declaration. From the above analysis, it is clear that there are four cases of share price increase among six cases.

### 4.1.3 Himalayan Bank Ltd. (HBL)

Table: 7
Data on Dividend Declaration and Share Price for HBL
The share HBL days after

| 2061-12-12 | Share Price In Rs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Before | 980 | 980 | 980 | 983 | 990 | 990 | 990 | 990 | 990 | 990 | 1000 | 991 | 997 | 994 | 988 |
| After | 600 | 630 | 661 | 694 | 728 | 806 | 805 | 807 | 807 | 809 | 806 | 805 | 810 | 810 | 810 |
| 2063-02-11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1059 | 1073 | 1090 | 1125 | 1155 | 1181 | 1174 | 1150 | 1118 | 950 | 900 | 880 | 865 | 870 | 860 |
| After | 870 | 873 | 880 | 895 | 896 | 891 | 890 | 890 | 890 | 895 | 887 | 890 | 883 | 887 | 891 |
| 2063-09-26 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1125 | 1126 | 1140 | 1140 | 1123 | 1100 | 900 | 910 | 945 | 942 | 950 | 951 | 945 | 943 | 940 |
| After | 940 | 940 | 940 | 935 | 935 | 930 | 920 | 935 | 950 | 950 | 945 | 952 | 972 | 1020 | 998 |
| 2064-10-28 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1220 | 1210 | 1190 | 1140 | 1140 | 1140 | 1140 | 1100 | 1105 | 1105 | 1100 | 1110 | 1110 | 1125 | 1130 |
| After | 1145 | 1150 | 1150 | 1150 | 1045 | 1025 | 985 | 980 | 1000 | 1010 | 1020 | 1020 | 1010 | 1010 | 970 |
| 2065-09-16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 2480 | 2500 | 2510 | 2560 | 2600 | 2728 | 2800 | 2790 | 2806 | 2840 | 2800 | 2880 | 2220 | 2180 | 2095 |
| After | 1995 | 1900 | 1812 | 1618 | 1730 | 1695 | 1710 | 1660 | 1550 | 1510 | 1480 | 1394 | 1366 | 1420 | 1430 |
| 2066-09-24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1999 | 1880 | 1886 | 1940 | 1945 | 1908 | 1900 | 1900 | 1880 | 1850 | 1830 | 1850 | 1840 | 1800 | 1800 |
| After | 1520 | 1465 | 1445 | 1415 | 1275 | 1235 | 1141 | 1137 | 1167 | 1190 | 1261 | 1337 | 1390 | 1441 | 1469 |

declaration of dividend is moving sometimes high and sometimes low. It is generally believed that price will increase in future after making the dividend paid. Market price in 2061, 2062 and 2064 after dividend payment is increasing but in 2065 and 2066 market price is decreased and 2063 market price is constant. All these explained information is of day 1.The following days follows the same options.
$\mathrm{H}_{0}$ : There is no effect of dividend declaration on share price.
$\mathrm{H}_{1}$ : Dividend declaration affects share price.

Table: 8
Presentation of $t$-value for HBL

| Date of Dividend <br> Declaration | Computed t-value | Tabulated t-value | Remarks |
| :--- | :--- | :--- | :--- |
| $2061-12-12$ | 12.563 |  |  |
| $2063-02-11$ | 4.381 | 2.145 | Significant |
| $2063-09-26$ | 2.151 |  | Significant |
| $2064-10-28$ | 8.483 |  | Significant |
| $2065-09-16$ | 12.542 |  | Significant |
| $2066-09-24$ | 14.955 |  | Significant |

The above table depicts the summarized results of paired $t$-test for six dates of dividend declaration of HBL.
The computed $t$-value on 2061, 2062, 2063, 2064, 2065 and 2066 are greater than tabulated value of $t$ at $5 \%$ level of significance. It implies that share prices have significantly decreased after the date of dividend announcement. This also shows that dividend announcement has a significant influence on share prices. Finally, the above analysis shows that there are negatively effects in HBL share price by dividend declarations.

### 4.1.4 NABIL Bank Ltd (NABIL)

Table: 9
Data on Dividend Declaration and Share Price for NABIL
Source:
Report
Broker's
Market
The share NABIL days after

| $\mathbf{2 0 6 2 - 0 1 - 2 7}$ | Share Price In Rs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Before | 805 | 800 | 751 | 751 | 751 | 755 | 760 | 762 | 770 | 804 | 806 | 806 | 805 | 807 | 812 |
| After | 810 | 810 | 820 | 815 | 815 | 815 | 815 | 815 | 827 | 815 | 835 | 855 | 875 | 901 | 916 |
| $\mathbf{2 0 6 2 - 0 9 - 2 5}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1201 | 1206 | 1217 | 1266 | 1280 | 1260 | 1270 | 1215 | 1200 | 1190 | 1190 | 1180 | 1180 | 1185 | 1180 |
| After | 1170 | 1170 | 1170 | 1172 | 1162 | 1160 | 1161 | 1163 | 1163 | 1160 | 1160 | 1164 | 1170 | 1170 | 1186 |
| $\mathbf{2 0 6 3 - 0 9 - 1 0}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 1660 | 1660 | 1650 | 1700 | 1631 | 1605 | 1611 | 1616 | 1615 | 1625 | 1670 | 1700 | 1750 | 1800 | 1800 |
| After | 1740 | 1732 | 1730 | 1720 | 1725 | 1735 | 1742 | 1740 | 1740 | 1745 | 1745 | 1750 | 1750 | 1757 | 1765 |
| 2064-07-21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 2170 | 2300 | 2300 | 2300 | 2300 | 2300 | 2301 | 2290 | 2290 | 2300 | 2300 | 2340 | 2340 | 2300 | 2320 |
| After | 2467 | 2575 | 3090 | 3150 | 2840 | 2840 | 2870 | 2850 | 2700 | 2810 | 3310 | 3310 | 3350 | 3400 | 3330 |
| 2065-06-21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 5775 | 5799 | 5800 | 5750 | 5900 | 6000 | 620 | 6425 | 6700 | 5000 | 5000 | 4900 | 4800 | 4710 | 4450 |
| After | 4255 | 4150 | 4160 | 4325 | 4300 | 4180 | 4190 | 4107 | 4000 | 4020 | 4020 | 4150 | 4233 | 4233 | 4250 |
| 2066-06-13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before | 5900 | 5830 | 5875 | 5800 | 5680 | 4000 | 4035 | 4100 | 4150 | 4000 | 3982 | 3951 | 3951 | 3940 | 4150 |
| After | 4100 | 4000 | 3980 | 3890 | 3754 | 3800 | 3856 | 3961 | 3926 | 2800 | 2675 | 2500 | 2643 | 3750 | 3775 |

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declaration of dividend is moving sometimes high and sometimes low. It is generally believed that price will increase in future after making the dividend paid. Market price in 2064 after dividend payment is increasing but in 2061, 2062, 2063, 2065 and market price is decreased. All these explained information is of day 1.The following days follows the same options.
$\mathrm{H}_{0}$ : There is no significant difference in the mean share prices before and after dividend declaration.
$\mathrm{H}_{1}$ : Share prices have increased or decreased significantly after dividend declaration.

Table: 10
Presentation of $\mathbf{t}$-values for NABIL

| Date of Dividend <br> Declaration | Computed <br> t-value | Tabulated t-value | Remarks |
| :--- | :--- | :--- | :--- |
| $2062-01-27$ | -7.108 | 2.145 | Significant |
| $2062-09-25$ | 4.778 |  | Significant |
| $2063-09-10$ | -4.506 |  | Significant |
| $2064-07-21$ | -9.605 |  | Significant |
| $2065-06-21$ | 7.531 |  | Significant |
| $2066-06-13$ | 5.479 |  | Significant |

As revealed by the above table, the computed $t$-value for the date 2062-09-25, 2065-06-21 and 2066-06-13 are 4.778, 7.531 and 5.479 which are highly greater than tabulated value i.e. 2.145 . This means that share price of NABIL have decreased significantly just after the date of dividend announcement. On the other hand, the computed $t$-values for the dates 2062-01-27, 2063-09-10 and 2064-07-21 are negative implying that share prices have increased significantly after dividend declaration dates.

Finally, the following table is designed in order to have a quick glimpse at the results of paired t -tests for all the sampled companies.

Table: 11
Presentation of Significant and Insignificant Cases

| S. No. | Companies | No. of <br> significant <br> Cases | No. of <br> Insignificant <br> Cases | Cases of <br> Increased <br> Share price | Cases of <br> Decreased <br> Share Price |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | SCBL | 4 | 2 | 2 | 2 |
| 2 | NIBL | 1 | 5 | - | 1 |
| 3 | NSBL | 4 | 2 | 4 | - |
| 4 | HBL | 6 | - | - | 6 |
| 5 | NABIL | 6 | - | 3 | 3 |
|  | Total | 21 | 9 | 9 | 12 |

As shown by the above table out of 30 cases of paired $t$-tests, 21 cases show date of dividend declaration has effect on share prices. However, 4 cases of paired t-test represent that dividend declaration has no effect on share prices and 9 cases have increased significantly after the announcement of dividend. On the other hand, 12 cases show that share prices have decreased significantly as result of dividend announcement.

The above results, on average, show that the share prices do not increase immediately after the dividend declaration, which may be due to signaling effect of dividend. However, this result supports the argument that share prices decline immediately after the dividend declaration.

### 4.2 Analysis of NRB's Directives and Share Price

This sub-section of this chapter aims to analyze the effect of two directives of Nepal Rastra Bank (NRB) on share prices of the sampled companies. In order to attain this objective, the same procedure as applied in the case of dividend declaration is followed. Herein, the two directives issued by NRB on 2062-05-07 and 2064-09-05 are taken into consideration for the analysis purpose. The directive issued on 2062-05-07 prescribes the terms and conditions for commercial banks to invest in shares and saving papers. Similarly, another directive has specified a minimum cash balance to be maintained by the commercial banks.

### 4.2.1 Analysis of Directive Issued on 2062-05-07 and Share Price

The following hypothesis has been developed and tested.
$\mathrm{H}_{0}$ : There is no difference in the mean share prices before and after the issuance of the directive.
$H_{1}$ : Share prices have increased or decreased significantly immediately after the issuance of the directive.

Table: 12
First Directive and $\mathbf{t}$-values

| S.N. | Companies | Computed t-value | Tabulated t-value | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| 1 | SCBL | 5.783 |  | 2.145 |
| 2 | NIBL | 9.732 |  |  |
| 3 | NSBL | 2.512 |  |  |
| 4 | HBL | 2.618 |  | Significant |
| 5 | NABIL | 4.286 |  | Significant |
|  |  |  |  | Significant |

## (Refer to Annex 1)

As revealed by the above table, the computed value of $t$ for five banks other than NIBL is highly greater than tabulated value of $t$ at $5 \%$ level of significance for 14 d.f. This implies that share prices of these banks have decreased significantly after the issuance of the directive.

### 4.2.2 Analysis of Directive Issued on 2064-09-05 and Share Price

$\mathrm{H}_{0}$ : There is no difference in the mean share prices before and after the issuance of the directive.
$\mathrm{H}_{1}$ : Share prices have increased or degreased significantly after the issuance of the directive.

Table: 13
Second Directive and $t$-values

| S.N. | Companies | Computed t-value | Tabulated t-value | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| 1 | SCBL | 5.788 |  |  |
| 2 | NIBL | 7.907 | 2.145 | Significant |
| 3 | NSBL | 3.065 |  | Significant |
| 4 | HBL | 7.970 |  | Significant |
| 5 | NABIL | 7.372 |  | Significant |

(Refer to Annex 1 )
The above table shows the summarized results of paired t-test accomplished for identifying the effect of the directive issued on 2064-09-05 on the share prices of the sampled companies. The computed t-value of all sampled banks is highly greater than
tabulated value of $t$ at $5 \%$ level of significance for 14 degrees of freedom. It implies that share prices have decreased significantly after the date of issuance of the directive.

### 4.3 Correlation Analysis

Correlation analysis helps to describe the degree to which one variable is linearly related to another. In other words, correlation analysis gives the extent to which the two variables correlate and the direction along which they move. Therefore, this statistical tool is applied here to find the linear relationship between MPS and various informational variables like EPS, DPS and ROE. The coefficient of determination is also used in explaining the variation in MPS due to the variation in independent variables such as EPS, DPS and ROE.

Table: 14
Correlation between MPS and Various Financial Indicators

| S.N. | Name of Company | EPS | DPS | ROE |
| :--- | :--- | :--- | :--- | :--- |
| 1. | SCBL | -0.364 | -0.809 | -0.527 |
|  |  | $\mathbf{( 0 . 1 3 2 )}$ | $\mathbf{( 0 . 6 5 4})$ | $\mathbf{( 0 . 2 7 8})$ |
| 2. | NIBL | 0.570 | -0.538 | 0.779 |
|  |  | $\mathbf{( 0 . 3 2 5 )}$ | $\mathbf{( 0 . 2 8 9 )}$ | $\mathbf{( 0 . 6 0 7 )}$ |
| 3. | NSBL | 0.822 | 0.005 | 0.802 |
|  |  | $\mathbf{( 0 . 6 7 5 )}$ | $(\mathbf{0 . 0 0 0})$ | $\mathbf{( 0 . 6 4 4 )}$ |
| 4. | HBL | 0.830 | 0.000 | 0.453 |
|  |  | $\mathbf{( 0 . 6 8 9 )}$ | $\mathbf{( 0 . 0 0 0}$ | $\mathbf{( 0 . 2 0 5 )}$ |
| 5. | NABIL | 0.080 | 0.659 | 0.166 |


|  |  | $\mathbf{( 0 . 0 0 6 )}$ | $\mathbf{( 0 . 4 3 5 )}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{( 0 . 0 2 8 )}$ |  |  |  |

Note: The figures in bracket with bold letter denote the coefficient of determination.
(Refer to Annex 4)
The above table depicts the relationship between MPS and various financial indicators for the sampled companies The Karl Pearson's coefficient between MPS and EPS of SCBL is -0.364 which means MPS of SCBL is inversely related to EPS. Such inverse relationship seems quite impracticable and impels us to conclude that MPS of SCBL does not depend on EPS. The coefficient of determination of SCBL is 0.132 . This implies that $13.2 \%$ variation in MPS is accounted for by the variation in EPS. However, such low value of R2 also suggests that there may be many other factors that affect MPS. Similarly, the correlation coefficients between MPS and EPS for NIBL, NSBL, HBL and NABIL are $0.570,0.822,0.830$ and 0.080 respectively. These figures also indicate that there exists positive relationship between MPS and EPS of these companies. The coefficients of determination of NIBL, NSBL, HBL and NABIL are $0.325,0.675,0.689$ and 0.006 respectively. It means $32.5 \%$ variation in MPS is explained by the variation in EPS of NIBL, $67.5 \%$ variation in MPS is explained by the variation in EPS of NSBL, $68.9 \%$ variation in MPS is explained by the variation in EPS of HBL and $0.06 \%$ variation in MPS is explained by the variation in EPS of NABIL. But such low values of R2 indicate that there may be many other factors other than EPS that meet MPS.

The fourth column of the above table represents correlation coefficients and coefficient of determination between MPS and DPS for all the sampled companies. The correlation coefficient between MPS and DPS of SCBL and NIBL are -0.809 and -0.538 which shows that each banks' variables moves in the opposite direction. The coefficient of determination of SCBL and NIBL are value of 0.654 and 0.289 implying that $65.4 \%$ and $28.9 \%$ variation in MPS are caused by the variation in DPS of both bank. The correlation coefficients between MPS and DPS of NSBL, HBL and NABIL are $0.005,0.000$, and 0.659 respectively. These figures suggest that an increase in DPS leads to increased in MPS. According to the arguments of Myron J. Gordon, such result is expected to happen in growth firms. The coefficient of determination between MPS and DPS of NSBL, HBL and NABIL are $0.000,0.000$ and 0.435 respectively. These figures indicate that, except the case of NABIL, DPS is no responsible in explaining the variation in MPS. The relationship between MPS and DPS is statistically significant at the level of $5 \%$ only for NABIL where as it is insignificant for the others.

As revealed by the above table, the correlation coefficients between MPS and ROE of NIBL, NSBL and HBL are $0.779,0.802$ and 0.453 respectively. These positive figures imply that an increase in ROE leads to an increase in MPS. Such result is expected to happen simply because ROE is the major indicator of the company's performance. The coefficients of determination of one banks is very low ( 0.205 for HBL) indicating that ROE is less responsible for explaining the variation in MPS and 0.607 for NIBL, 0.644 for NSBL. On the other hand, the correlation coefficient between MPS and ROE for SCBL and NABIL is negative implying that an increase in ROE leads to decrease in MPS. This result sounds quite ridiculous and impels us to conclude that MPS of these banks does not depend on ROE but moves randomly. The correlation coefficient between MPS and ROE is statistically insignificant at the level of $5 \%$ for all the sampled banks.

### 4.4 Regression Analysis

As stated in the earlier chapter, regression analysis helps to establish the functional relationship between the dependent and independent variables and thereby provides a mechanism for prediction or estimation. The functional relationship so obtained from the regression analysis is useful not only for estimating but also for identifying cause and effect relationship between the variables. Therefore, simple regression analysis is performed here in order to determine the separate effect of EPS, DPS and ROE on MPS of the sampled companies.

### 4.4.1 The Regression Equation of MPS on EPS (MPS = a+b EPS)

Table: 15
The Regression Equation on EPS

| S.N. | Company | Regression Coefficient |  | SE of b | $\mathbf{r}^{2}$ | SEE | F | Significance F |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | constant (a) | Slope (b) |  |  |  |  |
| 1 | SCBL | 8647.639 | -25.236 | 37.325 | 0.132 | 1992.48191 | 0.457 | 0.547 |
| 2 | NIBL | 12.893 | 29.459 | 24.489 | 0.325 | 583.06646 | 1.447 | 0.315 |
| 3 | NSBL | -163.325 | 46.896 | 18.787 | 0.675 | 421.21966 | 6.231 | 0.088 |
| 4 | HBL | -2196.497 | 63.199 | 24.535 | 0.689 | 297.36350 | 6.635 | 0.082 |
| 5 | NABIL | 2652.249 | 9.726 | 69.605 | 0.006 | 2046.50790 | 0.020 | 0.898 |

## (Refer to Annex 5 )

The above table depicts the summarized results of the regression analysis of MPS on EPS of the sampled companies. The regression coefficient (b) of SCBL is -
25.236 which implies that one rupee increase in EPS leads to the average of about 25.236 decreases in MPS. But such result is unreasonable in practice. However, the standard error of $b$ explains that the value of $b$ may vary by Rs. 37.32. The regression constant (a) of SCBL is 8647.639 which indicate that MPS should not fall below that level even if EPS is omitted from the model. The estimation of MPS may vary be Rs. 1992.48 as the standard error of the model for SCBL explains it. Since the significant value of F for SCBL at 0.547 is greater than 0.05 , the relationship between MPS and EPS as explained by the model is statistically insignificant.

The coefficient of regression (b) of NIBL, NSBL, HBL and NABIL are positive at 29.459, 46.896, 63.199 and 9.726 respectively, which indicate that an increase in EPS by a rupee leads to an increase in MPS by Rs. 29.459, 46.896, 63.199 and 9.726. The regression constant NSBL is -163.325 which implies that the value of MPS does not go below that level even if EPS is zero. However, the value of MPS is always greater than zero in practice. Furthermore, 421.21966 value of the standard error of estimate for NSBL implies that the estimation of MPS might be inaccurate by that amount. The value of significant F of NSBL is 0.088 which is greater than 0.05 . It indicates that the relation explained by the regression model is statistically insignificant.

### 4.4.2 The Regression Equation of MPS on DPS (MPS=a+b DPS)

Table: 16
The Regression Equation of MPS on DPS

| (Refer to Annex | S.N. | company | Regression Coefficient |  | SE of b | $\mathrm{r}^{2}$ | SEE | F | Significance F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Constant (a) | Slope (b) |  |  |  |  |  |
| The above table |  |  |  |  |  |  |  |  |  |
| results of | 1 | SCBL | 9186.589 | -45.811 | 19.269 | 0.654 | 1257.32742 | 5.682 | 0.097 |
| analysis of MPS | 2 | NIBL | 2144.740 | -47.642 | 43.144 | 0.289 | 598.59237 | 1.219 | 0.350 |
| the sampled | 3 | NSBL | 1104.269 | 0.642 | 70.339 | 0.000 | 738.87060 | 0.000 | 0.993 |
| The regression | 4 | HBL | 1499.756 | 0.013 | 32.040 | 0.000 | 532.91649 | 0.000 | 1.000 |
|  | 5 | NABIL | -408.826 | 43.777 | 28.809 | 0.435 | 1543.38681 | 2.309 | 0.226 |

shows the regression on DPS for companies. coefficient negative with a value of -45.811 . This implies that one rupee increase in DPS leads to decrease in MPS by Rs. 45.811 on average. However, standard error of b indicated that it may vary Rs. 19.269. Theoretically, it is argued that there should be positive relationship between MPS and DPS in the long run. However, in short run, it is asserted that MPS should decline by the equal mount of dividend paid as SCBL analysis. The regression constant (a) of SCBL is 9186.589 . This means MPS of SCBL does not go below that level even if DPS is zero. But in practice it is found that MPS is always greater than 0 . The estimation of MPS may vary by Rs.
1257.32742 as the standard error of model for SCBL explains it. The significant value of F, i.e. 0.097 for SCBL is grater than 0.05 . It implies that the relation of MPS with does is not statistically significant.

On the other hand, the regression coefficient (b) of NIBL is -47.642. It means MPS is inversely related to EPS of the respective companies. In other words, an increase in DPS by one rupee causes MPS to decrease by Rs. 47.642 . However, the standard errors of $b$ indicate that the values of $b$ may vary by Rs. 43.144. Similarly, the estimation of MPS may differ by Rs. 598.592 for NIBL. As explained by the value of the significant F, the relation between MPS and DPS is significant at the level of 5\% only in the case of NIBL whereas the relation is insignificant.

### 4.4.3 The Regression Equation of MPS on ROE (MPS=a+b ROE)

Table: 17
The Regression Equation of MPS on ROE

| (Refer to Annex 7 | S.N. | Company | Regression Coefficient |  | SE of b | $\mathrm{r}^{2}$ | SEE | F | Significance F | ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| As revealed by the the regression |  |  | Constant (a) | Slope (b) |  |  |  |  |  | above table, |
|  | 1 | SCBL | 21725.319 | -491.156 | 457.410 | 0.278 | 1817.90580 | 1.153 | 0.362 | NABIL are |
|  | 2 | NIBL | -2537.394 | 168.875 | 78.420 | 0.607 | 444.91980 | 4.637 | 0.120 | NABIL are - |
| 1.156 and | 3 | NSBL | -354.249 | 92.215 | 39.619 | 0.644 | 441.10910 | 5.417 | 0.102 | 227.769 |
| respectively. Thi | 4 | HBL | -613.740 | 89.383 | 101.555 | 0.205 | 475.09580 | 0.775 | 0.444 | means MPS of |
| both the | 5 | NABIL | 11154.837 | -227.769 | 779.166 | 0.028 | 2024.52556 | 0.085 | 0.789 | companies is |

such result is absolutely ridiculous in practice. Such result is expected to happen in practice simply because ROE is the major indicator of a company's performance. The values of b for SCBL and NABIL may differ by Rs. 457.410 and Rs. 779.166 respectively as it is explained by the standard error of $b$. The values of $b$ for SCBL and NABIL may differ by Rs. 457.410 and Rs. 779.166 respectively as it is explained by the standard error of $b$. The regression constants of SCBL and NABIL are 21725.319 and 11154.837. These figures suggest that MPS of these companies does not go below that level even if ROE is zero. IT implies that MPS is never found in practice. The values of SEE suggest that the estimation of MPS may vary by Rs. 1817.90580 for SCBL and by Rs. 2024.52556 for NABIL.

On the other hand, NIBL, NSBL and HBL have negative value of regression constants indicating that ROE has positive impact on MPS. Likewise regression constants for NIBL, NSBL and HBL are $-2537.394,-354.249$ and -613.740 respectively. The estimation of MPS through the use of the regression model might be inaccurate by Rs. 444.92, Rs. 441.11 and Rs. 475.10 for NIBL, NSBL and HBL respectively.

Since the values of significant F of the sampled banks are greater than 0.05 , the relation established by the model is statistically insignificant at the level of $5 \%$. Therefore, it can be concluded that the relation between MPS and ROE is not justifiable.

### 4.5 Multiple Regression Analysis

In multiple regression analysis two or more independent variables are used to estimate the values of a dependent variable. In other words, multiple regression analysis helps to establish the functional relationship between more than two variables and thereby provides a mechanism for estimation. However, multiple regression analysis is applied here in order to analyze the combined effect of EPS, DPS and ROE on MPS of the sampled companies.

### 4.5.1 The Multiple Regression Equation for SCBL: (MPS $=\mathbf{a}+\mathbf{b}_{1}$ EPS $+\mathbf{b}_{2}$ DPS $+\mathbf{b}_{3}$ ROE)

Table 18
The Multiple Regression Equation for SCBL

| (Refer | Description | $\mathbf{a}_{1}$ | $\mathrm{b}_{1}$ | $\mathrm{b}_{2}$ | $\mathrm{b}_{3}$ | $\mathbf{r}^{2}$ | S.E.E | F value | Significant$\mathbf{F}$ | Annex 8 ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| The above depicts the | Coefficient Values | 5472.442 | 29.312 | -64.179 | 33.266 | 0.744 | 1872.74119 | 0.971 | 0.615 | table <br> results of regression |
| multiple analysis | Standard error | $\begin{aligned} & 20177.03 \\ & 2 \end{aligned}$ | 49.874 | 48.075 | 650.946 |  |  |  |  |  |
| accomplished | t-values | 0.271 | 0.588 | -1.335 | 0.051 |  |  |  |  | for |
| combined | Significant-t | 0.831 | 0.662 | 0.409 | 0.967 |  |  |  |  | effect of |

EPS, DPS and ROE on MPS of SCBL. The regression coefficient $b_{1}$ represents that one rupee increase in EPS leads to an average increase in MPS by Rs. 29.312 if the other two variables i.e. DPS and ROE are kept constant. However, the value of b1 may vary by Rs. 49.874 as it is explained by the standard error of b1. The value of $b 1$ is statistically insignificant at $5 \%$ as the t-test reveals it. Similarly, the regression coefficient $b_{2}$ measures the average effect of DPS on MPS. The value of $b_{2}$ being -64.179 indicates that an increase in DPS by rupee one leads to a decrease in MPS by Rs. 64.179 , holding the two other variables constant. The value of $b_{2}$ is not justifiable as the significant value of i.e. 0.409 is highly greater than 0.05 . Likewise, the coefficient $b_{3}$ measures the average effect of ROE on MPS. The value b3 which is equal to 33.266 indicates that an increase in ROE by $1 \%$ causes MPS to increase by Rs. 33.266 if the two other variables are kept constant. The regression constant (a) of SCBL is 5472.442 which imply that MPS does not go below that level even if EPS, DPS, and ROE are omitted form the model. The coefficient of determination $\mathrm{r}^{2}$ explains that $74.4 \%$ variation in MPs is accounted for by the variations in EPS, DPS and ROE. The estimation of MPS might be inaccurate by Rs.1872.74119 as the standard error of explains it. The value of significant F is 0.615 which is greater than 0.05 . Therefore, the relationship established by the model is insignificant at $5 \%$ level of significance.

### 4.5.2 The Multiple Regression Equation for NIBL: (MPS=a+b $\mathbf{b}_{1}$ EPS $+\mathbf{b}_{2}$ DPS+ $\mathbf{b}_{3}$ ROE)

Table 19
The Multiple Regression Equation of NIBL

| Description | $\mathbf{a}_{1}$ | $\mathrm{b}_{1}$ | $\mathrm{b}_{2}$ | $\mathrm{b}_{3}$ | $\mathbf{r}^{2}$ | S.E.E | F value | Significant <br> F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coefficient Values | -2348.891 | -27.165 | -30.430 | 235.456 | 0.731 | 637.57360 | 0.906 | 0.629 |
| Standard error | 3566.705 | 53.817 | 52.648 | 216.665 |  |  |  |  |
| t-values | -0.659 | -. 505 | -0.578 | 1.1087 |  |  |  |  |
| Significant-t | 0.629 | 0.702 | 0.666 | 0.474 |  |  |  |  |

The above table shows the outcomes of multiple regression analysis for NIBL. The regression coefficient $b_{1}$ is -27.165 which implies that one rupee increase in EPS leads to the average of about Rs. 27.165 decrease in MPS if the two other variables are kept constant. However the standard errors of b1might vary by Rs. 53.817. The value of $b_{1}$ is statistically insignificant at $5 \%$ as the $t$-test shows it. The regression coefficient $b_{2}$ is -30.430 which indicates that one rupee increase in DPS leads to a decrease in MPS by Rs. 30.430, holding the two other variables constant. Similarly, the regression coefficient $b_{3}$ measures the average effect of ROE on MPS. The value of $b_{3}$ is positive at 235.456 and thus explains that $1 \%$ increase in ROE also increases MPS by Rs. 235.456 if the other two variables are kept constant. The regression constant (a) with the value of -2348.891 indicates that MPS does not go below that level even if EPS, DPS and ROE have values of zero. However negative MPS is ridiculous in practice. The coefficient of determination ( $\mathrm{R}^{2}$ ) explains that $73.1 \%$ variation in MPS is caused by the variation in EPS, DPS and ROE respectively, whereas $26.9 \%$ variation in MPS is due to other extraneous factors. The standard error of estimate of that model reveals the fact that the estimation of MPS may vary by Rs. 637.57360 . The regression model is statistically insignificant at $5 \%$ level of significance as the F-test reveals it.

### 4.5.3 The Multiple Regression Equation of NSBL: (MPS $=\mathbf{a}+\mathbf{b}_{1} \quad \mathbf{E P S}+\mathbf{b}_{2} \mathbf{D P S}+\mathbf{b}_{3}$ ROE)

Table 20
The Multiple Regression Equation of NSBL

| Description | $\mathbf{a}_{\mathbf{1}}$ | $\mathbf{b}_{\mathbf{1}}$ | $\mathbf{b}_{\mathbf{2}}$ | $\mathbf{b}_{\mathbf{3}}$ | $\mathbf{r}^{\mathbf{2}}$ | S.E.E | F value | Significant F |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Coefficient <br> Values | -519.961 | 46.064 | -79.890 | 43.798 | 0.965 | 238.54122 | 9.261 | 0.236 |
| Standard error | 468.501 | 61.612 | 27.716 | 126.082 |  |  |  |  |


| t-values | -1.110 | 0.748 | -2.882 | 0.347 |
| :--- | :--- | :--- | :--- | :--- |
| Significant-t | 0.467 | 0.541 | 0.213 | 0.787 |

As shown by the above table, the regression coefficient $b_{1}$ is 46.064 which imply that one rupee increase in EPS leads to an increase in MPS by Rs. 46.064 on average if DPS and ROE are kept constant. The value of $b_{1}$ may vary by Rs. 61.612 as the standard error of $b_{1}$ explains it. However, the prediction of $b_{1}$ is insignificant at the level of $5 \%$. Similarly, the regression coefficient $b_{2}$ is -79.890 on averages if EPS and ROE are constant. The significant value of $t$ for $b 2$ is 0.213 which is greater than 0.05 . Therefore, the prediction of $b_{2}$ is statistically insignificant. Likewise, the coefficient $b_{3}$ explains the average effect of ROE on MPS. The value of $b_{3}$ being 43.798 indicates that $1 \%$ increase in ROE leads to the average of about Rs. 43.798 increases in MPS if the other two variables are kept constant. The standard error of $b_{3}$ explains that $b_{3}$ may differ by Rs. 126.042. The regression constant (a) of NSBL is -519.961 which imply that MPS does not go below that level even of EPS, DPS and ROE are omitted form the model. However negative MPS is not in practice. The value of 'a' is statistically significant at the level of $5 \%$. The coefficient of determination $\left(\mathrm{R}^{2}\right)$ is 0.965 it implies that $96.5 \%$ variation in MPS is explained by the three variables of the model. The standard error of the model is very low with a value of 238.5412 . This indicates that the estimation of MPS may be closer to the reality. Since the significant value of $F$ i.e. 0.236 is greater than 0.05 , the relationship established by the model is insignificant at the level of $5 \%$.

### 4.5.4 The Multiple Regression equation for HBL: (MPS=a+b $\mathbf{b}_{1}$ EPS+ $\mathbf{b}_{2}$ DPS+ $\mathbf{b}_{3}$ ROE)

Table 21

The Multiple Regression Equation for HBL

| Description | $\mathbf{a}_{\mathbf{1}}$ | $\mathbf{b}_{\mathbf{1}}$ | $\mathbf{b}_{\mathbf{2}}$ | $\mathbf{b}_{\mathbf{3}}$ | $\mathbf{r}^{\mathbf{2}}$ | S.E.E | $\mathbf{F}$ <br> $\mathbf{v a l u}$ <br> $\mathbf{e}$ | Significant <br> $\mathbf{F}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Coefficient <br> Values | -942.216 | 129.089 | 12.988 | -226.288 | 0.887 | 310.13487 | 2.619 | 0.420 |
| Standard <br> error | 2464.308 | 73.766 | 48.051 | 285.228 |  |  |  |  |
| t-values | -0.382 | 1.750 | 0.270 | -0.793 |  |  |  |  |
| Significant-t | 0.768 | 0.331 | 0.832 | 0.573 |  |  |  |  |

The above table depicts the summarized results of multiple regression analysis accomplished for determining the combined effect of EPS, DPS and ROE on MPS of HBL. The regression coefficient $b_{1}$ is 129.089 . It means MPS of HBL is positive related to EPS. Furthermore, it indicates that an increase in EPS by rupee one leads to a increase in MPS by Rs.
129.089 on average if the two other independent variables are kept constant. The predictions of b1might vary by Rs. 73.766 as the standard error of it explains. Similarly, the coefficient $b_{2}$ with a value of 12.988 implies that an increase in DPS by rupee one leads to an increase in MPS by Rs. 12.988 on average if the rest two variables are constant. However the value of $b_{2}$ may vary by Rs. 48.051. On the other hand, the coefficient $b_{3}$ is negative indicating that there is inverse relationship between MPS and ROE. The relationship also sounds ridiculous simply because ROE is the major indicator of a company's performance and efficiency. However the value of b3 might differ by Rs. 285.228 as the standard error describes it. The regression constant (a) of HBL is 942.216 which represent the average level of MPS when EPS, DPS and ROE have a value of zero. But the standard of 'a' implies that the value varies substantially. The coefficient of determination ( $\mathrm{R}^{2}$ ) explains that $88.7 \%$ variation in MPS is due to other extraneous factors. The value of significant F i.e. 0.420 is greater than 0.05 . Therefore the relationship as explained by the model is insignificant at the level of $5 \%$.

### 4.5.5 The Multiple Regression Equation for NABIL: (MPS $=\mathbf{a}+\mathbf{b}_{1}$ EPS $+\mathbf{b}_{2}$ DPS $+\mathbf{b}_{3}$ ROE )

Table 22
The Multiple Regression of NABIL

| Description | $\mathbf{a}_{\mathbf{1}}$ | $\mathbf{b}_{\mathbf{1}}$ | $\mathbf{b}_{\mathbf{2}}$ | $\mathbf{b}_{\mathbf{3}}$ | $\mathbf{r}^{\mathbf{2}}$ | S.E.E | $\mathbf{F}$ <br> value | Significant F |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Coefficient <br> Values | -11146.2 | - |  |  |  |  |  |  |
| -173. | 108.253 | 769.779 | 0.867 | 1298.22253 | 2.168 | 0.454 |  |  |
| Standard <br> error | 20336.984 | 102. <br> 684 | 44.599 | 815.827 |  |  |  |  |
| t-values | -0.548 | - <br> 1.68 <br> 7 | 0.2427 | 0.944 |  |  |  |  |
| Significant-t | 0.681 | 0.34 <br> 1 | 0.249 | 0.518 |  |  |  |  |

As shown by the table, the regression coefficient $b_{1}$ is negative at -173.213, which indicate that one rupee increase in EPS leads an average of about Rs. 173.213 decrease in MPS if the two variables independent variables are kept constant. Such result is ridiculous. However, the value of $\mathrm{b}_{1}$ may vary by Rs. 102.684 as the
standard error explains it. The significant value of $t$ for $b_{1}$ is 0.314 which is greater than 0.05 . Therefore, it is insignificant at the level of $5 \%$. Similarly, the regression coefficient $b_{2}$ measures the average effect of DPS on MPS. The value of $b_{2}$ being 108.253 implies that an increase in DPS by rupee one leads to a increase in MPS by Rs. 108.253 if the two other independent variables are kept constant. Likewise, the regression coefficient $b_{3}$ with a value of 769.779 explains that one percent increase in ROE leads to a increase in MPS by Rs. 769.779 if DPS and EPS are kept constant. The values of both $b_{2}$ and $b_{3}$ are statistically insignificant at the level of $5 \%$. On the other hand, the regression constant (a) is -11146.2 implying that MPS of NABIL does not go below that level even if EPS, DPS and ROE are equal to zero. The coefficient of determination $R^{2}$ explains that $86.7 \%$ variation in MPS may vary by Rs. 12980.22 as the standard error of estimate of the model explains it. The relationship as explained by the model is statically insignificant at the level of $5 \%$ because significant value of i.e. 0.454 is greater than 0.05 .

### 4.6 Major Findings

The findings based on the above analysis are presented as follows:

1. Among six cases of paired t -test carried out for SCBL, there are four significant cases, which imply that there is significant difference in the mean share price immediately after dividend declaration. Moreover, there are two significant cases of share price decrease among four significant cases.
2. Only one case of paired t-test of NIBL shows that share price differs significantly immediately after dividend declaration. However, five case shows that there is no effect of dividend declaration on share price. Moreover, there is one significant and the cases of share price decrease.
3. Out of six cases of paired $t$-tests carried out for NSBL, there are also four significant cases, which indicate that share prices have either increased or decreased after dividend declaration.
4. Six cases out of six cases of pair t-tests carried out for HBL shows that there is significant difference in the mean share price immediately after dividend declaration.
5. In the case of NABIL, out of six cases of pair t-test, all cases are found significant. Furthermore there are three significant cases of share price increases and three case of share price decrease.
6. According to the result of paired $t$-tests carried out for analyzing NRB's directives issued in 2062-05-07 and share price, it is found that share prices of all sampled banks SBSL, NIBL, NSBL, HBL and NABIL have decreased significantly immediately after the issuance of the directive.
7. According to the result of paired $t$-tests carried out for analyzing NRB's directive issued in 2064-09-05 and share price, it is found that share prices of the sampled banks again have decreased significantly after the issuance of the directive.
8. MPS of SCBL is negatively correlated with EPS, DPS and ROE. The relationship is statically insignificant at the level of $5 \%$.
9. MPS of NIBL is positively correlated with EPS and ROE respectively but negatively correlated with DPS. However the relationship is statistically insignificant at the level of 5\%.
10. MPS of NSBL is also positive correlated with EPS, DPS and ROE. However, the relationship of MPS with DPS is significant at the level of $5 \%$ in the case of NSBL.
11. HBL's MPS has positive relationship with EPS and ROE but relationship with DPS shows zero, that is no relationship with DPS in MPS for HBL. However, the relationship is statistically insignificant level of $5 \%$ in the case of HBL.
12. There is positive relationship between MPS and EPS as well DPS of NABIL, which is statistically insignificant at the level of 5\%. However, its MPS has insignificant negative relationship with EPS.
13. The regression analysis of MPS on EPS of NSBL and HBL shows positive regression coefficient and negative constant term. It implies an increase in EPS leads to an increase in MPS but MPS should not go below Rs. 163.625 for NSBL and 2196.49 for HBL to maintain positive value. The relation so explained by the regression is statistically insignificant of all sampled banks at level of 5\%.
14. The relationship between MPS and DPS as explained by the simple regression analysis are significant at the $5 \%$ level all sampled banks. Therefore, the model explains that all sampled banks' MPS are not depends upon DPS.
15. According to the regression analysis of MPS on ROE, the regression coefficients of SBCL and NABIL are negative indicating that an increase in ROE also leads to decrease in MPS. But the relationship is not significant. On the other hand, the regression coefficient of NIBL, NSBL and HBL is positive. This relationship sounds quite ridiculous and contradictory.
16. According to the multiple regressions analysis of MPS on EPS, DPS and ROE, there is no significant relationship of MPS with EPS, DPS and ROE for SCBL, NIBL, NSBL, HBL and NABIL.

## CHAPTER -V

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary

The investment decision largely depends on the information about the performance of the company. In general, most investors prefer to buy shares of those companies whose earnings are very attractive. however, a rational investor analyzes not only earning but also various information regarding the companies' management and their dividend policy, economic situation, market conditions and many other factors before actually making an investment. Therefore, market price of shares moves in accordance with the type of information disseminated to the capital market.

Keeping the above facts in mind, the study has been undertaken with an aim of analyzing the effect of information on share price. More specifically, dividend declaration, earning, return on shareholders equity and NRB's directives have been assumed as informational variables and their effect on share price has been studied for the sampled companies. Five joint venture banks have been selected judgmentally as sample for the purpose of the study. The study has used secondary data and information obtained from various sources like financial reports, and broker's daily market report and web sites etc.

In order to determine the effect of dividend declaration on share price, share of regular 15 trading days before and after the date of dividend declaration have been taken into consideration and paired $t$ - test has been used in order to test the developed hypothesis. Moreover, correlation and regression analyses have been used to find the relationship between MPS and DPS. On the other hand, the paired t - test has also been applied in determining whether there is significant difference in the means share price immediately after the issuance of the NRB's directives. Herein, it has been assumed that no other important information flowed into the Nepalese capital during the periods taken into consideration for the study and volatility in share price of the sampled companies is due to dividend declaration or NRB's directives. In order to analyze the effect of EPS and ROE on MPS, Correlation and regression analysis of six years' data of the sampled companies are carried out. The computations of correlation and regression analysis have been made with an aid of SPSS computer program.

Finally, major finding based on the various analytical tools have been presented and the following conclusion is made.

### 5.2 Conclusion

The finding based on the paired t-test lead us to conclude that there is significant difference in the mean share mean share price immediately after the dividend declaration. Since there is no specific pattern or trend of share prices of the sampled companies, share prices may either increase or decrease immediately after dividend declaration. Similarly, it is found that volatility in share price is also caused by the macro-economic variable like NRB's directives. On the other hand, the finding based on the correlation and regression analysis, on average; indicate that there is no significant effect of EPS, DPS and ROE on MPS of the sampled companies. Likewise, the finding based in multiple regression analysis suggest that EPS, DPS and ROE on average, do not explain the variation in MPS of sampled companies.

### 5.3 Recommendations

Based on the above summary and conclusion, some recommendations are presented made which are as follows:

1. Since the study finds no specific trend in the changes in the share prices immediately after the dividend declaration, corporate bodies should educate the public investors about the real impact of dividend declaration on share prices. It can be done by organizing seminars, workshops and through other media and publications
2. The directives issued by NRB must be made available not only for the concerned corporate bodies but also for public investors. This can be done by publishing its directives in national newspapers, magazines etc.
3. Since the study finds no significant relationship between MPS and the major financial indicator, it is recommended that investor should not make their investments in shares without analyzing financial position of the corporate bodies.
4. A separate body made up of financial experts should be established to provide financial suggestions for public investors.

## BIBLIOGRAPHY

## Books

Adams, Everette and Ronald .J., (2000), "Production \& Operation Management," Prientice Hall of India Pvt. Ltd, New Delhi

Agrawal, Dr. G.R., (1975) 'Inventory Management and Control Techniques"
Agrawal, Dr. G.R., (2000), "Marketing in Nepal, Fundamental Management and Strategy", Educational Enterprises (P.) Ltd, Kathmandu,

Ahuja, K.K., (1993), 'Production Management", CBS Publishers and Distributors, Delhi
American Institute of Certified Public Accountants, (1961) "Accounting Resources and Terminology Bulletins," Final Edition New York

Baffa, Elood S., and Sarin, Rakesh K., (1998), " Modern Production/ Operation Management," John Lazley and Sons (Asia) Pvt. Ltd.

Bajracharya, Pusker M \& Shrestha, Durgesh Kumar; (1988), 'Production Management", Nutan Printing Press
Banargee, A.M. and Prasad Lallan, (1985) "Production Management" Sterling Publishers Pvt. Ltd.

Colin Drury, "Management and Cost Accounting", Thomson Learning, London, $5{ }^{\text {th }}$ Edition
Goel, B.S.; (1992), 'Production Management " Pragati Prakashan, Meerut
Gupta, S.C., "Fundamentals of Statistics", Himalayan Publishing House, 5 th Edition

Hading, G \& Whitin, T M; 'Analysis of Inventory System'', Eaglewood Diff, New Jersey Printer hall
Hampton, John J., (1998), 'Financial Decision Making: Concept, Problems and Cases'', Prentice Hall of India Pvt. Ltd. New Delhi

Jain, S P \& Narang, K L, (1988), 'Cost Accounting', Kalyani Publishers, New Delhi
Jain, S. P. \& Narang, K. L., (1997), "Advance Accountancy" Thirteenth Revised Edition, Kalyani Publisher New Delhi

Kirk, Patrick, Charles, A. and Levin, Richard, I., 'Quantitative Approach to Management'", Magrow Hill International Book Company, $4^{\text {th }}$ Edition

Kuchal, S. C., (1982), ''Financial Management," Chaitanya Publishing House, Allahabad, 8th Edition
Pandey I.M., (1989), 'Financial Management" ,Vikash Publishing House Pvt. Ltd. New Delhi,
Shrestha, K.N, and Manandhar, K.D., (2057), "Production and O peration M anagement", Kathmandu Valley Publishers

Weston, J. Fred \& Eugene F. Brigham, 'Essentials of Managerial Finance" Eleventh Edition, the Dryden Press

## Related Studies

Ballika, Radha Kumari, (2006), "A study on inventory Management in Hetauda Cement Industries Ltd", An unpublished Master's Dissertation, submitted to faculty of management, Central Department, TU Kirtipur

Baral , Puspa Raj, (1994), " Inventory Management "' A case study of Gandaki Noodles, An unpublished Master's Dissertation, submitted to faculty of Management, Central Department, TU Kirtipur

Dahal, Bishnu Prasad; (1999), ' 'Financial Analysis of Hetauda Textile Industry (HTI). "An unpublished Master's Dissertation, submitted to faculty of Management, Central Department, T U Kirtipur

Pokhrel, Dhruba Raj, (1992), " A study on Inventory Management in Janakpur Cigarette Factory" , An unpublished Master's Dissertation, submitted to faculty of Management, Central Department, TU Kirtipur

Shrestha, Surendra, (1988), 'Inventory Management, A Case Study of Gorkhapatra Corporation," An unpublished Master's Dissertation, submitted to faculty of Management, Central Department, T.U Kirtipur

Yadav, Surendra Prasad; (1999), "Inventory Management Manufacturing Public Enterprises, A case study of Janakpur Cigarette Factory Ltd.' An unpublished Master's Dissertation, submitted to faculty of Management, Central Department, T.U Kirtipur

## DATA on NRB Directives and share Price

Annex: 1
Date of Issuance of First NRB Directive: 2062-05-07

| Company | Share price in Rs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCBL | Before | 2422 | 2450 | 2525 | 2551 | 2540 | 2500 | 2490 | 2470 | 2490 | 2460 | 2450 | 2440 | 2440 | 2400 | 2375 |
|  | After | 2370 | 2370 | 2380 | 2372 | 2365 | 2350 | 2330 | 2330 | 2330 | 2365 | 2375 | 2375 | 2400 | 2406 | 2404 |
| NIBL | Before | 885 | 885 | 880 | 890 | 871 | 871 | 870 | 870 | 865 | 850 | 825 | 821 | 832 | 840 | 825 |
|  | After | 820 | 815 | 815 | 807 | 800 | 790 | 790 | 780 | 810 | 820 | 810 | 790 | 791 | 790 | 790 |
| NSBL | Before | 357 | 377 | 378 | 382 | 386 | 391 | 405 | 405 | 400 | 395 | 390 | 395 | 390 | 385 | 300 |
|  | After | 360 | 350 | 350 | 357 | 360 | 360 | 370 | 381 | 379 | 372 | 372 | 370 | 370 | 368 | 370 |
| HBL | Before | 961 | 970 | 980 | 1020 | 1000 | 1040 | 1040 | 1028 | 1002 | 980 | 980 | 1000 | 1032 | 1040 | 1030 |
|  | After | 990 | 985 | 986 | 980 | 976 | 970 | 965 | 976 | 1000 | 1000 | 1000 | 980 | 980 | 950 | 952 |
| NABIL | Before | 1605 | 1615 | 1635 | 1650 | 1675 | 1650 | 1640 | 1606 | 1605 | 1680 | 1679 | 1650 | 1634 | 1639 | 1600 |
|  | After | 1390 | 1600 | 1611 | 1615 | 1600 | 1580 | 1570 | 1585 | 1600 | 1600 | 1610 | 1610 | 1595 | 1580 | 1580 |

Date of Issuance of First NRB Directive: 2064-09-05

| Company | Share price in Rs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCBL | Before | 8250 | 7650 | 8150 | 8300 | 8450 | 8350 | 7938 | 8100 | 8300 | 8550 | 8605 | 8700 | 5010 | 5260 | 5260 |
|  | After | 5692 | 6261 | 6720 | 6750 | 6745 | 6562 | 6693 | 6301 | 6130 | 6060 | 5895 | 5778 | 5770 | 5250 | 4980 |
| NIBL | Before | 2375 | 2350 | 2380 | 2380 | 2350 | 2350 | 2473 | 2550 | 2610 | 2750 | 2791 | 2850 | 2830 | 2690 | 2600 |
|  | After | 2040 | 2200 | 2110 | 2068 | 1960 | 1862 | 1750 | 1650 | 1605 | 1600 | 1700 | 1870 | 1760 | 1755 | 1750 |
| NSBL | Before | 2160 | 2250 | 2300 | 2300 | 2300 | 2300 | 2300 | 2285 | 2300 | 2345 | 2388 | 2509 | 2660 | 2620 | 2590 |
|  | After | 2530 | 2400 | 2105 | 2315 | 2224 | 2002 | 1865 | 2256 | 2214 | 2070 | 2000 | 1810 | 1860 | 1970 | 2100 |
| HBL | Before | 2575 | 2540 | 2450 | 2480 | 2480 | 2500 | 2510 | 2560 | 2611 | 2728 | 2800 | 2790 | 2806 | 2840 | 2800 |
|  | After | 2220 | 2320 | 2180 | 2095 | 1985 | 1995 | 1900 | 1812 | 1707 | 1618 | 1730 | 1696 | 1710 | 1660 | 1550 |
| NABIL | Before | 5370 | 5500 | 5590 | 5600 | 5675 | 5725 | 5670 | 5350 | 5310 | 5340 | 5425 | 5500 | 5510 | 5399 | 5470 |
|  | After | 5400 | 5325 | 5199 | 5120 | 4950 | 5010 | 4910 | 4420 | 3685 | 4600 | 4508 | 4418 | 4418 | 4400 | 4510 |

Source: NRB Notice, Broker's Daily Market Report and www.nepalstock.com

## Nepal Standard Chartered Bank Ltd.

Date of Divided Declaration M 2061-09-24

| Before (x) | After (y) | Difference d $=(\mathrm{x}-\mathrm{y}$ ) | $\mathrm{d}^{2}$ |
| :---: | :---: | :---: | :---: |
| 1550 | 1545 | 5 | 25 |
| 1540 | 1571 | -31 | 961 |
| 1550 | 1570 | -20 | 400 |
| 1540 | 1580 | -40 | 1600 |
| 1545 | 1601 | -56 | 3136 |
| 1542 | 1635 | -93 | 8649 |
| 1541 | 1650 | -109 | 11881 |
| 1540 | 1640 | -100 | 10000 |
| 1535 | 1650 | -115 | 13225 |
| 1530 | 1655 | -125 | 15625 |
| 1520 | 1660 | -140 | 19600 |
| 1520 | 1655 | -135 | 18225 |
| 1520 | 1650 | -130 | 16900 |
| 1521 | 1650 | -129 | 16641 |
| 1525 | 1650 | -125 | 15625 |
|  |  | $\Sigma \mathrm{d}=-1343$ | $\Sigma \mathbf{d}^{2}=152493$ |
| $\bar{d}=\frac{\sum d}{n}=\frac{1343}{15}=-89.53$ |  |  |  |
| $S^{2}=\frac{1}{n-1}\left[\sum d^{2}-\frac{\left(\sum d\right)^{2}}{n}\right]=2303.5523$ |  |  |  |

Therefore, $\mathrm{S}=47.99$
Computed t-value $=\frac{\bar{d}}{s} \times \sqrt{n}=-7.2254$
Tabulated value at $5 \%$ level of significance for 14 degree of freedom $=2.145$
Decision: Since calculated value is more than tabulated value at $5 \%$ level of significance,
H 1 is accepted.

Note: In the case of other sampled banks, the sample process is followed.

## T-Test

Paired Samples Statistics

|  |  |  |  |  | Std. Error <br>  |
| :--- | :--- | :---: | ---: | ---: | :---: |
| Pair | Mean | N | Std. Deviation | Mean |  |
| 1 | After | 1534.6000 | 15 | 11.03112 | 2.84822 |

Paired Samples Correlations

|  | N | Correlation | Sig. |  |
| :--- | :--- | ---: | ---: | ---: |
| Pair 1 | Before \& After | 15 | -.757 | .001 |

Paired Samples Test

|  | Paired Differences |  |  |  |  | t | df | Sig. (2-tailed) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. Deviation | Std. Error Mean | 95\% C Interv Diffe | fidence of the nce |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| Pair 1 Before - A | -89.53333 | 47.99534 | 12.39234 | -116.112 | -62.95440 | -7.225 | 14 | . 000 |

## SUMMARY OF INFORMATION



## Standard Chartered Bank Nepal Ltd.

## Correlations

Correlations

|  |  | MPS | EPS | DPS | ROE |
| :--- | :--- | ---: | ---: | ---: | ---: |
| MPS | Pearson Correlation | 1 | -.364 | -.809 | -.527 |
|  | Sig. (2-tailed) |  | .547 | .097 | .362 |
|  | N | 5 | 5 | 5 | 5 |
| EPS | Pearson Correlation | -.364 | 1 | .710 | .516 |
|  | Sig. (2-tailed) | .547 |  | .179 | .373 |
|  | N | 5 | 5 | 5 | 5 |
| DPS | Pearson Correlation | -.809 | .710 | 1 | .689 |
|  | Sig. (2-tailed) | .097 | .179 |  | .198 |
|  | N | 5 | 5 | 5 | 5 |
| ROE | Pearson Correlation | -.527 | .516 | .689 | 1 |
|  | Sig. (2-tailed) | .362 | .373 | .198 |  |
|  | N | 5 | 5 | 5 | 5 |

## Regression MPS on EPS

Variables Entered/Removed

| Model | Variables <br> Entered | Variables <br> Removed | Method |
| :--- | :---: | :---: | :--- |
| 1 | EPS $^{\text {a }}$ |  | Enter |

a. All requested variables entered.
b. Dependent Variable: MPS

| Model Summary |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Model R R Square Adjusted <br> R Square <br> 1 $.364^{\mathrm{a}}$ .132 -.157 <br> the Estimate    |  |  |  |  |  |

a. Predictors: (Constant), EPS

a. Predictors: (Constant), EPS
b. Dependent Variable: MPS

## Coefficients ${ }^{\text {a }}$

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients |  |  |
| :--- | :--- | ---: | ---: | :---: | :---: | :---: |
| Model |  | t |  |  |  |  |
|  | B | Std. Error | Beta | t |  |  |
| 1 | (Constant) | 8647.639 | 5508.994 |  | 1.570 | .214 |
|  | EPS | -25.236 | 37.325 | -.364 | -.676 | .547 |

a. Dependent Variable: MPS

## Regression MPS on DPS

## Variables Entered/Removed'

| Model | Variables <br> Entered | Variables <br> Removed | Method |
| :--- | :---: | :---: | :--- |
| 1 | DPS $^{\text {a }}$ |  | Enter |

a. All requested variables entered.
b. Dependent Variable: MPS

Model Summary

| Model | R | R Square | Adjusted <br> R Square | Std. Error of <br> the Estimate |
| :--- | ---: | ---: | ---: | ---: |
| 1 | $.809^{\mathrm{a}}$ | .654 | .539 | 1257.32742 |

a. Predictors: (Constant), DPS

| ANOVA ${ }^{\text {b }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 8982113 | 1 | 8982113.294 | 5.682 | .097a |
|  | Residual | 4742617 | 3 | 1580872.235 |  |  |
|  | Total | 13724730 | 4 |  |  |  |

a. Predictors: (Constant), DPS
b. Dependent Variable: MPS

## Coefficients ${ }^{\text {a }}$

|  |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Model | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 9186.589 | 1855.387 |  | 4.951 | . 016 |
|  | DPS | -45.811 | 19.219 | -. 809 | -2.384 | . 097 |

a. Dependent Variable: MPS

## Regression MPS on ROE

## Variables Entered/Removed ${ }^{\text {d }}$

| Model | Variables <br> Entered | Variables <br> Removed | Method |
| :--- | :---: | :---: | :--- |
| 1 | ROE $^{\mathrm{a}}$ |  | Enter |

a. All requested variables entered.
b. Dependent Variable: MPS

## Model Summary

| Model | R | R Square | Adjusted <br> R Square | Std. Error of <br> the Estimate |
| :--- | ---: | ---: | ---: | ---: |
| 1 | $.527^{a}$ | .278 | .037 | 1817.90580 |

a. Predictors: (Constant), ROE

ANOVA ${ }^{\text {b }}$

| Model |  | Sum of <br> Squares | df | Mean Square | F | Sig. |
| :--- | :--- | :---: | ---: | :---: | :---: | :---: |
| 1 | Regression | 3810386 |  | 1 | 3810385.555 | 1.153 |
|  | Residual | 9914344 | 3 | 3304781.482 |  | $.362^{\text {a }}$ |
|  | Total | 13724730 | 4 |  |  |  |

a. Predictors: (Constant), ROE
b. Dependent Variable: MPS

## Coefficients ${ }^{\text {a }}$

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients |  |  |
| :--- | :--- | ---: | ---: | ---: | :---: | :---: |
| Model |  | B | S Std. Error | Beta | Sig. |  |
| 1 | (Constant) | 21725.319 | 15623.437 |  |  | .259 |
|  | ROE | -491.156 | 457.410 | -.527 | -1.074 | .362 |

a. Dependent Variable: MPS

## Regression MPS on EPS, DPS and ROE

Variables Entered/Removed

| Model | Variables <br> Entered | Variables <br> Removed | Method |
| :--- | :--- | :--- | :--- |
| 1 | ROE <br> DPS |  | Enter |

a. All requested variables entered.
b. Dependent Variable: MPS

Model Summary

| Model | R | R Square | Adjusted <br> R Square | Std. Error of <br> the Estimate |
| :--- | :--- | ---: | ---: | ---: |
| 1 | $.863^{\mathrm{a}}$ | .744 | -.022 | 1872.74119 |

a. Predictors: (Constant), ROE, EPS, DPS

| ANOVA ${ }^{\text {b }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 10217570 | 3 | 3405856.815 | . 971 | .615 ${ }^{\text {a }}$ |
|  | Residual | 3507160 | 1 | 3507159.555 |  |  |
|  | Total | 13724730 | 4 |  |  |  |

a. Predictors: (Constant), ROE, EPS, DPS
b. Dependent Variable: MPS

## Coefficients ${ }^{\text {a }}$

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients |  |  |
| :--- | :--- | ---: | ---: | :---: | ---: | ---: |
| Model |  | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 5472.442 | 20177.032 |  | .271 | .831 |
|  | EPS | 29.312 | 49.874 | .422 | .588 | .662 |
|  | DPS | -64.179 | 48.075 | -1.133 | -1.335 | .409 |
|  | ROE | 33.266 | 650.946 | .036 | .051 | .967 |

a. Dependent Variable: MPS


[^0]:    ${ }^{1}$ Ibid. p. 17

[^1]:    ${ }^{2}$ Shrestha, M.K. (2009), Why Share Market Inactive? Problem and Measures, Nepalese Management Journal, Management Day Souvenir.

[^2]:    ${ }^{3}$ Francis, Jack Clark (1997), Investments: Analysis and Management, New York: MC Graw Hill, p. 84
    ${ }^{4}$ Blake, David (1996), Financial Market Analysis, New York: Happer and Row Publishers, , p. 13

[^3]:    ${ }^{5}$ Ibid pp. 14-16
    ${ }^{6}$ Gitman, J. Lawerence (1988), Principle of Managerial Finance, New York: Harper Collins Publishers, pp. 31-32
    ${ }^{7}$ Nancy L. Jacob, R. Richardson Pettit, Investment Homewood III: Richard D. Irwin, Inc, 1984) pp. 6-7
    ${ }^{8}$ Sharpe, William F, Gordon , J. Alexander and Jeffery, V. Bailey (2001), Investments, New Delhi: Prentice Hall of India Ltd., pp. 1-6

[^4]:    ${ }^{9}$ Jones, Charles P. (1988), Investment Analysis and Management, New Delhi: John Willey and Sons, pp. 23-47
    ${ }^{10}$ Famma, Eugene F. (Jan. 1965), The Behavior of Stock Market Price, Journal of Business pp. 34-105

[^5]:    ${ }^{11}$ Khan, M.Y. Jain, P.K.(1992) Dividend Policy Decision: Financial Management Text and Problem, New Delhi: Mc Graw Hill Publishing Ltd., p. 543
    ${ }^{12}$ Ezra, Solomon (1963), The Theory of Financial Management, Colombia: Colombia University Press, p. 142

[^6]:    ${ }^{13}$ Pettit, R. Richard (Dec. 1972) "Dividend Announcement, Security Performance and Capital Market Efficiency", The Journal of Finance, Vol. XXVII, No. 5 pp. 993-1007

[^7]:    ${ }^{14}$ Kothari, C.R (1990), Research Methodology: Methods and Techniques, New Delhi: Wishwa Prakashan, p. 10

[^8]:    ${ }^{15}$ Gupta, S.P. (1997), Statistical Methods, New Delhi: Sultan Chand and Sons Publishers, pp. 7.3-7.5

