Price Performance of IPOs in Indian Stock Market

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE
OF

MASTER OF PHILOSOPHY

(ECONOMICS)

Under the supervision

Of

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MAY (2009)

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PARENTS

CERTIFICATE

I hereby certify that the work which is being presented in this thesis entitled "Price Performance of IPO's in Indian Stock Market" in partial fulfillment of the requirements for award of the Degree of Masters of Philosophy in Economics, submitted in School of Management and Social Sciences, Thapar University, Patiala, is an authentic record of my own work carried out under the supervision of Dr (Ms) Ravi Kiran, Associate Professor, School of Management and Social Sciences.

The matter presented in this thesis has not been submitted for the award of any other degree of this or any other University.

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ACKNOWLEDGEMENT

I would like to thank my supervisor, Dr. Ravi Kiran, Associate Professor of School of Management and Social Sciences, Thapar University, Patiala, who played a significant role in helping me to decide the framework of this dissertation by ironing out my confusions and queries. I am also grateful to her taking the time to respond to all my emails and providing me, with detailed suggestions and comments on my work.

Sincere thanks to everyone- my friends, well wishers for their support and encouragement, without which accomplishing of this task would have been rather difficult.

In the end, I would like to thank my parents and my sister, Shivani, for their never ending support and their confidence in me and showing me the right way always. I am also thankful to Shikha di, who encouraged me at the time of my let down. This dissertation is dedicated to them.

Above all I thank God for His blessings.

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Abstract

The present study intends to examine the price performance of the Indian IPOs listed on NSE, using a sample of IPOs that tapped the NSE market during 1999-2008 by taking in consideration of their prices. The short run as well as long run analysis of their price performance have been done by taking the gap of time intervals of 1 weak, 1month, 3months, 6months and 1year, 2years, 3years respectively. In addition to that an analysis has been conducted to know the influence of the factors viz. subscription level, Issue size, Listing Lead time and Age, on the price performance of the IPOs. The study shows that underpricing is present in the Indian Capital market. Also, underpricing is more prevalent in the short run than in the long run. The study further shows that IPOs come to their intrinsic value over a period of time. The regulatory framework of IPOs with special reference to SEBI guidelines has also been done.

Key Words: IPO, Price Performance, Underpricing.

CHAPTER I
INTRODUCTION

An initial public offering is the sale of a company's stock to the public for the first time. The primary impetus for an IPO is generally either to raise capital or to offer an exit strategy to some of the firms existing owners, but a number of other motivations and considerations also influence a firm's decision to go public. This decision process illuminates a firm's goals in issuing an IPO, which are important to evaluate the potential reasons for the underpricing we observe.

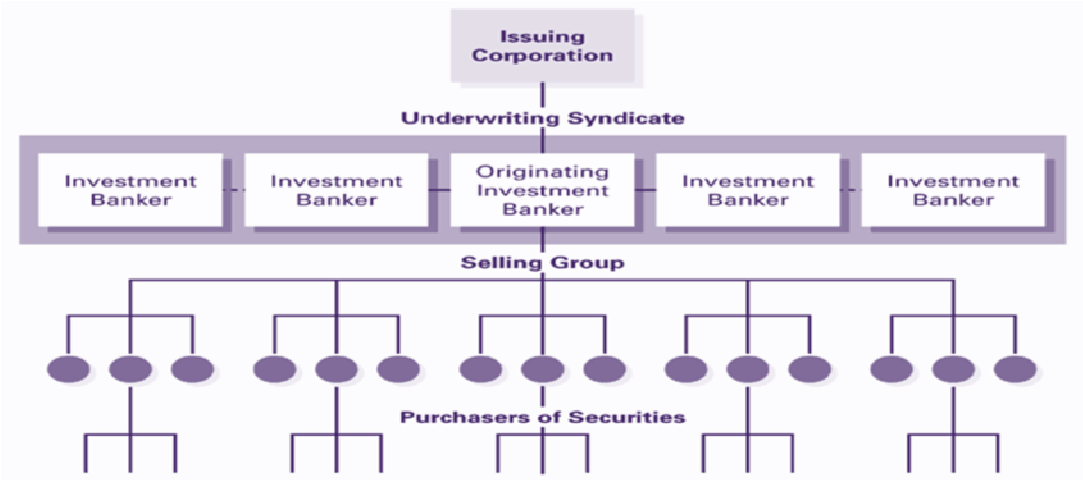
Start-up companies rarely have the resources, history, or credibility to conduct an IPO. In fact, firms in the most incipient stage of development generally rely entirely on personal loans, savings, family, and friends for their initial financing. Even as a company begins to develop and show some signs of promise, it will rarely attempt a public offering; instead, it will look to angel investors or venture capital. Angel investors are wealthy individuals, often prior entrepreneurs, who will provide financing in exchange for equity in the company. Venture capital comes from firms rather than individuals, but the principle is the same: investors offer financing in return for a stake in the company. Both angel investors and venture capital firms frequently take an active role in the company, advising management on the most of issues it faces.

The initial investors are naturally hesitant to provide all the funding upfront, and different private equity investors target companies at different stages of growth. Thus, successful companies will typically undergo multiple rounds of financing and will develop a base of investors that intend to eventually liquidate their stakes. When investors decide it is time to cash in on their investment, they have three choices: sell their equity to a larger or later-stage investment firm, sell the company to a larger company looking to make an acquisition, or sell their equity in an initial public offering of the company. Similarly, when an "IPO-ready" company requires additional financing, it has multiple options: pursue further equity financing from the private market, issue debt, or conduct an IPO. So what prompts investors and the company to go with the IPO option?

In addition to provide an immediate capital influx and mechanism through which existing owners can cash in on their investment, there are other advantages of going public. Since the expectation is that a liquid aftermarket will develop following the offering, firms conducting an IPO can expect to be in a position to raise additional capital relatively easily and on favorable terms following the initial offering. The increased liquidity also makes it possible for public companies to offer stock-based incentives and compensation, which can help them attract and retain top employees and improve employee productivity.

Trading on an exchange also makes mergers and acquisitions easier since stock can be issued as part of the deal. Due to increased visibility, companies going public may also experience an increase in prestige, which can improve their credibility with suppliers and customers, resulting in better credit terms and more pricing leverage. Even the increased scrutiny of public companies is not all bad since it usually allows the company to issue debt at lower rates. The history of IPO mechanism can be traced back to period of CCI regime i.e. Controller of Capital Issues. Prior to nineties all the public issues have to take the permission of C.C.I. The latter determines all other aspects of the issue. The office of C.C.I. was abolished .In 1993 after the formation of SEBI during 1992. SEBI was honored to regulate all aspects of Capital market, including primary market and IPO's. IPO market has undergone a change with an introduction of fixed price regime and has further advanced with implementation of Book Building process as a result of Malegam Committee which was set up in1995.

1.1 IPO Process



First the firm has to select an underwriter for selling its securities in primary market. The company usually consults with an investment banker to determine how best to structure the offering and how it should be distributed. Since most of the new issues are too large for one underwriter to effectively manage, the investment banker, also known as the underwriting manager, invites other investment bankers to participate in a joint distribution of the offering. The group of investment bankers is known as the syndicate. Members of the syndicate usually make a firm commitment to distribute a certain percentage of the entire offering and are held financially responsible for any unsold portions. The underwriter syndicate can choose either best effort method or firm commitment method for selling of the securities. There exist two main mechanisms in India for the sale of public issues.

Fixed Price Method.

Book Building Method.

1.1.1 Fixed Price Method - In a fixed priced offer, an issuer company is allowed to freely price the issue. The basis of issue Price is disclosed in the offer document where the issuer is closes in detail about the qualitative and quantitative factors justifying the issue price. The issuing firm (with the help of the underwriter) decides upon a selling price and offers a set number of shares at that price. The underwriter does not build a book of potential orders; instead, the price is based upon the underwriter's judgment of the market conditions and the intrinsic value of the company. The Issuer company can mention a price band of 20% (cap in price band should not be more than 20% of the floor price) in the Draft offer documents filed with SEBI and actual price can be determined at a later date before filing of the final offer document with SEBI / ROCs. In its offering materials, the issuer will give both a qualitative and quantitative justification for the chosen price. If the offering is oversubscribed, the shares are allocated on a pro rata basis. This type of offering is commonly used in Singapore, Finland, India and the U.K.

1.1.2. **Book Building Process** - In the traditional IPO process, an investment bank is always hired to "underwrite" an IPO. The issuing firm will choose a "lead underwriter" (book runner) or "co managers" risk, the investment banks themselves almost always form a syndicate, and each member of which will sell part of the issue .Deals can be structured in a variety of ways. One major consideration is whether it is a "firm commitment" or "best efforts" agreement. In a firm commitment, the underwriter buys the entire offer and resells it to the public, thus guaranteeing the amount of money that will be raised; under a best efforts agreement the underwriter sells as much of the security to the public as it can sell at the offering price, but it does not guarantee the quantity. Underwriting contracts will also specify he underwriter fee (typically 5%) and the "green shoe" option (allows the underwriter to increase the number of shares offered, typically by 15%).After the details of the deal have been worked out, the underwriter files a registration statement with the SEBI. This document provides details on the offering, as well as company information, such as financial statements, management backgrounds, legal proceedings, and insider holdings.

Next, the underwriter puts together a "red herring" (a preliminary prospectus that contains information on the company and offering), and goes on a "road show" in which they present

to potential investors and gauge demand. Most of these potential investors are institutional investors, such as mutual funds, pension funds, and hedge funds, and they give the underwriter feedback as to how much stock they intend to buy and at what price. This is called the "book building process" since the underwriter builds a book of potential orders. After the SEBI approves the registration and the road show is complete, the underwriter and issuing firm decide on an offering price range, which will depend upon the success of the road show, the current market conditions, and the company's goals.

After the offering range is decided upon, the underwriter will accept bids from interested investors. If the orders exceed the value of the issuance, the IPO is "oversubscribed." When this is the case, the offering will price at the high end of (or even a little above) the offering range, the underwriter will have partial discretion over how to allocate the limited shares among the bidding institutional investors, and the underwriter will exercise its green shoe option. When an offering is undersubscribed, it will price at the low end of the range; or, if the offering is extremely undersubscribed, the issuer may decide to postpone the deal. Since institutional investors are their best clients, investment banks heavily favor them over retail (individual) investors. Thus, there is a degree to which retail investors are "excluded" from IPO's. This is compounded by the fact that in many IPO's, only those individual investors who have a brokerage account with one of the underwriters are even eligible to participate in the offering. The defining features of the book building mechanism are: a price that is elastic to demand but ultimately set by the underwriter, and a discretionary share allocation mechanism that has historically led to the exclusion of most retail investors. This method is used in almost all domestic IPO's.

1.2 Concept of Underpricing

Generally, it has been found that investors, who purchase IPO's on the offering day, experience high returns on the first trading day, indicating that these shares may have been priced at the time of their offering to the public at values much below their intrinsic value. The phenomenon is known as underpricing.

Underpricing of issue represents the first day returns generated by the firm, calculated as:

$$\frac{\text{Closing Price} - \text{Offer price}}{\text{Offer price}}$$

An issue is under (over) priced if the price received by the issuer in the primary market is lower (higher) than the price of the same securities in the secondary market.

'*Underpricing of IPOs is a universal phenomenon*!' Loughran, Ritter and Rysquist (1994) has been summary of the equally weighted average initial returns on IPOs in a number of countries around the world in the form of an illustrative table, which has been updated till April 13, 2001 (as shown in Table 1) . It provides the cross-sectional variation in underpricing, ranging from a low of 4.2% in France to a high of 388% in China. Underpricing is ubiquitous but the amount of underpricing varies across countries. They have contended that differences in underpricing might result from differences in institutional arrangements.

Making a firm public is significant turning point in the life of a firm with serious wealth implications for the existing shareholders. The success of the public listing depends, among other factors, on the ability to determine an offer price. This is a difficult process. Thus, if the firm's shares are overvalued, their sale to the public will fail; if it succeeds, it will entail a transfer of wealth from the new shareholders to the old ones.

In case the new shares are undervalued the old shares will relinquish a claim on the firm's cash flows at a price below its fair value. To avoid certain uncertainties involved in the public sale of their securities, firms retain underwriters who undertake the risk of pricing and selling the new securities. The conditions under which new securities are offered to the public and the role of underwriter are both affected by the regulatory and institutional environment of local IPO market.

Table 1.1: International Evidence on Average Initial Returns

Country	Source	Sample Size	Time Period	Average Initial Returns (in %)
Australia	Lee, Taylor & Walter; Woo	381	1976-1995	12
Austria	Aussenegg	76	1984-1999	7
Belgium	Rogiers,Manigart & Ooghe;Manigart	86	1984-1999	15
Brazil	Aggarwal,Leal & Hernandez	62	1979-1990	79
Canada	Jog & Riding; Jog & Srivastava, Kryzanowski & Rakita	500	1971-1999	6
Chile	Aggarwal,Leal & Hernandez; Celis & Maturana	55	1982-1997	9
China	Datar & Mao; Gu and Qin (A shares)	432	1990-2000	257
Denmark	Jakobsen & Sorensen	117	1984-1998	5
Finland	Keloharju; Westerholm	99	1984-1997	10
France	Husson&Jacquillat; Leleux &Muzyka; Piliard & Belletante; Derrien & Womack	448	1983-1998	10
Germany	Ljungquist	407	1978-1999	28
Greece	Kazantzis & Thomas	129	1987-1994	52
Greece	Kazantzis & Levis	79	1987-1991	49
Hong Kong	McGuinness; Zhao & Wu	334	1980-1996	16
Hong Kong	Dawson	21	1978-1984	14
India	Krishnamurti & Kumar	98	1992-1993	35
Indonesia	Hanafi	106	1989-1994	15
Israel	Kandel, Sarig & Wohl; Amihud & Hauser	285	1990-1994	12
Italy	Arosio, Giudici & Paleari	164	1985-2000	24
Japan	Fukuda; Dawson &Hiraki ; Herbner & Hiraki; Peltway & Kaneko; Hamao, Packer & Ritter; Kaneko & Pettway	1542	1970-2000	26
Korea	Dhatt, Kim & Lim; Ihm; Choi & Heo	477	1980-1996	74
Malaysia	Isa; Isa & Yong	401	1980-1998	104
Malaysia	Dawson	21	1978-1984	167

Country	Source	Sample Size	Time Period	Average Initial Returns (in %)
Mexico	Aggarwal,Leal &Hernandez	37	1987-1990	33
Netherlands	Wessels; Eijgenhuijsen & Buijs; Jenkinson, Ljungquist, & Wihelm	143	1982-1999	10
New Zealand	Vos & Cheung; Camp & Munro	201	1979-1999	23
Nigeria	Ikoku	63	1989-1993	19
Norway	Emilsen, Pedersen & Sattern	68	1984-1996	13
Philippines	Sullivan & Unite	104	1987-1997	23
Poland	Aussenegg	149	1991-1998	36
Portugal	Almeida & Duque	21	1992-1998	11
Singapore	Lee, Taylor & Walter	128	1973-1992	31
Singapore	Dawson	39	1978-1984	39
South Africa	Page & Reyneke	118	1980-1991	33
Spain	Ansotegui & Fabregat	99	1986-1998	11
Sweden	Rydquist	251	1980-1994	34
Switzerland	Kunz & Aggarwal	42	1983-1989	36
Taiwan	Lin & Sheu; Liaw, Liu & Wei	293	1986-1998	31
Thailand	Wethyavivorn & Koo-smith; Lonkani & Tirapat	292	1987-1997	47
Turkey	Kiymaz	138	1990-1996	14
United Kingdom	Dimson; Levis ; Lingquist	3042	1959-2000	18
United States	Ibbotson, Sindelar & Ritter	14760	1959-2000	18

Sources: Loughran, Tim, Ritter, Jay R. and Rydquist, Kristian(1994) Updated April 13, 2001

CHAPTER-II
REVIEW OF LITERATURE

Blum (1973) examined the issues of relative performance of the over-the-counter market with the initial common stock offerings, underpricing, and the risk involved thereof. The total period had been covered by the study w.e.f Jan 19, 1965 to June 30, 1970 with a random sample of 400 initial common stock offerings. The market returns and risks associated with these 400 issues have been calculated for 16 time periods, ranging from one week to one year after the offering date. The study conducted so far suggests that the investment bankers have either underpriced or pushed in the after-market those IPOs in which they held greatest financial interest.

Ritter (1984) analysed the 'hot issue' market of 1980 by considering 1028 issues in 1977-82 period in the U.S. The study calculated the initial percentage returns that were not adjusted for market movements. For each month in the period January 1977 to December 1982, an equally weighted average initial return was calculated by taking the simple arithmetic average of the initial returns of all unseasoned new issues having offering dates in that calendar month. For the 1960-76 periods, a monthly time series of the number of issues and average initial returns has been collected, allowing an analysis of the time series behaviour of initial public offerings for the 23 years period i.e. for the 1960-82. The results of the study depict that there has been 3 or 4 periods during 1960-82 in which monthly average initial returns on unseasoned new issues has been extremely high for prolonged periods. During the hot issue market of 1980, for 15-month period the initial return is 48.4%, as compared to with the average initial return in the period 16.3% of 1977-82 periods, the cold issue market. The study also presents a theoretical framework which explains the phenomenon of underpricing i.e. 'Rock's theory of underpricing of Initial Public Offerings'.

Tinic (1988) has developed and tested the hypothesis that underpricing serves as a form of insurance against legal liabilities and the associated damages to the reputation of both the investment bankers and the issuers. The researcher had divided the sample size into two periods, the Pre-SEC period, i.e., from 1923 to1933 and the Post-SEC period, i.e., from 1966

to 1971. The study shows that in post SEC the prestigious investment bankers/ underwriters had started to avoid underwriting speculative small issues. Moreover, in post SEC the magnitude of underpricing had paled off in comparison to excess returns in pre SEC period.

Mauer and Senbet (1992) analysed the role of secondary market in pricing and underpricing of IPOs. The study considered 1002 IPOs during the period 1977- 1984. IPOs are above $ 1.5 million, underwritten and subsequently traded on NASDAQ, AMEX or NYSE. The analysis is done with the use of Pearson correlation coefficients calculated between initial returns, Dimon Beta, Residual risk, Offering size, age and time of offering. They had argued that incomplete spanning of the primary issues in the secondary market and limited investors access play an important role in the pricing of IPOs. The results derives price differential between primary and secondary market which are consistent with IPO underpricing. The study reveals that the IPO initial returns are positively related to IPO residual risk, negatively related to offering size and company age, and are not related to systematic or beta risk.

Chemmanur (1993) presents an information-theoretic model of IPO pricing in which insiders sell stock, in both the IPO and the secondary market, have costly private information about performance of the firm. High value firms, which know that they are going to pool with the low-value firms, induced outsiders to engage in information production by underpricing, which compensates outsiders for the cost of producing information. So underpricing results from insiders inducing information production in order to have a more precise valuation of their firm in secondary market.

Jegadeesh, *et al*. (1993) had tested the signaling model of underpricing. The sample period is from 1980 to1986. The study has included all IPOs of the given sample period but it has considered only 'firm commitment' IPOs and has excluded the best effort offerings. The results of the study show that there is a positive relation between IPO underpricing and the probability and size of subsequent seasoned offering. But contrary to the basic implication of the signaling hypothesis, the evidence shows that issuers do not have to rely on the costly underpricing mechanism to signal to the market information relevant for future equity issues.

Therefore the support for the signaling hypothesis as a major determinant of IPO underpricing is weak.

Shah (1995) has analysed the stylized empirical regularities about India's IPO market, via dataset of 2056, IPOs between time period of 1991-1995. The present researcher has used time series regression analysis. The empirical findings of the research study highlight that the price at first listing was 105.6% above the offer price on an average. Secondly, listing delay affects the IPO underpricing and is strongly related with the issue size. And finally, Underpricing gently increases with offer price. But the shortcoming of the study is that stock market return may also affect the very IPO planning process via longer lags but the sample period runs too short to identify this.

Madhusoodanan and Thiripalraju (1997) analyze the Indian IPO market for the short term as well as long term underpricing. They also examine the impact of the issue size on the extent of underpricing in these offerings and the performance of the merchant bankers in pricing these issues. The study indicates that, in general, the underpricing in the Indian IPOs in the short run is higher than the experiences of other countries. In the long-run too, Indian offerings have given high returns compared to negative returns reported from other countries. The study also reveals that none of the merchant bankers showed any better pricing capabilities.

Chen, *et al.* (2000) investigates the post-issue market performance of 277 A-share and 65 B-share IPOs listed on China's new stock market during the period 1992-1995. The results highlight that A-share IPOs are more severely underpriced than B-share IPOs during initial return period; and B-share IPOs underperform for post three years period in the market. It is found that on an average both gross proceeds and pre-IPO book value of equity is greater for B-share IPOs than for A-share IPOs. All the returns data used in this study were adjusted for stock splits, stock dividends and rights offerings. They have bifurcated the study into two parts for evaluating the after market performance of IPOs, which are (1) the initial returns, for the period of offering date to the Ist trading date (2) the aftermarket period return, for one, two and three years after IPOs. The performance measures used were: - (1) the Initial

Returns (2) Market adjusted Buy and Hold Return, (3) the wealth relative. Multivariate regression analysis was used to examine cross-sectional determinants of the aftermarket performance of China's IPOs, the results showed that long run performance of IPOs was inversely related to initial returns .The results showed that the initial returns on A-shares are extremely high and exceeded those reported in other countries. The sample being taken thereof shows that the aftermarket performance is positive in first year after listing but thereafter returns declines. The results of multivariate regression analyses have showed that economic factors affected the IPO underpricing.

Lowry and Schwert (2000) analyzed the aggregate IPO market activity and also have examined the initial returns at the firm level. The research also studies strong cycles in the number of IPOs by calculating the average initial returns realized by investors from 1960 to 1997.The statistical measures being used in the study are mean, median, standard deviation and auto-correlations. The results show that IPOs cycles occurs and has subsequent effect on returns and underperformance. The study also shows that clustering of IPOs happens in the market and is also associated with predictably different initial returns. And also the information about the value of an IPO which is being available during registration period has an effect on the prices and offering decisions of other firms.

Alwarez and Gonzalez (2001) analyzed all the IPOs in Spanish market during 1987-1997, with a sample of 56 firms to provide evidence on initial underpricing and long run underperformance of IPOs. They have used Buy and Hold Returns (BHR), Calendar time portfolios and the Fama and French three factor Model for their analysis. The results of study show that the existence of long run underperformance depends upon the methodology used. There exists long run underperformance when BHR are used and not when mean calendar time returns are employed. Secondly the study also shows that neither the characteristics of IPO i.e. IPO's size, underwriters reputation nor those of the firm in the year prior to going public have a statistically significant influence on the stock return of the firm three or five years after going public.

Gompers and Lerner (2001) analyzed the performance of nearly 3661 IPOs in the United States from 1935 to 1975 for 5 years. The study considers a Pre-NASDAQ period. The results display the evidence of underperformance when event time buy and hold abnormal returns are used. However the underperformance disappears when cumulative abnormal returns are used. The study also indicates that the initial returns of recent IPOs contained information on the market's valuation of future IPOs.

Ljungquist, *et al.* (2001) suggests a mode which provided empirical evidence on underpricing, hot issue markets and long run underperformance. The objective of the study is to offer a simple model of the pricing and other features of IPO process. The study relates the hot IPO markets to the presence of a class of investors who are 'irrational' in the sense of having exuberant expectations regarding future performance. Underpricing and long-run performance emerged as underwriter's attempt to maximize profits from the sale of equity, at the expense of these exuberant investors. Underpricing has served to compensate regular IPO investors for their role in restricting the supply of available shares and maintaining prices. The results of the study show that there are three main empirical IPO 'anomalies' – underpricing, hot issue markets and long run underperformance; and the emergence of hot markets result in increase in optimism of Sentiment traders which causes IPO swings in the market.

Ritter and Welch (2002) examined three main aspects i.e. why firms go public, why they reward first day investors with considerable underpricing and how IPOs perform in the long run. The study explains the 'Life cycle theories' and 'Market timing theories'. This study presents both theoretical and empirical evidence for short run and long run underperformance of IPOs and shows that the underpricing is sensitive to methodology and to the time period being chosen. Second, Fama-French Multifactor regressions could produce odd results.

Krishnamurti (2002) provides an evidence for the wide spread underpricing of Indian IPOs by analysing386 IPOs in post liberalizing era, from the period July 1992 to Dec 1994.The empirical evidence confirms the underpricing phenomenon in Indian Market by using Raw

returns, Market Adjusted Returns. It also analyzed the factors responsible for pervasive and persistent occurrence of underpricing in the IPO market.

The researcher briefly describes the status of investment banking industry in India and has also outlined the regulations and procedures involved in the new issue process in India. The researcher has pointed out that the top and established lead managers in the industry manages approximately 56% of the issues and thus he tried to convey that the market is being held by the top merchant bankers and they enjoy the lion's share in the market by analyzing the overview of the investment banking industry.

The research findings, after empirical analysis, highlight that underpricing comes down with increasing offer prices and believed that the offer is the proxy for the size of the firm. Secondly smaller firms are more risky because there exists a greater degree of information asymmetry between insiders of the firm and outside investors. (a main reason considered for underpricing)

The initial listing returns of IPOs are related to subscription levels and raw returns. Market adjusted returns are strongly related with subscription levels. Underpricing is due to the merchant bankers' inability the extent of demand for the issue at the offer price. Large time lags between setting up of the offer price and the offer opening date cause underpricing. In India, the lag period is typically three to four months long. Adverse market movements during the time lag may create mis-pricing.

Singh (2003) has reported that the internationally observable phenomenon of IPO market is characterized by pervasive underpricing in the short run and underperformance in the long run. Indian investors get very high returns up to a period of six months and thereafter the returns declines. The long-term investors, who continue to hold their investments for a period of two–three years, experiences negative returns

Yan and Cai (2003) analyze long run performance of 718 IPOs in Japanese over-the-counter market (JASDAQ) from the period 1991-2001. The primary objective of the study is to

determine whether and how the phenomenal market and operating underperformance are intrinsically associated and mutually explicable by behavioral hypothesis. The study analyzes the systematic over-optimism of market investors and managers at the time of IPO events and uses the hypotheses of "Windows of Opportunity" and market timing. The performance measures being used are post-issue long-run holding period stock returns (HPRs) for JASDAQ IPOs adjusted by alternative benchmarks, along with profitability ratios; growth rates; M/B; P/E; and Tobin's Q measures of market expectations for potential earnings growth. The results shows that although median offer price of JASDAQ IPOs are lower than non-JASDAQ by about 23%, the initial returns are higher by 26%, which have shed light on the hypothesis of "leave more money under the table" in JASDAQ market. It shows that the JASDAQ IPOs suffer homogeneous collapses not only in financial performance, but in market expectation measures by M/B, P/E and Tobin's Q as well. The results of this study show that the continuing operating long run under-performance and explains that "Agency problem theory" is not effective in explaining the long run operating underperformance of JASDAQ IPOs.

Pastor and Veronesi (2003) analyzed IPOs from the period Jan 1960 to Dec 2002 and observed 16 IPO waves and used regression analysis for analyzing IPO performance. The researchers have used Market Returns (MKT), Market Volatility (MVOL), and Aggregate M/B ratio and time series analysis. The study presents a theoretical framework on different aspects such as IPO waves, Optimal IPO timing, and IPO valuations. Empirical evidence shows that the results are inconsistent with the long run underperformance of IPOs.

Vaidayanathan (2007) studies the price performance of IPOs in the NSE. The study suggests that the demand generated for an issue during book building and the listing delay positively impact the first day under pricing whereas the effect of money spent on the marketing of the IPO is insignificant.

The study considers the data from March 2004 to Oct 2006 and takes into account 55 companies for analysis. The researcher has verified that the demand generated for an issue during book building and the listing delay positively impact the first day underpricing

whereas the effect of money spent on the marketing of the IPO is insignificant. The researcher has found that the degree of underpricing in the sample is varying from -33.04% to 82.5% with a mean value of 22.62%. There are only 27.27% which got listed at a discount to their offer price (i.e. overpricing of issues), whereas 72.73% firms showed underpricing phenomenon.

The present researcher has also thrown light on the fact that the average underpricing has gone down up to 22.62% during the period in context, as compared to 105.6% (reported by Shah, 1995) during the period 1991 to 1995. This is due to change in regulation whereby the allocations to informed investors are allowed, which makes the market more efficient.

An important finding of the study is that there are a large number of firms (54.5%) in the sample which give a negative return, unadjusted for market returns just one month after their listing, when at the same time adjusted for market returns (more than 58% of the firms in the sample) give a negative return in a period of one month. In simple words, the researcher has tried to explain that if an investor would have invested in the IPOs of all firms of our sample, got allocation in each one of these and waited for a month then he would have on an average earned return of 1.06%. But this is 1.13% below the market returns. Thus, an investor would be better off by investing in index based mutual funds during the period of the study rather than investing in IPOs if only a short term horizon of one month is considered.

One of the important and unique contributions of this study is that the after market in India regards the final offer price which has been set after book building as a credible signal for the firm's underpricing. Another finding of the study is that the returns form IPOs get diffused within one month of the listing of the firms and on an average the gains in one month after listing are lesser than those of the market.

The important limitation of the study is that due to non availability of 'one size fits all' model for studying IPO underpricing phenomenon, the present study can give contradictory results with the other studies. Secondly, the time horizon taken is considered short by the researcher.

Kumar (2007) has analysed the long run as well as short run price performance with respect to the book building process in India and has verified the presence of underpricing phenomenon in Indian IPOs up to the time span of twenty four months from the date of listing.

The study examines 156 firms (which issued their IPOs through book building route on the NSE) over the period of 1999 to May 2007. The researcher has used the analysed the short run performance by applying the simple returns and market adjusted returns to capture the market movements during the period between the offer closures to listing. The long run performance analysis is done by studying the buy and hold adjusted returns (BHAR) and monthly market adjusted returns (MMAR) at regular monthly intervals from the second day of their listing. The index Nifty has been used for calculating the market adjustments.

The empirical evidence shows that 156 IPOs sampled in this paper on an average IPOs got listed with 26.35% premium over the offer price and the median premium of around 18%. The researcher has applied a regression technique which shows that the offer to open returns explain the variation in offer to close returns to an extent of 80%. Also cross sectional regression is used in this study with initial returns (dependent variable) and size, before market condition, offer price quotient to explain underpricing (independent variable) . The results suggest that the larger the issue price, the lesser is the underpricing. If the general market conditions are optimistic, the issue attracts more investors thus leading to higher premium in returns.

The empirical research of long run analysis shows that the IPOs give better performance up to two years but after that they start underperforming and a comparison with international evidence shows the after market performance over three years period is -14.69%. An important finding of the paper is that with the introduction of book building process in India the extent of IPO underpricing has gone down. The researcher has also thrown light on the limitation of the study that is the size of the sample is found small for the studying the impact of underpricing beyond the time frame of 24 months.

Janakiramanan (2007) has examined the evidence of the long run underperformance in the Indian market using the data set of firms over the period of 2000-02, by using CAPM and three factor models as benchmarks. The researcher has taken a sample of 116 companies from various industries. The sample of the study consists of 116 IPOs issued by companies in the Indian market during the period from 2000 to2001. The aftermarket performance is taken for five years.

The study uses various methods to ascertain the performance because of the sensitivity of the results to the choice of benchmarks, so as to elucidate the possibility that the magnitude of the performance is benchmark dependent. The researcher has used total return, market adjusted abnormal return for short run as well as for long run. The study employs the basic capital asset pricing model (CAPM), the Fama and French three factor model and the average return model. The results for the three factor model imply a greater positive return as compared to the CAPM in the long run. The results depict that the three factor model may be better suited for explaining long-run underperformance. The long term performance of these companies shows that investment in Indian IPOs provides positive abnormal return by the end of 60 days. The abnormal return is greater for investment in smaller companies to investment in larger companies.

Khurshed, *et al.* (2008) has examined the timing and subscription pattern of different groups of investors' viz. retail investors, QIB's, NII's. Authors have divided the study into two parts, the Pre-listing period and Post-listing period underpricing. The sample period for the study is March 1999 to March 2008 and the sample size is 239 IPOs. The authors have used descriptive analysis, correlation techniques and multivariate regression. The results indicate that subscription level of non-institutional investors and retail investors is significantly influenced by the subscription pattern of qualified institutional buyers. Moreover, the findings show that the transparency of the book-building process in Indian IPOs helps to nullify the winner's curse problem for the non-institutional and retail investors.

Singh and Kumar (2008) have analysed short and long run underpricing of IPOs in the Indian Capital markets by looking at different factors affecting them. The study proposed a model of

underpricing taking oversubscription variables along with age and issue size. They have performed industry wise analysis from the time period of Jan. 2006 to Oct.2006 by taking 116 IPOs. The study shows that Indian Capital markets are found to follow industry specific waves. The sectors which are performing well are more underpriced in short run as well as perform well in long run.

CHAPTER -III
RESEARCH METHODOLOGY

The study has been aimed at appraising the price performance of the Indian IPOs and to judge the extent of underpricing. This chapter covers the objectives of the study, data and methodology covered in the study.

3.1 Objectives of the study

More specifically, the study has been designed to achieve the following objectives:

1. To study the regulatory framework governing IPOs in India.
2. To measure the initial underpricing of IPOs in India i.e. from the date of offer to the public to the date of their listing.
3. To examine the extent of short run underpricing of IPOs in India
4. To analyze the underpricing for the long run i.e. up to a period of 3 years.
5. To analyze the factors influencing price performance of IPOs.

3.2 Data and Methodology

The study is based on the secondary data. Secondary data has been collected from the National Stock Exchange of India, SEBI etc. The study includes the prices of those companies which satisfy the following criteria:

i. The IPO is listed on the NSE and has been traded for six months for short run analysis, and up to three years for long run analysis. In other words, companies pricing performance is available on the NSE for the time period considered.

ii. Data regarding offer price, listing date, listing price and the prices subsequently required are available.

iii. Short-run analysis: All IPOs, with equity share as an instrument, listed on NSE for the time period from year 1999 to Dec 2008 have been considered. The total no. of companies is 244 for the short run analysis.

iv. For Long-run analysis: All IPOs, with equity share as an instrument, listed on NSE for the time period from year 1999 to 2005 have been considered. For the long run analysis the total no. of companies is 65.

v. For the factors affecting IPOs price performance analysis: All IPOs that's data has been available are considered for study.

To test whether a stock has been priced at its intrinsic worth or not and to determine the magnitude and degree of the deviations of market price of the stock from its offer price, returns have been computed.

If the returns are positive, the indication is that of underpricing while negative returns imply overpricing. It is not possible to compare these returns across the board, because the market was in different phases during the period. So, this return has been adjusted using the returns on the CNX S&P Nifty Index for the corresponding period. In order to analyze the short run underpricing, one week, one month, three months and six months time intervals have been taken. In case the share prices are not available for a particular date, a seven days window has been considered and the price available on the nearest date has been selected.

The initial return on IPOs has been computed as the difference between the closing price on the first day of trading and the offer price, divided by the offer price.

$$R\_Ret. = \left[\frac{P_1 - Po}{P_o}\right]^{*} 100 \quad \text{---------- (i)}$$

Where R_Ret. = subscriber's initial return (hereafter raw return)

P_1 = closing price on the first day of trading

P_o = Offer price

The return measured by Equation (i) would be valid in a perfect market, where there is no time gap between the application closing date and the first day of trading, no opportunity cost of money deposited with the application (or demand for shares does not exceed the supply of shares and hence no rationing takes place), and no other costs associated with lodging an application. If the first condition is not fulfilled, returns should be adjusted for changes in market conditions during this period. In most cases the gap between the application closing date and the first day of trading would be very small and is likely to have a negligible effect. But, in India this gap is quite long. During this period, a major change could occur in market conditions and the observed premium (discount) measured by equation (i) could be caused by a change in market conditions rather than initial mispricing. Therefore, the raw return estimated by equation (1) has been adjusted for market return.

$$MAER = \left(\frac{P_1 - P_0}{P_0} - \frac{M_1 - M_0}{M_0} \right)^{*} 100 \text{----------(ii)}$$

Where MAER = Market adjusted excess return

M_1 = Closing value of Market Index on the first trading day

M_o = Closing value of Market Index on the offer closing date.

Since for different companies, the time taken to list varies, so to normalize for this, annualized returns will be calculated by multiplying Raw and MAER by the following factor.

$$\text{Annualizing factor} = \frac{365}{\text{Listing Lead Time}} \text{ ---------- (iii)}$$

The returns for the different time period gaps considered is calculated by taking closing prices of the given stock after the specified time gap (i.e. one week, 1 month, 3 months, 6 months, 1year, 2 year or 3 years) from the listing day. So the formula used in equation (i) is adjusted as follows:

$$R\_Ret_t. = \left(\frac{P_t - P_0}{P_o} \right)^{*} 100 \text{ ----------(iv)}$$

Where $R\_Ret._t$ = raw return of the stock at time t after listing day

P_t = closing price at time t

P_o = closing price on Listing day

Similarly, the market adjusted excess returns are calculated for the given time periods, by using the following formula

$$MAER_t = \left(\frac{P_t - P_o}{P_t} - \frac{M_t - M_o}{M_o} \right) * 100 \quad \text{-------(v)}$$

Where MAER = Market adjusted excess return at the end of time period t

M_t = Closing value of the index at time period t

M_o = Closing value of the index on Listing day

The average of R_Ret_t values, for all securities gives the return on days't' for the sample.

To examine the short-run underpricing, another measure Wealth Relative (Index) has been calculated. The magnitude of this measure is an indication of the performance of IPOs vis-à-vis the market. A wealth relative of value greater than unity implies that IPOs outperformed the market in that period, while a wealth relative below 1 indicates under-performance. When an IPO outperform the market then that means that it has given higher returns than the market which implies that it was underpriced previously and when it gained it actual worth in the market it outperformed the market in terms of returns. WR_{it} for a sample of n stocks at time t is calculated using the formula

$$\text{Wealth Relative, } WR_{it} = \frac{1 + \frac{1}{N} \sum_{i=1}^{N} R\_Ret_t}{1 + \frac{1}{N} \sum_{i=1}^{N} MR\_Ret._t} \quad \text{---------- (vi)}$$

Where R_Ret_t = R_Ret. /100

MR_Ret_t = MR_Ret. /100

N = total number of IPOs in the sample

Besides that descriptive statistical methods are also been used in the study to analyze the considered data.

3.3 Hypotheses:

The hypotheses which are being considered for the study are given below. These hypotheses are null hypotheses**.**

H_1: There is no relation between age and pricing performance of the IPOs

H_2: There is no relation between Issue size and pricing performance of the IPOs

H_3 : There is no relation between Subscription level and pricing performance of the IPOs

H_4: There is no relation between Listing Lead time and pricing performance of the IPOs

H_5 : Long run underpricing is more than Short run underpricing.

This chapter has covered the brief of the methodology and the conceptual framework of the study.

CHAPTER-IV
REGULATORY FRAMEWORK OF IPOS
(WITH SPECIAL REFERENCE TO SEBI GUIDELINES)

This chapter presents the regulatory framework governing the issuance of IPOs through Public offer, Book building and Online route. The market design for primary market has been provided in the provisions of: (a) the SEBI Act, 1992 which establishes SEBI to protect investors and develop and regulate securities market; (b) the Companies Act, 1956, which sets out the code of conduct for the corporate sector in relation to issue, allotment and transfer of securities, and disclosures to be made in public issues; (c) the Securities Contracts (Regulation) Act, 1956, which provides for regulation of transactions in securities through control over stock exchanges; and (d) the Depositories Act, 1996 which provides for electronic maintenance and transfer of ownership of de-mat securities.

In this chapter, the market design for IPOs as provided by SEBI has been analysed. An elaborate system built under the Capital Issues (Control) Act, 1947, established firm control of the Central government over IPOs and other capital Issues in the post independence era since1947 until the abolition of the Act, in 1992. This abolition paved the way for free access to the capital markets and for free pricing of IPOs and other capital issues. SEBI has become the focal point for regulating issues of capital by the corporate sector. It has been entrusted with the responsibility to look after the interest of investors in this regard by providing them with adequate and full disclosures in the offer documents and by regulating the various intermediaries connected with the issue of capital. In this context, SEBI issued guidelines in June, 1992 known as Disclosure and Investor Protection Guidelines, which govern the issue of capital to public. SEBI has been issuing clarifications to these guidelines from time to time aiming at streamlining the public issue process. In order to provide a comprehensive coverage of the DIP guidelines, SEBI has issued a compendium series in January, 2000, known as SEBI (DIP) Guidelines, 2000. These guidelines apply to all public issues, offers for sale and right issues of listed and unlisted companies.

4.1 Eligibility Norms for Companies Issuing IPOs

SEBI has introduced entry norms for the IPO market. According to the guidelines issued by SEBI, a company intending to make an IPO should satisfy some eligibility conditions. It has to file a draft prospectus with SEBI, through an eligible merchant banker, at least 21 days prior to the filing of prospectus with the Registrar of Companies. A company cannot make a public issue unless it has made an application for listing of the securities with stock exchange(s). The company must also have entered into an agreement with the depository for dematerialization of its securities.

An unlisted company can make initial public issue, on fixed price basis or on book building basis, provided it has a pre-issue net worth of not less than Rs.1 crore in 3 out of the 5 preceding years and has minimum net worth in immediately preceding 2 years. Also, the company should have Net Tangible Assets of at least Rs.3 crore in each of the proceeding 3 years of which not more than 50% is held in monetary assets; and in case the company has changed its name within last one year, at least 50% of the revenue for the preceding 1 year is earned by the Company from the activity suggested by the new name [1] The Company should also have a track record of distributable profits in terms of section 205 of the Companies Act, 1956, for at least 3 years out of the preceding 5 years[2]. Earlier SEBI norms permitted a new company to come out with an IPO if it has a dividend payment track record for 3 years ,out of the 'actual payment of dividend' to 'ability to pay dividend' in terms of Section 205 , out of immediately preceding 5 years. In order to encourage IPOs, SEBI relaxed this requirement Companies Act, 1956. That is why; the company making IPO must have distributable profits for at least three out of immediately preceding five years. Further, the issue size should not exceed five times of its pre-issue net worth. A company is eligible to make a public issue on fixed price basis or on book building basis, if the issue size does not exceed five times its pre-issue net worth.

If the company does not meet the above criteria, i.e., not having track record or it wishes to raise more than 5 times the pre-issue net worth, then the issue will have to be compulsorily

made through book building route. In such a case, 60% of the issue size will have to be allotted to the 'Qualified Institutional Investors'. If the company wishes to issue only 10% of post issue capital to public, then it can be made only through book building with allocation of 60% of the issue to QIBs. Also, one of the following two conditions must be satisfied i.e. firstly, the minimum post-issue face value capital of the company shall be Rs. 10 crore; or secondly, there shall be compulsory market making for a minimum depth of 300 shares along with maximum bid-ask spread of 10%[i] .

A listed company can make public issue if the issue size does not exceed 5 times its previous net worth as per audited balance sheet of the last financial year. Private sector banks, public sector banks and Infrastructure companies are exempt from the requirement of eligibility norms if their project has been appraised by a public FI or IDFC or IL&FS or a bank which was earlier a public FI [ii] and not less than 5% of the project cost is financed by any of the institutions, jointly or severally, by way of loan and/ or subscription to equity.

Companies in the information technology sectors requested SEBI that in view of the factors like high valuation enjoyed by these companies coupled with low capital requirements, importance of employee stock options (as employees are the main asset for these companies) and attractiveness of ADR route for listing on overseas stock exchange with capital dilution as low as 10 per cent, they may be granted relaxation from requirement to offer to the public at least 25 per cent of the securities issued for the purpose of listing. In view of the fact that accumulation of excess capital by these companies would result in unproductive utilization and crowd out the other industries in need of capital, SEBI decided to allow these companies to list their shares by making a public offer of 10 per cent of the post issue capital instead of 25 per cent, subject to requirements of issue of minimum number of securities and a specified minimum issue size.

A concern had arisen about the misuse of high valuation of IT industry by some unscrupulous promoters who may charge unreasonably high premiums from the investors. It was, therefore, thought necessary to stop the access to public funds by such promoters so that the interest of genuine promoters is protected. Thus, in continuation of efforts to ensure that

the offer document contains adequate disclosures to enable the investors to make an informed investment decision, additional disclosure requirements were stipulated for companies which changed their names in the recent past to give an impression of being into information technology. Eligibility norms were modified to provide that a company in the IT sector going for IPO/offer for sale shall have track record of distributable profits as per Section 205 of the Companies Act in three out of five years in the IT business/from out of IT activities. This clause has been deleted now.[iii]It can also access the market through the alternative route of appraisal and financing by a bank or financial institution.

Thus, existing eligibility norms of the issuers have been reviewed interalia with an objective to strengthen the existing norms, to facilitate entry of mid-cap, small-cap new entrepreneurs to the primary market without exposing the public to undue risk, to maintain quality of issuer companies and also to keep fly by night issuers at bay[iv].

4.2 Pricing of IPOs

Pricing the instrument is the most critical element of an issue. Since the abolition of CCI, the onus of pricing the issue has fallen on merchant bankers. Companies are now allowed to freely price their issues. The idea behind free pricing was that if companies overpriced their issues, the market would penalize them by not subscribing and by underpricing; the companies would have to forego the potential premium.

In the CCI regime, when all the issues coming with a public issue had to price their issue based on the CCI formula, was a case of anti-market practice, where all companies whether fundamentally sound or not had to price their issues very conservatively. As a result of this, all the issues coming into the market were easily oversubscribed leaving a few devolvements. The merchant banker's role during this period was limited.

With the abolition of CCI in June 1992, the restriction was removed and companies were allowed to price their equity at a premium subject to certain conditions. This free pricing regime had its own quota of boons and banes. The sound companies with good fundamentals

were able to tap funds from the capital market at a premium. On the other hand, companies with dubious credentials issued capital with rosy projections and fleeced the uninformed investors. The merchant banking community too moved into the numbers game and became less concerned about the quality of issues. This resulted in the overpricing of many issues which often gave negative initial returns to the investors (*ICFAI*, 1999).

4.2.1 SEBI Guidelines about Pricing

A company eligible to make a public issue may freely price its equity shares. An eligible infrastructure company and public or private sector bank can also freely price their equity shares, as specified by SEBI and RBI respectively from time to time.[v]

4.2.2 Differential Pricing

Offer documents filed with the Board and actual price can be determined at a later stage.
Any company making a public issue of equity shares may issue such securities to applicants in the firm allotment category at a price different from the price at which the net offer to the public is made provided that the price at which the security is being offered to the applicants in firm allotment category is higher than the price at which securities are offered to public.

4.2.3 Price Band

Issuer company can mention a price band of 20% (cap in the price band should not be more than 20% of the floor price) in the date before filing of the offer document with ROCs. If the Board of Directors have been authorized to determine the offer price within a specified price band, such price shall be determined by a resolution to be passed by the Board of Directors.
In case of listed company, the lead merchant banker should give a 48 hours notice of such meeting to the Designated Stock Exchange. Also, in case of public issue or rights issue by listed issuer company, issue price or price band may not be disclosed in the draft prospectus filed with the Board.[vi] The final offer document shall contain only one price and one set of financial projections, if applicable.

4.2.4 Freedom to Determine the Denomination of Shares for Public

Keeping in view the changes in the capital market emanating from free pricing of shares and free access to market for funds by the issuers, the SEBI with the objective of broadening the investors' base, dispensed with the requirement of standard denomination of Rs.10 and Rs.100 (in terms of government circulars) and gave freedom to companies with dematerialized shares, to issue shares at any denomination but not below Re.1/- or decimal of a rupee to be determined by them. Now, an eligible company shall be free to make public issue of equity shares in any denomination determined by it in accordance with sub-section (4) of section 13 of the Companies Act, 1956 and in compliance with the norms as specified by SEBI from time to time[vii]. The companies proposing to issue shares in any denomination shall comply with the following:

i. The shares shall not be issued in the denomination of decimal of a rupee;
ii. At any given time there shall be only one denomination for the shares of the company;
iii. The company shall adhere to the disclosure and accounting norms specified by SEBI from time to time

This measure would give freedom to companies to price their IPOs below Rs.10 and would thus be an extension of free pricing. This will also harmonize the existing separate disclosure and entry point norms for par and premium issues.

4.3 Promoters' Contribution and Lock-in Requirements

4.3.1 Promoters' Contribution

In a public issue by a company, the promoters shall contribute not less than 20% of the post issue capital. Promoters shall bring in the full amount of the promoters contribution including premium at least one day prior to the issue opening date which shall be kept in an escrow account with a Scheduled Commercial Bank and the said contribution/amount shall be

released to the company along with the public issue proceeds. But where the promoters' contribution has been brought prior to the public issue and has already been deployed by the company, the company shall give the cash flow statement in the offer document disclosing the use of such funds received as promoters' contribution.[viii] Further where the promoters' minimum contribution exceeds Rs.100 crore, the promoters shall bring in Rs.100 crore before the opening of the issue and the remaining contribution shall be brought in by the promoters in advance on pro-rata basis before the calls are made on public[ix]. The requirement of promoter's contribution shall not be applicable in case of public issues of securities by a company which has been listed on a stock exchange for at least 3 years with a track record of dividend payment, and companies where no identifiable promoter or promoter group exists. Promoters should disclose their existing shareholding and the extent of their participation in offer document.[x]

4.3.2 Lock-in Requirements

In case of any issue of capital to the public the minimum promoters' contribution shall be locked in for a period of 3 years. The lock-in shall start from the date of allotment in the proposed public issue and the last date of the lock-in shall be reckoned as three years from the date of commencement of commercial production or the date of allotment in the public issue whichever is later. If the promoter's contribution in the proposed issue, in case of unlisted company, exceeds the required minimum contribution, such excess contribution shall also be locked in for a period of one year, [xi]previously it was 3 years. While in case of listed companies this would be guided by provisions of Guidelines on Preferential issues. The securities forming part of promoters' contribution and issued last to the promoters shall be locked in first for the specified period. But the securities issued to the financial institutions appearing as promoters, if issued last, shall not be locked-in before the shares allotted to the other promoters.

4.3.3 Lock-in of Pre Issue Share Capital of an Unlisted Company

The entire pre-issue share capital, other than that locked-in as promoters' contribution, shall be locked-in for a period of one year from the date of commencement of commercial production or the date of allotment in the public issue, whichever is later.

The above Clause shall not be applicable to the pre-issue share capital held by venture capital funds and foreign venture capital investors[xii] registered with the Board. However, the same shall be locked-in as per the provisions of the SEBI (Venture Capital Funds) Regulations, 2000 and any amendment thereto held for a period of at least one year at the time of filing draft offer document with the Board and being offered to the public through offer for sale."[xiii]

4.4 Pre-Issue Obligations

The lead merchant banker plays an important role in the pre-issue obligations of the company. He exercises due diligence and satisfies himself about all aspects of offering and adequacy of disclosures in the offer document. Each company issuing securities has to enter into a Memorandum of Understanding with the lead merchant banker, which specifies their mutual rights, liabilities and obligations relating to the issue.

In case a public issue is managed by more than one merchant banker, the rights, obligations and responsibilities of each merchant banker shall be demarcated**.** In case of under-subscription of an issue, the lead merchant banker responsible for underwriting arrangements has to invoke underwriting obligations and ensure that the underwriters pay the amount of devolvement. The lead manager shall ensure that the issuer company has entered into agreements with all the depositories for dematerialization of securities. He shall also ensure that an option is given to the investors to receive allotment of securities in dematerialized form through any of the depositories.[xiv] All the other formalities related to post-issue obligations like allotment, refund and dispatch of certificates are also taken care by the lead merchant banker. From May 2007 onwards SEBI has mandatory the grading of IPOs by any SEBI authorized credit rating agency. This has to be mentioned in the company's prospectus.

4.5 Other Issue Requirements

Rule 19(2) (b) of SC (R) Rules, 1957

In case of a public issue by an unlisted company, the net offer to public shall be at least 10% or 25% as the case may be, of the post-issue capital[xv]and in case of listed companies it is 10% or 25% of the issue size.[xvi]. An eligible infrastructure company, inviting subscription from public may not be required to offer at least10% or 25% of its securities to public for subscription as required under rule 19(2)(b) of SC(R) Rules, 1957.

Previously, in case of public issues of equity shares by unlisted companies *in any of the eligible sectors*[xvii] at least 10% of the securities issued by such company might be offered to the public subject to the following: -

i. Minimum twenty lakhs securities are offered to the public (excluding reservation, firm allotment and promoter's contribution); and
ii. The size of the offer to the public i.e. the offer price multiplied by the number of securities offered to the public at point (i) above is minimum Rs.50 crore.
iii. The issuer company is free to make reservations and/or firm allotments to various categories of persons mentioned hereafter for the remaining of the issue size subject to other relevant provisions of these guidelines.

But now the issuer company is free to make reservations and/or firm allotments to various categories of persons mentioned hereafter for the remaining of the issue size subject to other relevant provisions of these guidelines.[xviii]In a public issue (not being a composite issue) by a listed company, the reservation on competitive basis can be made for the shareholders who, on the record date (date fixed for the purpose of determining the eligible shareholders) , are holding shares worth up to Rs. 50,000/- determined on the basis of closing price as on the previous day.[xix]

An unlisted company may make an application to the Board for relaxation from applicability of clause (b) to sub-rule (2) of Rule 19 of the Securities Contracts (Regulation) Rules, 1957

for listing of its shares without making an initial public offer if it satisfies the conditions mentioned in the guidelines.

4.6 Green-Shoe Option[xx]

An issuer company making a public offer of equity shares can avail of the Green Shoe Option (GSO) for stabilizing the post listing price of its shares.[xxi] A company desirous of availing this option, shall in the resolution of the general meeting authorizing the public issue seek authorization also the possibility of allotment of further shares to the 'stabilizing agent'(SA) at the end of the stabilization period in terms of clause 8A.15 [xxii]. The prime responsibility of SA is to stabilize post listing price of the shares. The SA should enter into an agreement with the promoters, the details of which would be disclosed in Red Herring Prospectus, and the final prospectus.

In case of an initial public offer by a unlisted company and by a listed company also, the promoters and pre-issue shareholders holding more than 5% shares, may lend the shares subject to the provisions.[xxiii]

4.7 Guidelines for Book-Building[xxiv]

Book building is a price discovery mechanism used by the corporate issuing securities. The mechanism also helps the small investors to subscribe to securities at a price, which is arrived at by a transparent process. The importance of this mechanism was recognized by the SEBI and book building guidelines were introduced in 1995. However, while book building became an accepted practice in the market for private placement of debt securities, it remained absent in the public issue market despite the regulatory framework being in place for a long time but now it has become the most popular method for the IPOs. An issuer company proposing to issue capital through book building has two options, viz., 75% book building route and 100% book building route. The 75% book building route is available to all body corporate that are otherwise eligible to make an issue to the public. In case this route is followed, the issue size shall not be less than Rs. 100 crore and underwriting shall be

mandatory to the extent of the net offer to the public. The prospectus should indicate the price band within which the securities are being offered for subscription. The balance 25% of the issue will be issued at the price determined through book building only to retail individual investors who have either not participated or have not received any allocation, in the book built portion.[xxv] The issue price for the book built portion and the fixed price portion shall be the same. If 100% book building route is adopted, the size of issue has to be at least Rs. 25 crore and the issue has to be fully underwritten. The book built portion shall be allotted in de-mat form only. Book building shall be for the portion other than the promoters' contribution. Not more than 60% of the book built portion can be allocated to institutional investor, not less than 15% on proportional basis to non-institutional investors applying for more than 1,000 shares and the remaining 25% to small investors on pro-rata basis.

SEBI had issued guidelines in October 1997 for book building, which were applicable for 100% of the issue size and for issues above Rs.100 crore. The guidelines were revised subsequently to reduce the limit to issues of Rs.25 crore to encourage the use of this facility. However, no issuer used this facility. SEBI modified the framework for book building further in October 1999 and Aug 2003 to make it more attractive. Under the modified guidelines an issuer has been given the option to book build either 90 per cent of the net offer to the public or 75 per cent of the net offer to the public. The balance issue is offered to the public at the fixed price determined through book building exercise.

The book building mechanism is designed keeping in view the international practices and procedures for book building. The modified framework does not replace the existing guidelines. The issuer company shall enter into an agreement with one or more of the Stock Exchange(s) which have the requisite system of on-line offer of securities. The Lead Merchant Banker shall act as the Lead Book Runner[xxvi] and he would have to follow the specified code of ethics. The red herring prospectus shall disclose, either the floor price of the securities offered through it or a price band along with the range within which the price can move, if any[xxvii]

The issuer would have option to issue securities using book building facility under the existing framework or the modified set up broadly as given below:

i. The present requirement of graphic display of demand at bidding terminals to syndicate members as well as the investors has been made optional.

ii. The 15% reservation for individual investors bidding for up to 10 marketable lots may be merged with the 10% fixed price offer.

iii. Allotments for the book built portions shall be made in demat form only.

iv. The issuer may be allowed to disclose either the issue size or the number of securities to be offered to the public

v. Additional disclosure with respect to the scheme for making up the deficit in the sources of financing and the pattern of deployment of excess funds shall be made in the offer document.

4.8. De-mat Issues

As per SEBI mandate, all new IPOs will have to be compulsorily traded in dematerialized form. The admission to a depository for dematerialization of securities has been made a prerequisite for making a public or right issue or an offer for sale. The investors would, however, have the option of either subscribing to securities in physical form or dematerialized form. The Companies Act, 1956 requires that every public listed company making IPO of any security for Rs.10 crore or more shall issue the same only in dematerialized form.

4.9. Guidelines for OTCEI Issues

Any company making an initial public offer of equity shares and proposing to list them on the Over the Counter Exchange of India (OTCEI) shall comply with all the requirements specified in these guidelines:

4.9.1 Eligibility Norms

Any company making an initial public offer of equity shares and proposing to list them on the OTCEI, is exempted from the eligibility norms specified by SEBI for IPOs, if it is sponsored by a member of the OTCEI and has appointed at least two market makers (one compulsory and one additional market maker) and fulfills the listing criteria laid down by the OTCEI. The issuer company shall not delist its securities from OTCEI for a minimum period of three years from the date of admission to dealing of such securities on OTCEI.

4.9.2 Pricing Norms

Any offer for sale of equity share or any other security convertible at a later date into equity shares resulting out of a Bought out Deal (BOD) registered with OTCEI is exempted from the pricing norms specified by SEBI subject to the following conditions:

i) The promoters after such issue shall retain at least 20% of the total issued capital with the lock-in of three years from the date of the allotment of securities in the proposed issue; and

ii) At least two market makers (one compulsory and one additional market maker) are appointed in accordance with the Market Making guidelines stipulated by the OTCEI.

4.9.3 Projections

In case of securities proposed to be listed on OTCEI, projections based on the appraisal done by the sponsor who undertakes to do market making activity in the securities offered in the proposed issue can be included in the offer document subject to compliance with other conditions contained in the said clause.

4.10. Offering Securities in Public Issues through the Stock Exchange Mechanism. (e-IPO).

To facilitate the process of public offerings, SEBI introduced the new system viz. 'Online Securities Offer System' which seeks to extend the benefits of on-line trading in the secondary market to the primary market. The system not only uses the existing infrastructure of the exchanges (viz.. terminals, brokers and systems) besides making necessary improvisations in software packages and improved means of connectivity. The present primary issue process involves printing of a large number of application forms and dispatching of refund orders and, therefore, leads to increase in cost and time required for the public issues. The new system would reduce the cost and time involved in a public issue process and does away with the blocking of funds of the investors.

Companies can now make initial public offers (IPOs) through the on-line system of the stock exchanges or through the existing banking channel. The procedure of e-IPOs has been laid down in the DIP Guidelines. The guidelines for on-line issues will be applicable in respect of fixed price issues as well as for the fixed price portion of book built issue. In this system, brokers would place 'buy' orders for shares in the primary issue on behalf of their clients and would transfer the valid order data to the registrars to the issue on a daily basis. On closure of the issue, the basis of allocation would be finalized and the allocation money paid to the clients. On receipt of the money, the broker would hand over the application forms and money to the exchange after adjusting for any margin money previously collected. On completion of the above formalities, the shares would be allotted to the applicants. This mechanism would reduce the time taken for completion of the issue process and the cost of issues. It would benefit the issuers by ensuring faster listing of securities, thereby enabling quicker access to the funds raised in the issue.

4.10.1Guidelines for e-IPOs[xxviii]

The SEBI had considered the proposal of offering securities in public issues through the stock exchange mechanism and after considering the advantages of the system, approved the

proposal. Accordingly, the Guidelines for offering securities in public issues online through the stock exchange mechanism have been framed.

4.10.2 Guidelines

A company proposing to issue capital to public through the on-line system of the stock exchange for offer of securities shall comply with the requirements as contained in this Chapter in addition to other requirements for public issues as given in these Guidelines, wherever applicable.

4.10.3 Agreement with the Stock exchange.

The company shall enter into an agreement with the stock exchange (s), which have the requisite system of on-line offer of securities.

Provided that, where the Exchange has the requisite system of on-line offer of securities, the company shall also, enter into an agreement with the Regional Stock Exchange for offering securities to public through on-line system. Now this provision has been deleted.[xxix]

The agreement mentioned in the above clause shall specify *inter alia,* the rights, duties, responsibilities and obligations of the company and stock exchange(s) *inter se*. The agreement may also provide for a dispute resolution mechanism between the company and the stock exchange.

4.10.4 Appointments of Brokers

The stock exchange shall appoint brokers of the exchange, who are registered with SEBI, for the purpose of accepting applications and placing orders with the company.
For the purpose of this, the brokers so appointed accepting applications and application monies, shall be considered as 'collection canters'.

The broker/s so appointed, shall collect the money from his/their client for every order placed by him/them and in case the client fails to pay for shares allocated as per the Guidelines, the broker shall pay such amount.

4.10.5 Listing

The company may apply for listing of its securities on an exchange other than the exchange through which it offers its securities to public through the on-line system[xxx].

4.10.6 Responsibility of the Lead Manager

The Lead Manger shall be responsible for co-ordination of all the activities amongst various intermediaries connected in the issue / system.

The names of brokers appointed for the issue along with the names of the other intermediaries namely lead managers to the issue and registrars to the Issue shall be disclosed in the prospectus and application form.

4.10.7 Mode of operation

The company shall, after filing the offer document with ROC and before opening of the issue, make an issue advertisement in one English and one Hindi daily with nationwide circulation, and one regional daily with wide circulation at the place where the registered office of the issuer company is situated.

The advertisement shall contain the salient features of the offer document as specified in Form 2A of the Companies (Central Governments) General Rules and Forms, 1956. The advertisement in addition to other required information shall also contain the following:

i. the date of opening and closing of the issue
ii. the method and process of application and allotment
iii. the names, addresses and the telephone numbers of the stock brokers and centers' for accepting the applications.

During the period the issue is open to the public for subscription, the applicants may

i. approach the brokers of the stock exchange/s through which the securities are offered under on-line system, to place an order for subscribing to the securities. Every broker shall accept orders from all clients who place orders through him;

ii. directly send the application form along with the cheque/Demand Draft for the sum payable towards application money to the Registrar to the Issue or place the order to subscribe through a stock broker under the on-line system.

In case of issue of capital of Rs.10 crore or above the Registrar to the Issue shall open centers' for collection of direct applications at the four metropolitan centers' situated at Delhi, Chennai, Calcutta and Mumbai.

The broker shall collect the client registration form duly filled and signed from the applicants before placing the order in the system as per "Know your client rule" as specified by SEBI and as may be modified from time to time.

The broker shall, thereafter, enter the buy order in the system, on behalf of the clients and enter details including the name, address, telephone number and category of the applicant, the number of shares applied for, beneficiary ID, DP code etc. and give an order number/order confirmation slip to the applicant.

The applicant may withdraw applications in terms of the Companies Act, 1956.

The broker may collect an amount to the extent of 100% of the application money as margin money from the clients before he places an order on their behalf.

The broker shall open a separate bank account [Escrow Account] with the clearing house bank for primary market issues and the amount collected by the broker from his clients as margin money shall be deposited in this account.

The broker shall, at the end of each day while the issue is open for subscription, download/forward the order data to the Registrar to the Issue on a daily basis. This data shall consist of only valid orders (excluding those that are cancelled). On the date of closure of the issue, the final status of orders received shall be sent to the Registrar to the issue/company.

On the closure of the issue, the Designated Stock Exchange[xxxi], along with the Lead merchant banker and Registrars to the Issue shall ensure that the basis of allocation is finalized in fair and proper manner on the lines of the norms with respect to basis of allotment as specified in Chapter VII of the Guidelines, as may be modified from time to time.

After finalization of basis of allocation, the Registrar to the Issue/company shall send the computer file containing the allocation details i.e. the allocation numbers, allocated quantity etc., of successful applicants to the Exchange. The Exchange shall process and generate the broker-wise funds pay-in obligation and shall send the file containing the allocation details to member brokers.

On receipt of the basis of allocation data, the brokers shall immediately intimate the fact of allocation to their client /applicant. The broker shall ensure that each successful client/applicant submits the duly filled-in and signed application form to him along with the amount payable towards the application money. Amount already paid by the applicant as margin money shall be adjusted towards the total allocation money payable. The broker shall, thereafter, hand over the application forms of the successful applicants who have paid the application money, to the exchange, which shall submit the same to the Registrar to Issue/company for their records.

The broker shall refund the margin money collected earlier, within 3 days of receipt of basis of allocation, to the applicants who did not receive allocation.

The brokers shall give details of the amount received from each client and the names of clients who have not paid the application money to the exchange. The brokers shall also give soft copy of this data to the exchange.

On the pay-in day, the broker shall deposit the amount collected from the clients in the separate bank account opened for primary issues with the clearing house/bank. The clearinghouse shall debit the primary issue account of each broker and credit the amount so collected from each broker to the "Issue Account"

In the event of the successful applicants failing to pay the application money, the broker through whom such client placed orders, shall bring in the funds to the extent of the client's default. If the broker does not bring in the funds, he shall be declared as a defaulter by the exchange and action as prescribed under the Byelaws of the Stock Exchange shall be initiated against him. In such a case, if the minimum subscription as disclosed in the prospectus is not received, the issue proceeds shall be refunded to the applicants.

The subscriber shall have an option to receive the security certificates or hold the securities in dematerialized form as specified in the Guidelines

The concerned Exchange shall not use the Settlement/Trade Guarantee Fund of the Exchange for honoring brokers' commitments in case of failure of broker to bring in the funds.

On payment and receipt of the sum payable on application for the amount towards minimum subscription, the company shall allot the shares to the applicants as per these Guidelines. The Registrar to the Issue shall post the share certificates to the investors or, instruct the depository to credit the depository account of each investor, as the case may be.

Allotment of securities shall be made not later than 15 days from the closure of the issue failing which interest at the rate of 15% shall be paid to the investors.

In cases of applicants who have applied directly or by post to the Registrar to the issue, and have not received allocation, the Registrar to the issue shall arrange to refund the application monies paid by them within the time prescribed.

The brokers and other intermediaries engaged in the process of offering shares through the on-line system shall maintain the following records for a period of 5 years:

i. orders received
ii. applications received
iii. details of allocation and allotment
iv. details of margin collected and refunded
v. details of refund of application money

SEBI shall have the right to carry out an inspection of the records, books and documents relating to the above, of any intermediary connected with this system and every intermediary in the system shall at all times co-operate with the inspection by SEBI. In addition the stock exchange has the right of supervision and inspection of the activities of its member brokers connected with the system.

In addition to the above, the DIP guidelines also provide details of the contents of the offer document and advertisement, other requirements for issues of securities. The guidelines also lay down detailed norms for issue of debt instruments, issue of capital by designated FIs and preferential/bonus issues.

CHAPTER-V
IPO ACTIVITY IN INDIAN STOCK MAERKET

IPO market in India has seen many ups and down during the last decade. It has seen a steep rise in the initial years of the post liberalization. The Growth observed during the first half of the 90s is mostly attributed to the financial liberalization of the economy. Capital market reforms like abolition of the office of controller of capital issues (CCI), constitution of SEBI under the new security and regulation act and relaxation in pricing of capital issues played an important role in such upsurge. Table1 show that IPO market has witnessed an exploding growth from 158 issues during 1991-1992 amounting to Rs. 724 crore to 1357 IPOs for Rs. 10924.11 crore during 1995-1996.

There was a marked decline in the number of IPOs and amount raised through them in 1996-1997, largely as a result of stricter eligibility criteria for public issues imposed by SEBI. The number of IPOs declined to 717 amounting to Rs. 5958.60 crore during 1996-1997 (Annual Report, SEBI, 1996-97). The number of IPOs further declined in 1997-98 to 52 amounting to Rs1047.52 crore. The decline in the share of IPOs can be partly attributed to the decline in industrial activity in the country and partly due to strict entry point norms, which prevented green field projects without track record from accessing the market (Annual Report, SEBI, 1997-98).

For the financial year 1998-99, only 18 IPOs for Rs. 404.21 crores were floated. The absence of issues of good quality, lack of confidence of investors in new companies and depressed secondary market, were some of the factors, which hindered the growth of IPOs (Annual Report, SEBI, 1998-99). There was a marked increase in the number of IPOs during 1999-00 to 51 from 18 IPOs and their successful subscription indicated the restored willingness and confidence of investors to invest in new companies especially in knowledge based industries particularly in information technology and healthcare IPOs which came to the market in a big way. This was also a worldwide trend. And this trend continued for 2000-01 when number of IPOs increased to 114 amounting to Rs. 2722.38 crore. The number again tumbled down to 7

IPOs amounting Rs. 1201.8 crore during 2001-02. But it was back to spring time again by the end of 2004-05.

Thus, it can be concluded from table 2.1 that IPO market experienced boom during 1997-99 and recovery during 1999-01. Things again looked down for 2001-03 but back to good times by the end of financial year 2006-07& 2007-2008. Hence, IPO market in India presents an interesting case for study because of its various nuances for a period 1992-05.

Table 5.1: Growth of IPO market in India

Year	Number of IPOs	Amount(Rs.Cr.)
1991-1992	158	724
1992-1993	467	3673
1993-1994	693	7650
1994-1995	1231	9919
1995-1996	1357	10924.11
1996-1997	717	5958.60
1997-1998	52	1047.52
1998-1999	18	404.21
1999-2000	51	2719.04
2000-2001	114	2722.38
2001-2002	7	1201.8
2002-2003	6	1038.68
2003-2004	14	1412
2004-2005	23	12382
2005-2006	79	10936
2006-2007	77	28504
2007-2008	85	42595

Source: SEBI Annual Reports

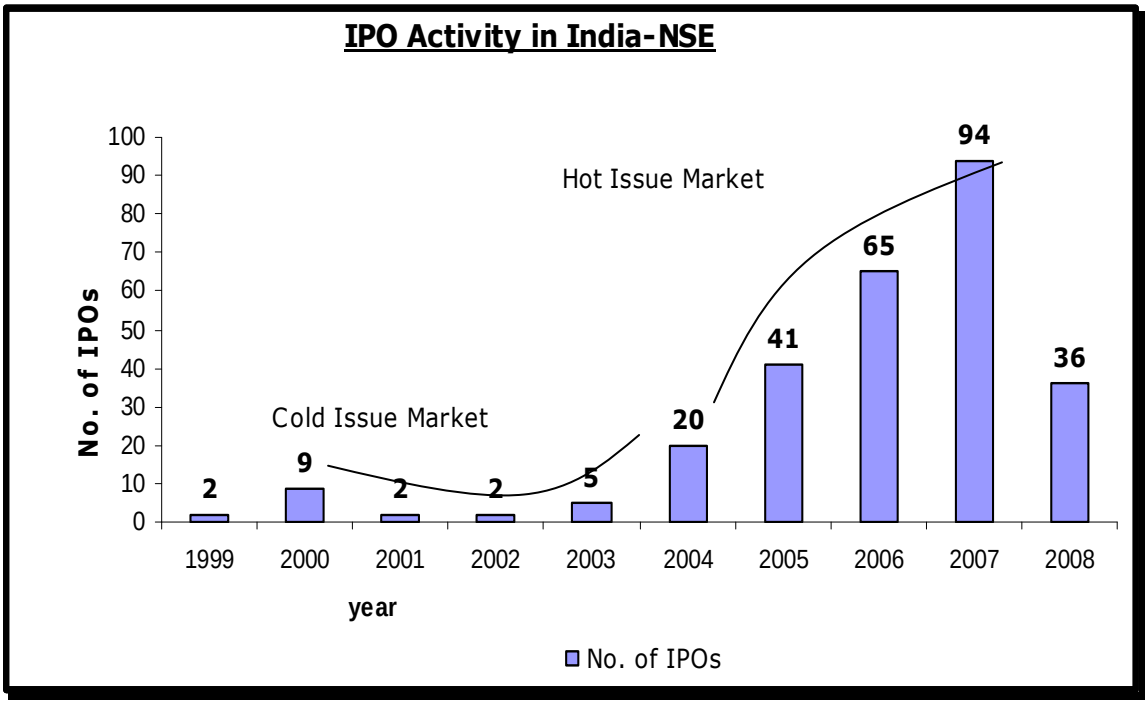
IPO Activity in NSE

Table 5.2: IPO Activity in NSE (over a considered time period)

Year	No. of IPO *
1999	2
2000	9
2001	2
2002	2
2003	5
2004	15
2005	40
2006	65
2007	94
2008	36

The table gives the frequency of the book- built IPOs in India with respect to the year of issue and the issue size. As it is evident from the table that the number of IPOs listed on National Stock Exchange were quite less from the year 1999 to 2003 as compared to the number listed on from the year 2004 to 2007. There were twenty IPOs in total from 1999 to 2003 whereas year 2004 alone witnessed the listing of twenty IPOs. Afterwards the IPOs number has followed an increasing trend up to 2007. and the growth rate from the year 2004 to 2007 is 38.8%.whereas the growth rate from the year 1999 to 2003 has a negative growth rate of 53.33%.So we may say that the time frame from the year 1999 to 2003 represents a *cold issue market* for the NSE while the time frame from 2004 to 2007 represents the *hot issue market*.

Fig.5.1: IPO Activity in NSE (over a considered time period)



As it is clear in the above table 5.2 that from 1999-2003, there is cold issue market i.e. the issuance of no. of IPOs in NSE is far less than in hot issue market i.e. from 2004 to 2007.Then again there is a fall in no. of IPOs being issued in NSE. The main reason for the increase in IPOs over a time period, is that during 2003to 2007, there has been a boom period in India. Besides this SEBI has made a no. of amendments increasing the investors confidence in Primary market viz. no. of IPOs are being launched through Book-Building process due SEBI initiatives, IPO Grading system (mandatory w.e.f. May 2007) and moreover protecting retail investors by revising DIP Guidelines from time to time. Regarding the recent fall in issuance of IPOs in2008 is the current slowdown in India due to recession in developed economies.

Comparative Study between Book-Building mechanism and Fixed Price Regime

A comparative study has been conducted to find out and highlight the current trend of the companies in choosing the form of mechanism in which they would like to sell their IPOs in the primary market.

Table 5.3:- Comparison of Mechanism for IPOs

No. of IPOs	Fixed Price Regime	Book-Building Method
244	16	228

There has been a persistent shift in the mechanism companies are opting for their IPOs. The Fixed-Price offer mechanism was more prevalent till 2003 and after that Book-Building mechanism came in to the scene. The main reason is the initiatives taken by SEBI like screen based auction etc. Companies prefer the book building because it solves the "leakage" of value often seen with fixed priced IPOs. Here the issuer sets a price range within which the investor is allowed to bid for shares. The range is based on where competitive companies are trading and an estimate of the value of the company that the market will bear. The book building method is favored for its mutually beneficial nature: investors get the shares at a fair price that typically has potential upside, and the issuing company receives fair compensation. Moreover in book building process a company has two options viz. 75% Book building process and 100% Book building process. In the former system company has the option to sell 25% of the total public issue at fixed price and the rest, i.e., 75% through book building method. While in the latter all can be sold through book building process.

CHAPTER VI

PRICE PERFORMANCE OF IPO'S: SHORT RUN ANALYSIS

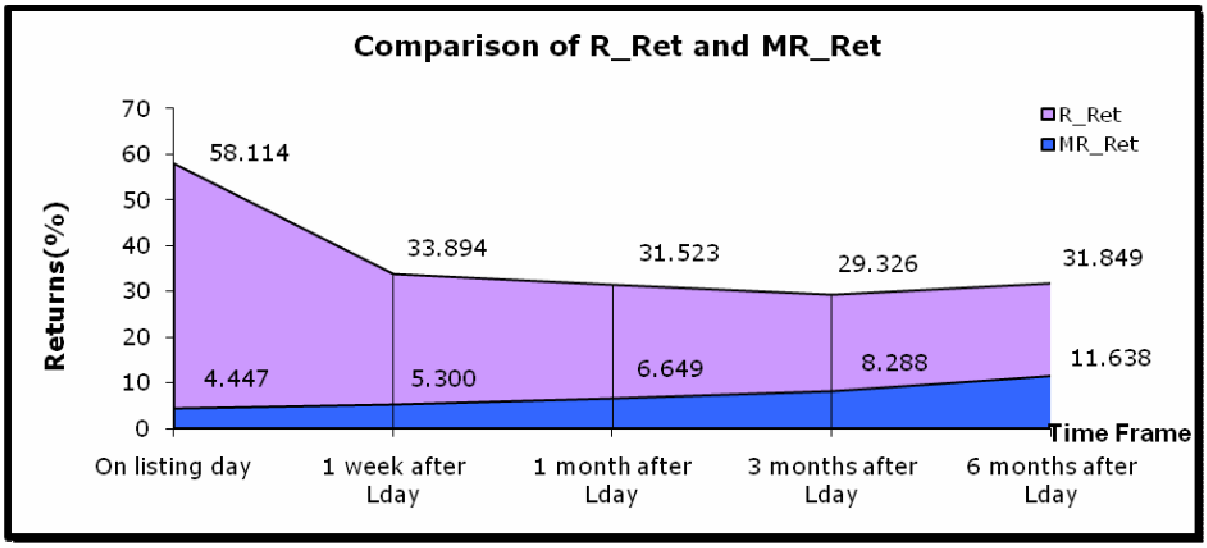
Short run analysis of price performance of the IPOs is essential to study the extent of underpricing. For this purpose, the buy and hold period of first trading day i.e. listing day, 1 week after listing day, 1 month after listing day, 3 months after listing day and 6 months after listing day have been considered.

Table 6.1:- Returns over short run

Time Frame	R_Ret. (%)	MR_Ret. (%)
On the listing day	58.11	4.45
1 weak after listing day	33.89	5.30
1 month after listing day	31.52	6.65
3 months after listing day	29.32	8.29
6 months after listing day	31.84	11.62

The overall returns obtained from the IPOs are shown in the table 6.1. The returns, thus, calculated are the Raw Returns taken on the listing day, one week after listing day, one month after listing day, three months after listing day and six months after listing day so as to analyze the price performance of the IPOs in the short run. These returns are in turn compared with that of the market returns, which are calculated by taking into consideration the S&P CNX Nifty Index (so as to represent the market behavior during the exactly same time span).

Fig. 6.1:- Comparison of R_Ret. and MR_Ret.



As we can see in the fig.6.1 that the R_Ret are quite high on the listing day and have fallen considerably over the short run time period. Also, the MR_Ret are not showing so much variation as the R_Ret are.

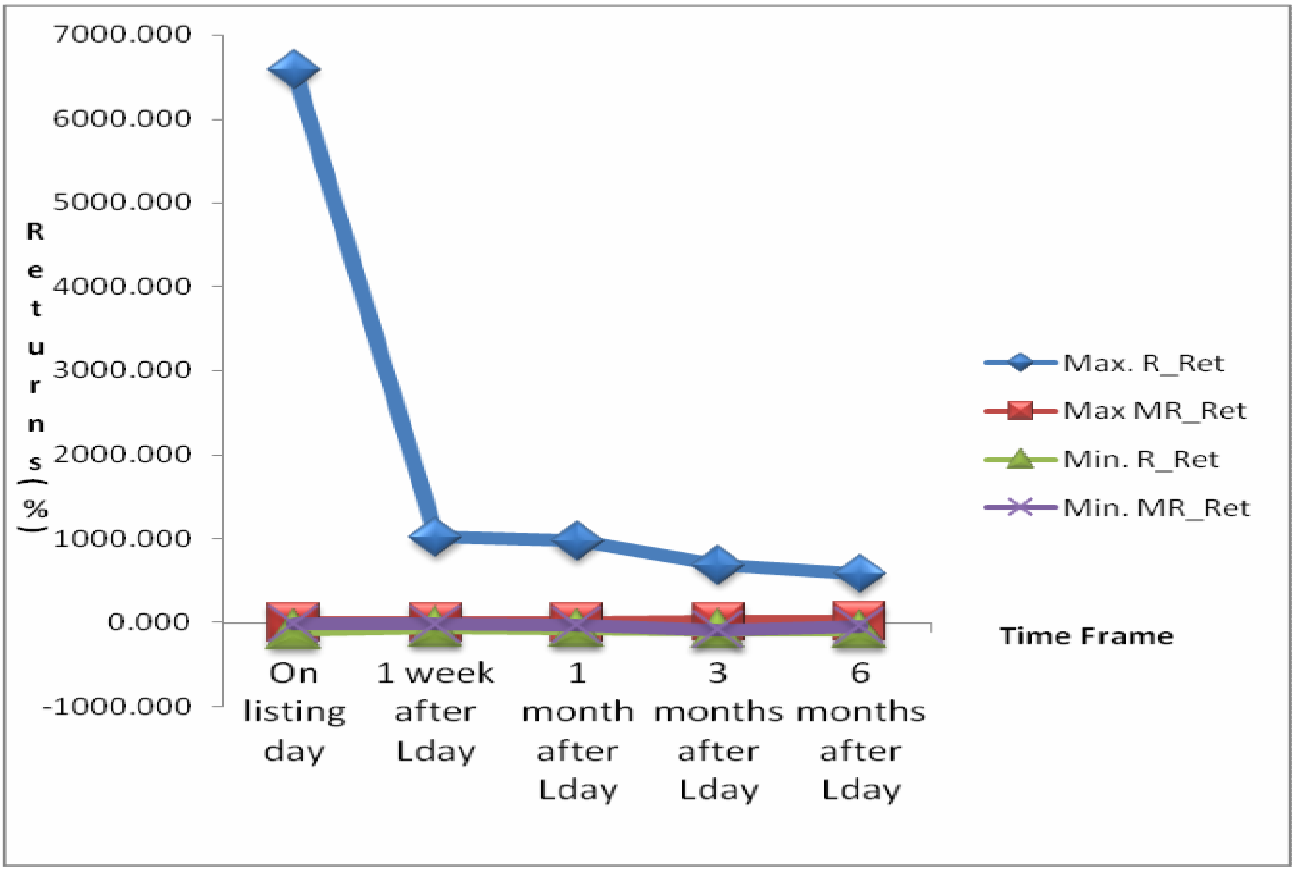
These returns showed the extent of underpricing of the IPOs which generate returns to the investors on the first trading day of price discovery. The returns fell down dramatically after one week from the listing day and subsequently to compensate for the price appreciation and tend to normalize thereon.

Table 6.2:- Max. and Min. R_Ret. and MR_Ret.

Time Frame	N	Max.R_Ret.	Max.MR_Ret.	Min.R_Ret.	Max.MR_Ret.
On listing day	244	6589.86	911.84	-88.91	-214.40
1 weak after L'day	244	1010.00	916.17	-55.54	-22.77
1month after L'day	244	964.58	952.16	-67.00	-36.29
3months after L'day	244	683.12	868.90	-80.71	-87.31
6months after L'day	244	572.92	987.90	-83.28	-45.88

The maximum R_ret from the IPOs that an investor can earn on the listing day is 6589.856 % whereas the minimum loss is 88.9%. These figures itself shows the scope or the wide range for the profit. The higher end for the profit is quite high as compared to losing end along with the overall raw return is approx. 12 times the market raw return. Similarly, we can observe that the raw returns are 6times, 5 times, 3.5 times and 2.6 times the market raw returns on 1weak, 1 month, 3 months & 6 months after listing respectively.

Fig. 6.2:- Comparison of max. &min. Values of R_Ret. and MR_Ret.



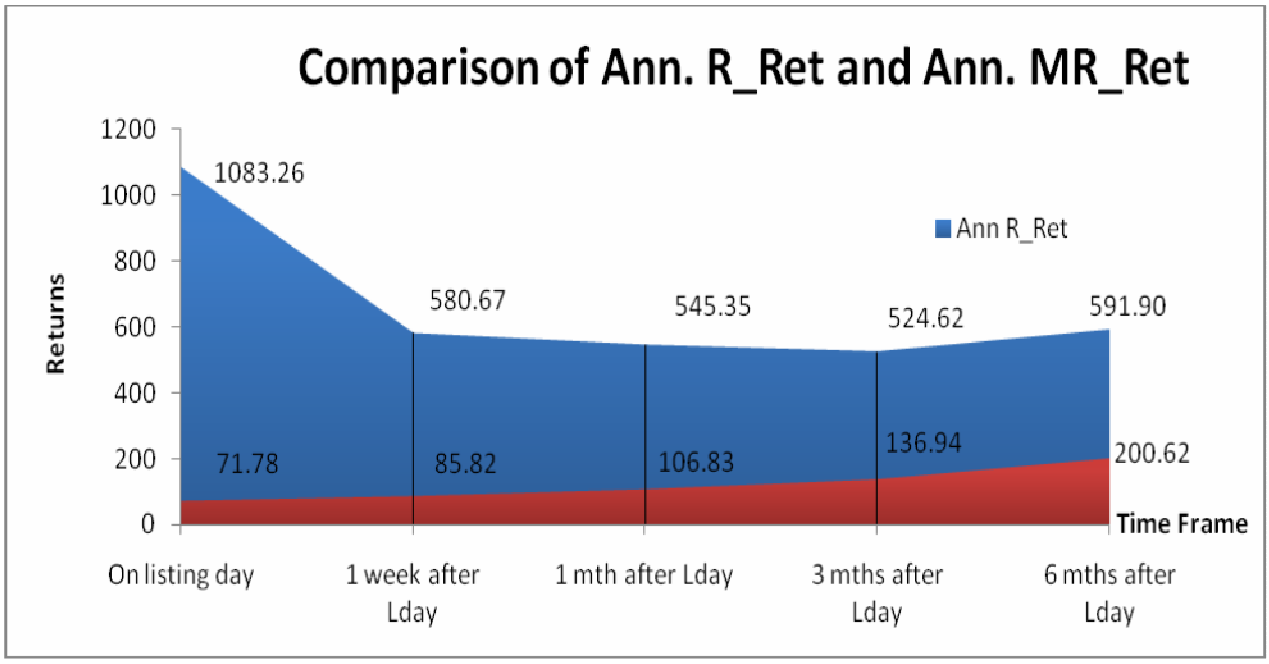
The fig.6.2 clarifies the fact that what a huge amount an investor can earn from an IPO during to underpricing on the listing day. Whereas the maximum amount of loss he has to incur is not too much different form that of the market loss which is evident from the overlapping graph lines of Min R_Ret and Min MR_Ret in the graph shown.

Table 6.3:- Values of Ann. R_Ret. and MR_Ret.

Time	N	Ann R_Ret	Max Ann. R_Ret	Min R_Ret	Ann MR_Ret	Max MR_Ret	Min MR_Ret
On listing day	244	1083.26	133627.81	-1545.32	71.78	15128.20	-339.63
1 week after Lday	244	580.67	20480.55	-913.87	85.82	15200.15	-295.83
1month after Lday	244	545.35	19559.60	-997.40	106.83	15797.12	-575.85
3 months after Lday	244	524.62	13852.25	-1472.50	136.94	14415.89	-1448.61
6 months after Lday	244	591.90	11617.47	-1519.81	200.62	16387.54	-729.31

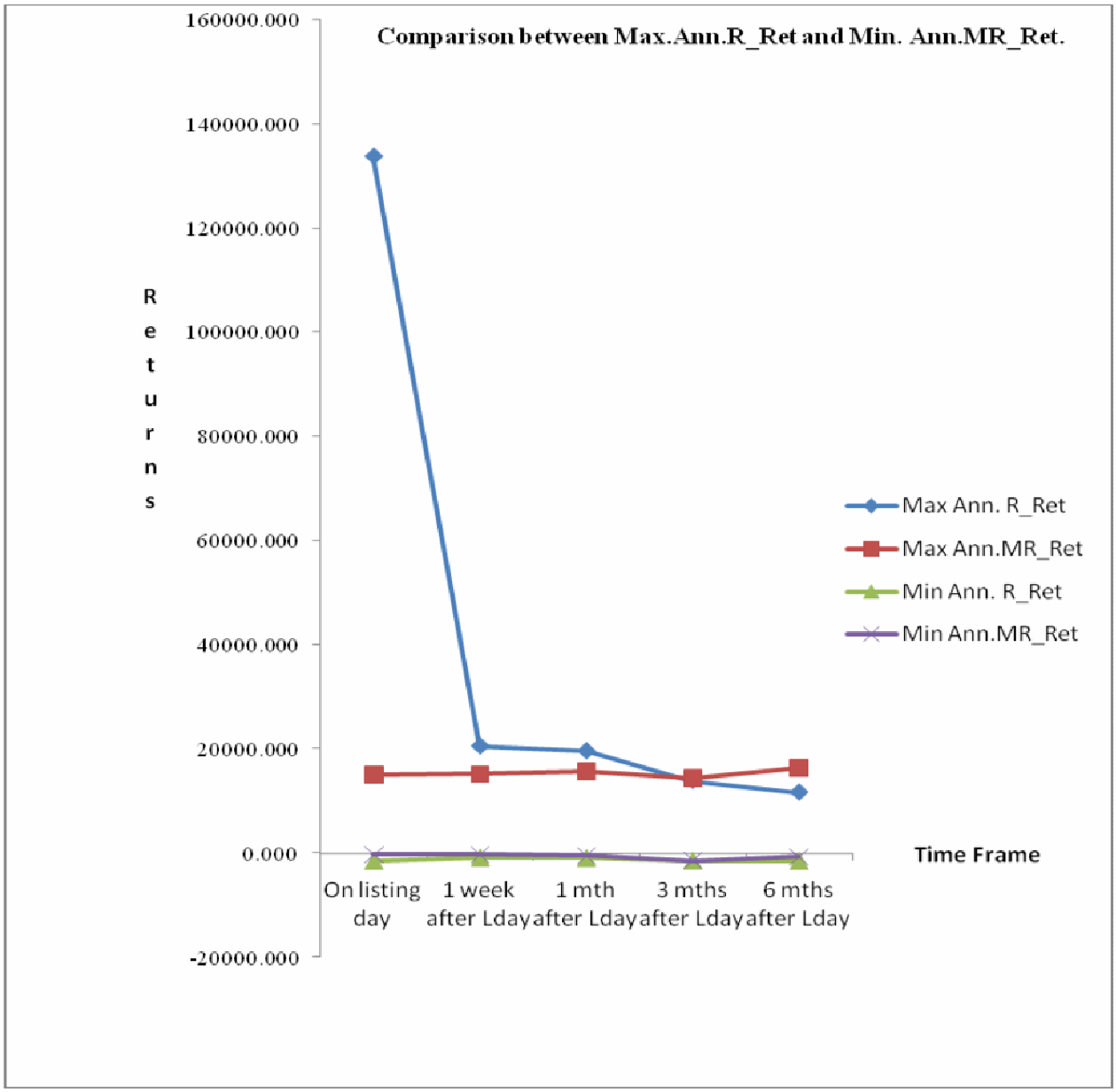
In order to make returns obtained from the various IPOs more comparable the listing lead time has been considered and the annualized raw returns both for the IPOs and the market have been calculated. The inclusion of this factor provides a similar basis for the study of extent of underpricing in the IPOs by nullifying the effect of the time taken or varying number of days taken by the companies for getting their stocks listed thus annualized raw returns provide a better picture of the price performance of the IPOs and the phenomenon of IPOs. If we look at the table6.3 and the fig.6.3 simultaneously then we can clearly see the difference in the ann. raw returns of the IPOs and that of market on the listing day and their decline thereof. In the short run the results highlight that there is a good difference of annualized raw returns over the annualized market raw returns.

Fig.6.3 :-Comparison of Ann. R_Ret. and Ann. MR_ret.



The graph 6.4 below supports the phenomenon of excessively high annualized raw returns in the short run as compared to the lesser amount of loss possibilities which are equivalent to that of normal market loss.

Fig. 6.4:- Comparison between Max.Ann.R_Ret. and Min. Ann.MR_Ret.

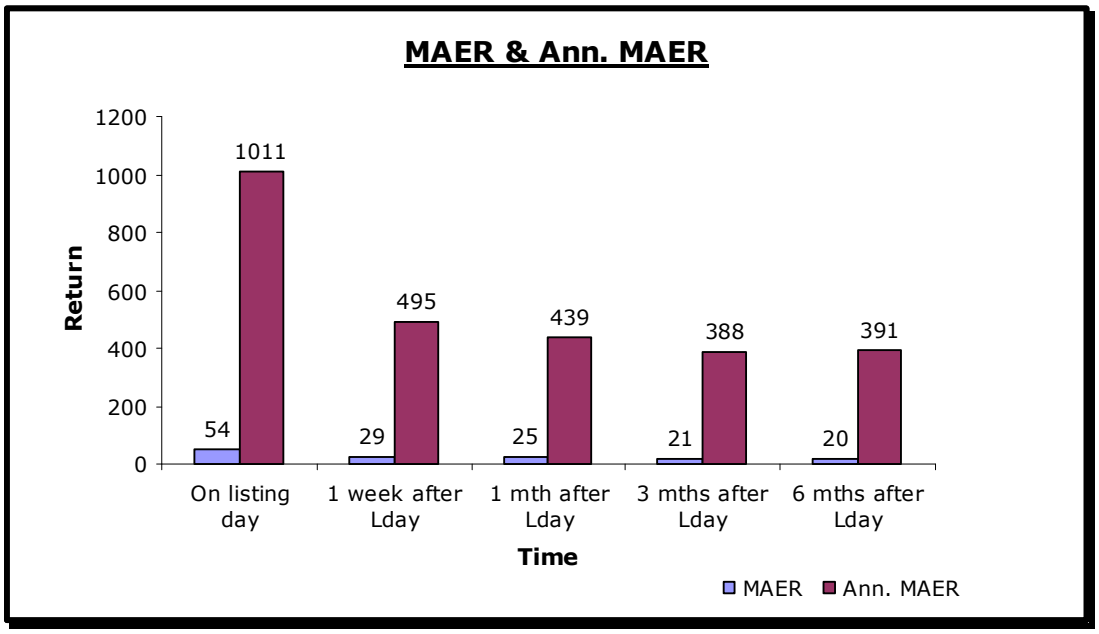


MAER or Market Adjusted Excess Return and Ann. MAER clearly define the excessive amount of returns that goes into the pocket of an investor over and above the market returns. Moreover when we consider Annualized MAER the effect of the varying listing delay gets nullified and the phenomenon of underpricing reflects itself in the true manner. It is quite clear from the table6.4 andfig.6.5 below that when we simply take MAER the returns are so but when the Ann. MAER are considered then they simply surpass the MAER and shows the scope of underpricing present in the market.

Table 6.4:- Values of MAER and Ann. MAER

Time	N	MAER	Max. MAER	Min. MAER	Ann. MAER	Max Ann. MAER	Min. Ann. MAER
On listing day	244	53.66	6603.34	-676.19	1011.47	133901.22	-11218.70
1 week after Lday	244	28.59	1005.66	-756.94	494.85	20392.64	-12558.36
1 month after Lday	244	24.87	960.94	-904.97	438.51	19485.84	-15014.37
3 months after Lday	244	21.03	680.32	-861.33	387.68	13795.54	-14290.39
6 months after Lday	244	20.21	561.91	-1006.84	391.27	11394.43	-16704.47

Fig. 6.5:- Comparison of MAER and Ann. MAER



Wealth Relative (Index)

Wealth Relatives is an efficient measure to evaluate short run underpricing of IPOs. The values for the sample IPOs have been shown in the figure 6.1 and the percentage values are shown in figure 6.3 In figure 6.6, the values for the wealth relative index has been compared with the unity. The value greater than unity shows that the IPOs have been underpriced. In case of the sample taken for study, the values are greater than one and are highest on the

listing day which implies that underpricing of IPOs had been discovered on the first day of trading itself. Also the phenomenon of underpricing persisted in the short run till six months after listing.

Fig. 6.6:- Wealth Relative

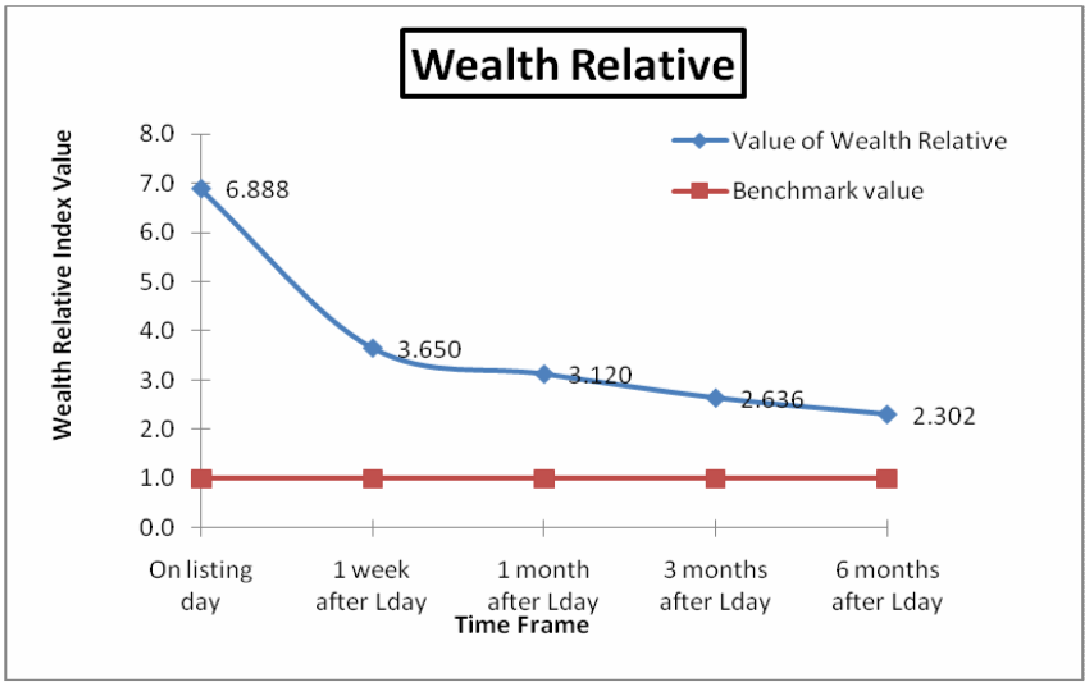
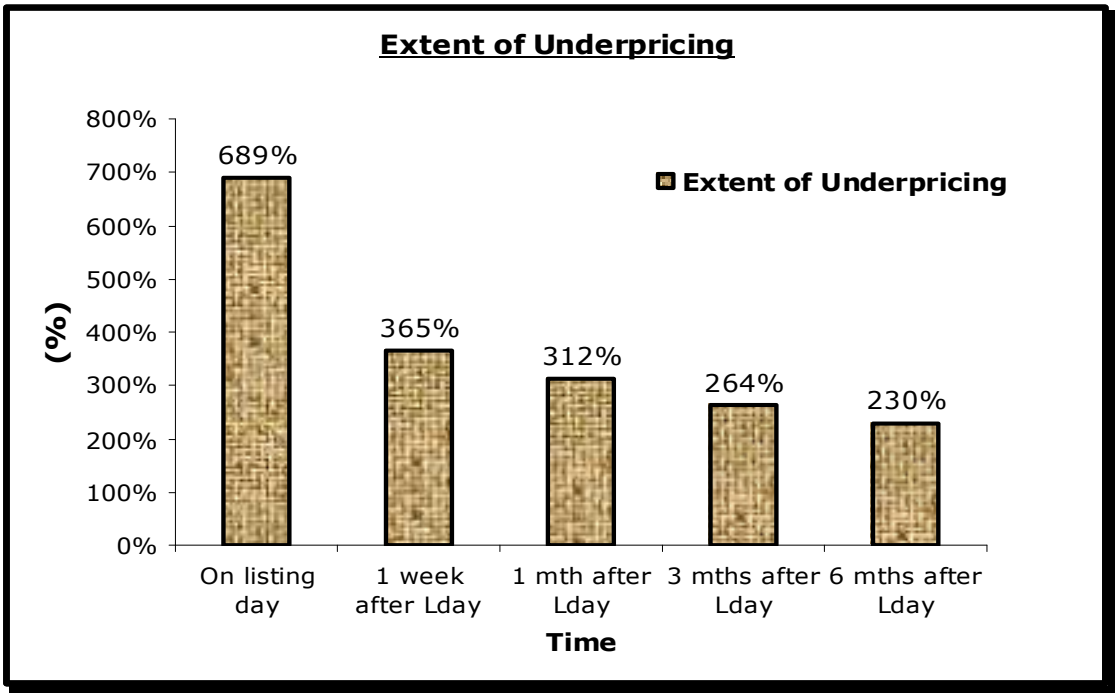


Figure 6.7 shows the percentage values of the extent of underpricing and it is evident that the IPOs generated 689 %(approx) returns on the first day of listing and outperformed market index returns by 589%. Thereafter, they tended to normalize their returns and generated high returns for the investors all through the short run time period. But what is worth noticing here is that though the returns remain quite high in the short run but they show a declining trend which infers that the price behaviour tends to normalize the returns so as to make the IPO generated returns equivalent to the market returns. These returns actually normalize themselves along the market behaviour in the long run after the market players have taken the fruits of underpricing. Thus, this measure verifies the high extent of underpricing present in the IPO market in the short run.

Fig. 6.7 :- Extent of Underpricing



CHAPTER-VII

FACTORS AFFECTING IPO PRICE PERFORMANCE

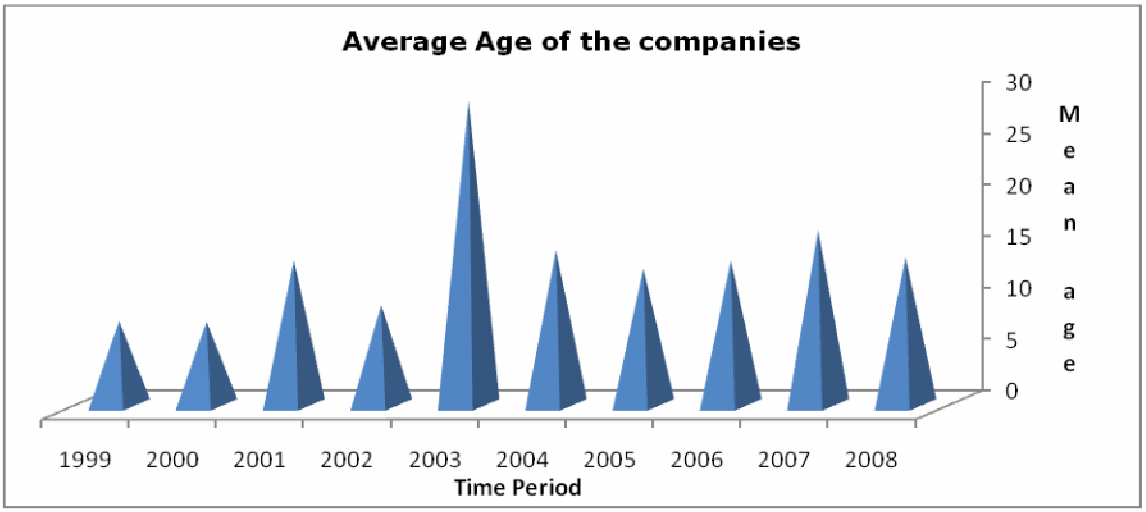
7.1 Comparative Study of factor Age over the considered time period

Age of a company is the difference between the incorporation date of a company and its listing date irrespective of the company's name change and sifting over from private to public limited.

Table 7.1:- Average Age of Companies (Opting for IPOs)

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
N(244)	1	9	2	2	5	15	40	60	82	29
Mean	8.15	8.08	14.05	9.69	29.55	15.03	13.25	14.07	17.01	14.37
Median	8.15	6.24	14.05	9.69	12.42	15.70	10.70	12.12	12.84	12.09
Standard deviation	____	4.33	8.5	4.33	42.16	10.97	13.15	7.89	15.18	12.13
Max.	8.15	16.74	20.07	12.76	103.82	35.55	73.43	39.68	100.06	66.89
Min.	8.15	4.93	8.03	6.62	4.05	1.05	0.32	.39	2.32	2.29

Fig. 7.1:- Average Age of Companies



From the above Table7.1 and fig.7.1 it is clearly shown that over the time period the mean age of companies has declined. In other words, we can say that the young and middle-aged companies are coming to market more rigorously in the considered time period, except for the period 2003 in which the mean age is high because of launch of IPO of Vardhman Acrylics Limited which is 103 years old.

Table 7.2:- Initial Listing Returns of IPOs by Age

Average								
Sample Size	**Age (A)**	**Raw Returns**	**MAERs**	**Offer Price**	**Listing Lead Time**	**Issue Size**	**Annualized Raw Returns**	**Ann. MAERs**
N	(years)	(%)	(%)	(Rs.)	(Days)	(Lakh Shares)	(%)	(%)
242	All	23.85	21.56	211.19	27.80	318.28	444.5	711.80
79	A<=10	30.24	31.72	204.02	24.68	408.86	505.47	1644.22
117	10<A<=20	76.09	68.62	230.06	26.49	205.57	1474.17	1949.59
32	20<A<=30	148.84	113.31	182.25	37.03	404.62	2406.45	3291.26
14	A>30	88.41	63.32	160.21	35.36	551.82	1487.14	7505.39

Many research studies have empirically tested the relation between age and underpricing. The present study highlight that age affects the underpricing significantly, which is also shown in table 7.2. The highest returns are given by from the age group of 20 to30. The table clearly shows that with an increase in age, the raw returns also increase though in the age group of more than 30 years the returns have declined. It is due to the reason that the data variation in this group is significant as companies' age is ranging from 30 years to even 100 years.

Issue-Size and Price Performance

Issue size is the offer size of a company i.e. the total no. of shares a company is selling in their IPOs. According to SEBI guidelines the issue size that is being offered should be disclosed in Red- Herring Prospectus. The overall mean issue size over the considered time

period (1999-2008) is 445.16 .The maximum offer size is 8658.3 of NTPC (2004) and minimum is 13.71 of D-LINK (2001) with raw returns 21.85 and -48.85 respectively.

Table 7.3:- Initial Listing Returns of IPOs by Issue Size

Sample Size	**Issue Size (I)**	**Raw Returns**	**MAER**	**Offer Price**	**Listing Lead Time**	**Issue Size**	**Annualized Raw Returns**	**Annualized MAERs**
N	(lakh shares)	(%)	(%)	(Rs.)	(Days)	(lakh shares)	(%)	(%)
244	All	23.31	21.49	212.44	27.75	321.708	442.73	707.01
108	I<=60	26.37	25.04	248.42	30.01	39.72	457.64	1029.52
60	60<I<=120	27.73	4.17	203.35	27.7	83.79	491.65	1936.48
23	120<I<=180	168.98	162.19	226.26	23.21	147.34	3210.82	4216.05
11	180<I<=240	114.98	94.95	132.09	20.81	202.25	2059.426	1727.45
42	I<240	478.01	478.85	146.40	26.31	1513.46	9435.43	707.01

Table7.3 shows the correlation between underpricing with the Issue size. All the average raw returns and mean MAER given by IPOs basis on Issue sizes are positive. From the Table , it is clearly shows that the optimum issue size for an IPO is between 120 and 180 (lakh shares). With an increase in the issue size, there is a gradual increase in raw returns. So from an investor point of view this is the optimum size to invest in. For the last sample of the table i.e. above 240 lakh shares, the returns are high because of data variation as it includes the shares ranging from 584.99 of PTC to 8658.3 of NTPC lakh shares. So the variation is obvious. The regression value between the above two factors is 0.27 and R^2 is 0.015

Subscription level and Price Performance

Subscription level of IPOs depicts the total demand of the issue generated in market by investors' viz. retail investors, NIIs and QIBs. Subscription level is being calculated by dividing total demand (of the issue) by total offer size. The benchmark value of subscription

level is 1. If the subscription level value is less than 1 then the issue is undersubscribed and if it is more than 1, it is over-subscribed.

Table 7.4:- Initial Listing Returns of IPOs by Subscription level

Sample Size	Subscription level (S)	Raw Returns	MAER	Offer Price	Listing Lead-time	Issue Size	Annualized Raw Returns	Annualized MAERs
N	(no.of times)	(%)	(%)	(Rs.)	(Days)	(lakh shares)	(%)	(%)
229	All	26.47	24.27	213.66	26.66	304.25	504.85	807.58
158	S<=30	36.67	32.66	191.92	25.92	244.49	726.76	1311.59
44	30<S<=60	132.12	124.29	215.84	32.38	436.69	2352	2252.49
19	60<S<=90	304.94	302.73	274.2	231.84	575.35	5351.83	6776.4
8	S<=90	1288.27	1326.44	487.5	21.37	112.28	21699.2	33688.1

From the table 7.4 it is crystal clear that with an increase in subscription level there is a subsequent increase in raw returns. This shows the clear correlation between the two indicating that the issues which are more subscribed are bound to give significant positive raw returns indicating underpricing. The multiple R is 0.27 and R^2 is .07 for these factors.

Listing Lead Time and Price Performance

Lead-time is the time lag between the closing date of the issue and the instant when it gets enlisted with the stock exchange. Different issues take different time spans for listing. The listing delay in the sample used in the present study ranges between 18days to as many as 576 days and this lead-time averages at 27 days. So to scrutinize the effect of delay in IPO listing performance, a cross-sectional analysis was made slicing the lead-time in three categories.

Table 7.5:- Initial Listing Returns of IPOs by Listing Lead Time

Sample Size	Listing Lead Time (L)	Raw Returns	MAER	Offer Price	Listing Lead Time	Issue Size	Annualized Raw Returns	Annualized MAERs
N	(no. of days)	(%)	(%)	(Rs.)	(Days)	(lakh shares)	(%)	(%)
244	All	23.37	21.54	212.44	27.75	321.708	1082.47	1728.64
5	L<=15	880.62	785.94	47	13	484.47	26338.62	23693.99
221	15<L<=30	27.37	25.27	219.89	21.34	306.08	517.76	839.81
18	L<=30	75.66	64.86	167	110.89	468.32	995.1	1046.24

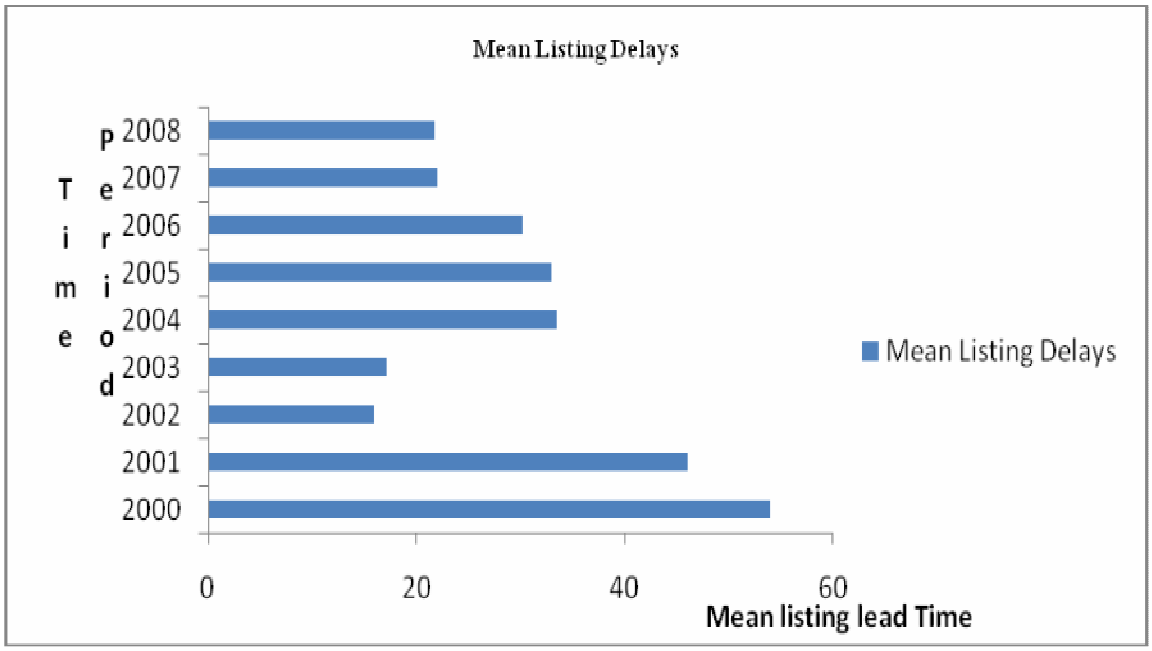
The table 7.5 shows that the raw returns as well as market adjusted return estimated on the basis of number of days for listing indicate that when the listing delay is between 15 to30 days, the returns are significantly different from zero. 90% of IPOs are falling in the category of 15 to 30 of listing lead time. But the IPOs which are falling in the range of less than and equal to 15 days are giving highest raw returns though they are only 2%.

So, the above analyses support the hypothesis that lower listing delays give better performance though no. of firms chose to have listing delays of 15 to 30 days. The value of R is 0.15 and R^2 0.024

Table 7.6:- Listing Lead Time over a considered Time Period

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
N(244)	9	2	2	5	15	40	60	82	29
Mean	54	46	16	17.2	33.4	32.9	30.13	22	21.7
Median	52	46	16	20	21	21	21	22	21
Standard deviation	15.8	2.8	2.8	5.2	50.9	77.7	50.3	2.3	2.3
Max.	92	48	18	22	217	512	352	36	27
Min.	42	44	14	11	13	17	16	17	17

Fig.7.2:- Average age of Companies



From the table7.6, it can be concluded that the listing lead time has come down over a period of time. The mean listing delays have declined from54 of year 2000 to 21.7 of year 2008. The maximum and minimum has come down from 92 and42 to 27 and 17 respectively from 2000 to 2008.

CHAPTER VIII

LONG RUN ANALYSIS

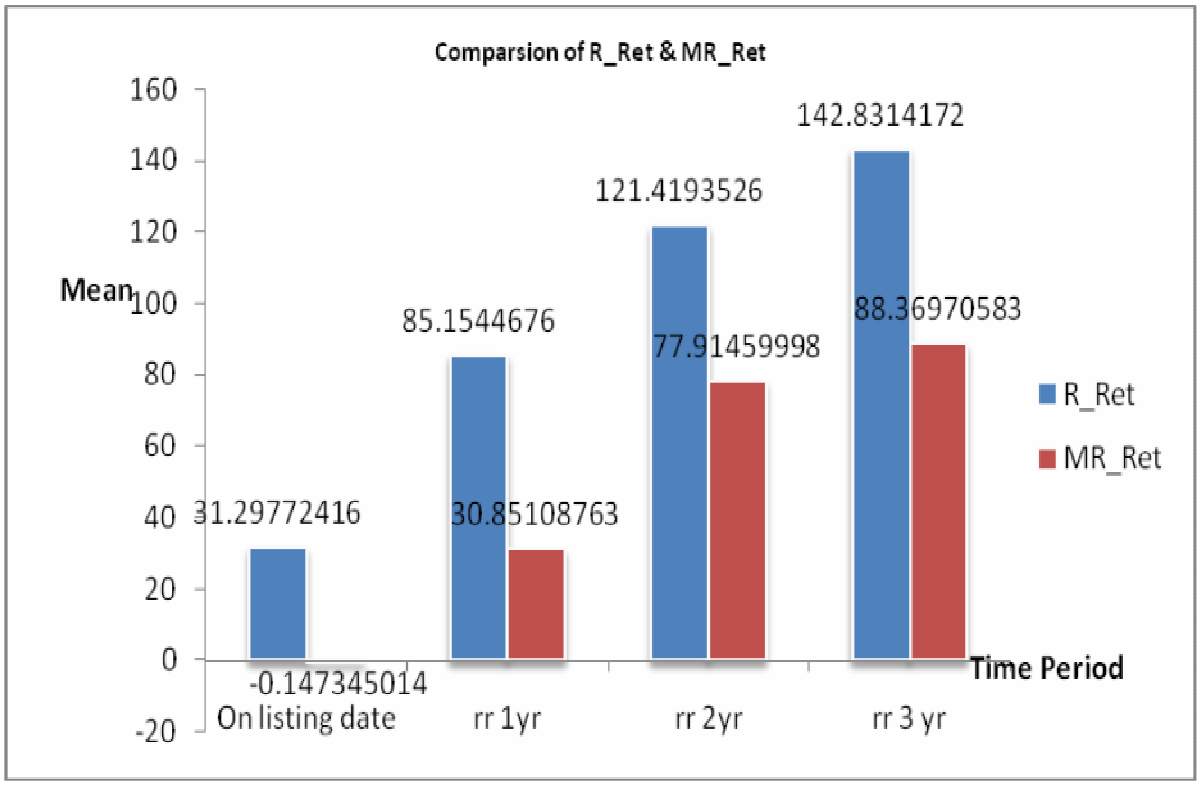
Generally, the investor envisages, what would be his return after one year, or two years, or three years or in subsequent years if he invested his money today in an investment avenue. Initial public offerings are an interesting investment opportunity which generally ensures positive return in the short run. But do they offer the same thing in the long run also? Do the IPOs remain underpriced in the long run or not? To answer these questions the long run price performance analysis has been done, which is presented below.

The overall returns obtained from IPOs are shown in the table 8.1. The returns, thus, calculated are the raw returns taken on the listing day, one year after the listing day, two years after the listing day and three years after the listing day, to analyze the price performance of the IPO in the long run. These returns are in turn compared with that of the market returns, which are calculated by taking into considerations the S&P CNX Nifty Index (so as to represent the market behavior during the exactly same time span).

Table 8.1:- Raw Returns and Market Returns

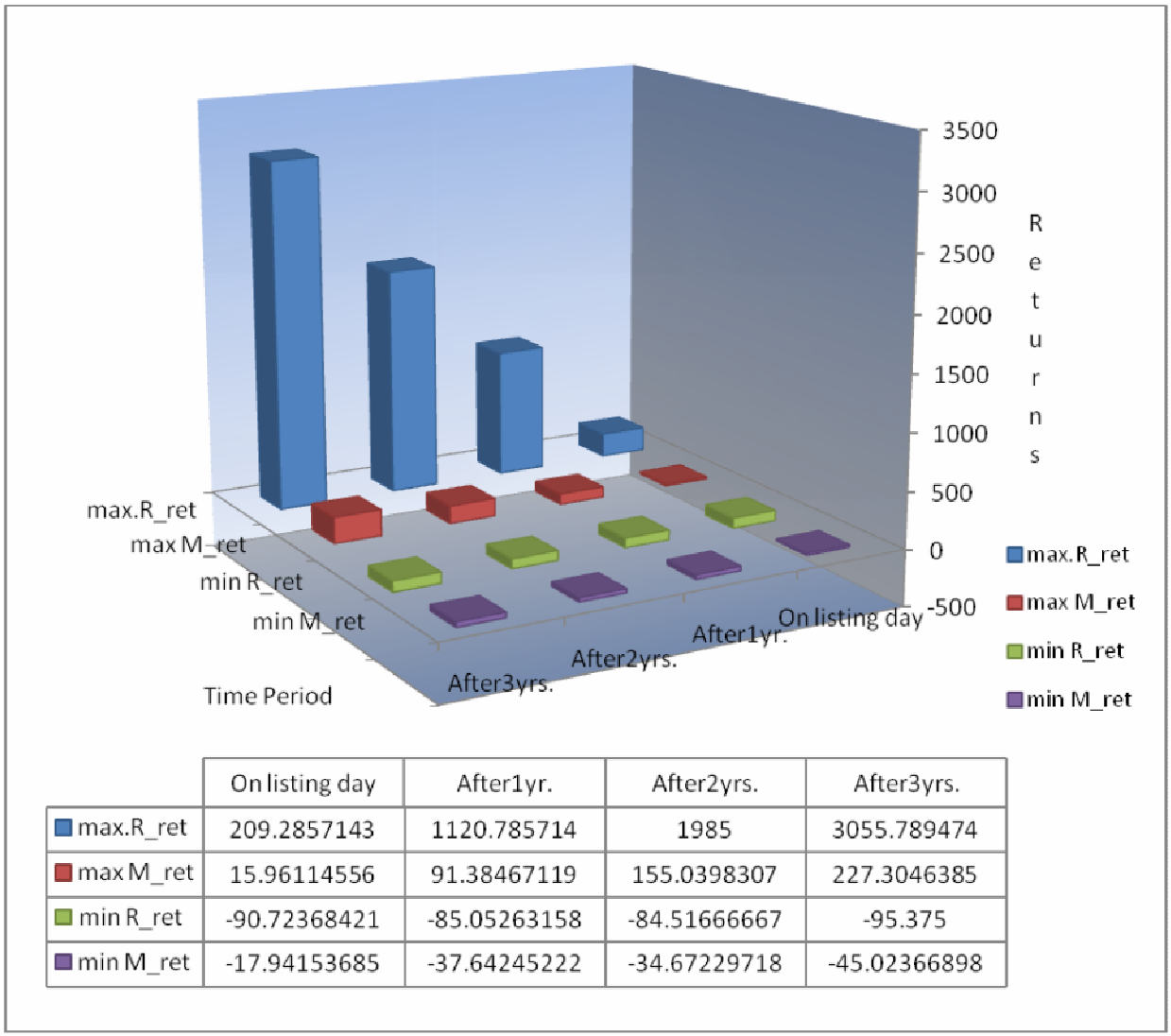
	Mean	
Time Span	R_Ret.	MR_Ret.
On Listing Day	32.29	-0.15
After 1 year	85.15	30.85
After 2 years	121.40	77.9
After 3 years	142.83	88.36

Fig.8.1:-Comparison of R_Ret and MR_Ret.



It is generally observed in the equity market that IPOs would come to their intrinsic value in the long run but there are various factors which also play an important role, like market sentiments of the considered time period, global market trend etc. In my study there are 65 IPOs over a time period of 1999- 2005in the long run analysis. Their returns have been calculated after 1, 2 and3 years respectively. In India there was a Boom-Period during 2003-2007, so the raw returns are greater than market returns even after 1, 2 and 3 years and have not come to their true value (so it is an exception in the taken time period due to market sentiments).

Fig.8.2:- Comparison between max. and min. R_Ret. And MR_Ret



	On listing day	After1yr.	After2yrs.	After3yrs.
max.R_ret	209.2857143	1120.785714	1985	3055.789474
max M_ret	15.96114556	91.38467119	155.0398307	227.3046385
min R_ret	-90.72368421	-85.05263158	-84.51666667	-95.375
min M_ret	-17.94153685	-37.64245222	-34.67229718	-45.02366898

The fig.8.2 explains the comparison of max. and min. R_Ret. and MR_Ret. It shows that the max raw returns are very high compared to max. market returns and same is the case with min. raw returns.

Comparison between Ann.R_Ret and Ann. MR_Ret:-

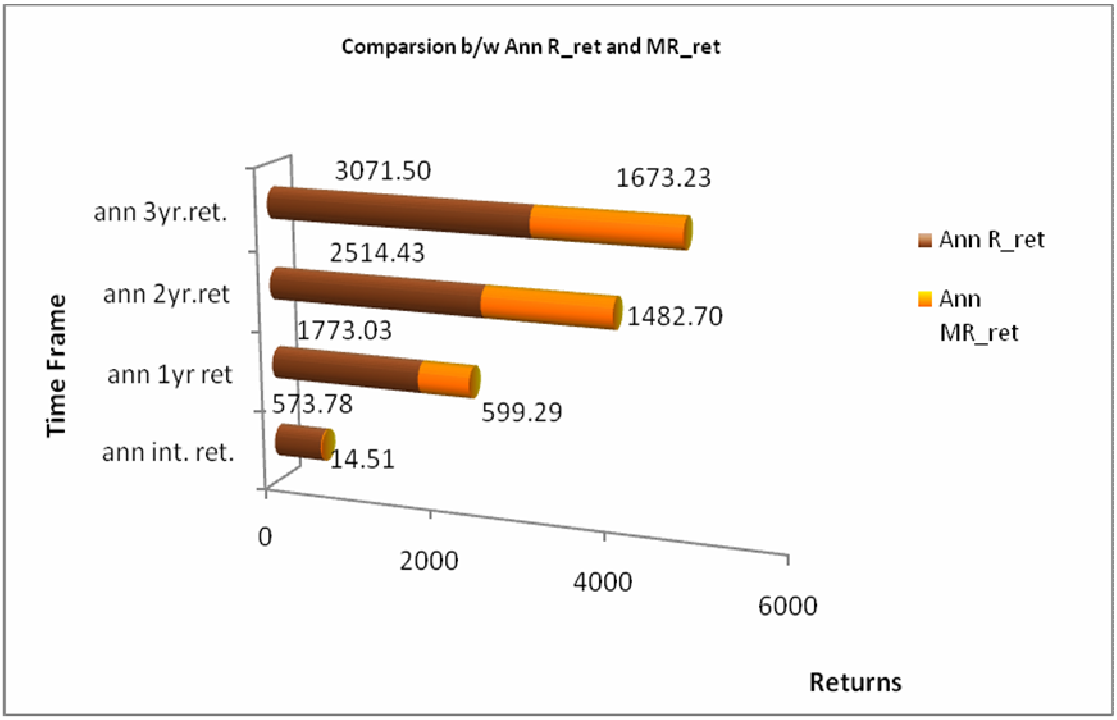
Ann. R_Ret represent the raw returns being annualized in effect to nullify the impact of time taken by an IPO for getting on to the stock exchange floor .While on the other day Ann.

MR_Ret shows the annualized raw returns for the same considered time period of the market as to provide a comparable benchmark. When we compare the annualized returns with annualized market raw returns we can clarify whether the IPO has given investor a better return or not, for the considered time period in the same regulatory framework and market sentiments.

Table 8.2:- Ann. R_Ret. and MR_Ret.

	Mean	
Time Span	Ann.R_Ret.	Ann.MR_Ret.
On listing Day	573.78	14.51
After1 year	1773.03	599.29
After2 years	2514.44	1482.7
After 3 years	3071.50	1673.23

Fig.8.3:- Comparison between Ann. R_Ret. & MR_Ret.



The table 8.2 along with fig.8.3 depicts that an investor remains in the profit even after holding the equities for 3 years. The highest annualized raw returns are made by IndiaBulls IPO for the successive three years. The maximum return came in 2007 i.e. 74357.54(ann. Raw returns). Over the considered time period Ann. Raw returns grow very fast as compared to market ann. raw returns.

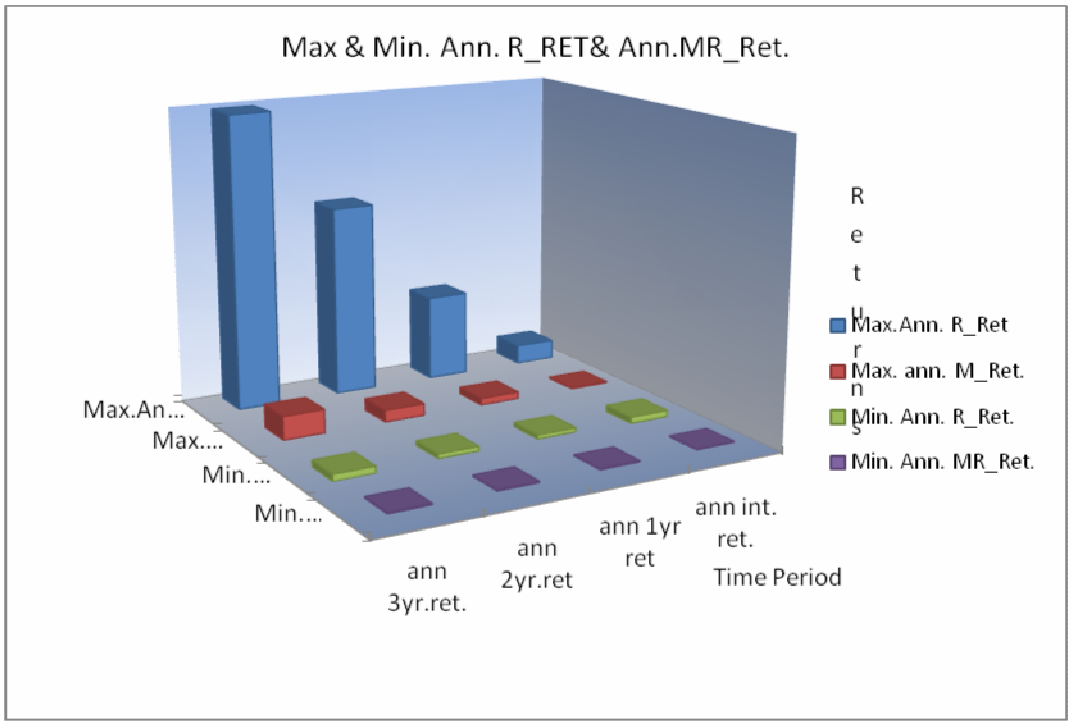
Max. & Min. Ann. R_Ret and Ann. MR_Ret.:

The max. and min. Ann. R_Ret & Ann. MR_Ret. show the range of the data i.e. what can be the highest data range and lowest data range. Moreover it also depicts by how many times a market can jump up to its higher end and slope down towards its lower end and also the IPOs returns.

Table8.3:- Max. and Min. Ann.R_Ret. and Ann. MR_Ret.

	Maximum		Minimum	
	Ann.R_Ret.	Ann. MR_Ret.	Ann. R_Ret.	Ann.MR_Ret.
Ann. Initial Returns	4774.33	218.43	-1576.86	-217.26
Ann. 1year Returns	21669.47	1669.47	-967.53	-250.89
Ann.2year Returns	48301.66	2935.26	-1104.48	-256.05
Ann.3year Returns	74357.54	5906.02	-1709.38	-260.85

Fig. 8.4 :- Max. and Min. Ann. R_Ret. and Ann. MR_Ret.



The table 8.3 and fig. 8.4 shows that Ann. R_Ret in both cases, i.e., max. and min. are fared well as compared to the Ann. MR_Ret. So, it can be concluded that an investor is well off in the considered time period than market in the same time period.

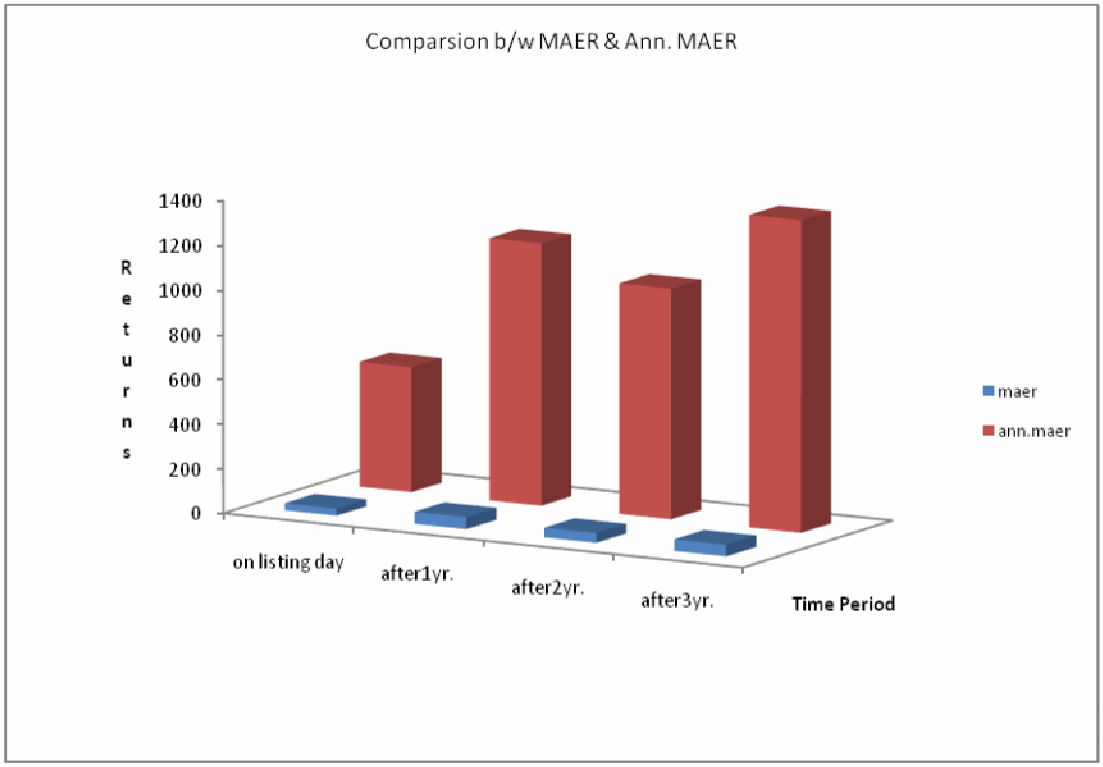
Comparison of MAER and Ann. MAER:

By studying the comparison , it can be explained that how much an investor can earn from the market .By taking Ann. MAER , the effect of listing delays can be nullified and so underpricing can be shown more clearly. However in the MAER, there is an effect of listing delays but in long run it has to be wiped out to show the real picture.

Table 8.4:- Comparative values of MAER and Ann. MAER

	MAER	Ann.MAER
On Listing Day	31.45	559.27
After 1 year	54.30	1173.73
After 2 year	43.50	1031.73
After 3 year	52.35	1398.27

Fig. 8.5:- Comparison of MAER & Ann. MAER



The table 8.4 and fig.8.5 shows clearly that after nullifying the effect of listing delays, the underpricing is shown more clearly. It is also shows the level of underpricing present in the market.

Wealth Relative Index:

It shows the extent of underpricing presented in the market. The fig. depicts that the underpricing goes down in the long run.

Fig. 8.6:- Wealth Relative

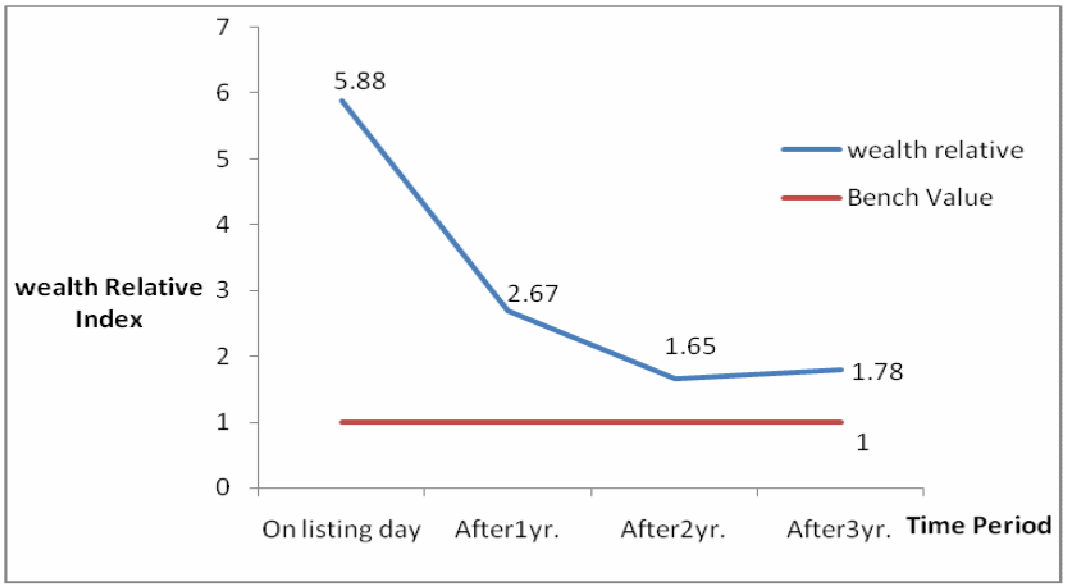
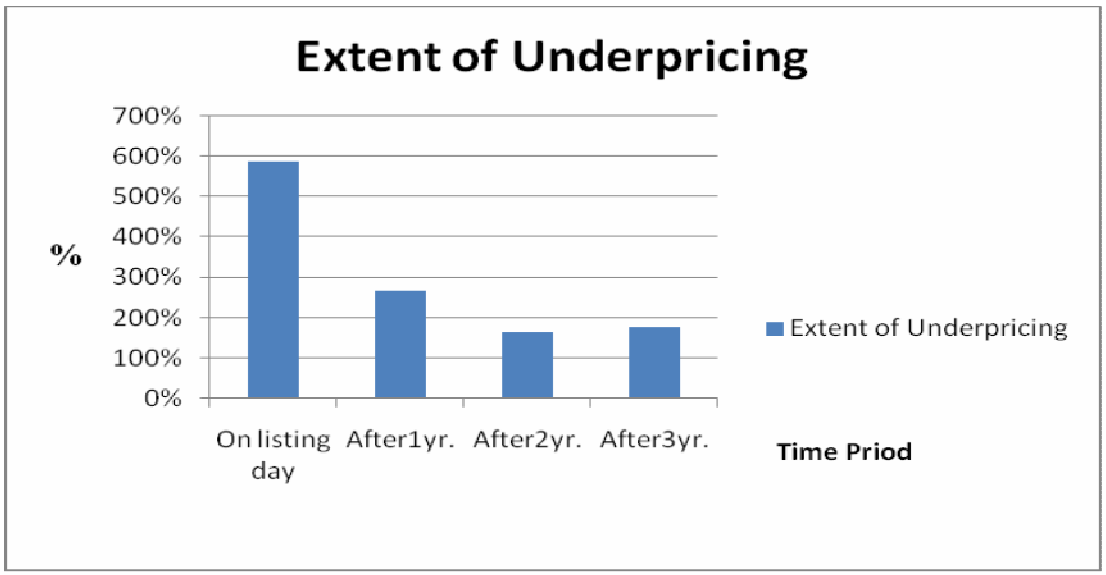


Fig.8.7:-Extent of Underpricing:-



Chapter-IX
Conclusion

Conclusion:-

From the foregoing analysis, it can be concluded that underpricing is present in NSE. It can also be concluded that underpricing is more severe in the short run periods, i.e., from the listing day to the six months after the listing. However the long run IPOs tends to move to their intrinsic value or true value wiping out much of the underpricing. The difference between the extents of underpricing in the two time intervals is very much. For long time interval is taken up to 3 years from the day of the listing of the company. It shows that if an investor buys and holds the equities, how much he is going to earn over the considered time period. In addition to that an analysis of the influence of factors on IPOs pricing performance has been done. The factors taken in to consideration are: Subscription level, Issue size, Listing lead time and Age. The results show that these factors influence the initial returns, i.e., R_Ret. of the listing day of the company.

Limitations of the study:-

1. The limitations of the average that is being impacted by the extreme values can not be avoided in return calculation while examining the performance for annualized raw returns and annualized market adjusted raw returns.
2. The non-availability of data of prices for few companies which could not be considered for this analysis purpose.
3. The volatility and the changing market conditions, which do have an impact on the prices of the shares and thus the returns generated thereof, could not be avoided.
4. The other limitation of this study was the shortage of time for completing such a vast topic, due to which the sample of limited companies on NSE has been taken.

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Appendix:-1

Year	No.of IPOs	Name of Company
1999	1	HCL Technologies Limited
2000	9	Shree Rama Multi Tech Limited Zydus Cadila Healthcare Limited iGate Global Solutions Limited Tata Teleservices (Maharashtra) Limited MRO TEK Limited Pritish Nandy Communications Limited Balaji Telefilms Limited AZTEC Software & Technology Services Limited Creative Eye Limited
2001	2	Mid-Day Multimedia Limited D-Link(India) Limited
2002	2	Bharti Tele Ventures Limited I-Flex Solutions Limited
2003	5	Divi's Laboratories Limited Maruti Udyog Limited Vardham Acrylics Limited Indraprestha Gas Limited T.V.Today Network Limited
2004	15	Panti Computer Systems Limited Indian Petrochemicals Limited Power Trading Corporation of India Petronet LNG Limited Biocon Limited Dishman Pharmaceuticals & Chemicals Limited Datamatics Technologies Limited New Delhi Television Limited Tata Consultancy Services Limited

		IndiaBulls Financial Services Limited National Thermal Power Corporation Limited S.A.L. Steel limited Deccan Chronics Holdings Limited Bharati Shipyard Limited Indoco Remedies Limited
2005	40	Jet Airways(India) Limited UTV Software Communications Emami Limited Gateway Distriparks Limited 3i Infotech Limited Gokaldas Exports Limited Shringar Cinemas Allsec Technologies Limited India Infoline Limited Shoppers Stop Limited Provogue (India) Limited Yes Bank Limited Nectar Lifesciences Limited SPL Industries Limited IL&FS Investment Limited Shri Rampuri Balaji Steels Limited Infrastructure Development Finance Company Limited HT Media Limited Sasken Communications Technologies Limited Amar Remedies Limited Talbros Automotive Components Limited Suzlon Energy Limited Aurionpro Solutions Limited Shree Renuka Sugars Limited Bannari Amman Spinning Mills Limited

		Prithvi Information Solutions Limited Piramyd Rewtail Limited Bombay Rayon Fashions Limited AIA Engineering Limited Triveni Engineering &Industries Limited Everst Kanto Cylinder Limited Repro India Limited Kernex Microsystems (I) Limited PVR Limited Tulip IT Services Limited Punj Lyoyd Limited Educomp Solutions Limited Celebrity Fashions Limited Bartonics India Limited
2006	60	Shree Astavinayak Cine Vision Li mited Pyramid Saimira Theatre Limited Cairn India Limited Tanla Solutions Limited Ess Dee Aluminium Limited L.T.Overseas Limited Sohba Developers Limited Ruchira Papers Limited Blue Bird (India) Limited Parsvnath Developers Limited Lanco Intratech Limited Info Edge (India) Limited Global Vectra Helicorp Limited Development Credit Bank Limited Hanung Toys and Textiles Limited JHS Svendgaard Laboratories Limited FIEM Industries Limited

		Gwalior Chemical Industries Limited HOV Services Limited Atlanta Limited Action Construction Equipment Limited Voltmap Transformers Limited GMR Infrastructure Limited Tech Mahindra Limited Allcargo Global Logistics Limited Prime Focus Limited Deccan Aviation Limited Unity Infraprojects Limited Plethico Pharamaceuticals Limited Lokesh Machines Limited Sun TV Limited Emkay Share and Stock Brokers Limited Godwari Power and Ispat Limited R Systems International Limited Tantia Constructions Limited Kewal Kiran Clothing Limited Uttam Sugar Mills Limited Adhunik Meytaliks Limited Solar Explosives Limited Visa Steel Limited NITCO Tiles Limited J.K. Cement Limited Mahindra &Mahindra Financial Services Limited B.L.Kashyap &Sons Limited Pratibha Industries Limited Gitajali Gems Limited Sadbhav Engineering Limited INOX Leisure Limited

		Jagran Prakashan Limited Gujarat State Petronet Limited Entertainment Network (India) Limited
2007	82	Precision Pipes and Profiles Company Limited MANAKSIA LIMITED ARIES AGRO LIMITED BRIGADE ENTERPRISES LIMITED Transformers and Rectifiers (India) Limited BGR ENERGY SYSTEMS LIMITED ECLERX SERIVCES LIMITED JYOTHY LABORATORIES LIMITED KAUSHALYA INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED KOLTE PATIL DEVELOPERS LIMITED RENAAISSANCE JEWELLERY LIMITED EDELWEISS CAPITAL LIMITED Mudra Port and Special Economic Zone Limited EMPEE DISTILLERIES LIMITED Religare Entrises Limited BARAK VALLEY CEMENTS LIMITED Maytas Infra Limited Supreme Infrastructure India Limited Koutons Retail India Limited Consolidated Construction Consortium Limited Kaveri Seed Company Limited Dhanus Technologies Limited Power Grid Corporation of India Ltd. Motilal Oswal Financial Services Limited Indowind Energy Limited Magnum Ventures Limited SEL Manufacturing Company Limited

		Asian Granito India Limited TAKE Solutions Limited K.P.R. Mill Limited Purvankara Projects Limited Central Bank of India IVR Prime Urban Developers Limited Omnitech Infosolutions Limited Zylog Systems Limited Omaxe Limited Alpa Laboratories Limited Simplex Projects Limited Everonn Systems India Limited Allied Digital Services Limited Housing Development and Infrastructure Limited Roman Tarmat Limited DLF Limited Vishal Retail Limited Nelcast Limited Meghmani Organics Limited Decolight Ceramics Limited Time Technoplast Limited Nitin Fire Protection Industries Limited Insecticides (India) Limited Binani Cement Limited MIC Electronics Limited Bhagwati Banquents & Hotels Limited Fortis Healthcare Limited ICRA Limited Orbit Corporation Limited Abhishek Mills Limited Page Industries Limited

		Raj Television Network Limited AMD Metaplast Limited Idea Cellular Limited Evinix Accessories Limited Mudra Lifestyle Limited Oriental Trimex Limited MindTree Consulting Limited Broadcast Initiatives Limited Indus Fila Limited Euro Ceramics Limited Indian Bank C&C Constructions Limited SMS Pharamaceuticals Limited Power Finance Corporation Limited Transwarranty Finance Limited Firstsource Solutions Limited Redington (India) Limited Cinemax India Limited Technocraft Industries (India) Limited House of Pearl Fashions Limited Akruti Nirman Limited Pochiraju Industries Limited Autoline Industries Limited
2008	29	20 MICRONS LIMITED RESURGERE MINES &MINERALS INDIA LIMITED AUSTRAL COKE & PROJECTS LIMITED NU TEK INDIA LIMITED VISHAL INFORMATION TECHNOLOGIES LIMITED BIRLA COTSYN INDIA LIMITED KSK ENERGY VENTURES LIMITED LOTUS EYE CARE HOSPITAL LIMITED

		FIRST WINNER INDUSTRIES LIMITED ARCHIDPLY INDUSTRIES LIMITED SEJAL ARCHITECTURAL GLASS LIMITED GIKUL REFOILS AND SOLVENT LIMITED KIRI DYES AND CHEMICALS LIMITED TITAGARH WAGONS LIMITED Sita Shree Food Products Limited GAMMON INFRASTRUTURE PROJECTS LIMITED RURAL ELECTRICATION CORPORATION LIMITED V-GUARD INDUSTRIES LIMITED GSS AMERICA INFOTECH LIMITED Tulsi Extrusions Limited IRB Infrastructure Developers Limited SHRIRAM EPC LIMITED Bang Overseas Limited ONMOBILE GLOBAL LIMITED KNR Construction Limited CORDS CABLE INDUSTRIES LIMITED J.Kumar Infraprojects Limited RELIANCE POWER LIMITED FUTURE CAPITAL HOLDINGS LIMITED

* The name of companies are quoted as registered in the NSE irrespective of the capital and small letters.

Appendix (of Regulatory Framework) 2:-

i Inserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/14/2005/25/1 dated January 25, 2005.

ii Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

iii Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

iv Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

vInserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/14/2005/25/1 dated January 25, 2005.

viInserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/19/2006/31/3 dated March 31, 2006.

vii Inserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/13/2004/28/5 dated May 28, 2004.

viiiInserted vide SEBI Circular No. DIP (Compendium) Circular No. 3 dated August 04, 2000.

ix Inserted vide SEBI Circular No. DIP (Compendium) Circular No. 3 dated August 04, 2000.

x Inserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/14/2005/25/1 dated January 25, 2005.

xi Inserted vide SEBI Circular No. DIP (Compendium) Circular No. 3 dated August 04, 2000.

xii Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

xiii Inserted vide SEBI Circular No. DIP (Compendium) Circular No. 3 dated August 04, 2000.

xivInserted vide SEBI Circular No. RMB (Compendium) Series Circular No. 2 (1999 – 2000) dated February 16, 2000.

xvInserted vide SEBI Circular No. RMB (Compendium) Series Circular No. 1 (2001-2002) dated July 17, 2001

xvi Inserted vide SEBI Circular No. RMB (Compendium) Series Circular No. 1 (2001-2002) dated July 17, 2001

xvii Inserted vide SEBI Circular No. RMB (Compendium) Series Circular No. 1 (2001-2002) dated July 17, 2001

xviii Inserted vide SEBI Circular No. RMB (Compendium) Series Circular No. 1 (2001-2002) dated July 17, 2001

xixInserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/13/2004/28/5 dated May 28, 2004.

xx Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

xxi Inserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/13/2004/28/5 dated May 28, 2004.

xxii Inserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/14/2005/25/1 dated January 25, 2005.

xxiii Inserted vide SEBI Circular No. SEBI/CFD/DIL/DIP/13/2004/28/5 dated May 28, 2004

xxiv Inserted heading vide SEBI Circular No. SEBI/CFD/DIL/DIP/14/2005/25/1 dated January 25, 2005.

xxv Substituted vide SEBI Circular No. RMB (Compendium) Series Circular No. 1 (2001-2002) dated November 29, 2001

xxvi Inserted vide SEBI Circular No. RMB (Compendium) Series Circular No. 4 (2001-2002) dated March 06, 2002.

xxvii Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

xxviii Substituted vide SEBI Circular No. RMB (Compendium) Series Circular No. 1 (2001-2002) dated November 29, 2001

xxixInserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

xxx Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.

[xxxi] Inserted vide SEBI/CFD/DIL/DIP/Circular No. 11 dated August 14, 2003.