

CHAPTER- I

INTRODUCTION

1.1 Background of the Study

In simple term Initial Public offering commonly known as IPO is the first sale of securities (almost always stock) in a corporation under the regulations governing a public company. Whenever a private organization raises capital from public for the first time through issuance of securities it's termed as IPO. Usually securities offered is ordinary shares, however other securities like preference shares, debentures or mutual fund schemes are also issued.

For IPO, the company works with an investment bank for its issue of IPO. The investment bank also known as underwriter acquires the first issue of stocks from the company at a negotiated price and then makes the shares available for sale to its clients and other investors. Companies that have IPOs are usually young companies and are in need of large amount of capital.

A company can only have one IPO, the first and only time it makes stock available to the public. After IPO, a company is said to be a public company or simply public. Public company that needs additional financing for further business development or expansion may choose to issue more stock at a later time. And this is called a subsequent or follow on or offering.

IPO is a major source of obtaining large fund for long term. Large amounts of capital have been raised in recent years by small companies that went public and have been able to make billions out of the fund. However, going public isn't for every company. Usually the ideal candidate for an IPO requires both a well-established track record of steadily growing sales and earnings and operates in an industry that is currently in the news. If a company have a much of these characteristics then it may go public and not much of the other for instance little earnings. Going public requires stringent requirements like audited financial reports of past several years, operating in a fast growing industry, appointment

of outside directors and an IPO is also probably the most expensive way to raise money in terms of the amounts you have to lay out upfront.

The IPO volume has grown significantly over the years, not only in the developed economies of US or the European Union but also emerging and developing economies such as the economies of south East Asia, Latin America and also Africa. China has seen some of the largest IPOs in the past few years leading to a huge growth in the domestic stock market capitalization. The privatization of the state enterprises has also contributed to the growth in the IPO volume.

IPO is an important component of capital market and is influenced by both the size and level of development of capital market. And in context of Nepal, history of development of capital market is not a long one, it is just in the infant stage and further improvement of capital market is crucial.

In 1937 Biratnagar Jute Mill and Nepal Bank Limited floated ordinary shares and in 1964 government bond were issued, these were the positive symptoms in the development of capital market in Nepal. Establishment of Security Exchange Centre (SEC) in 1976 was the real first step in the development of capital market of Nepal. SEC was established with an objective of facilitating and promoting the growth of capital markets. Before conversion it was the only capital markets institution undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other financial services. When the government adopted the policy of economic liberalization and privatization in 1990s then the capital market of Nepal began to take momentum. And during the period SEC was divided into two institutions, Security Board of Nepal (SEBON) and Nepal Stock Exchange (NEPSE).

Under the provision of securities exchange act 1983, SEBON was established in June 7, 1993 to regulate and manage the securities market. Since its establishment, SEBON has been regulating the market under Securities Exchange Act 2006. SEBON has been concentrating its effort to improve the

legal and statutory framework which bars the development of capital market. SEBON has been functioning as an apex regulator of securities market. Some of the major functions, duties and powers of SEBON as per the act are:

- a. Offering advice to government on matters concerned with the development of the capital market.
- b. Register the securities of corporate bodies established with the authority to make a public issue of its securities.
- c. Giving permission to operate a stock exchange to any corporate body desirous of doing so
- d. Supervising and monitoring the functions and activities of stock exchange.
- e. Inspecting whether or not any stock exchange is executing its functions and activities in accordance with this act or the rules and taking action if found not abiding by the law.
- f. Reviewing or making arrangement for reviewing the financial statements submitted by the corporate bodies issuing securities and security dealers, and issue directives deemed necessary in that connection to the concerned corporate body.
- g. To systematize and make transparent the act of acquiring the ownership of a company or gaining control over its management by purchasing its shares in a single lot or in different lots.
- h. To establish coordination and exchange cooperation with the appropriate agencies in order to supervise and regulate matters concerning securities or companies.
- i. To discharge or make arrangements for discharging such other functions as are necessary for the development of securities and the capital market.

NEPSE is a nonprofit and also the only institution so far to facilitate secondary market transactions in Nepal. NEPSE operates under Security Exchange Act 1983 and it commenced its regular operations on January 13, 1994 by adopting Open Outcry System. The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through market intermediaries such as brokers and market makers. Government of Nepal, Nepal Rastra Bank (NRB),

Nepal Industrial Development Corporation and its members are the shareholders of NEPSE.

Members of NEPSE are permitted to act as intermediaries in buying and selling of government bonds and listed corporate securities. At present, there are 23 member brokers and 2 market makers, who operate on the trading floor as per the Securities Exchange Act, 1983, rules and bye-laws. Besides this, NEPSE has also granted membership to 11 finance companies as issue and sales manager and securities trader. Issue and sales manager works as manager to the issue and underwriter for public issue of securities whereas securities trader works as individual portfolio manager.

On August 24, 2007 NEPSE introduced fully automated screen based trading. This trading system of NEPSE is called NEPSE Automated Trading System (NATS) and it adopts the principle of an order driven market. In this system the best buy order is matched with the best sell order. For an order matching the best buy order is the one with the highest price and the best sell order is the one with the lowest price. This is because the system views all buy orders available from the point of view of the sellers and all sell orders from the point of view of the buyers in the market. So, of all buy orders available in the market at any point of time, a seller would obviously like to sell at the highest possible buy price that is offered. Hence, the best buy order is the order with the highest price and the best sell order is the order with the lowest price.

Trading of securities take place on all days of week except Saturdays and holidays declared by NEPSE. However, on Friday only odd lot trading is done. The trading can be done either from NEPSE's trading floor or from the broker's office. NEPSE uses sophisticated technology through brokers can trade remotely from their office located inside the Kathmandu valley. This remote trading facility was started from November 1, 2007.

1.2 Focus of the Study

Capital market is the market where long term lending and borrowing takes place. It plays a dominant role in mobilizing savings and channeling them into productive investment for the overall development of the country. One of the most important aspect of capital market is it assists in capital formation which indeed makes a major contribution in the economic growth of the country. And in context of Nepal, it has not been able to contribute in the economic growth. It has not taken any height and there are so many rooms for further improvement which is crucial for making any capital market a developed capital market.

Capital market through its ability to mobilize resources from fund surplus group to fund deficit group does play an important role in economic development of a country. In this context IPO as an important capital market mechanism enables not only business entities but also government at occasions to raise long term fund at convenient terms. Through IPO, issuer gains access to needed funds and at the same time it provides investment opportunity to the investors and to the general public. This ensures there is equilibrium between surplus fund group and deficit fund group. In Nepal SEBON is the authorized institution which provides approval to the securities being offered through IPO whereas, NEPSE is the only stock exchange where such issues are listed for legal trading.

Therefore, the study has been focused on analysis of existing state of IPO in Nepal, analysis of IPO underpricing, analysis of subscription pattern and analysis to find if initial return on IPO is maintained on 2nd and 3rd day of trading. Furthermore the study is focused only on IPO of common stock issued by companies listed on NEPSE during the study period. The analysis has been accomplished with the assistance of statistical tools like simple arithmetic mean, standard deviation and coefficient of variation.

1.3 Statement of the Problem

Although the foundation of stock market development was laid back in 1976 with the establishment of SEC, the Nepalese stock market is still in its infant

stage. Its contribution to GDP is still nominal. Nepalese stock market has very limited offerings and those offered are under the strict regulation of the state. Nepalese stock market has been more or less stagnant and it can be attributed to unstable political conditions, lack of rational investors, poor state of information disclosure and poor corporate governance. IPO being an integral mechanism of stock market has been highly influenced by these things and the study has been focused on analyzing different aspects of IPOs in Nepal. More specifically, the study will try to answer the following research questions:

- a. What is the current status of IPOs in Nepal?
- b. Does underpricing in Nepalese IPOs exist?
- c. What is the subscription Pattern for IPOs?
- d. Is there any relation between underpricing and subscription pattern?
- e. What is the pattern of share price return on 1st, 2nd and 3rd day of trading?

1.4 Objectives of the Study

Capital market of the Nepal is still in its early days and IPO and its practices are also limited. The basic objective of the study is to analyze different aspects of IPOs in Nepal. More specifically, objectives of the study are:

- a. To analyze current status of IPOs in Nepal.
- b. To determine whether underpricing does exist in Nepalese IPO or not.
- c. To analyze the subscription pattern of Nepalese IPOs.
- d. To determine if there is any relation between underpricing and subscription pattern.
- e. To analyze the pattern of share price return of the 1st, 2nd and 3rd day of trading.

1.5 Importance of the Study

IPO has been playing a significant role in the capital market. And their practice is very much limited in Nepal. To make things worse there is not much of research done covering different aspects of IPOs in Nepal. So, this study is expected to provide some insight into different aspects of and how it is being practiced in Nepal. Included analyses are expected to provide rational grounds for prospective investors enabling them to make better investment decisions

especially during IPOs. Furthermore, it is expected that it will open new avenues for future research.

1.6 Limitations of the Study

For MBS program, this study represents the partial fulfillment for the requirement for the completion of degree and this research work has to be done and submitted within a certain time. This study will also be limited by the following factors:

- a. Companies listed in NEPSE are regarded as population.
- b. Samples are taken from commercial banks, development banks, finance companies, insurance companies and manufacturing and processing companies.
- c. The study is based on secondary data.
- d. Other limitations are time constraints, resource constraints and lack of research experience.

1.7 Organization of the Study

As per the need of the study and procedures used and to make the study easy to understand, entire study is shaped up in five chapters. Chapter one to five consists of introduction, review of literature, research methodology, presentation and analysis of data, and summary, conclusion and recommendations.

The first chapter, introduction, includes background, focus of the study, statement of the problem, objective of the study, significance of the study, limitation of the study and organization of the study.

The second chapter Literature Review includes a discussion on the conceptual framework and review of the major empirical works as well as review of Nepalese studies. The related conceptual consideration and review of related literature conducted in this chapter provide a framework with help of which this study has been accomplished. Basically this chapter deals with review of available literature which includes review of books, bulletins, journals and annual reports of related organizations.

Third chapter is Research Methodology. It comprises research design, population and sample, nature and sources of data, data analysis technique, selection of enterprises and method of analysis.

Fourth chapter is Data Presentation and Analysis. It contains data related to various aspects of IPO and their analysis based on various statistical tools. The chapter ends with major finding of the study.

Finally the fifth chapter, Summary, Conclusions and Recommendations covers summary of the whole study, conclusions based on major findings and recommendations.

And at the end of the thesis work, bibliography and appendices are presented.

CHAPTER- II

LITERATURE REVIEW

Review of literature is the important parts of any thesis. Literature review includes old thesis, dissertation, newspaper, magazine and suggestion of experts. To be precise, this chapter attempts to review major studies related to current status of IPO, underpricing of IPO, subscription pattern of IPO, relationship between underpricing and subscription pattern of IPO and analyze the pattern of share price return of the 1st, 2nd and 3rd day of trading.

To make the study easy this chapter is divided into two sections: conceptual review and review of related studies. Conceptual review identifies the components and ingredients that formed the foundation of the study whereas review of related studies draws excerpts from the number of research works carried out illustrating various faces of the subject matter.

2.1 Conceptual Review

A market is the means by which product and services are bought and sold directly or through an agent. A financial market can be defined as a mechanism bringing together buyers and sellers of financial assets in order to facilitate trading. It is a place where securities are bought and sold. Financial market is an active market where capital resources are transferred from savers to users. The transfer is done in expectation of returns from users in specified time period. Financial market consists of money market and capital market.

Money market comprises of short term loans, certificates of deposit, treasury bills, banker acceptances, commercial paper and promissory notes for short term financial needs and these are practiced in both primary & secondary market. In short, money market deals with short term instruments. Money market exists to bring together buyers and seller of securities and facilitate the exchange of financial assets.

Money market brings together the supplier and the demander of short term liquid fund. It is the type of market which is meant for a short term and for highly liquid debt

securities. Money market typically involves financial assets that have a life span of one year or less. Money market instruments include short term marketable, liquid and low risk securities. Money market instruments, sometimes, are also called cash equivalents or just cash.

Capital market is the market where long term lending and borrowing takes place. The capital market is defined as a place where finance is raised by companies for meeting their requirement of funds for new projects, modernization, expansion programs, long term working needs and many others proposes. Both companies and the government raise funds for long-term investment via the capital market and the major capital market includes stock market, bond market and the primary market. The capital market mobilizes savings of individuals as investment in shares, debentures, units of mutual funds and other like financial instruments which are ultimately deployed for productive purpose in various sectors of the economy. Capital market is the link between lender and borrower of funds.

The capital market comprises of two major markets, the primary market where new securities are issued and the secondary market where already issued securities are traded. And this study is basically based on primary market.

The primary market is the place where corporations and government issue new securities for the first time to generate the money for real investment. All the securities whether for short term or long term are initially issued in the primary market. This is the only market in which the company or government bodies are involved in the transaction and receives direct benefits from issue i.e. the company actually receives the proceeds from the sale of securities.

The secondary market is where investors purchase securities or assets from other investors, rather than from issuing companies themselves. The secondary market is a very important element of the capital market. The existence of an organized secondary market provides a level of confidence to holder of securities so they purchase securities in the primary market in expectation that they can readily convert these securities to cash whenever they wish to do so. And for the investors who have not been able to acquire securities from the primary market are able to acquire securities

from the secondary market, in this way secondary market have been creating more investment opportunities.

Now, it is very important to be acquainted with the general concepts of the IPO and other related matters of IPO before getting into the main subject matter of the various aspect of IPO. It presents the excerpt on theoretical concept of IPO, IPO as a capital market mechanism, IPO and its theoretical aspects, historical background of capital market development in Nepal and procedural aspects of IPO practices in Nepal.

2.1.1 Concept of IPO

An IPO is the selling of securities to the public in the primary market. It is the first time a company offers shares of stock to the public. Smaller, younger companies seeking capital to expand their business often consider venturing in IPOs. It is also referred to as a public offering.

IPO is the process through which fund seeker groups such as business entities obtain requires fund from the willing fund surplus group such as investors. The securities offered in IPO may include bonds, debentures, preference shares and commercial paper along with common shares. However, in this study, IPO is used in the sense of issuing common shares to the public for the first time. Thus, IPO can also be perceived as a medium through which privately held corporations are turned into public company. Public offering is a security offering where all investors have the opportunity to acquire a portion of the financial claims being sold (Kewon and Others 2004, 471). Hence, through IPO, public at large are able to buy the financial instruments that allow to have some claim on the issuing company.

Market for new issues of securities is a primary market. A market is primary if the proceeds of sales go to the issuer of the securities sold. In other words, it refers to the initial launch of a company's shares when they first become available for a trading on the stock market.

2.1.2 Reasons to Go for IPO

The main reason of an IPO is to raise capital for the company; however, it is not the only reason to go public. Other than raising fund, there are some other major reasons for a company to go public.

If the private firm is successful, usually the owners will want to take the company public with a sale of securities to outsider. Through IPO, founders simply want to establish a value and liquidity for their stock (Van Horne 2002, 578). Thus, firms go for IPO not only to gain access to additional capital but also to establish value and develop liquid market for its stock.

Similarly, the firm with major investment plans and high leverage gaining access to a non bank source of finance is a benefit of going public. In this regard, Rajan (1992) asserted that, to reduce debt and increase investment with, lower cost firms are interested to go public. Hence, when interest rates are high, companies particularly those concerned by cost find it reasonable to go for IPO.

2.1.3 Advantages and Disadvantages of IPO

IPO is the first sale of stock by a company. Small companies looking to further the growth of their company often use an IPO as a way to generate the capital needed to expand. Although further expansion is a benefit to the company, there are both advantages and disadvantages that arise when a company goes public.

There are many advantages for a company going public. As discussed earlier, the financial benefit in the form of raising capital is the most distinct advantage. Another advantage is an increased public awareness of the company because IPOs often generate publicity by making their products known to a new group of potential customers. An IPO also provides enhanced liquidity.

Even with the benefits of an IPO, there are many disadvantages that the public companies often have to face. One of the most important one is the management no longer can take decisions as freely as they used to take and also the need for added disclosure for investors. Furthermore there are substantial onetime costs associated with IPOs, and these costs can be direct or indirect. Direct costs mainly include legal, auditing and underwriting fees while indirect cost includes management time and effort devoted to conduct the offering and the money left on the table.

Money left on the table is the amount left by the issuing company because of the underpricing of their issue.

Before deciding whether or not to go public, companies must evaluate all of the potential advantages and disadvantages that will arise. This usually happens during the underwriting process as the company works with an investment bank to weigh the pros and cons of a public offering and determine if it is in the best interest of the company.

2.1.4 Capital Market and IPO

Capital market is a market for securities where business enterprises and governments can raise long-term funds. It is defined as a market in which transaction is done for periods longer than a year, as the raising of short-term funds takes place on other markets like the money market. The capital market includes the stock market (equity) and the bond market (debt). Financial regulators oversee the capital markets in their designated jurisdictions to ensure that investors are protected against fraud, among other duties.

The capital market enables suppliers and demanders of long-term funds to make transactions of various securities. The key capital market securities are bonds (debt) and both common and preferred stock (equity). Bonds are long-term debt instruments used by business and government to raise large sum of money generally from a diverse group of lenders whereas stocks are unit of ownership in a corporation.

Securities market is one of the constituents of capital market. It has a wide embracing for the buying and selling securities and all these agencies and institutions which access the sale and resale of corporate securities. A stock market is a public market for the trading of company stock and derivatives at an agreed price; these are securities listed on a stock exchange as well as those only traded privately (Rough 1996, 50).

According to Securities Exchange Act 1933; securities means shares, stock bond, debenture, debenture stock issued by a corporate body or a certificate relating to unit saving scheme or group saving scheme issued by any corporate body in accordance with the prevailing laws or negotiable certificates of deposit or treasury bond issued

by Government of Nepal and it includes the securities issued under full guarantee of Government of Nepal by a notification published in Nepal Gazette or receipts relation to deposits of securities as well as right and interest relating to securities.

Capital market plays a vital role in the national economy. It plays a model role in boosting economic activities in the country. It is an organized institution where various securities are issued and traded for the purpose of collection and mobilization of private and institutional saving. Capital market also allows altering liquidity position, risk of their prospective portfolios in response to availability of information and marketability of securities.

Capital market helps to mobilize savings of individuals through investment in various financial instruments like common stock, debenture, and mutual funds etc, which are ultimately deployed for productive purpose in different sectors of the economy. It is the center for government, business firms and various other institutions to raise capital as per their need through the issue of intermediate and long run securities.

Backbone of capital market is formed by various securities exchanges which provide a playing field for various debts and equity transactions. In that sense, securities market can be considered extremely important constituent of capital market.

On the basis of transactions done, capital market is classified as the primary market and the secondary market. The primary market is where new stock and bond issues are sold to investor. The secondary market is where existing securities are sold and bought from one investor or trader to another, usually on a securities exchange, over the counter. In Nepal, to date NEPSE is the only securities exchange centre that provides the market place in which the firms can raise funds through the sale of new securities and the purchaser of those securities can easily resell them when necessary. And as per the need of the study, this research work deals only with the primary market.

2.1.4.1 IPO, Subset of Primary Market

Primary market is the place from which corporations get new capital. Depending upon whether the securities being offered is for the first time or in succession, total offerings in primary market can be divided as the initial public offering or the successive public offerings.

Market condition is one of the determinants that directly relates to the volume of IPOs in the market. When the market is growing or the trend is Bullish, number of companies issuing common stock through IPO increases and issue of IPO decreases when the market is declining or the trend is Bearish. When the market is high or rising, the number of new issues being offered to the public rises and when the market is low or falling, the number declines (Cheney and Moses 1992, 64). This has been well documented in the markets of developed countries like USA, Japan including others. In USA, during the dotcom bubble of late 1990s, many venture capital driven companies were started seeking to cash in on the bull market. Those companies used to offer their IPOs quickly. Their actions were usually justified as stock price spiraled upwards as soon as they went public. Similar phenomenon occurred in Japan too. Some companies operated in similar way and their only goal was the IPO.

All these study shows that the number of IPOs being offered in a year largely depends on the state of the market. However, in context of Nepal IPO has been a mandatory issue especially for financial institutions operating under the regulation of Nepal Rastra Bank (NRB).

As far as issuing securities through IPO is concerned, issuing company has two options. Issuing company can sell securities directly through private placement or they can sell through investment bankers as public sale.

In private placement, rather than selling securities to the public, company can sell the entire issue to a single institutional investor or a small group of such investors. Here the company negotiates directly with the investor over the terms of the offering, eliminating the function of the underwriter. The entire issue is sold to one or few large institutional investors directly. The typical private placement is of medium size as large firms borrow in the public bond market and smaller companies borrow from banks (Mark S. Carey 1993, 77-92).

In public sale, issues are sold through investment bankers and these investment bankers are often known as underwriters. Investment banker serves as intermediaries between issuing company and the investors. In general, there are group of

underwriters who handle an IPO. Among such group of underwriters one act as a lead underwriter and rest as a selling group. On being appointed by issuing company, underwriters provide an array of services to issuing company. First, they help the issuing company to determine the range of price at which the securities are to be offered along with the numbers of shares to be sold. Furthermore, the reputation of underwriter becomes useful in convincing prospective investors that the shares worth the price at which they are being offered. Secondly, they also perform the task of selling the securities. They sell the issued securities to the retail as well as institutional investors. Even, some underwriters maintain analyst to cover stock prices after they are issued just to ensure that investors have faith.

Generally underwriters work either on best effort basis or underwrite the entire issue. In the best effort basis, the underwriter does not guarantee that the entire issue of the company will be sold but it will just put its best effort to sell the issue. However, on underwriting of entire issue, the company does get the guarantee of entire issue being sold because the investment banker actually buys the entire issue from company and resell it to the public. In addition, most underwriting agreements have green shoe provision. This provision gives underwriters the right to buy additional shares at the offer price to cover possible over allotments. But since the price in the immediate aftermarket for a seasonal issue may reflect negative abnormal returns, the underwriter would have no incentive to buy at the higher offer price (Weston and Copeland 1992, 899).

To sell issues through IPO, certain process should be followed. The firm should first obtain approval from its present shareholders before going public. And once the firm decides to go public, the first and foremost thing to do is to select underwriters. Underwriters are investment banking firms that act as financial midwives to a new issue (Brearley and others 2004, 370). Investment bankers are financial intermediaries that specialize in selling new security issues and advising firms with regard to major financial transaction and merchant bankers are the underwriter of the securities who is responsible for promoting and facilitating the sale of the companies' IPOs. Before any stock is sold to public, the company must register the stock in a concerned office like SEC in USA, SEBON in Nepal. The registration statement contains information about proposed financing and firm's history, existing business and plan for the future.

First part of the registration statement is distributed to the public in the form of preliminary prospectus. The prospectus describes the key aspects for the issue the issuer and its management and financial position.

The SEBON reviews the registration statement and the prospectus to see that all the required information is presented and that it is not misleading. Only then SEBON approves the registration and the company then is able to issue final prospectus and sell the securities.

2.1.5 Securities Offered in IPO

IPO simply does not happen, different sorts of securities need to be offered to make it happen. This portion of the study is particularly focused in ordinary shares, however, we need to know in brief about other securities or instruments of the IPO. Major instruments of the IPOs are ordinary shares, preference shares, debentures and bonds, options, warrants and convertibles.

2.1.5.1 Ordinary Shares

Ordinary shares, also known as common shares or equity shares are the major instruments of the IPO. It represents the ownership position in a company. It is a security which does not have any fixed maturity and income. However, the investors in common stock are able to exercise control over corporation through their voting rights. Of all the available securities, it is the most risky security because if the company goes bankrupt, ordinary share holders are the last in priority of claims on assets and they again are last in receiving earnings.

Some of its major features are:

- a. They run the risk of receiving nothing if earnings are insufficient to cover all obligations.
- b. Every equity shareholder has the right to vote on every resolution placed before the company and the holders' voting right on a pool is in proportion to their share of paid up capital of the company.
- c. Have the share in the profit.

- d. The company is under legal compulsion to offer new issues of the equity to the existing stockholders before placing them in the market for subscription. Such right is termed as preemptive right or right offering.
- e. There is no stated maturity date at which capital must be returned to the equity shareholders.

2.1.5.2 Preference Shares

Preferred stock is a fixed income security and it is also the alternative sources of long term funds for the company. Preferred stock is similar to bonds in some respects and to common stocks in other ways. Preferred stock represents equity of a corporation but it is different from common stock because it has preferences over common stock in payment of dividends and in case of liquidation of the company they have the claim before common stock holders.

The preferred stock, though not as much popular as bonds and common stocks, offers unique features that make it attractive under certain circumstances. It is a hybrid security because it has characteristics of both debt and common stock. It is essentially a fixed income security as preferred stock investors typically receive fixed dividends.

Preferred stock has a number of distinct features, major features are:

- a. It has priority of claim over common stockholders in regards to income. They are paid dividend at a fixed rate as specified in the agreement.
- b. Preferred stockholder claims on assets are superior to equity stockholder in case of time of liquidation of the company.
- c. Preferred stockholder do not have direct right to participate in the management through voting.
- d. If mentioned in the corporation's charter, preferred stockholders may switch over to equity stocks.
- e. A call provision gives the issuing corporation the right to call the preferred stock for redemption.

2.1.5.3 Debentures and Bonds

Debenture is a debt security and is the alternative sources of long term fund for the company. In the UK, Nepal, India and many other countries the term debenture is

popular, but in the USA the term bond is commonly used. A debenture is an unsecured corporate debt, whereas a bond is secured by a mortgage on the corporate property. A debenture is an acknowledgement of a debt under the sale of a company and containing a contract for the repayment of the principal sum at a specified date and for the payment of interest at a fixed rate percentage. A bond is a type of fixed income security by a borrowing entity in which the amount to be paid to the investor is specified in the investment contract known as indenture. Debentures have some important features such as interest rate, maturity date, redemption, indenture, security, convertibility, yield and claims on assets and incomes.

Some of the major features of debentures and bonds are:

- a. Both debentures and bonds have fixed maturity date.
- b. Debenture holders have priority on claim to income over preferred stockholders and common stockholders.
- c. Bondholders also have priority over stockholders of common and preference shares in respect of their claims on assets.
- d. Debenture holders and bondholders do not have power to control through votes by electing directors but they indirectly influence managerial decision through protective covenants in indenture.

2.1.5.4 Options

An option is probably the most popular derivative security in the world of investment. It is a contract between two people wherein one person grants the other person the right, but not obligation, to buy or sell a specified asset at a pre determined price on or before an expiration date. It is derivative security because it derives its value from an underlying security such as stocks, bonds, etc. In the securities industry, options are marketable security and can be bought and sold in the stock exchanges. So, the option owner has the right to sell the option and any other investors can invest on it. An option buyer pays an option writer a premium for granting the option. After options have been created, they can be traded at determined premiums (or prices) that fluctuate continuously. Options doesn't exist in Nepalese financial market and it is not considered as the instrument of the IPO.

2.1.5.5 Warrants

A warrant is a long term option that gives the holder the right to purchase a stated number of shares of the company's stock at a specified price within stipulated period of time. Generally, warrants are distributed with debt and preferred stock and they are used to induce investors to buy long term debt and preferred stock with a lower coupon rate than would otherwise be required. Warrants are long term call options that have value because holders can buy the firm's common stock at the exercise price regardless of how high the market price increase. Warrants are usually used by growing firms as sweeteners to reduce the cost of fund. Warrants may be detachable

or non detachable. Detachable warrants can be sold or purchased without selling or purchasing the security to which it is attached so that after the warrants have been exercised, the bond remains outstanding and total capital increases. To date, warrants are not exercised in Nepal.

2.1.5.6 Convertibles

Convertibles are bonds or preferred stocks that can be exchanged for stated number of common stocks at the option of the holder within stipulated period of time. A bond can be converted into preferred stock or common stock while the preferred stock can be converted only into common stock. Conversion feature increases the marketability of the security. Unlike the exercise of warrants, the debt and preferred stock is simply replaced by common stock but does not provided additional capital to the company.

In Nepal, to date, there is only one convertible issued, the convertible preferred stock by Everest Bank Limited but convertible bond has not been issued yet.

2.1.6 Theoretical Aspects of IPO

Many studies on IPOs have been conducted in different part of the world. These studies have consistently indicated two patterns associated with IPO issues. These two patterns are Underpricing of IPO and IPO's Longrun Underperformance.

2.1.6.1 Underpricing of IPO

When the offer price of IPO is lower than the price of the first trade, the stock is considered to be underpriced. Usually a stock is underpriced temporarily because the laws of supply and demand will eventually drive it toward its intrinsic value. It is believed that IPOs are often underpriced because of concerns relating to liquidity and uncertainty about the level at which the stock will trade. The less liquid and less predictable the shares are, more underpriced they will be. This happens in order to compensate investors for the risk they are taking. Also an IPO issuer tends to know more about the value of the shares than the investor, so, the company must underprice its stock to encourage investors to participate in the IPO.

Determining the optimum offer price of IPO issue is the most difficult thing for an

investment banker, it is even more difficult if the issues are of new and young companies. If the issues are priced too low then the issuing company and its existing investors will not be pleased to leave handsome amount of money in the table but at the same time if they are priced too high then it might lead to under subscription and even may result in withdrawal of an issue. This is crucial aspect because it is detrimental for the financial aspect as well as reputation of the underwriter or the investment banker. So, underwriters do have some incentive to underprice the issue.

In a research conducted by J.R. Ritter in 1998, it is concluded that underpricing does exist in every market but extent of underpricing varies from one country to other. The study reveals that among 33 countries, the IPO underpricing ranged from lowest of 4.2% to highest of 388%. Similarly, many other studies done in number of emerging markets showed similar results. Thus, initial underpricing of IPOs seems to be a world phenomenon and the extent of IPO underpricing varies from one country to another and one market to another.

Various theories have been put forth to explain this phenomena of IPO underpricing. One of the most convincing theories is that IPO are deliberately underpriced by underwriters. Underwriters underprice issues to ensure success of the issue. In addition, it is an easy way for them to reward their loyal clients. Similarly, the issuing company also wants to underprice the issue but not by higher margin as the typical run up in the price will create excitement among investors and might prove beneficial for future issues. In addition, they do not offer much portion of shares to the public and they do not lose much.

Another convincing hypothesis is winners curse hypothesis. It assumes that there exist two groups of investors, informed investors and uninformed investors. Usually informed investors get away with most of the desirable and appealing new issues while uninformed investors get most of the least desirable and unappealing issues and the uninformed investors face winner's curse. Therefore, IPOs are underpriced sufficiently to compensate them for the bias in the allocation of new issues. Yet another group of researchers claim that IPOs are underpriced to reveal the firms quality.

Similarly, according to bandwagon hypothesis, when the investors do buy the new issues after seeing that other investors are also buying and do not buy if others are not buying then the bandwagon effect may develop. To prevent it, the issuing company may want to underprice the issue to induce early investors to buy and induce a bandwagon in which all the other subsequent investors will want to buy.

Although, these theories have been criticized on the ground of extreme assumptions and various other reasons but the fact is that each of them do possess a hint of truth in them. Most importantly, they do help us to understand the underpricing of IPO.

2.1.6.2 IPO's Long Run Underperformance

Another pattern associated with IPO is poor performance of stock price of IPOs in the long run. It means even though IPOs do provide higher initial return but their long term return over subsequent 3 to 5 years are below average.

Edward M. Miller explains long run underperformance as, IPO, even though risky; typically underperform the indices for the first few years after offering. This can be explained by high divergence of opinion raising the initial market price, and by this divergence of opinion declining over time. With time, the valuation of the price setting marginal investor comes closer to the average investor's valuation. This theory also explains why the firms with the greatest underperformance are those with a short operating history, low sales, low prestige underwriters, low institutional ownership, high volatility, high underpricing at the time of issuance, listing on regional exchanges, and those in certain industries.

Some of the long run underperformance found in previous work is likely the result of mismeasurement. However, Fama and French's (1993) three factor asset pricing model shows that the underpricing is largely found in the small nonventure backed firms and underperformance is not an IPO effect. It concludes that IPO underperformance is not an issuing firm effect. It is a small, low-book-to-market effect.

Innumerable researchers have examined the difficulty in pricing IPOs. The general view has been that IPOs tend to outperform in the short run, but then underperform in the long run. Among the authors that have exposed this finding that IPOs have historically

underperformed in the market are Ritter (1991) and Ritter and Loughran (1995). Other papers also showed that this underperformance of IPO extends to almost all markets.

A study conducted by Ritter in 1998 revealed that the companies which went public during 1970 to 1993 produced an average return of just 7.9% per year for five years after the offering using the first trading day's closing price as the purchase price. However, the control group of non issuing firms matched by market capitalization produced average initial return of 13.1%. Thus, the study concluded that on average IPOs underperformed by 5.2% per year in the 5th year after going public.

Whatever may be the reasons all these statements do indicate that IPOs do underperform in long run.

2.1.7 Historical Background of Capital Market Development in Nepal

Development of capital market in Nepal dates back to 1936 when Biratnagar Jute Mill issued ordinary shares. Nepal Bank Ltd., the first commercial bank of Nepal was established in 1937 and in the same year an institution named Tejarath Adda was established to facilitate lending to employees engaged in government offices. And this happened to be the positive symptom in the development of Nepalese capital market. In 1937 itself, Industrial Act was promulgated to serve as platform in strengthening the process of capital market development and national economy as a whole. In the subsequent years quite few companies issued equity shares but the public involvement was almost negligible because almost all the shares of such companies were acquired by Ranas.

In 1950, after out throwing the Rana regime, democracy was established in Nepal and the interim government was formed. However, no steps were taken by the government to strengthen the capital market. When the then government His Majesty's Government (HMG) Nepal issued securities like bonds and treasury bills and it is still in practice. In fact, such government bonds still occupy the major portion of Nepalese securities market.

In 1974, the government announced Industrial Policy under which Security Market Centre was established. However, its activities were very limited as it looked after few

aspects of government securities like development bonds, national saving bonds and some securities of private companies. The institution used to run under the virtual monopoly of government.

Security Market Centre was turned into Securities Exchange Centre (SEC) in the year 1976. SEC was established with the objective of facilitating and promoting the capital market in Nepal (Adhikari 2004, 75). It was the only institution representing capital market and it operated under Company Act. Later in 1983, Security Exchange Act was promulgated and SEC operated under the same act. Major objectives of the Security Exchange Act was to provide systematic and favorable market environment for securities along with ensuring and protecting the interest of individuals and institutional investors as well as to increase the public participation in various firms and companies (Gurung 1999, 15). During the period SEC used to carry out the activities of brokering, underwriting, managing and marketing of public issues. SEC also provided other financial services. Being an only institution representing capital market and having limited resources, it was not able offer services of secondary market ensuring liquidity of the issues.

In 1990/91, then interim government launched broader financial reform programs under the framework of privatization and liberalization. In this context, the government established two major institutions, Citizens Investment Fund and Nepal Industrial Development Corporation (NIDC) to widen the reach and range of activities of capital market. Due to changing economic environment and increasing dynamism in the market, the change in structure and operations of SEC became essential. So identifying the need, in 1993, government divided SEC into distinct entities Security Board of Nepal (SEBON) and Nepal Stock Exchange (NEPSE).

SEBON was established by the Government of Nepal on June 7, 1993 as an apex regulator of Securities Markets in Nepal. It has been regulating the market under the Securities Exchange Act, 2006. The major objective of the board is to promote and protect the interest of investors by regulating the securities markets. Other objectives of SEBON are to regulate, monitor, direct, control and coordinate the entire capital market of Nepal. SEBON regulates both primary and secondary market. And SEBON works under Ministry of Finance.

NEPSE is a nonprofit organization and only institute to facilitate secondary market of Nepal. It is established under the company act and operates under Securities Exchange Act, 1983.

The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through member, market intermediaries, such as broker, market makers etc. NEPSE opened its trading floor on January 13, 1994 with Open Outcry System. Government of Nepal, NRB, Nepal Industrial Development Corporation and members are the shareholders of NEPSE.

Members of NEPSE are permitted to act as intermediaries in buying and selling of government bonds and listed corporate securities. At present, there are 23 member brokers and 2 market makers, who operate on the trading floor as per the Securities Exchange Act, 1983, rules and bye-laws. Besides this, NEPSE has also granted membership to 11 finance companies as issue and sales manager and securities trader. Issue and sales manager works as manager to the issue and underwriter for public issue of securities whereas securities trader works as individual portfolio manager.

2.1.8 Institutions Involved in IPOs of Nepal

In order to develop the financial markets, number of financial institutions is required. And the smooth functioning of these institutions helps to achieve the efficient functioning of financial markets. Among the several types of financial institutions, investment banking firm is one of them. The investment banking firm rather known as underwriter acts as middlemen and helps in the distribution of the new securities to the public. The major function of the investment banks is to buy the securities from the issuing company and resell them to investors.

Companies do not undertake the public issue of securities frequently; hence the issuing firms are not expert in the distribution of securities. They are not familiar with the trend in capital market. But investment banking firms have the expertise. They do not only have expertise but they too have organizations and contacts to sell the securities.

There are large numbers of companies that issue both bonds and common stock to the public. And in context of Nepal corporate public security offerings have increased tremendously in recent year. IPO being complex and time consuming process often needs the participation of a number of agencies. In this reference, agencies or institutions involved during the process of IPOs in Nepal are discussed below:

2.1.8.1 Issuing Companies

The company which is raising additional capital through IPO is known as issuing company. As per the provision of Company Act, 2006, only companies registered as public company are allowed to go for IPO. The act has strictly specified that the private companies should not issue any shares or debentures to the public. If the private company wants to issue shares or debentures to the public, then it must re-register as a public company in company registrar's office. Similarly, as per NRB Directives, Banks and Finance Companies had to go for IPO within certain stipulated time. Furthermore, as per provision of Banks and Financial Institutions Act, 2006, Banks and Finance companies should set aside minimum of 30% of their issued capital to be allocated to the public. However, 5% of such shares could be allocates to their employees.

2.1.8.2 Issue Managers

Issue manager is an institution that is responsible for the management of IPO. As per Securities Act 2006, issue managers are institutions holding license from the NEPSE to manage public offering issues. To date, NEPSE has authorized 9 finance companies to sever as sales and issue managers. Issue managers receive issue commission from issuing company in return of their services. Such issue commissions are decided through negotiation although there is a stipulated maximum limit allowed by the law.

Table 2.1: Name of Issue Managers in Nepal

Serial No.	Name of Issue Manager
1	Nepal Merchant Banking & Finance Ltd.
2	National Finance Co. Ltd.
3	Ace Finance Co. Ltd.
4	Nepal Finance & Saving Co. Ltd.
5	United Finance Co. Ltd.
6	Nepal Sri Lanka Merchant Bank Ltd.

7	Citizen Investment Trust Ltd.
8	Nepal Share Markets Co. Ltd.

2.1.8.3 Merchant Bankers

Merchant bankers are the financial intermediary that specializes in selling new security issues and advising firms with regard to major financial transaction (Gitman, 2003: 316). The role of merchant bankers is to help create and expand securities underwriting and advising corporations and managing investment portfolio for the needing groups. They charge service charge to their client for intermediary and advisory role. The role of merchant banking in managing the public offerings comes under the heading of securities underwriting. For the working of merchant banking function in Nepal, Nepal Rastra Bank has set forth the working guidelines.

2.1.8.4 Underwriters

Underwriter is an institution authorized to render insurance to the securities issued during IPO and to accept liability for specified risk. As far as practices in Nepal are concerned, issues from manufacturing companies, processing companies and banks have to be underwritten but such provisions have been relaxed for finance companies. Furthermore, in the event that the issued shares are not fully subscribed by public, the unsold issues have to be distributed among the underwriters or pro rata basis to the extent for their commitment. In the context of Nepal, according to the law, underwriters can charge maximum of 3% of underwritten amount as their service charge.

2.1.8.5 Bankers to the Issue

Commercial banks normally act as the bankers to the issue and their main responsibility is to provide custodian service to the issuing company. They may or may not receive applications from the investors, issue acknowledgements for the same and enter the application details in application schedules. They may also be involved in the process of realizing the proceeds of issue through cheques/drafts and release final certificates to the issue manager for the number of applications and amount collected.

2.1.8.6 Collection Centers

These are the authorized institution to collect application from the investors issue acknowledgement for the same and the proceeds of issue through cheques/drafts. They also issue final certificates to the issue manager for the number of applications and amount collected. They are provided collection charges for their services which are usually determined through negotiation and are based on number of applications handled and amount collected. Banks, finance companies, brokerage houses mostly perform the role of collection centers.

2.1.8.7 Others

Various other institutions like SEBON, NEPSE and Company Registrar's Office (CRO) also do play same role influencing IPO in one way or the other. As per provisions of Securities Act 2006, issuing companies should get issue approval from SEBON. The companies should also get issue approval from CRO. If the issuing companies are financial institutions, they need to obtain approval for IPO from NRB as well. Similarly, trading of securities is considered illegal, if they are not listed in NEPSE.

2.1.9 Procedural Aspects of IPOs in Nepal: Legal Aspects and Process

Any institution that goes for IPO needs to abide by various laws, acts and regulations. Generally, Company Act 2053 and Securities Exchange Act 1983 used to guide IPO activities in the past. However, these acts have been replaced by Company Act 2006 and Securities Exchange Act 2006 respectively. So, now onwards, companies need to abide by above mentioned acts and their provisions. However, there also exist other legislations and guidelines such as Security Registration and Approval Guidelines 2000, Securities Allotment Guidelines 1994, Security Listing Bylaws 1996 to ensure that IPO process becomes more transparent and disciplined.

The first and foremost step in the process of IPO is to get an authorized investment banker or issue manager (authorized from NEPSE) to handle the whole process as per the provisions of Securities Registration and Issue Approval Guidelines 2000. Upon being appointed, the issue manager conducts due diligence investigation of the issuing company to analyze overall aspects of the issuing company that is mentioned in the proposal for the public issue like nature of business, its financial position, plans, management etc. upon being satisfied, the issue manager prepares detail document along with prospectus to be submitted into the CRO.

CRO upon receiving such prospectus analyzes its various aspects in consultation with SEBON and only after being satisfied grants issue approval. After receiving issue approval from CRO, the issue managers further need to register the prospectus along with other necessary documents in SEBON and obtain issue approval as per the Securities Exchange Act 2006. The prospectus should contain detailed information regarding name of the corporation, its address, objective of its establishment, share capital value, potential risks involved and various other information which will enable investors to make rational decision. In the care of financial institutions, they need to get issue approval from NRB as well.

Before giving issue approval, SEBON analyzes the validity of the information presented in the prospectus and the other documents. Due Diligence Report submitted by the issue manager often becomes basis for such analysis.

After receiving issue approval from both CRO and SEBON, the issue manager on behalf of issuing company is now legally authorized to make public issue. In fact, the issuing company should open its issue to public within two months from the date of approval by SEBON. And the issue should be within the guideline of Securities and Registration and Issue Approval Guidelines 2000.

2.2 Review of Related Studies

This section of the study draws excerpts from international journals, articles, Nepalese journal articles along with Master's dissertations like thesis, paper, study, essay, etc. International journals have been accessed through various websites like www.blackwell-synergy.com, www.emeraldinsight.com and many others. Similarly, Nepalese journals and Masters' dissertations have been accessed through library of St. Xavier's College, Kathmandu; central library of TU; library of SEBON.

2.2.1 Review of International Journals and Dissertations

Many studies have been carried out elucidating different aspects of IPOs throughout the globe. Some research works are relevant to this study and some are not. However, only those studies that were accessible and considered relevant to this study have been included and excerpted below.

Ritter (1998) performed a research survey title 'Initial Public Offering'. The main trust of the study was to survey the market for initial public offerings. However, it has also discussed the process of going public with particular emphasis on how contractual mechanism deals with potential conflicts of interest. The valuation of the IPOs, book building, price stabilization and the cost of going public are also discussed. It has also documented and analyzed three empirical patterns: short run underpricing, hot issue markets and long run underperformance. The study focused on operating companies going public, however, the IPOs of closed end funds and real estate investment trusts were also briefly discussed.

At the end, he summarized that the companies going public especially young companies face a market that is subject to sharp swings in valuation pricing deals can be difficult even in stable market conditions because insiders presumably have more information than potential outside investors. To deal with these potential problems, market participants and regulators insist on the disclosure of material information. He has also documented three patterns for IPOs in US and many countries of new issue underpricing, cycles in volume and extent of underpricing and long run underperformance. Yet in some respect, he found the poor performance of IPOs in the long run as a puzzle in the new issues underpricing phenomenon. He also documented that the number of US IPOs is immense which subsequently contributed in the development of infrastructure to create and fund young companies especially in the hi-tech sector.

Habibullah, in 1999 carried out a study 'Financial Markets in Least Developed Countries'. the study showed evidences that in some Asian countries including Nepal, economic development reflected in economic growth leads the financial development measured in the ratio of broad money to gross national product (M2/GNP). This implies that economic development has preceded the financial market development in case of Nepal. But several other studied conducted in other least developed countries reveal that the financial development has preceded the economic development. The stock market development measured by market liquidity, market capitalization and total turnover is correlated with current and future economic growth, capital accumulation and productivity growth as evidenced by Levine and Zervos (1996). The

efficient money, foreign exchange and capital markets increase investments to the most productive sector of the economy and thereby increase output through saving mobilization. Such markets also price the risk associated with an investment accurately.

Kviback in 2001 did a research, 'Nepal Survey: Issues in Local Bond Market Development'. Major finding of his studies were: The financial market in Nepal is relatively underdeveloped. The government market is more developed, but prices are not market oriented. The state of development of equity markets indicates how well versed issuers, investors and intermediaries are in dealing with securities at the primary and secondary market levels. However, Nepal's overall market is still infant.

The equity market of Nepal is relatively small as compared to international standards. With only 114 companies being listed in about 11 years of establishment of NEPSE, the equity market in Nepal requires more effort and contribution from the privately held companies as well as the investors. The status of Nepalese equity market is being elaborated in the following extraction of a report.

Ritter and Welch in 2002 reviewed theory and evidence on IPO activity: why firms go public, why they reward first day investors with considerable underpricing and how IPOs perform in the long run. The study confined to the US based firms. It focused mainly on three areas of current research on IPOs, reasons for going public, the pricing and allocation of shares and long run performance.

The study concluded that market conditions are the most important factor in the decision to go public, whereas the stage of the firm in its life cycle deemed the second important factor. They also argued that theories based on asymmetric information are unlikely to explain average first day return of 65%. Furthermore, they asserted that future explorations would need to concentrate on agency conflicts and share allocation issues on one hand and behavioral explanations on the other hand. At the end, they seem to favor behavioral point of view to explain long run performance with emphasis on caution.

Lowry and Schuvert in 2002 carried out a study on IPO Market Cycles: Bubbles or

Sequential Learning? The study emphasized that both IPO volume and average initial returns are highly correlated. Furthermore, companies tend to go public following periods of high initial returns.

The study revealed that there exist significant positive relation between average initial returns and subsequent IPO volumes. They concluded with the result which showed that the dynamic behavior of initial returns and IPO issued is a complicated function of many factors. There are significant biases in IPO offer prices that arise from underwriters not fully incorporating all avoidable information when they set offer prices. These biases affect both the serial correlation in initial returns and the lead lag relation between initial returns and IPO volumes. They also found that the serial correlation in initial returns is predominantly driven by information learned during the registration periods of recent IPOs but only partially incorporated into the offer price. Furthermore, they found that its information learned during the registration period that is positively related to future IPO volumes. Investment bankers learning processes throughout this registration period causes monthly aggregate initial returns to be auto correlated and to be positively related to future level of IPO activity.

Agrawal and others 2002 analyzed institutional allocation in IPO using a new data set of US offerings between institutional allocation and day one IPO returns. The study identified IPOs offered between May 1997 and June 1998 from the Securities Data Company's (SDC). New issue database excluding American Depository receipts, unit offerings, closed end funds and Real Estate Investment Trusts (REIT). The information needed for study was acquired from investment banks for all issues in which they were lead managers.

By using two fold analyses, they found that there is a positive relationship between institutional allocation and underpricing. They also explained why institutional allocation is greater in underpriced issues. The explanations were based partly on book building theories of IPO underpricing and the fact that institutional allocation is positively related to IPO underpricing because of private information. Finally, they concluded that there is little empirical evidence on how the day one gains in IPOs are allocated between institutional and retail investors. The question of whether IPO

allocations practices systematically favor institutions over retail investor is also a subject of much debate and ongoing regulatory investigations.

Gasbarro and others in 2003 carried out a research study entitled Underpricing and After Market Performance of IPO Firms in Mauritius. The study focused on measuring the financial strength and identifying its relation to IPO underpricing and aftermarket performance. They used pre IPO prospectus information, annual reports and market data to create proxies for financial strength. In the aftermarket, financial strength measures were used to partition firms into high and low strength groups similar to the study of Barth Et. Al. in 1998.

By the end, they concluded, unlike any other market underpricing does exist in Mauritius too. This underpricing is related to pre IPO financial variable gathered from each firm's prospectus. As previous researches suggested that underpricing reflects financial strength, they found that cash flow and sales are positively related to underpricing.

Ljungqvist and Wilhelm Jr. in 2003 carried out a research on IPO pricing in The Dot.Com Bubble with the objective of establishing that the regime shift in initial returns and other elements of pricing behaviors can be at least partially accounted for by marked changes in pre IPO ownership structure and insider selling behaviors over the period which reduced key decision makers incentives to control underpricing. In this regard, they included firms completing an IPO between January 1996 and December 2000 as enlisted in Thomas Financial SDC database.

During the study, they found that initial returns are larger when insider ownership stakes are smaller and more fragmented and when insiders sell fewer shares at offer price. Similarly, when CEOs and venture capitalists sell fewer shares in the IPO, price revisions, which we interpret as a measure of information acquired during the selling effort are less aggressive. Thus, their results indicated a strong association between aberrant pricing of dot.com bubble and changes in ownership structure and insider selling behaviors.

Finally they concluded that the aberrant pricing behavior witnessed during the

dot.com bubble could be at least partially accounted for by marked changes in per IPO ownership structure and insider selling behaviors over the same period. Pre IPO CEO Ownership stakes were half their former level and ownership fragmentation increased sharply. The frequency and magnitude of secondary sales by all insiders, especially CEO has declined sharply. Finally directed shares program which provided for purchase of shares by friends and families at the discounted offer price become ubiquitous.

Kasserer and Kraft in 2003 carried out a study, 'How Issue Size, Risk and Complexity are Influencing External Financing Costs: German IPOs Analyzed from an Economies of Scale Perspective'. The study mainly focused on the cost of raising capital in Germany. The study included a cross sectional analysis of flotation cost data for 117 IPOs over the year 1993 to 1998. The research mainly focused on, how can the IPO flotation cost function be defined within the economies of scale view in order to capture the import of a set of economically relevant variables? In addition, what statistical methods will provide the most powerful estimation and does this function reveals economies of scale on the level of single issue.

After the completion of study, they asserted that there is no strong support for economies of scale in IPO financing activities. In fact, marginal spreads seem to be rather constant in gross proceed and do not as the economies of scale view predicts, decrease with issue size. They also found these spreads to be higher for more risky and complex offerings. Their second major finding was that the fixed costs are negligible as far as underwriting fees are concerned. In fact they accounts on average for only 5 to 9 % of underwriting costs. Significantly, they also did not find evidence in support of the presumption that IPO spreads are clustered, which is in stark contrast to recent findings related to the US market.

Fields and others in 2003 performed a study on 'A Comparison of Underwriting Costs of Initial Public Offering by Investment and Commercial Banks'. The study mainly examined the differences in underwriting costs between commercial banks section 20 – underwritten IPOs and investment bank underwritten IPOs.

In the study, they used a sample of section 20 commercial banks and investment banks underwritten IPOs from 1991 to 1997. They identified 4566 IPOs during the period

using Securities Data Corporation (SPC) initial offering database. They examined gross margin and underpricing separately and combined to assess whether the costs of IPO underwriting differ for commercial and investment banks. They also provided sensitivity test to address potential endogenously bias.

Their analysis found that underwriting costs for IPOs are lower for commercial banks underwritten issues than for investment bank underwritten issues. Total underwriting costs are significantly lower for commercial bank underwritten issues both statistically and economically. The lower total underwriting costs for commercial bank underwritten issues reflects lower underpricing costs rather than any differences in gross margin. Finally, they concluded that longer term studies would be needed to determine whether the findings on the study persist in future, as section 20 subsidiaries become more established in the IPO underwriting market.

Corwin and Schultz in 2005 examined syndicates for 1638 IPOs from January 1997 to June 2002. Contrast to the popular belief that larger syndicate yields benefits; they discussed several factors that may limit syndicate size. They mainly examined how syndicate structure affects the likelihood and magnitude of the offer price revisions in response to information revealed during the filing period. As a proxy for this information, they used the total return from the midpoint of the filing price range to the closing price of the first day of trading. For the purpose, they collected an initial sample of 2146 IPOs issued between January 1997 and June 2002 from the Securities Data Company's global new issues database.

They found strong evidence of information production by syndicate members in IPOs underwritten by large syndicated and particularly by syndicates with a lot of co managers, the offer price is more likely to be revised away from the midpoint of the filling price range in respond to information. In forming syndicated, relationships are critical. They also found that adding co managers to an IPO syndicate increases both the number of market makers and the number of analysts issuing reports in the aftermarket.

For large IPOs, they found that underwriters who can provide coverage by a top ranked analyst are more likely to be included in the syndicate. Similarly, even though

the issuers benefit from increasing the number of syndicate members and especially the number of co managers who underwrite their IPOs, syndicate size is very much dependent upon the preference of book manager rather than issuers. Finally, they concluded that although the IPO proceeds increased from 1997 to 2002, syndicates grew smaller. At the same time, the number of company managers increased. This change in the syndicate structure over time provided an interesting area for future research.

Derrien in 2005 carried out a research study, *IPO Pricing in Hot Market Conditions; Who Leaves Money on the Table?* In the paper, researcher has assumed that Millers (1977) model holds for IPOs and developed a model of IPO pricing in favorable market conditions. The model relies on the assumption that aftermarket price support is costly for the underwriter. The prediction of the model was tested using a sample of 62 IPOs completed in the French stock exchange between 1999 and 2001. A sample of the latest French offerings with a fraction of the shares reserved for the individual investors supported the predictions of the model. The paper mainly analyzed the impact of favorable investor sentiment on the pricing initial return and long run performance of the IPO stocks.

By the end, he concluded that if noise traders are bullish, they are ready to buy IPO shares at high prices. In this framework, IPO prices reflect the private information collected in the IPO process and partially the public information (noise trader sentiment) known at the time of offering. Therefore, IPO are overpriced i.e. priced over their long run intrinsic value on average but exhibit positive initial returns. Hence, the companies going public in hot markets are not upset about leaving money on the table, as they know that their shares are overpriced at the time of offering.

In the year 2006, Georgan and others carried out a study '*The Strategy of Going Public; How UK Firms Choose Their Listing Contracts*'. The study carried two objectives: first to derive potential factors that may influence the choice of IPO listing contracts from the few theoretical papers and empirical studies in the field and the second objective was to test how well those factors explain the choice of the listing contract for the case of UK's IPOs. The study focused on 240 floatation's which were listed on the official list of London stock exchange during the period of 1991 to 1995. They used a binomial

profit model to measure the impact of the variables on the contract choice. As the study proposed that three types of factors essentially influence the choice of contract; ex ante uncertainty, certification (by the sponsor, creditors and venture capitalist) and the visibility/exposure of the issue, they found that the higher the ex ante uncertainty at the time of IPO, greater is the profitability that the firms choose a placing a contract. They also found strong evidence that sponsor and creditor screening signals the quality of the IPO firm. Hence, firms which use highly reputable sponsors and those with high debt to assets ratios usually choose public offer contracts. They also found that firm that make small issues find it cheaper to use placing contracts. Finally they concluded that in general the decision to choose a placing rather than an offer or vice versa is taken by the firm within the framework of rational behavior.

In 2006 Alexander Ljungqvist conducted a study on 'IPO Underpricing'. The study looked through the principal theories that have been proposed to explain IPO underpricing and discusses the empirical evidence. Theories of underpricing can be grouped under four broad headings: asymmetric information, institutional, control, and behavioral. The key parties to an IPO transaction are the issuing firm, the bank underwriting and marketing the deal, and the new investors. Asymmetric information models assume that one of these parties knows more than the others, and that the resulting informational frictions give rise to underpricing in equilibrium. Institutional theories focus on three features of the marketplace: litigation, banks' price stabilizing activities once trading starts, and taxes. Control theories argue that underpricing helps shape the shareholder base so as to reduce intervention by outside shareholders once the company is public. Finally, behavioral theories assume the presence of 'irrational' investors who bid up the price of IPO shares beyond true value.

Major findings of the study were the empirical evidence supports the view that information frictions have a first order effect on underpricing. At the same time, the enormous variation in the extent of underpricing over time raises doubt in some people's mind whether information-based explanations on their own can account for the huge amounts of money left on the table in hot markets, such as the internet bubble of 1998-2000. And there is a continued interest in behavioral explanations, cross-country tests that exploit interesting institutional differences, conflicts of interest within investment banks, and the use of auctions to market and price IPOs.

Alexander Ljungqvist concluded that IPOs are underpriced in virtually all countries and that the number of companies going public and the extent of underpricing fluctuate over time. There is a large body of theoretical work explaining IPO underpricing, and most theories have been subjected to rigorous empirical testing. The empirical evidence supports the view that information frictions (including agency conflicts between the issuing company and its investment bank) have a first-order effect on underpricing.

In 2006 in Sweden, Jens Eriksson and Carl Geijer conducted a study 'Why Are IPOs Still Attractive? A Comparison Between Going Public or Staying Private'. The purpose of the study was to analyze and describe the reasons of making an IPO instead of selling to a Private Equity (PE) company from a shareholder's point of view. The major findings of the study were why shareholders' choose an IPO instead of selling to a PE company. And the findings are: i. attain share liquidity ii. increases the status and publicity, and thereby the credibility of the company and iii. no PE company offered good price enough. The main motives for the companies that made IPO were exit for shareholders, share liquidity, raise of cash for the company and corporate restructuring.

Jens Eriksson and Carl Geijer concluded that all motives could have been achieved by selling to a PE company, except to attain share liquidity. One of the attractive reasons for share liquidity is that shareholders easily can choose between reducing ownership, increasing ownership or remain with existing shares. Another attractive reason is that financial institutions normally become shareholders, which in turn increases the credibility of the company. Eight out of the ten companies had parallel plans to the IPO; most of them including a possible PE buy-out scenario. However, no PE company offered a price high enough for the individual companies. Either the existing owners received a better IPO price, or the remaining owners believed that the stock exchange would outperform the PE price offers in the long-run. Theory means that buy-out has got its advantages compared to IPO, but the empirical findings show that the alternatives were on the contrary quite similar. The single advantage with a possible buy-out was that it would demand less, or at most equal, work load in terms of preparation before the sale. However, the negative part with the IPO was that it was

considered expensive as well as it took energy and distraction of focus it took from the management team.

Brau and Fawcett in 2006 performed a study on 'Initial Public Offerings: An Analysis of Theory and Practice'. The study intended to extend the IPO literature by analyzing unique data from surveys of Chief Financial Officers (CFOs) to compare CFO perspectives to prevailing academic theory. Specifically, they examined the following seven issues: motivations for going public, timing of the IPOs, underwriter selection, underpricing, signaling IPO process issues and the decision to stay private. In this regard, they surveyed three sub samples of firms, namely those that successfully completed an IPO, those that began the process but chose to withdraw the issue and those that are large enough to go public, but have not attempted an IPO. They surveyed 330 CFO's and their survey process followed Dill Man's (1978) total design method which is a standard for conducting academic surveys.

Their findings are summarized as; the most important motivation for going public is to create public shares for use in future acquisitions. Insiders are opportunistic especially at venture capitalist backed firms. They seek to go public at a time that portends a high stock price. The underwriter selection process is driven by a very small set of criteria namely underwriter reputation and IPO process expertise. CFOs are well informed regarding expected underpricing. They attribute most underpricing to market uncertainty and the need to reward investors for taking the risk of IPO. The most important positive signal is past historical earnings, this may promote window dressing. And companies remain private to preserve decision making control ownership.

In June 2008 Robin Anderson and Estelle Joubert Westling conducted a study 'Can First Day Return of IPOs be Explained by Individual Financial Ratios?' The research work studied the relationship between historical financial ratios and first day returns of IPOs. The empirical data is based on 49 IPOs that were made on the Stockholm OMX Stock Exchange during the period 2000 to 2008. The point of departure was to explore the ramifications of less favorable financial ratios and their impact on first day returns. The study was based on theories of asymmetric information as a foundation to investigate how financial ratios possibly could bridge information uncertainties and

affect the ex ante uncertainty when investing in an IPO. This has been examined through a large set of financial ratios.

The study was done to examine whether financial ratios can explain first day returns. Opposite to the expectation, the results showed that the individual financial ratios used in the study cannot predict first day returns. In the analysis several interpretations had been provided in order to explain why financial ratios do not have any significant impact on the first day returns. Two notably strong findings was made, the financial ratios only constitute a fraction of the information available in the IPO process and the high variation in the financial ratios could make them noisy estimators of the firm performance. Collectively, they form a plausible explanation for the outcome of the study.

They concluded that no statistically significant relationship could be found between the financial ratios and first day returns in the studied sample.

2.2.2 Review of Nepalese Journals and Dissertations

Very few researches had been carried out by various scholars covering different aspects of capital market in Nepal. Yet, research work related to IPO still lacks in context of Nepal. However, few researches that are relevant to and accessible during the study period have been excerpted below.

Shrestha (1996) has conducted a research study on, 'Public Response to Primary Issue of Share in Nepal'. The main objective of the study was to evaluate the primary market of shares, analyze the pattern of public response to the shares and to identify the problems of primary market in Nepal. He has used both primary and secondary data from 12 selected companies for the period of 3 years from January 1993 to January 1996. He has employed simple average, chi-square test and coefficient for deduction.

The study conclude that public response to the issue of shares of banks, finance and insurance companies were better than that of manufacturing and processing, trading, hotel and other groups of companies. The success of response to the public issues largely depends on the response from within Kathmandu valley and to some extent, the issues of shares seem to attract from outside the valley.

Gurung (1999) carried out the research entitled, 'Share Price Behavior of Listed Companies in Nepal' with the objective of analyzing the price movement of shares of listed companies in Nepal. The study was based on historical price data covering the period of five years from January 1994 to December 1998. The study as per its nature was based largely on secondary data.

The study concluded that the performance of banking group is highly attractive and liquid as signified by their trading turnover. The performances of listed companies have been deteriorating. This implies the uncertainty and instability in stock market. Similarly, the market was bullish during the initial period of the study but due to political instability, immature liberalization and privatization policy of the HMG Nepal has resulted into the bearish trend in the market during latter years of the study.

Pandey (2001) who has done research on, 'Public Response to Primary Issue of Shares in Nepal', with the objective of identifying the problems of primary share issue market, assess the growth of primary issue market, analyze the pattern of public response to shares & find the reasons of variations. Pandey summarized his findings as: public response in primary market is high due to lack of opportunities for investment in other fields. No proper investment analysis is been made. Despite this, public are attracted towards shares than other sectors, basically to increase their value of investment, be it dividend capital gain or bonus shares. It can be seen that public response to primary issues on banking and financial sectors is normally higher than that of the manufacturing and services sector. Major causes for proper response in the period 1995-1998 were; interest rates were higher as compared to dividend yield, the public companies were not performing well and people did not know about the importance of investing securities.

Paudel in 2002 carried out a study, 'Investing in shares of Commercial Banks in Nepal: An Assessment of Return and Risk Elements'. Major findings of his studied were: The shares of commercial banks in Nepal are heavily traded in the stock market and therefore these shares play a vital role in the determining stock exchange indicators. The average mean return and market portfolio as measured by percent

changes in the NEPSE index was 5051 percent over the sample period. All the shares produced higher rates of return than the return on market portfolio. However, the risk-return characteristics do not seem to be the same for all the shares reviewed. The shares with larger standard deviation seem to be able to produce higher rates of return. The portion of unsystematic risk is very high with the shares having negative beta coefficient. The risk per units of return as measured by the coefficient of variation is less than that of the market as a whole for all the individual shares. Most of the shares fall under the category of defensive stocks, (having beta coefficients less than 1), except the shares of Bank of Kathmandu Ltd. Return on the shares of NABIL Bank Ltd. is negatively correlated with the return on market portfolio and therefore it has negative beta coefficient. From the analysis, it appears that none of the shares are correctly priced. Theoretically, the market price of an overpriced (under priced) share will fall (rise) in order to increase the expected return such that the expected return equals the required return. Therefore, shares of NABIL Bank Ltd., Nepal Investment Bank Ltd. and Himalayan Bank Ltd. were overpriced relative to equilibrium market prices, thus, will decline. The remaining share appears to be under-priced indicating a possible positive long term price trend.

Adhikari (2005) has conducted a research on 'An Analysis of Determinants of IPO Underpricing in Nepal'. The basic objective of the study was to analyze the underpricing of IPOs in the context of Nepal. Beside the study also examined the trends of public offering market and process of going public in Nepal. For propose of study data of the periods of 4 years from 1999/00 to 2003/04 were used.

The researcher concluded that underpricing does not occur among Nepalese firms. The researcher also added that the result is not consistent with theory and different finding of empirical studies conducted in different countries. IPOs market in Nepal does not enjoy any right to set the price of their issue. The price setting process is totally controlled by the regulatory body. Because of this reasons Nepalese merchant banker could not play any role to influence the offer price of IPOs.

Bhattarai (2006) has performed a study on, 'Public Response to Initial Public Offering in Nepal', with the basic objective of assessing public response to the initial public offering. However, the study also focused on the dealing process and pace of the IPO.

The study has used both primary and secondary data. Primary data collected through direct questionnaires provided to the general investor while secondary data were collected from various publications of SEBON, NEPSE and other institutions.

The study concluded that most of the general investors in Nepal do not have significant information regarding the primary market but still they are very much interested to invest money in the primary market. It also found that almost each sector was getting good response from public. Specially, financial institutions and insurance companies were becoming more preferable for public than the other non-financial sectors.

in 2007, Dahal carried out a research 'The Performance of Nepalese IPOs'. the study was based on 107 IPOs from the fiscal year 1993 to 2006. the study mainly focused on subscription times of securities on IPOs and IPOs return'. After the completion of the study, he asserted that Nepalese IPOs had been heavily oversubscribed. the study showed that the investors have very high degree of attraction to the IPOs. it was noticed that Nepalese IPOs in terms of issue and subscription had been bumpy during the study period. it is also noticed that the investors make 53.25% market adjusted return leading to concluding that Nepalese IPOs are highly underpriced. on the other hand it showed that due to higher underpricing, higher wealth lost by the promoter. it is also found that IPOs return had been mainly affected by the subscription times of issue and general returns of stock market. the study also revealed that the firm size expressed as the size of total assets affects the subscription times of issued positively and the debt equity ratio affects the same negatively.

2.3 Research Gap

Even though numerous studies have been carried out in different part of the world covering different aspects of IPO including two empirically tested theories: IPO underpricing and Long run underperformance of IPOs, such studies are not available on Nepalese context. Few studies have analyzed existing state of IPOs in Nepal and one research paper has tried to ascertain IPO underpricing in Nepal. However, none of the studies have been able to portray the complete picture of IPOs and their practices

in Nepal. In this context, the study attempts to analyze existing state of IPOs in Nepal, analyze IPO underpricing in Nepal, analyze subscription pattern of IPO issues and analyze whether higher return of IPO is maintained on 2nd and 3rd day of trading.

CHAPTER- III

RESEARCH METHODOLOGY

Research methodology is a way of systematically solving a research problem. It studies the procedures and techniques adopted during the study. It includes research design, population and sample, nature and sources of data, method of data collection, data processing, data analysis tools and limitation of the methodology.

3.1 Research Design

Research design is the conceptual structure within which the research is conducted. It is the blue print for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data. Research design is needed because it facilitates the smooth sailing of the various research operations thereby making research as efficient as possible by yielding maximal information with minimal expenditure of time, effort and money.

Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research question and to control variance (Kerlinger 1980, 275). The plan is overall scheme or program of the research. A research design expresses both the structure of the research design problem and plan of investigation used to obtain evidence or relations of the problems.

This study is based on descriptive and analytical research design. Analytical research design has been used to analyze existing state of IPOs in Nepal using Log-linear model and simple descriptive statistical tools. Furthermore, same design has been extended to analyze IPO underpricing in Nepal. Similarly, descriptive research design has been used to analyze subscription pattern and its

relation with underpricing along with analysis of price changes on 1st, 2nd and 3rd day of trading.

3.2 Population and Sample

Number of companies listed in NEPSE as of August 11, 2009 are 159 and these companies are divided into 9 major sectors namely commercial banks, development banks, finance companies, insurance companies, manufacturing and processing companies, hotels, hydropower companies, trading companies, and others. And the study is focused on only those companies which have gone for IPO during the period of fiscal year 1993/94 to 2007/2008. Moreover, only 5 sectors are taken into considerations for the study. Covered sectors are commercial banks, development banks, finance companies, insurance companies and manufacturing & processing companies. Hence the population of the study is 147 listed companies representing 5 different sectors in NEPSE. Similarly, IPO of ordinary shares is the focus of the study and when analyzing the existing state of IPOs in Nepal, the offers from collective schemes like mutual fund and Citizen Investment Trust is not taken into considerations.

As far as sampling is concerned, stratified random sampling technique is used to ensure that each and every company representing different sectors have fair chance of being selected. In this study random sampling table is used within the sample frame of 25%.

3.3 Sources and Nature of Data

As per the nature of the study, the study is entirely based on secondary data. Major sources of data for the study are:

- a. Annual reports and website of SEBON covering different fiscal years to analyze existing state of IPOs in Nepal.
- b. Trading reports and website of NEPSE to reveal share price information during analysis of underpricing.
- c. Daily newspapers covering different periods of time to reveal share price information needed during analysis of underpricing.

- d. Acts and regulations governing security market and IPO issues that mainly included Securities Exchange Act 2007, Company Act 2006 and Security Regulation and Issue Approval Guidelines 2000.

3.4 Data Collection Technique

Annual reports covering different fiscal years of SEBON were collected from its head office. Similarly, trading reports of NEPSE were retrieved from its head office at Durbar Marg. Daily newspapers like The Kathmandu Post, The Himalayan Times and The Rising Nepal were accessed from library of Tribhuvan University and St. Xavier's College. Acts and regulatory information was obtained from law firms as well as official website of SEBON and NEPSE.

3.5 Data Processing

At first relevant data are extracted from above mentioned sources and recorded in the master sheet. The data are then entered into the spreadsheet to present them into appropriate tables and figures with the aid of various computer applications. Microsoft excel is used to analyze data revealing existing state of IPOs and underpricing of IPO in Nepal. And to obtain the growth rates of issued amount, average size of issue offered and amount of issues offered from financial and non financial sector, sophisticated computer application of Statistical Package for Social Sciences (SPSS) is used.

3.6 Data Analysis Tools

In the study, different statistical tools and various models have been used to analyze the data and reach the meaningful results. And these tools and models are described below.

3.6.1 Mean

Generally mean indicates the measure of the middle of the data set and denoted by μ or \bar{x} . In other words, it is just the sum of all the observations divided by the number of observations. During the analysis mean or average have been used synonymously for equal weighted mean.

Symbolically,

$$\mu = \frac{\sum X}{N}$$

Where,

- μ : the population mean of variable X
- $\sum X$: sum of all the observed value of variable X
- N : the total number of observations

3.6.2 Standard Deviation

Standard deviation is the absolute measure of dispersion and it is denoted by σ . It shows the degree of variations among the observations' value in the data set. Normally, higher the value of standard deviation, higher the degree of fluctuation and higher the risk. In this study, standard deviation has been used to indicate the degree of fluctuations in the level of initial return from different companies during the study period.

Symbolically,

$$\sigma = \sqrt{\frac{\sum (X - \mu)^2}{N}}$$

Where,

- σ : standard deviation
- X : observation
- μ : population mean for observed value of X
- $\sum (X - \mu)^2$: sum of all values of $(X - \mu)^2$

3.6.3 Coefficient of Variation

It is the relative measure of dispersion and is usually denoted by its short form CV. It is dimension less number that allows comparison of the variation of populations that have significantly different mean values and usually presented

in the percentage. Normally, when $CV > 1$ the distribution is considered of high variation and when $CV < 1$ the distribution is considered of less variation. It has been used to reflect the relative measure of degree of fluctuation in the level of underpricing from different companies.

Symbolically,

$$CV = \frac{\sigma}{\mu}$$

Where,

σ : standard deviation of the population

μ : population mean

3.6.4 Karl Person's Coefficient of Correlation

In this study, Karl Person's coefficient of correlation has been calculated in order to examine the relationship between the issued amount of finance sector and non finance sector during the study period. It has been obtained by using the following formula:

$$r = \frac{\sum(x - \bar{x})(y - \bar{y})}{N\sigma_x\sigma_y}$$

Where,

σ_x : standard deviation of series x

σ_y : standard deviation of series y

N : number of pairs of observations

Probable error also known as PE helps to interpret the value as well as measures the reliability of the coefficient of correlation.

Probable error is calculated as:

$$PE = .6745 \times \frac{1 - r^2}{\sqrt{N}}$$

3.6.5 Model for Measuring Underpricing

In order to find the extent of underpricing or the level of initial return, Jay R. Ritter's 1984 model has been used. As per the model, underpricing is calculated as the first day closing price less the initial offer price divided by the offer price.

The model is based on the assumption that the opening market price close to an unbiased indicator of the closing market price on the first day. So results are insensitive to whether opening or closing market price is used.

Symbolically,

$$UPI = \frac{Pi_1 - Pi_0}{Pi_0} \times 100$$

Where,

UPI : level of underpricing

Pi_0 : offered price of common stock i

Pi_1 : closing price of share i at 1st day of trading

3.6.6 Model for Measuring Growth Rates

Log-linear model as a form of semi log model has been used to calculate the growth rates of amount issues offered, average size of issues offered and the amount of issues offered from financial and non financial sector during the study period.

As per the model:

$$\ln Y_i = \alpha_1 + \alpha_2 X_i + u_i$$

Where,

\ln : natural log

Y_i : dependent variable

X_i : independent variable

α_1 : intercept

α_2 : slope coefficient (it gives the instantaneous growth rate)

u_i^1 : disturbance error of the variable

Compound growth is calculated by taking the anti-log of slope coefficient,

¹ The disturbance or error term is a random variable and may well represent all those factors that affect dependent variable but are not taken into account explicitly.

subtracting 1 from it and finally multiplying it by 100. Instantaneous growth rate gives the growth at a point in time whereas compound growth rate gives the growth rate over the period.

3.7 Limitations of the Methodology

Availability of data is a major concern. SEBON and NEPSE are the sole authority to release data needed for analysis in this study but all the required data were not available. The major portion of analysis, especially stock price information has been based on daily newspapers and website of NEPSE. Hence, analysis is subsequently bound to be influenced by the quality of presentation; the unavailability of data has also forced to limit the time frame of study into fiscal year 1993/94 to fiscal year 2007/08. The study has used stratified random sampling, descriptive and analytical research design, and hence the study is subjected to their inherent biases.

CHAPTER- IV

PRESENTATION AND ANALYSIS OF DATA

The chapter includes presentation and analysis of collected data through secondary sources. It reveals existing state of IPOs in Nepal, analyzes IPO underpricing, analyzes subscription pattern of IPOs offered and finally presents comparison of initial return on offered price on second and third day of trading. All these analyses are based on simple statistical calculations.

4.1 Data Presentation and Analysis

4.1.1 Amount of Public Issues Offered

Securities Act 2063 provisioned that any company which goes for IPO must get issue approval from security board of Nepal prior to make their offer to public. Since first year of SEBON's operation, it has given issue approval to 262 issues amounting Rs. 25565 million to date (SEBON, 2008). As securities regulation also provisioned that the company, which got issue approval may commit their offer any time within two months from the date of issue approval (Security Registration and Issue Approval Guideline, 2002), so the amount of issue approved and the actual amount issued in a fiscal year may vary. Hence, for better result the study is focused on actual amount issued in the fiscal year rather than the amount approved by the SEBON. Amount of public issues offered during the study period along with its growth rates is presented in the table no 4.1.

Table 4.1: Amount of Public Issues

Rs. In Millions

Year	Amount of Public Issue (Rs.)	Annual Growth Rate (%)
1993/94	244.40	-
1994/95	174.00	(28.81)
1995/96	293.70	68.79
1996/97	332.20	13.11
1997/98	462.40	39.19
1998/99	258.00	(44.20)
1999/00	326.90	26.71
2000/01	410.50	25.57
2001/02	1,441.40	251.13
2002/03	556.50	(61.39)
2003/04	1,027.50	84.64
2004/05	1,626.80	58.33
2005/06	2,443.30	50.19
2006/07	2,295.50	(6.05)
2007/08	10,668.20	364.74
Total	22,561.30	-

From table 4.1 it is clear that since the SEBON's first operation, amount of public issue have never been consistent. In the year 1993/94, the issue was Rs. 244.4 million and in the year 1994/95, the issue decreased to Rs. 174 million. However, the coming years have been showing the rising trends. The amount of public issues rose to Rs. 293.7 million in year 1995/96, Rs. 332.2 million in 1996/97 and Rs. 462.4 million in year 1997/98. Again in year 1998/99 the amount dropped to Rs. 258 million and in the year 1999/00 the amount once again rose to Rs. 326.9 million. It continued to rise for two more years, in the year 2000/01 it was Rs. 410.5 million and in the year 2001/02 the amount was Rs. 1441.4 million. Once again in the year 2002/03, the amount dropped substantially to just Rs. 556.5 million. Again for three more years, the amount of public issues went very high. For the year 2003/04 the amount was Rs. 1027.5 million, for the year 2004/05 the amount was Rs. 1626.8 million and for the year 2005/06 the amount was Rs. 2443.3 million. In the year 2006/07, the amount

once again dropped a bit to Rs. 2295.5 million. And in the year 2007/08, the final year of the study period, the amount was Rs. 10668.2 million.

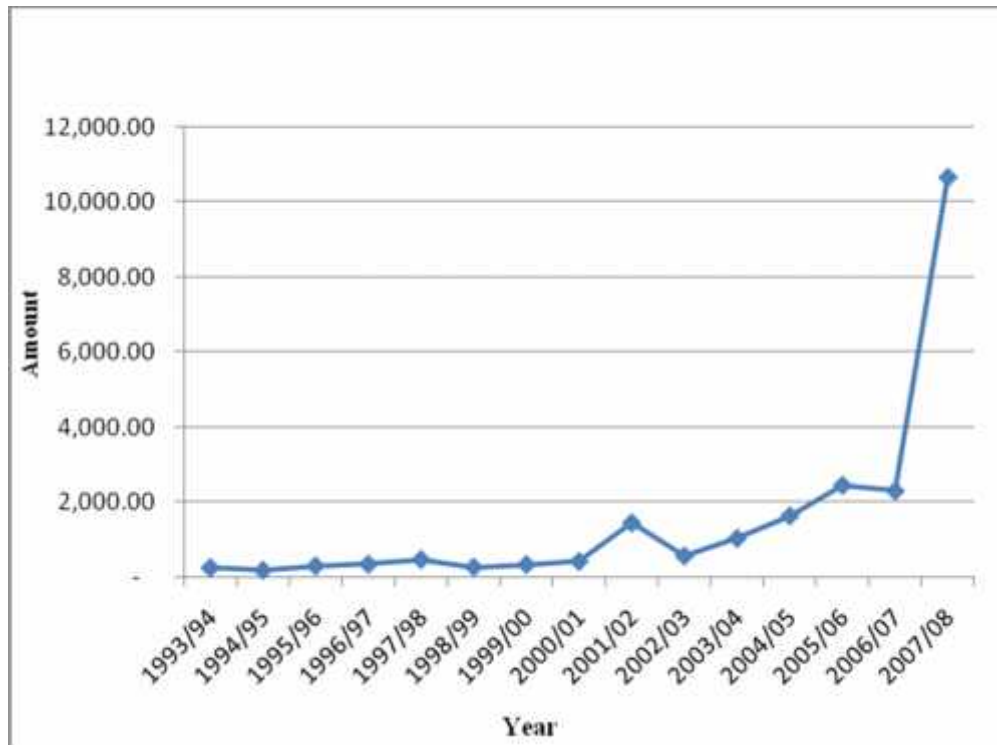


Fig. 4.1: Amount of Public Issues

From the figure 4.1, very high coefficient of trend line suggests that the amount of public issue offered has been in the rising trend during the study period.

During the entire study period the highest amount of public issues was Rs. 10668.2 million in the year 2007/08 while the lowest amount of public issue was Rs. 174 million in the year 1994/95. The total amount of public issue during the study period was Rs. 22561.3 million. In this regard, as per the log linear model, instantaneous growth rate of issued amount is 22.96% per year and the compounded growth rate is during the study period is 25.80%. This proves that the issued amount has been growing during the period.

4.1.2 Number of Public Issues Offered

The number of public offerings enables to identify the exact number of offers made by various listed companies to the general public in each fiscal year. Table 4.2 reveal the number of issues offered in each fiscal year during the study period.

Table 4.2: Number of Public Issues

Rs. In Millions

Year	Amount (Rs.)	No. of Issue	Average Size (Rs.)	Annual Growth Rate (%)
1993/94	244.4	16	15.28	-
1994/95	174	10	17.40	13.91
1995/96	293.7	12	24.48	40.66
1996/97	332.2	5	66.44	171.46
1997/98	462.4	12	38.53	(42.00)
1998/99	258	5	51.60	33.91
1999/00	326.9	6	54.48	5.59
2000/01	410.5	9	45.61	(16.28)
2001/02	1,441.40	12	120.12	163.35
2002/03	556.5	18	30.92	(74.26)
2003/04	1,027.50	14	73.39	137.39
2004/05	1,626.80	14	116.20	58.33
2005/06	2,443.30	29	84.25	(27.49)
2006/07	2,295.50	34	67.51	(19.87)
2007/08	10,668.20	64	166.69	146.90
Total	22561.3	260	972.90	

Likewise, the amount of public issues, the number of issues offered in a fiscal year also did not show any consistent trend over the study period. During the entire study period, the lowest number of issue offered in a year was 5 on two fiscal years, 1996/97 and 1998/99. The highest number of issues offered in a fiscal year was in the last year of the study period i.e. 2007/08 and the number was 64.

The average size of issue offered in each fiscal year has also been in fluctuating trend. Average size of issue offered was smallest in the year 1993/94 and largest in the year 2007/08. However, instantaneous growth rate of 12.49% per year suggests that the average size of issue offered has been growing. And the compound growth rate for the study period is 13.31%.

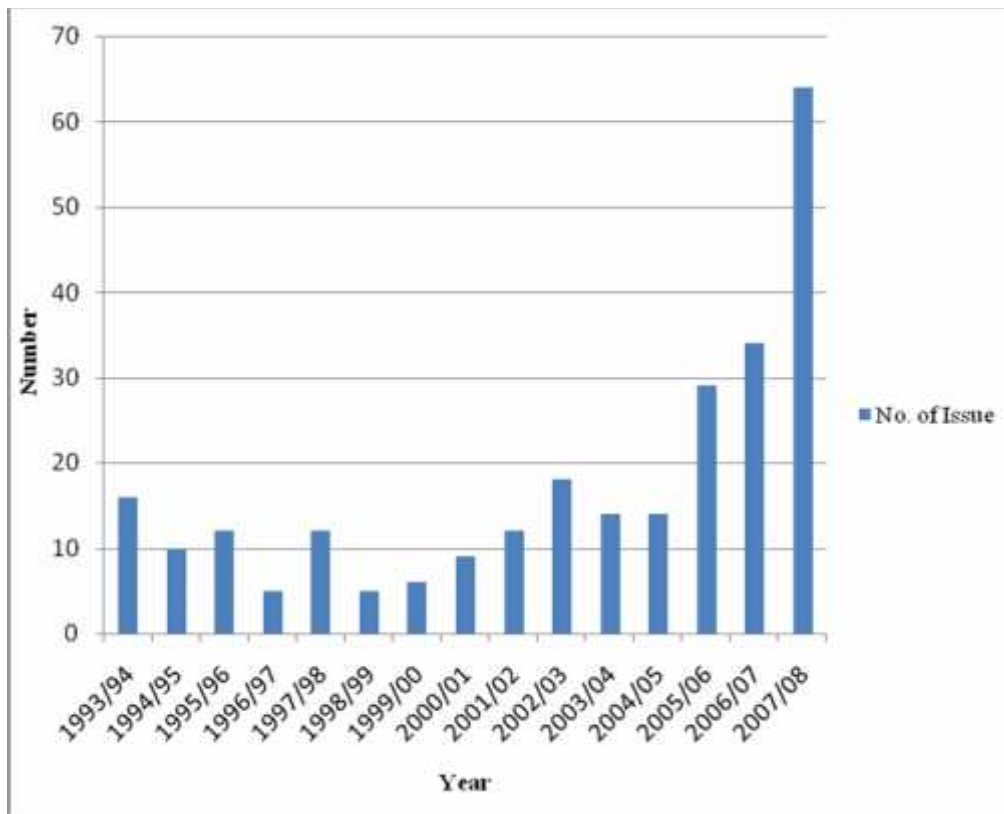


Fig. 4.2: Number of Public Issues

Trend in the above figure suggests that the number of public issues offered during the study period has been growing.

4.1.3 Publicly Issued Companies

As per the requirement of NEPSE, issuing companies should list their issues in NEPSE for allowing such issues to be traded on its trading floor. Since opening of NEPSE in year 1994, 156 companies have already been listed till the end of fiscal year 2007/08. Total paid up capital of these companies amounted to Rs. 29465.8 million. The most intriguing aspect of this total paid up capital is the contribution from financial sector that includes commercial banks, development banks, finance companies and insurance companies as revealed from table 4.3.

Table 4.3: Publicly Issued Companies

Rs. In Millions

Serial No.	Sector	No. of Companies	Percent	Paid up Value (Rs.)	Percent
1	Commercial Banks	21	13.46	14,667.30	49.78
2	Development Banks	23	14.74	2,322.70	7.88
3	Finance Companies	58	37.18	4,317.30	14.65
4	Insurance Companies	18	11.54	1,669.70	5.67
5	Manufacturing and Processing Companies	21	13.46	2,539.70	8.62
6	Trading	5	3.21	78.40	0.27
7	Hotels	4	2.56	1,552.90	5.27
8	Others	6	3.85	2,317.80	7.87
Total		156	100	29465.8	100

As shown in table 4.3, out of 156 companies listed, 120 companies are from financial sector, which is 76.92% of the total listed companies in NEPSE. Similarly, from paid up value perspective commercial banks cover 49.78%, development banks cover 7.88%, finance companies cover 14.65% and insurance companies cover 5.67% of the total paid up capital. Together as a financial sector they account for 77.98% of the total paid up value.

On the other hand, manufacturing and processing companies being the fourth largest sector together with commercial banks in terms of number of listed companies' accounts for only 8.62% of paid up value while the commercial banks have the highest. Similarly, trading, hotel and other account for 0.27%, 5.27% and 7.87% of the paid up capital respectively. Together as a non financial sector they account for 22.02% of the total paid up value.

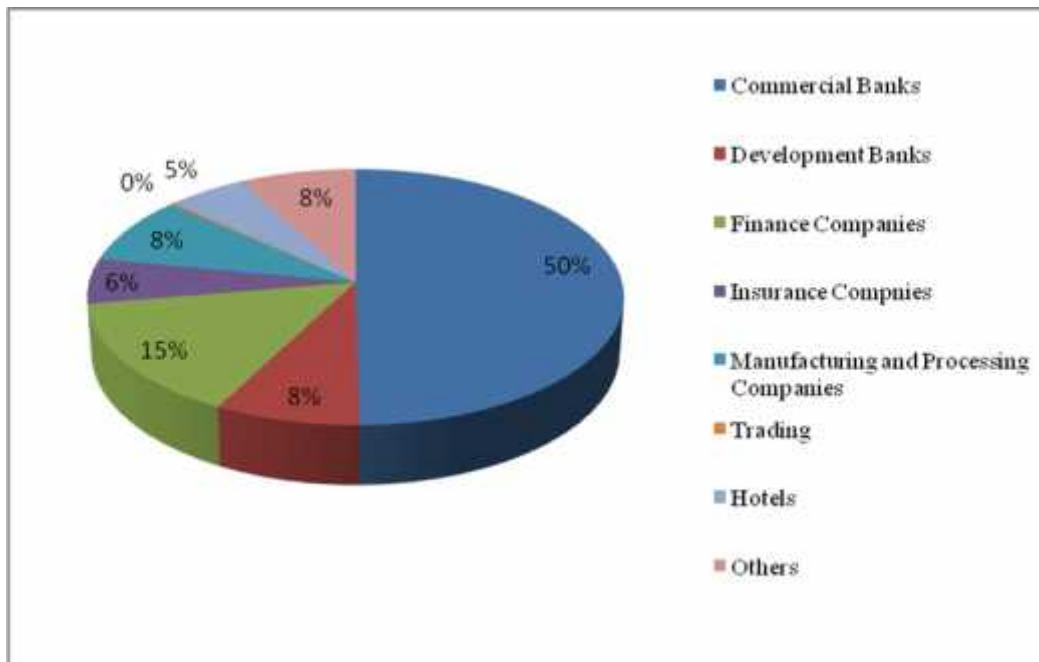


Fig. 4.3: Publicly Issued Companies

4.1.4 Public Issues from Financial and Nonfinancial Sector

Companies listed in NEPSE can be divided into financial sector companies and nonfinancial sector companies. Finance sector mainly includes commercial banks, development banks, finance companies and insurance companies while non finance sector includes manufacturing and trading companies, hotels and others. Table 4.4 reveals the public issues from financial and nonfinancial sector during the study period.

Table 4.4: Public Issues from Financial and Nonfinancial Sector

Rs. In Millions

Sector	Financial			Nonfinancial			Total	
	Year	No. of Issues	Amount (Rs.)	Annual Growth Rate (%)	No. of Issues	Amount (Rs.)	Annual Growth Rate (%)	No. of Issues
1993/94	6	87.8	-	10	156.6	-	16	244.4
1994/95	6	120	36.67	4	54	-65.52	10	174
1995/96	8	95.1	-20.75	4	198.6	267.78	12	293.7
1996/97	4	107	12.51	1	225.2	13.39	5	332.2
1997/98	9	315.5	194.86	3	146.9	-34.77	12	462.4
1998/99	3	58	-81.62	2	200	36.15	5	258
1999/00	5	237.3	309.14	1	89.6	-55.20	6	326.9
2000/01	8	260.5	9.78	1	150	67.41	9	410.5
2001/02	11	1267.9	386.72	1	173.5	15.67	12	1441.4
2002/03	18	556.5	-56.11	-	-	-100.00	18	556.5
2003/04	14	1027.5	84.64	-	-	-	14	1027.5
2004/05	13	1486.8	44.70	1	140	-	14	1626.8
2005/06	27	1759.4	18.33	2	683.9	388.50	29	2443.3
2006/07	15	380.3	-78.38	-	-	-100.00	15	380.3
2007/08	16	924.8	143.17	-	-	-	16	924.8
Total	163	8684.4		30	2218.3		193	10902.7

From table 4.4, it is revealed that total of 193 public issues were made from financial and nonfinancial sector during the study period. Out of 193 offers, 163 offers (84.46%) were from financial sector whereas rest 30 (15.54%) from non financial sector. During the study period, total of Rs. 10902.7 million issues were issued to public. Out of it Rs. 8684.4 million was from financial sector. Contribution from nonfinancial sector amounted Rs. 2218.3 million. On average there is approximately 11 offers from the financial sector every year and just 2 from nonfinancial sector. Similarly, on average, public issues of Rs. 578.96 million came from financial sector while Rs. 147.87 million nonfinancial sectors. These figures clearly show that the financial sector is the most dominant force of Nepalese IPO market.

Table 4.5: Calculation of Growth Rate and Correlation between Financial and Nonfinancial Sectors' Issues

Variables	Growth Rate		Correlation Coefficient	PE	6PE	Remarks
	Instantaneous	Compound				
Financial Sector	20.81	23.13	0.3935	0.1494	0.8964	r<6PE
Nonfinancial Sector	-28.55	-24.83				

Similarly, table 4.5 revealed that issues from financial sector were growing at a rate of 20.81% per year during the study period and the overall growth for the period was 23.13%. On the other and the issues from non financial sector had a negative growth rate of -28.55% its overall growth rate too was negative i.e. -24.83% during the study period. This showed that the issues from financial sector were growing rapidly while the issues from non financial sector were decreasing.

The correlation coefficient r between amounts of issues from financial sector and nonfinancial sector was 0.3935 and probable error (PE) multiplied by six i.e. 6PE is 0.8964 Since, r is positive and $r < 6PE$, it can be asserted that there exists low degree of positive correlation between amount of issues from financial sector and nonfinancial sector and also the value of r is insignificant. Statistically, it can be interpreted that there is no sufficient evidence of relationship between amount of issues from financial sector and nonfinancial sector.

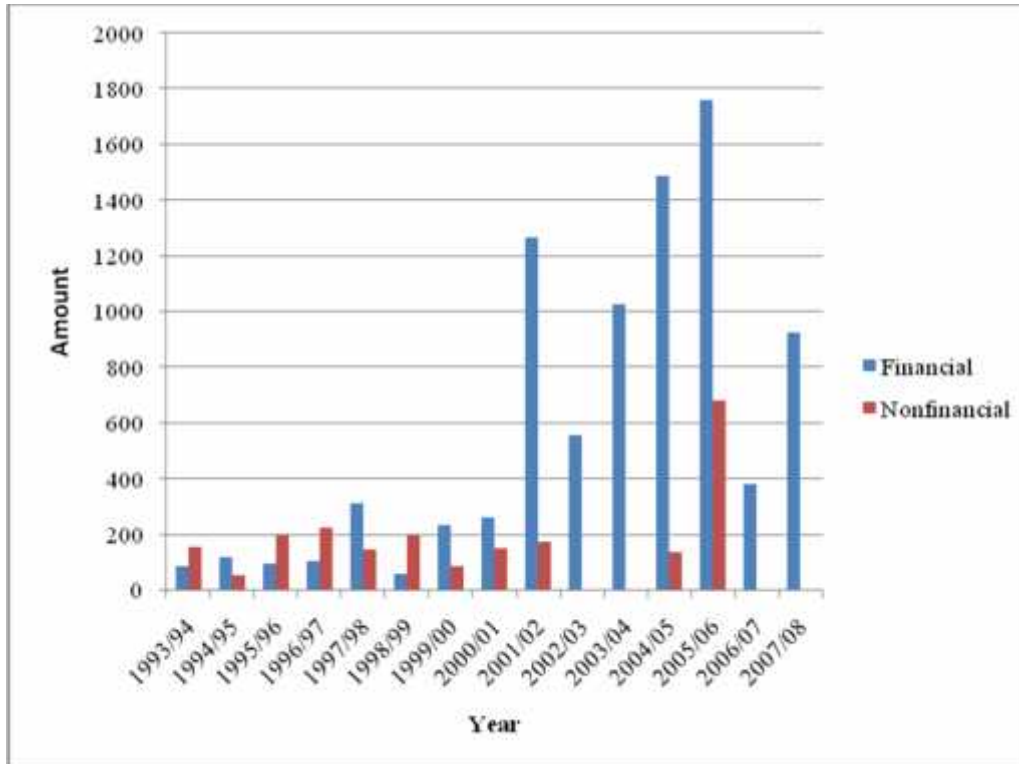


Fig. 4.4: Public Issues from Financial and Nonfinancial Sector

4.1.5 Instrument-wise Public Issues

Like many other emerging financial market, Nepalese financial market too provides limited variety of investment instruments which mainly includes ordinary shares, preference shares, debentures and few issues from collective investment schemes like mutual funds. Over a period of time, Nepalese stock market has been relying on few financial instruments namely ordinary shares and right shares and this cannot be considered good sign regarding overall development of Nepalese stock market.

As shown in table 4.6, out of 260 offerings during the study period, 138 issues were ordinary shares which are 53.08% the total issue offered during the study period. Similarly, 105 issues were right issue which is 40.38% of total issue. Also 14 issues were debenture i.e. 5.38% of the total issue. Hence from number of issues offered perspective, ordinary share was the most preferred instrument for issuing company followed by right issues, debentures and preference shares.

Table 4.6: Instrument-wise Public Issues

Rs. In Millions

Year	Ordinary Share		Right Share		Debenture		Preference Share		Total	
	No. of Issue	Amt (Rs.)	No. of Issue	Amt (Rs.)	No. of Issue	Amt (Rs.)	No. of Issue	Amt (Rs.)	No. of Issue	Amt (Rs.)
1993/94	14	227.9	2	16.5	-	-	-	-	16	244.4
1994/95	10	174	-	-	-	-	-	-	10	174
1995/96	10	224.7	2	69	-	-	-	-	12	293.7
1996/97	2	57	3	275.2	-	-	-	-	5	332.2
1997/98	8	119.4	3	250	1	93	-	-	12	462.4
1998/99	3	148	1	30	-	-	1	80	5	258
1999/00	3	202.3	3	124.6	-	-	-	-	6	326.9
2000/01	7	278.7	2	131.8	-	-	-	-	9	410.5
2001/02	5	319.5	5	621.9	1	360	1	140	12	1441.4
2002/03	14	394.3	4	162.2	-	-	-	-	18	556.5
2003/04	10	657.5	3	70	1	300	-	-	14	1027.5
2004/05	7	1231.87	6	94.93	1	300	-	-	14	1626.8
2005/06	14	579.8	11	1013.5	4	850	-	-	29	2443.3
2006/07	15	380.3	17	1265.2	1	250	1	400	34	2295.5
2007/08	16	924.8	43	6793.4	5	2950	-	-	64	10668.2
Total	138	5920.07	105	10918.2	14	5103	3	620	260	22561.3
%	53.08	26.24	40.38	48.39	5.38	22.62	1.15	2.75	100.00	100.00

Similarly, from issued amount perspective, right shares were the dominating financial instrument with 48.39% of total issued amount. Second most used instrument was ordinary shares with 26.24% of total amount followed by debentures with 22.62% and preference shares with 2.75%.

One of the most striking aspects of the analysis has been the fact that the preference shares were issued only 3 times and debentures only 14 times during the entire study period which covered 15 years. This clearly shows that Nepalese stock market is entirely dependent on few financial instruments like ordinary shares and right shares. This over dependency limits the boundary of investment opportunities to the public in one hand and on the other hand limits the overall

development prospect of Nepalese financial market. And at the same time, this may also justify the selection of ordinary share as subject of this study.

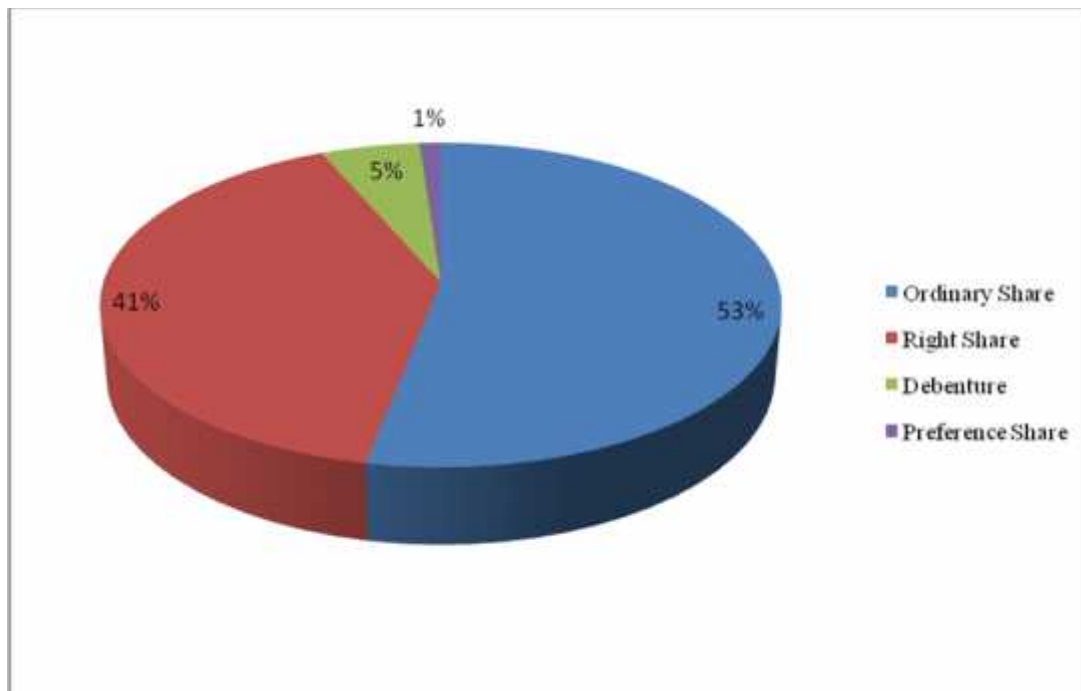


Fig. 4.5: Instrument-wise Public Issues

4.1.6 Analysis of Subscription Pattern of Issues

When a company offers its issues to public, the demand received from public is bound to vary. When demanded number of shares is higher than the offered number of shares, it's called over subscription and when the demanded number of shares is lower than the number of shares offered, it's called under subscription. Likewise, when the offered number of shares and demanded number of shares are equal it is the case of full subscription.

Table 4.7: Subscription Pattern of the Issue

Year	Total No. of Issues	Over Subscription		Under Subscription		Full Subscription	
		No.	%	No.	%	No.	%
1993/94	14	14	100.00	-	-	-	-
1994/95	10	7	70.00	1	10.00	2	20.00
1995/96	10	5	50.00	5	50.00	-	-
1996/97	2	2	100.00	-	-	-	-
1997/98	8	5	62.50	2	25.00	1	12.50
1998/99	3	2	66.67	1	33.33	-	-
1999/00	3	3	100.00	-	-	-	-
2000/01	7	7	100.00	-	-	-	-
2001/02	5	4	80.00	1	20.00	-	-
2002/03	14	14	100.00	-	-	-	-
2003/04	10	10	100.00	-	-	-	-
2004/05	7	6	85.71	1	14.29	-	-
2005/06	14	14	100.00	-	-	-	-
2006/07	15	15	100.00	-	-	-	-
2007/08	16	16	100.00	-	-	-	-
Total	138	124	87.66	11	10.17	3	2.17

From table 4.7 it is clear that the total of 138 companies issued their common shares to the public during the study period of fiscal year 1993/94 to 2007/08.

In the fiscal year 1993/94, total of 14 companies issued their ordinary shares through IPO and all of them were oversubscribed. In the subsequent year, 10 companies went for IPO and 7 issues were oversubscribed, 2 were fully subscribed and 1 was undersubscribed. Similarly, in year 1995/96, 5 issues out of 10 were oversubscribed and the other 5 were undersubscribed. In year 1996/97, there were issues from 2 companies and both the issues were oversubscribed. In 1997/98, there were 8 issues; out of the 8 issues 5 were oversubscribed, 2 were undersubscribed and 1 was fully subscribed. Similarly, in year 1998/99 out of 3 issues 2 were oversubscribed and 1 was undersubscribed.

However, in 1999/00 all the companies' issues i.e. 3 out of 3 issues were oversubscribed. The pattern was repeated in year 2000/01 when all the 7 issues were oversubscribed. In year 2001/02, out of 5 issues 4 issues were oversubscribed while the remaining 1 was undersubscribed. Once again the trend of 100% oversubscription repeated in year 2002/03 and 2003/04. All 14 issues of 2002/03 and 10 issues of 2003/04 were oversubscribed, however, in the coming year the trend again was broken. In 2004/05 out of 7 issues 1 subscription was undersubscribed while the remaining 6 were oversubscribed. Once again in year 2005/06 all the 14 issues were oversubscribed. Likewise in the years 2006/07 and 2007/08, all the IPOs 15 and 16 respectively were oversubscribed.

Hence, from total of 138 issues, 124 issues representing 87.66% of total issues were oversubscribed, 11 issues accounting 10.17% were undersubscribed and only 3 issues i.e. 2.17% were fully subscribed. These figures illustrate that most of the companies which issued their ordinary shares through IPO during the study period of fiscal year 1993/94 through 2007/08 experienced oversubscription of their issues. This fact may hint out why most companies prefer common shares to raise capital from general public.

4.1.6.1 Sector-wise Analysis of Subscription Pattern

SEBON has divided all the listed companies into eight different sectors namely commercial banks, development banks, finance companies, insurance companies, manufacturing and processing companies, trading companies, hotels and others. Table 4.8 depicts subscription state of issues from various institutions belonging to commercial banks, development banks, finance companies, insurance companies and manufacturing and processing companies. Trading companies, hotels and others are excluded as the number of companies within these sectors is considered very small as compared to the time frame of the study.

Table 4.8: Subscription Pattern of the Issue from Different Sector

Rs. In Millions

Serial No.	Sector	Issuing Company	Issued Amount	Subscription Times	Result
1	Commercial Bank	Bank of Kathmandu Ltd.	45	5.36	Oversubscribed
		Lumbini Bank Ltd.	150	7.21	Oversubscribed
		Nepal Credit & Comme	210	1.22	Oversubscribed
2	Development Bank	Nirdhan Uthan Bank Ltd.	3.3	3.88	Oversubscribed
		Gandaki Development F	15	3.98	Oversubscribed
		Excel Development Bank	6	18.97	Oversubscribed
		Infrastructure Developm	24	9.36	Oversubscribed
3	Finance Company	Annapurna Finance Co.	2	28.04	Oversubscribed
		Nepal Abas Bikash Bitta	20	0.94	Undersubscribed
		Narayani Finance Ltd.	4	1.72	Oversubscribed
		Yeti Finance Co. Ltd.	8	2.2	Oversubscribed
		Universal Finance Ltd.	3.3	4.52	Oversubscribed
		Lalitpur Finance Co. Ltd.	9.5	1.06	Oversubscribed
		Pashchimanchal Finance	8	1.47	Oversubscribed
		Alpic Everest Finance L	5	42.17	Oversubscribed
		International Leasing &	30	21.7	Oversubscribed
		United Finance Ltd.	24	10.55	Oversubscribed
		Standard Finance Ltd.	24	3.63	Oversubscribed
		Fewa Finance Co. Ltd.	8	23.55	Oversubscribed
		Birjung Finance Ltd.	24	7.05	Oversubscribed
		ICFC Bittiya Sanstha Ltd	24.4	35.06	Oversubscribed
		Kuber Merchant Bittiya	22.5	4.45	Oversubscribed
4	Insurance Company	Neco Insurance Co. Ltd.	20	1.21	Oversubscribed
		Nepal Life Insurance Co.	50	7.56	Oversubscribed
		Prudential Insurance Co.	20	9.57	Oversubscribed
		Shikhar Insurance Co.	25	43.76	Oversubscribed
5	Manufacturing and Processing Company	Unilever Nepal Ltd.	13.8	6.54	Oversubscribed
		Himgiri Textile Industri	19.2	1.57	Oversubscribed
		Sri Ram Sugar Mills Ltd.	46.5	0.53	Undersubscribed

From table 4.8 it is revealed that out of 3 sampled commercial banks, the IPO of Lumbini Bank Ltd. got the highest demand with the subscription times of 7.21 and IPO of Nepal Credit and Commerce Bank Ltd. experienced lowest demand

with subscription of just 1.22 times. Yet all the sampled firms had subscription times more than one indicating all the issues were oversubscribed.

Similarly, 4 of the sampled companies from development bank sector had subscription times of approximately 9, which suggest that the IPO of development banks are also oversubscribed.

In the case of finance companies, among 15 sampled companies only one company had subscription times less than 1 i.e. 0.94, indicating under subscription. All the other companies' had subscription times of greater than 1; hence all of those 14 issues were oversubscribed. The subscription time of those over subscription marked as high as 42.17 times for Alpic Everest Finance Ltd. and as low as 1.06 times for Lalitpur Finance Co. Ltd.

As far as insurance companies are concerned, out of 4 sampled companies, Shikhar Insurance Co. Ltd. had the highest subscription of 43.76 times. However, all the sampled issues had subscription times of greater than 1; so, all the IPOs from sampled insurance companies were oversubscribed.

In the case of manufacturing and processing sector two of the sampled issue (Unilever Nepal Ltd. and Himgiri Textile Industries Ltd.) had subscription times of greater than 1 i.e. 6.45 and 1.57. So, the IPOs of Unilever Nepal Ltd. and Himgiri Textile Industries Ltd. experienced oversubscription. Remaining 1 sampled issue had subscription times of less than 1 indicating IPO's under subscription.

In aggregate, all IPOs of commercial banks, development banks and insurance companies were oversubscribed indicating that IPOs of these sectors were highly appreciated and demanded by general public. Similarly, in the case of finance companies, only one issue was undersubscribed while rest of the issues were oversubscribe implicating that the IPOs from this sector also received good response from public. As commercial banks, development banks, finance companies and insurance companies represents financial sector, in larger frame it could be asserted that in general IPO from financial sector received good

response from general public leading to oversubscription of the issues during the study period.

In contradiction, manufacturing and processing sector the only sector representing nonfinancial sector had disappointing response from general public to its issue. One third of the sampled companies were undersubscribed.

Although the number of sampled issues representing various sectors may be small yet might be just good enough to render hint on why the number of IPOs are increasing from financial sector while it is exactly opposite for nonfinancial sector like manufacturing and processing sector.

4.1.7 Analyzing Underpricing of IPOs in Nepal

Large number of study conducted in different part of the world over a different period of time has established that underpricing does exist in IPO market. The study is concerned about whether underpricing exist in Nepalese IPO or not. For the purpose of identifying the level of underpricing or initial return of the issues, J.R. Ritter's model has been used. In the model, initial return or level of underpricing is calculated by subtracting offered price from first trading day's closing price of the issue and then dividing it by the offered price.

As seen in Table 4.9, all the sampled companies have offered their issues at face value of Rs. 100 each. Although, there are provisions in existing security guidelines and regulations to issue common shares at discount or premium, neither of the companies had done so. From the data it's obvious that most of the issues had a first trading day's price higher than the offered price indicating that they were underpriced at the time of their issue.

Table 4.9: Underpricing of IPOs in Nepal

Serial No.	Listing Date	Company	Offer Price	1 st Day's Closing Price	Initial Return (%)
1	02.09.1994	Annapurna Finance Co. Ltd.	100	366	266
2	22.09.1994	Unilever Nepal Ltd.	100	485	385
3	28.05.1995	Himgiri Textile Industries Ltd.	100	53	(47)
4	01.05.1996	Nepal Abas Bikash Bitta Co. Ltd.	100	50	(50)
5	25.06.1996	Narayani Finance Ltd.	100	110	10
6	23.01.1997	Yeti Finance Co. Ltd.	100	96	(4)
7	10.04.1997	Universal Finance Ltd.	100	50	(50)
8	17.07.1997	Bank of Kathmandu Ltd.	100	171	71
9	30.03.1998	Neco Insurance Co. Ltd.	100	99	(1)
10	08.10.1998	Lalitpur Finance Co. Ltd.	100	75	(25)
11	18.04.1999	Sri Ram Sugar Mills Ltd.	100	50	(50)
12	20.05.1999	Pashchimanchal Finance Co. Ltd.	100	112	12
13	12.10.2001	Alpic Everest Finance Ltd.	100	264	164
14	26.11.2002	International Leasing & Finance	100	126	26
15	26.11.2002	United Finance Ltd.	100	123	23
16	22.01.2003	Nepal Life Insurance Co. Ltd.	100	145	45
17	24.04.2003	Nirdhan Uthan Bank Ltd.	100	100	-
18	17.09.2004	Fewa Finance Co. Ltd.	100	165	65
19	10.11.2004	Lumbini Bank Ltd.	100	134	34
20	10.11.2004	Prudential Insurance Co. Ltd.	100	150	50
21	02.03.2005	Standard Finance Ltd.	100	122	22
22	31.03.2005	Nepal Credit & Commerce Bank	100	110	10
23	20.03.2005	Birjung Finance Ltd.	100	103	3
24	29.06.2006	Gandaki Development Financial	100	115	15
25	13.02.2007	Shikhar Insurance Co. Ltd.	100	270	170
26	11.10.2007	ICFC Bittiya Sanstha Ltd.	100	350	250
27	06.11.2007	Excel Development Bank Ltd.	100	570	470
28	24.04.2008	Infrastructure Development Bank	100	550	450
29	13.05.2008	Kuber Merchant Bittiya Sanstha	100	309	209
Average					87.00

Out of the 29 sampled issues only 7 issues had their first trading day's price lower than their offer price indicating instances for overpricing of IPOs in Nepalese market. Similarly, 2 issues have their first trading day's closing price equal to their offered price and rest of the issues, 20 sampled issues have first

trading day's closing price higher than their offered price indicating underpricing. Among these underpriced issues, issues from Excel Development Bank Ltd. has the highest initial return of 470% while the issue from Birgunj Finance Ltd. has the lowest initial return of 3%. Hence, average initial return for Nepalese IPO stands at almost 87%.

Looking at the underpricing of IPO in various other emerging markets, Gasbarro (2003) found average first day underpricing of 10.6% in Mauritius. Similarly, Paudyel (1998) reported 62% initial underpricing in Malaysia. Also, J.R. Ritter (1998) revealed an average initial return of Singapore was 31.4%, India's return was 35.3%, Taiwan's return was 45% and for Thailand it was 58.1%. All these figures suggest that average first day return of IPOs in Nepal is consistent with those of emerging markets around the globe. The average standard deviation for initial return on stock price of Nepalese IPO is 30.24%. However, Gasbarro (2003) reported standard deviation of 11.47% in Mauritius. In this context, the fluctuation in the first day stock price return of Nepalese IPOs seemed to be quite high indicating that the IPOs first day return of issues from Nepalese companies are more variable than those reported by Gasbarro and others.

4.1.7.1 Sector-wise Analysis of Underpricing of IPOs in Nepal

Table 4.10 depicts information reflecting different aspects of IPO underpricing of five different sectors: commercial banks, development banks, finance companies, insurance companies and manufacturing and processing companies.

Table 4.10: Sector-wise Analysis of Underpricing of IPOs in Nepal

Serial No.	Sector	Issuing Company	Initial Returns	Average Initial Return		CV
1	Commercial Bank	Bank of Kathmandu Ltd.	71	38.33	25.09	65.46
		Lumbini Bank Ltd.	34			
		Nepal Credit & Commerce	10			
2	Development Banks	Nirdhan Uthan Bank Ltd.	-	233.75	226.42	96.86
		Gandaki Development Fin	15			
		Excel Development Bank	470			
		Infrastructure Development	450			
3	Finance Companies	Annapurna Finance Co.	266	61.40	102.99	167.74
		Nepal Abas Bikash Bitta	-50			
		Narayani Finance Ltd.	10			
		Yeti Finance Co. Ltd.	-4			
		Universal Finance Ltd.	-50			
		Lalitpur Finance Co. Ltd.	-25			
		Pashchimanchal Finance	12			
		Alpic Everest Finance Ltd.	164			
		International Leasing & Fin	26			
		United Finance Ltd.	23			
		Standard Finance Ltd.	22			
		Fewa Finance Co. Ltd.	65			
		Birjung Finance Ltd.	3			
		ICFC Bittiya Sanstha Ltd.	250			
Kuber Merchant Bittiya	209					
4	Insurance Companies	Neco Insurance Co. Ltd.	-1	66.00	63.25	95.83
		Nepal Life Insurance Co.	45			
		Prudential Insurance Co.	50			
		Shikhar Insurance Co. Ltd.	170			
5	Manufacturing & Processing Companies	Unilever Nepal Ltd.	385	96.00	204.36	212.88
		Himgiri Textile Industries	-47			
		Sri Ram Sugar Mills Ltd.	-50			

Table 4.10 revealed that among 3 sampled companies from commercial bank sector the highest initial return was 71% for Bank of Kathmandu Ltd. and lowest initial return of 10% for Nepal Credit and Commerce Bank Ltd. The average initial return for the sector was 38.33% and standard deviation was 25.09%. As far as initial return in concerned, the sector's average initial return is marginally lower than that of NEPSE's average initial return of 42.54% but the standard

deviation of NEPSE is 30.24% while its 25.09% for sampled companies. It indicates that initial return for the issues from commercial bank is more homogeneous or less variable than those from overall companies of NEPSE.

Similarly, out of 4 sampled issues from development bank sector, one company did not provide initial return at all. And the average initial return of the sector is 233.75%. The standard deviation for the sector is 226.42%. Looking at NEPSE's average initial return 42.54% and standard deviation 30.24%, the sector's performance is very good in comparison to average initial return but from standard deviation's point of view the issues does not seem to have better consistency than that of overall issues from NEPSE.

As far as finance companies are concerned, 4 of the issues had negative initial return. Among other, the initial return of sampled issues varied from as low as 3% to as high as 266%. The average initial return for the sector was 61.40% and the standard deviation of 102.99%. Average initial return and standard deviation for the sector is higher than that of NEPSE which suggests that the issues were more variable to that of overall issues of NEPSE.

In the case of insurance companies, among the sampled 4 companies, 1 company's IPO had negative initial return while the other 3 had average initial return of 45%, 50% and 170% resulting in sector's average initial return of 66% and the standard deviation for the sector is 63.29%. This sector too had initial return and standard deviation is higher than that of NEPSE's, higher standard deviation of the sector in comparison to NEPSE suggests that the variation in the average initial return of its issues was much higher than that of NEPSE's.

Finally from manufacturing and processing sector's perspective, the initial return of 3 of its sampled issues ranged from -47% to 385%. The average initial return for the sector was 96% and the standard deviation of 204.36%. The sector's average initial return and standard deviation as compared to that of NEPSE's is much higher. In fact, the degree of fluctuation, standard deviation of the sector is highest among all the other sectors. This indicates that the average initial return

of IPO of manufacturing and processing sector varies more than that of IPO from any other sector.

From the coefficient of variation's (CV) perspective, the lowest CV is of commercial banks sector which is 65.46% followed by insurance companies with CV of 95.83%, development banks with 96.86%, finance companies with 167.74% and finally the manufacturing and processing sector with the highest CV of 212.88%. This indicates that the average initial return for the IPOs from commercial banking sector has the lowest degree of variation and lowest risk as compared to other remaining sector. On the other hand, average return of the IPOs from the manufacturing and processing sector has the highest degree of variation and highest degree of risk. Thus it can be summarized that from CV's perspective, commercial banks carries lowest risk in its average initial return while the manufacturing and processing companies' initial return carries the highest risk among the sectors studied.

4.1.7.2 Year-wise Analysis of Underpricing of IPOs in Nepal

Level of underpricing of sampled issues in their respective trading years has been depicted in table 4.11.

As shown in table 4.11, in fiscal year 1994 two of the sampled companies provided a very good average return of 325.5%. In 1995 only one sampled company was included and it yielded negative initial return of -47%. In 1996, two of the sampled companies were included and they yielded negative average initial return of -27%. In 1997, three sampled companies were selected and they yielded average initial return of 5.67%. In year 1998, two companies were sampled and they produced a negative average initial return of -13%. In year 1999, 2 companies were selected and they also provided negative initial average return of -19%. And since 2001 no sampled companies yielded negative initial average return. The average initial return for the fiscal year 2001 was 164% followed by 24.5% for year 2002, 22.5% for 2003 and 49.67% for 2004. The average initial return then decreased to 11.67% for year 2005 and rose slightly in year 2006 to reach 15%. In the year 2007 it once again rose to 296.67% and in the year 2008 it dropped to 219.67%.

Table 4.11: Year-wise Analysis of Underpricing of IPOs in Nepal

Serial No.	1 st Trading Year	Company	Initial Return	Average Initial Return
1	1994	Annapurna Finance Company Ltd.	266	325.5
		Unilever Nepal Ltd.	385	
2	1995	Himgiri Textile Industries Ltd.	-47	-47
3	1996	Nepal Abas Bikash Bitta Co. Ltd.	-50	-20
		Narayani Finance Ltd.	10	
4	1997	Yeti Finance Co. Ltd.	-4	5.67
		Universal Finance Ltd.	-50	
		Bank of Kathmandu Ltd.	71	
5	1998	Neco Insurance Co. Ltd.	-1	-13
		Lalitpur Finance Co. Ltd.	-25	
6	1999	Sri Ram Sugar Mills Ltd.	-50	-19
		Pashchimanchal Finance Co. Ltd.	12	
7	2001	Alpic Everest Finance Ltd.	164	164
8	2002	International Leasing & Finance Co.	26	24.5
		United Finance Ltd.	23	
9	2003	Nepal Life Insurance Co. Ltd.	45	22.5
		Nirdhan Uthan Bank Ltd.	-	
10	2004	Fewa Finance Co. Ltd.	65	49.67
		Lumbini Bank Ltd.	34	
		Prudential Insurance Co. Ltd.	50	
		Standard Finance Ltd.	22	
11	2005	Nepal Credit & Commerce Bank Ltd.	10	11.67
		Birjung Finance Ltd.	3	
12	2006	Gandaki Development Financial Inst.	15	15
13	2007	Shikhar Insurance Co. Ltd.	170	296.67
		ICFC Bittiya Sanstha Ltd.	250	
		Excel Development Bank Ltd.	470	
14	2008	Infrastructure Development Bank Ltd.	450	219.67
		Kuber Merchant Bittiya Sanstha Ltd.	209	

4.1.8 IPO Underpricing and Subscription Pattern

Despite the fact that security regulations have made provisions allowing issuing companies to offer their IPOs at premium, all the sampled companies were found

to issue their issues at their face value of Rs. 100. As far as Nepalese IPO market is concerned, pricing issues is not the field where the merchant bankers can play a vital role. Considering all these facts it is worth analyzing whether there exists any relation between IPO underpricing and subscription pattern of IPOs in Nepal.

Table 4.12: IPO Underpricing and Subscriptions Pattern

Serial No.	Sector	Company	Subscription Times	Pattern of Subscription	1st Day Initial Return
1	Commercial Banks	Bank of Kathmandu Ltd.	5.36	Oversubscribed	71
		Lumbini Bank Ltd.	7.21	Oversubscribed	34
		Nepal Credit & Commerce	1.22	Oversubscribed	10
2	Development Banks	Nirdhan Uthan Bank Ltd.	3.88	Oversubscribed	-
		Gandaki Development Fina	3.98	Oversubscribed	15
		Excel Development Bank	18.97	Oversubscribed	470
		Infrastructure Development	9.36	Oversubscribed	450
3	Finance Companies	Annapurna Finance Co.	28.04	Oversubscribed	266
		Nepal Abas Bikash Bitta	0.94	Undersubscribed	-50
		Narayani Finance Ltd.	1.72	Oversubscribed	10
		Yeti Finance Co. Ltd.	2.2	Oversubscribed	-4
		Universal Finance Ltd.	4.52	Oversubscribed	-50
		Lalitpur Finance Co. Ltd.	1.06	Oversubscribed	-25
		Pashchimanchal Finance	1.47	Oversubscribed	12
		Alpic Everest Finance Ltd.	42.17	Oversubscribed	164
		International Leasing & Fi	21.7	Oversubscribed	26
		United Finance Ltd.	10.55	Oversubscribed	23
		Standard Finance Ltd.	3.63	Oversubscribed	22
		Fewa Finance Co. Ltd.	23.55	Oversubscribed	65
		Birjung Finance Ltd.	7.05	Oversubscribed	3
		ICFC Bittiya Sanstha Ltd.	35.06	Oversubscribed	250
Kuber Merchant Bittiya	4.45	Oversubscribed	209		
4	Insurance Companies	Neco Insurance Co. Ltd.	1.21	Oversubscribed	-1
		Nepal Life Insurance Co.	7.56	Oversubscribed	45
		Prudential Insurance Co.	9.57	Oversubscribed	50
		Shikhar Insurance Co. Ltd.	43.76	Oversubscribed	170
5	Manufacturing & Processing Companies	Unilever Nepal Ltd.	6.54	Oversubscribed	385
		Himgiri Textile Industries	1.57	Oversubscribed	-47
		Sri Ram Sugar Mills Ltd.	0.53	Undersubscribed	-50

As seen from table 4.12, in the case of commercial banks, all the three sampled issues were oversubscribed with subscription times of 5.36, 7.21 and 1.22 being the lowest. Also, the first day return of 71%, 34% and 10% respectively. Here, the IPO of Nepal Credit and Commerce Bank Ltd. received lowest subscription and at the same time it also yielded lowest initial return.

Similarly, all the sampled issues of development banks sector received oversubscription with subscription times almost being 9 for each and among the 4 issues, one yielded initial return of 15%, the other didn't yield any initial return at all and the other two yielded 470% and 450%.

As for the finance companies, four finance companies: Annapurna Finance Co. Ltd., Alpica Everest Finance Ltd., International Leasing and Finance Co. and Fewa Finance Co. Ltd. received phenomenal response to their IPOs with subscription of 28.04, 42.17, 21.7 and 23.55 times respectively. These figures are almost the highest subscription times as far as subscription time of the sector is concerned. These issues also produced very high first day return of 266%, 164%, 26% and 65% respectively for each of the companies. In the sector, issue from Nepal Abas Bikash Bitta Co. Ltd. undersubscribed and it also yielded negative initial return. Moreover, 3 of the oversubscribed issues too yielded negative initial return; also 2 out of these 3 issues were just marginally oversubscribed.

In the case of insurance companies, all the sampled 4 companies were oversubscribed. However, 1 of the issues Neco Insurance Co. Ltd. yielded negative initial return. The issue that produced negative initial return also did receive very modest oversubscription with just 1.21 times of subscription. Rests of the issues were highly oversubscribed with subscription of 7.56, 9.57 and 43.76 times and they also yielded high initial return of 45%, 50% and staggering 170%.

Finally in the case of manufacturing and processing companies sector, out of the 3 sampled companies, only one company's IPO was highly oversubscribed and the company also yielded very high first day return of 385%. Among other 2

companies IPOs, one was oversubscribed while the other was undersubscribed and they both yielded negative return.

All these figures indicate that the IPO for those companies whose issues were oversubscribed tend to have at least some positive initial return, however, some sampled issues contradict it. And the companies whose IPOs were highly oversubscribed tend to have very high initial return and the companies whose IPOs were undersubscribed tend to have negative or no initial return at all.

4.1.9 Analysis of Price Change on Offered Price on 1st, 2nd and 3rd Day of Trading

Earlier parts show that the investors normally gain if they prefer to sell their stock on the first day of trading owing to underpricing.

In this section, it has been attempted to analyze whether investors would have gained or lost if they would have decided to hold their stock on the first day of trading and sell them on second or third day of trading.

In the table 4.13, out of 29 sampled companies, 13 have shown declination on the share price from the first day of trading as against the third day of trading. Those shareholders who would have preferred to sell their stock on 3rd day of trading would have lost some amount in comparison to those shareholders who would have sold their issue on the 1st day of trading.

Table 4.13: Price Change on Offered Price on 1st, 2nd and 3rd Day of Trading

Serial No.	Company	Offered Price	Change in Price		
			1st Day	2nd Day	3rd Day
1	Annapurna Finance Co. Ltd.	100	266.00	214.00	190.00
2	Unilever Nepal Ltd.	100	385.00	300.00	278.00
3	Himgiri Textile Industries Ltd.	100	-47.00	-47.00	-47.00
4	Nepal Abas Bikash Bitta Co. Ltd.	100	-50.00	-51.00	-55.00
5	Narayani Finance Ltd.	100	10.00	21.00	21.00
6	Yeti Finance Co. Ltd.	100	-4.00	-9.00	-7.00
7	Universal Finance Ltd.	100	-50.00	-54.00	-53.00
8	Bank of Kathmandu Ltd.	100	71.00	67.00	60.00
9	Neco Insurance Co. Ltd.	100	-1.00	5.00	6.00
10	Lalitpur Finance Co. Ltd.	100	-25.00	-32.00	-35.00
11	Sri Ram Sugar Mills Ltd.	100	-50.00	-50.00	-55.00
12	Pashchimanchal Finance Co. Ltd.	100	12.00	12.00	11.00
13	Alpic Everest Finance Ltd.	100	164.00	155.00	162.00
14	International Leasing & Finance Co.	100	26.00	27.00	27.00
15	United Finance Ltd.	100	23.00	25.00	22.00
16	Nepal Life Insurance Co. Ltd.	100	45.00	38.00	28.00
17	Nirdhan Uthan Bank Ltd.	100	-	-	-
18	Fewa Finance Co. Ltd.	100	65.00	60.00	68.00
19	Lumbini Bank Ltd.	100	34.00	29.00	25.00
20	Prudential Insurance Co. Ltd.	100	50.00	52.00	53.00
21	Standard Finance Ltd.	100	22.00	14.00	9.00
22	Nepal Credit & Commerce Bank Ltd.	100	10.00	15.00	27.00
23	Birjung Finance Ltd.	100	3.00	3.00	8.00
24	Gandaki Development Financial	100	15.00	15.00	15.00
25	Shikhar Insurance Co. Ltd.	100	170.00	143.00	128.00
26	ICFC Bittiya Sanstha Ltd.	100	250.00	257.00	264.00
27	Excel Development Bank Ltd.	100	470.00	498.00	527.00
28	Infrastructure Development Bank	100	450.00	483.00	483.00
29	Kuber Merchant Bittiya Sanstha Ltd.	100	209.00	232.00	248.00
Average		-	87.00	83.52	83.03

Similarly, 3 out of 29 issues had shown no change in their share price on those days of trading. It would not have made any difference to the shareholders whether they would have sold their shares on 1st or 2nd or 3rd day of trading as far as gain from share price is concerned. Of the sampled companies, 13 companies

have shown inclination on their share price on 3rd day of trading as compared to their 1st day of trading. For those investors holding the stock till the 3rd day of trading would have been better than selling them on 1st day of trading as far as gain from share price is concerned.

One of the most important parts in this study has been the sharp decline in the share price of IPO of two of the sampled companies which had provided highest return on 1st day of trading. Annapurna Finance Co. Ltd. and Unilever Nepal Ltd., these companies yielded astonishingly high return of 266% and 385% respectively on the 1st day of trading. However, these companies ended their 3rd day of trading with share price change of 190% and 278% respectively. Those stock holders who would have sold their stock on 3rd day of trading would have lost considerably as compared to those who had sold their stock on 1st day of trading.

Table 4.13 also reveals that as far as changes on share price on 1st, 2nd and 3rd day of trading are concerned, they decline continuously. This is revealed as average of share price change decreases from 90.45% on 1st day of trading to 87.17% on 2nd day of trading and to 86.69% on the 3rd day of trading.

The analysis shows that the tentative view that investors are better off with selling their IPO stock on the 1st day of trading rather than selling on 2nd day or 3rd day of the trading. It means that the Nepalese IPOs in short run, at least till 3rd day of trading, does under perform as far as their share price return is concerned.

4.2 Major Findings of the Study

The main objective of the study was to analyze different aspects of IPOs in Nepal. The data which were obtained through secondary sources were analyzed using different statistical tools and models which resulted in following findings:

The amount of issues offered has increased from Rs. 244.4 million in fiscal year 1993/94 to Rs. 10668.2 million in fiscal year 2007/08, almost 44 fold

increments. As per log linear model, the instantaneous growth rate of amount of issues offered is found to be 22.96%, while the compound growth rate is found to be 25.80%. Also, the coefficient of trend line of amount of issues offered during the study period has very high positive value. During the same period the number of issues offered increased from 16 in year 1993/94 to 64 in year 2007/08. Similarly, the average size of issues offered increased from Rs. 15.28 million to Rs. 166.69 million. It has instantaneous growth rate of 12.49% while compounded growth rate is found to be 13.31%.

Among 8 sectors, commercial banking sector has accounted for 49.78% of total paid up capital while the second highest contributor finance companies sector has accounted for only 14.65% of total paid up capital. Again, financial sector that comprises commercial banks, development banks, finance companies and insurance companies has accounted for 120 offers (out of 156) while non financial sector that comprises manufacturing and processing, trading companies, hotels and others has accounted for only 36 offers. Similarly, approximately 8 issues have been offered by financial sector as against only 2 offers from non financial sector in each fiscal year during the study period.

Similarly, as far as instrument wise offer is concerned, out of 260 offers, 138(53.08%) offers have been ordinary shares, followed by right shares 105(40.38%), debentures 14(5.38%) and preference shares only 3(1.15%). Moreover, from issued amount perspective, right shares have accounted 48.39% of the total amount, followed by ordinary shares (26.24%), debentures (22.62%) and preference shares (2.75%) respectively.

During the study period 138 companies have offered their common shares through IPO to public, out of which, offers from 124 companies, 87.66% of total offers have received oversubscription. Similarly, 11 companies' issues have received under subscription while only 3 companies' issues have been fully subscribed. Furthermore, sector-wise analysis of subscription pattern revealed that issues from commercial banks, development banks and insurance companies have been fully subscribed. Also, most of the issues from finance companies

have been oversubscribed. But issues from manufacturing and processing sector have mostly been undersubscribed.

By using J.R. Ritter's (1984) model, it has been found that average level of underpricing (1st day's return) is 87% with standard deviation of 30.24%. Similarly, from sector wise analysis perspective, commercial banking sector have average initial return of 38.33% and standard deviation of 25.09%, for development banks average initial return is found to be 233.75% and standard deviation is 226.42%, finance companies have average initial return of 61.40% and standard deviation of 102.99%, insurance companies have average initial return of 66% and standard deviation of 63.25% and finally manufacturing and processing companies have average initial return of 96% along with the degree of fluctuation as indicated by standard deviation of 204.36%. Likewise, CV for commercial banks, development banks, finance companies, insurance companies and manufacturing and processing companies are 65.45%, 96.86%, 167.74%, 95.83% and 212.88% respectively.

Among sampled issues, 27 issues have been oversubscribed and 21 of those oversubscribed issues have produced positive initial return. However, remaining 2 issues have been undersubscribed and these 2 issues have not produced any positive initial return at all.

As far as the price change on offered price on 1st, 2nd and 3rd day of trading is concerned, out of 29 sampled companies, share price of 13 companies have decreased in 3rd day of trading as against 1st day of trading. Only 3 companies' share prices have shown no change on 2nd and 3rd day of trading as against the 1st day of trading. Furthermore, 13 sampled companies have shown inclination on their share price on 3rd day of trading as compared to their 1st day of trading. The average price change from offered price on first day of trading (initial return) is 87%, which has decreased to 83.52% on 2nd day of trading and further decreased to 83.03% on 3rd day of trading.

CHAPTER- V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter embodies three parts of the study: Summary, Conclusion and Recommendation. The first part goes over with summarization of the whole study, the second part depicts the conclusions and the final part presents recommendation in the light of its findings.

5.1 Summary

Money or capital in financial vocabulary is one of the most important prerequisite for any business entity. Business entities need capital at various stages of their performance. Some may need it to establish their businesses while others may need it to diversify their activities and achieve their ambitious growth plan. Generally there exist two markets from where business entities secure capital, money market and capital market. Money market avails funds for shorter period of time, maximum of one year whereas capital market avails long term funds with terms suiting the needs of business entities. Primary market is the market for new and unseasoned securities whereas secondary market is the market for existing and seasoned securities

IPO is the key mechanism of primary market. IPO is the first time issuance of securities to the public. Securities being offered can be debt or equity offering. Various components of capital market play important roles in practice and procedure of IPO. Investment bankers or underwriters are one among them. Investment bankers are individuals or institutions who provide an array of functions to ensure that business entities are able to meet their objectives of issuing securities through IPO. Moreover, they ensure that during IPO, all the steps and processes are followed in accordance to existing rules and guidelines.

As far as practices in Nepal are concerned, basically there exist two institutions which guide and influence IPO processes. They are SEBON and NEPSE. SEBON is the regulatory body which looks after all the securities market transaction including IPO. Likewise, NEPSE is the sole stock exchange of Nepal

which provides liquidity and marketability to the securities being offered. By the end of FY 2007/08 150 companies have been listed in NEPSE.

Even though the foundation of systematic capital market development was laid in 1976 AD with the establishment of Security Exchange Centre (SEC), even after two decades Nepalese capital market is still in its infant stage. The securities being offered and its practices are still traditional and limited. Moreover, there is lack of research work covering different aspects of capital market in Nepal. In this context, this study has been carried out with the objective of unraveling various aspects of IPOs and their practices in Nepal.

Conceptual review of the study has covered concept of IPO, illustrating IPO along with its advantages and disadvantages, IPO as a mechanism of primary market, IPO and its historical perspective in Nepal and process of IPO, which shed lights on how IPO is being practiced in Nepal. Similarly review of related studies has covered the research works carried out abroad along with few dissertations relating to subject matter. Research works carried out abroad were in the form of journal-articles which mainly portrayed two patterns associated with IPO: IPO under-pricing and poor long-run performance of IPOs. These journals were mainly retrieved from online source such as www.blackwell-synergy.com and www.emeralinsight.com. Similarly dissertations shed light on capital market issues and existing state of share issues in Nepal to certain extent. These dissertations were accessed from libraries of St. Xavier's College and T.U.

For the purpose of meeting the objectives of the study, it has used descriptive and analytical research design and stratified random sampling. As per sample frame of 25%, 29 companies representing 5 different sectors: commercial banks, development banks, finance companies, insurance companies and manufacturing and processing companies, listed on NEPSE, have been selected. As the study is based on secondary source, required data have been retrieved from annual reports of SEBON, trading reports of NEPSE, various acts and regulations and newspapers like The Kathmandu Post and The Rising Nepal.

Similarly, simple statistical tools like mean (μ), Standard Deviation (), Correlation Coefficient (r) and Coefficient of Variation (CV) along with log linear model and J.R Ritter's (1984) model have been used to analyze the related data. The data have been analyzed manually as well as with the assistance of sophisticated computer programs like SPSS, Microsoft excel and words as per need.

The analysis of amount of issues being offered and number of issues being offered have revealed that Nepalese IPO sector have grown during the study period. Similarly, sector-wise analysis of public issue revealed that financial sector's IPO has been dominating Nepalese IPO market and instrument wise analysis of offered issues have identified ordinary shares as most preferred instrument. By using J.R Ritter's (1984) model it has been certain that Underpricing does exists in Nepal with average initial return of 87%. The finding is consistent with average initial return of other emerging markets. It also had standard deviation of 30.24% which is considerably higher than standard deviation of other emerging markets like Mauritius. The analysis also revealed that most of the issues offered during the study period were oversubscribed. It also found that there do exist relationship between subscription patterns and underpricing. Most of the oversubscribed issues produced positive initial return while the undersubscribed issues did not produce any positive return at all. Finally, the analysis segment concluded that percent change from offered price at the first day of trading, initial return goes on declining on second and third day of trading. It means investors are better off selling their IPO shares at first day of trading rather than on second day of trading.

5.2 Conclusions

The amount of issues offered has been growing by 22.96% per year during the study period of 1993/94 through 2007/2008. Also, the overall growth rate for the period is 25.80%. The very high positive value of the coefficient of trend line indicates that the amount of issues offered during the study period has been in rising trend. Moreover, the average amount of issue offered has been growing by

12.49% per year and its overall growth rate is found to be 13.31% during the study period. All these figures conclude that Nepalese IPO market has been growing during study period.

The financial sector which comprises commercial banks, development banks, finance companies and insurance companies has dominated Nepalese IPO market as revealed by the number of issues offered during the study period.

As far as instrument-wise issues offered during the study period is concerned, the number of issues offered and the amount of issues offered both indicates that right share is the most preferred instrument followed by ordinary share, debenture and preference share respectively.

Most of the companies' issues received overwhelming demand from public which has led to oversubscription of their issues. Furthermore, issues from all the sampled companies belonging to commercial banks, development banks and insurance companies have been oversubscribed. Similarly, most of issues from finance companies have also been oversubscribed. Issues from only sampled non-financial sector, manufacturing and processing sector are mostly undersubscribed. This concludes that the general public has good faith on the IPO issues being offered by companies belonging to financial sector while issues from non-financial sector are not accepted with that great enthusiasm.

Underpricing does exist in Nepal and average level of underpricing (equally weighted mean) is 87%. The average level of underpricing is consistent with those of other emerging markets like Mauritius. The standard deviation, which measures the degree of fluctuation stands at 30.24% which is quite higher than those in other emerging markets like Mauritius. It indicates that there is greater degree of fluctuation in the level of underpricing of issues being offered in Nepalese IPO market. Furthermore manufacturing and processing sector has the highest risk and insurance sector has the lowest risk as indicated by C.V.

Oversubscribed issues have yielded some initial return while the undersubscribed

issues have not yielded any initial return at all. It concludes that the issuing companies, whose issues are overwhelmingly demanded by public, do justify their support through higher return on first day of trading.

As revealed from percentage change in offered price on 1st, 2nd and 3rd day of trading, the high initial return on share price (return on 1st day of trading) has not been maintained on 2nd and 3rd day of trading. It rather keeps on declining. So, investors are better off selling their IPO shares on first day of trading rather than selling them on second or third day of trading.

5.3 Recommendations

Nepalese capital market is largely dependent on financial sector, which is not good sign for overall development of IPO market and capital market as a whole. In this regard the regulatory body and the government should take some step forward and encourage public issues from other sectors like manufacturing and processing by providing additional facilities such as tax-concessions.

Ordinary share and right share is found to be most used financial instruments while other financial instruments like preference shares and debentures are rarely issued. The fact that such ordinary shares carry maximum risk to investors on one hand and also cause dilution of ownership to issuing company, seemed to be forgotten. In this regard, its recommended that root cause beneath should be traced and tackled for good.

Public has shown faith on IPOs from financial sector while they do not have shown much faith on IPOs from non-financial sector. This must have been due to the fact that non-financial companies have been performing poorly since last decade or so while financial sector has been doing well. In this perspective, companies from non-financial sector are recommended to come up with schemes which will attract good companies belonging to non-financial sector to go for IPO.

Even though most of the IPO issues were found to be underpriced, there were

few issues, which were found to be overpriced. This could have been due to the fact that regulations in the past and existing regulations too have not fully authorized investment bankers to determine price of their issues. In this regard, it is recommended that regulatory body should allow IPO market to set their offer price. Free market can cause competition among the issuing company forcing them to make their offer at lower price, which will attract more investors benefiting capital market in long term.

Buy and sell group of investors are recommended to sell their IPO share at first day of trading rather than selling them on second or third day of trading.

Since the study has established that underpricing does exist among Nepalese IPO, it has opened new avenue for upcoming researchers. Here, researchers are recommended to analyze underpricing in detail by taking larger sample size and three sectors which were excluded from the study, should also be included. Furthermore, IPO underpricing could also be analyzed from year-wise perspective. Apart from that other empirically proven theory regarding IPO, long run underperformance could also be tested in Nepalese context. At the same time, interested researchers are also cautioned that obtaining reliable information needed to carry out such works will require some doing from them.

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