

Public Issue Wealth Creators or Destroyers for retail investors in the long run? : An Evidence
from Indian Equity Market

Khushboo Vora

Assistant Professor, Department of Finance

Official addresses:

N. L. Dalmia Institute of Management Studies & Research,
Srishti, Sector 1, Mira Road East, Mumbai –401104, Maharashtra India

Phone number:

9819165681

And email addresses:

vorakhushboo89@gmail.com or Khushboo.vora@nldalmia.edu.in

Abstract

This study endeavours to examine the weather retail investors' wealth is destroyed or created by subscribing to a public issue and then staying invested for 7 long years, given that underprice exists. The long run performance of the main stream public issue in the year 2010 was studied using CAGR and wealth relative model. It was found that the average initial return (listing day return) was 32.26% and average 84 months CAGR being -3.2% stating that an investors wealth is destroyed if he/she would have stayed invested for 7 long years rather than choosing to exit and create wealth on listing day. Using wealth relative as a measure of performance, 58.33 per cent companies reported positive wealth relative, greater than one indicating the superior performance over market.

Key Words

Underperformance, Retail Investors, Public Issues, Wealth Relative, CAGR

Bibliographical notes:

Khushboo Vora, is an assistant professor at N. L. Dalmia Institute of Management Studies and Research. She is NET/ SET qualified professor with 5 years of teaching experience, gold medalist in Post Graduate Diploma in Business Management (PGDBM)-AICTE approved, holds Master Degree in commerce (M.Com) from University of Mumbai and she is currently pursuing her Ph.D in Management Studies from University of Mumbai.

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ABSTRACT

This study endeavours to examine the weather retail investors' wealth is destroyed or created by subscribing to a public issue and then staying invested for 7 long years, given that underprice exists. The long run performance of the main stream public issue in the year 2010 was studied using CAGR and wealth relative model. It was found that the average initial return (listing day return) was 32.26% and average 84 months CAGR being -3.2% stating that an investor's wealth is destroyed if he/she would have stayed invested for 7 long years rather than choosing to exit and create wealth on listing day. Using wealth relative as a measure of performance, 58.33 per cent companies reported positive wealth relative, greater than one indicating the superior performance over market.

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INTRODUCTION

Primary market in India is huge and extensive. Corporation and government mobilize resources through primary market by issuing instruments like equity shares, bonds, CCPS etc. The presence of an equity culture is crucial for the development of a country. Such a culture results from a well-developed equity primary market. In such a market, issuers get access to capital which is perpetual in nature. As equity constitutes the risk capital, it allows the company to leverage upon the equity capital to raise borrowed funds for financing expansion. Investors get an opportunity to generate returns which are higher than the debt instruments. In this research paper we will focus only on raising capital through equity market and that also only through public issue (Initial Public Offering and Further Public Offering). The researcher is not considering rights issue here.

Indian Public issue (IPO and FPO) market is considered unique around the world since it involves large number of retail (small) investors, very high level of over-subscription, minimal rejection/withdrawal of issues; and very low financial literacy of these retail investors. Therefore, the focus of SEBI through all its initiatives is always to ensure that retail investors are protected from all public issues with dubious background. Thus an

effort is always to ensure that only genuine issuers approach the IPO market with fair level of valuation of their stock very much in line with quality of their fundamental strength.

The broad picture of contribution of equity market for raising funds through primary market for the period 2000 to 2017 is presented in the Figure 1. From 2000-01 to 2009-10 there was an increasing trend in the amount raised from equity primary market. The percentage share of amount raised from bonds, CCPS and other instruments is negligible. From 2010-11 till present the trend in the amount raised from equity primary market is downward. However recently the trend is again increasing.

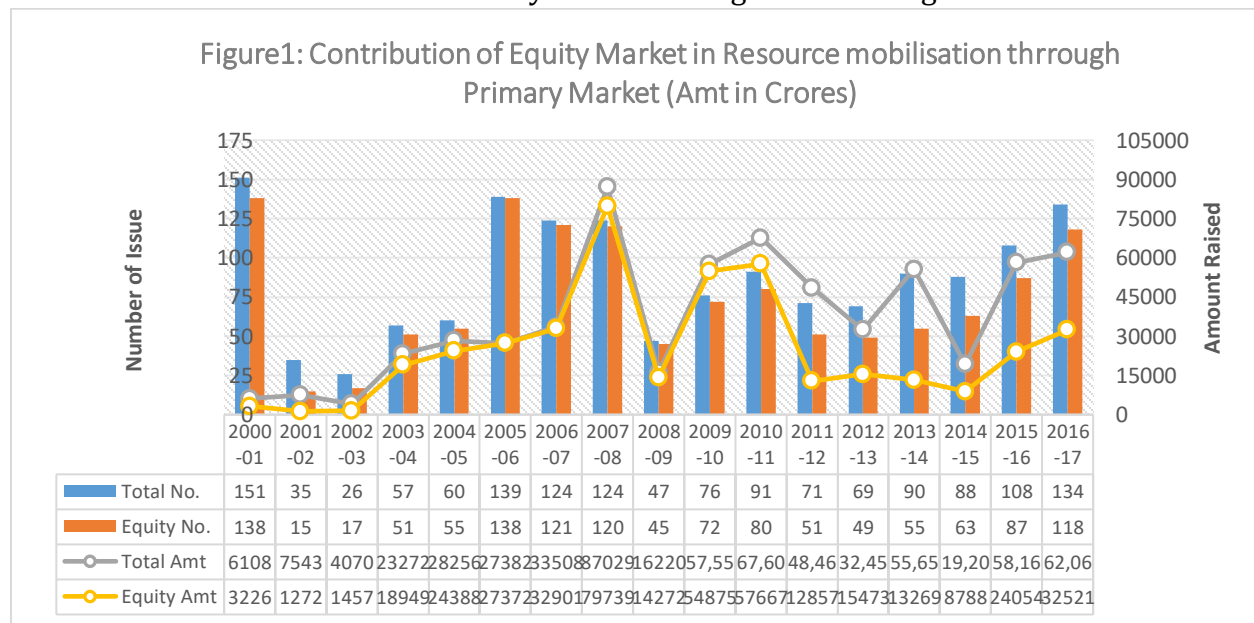
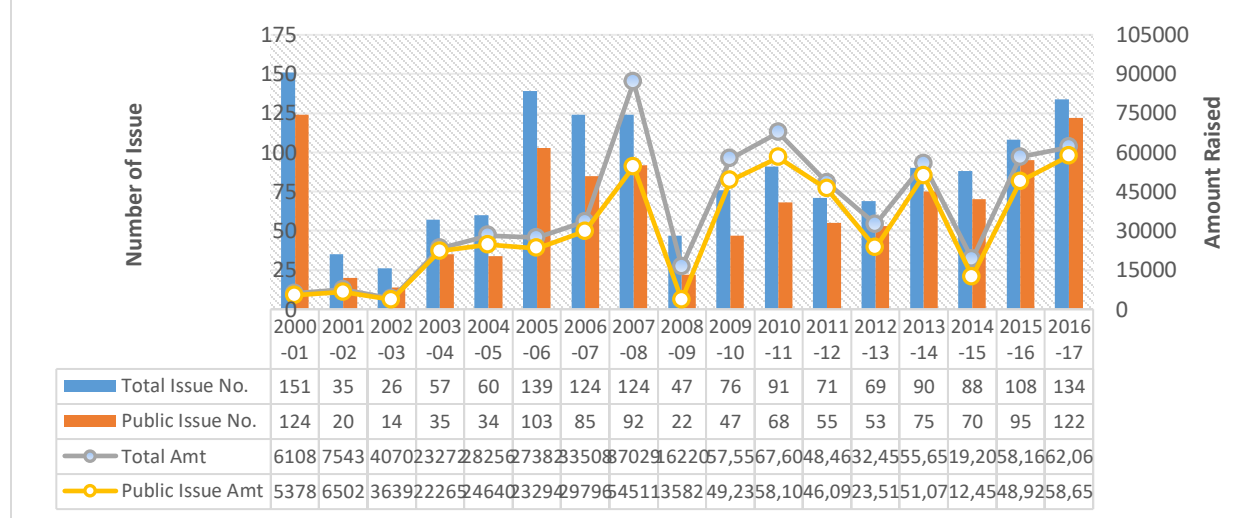


Figure 2, throws light on the total number of issues and the amount raised through them. It also captures the total number of public issues and amount raised in those years. The amount raised through public issue in primary market is the highest in 2016-17 of Rs 58651 crores and second highest in 2010-11 of Rs 58104.84 crores. Since 2016-17 is short is period to evaluate long term performance, 2010-11 is considered.

Figure 2: Contribution of Public Issue in Resource mobilisation through Primary Market (Amt in Crores)



Each and every type of investor is attracted to the equity primary market. The underpricing offers excellent opportunity to buyers for purchasing stocks at an attractive price to assure profits. However, it is equally true that investors find gaps in expected value and actual value or profits generated in the long run

The evidence on short-run underpricing of public offering is a well-documented with studies done by Stoll and Curley (1970), Reilly (1973), Ibbotson (1975), Poornima et al (2016), Kaur (2017), Sanjay Dessai (2015), Mishra (2010), Murthy and Singh (2014), Younesi, et.al (2012), Batenil, et.al (2014), Deng & Zhou (2015). Winner’s curse hypothesis developed by Rock, (1986) is one of the widely used and appreciated model of underpricing.

Empirical studies have found evidence that the underpricing for IPOs of financial institutions is related to proxies for Offer size (Megginson & Weiss, 1991), asymmetric information (Ibbotson, 1975) age of the firm (Muscarella & Vetsuypens, 1989) market capitalization, (McDonald & Fisher, 1972), (Baker & Wurgler, 2007), Pricing mechanism (Bansal & Khanna, 2012), share-holding (Kim, 2004), shareholders wealth (Dolvin and Jordon, 2008).

However, the evidence on long run performance of IPOs is mixed. A very large number of research studies provide evidence of significant long-run underperformance of IPOs.

However, some researchers have reported long-run over performance of IPOs and some others find that IPOs underperform only marginally in the long run. The present study updates the evidence on long-run performance of IPOs in India

Review of Literature

Studies on long-run performance of IPOs have been carried out in diverse countries, mainly in the developed markets, such as the USA (Gompers & Lerner, 2003; Ibbotson, 1975; Ritter, 1991), the UK (Brennan & Franks, 1997; Espenlaub et. all, 2000), Australia (Bird & Yeung, 2010; How, 2000), China (Chi et.all 2010; Gao, 2010), Canada (Boabang, 2005; Kooli & Suret, 2004), Hong Kong (Agarwal et.all 2008), Singapore (Lee et.all 1996) and Germany (Ljungqvist, 1997). Researchers have then used different determinants of long run performance of IPOs to explain these s. These variables include the age of the issuing firm, size of the issue, size of the firm, offer price, listing delay and market volatility, among others.

In emerging markets, the behaviour of long-run IPO returns may be expected to be different from that in the developed markets owing to the difference in market efficiency. Some studies have been carried out in the emerging markets of Egypt (Omran, 2005), Greece (Thomadakis et.all 2012), Jordan (Ajilouni & Abu- Ein, 2009), Malaysia (Ahmad-Zaluki et.all 2007), etc. In contrast to long-run underperformance of IPOs generally observed in the developed markets, studies in Greece and Malaysia find evidence of long-run outperformance by IPOs. It is, therefore, of interest to study the long-run performance of public issue in India which is also an emerging market.

In India also, a few studies (Kakati, 1999; Kumar, 2007; Madhusoodnan et.all 1997; Sehgal & Singh, 2008) examine the long-run performance of IPOs by Indian companies. These studies find mixed evidence on the long run performance of IPOs. Out of these studies, only Sehgal and Singh (2008) relate firm- and issue-specific characteristics with the long-run performance of IPOs. This study is, however, dated and uses data as old as 2001.

The existing literature on event study format warranted that we need to ascertain the abnormal or excess return first. There are many ways to calculate the excess return such as (i) mean-adjusted return model, (ii) market-adjusted return model, (iii) market model or ordinary least square (OLS) market model, (iv) capital asset pricing model (CAPM) - based abnormal return model and (v) Fama–French multifactor model. There has been significant debate on whether researchers should use CAR or BHAR method of calculating abnormal

returns when conducting event studies. For a layman and an investor who doesnot have knowledge of financial terms, all the above methods sound greek and latin. The common way to analyse the long run return of any investment is CAGR (Compounded Average Growth Rate). A retail investor may not be aware of how to calculate excess return through all the above mentioned 5 methods, but will definite know how to calculate CAGR. Even if, investor is unaware, it's quite easy to educate the investor with CAGR method, rather than any other method.

Ritter (1991) have documented that, in the long run, IPO shares underperform. Researcher reports firms substantially underperform a control portfolio of firms matched by size and industry from the closing price on the first day of public trading to their three-year anniversaries. Researcher describes over the long run poorly perform as a result of overinvestment as the 'over optimism and fads story'.

Jensen, (1986) stated that after the IPO, managers may tend to overinvest as a result of excess funds available from the issue, a manifestation of Jensen's free cash flow hypothesis

Myers & Majluf, (1984) stated that after the IPO, managers may tend to overinvest by taking advantage of the firm's temporarily overvalued equity as 'cheap' currency to acquire assets. Thus, subsequently over the long run, the issuer may perform poorly as a result of this overinvestment.

Das. Et.all (2016) studied long-run performance of, selected Indian companies which went public for the first time in the primary market during the study period of 1999–2007, using monthly returns following event study methodologies found no significant long-run underperformance or over-performance in case of the Indian IPOs. Researcher also applied wealth relative as a measure of performance of those IPOs&conclude that the long-run performance of Indian IPOs is not as distressful as reported in the international literature for other countries at least in case of wealth relative involving simple average return.

Dhamija1 & Arora (2017) examines 377 initial public offerings (IPOs) made by Indian companies during the period 2005–2015 and state that Indian IPOs outperform the broad market initially followed by significant underperformance in the long run. The important issue characteristics that influence the long-run performance of IPOs in India are the type of issuer (government-owned or private), lead manager prestige (LMP), promoter holding and the issue size. the fact that over 82 per cent of the issueswere trading below their issue price at the end of the36-month period after issue does raise concerns about the efficacy of

the 'free pricing' mechanism and other steps taken by the SEBI. Though the short-term investors (those selling the allotted shares at the time of listing) are making money, the long-term investors are actually losing money in the equity primary market. If this trend continues, it would be difficult to create an equity culture in the country.

Sharma et.al. (2013) stated that gaps do appear in perceived profits and the actual profits. Maximum gains are achieved if the stock is sold on its listing day itself. Most of the sectors' clear gains are visible at least during the first six months period. However, the stocks across all sectors tend to lose their ability to sustain profitability over time. Public sector stocks are safer than private sector stocks and they remain the safest bet amongst all sectors during both short as well as long term periods. Selectively, petrochemical and finance sector stocks could be chosen for short as well as long term gains. Manufacturing sector stocks appear to be least performing stocks during short as well as long term duration. Further, if non-performing IPOs could be checked out, there would be substantial gains for the investors. This was concluded by analyzing 319 public offers through the book building process from the period September 1999 to March 2011.

Murthy et. al. (2016) examine the Long-run performance of initial public offerings (IPOs). The data has been taken for 31 IPOs from the year 2000 to 2003. We have used Logistic Regression Model. The companies have listing gain, short-run gain but they are not able to give long run gain.

Khurana et.al (2016) it is advisable for retail investor to follow upon his own risk-return and holding capacity, any single or combination of all the 3 strategies when investing in an IPO — 1st Sell all the allotment on listing day itself, 2nd Partial profit booking on listing and rest holding for long term and 3rd holding for a period of more than 5 years. Investing in IPO does not necessarily mean "wealth creation". Strategy of pure "invest & hold" does not necessarily generate profits over a long period of time and therefore, IPO's should be looked at from both the perspectives of short term gains & long term wealth creation that too selectively as an investment avenues.

Sridevi V. et.al (2017) analyzed all the IPOs listed on National Stock Exchange and Bombay Stock Exchange spanning from 2004 to 2016. We reported that the cumulative average return to the investor investing in IPOs is slightly higher when compared to the cumulative average returns obtained by investing in Nifty.

Objective of the Study

1. To evaluate the long-run returns of selected public issue using Compound Annual Growth Rate (CAGR) model
2. To decide whether public issue are wealth creators or destroyers for retail investors in the long run using wealth relative model.

RESEARCH METHODOLOGY

Data: The study rests only on cross sectional data for the purpose of achieving the objectives. The secondary data of all the mainline IPO's/FPO's that were listed on Bombay Stock Exchange (BSE) for the calendar year 2010 was collected from <http://www.chittorgarh.com> and www.bseindia.com (accessed on 10th October 2018). The present study focuses on both the categories of equity public issue, IPO and FPO. The study ignores the rights issue done in equity market. The IPOs/FPOs whose minimum post issue paid up capital was Rs 10 crores, called as mainline IPOs /FPOs were selected. Of all the mainline public issue (IPO and FPO) that were issued, the public issues where retail investor subscription ratio is greater than 10% and also where underpricing phenomenon exists, i.e. listing price returns is positive were considered for further analysis. The aim of this research is to understand whether retail investors will benefit from investing in public offers, hence the subscription of retail investors in public offer is given importance. Moreover, if on the listing day, the returns are positive, then we know how much percentage gain we have made on day one, and there after 84 months, i.e. 7 years or 1799 days. The assumption is that there were 257 trading days in a year. The present study is the semi-strong form of EMH simply because researcher have made use of the information that is available in the public domain.

Underpricing (IR_i) can be defined as the percentage difference between the first day's listing price (open price) (P_1) and the offer price (P_0) of the IPO share or percentage difference between the first day's closing price and the offer price of the IPO share. It captures the difference between investors' willingness to pay and the actual receipt of the issuers. In this research, for calculation of underpricing (initial return or listing day return), P_i is considered as list price

$$IR_i = \frac{P_1 - P_{i0}}{P_0} \times 100 \dots \dots \dots (1)$$

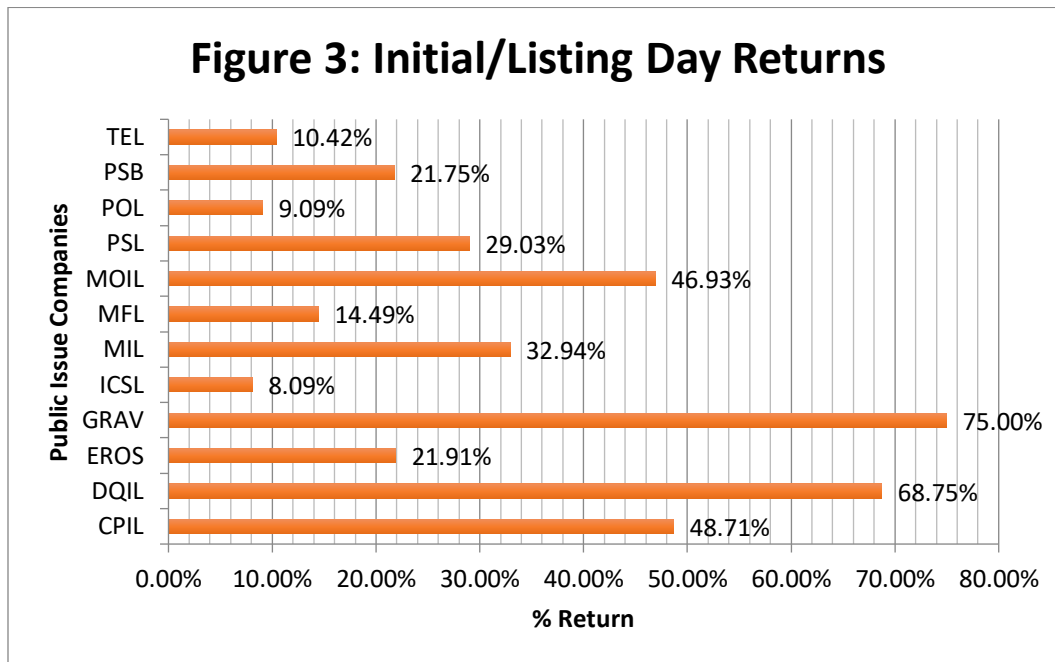


Figure 3 depicts the overall listing gain of the selected public issue. Where GRAV gave the highest return of 75% and ICSL gave the lowest return of 8.09%. The average return being 32.26%, which helps us interpret that a retail investor would have gained on an average 32.26% returns on the listing day if, he would have invested, was allotted share and sold all the allotment on listing day in all the above issue.

Close Price (CP) at the end of 7 years	CP>Offer Price	CP<Offer Price	CP>Listing Day Close Price	CP<Listing Day Close Price
No. of Companies	7 (58.33%)	5 (41.67%)	8 (66.67%)	4 (33.33%)

MIL, MFL and MOIL are the companies whose Close Price (CP) at the end of 7 years of public issue is greater the offer price but lesser than the Listing Day Close Price.

Researcher has used only CAGR and wealth relative as the measure to evaluate the long run return of public issue and conclude whether public issue are wealth creators or destroyers. Using the simple time value of money concept, researcher arrives at the below formulae

$$P_i = P_0 \times (1 + CAGR)^n \dots\dots\dots(2)$$

$$CAGR_i = \left(\frac{P_i}{P_0}\right)^{\frac{1}{n}} - 1 \dots\dots\dots(3)$$

Where P_0 is offer price and P_i is the closing price at the end of each year, from year 1 to year 7, n is the number of years for which CAGR is to be calculated. P_i is calculated for 1, 257, 514, 771, 1028, 1285, 1542, 1799 days from the listing day. The listing day is considered the first day of trading even for an FPO. Researcher has assumed 257 trading days in a year. The rationale behind choosing 7 years as the investment horizon is to understand whether in equity market investing through public issue, investor can double their money as the case was by investing in post office deposits or kisan vikas patra during 2010.

Public Issue	IR	CAGR						
	1st Day	1 Year 257 days	2 Year 514 days	3 Year 771 days	4 Year 1028 days	5 Year 1285 days	6 Year 1542 days	7 Year 1799 days
CPIL	48.71%	-13.10%	-27.31%	-38.95%	-25.09%	-14.12%	-15.73%	-11.94%
DQIL	68.75%	-29.69%	-43.27%	-50.17%	-21.29%	-21.96%	-16.87%	-21.46%
EROS	21.91%	48.51%	-1.57%	-0.38%	17.03%	7.06%	-1.37%	3.36%
GRAV	75.00%	250.53%	163.74%	17.67%	25.41%	-0.04%	11.34%	30.67%
ICSL	8.09%	-1.28%	-27.04%	-16.79%	-5.37%	8.74%	3.51%	4.62%
MIL	32.94%	-44.70%	-17.89%	-14.88%	-20.09%	-2.53%	-5.72%	3.27%
MFL	14.49%	-74.03%	-41.71%	-42.19%	-9.89%	-5.18%	-8.12%	0.11%
MOIL	46.93%	-38.89%	-16.24%	-14.62%	-6.15%	-13.29%	-2.37%	0.90%
PSL	29.03%	33.23%	3.97%	18.81%	33.69%	19.48%	14.66%	11.48%

POL	9.09%	-34.05%	-22.32%	-58.79%	-56.75%	-57.36%	-51.68%	-43.39%
PSB	21.75%	-51.08%	-19.74%	-27.30%	-17.53%	-23.30%	-12.86%	-15.90%
TEL	10.42%	-45.92%	-25.31%	-26.09%	-14.54%	-10.94%	-3.93%	-0.25%
Average CAGR	32.26%	-0.04%	-6.22%	-21.14%	-8.38%	-9.45%	-7.43%	-3.21%

Table 2 depicts, that all the public issue were listed at a price higher than offer price, thus giving positive returns to the investor. We can conclude that, wealth is created for an investor on the listing day. Figure 4, reveals that at the end of 7 years, from the date of public issue, issuing companies share prices were trading lesser than their offer price (offer price adjusted for all corporate actions). This concludes that long term returns were lesser than the listing day gain, proving that on listing day shareholders wealth is created, however if stayed invested for 7 years, wealth is eroded.

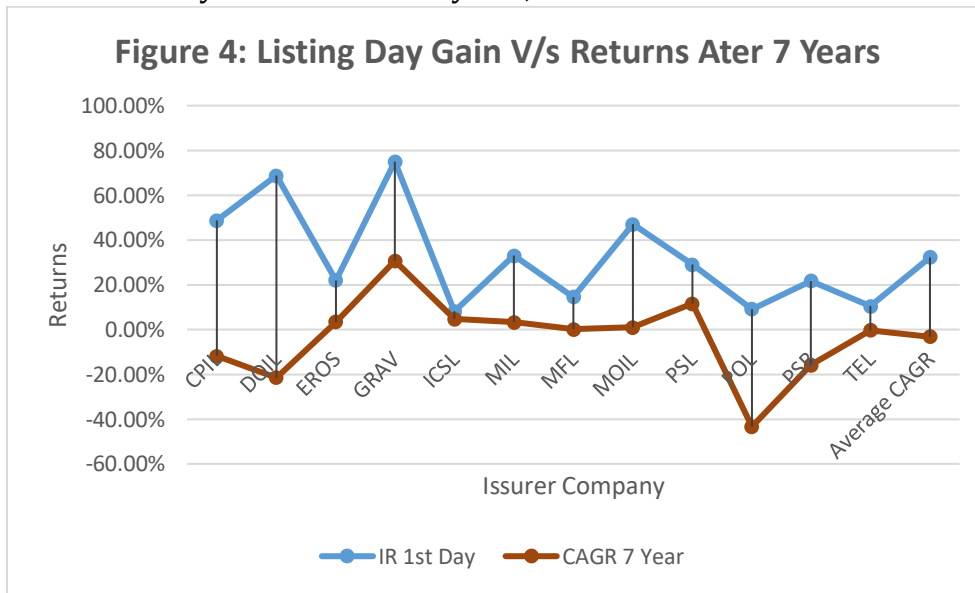
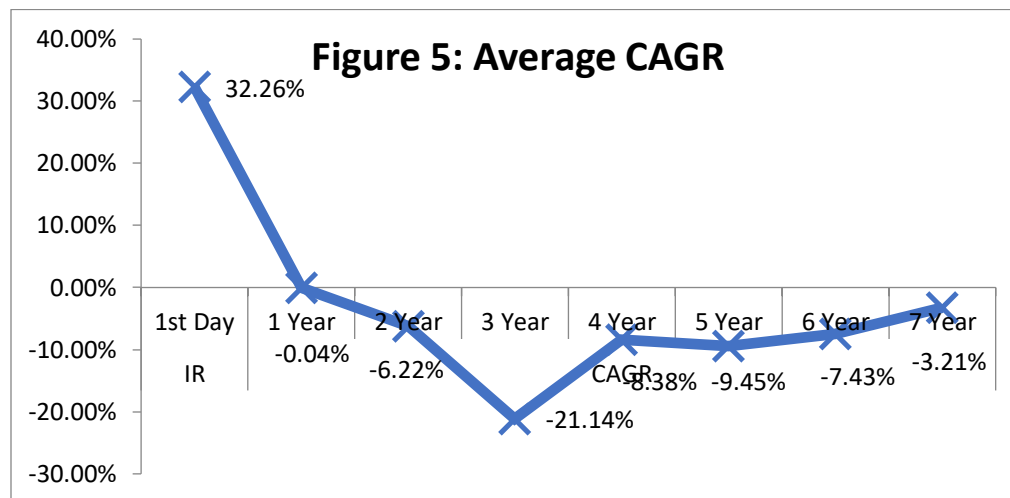


Figure 5, shows that on an average CAGR for all years, from year 1 to year 7, is negative. If an investor would have subscribed for all these public issue, got the allotment, and carried the shares for 1 to 7 years also, the investor would have made a loss. The most negative cumulative returns are for 3 year holding period @21.14%. Even after 7 years of investment in all these public issue, which were highly oversubscribed, underpriced, gave good positive returns on listing day; an investor would have not received the principal amount also. Here we are ignoring the time value of money also and looking at mere numbers. As per the rule of 72, assuming 10.28% expected returns per annum; an investor takes 7 years to double the money. But in our situation, investor has got negative returns

after 7 years of investment. After 7 years, his purchasing power has reduced. This wealth is destroyed. If we look company wise then, GRAV gave CAGR of 30.67% after 7 years, whereas POL gave a CAGR of -43.39%. Only 5(41.67%) companies gave a marginally positive CAGR, however 7 (58.34%) companies gave a negative CAGR and pulling the average CAGR to negative. This documents evidence of underpricing during short-run and underperformance phenomena in the long run.



Wealth Relative

The performance of IPOs can also be evaluated by using the concept of wealth relative as has been done by Levis (1993) and can be measured at different time intervals.

Generally, a wealth relative of greater than one indicates better performance of an IPO over the market index, while the wealth relative less than one indicates underperformance. We have used the method to ascertain the long run performance of IPOs in India. Wealth relative can be calculated using simple average return during 84 months and corresponding 84-month average benchmark (market) return. Following is the formula for wealth relative using simple average return.

$$WR = \frac{1 + \text{Average 7 year return on Public Issue}}{1 + \text{Average 7 year return on market index}} \dots\dots\dots (4)$$

$$WR_i = \frac{1 + \frac{1}{1799} \sum_{t=1}^{1799} R_{it}}{1 + \frac{1}{1799} \sum_{t=1}^{1799} R_{mt}} \dots\dots\dots (5)$$

$$R_i = \frac{P_{i1} - P_{i0}}{P_{i0}} \times 100 \dots \dots \dots (6)$$

Where " R_i " denotes daily return for stock ' i ', P_{i1} is the closing share price of the stock ' i ' at the end of a day and P_{i0} is the closing price of the previous day. The corresponding daily return for the market index is similarly calculated as follows.

$$R_m = \frac{P_{m1} - P_{m0}}{P_{m0}} \times 100 \dots \dots \dots (7)$$

where R_m is the daily return for the market benchmark, P_{m1} is the closing value of the market index at the end of the day and P_{m0} is closing value of the market index of the Previous day. While calculating the daily returns for long-run performance of public issue, we have included the listing day return as against been done by Ritter (1991) in order to find the long-run performance.

Table 3: Wealth Relative Based on Simple Average Return of the Sample IPO Companies over 7-year Period		
Wealth Relative (WR)	WR > 1	WR < 1
No. of Companies	58.33% (7)	41.67% (5)

Here, we have reported wealth relatives of the sample firms over a period of 7 years that is, for the time interval of 84 months or 1799 days assuming 257 trading days in a year. Table 3 depicts that a sizable proportion of companies exhibit a wealth relative higher than unity. To be specific, as many as 58.33 per cent (7 companies out of 12) companies reported positive wealth relative, greater than one indicating the superior performance over market.

Conclusion

The study indicates that Indian Equity Market public issue have generated negative returns over an extended period of time, after the listing period. To sustain investors' interest in the public issue market, it is important to provide them with reasonable returns—both in the short term and in the long term.

However, the fact that average CAGR -3.21% and approx. 41.67% of the issues were trading below their offer price at the end of the 84-month period raise concerns about the efficacy of the 'free pricing' mechanism and other steps taken by the SEBI. Though the short-term investors (those selling the allotted shares at the time of listing) are making money, the long-term investors are actually losing money in the equity primary market. Thus, the pattern of public issue share price performance in Indian stock exchange over this period is somewhat consistent with Ritter's (1991) 'fads and overoptimism' hypothesis.

The findings have important implications for investors, issuers and regulators. Investors need to understand that in the regime of free pricing and disclosure, a very high level of underpricing would not sustain. The investment in equity public issue should not be viewed as a 'safe haven'. As the current regulations are based upon 'free pricing with adequate disclosures', the investors need to analyze and understand the contents of the offer documents to take an informed investment decision. If the investor, particularly a retail investor, does not have the requisite expertise in understanding and analyzing the risk associated with equity investing, it would be advisable for him/her to invest through mutual fund route. Investors should not get carried away by the initial euphoria surrounding the public issue and listing gain. In the aftermarket, each issue needs to be analyzed against other listed companies for taking investment decisions.

Issuers must share all the relevant information with the investors to improve the transparency. While drafting the offer document, it is important to share information which may influence the decision-making by investors.

SEBI must take more measures to improve transparency and pricing Efficiency so as to promote an equity culture in the country, and providing consistent benefits to both investors and issuers.

To summarize, Investors would be more benefitted if they book their profit on listing day itself or during the initial period of listing. The more time they take to book their profits, lesser will be the return. Maximum gains are achieved if the stock is sold on its listing day itself. However, the stocks tend to lose their ability to sustain profitability over the time.

Limitations & Further Scope of Study.

This paper has opened up avenues for future research on other primary market issues like rights issue, bonds etc. in India. The present study is restricted to only mainline public offer during the period 2010, SME public offer can also be considered to increase the sample size and the time frame can be enlarged say from 2000 to till present to gauge the long run performance. To better understand the long-term performance, it is important to further analyze the performance based upon various issue characteristics that may have an influence upon the IPO performance like Issue Size, Age of the Issuing Firm, Total Assets, Bonus/Split, Industry, Promoter Holding, Hot Issue Market, Lead Manager's (Underwriter's) Prestige, Method of Pricing, Type of Sale, Anchor Investor, Auditors' Prestige, Oversubscription, Grading of Issue, Issue Premium etc.

APPENDIX 1

List of Sample Public Issue Companies	Abbreviation	Listing Date
Career Point Infosystems Ltd	CPIL	06 October 2010
DQ Entertainment (International) Ltd	DQIL	29 March 2010
EROS INTERNATIONAL MEDIA	EROS	06 October 2010
Gravita Ltd	GRAV	16 November 2010
Infinite Computer Solutions Ltd.	ICSL	03 February 2010
Man Infraconstruction Ltd	MIL	11 March 2010
Microsec Financial ltd	MFL	05 October 2010
MOIL Limited	MOIL	15 December 2010
PERSISTENT SYSTEMS LIMITED	PSL	06 April 2010
Pradip Overseas Limited	POL	05 April 2010
PSB	PSB	30 December 2010
Technofab Engineering Ltd	TEL	16 July 2010

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