A STUDY ON COMPARISON OF INDIAN IPOS (2004:2008) SHORT RUN PERFORMANCE BASED ON ISSUE SIZE, OWNERSHIP STRUCTURE, SECTOR, ACTIVITY TIME PERIOD AND YEAR OF ISSUANCE

Drashti Shah

ABSTRACT
The Indian economy is growing at a very fast growth rate. Within the Asian region it is the second fastest economy and has become the investment center for the large global companies and countries. With a robust currency and a consistent growing GDP the buying power of the people has increased as well as the credit cycle has elongated. This research aims at discovering comparison of short term performance of IPOs issued in the Indian market during 2004 to 2008. Descriptive Statistics like Mean, Median and Standard deviation and Krushkal- Wallis test and Mann Whitney U test have been used for comparison of IPOs based on their IPOs issue size, based on their sector, based on type of ownership, based on type of activity period and based on year of issuance. Evidence is found that, performance is not influenced by offer size, sector, ownership and timing of issue. Whereas, influenced by Year of issuance.

Keywords: Indian IPO, Offer Price, Issue Size, Ownership Structure, Sector.

I. INTRODUCTION
For Indian economy, Banks and Financial Institutions were main players of resource mobilization for savings allocation. After 1980, the Indian economy has gained slow growth because of globalization and liberalization. It resulted into expansion and growth of Indian Capital Market both at primary and secondary segments level. There was a clear shift away from banks and other financial institutions towards equity participation. It was an entirely new experience for general public to invest their savings in new equities and was an opportunity for entrepreneurs as well as bunglers/squanders to mobilize resources for their new ventures. Present paper is concerned with the comparison of short term performance of IPOs issued in the Indian market has remained a relatively unexplored area, research focuses to measure and compare the short term return related to listing price and offer price up to period of 1 month, 6 month and 12 month after listing date based on different issue size, based on different ownership structure, based on year of issuance, based on activity time period of IPOs and based on different sector of companies.

II. LITERATURE REVIEW

S SS Kumar (2007), Short and Long-run Performance of Book built IPOs in India. This study examines the performance of IPOs issued through the book building process in India over the period 1999 to 2006. Results indicate that the IPOs are underpriced as is evidenced by the positive listing day returns and are outperforming the market in the subsequent months almost up to twenty four months. However, after two years of listing they generate negative returns.

Harjeet S. Bhabra and Richard H. Pettway (2003), IPO Prospectus Information and Subsequent Performance

In this study the main focus was on whether the information contained in the offering prospectus is related to the subsequent stock return performance. Using a random sample of 242 firms from all 1987–1991 IPOs with the one-year stock returns conclude that firms that reissue equity or merge show significantly superior stock return performance compared to those that continued to trade and did not reissue equity. Underperformance is most severe for the smaller and younger firms and prospectus information is more useful to predict survival/failure compared to subsequent equity offerings or acquisitions.

Stavros Peristiani and Gijoon Hong (2004), Pre-IPO Financial Performance and Aftermarket Survival

In this article, document a gradual but significant deterioration in pre-IPO financial performance over the 1980-2000 period and a corresponding rise in the failure rate of firms following their entry in the public market., show that Pre-IPO profitability and related measures are very good predictors of a firm's ability to survive in the aftermarket was shown by, Using a hazard regression model. However, the average profit level of IPO firms has improved in the last two years. The mean return on assets ratio for issuers has rose from -42 percent in 2000 to -6 percent in 2001-02. Over the first three quarters of 2003, IPO firms achieved a positive 3.9 percent return on assets. This upturn in profitability provides some evidence that market participant shave begun to underwrite and invest in financially stronger companies.

Jay R. Ritter (1991), The Long-Run Performance of Initial Public Offerings. A strategy of investing in IPOs at the end of the first day of public trading and holding them for 3 years would have left the investor with only 83 cents relative to each dollar from investing in a group of matching firms listed on the American and New York stock ex- changes. Younger companies and companies going public in heavy volume years did even worse than average.

Mario Levis (1993), The Long-Run Performance of Initial Public Offerings: The UK Experience 1980-1988 Using a sample of 712 IPOs listed on the London Stock Exchange in 1980 to 1988, this study documents an average first day return of 14.3%.

Jay R. Ritter (1984), The "Hot Issue" Market of 1980
This paper analyzes the "hot issue" market of 1980, the 15-month period starting in January 1980 and extending through March 1981 during which the aver- age initial return on unseasoned new issues of common stock was 48.4%. (This is not an annualized return.) This average initial return compares with an average of 16.3% during the "cold issue" market comprising the rest of the 1977-82 period. An equilibrium explanation for this difference in average initial returns is investigated but is found to be insufficient. Instead, this hot issue market is found to be associated almost exclusively with natural resource issues. For firms in other industries, a hot issue market is barely perceptible.

Seshadev Sahoo and Prabina Rajib (2010), After Market Pricing Performance of Initial Public Offerings (IPOs): Indian IPO Market 2002-2006. The paper presents fresh evidence on IPO performance, i.e., short-run under pricing and long-run underperformance for 92 Indian IPOs issued during the period 2002-2006 up to period of 36 month.. It is reported that on an average the Indian IPOs are underpriced to the tune of 46.55 percent on the listing day compared to the market index.

From that detail analysis, this study suggests certain research gaps. First, the recent dataset calendar year covering 2004-2008 has been used. Second, no prior studies have compared short term performance for different categories of IPOs. Third, research gap of the study is that NSE Mid-Cap 50 Index has been adopted for classification of IPOs based on different issue size.

III. RESEARCH METHODOLOGY

A. Problem Statement: “Comparison of Indian IPOs (2004: 2008) short term performance based on Issue Size, Ownership Structure, Sector, Activity time Period and Year of Issuance.”

B. Research Objectives

- To measure short term performance of the Initial Public Offerings issued in India relative to listing price and offer price up to a period of 1 month, 6 month and 12 month.

- To compare the short term performance of Initial Public Offering in India based on their issue size i.e. small, medium and large size
- To compare the short term performance of Initial Public Offering in India based on their Sector i.e. Public and Private Sector Companies
- To compare the short term performance of Initial Public Offering in India based on type of ownership i.e. Groped and Non grouped Companies
- To compare the short term performance of Initial Public Offering in India based on their type of Activity Period i.e. High activity and Low Activity Period.
- To compare the short term performance of Initial Public Offering in India based on year of issuance i.e. 2004, 2005, 2006, 2007 and 2008.

C. Variables

- Return: Simple returns to capture the market movements during the period are used to evaluate the short-run after-market returns for IPOs. Return has been computed with reference to both offer price and list price. Return considered is calculated by taking closing prices of the given stock after the specified time gap (i.e. 1 month, 6 months, 12 months) from the listing day. So the formula used in equation as follows:

$$Return = \frac{Pt - P0}{P0} \times 100 \qquad \text{(i)}$$

Where,

Return = raw return of the stock at time t after listing day

Pt = closing price at time t

P0 = Listing or Offer day closing price

In order to analyze the short run performance, one month, six months,12 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.

- Offer Price i.e. price at which IPO is offered
- Listing price i.e. price at which IPO is listed on stock market
- Return related to listing price and offer price up to a period of 1 month, 6 month and 12 month of listing price
- Issue size i.e. small, medium and large issue size
- Ownership structure of the company i.e. private and private sector companies
- Activity period of issue i.e. high and low activity time period
- Year of issuance i.e. IPOs issued in calendar year 2004, 2005, 2006, 2007 and 2008

D. Research Design:

Descriptive research seeks to depict what already exists in a group or population. The present study is Descriptive Research in nature.

E. Data collection:

Secondary data was collected and used for background information of the list of IPOs and share price from websites www.nseindia.com, www.bseindia.com, www.sebi.gov.in, and www.capitaline.com and CMIE Prowess.

F. Sampling Design-

The sampling frame is companies who had issued IPOs (equity only) during calendar year 2004 to 2008 in India shown in table 1.

G. Hypothesis

H01: There is no significant difference in the mean rank of IPOs returns among different types of offer size. i.e. small, medium and large size.

H02: There is no significant difference in the mean rank of IPOs returns between Public sector companies and Private sector companies.

H03: There is no significant difference in the mean rank of IPOs returns between Grouped and Non-grouped companies.

H04: There is no significant difference in the mean rank of IPOs returns between IPO issued during High activity period and Low activity period

H05: There is no significant difference in the mean rank of IPOs returns among Year of issuance of IPO.

H. Data Analysis Tools

The main statistical tools used mean, median and standard deviation. Normality test, Mann Whitney U Test, Kruskal Wallis Test have been applied by spss 16.00

I. Scope and Benefits of the study

The study has been undertaken with a view point of benefiting a significant section of the society. The researcher has thus focused on very concerning issue of post issue performance of IPOs issued in India up to 1 year of listing. The study helps to understand present role of IPOs in Indian Financial Market. The result will be of interest to the investors, advisors, financial planners, advisory body of companies. The study would stimulate further researches and grab attention of researchers towards comparison of IPOs short term performance in India. The findings from the study are considered to be useful in finding out the difference between return related to listing price and offer price up to period of 1 month, 6 month and 12 month from listing date for different category of IPOs.

J. Limitations of the study

1. The sample includes all the IPOs from 2004-2008 where 17 public and 308 private sector IPOs were issued, so totally 325 IPOs were included.
2. The limitations of the average that is being impacted by the extreme values cannot be avoided in return calculation while examining the performance for annualized returns.
3. The non-availability of data of prices for 13 companies which could not be considered for this analysis purpose.
4. 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.
5. Major limitation of the paper is, it has not considered abnormal return for analysis.

IV. DATA ANALYSIS

To compare the short run performance, market performance for the sample IPOs has been computed with reference to offer price and listing day close price by using simple Return. Table 2 details the mean, median and standard deviation of return for all 325 sample companies using Returns. It reports the distribution of Return from the listing day up to 12 months, with reference to both offer price and list price. Panel 'A' shows 'R_List,' return relative to the list price. Panel 'B' reports 'R_Offer' return relative to offer price.

The observation of table 2 demonstrates that there are 325 IPOs in this study. The IPOs includes Initial Public Offerings issued during January 2004 to December 2008. Row 1 indicates periods post IPOs is different time period for which simple return is calculated. L+1month is 1 month, L+6month is 6 month, L+12month is 12 month after listing price relative to list price in Panel A and relative to offer price in panel B.

While comparing the R_List and the R_Offer, it is apparent that the list day traders cannot get short-term excess returns in India. It is only those investors who acquire stocks through direct subscription to IPOs are able to earn excess returns compared to the market index. It can be concluded that if investors buy shares during IPO offer period, they will get a positive. Significance value 0.000 indicates that data are not normally distributed therefore comparison for different IPOs has been done by non-parametric test.

Based on Offer size

If IPOs offer size is less than 1000 crores is treated as Small offer size, between 1000 to 5000 crores is treated as Medium Offer Size and more than 5000 crores is treated as Large Offer Size.

Small offer size	< 1000 crores	305
Medium Offer Size	1000 – 5000 cores	15
Large Offer Size	> 5000crores	5

From mean return of table 3, it can be interpreted that investors who acquire stocks of Medium offer size are able to earn excess returns compared to small offer size and large offer size investors. It can be concluded that if investors buy shares of Medium Offer Size, they will get a return higher with lowest standard deviation as well. From Kruskal Wallis Test it can be interpreted that the difference between Small Offer Size, Medium Offer Size and Large Offer Size is not statistically significant for mean rank from offer price to listing price returns. Hence IPO performance is same for small, medium and large offer size as per interferential statistics.

Based on Ownership Structure:

The observation of table 4 demonstrates that there are 81 IPOs of grouped Companies and 244 IPOs of Non grouped Company in this study. From mean return, it can be interpreted that investors who acquire stocks of Group are able to earn excess returns compared to Non-group investors. From Mann Whitney U test, it can be concluded that there is no significant difference in the mean rank of returns for grouped and non-grouped companies. This suggests that short term performance does not have any association with type of ownership structure of the company.

Based on Sector

The observation of table 5 demonstrates that there are 17 IPOs of public sector Companies and 308 IPOs of Private Sector Companies in this study. From mean return, it can be interpreted that investors who acquire stocks of Public Sector are able to earn excess returns compared to Private Sector investors. It can be concluded that if investors buy shares of Public Sector, they will get a return higher with lowest standard deviation as well. Mann Whitney U test (Column 9) suggests that there is no significant difference in the mean rank of IPOs for Public sector Companies and private sector companies.

Based on Activity time period:
To investigate whether the IPOs Performance differs with the different activity period or not, entire sample data has been divided into 2 categories, i.e. If in the quarter, more than 5 IPOs have been issued, then it is treated as High Activity Period and a quarter with less than or equal to 5 issues is treated as Low Activity Period. (Seshadev Sahoo and Prabina Rajib(2010) and Helwage and Liang (2004). Chart 1 indicates period of study (2004-2008) is divided in 20 quarters. Quarter 2, 3, 19 and 20 have less than 5 IPOs, so total 15 IPOs issued in low activity period and rest 310 IPOs issued in high activity period.

From mean return of table 6, it can be concluded that if investors buy shares in Low Activity Period, they will get a return with lowest standard deviation as well. From Mann Whitney U test, it was observed that the difference between Low Activity Time Period and High activity time period is not statistically significant for mean rank of returns relative to list price and offer price.

Based on Issuance of year:
The observation of table 7 demonstrates that there are 24 IPOs issued in 2004, 71 IPOs issued in 2005, 91 IPOs issued in 2006, 102 IPOs issued in 2007 and 37 IPOs issued in 2008. From mean return, it can be interpreted that investors who acquire stocks in year 2004 and 2005 are able to earn excess returns compared to 2006, 2007 and 2008 investors. From Kruskal Wallis test, it can be stated that there is significant difference in the mean rank Initial public offerings in India based on Year of Issuance. IPO issued in calendar year 2004, 2005, 2006, 2007 and 2008 have not given same return from offer price to listing price.

V. CONCLUSION AND SUGGESTIONS

It is to be suggested to the investors to invest in IPO at offer price as the possibility to get positive return is higher in this case. It also supports the view of Seshadev sahoo and Prabina Rajib (2010). The result reveals that the difference between Small Offer Size, Medium Offer Size and Large Offer Size is not statistically significant for mean rank of returns relative to list price and offer price. So, it can be concluded that IPOs long term performance does not depend on its offer size. Difference between Public Sector Companies and Private Sector Companies is not statistically significant for mean rank of returns relative to list price and offer price. So, it can be concluded that IPOs short term performance is not depend on it type of Sector. There is no difference in long term performance for group and non-group ownership of companies for all the time period. So, we can conclude that IPOs long term performance does not depend on its type of ownership. There is no difference in short term performance for low activity time period IPOs and high activity time period IPOs. So, it can be concluded that IPOs short term performance does not depend on its type of activity period. The difference between IPOs issued in year 2004, 2005, 2006, 2007 and 2008 is significant for mean rank of returns relative to list price and offer price. So, it can be concluded that IPOs long term performance is depend on it year of issuance.

For future research, it is suggested the extension of this analysis to get possible explanations for long-run underperformance for Indian IPOs, factors like leverage at IPO date, ex-ante uncertainty, age of IPO firm, rate of subscription, promoter groups retention, and price-to-book value can be considered. The scope of the research study could even be improved by extending the time period of study prior to 2004.

VI. REFERENCES

Bhabra. H. and Pettway. R.(2003) IPO Prospectus Information and Subsequent Performance. Financial Review, 38(3), 369-397.

Helwege. J. and Liang. N. (2004) Initial Public Offerings in Hot and Cold Markets. Journal of Financial and Quantitative Analysis, 39(3), 541-569.

Kumar. S. (2007) Short and long-run performance of bookbuilt IPOs in India. Impact, International Journal of Management Practices & Contemporary Thoughts 2(2): 19-29 dspace.iimk.ac.in/bitstream/2259/523/1/sssk.pdf.

Levis. M. (1993). The Long-Run Performance of Initial Public Offerings: the UK Experience 1980-1988. Financial Management, 22(1), 26-41.

Peristiani. S. and Hong, G. (2004) Pre-IPO Financial Performance and Aftermarket Survival. Current Issues in Economics & Finance, 10(2), 1-7.

Ritter (1991). The Long-Run Performance of Initial Public Offerings. Journal of Finance. 46(1), 3-27.

Ritter.(1984). The Hot Issue Market of 1980. Journal of Business. 57(2), 215-240.

Sahoo. S. and Rajib. P. (2010) After Market Pricing Performance of Initial Public Offerings (IPOs): Indian IPO Market 2002-2006. Vikalpa Volume 35, No 4, October - December 2010.

TABLES

Table 1: Description of the Sample of IPOs and Sample Selection Criterion

Total number of IPOs offered during year 2004 to 2008	338
Exclusion number of IPOs missing after-market price data	13
Final Total number of IPOs of the study	325

Note: percentage of eligible companies in the sample is 96.15%

Table 2 Simple Average Return relative to List Price and Offer Price

Periods Post-IPO	Panel A: R_List (N=325)			Panel B: R_Offer (N=325)		
	Mean	Median	Std Dev	Mean	Median	Std Dev
L + 1 month	-2.87	-6.69	28.46	29.57	11.14	75.28
L + 6 month	-1.93	-14.77	60.59	27.33	3.59	87.08
L + 12month	2.56	-21.7	88.45	33.92	-3.93	126.38
Significance Value	0.00			0.00		

Table 3 Average Return of Small, Medium and Large Offer Size IPOs return relative to list price (Panel A) and offer price(Panel B)

Post Period	Periods Post-IPO	Small Offer Size (N=305)			Medium Offer Size (N=15)			Large Offer Size (N=5)			Asymp. Sig
		Mean	Median	Std.dev	Mean	Median	Std.dev	Mean	Median	Std.dev	
R_List	L + 1 month	-3.22	-8.09	29.05	4.49	5.29	17.5	-3.76	0.84	13.1	0.169
	L + 6 month	-2.61	-15.76	61.67	7.51	-1.99	36.16	11.41	14.58	56	0.192
	L + 12month	2.25	-23.97	90.48	12.2	-1.18	47.01	-7	-20.24	57.41	0.182
R_offer	L + 1 month	29.37	11.1	76.42	43.82	21.05	61.07	-1	5.08	13.45	0.233
	L + 6 month	26.73	2.33	88.86	43.1	33.15	51.18	17.11	12.08	62.07	0.172
	L + 12month	33.81	-5.18	129.39	48.46	32.53	67.34	-3.02	-19.86	54.49	0.119

Table 4 Average Return of Group and Non Group IPOs return relative to list price and offer

Post Period	Periods Post-IPO	Group (N=81)			Non-group (N=244)			Asymp. Sig
		Mean	Median	Std.dev	Mean	Median	Std.dev	
R_List	L + 1 month	-1.18	-3.36	26.38	-3.43	-8.01	29.14	0.242
	L + 6 month	5.16	-10.57	57.87	-4.28	-16.82	61.4	0.08
	L + 12month	9.93	-17.47	102.16	0.12	-23.06	83.49	0.22
R_offer	L + 1 month	30.52	8.57	65.13	29.25	11.67	78.47	0.627
	L + 6 month	36.35	15.83	84.07	24.34	0.06	88.02	0.078
	L + 12month	42.16	8.28	134.51	31.18	-11.27	123.73	0.101

Table 5 Average Return of Public and Private Sector IPOs return relative to list price and offer price

Post Period	Periods Post-IPO	Public Sector (N=17)			Private Sector (N=308)			Asymp. Sig
		Mean	Median	Std.dev	Mean	Median	Std.dev	
R_List	L + 1 month	9.18	-0.4	23.62	-3.53	-8.35	28.58	0.021
	L + 6 month	7.4	-2.98	32.85	-2.44	-15.87	61.75	0.077
	L + 12month	4.86	-8.45	50.78	2.44	-23.77	90.12	0.133
R_offer	L + 1 month	46.65	28.31	64.06	28.62	10.53	75.82	0.078
	L + 6 month	43.14	12.5	69.2	26.46	2.8	87.97	0.084
	L + 12 month	38.39	2.26	69.6	33.67	-4.84	128.85	0.116

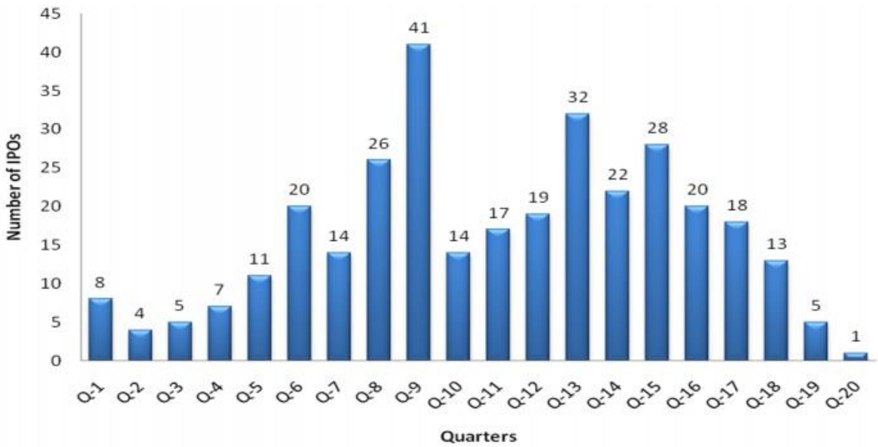

Chart 1 Frequency of IPO as per quarter:

Table 6 Average Return of Low Activity and high activity IPOs return relative to list price and offer price

Post Period	Periods Post-IPO	Low Activity Period (N=15)			High Activity Period (N=310)			Asymp. Sig. (2-tailed)
		Mean	Median	Std.Dev	Mean	Median	Std. Dev	
R_List	L + 1 month	-9.02	-10.36	26.43	-2.57	-6.65	28.56	0.485
	L + 6 month	30.85	29.93	89.26	-3.51	-15.41	58.6	0.051
	L + 12month	67.04	33.88	192.66	-0.56	-23.06	79.44	0.098
R_offer	L + 1 month	16.53	29.27	52.24	30.25	11.07	76.25	0.999
	L + 6 month	68.32	60.51	125.31	25.43	2.98	84.65	0.151
	L + 12month	109.3	38.59	252.84	30.06	-4.16	116.19	0.363

Table 7 Average Return of Group and Non Group IPOs return relative to list price and offer price

Year	No of IPOs		R_List			R_offer		
			L+1 month	L + 6 month	L + 12month	L + 1 month	L + 6 month	L + 12 month
2004	24	Mean	-0.72	24.46	85.63	55.3	89.95	178.11
2005	71		3.2	8.58	22.17	48.91	49.37	71.8
2006	91		-3.75	-8.93	14.57	19.88	11.72	38.95
2007	102		-2.68	2.46	-22.47	32.66	32.72	-0.01
2008	37		-14.28	-34.1	-49.47	-8.55	-31.34	-52.88
2004	24	Median	-2	12.99	45.5	45.34	59.25	84.45
2005	71		0	-6.04	-11.97	34.08	28.4	37.03
2006	91		-8.92	-15.76	-8.45	4.07	0.23	5.83
2007	102		-9.01	-17.46	-44.07	9.39	-1.86	-36.49
2008	37		-13.53	-46.61	-58.22	-16.72	-47.8	-63.45
2004	24	Std Dev	21.69	69.19	154.64	59.46	101.26	213.45
2005	71		24.17	67.23	81.33	59.48	77.95	128.64
2006	91		31.39	42.8	80.02	57.67	63.46	97.89
2007	102		29.47	68.43	72.05	101.27	102.19	102.03
2008	37		27.19	39.34	37.66	43.37	52.88	31.98
Asymp. Sig. (2-			0	0	0	0	0	0

ABOUT AUTHOR

Prof Drashti Shah, UGC NET, JRF, MPhil, MBA (Finance), Bcom. She is Assistant Professor at S. R. Luthra Institute of Management, Surat. She has more than 5 years of teaching and industry experience. She has done her post graduation from Gujarat University. She has done M.Phil in Management on Long run IPO performance from VNSGU. She has cleared UGC Net and JRF. Her areas of interest are in finance, Accounting and General Management. She has presented and published 5 research papers in many national and international magazines.