



## CHAPTER - I

### INTRODUCTION

#### **1.1 Background of the Study**

The business world today is more sophisticated than it was in the past. The changing lifestyle and increased demand for goods and services have always been a challenge as well as opportunity to business houses. The expansion of any kind of business is impossible if there is insufficient fund. The firms need finance for various purposes. The type of finance needed by a firm largely depends upon the type of the enterprises, and varies from one firm to other, depending on the firm's peculiarities. The need for long-term assets may be higher for some enterprises than the others and they may require higher amount of working capital, too.

The nature and volume of capital needed in a productive process are directly related to the nature and volume of number of components. These components include use of land, capital equipment, labor, building up of stocks and miscellaneous expenses (Goldschmidt, 1956:54).

There are two sources; internal and external, of fulfilling financial needs of a firm. Internal sources of financing mainly consist of retained profits of the enterprises and the provision for depreciation. This self-financing was the only method of financing an enterprise in a rudimentary stage of the economy where every economic unit is self-sufficient.

With the development of money, finance and financial institutions, it is no longer necessary for an enterprise to finance from its internal sources alone and have a balanced budget. Furthermore, the innovation of corporate form of business organization with the principle of limited liability and efficient technique of acquiring capital through the issue of variety of ownership and debt securities have enabled investors to satisfy their diverse asset preferences. This has made it possible for a corporate enterprise to attract the external funds from the public by issuing shares. On the other hand, promoters' equity fund may not be sufficient for its financial requirements whether it is newly establishing company or seeking to expand and modernize. They can get loans from the banks and financial institutions, which lend only a certain percentage of the company's equity base or asset which may not be sufficient for the company. At the same time, getting loan from bank and financial institutions is not easy because there is a lengthy process and

legal requirements involved. Issuing of shares to the general public is made compulsory under Securities Exchange Act, 1983 AD in Nepal. Promoters will not receive permission from the government authority to establish a public limited company if they do not show desire to include general public in its equity base. Hence, the firm needs to sell part of its total equity to the general public to raise the required funds through public issue of shares. (Securities Exchange Act, 1983)

Looking back into the history of Nepalese securities market, it can be traced that the market started in the mid 1930s with the issuance of shares of some companies. However, the formal institutionalization began only after the establishment of Securities Exchange Center in 1976. The then Securities Exchange Center was responsible for undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other securities market services. Introduction of the Company Act in 1964, issuance of Government Bond in 1964 and introduction of Securities Act in 1983 were the most important past initiatives for the development of securities markets in Nepal. The development process accelerated with the liberalization policy of the Government during 1990s. During the period major initiatives were taken for the development of the securities market, the most important one being establishment of Securities Board of Nepal (SEBON) in 1993 as an apex regulator of securities markets. With the establishment of SEBON the then, Securities Exchange Center was converted into Nepal Stock Exchange Ltd. (NEPSE), which started secondary trading of securities with the introduction of stock brokers.

The major regulatory framework for the securities market is provided by Securities Act, 2006, which has given authority to the SEBON for the regulation of securities market. As per Act, the major objectives of SEBON are to regulate issue and trading of securities and market intermediaries, promote the market and protect investors' rights. Besides, the duties and responsibilities of Securities Board are to register securities and approve prospectus of public companies, providing license to operate stock exchanges, provide license operate securities businesses, permit operation of collective investment schemes and investment funds, draft regulations, issue directives and guidelines and approve

bylaws of stock exchanges, supervise and monitor stock exchanges and securities business activities, take enforcement measures to ensure market integrity, frame policies and programs relating to securities market and advise the government in this regard. Thus, the responsibility of developing and regulating the securities market in the country rests solely on SEBON. (Thapa, 2007:21)

Initial Public Offering (IPO), also referred to simply as a “public offering”, is when a company issues common stock or shares to the public for the first time. They are often issued by smaller, younger companies seeking capital to expand, but can also be done by large privately-owned companies looking to become publicly traded (<http://en.wikipedia.org/wiki/IPO>).

For the investors Initial Public offering (IPO) is also an option. An Initial Public Offering (IPO) occurs when a security is sold to the general public for the first time, with the expectation that a liquid market will develop. An IPO can be of any debt or equity security.

In an IPO, the issuer may obtain the assistance of an underwriting firm, which helps it determine what type of security to issue (common or preferred), best offering price and time to bring it to market.

IPO can be a risky investment. For the individual investors, it is tough to predict what the stock or share will do on its initial day of trading and in the near future since there is often little historical data with which to analyze the company. Also, most IPO are of companies going through a transitory growth period, and they are therefore subject to additional uncertainty regarding their future value (<http://en.wikipedia.org/wiki/IPO>).

Primary market of securities which originates new issues of stocks and bonds avails cash to the issuer which may be invested in the business. Generally companies start out their business by raising equity capital from the small number of investors, and with the increment of the business activities it needs additional equity capital and desires to "go public" by selling to the general public. This kind of public offering includes cost that may direct or indirect. The direct costs include legal, auditing, and underwriting fees. And the indirect costs include management of time and efforts as well as dilution of selling shares at below the price prevailing in the market. These kinds of direct and indirect costs affect the cost of capital for firms going public.

The people or institutions responsible for finding out investors for the IPO of the securities sold in the primary market are called the investment bankers or issue managers. Investment bankers are also called underwriters; they purchase new issues from security issuers and arrange for their resale to the investing public. IPO generally involve one or more investment banks as "Underwriters". The company offering its shares called the "issuer" enters a contract with an underwriter to sell its shares to the public. The underwriter then approaches investors with offers to sell these shares.

Capital Market is gaining business attention since last few years. The NEPSE index, which shows the stock price trend of all the listed securities in the stock market, has been increasing in the recent fiscal years. Hence, the general investors are very keen to make investment in the securities of the companies through both secondary and primary markets. In primary market, the investment is made through public issues of ordinary shares, preference shares, debentures and right shares as well as mutual fund and unit scheme.

To sum up, an initial Public Offering is the first sale of corporation's common shares to public investors. The main purpose of an IPO is to raise capital for the corporation. While IPO are effective at raising capital, they also impose heavy regulatory compliance and reporting requirements.

## **1.2 Focus of the Study**

This study mainly focuses on the responses of individual investors towards Initial Public Offering. It also focuses on what they actually want in IPO before they actually invest their sector preference, their knowledge level, and performance of issue managers. It also focuses in the distribution process of IPO, restriction on margin lending as IPO funding via financial institutional loans is not a healthy practice as it does not reveal the true picture of the company. Single investors apply hundreds of application showing dummy names. As a result they can capture large number of shares and can influence the company management and stock price too. Public Response to primary market in Nepal is mainly considered as the primary market practices in Nepal. There are many securities issued in the primary market such as Bond, Preferred stock and common stock. This study mainly considered common stock as a concern for study.

## **1.3 Statement of the Problem**



In developing country like Nepal, IPO is still a new phenomenon. Majority of the Nepalese people are said to have been illiterate and even educated people too don't know much about the practice of stocks. Response to the IPO has always been so overwhelming, however even the aware people lack the confidence level. So it is unlikely that they invest in the securities logically. IPOs can be a risky investment. For the individual investor, it is tough to predict what the stock will do on its initial day of trading and in the near future because there is often little historical data with which to analyze the company. Also, most IPOs are of companies' going through a transitory growth period, which are subject to additional uncertainty regarding their future values.

But the recent trend shows that the investors invest in the IPO many times more than the issue. The reason for this is that only limited investors are applying for the IPO by hoarding citizenship certificates of other people. In Nepalese context it is evident that people lack the knowledge and because of which people are giving their power of attorney to other for IPO, Which affect the financial system badly. These people are creating an artificial crisis, which in turn, increases share price more than their book value.

To control this activity, Security Board of Nepal (SEBON) is updating the criteria required for applying IPO, in order to make the IPO transparent. Among them, the latest updated criteria is that the investor should disclose the banking detail if he wants to apply for more the Rs 10,000 and the investor should be present while submitting the form along with the original citizenship certificate; the issuing company must give the interest for the applied money during the period between applying date and allotment date; the issue manager must give the account payee cheque while refunding the money for applying more than Rs 10000 and the issue manager must allot the share within 45 days.

The problem towards this study is directed to identify the investor's responses towards the IPO of financial as well as non-financial sectors in Nepalese market, how is primary market growing in Nepal, how are the issue managers performing in IPO, generally what an investor expects from his or her investment, how to invest in IPO and how to manage fund for IPO etc.

There are 21 commercial banks listed in the stock exchange up to fiscal year 2008/09. From the population of all total of 21 only 6 are taken as sample.

In all the six cases we have found applied number of shares is higher than the issued one, i.e. all the issues are oversubscribed. Oversubscription ranges between 34.25 to 1.98 times. For the 3000,000 shares issued by Global Bank Ltd. 102750000 shares have been applied that

means it was oversubscribed 34.25 times. Similarly, 7.21 times oversubscription in the case of Lumbini Bank Ltd. Oversubscription can also be witnessed in the case of Siddhartha Bank Ltd, which is

18.65 times. Similarly, Shares of Citizens Bank International Ltd, Bank of Asia, Prime

Commercial Bank Ltd, were seen to have been oversubscribed by 20.98 times, 18.90 times and

29.85 times respectively.

From above it is clear that commercial banks share issues are getting good response from

Investor. Investor found to be interested in shares of Commercial Banks.

Among the 29 development banks listed with the security board, only 6 are taken as sample.

In all the investor issue of development banks we found over Subscription all the time. That does indicate that investor is also interested in development banks shares. Among them Himchuli Bikas Bank Ltd (HBBL) was highly subscribed in 2007, the Subscription time was 133.62. For the share issued 120,000, there was application for 16034400 shares. Similarly Malika Bikas Bank Ltd (MBBL) was over-subscribed by 54.84 times, Gorkha Development Bank Ltd (GDBL) by 108.32 times, Swabalamban Bikas Bank(SBB) by 96.23 times, Public Development Bank Ltd (ABBL) Ltd. by 28.26 times and the least subscribed but still over-subscribed was in the case of Vibor Bikas Bank Ltd (VBBL) Ltd. by 28.26 times. The average subscription time is 71.41 times.

#### **1.4 Objectives of the Study**

The overall objective of this study is to explore and examine the investor's response to the Initial offering or primary issue of shares in perspective of Nepal. The specific objectives of the study are as follows:-

- To analyze the pattern of public response to the initial public offering of different sectors.
- To assess the current situation of primary market issues
- To identify the performance of the investment bankers (issue managers) in the process of

IPO.

- To examine the growth of primary share issue market in Nepal.
- To conduct an opinion survey regarding Investor Response.

### **1.5 Significance of the Study**

This study might serve to be crucial information for these respective institutions taken as sample for the study in IPO procedure. This study will also be helpful to the prospective investors and the organization in the field of public Offering as there still lacks the study regarding IPO in Nepal. This study will assist in the formulation of policy and will also assist the policy makers to get the practical knowledge of existing rules and regulations.

From this study, investors will have more clear conception over their investment and they will be able to make a right choice. It will also be helpful to the students who want to make research in IPO.

This study will be significant to analyze the legal provision, possibilities, problems and prospects of IPO in Nepal. It will also be helpful to know the investors response to IPO of different industries. The prospective offering company may also get significant knowledge from this study.

## **1.6 Limitations of the Study**

This study of public response regarding IPO has some limitations as well.

They are:-

- This study takes the secondary data also, so the accuracy of research depends upon the reliability of the data.
- The data are used only up to 2009.
- The information regarding the same questionnaire is different from different sources.
- Many Securities are issued in the securities market but considered only common stock for the analysis.

## **1.7 Organization of the Study**

### **Chapter – I: Introduction**

This chapter contains introductory part. It describes the general background of the study, statement of the problem, objective of the study, significance of the study,

limitation of the Study and organization of the study.

## **Chapter - II: Review of Literature**

This chapter contains brief review of past research works and studies. It describes the conceptual framework of the subject matter as well.

## **Chapter – III: Research Methodology**

This chapter explains about the methods to collect the data, the sample size used and about the methods used to analyze the data.

## **Chapter – IV: Data Presentation and Analysis**

This chapter presents the collected data in tabular form and in different pictures, so that it could be easy to analyze them.

## **Chapter - V: Summary, Conclusion and Recommendations**

This chapter finally summarizes the study in few paragraphs and tries to conclude the whole study; that is the result of the research. And finally depending upon the summary and conclusion, recommendations have been given.

**CHAPTE  
R - II**

**REVIEW OF LITERATURE**

**Intr  
odu  
ctio  
n**

Review of literature is an essential part of scientific research, it is a way to discover what other research in the area of our problem has uncovered. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. It is also a way to avoid investigating problems that have already been definitely answered. (Pant, 2005:39)

So, the books and previous studies related to this field of study may provide the foundation for the study. By linking the present study with the past research studies, the continuity in research may be provided.

This part has been divided into conceptual framework and review of past research works.

**2.1 Conceptual  
Framework**



### 2.1.1

#### **Financial Market**

Financial markets provide a forum in which suppliers of loans and investment can transact business directly. The loans and investment of institution are made without the direct knowledge of the suppliers of fund (savers), suppliers in the financial markets know where their funds are being lent or invested. The two key financial markets are the money market and the capital market. Transaction in short- term debt instruments or marketable securities take place in the money market. Long-term securities (bond and stocks) are traded in the capital market (Gitman,

1

9

8

8

:

3

0

)

.

All securities, whether in the money or capital markets, are initially issued in the primary market. This is the only market in which the company or government is directly involved in the transaction and receives direct benefit from the issue-that is, the company actually receives the proceeds from the sale of securities. Once the securities begin to trade among individual, business, government or financial institution savers and investors, they become part of the

secondary market. The primary market is where new securities are sold. The secondary market can be viewed as a “used” or “pre-owned” securities market. (Securities Board)

### **2.1.2**

#### **Money**

#### **Market**

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

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

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

The development of a sound securities market with its constituent financial institution is one of the mechanisms which enable the efficient transformation of savings from the hands of surplus spending units to those of deficit spending ones who can use them

more productivity and/ or have loss/ risk aversion (Rough, 1966:56).

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

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

Market liquidity or the ability to buy and sell securities easily is also indicated by two measures. One is the total value of shares traded on the stock exchange divided by GDP. The second measure of liquidity is the turnover ratio, the value of total shares traded divided by market

capitalization. Thus, turnover, by capturing trading relative to the size of the stock market, complements the total value ratio, which compares trading to the size of the economy (The World Bank, 1995).

Market concentration is determined by computing the share of market capitalization for the ten largest stocks on the exchange.

### **2.1.3**

#### **Capital**

#### **Market**

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

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

The capital market is a financial relationship created by a number of institutions and arrangements that allows the supplies and demanders of long term funds-funds with

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

Some organizations and individuals have more money than they currently need, and are thus, often described as lenders. Others need many more than they have and are required to borrow

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

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

Thus the capital market includes:

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

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

## **2.1.4 Primary Market vs. Secondary Market**

### **2.1.4.1**

#### **Primary Market**

Primary market is new issue market of securities. The primary market deals with those securities, which have been made available to the first time. "Primary Market is the market place where instead of goods and services securities are sold to mobilized the savings for the establishment and operation of the business" (Bhattarai, 2002:3).

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

following important functions of  
primary market. Organization

Un  
der  
val  
uin  
g

D  
is  
tr  
i  
b  
u  
ti  
o  
n

The new issues in primary market facilitate of raising long-term funds and these can be classified as “initial issues” and further this voice issues offered for the first raise issues, it is called further issues. The interplay of these functions helps to transfer resources from the sources from the sources of supply to demand.

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

*I.*

*Pu*



### ***Public Issue-***

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

### ***II.***

#### ***R***

#### ***Right***

### ***Issue-***

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

### ***III. Private***

#### ***placement***

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

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

#### **2.1.4.2 SECONDARY MARKET**

Secondary market is that market value where there is trading of outstanding securities of private business organizations and government. Investors can purchase and sell outstanding securities of companies in secondary market. "Secondary market is the market place where secondhand securities are traded. It means securities once purchased through primary market are traded in secondary market" (Bhattarai, 2002:5).

In growth of primary market, there is also contribution of secondary market. Secondary market accelerates the liquidity of securities. Stock is traded in two different kinds of market: Stock exchange and OTC market. New York exchange (NYSE) and (NEPSE) are examples of organized and secondary market. Securities trading in primary and secondary market can be divided as follows:

##### **Ordin ary Shares**

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

##### **Prefere nce Shares**

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

**B**  
**o**  
**n**  
**d**

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

### **2.1.5 Investment consideration to the potential investors in the Primary Market**

Rules and regulations alone would not be able to protect the interest of investors. They should be able to analyze and evaluate following aspects of the company before taking their investment decision.

Investors should select those companies share which are regarded as well operating and good future prospects, reliable management, beneficial sectors or higher growth. Investing in the shares of these companies is less risky than others. The investors who invest in stock, they must compare the price and the value or the share in the market and should select the share which has lower market price in comparison to its value.

The investors should take information regarding company's promoters, size, growth, environment, board of directors, past statements and as well as budgeted statements, which can be obtained from memorandum, prospectus, articles of the concerned company.

### **2.1.6 Investment consideration to the potential investors in the Secondary Market**

Investors should be informed about the following matters before investing in the secondary market.

- Keep information of the companies return to the shareholders in the form of cash dividends, stock dividends, bonus shares etc. they should also be informed about Earning per share (EPS), book value of share (BVS), price earnings ratio (P/E Ratio), future plan, growth expectancy of the company through the annual, quarterly and half-yearly performance reports, profit and loss

account (P/L a/c), balance sheet (B/S) and annual reports.

- Analyze the price related information provided by SEBON and NEPSE about the listed companies.
- Study the trading statements and financial analysis of the listed companies published by

NEPSE.

- Study articles related to the trading of shares and economic matters published in different newspapers and magazines.
- Study the annual report of SEBON.
- Study the act and regulation concerning to the shareholder's right.

Once the investors think of making investment, he approaches to the broker to choose a firm that is suitable for his needs of investments and to select a representative of the firm with whom he can work. The representative should be able to furnish the investor at all times, on reasonable choice, information on any specific company's securities.

### **2.1.7 Pricing**

#### **Differences**

We may have found that there can be large differences between the price of an Initial Public offering (IPO) and the price when the IPO shares start trading in the secondary market.

The pricing disparities occur most often when an IPO is "hot" or appeals to many investors. When an IPO is "Hot", the demand for the securities far exceeds the supply of shares. The excess demand can only be satisfied once trading in the IPO shares begins. This imbalance between supply and demand generally causes the price of each share to rise dramatically in the first hours or days of trading. Many times the price falls after this initial flurry of trading subsidies.

### **2.1.8 IPO by Private Company to the Public**

IPOs are often issued by smaller, younger companies seeking capital to expand and also can be done by large privately owned companies looking to become publicly traded.

In an IPO, the issuer obtains the assistance of an underwriting firm, which helps it determine what type of security to issue (common or preferred), best offering price and time to bring it to market

(<http://en.wikipedia.org/wiki/IPO>).

### **2.1.9 Risky**

#### **Investment**

Investing in IPO is often seen as an easy way of investing, but it is highly risky and many investment advisers advise against it unless you are particularly experienced and knowledgeable. IPO is considered risky because of the unpredictability in nature. No past track record of the company adds further to the dilemma of the shareholders as to whether to invest in the IPO or not. With no past track record, it becomes a difficult choice for the investors to decide whether to invest in a particular IPO or not, as there is no basis to decide whether the investment will be profitable or not. For the individual investor, it is thus tough to predict what the stock will do on its initial day of trading and in the near future since there is often little historical data with which to analyze the company. Returns from investing in IPO are not guaranteed. The Stock Market is

highly volatile. Stock Market fluctuations widely affect not only the individuals and household, but the economy as a whole. The volatility of the stock market makes it difficult to predict how the shares will perform over a period of time as the profit and risk potential of the IPO depends upon the state of the stock market at that particular time. (Guleria, 2009:15)

**P  
r  
i  
c  
i  
n  
g**

Initially, IPOs have been under-priced. The effect of under-pricing an IPO is to generate additional interest in the stock when it first becomes publicly traded. This can led to significant gains for investors who have been allocated shares of the IPO at the offering price. However, under-pricing an IPO results in "money left in the table ", lost capital that could have been raised for the company had the stock been offered at a higher price.

The danger of over pricing is also an important consideration. If a stock is offered to the public at a higher price than what the market will pay, the underwriters may have trouble meeting their commitments to sell shares. Even if they sell all of the issued shares, if the stock falls in value on the first day of trading, it may lose its marketability and hence even more of its value.

Investment banks therefore take many factors into consideration when pricing an IPO, and attempt to reach an offering price that is low enough to stimulate interest in the stock, but high enough to raise adequate amount of capital for the company. The process of determining an optimal price usually involves the underwriters ("syndicate") arranging share purchase commitments from lead institutional investors.



## **Why Go Public?**

Before deciding whether one should complete an IPO, it is important to consider the positive and negative effects that going public may have on their mind. Typically, companies go public to raise and to provide liquidity for their shareholders. But there can be other benefits. Going public raises cash and usually a lot of it. Being publicly traded also opens many financial doors:

- 9 As long as there is market demand, a public company can always issue more stock. Thus, mergers and acquisitions are easier to do because stock can be issued as part of the deal.
- 9 Trading in the open markets means liquidity. This makes it possible to implement things like employee stock ownership plans, which help to attract top talent.
- 9 Going public can also boost a company's reputation which in turn, can help the company to expand in the marketplace.(Guleria,2009:11)

## **Significatio of IPO**

Investing in IPO has its own set of advantages and disadvantages. Where on one hand, high element of risk is involved, if successful, it can even result in a higher rate of return. The rule is: higher the risk, higher the return. The company issues an IPO with its own set of management objectives and the investor looks for investment keeping in mind his own objectives. Both have a lot of risk involved. But then investment also comes with an advantage for both the company and the investors.

The significance of investing in IPO can be studied from 2 viewpoints – for the *company* and for the *investors*. This is discussed in detail as follows:

### **9 Significance to the company**

When a privately held corporation needs additional capital, it can borrow cash or sell stock to raise needed funds. Or else, it may decide to “go public”. "Going Public" is the best choice for a growing business for the following reasons:

- The costs of an initial public offering are small as compared to the costs of borrowing
- large sums of money for ten years or more,
- The capital raised never has to be repaid.
- When a company sells its stock publicly, there is also the possibility for appreciation of the share price due to market factors not directly related to the company.
- It allows a company to tap a wide pool of investors to provide it with large volumes of capital for future growth. .(Guleria,2009:12)

### **9 Significance to the shareholders**

The investors often see IPO as an easy way to make money. One of the most attractive features of an IPO is that the shares offered are usually priced very low and the company's stock prices can increase significantly during the day the shares are offered. This is seen as a good opportunity by 'speculative investors' looking to notch out some short-term profit. The 'speculative investors'

are interested only in the short-term potential rather than long-term gains. (Guleria, 2009:13)

### **How does an IPO get valued?**

The price of a financial asset traded on the market is set by the force of supply and demand. Newly issued stocks are no exception to this rule- they sell for whatever price a person is willing

to pay for them. The best analysts are experts at evaluating stocks. They figure out what a stock is worth, and if the stock is trading at a discount from what they believe it is worth, they will buy the stock and hold it until they can sell it for a price that is close to or above, what they believe is a fair price for the stock. Conversely, if a goal analyst finds a stock trading for more than he or she believes it is worth, he or she moves on to analyzing another company, or short sells the overpriced stock, anticipating market correction in the share price.

### **What are some good methods for analyzing IPO's?**

Initial public offerings (IPO) are unique stocks because they are newly issued. The companies that issues IPOs have not been traded previously on an exchange and are less thoroughly analyzed than those companies that have been traded for long time. Some people believe that the lack of historical share price performance provides a buying opportunity, while others think that because IPOs have not yet been analyzed and scrutinized by the market, they are considerably riskier than stocks that have a history of being analyzed. A number of methods can be used to analyze IPOs, but because these stocks do not have a demonstrated past performance, analyzing them using conventional means becomes a bit trickier.

If we are lucky enough to have a good relationship with our broker, we may be able to purchase oversubscribed new issues before their clients. These tend to appreciate considerably in price as soon as they become available on the market: because demand for these shares is higher than supply, the price of oversubscribed IPO's tends to increase until supply and demand come into equilibrium.

Here are some points that should be evaluated when looking at a new issue:

1. Why has the company elected to go public?
2. What will be the company doing with the money raised in the IPO?
3. What is the competitive landscape in the market for the business's products or services?

What is the company's position in this landscape?

4. What are the company's growth prospects?
5. What level of profitability does the company expect to achieve?
6. What is the management like? Do the people involved have previous experience running a public-trading company? Do they have a history of success in business ventures? Do they

have sufficient business experience and qualifications to run the company?

Does the management itself own any shares in the business?

7. What is the business or company's operating history, if any?

The first public offering of equity shares or convertible securities by a company, which is followed by the listing of a company's shares on a stock exchange, is known as an 'Initial Public Offering'. In other words, it refers to the first sale of a company's common shares to investors on a public stock exchange, with an intention to raise new capital. Going public means a company is switching from private ownership to public ownership. Going public raises cash and provides many benefits for the company. Many startups went public without any profits and little more than a business plan. For those getting in on a hot IPO is very difficult, if not impossible. The most important objective of an IPO is to *raise capital* for the company. It helps a company to tap a wide range of investors who would provide large volumes of capital to the company for future growth and development. A company going for an IPO stands to make a lot of money from the sale of its shares which it tries to anticipate how to use for further expansion and development. The company is not required to repay the capital and the new shareholders get a right to future profits distributed by the company. (Guleria, 2009:10)

The process of underwriting involves raising money from investors by issuing new securities. Companies hire investment banks to underwrite an IPO.

It's hard enough to analyze the stock of an established company. An IPO company is even trickier to analyze since there will not be a lot of historical information. Look for the usual information, and at the same time pay special attention to the management team and how they plan to use the funds generated from the IPO. At the same time we should analyze the underwriters as well. Successful IPO's are typically supported by the brokerages that have the ability to promote a new issue well.

### **2.1.10                    The Underwriting Process**

When shares are bought in an IPO it is termed primary market. The primary market does not involve the stock exchanges. A company that plans an IPO contacts an investment banker who will in turn called on securities dealers to help sell the new stock issue. This process of selling the new stock issues to prospective investors in the primary market is underwriting (Guleria,

2

0

0

9

:

1

3

)

.

Underwriting is an agreement between the issuing company and financial institution like bank, merchant banks, broker or other person, providing for their taking up the shares or debentures to the extent specified in the agreement.

When a company wants to go public, the first thing it does is hire an Investment Bank. A company could theoretically sell its shares on its own, but realistically, an investing bank is required. Underwriting is the process of raising money by either debt or equity. We can think of underwriters as middlemen between companies and the investing public. The biggest underwriters in our Nepal are Nepal Merchant Banking & Finance Ltd. Co.(NMBL), Citizen Investment Trust (CIT), NIDC Capital Market Ltd. (NCML), etc.

The company and the investment bank will first meet to negotiate the deal. Items usually discussed include the amount of money a company will raise, the type of securities to be issued and all the details in the underwriting agreement. The deal can be structured in a variety of ways. For example, in a firm commitment, the underwriter guarantees that a certain amount will be raised by buying the entire offer and then reselling to the public. In a best efforts agreement, however, the underwriter sells securities for the company but does not guarantee the amount raised. Also, investment bank does not bear all the risk of offering. Instead, they form a syndicate of underwriters. One underwriter leads the syndicate and the others sell a part of the issue. Only a limited number of broker-dealers are invited into the syndicates as underwriters and some of them do not have individual investors as clients. Moreover, syndicate members themselves do not receive equal allocation of securities for sale to their clients.

The underwriters in consultation with the company decide on the basic terms and structure of offering well before trading starts, including the percentage of shares going to institutions and to individual investors. Most underwriters target institutional investors as wealthy investors in IPO distributions. Underwriters believe that institutional and wealthy investors are better able to buy large blocks of IPO shares,



assume the financial risk, and hold the investment for the long term.

Once all sides agree to a deal, the investment bank puts together a registration statement to be filed with the SEC. The document contains information about the offering as well as company info such as financial statements, management background, any legal problems, where the money is to be used and insider holdings. The SEC then requires a cooling off period, in which they investigate and make sure all material information has been disclosed. Once the SEC approves the offering, a date (the effective date) is set when the stock will be offered to the public.

During the cooling off period the underwriter puts together what is known as the Red-herring. This is an initial prospectus containing all the information about the company except for the offer- price and the effective date, which are not known at the time. The company act has made mandatory that any institution going into public offering must issue the prospectus before issuing the securities to the public. With the Red-herring in hand, the underwriter and company attempt to hype and build up interest for the issue. They go on a road-show, also known as the "dog and pony show"- where the big institutional investors are courted.

As the effective date approaches, the underwriter and the company sit down and decide on the price. This is not an easy decision: it depends on the company, the success of the road-show and, most importantly, current market conditions. Of course, it's in both parties interest to get as much as possible. Finally, the securities are sold on the stock market and the money is collected from investors.

## **2.2 Review of Previous Thesis**

The investment consideration begins from the selection of the broker to assist the trading in the securities market. Most investors have access to investment information in the form of oral and written from their brokers. Brokers subscribe to well-known investment information sources that can be used by the customers. Brokers are most active trading agents of capital market. Stockholders are backbone of stock market growth and its smooth functioning.

**Pandey (2001)**, conducted a research on, "Public response to Primary Issue of Shares in Nepal," with the objective of: identify 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 variation. Mr. Pandey has summarized his find 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 poor 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. Now the response is highly positive because people are aware, money flow in the market is higher, people have seen that most companies are distributing dividends, share prices are increasing for most

companies and a lack of better alternatives for investment. Now that the average interest rates have gone down, more can be obtained from investment in stock.

**Pant (2006)**, who has done research on "Public Response to IPO in Nepal", with the objective of: identify the dealing process of IPO, analyze the pace of IPO and analyze the public response to the IPO. He used primary and secondary data both.

He has concluded that general investors in Nepal do not have sufficient information regarding the primary market and in spite of this they are interested in investing money in the primary market. They are more interested in financial sector than non-financial sector.

He has also summarized that pace of initial public offering in Nepal seems to be irregular. Even though the organization's process of public offering is quite long, the service provided to the investors seems to be satisfactory. Public response in stock market is high due to lack of opportunities for investment in other sector. Despite this, public are attracted towards shares to increase their value of investment.

A study conducted by **Shrestha** (1996) on the public response to primary issue of shares in Nepal reveals the fact that the scope of primary market is recent days in burgeoning by leaps and bounds. Even the general investors are boisterously pumping up their savings in the new issue of shares causing over subscription to a great deal. Shrestha here asserts that the growth of the primary market is encouraging since many public limited companies including joint venture Banks have been successful in tapping capital through the floatation of shares to the companies is a direct manifestation of the growing public confidence in the primary market.

The general public simply taps everything that comes on their way, regardless of the promoter's background and company feasibility. Each and every company that came into the market has been successful in tapping the capital from the market and the issue

closed within the minimum stipulated time of seven days with huge over subscriptions. Issues of some foreign collaboration banks were oversubscribed to an extent of 19 times and this became simply overwhelming to the company concerned as well as to the issue managers which lead to delays in allotment of shares, refunding and distribution of share certificates to the allotted public. In empirical terms, the shares of 27 companies were placed in the market after the establishment of full-fledged stock exchange. The issue amount is Rs. 533.81m whereas 442,841 applicants applied for the shares but only 132,815 were allotted its shares. While giving details of statement of problems Shrestha

presents a rosy picture of the primary market. It is because he is solely dealing with the public response to the primary market. Though issue managers delay in refunding share subscription and allotting shares, he has not cited any such examples throughout his thesis; He further adds that the public response varies from one business sector to another business sector.

During his study period, companies were facing problems in issuing their share to general public. The companies, which have issued shares to the general public, had predicted higher dividend and earnings per share but unfortunately most of them have failed to deliver. Even the performance of the issue manager is also not as good as expected. The mismanagement that follows when the subscription list is open and the subsequent delay in the allotment of shares tend to undermine the confidence of the investor's there by hindering the future growth of the primary market. Here, Shrestha attributes the sluggish development of the primary market to the crash of stock prices and its speculation, exaggeratedly projected dividend and ROI through prospectus, and issue managers' unscrupulousness in making decision for the allotment for the shares and refunding capital. If all these are detrimental to the primary market, then he has to justify the extent to which the primary market has been detracted from these malpractices. On the contrary, there exist other uncontrollable forces, which hinder the smooth functioning of the primary market. Economic policy, capital formation, investor's attitude, alternative investment opportunities, legal provisions and foreign investment policy belong to this category.

Evaluating the primary market, analyzing the pattern of public response to the new issues, identifying the problems of primary market and presenting remedial measures for the primary market are the objectives set out in the study. Evaluation of primary market does not merely include the number of share issued and sold in the market. As a part of the capital market, it should be reviewed from different angles, like the legal provision, the ratio of shares held by the promoters if not accepted in the share subscription etc. The study is silent about all these multivariate aspects of the primary market. So far as the patterns of the public response to new issue are concerned it has

been stratified presumably from the view point of geographical distributions of places. Most importantly to know whether the people are consciously aware of the primary market to say the least of the securities market then it is likely that the investor's status plays a vital role in the analysis of primary market. No doubt urban population is generally responsive of any sorts of economic trend population is generally responsive of any sorts of economic trend but the question arises: What sorts of social sector are more reactive? These are the indispensable phenomena of the study.

The overall analysis of public response to primary market comprises of two prime ingredients:

- Geographical

response and

- 

Subscription

status

In this regard, research hypothesis test here correctly assumes support of the study. Although he has selected 12 companies from different sectors and assures that they will represent the remaining one with a view to important information. But he has not stated on what basis they were picked up for the research work. Thus here Shrestha has ignored the statistical concept of selecting companies from the population.

Shrestha further opines that there are data problems in Nepal to conduct a research not only in the capital market but in other fields too. This study found problems regarding the availability of data according to the occupation. Shrestha confirms his failure in the analysis of public response as per the occupational division of applications. Similarly, he points at the wrong design of share application form on the part of the issue managers. Opinion survey questionnaire, interview method would be instrumental in his research work. To understand the public response to market, the analysis should have incorporated both qualitative and quantitative approach of research. That is why; quantitative analysis of the public response has made the study utterly biased.

With regard to the subscription status of the companies, he has found that all the companies are oversubscribed so much so that some are oversubscribed 19 times. To this effect, Shrestha delimits his study maintaining that all the companies, which floated their share to the public before 1933, have not been included because



of the unavailability of data. Contrary to his version, the Harisiddhi Bricks and Tiles Factory that issued share during Shrestha's study period had been under subscribed.

Moreover, public response should be dwelling on other factors. For this sake, shrestha assumes that due to the prevailing unfavorable condition of the secondary market, the primary market has been suffering as well. Shrestha has mentioned that the secondary market of securities will play a significant role in boosting the primary market. Since the secondary market is the purview of his study, his way of justifying the condition of the secondary market is not as well as expected. No market price of shares has been analytically presented in the study. Nor does the study include dividend distribution of the companies. In absence of these characters, the failures of the primary market cannot solely be attributed to the secondary market. This study has been conducted devoid of the secondary market analysis.

Above all, Shrestha concludes that a subscription is affected by issue size: the smaller the issues size the greater the times of subscription. This shows that big issue in the future may face problem in collecting issued amount as the fall in the secondary market is bound to affect the primary market. But as we can see from our past experiences, Taragaun Regency Hotel Ltd. And Nepal Industrial and commercial bank were able to collect a huge amount of funds within a very short period of time. Shrestha's rhetoric signifies that share subscription will go up if the issues size is big. It means company will face difficulties in the future while collecting funds. In this connection, Shrestha presents contradictory views in term of issue size and subscription. If the secondary Market has any impact on the primary market then this should be dealt with an investigative study on both the markets.

IPOs are also supposed to signal the health of companies making the IPO's. There are two ways in which IPOs, after being announced, provide important signals about the company; one when they are announced and the other at the start of trading.

Oversubscription of IPO's after announcement signals a reasonably good health of the company and underpricing of shares as more and more investors try and take benefit of IPO. However, due to availability of loans from financial institutions, the true picture of the company may no longer prevail. This could be due to asymmetric information as even those who know little about stock valuation( primarily speculators rather than rational investors) may approach financial institutions fro loans so that they could enjoy more from a short run performance of IPO's. Besides, more shares being allotted to bigger players in the market, informal buy sell deals happen even before the start of trading (because they could not win allotment during IPO), the price generally paid by the investors is more and the start of the trading day, we could well observe that the share prices are more than the normally expected and unrealistic (New Business Age, March 2006:49).

### 2.3

#### Research

Above all, Shrestha concludes that a subscription is affected by issue size: the smaller the issues  
**h Gap**

Though there are many research studies relating to public response to IPO in Nepal, they failed to analyze the basis for distribution of shares, performance analysis of Issue Managers in the process of IPO and response for the margin lending restriction. For the primary data analysis this research has tried to involve more and more people from various sectors like bank, university, business. As in Nepal maximum investors are risk averters, this study also analyzed whether people prefer personal fund or loan for investment. Today's practice is that most investors apply with many names so that they could get more and more shares in IPO, so this research also takes individual

investors responses whether they would prefer pro-rata basis for distribution or lucky-draw, which is also missing in other related researches to IPO.

## **CHAPTER – III**

### **RESEARCH METHODOLOGY**

In order to achieve the basic objectives of the study this chapter describes the methods and processes applied to accomplish the study. This chapter provides the methodology followed to achieve the objectives stated in this research work. Research Methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. In other words, research methodology describes the method and process to be followed during the research work (Kothari, 1990:10).

This chapter presents the population and procedure, data processing methods, definition of variables, and descriptions of the statistical tools used for the purpose of analysis of the data.

#### **3.1**

##### **Research**

##### **Design**

By research design we mean an overall framework or plan for the activities to be undertaken during the course of a research study. The research design serves as a framework for the study, guiding the collection and analysis of the data, the research instruments to be utilized, and the sampling plan to be followed (Pant, 2005:92).

This study covers quantitative methodology in a greater extent and also uses the descriptive part based on both technical aspect and logical aspect. This research study attempts to analyze the public response to IPO, performance of investment bankers (issue managers) in IPO, source of relating information on the public response to IPO.

Thus descriptive as well as analytical research design has been used. This study attempts to analyze the relation between different variables relating to IPO and public responses. It also tries to analyze what factors actually motivate the investors to invest, what is their goal behind investment, their response sector wise. Therefore, the research design of this study is exploratory in nature.

### **3.2 Population and Sample**

The large group about which the generalization is made is called the population under study. Because of the large group size, it is fairly difficult to collect detail information from each member of population. Rather than collecting detail information from each number, the small portion is chosen as representation of the population is called the sample. Population for this

research is the total number of listed companies up to fiscal year 2008/09. There are 159 listed companies as per below table:-

**T  
a  
b  
l  
e  
3  
.  
1**

**Population and Sample of  
the Study**

Sector	Population of the study	Sample of the study	Percentage (%)
<b>Financial Sector</b>			
Commercial Bank	21	6	28.57%
Development bank	29	6	20.69%
Finance companies	61	6	9.83%
Insurance companies	17	5	29.41%
<b>Total</b>	128	23	
<b>Non-financial Sector</b>			
Mfg. & Pro. Co.	18	4	22.22%

Trading co.	4	2	50%
Hotel	4	2	50%
Others	5	1	20%
<b>Total</b>	31	9	

Table 3.1 shows that from among the 15 listed commercial bank, only 6 (i.e. 28.57%) are taken as sample. In the case of development bank and finance companies 6 (i.e.20.69%) and 6 (i.e.9.83%) samples are taken from population of 29 and 61 respectively. From 17 Insurance companies 5 (i.e.29.41%) are taken as sample. From non-financial sector altogether 9 companies are taken as sample from 31 companies (i.e. 29%).



For the primary data collection 150 respondents from bank, business, university, and brokerage firm have been taken as sample.

### **3.3 Sample**

#### **Characteristics**

Among the 150 respondents for the primary data collection, 20%(30) are students, 40%(60) are businessman, 16.67%(25) are bankers, 3.33%(5) are brokers and rest 20%(30) are others.

### **3.4 Data Collection**

#### **Procedure**

A questionnaire schedule was designed in view of the data requirements and distributed to various respondents through which a field survey is conducted. A questionnaire was distributed to

150 respondents (students, businessman, bankers, brokers, and others) for their responses. Almost all the respondents who were approached readily agreed to respond to the questionnaire. For the secondary data collection data from Nepal Merchant Bank & Finance company Ltd., NIDC Capital Market, Citizen Investment Trust, have been approached. At the same time data from Annual report of Security Board Nepal has also been taken.

### **3.5**

#### **Analysis**

#### **of Data**

After the collection of data, an analysis of the data and the interpretation of the results

are necessary because data collected from various sources might be in raw form. So, they cannot be used directly. Further, they need to be verified and simplified for the purpose of analysis. The data collected through questionnaire were categorized, tabulated, processed and analyzed using different methods. They are analyzed by using various statistical tools like percentage, means, Pearson correlation coefficient, Chi-square test of Hypothesis. A descriptive analysis is also done to find out the overall view and reached to the conclusion.

As both data primary as well as secondary has been used, analysis techniques for the both have been used. Data analysis helps to make the reader more clear about the research and helps to draw conclusions.

### **3.6**

#### **Pre test ing**

The pretesting of the questionnaire was done on a sample of 10 respondents. Depending on the difficulties encountered by them in answering the questions, its initial format was suitably modified.

### **3.7**

#### **Statistica**

#### **I Tools**

Statistical tools are used to implicit the comparative results. For the purpose of the study following statistical tools are used:

#### **3.7.1 Bar- diagrams and graphs**

Diagrams and graphs are visual aids which give a bird's eye view of a set of numerical data which show the information in a way that enables us to make comparison between two or more than two sets of data. Diagrams are in different types. Out of these various types of diagram one of the most important forms of diagrammatic presentation of data is simple bar diagram, which is perhaps the most effective graphic method for comparing quantities. Time-series graphical data presentation is also done, which is helpful to examine the behavior of some variables over a period of time.

#### **3.7.2**

#### **Pie- diagram**

A pie- diagram is a widely used aid that is generally used for diagrammatic presentation of the values differing widely in magnitude. In this method all the given data are converted into 360 degree as the angel of a circle is 360 degree and all components of the data are presented in terms of angels that total 360 degree for one set of data.

### **3.7.3**

#### **Percentage**

Percentage is one of the most useful tools for the comparison of two quantities or variables. Simply, the word percentage means per hundred. In other words, the fraction with 100 as its denominator is known as a percentage and the numerator of this fraction is known as rate of percent.

### **3.8 Formulation of Hypothesis**

This study is based on both secondary as well as primary data. The primary data has been collected by questionnaire. Using computers application programs especially MS-Excel has done processing of these data. Some others statistical tools have been used for presentation and make raw data into organized forms and also for presentation and make raw data into organized forms and also for analysis and interpretation. In this research work some suggested solution called as hypothesis to suggest new observation.

With the available data some hypothesis are tested and given the decision accordingly. It may not be proved absolutely but in practice it is accepted if it has stood with a critical testing.

### 3.8

#### .1 t- test

For examining the secondary data, t- test has been done for the significance of an observed sample correlation coefficient between financial and non financial sector and for the purpose, following hypotheses are formulated:

**Hy**

**po**

**the**

**sis**

**1**

t test for the significance of an observed sample correlation coefficient between banks and non financial sector.

Null hypothesis:  $H_0: \rho=0$  i.e. there is no correlation in the population or the population correlation coefficient is zero.

Alternative hypothesis:  $H_1: \rho \neq 0$  i.e. there is correlation in the population or the population correlation coefficient is not zero.

**Hy**

**po**

**the**

**sis**

**2**

t test for the significance of an observed sample correlation coefficient between Development banks and non financial sector.

Null hypothesis:  $H_0: \rho=0$  i.e. there is no correlation in the population or the population correlation coefficient is zero.

Alternative hypothesis:  $H_1: \rho \neq 0$  i.e. there is correlation in the population or the population correlation coefficient is not zero.

**Hy**

**po**

**the**

**sis**

**3**

t test for the significance of an observed sample correlation coefficient between Finance companies and non financial sector.

Null hypothesis:  $H_0: \rho=0$  i.e. there is no correlation in the population or the population correlation coefficient is zero.

Alternative hypothesis:  $H_1: \rho \neq 0$  i.e. there is correlation in the population or the population correlation coefficient is not zero.

#### Hypothesis 4

t test for the significance of an observed sample correlation coefficient between Insurance companies and non financial sector.

Null hypothesis:  $H_0: \rho=0$  i.e. there is no correlation in the population or the population correlation coefficient is zero.

Alternative hypothesis:  $H_1: \rho \neq 0$  i.e. there is correlation in the population or the population correlation coefficient is not zero.

While examining the t-test for significance of an observed sample correlation coefficient, the test statistic is obtained as below:

$$t = \frac{r}{\sqrt{\frac{1-r^2}{n-2}}} \sim t_{n-2}$$

Follows t-distribution with (n-2) degree of freedom

Where, r= sample correlation coefficient and is computed by

$$r = \frac{n \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{\left[ n \sum X_1^2 - (\sum X_1)^2 \right] \left[ n \sum X_2^2 - (\sum X_2)^2 \right]}}$$

n = sample  
size (pairs) )

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

(Assumed)

Decision: If calculated value of  $|t|$  is smaller than the tabulated  $t$ , the null hypothesis is accepted and vice versa.

### **3.8.2 Chi-square test**

For examining the primary data, chi-square test has been done for testing the significance of an observed and expected opinion of the respondents and for the purpose, following hypotheses are formulated:



**Hypothesis – 1**

Test of significance of relationship between observed and expected opinion regarding the knowledge about IPO.

**Null Hypothesis (Ho):** There is no significant relationship between observed and expected opinion regarding the knowledge about IPO.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the knowledge about IPO.

**Hypothesis – 2**

Test of significance of relationship between observed and expected opinion regarding the willingness/ interest to invest in IPO.

**Null Hypothesis (Ho):** There is no significant relationship between observed and expected opinion regarding the willingness/interest to invest in IPO.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the willingness/interest to invest in IPO.

**Hypothesis – 3**

Test of significance of relationship between observed and expected opinion regarding the sources of information about the IPO.

**Null Hypothesis (Ho):** There is no significant relationship between observed and

expected opinion regarding the sources of information about the IPO.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the sources of information about the IPO.

#### **Hypothesis – 4**

Test of significance of relationship between observed and expected opinion regarding the investors' preference while investing.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the investors' preference while investing.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the investors' preference while investing.

### **Hypothesis – 5**

Test of significance of relationship between observed and expected opinion regarding the number of Companies Invested by the respondents.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the number of Companies Invested by the respondents.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the number of Companies Invested by the respondents

### **Hypothesis – 6**

Test of significance of relationship between observed and expected opinion regarding the **fund**

Used for the Investment.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the fund Used for the Investment.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and

expected opinion regarding the fund Used for the Investment.

### **Hypothesis – 7**

Test of significance of relationship between observed and expected opinion regarding the

Funding via Financial Institution Regulation.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the Funding via Financial Institution Regulation.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the Funding via Financial Institution Regulation.

**Hypothesis – 8**

Test of significance of relationship between observed and expected opinion regarding the expectation behind Investment in IPO.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the expectation behind Investment in IPO.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the expectation behind Investment in IPO.

**Hypothesis – 9**

Test of significance of relationship between observed and expected opinion regarding the Sector

Preference for Investment.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the Sector Preference for Investment.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the Sector Preference for Investment.

**Hypothesis – 10**

Test of significance of relationship between observed and expected opinion

regarding the preferred Financial Sector.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the preferred Financial Sector.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the preferred Financial Sector.

### **Hypothesis – 11**

Test of significance of relationship between observed and expected opinion regarding the preferred Non Financial- Sector.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the preferred Non Financial- Sector.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the preferred Non Financial- Sector.

### **Hypothesis – 12**

Test of significance of relationship between observed and expected opinion regarding the ultimate

Goal for Investment.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the ultimate Goal for Investment.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the ultimate Goal for Investment.

### **Hypothesis – 13**

Test of significance of relationship between observed and expected opinion regarding the basis for Distribution of Shares.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the basis for Distribution of Shares.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and

expected opinion regarding the basis for Distribution of Shares.

#### **Hypothesis – 14**

Test of significance of relationship between observed and expected opinion regarding the **reason for not going Public**.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the reason for not going Public.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the reason for not going Public.



## Hypothesis – 15

Test of significance of relationship between observed and expected opinion regarding the reason for limited people investment.

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between observed and expected opinion regarding the reason for limited people investment.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant relationship between observed and expected opinion regarding the reason for limited people investment.

While examining the hypothesis by the Chi-square test, the expected frequencies are calculated by applying the formula;

$$E = \frac{\sum O}{N}$$

And the calculated values of  $\chi^2$  were calculated by using the following formula,

$$\chi^2 =$$

$$\sum \frac{(O - E)^2}{E}$$

Where, O = Observed frequency

E = Expected frequency

Decision: If tabulated value of  $\chi^2$  is greater than the calculated value, Null hypothesis is accepted and vice versa.

**CHAPTE**  
**R - IV**

**DATA PRESENTATION AND ANALYSIS**

This chapter deals with data presentation, analysis and interpretation following the research methodology presented in the third chapter. Data presentation and analysis are the central steps of the study. The main purpose of this chapter is to analyze and elucidate the collected data to achieve the objective of the study following the conversion of unprocessed data to an understandable presentation. The chapter deals with the main body of the study.

**4.1 Data Presentation**

**Analysis**

Data presentation is the method of exhibiting them into tables and figures. Data analysis summarizes the collected data and its interpretation attempts to find the meaning and implication of results of data analysis. Analysis is not complete without interpretation and interpretation cannot proceed without analysis. In this course of analysis, data gathered from various sources have been inserted in the tabular form and shown in diagram form. The data have been analyzed by using financial and statistical tools. The results of the computation have also been summarized in appropriated tables. The samples of computation of each model have been included in annexes. This chapter includes presentation of data and analysis of that data to reach at a conclusion. The primary data are used to analyze the investor awareness, response, expectation, choice for investment etc. The secondary data are use to analyze the investor response to the initial investor offering per year and sector wise along with under subscription and oversubscription, growth of public offering and the behavior of general investors.

Following methods are used to analysis  
the data:

- Chi-Square Model of Hypothesis
- Correlation coefficient for hypothesis testing (t-test)

Collected data have been also analyzed taking resort to other basic statistical tools;  
percentage, simple average.

## **4.2 Analysis of Secondary Data**

The study attempts to analyze the secondary data collected from the annual reports of SEBON, websites of SEBON and NEPSE.

### **4.2.1 Growth of Initial Public Offering**

Significant growth can be witnessed for the Initial Public Offering of Nepalese securities market. In the FY 1993/94 the Initial Public Offering was only Rs. 244.40 million with only 16 issues approved, it reached to 64 issues approved amounting to Rs. 16828.51 million in the FY 2008/09.

#### **4.2.1.1 Amount of Issue Approved**

As per the provision of the Securities Exchange Act, 1983, it is mandatory that the issuing company should register the securities in SEBON and get issue approval before going to public. From the fiscal year 1993/94 to 2008/09 SEBO/N has approved 260 issues of securities amounting to Rs. 39,389.90 million. The details are as follows:

**Table****4.1****Amount of Issue****Approved**

(Rs. in millions)

Year	Amount of Issue Approved	% of Issue Approved
1993/94	244.40	0.62
1994/95	173.96	0.44
1995/96	293.74	0.75
1996/97	332.20	0.84
1997/98	462.36	1.17
1998/99	258.00	0.65
1999/00	326.86	0.83
2000/01	410.49	1.04
2001/02	1441.33	3.66
2002/03	556.54	1.41
2003/04	1027.50	2.61
2004/05	1626.82	4.13

2005/06	2443.28	6.20
2006/07	2295.5	5.83
2007/08	10668.20	27.08
2008/09	16828.51	42.72
Total	39,389.90	100.00

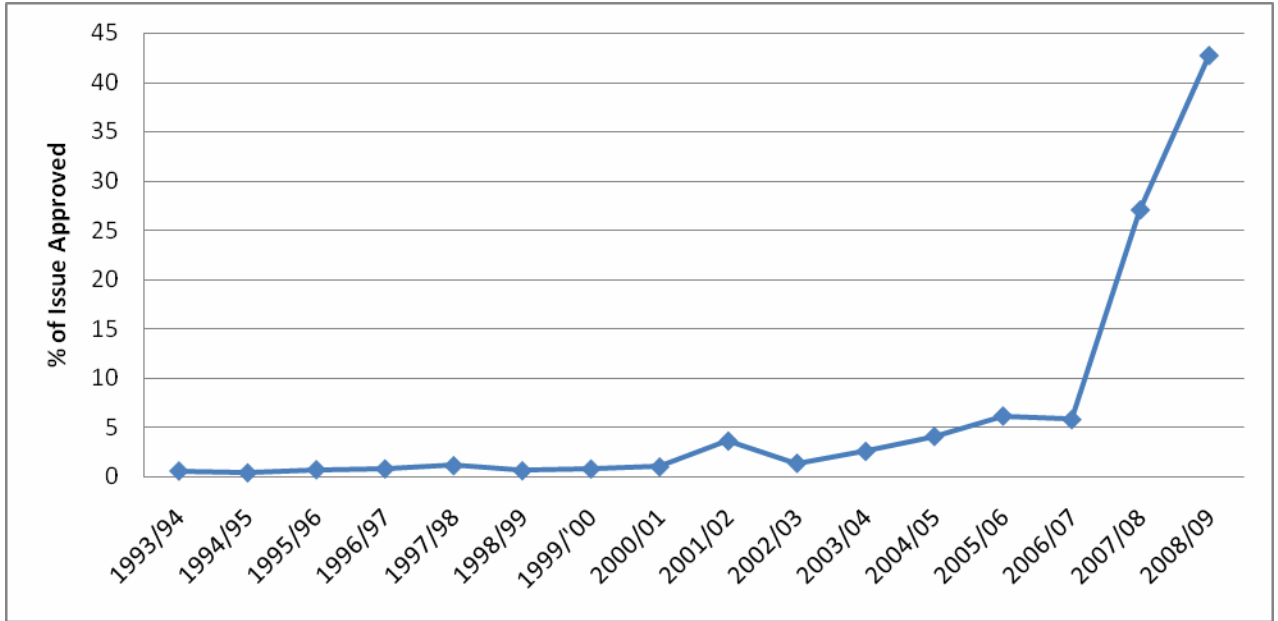
*Source: SEBON Annual Report (2008/09)*

Table 4.1 shows the variation of issue amount approved during 1993/94 to 2008/09 period. The highest amount approved is Rs.16,828.51 million (42.72%) in the fiscal year 2008/09 and the lowest amount approved is Rs.173.96 million (0.44) in the fiscal year 1994/95. During the period issue amount approved reaches at a high point in 2001/02 then declines and again started rising then after.

**F  
i  
g  
u  
r  
e  
4  
.  
1**

**Amount of Issue  
Approved**





In the Figure 4.1 the peak point is in the year 2008/09, which shows that the highest amount of issue approved in that year which is 42.72%. And the lowest point is in the year 1994/95 in which only 0.44% of total issue approved was issued.

#### 4.2.1.2 Number of Issue Approved

Table 4.2 shows the number of issue approved during the period 1993 to 2008/09.

**Table  
4.2**

**Number of Issue Approved**

Year	Number of Issue Approved	% of Issue Approved
1993/94	16	4.94
1994/95	10	3.09
1995/96	12	3.70
1996/97	5	1.54
1997/98	12	3.70
1998/99	5	1.54
1999/00	6	1.85
2000/01	9	2.78
2001/02	12	3.70
2002/03	18	5.56
2003/04	14	4.32
2004/05	14	4.32
2005/06	29	8.95
2006/07	34	10.49
2007/08	64	19.75

2008/09	64	19.75
Total	324	100.00

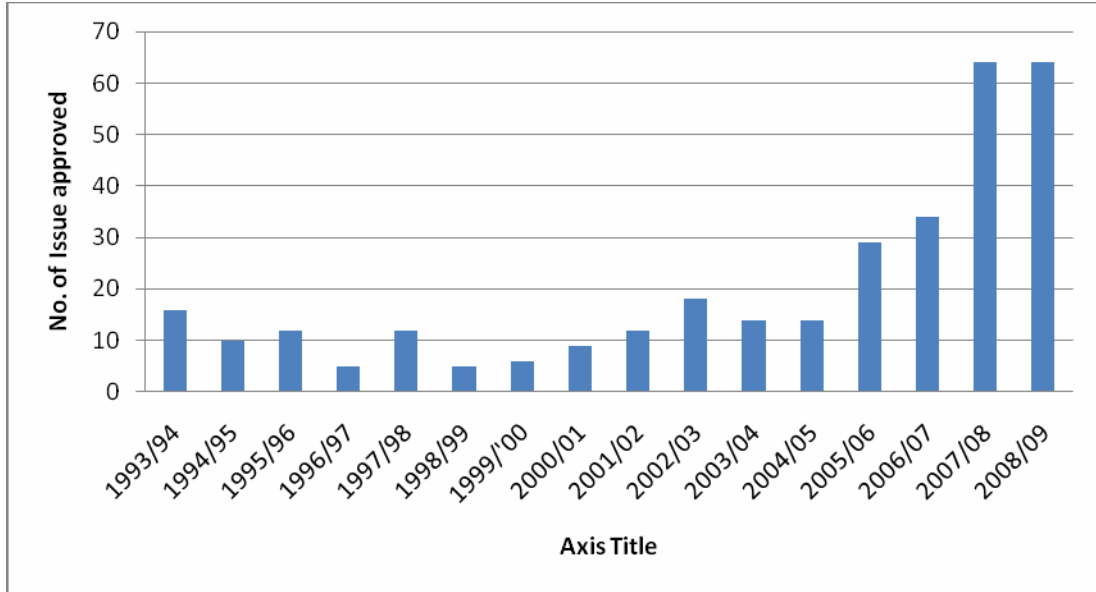
*Source: SEBON Annual Report (2008/2009)*

Table 4.2 shows that from 1993/94 to 2008/09 SEBON has approved 324 issues in total. Among which highest number of issue approved were in the year 2007/08 and 2008/09, 64 issues approved (19.72%) in both the years, whereas the lowest issue approved was in the year 1996/97 and 1998/1999. Simultaneously 16 (4.94%) issues were approved in 1993/94, 10 issues (3.09%) in 1994/95, 12 issues (3.70%) in 1995/96 and in 1997/98, 6 issues (1.85%) in 1999/2000, 9 issues (2.78%) in 2000/01, 12 issues (3.70%) in 2001.02, 18 issues (5.56%) in 2002/03, 14 issues (4.32%) in 2003/2004 and in 2004/05, 29 issues (8.95%) in 2005/06, 34 issues(10.49%) in

2  
0  
0  
6  
/  
0  
7  
.

**Fi  
g  
u  
re  
4.  
2**

**Number of Issue Approved**



In the Figure 4.2, highest number of issue approved is 64 number of issues in the year 2007/08 and 2008/09 , whereas the lowest number of issue approved is only 5 issues in the year 1996/97 and 1998/99.

#### **4.2.2 Over and Under Subscription of Securities**

The demand for securities may be greater or lesser than the issuing amount. When the demand is greater that is over subscription and when lesser that is under subscription.

**T  
a  
b  
l  
e  
4.  
3**

**Over And Under Subscription of Securities**

Year	No. of Issue	Over Subscribed		Under Subscribed		Constant	
		No.	%	No.	%	No.	%
1993/94	16	16	100	0	0	0	0
1994/95	10	7	70	1	10	2	20
1995/96	12	6	50	6	50	0	0
1996/97	5	2	40	0	0	3	60
1997/98	12	5	41.67	5	41.67	2	16.67
1998/99	5	3	60	1	20	1	20
1999/00	6	4	66.67	1	16.67	1	16.67
2000/01	9	8	88.89	1	11.11	0	0
2001/02	12	5	41.67	4	33.33	3	25
2002/03	18	14	77.78	3	16.67	1	5.55
2003/04	14	12	85.71	2	14.29	0	0

2004/05	14	6	42.86	7	50	1	7.14
2005/06	29	17	58.62	10	34.48	2	6.90
2006/07	34	16	47.05	14	41.17	4	11.76
2007/08	64	24	37.5	32	50	8	12.5
Total	260	145		87		28	

*Source: SEBON Annual Report (2008/2009)*

Table 4.3 shows that from the 260 issues between 1993/94 to 2007/08, most of the issues are over subscribed. And only 87 times it is under subscribed. In the year 1993/94, it is over subscribed all the 16 issues (i.e.100%) over subscription.

### 4.2.3 Performance of the Issue

#### Managers

T  
a  
b  
l  
e  
4  
.  
4

#### Number and amount of Issue Managed by Issue Managers

S.N	Issue Managers	Issue Management (2008/09)			
		No. of Issue Managed	%	Amount of Issue Managed	%
1					
2					
3					



4					
5					
6					
7					
8					
<b>TOTAL</b>		64	100	16,828.51	100

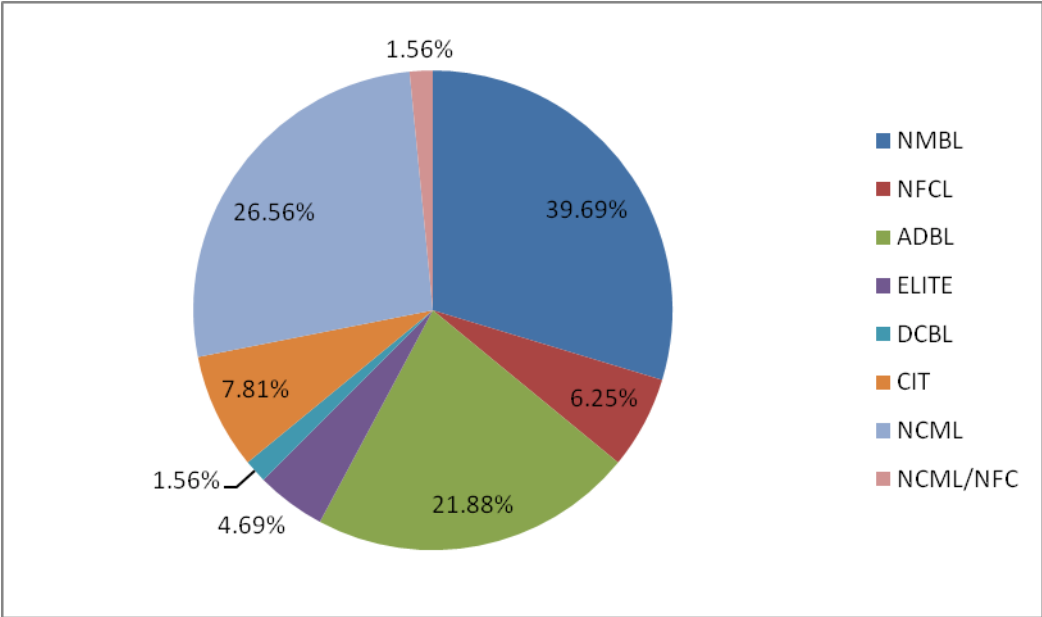
*Annual Report of SEBON (2008/09)*

In the year 2008/09, among the 17 issue managers only seven have managed the issue. And even among them, highest number of issue managed is by NMBL i.e. 19 issues (29.69%) and second

highest is by NCML i.e. 17 issues (26.56%). In terms of amount of issue managed, highest amount of issue managed by NCML (34.53%) and then NMBL (26.81%) respectively. Number wise lowest issue is managed by DCBL i.e. only one issue (1.56%) ,while amount wise NFCL has the lowest amount of issue managed (0.92%). One issue is jointly managed by NCML AND NFC, amounting to 80 million (0.48%).

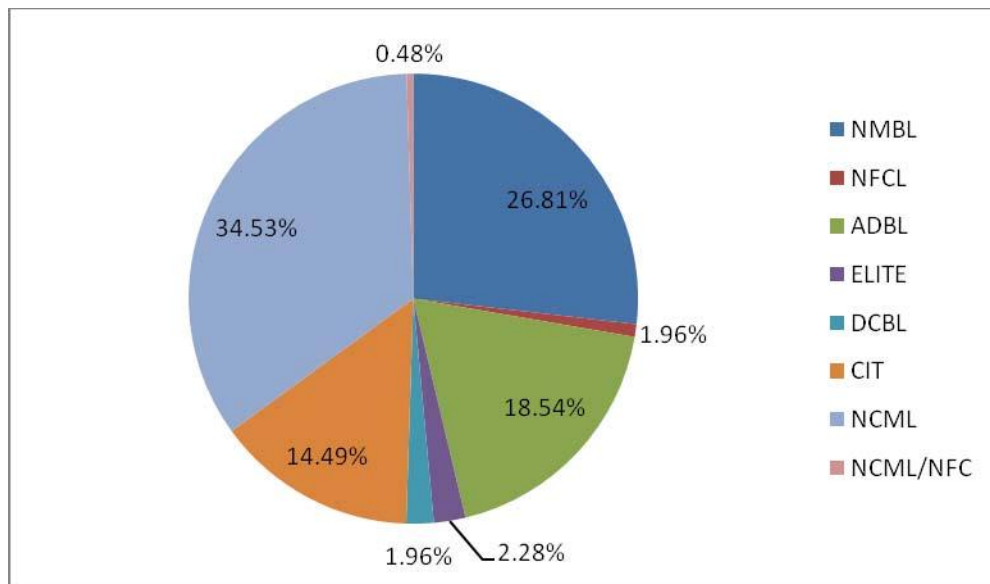
**Fi  
g  
u  
re  
4.  
3**

**Number of Issue  
Managed**



**Fi  
g  
u  
r  
e  
4.  
4**

**Amount of Issue  
Managed**



In the Figures 4.3 and 4.4 highest numbers of issues and amount is managed by NMBL & NCML. At the same time lowest number of issue managed is shown by the smallest part covered in the pie by DCBLL and lowest amount of issue managed by

NFCL.

#### **4.2.4 Investor Response to IPO**

##### **4.2.4.1 Financial Sector**

Financial Sector includes commercial bank, development banks, finance companies and insurance companies.

##### **4.2.4.1.1 Investor Response to Commercial Banks**

Out of the total population of listed banks only 6 are taken as sample.

**T  
a  
b  
l  
e  
  
4  
.  
5**

**Investor Response to Commercial Banks**

S. No.	Name of Company	Share Issued (‘000)	Applied	Year	Subscription times	Result
1.	LUBL	1500	10818600	2004	7.21	Over Subs.
2.	SBL	1500	27979950	2005	18.65	Over subs.
3.	GBL	3000	102750000	2008	34.25	Over Subs.
4.	CBIL	3000	62940000	2009	20.98	Over Subs.
5.	BOA	3000	56700000	2009	18.90	Over subs.

6.	PCBL	3000	89550000	2009	29.85	Over Subs
----	------	------	----------	------	-------	--------------

*Source: SEBON Annual*

*Report 2008/09*

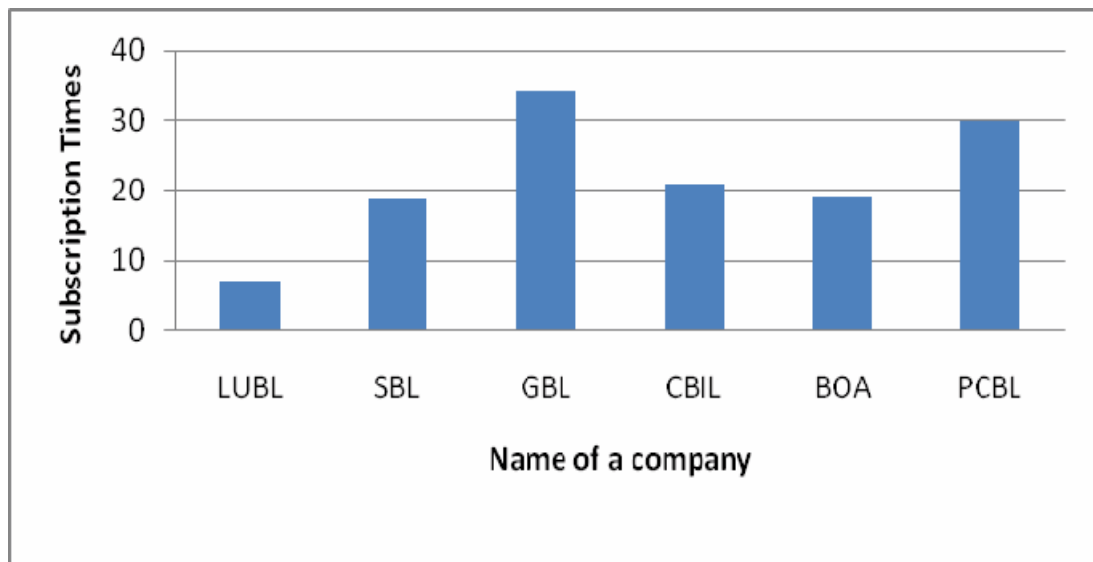
Table 4.5 shows the issued shares of commercial bank along with applied shares. In all the six cases, it is witnessed that applied number of shares is higher than the issued one, i.e. all the issues are over subscribed. Over subscription ranges between 34.25 to 7.21 times. For the 3000000 shares issued by Global Bank Ltd. 102750000 shares have been applied that means it was over subscribed 34.25 times. Similarly 29.85 times subscription in the case of Prime Commercial Bank Ltd., 20.98 times in the case of Citizens Bank International Ltd., 18.90 times in the case of Bank of Asia., 18.65 times in the case of Siddhartha Bank Ltd., 7.21 times in Lumbini Bank Ltd.'s case.

From the above it is clear that commercial banks share issues are getting good response from

Investor. Investor found to be interested in shares of Commercial Banks.

**F  
i  
g  
u  
r  
e  
4.  
5**

**Investor response to  
Commercial Banks**



In the Figure 4.5 it is clear that highest subscription was in the case of GBL with highest bar while the lowest bar shows that LUBL was least subscribed.

#### **4.2.4.1.2 Investor Response to Development Bank**

Among the 23 listed development banks, only 6 are taken as sample.

**T  
a  
b  
l  
e  
4  
·  
6**

**Investor Response to  
Development Bank**

S.No	Name of Bank	Shares Issued	Shares Applied	Issued Year	Subscription times	Result
1.	SBB	60000	5773800	2007	96.23	Oversubs.
2.	GDBL	960000	103987200	2007	108.32	Oversubs.
3.	HBBL	120000	16034400	2007	133.62	Oversubs.
4.	MBB	150000	8226000	2007	54.84	Oversubs.
5.	VBBL	2652000	19041360	2009	7.18	Oversubs.
6.	PDBL	600000	16956000	2009	28.26	Oversubs.

*Source: SEBON Annual Report 2008/09*



In all the case above, investors' response to the share issue of development banks end up in oversubscription. It does indicate that investors are also highly attracted to invest in the shares of development banks. Among them Himchuli Bikas Bank Ltd (HBBL) was highly subscribed in 2007, the Subscription time was 133.62. For the share issued 120,000, there was application for

16034400 shares. Similarly Swabalamban Bikash Bank Ltd (SBBL) was over-subscribed by

96.23 times, Gorkha Development Bank Ltd (GDBL) by 108.32 times, Malika Bikas Bank Ltd

(MBBL) was over-subscribed by 54.84 times, Public Development Bank Ltd (PBBL) Ltd. by

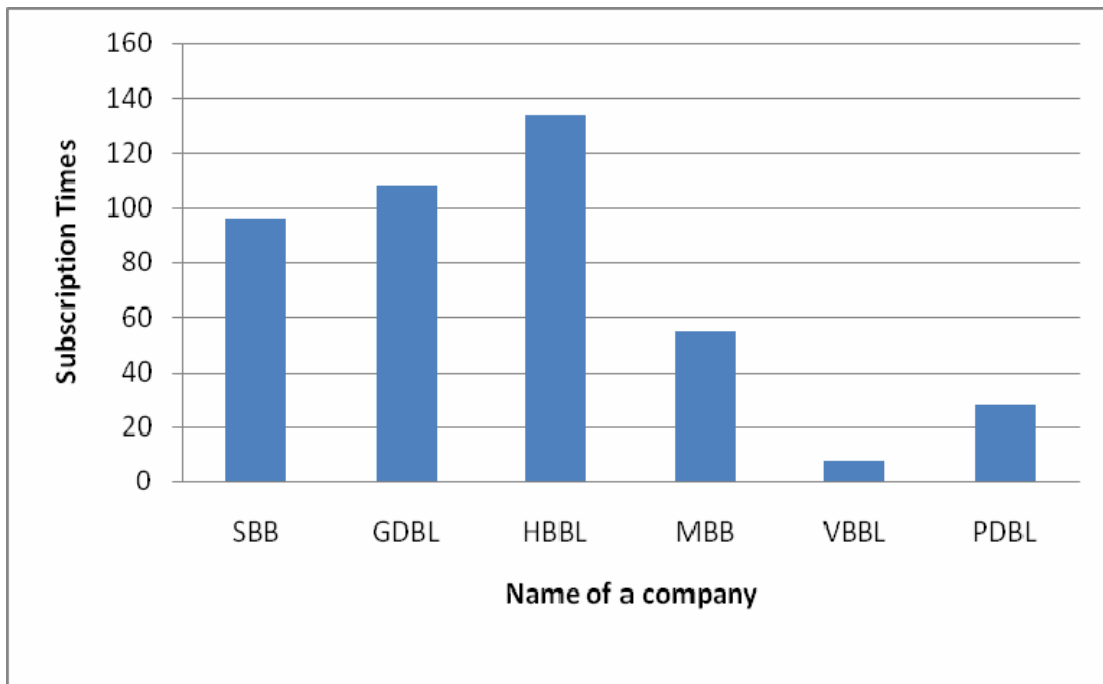
28.26 times and the least subscribed but still over-subscribed was in the case of Vibor Bikas Bank

Ltd (VBBL) Ltd. by 7.18 times. The average subscription time is 71.41.

**F  
i  
g  
u  
r  
e  
  
4**

6

### Investor Response to Development Bank



The Figure 4.6 shows that among development banks highest Subscription was in the case of

HBBL with highest bar and lowest in the case of VBBL with lowest bar.

#### **4.2.4.1.3 Investor Response to Finance Companies**

There are altogether 58 listed finance companies from which 6 are taken for research investor response.

**T  
a  
b  
l  
e  
4  
.7**

**Investor Response to Finance Companies**

S.No	Name of Company	Shares Issued	Shares Applied	Issued Year	Subscription times	Result
1.	ICFC-FI	244000	8554640	2007	35.06	Oversubs.
2.	EFI	195000	5007600	2007	25.68	Oversubs.
3.	SBSL	200000	5342000	2008	26.71	Oversubs.
4.	KFL	200000	4383000	2008	21.93	Oversubs.
5.	AFL	180000	4723200	2009	26.24	Oversubs.
6.	CFL	210000	6522600	2009	31.06	Oversubs.

*Source: SEBON Annual*

*Report 2008/09*

In all the investor Response to Finance Companies we found over Subscription all the time. That means Investors are also interested in Finance Companies shares. Highest over Subscription of

35.06 times is in the case of ICFC Financial Institution (ICFC-FI). Where 8554640 shares are applied for only 244000 shares issued. It is explicit from the table above that public oversubscribed shares of Emporial Financial Institution (EFI) by 25.68, oversubscribed shares of Sikhar Bittiya Sansthan Ltd.(SBSL) by 26.71 times, 21.93 times oversubscription is witnessed in the case of Kaski Finance Ltd.(KFL). The year 2009 also witnessed the oversubscription of shares of Api Finance Ltd.(AFL) and Crystal Finance Ltd.(CFL) by 26.24 and 31.06 times respectively. The average subscription time is 27.78 times. This all shows those investors are interested in shares of finance companies.

**F  
i  
g  
u  
r  
e  
4  
.  
7**

**Investor Response to Finance Companies**

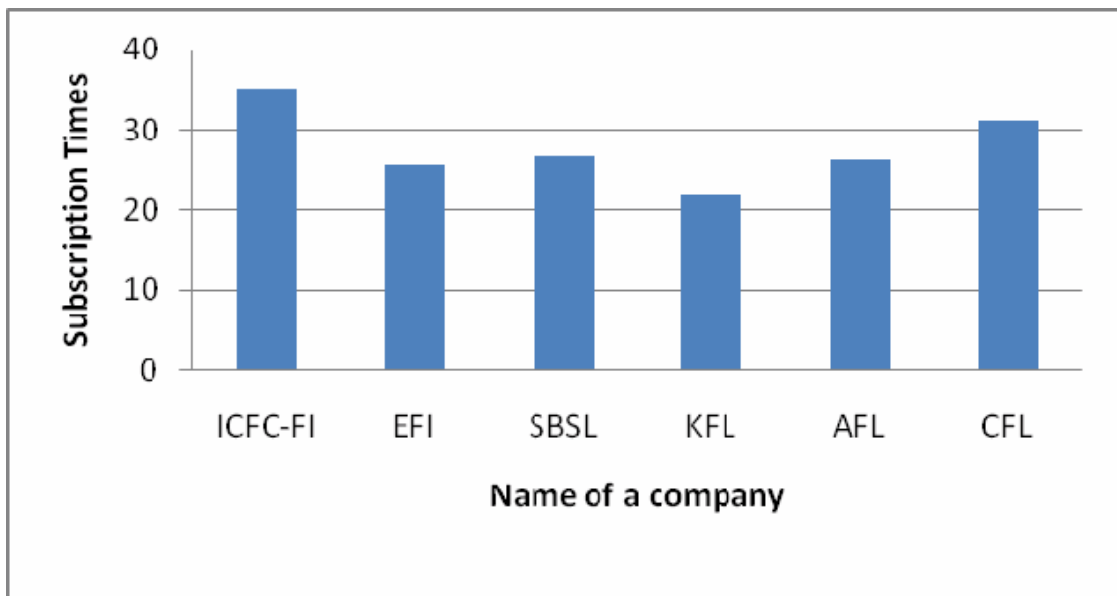


Figure 4.7 clearly shows that ICFC-FL was highly subscribed while KFL was least subscribed. However no company was under subscribed.

**4.2.4.1.4 Investor Response to Insurance Companies**

For the research only 5 companies are taken from the population of 18.

**T  
a  
b  
l  
e  
  
4  
.  
8**

### **Investor Response to Insurance Companies**

S.No.	Name of Company	Shares Issued	Shares Applied	Issued Year	Subscription times	Result
1.	NBICL	200000	265380	2003	1.33	Oversubs.
2.	PICL	200000	1913620	2004	9.57	Oversubs.
3.	SICL	250000	10939650	2006	43.76	Oversubs.
4.	LGICL	250000	17932500	2007	71.73	Oversubs.
5.	SIL	250000	15157500	2007	60.63	Oversubs.

*Source : SEBON Annual Report 2008/09*

**Figure 4.8**

**Investor Response to Insurance Companies**

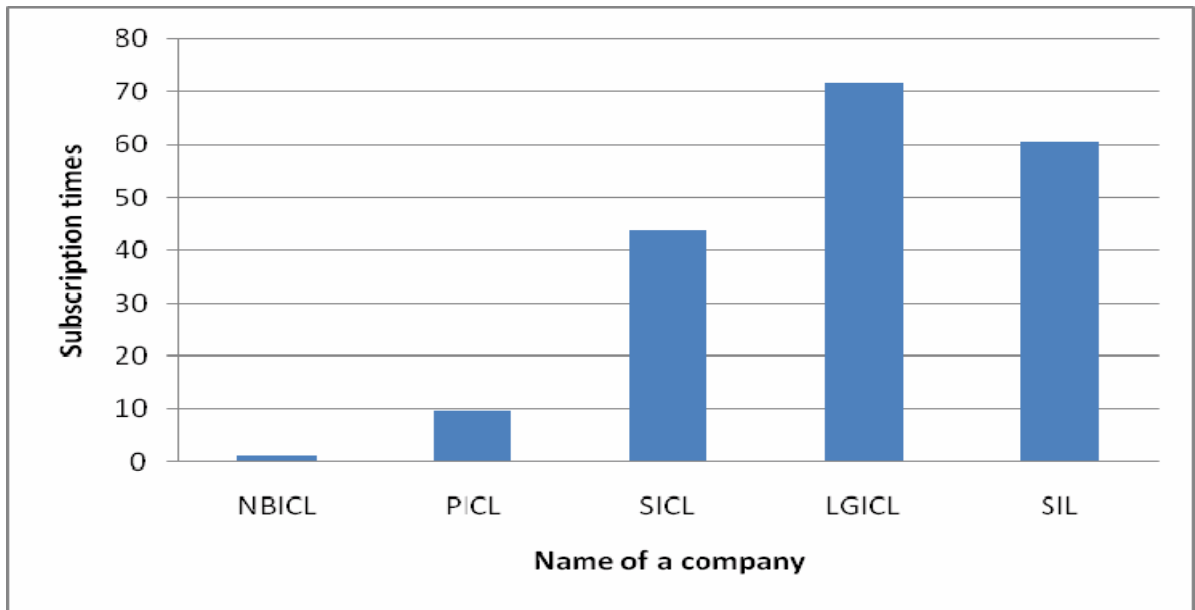


Table and Figure 4.8 shows the investor response to insurance companies ranges from 1.33

Subscription times to 71 times. Of 200,000 shares issued, the public oversubscribed by 1.33 times in the case of NB Insurance Co. Ltd (NBICL); in Prudential Insurance Co. Ltd.(PICL) 9.57 times oversubscription, public ended up oversubscribing shares of Shikhar Insurance Co. Ltd and Siddhartha Insurance Ltd by 43.76 times and 60.63 times. Public responded overwhelmingly with the highest Subscription of 71.73 times to the shares of Lumbini General Insurance Company Ltd. (LCICL) where 17932500 shares have been applied for 250000 shares issued.

All this clearly indicates that people are highly attracted to invest in Insurance Companies and they are also a good option to invest.



**4.2.4.2 Non- Financial Sector Investor Response to Insurance Companies**

**Figure 4.8**

Non-Financial Sector includes Manufacturing & Processing Companies, Trading Companies, Hotels and others. Up to the fiscal year 2007/08, there are 47 non-financial sector companies listed. From those here 9 are taken as sample.

**T  
a  
b  
l  
e  
  
4  
.  
9**

**Investor Response to Non-financial Sector**

S.	Name of Company	Issued Shares	Applied Shares	Issued Year	Subscription times	Investor Response
1.	BSL	50000	197150	1994	3.94	Over subs.
2.	HTIL	192000	301152	1994	1.57	Over subs.
3.	BPPNL	1050000	1101135	1996	1.05	Over subs.
4.	SSML	465000	245985	1997	0.53	Under subs.
5.	TRHL	1200000	2965440	1999	2.47	Over subs.
6.	OHL	1500000	9429000	2000	6.29	Over subs.
7.	HDL	17344600	183347	2001	0.11	Under subs.
8.	NHCL	1400000	301700	2004	0.22	Under subs.
9.	CHCL	2374100	12104112	2005	5.10	Over subs.

Source: SEBON Annual

*Report 2008/09*

From Table 4.9 it found the Subscription of three companies to be under-subscribed and rest 6 companies to be over-subscribed. And at the same time over-Subscription ranges from 1.05 to

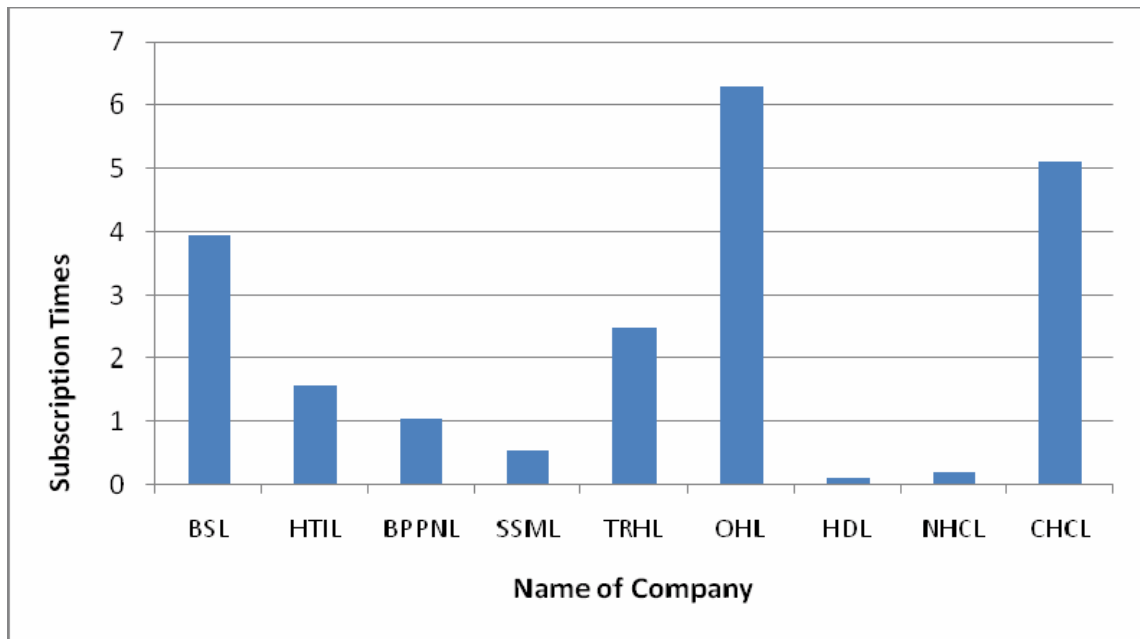
6.29 only which is seen to be lower than other financial sectors response. Investor is use of Shreeram Sugar Mills Ltd., Himalayan Distillery Ltd. & National Hydropower Co. Ltd., have the Subscription of 0.53, 0.11 and 0.22 times respectively. Oriental Hotels has high Subscription of

6.29 times. Birat Shoe Ltd., Himgiri Textile Industries Ltd., Brikuti Pulp & Paper Nepal Ltd., Taragaon Regency Hotels Ltd. and Chilime Hydro Power Co. Ltd. have Subscription of 3.94,

1.57, 1.05, 2.47 & 5.10 times respectively.

**Figure 4.9**

**Investor Response to Non-financial Companies**



From Figure 4.9 it is clear that OHL was highly subscribed with 6.29 times Subscription while Himalayan Distillery Ltd was least subscribed with 0.11 times among the non financial companies.

#### 4.2.5 Hypothesis testing (student's t-test)

1) **t test for the significance of an observed sample correlation coefficient between banks and non financial sector.**

Null hypothesis:  $H_0: \rho > 0$  i.e. there is positive correlation in the population or the variables are positively correlated.

Alternative hypothesis:  $H_1: \rho < 0$  i.e. there is negative correlation in the population or the variables are negatively correlated.

Test statistic: Under  $H_0$ , the test statistic is

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} \quad \square \quad t_{n-2}$$

$$t = \frac{0.828437}{\sqrt{1-(0.828437)^2}} \times \sqrt{6-2}$$

$$t=2.9582$$

Follows t-distribution with (n-2) degree of freedom i.e. 4

Where, r = sample correlation coefficient.

n = sample size (pairs)

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

Critical value: tabulated or critical value of t at 5% level of significance for 4 degree of freedom in a one tailed test is 2.132.

Decision: Since the Calculated value of | t | is greater than the tabulated t, the null hypothesis is rejected.

2) **t test for the significance of an observed sample correlation coefficient between Development banks and non financial sector.**

Null hypothesis:  $H_0: \rho > 0$  i.e. there is positive correlation in the population or the variables are positively correlated.

Alternative hypothesis:  $H_1: \rho < 0$  i.e. there is negative correlation in the population or the variables are negatively correlated.

Test statistic: Under  $H_0$ , the test statistic is

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} \quad \square \quad t_{n-2}$$

$$t = \frac{0.393737}{\sqrt{1-(0.393737)^2}} \times \sqrt{6-2}$$

$$t=0.8566$$

Follows t-distribution with (n-2) degree of freedom i.e. 4

Where, r = sample correlation coefficient.

n = sample size (pairs)

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

Critical value: tabulated or critical value of t at 5% level of significance for 4 degree of freedom in a one tailed test is 2.132.

Decision: Since the Calculated value of | t | is smaller than the tabulated t, the null hypothesis is accepted.

### **3) t test for the significance of an observed sample correlation coefficient between Finance companies and non financial sector.**

Null hypothesis:  $H_0: \rho > 0$  i.e. there is positive correlation in the population or the variables are positively correlated.

Alternative hypothesis:  $H_1: \rho < 0$  i.e. there is negative correlation in the population or the variables are negatively correlated.

Test statistic: Under  $H_0$ , the test statistic is

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} \quad \square \quad t_{n-2}$$

$$t = \frac{0.124657}{\sqrt{1-(0.124657)^2}} \times \sqrt{6-2}$$

$$t=0.2512$$

Follows t-distribution with (n-2) degree of freedom i.e. 4

Where, r = sample correlation coefficient.

n = sample size (pairs)

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

Critical value: tabulated or critical value of t at 5% level of significance for 4 degree of freedom in a one tailed test is 2.132.

Decision: Since the Calculated value of | t | is smaller than the tabulated t, the null hypothesis is accepted.

**4) t test for the significance of an observed sample correlation coefficient between Insurance companies and non financial sector.**

Null hypothesis:  $H_0: \rho < 0$  i.e. there is positive correlation in the population or the variables are positively correlated.

Alternative hypothesis:  $H_1: \rho < 0$  i.e. there is negative correlation in the population or the variables are negatively correlated.

Test statistic: Under  $H_0$ , the test statistic is

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2} \quad \square \quad t_{n-2}$$

$$t = \frac{-0.3958}{\sqrt{1-(-0.3958)^2}} \times \sqrt{6-2}$$

$$t = -0.862$$

$$|t| = 0.862$$

Follows t-distribution with (n-2) degree of freedom i.e. 3

Where, r = sample correlation coefficient.

n = sample size (pairs)

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

Critical value: tabulated or critical value of t at 5% level of significance for 3 degree of freedom in a one tailed test is 2.353.

Decision: Since the Calculated value of | t | is smaller than the tabulated t, the null hypothesis is accepted.

**Table 4.10**  
Tabular form of the Result

<b>Null Hypothesis</b>	<b>Correlation coefficient(r)</b>	<b>Calculated Value of t</b>	<b>Tabulated value at 5% level of significance</b>	<b>Result</b>
1.H <sub>0</sub> : $\rho=0$	0.828437	2.9582	t   for 4 d.f.=2.132	<b>Rejected</b>
2. H <sub>0</sub> : $\rho=0$	0.393737	0.8566	t   for 4 d.f.=2.132	<b>Accepted</b>
3. H <sub>0</sub> : $\rho=0$	0.124657	0.2512	t   for 4 d.f.=2.132	<b>Accepted</b>
4. H <sub>0</sub> : $\rho=0$	-0.3958	0.862	t   for 3 d.f.=2.353	<b>Accepted</b>

### 4.3 Analysis of Primary

#### Data

Primary data are also taken to give more reliable outlook to the research. Questionnaire method is used to get the primary data, the result of which area as below. Only 150 respondents are taken for the data collection.



### 4.3.1 Knowledge about IPO

While getting information about if people had heard about IPO from 150 respondents 3.33% said they have never heard about IPO, 21.33% said seen in papers & books, 23.33% said that they have heard a little about it and rest 52% said that they are well-known about IPO.

**T  
a  
bl  
e  
4.  
11**

#### Knowledge about IPO

	Alternatives	No. of Respondents	Percentage (%)
a.	Never heard	5	3.33%
b.	Seen in paper & books	32	21.33%
c.	A little heard	35	23.33%
d.	Yes, of course	78	52%

	150	100%
--	-----	------

**(Survey conducted for the study, 2010)**

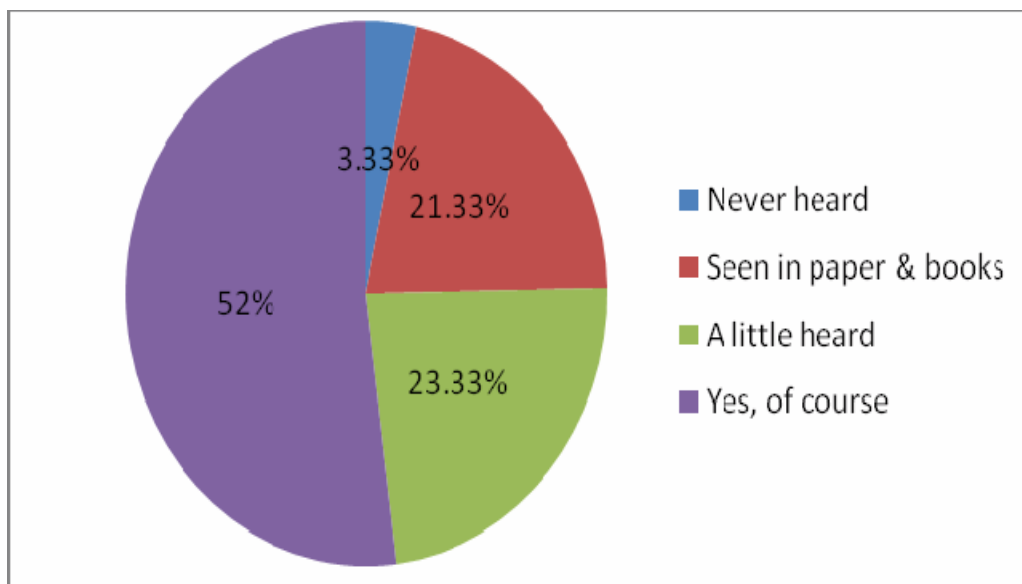
**Figure 4.10****Knowledge about IPO**

Figure 4.10 shows that most of the people i.e.52% is knowledge about IPO while least 3.33% are unknown about the IPO that means they never had heard about this.21.33% have seen about in papers and books while 23.33% have heard very little about IPO.

**4.3.2 Interest (Willingness) to invest in IPO**

Only 10 respondents (i.e.6.67%) are found to be risk averter, they do not want to take risk at all from investing in IPO. 18% stated they want to invest if had money (hard

cash). 52 respondents (34.67%) stated that their interest to invest depends upon the sector. Rest 40.66% stated that they are willing to invest in IPO even with the loan if not the hard cash.

**T  
a  
b  
l  
e  
4.  
12**

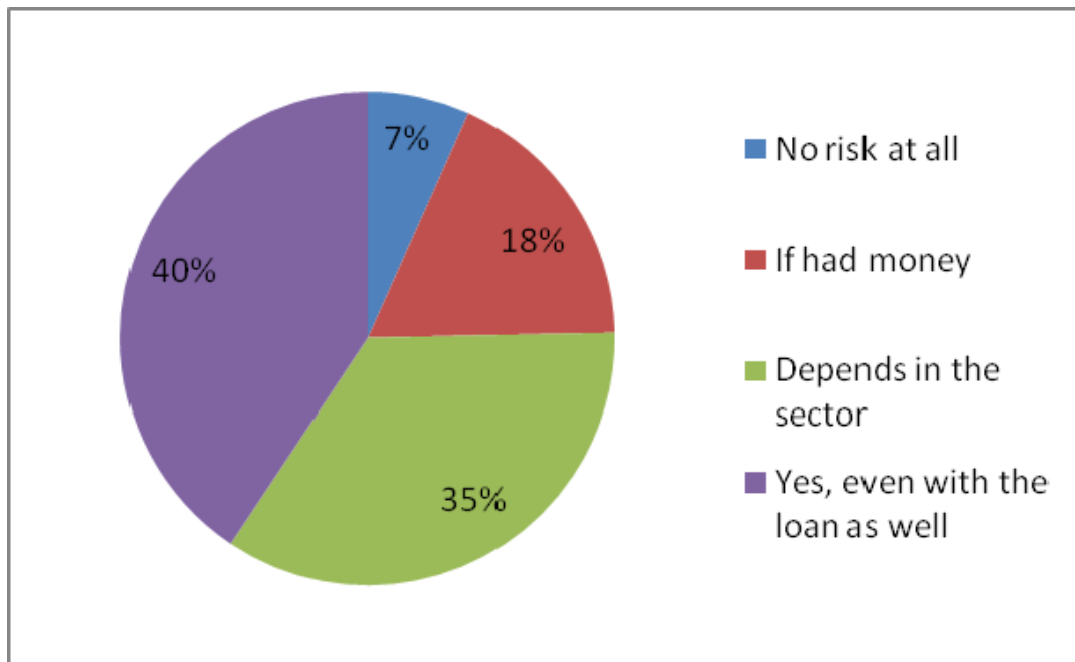
**Interest (Willingness) to invest in IPO**

	Alternatives	No. of Respondents	Percentage (%)
a.	No risk at all	10	6.67%
b.	If had money	27	18%
c.	Depends in the sector	52	34.67%
d.	Yes, even with the loan as well	61	40.66%
Total		150	100%

(Survey conducted for the study, 2010)

**Fig  
ur  
e  
4.1  
1**

### Interest (Willingness) to invest in IPO



From Figure 4.11 it is clear more than 40% people are interested to invest in IPO even with the loan and the least 6.67% do not want to take risk. Interest of 34.67% lies on the related sector of IPO. While 18% want to make only cash investment.

### 4.3.3 Source of Information about IPO

Out of 150 respondents, 41.33% said that they get information about IPO from Advertisements,

31.33% people said from personal relations or from market. Similarly 18% respondents said that they get information from. There are 9.33% people who find other way of getting information.

**T  
a  
bl  
e  
4.  
13**

#### **Source of Information about IPO**

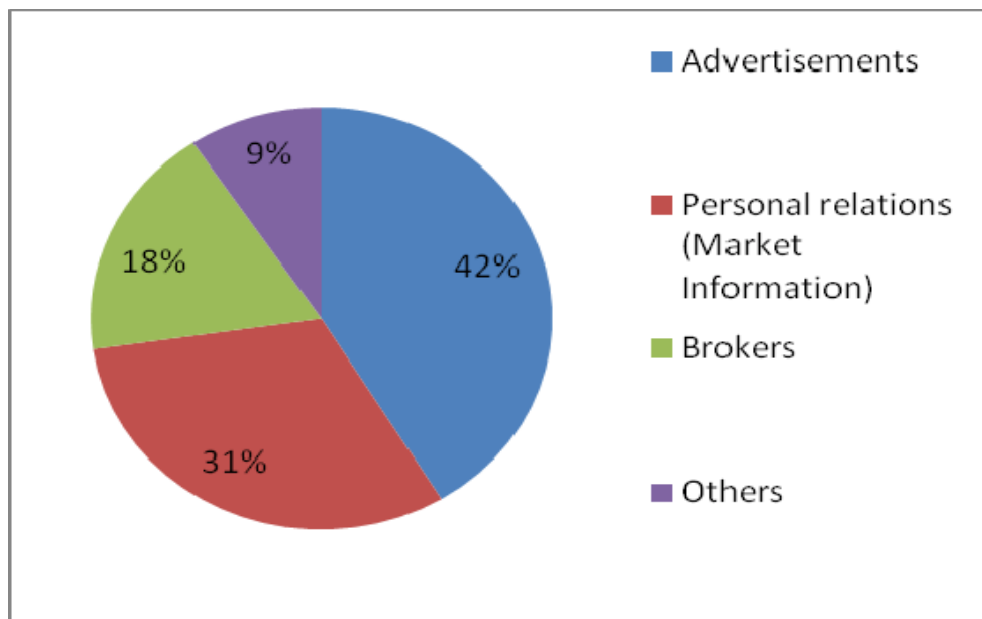
	Alternatives	No. of Respondents	Percentage (%)
a.	Advertisements	62	41.33%
b.	Personal relations (Market Information)	47	31.33%
c.	Brokers	27	18%

d.	Others	14	9.33%
Total		150	100%

(Survey conducted for the study, 2010)

**Fig  
ur  
e  
4.1  
2**

#### Source of Information about IPO





In the Figure 4.12 highest pie is covered by advertisements regarding the response on source of information i.e.41.33% and only 18% are informed by the brokers and 31.33% get information from their relatives.

#### **4.3.4 Investors Preference While Investing**

While asking about the things that come first in their mind, their preferences were totally different from each other. 14.67% people said they are interested to know promoters name first, 46.67% people give preference to the relative company's performance. 5.33% are sensitive about the brokerage commission whether it avails or not. Rest 33.33% first wants to know what the market says.

**T  
a  
bl  
e  
4.  
14**

#### **Investors Preference While Investing**

	Alternatives	No. of Respondents	Percentage (%)
a.	Promoters	22	14.67%
b.	Company's Performance	70	46.67%
c.	Brokerage Commission (avails or not)	118	5.33%

d.	Market Information	50	33.33%
Total		150	100%

**(Survey conducted for the study, 2010)**

Fi  
g  
u  
re  
4.  
1  
3

### Investors Preference While Investing

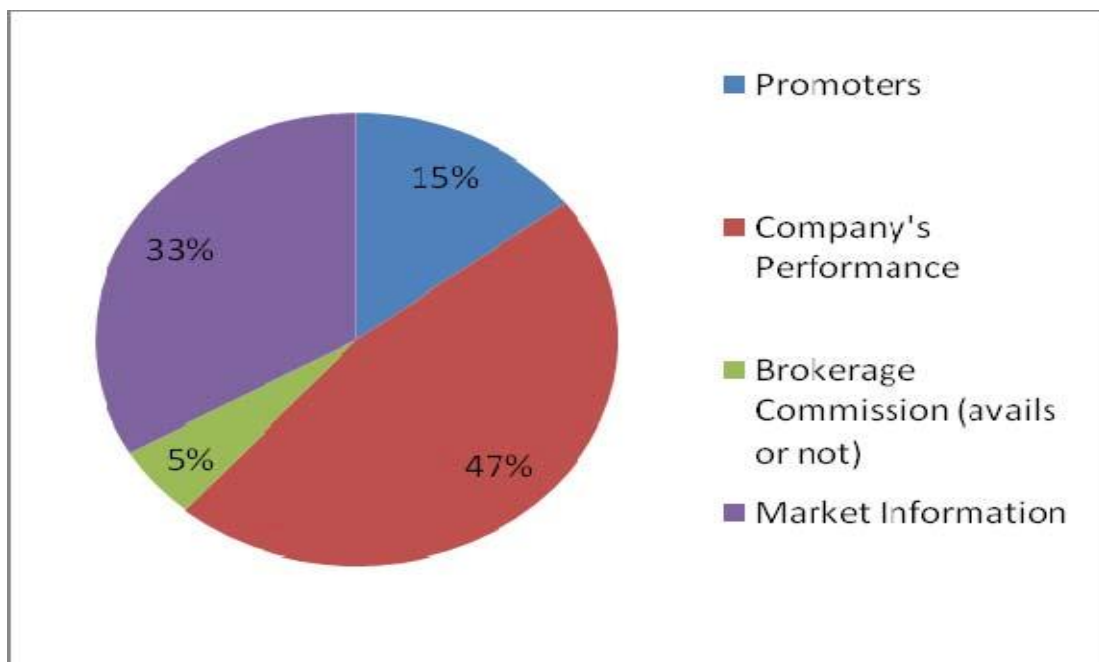


Figure 4.13 makes clear that most of the investors (46.67%) prefer to know about the company's performance rather than any other thing before investing and least (5.33%) concern about the brokerage commission.

#### 4.3.5 Number of

### **Companies Invested**

Out of 150 respondents 41.33% said that they have invested in only one company, 36.67% said two to three company, and 7.33 said that they have invested in more than three companies and 14.67% were found to invest in none of the organization.

**Table  
4.15**

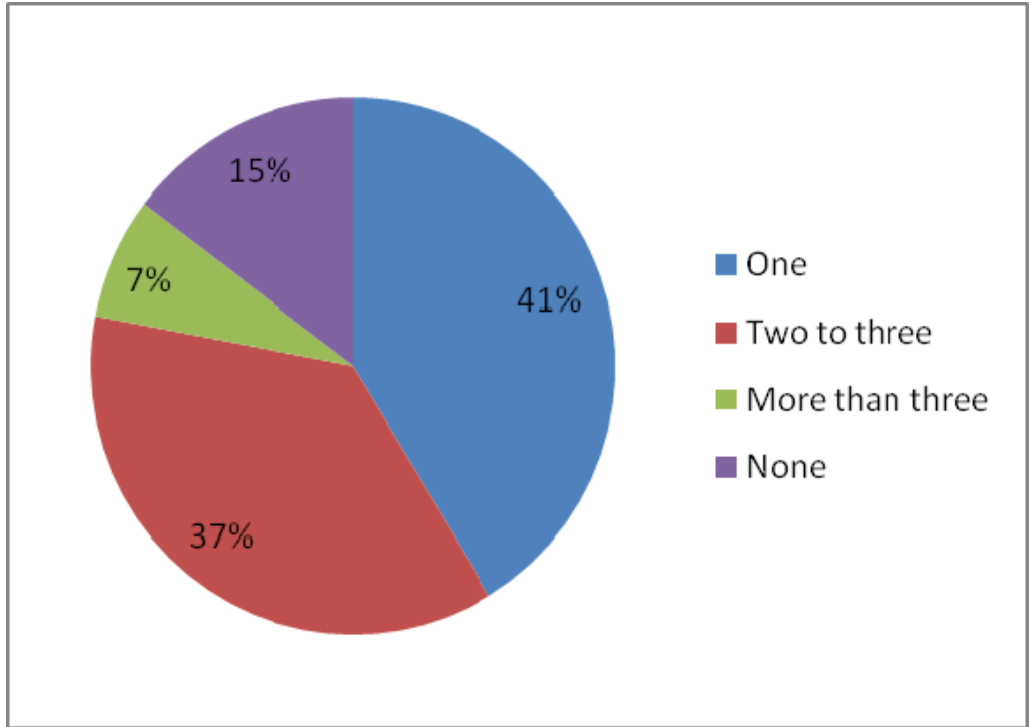
**Number of Companies Invested**

	Alternatives	No. of Respondents	Percentage%
a.	One	62	41.33%
b.	Two to three	55	36.67%
c.	More than three	11	7.33%
d.	None	22	14.67%
	Total	150	100%

**(Survey conducted for the study, 2010)**

**Figure  
4.14**

**Number of Companies Invested**



Being back in share investment in Nepal 7.33% has been found to have invested in more than three companies. Most (41.33%) have invested in only one company and 14.67% have invested in none.

#### **4.3.6 Fund Used for the Investment**

In the question of fund used in IPO investment, 92 respondents i.e. 65.33% answer personal fund while rest 34.67% answer loan/credit fund.

**T  
a  
bl  
e  
4.  
16**

#### **Fund Used for the Investment**

	Alternatives	No. of Respondents	Percentage (%)
a.	Personal Fund	98	65.33%
b.	Loan/Credit	52	34.67%
Total		150	100%

**(Survey conducted for the study, 2010)**

**Fig  
ur**

e  
4.1  
5

**Fund Used for the Investment**

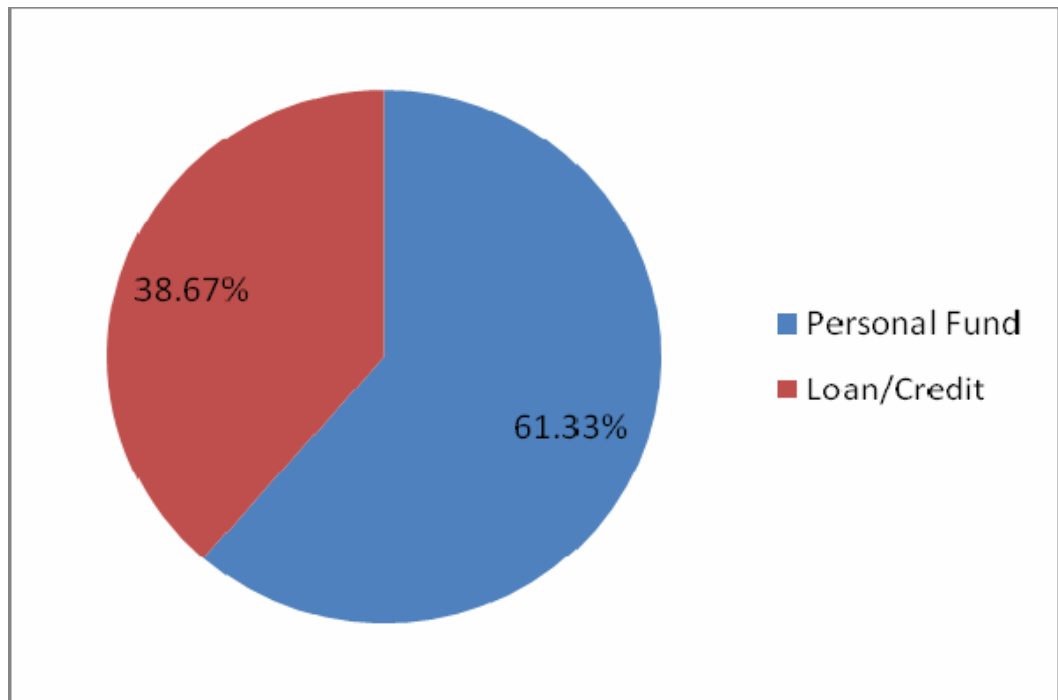




Figure 4.15 shows that more than half wants to use their own fund rather than credit.

#### **4.3.7 Funding Via Financial Institution Regulation**

In the question whether IPO funding via financial institution should be regulated or not, 102 respondents i.e. 68% found to be in favor and rest 32% in against of it, they said it should not be regulated by NRB as middle class also can invest in it.

**T  
a  
bl  
e  
4.  
17**

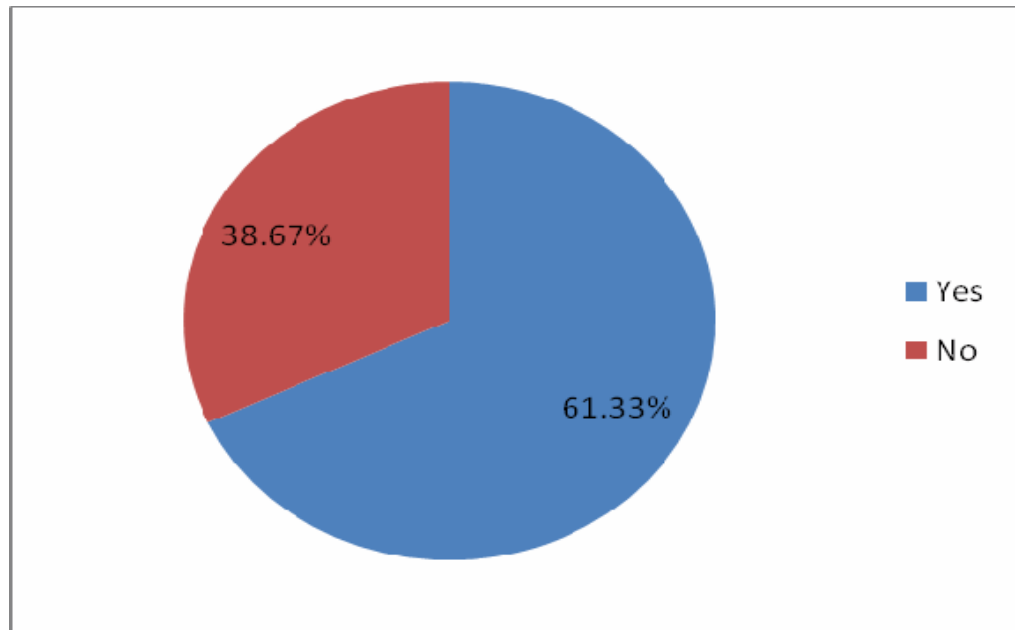
#### **Funding Via Financial Institution Regulation**

	Alternatives	No. of Respondents	Percentage (%)
a.	Yes	102	68%
b.	No	48	32%
		150	100%

**(Survey conducted for the study, 2010)**

**Fig  
ur  
e  
4.1  
6**

**Funding Via Financial Institution Regulation**



### 4.3.8 Expectation behind Investment in IPO

Different people have different expectation behind investing in IPO. For the question regarding these responses where as follows:

**T**  
**a**  
**bl**  
**e**  
**4.**  
**18**

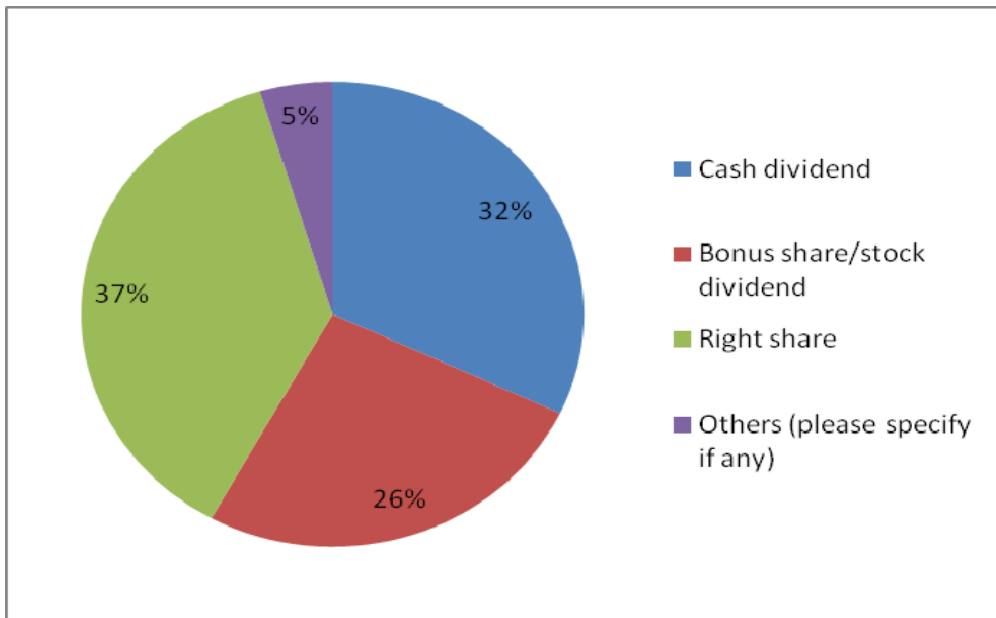
#### **Expectation behind Investment in IPO**

	Alternatives	No. of Respondents	Percentage (%)
a.	Cash dividend	48	32%
b.	Bonus share/stock dividend	39	26%
c.	Right share	56	37.33%
d.	Others (please specify if any)	7	4.67%
Total		150	100%

**(Survey conducted for the study, 2010)**

**Fig  
ur  
e  
4.1  
7**

**Expectation behind  
Investment in IPO**



Here, 32% expects cash dividend, 26% expects bonus share, 37.33% states to be favor or right share while rest 4.67% seen to be interested in other than these matters.

#### **4.3.9 Sector Preference for Investment**

For the question whether to choose financial sector to invest or non-financial sector, 88% choose financial sector and rest 12% choose non-financial sector which have been clearly shown in the below chart.

**T  
a  
b  
l  
e  
4  
.  
1  
9**

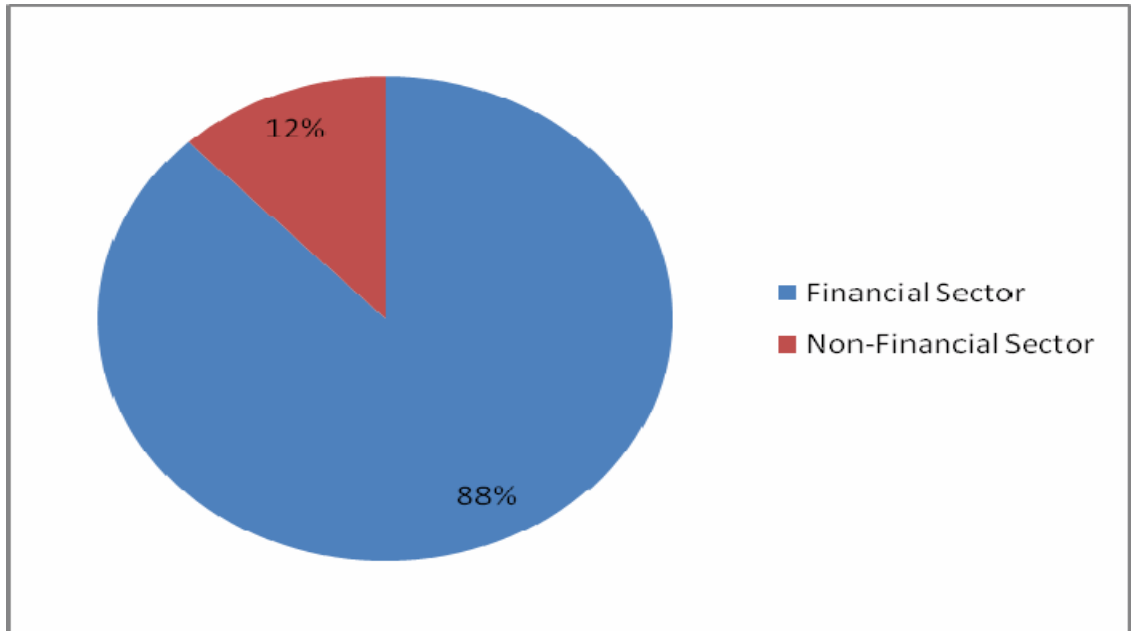
#### **Sector Preference for Investment**

	Alternatives	No. of Respondents	Percentage (%)
a.	Financial Sector	132	88%
b.	Non-Financial Sector	18	12%
	Total	150	100%

**(Survey conducted for the study, 2010)**

**Fi  
g  
u  
re  
4.  
1  
8**

**Sector Preference for Investment**



#### 4.3.10 Preferred Financial Sector

From among the 150 respondents 52 prefer commercial bank, 48 prefer development bank, 29 prefer finance company and only 21 prefer Insurance Company for investment in financial sector.

**T  
a  
b  
l  
e  
4  
.  
2  
0**

#### Preferred Financial Sector

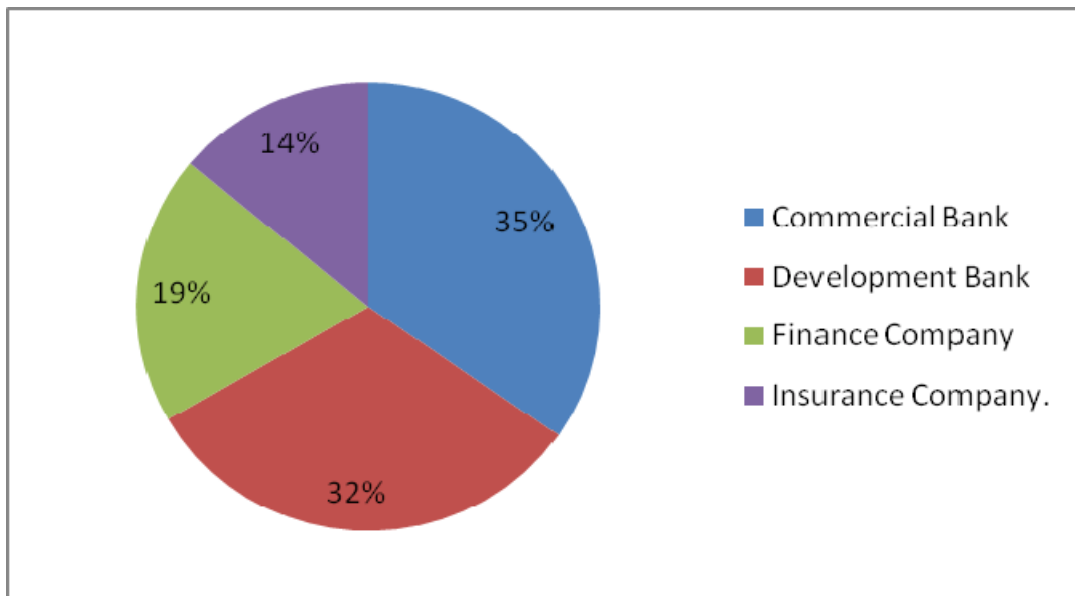
	Alternatives	No. of Respondents	Percentage (%)
a.	Commercial Bank	52	34.67%
b.	Development Bank	48	32%
c.	Finance Company	29	19.33%
d.	Insurance Company.	21	14%

Total	150	100%
-------	-----	------

(Survey conducted for the study, 2010)

**F  
i  
g  
u  
r  
e  
4.  
1  
9**

**Preferred  
Financial Sector**





In the Figure 4.19, 34.67% or most of the investors give preference to Commercial Bank for IPO investment. 32% give to Development Bank, 19.33% are found to be in favor of Finance Company and remaining 14% are in favor of Insurance Company. Among the investors least are in favor of insurance company.

#### **4.3.11 Preferred Non-Financial Sector**

From among the 150 respondents for the question which non-financial would you prefer to invest the responses were as follows:

**T  
a  
b  
l  
e  
4  
.  
2  
1**

#### **Preferred Non Financial- Sector**

	Alternatives	No. of Respondents	Percentage (%)
a.	Manufacturing & Processing Company	67	44.67%

b.	Hotels	28	18.67%
c.	Trading Company	49	82.66%
d.	Other Company	6	4%
Total		150	100%

**(Survey conducted for the study, 2010)**

**Figure  
4.20**

**Preferred Financial- Sector**

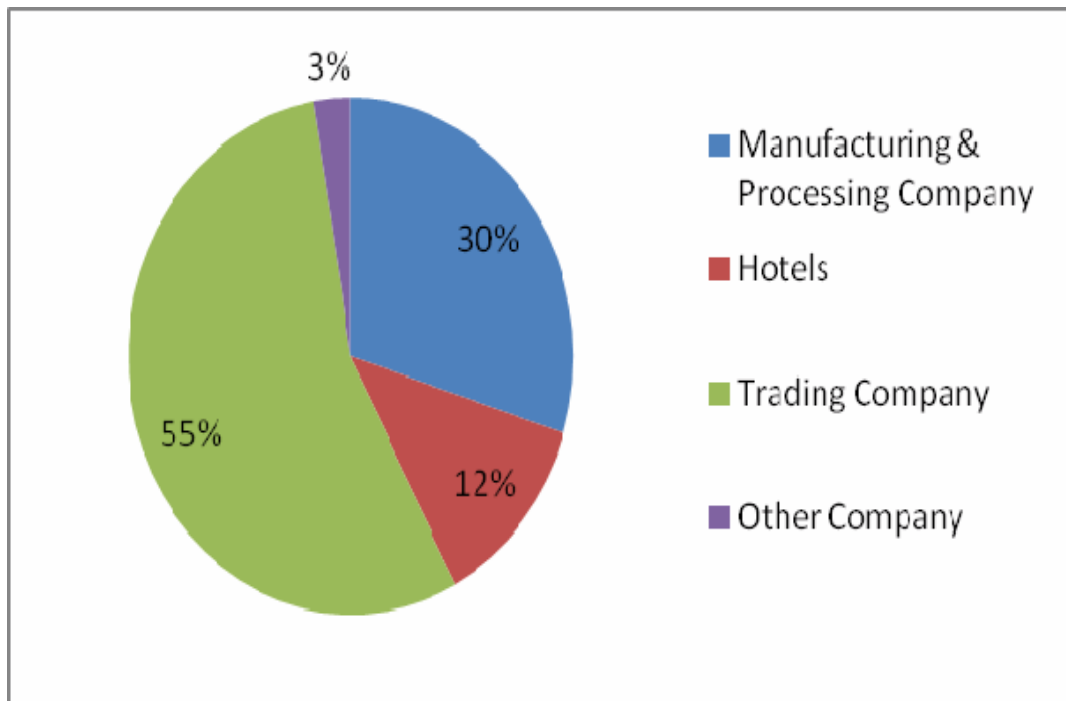


Table and Figure 4.20 show that for non-financial sector, 44.67% seems to be interested in Manufacturing & Processing Company, 18.67% are interested in Hotels while 32.66% interested in Trading Companies. And the least i.e. 4% only are interested in other sector.

**4.3.12 Ultimate Goal for**

## **Investment in IPO**

Different people have different goal for investment. 22.67% have goal of support for old-age,

3.33% want to invest for children education, 68% want to invest for fulfilling the goal of getting annual return and rest 6% have other than these goals.

**T  
a  
b  
l  
e  
4.  
22**

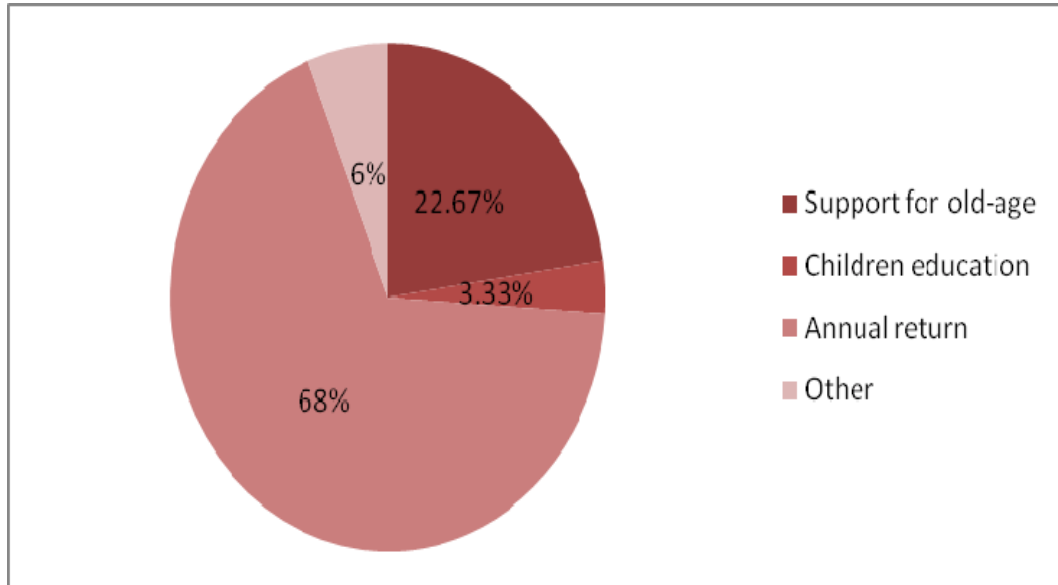
**Ultimate Goal for Investment**

	Alternatives	Number of Respondents	Percentage (%)
a.	Support for old-age	34	22.67%
b.	Children education	5	3.33%
c.	Annual return	102	68%
d.	Other	9	6%
Total		150	100%

(Survey conducted for the study, 2010)

**Fig  
ur  
e  
4.2  
1**

### Ultimate Goal for Investment



The Figure 4.2168% think the ultimate goal behind invest in IPO is the annual return from that ,

22.67% want to invest for the support for old-age, only .33% want to invest for children education and than left 6% think other reasons to invest in IPO.

### 4.3.13 Preference to the basis for distribution of Shares

While questioning about the basis for distribution of shares to investor 76% (114 respondents) were found to be in favor of pro-rate basis and the rest 24% (36 respondents) were in favor of lucky draw.

**T  
a  
b  
l  
e  
4  
.  
2  
3**

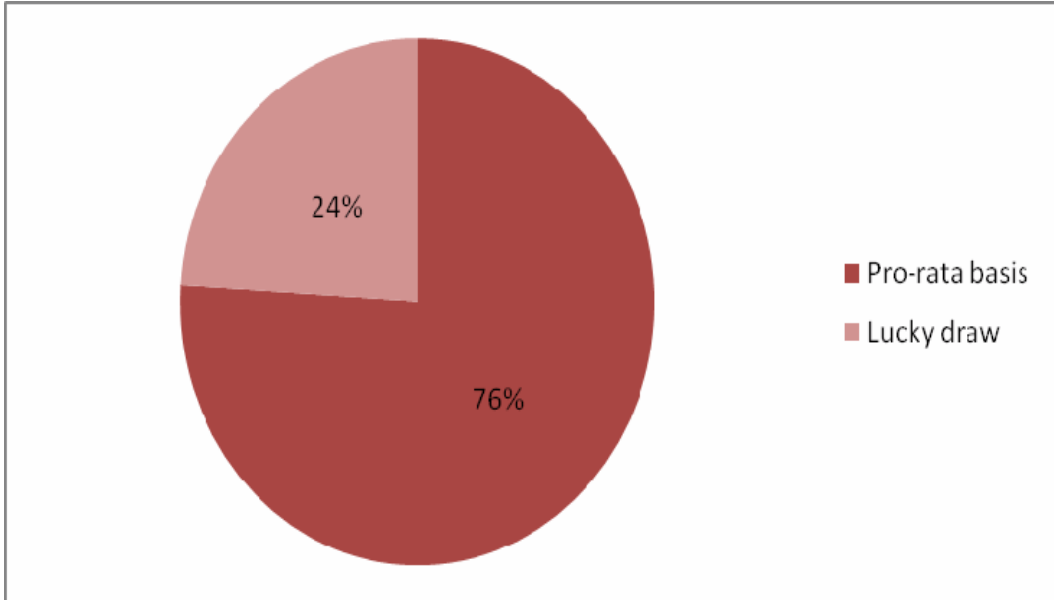
#### Preference to the basis for Distribution of Shares

	Alternatives	No. of Respondents	Percentage (%)
a.	Pro-rata basis	114	76%
b.	Lucky draw	36	24%
Total		150	100%

**(Survey conducted for the study, 2010)**

**Fi  
g  
u  
re  
4.  
2  
2**

**Basis for Distribution  
of Shares**





In the Figure 4.22 it is clear that 76% people prefer pro-rata basis while only 24% prefer lucky draw basis for share distribution.

#### **4.3.14 Reason for not going Public**

All companies do not want to go Public. 28.67% think control is the only reason for it. Companies do not want to loose the control by going Public. 35% think they do not want to share profit, 5.33% think they do not want to bear the obligation to mass shareholders and remaining 30.67% think they do not want to make the management complex by going Public.

**T  
a  
bl  
e  
4.  
24**

#### **Reason for not going Public**

	Alternatives	No. of Respondents	Percentage (%)
a.	To keep control	43	28.67%
b.	Sharing of profit	53	35.33%

c.	Obligation to mass shareholders	8	5.33%
d.	Complexity in management	46	30.67%
Total		150	100%

**(Survey conducted for the study, 2010)**

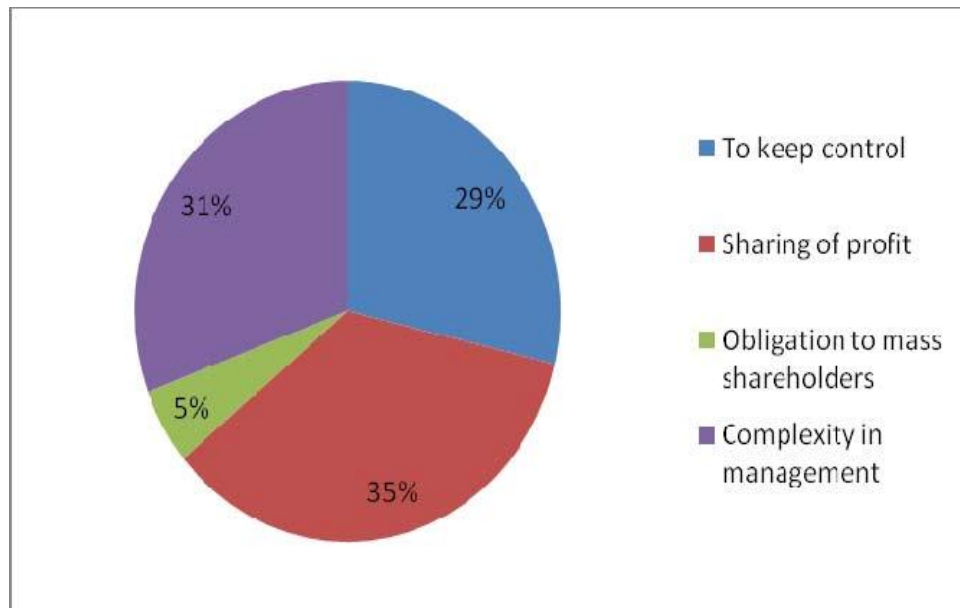
**Figure 4.23****Reason for not going Public**

Figure 4.23 and Table 4.23 clearly show that the reason behind most of the companies not going public is they do not want to share profit (35.33%), 30.67% believe company fears complexity in management, 28.67% believes it simply because companies want to keep full control, only 5.33% believes that companies do not want to increase obligation to mass shareholders.

**4.3.15 Reason for Limited People Investing in Primary Market**

Only limited people invest in the primary market. For the reason asked 21.33% stated this is due to lack of money, 3.67% stated due to lack of knowledge, 67.33% said people lacks information and only 2.67% stated other reasons.

**T  
a  
b  
l  
e  
4.  
25**

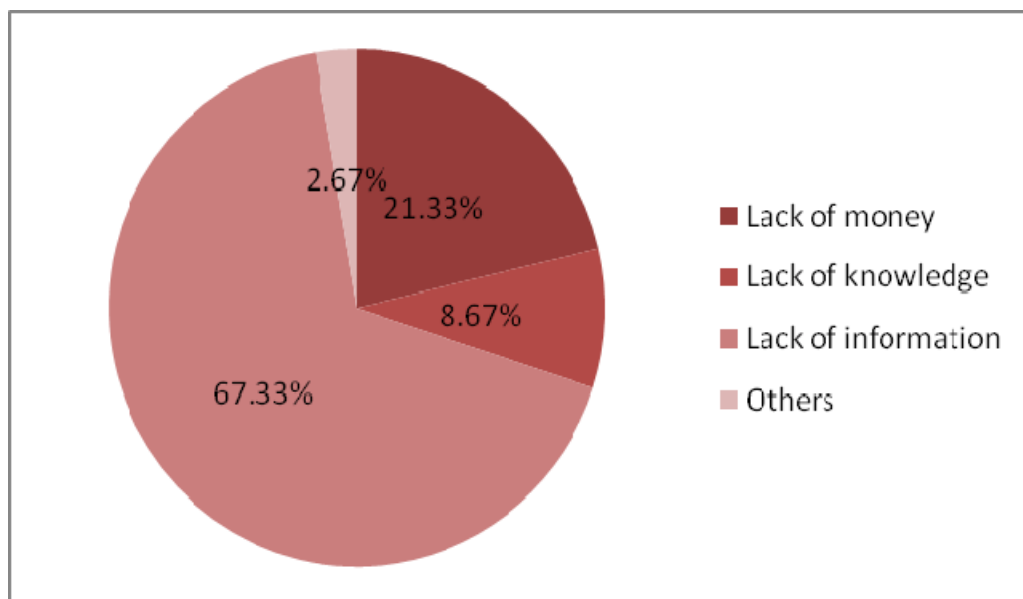
**Reason for limited people  
investment**

S.N	Alternatives	Respondents	Percentage (%)
a.	Lack of money	32	21.33%
b.	Lack of knowledge	13	8.67%
c.	Lack of information	101	67.33%
d.	Others	4	2.67%
Total		150	100%

**(Survey conducted for the study, 2010)**

**Fig  
ure  
4.2  
4**

### Reason for Limited People Investment



In the Figure 4.24 highest parts is covered by lack of information i.e. 67.33%, which means most people do not invest in primary market due to lack of information. 21.33% shows the reason of lack of money, 8.67% shows lack of knowledge and least 2.67% do not invest due to other reasons than these.

#### 4.4 Hypothesis testing (Chi-Square test)

**T**  
**a**

bl  
e  
4.  
26

### Testing of Hypothesis and test of significance

Hypothesis	Calculated Value of $\chi^2$	Tabulated value of $\chi^2$ at 5% level of significance	Result
Hypothesis 1	72.88	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 2	43.44	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 3	36.08	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 4	61.94	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 5	49.31	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 6	7.71	$\chi^2$ for 1 d.f.=3.84	Null Hypothesis rejected.
Hypothesis 7	19.44	$\chi^2$ for 1 d.f.=3.84	Null Hypothesis rejected.
Hypothesis 8	36.93	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 9	86.64	$\chi^2$ for 1 d.f.=3.84	Null Hypothesis rejected.
Hypothesis 10	17.73	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 11	55.6	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 12	161.09	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 13	40.56	$\chi^2$ for 1 d.f.=3.84	Null Hypothesis rejected.
Hypothesis 14	32.35	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.
Hypothesis 15	154.27	$\chi^2$ for 3 d.f.=7.82	Null Hypothesis rejected.

Source: Annex 3

Null hypothesis 1 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $72.88 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the knowledge of respondents about IPO.



Null hypothesis 2 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $43.44 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the willingness/interest to invest in IPO.

Null hypothesis 3 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $36.08 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the sources of information about the IPO.

Null hypothesis 4 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $61.94 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the investors' preference while investing.

Null hypothesis 5 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $41.31 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the number of Companies Invested by the respondents.

Null hypothesis 6 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $7.71 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the fund Used for the Investment.

Null hypothesis 7 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $19.44 > 3.84$ ), which implies that there is significant relationship between observed and expected opinion regarding the Funding via Financial Institution Regulation.

Null hypothesis 8 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $36.93 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the expectation behind Investment in IPO.

Null hypothesis 9 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $86.64 >$

Null hypothesis 2 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $43.44 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the Sector Preference for Investment. The calculated  $\chi^2$  is 43.44, which is greater than the tabulated  $\chi^2$  of 7.82, indicating a significant relationship between observed and expected opinion regarding the Sector Preference for Investment.

Null hypothesis 10 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $17.73 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the preferred Financial Sector.

Null hypothesis 11 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $55.6 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the preferred Non Financial- Sector.

Null hypothesis 12 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $161.09 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the ultimate Goal for Investment.

Null hypothesis 13 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $40.56 > 3.84$ ), which implies that there is significant relationship between observed and expected opinion regarding the basis for Distribution of Shares.

Null hypothesis 14 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $32.35 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the reason for not going Public.

Null hypothesis 15 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $154.27 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the reason for limited people investment.

#### **4.5 Major Findings of the Study**

The major findings of this study are as follows:

- Investor response to the financial institutions and insurance sectors is higher

Null hypothesis 11 rejected as calculated  $\chi^2$  is greater than tabulated  $\chi^2$  (i.e.  $55.6 > 7.82$ ), which implies that there is significant relationship between observed and expected opinion regarding the preferred Non Financial- Sector.

100 % only whereas in non-financial sector 3 are undersubscribed i.e. 33.33%

among the

9 samples.

- Among the financial sectors, about 34.67% people chose commercial banks and in non- financial sectors 44.67% people preferred manufacturing and processing company.
- Among the 17 issues managers in the year 2008/09 only 7 have managed the issue. And even among them NMBL and NCML are seems to be the dominant one as they both rank first and second respectively in terms of highest number of issue managed (29.69% and 26.56%) and highest amount of issue is managed by NCML and NMBL (34.53% and 26.81%).

- Most of the people (76%) prefer pro-rata basis for allotment not the lucky-draw (24%) as pro-rata basis assure the investor about getting the share.
- 46.67% are interested in company's performance while 14.67% are eager about reputed promoters. Most are seen to invest in company if performing well and less give preference to the company's promoters.
- As most of the companies do not want to share the profit with investor, they do not go publicly. 35.33% believes that most of the companies do not want to go public as they do not want to share profit. 30.67% believes companies do not want complexity in the management. 28.67% thinks companies do not want to lose control, as 5.33% thinks they do not want to bear obligation towards shareholders.
- Still most of the people (67.33%) lack information regarding stock so limited number of people are investing in primary market. 21.33% do not invest as they lacks money.
- Most of the investors (68%) expect annual return from the investment in IPO, 22.67% wants to invest as they think it will be support for old-age, 3.33% invest for children education.
- Nepalese investors are risk averter so of the do not like to invest from credit/loan. Only

34.67% like to invest from the financial institution loan.

- Pace of public offering is also increasing as amount of issue approved is seen to have been continuously increasing from 1993/94 (244.4 million) to 2001/2002 (1441.33 million) then decreased one time and again started increasing and reached at 2443.28 million in 2005/2006 and again decreased at 2295.5 million in 2006/07 and in the year 2007/08, increased tremendously with the total issue approved reached to Rs.10668.20 million and in the year 2008/09, it increased to record high Rs.16,828.51.

## CHAPT ER - V

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1

#### Sum mar y

IPO is the selling of securities to the general public for the first time. Primary market which avails fund to the issuer provides opportunity to invest to the small investors as well. This kind of public offering includes different kinds of cost like legal fee, auditing fee, underwriting fee & time cost. Companies going public involve one or more investment banks or issue managers as "underwriters". They enter into a contract for primary issue. As the underwriters and the company that issues control the IPO process solely, we find problems in this underwriting.

This study focuses on Investor response to IPO, problems and growth of primary market in Nepal, role of investment bankers, the pace of IPO, impact of loans from financial institutions for IPO funding.

Even first public issue was in 1973 A.D., secondary market came into existence only in 1993, after the conversion of Security Exchange Center in Nepal Stock Exchange Ltd. With the enactment of Securities Ordinance 2005, all companies going public must be registered at the SEBON before issuance of securities and must publish prospectus after getting SEBON's approval.

Most of the investors in Nepal lack the knowledge about IPO and if even they know, they do not want to take risk at all. For this prevailing situation of the country can be another reason. Loans from financial institution for IPO funding is breaking the healthy practice as single man applies from different names and captures large number of shares which ultimately influence company management and stock price too.

IPO can be a risky investment as historical data of the issuing company affects it. As IPO's are generally under priced which attracts more investors. And if IPO's are overpriced, this may create problems to underwriters as they may not meet their commitment to issuing company.

From 1993/94 to 2008/09 SEBON has approved 324 issues amounting Rs. 39,389.90 million. The highest number of issues is in the year 2007/08 and 2008/09, which is 64 and the lowest is in

1996/1997 and in 1998/1999 which is 5 only. Out of the total issues approved up to FY 2007/08,

145 were oversubscribed, 87 were undersubscribed and 28 were constant.

While analyzing the Investor response in financial sector, in average 21.64 times Subscription found in Commercial Bank. For the development bank Subscription time of 71.40 in average is found, for the finance companies average Subscription is 27.78 times. For the Insurance Companies average Subscription is 37.40 times. From all this it is clear that most desirable financial sector is development bank sector, 31.71 Times Subscription for the whole financial sector.

Similarly, only 2.36 times Subscription was found in case of non-financial sector. It gives the clue that public are more attracted toward financial sector than non-financial sector.

NMBL and NCML are seems to be the dominant one as they both rank first and second respectively in terms of highest number of issue managed (29.69% and 26.56%) and highest amount of issue is managed by NCML and NMBL (34.53% and 26.81%).

From the primary data analyzes it is clear that most of the public are aware about the IPO, only

3.33% haven't heard about IPO. 6.67% people do not want to take risk while 40.66% want to invest in IPO even with the loan. Most of the respondents (41.33%) seem to have been informed about IPO from advertisements. Among the investors 46.67% people give preference to company's performance before investment, while only 5.33% give preference to brokerage commission. 14.67% are interested in the promoter's recognition.



Most of the respondents (41.33%) have invested in only one company; only 7.33% have invested in more than three company. 14.67% have not invested in any organization. More than 50% respondents prefer personal fund than credit/loan. 68% of the respondents are in favor that IPO funding through financial intuitions should be regulated by NRB. About 37.33% expects right share from the investment, 32% expects cash dividend at the year end.

About 88% are interested to invest in financial sector and only 12% are in non-financial sector. From among the financial sector 34.67% are interested in commercial bank, 32% in development bank, 19.33% in finance companies and only 14% in insurance companies. In the case of non- financial sector highest 44.67% are interested in manufacturing and processing company, 18.67% in hotels & 32.66% in trading company. For 68% people, annual return is the ultimate goal for investing, 22.67% attribute it as a support for old-age. 76% prefer pro-rata basis for share

allotment rather than lucky draw. 35.33% people think that most companies do not go public as they do not want to share profit with public, whereas 28.67% think it's because they want to keep control with themselves, 30.67% thinks as it may bring complexity in management. Most of the people (67.33%) show the reason of lack of money for limited people investing in primary market and only 21.33% think it's due to lack of money.

From the study, it is clear that if people get opportunity, maximum are eager to invest in IPO as in

Nepal, where there is no other alternative for investment.

## 5.2

### **Con clusi on**

In spite of the long period of securities prevailing in the Nepalese market, most of the public do not know about IPO. Even if they do have knowledge, most of them are interested in financial sector than non- financial sector. Even among the financial sector most are interested in Commercial Banks. But among the financial sector Development Bank has the highest subscribed one. While public ended up in oversubscribing the shares of financial sector by 31.71 times, the subscription rate is 2.36 times for non-financial sector.

Vast deviation is found in the primary market of Nepal during 1993/1994 to 2007/2008 period, number of issue approved ranges from 64 at highest in 2007/2008 and 2008/09 to 5 at lowest in 1996/97 and

1998/1999.

Most people are in favor of regulation by NRB for IPO funding via financial institutions as it lessens the equal chance of getting allotment. Most of the shares go in lap of big investors. This kind of mismanagement in allotment discourages the investors. Contract between the issue manager and the issuing company highly affects the whole IPO process, so it is necessary to make this as per general public's need. And moreover, it should also be regulated. People are eager to know the promoters, company's performance before investment. IPOs handled by bigger brokerages are found to be more successful.

Even though the whole IPO process is very long, Nepalese investors are interested to invest in this sector.

### **5.3**

#### **Recommendations**

To develop and expand the Nepalese IPO more effectively and efficiently the following recommendations have been recommended:

- The Securities Board Nepal and other concerned authorities should conduct public awareness and investors education programs to increase the level of investors' awareness
- Encourage active participation of other sectors of the economy besides banks, finance companies and insurance through the enforcement of good corporate governance. Investment in corporate sectors should be encouraged
- As investment bankers play a vital role in the IPO process, they should try to give more transparent, fast, hassles free services so that more public get the opportunity to involve in the IPO.
- Before investing in any company, all the investors must go through that company's financial details, prospectus, otherwise they end up getting themselves be in difficulty if go after market rumors, neglecting more important things.
- Small investors are also the part of primary market, so IPO funding through financial institution should be strictly regulated to discourage the big investors who apply in names of relatives, friends etc.
- For making IPO "hot", more and more advertisements need to be done, and true picture should be exhibited to the general public. So that price does not fall after issue at the time of trading.
- Most underwriters target institutional or wealthy investors in IPO distribution, which is ethically as well as logically very wrong. The allotment process must be pro-rata basis rather than lucky-draw, so that all investors may get shares.
- Investors are becoming speculators rather than rational investors due to asymmetric information. They should know the whole stock valuation process and only then initiate to invest.
- While choosing the issue Manager Company should choose those, whom general investors could believe.
- Application from each corner of the country should be asked so that all interested candidates could apply. As it is found that most of the IPO's are concentrated in the valley only.
- A professional independent analysis on the latest security offers in the capital market should be encouraged. Economic journalism is encouraged to come forward

to fulfill their responsibility to the society and the expectation of the investor which help to take investment decision.

## BIBLIOGRAPHY

Gitman, L. J (1994). **Principles of managerial finance**, New York: Harper Collins College

Publishers.

Guleria, Arun (2009). **Introduction to the Initial Public Offering**, Jalandhar: Lovely

Professional University

Gupta, S.C. (1999). **Fundamental of Statistics**, New Delhi: Himalayan Publishing House. Gupta, S.P. (1991). **Statistical methods**, New Delhi: Sultan Chand and Sons Publications.

Joshi, P.R.(2001). **Research Methodology**. Kathmandu: Nepal Buddha Academic

Publishers and Distributors Pvt. Ltd.

Kothari, C. R. (1994). **Quantitative techniques**, New Delhi: Vikas Publishing House Pvt.

Ltd.

Oxford University Press. (1997). **Oxford Dictionary of Finance and Banking**.

New

Edition. United Kingdom

Pandey, S. (2001). **Public Response to Primary Issue of share in Nepal**. An Unpublished

Master's Degree Thesis, Central Department of Management, Tribhuvan University.

Pant. (2006). **Public Response to IPO in Nepal**. An Unpublished Master Degree

Dissertation, Central Department of Management, T.U.

Sharpe, W. F., Alexander G. J, and Bailey J. V.(2000). **Investments**, New Delhi: Prentice

Hall of India Private Limited.

Shrestha S.K. (1996). **Public Response to Primary Issue of Share in Nepal**. An Unpublished Master's Degree Thesis, Central Department of Management, Tribhuvan University.

Security Board of Nepal, “**Annual Report 2008/2009**”. Kathmandu.

Sthapit, Gautam, Joshi, and Dongol (2009). **Statistical Methods**, Kathmandu: Buddha

Academic Enterprises Pvt. Ltd.

Thapa, K. “**Nepalese Securities Market: Regulation and Development**”.  
SEBON Journal. Vol. 3 (July 2007), pp 21-29.

Van Horne, J. C. (2000). **Financial management and policy**, New Delhi: Prentice Hall of

India Pvt. Ltd.

Weston, J. F. and Copeland T. E. (1992). **Managerial Finance**, New York: The Dryden

Press.

Wolff and Pant (2005). **Social Science Research and Thesis Writing**,  
Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

### **Websites**

[http://en.wikipedia.org/wiki](http://en.wikipedia.org/wiki/IPO)

[i/IPO](#)

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

[www.nrb.org.np](http://www.nrb.org.np)



[www.sebonp.com](http://www.sebonp.com)

**A  
N  
N  
E  
X  
-  
1**

**Ques  
tion  
nair  
e**

Dear respondents I will be very grateful if you kindly fill-up this questionnaire which is the requirement of our Master level thesis.

N  
a  
m  
e:

O  
cc  
u  
p  
at  
io  
n:  
A  
d  
dr  
es  
s:

1) Have you ever heard about IPO?

a) Never heard

c) A little

b) Seen in papers and books

d) Yes, of course

2) Would you like to invest in IPO?

a) No risk at all

c) Depends on the sector

b) If had money

d) yes, even with the loans

3) How do you come to know about IPO of any company?

a) Advertisements

- c) Brokers
- b) Personal relations (market info)
- d) others

4) What comes first in your mind while investing?

- a) Promoters
- c) Brokerage Commission (avails or not)
- b) Company's performance
- d) market information

5) In how many companies have you invested?

- a) One
- c) More
- than three
- b) Two to three
- d) none

6) Which fund would you like to invest in IPO?

a)

Persona

l Fund

b)

Loan/

Credit

7) Do you think it is good that IPO funding via financial institutions loans should be prohibited by NRB?

a

)

y

e

s

b

)

n

o

8) What expectation led you to invest?

a) Cash dividend

c) Right share

b) Bonus share/ stock dividend    d) others (please specify if any).....

9) Would you prefer financial sector or non-financial sector for investment?

- a) Financial sector
- b) Non-financial sector

10) If you like to invest in financial sector than in which type?

- a) Commercial Banks
- b) Development banks
- c) Finance companies
- d) Insurance companies

11) If you are interested in non-financial sector than in which type?

- a) Manufacturing and Processing Company
- b) Hotels
- c) Trading Company
- d) Other Company (Please specify).....

12) What ultimate goal led you to invest in IPO?

- a) Support for Old-age
- c) Annual Return

b) Children Education

d) others (please specify if any).....

13) Would you prefer pro-rata basis or lucky draw for the distribution of shares?

a)

Pro-

rata

basis

b)

Luck

y

draw

14) Why most of the companies do not like going in public?

a) To keep control

c) Obligation to mass

shareholders b) Sharing of Profit

d) Complexity in

management

15) What do you think the reason that the limited number of people invest in the primary market?

a) Lack of money

c) Lack of Information

b) Lack of Knowledge

d) others (please specify if any).....



## ANNEX-2

### Calculation of correlation

- 1) Correlation between the subscription times of IPOs of commercial banks and non-financial sector.

Year	Com. Banks	Subs. Tim (X <sub>1</sub> )	Year	Non-Fin. Companies	Subs. Tim (X <sub>2</sub> )	X <sub>1</sub> × X <sub>2</sub>	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>
2004	LUBI	7.21	2007	SSMI	0.52	3.75	51.98	0.27
2005	GBI	18.65	2008	TRII	0.47	8.76	347.89	0.22
2008	GBI	24.25	2008	QIH	6.28	151.49	1172.06	39.54
2009	CBII	20.08	2001	IJI	0.11	2.21	440.16	0.01
2009	BOA	18.0	2004	NHGI	0.22	4.16	357.21	0.04
2009	BCBI	20.85	2005	CHCI	5.1	107.24	891.02	26.01
		129.84			14.72	424.02	2261.26	72.02

$$r = \frac{n \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{n \sum X_1^2 - (\sum X_1)^2} \sqrt{n \sum X_2^2 - (\sum X_2)^2}}$$

$$= 0.828437$$

There is high degree of positive correlation between the subscription times of IPOs of commercial banks and non-financial sector.

- 2) Correlation between the subscription times of IPOs of Developments banks and non- financial sector.

Year	Dev. Banks	Subs. Tim (X1)	Year	Non-Fin. Companies	Subs. Tim (Y2)	X1xY2	$\sum X^2$	$\sum Y^2$
2007	SBB	96.23	1997	SSML	0.53	51.00	9260.21	0.28
2007	GDBL	108.32	1999	TRHL	2.47	267.55	11733.22	6.10
2007	HBBL	133.62	2000	OHL	6.29	840.46	17854.30	39.56
2007	MBB	54.84	2001	HDL	0.11	6.03	3007.42	0.01
2009	VBBL	7.18	2004	NHCL	0.22	1.58	51.55	0.04
2009	PDBL	28.26	2005	CHCL	5.1	144.13	798.63	26.01
		428.45			14.72	1310.76	42705.35	72.02

$$r = \frac{n \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{n \sum X_1^2 - (\sum X_1)^2} \sqrt{n \sum X_2^2 - (\sum X_2)^2}}$$

2

$$= \frac{6 \times 1310.76 - 428.45 \times 14.72}{\sqrt{6 \times 428.45^2 - (428.45)^2} \sqrt{6 \times 72.02^2 - (14.72)^2}}$$

$$= 0.393737$$

There is low degree of positive correlation between the subscription times of IPOs of development banks and non-financial sector.

3) Correlation between the subscription times of IPOs of Financial banks and non-financial sector

Year	Finance Companies	Subs. Tim (X1)	Year	Non-Fin. Companies	Subs. Tim (Y2)	X1xY2	$\sum X^2$	$\sum Y^2$
2007	ICFC-FI	35.06	1997	SSML	0.53	18.58	1229.20	0.28
2007	EFI	25.68	1999	TRHL	2.47	63.42	659.46	6.10

2008	SBSL	26.71	2000	OHL	6.29	168.00	713.42	39.56
2008	KFL	21.93	2001	HDL	0.11	2.41	480.92	0.01
2009	AFL	26.24	2004	NHCL	0.22	5.77	688.53	0.04
2009	CFL	31.06	2005	CHCL	5.1	158.40	964.72	26.01
		166.68			14.72	416.60	4736.27	72.02

$$r = \frac{n \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{n \sum X_1^2 - (\sum X_1)^2} \sqrt{n \sum X_2^2 - (\sum X_2)^2}}$$

$$= -0.124657$$

There is low degree of positive correlation between the subscription times of IPOs of Financial companies and non-financial sector.

4) Correlation between the subscription times of IPOs of Insurance companies and non-financial sector

Year	Insurance Companies	Subs. Tim (X1)	Year	Non-Fin. Companies	Subs. Tim (X2)	X1×X2	X1 <sup>2</sup>	X2 <sup>2</sup>
2003	NBICL	1.33	1999	TRHL	2.47	3.29	1.77	6.10
2004	PICL	9.57	2000	OHL	6.29	60.19	91.59	39.56
2006	SICL	43.76	2001	HDL	0.11	4.81	1914.93	0.012
2007	LGICL	71.73	2004	NHCL	0.22	15.78	5145.19	0.04
2007	SIL	60.63	2005	CHCL	5.1	309.21	3675.99	26.01
		187.02			14.19	393.28	10829.48	71.74

$$r = \frac{n \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{(n \sum X_1^2 - (\sum X_1)^2)(n \sum X_2^2 - (\sum X_2)^2)}}$$

$$=-0.3958$$

There is low degree of negative correlation between the subscription times of IPOs of Insurance companies and non-financial sector

## ANNEX-

### 3

#### Chi-square test

#### Hypothesis-1

In 150 random samples of respondents, which contains the following distribution

Hypothesis test regarding the knowledge about IPO

Response	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Never heard	5	37.5	-32.5	1056.25	28.16
Seen in paper & book	32	37.5	-5.5	30.25	0.80
A little heard	35	37.5	-2.5	6.25	0.17
Yes, of course	78	37.5	40.5	1640.25	43.74
Total	150	150		2733	72.88

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 72.88$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

## Hypothesis-2

In 150 random samples of respondents, which contains the following distribution

Hypothesis test regarding the willingness/interest to invest in IPO.

Response	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
No risk at all	10	37.5	-27.5	756.25	20.17
If had money	27	37.5	-10.5	110.25	2.94
Depends in the sector	52	37.5	14.5	210.25	5.61
Yes, even with the loan well	61	37.5	23.5	552.25	14.72
Total	150	150		1629	43.44

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 43.44$$

Where  $\chi^2$  = Chi-square test

O= observed frequency



E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

### **Hypothesis-3**

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the sources of information about IPO

Alternatives	O	E	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
Advertisements	62	37.5	24.5	600.25	16.00
Personal relations (Mark Information)	17	37.5	0.5	0.25	0.41
Brokers	27	37.5	-10.5	110.25	2.94
Others	14	37.5	-23.5	552.25	14.73
total	150	150		1353	36.08

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 36.08$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

#### **Hypothesis-4**

In 150 random samples of respondents, which contains the following distribution: Hypothesis test regarding the investors' preference while investing in IPO

Alternatives	O	E	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
Promoters	22	37.5	-15.5	240.25	6.41
Company's Performance	70	37.5	32.5	1056.25	28.17
Brokerage Commission (avails not)	8	37.5	-29.5	870.25	23.21
Market Information	50	37.5	12.5	156.25	4.17
	150			2323	61.95

Test statistic

$$\therefore \chi^2 = \sum \frac{(O - E)^2}{E} = 61.94$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

### **Hypothesis-5**

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the number of companies invested

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
One	62	37.5	24.5	600.25	16.00
Two to three	55	37.5	17.5	306.25	8.17
More than three	11	37.5	-26.5	702.25	18.73
None	22	37.5	-15.5	240.25	6.41
Total	150			1849	49.31

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 49.31$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

### Hypothesis-6

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the fund used for the investment

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Personal Fund	98	75	23	529	7.05
Loan/Credit	52	75	-23	529	7.05
Total	150	150			14.10

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E}$$

*E*

$$= 7.71$$

Where  $\chi^2$  = Chi-square test

O = observed frequency

E = Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 75$$

Degree of freedom(df) =  $n - 1 = 1$

Level of significance = 5% (assumed)

## Hypothesis-7

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the funding by financial institution  
regulation

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Yes	102	75	27	729	9.72
No	48	75	-27	729	9.72
Total	150	150			19.44

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 19.44$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{2} = 75$$



$n$

Degree of freedom(df)= $n-1=1$

Level of significance=5% (assumed)

### **Hypothesis-8**

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the expectation behind investment in IPO

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Cash dividend	48	37.5	10.5	110.25	2.94
Bonus share/stock dividend	30	37.5	1.5	2.25	0.06
Right share	56	37.5	18.5	342.25	9.13
Others (please specify any)	7				
Total	150	150			36.93

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 36.93$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

### Hypothesis-9

In 150 random samples of respondents, which contains the following distribution: Hypothesis test regarding the sector preference for investment

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Financial Sector	132	75	57	3249	43.32
Non-Financial Sector	18	75	-57	3249	43.32
Total	150	150			86.64

Test statistic

$$\therefore \chi^2 = \sum \frac{(O - E)^2}{E} = 86.64$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 75$$

Degree of freedom (df)=n-1=1

Level of significance=5% (assumed)

### **Hypothesis-10**

In 150 random samples of respondents, which contains the following distribution:

Test statistic Hypothesis test regarding the preferred financial sector

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Commercial Bank	52	37.5	14.5	210.25	5.61
Development Bank	48	37.5	10.5	110.25	2.94
Finance Company	29	37.5	-8.5	72.25	1.93
Insurance Company.	21	37.5	-16.5	272.25	7.26
Total	150	150			17.73

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 17.73$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

### Hypothesis-11

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the preferred non-financial sector

Alternatives	O	E	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
Manufacturing & Processing Company	67	37.5	29.5	870.25	23.21
Hotels	28	37.5	-9.5	90.25	2.40
Trading Company	49	37.5	11.5	132.25	3.53
Other Company	6	37.5	-31.5	992.25	26.46
Total	150	150			55.6

Test statistic

E=Expected frequency and calculated by:

$$\therefore \chi^2 = \sum \frac{(O - E)^2}{E} = 55.6$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

## Hypothesis-12

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the ultimate goal for the investment

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Support for old-age	34	37.5	-3.5	12.25	0.33
Children education	5	37.5	-32.5	1056.25	28.17
Annual return	102	37.5	64.5	4160.25	110.94
Other	9	37.5	-28.5	812.25	21.66
Total	150	150			161.09

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 161.09$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:



$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom(df)=n-1=3

Level of significance=5% (assumed)

### **Hypothesis-13**

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the preferred basis for the distribution of shares

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Pro-rata basis	114	75	39	1521	20.28
Lucky draw	36	75	-39	1521	20.28
Total	150	150			40.56

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 40.56$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 75$$

Degree of freedom (df)=n-1=1

Hypothesis test regarding the preferred basis for the distribution of shares  
 Level of significance=5% (assumed)

**Hypothesis-14**

In 150 random samples of respondents, which contains the following  
 distribution: Hypothesis test regarding the reasons of companies  
 going public

Alternatives	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
To keep control	43	37.5	5.5	30.25	0.81
Sharing of profit	53	37.5	15.5	240.25	6.41
Obligation to shareholders	8	37.5	29.5	870.25	23.21
Complexity in management	46	37.5	8.5	72.25	1.93
Total	150	150			32.35

Test statistic

$$\therefore \chi^2 = \sum \frac{(O - E)^2}{E} = 32.35$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom (df)=n-1=3

Level of significance=5% (assumed)

### **Hypothesis-15**

In 150 random samples of respondents, which contains the following distribution:

Hypothesis test regarding the reason for limited people investment

Alternatives	O	E	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
Lack of money	32	37.5	-5.5	30.25	0.81
Lack of knowledge	13	37.5	-24.5	600.25	16.00
Lack of information	101	37.5	63.5	4032.25	107.53
Others	4	37.5	-33.5	1122.25	29.93
Total	150	150			154.27

Test statistic

$$\therefore \chi^2 = \sum \frac{(O-E)^2}{E} = 154.27$$

Where  $\chi^2$  = Chi-square test

O= observed frequency

E=Expected frequency and calculated by:

$$E = \frac{\sum O}{n} = 37.5$$

Degree of freedom (df)=n-1=3

Level of significance=5% (assumed)