"IPO Market: Underpricing or overpricing?"

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Abstract

Extant literature broadly supports the view that IPOs are underpriced. IPO pricing is mostly argued from the point of view of listing gains/ losses. This paper seeks to explain the process and outcomes of IPO pricing in the Indian capital market with the help of a basic model. With the help of certain cases it attempts to show that concept of underpricing is misleading and needs to be revised. According to this paper the extant notion of 'underpricing' needs to be termed as 'overpricing' by the IPO market.

The paper examines six different strategies of investment. Amongst other testing methods it uses a non-parametric test, namely, the sign test. With the help of these tests this paper shows that IPOs are overpriced in comparison to their true price irrespective of the boom or recession in the market, in the Indian capital market.

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1.0 Introduction

Extant literature broadly supports the view that IPOs are underpriced. IPO pricing is mostly argued from the point of view of listing gains/ losses. This paper seeks to explain the process and outcomes of IPO pricing in the Indian capital market with the help of a basic model. With the help of certain cases it attempts to show that concept of underpricing is misleading and needs to be revised. According to this paper the extant notion of 'underpricing' needs to be termed as 'overpricing'.

There are seven sections in this paper. The first is an introduction. The second explains the "Price Discovery Process'. The third section explains the 'Market Model'. The next section discusses the earlier works. The fifth section lays out the methodology. Section six gives the results. The seventh section concludes.

2.1 The Price Discovery Process

Corporates may raise capital in the primary market by way of an initial public offer, rights issue or private placement. An Initial Public Offer (IPO) is the selling of securities to the public in the primary market. This Initial Public Offering can be made through the fixed price method, book building method or a combination of both. Difference between shares offered through book building and offer of shares through normal public issue:

Features	Fixed Price process	Book Building process
Pricing	Price at which the securities are offered/ allotted is known in advance to the investor.	Price at which securities will be offered/ allotted is not known in advance to the investor. Only an indicative price range is known.
Demand	Demand for the securities offered is known only after the closure of the issue	Demand for the securities offered can be known everyday as the book is built.
Payment	Payment if made at the time of subscription wherein refund is given after allocation.	Payment only after allocation.

Book building

This is the process of price discovery. The company does not come out with a fixed price for its shares; instead, it indicates a price band that mentions the lowest (referred to as the floor) and the highest (the cap) prices at which a share can be sold. Bids are then invited for the shares. Each investor states how many shares s/he wants and what s/he is willing to pay for those shares (depending on the price band). The actual price is then discovered based on these bids.

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explain the process in detail. According to the book building process, four classes of investors can bid for the shares:

1. **Retail Individual Investor (RII):** In the retail individual investor category, investors cannot apply more than Rs one lakh (Rs 1, 00,000) in an IPO. Retail Individual investors have an allocation of 35% of shares of the total issue size in Book build IPOs. NRI's who apply with less than Rs 100000/ are also considered as RII category. Retail Individual investor can bid for more than Rs 100000 in an IPO by applying in NON institutional Investors Category. There is no upper limit for bidding amount in 'NON institutional Investors Category.
2. **High Networth Individual (HNI):** If Retail Investor applies for more than Rs 100000 of shares in an IPO , they are considered as HNI.
3. **Non Institutional bidders :** Individual investors , NRI's, Companies , trusts, etc. who bid for more than Rs 1 lakh are known as Non Institutional bidders. Non-Institutional bidders have an allocation of 15% of shares of the total issue size in Book build IPOs.
4. **Qualified Institutional Bidders (QIBs):** Financial institutions , banks , FII's and Mutual funds who are registered with SEBI are called QIB's. They usually apply in very high quantities. QIBs are mostly representatives of small investors who invest through mutual funds, ULIP schemes of insurance companies and pension schemes . QIB have an allocation of 50% of shares of the total issue size in book build IPOs.

Allotment

This is the process whereby those who apply are given (allotted) shares. The bids are first allotted to the different categories and the over-subscription (more shares applied for than shares available) in each category is determined. Retail investors and high net worth individuals get allotments on a proportional basis. For instance, if a retail investor has applied for 200 shares in the issue, and the issue is over-subscribed five times in the retail

category, then the retail investor gets to get 40 shares (200 shares/5). Sometimes, the over-subscription is huge or the issue is priced so high that retail investors cannot really bid for too many shares before the Rs 50,000 limit is reached. In such cases, allotments are made on the basis of a lottery. Say, a retail investor has applied for five shares in an issue, and the retail category has been over-subscribed 10 times. The investor is entitled to half a share. Since that isn't possible, it may then be decided that every 1 in 2 retail investors will get allotment. The investors are then selected by lottery and the issue allotted on a proportional basis. That is why there is no way you can be sure of getting an allotment.

The Process

A company coming out with a public issue has to come out with an Offer Document/ Prospectus. An offer document is the document that contains all the information you need about the company. It will tell you why the company is coming is out with a public issue, its financials and how the issue will be priced. The Draft Offer Document is the offer document in the draft stage. Any company making a public issue is required to file the draft offer document with the Securities and Exchange Board of India, the market regulator. If SEBI demands any changes, they have to be made. Once the changes are made, it is filed with the Registrar of Companies or the Stock Exchange. It must be filed with SEBI at least 21 days before the company files it with the RoC/ Stock Exchange.

During this period the investors can have access to the Red Herring Prospectus which is just like the above, except that it will have all the information as a draft offer document; it

will, however, not have the details of the price or the number of shares being offered or the amount of issue. That is because the Red Herring Prospectus is used in book building issues only, where the details of the final price are known only after bidding is concluded.

The Process:
• The Issuer who is planning an IPO nominates a lead merchant banker as a 'book runner'.
• The Issuer specifies the number of securities to be issued and the price band for orders.
• The Issuer also appoints syndicate members with whom orders can be placed by the investors.
• Investors place their order with a syndicate member who inputs the orders into the 'electronic book'. This process is called 'bidding' and is similar to open auction.
• A Book should remain open for a minimum of 5 days.
• Bids cannot be entered less than the floor price.
• Bids can be revised by the bidder before the issue closes.
• On the close of the book building period the 'book runner evaluates the bids on the basis of the evaluation criteria which may include -
○ Price Aggression
○ Investor quality
○ Earliness of bids, etc.
• The book runner and the company conclude the final price at which it is willing to issue the stock and allocation of securities.
• Generally, the number of shares is fixed; the issue size gets frozen based on the price per share discovered through the book building process.
• Allocation of securities is made to the successful bidders.
• Book Building is a good concept and represents a capital market which is in the process of maturing.

The Syndicate

Just because the prospectus has been filed with SEBI, it doesn't mean it recommends the issue or guarantees its contents. This responsibility rests with the lead managers to the issue, who are supposed to do due diligence on the issue. In plain language, that means lead managers have to ensure the company is following the rules laid down for an IPO, that it has made available all the information a potential investor needs to know and that the facts in the prospectus are correct.

They are also called merchant bankers and are in charge of the issue process. They act as intermediaries between the company and the investors. They are also responsible for drawing up the prospectus and marketing the issue. If it is a book building process, the lead manager also helps determine the price band; in such cases, they are also called Book Running Lead Managers. Post issue activities, like intimation of allotments and refunds, are their responsibility as well.

The actual work of drawing up the list of allotees, crediting the shares to their demat accounts and ensuring refunds, if not allotted the shares, is done by the Registrar to the Issue. This is a financial institution appointed to keep a record of the issue and ownership of company shares. In the case of complaints like non-receipts of shares or refunds, investors must complain to the lead managers, who take up the matter with the registrars.

The names of all the lead managers and the registrar to the issue, with their addresses, phone numbers and e-mail addresses, are displayed prominently on the cover of every prospectus.

An Underwriter to the issue could be a banker, broker, merchant banker or a financial institution. They give a commitment to underwrite the issue. Underwriting means they will subscribe to the balance shares if all the shares offered at the IPO are not picked up. Suppose there is an issue is for Rs 100 crore (Rs 1 billion) and subscriptions are received only for Rs 80 crore (Rs 800 million). It is then left to the underwriters to pick up the balance Rs 20 crore (Rs 200 million). If underwriters don't pay up, SEBI will cancel their licenses.

IPOs are, are therefore, nothing but stocks, which are a risky investment with no guarantees. The lead manager may have certified that the facts, as disclosed in the prospectus, are correct. Prominent financial institutions may agree to underwrite the issue. The issue may even end up being oversubscribed. All this still does not mean that IPOs are being offered and being priced by the IPO market at the right or 'True Price'.

IPOs can be a risky investment. For the individual investor, it is tough to predict what the stock will do on its initial day of trading and in the near future because there is often little historical data with which to analyze the company. Also, most IPOs are of companies going through a transitory growth period, which are subject to additional uncertainty regarding their future values.

In an IPO is also referred to as a "public offering". The issuer obtains the assistance of an underwriting firm, which helps it determine what type of security to issue (common or preferred), the best offering price and the time to bring it to market. This price is known

as the ‘Issue Price’ or ‘Public Offering Price’ (PoP). When underwriters determine the public offering price, they look at a number of factors. Some of these include the company's financial statements (how profitable it is), public trends, growth rates and even investor confidence.

Underpricing

Often the pricing of an initial public offering (IPO) is below its market value. When the offer price is lower than the price of the first trade, the stock is considered to be *underpriced,* as per the conventional notion of IPO pricing. A stock is usually only underpriced temporarily because the laws of supply and demand will eventually drive it toward its intrinsic value. It is believed that IPOs are often underpriced because of concerns relating to liquidity and uncertainty about the level at which the stock will trade. The less liquid and less predictable the shares are, the more underpriced they will have to be in order to compensate investors for the risk they are taking. The conventional argument given for ‘underpricing’ is that an IPO's issuer tends to know more about the value of the shares than the investor, and therefore, the company must underprice its stock to encourage investors to participate in the IPO.

Strategy of the syndicate

Although the term ‘syndicate’ refers to a conglomerate of merchant bankers which is usually formed in the case of a large Issue, here we use the term to signify a group of interested entities who act behind the scenes, like the underwriters, book-runners, auditor who have prepared the three years accounts reflected in the Red Herring prospectus. Since a certain minimum fixed cost is incurred by the merchant banker the commission is

larger on small deals in percentage terms. In the case of larger issues the syndicate tries to win over the IPO Company by minimizing their own rate of commission. At the same time their game plan is to maximize their earning from the issue. They do so by exploring the paying capacity of potential investors during the 'cooling-off period' by holding meeting with them. In fact, they assess the elasticity of demand for the particular Issue. By lowering the rate of commission they have got the deal. Now the attempt is to maximize total turnover of the Issue. If by raising price the quantity demanded (number of applicants * size of application (number of shares) does not fall then their variable cost is fixed but their total revenue rises because it is based on turnover in value terms. Similarly, if the demand for a small sized issue is limited through the book-building process they try to increase the price so that their earnings increase. In, short, it benefits them to raise the issue price. They are able to do so because of possession of asymmetric information at their behest. The IPO market is incomplete. It is informationally inefficient. Another set of entities whose interest coincide with the 'syndicate' are the FIIs, big industrial houses, promoters, etc. They are able to assess and gauge the possible trends upon listing. They are able to predict the "high" quote and take advantage of it by selling at the "high" quote.

3.1 The Market Model of IPO pricing

The processes of 'Fixed Pricing' and 'Book Building' can in the Indian context be equated to the two policy periods. In the pre-liberalization period it is epitomized by the Controller of Capital Issues (CCI era) where there was a fixed formula for pricing

decided by the CCI. In the post liberalization period the price discovery process was largely governed by 'Book Building' method.

Under CCI regime the market used to allocate new shares on the basis of a fixed price. If price is high, there would be excess supply (See Figure 1). This would result in downward pressure on price, such that equilibrium quantity is established. Conversely, if price is low there would be excess demand and there would be an upward pressure on price, so that once again equilibrium quantity is established. CCI used to fix the price adhocly. Therefore, it did not allow market forces to operate. This leads to misallocation of capital.

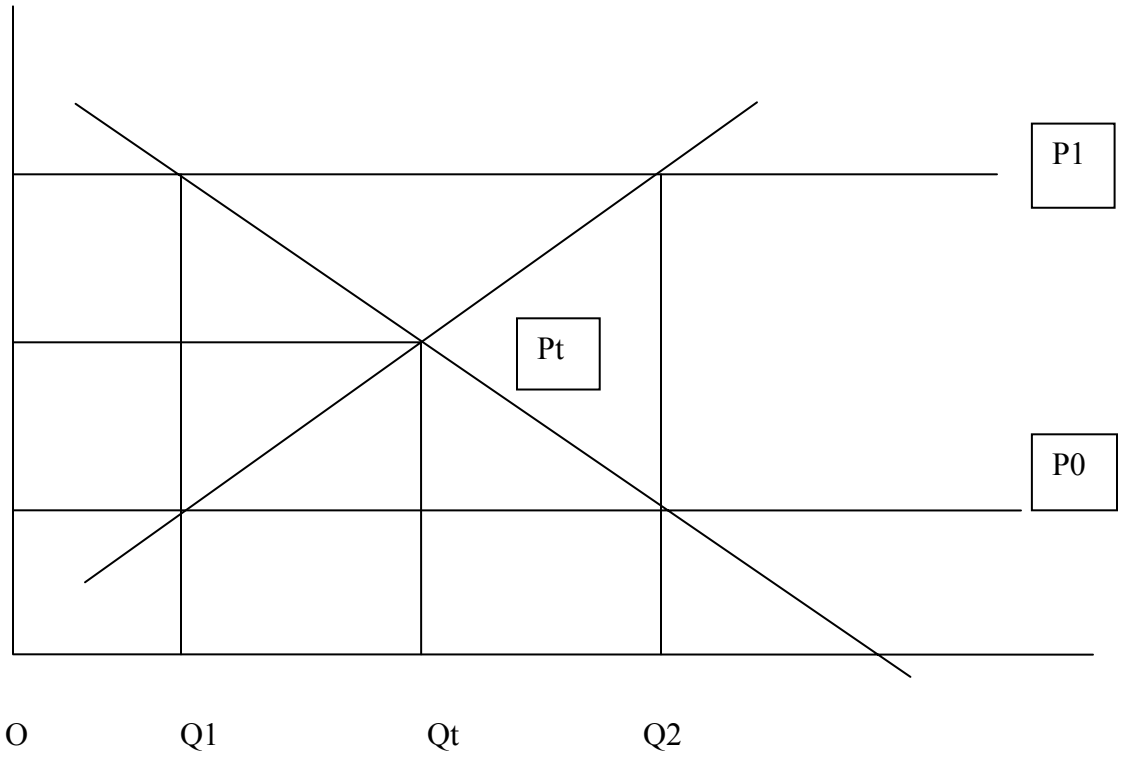
Case 1: (Under CCI era) when the price has been fixed without taking the influence /opinion of the investors, if we take (P1) as a price set by CCI, then our supply is OQ2 and our demand is OQ1 the excess supply is Q2Q1. The 'actual demand' (DDA) which is equal to OQ1 = 'actual supply' (SSA). But, since true price is Pt, demand equals OQt. So Q1Qt is misallocation of capital. At price P1, investors do not want to invest their money because they perceive the fixed price P1 could be reduced and equal to true price (Pt). If this thing happens, then the investors may invest without any hesitation and demand of shares may increase to Qt from Q1. In this case, 'actual price' is P1 which is higher than true price Pt. Hence stock is overvalued and it also leads to under-subscription of shares. This under-subscription reflects the failure of the market to allow price and quantity to adjust. The misallocation is a social loss because flexible prices could have lead to a conversion of the 'market signal' of excess supply into a lowered price, at Pt, which is the 'true price'. Under-subscription does not translate into a lowering of price, so as to encourage capital investment. It is a loss-loss situation because neither does the IPO gain

fully, nor does the investor nor does the market. The capital market is short of funds to the tune of Q1Qt.

Case 2: If price is fixed at Po, then the actual demand is OQ2 and actual supply is OQ1. Excess demand is Q1Q2 (which is refund by the company to the investor). But at the same time true price is Pt and true quantity is OQt. At the opening of issue, if price is fixed then Q1Qt is misallocation of demand. The issue of the company is oversubscribed but the company is unable to fix a correct or right price and due to which they suffer a loss of Q1Qt demand, which is misallocation.

Figure1

Pricing under CCI



In practice, during the CCI regime most of the issues had to price their issue based on the CCI formula was conservative. During CCI era, the pricing formula ensured a price of the issue which mostly resulted in underpricing of the initial public offer.

Pricing under book-building

With the abolition of CCI in June, 1992, the restriction was removed and companies were allowed to price the equity at a premium subject to certain conditions. Ideally, the pricing should be rational. It should reflect the fundamental value of the share and should adjust to the demand and supply conditions. In such a case there would be no over-subscription or under-subscription. There would be neither listing gain nor loss. Under the book building or free pricing era we could picturize the market conditions as given in Figure 2.

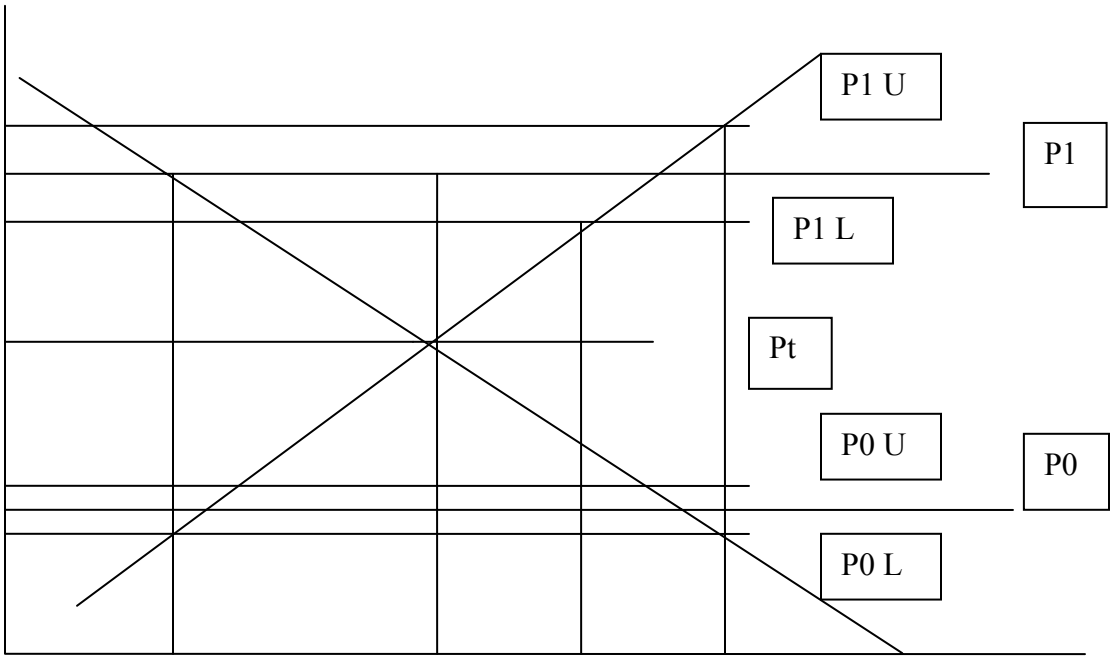
Informational Efficiency

Under the free pricing era, we assume that the market is efficient. This implies the following:

1. Information is available to every body, instantly and uniformly.
2. It assumes that entities involved in the process of price discovery do not have a conflict of interest in fixing the price.
3. That price fixation is done in a fair and transparent manner.
4. Also, it is expected that the potential buyers would influence the price through the book-building process.
5. Where a suggestive price band is offered, it is assumes that the price signal is non-distorting.

Figure 2

Pricing under Book-Building



If the 'issue price' is fixed at PL1, this is an *ex-post* price since the transaction is done and sealed. The insiders are forcing the investors into an adverse selection. The investors have sunk their investment till the listing day. This is an incentive for the IPO Company because the company has succeeded in convincing the investor that the true price is P1. This is indicative of 'moral hazard' because the 'insiders' have greater information and have over-priced the share in comparison to the true price Pt. However, in terms of popular terminology P1L is treated as 'underpricing'. The expectation is that the listing price would be higher than P1L and so the investors would have an immediate gain of P1L to P1U. In the market period since information and flows are incomplete the listing price may open at P1U and drop on closing to P1. The 'insiders' and other players who

have better means and better information or have a stake in raising the issue price protect themselves and leave the ordinary investor to bear the risk both in the case of listing gains as well as the short-run gains. They can do so because they are able gain by selling at the 'high' listing price (P1U) while other cannot because they do not know what is the 'likely' 'true price'.

Insider information and inefficiency

However, if the market is 'semi-strong form' efficient, it cannot absorb the 'insider information'. The true price will not be established immediately. Eventually, the market would evaluate the stock at Pt and the stock price would fall from the listing price. This trend would continue to happen till the time that the true price Pt is established. This would, however, take sometime because of the 'informational inefficiency' and the presence 'noise trading' in the very short run. This implies that if the listing price is greater than the true price that would be established in the short run, ultimately the 'True Price' would then be established.

Market price Vs. IPO determined

Efficient market hypothesis depended or base upon market information. Price discovery process can be done into two ways

1) Price discovery before listing – Book Building
2) Price discovery after listing – Market Price

There is a difference between pre listing information and post listing information. In the absence of the market processing and valuation, it is the prelisting information set that prevails. The price discovery process depended not only upon post listing information but also on the antecedent of the issue. There are three kinds of information in these antecedents. These antecedents can be classified as historical information – long term,

past information – recent past (in the draft prospectus) and current information at the time of issue (in the bidding process). In the case of IPO's based on book building, price discovery process depends upon pre listing information.

If the sum total of this information has a positive signal for the market, then the price determined through book building process should be an efficient price. If the book building process does not lead to an efficient price, any information of post listing characteristics would reflect efficiency of the price discovery process.

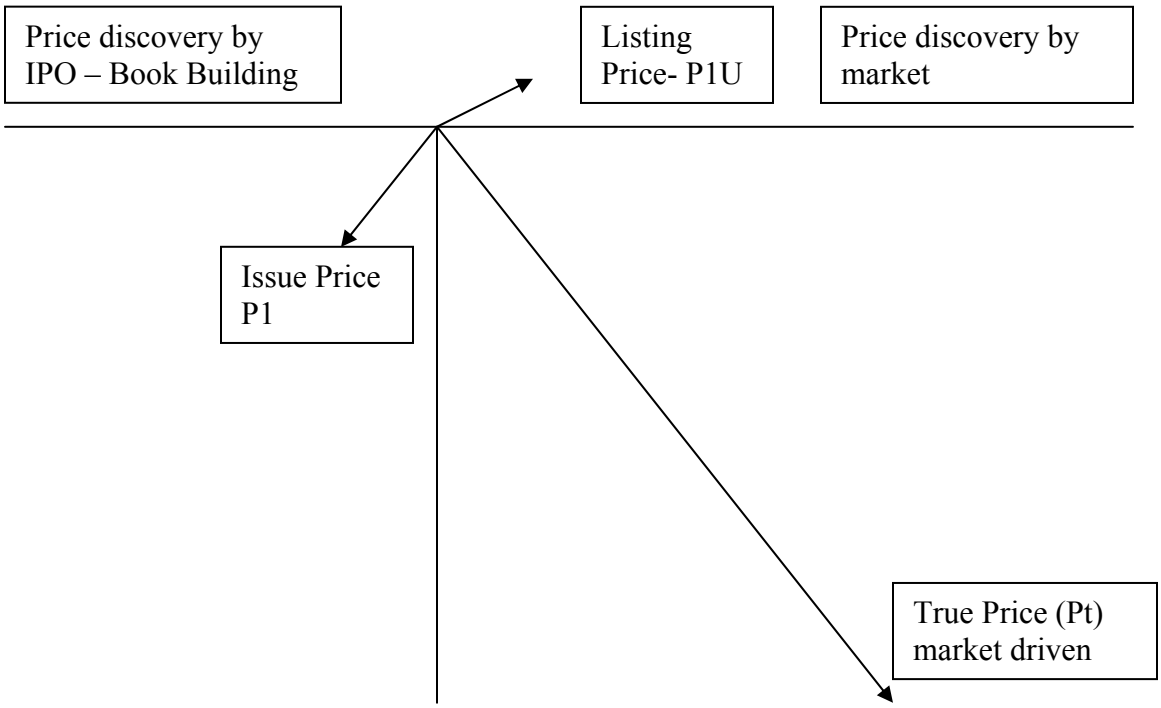
1 Post listing information is based on actual performance .It is therefore ex-post evaluation by the market

2 Pre listing information is based on ex-ante evaluation. Therefore the book building process would be effective only if ex-ante evaluation is realized in ex-post terms.

Hence, if it is assumed according to the efficient market hypothesis, that the market is able to evaluate any stock in an efficient manner based on its intrinsic value or fundamental value, then the yardstick of efficient price is not the listing price. The listing date or before listing date, no information has come. Therefore the listing price is based on the pre information listing date. As new information comes in the market and noise trading is minimized, the true price will be established.

In the following diagram we explain our notion of overpricing. Conventionally, pricing is said to be 'underpricing' if the listing price is below issue price. In Figure 3, it is P1 (–) P1U, which is negative. It is, therefore, felt that it is underpricing. In our reckoning the true price is Pt which is below P1U. Therefore, the first market price to be established is P1U and not P1. This market price happens to be higher than Pt. Thus, short term

investors are buying at P1U and selling anywhere below that, till it reaches Pt, which is the lowest. Since both P1U and Pt are market driven we must consider only these prices for defining 'over-pricing'. Since listing price is higher that true price the market is over-pricing a newly launched IPO. The comparison of P1U with P1 is irrelevant for market pricing. When we refer to IPO pricing we must allow market driven prices to operate and must make them the basis of comparison. Therefore, the IPO market overprices new issues. Their true price is much below. This hypothesis has been tested below.



Types of investors and strategies

IPO investment is done by two types of investors with different objectives.

1) Type I: The first investor may be called as 'Fly by night' investor who invests for listing gain.
2) Type II: The second investor may be called the short term investor who invests for short term capital gain.

The investment decision of first category investor is based on four points of information.

1) Red herring prospectus
2) Lowest price in the price band
3) Highest price in the price band
4) Listing price

This however is very limited information and is hardly related to performance. The 'syndicate', on the other hand has much greater information at its behest. They then are able to influence the listing price. Although it is market determined it is not an 'efficient' price.

This could lead to different types of strategies for each of the types of investors mentioned above:

Type I:

a) To invest and sink in funds into an IPO at the time of the issue, wait for allotment and hope to make a quick return by selling on at the listing price.
b) To buy a portfolio of shares at the time of issue and hope to get a gain through listing gain.

Type II:

a) Buy the listed share on the day of listing and then waiting for an appropriate day to sell and get short run gains.
b) A better strategy may be to roll-over capital by investing the capital daily.
c) Thirdly, one could buy stocks on the listing day and keep making part sales (of lots) daily.

d) Fourthly, buy a portfolio of share on the day of listing and hope to get a gain through short run gain as defined.

4.1 Review of Literature

A review of literature would make us believe that Initial Public Offerings (IPOs) in India and most other countries are usually underpriced. A stock issue is deemed to be underpriced if the closing price on the first day of listing is higher than the IPO price. A review of the literature on the subject confirms that even though the book building methodology is an improvement over fixed price IPOs, issues continue to be significantly underpriced. For example, on average, according to studies, underpricing in the US from 1980 to 2001 was 18.8 per cent. In the dotcom boom years of 1999 and 2000, underpricing was much higher at about 72 per cent and 56 per cent, respectively. (Agarwal et. al. (2002); Su and Fleisher (1997); Hunger (2005))

This understanding of 'underpricing' falls short of our understanding, as has been explained above. In his paper "Revisiting IPO Underpricing in India", Saurabh Ghosh, attempts to identify the factors explaining IPO underpricing in an emerging economy, India, using 1842 companies that got listed on the Bombay Stock Exchange (BSE) from 1993 to 2001. Unlike the existing works that analyzed the relation of ex-ante risk proxies and underpricing, this paper concentrates on volatility of stock return just after listing and underpricing of Indian IPOs. Contrary to the theoretical prediction, this paper finds a negative relation of underpricing and volatility.

Aggarwal (2008) analyze the Indian IPO issue and their pricing mechanism with empirical studies on the valuation of IPOs and both theoretical and empirical work on the determinants of short–run under pricing. Aggarwal, Krigman and Womack (2002), Madhusoodanan, and Thiripalraju (1997) and Rock (1986) and Jegadeesh, Weinstein, and Welch (1993), amongst others have reviewed the problem of underpricing. Their approach varies from ours and is not comparable.

5.1 Data and methodology

We have taken data on share prices of IPOs quoted in National Stock Exchange. Our approach is a case study approach. The data of twenty four companies has been taken from NSE. We have used the Nifty for observing the overall trend in the market during the two periods under study. The following procedures, measure and tests have been done for two time periods, in the stock market, namely;

i) January 2007 to July 2007 – a period of boom.

ii) January 2008 to July 2008 – a period of downturn.

The methodology consists of the following step:

To measure and analyse:

a. Listing gain – by taking the 'high' quote.

b. Price trends:

   i. To study the trends of average price of the share - post listing.

   ii. To use a sign test (non-parametric) to verify whether post listing IPOs give short-run gains or losses to investors who invest of the listing day.

c. To analyse the trends and conclude about 'Underpricing or Overpricing' of IPOs.

Definitions and Measures

Measuring capital gains:

- Listing day gain is defined as:

  Lg = ((Listing Day High Price (MINUS) Issue Price (Prev. Close))/Issue Price (Prev. Close))*100

- Short run loss is defined as:

  iff

  SRg = (Daily Average Price (Post-listing) (MINUS) Listing Day (Closing Price[1])) <0

Measuring growth rates:

For studying the trend of the permanent component of price we used the following semi-log equation:

Ln Pt = a + b*Time + Ut

Here, Ln stands for Log to base 'e'.

b = daily compound growth rate

Ut = error term

Sign Test

[1] We have considered closing price because that is the last opportunity for a short run investor to buy a newly listed share.

We have used a student's t-test as the test statistic for $\alpha = 0.05$, for testing the following hypothesis:

$H0: \pi = 0.5$

$Ha: \pi$ is not 0.5

Where, p is the proportion of negative signs (losses) out of given sample of observations (30 daily average price quotes) and 'π' is the proportion of loss in the short run, in the population. Where 'q' is the proportion of gain in the short run and 'n' is the number of observations.

$$t = (p - \pi_{H0}) / \text{S.E. } (p)$$

$$\text{S.E. } (p) = \sqrt{(p*q)/n-1}$$

S.E. (p) is the standard error of the estimated proportion of short run losses.

6.1 Results

As per the methodology laid out above the following results obtain. The first thing that we observe is that our results do not vary across the two periods, whether boom or recession. With the help of the semi-log growth equation we have determined that the index was growing at 0.1% per day during the first period - January 2007 to July 2007. During January 2008 to July 2008 the index was falling at 0.228% per day. It is clearly proved that the first period was bullish and the second was bearish.

Secondly, the main finding is that almost all scrips in both periods have medium to high listing gains (see tables 3 and 4). Except for one scrip none has losses. This shows that 'Type I: (a) and (b)' (above) are successful for the first type of investor. This means that they are able to beat the market. This in turn means that the listing price is not an 'efficient' price. It is based on imperfect information. Therefore, the IPO market has overpriced the stock, at the time of listing. This is corroborated by the following results. Thirdly, the growth rate is negative in almost all 24 cases (except two). This means that the prices have fallen almost invariably after listing. They were gravitating towards their true price, Pt. This means that 'Type II: (a) and (b)' strategies listed above, fail for the second type of investor. Thirdly, the 'Type II: (c)' strategy clearly fails because there is a consistent decline in the price following listing, in most cases. Fourthly, if any investor would have made a portfolio of 12 scrips, which is 'Type II: (d)', strategy, in each period he would have incurred a loss in 7 out of 10 cases. All of the four strategies fail in the case of the second type of investor.

Tables 1 – 4 here

7.1 Conclusions

The sign test conclusively proves that the way of looking at IPO pricing is to treat the difference between 'Listing Price' and Short Run price as the basis of 'overpricing' rather than treating the difference between 'Issue Price' and 'Listing Price' as 'Underpricing'. The listing price is company driven and is inefficient because the investor can beat the market and have listing gains. But the market price has overvalued the new share and is

making a correction so invariably the price falls later. The overvaluation by the market initially is because the syndicate misguides the market with wrong signals.

The true price is being discovered only post listing. New information comes into the market, other than that floated by the syndicate, and therefore, the new 'true' price is established by the market. The earlier price discovery was company driven the latter is market driven. Just as the market makes corrections it is for us to correct our notions of 'underpricing' and 'overpricing'.

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Table 1

Price Trend of Selected IPOs from January 2007- July 2007 (Bullish Period)				No of
S.no		**Name of the company**	**Price Trend**	**observations**
	1	Autoline industries ltd	<0	22
	2	Technocraft industries ltd	-0.009	24
	3	Redington India Ltd.	-0.011	21
	4	Power Finance Corporation Ltd	-0.002	28
	5	Raj Television Network Ltd	-0.006	32
	6	Idea Cellular Ltd	0.008	37
	7	Binani Cement Ltd.	-0.0023	28
8		ICRA Ltd	0.0027	35
	9	Fortis Health Care Ltd	-0.005	33
	10	Nitin Fire Protection Industry Ltd	<0	29
	11	Vishal Retail Ltd	-0.006	30
	12	DLF Ltd	0	29

Table 2

Price Trend of Selected IPOs from December 2007-May 2008 (Bearish Period)			
S.no	**Name of the company**	**Price Trend**	**No of observations**
1	Rpower Ltd.	-0.005	24
2	Rural Electrical Corporation Ltd	0.004	34
3	Future Capital Ltd.	-0.02	26
4	Titagarh Wagon Wheel Ltd	0	28
5	IRB Infrastructure Developers Ltd.	-0.008	23
6	V-guard Industries Ltd.	0	23
7	Shriram EPC Ltd.	-0.01	30
8	On Mobile Ltd.	0	31
9	KNR Construction Ltd.	-0.03	28
10	BGR Energy Ltd.	-0.01	35
11	Gokul Refoil and Solvent Ltd.	0	31
12	Brigade Ltd.	-0.01	30

Table 3

	IPO	LG (%)	T-calculated	T-tabulated	Degree Of freedom
	January to July 2007- Bullish Period				
1	Autoline industry Ltd	27.86	Indeterminate	2.08	21
2	Technocraft industry Ltd	33.33	-0.81	2.06	24
3	DLF Ltd	11.22	-13.50	2.05	28
4	Vishal	190.51	4.04	2.05	29
5	Nitinfire protection Ltd	172.1	13.50	2.05	28
6	Fortis healthcare Ltd	1.85	6.57	2.04	32
7	ICRA Ltd	163.63	-33.00	2.04	34
8	Binani cement Ltd	2.66	3.62	2.05	27
9	IDEA cellular Ltd	22.66	Indeterminate	2.04	36
10	Raj TV Ltd	-4.02	10.06	2.04	31
11	PowerFinanceCcorporation Ltd	40.47	8.65	2.05	27
12	Redington India Ltd	54.33	3.53	2.09	20

Note: 7 out of 10 are statistically significant at 5% level and display losses, while all scrips (except one) make a listing gain.

Table 4

	IPO	LG (%)	T-calculated	T-tabulated	Degree Of freedom
	January to July 2008 - Bearish Period				
1	Future Capital Ltd.	41.3	3.20	2.06	25
2	Titagarh Wagon Wheel Ltd.	33.33	-3.00	2.05	27
3	IRB Infrastructure Developers Ltd.	8.1	0.20	2.07	22
4	On Mobile Ltd.	31.39	-4.25	2.04	30
5	Shriram EPC ltd.	25.66	7.18	2.05	29
6	BGR Energy Ltd.	92.22	14.50	2.04	34
7	R Power Ltd.	17.77	-2.48	2.07	23
8	Brigade Ltd.	25.61	5.08	2.05	29
9	Gokul Refoil & Solvent Ltd.	15.23	Indeterminate	2.04	30
10	KNR Construction Ltd.	23.52	8.65	2.05	27
11	V-guard Industries Ltd.	20.67	10.50	2.07	22
12	Rural Electrical Corporation Ltd.	23.71	6.82	2.04	33

Note: 7 out of 10 are statistically significant at 5% level and display losses. While all scrips make a listing gain.