

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the study

Nepal is a landlocked and agricultural country which lies in South East Asia. Nepal is one of the least developed countries in the world with per capita income of US\$ 320. (Source: World Bank Report 2009). The problem of fulfilling basic needs poses a huge burden.

One of the functions of commercial bank is investment policy, which help to economic development of the country. The process of the economic development depends upon various factors, however economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development. Hence, investment policy is one such tool that helps for proper utilization of resources.

Nepalese capital market is in very early stage of development. There are various inconsistencies and hindrances exist on the way to run the market smoothly. The Nepalese capital market was established as security Market Center (SMC) in 1976. In 1984, the SMC was renamed as Security Exchange Center (SEC). After converting SEC into Nepal Stock Exchange (NEPSE) in 1993, it brought new atmosphere in Nepalese capital market. NEPSE is non-profit making organization. It is one and only secondary market for Nepalese corporate securities, operating under Security Exchange act 1983. NEPSE opened its trading floor on 13<sup>th</sup> January 1994 and started to calculate the NEPSE Index since 12<sup>th</sup> February 1994. NEPSE plays vital role for developing the efficient capital market. Managing public issue is one of the important roles of NEPSE.

Van Horne (1998) states that, when a company is formed, it obviously must be financed. Often the seed money comes from the founders and their families and

friends. For some companies, this is sufficient to get things launched and with retained earnings, no more equity is needed. In other situation equity infusions are necessary.

From above quotation, it is clear that when a large-scale firm is to be established it fulfills the financial requirement by the issue of equity share. There are some other sources available to raise fund. These sources are called financial instruments such as preferred stock, bond, debenture, rights share, derivatives etc. Among these alternatives this study is mainly focused on the impact of rights share offering in share price movement and its practice in Nepal.

Banking plays a significant role in the development of national economy as a financial institution through its primary function of borrowing and lending. Modern bank prefers varieties of function; therefore it is difficult to decide the function of a modern bank because of there complexity and versatility in operation. Various authors have defined the word "Bank" in different ways. "A commercial bank is dealer in money and it substitutes for money such a check or a bills of exchange, it also provides a variety of financial service." (The new Encyclopedia of Britannica, Vol. 4:1985; 600)

Only in 1990 A.D. after restoration of democracy, the government took the liberal policy in banking sector. As an open policy of Nepal Government to get permission to invest banking sector from private & foreign investor under commercial bank act 1975 AD., different private banks are getting permission to establish with the joint venture of other countries. The development of Commercial Banks in Nepal is categorized in three phases on the basis of financial institutions policies adopted by the country from time to time.

Now, there are 26 commercial banks in operation. Among them two are under government control and other 24 are non-government and joint venture banks. One of the most important achievements of the growth of commercial banks is domestic savings. JVB's gave a new horizon to the financial sector of the country. They were expected to bring the foreign capital, technology, experience, healthy competition, expertise and skills in Nepal.

The following table below shows in a chronological order a list of the licensed commercial banks and their branches operating in Nepal.

**Table No. 1.1**

**List of Licensed Commercial Banks**

<b>S.N.</b>	<b>Commercial Banks</b>	<b>Established</b>	<b>Head Office</b>
1.	Nepal Bank Ltd.	1937/11/15	Kathmandu
2.	Rastriya Banijya Bank	1966/01/23	Kathmandu
3.	Agricultural Development Bank Ltd.	1968/01/02	Kathmandu
4.	Nabil Bank	1984/07/16	Kathmandu
5.	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu
6.	Standard Chartered Bank	1987/01/30	Kathmandu
7.	Himalayan Bank Ltd.	1993/01/18	Kathmandu
8.	Nepal Bangladesh Bank	1993/06/18	Kathmandu
9.	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu
10.	Everest Bank Ltd.	1994/10/18	Kathmandu
11.	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu
12.	Nepal Credit and Commercial Bank	1996/10/14	Siddhartha Nagar
13.	Lumbini Bank Ltd.	1998/07/17	Narayanghat
14.	Nepal Industrial and Commercial Bank Ltd.	1998/07/02	Biratnagar
15.	Machhapuchhre Bank Ltd.	2000/10/03	Pokhara
16.	Kumari Bank Ltd.	2001/04/03	Pokhara
17.	Laxmi Bank Ltd.	2002/04/03	Birgunj
18.	Siddhartha Bank Ltd.	2002/12/24	Kathmandu
19.	Global Bank Ltd.	2007/01/02	Birgungj, Parsa
20.	Citizen Bank Ltd.	2007/06/21	Kathmandu
21.	Prime Bank Ltd.	2007/09/24	Kathmandu
22.	Sunrise Bank Ltd.	2007/10/12	Kathmandu
23.	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24.	Development Credit Bank Ltd.	2009/01/12	Kathmandu
25.	Nepal Merchant Bank Ltd.	2009/02/22	Kathmandu
26.	Kist Bank Ltd.	2009	Kathmandu
27.	Janata Bank Limited	2010	Kathmandu
28.	Mega Bank Limited	2010	kathmandu

**Source:** <http://brf.nrb.org.np>

## **1.2 Introduction of the Rights Issue**

Van Horne (2002) states that instead of selling a security issue to new investors, some firms offer the securities first to existing shareholders on a privileged subscription basis. Some time the corporate charter requires that a new issue of common stock or an issue of securities convertible into common stock be offered first to existing shareholder because of their preemptive rights.

Weston & Copeland (1992) states that, if the new common stocks are issued giving the rights to purchase first by the existing shareholders than it is called rights share offering. Each shareholder is issued an option to buy a certain number of new share and the terms of the option are contained on a piece of paper called rights. Each stockholder receives one rights for each shares of stock owned. So rights share issue is privileged given to the existing shareholders that helps them to keep their control position proportionately equal and the issuing price will also be lesser than the market price. This lower price would help to maximize the capital gain of the shareholders. Rights is the negotiable instruments. It has its expiration date. One of the advantages of rights share offering is the minimization of flotation cost. The procedure of rights share offering is similar to the non-rights issue.

Rights share issue practice in Nepal has no long history as compare to other developing country. While looking the issue approval from the SEBON of Nepal researcher can easily notice an increasing trend of issuing rights share. During the 14 years period, SEBON has granted rights issue approval amounting Rs. 11755.75 million. This amount comes to be the largest amount among various issue proved by SEBON. Rights issue occupied 50.58% of total issue approval out of total listed companies given the issue approval only 43 companies issues rights share to raise fund. In Nepal, Company act 1997 has provisioned about the preemptive rights of shareholders in the section 42 (4). It stated that if the rights is contained in a firm's charter then the firm must offer common stock to existing shareholders. If not the company has choice of rights share offering or public offering. But the law in India required that new common stock must be first issued

to the existing shareholders on a pro rata basis. In India rights is a negotiable but in Nepal there has not been any provision here to make the rights negotiable.

This study is mainly focused on impact of rights issue in share price movement in the context of Nepalese commercial banks and the practice of rights issue in Nepal as well.

### **1.3 Statement of the Problem**

Rights share offering is a way of raising fund. An existing shareholder is entitled to have a proportion number of new shares at pre stated price, which is somewhat lower than the market price of share. But to buy additional number of shares, the shareholder should have his name in company book before record date. If one shareholder purchases shares after record date he has no rights to buy the additional number of shares. So, before record date there is high demand of shares in secondary market. Demand of shares increased because people rush to the secondary market in order to enlist their name in the company's book, before the record date. No doubt the price of the new share is also lower than market price. On the other side the existing shareholder generally have no willingness to sell the shares to exercise the rights. Due to this double pressure the price of share goes upward.

On the other side theoretically, after announcement of rights share offering, the price of the share should be change. Similarly after exercise of the rights share, the price of the share should be declined by its value of rights. But findings on the price effect of rights offering on market price of stock are inconsistent. Findings are different in different research conducted by researchers. Dolley (1934), in his study he concludes that in two out of three cases the market value of stock ex-rights plus the market value of the rights share will be greater on record date than the last preceding quotation on the stock rights-on. Most stock going ex-rights, fail to decline in market value by full value of rights. In last he said that investor is about as likely to lose, as he is to gain if he sells his stock at the announcement

date and buys it back just prior to the record date. But he didn't explain what should be the actual share price before and after the announcement of rights offering in his study. Likewise, the result of Nelson (1980) indicates that there is a significant drop in the market price associated with the announcement of rights offering. The evidence is inconclusive, however, for at least three different reasons. To begin with, the price effect could be attributable to announcements about earnings, dividends or other events. Second, the study did not focus on the announcement date but considered the date of record and dates six months prior and subsequent. Lastly, in adjusting for the market, all securities were assumed, implicitly, to be identical to each other and hence to market. In these study researchers did not explain, whether sample companies followed the theory of rights offering or not. So here the main problem of the study is to identify whether the price behavior of sample companies meets the theory or not which is not proved in previous studies in context of Nepal.

While offering the rights share there is another problem of under subscription arises. Due to the lack of instrument of rights transfer, there arise a problem of under subscription of rights share and finally this absence deprives the existing shareholders from enjoying the choice of selling the rights.

Beside this, there are other problem regarding rights offering in Nepal like, no company can issue their rights share at discount and premium thus all companies are issuing rights share in par value, it causes vast deviation between market price per share and subscription price per share. It deals with the following issues:

- What will happen in the share price movement after announcement of rights share?
- What are prospects of issuing the rights share in Nepalese capital market?
- Is there, any problem regarding rights share issue practice in Nepalese capital market?

## **1.4 Objectives of the Study**

The main objectives of this study are to examine the rights share practice and its impact on share price movement of commercial banks in Nepal. The study covers two aspects of rights issue (a) the characteristics of rights offering by the commercial banks (b) the share price movement associated with the rights offering. To achieve this basic objective, the following specific objectives have also been considered in this study:

- a. To study and examine movement in stock price before and after the announcement of rights issue.
- b. To analyze the procedure of rights issue in the context of Commercial Bank of Nepal.
- c. To analyze practices, problems and prospects of rights issue in Nepal.
- d. To provide the corrective measures to all concerned on the basis of the findings of this study.

## **1.5 Significance of the Study**

The proper mobilization and utilization of domestic resources become indispensable for any developing country aspiring for a sustainable economic development and there is no doubt that commercial banks have a vital role in the collection of dispersed small saving of the Nepalese people and transforming them into meaningful capital investment. The success and prosperity of the bank relies heavily upon the successful investment of collected resources to the important sectors of economy. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of commercial banks. Good investment policy has a positive impact on economic development to the country and vice-versa. So, the investment policy of commercial banks should be in accordance with the spirit of economic enlistment of the people.

As mentioned above, there are many loopholes in the investment policies of commercial banks of Nepal which affects their performance to the great extent. It

becomes every body's concern when their performance doesn't see so satisfactory in terms of utilizing its resource efficiently in productive sectors. The study of commercial banks investment policy focusing on interest rate structure, portfolio management and credit management will strive to disclose the internal weakness and furnish the ideas for improvement. Therefore, the researcher has undertaken the study to analyze the existing investment policy of commercial banks and point out the defects inherent in it and provide package of suggestions for its improvement.

### **1.6 Focus of the Study**

This study is concern with the rights share practice and its impact on share price movement of commercial banks in Nepal.

Basically this study has been focused on following topics:

- a. Price movement before and after announcement of rights share.
- b. Practice of rights issue and its problem and prospects in Nepalese corporate firm.
- c. Procedures of rights issue in Nepal.

### **1.7 Limitation of the Study**

This study is required for the partial fulfillment of MBS Degree. Hence it is subject to some limitation, which affect the studies are given below:

- The study has analyzed the last 13 years data beginning from 1995/96 to 2007/08.
- This study has assumed that the related published and unpublished documents. Journals, articles and other previous studies are realistic.
- Other variables that affect the stock price of sample companies are totally ignored while analyzing the share price movement.



- This study is mostly based on secondary data and as per the requirement of the study primary data has also been used.
- Out of total rights issuing companies only one sector i.e. commercial banks are considered from which 5 banks are taken as sample for the study.

## **1.8 Organization of the Study**

This study has been organized into five chapters. Each devoted to some aspects of the study on rights share practice and its impact on share price movement of commercial bank in Nepal. The chapter one to five will consists of following:

Chapter I: Introduction

Chapter II: Review of Literature

Chapter III: Research Methodology

Chapter IV: Data Presentation and Analysis

Chapter V: Summary, Conclusion and Recommendation

Chapter one contains the introductory matters, which describes the general background statement of the problem, objectives of the study, limitation of the study, statement of the hypothesis and significance of the study.

Chapter two contains brief review of literature, which has been organized into two sections. section one contains conceptual framework of rights offering and section two contains the review of related studies.

Chapter three contains research methodology employed in the study. It includes the introduction, research design, nature and sources of data, data analysis tools, sampling procedure and definition of some key terms.

Chapter four contains presentation and analysis of data. This is the main and key chapter of research study. In this chapter sources of data are primary and secondary, which are presented in appropriate form. Analysis and interpretation of data have been performed thereafter. From this analysis and interpretation major findings have been presented.

Lastly summary, conclusion and recommendation of the study have been presented in chapter five.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

Review of literature is the study of past research studies and relevant materials. It is an advancement of existing knowledge and in-depth study of subject matter. It starts with a search of a suitable topic and continues throughout the volumes of similar or related subjects. It is very rare to find out completely new program. In literature review, researcher takes hints from out completely new problem. In literature review, researcher takes hints from past dissertation but he or she should take heed of replication. Literature review means reviewing research studies and other pertinent proposition in the related area of the study so that all the past studies their conclusions and deficiencies and further research take place. It is a vital and mandatory process in research works. During the review of this research, in depth study and theoretical investigation regarding Investment policy aspects and their present application and potentialities made. Investment "Range of investment held by an investor, company etc." (Oxford Dictionary: 1994) Hence, in this chapter, the focus has been made on the review of literature relevant to the investment policy of commercial banks in Nepal. For this study, different Journals, Article, Books, Annual reports, and some research paper related with this topic has been reviewed.

The study about rights share practice and its impact on share price movement of commercial banks in Nepal has already been done streamline to some extent in the first chapter regarding statement of problem, objectives and rights issue practice in general. Now, in this chapter the main focus is given on review of literature. Moreover, in order to make this study more comprehensive it is important to go through the relevant literature.

## **2.1 Conceptual Review**

The easy way of raising capital is issue of common stock. When a company issue shares for public, the stock offering, is called initial public offering. But when a company issue shares to the existing shareholders the stock offering is called rights share offering is new phenomenon. It is relatively new practice for Nepalese organizations.

### **2.1.1 General Rights of Shareholders**

The rights of holders of common stock in a business corporation are established by the law of state in which the corporation is chartered and by the terms of the charter granted by the state. Chartered are relatively uniform on many matters, including collective and specific rights. Certain collective rights are usually given to the holders of common stock (Weston and Copeland, 1992).

1. The rights to amend the charter with the approval of the appropriate officials in the state and incorporation,
2. The rights to adopt and amend by laws,
3. The rights to elect the directors of the corporation,
4. The rights to authorize the sale of fixed assets,
5. The rights to enter into mergers,
6. The rights to change the amount of authorized common stock, and
7. The rights to issue preferred stocks, debentures, bonds, and other securities,

Weston and Copeland (1992) state that common stock holder also have specific rights as individual owners.

1. The rights to vote in the manner prescribed by the corporate charter,
2. The rights to sell their stock certificates (their evidence of ownership) and, in this way, to transfer their ownership interest to other persons,
3. The rights to inspect the corporate books (obviously, a corporation cannot have its business affairs distribute by allowing every stockholder to go through any records which they want to inspect. Further more, a corporation

cannot wisely permit a competitor who buys share of its common stock to look at all the corporation records. There must be, and there are, practical limitations to this rights), and

4. The rights to share residual assets of the corporation on dissolution. (However, the holders of common stock are last among the claimants to the assets of corporation).

### **2.1.2 Characteristic of Rights share**

Studying about rights share offering the following characteristics of rights can be described:

- a) The number of rights that a shareholder gets is equal to the number of shares held by him.
- b) The rights issuing company determines the number of rights required to subscribe to an additional share.
- c) The price per share for additional equity, called the subscriptions price, is left to the discretion of the company.
- d) Rights are negotiable. The holder of rights can sell them.
- e) Rights can be exercised only during a fixed period, which is usually about thirty days.

### **2.1.3 Rights share offering**

A rights is an option to buy a security at a specified price during a designated period. A company gives its existing stockholders the first opportunity to purchase a new security issue on a privileged-subscription basis. Preemptive rights is a privilege offered to existing shareholders for buying a specified number of additional shares of the company's stock before the stock is offered to outsiders for sale. In other words, a provision in company's charter or by laws that gives the existing shareholders rights to purchase new share at subscribe price on pro-rata basis. A stockholder is issued one rights per share of stock already owned. Van Horne (2002) states, under a preemptive rights existing common stockholders have

the rights to preserve their proportionate ownership in the corporation. If the corporation issues additional common stock they must be given the rights to subscribe the new stock so that they maintain their pro-rata interest in the company.

When a company makes a rights issue, it sends a "Letter of Offer" to existing holder of equity share indicating the amount of new full shares or coupons to which they are entitled in proportion to their old shareholding. Letter of offer must be exercised within a relatively short given period usually not more than thirty days, unless the date is extended by the company.

When a company sells securities by privileged subscription, it mails to its stockholders on rights for each share of stock held. With a common stock offering, the rights gives the stockholders the option to purchase additional shares according to the terms of the offering. The terms specify the number of rights required subscribing for and additional share of stock, the subscription price per share and the expiration date of the offering. The holder of rights has three choices:

- a. Exercise them and subscribe the additional shares.
- b. Sell them because they are transferable.
- c. Do nothing and let them expire.

Generally, the subscription period runs about three weeks. A stockholder who wishes to buy a share of additional stock but does not have the necessary number of rights may purchase additional rights. For example, if we own 152 shares of stock in a company and the number of rights required to purchase one additional share is 5, our 152 rights will allow us to purchase 30 full shares. If we would like to buy 31<sup>st</sup> share we may do so by purchasing an additional 3 rights.

In a rights share offering, the board of directors establishes a date of record. Investor, who buy the stock prior to that receive the rights to subscribe to the new issue. The stock is said to sell with rights on through the date of record. After the

date of record, the stock is said to sell ex-rights that is the stock is traded without the rights attached. An investor who buys the stock after this date does not receive the rights to subscribe to additional stock.

#### **2.1.4 Pros and Cons of Rights Issue**

Rights give the existing shareholders rights to purchase additional shares at a price somewhat lower than market price. This system is advantageous for company also because all shares can be sold at certain period. The pros and cons of rights issue are as follows:

##### **Pros:**

- a) The existing shareholders control is maintained through the pro-rata issue of shares.
- b) Raising funds the sale of rights issue rather than public issue involves less flotation costs as the company can avoid underwriting commission. For example: the flotation costs of common stock issued during the period 1970 to 1975 were 6.17% on public issue compared with 2.45% on rights offering in U.S.A.
- c) In the case of profitable companies the issue is more likely to be successful since the subscription price is set much below the current market price.

##### **Cons:**

- a) The main disadvantage is to the shareholders who fail to exercise their rights; they lose in terms of decline in their wealth.
- b) Second is for those companies whose shareholding is concentrated in the hands of financial institutions because of the conversion of loan into the rights issue.

Rights issue gets positive response from the current shareholder because they can get more shares at below the market price. Existing stockholder always prefer rights offering rather than public offering of shares.

### 2.1.5 Valuation of Rights

"The market value is a function of the present market price of the stock, subscription price and the number of rights required to purchase an additional share of stock."

When companies announce rights share offering, the shareholder, the investors generally rush to buy the stocks of that company. Ultimately the rights generate certain value. When the stock is selling rights on, the theoretical value of rights can be calculated using the following formula:

$$V_r = \frac{P_o - P_s}{r + 1}$$

Variable defined:

$V_r$  = Market value of one rights when stock is selling rights on

$P_o$  = Market price of a share

$P_s$  = Subscription of rights required to purchase one share of stock.

$r$  = Number of rights required to purchase one share of stock.

Example:

If current market price of share is Rs. 32 and subscription is Rs. 20, Number of rights required to purchase one share is 3, then the value of one rights using the above formula is:

$$V_r = \frac{32 - 20}{3 + 1}$$

Theoretical value of one rights is Rs. 3.



### **2.1.6 Market Price of Share**

Market price of the share means the price of share determined by the market and traded in the stock exchange. Generally, this market price of share is determined by demand and supply of market. But that is not the only thing which determines the share price. Other determinants of market price of share are as follows:

a) Dividend

Shareholders who invest their money in common stock always seek return in the form of dividend. If the company pays higher rate of dividend then ultimately the share price goes higher and vice-versa.

b) Cost of Capital

Generally, cost of capital refers to the cost of fund raised. If cost of capital is higher automatically return will be lower. Finally the share price goes down.

c) Company's Earning

Highly earning organizations pay higher dividend than the price of the share moves upward and vice versa.

d) Signaling Effect

Another major price determinant is signaling effect. Signaling effect or signals means the market rumors which is related to the stock market. For example, Budget Speech, Insurgency, Emergency, Dividend Announcement, Rights Offering etc. Due to these rumors, investors and stockholders buy and sell the stock. This finally affects the share price.

e) Economic Condition

Another, condition of country, also determines the share price directly. If the economy is growing, obviously the price of share also increases. In the phase of recession or depression it goes downward.

### **2.1.7 Market value of rights Vs theoretical Value of Rights**

Actual value or market value or rights may differ somewhat from its theoretical value on account of transaction costs, speculation and the irregular exercise and sale of rights over the subscription period. Market price of rights may be higher or lower than theoretical value. If the price of a rights is significantly higher than its theoretical value, stockholders will sell their rights and purchase the stock in the market. Such action will exert downward pressure on the market price of the stock. If the price of the stock is significantly lower than its theoretical value, arbitragers will buy the rights, exercise their rights to buy stock and then sell the stock in the market. Such action will exert upward pressure on its theoretical value.

### **2.1.8 Effects of Rights Issue on Stockholders Wealth**

After receiving the rights from the issuing company, shareholders have three options. One is to exercise their rights and purchase additional number of shares. Second is to sell the rights and finally the third option is do nothing and let them expire. If shareholders have sufficient fund, they exercise the rights. If they do not have sufficient fund or do not want to buy more stock, they will sell the rights. In either case, provided that the theoretical value of rights holds true, stockholders will neither benefit nor lose by the rights offering. A stockholder may suffer a loss, if he forgets to exercise or sell his rights or brokerage of selling the rights are excessive.

### **2.1.9 Nepalese perspective of Rights Issue**

Prof. Dr. M.K. Shrestha (1992) states that though the size of the shareholders population in Nepal has been growing constantly the government seems to have not take and initiative in formulating the separate act which protects the shareholders rights.

Shareholders subscribe the shares floated by the public limited companies through Security Exchange Center (SEC) for the firm belief that there will be proper response of their rights which consist of both the collective and specific rights. The collective rights of shareholders include the amendment of charter with approval of appropriate officials.

In Nepal, the concerned officials seem to be not relevant as they interfere in the shareholder's rights. That is why the collective rights of the shareholders get ignored. In the annual general meeting shareholders can amend the internal by laws, elect directors, authorize the sale of assets, enter into mergers, change amount of the authorized capital and so on. But in reality, many annual general meetings have undermined the collective rights of the shareholders. For instance, National Life and General Insurance Company had suppressed the collective rights of shareholders by not adhering to the consent of shareholders members in the board through the proposal was put forward by the management before shareholders. The same is true in the case of Butwal Dhago Udhyog as the management wanted to have a control over the collective rights of shareholders.

Shareholders have rights to vote as prescribed by the charter, they have rights to sell the transfer share certificate and also rights to inspect accounts as well as rights to claim assets and income. Regarding their voting rights, the contest through collecting proxies can perform a very useful representation in the board of directors. By gaining board representation through proxies, the winning candidate may stimulate the shareholders expectations. But in practice the trend of collective proxies has found to be mixed. Because in most of the cases the candidate who represented the board through proxies seems to have considered only few vested interest at cost of many others. These can be taken as the tangible evidence.

One of the basic rights of shareholders is the power to use their votes while they elect their representatives for the board of directors. By exercising this power, shareholders choose a representative who can guide the board to formulate

strategic plans and policies beneficial to the shareholders at large. Hence, the voting rights of shareholders are very crucial while its misuse may cause a great loss to the shareholders themselves.

### **2.1.10 Procedure for the Issue of Rights in Nepal**

Every company which to issue rights share should follow some procedure. Company Act 2053 is silent about the rights issue but mentioned that rights share shall be issued following the same procedure as ordinary regulation to issue the rights. Following procedure is generally adopted by Nepalese Company to issue rights share:

- a) The board of Directors should consider about the determination of the quantum of further capital requirement and the proportion in which the rights issue might be offered to existing shareholders.
- b) Annual general meeting should pass the proposal of Board of Directors by its majority.
- c) Company should notify NRB, NEPSE office of the company register and SEBON sufficiently with prospectus in advance of the date of board meeting at which the rights issue is likely to be considered and should get permission from them.
- d) Main announcement with prospectus which gives a general indication of the reasons which have made the issue desirable, the purpose for which the new money is to be used.
- e) Letter of provisional allotment of rights offering to the shareholders about the terms of the rights offered, the number of new shares allocated to each given the number of old shares, the price at which the issue is to be made and the conditions letter will be seen after the date of announcement.
- f) After the receipt of the letter of provisional allotment, the allotment must be made for those shares which are renouncing.

- g) Certificates are distributed to shareholders who participated in the rights offering announcement. Shareholders who have accepted and fully paid up their allotment can renounce the actual certificate in favor of a third party. Because of non-transferable instrument, such parties are not seen in Nepalese content.
- h) Listing of shares in the NEPSE again with increased number which must be approved by the stock exchange after which an application for listed new share could be made.

### **2.1.11 Procedures for the sale of securities**

Moyer, Macguigan and Kretlow (1997) state that when selling stock through a rights share offering firms usually enlist the service of investment bankers, Who urge rights holders to purchase the stock. In an agreement called standby underwritings, the investment banker agrees to purchase at subscription price any shares that are not sold to rights holders. The investment banker can resell the shares. In a standby underwriting, the investment banker bears risk and is compensated by an underwriting fee.

## **2.2 Review of Related Studies**

### **2.2.1 Review of Articles**

To make more relevant and to add input in this study some Journals and articles are also reviewed below:

Dolley (1934) conducted a study on the topic "The price effect of stock rights issues." In this study he uses 303 stock rights issued out of 422 privileged subscription recorded in NYSE. He classified these stock rights by various methods such as industry wise according to the years in which they were issued. In this study he defines a lot of key terms clearly with example.

To analyze the price effect of stock rights issue he uses the price from announcement date to record date. Since the sole object in the procedure was to develop the general price trends, the dates for which these quotations were obtained were only approximately one, two, and three and four weeks prior to the record date. The entire sample of 303 stock was not used in this test because it was thought that a smaller number would serve to reveal the general trend.

The result of this study seems that the possibilities of a stockholder realizing an immediate profit from a rights issue are narrowly limited. Investor is about as likely to lose, as he is to gain if he sells his stock at the announcement date and buys back just prior to the record date. If he sells his stock ex-rights together with his rights on the record date, in two cases of out of three he will realize a slight appreciation over the value of his stock on the preceding business day. If the stockholder decides to exercise his rights, he would do well to exercise them toward the end of the subscription period, thus allowing for a possible decline in the market price of the stock ex-rights below the subscription price, which would render the stock ex-rights below the subscription price, which would render the stock rights valueless.

However, if the stockholder elects to sell his stock rights, his chances of securing the optimum market price would slightly better if he should sell at the beginning rather than the end of the subscription period. For the professional speculator, it would seem in general market that the best chances for profit would lie either in purchasing the stock rights-on just prior to the record date and selling the shares ex-rights themselves on the record date, or in selling the rights short on the record date and covering later in the subscription period. However, the individual price reactions both of the stock and the rights vary so widely from case to case as to render speculation according to rigid rules highly unsafe.

*Nelson (1965)* in his study, reports that an empirical test of whether the price effects of stock dividend and splits are also observed in the quasi split characteristics of rights. He tested the proposition that stock rights have splits effects similar to stock splits and dividends. The significance of the study is indicated by the fact that approximately two thirds of new issues of common stock are sold through privileged subscription in US stock market. He uses three-price quotation for the study i.e., (i) Six months before the announcement of the offering. (ii) On the 1<sup>st</sup> day of rights trading and (iii) Six months after the close of rights offering. By analyzing data he found that the average adjusted price of all offering declined by 0.2% from six months before the announcement of rights to six months after the close of the rights trading period. Market prices, adjusted both for split effects and general market effects, increased following rights offering when cash dividends were increased. But the sizes of the changes were not as large as those found in previous studies, which measured the effects of cash dividend increases on market prices six months following stock splits and stock dividends. The data also show that earning increases have about the same order of magnitude of influence as dividend increase on adjusted market prices six months after the rights offerings.

*Marsh (1979)* used London share price database to study equity rights issue and the efficiency of the UK stock market. He considers whole population of rights issuing company i.e. 1145 companies on the London quoted and registered companies between 1962 to 1975 although 148 issues were excluded because of potential ambiguities in the calculation of rights issue adjustment factors. He found the population abnormal return estimate for the two years post announcement period was only 4.5% or almost exactly half of the figure obtained for the random sampling. Similarly, over the one-month period following the announcement the abnormal return estimated were 2.8% and 1.6% respectively. The mean ex-post market return was only 0.8% higher than the mean risk free rate over the two-year post announcement period, so he expects his results to be largely independent of his beta estimates.

Since his study was concerned with market efficiency, he confined attention to the post announcement period and striking feature was the apparent existing of abnormal returns after the news has been made public. Furthermore, his results are unaffected by the choice of model although the returns were somewhat lower with market model.

He further states that price pressure implies a temporary price fall around the ex-date. To test this, he applied the single stage cross sectional model to full sample of nearly a thousand issues. The results are consistent with the existence of small amount of price pressure. Share price appear to suffer a temporary set back of 0.9% during the immediate ex-rights period, although the more than recover from this over the next month with an abnormal return of 1.8% over the second period examined. While a small part of the price fall could be due to information effects delayed until after announcement date because of non-trading. There appear to be no other plausible explanation, which are consistent with market efficiency.

The results of his tests on price pressure and market liquidity were far more conclusive. Although an average, there did appear to be small setback of 0.5% to 1% when the share went ex-rights, he found no evidence whatsoever that the returns over the issue (or announcement) period were related to the size of the issue. Quoted companies appear to be able to sell any reasonable amount of new equity at effectively the current market price and do not appear to face a downward and sloping demand curve for their shares. Hence although in recent years there has been an active public debate in UK or the adequacy of the capital market there seems little satisfaction for any real concern over the operations of this particular segment. The London Stock Exchange appears to be a highly liquid market.

*Marrsh (1980)*, in another study of valuation of underwriting agreements for UK rights issue states that UK companies raise virtually all of their new equity capital via the rights issue. Companies can guarantee the subscription of their issue having



them underwritten and in recent years this procedure has been adapted for 90% of UK rights issues. Underwriting is usually carried out on a fixed fee basis representing at least 1.25% of the total money raised, and hence it is clear that quite substantial sums of money are involved. Since underwriting is simply a put option giving the company the rights to put a failed issue on to the underwriter. In this study he describes an application of Black and Scholes model to the valuation of rights issue underwriting agreements over the period of 1962 to 1975. Model prices are compared with the fees charged in order to assess whether the latter represent competitive prices.

Furthermore he uses the same population and sample as in previous study, however he is unable to establish the date of the underwriting agreement with any degree of confidence. These issues were therefore excluded, leaving him with a sample of 539 underwritten issues for the purpose of this study. Underwriter performs an economically useful function by assuming the risks of a failed issue. Aside from the question of whether shareholders really wish to indulge in option trading with institution, the question of whether underwriting has historically proved worthwhile is an empirical one. In fact when he used the Black and Scholes model to value UK underwriting, over period 1962 to 1975, the evidence strongly indicated that underwriting, taken alone and ignoring side payments, was considerably overpriced.

*White and Lusztig* (1980) conducted a study on the topic price effects of rights offerings. The purpose of this study has been to test empirically two hypothesis with respect to the price effects of rights offerings. Its importance for the normative theory of financial management is obvious. The techniques used in the study was a pooled cross-section time series model. This approach permitted the abstraction from the components of returns attributable to market wide events and other firm specific events on or near the date of interest, as well as tests of significance of events market prices. The result of the pooled regressions provides more definitive information on the price behavior associated with the

announcement of a rights offering. Since the t-statistics on the announcement date dummy variables were statistically significant at the 1% level or better, the hypothesis that on average investors believe that there is negative information associated with a rights offering can not be rejected.

The second hypothesis, capital markets in this instance are inefficient, assumes that managements' and investors' expectations differ and that investors require time to assimilate information. Since the coefficient on the dummy variables for the five days subsequent to the announcement of the rights offering were not statistically different from zero to 5% confidence level, the null hypothesis that prices adjust quickly and unbiased to new information can not be rejected.

### **2.2.2 Review of thesis**

Till the date, many studies have been done, related to the impact on market price by various variables such EPS, DPS and signalling effects. But out of them very few thesis directly consider the rights issue to study the impact on share price.

*Gautam* (2001) has conducted a study on the topic, 'Analysis of Share price Movement Attributed to Rights Offering Announcement' in 2001. The main objectives of his study were to find the effect of rights offering on the share price movement, to find out, if there is any problem in the primary issue of securities and to analyze the adequacy of the contents of the company act 2053 B.S. in regard to section 21, that emphasis about that matter to be disclosed in the issue prospectus. To conduct his study, he had used correlation analysis between share price movement and NEPSE index i.e. general market movement and t-statistics between share price before and after rights issue announcement. T-statistics is used to test if there was significant change in share price before and after the issue of rights. But he did not consider the value of rights, which is very important in share price determination after the issue of rights share. Further, his analysis only covers data from 2052 to 2056 B.S. That result may not represent the present economic scenario. He had taken only three companies as sample to complete his study but

here the researcher has taken six rights issuing commercial banks as sample to conduct the study. The major findings of his study are that the change in share price due to rights offering cannot be generalized. He further states there is lack of legal provision in company act regarding the issue of rights share and also the lack of investors protection act. He concludes that Nepalese security market has failed to use various capital market instruments such as warrants, convertible option etc.

*Lamsal* (2002) had conducted the study on impact of information on share price in 2002. In this study his objective was to determine the impact of information, such as dividend declaration, return on equity and EPS on share price. To analyze his study, he had use t-test and correlation. But he did not consider rights issue as an important factor in share price determinants. So here researcher has analyzed the rights issue as an important factor in share price movement. *Lamsal* in his study finds that there is significant difference in share prices of four samples companies out of five, because of information of divided declaration. It is found that share price of the sampled organization has decreased significantly after the issuance of directives made by NRB. In most cases MPS is negatively correlated with EPS, DPS & ROE.

*Aryal* (2003) a study on the topic "Equity Rights Issue, its Practice and Impact in Nepal" had been conducted. But his objectives of the study are different than Gautam's study. The main objectives of his study is to examine the relationship between stock price reaction and announcement of rights issues and to analyze the relationship between rights share and equity share and rights share and NEPSE Index. To conduct this study he used cross sectional analysis by estimating the regression. He analyzed only the relationship between rights share to equity share and rights share to NEPSE index .In this research he finds announcement of equity rights issue are associated with a positive effect on share prices. He further states that theoretical value of rights differs form company to company. At last he concludes that firstly company issues rights share for increasing equity capital an to invest it in company diversification and expansion. Secondly they issue right

share to increase capital to meet the level prescribed by Nepal Rastra Bank. The rights share and equity share has low degree of positive correlation. The correlation coefficient between rights share and NEPSE has also positive correlation.

*Lamichhane* (2004) conducted a study related to the rights offering and its impact on market price in 2004 in the Nepalese context. His objectives in this study is to identify the significant change in share price after announcement of rights offering and to recommend some policies that will help to rectify the current problems in the rights issue of securities. To conduct the study, he had used the correlation between share price and price index, t-statistics between share prices before and after the rights issue announcement. He did not consider the value of rights, which is very important in share price determination after the issue of rights shares. His analysis only covers the data 2056 to 2060 B.S. But here the researcher has analyzed the data from 2054 to 2062, which can show the present economic scenario. He had taken sample from different sector but here the researcher has use only one and most important sector i.e. commercial banks to conduct the study. In this study his major findings were different between share price before and after the rights issue of sample companies is significant. He further states that rights share issue is new practice in Nepal; sample companies are unable to increase the market capitalization through rights issue, as the practice does not follow the theory. Under subscription of rights share is common problem. Company act 2053 is not adequate for this and issues procedure of rights shares.

Surya Chandra Shrestha (2008) has conducted research on 'Stock Prices Behaviors in Nepal' this study aims to examine the efficiency of the stock market in Nepal.

The objectives of the study were:

- To examine the serial correlation of successive daily price changes of the individual stocks.

- To determine whether the sequence of price changes is consistent with changes of the series of random numbers expected under the independent Bernoulli process.
- To determine the efficiency of the stock market through the theoretical model of efficient market hypothesis in the Nepalese stock market.
- To provide feedback policy towards institutional development of efficient market.

He used the data considering the daily closing price of 30 listed companies' shares (ordinary) in the NEPSE. His study period was of almost one and half years. He used the Serial Correlation test and Run Test as Test Methodology.

Serial correlation Test: He applied serial correlation to test the stock price behavior of Nepal Stock Exchange by giving sight in whether the price changes of shares are independent to each other. For this purpose he computed the serial correlation of 1-15 lag days applying the natural logarithm model for daily price changes.

**Run Test:** He also, in orders to test independence of stock prices, applied runs test. He analyzed runs by total numbers of expected runs and runs sighs.

The major findings and conclusions drawn on this study were:

After applying the required models and methodologies he found average correlation coefficient of 0.2055, 0.825, 0.0704, for 1, 2 and 3 lag days respectively. And for lags 5 to 15 days were less then 0.07. In overall, large number of serial correlation coefficients of the log price changes of the 30 stocks for the sample periods are significantly departed from zero. In addition runs analysis also followed the serial correlation result that means there has significant difference between actual numbers of runs for series of daily closing prices changes of the market. By the result of his applied models and methodologies he conducted", the successive price changes are not independent random variable for the 30-sample stock listed in NEPSE. Therefore, the random walk theory is not suitable description for the stock market price behaviour in Nepal.

By study of Shrestha, large number of serial correlation coefficients of the log price changes of the 30 stocks for sample period is significantly departed from zero. In addition runs analysis also followed the serial correlation result that means there has significant difference between actual numbers of runs for series for daily closing prices changes of the market. In the study Shrestha has applied for technical analysis only to get the result of share price behaviors and he has not used any fundamental tools for analysis.

Krishna Prashad Paudel (2008) entitled "Stock price behavior of commercial banks in NEPSE" with the objective to examine monthly closing price of 6 listed commercial banks during the period of three consecutive years from 2005 to 2007. The researcher used correlation coefficient, regression analysis, and run test and auto correlation. He found in his study that successive price changes were correlated with previous price series. He also found that most of the stocks did not follow random walk hypothesis. The present stock prices were dependent to the historical prices. The EPS was the most affecting factor for the price change of the stock. Most of the investors wanted to invest in the shares of commercial banks because the fluctuation in NEPSE index was due to the transaction of commercial bank shares. There were serious limitations in the study. Data used in this study, monthly closing price of stocks not enough to predict the behavior of share prices. Moreover, there was mismatch between calculated and quoted price. However, he concluded that the involvement of more and more institutions as well as individual investors in capital market through broker's network raised the transaction volume. Rumors spread by brokers and create genuine speculation. Fair plays of bulls and bears make market equilibrium resulting price stabilization speculation on the trading of shares is encouraged. Thus, the market starts to walk randomly reflecting true values of shares. Providing alternatives to make diversified portfolio facilitates investors.

### **2.3 Research Gap**

According to the theory of rights share offering, the price of shares increases after the announcement date and the price again decrease after the allotment of shares to the extent of value of rights. So, if the same things happen in the share market scenario, then the research like this seems to be unnecessary one. But in real practical life the theory is not being followed.

Various studies have been done on the topic of share price and its determinants, but no one has given focus on rights share as an important factor which affects the market price of shares in share market significantly.

Though few studies have considered rights issue shares and its impact on share price movement in Nepalese share market, they fail to focus on rights share as the second highest instrument of share fund required for a company. Furthermore previous studies had not tested the correlation of share price with general market movement using the data of FY 2053/054 to FY 2064/065 B.S.

Thus, research gap and weaknesses are found in previous studies, this research has been conducted to find out value of rights of rights issuing companies. Though out of different sectors, only one i.e. the commercial banks with 5 sample commercial banks, this research has been conducted but it has been tried at most to find the impact of rights issue on market price of the sample commercial banks.

## **CHAPTER - III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The above mentioned, objectives could be fulfilled by well-settled research methodology. The proper analysis of this study could be meaningful only on the rights choice of research tools that help to meaningful conclusion. Research methodology refers to the various sequential steps to be adopted by a researcher in studying problem with certain object in view. It would be appropriate to mention that research project are not susceptible to any one complete and inflexible sequence of steps and the types of problem to be studied will determine the particular steps to be taken and their order too.

This study about selected commercial banks in Nepal has been already done streamline to some extent in earlier chapter in general. But, the proper analysis of this study could be meaningful conclusion. The main objective of this study is to analyze the rights share practice and its impact on share price movement in the context of Nepalese commercial banks. Therefore in this chapter the focus has been made on research design, nature and sources of data, sampling procedure, coverage of data, tools used for analysis and definition of some key terms used.

#### **3.2 Research Design**

Research design was the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. To conduct this study, descriptive and analytical research design had been adopted. The study was based on historical data had an ex-post facto research because no variables are in the control of researcher and no variables in this research was manipulated during the study period. Descriptive research design was used for conceptualization, problem identification, conclusion and suggestion. Analytical research design was used for analyzing the data to find out the result.



### **3.3 Sources of Data and Collection Procedure**

This study was heavily based on secondary data. Primary data was taken to some extent. So, qualitative and quantitative data would be taken for the study of the research. The sources of data and collection procedure were as follows:

- a. **Primary data:** It was collected through direct interview and questionnaire method which was collected from experts, investors and other concerned people. Opened, closed and mixed questionnaire methods were used for the questionnaire. Similarly, structured and unstructured interview was used for data collection informal talks with concerned persons.
- b. **Secondary data:** It was collected from published and unpublished documents. Annual reports, prospectus and bulletin of SEBON, NEPSE and other related companies, newspapers, magazines, books and other statistics would be taken into consideration. Useful information was also being collected from Internet.

### **3.4 Population and Samples**

Stratified and random sampling method was taken for the study. There are 26 Commercial Banks listed in NEPSE at the research period out of them 17 commercial banks issued rights share. This means the population size will be 17 Banks. But researcher could not take all institutions so only five cases of rights issue have been taken as samples for the study. The **Class A Licensed Commercial Banks** in Nepal are under below:

**Table: 3.1****List of Class A Licensed Commercial Banks**

<b>Names</b>	<b>Operation Date</b>	<b>Head Office</b>
1. Nepal Bank Limited	1937/11/15	Dharmapath, Ktm.
2. Rastriya Banijya Bank	1966/01/23	Singhdarbarplaza, Ktm.
3. Agricultural Development Bank Ltd.	1968/01/02	Kathmandu
4. NABIL Bank Limited	1984/07/16	Kantipath, Kathmandu
5. Nepal Investment bank Ltd.	1986/02/27	Darbar Marg, Ktm.
6. Standard Chartered Bank Nepal Ltd.	1987/01/30	Naya Baneshwar, Ktm.
7. Himalayan Bank Limited	1993/01/18	Thamel, Kathmandu
8. Nepal SBI Bank Limited	1993/07/07	Hattisar, Kathmandu
9. Nepal Bangladesh Bank Limited	1993/06/05	Naya Baneshwar, Ktm.
10. Everest Bank Limited	1994/10/18	Lazimpat, Kathmandu
11. Bank of Kathmandu Limited	1995/03/12	Kamaladi, Ktm.
12. Nepal Credit & Commerce Bank Ltd.	1995/10/14	Siddharthnagar, Rupandehi
13. Lumbini Bank Limited	1998/07/17	Narayanghat, Chitwan
14. Nepal Industrial & Commercial Bank Ltd.	1998/07/21	Biratnagar, Morang
15. Machhapuchhre Bank Limited	2000/10/03	Prithvi Chowk, Pokhara
16. Kumari Bank Limited	2001/04/03	Putalisadak, Ktm.
17. Laxmi Bank Limited	2002/04/03	Adarshanagar, Birgunj
18. Siddharth Bank Limited	2002/12/24	Kamalagdi, Ktm.
19. Global Bank Ltd.	2007/01/02	Birgunj, Parsa
20. Citizen Bank Ltd.	2007/06/21	Kathmandu
21. Prime Bank Ltd.	2007/09/24	Kathmandu
22. Sunrise Bank Ltd.	2007/07/23	Kathmandu
23. Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24. Development Credit Bank Ltd.	2009/01/02	Kathmandu
25. Nepal Merchant Bank Ltd.	2009/02/22	Kathmandu
26. Kist Bank Ltd.	2009	Kathmandu
27. Janata Bank Limited	2010	Kathmandu
28. Mega Bank Limited	2010	kathmandu

*Source: Banking and Financial Statistics-48, a journal of Bank & Financial Institutions Regulation Department, NRB and Different journals.*

Out of them, only five commercial banks have been taken as sample for the study. Their head offices are in Kathmandu valley. The samples of Commercial Banks are:

1. Everest Bank Ltd.
2. Bank of Kathmandu Ltd.
3. Nepal Bangladesh Bank Ltd.
4. Nepal SBI Bank Ltd.
5. Nepal Investment Bank Ltd.

### **3.4.1 Allowance for leakage of Information**

Information about the director's intention to issue rights share may be find out in many cases before the date of director's meeting. If that happens the price should rise as a result of the impending decision that may take places much before the director's actual decision. There may be the cases of insiders taking advantage by making purchase in advance of the official announcement so that the market price begin to rise over before the actual announcement. For these reason, only going back at least some days before the formal announcement of the board's decision use the true price effect of rights issue decision case. Considering all the factors we decided to go back 90 days before from the date of rights share announcement. Thus for the study, the base date for measuring relative changes in share price as result of rights issue is the date 90 days prior to announcement date.

### **3.4.2 Removing the Effect of Market Movement**

Measurement of the price effects of the rights shares issue involves a comparison of share of different point of time. In actual practice, general price movement also affects particulars share price. Since the rights share announcement if particular share price is found to raised by 10%, this cannot be attribute to the rights share offering over some period, share price in general level also moved up by 10% more. On the other hand, if a particular share price just remains unchanged in the face of declining market trend, the strength may be due to rights issue. Hence, the

isolation of the effect of the rights share issue necessarily requires the elimination of the general market movement.

a. To analyze the share price movement, five different times were selected. The announcement date is taken as a base date to take above five points. The selected points are as follows:

i) *90 days before announcement date*: In order to isolate the effects of rights offerings, it is necessary to make comparison with dated unaffected by the offering. New financing frequently becomes known in the financial community prior to its official announcement. A 90 days lead-time appears adequate.

ii) *10 days before announcement date*: Few days before the announcement date, it is supposed to that very limited shareholders do know it and does not bring any material influence on the share price behavior of the stock.

iii) *The day of announcement*

iv) *7 days after the announcement data*: When the company explicitly announces the issue of rights share, comparatively there will be high demand of the rights attached shares and this phenomenon causes the share price to rise. This period is supposed to depict the true picture of the share price of post announcement stock.

v) *180 days after the announcement data*: In order to assess the post offering effects of rights offering, it is necessary to have a price quotation some time after the offering, yet not so much later that factors obscure the results. 180 days appears reasonable for this purpose.

b) Price quotations for each share were collected for all five periods of time or reasonably close to them. These price quotations were then converted into price relative with the point (i) as the base date. This all price changes have been expressed relative to the base date price i.e. the price 90 days before the announcement date.

c) The equity price index was noted against each price relative. The price index was also converted to new set of index numbers again with point (i) as the base.

d) Finally the price relative against each of five points of time, as obtained in step (b) above was expressed as a percentage of corresponding index numbers as adjusted in step (c) above.

Stated in simple terms, our procedure for eliminating the effect of the general market movement boils down to adjust the actual share price on any date downwards in proportion to an upward general market movement since the base date and adjusting it upward in the proportion to a downward general movement.

Thus, we get a series of five percentages for each of the shares in our sample representing of time, after the effect of general market movement have been eliminated.

### **3.4.3 Data Analysis Tools**

Brief explanations of data analysis tools used in this study are as follows:

#### **a) Co-efficient of Correlation (r)**

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another. The coefficient of correlation measures the direction of relationship between two sets of figures. It is the square root of co-efficient of determination. Correlation can either be negative or positive. If both variables are changing in the same direction, then correlation is said to be positive but when the variations in the two variables take place in opposite direction the correlation is termed as negative. In the study, coefficient of correlation is calculated between rights share and NEPSE Index.

#### **b) Coefficient of Determination ( $r^2$ )**

The coefficient of determination is a measure of degree of linear association or correlation between two variables. One of which happens to be independent and other being dependent variables. In other word,  $r^2$  measures the percentage of total variation in dependent variable explained by independent variables. The coefficient of determination has value range from 0 to 1. for example, if  $r^2$  is equal

to 0.85 that indicates the independent variables used in regression model explain 85% of the total variation in the dependent variable. A value of one occur only if the unexplained variation is zero which simply means that all the points in the scatter diagram fall exactly on the regression line.

### c) Probable Error

Probable Error (P.E.) is used to measure the reliability and test of significance or correlation coefficient. It is calculated by following formula:

$$\text{P.E.} = 0.6745 \times \frac{1 - r^2}{\sqrt{n}}$$

Where,

- r = the value of correlation coefficient
- n = No. of pairs of observation.

P.E. is used in interpretation whether the calculated value of 'r' is significant or not.

If  $r < \text{P.E.}$ , it is insignificant, i.e. there is no evidence of correlation.

If  $r > 6\text{P.E.}$  it is significant.

### d) Statement of Hypothesis

To analyze the data available, t-statistics has been used to test the significance of the difference between the share prices under the following hypothesis:

#### Null Hypothesis ( $H_0$ ):

There is no significant difference between the share price movement before and after the announcement of the rights share offerings.

#### Alternative Hypothesis ( $H_1$ ):

There is significant difference between the share price movements before and after the announcement of the rights share offerings.

## Use of t-test

T-statistics is also used to test the significance of the difference between the share price before and after the announcement of the rights share offering by the companies. Since the share prices of few transacted (i.e. less than 30 transactions) are taken. T-test is suitable tool for analyzing the significance of difference between the share price movement before and after the announcement of the rights share offering. Here the researcher has used paired t-test.

$$s^2 = \frac{\sum (X - \bar{X})^2 + \sum (y - \bar{y})^2}{n_1 + n_2 - 2}$$

$$t_{\text{cal}} = \frac{X - Y}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

where,

X = Price Index of total equity capital before announcement

Y = Price Index of total equity after announcement and other symbols have their usual meaning, i.e.

n = Number of observation

In this analysis the researches have used 5% level of significance to test the hypothesis.

## e) Valuation of Rights

Rights have certain market value because the rights share is generally offered at lower than market price. The value of a stock rights may be defined as the value at which the rights should be quoted in the market. So, people are interested towards that particular share attached with rights. After rights offering, existing shareholders want to exercise that rights to purchase new common stock and some want to sell rights. Though there is no provision to make rights transferable in

Nepal, but valuation of rights is very important to analyze the share price movement. After the closing date of rights share offering, the share price will drop to the extent of value of rights.

$$\text{Valuation of one rights (V}_r\text{)} = \frac{P_0 - P_s}{r + 1}$$

$$\text{Theoretical price of share} = P_0 - V_r$$

Where,

$P_0$  = Current market price of share, rights - on

$P_s$  = Subscription price.

$r$  = Number of rights required to purchase one new share.

#### **f) Others**

Other tools such as percentage, statistical diagram statistical table and average have been used as per demand of the study, which are very useful in this study to analyze, and present the data in appropriate form.



## **CHAPTER IV**

### **DATA PRESENTATION & ANALYSIS**

The rights share practice and its impact on share price movement of Nepalese commercial banks regarding objectives and practice has been already discussed in first chapter. At the same time, the relevant literature that matters important to this study is also streamline in second chapter. Moreover, the research methodology considering the methods of research chosen in this study had given detail in third chapter. Now the most important part of this study that consist of analysis and presentation of empirical data focus on how far the Nepalese companies are practicing the rights share and how it affects the share price movement of these companies.

In order to analyze the study, the necessary financial facts and figures as well as descriptive information are also gathered through financial statement, annual report, and questionnaire is used to obtain further qualitative information. Only the important variable that are very sensitive and pertinent are taken into account. To obtain the best result, the data have been analyzed according to research methodology as mentioned in previous chapter.

#### **4.1 Procedure for Issue of Rights in Nepal**

The mechanism and the sequence of events in the case of rights issues are somewhat complicated and it will therefore be useful to outline briefly the actual procedures by which a rights issue is typically made.

- The board of director should decide and determined the quantum of further capital requirement and the proportions in which the rights issues might be offered to its existing shareholders.
- AGM should pass the proposal of BOD by its majority.

- Company should notify the NRB, NEPSE, office of the company registration and SEBON with the prospectus, in advance of the date of board meeting on which rights issues is likely to be considered and should get permission from there.
- Make an announcement with prospectus, which gives a general indication of the reason, purpose of the issue, which will make the issue desirable.
- Letter of provisional allotment or rights offering to the shareholders with the prospectus. This will define the term of the rights offering, the number of new shares allocated to each given number of old shares, the price at which the issue is to be made i.e. subscriptions price and the condition of which shareholders will qualify for the rights issue. The letter will be sent after the date of an announcement.
- After the record of the letter of the provisional allotment, the allotment must be accepted or re-announced and payment in full or partial must be made for those share, which are re-announced.
- Certificates are distributed to the shareholders who have participated in the rights offering announcement. Shareholders who had accepted and fully paid up their allotment can re-announce the actual shares certificate in favor of third party.
- List the shares in the stock exchange again with the increased number, which must be approved by the stock exchange after which an application for listed new shares could be made.

## **4.2 Rights Offering and its Impact on Share Price**

### **4.2.1 Rights Share and its Impact on Share Price Movement of Companies before and after Rights Offering:**

In this part of the study, the main focus is to analyze the price movement of selected sample companies with NEPSE index. To obtain the best result, different points of time period known as I to V were selected for observing the price movement assuming the announcement date as the reference point. The given point shows the following price quotations:

- a. 90 days before the announcement date.
- b. 10 days before the announcement date.
- c. The day of announcement.
- d. 7 days after the announcement.
- e. 180 days after the announcement.

The main objectives of this method of analysis are to eliminate the effect of the general market movement from our analysis. Otherwise stated, the procedure for eliminating the effect of general market movement boils down to adjust the actual share price on any date downwards in proportion to an upward general movement since the base date and adjusting it upward in proportion to a downward, general market movement. Thus finally, we get a series of five percentages for each of the shares in our sample representing relative change in a share price at different points of time, after eliminating the effect of the general market movement.

There are 103 cases of rights offered by 43 companies, out of total listed companies in Nepal till the FY 2064/065. But here only one sector i.e. commercial banking sector is chosen as it is the largest sector to issue the rights issue shares for the purpose of study. So, the following banks are the sample commercial banks which have issued the rights issue share in different time intervals;

- 1) Everest Bank Ltd.
- 2) Bank of Kathmandu Ltd.
- 3) Nepal Bangladesh Bank Ltd.
- 4) Nepal SBI Bank Ltd.
- 5) Nepal Investment Bank Ltd.

## 4.2.2 Analysis of Share Price Movement of Everest Bank Ltd

**Table 4.1**

### **Share Price Movement of Everest Bank Ltd**

Selected points of time	Share Price (RS.)	Price Relatives	Total Price Index of Equity Capital	Price Index Converted to New Base	% Change from Base	Adjusted Price Relatives 2 as % of 4	% Change from Base
	1	2	3	4	5	6	7
I	875	100	375.07	100	-	100	-
II	710	81.40	334.50	89.18	(10.82)	90.98	(9.02)
III	701	80.11	333.60	88.94	(11.06)	90.07	(9.93)
IV	660	75.43	323.51	86.25	(13.75)	87.45	(12.55)
V	450	51.43	269.79	71.25	(28.08)	71.51	(28.49)

From table 4.1, it is found that the share price of Everest Bank Ltd. is in decreasing trend. Share price of EBL before 90 days of announcement date was Rs. 875 and was decreased to Rs. 450 after 180 days of announcement date, nearly 50%, decline over this period. While observing total price index of equity capital, it also declined from 375.07 to 333.60 on the period I to III. A decline of 41.47 was realized between period I to III. Therefore the declination on market price of the share of EBL from base date to day of announcement is basically attributed to market trend. On the other hand, observing after the day of announcement, market price of the share went further down by Rs. 41 during period III and IV and became Rs. 660. Theoretically market price of the share should have gone up for few days just after the rights announcement, which did not happen in case of EBL due to holder's record date. It means obviously, that the investors who purchased the share of EBL on the day of announcement or onwards were not entitled to buy rights share. It is quite contrary to the theory of rights issue. That is why market price of share went down instead of increasing. Investors after the date of

announcement may have thought that, number of share were going to increase, EPS were going to decrease or Ex-rights price of share was going to decrease. It is believed that the original share price will be restored and the market shows normal price behavior after 180 days of announcement date, but in case of EBL, the share price was still in decreasing trend and leveled up to at Rs. 450, which seemed moving according to the principle of rights.

Rights offering theory does not match in case of EBL.

Market Price of Share	=	Rs. 701
Value of One Rights	=	Rs. 300.50
Ex-rights price of Share	=	Rs. 400.50

The value of the share after allotment should be around Rs. 400, but the share price of EBL was Rs. 450 after 180 days of announcement date. Thus the share of EBL was overpriced. (Annex-6)

#### 4.2.3 Analysis of Share Price Movement of Bank of Kathmandu Ltd

**Table 4.2**

**Share Price Movement of Bank of Kathmandu Ltd**

Selected points of time	Share Price (RS.)	Price Relatives	Total Price Index of Equity Capital	Price Index Converted to New Base	% Change from Base	Adjusted Price Relatives 2 as % of 4	% Change from Base
	1	2	3	4	5	6	7
I	1015	100	367.37	100	-	100	-
II	801	78.92	323.51	88.06	(11.94)	89.62	(10.38)
III	815	80.30	334.64	91.06	(8.91)	88.15	(11.85)
IV	460	45.32	321.96	87.64	(12.36)	51.71	(48.29)
V	315	31.03	259.75	70.74	(29.29)	43.88	(56.12)

In case of BOK, the share price was in decreasing trend after announcement of rights issue, almost similar to Everest Bank Ltd. Price of BOK's share was Rs. 1015 before 90 days of announcement date. It decreases up to Rs. 801, ten days before the announcement date, but it increases to Rs. 815 at the day of announcement date. After announcement date, the market price of share decreased substantially to Rs. 460 despite the fact that general market movement was not going downward so rapidly. After 180 days of rights offering the share price down to Rs. 315. Total price index of equity share was 367.37 before 90 days of announcement date. It came to 323.51 ten days before announcement date and to 334.64 in the announcement date. The total price index of share went down to 259.75 after 180 days of announcement date.

While analyzing the percentage change in the adjusted price index from the base index, the price index was decreased by 11.94% ten days before announcement date. Similarly, it decreased by 8.91% from point II to point III. After seven days of announcement date, it decreased by 12.36% and by 29.29% after 180 days of announcement date. The adjusted share price in column 7 is decreased by 10.38% before ten days of the announcement date and by 11.85% at the day of announcement date, the adjusted price is decreased by 48.29% from the base price index. After seven days of announcement date, decreased in the adjusted share price is far more than the decrease in the price index converted to new base, which is just 12.36%. Such a large percentage of decrease in the adjusted share price provides sufficient evidence to argue that this price decrease must have been attributed by the announcement of rights offering to the existing shareholders. Only the 12.36% and any further decrease in the share price can be attributed to the announcement effect of rights offering to the existing shareholders.

In case of BOK, the theory of rights offering does not match.

Market Price of Stock	=	Rs. 815
Value of One Rights	=	Rs. 357.5
Ex-rights Price of Share	=	Rs. 457.5

Hence after issue of rights share, BOK's share price fall more than its value of one rights and ex-rights price is less than its theoretical price i.e. Rs. 315. (Annex-6)

#### 4.2.4 Analysis of Share Price Movement of Nepal Bangladesh Bank Ltd.

**Table 4.3**

**Share Price Movement of Nepal Bangladesh Bank Ltd.**

Selected points of time	Share Price (RS.)	Price Relatives	Total Price Index of Equity Capital	Price Index Converted to New Base	% Change from Base	Adjusted Price Relatives 2 as % of 4	% Change from Base
	1	2	3	4	5	6	7
I	432	100	200.84	100	-	100	-
II	350	81.02	196.34	97.76	(2.24)	82.88	(17.12)
III	365	83.33	201.22	100.19	0.19	83.17	(16.83)
IV	393	89.73	202.45	100.80	0.80	89.02	(10.98)
V	260	59.36	232.29	115.66	15.66	51.32	(48.68)

In case of NB Bank Ltd, situation was somewhat different. The share price was Rs. 432 before 90 days of the announcement date and it dropped to Rs. 350, ten days before announcement date and increased to Rs. 365 in the day of announcement. Increase of price to Rs. 395 from Rs. 365, has been found from the point III to IV. After 180 days of announcement ate, it went down to Rs. 260. When we look to the price index it was 200.84 before 90 days of announcement date and it dropped to 196.34, ten days before the announcement date and after the price index started to increase and it was 201.22 in the day of announcement of rights share. After seven days of announcement date it was increased to 202.45 and after 180 days of announcement, it was raised up to 232.29.

While examining the percentage change in the adjusted price index from the base index in column 5 and percentage change in the adjusted share price form the base

index in column 7, it is clear that change in share price is not only due to general market movement. The adjusted price was increased from 82.88% in ten days before announcement date to 83.17% in the day of announcement while converted price index has been increased to 100.19% from 97.76% between point II and III. The adjusted share price is increased by 5.85% while converted price has been increased by just 0.61% from the point III to IV. Thus we can say, this increment in share price is due to rights offering because shareholder rushes to share market to enlist their name within the record date. But after 180 days of announcement date the share price has been dropped to Rs. 260.

In case of NB Bank Ltd., a rights has positive impact on share price movement and it approximately meets the theory.

Market Price of Share = Rs. 365

Value of One Rights = Rs. 132.50

Ex-rights Price of Stock = Rs. 232.50

Since the share price of NB Bank Ltd. after 180 days of announcement is Rs. 260 around the ex-rights price i.e. Rs. 232.50. So one can easily conclude that NB Bank Ltd. approximately meet the theory of rights offering. (Annex-6)

#### 4.2.5 Analysis of Share Price Movement of Nepal SBI Bank Ltd.

**Table 4.4**

**Share Price Movement of Nepal SBI Bank Ltd.**

Selected points of time	Share Price (RS.)	Price Relatives	Total Price Index of Equity Capital	Price Index Converted to New Base	% Change from Base	Adjusted Price Relatives 2 as % of 4	% Change from Base
	1	2	3	4	5	6	7
I	338	100	247.17	100	-	100	-
II	459	135.80	289.56	117.15	17.15	115.92	15.92
III	370	109.47	292.59	118.38	18.38	92.08	(7.92)
IV	346	102.37	296.78	120.07	20.07	85.26	(14.74)
V	373	110.36	305.32	123.53	23.53	89.34	(10.66)



Table 4.4 shows that the share price of Nepal SBI Bank Ltd. increased from Rs. 338 to Rs. 459, from base date to the ten days before the announcement date. This price is Rs.370 at the day of announcement date and it dropped to Rs. 346, after seven days of announcement date. But it increased to Rs. 373 after 180 days of announcement date, while price index shows the increasing trend. It was 247.17, 90 days before the announcement date. It moved up to 287.56 ten days before the announcement date and to 292.59 on the day of announcement of rights offering. Seven days after the announcement, total price index of equity shares reached up to 296.78 and even after the 180 days of announcement date, it is still increased up to 305.32, which obviously depicts the increasing trend in the general market movement. Column 5 shows that price index is increased by 17.15% ten days before the announcement date and by 18.38% in the day of announcement date. After seven days of announcement date, increased by 20.07% and by 23.53% after 180 days of announcement date. Similarly column 6 and 7 shows the adjusted share price and its percentage increases or decreases from the base date respectively. In the column 7, adjusted share price was increased by 15.92% ten days before the announcement date, but was decreased by 7.92% at the day of announcement date and by 14.74% after seven days of announcement date. Thus, this increase in share price was because of rights offering and general market movement. Both have equal effect on the share price movement.

Values of rights and ex-rights price of Nepal SBI Bank's stock are as follows:

Market price of stock = Rs. 370

Value of One Rights = Rs. 90

Ex-rights price of stock = Rs. 280

The value of the share after the allotment should be around Rs. 280, but the share price of Nepal SBI Ban Ltd. was Rs. 373 after 180 days of rights share announcement. Thus the share of Nepal SBI Bank Ltd. was overpriced. (Annex-6)

#### 4.2.6 Analysis of Share Price Movement of Nepal Investment Bank Ltd.

**Table 4.5**

**Share Price Movement of Nepal Investment Bank Ltd.**

Selected points of time	Share Price (RS.)	Price Relatives	Total Price Index of Equity Capital	Price Index Converted to New Base	% Change from Base	Adjusted Price Relatives 2 as % of 4	% Change from Base
	1	2	3	4	5	6	7
I	1170	100	247.41	100	-	100	-
II	1331	113.76	293.58	118.66	18.66	95.87	(4.13)
III	801	68.46	288.89	116.77	16.77	58.63	(41.37)
IV	880	75.21	288.34	116.54	16.54	64.54	(35.46)
V	831	71.03	306.15	123.74	23.74	57.59	(42.41)

In table 4.5 column 1 shows the share price of Nepal Investment Bank Ltd. in different period of time. The share price of NIB was Rs. 1170 before 90 days of announcement date. It was increased to Rs. 1331 before 10 days of announcement date, which drastically decreased to Rs. 801 on the day of announcement date. Market price of the share was Rs. 880 after seven days of announcement date. However market price of the share was slightly increased just after rights share announcement. Again decreasing trend of market price of share seemed and it went to Rs. 831 after 180 days of announcement date. By analyzing the share price movement of NIB and the trend of general market moment change in the market price form period I to period II, is basically due to general market movement, at that time market index had increased to 293.58 from 247.41. Column 5 shows that, price index was increased by 18.66% ten days before the announcement date. Similarly it increased by 16.77% from point I to III. Change in share price between II and III was not solely due to general market movement. Other factor like dividend caused the rapid decrease in share price. However slight increase in share

price can be observed in point IV in comparison to point III. In the above table column 6 shows adjusted price relatives. The adjusted price relative was increased to 64.54% from 58.63% between point III and IV. It clearly indicated that increase in share price was due to rights announcements. It was compatible to point IV at the same period price relatives also decreased from 64.54% to 57.59%.

Theoretically, the share price decreases after rights offering. But the price behaviour of NIB share did not follow the theory.

Market Price of Share	=	Rs. 801
Value of One Rights	=	Rs. 350.50
Ex-rights Price of Share	=	Rs. 450.50

The value of the share after the allotment is around Rs. 450 but the share price of NIB was Rs. 831 after six month. Thus the share price of NIB is overpriced. (Annex-6)

Theoretically after rights share issue the market price per share must be decline equal to its value of rights. But in practice due to the various factors such as dividend policy of the company. Demand and supply of share, cost of capital and the information flow to the outsider which is called as signaling effect market price is different at in different time period but finally it is near about its ex-rights price.

### **4.3 Correlation Coefficient between Share Price Movement and General Market Movement**

Share price movement, not only affected by rights offering but general market movement also largely affects it. So the correlation between the share price before and after the announcement of rights share and price index before and after the announcement of rights share has been calculated to find out, if there is any relation between the share price and price indices of the company. For calculation of correlation, share price of company are considered as the dependent variable, which fluctuate according to the fluctuation on the index of the total equity capital.

NEPSE has just started the practice of calculation and publishing the sector wise indices. For the period under the study, sector wise index was not available so that through out the study period the price index of total equity capital is used. Calculation of correlation coefficient and P.E. gives following results:

**Table 4.6**  
**Correlation Coefficient between Share Price and NEPSE Index**

Companies	r	r <sup>2</sup>	P.E.	6 P.E.
Everest Bank Ltd.	0.9997	0.9994	0.0002	0.0012
Bank of Kathmandu Ltd.	0.8925	0.7965	0.0626	0.3755
Nepal Bangladesh Ltd.	-0.8181	0.6693	0.1000	0.6000
Nepal SBI Bank Ltd.	0.3091	0.0955	0.2728	1.6368
Nepal Investment Bank Ltd.	-0.3987	0.1590	0.2537	1.5221

Refer to Annex-4

By Table 4.6,

While analyzing, the correlation coefficient of Everest Bank Ltd., it is nearly about 1, which is perfect positive correlation. Its correlation is significant too, because its correlation coefficient i.e.  $r = 0.9997$ , is greater than 6P.E. i.e. 6P.E. = 0.0012. Its coefficient of determination ( $r^2$ ) is 0.9994 or 99.94%, it means general market movement has 99.94% role in the share price behaviour of EBL. In case of Bank of Kathmandu, correlation coefficient between its share price and general market movement is 0.8925. It means there is strong positive correlation coefficient ( $r$ ) is greater than 6P.E. Thus we can conclude that share price behavior of BOK is due to general market movement, since its correlation is significant reliable.

In case of Nepal Bangladesh Bank Ltd., it has the high degree of negative relation between share price movement and general market movement i.e.  $r = -0.8181$ , which is significant too because  $r > 6P.E.$  (0.60). It means there negative correlation between share price movement and general market movement. Coefficient of determination is 0.6693 i.e. 66.93% for their relationship.

In case of Nepal SBI Bank Ltd., there is low degree of positive correlation i.e.  $r = 0.3091$  between share price movement and general market movement. Correlation coefficient of NSBI is less than 0.50, so it is defined as low degree of positive correlation. It is also less than 6P.E. i.e.  $r (0.3091) < 6P.E. (1.6368)$ , so it is proved that correlation is not significant. The coefficient of determination i.e.  $r^2 = 0.0955$  or 9.55%, means that about 9.55% of valuation in the share is explained by the general market movement. Thus rights offering have some effect in share price movement of NSBI.

But in case of Nepal Investment Bank Ltd., there negative but low degree relationship between share price movement and general market movement. But this is not significant because its correlation i.e.  $-0.3987$ , is less than probable error i.e. 1.5221. General market movement explains only 15.90% variation in the share price of NIB. Thus rights offering have some effects in the share price movement of NIB.

The relationship between share price and NEPSE index is always positive. In other words after increase in share price NEPSE index will also increase and after decrease in share price NEPSE index will also decrease.

But in above calculation of 5 samples Bank different result has been obtained. Two of them are highly correlated another two are negatively correlated and one of them is low degree of correlation.

That result occurs because NEPSE index indicates the average increase or decrease in share price of all listed company. When individual share price are independent from each other. Some may be increase and some may be decrease.

#### **4.4 Use of t-statistics to Measure the Immediate Impact of Rights offering on the Share Price and on General Market Movement.**

Theoretically after rights issue, share price of the company move upward till the close of issue date. To analyze whether there is any significant change in share price movement and price index (NEPSE index) or not after announcing the rights share, researcher has used t-statistics. Following table shows the calculated and tabulated values of t-statistics of respective companies.

**Table 4.7****Calculated Value and Tabulated Value of t-statistics**

<b>Name of Company</b>	<b>Test For</b>	<b>Significance Level</b>	<b>Degree of Freedom</b>	<b>t<sub>tab</sub></b>	<b>t<sub>cal</sub></b>	<b>Result</b>
Everest Bank Ltd.	Share Price	5%	8	2.306	3.29	Significant
	Price Index	5%	8	2.306	0.02	Insignificant
Bank Of Kathmandu Ltd.	Share Price	5%	8	2.306	45.95	Significant
	Price Index	5%	8	2.306	1.478	Insignificant
Nepal Bangladesh Bank Ltd.	Share Price	5%	8	2.306	6.24	Significant
Nepal SBI Bank Ltd.	Price Index	5%	8	2.306	5.74	Significant
		5%	8	2.306	4.49	Significant
Nepal Investment Bank Ltd.		5%	8	2.306	3.122	Significant
	Share Price	5%	8	2.306	1.987	Insignificant
	Price Index	5%	8	2.306	2	Significant

Refer to Annex - 3

Calculated value of 't' case to EBL is 3.29, whereas the tabulated value at 5% level of significance for 8 degree of freedom is 2.306. Since  $t_{cal}$  is greater than  $t_{tab}$ , it can be inferred the difference between the share price few days before and after the announcement of the rights offering is significant. But the difference in the price indices of total equity capital is insignificant. Because 't' calculated for NEPSE indices is less than tabulated value of 't' i.e.  $t_{cal} (0.02) < t_{tab} (2.306)$ . Thus it can be inferred that the change in share price of EBL is attributed by the announcement of rights offering. In this case, hypothesis that the share price does not increase significantly after the announcement of the rights offering can be rejected and the alternative hypothesis that the share price increases significantly is accepted.

In case of Bank of Kathmandu Ltd. the calculated value of 't' for share prices is 45.95, whereas the tabulated value at 5% level of significance for 8 degree of freedom is 2.306. Since  $t_{cal} > t_{tab}$  the hypothesis that the share price do not change significantly is rejected and the alternative hypothesis that the share price has changed significantly is accepted. Thus, it can be inferred that the heavy decrease in share price of its stock can be attributed to rights offering But while calculating the t-statistics for the NEPSE indices  $t_{cal} (1.478) < t_{tab} (2.306)$ , which shows there is no significant difference in general market movement before and after the announcement of the rights offering.

In case of Nepal Bangladesh Bank Ltd. calculated value of 't' is 6.24 whereas tabulated value at 5% level of significance for 8 degree of freedom is 2.306. Since  $t_{cal}$  is greater than  $t_{tab}$ , the hypothesis that the share price does not change significantly is rejected and the alternative hypothesis that the share price has change significantly is accepted. Hence, researcher may conclude that after the announcement of rights offering share price has increased significantly. Such conclusion may be derived by change in general market movement also as there is significant change in general market index during the same period.

While analyzing the 't' test of Nepal SBI Bank Ltd., it has also high-calculated value of 't' for share price than tabulated value of 't' i.e.  $t_{cal} (4.48) > t_{tab} (2.306)$  at 5% level of significant for 8 degree of freedom. From which, researcher can conclude that the difference between the share price few days before and after the announcement of the rights offering is significant. Similarly, the difference in the price indices of total equity capital is also significant. Thus, it can be concluded that increase in share price can be attributed to rights offering. In case of NSBI, alternative hypothesis that the share price changes significantly after the rights issue can be accepted.

Finally, in case of Nepal Investment Bank Ltd. the calculated value of 't' is 1.9872, whereas the tabulated value of 't' at 5% significance level is 2.306 for 8 degree of freedom. Since  $t_{\text{cal}}$  is greater than  $t_{\text{tab}}$ , it can be inferred that the difference between the share prices few days before and after the announcement of rights offering is not significant. But the difference in the price indices of total equity capital is significant, since  $t_{\text{cal}}$  for NEPSE index is 5.42, which is greater than  $t_{\text{tab}}$  i.e. 2.306. Thus it can be concluded that the decrease in the share price of NIB is not attributed by the announcement of the rights offering. In this case null hypothesis that the share price does not change significantly after the rights issue announcement can be accepted.

So far as it has been observed that in case of NBL, EBL, BOK, NSBI and NBB there is obvious impact of rights offering on the share price movement of this companies .But this does not hold true in case of NIB's.Change in share price of NIB's share is not due to rights offering .It can be attributed to general market movement.

#### **4.5 Subscription of Rights Share in Nepal.**

Subscription is the major part of the public issue. There is a lot case of case of under subscription in Nepalese company. Due to various causes like lack of instrument of rights transfer, lack of investors awareness, financial problem of investors, there arise problem of under subscription of share and finally this absence deprives the existing shareholders from enjoying the choice of selling the rights. Following table shows the subscription of rights share in Nepal.



**Table 4.8**  
**Subscription of Rights Share in Nepal**

Fiscal Year	Issuer Company	Subscription in %
2056/57	Everest Bank Ltd.	27.17
2057/58	Bank of Kathmandu Ltd.	98.30
2058/59	Nepal SBI Bank Ltd.	97.26
2059/60	Nepal Investment Bank Ltd.	97.42
2060/61	Nepal Bangladesh Bank Ltd.	95.26
2061/62	Nepal SBI Bank Ltd.	96.50
2062/63	Nepal Investment Bank Ltd.	99.04
2063/64	Kumari Bank Ltd.	153.46
2064/65	Machhapuchhre Bank Ltd.	87.13

Source: Annual Report SEBON 2007/08

From Table 4.8, it is clearly seen that under subscription has been a major problem in rights share practice of commercial banking sector. Except in the case of Kumari Bank Ltd, all the banks have faced the problem of under subscription which creates problems to those companies to fulfill the capital requirement for which they have issued rights share.

The first case of rights share issue made by Everest Bank Ltd. is seen heavily undersubscribed. The subscription percent was only 27.17. It could be due investor's awareness and lack of proper knowledge regarding rights share practice. In other cases of rights share practice, though under subscription problem is there, the subscription percentage is above 90 except the case of Machhapuchhre Bank.

The problem of under subscription has been more complicated because there is lack of clear and easy provisions regarding sales or undersubscribed shares. Similarly, in Nepal there exists large number of shareholders holding few number of share so, they generally ignore rights share.

Generally the subscription of rights share is equal to hundred percent or below it because the rights share can buy only by them who have the rights to buy it. But in some cases, it is found over subscription. For example, one who have 10 share of a company that means he have 10 rights. If the company policy of rights share is in the ratio of 4:1 that means to buy one additional share must have a 4 rights. Now 10 rights can buy only 2 full share and remaining 2 rights is unable to buy another one share at that situation the investor offered to by 3 share. If there are many cases of such type the over subscription will occur in the rights share issue.

#### **4.6 Analysis of Primary Data**

As researcher mentioned, this study was heavily based on secondary data. But to make the study more effective and fruitful, here researcher had collected some data by distribution of questionnaire to concerned person. So, here the researcher analyzes the responses received from respondents.

**Table 4.9**

*Preference of sector to invest*

Sector	Mean Rank	Result
Banking/Financial	1.00	1
Insurance	2.16	2
Manufacturing/Trading	3.08	3
Hotel/Other	3.76	4

During the study period, question regarding investor's preference of sector to invest, all respondent gives first priority to the Banking and Financial sector. Its mean rank is 1 whereas for Insurance sector, mean rank is 2.16. So it is the second preferable sector of investor. For Manufacturing/Trading sector mean rank is 3.08, which occupied third position to attract investors. Mean rank of Hotels and others sectors is 3.76, which is last priority of investors to invest. This data clearly shows that, investors are more interested to invest in banking and financial sector.

**Table 4.10**

**Investors purpose of rights share purchase**

Cause	Mean Rank	Result
To Increase the value	1.96	1
To Increase the number of share	2.20	2
To Increase the dividend	2.56	3
To Maintain the control position in management	2.60	4

Regarding the question about the purpose of investors to purchase the rights share, most of the respondents give first priority for the option that to increase the value, its mean, rank is 1.96. For the second option to increase the number of share, mean rank is 2.20, which becomes second in ranking. Likewise for third option to increase the dividend mean rank is 2.56 and described as third rank. mean rank for fourth option to maintain the control position in management is 2.60, which is last in raking. In this way it can be concluded that main purpose of investor is to increase the value.

**Table: 4.11**

**Action of shareholders, if rights are transferable**

Option	Mean Rank	Result
Exercise the rights	1.84	1
Partially exercise & sell the rights	1.96	2
Sell the rights	2.20	3
Neither sell nor exercise	4.00	4

Next question regarding the action of shareholders, if rights are transferable in Nepal, first rank is obtained for the option that the shareholders will exercise the rights. The mean rank of this option is 1.84, whereas for the option that the shareholder will partially exercise and sell the rights mean rank is 1.96. It means that this option covers second rank in total. For the option that shareholders will

sell the rights, mean rank is 2.20 and its rank is third. Fourth rank is obtained for the option that shareholder will neither sell the rights nor exercise the rights since its mean rank is 4. So it can be concluded that, shareholder are well aware about their wealth position. They never let the rights to expire and they utilize the rights either by exercising them or by selling them if rights are transferable in Nepal.

**Table: 4.12**  
**Beneficiaries of the rights issue**

Option	Mean Rank	Result
Shareholders	1.60	1
Issuing Company	1.68	2
Issue managers	3.00	3
Brokers	3.72	4

As far as regarding the question about beneficiaries of the rights issue, most of the respondents indicated the shareholders for the first rank. Its mean rank is 1.60. For issuing companies second rank is obtained. Mean rank for issuing companies is 1.68. Issue manager as a beneficiary of rights issue holds third rank with mean rank of 3. For broker mean rank is 3.72 giving last rank i.e. 4. This data suggests that there is no any confusion about that the shareholder, issuing companies; issue managers and brokers are the main beneficiaries of the rights offering.

**Table: 4.13**  
**Cause of preference given to rights issue by company**

Causes	Mean Rank	Result
Easy process	1.76	1
Low flotation cost	2.00	2
Maintain control position in management	2.56	3
other	3.76	4

In another major question about the preference given to issue rights share by companies instead of other instrument, most of the respondents points the easy process of rights issue as the most important cause. It covers the first rank with mean rank 1.76. For another cause that the low flotation cost, mean rank is 2, which provides it in second rank. Another cause of practicing rights share by companies rather than other instrument is to maintain the control position in management, which covers third rank with 2.56 mean ranks. Respondent gives fourth rank for other cause. Its mean rank is 3.76. In this way, it can be concluded that Nepalese corporate firm issues rights share instead of other instruments, due to low flotation cost, easy process to collect fund, to maintain the control position in management and due to some other causes like legal provision etc. as well.

**Table: 4.14**  
**Causes of under subscription of rights share**

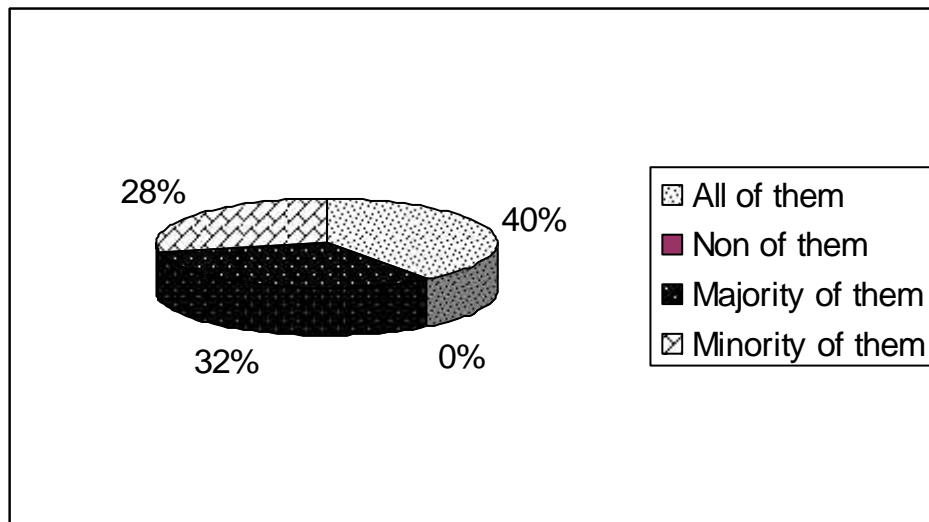
Causes	Mean Rank	Result
Low performance of company	1.52	1
Lack of investors awareness	2.08	2
Rights is not transferable	2.44	3
Other causes	4.00	4

In response to the question regarding the cause of under subscription of rights share, low performance of company is pointed out for first rank with mean rank of 1.52. Another causes the lack of investor's awareness receives the second most important cause of under subscription of rights share with mean rank of 2.08. Rights are not transferable in Nepal, which causes the under subscription of rights share. It becomes third most influencing cause with mean rank of 2.44 where other causes with mean rank of 4 got last rank. This helps researcher to conclude that the low performance of the rights issuing companies is the main cause of under subscription of rights share, whereas other causes like lack of rights transferable provision, investors awareness regarding rights share also are the causes of under subscription of rights share in Nepal.

*Investors' awareness about rights offering.*

**Figure 4.1**

**Investors Awareness to the Rights Offering**



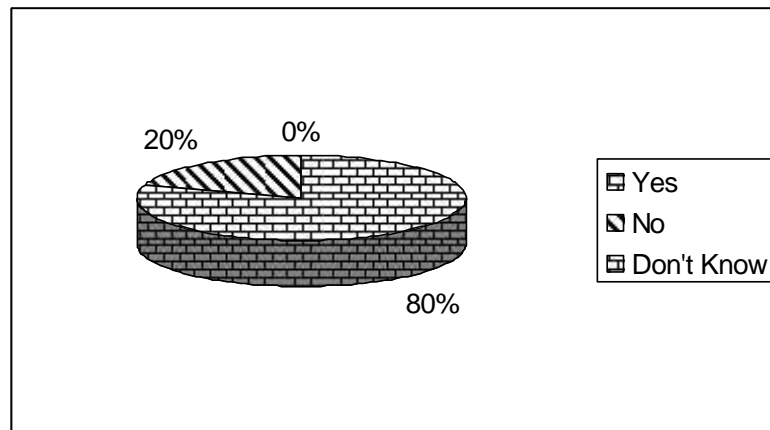
Question regarding awareness of in investors about rights offering, out of total respondents 10 said that all of them are well aware to entire phenomenon of rights share in Nepal. 8 respondents said that majority of the investors are well aware and remaining 2 said minority of them are well aware to the entire phenomenon of the rights share in Nepal. So, here researcher can conclude that most of the investors are well aware to entire phenomenon of rights share in Nepal.

***Difficulties regarding provision not to transfer the rights***

In response to the question about difficulties regarding the provision not to transfer the rights, 20 respondents said yes that investor faces difficulties because of that provision and remaining 5 said no there is not any difficulties due to lack of provision to make rights transferable. This can be concluded that due to lack of provision to make rights transferable, investors faces difficulties.

**Figure 4.2**

**Difficulties due to Non-transferable Rights Share**

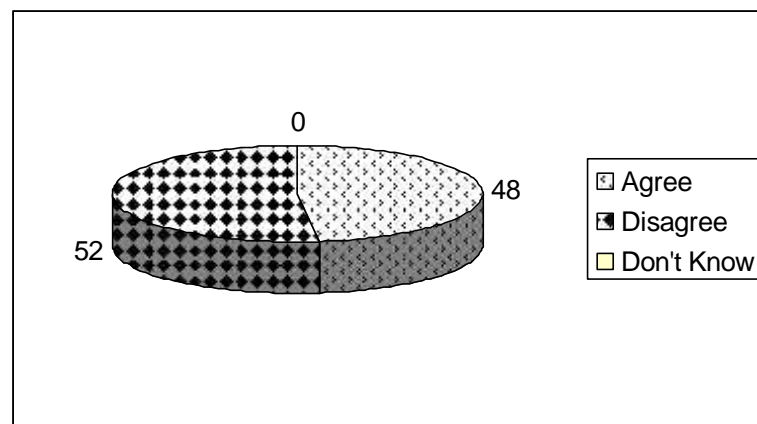


**Practice of Rights Share due to Large Corporate Firm**

Next question about lack of large corporate firms is the cause of low practice of rights share in Nepal, 12 respondents out of total agree with this and remaining 13 are disagree with this question. In conclusion, there is no any lack of large corporate firm in Nepal to practice rights share properly.

**Figure 4.3**

**Practice of Rights Share due to Large Corporate Firm**

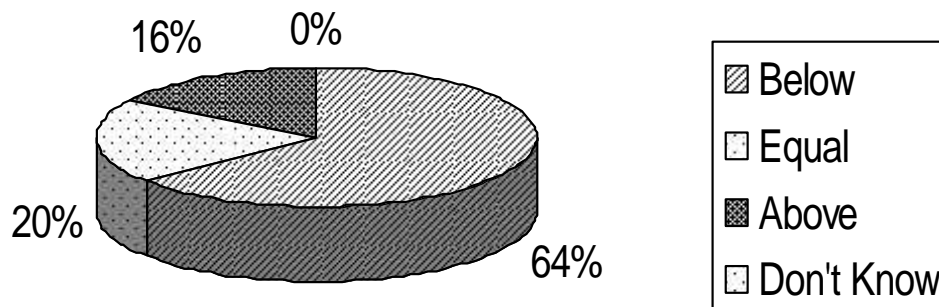


***Subscription price of rights share***

The question regarding subscription price, 16 respondents said it should be below the market price of the share, whereas 5 said that it should be equal to market price and remaining 4 said that they don't know what should be the subscription price.

So, it can be concluded that subscription price of rights share should be below the market price of share.

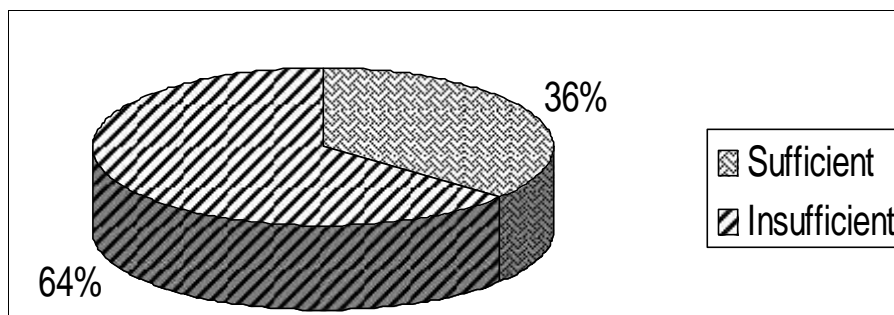
**Figure: 4.4**  
**Subscription Price Compare to Market Price**



***Adequacy of current legal provision regarding rights issue***

As far as regarding the current legal provision especially about rights offering 16 respondents said that, it is inadequate and remaining 9 said that it is adequate. Among the respondents, who said that current legal provision regarding rights offering is inadequate, cent percent are agreed on the clause that rights share should be transferable but in addition to this 80% said that there should be provision of premium issue of rights share and remaining 20% feels that there should be the clear procedure or rights transfer.

**Figure: 4.5**  
**Sufficiency of Legal Provision**

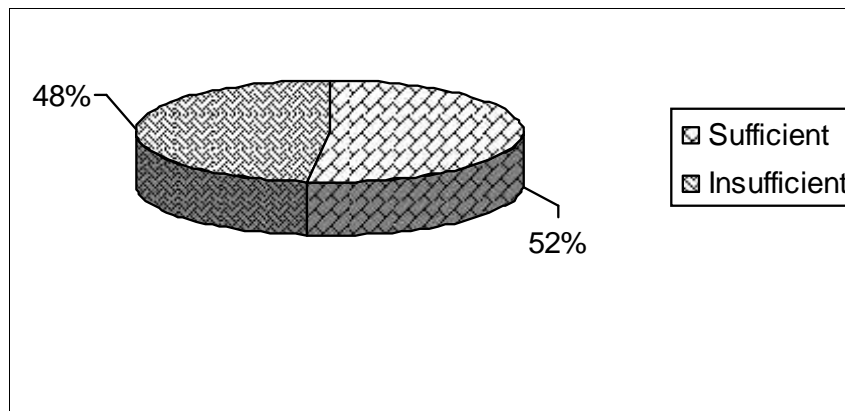




### *Sufficiency of infrastructure of Nepalese security market*

In response to the question regarding infrastructure of Nepalese security market, out of total respondents, 12 said that it is sufficient to rights share practice and remaining 13 said it is insufficient. Here researcher can conclude that there should be a lot of things to do to make Nepalese security market effective.

**Figure: 4.6**  
**Sufficiency of Infrastructure**



### *Problems of rights share practice in Nepal*

Finally question regarding problems of rights share practice different kinds of opinion were received. Lack of infrastructure, low subscription price of rights share, under subscription of rights share, lack of provision regarding allotment of under subscribed rights share, poor financial condition of investors, low economics growth of the country is the major problems to practice rights share in Nepal.

### **4.7 Major Findings of the Study**

Here the effort has been made in to present major findings of the study in rights share practice in Nepal and its impact on share price movement of commercial banks. The major findings of this study are presented in following headings; correspondence to the study objectives.

#### **4.7.1 Significance of Changes in Share Price after the Announcement of Rights Share**

From the analysis, the following results have been obtained:

- There is significant difference between share prices of Bank of Kathmandu Ltd. before and after the rights issue. But BOK also does not follow the theory of rights offering because its share price had moved downward than its ex-rights price.
- In case of Everest Bank Ltd., share price also decreased after rights issue and there was significant different between share price before and after the announcement of rights share.
- In case of Nepal Bangladesh Bank Ltd., its share price increased significantly and after allotment of the rights share its share was traded nearly in ex-rights price. So, researcher can say that stock of Nepal Bangladesh Bank Ltd. followed the theory of rights offering.
- There is significant difference between the share prices before and after rights share announcement of Nepal SBI Bank Ltd. But stock of NSBI does not follow the theory of rights offering. Its market price was overpriced.
- Finally in case Nepal Investment Bank Ltd., there is no significant difference between share prices few days before and after the announcement of rights share. So share price movement of NIB cannot be attributed to the rights offering. Share price of NIB was overpriced, so it does not follow the theory of rights offering.

#### **4.7.2 Rights Share Practice in Nepal**

- Rights offering have only twelve years history, so it is new practice for Nepalese companies.
- A rights offering in Nepal is in increasing trend in recent years. It occupied 41.48% in total public flotation, which is second largest position among all instruments.

- Out of total listed companies, only 103 cases of rights offered by 43 companies in Nepal. Most of the companies are issuing rights share in order to fulfill capital requirement as per the NRB directives.
- All the sectors except have practiced rights share in Nepal. Commercial Banking sector occupies largest almost of total rights offering among all sectors. It is about 56.83 percentage of total rights issued amount. Till the study period only 17 commercial bank have issued rights share for their existing shareholders. Nepal Bank Ltd. is the first bank to issue rights share in Nepal. Nepal SBI Bank Ltd. and Nepal Investment Bank Ltd. have issued rights share twice, whereas other commercial banks have issued only one time.
- All issue managers except United Finance Ltd. had underwrites the rights share in Nepal. CIT is the largest issue manager among all issue managers and NFCL is the smallest one.
- Nepalese investors mostly prefer the Banking and Finance sectors share to invest rather than other sector.
- Majority of the investors are well aware about the rights share in Nepal.

#### **4.7.3 Subscription of the Rights Share Issued**

- Most of the rights issues were under subscribed in Nepalese companies. So it is a common phenomenon in Nepal.
- Under subscription of rights share in caused by various factors. Lack of investors' awareness, low performance of companies, lack of effective flow of information, untraceable shareholders, and lack of provision for rights transfer and financial problem of shareholder are the major cause of under subscription.
- There is no clear and easy provision regarding the sales of under subscribed rights share in Nepal.
- Subscription of rights share in recent years is in increasing trend.

#### **4.7.4 Problems Regarding Rights Share in Nepal**

As it is mentioned above, there are a lot of things to do to develop rights share practice in Nepalese security market. In research some problems has been found, which are given below:

- Subscription price of rights share is too low as compare to market price of share.
- There is no any provision to make rights share free pricing.
- Lack of separate rules regarding rights share is another problem.
- Lack of provision to make rights share negotiable, which cause the under subscription of rights share.
- Most of the companies are suffering from under subscription of their rights share but there is no clear and easy provision regarding the sales of under subscribed rights share.
- Poor financial condition of shareholders in Nepal.
- Large no of shareholders holding small no of share and they generally ignored rights issue.

## CHAPTER V

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary

A rights offering in Nepal and its impact on share price movement of commercial banks is an exciting and challenging study. A brief introduction of the study and the overall view of rights offering are presented in introductory chapter and available literature on rights issue is reviewed in chapter second. The appropriate research methodology is presented in chapter third; the data are presented and analyzed in chapter four. Now, in this chapter an attempt has been made to present summary of findings, issue and gaps observed and give some suggestion for future course of action.

This study is concentrated on the various aspects of rights offering with special reference to the selected listed commercial banks of Nepal. It covers the period of 13 years from FY 1995/96 to 2007/08. It includes the data of mostly rights issuing commercial banks. But to show the practice of rights offering in Nepal, researcher takes some data of all rights issuing company.

Although Nepalese security market is practicing the rights offering since thirteen year, but it's every essence is not seemed to practice here. Only 103 cases of rights offered by 43 companies, out of total listed companies in Nepal till the FY 2064/065. In Nepal few cases of rights offering meets the theory. Mixed results have been obtained from the sample companies regarding rights offering theory in Nepal. Share price of Bank of Kathmandu Ltd. before rights share announcement was Rs. 801, but it went down to Rs. 460 after rights share announcement. Similar trend was observed in case of Everest Band Ltd., while mixed result in case of Nepal SBI Bank Ltd and Nepal Investment Bank Ltd.. was observed. But in case of Nepal Bangladesh Bank Ltd., share price was Rs. 350 before the announcement date and it went up to Rs. 393 after the

announcement of rights shares and again falls down to Rs. 260 after allotment of rights share.

This study has been done to fulfill some specific objectives. Main objectives of this study, is to examine the movement in share price before and after the announcement of rights issues and to analyze the rights issue practice in Nepal. Finding out the problem of rights issue in Nepal is another objective of this study. Till the date, many studies have been done related to the impact on market price by various variables such as EPS, DPS and signaling effects. But very few studies are directly concerned with rights issue in Nepal, because rights issue is relatively new phenomenon in Nepal. But it is really tried hard to make full effort to collect the related studies for review in second chapter.

This study is heavily based on secondary data. So useful data are collected from SEBON and related organization as well. Newspaper, annual reports of sample companies, journals and bulletins are important source to get secondary data in this study. Other information's are collected through internet as well. Primary data to make this study more reliable has been used to some extent. To collect primary data, personal interview and distribution of questionnaire to some specific people has been done. To conduct this study statistical tools as well as financial tools have been used.

## 5.2 Conclusion

Finally it can be concluded that there is no long history of rights share in Nepal. So it is a new phenomenon in Nepal. There is no doubt that a lot of things to work out to make the rights offering as effective instrument of raising fund in Nepal. While analyzing the rights offering by Nepalese companies, there are very few companies, which has meet the theory of rights offering i.e. the share price has increased significantly after the announcement of rights share and then traced on ex-rights price after allotment of rights shares. In most cases share price has decreased significantly after the rights share announcement and it was traded even below the ex-rights price. In our sample the bank's entire share was either traded above ex-rights price or below it. Almost in all cases of rights offering there exists some sort of under subscription of rights share. Some of shareholders even cannot get information about the rights share announcement made by their companies, other who are informed are no all aware of what the rights share means and what can be its impact on their wealth position. In Nepal rights are not transferable and it is also the cause of under subscription of rights share. There is no clear and easy provisions regarding sales of under subscribed rights share and many companies are distributing it to their employees. The employees are gaining in the cost of existing shareholders. The large no of shareholders are holding the few share and they generally ignore about the rights share.

While testing the hypothesis, mixed result has been obtained. In most companies, rights share affects the share price movement whereas in some it does not affect. Share price movement and general market movement in some cases positively correlated and in some cases it is negatively correlated. While analyzing share price movement during five periods, researcher has obtained different result. The legal provision and policies regarding of securities is not clear and the process of approval is lengthy. The formalities to be completed by issue manager before getting approval, is time consuming and lengthy. Some time it may take a fiscal year and in next fiscal year the essence of issue may

not remain and this is the reason that in some cases of rights offering holders record date remains prior to the announcement date, which is not consistent with the theory of rights offering. The regulation regarding the calculation of premium is not clear and certain regulation require company to issue rights share in par value that result in wide difference between market price per share and subscription price.

Thus, finally we can say that rights offering have some impact on share price that can be positive or negative. The general market movement to greater extent in Nepal also influences the market price of share. The capital market is not matured and the rights issue has not practiced properly by all sectors and companies.



### 5.3 Recommendations

Based on the findings of the analysis and the issues and gaps mentioned above, the researcher has provided some practicable recommendation in the following points:

- In Nepal all companies do not do rights share practice properly. So government should positively motivate them by good governance and provisions regarding rights share.
- Nepalese investors are not so well aware about rights offering. So to increase awareness of investors some programs like interaction, advertisement, videoconference, radio talk etc, should be managed by related companies, government and Medias as well.
- The mechanism of information flow is not found to be appropriate and effective that results in heavy under subscriptions of rights share. Thus effective alternative of information flow should be searched.
- Free pricing concept should be implemented in rights offering to get rid off from the problem of low subscription price of rights share.
- There is no any provision in company Act 2053 to make rights negotiable. So it should be amended and should make a provision of transferable rights, which helps to solve the problem of under subscription of rights share to some extent. It also protects the dilution in wealth of shareholders and also enhances the dimension of security market.
- Provisions regarding sales of under subscribed rights share should be made. The current practice to distribute them among the employees of the respective companies violates the very essence of the rights offering. The company act, therefore, should be quite clear in this regard.
- Lack of investor's protection act is another cause of under subscription of rights share. So, there, should separate investor's protection act so that investors can maintain their confidence, over their investment and feel secured.
- One critical factor that affects the share price and subscription is the holder's record date. The investors who purchase the share after that date are unable to get share. So, rights issuing companies should set the proper holder record date so that investors who want to enjoy the rights share offering can purchase the share issued by them.

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## ANNEX-1

### Rights Share Issue in Nepal

S.N.	Name of Issuing Companies	Fiscal Year	Issued Date	Amount raised through rights offering (Rs. In million)	Subscription price (Rs.)	Issue Manager Subscription
1.	Nepal Finance & Saving Co. Ltd.	1995/96	01/12/1995	2.00	0	0
2.	Seti Cigarette Factory Ltd.	1995/96	11/07/1996	67.00	77.90	0
3.	Himalayan General Insurance Co.Ltd	1996/97	-	30.00	-	AFC
4.	Bottlers Nepal Ltd.	1996/97	14/04/1997	225.20	0	CIT
5.	Nepal Share Market & Finance Ltd	1996/97	06/07/1997	20.00	100.00	AFC
6.	Nepal United Co. Ltd.	1997/98	18/02/1998	3.01	44.41	NFCL
7.	Nepal Bank Ltd.	1997/98	25/12/1997	241.95	0	CIT
8.	Annapurna Finance Co Ltd..	1997/98	03/03/1998	5.00	81.72	NFCL
9.	Nepal Share Market Ltd	1998/99	09/06/1999	30.00	0	AFC
10.	Necon Air Ltd	1999/2000	03/03/2000	89.60	95.31	CIT
11.	Paschimanchal Fin. Co. Ltd.	1999/2000	14/03/2000	20.0	129.65	.NSML
12.	Ace Finance Co. Ltd.	1999/2000	11/04/2000	15.00	100.00	NSML
13.	Narayani Finance Ltd.	2000/2001	28/03/2001	12.58	122.02	CIT
14.	Everest Bank Ltd.	2000/2001	11/07/2001	119.21	27.17	NSML
15.	Bank of Kathmandu Ltd.	2001/2002	31/08/2001	234.00	98.03	NSML
16.	Nepal Housing and Merchant Finance Ltd.	2001/2002	07/01/2002	15.00	100.00	NSML
17.	Ace Finance Ltd.	2001/2002	25/02/2002	45.00	100.00	NSML
18.	Nepal SBI Bank Ltd.	2001/2002	25/03/2002	287.87	97.26	NMB
19.	NIDC Capital Markets Ltd.	2001/2002	08/04/2002	40.00	95.00	CIT
20.	Nepal Investment Bank Ltd.	2002/2003	27/09/2002	57.24	97.42	NCML
21.	Nepal Share Market s and Finance Ltd.	"	29/01/2003	60.00	85.37	CIT
22.	Mahalaxmi Finance Ltd.	"	28/02/2003	25.00	0	NFCL
23.	Peoples Finance Ltd.	"	03/06/2003	20.00	56.69	NCML
24.	Alpic Everest Finance Ltd.	2003/2004	04/09/2003	60.00	85.37	CIT
25.	Siddhartha Finance Ltd.	"	09/12/2003	20.00	100.51	NEFINSC 0
26.	NB Finance and Leasing C. Ltd.	"	15/06/2004	30.00	66.84	NSBM
27.	Nepal Bangladesh Bank Ltd.	2004/2005	16/17/2004	359.92	95.26	NSMB
28.	Annapurna Finance Co. Ltd.	"	05/11/2004	20.00	97.33	NCML
29.	Nirdhan Utthan Bank Ltd.	"	25/04/2005	15.00	65.92	NMB
30.	Nepal SBI Bank Ltd.	"	03/05/2005	215.93	96.50	NMB

31.	Nepal Investment Bank Ltd.	"	13/05/2005	295.29	99.04	AFC
32.	National Finance Co. Ltd.	"	15/06/2005	43.20	97.06	NCML
33.	Development Credit Bank Ltd.	2005/2006	24/08/2005	80.00	95.87	NMB
34.	Kumari Bank Ltd.	"	21/12/2005	125.00	153.46	NCML
35.	Fewa Finance Co. Ltd.	"	18/01/2006	30.00	97.40	NMB
36.	Om Finance Co. Ltd.	"	18/01/2006	30.00	99.66	NMB
37.	Goodwill Finance Ltd.	"	03/03/2006	25.00	94.96	NCML
38.	Janaki Finance Co. Ltd.	"	15/03/2006	10.00	98.33	NEFINSC 0
39.	Central Finance Ltd.	"	26/03/2006	12.00	98.32	NCML
40.	Taragaun Regency Hotels Ltd.	"	26/03/2006	446.45	57.45	NCML
41.	Machhapuchere Bank Ltd.	"	25/05/2006	165.00	87.13	NMB
42.	Kist Merchant Banking and Finance Ltd.	"	30/05/2006	50.00	78.01	NMB
43.	Nepal Share Market & Finance Ltd.	"	04/06/2006	40.00	90.94	CIT
44.	Pokhara Finance Ltd.	2006/2007	20/07/2006	20.00	99	NMB
45.	Lumbini Bank Ltd.	"	13/08/2006	100.00	100	NCML
46.	Paschimanchal Bikas Bank Ltd.	"	20/08/2006	28.00	76	NCML
47.	Alpic Everest Bank Ltd.	"	07/09/2006	20.00	96	NMB
48.	Peoples Finance Ltd.	"	28/09/2006	40.00	56	NCML
49.	Chhimek Bikash Bank	"	27/10/2006	20.00	81	NMB
50.	Nepal Development Bank Ltd.	"	25/12/2006	160.00	54	NCML
51.	Ace Finance Company Ltd.	"	31/01/2007	194.00	99	NEFINC 0
52.	Navadurga Finance Co. Ltd.	"	02/02/2007	11.00	99	NEFINIC 0
53.	Annapurna Finance Co. Ltd.	"	09/02/2007	80.00	99	NCML
54.	Laxmi Bank Ltd.	"	25/04/2007	122.00	98	NMB
55.	Capital Merchant Banking & Finance Ltd.	"	27/04/2007	84.00	80	NCML
56.	Yeti Finance Ltd.	"	29/04/2007	6.30	83	NCML
57.	Business Development Bank	"	11/05/2007	30.00	100	AFC
58.	Kist Merchant Banking and Finance Ltd.	"	23/05/2007	100.00	100	NCML
59.	Siddhartha Bank Ltd.	"	04/06/2007	100.00	99	AFC
60.	Lumbini Bank Ltd.	"	19/06/2007	150.00		AFC
61.	Nepal Investment Bank Ltd.	2007/2008	29/01/2008	201.30	99	ACE
62.	Siddhartha Bank Ltd.	"	25/02/2008	138.00	99	NMB

63.	NIC Bank Ltd.	"	14/03/2008	158.40	96	NCML
64.	Lumbini Bank Ltd.	"	31/03/2008	250	85	ACE
65.	Kumari Bank Ltd.	"	24/04/2008	180	99	NCML
66.	Laxmi Bank Ltd.	"	02/05/2008	183	99	NMB
67.	Nepal Credit & Commerce Bank Ltd.	"	07/08/2007			NCML
68.	Pachimanchal Bikas Bank Ltd.	"	02/12/2007	700	89	ACE
69.	Bhrikuti Bikash Bank Ltd.	"	10/12/2007	30	97	NCML
70.	Development Credit Bank Ltd.	"	10/12/2007	807.40	99	NMB
71.	Siddhartha Bikash Bank Ltd.	"	10/02/2008	50		ACE
72.	Sanima Bikash Bank Ltd.	"	07/05/2008	64	99	NCML
73.	ACE Development Bank Ltd.	"	25/05/2008	96		NCML
74.	Gorkha Bikash Bank Ltd.	"	26/05/2008	160	1.30	CIT
75.	Business Development Bank Ltd.	"	29/05/2008	150	67	ACE
76.	Himchuli Bikash Bank Ltd.	"	30/05/2008	60	99	NCML
77.	Annapurna Bikas Bank Ltd.	"	10/06/2008	150		NEFINCO
78.	Sahayogi Bikas Bank Ltd.	"	17/06/2008	10.00	99	NCML
79.	Capital Merchant Banking and Finance Ltd.	"	09/12/2007	161.00	77	ACE
80.	Premier Finance Co. Ltd.	"	27/01/2008	14.40	98	NCML
81.	Nirdhan Uthan Bank Ltd.	"	16/11/2007	39.5		NCML
82.	Central Finance Ltd.	"	11/09/2007	24.00		NCML
83.	Nepal Merchant Banking and Finance Ltd.	"	08/01/2008	800	95	NFC
84.	Nepal Share Market & Finance Ltd.	"	19/11/2007	240	99	CIT
85.	IME Financial Institutions Ltd.	"	26/11/2007	50	99	CIT
86.	Prudential Bittiya Sanstha Ltd.	"	14/03/2008	50	86	ACE
87.	Paschimanchal Finance Co. Ltd.	"	19/05/2008	27.8	97	NFC
88.	Kist Bank Ltd.	"	16/05/2008	600	85	ACE
89.	Goodwill Finance Ltd.	"	25/05/2008	50	99	ACE
90.	United Finance Ltd.	"	30/05/2008	75	98	NCML
91.	Nepal Express Finance Ltd.	"	02/06/2008	30	99	NCML
92.	Royal Merchant Banking and Finance Ltd.	"	01/06/2008	60.6	99	ACE
93.	ICFC Bittiya Sanstha Ltd.	"	10/06/2008	224.8	85	NMB
94.	International Leasing and Finance Ltd.	"	25/06/2008	504	92	NCML

95.	Nepal Housing & Merchant Finance	"	25/06/2008	40.8	83	ACE
96.	Shree Investment Finance Ltd.	"	23/06/2008	16.8	99	NMB
97.	Standard Finance Ltd.	"	23/06/2008	72.6	101	NCML
98.	Gorkha Finance Ltd.	"	13/07/2008	30	106	CIT
99.	Guheshwori Merchant Baking Fin. Ltd.	"	15/07/2008	37	-	NCML
100.	Nepal Awas Bikas Bitta Co. Ltd.	"	15/07/2008	70.5	96	NFC
101.	Sagarmatha Insurance Co. Ltd.	"	20/02/2008	23.6	96	ACE
102.	Premiere Insurance Co. Ld.	"	26/06/2008	39	86	ACE
103.	Himalayan General Insurance Ltd.	"	07/07/2008	37.8	-	ACE

Source : Annual Report of SEBON, FY 2007/08



## ANNEX-2

### Information about Share Price and NEPSE Index before and after Announcement of Rights Share

**Table A2.1**

#### **Share Price and Index of Everest Bank Ltd. (2065-03-27)**

Share Price Before Announcement Date		Share price After Announcement Date		Share Price After 180 Days of Announcement Date	
Date	Share Price (Index)	Date	Share Price (Index)	Date	Share Price (Index)
2065-03-14	701 (333.60)	2065-03-22	660 (325.31)	2065-09-13	445 (271.45)
2065-03-13	705 (334.39)	2065-03-27	660 (326.14)	2065-09-16	450 (267.75)
2065-03-12	710 (335.17)	2065-03-28	700 (334.75)	2065-09-17	451 (266.20)
2065-03-07	710 (336.87)	2065-04-02	615 (346.80)	2065-10-19	460 (261.08)
2065-03-06	705 (336.22)	2065-04-03	600 (343.13)	2065-10-20	460 (261.18)

**Table A2.2**

#### **Share Price and Index of Bank of Kathmandu Ltd. (2065-04-05)**

Share Price Before Announcement Date		Share price After Announcement Date		Share Price After 180 Days of Announcement Date	
Date	Share Price (Index)	Date	Share Price (Index)	Date	Share Price (Index)
2065-03-26	805 (322.74)	2065-04-12	450 (321.96)	2065-10-05	315 (259.75)
2065-03-22	801 (323.51)	2065-04-15	485 (322.01)	2065-10-08	310 (257.73)
2065-03-20	801 (325.71)	2065-04-16	480 (323.64)	2065-10-09	306 (255.91)
2065-03-19	810 (327.95)	2065-04-17	488 (325.21)	2065-10-10	301 (254.99)
2065-03-18	805 (330.10)	2065-04-18	483 (325.60)	2065-10-11	305 (255.13)

**Table A2.3****Share Price and Index of Nepal Bangladesh Bank Ltd. (2065-03-25)**

Share Price Before Announcement Date		Share price After Announcement Date		Share Price After 180 Days of Announcement Date	
Date	Share Price (Index)	Date	Share Price (Index)	Date	Share Price (Index)
2064-12-20	337 (197.17)	2064-12-30	365 (201.22)	2065-06-28	260 (232.29)
2064-12-23	340 (196.14)	2065-01-02	374 (202.94)	2065-07-10	260 (232.00)
2064-12-24	345 (197.32)	2065-01-03	381 (202.10)	2065-07-11	261 (232.06)
2064-12-25	348 (198.87)	2065-01-04	393 (202.45)	2065-07-12	260 (232.13)
2064-12-26	350 (199.41)	2065-01-09	393 (203.16)	2065-07-17	267 (232.52)

**Table A2.4****Share Price and Index of Nepal SBI Bank Ltd. (2065-01-13)**

Share Price Before Announcement Date		Share price After Announcement Date		Share Price After 180 Days of Announcement Date	
Date	Share Price (Index)	Date	Share Price (Index)	Date	Share Price (Index)
065-01-07	370 (292.59)	2065-01-09	346 (296.11)	2065-07-13	373 (305.22)
2064-12-19	455 (284.21)	2065-01-20	346 (296.78)	2065-07-22	385 (303.48)
2064-12-17	460 (283.72)	2065-01-21	350 (298.78)	2065-07-23	385 (396.15)
2064-12-15	427 (279.86)	2065-01-22	357 (288.89)	2065-07-25	390 (307.98)
2064-12-11	426 (278.86)	2065-01-26	368 (288.79)	2065-07-29	390 (305.10)

**Table A2.4****Share Price and Index of Nepal Investment Bank Ltd. (2065-01-23)**

Share Price Before Announcement Date		Share price After Announcement Date		Share Price After 180 Days of Announcement Date	
Date	Share Price (Index)	Date	Share Price (Index)	Date	Share Price (Index)
065-01-22	801 (288.89)	2065-01-24	801 (288.89)	2065-07-23	831 (306.15)
2065-01-21	790 (298.78)	2065-01-26	830 (288.79)	2065-07-25	830 (307.98)
2065-01-19	1430(296.11)	2065-01-27	880 (288.34)	2065-07-29	830 (305.01)
2065-01-09	1331(293.58)	2065-02-01	885 (288.54)	2065-08-01	828 (300.58)
2065-01-07	1326(293.58)	2065-02-04	880 (289.31)	2065-08-07	801 (300.57)

Sources: Official quotation of share prices published in National Daily Newspaper

(Note: Figure under parentheses represents total price index of equity)

### ANNEX-3

#### **Test of Hypothesis by using t-statistic for the Test of Significance of the Difference between Share Prices and after the Announcement of Rights Offering.**

##### **Variables Defined:**

- X : Share price before announcement date.
- $\bar{X}$  : Mean of share price before announcement date.
- Y : Share price after announcement date.
- $\bar{Y}$  : Mean of share price after announcement date.
- $H_0$  : Null Hypothesis that is there is no significant difference between the share price movement before and after the announcement of rights offering.
- $H_1$  : Alternative Hypothesis that is there is significant difference between the share price movement before and after the announcement of rights offering.
- $t_{cal}$  : Calculated value of t.
- $t_{tab}$  : Tabulated value of t at a given significant level for certain degree of freedom.
- d.f : Degree of Freedom.
- $s^2$  : An unbiased estimate of population variance,  $\sigma^2$

**Table A3.1**  
**Everest Bank Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>
705	-1.20	1.44	660	13	169
710	3.80	14.44	660	13	169
710	3.80	14.44	700	53	2809
705	-1.20	1.44	615	-32	1024
701	-5.20	27.04	600	-47	2209
$\sum X = 3531$ $\bar{X} = 706.20$		$\sum (X - \bar{X})^2 = 58.80$	$\sum Y = 3235$ $\bar{Y} = 647$		$\sum (Y - \bar{Y})^2 = 6380$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{58.80 + 6380}{5 + 5 - 2} = 804.85$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{706.20 - 647}{\sqrt{804.85 \left( \frac{1}{5} + \frac{1}{5} \right)}} = 3.29$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} > t_{\text{tab}}$ , so the null hypothesis is rejected, hence the different is significant.

**Table A3.2**  
**Bank of Kathmandu Ltd.**

X	(X - $\bar{X}$ )	(X - $\bar{X}$ ) <sup>2</sup>	Y	(Y - $\bar{Y}$ )	(Y - $\bar{Y}$ ) <sup>2</sup>
805	0.60	0.36	450	-27.20	739.84
801	-3.40	11.56	485	7.80	60.84
801	-3.40	11.56	480	2.80	7.84
810	5.60	31.36	488	10.80	111.64
805	0.60	0.36	483	5.80	3.64
$\sum X = 4022$ $\bar{X} = 804.4$		$\sum (X - \bar{X})^2 = 55.20$	$\sum Y = 2386$ $\bar{Y} = 477.20$		$\sum (Y - \bar{Y})^2 = 958.80$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{55.20 + 958.80}{5 + 5 - 2} = 126.75$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{804.40 - 477.20}{\sqrt{126.75 \left( \frac{1}{5} + \frac{1}{5} \right)}} = 45.95$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} > t_{\text{tab}}$ , so the null hypothesis is rejected, hence the difference is significant.

**Table A3.3**  
**Nepal Bangladesh Bank Ltd.**

X	(X - $\bar{X}$ )	(X - $\bar{X}$ ) <sup>2</sup>	Y	(Y - $\bar{Y}$ )	(Y - $\bar{Y}$ ) <sup>2</sup>
337	-7	49	365	-16.20	262.44
340	-4	16	374	-7.20	51.84
345	1	1	381	-0.20	0.04
348	4	16	393	11.80	139.24
350	6	36	393	11.80	139.24
$\sum X = 1720$ $\bar{X} = 344$		$\sum (X - \bar{X})^2 = 118$	$\sum Y = 1906$ $\bar{Y} = 381.20$		$\sum (Y - \bar{Y})^2 = 592.80$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{118 + 592.80}{5 + 5 - 2} = 88.85$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{344 - 381.20}{\sqrt{88.85 \left( \frac{1}{5} + \frac{1}{5} \right)}} = -6.24$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} > t_{\text{tab}}$ , so the null hypothesis is rejected, hence the difference is significant.

**Table A3.4**  
**Nepal SBI Bank Ltd.**

X	(X - $\bar{X}$ )	(X - $\bar{X}$ ) <sup>2</sup>	Y	(Y - $\bar{Y}$ )	(Y - $\bar{Y}$ ) <sup>2</sup>
426	-1.60	2.56	346	-7.40	54.76
427	-0.60	0.36	346	-7.40	54.76
460	32.40	1049.76	350	-3.40	11.56
455	27	750.76	357	-3.60	12.96
370	-57.60	3317.76	368	14.60	213.16
$\sum X = 2138$ $\bar{X} = 427.60$		$\sum (X - \bar{X})^2 = 5121.20$	$\sum Y = 2386$ $\bar{Y} = 477.20$		$\sum (Y - \bar{Y})^2 = 347.20$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{5121.20 + 347.20}{5 + 5 - 2} = 683.55$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{427.60 - 353.40}{\sqrt{683.55 \left( \frac{1}{5} + \frac{1}{5} \right)}} = 4.49$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} > t_{\text{tab}}$ , so the null hypothesis is rejected, hence the difference is significant.



**Table A3.5**

**Nepal SBI Bank Ltd.**

X	(X - $\bar{X}$ )	(X - $\bar{X}$ ) <sup>2</sup>	Y	(Y - $\bar{Y}$ )	(Y - $\bar{Y}$ ) <sup>2</sup>
1326	190.40	36252.16	801	-54.20	2937.64
1331	195.40	38181.16	830	-25.20	635.04
1430	295.40	86671.36	880	24.80	615.04
790	-	119439.36	885	29.80	888.04
801	345.60	119577.16	880	24.80	615.04
	-				
	334.60				
$\sum X = 5678$ $\bar{X} = 1135.60$		$\sum (X - \bar{X})^2 = 392501.20$	$\sum Y = 4276$ $\bar{Y} = 855.20$		$\sum (Y - \bar{Y})^2 = 5690.80$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{392501.20 + 5690.80}{5 + 5 - 2} = 49774$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{1135.60 - 855.20}{\sqrt{49774 \left( \frac{1}{5} + \frac{1}{5} \right)}} = 1.9872$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} < t_{\text{tab}}$ , so the null hypothesis is accepted, hence the different is not significant.

**Test of Hypothesis Using t-static for the Test of Significance of the Difference between Price Indies and after the Announcement of Rights Offering.**

**Variable Defined:**

- X : Price index before announcement date.
- $\bar{X}$  : Mean of price index before announcement date.
- Y : Price index after announcement date.
- $\bar{Y}$  : Mean of price index after announcement date.

**Table A3.6**  
**Everest Bank Ltd.**

X	(X - $\bar{X}$ )	(X - $\bar{X}$ ) <sup>2</sup>	Y	(Y - $\bar{Y}$ )	(Y - $\bar{Y}$ ) <sup>2</sup>
336.22	0.97	0.94	325.51	-9.76	95.26
336.87	1.62	2.62	326.14	-9.13	83.36
335.17	-0.08	0.006	334.75	-0.52	0.27
334.39	-0.09	0.92	346.80	11.53	132.94
333.60	-1.65	2.72	343.13	7.86	61.78
$\sum X = 1676.25$ $\bar{X} = 335.25$		$\sum (X - \bar{X})^2 = 7.22$	$\sum Y = 1676.33$ $\bar{Y} = 335.27$		$\sum (Y - \bar{Y})^2 = 373.61$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{7.22 + 373.61}{5 + 5 - 2} = 47.604$$

Now, Test Statistics

$$t_{cal} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{335.25 - 335.27}{\sqrt{47.604 \left( \frac{1}{5} + \frac{1}{5} \right)}} = -0.02$$

$$|t_{cal}| = 0.02$$

$t_{tab}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{cal} < t_{tab}$ , so the null hypothesis is accepted, hence the different is not significant.

**Table A3.7**  
**Everest Bank Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>
322.74	-3.26	10.63	321.96	-1.72	2.96
323.51	-2.49	6.20	322.01	-1.67	2.79
325.71	-0.29	0.08	323.64	-0.04	0.002
327.95	1.95	3.80	325.21	1.53	2.34
330.10	4.10	16.81	325.60	1.92	3.69
$\sum X = 1630.01$ $\bar{X} = 326$		$\sum (X - \bar{X})^2 = 37.52$	$\sum Y = 1618.42$ $\bar{Y} = 323.68$		$\sum (Y - \bar{Y})^2 = 11.78$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{37.52 + 11.78}{5 + 5 - 2} = 6.16$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{326 - 323.68}{\sqrt{6.16 \left( \frac{1}{5} + \frac{1}{5} \right)}} = 1.478$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} < t_{\text{tab}}$ , so the null hypothesis is accepted, hence the different is not significant.

**Table A3.8**  
**Everest Bank Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>
195.17	-2.21	4.88	201.22	-1.15	1.32
196.14	-1.24	1.54	202.94	0.57	0.33
197.32	-0.06	0.004	202.10	-0.27	0.073
198.87	1.49	2.22	202.45	0.08	0.006
199.41	2.03	4.12	203.16	0.79	0.62
$\sum X = 986.91$ $\bar{X} = 197.38$		$\sum (X - \bar{X})^2 = 12.77$	$\sum Y = 1011.87$ $\bar{Y} = 202.37$		$\sum (Y - \bar{Y})^2 = 2.35$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{12.77 + 2.35}{5 + 5 - 2} = 1.8901$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{197.38 - 202.37}{\sqrt{1.89 \left( \frac{1}{5} + \frac{1}{5} \right)}} = -5.74$$

$$|t_{\text{cal}}| = 5.74$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} > t_{\text{tab}}$ , so the null hypothesis is rejected, hence the different is significant.

**Table A3.9**  
**Everest Bank Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>
292.59	8.74	76.39	296.11	2.24	5.02
284.21	0.36	0.13	296.78	2.91	8.47
283.72	-0.13	0.017	298.78	4.91	24.11
279.86	-3.99	15.92	288.89	-5.02	25.20
278.86	-4.99	24.90	288.79	-5.08	25.81
$\sum X = 1419.24$ $\bar{X} = 283.85$		$\sum (X - \bar{X})^2 = 117.36$	$\sum Y = 1469.35$ $\bar{Y} = 293.87$		$\sum (Y - \bar{Y})^2 = 88.61$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{117.36 + 88.61}{5 + 5 - 2} = 25.75$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{283.85 - 293.87}{\sqrt{25.75 \left( \frac{1}{5} + \frac{1}{5} \right)}} = -3.122$$

$$|t_{\text{cal}}| = 3.122$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} > t_{\text{tab}}$ , so the null hypothesis is rejected, hence the different is significant.

**Table A3.10**  
**Everest Bank Ltd.**

X	(X - $\bar{X}$ )	(X - $\bar{X}$ ) <sup>2</sup>	Y	(Y - $\bar{Y}$ )	(Y - $\bar{Y}$ ) <sup>2</sup>
288.89	-5.30	28.09	288.89	0.12	0.014
298.78	4.59	21.07	288.79	0.02	0.004
296.11	1.92	3.69	288.34	-0.43	0.19
293.58	-0.61	0.37	288.54	-0.23	0.05
293.58	-0.61	0.37	289.31	0.54	0.29
$\sum X = 1470.94$ $\bar{X} = 294.19$		$\sum (X - \bar{X})^2 = 53.59$	$\sum Y = 1443.87$ $\bar{Y} = 288.77$		$\sum (Y - \bar{Y})^2 = 0.545$

We have,

$$S^2 = \frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n_1 + n_2 - 2} = \frac{53.59 + 0.545}{5 + 5 - 2} = 6.767$$

Now, Test Statistics

$$t_{\text{cal}} = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{294.19 - 288.77}{\sqrt{6.767 \left( \frac{1}{5} + \frac{1}{5} \right)}} = 5.42$$

$t_{\text{tab}}$  at 5% level of significance for 8 degree of freedom = 2.306

$t_{\text{cal}} > t_{\text{tab}}$ , so the null hypothesis is rejected, hence the different is significant.

## ANNEX-4

### Correlation Coefficient and Coefficient of Determinant Between Share Price and NEPSE Index.

#### Variable Defined

- X : Share Price  
 Y : NEPSE Index  
 r : Correlation Coefficient  
 $r^2$  : Coefficient of Determinant  
 P.E. : Probable Error  
 N : Number of Pairs of observation

**Table A4.1**

#### Everest Bank Ltd

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>	(X - $\bar{X}$ ) (Y - $\bar{Y}$ )
875	195.80	38337.64	375.07	47.78	2282.93	9355.32
710	30.80	948.64	334.50	7.21	51.98	222.07
701	21.80	475.24	333.60	6.31	39.82	137.56
660	-19.20	368.64	323.51	-3.78	14.29	72.58
450	-229.20	52532.64	269.75	-57.54	3310.85	13188.17
$\sum X = 3396$ $\bar{X} = 679.20$	$\sum (X - \bar{X})^2 = 92662.80$		$\sum Y = 1636.43$ $\bar{Y} = 327.29$	$\sum (Y - \bar{Y})^2 = 5699.87$		(x-x)(y-y) =22975.70

Karl, Pearson's Coefficient of Correlation

$$r = \frac{\sum (X - \bar{X}) + \sum (Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 (Y - \bar{Y})^2}} = \frac{22975.70}{\sqrt{92662.80 \times 5699.87}} = 0.9997$$

$$r^2 = (0.9997)^2 = 0.9994$$

$$P.E. = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} = 0.6745 \times \frac{1 - 0.9994}{\sqrt{5}} = 0.0002$$

$$6P.E. = 6 \times 0.0002 = 0.0012$$

**Table A4.2**  
**Bank of Kathmandu Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>	$\frac{(X - \bar{X})}{(Y - \bar{Y})}$
1015	333.80	111422.44	367.37	45.924	2109.01	15329.43
801	119.80	14352.04	323.51	2.069	4.26	247.27
815	133.80	17902.44	334.64	13.194	174.08	1765.36
460	-221.21	48929.44	321.96	0.514	0.26	-113.70
315	-366.20	134102.44	259.75	-61.696	3806.39	22593.08
$\sum X = 3406$ $\bar{X} = 681.20$	$\sum (X - \bar{X})^2 =$ 326708.80		$\sum Y = 16072.23$ $\bar{Y} = 321.45$	$\sum (Y - \bar{Y})^2 =$ 6094		$\sum (X - \bar{X})(Y - \bar{Y})$ = 39821.44

Karl, Pearson's Coefficient of Correlation

$$r = \frac{\sum (X - \bar{X}) + \sum (Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 (Y - \bar{Y})^2}} = \frac{39821.44}{\sqrt{326708.80 \times 6094}} = 0.8925$$

$$r^2 = (0.8925)^2 = 0.7965$$

$$P.E. = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} = 0.6745 \times \frac{1 - 0.7925}{\sqrt{5}} = 0.0626$$

$$6P.E. = 6 \times 0.0626 = 0.3755$$



**Table A4.3**  
**Nepal Bangladesh Bank Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>	$\frac{(X - \bar{X})}{(Y - \bar{Y})}$
432	72	5184	200.84	-5.79	33.52	-416.88
350	-10	100	196.34	-10.29	105.88	102.90
365	5	25	201.22	-5.41	29.27	-27.05
393	33	1089	202.45	-4.18	17.47	-137.94
260	-100	10000	232.29	25.66	658.44	-2566
$\sum X = 1800$ $\bar{X} = 360$	$\sum (X - \bar{X})^2 = 16398$		$\sum Y = 1033.14$ $\bar{Y} = 206.63$	$\sum (Y - \bar{Y})^2 = 844.58$		$\sum (X - \bar{X})(Y - \bar{Y}) = 3044.97$

Karl, Pearson's Coefficient of Correlation

$$r = \frac{\sum (X - \bar{X}) + \sum (Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 (Y - \bar{Y})^2}} = \frac{-3044.97}{\sqrt{16398 \times 844.58}} = -0.8181$$

$$r^2 = (-0.8181)^2 = 0.6693$$

$$P.E. = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} = 0.6745 \times \frac{1 - 0.6693}{\sqrt{5}} = 0.10$$

$$6P.E. = 0.6745 \times 0.10 = 0.60$$

**Table A4.4**

**Nepal SBI Bank Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>	$\frac{(X - \bar{X})}{(Y - \bar{Y})}$
338	-39.20	1536.64	247.17	-39.11	1529.59	1533.11
459	81.80	6691.24	289.56	3.28	10.76	268.30
370	-7.20	51.84	292.59	6.31	39.82	-45.43
346	-31.20	973.44	296.78	10.50	110.25	-327.60
373	-4.20	17.64	305.32	19.04	362.52	-79.97
$\sum X = 1886$ $\bar{X} = 377.20$	$\sum (X - \bar{X})^2 = 9270.80$		$\sum Y = 1431.42$ $\bar{Y} = 286.28$	$\sum (Y - \bar{Y})^2 = 2052.94$		$\sum (X - \bar{X})(Y - \bar{Y}) = 1348.41$

Karl, Pearson's Coefficient of Correlation

$$r = \frac{\sum (X - \bar{X}) + \sum (Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 (Y - \bar{Y})^2}} = \frac{1348.41}{\sqrt{9270.80 \times 2052.94}} = 0.3091$$

$$r^2 = (0.3091)^2 = 0.0955$$

$$P.E. = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} = 0.6745 \times \frac{1 - 0.0955}{\sqrt{5}} = 0.2728$$

$$6P.E. = 6 \times 0.2728 = 1.6368$$

**Table A4.5**

**Nepal Investment Bank Ltd.**

X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>	$\frac{(X - \bar{X})}{(Y - \bar{Y})}$
1170	167.40	28022.76	247.41	-37.46	1403.25	-6270.80
1331	328.40	107846.56	293.58	8.71	75.86	2860.36
801	-201.60	40642.56	288.89	402	16.16	-810.43
880	-122.60	15030.76	288.34	3.47	12.04	-425.42
831	-171.60	29446.56	306.15	21.28	452.84	-3651.65
$\sum X = 5013$ $\bar{X} = 1002.60$	$\sum (X - \bar{X})^2 = 220989.20$		$\sum Y = 1424.37$ $\bar{Y} = 284.87$	$\sum (Y - \bar{Y})^2 = 1960.16$		$\sum (X - \bar{X})(Y - \bar{Y}) = 8297.94$

Karl, Pearson's Coefficient of Correlation

$$r = \frac{\sum (X - \bar{X}) + \sum (Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 (Y - \bar{Y})^2}} = \frac{-8297.94}{\sqrt{220989 \cdot 20 \times 1960 \cdot 16}} = 0.3987$$

$$r^2 = (-0.3987)^2 = 0.1590$$

$$\text{P.E.} = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} = 0.6745 \times \frac{1 - 0.1590}{\sqrt{5}} = -0.3987$$

$$6\text{P.E.} = 6 \times 0.2537 = 1.5221$$

## ANNEX-5

### Impact of Rights Offering Announcement of Share Price Movement Variable Defined.

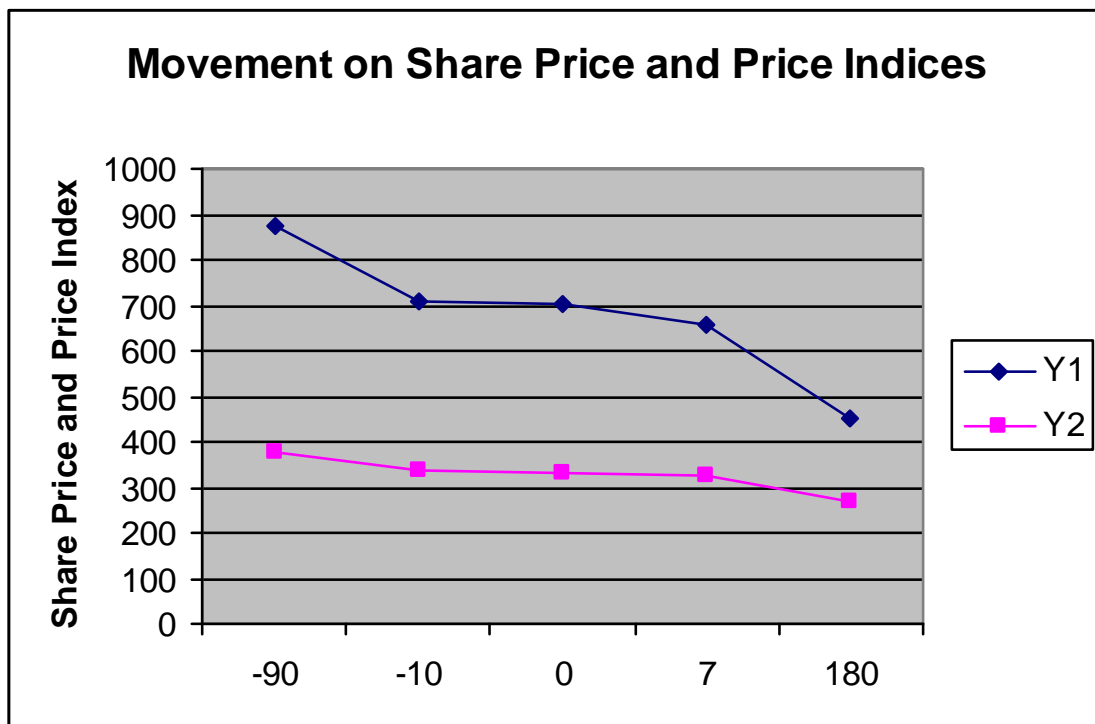
X = Days before and after announcement of rights share

$Y_1$  = Share Price

$Y_2$  = Price Index

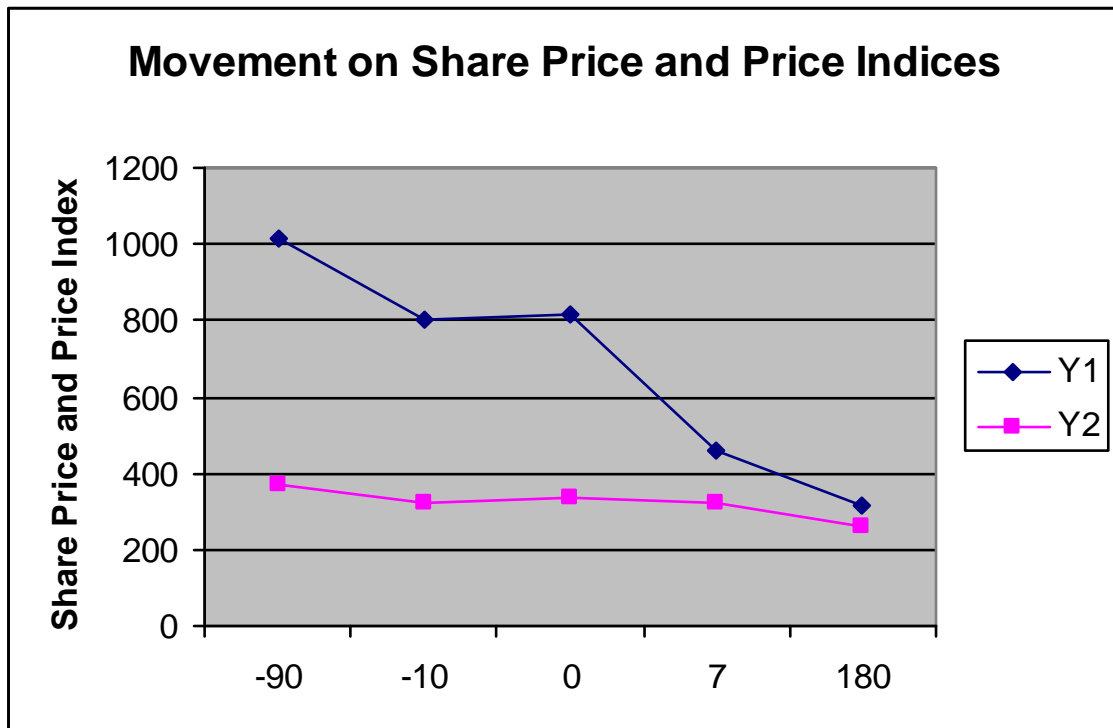
#### 1) Everest Bank Ltd.

X	-90	-10	0	7	180
$Y_1$	875	710	701	660	450
$Y_2$	375.07	334.50	333.60	323.51	269.75



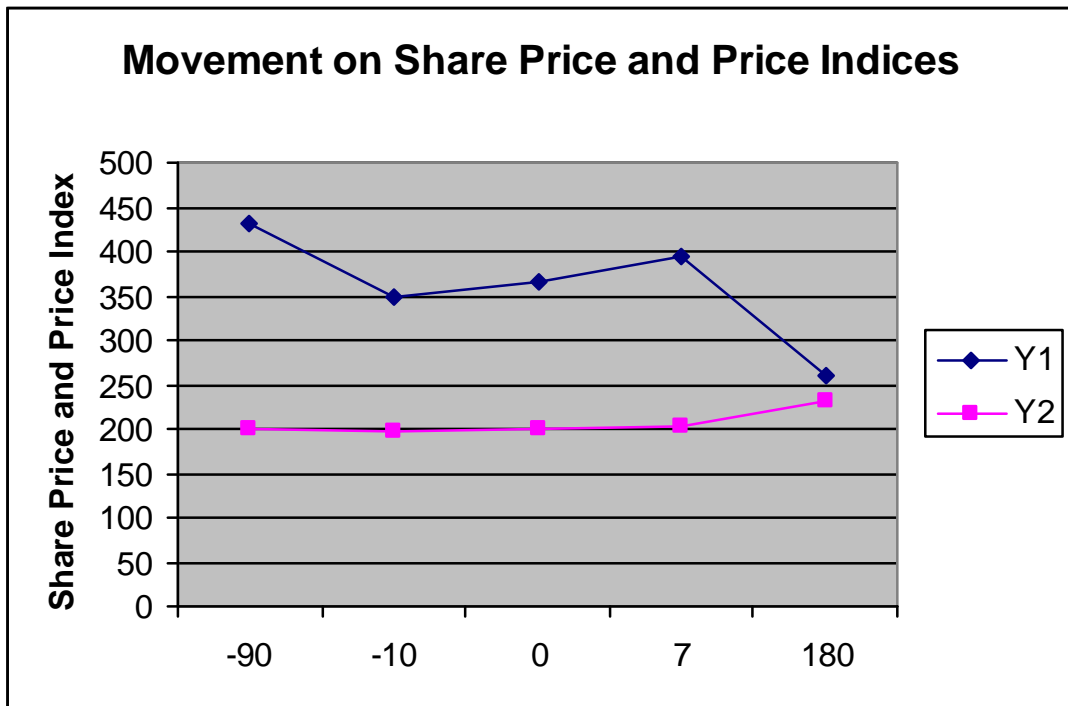
**2) Bank of Kathmandu Ltd.**

X	-90	-10	0	7	180
Y <sub>1</sub>	1015	801	815	460	315
Y <sub>2</sub>	367.37	323.51	334.64	321.96	259.75



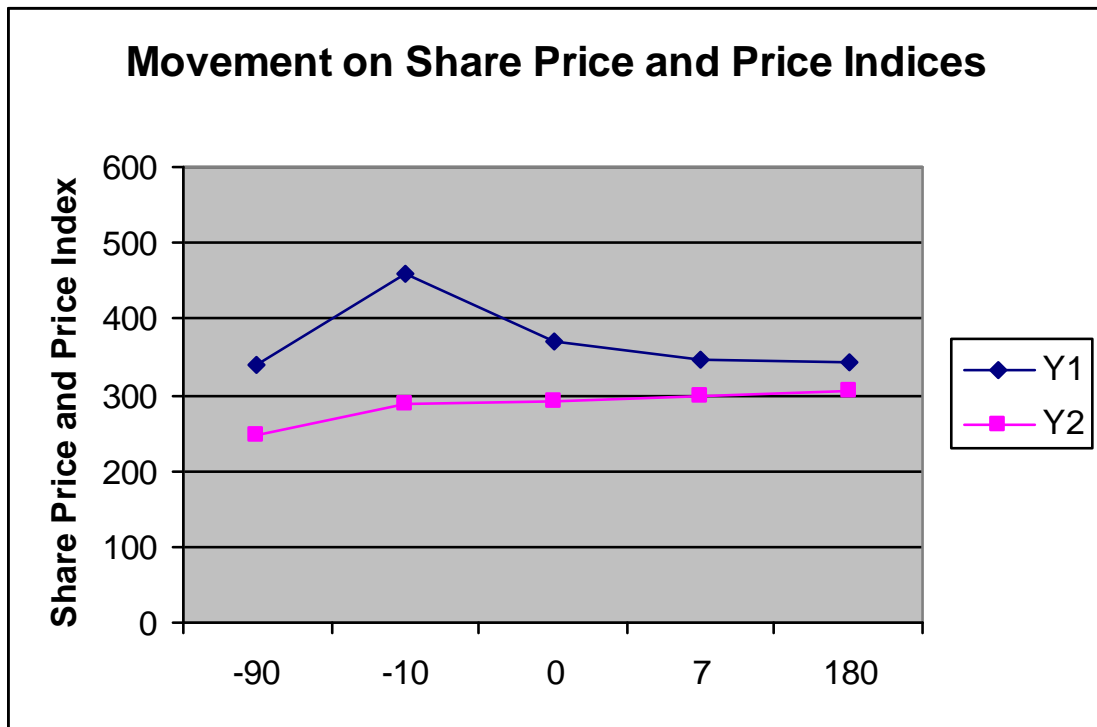
### 3) Nepal Bangladesh Bank Ltd.

X	-90	-10	0	7	180
Y <sub>1</sub>	432	350	365	393	260
Y <sub>2</sub>	200.84	196.34	201.22	202.45	232.29



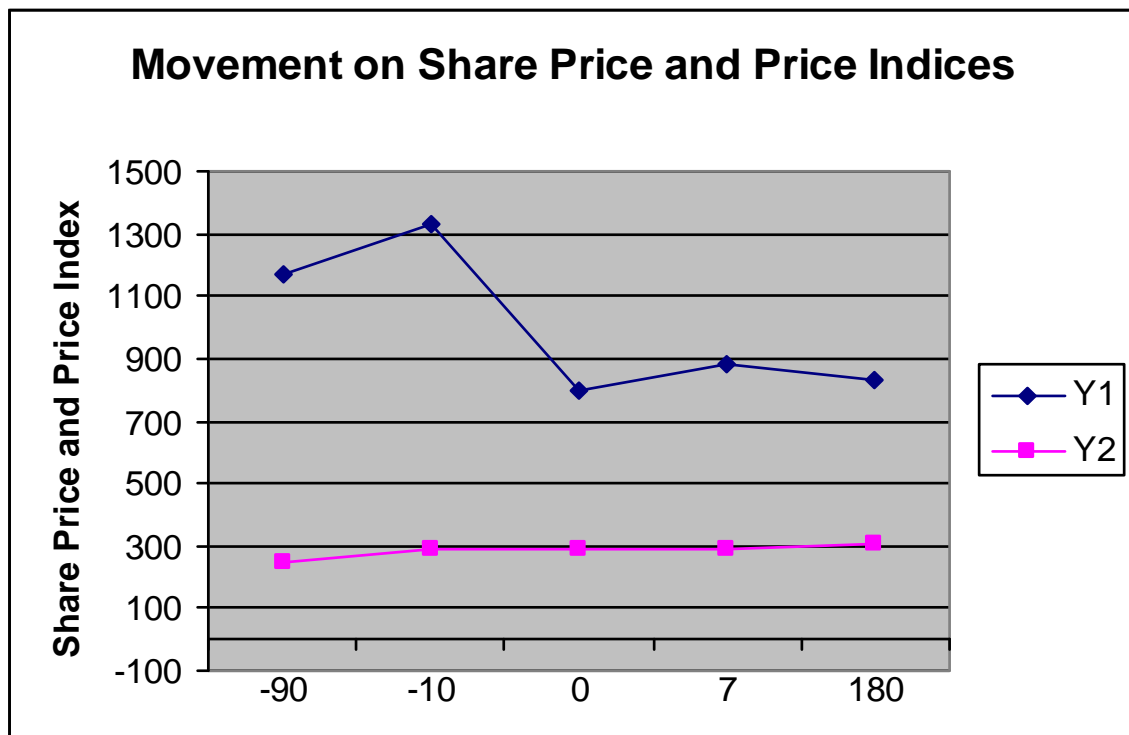
#### 4) Nepal SBI Bank Ltd.

X	-90	-10	0	7	180
Y <sub>1</sub>	338	459	370	346	343
Y <sub>2</sub>	247.17	289.56	292.59	296.78	305.32



**5) Nepal Investment Bank Ltd.**

X	-90	-10	0	7	180
Y <sub>1</sub>	1170	1331	801	880	831
Y <sub>2</sub>	247.41	293.58	288.89	288.34	306.15





## ANNEX - 6

Value of Rights and the Theoretical ex-rights price.

Variable Defined :

$P_o$  = Current market price

$P_s$  = Subscription price

$r$  = Number of rights required for an additional share

$P_x$  = Ex-rights price

$V_r$  = Value of Rights

$$V_r = \frac{P_o - P_s}{r + 1}$$

$$P_x = \frac{P_o \times r + P_s}{r + 1}$$

1. Everest Bank ltd.

$P_o$  = Rs 701

$P_s$  = Rs 100

$r$  = 1 share /rights

Now,

$$V_r = \frac{P_s - P_o}{r + 1} = \frac{701 - 100}{1 + 1} = Rs.300.5$$

$$P_x = \frac{P_o \times r + P_s}{r + 1} = \frac{701 \times 1 + 100}{1 + 1} = Rs.400.50$$

2. Bank of Kathmandu Ltd.

$$P_0 = \text{Rs } 815$$

$$P_s = \text{Rs } 100$$

$$r = 1 \text{ share /rights}$$

Now,

$$V_r = \frac{P_0 - P_s}{r + 1} = \frac{815 - 100}{1 + 1} = \text{Rs.}375.5$$

$$P_x = \frac{P_0 \times r + P_s}{r + 1} = \frac{815 \times 1 + 100}{1 + 1} = \text{Rs.}457.5$$

3. Nepal Bangladesh Bank Ltd.

$$P_0 = \text{Rs } 365$$

$$P_s = \text{Rs } 100$$

$$r = 1 \text{ share /rights}$$

Now,

$$V_r = \frac{P_0 - P_s}{r + 1} = \frac{365 - 100}{1 + 1} = \text{Rs.}132.5$$

$$P_x = \frac{P_0 \times r + P_s}{r + 1} = \frac{365 \times 1 + 100}{1 + 1} = \text{Rs.}232.5$$

4. Nepal SBI Bank Ltd.

$$P_o = \text{Rs } 370$$

$$P_s = \text{Rs } 100$$

$$r = 2 \text{ share /rights}$$

Now,

$$V_r = \frac{P_o - P_s}{r + 1} = \frac{370 - 100}{2 + 1} = \text{Rs.}90$$

$$P_x = \frac{P_o \times r + P_s}{r + 1} = \frac{370 \times 2 + 100}{2 + 1} = \text{Rs.}280$$

5. Nepal Investment Bank Ltd.

$$P_o = \text{Rs } 801$$

$$P_s = \text{Rs } 100$$

$$r = 1 \text{ share /rights}$$

Now,

$$V_r = \frac{P_o - P_s}{r + 1} = \frac{801 - 100}{1 + 1} = \text{Rs.}450.1$$

$$P_x = \frac{P_o \times r + P_s}{r + 1} = \frac{801 \times 1 + 100}{1 + 1} = \text{Rs.}450.5$$

## QUESTIONNAIRE

Dear Sir/Madam

I have been writing a thesis on "Practice of Rights Issue and its impact on share price movement of Commercial Banks in Nepal" in partial fulfillment of the requirement of Master of Business Studies (M.B.S). This questionnaire has been developed and presented towards you as a part of study. I humbly request you to fill it up at the best of your knowledge. Your kind cooperation in this regard will be great value for me. I shall be highly obliged for prompt responses as far as possible.

Name of Respondent .....

Address .....

Designation .....

Please tick to your group

- Individual Investor
- Broker
- Expert
- Issue Manager
- Corporate Firm

**Instruction:** Rank the following aspects of your view in order to your preference by indicating 1 to most preferred aspect, 2 to the second most preferred aspects and so on.

1. In your opinion, which sector's rights share issue does investors prefer most?

- a) Banking/Financial
- b) Manufacturing/Trading sector
- c) Hotel/Other sector
- d) Insurance sector

2. In your opinion, why investors are interested to purchase the rights share?

- a) To increase the value

- b) To increase the number of share
- c) To increases the dividend
- d) To maintain the control position in management.

3. What will the shareholders do, if rights are transferable in Nepal?

- a) They will sell the rights
- b) They will exercise to rights
- c) They will partially
- d) They will neither sell nor exercise or sell the rights

4. Whom do you think, are the beneficiaries of the rights share offering"?

- a) Issuing company
- b) Share holders
- c) Issue manager
- d) Broker

5. Why does the Nepalese corporate firms prefer rights share instead of other instruments?

- a) Low flotation cost
- b) Easy process to collect the fund
- c) To maintain control position in management
- d) Other causes

**Instruction :** Please answer the following questions with tick mark in given space as required by the questions.

6. Do you think investors are well aware to the phenomenon of rights share?

- a) All of them
- b) Non of them
- c) Majority of them
- d) Minority of them

7. Rights is not transferable in Nepal; in your opinion does investors face any difficulties due to this?

- a) Yes
- b) No

c) Don't know

8. Do you agree that, the lack of corporate firm is the main cause of low practice of rights share in Nepal?

a) Agree

b) Disagree

c) Don't know

9. Do you think that legal provisions regarding the rights share issue in Nepal are sufficient? If s insufficient what amendments are needed.

a) Sufficient

b) Insufficient

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10. Do you think that infrastructure of Nepalese security market is sufficient to increase the rights share practice?

11. In your opinion, what are the major problems to practice the rights share in Nepalese security market?

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12) Any experience and recommemendation, you want to share to develop rights share practice in Nepal ?

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