

Underpricing in Privatized Public Offerings: The Indian Experience

Priya Mandiratta

Research Scholar

University School of Financial Studies

Guru Nanak Dev University

Amritsar

Email id: mandiratta.priya@gmail.com

M.No: 7888736031

Dr. GS Bhalla

Professor

University School of Financial Studies

Guru Nanak Dev University

Amritsar

Email id: hellogsbhalla@gmail.com

Abstract

Underpricing of IPOs is the sale of shares at low prices and it is a well-documented fact of empirical equity market research. Present study aims to examine the same by estimating the magnitude of underpricing in disinvestment oriented IPOs and FPOs. Along with this, it also aims to compare the degree of underpricing across IPOs and subsequent stages of FPOs. Total number of IPO and FPO cases to be analyzed are 46 (8 IPO, 25 FPO-I, 10 FPO-II, 3 FPO-III) which have been introduced during 2003-2017 by Govt-owned enterprises in India. Market adjusted excess return methodology has been used to compute underpricing. Results depict that underpricing do exists in privatized public offerings. The study also witness the reduced underpricing levels from IPO to third stage of FPO which indicate towards high cost of raising equity at IPO and gets reduced at subsequent stages of FPOs. Based on the findings, the research recommends that divestment activity should spread over different stages of offerings i.e. IPOs

and FPOs. This research contributes to the literature by estimating and comparing the magnitude of underpricing in “privatized” public offerings and provides the Governmental institutions and investors with the base and information to make appropriate decisions.

Keywords: Central public sector enterprises, disinvestment, underpricing, IPOs and FPOs, market adjusted excess return.

Introduction

Underpricing can be explained as the sale of shares at low prices and it's a cost to the issuers. It has drawn considerable attention in the academic literature over the last the three decades (Ghosh, 2005). Sufficient research evidence exists for the hypothesis that IPOs of private and non-government affiliated firms are underpriced. But as mentioned by Setiobudi et al. (2000) this phenomenon has not occurred across privately-owned units only but it has also taken place in government owned enterprises also within the privatization form. Although less extensive but the research evidence on IPO underpricing of government-owned companies, is in uniformity with that on privately-owned enterprises (Dewenter and Malatesta, 1997). Coming to the research evidence, the extent of underpricing varies across the countries. As Menyah and Paudyal (1995) examined the UK underpricing experience and indicated that average underpricing level is 38.70 percent for privatized IPOs. Perotti and Guney (1993) reported an average underpricing figure for privatization oriented IPOs as 372.2% for Nigeria, 18.7% for France, 68.7% for Spain, 4.8% for Turkey and 99.6% for Malaysia. Jain and Padmavati (2012) confirmed an average underpricing of 28% for the IPOs of Indian private owned companies. The present study attempts to examine the magnitude of underpricing at the initial and subsequent stages of privatized public offerings in the one of the world's emerging market that is India. Afterwards, the present study also examines the hypothesis given by Lauren et al. (2004) that when the shares are sold in tranches, underpricing of the initial offering can support the issuing companies to maximize the total funds from the IPOs and all subsequent offerings. The empirical results provide strong statistical support for the above mentioned hypothesis. Therefore, the current study is of great economic significance because it provides governmental institutions and investors with the base and information to make appropriate decisions.

Review of Literature

The current section gives a brief explanation of the both theoretical and empirical literature relating to the underpricing issues in privatization oriented public offerings at both international and national level.

International evidence on underpricing in privatized public offerings

Gong (2001) investigated the price performance of IPOs of 11 formerly state owned enterprises in Australia. The current study estimated the magnitude of underpricing in the privatized IPOs in Australia. Afterwards the calculated underpricing level in Australia has been compared to the same variable in other OECD countries to check for the significant differences. The average underpricing figures were found to be 11.96 percent for unadjusted return and 10.92 percent in the case of adjusted return which were not different from the underpricing levels of privatized IPOs and that of privatized share offerings in other OECD countries. Standard t-test was employed to check for the differences.

Omran (2005) analyzed the underpricing and long run performance of share issue privatizations in the Egyptian stock market. Sample consisted of 53 firms, which were privatized between 1994 to 1998. The first objective of this study was to analyze the both short-run and long-run performances of SIPs in Egypt. Statistically significant positive returns for initial term and up to one year had been arrived through statistical analysis. However, the same significant results turned out to be negative for investors over three- and five-year horizons. Second objective of the study aimed to address the explanatory variables for such performance being measured in terms of returns generated. The initial excess returns i.e. underpricing was found to explained by ex-ante uncertainty and oversubscription, whereas the aftermarket abnormal returns over a one-year period were determined by ex-ante uncertainty and the price-earnings ratio.

Ariff et al (2007) examined the initial public offerings of 70 “government-linked” companies (GLCs) in three different countries such as UK, Singapore and Malaysia. The study aimed to analyze the hypothesis that degree of underpricing in GLCs will be relatively greater when compared to private companies. To analyze the data, event-study methodology was adopted. It employed market adjustment procedure to calculate adjusted or excess market returns for each share. For short term analysis 6 months were taken and for long term analysis 7-36 months were taken. The empirical evidence to the range of 14-133.5 percent underpricing being witnessed in the sample PSUs proved the hypothesis that government-linked IPOs are also underpriced. The

results also provided the strong support for hypothesis that Govt-linked IPOs are more underpriced than Non-Govt linked IPOs.

Peter (2007) examined the both short term and long term returns to initial public offerings in an emerging market Sri Lanka. Overall results revealed that the issue of underpricing had also been witnessed in a small developing economy like Sri Lanka.

Setiobudi et al (2011) estimated the short run underpricing level in privatization oriented IPOs of Indonesia. The study also aimed to compare the same with the underpricing level of privately-owned IPOs also. The empirical results witnessed the low level of underpricing in SOEs as compare to non-SOEs. Findings also depicted the significant impact of privatization on underpricing throughout the IPOs.

Indian evidence on underpricing in privatized public offerings

In India, research studies relating to IPO underpricing and its determinants are in abundance. But the studies specific to the examination of underpricing in disinvestment cum privatization oriented public offerings are scarce. Only single research study as explained below has been found being related to the both examination and comparison of the magnitude of underpricing at IPO and subsequent stages of public offerings.

Sehgal et al. (2014) examined the stock market reactions of those state owned public sector enterprises which opted for stock market route for disinvestment of shares. Along with price reactions, the authors also highlighted the underpricing issues of the sample PSUs. The event study methodology was applied to examine the market performance of 18 PSUs that made IPOs and FPOs between 2002 and 2013. Based on the empirical analysis in the context of underpricing issues, the study recommend that the disinvestment should be spread over the three stages of offerings, that is, primary issue (IPO), first-stage further offerings and second-stage further offerings.

Research Objectives

This article aims to examine the underpricing in disinvestment oriented IPOs and FPOs being introduced by Indian CPSEs. Therefore, two primary objectives of the study are:

- i. To estimate the magnitude of underpricing in disinvestment oriented IPOs and FPOs of CPSEs.

- ii. To compare the degree of underpricing across IPOs and subsequent stages of FPOs.

Research Methodology

Sample Selection and Time Period of the Study

The present study consists of 44 Indian CPSEs which constitute S&P BSE CPSE Index. Out of these, our analysis is restricted to only those 26 CPSEs which have been divested their shares through stock market mechanism. 25 listed CPSEs have been come out with the first stage FPOs since the year 2000. Then, seven out of these twenty six along with one more PSU i.e. thus making the total number to be eight have been considered for price reaction analysis at IPO stage because these CPSEs introduced there IPOs during this time period only. Further, 10 out of these twenty six CPSEs came out with second stage FPOs and three out of these ten came out with third stage FPOs as well, thus making the total number of IPO and FPO cases to be analyzed to 46. Table 1 provides the details regarding number of companies been considered for analysis at different stages of public offerings such as IPOs, FPO-I, FPO-II and FPO-III. Further, period to be studied in the present study ranges from April 2000 to March 2017.

Table 1: Number of disinvestment oriented IPOs, Stage-I, Stage-II and Stage-III FPOs

IPO	8
FPO-I	25
FPO-II	10
FPO-III	3

Source: Official website of Bombay Stock Exchange¹

Data Description

This study is based upon the secondary data and the relevant data, especially relating to the dates to be analyzed is compiled from:

- The Thompson Reuters Data stream database.
- Press Beaurue of India¹.

Methodology to compute Underpricing/ Market adjusted excess return for IPO and FPO

IPO Underpricing

¹ <http://pib.nic.in/newsite/pmreleases.aspx?mincode=63>

In order to compute IPO underpricing, Market adjusted excess return (MAER) has been calculated by subtracting market return from initial raw return. Vast majority of researchers have computed initial return from IPOs, using the offer price and the closing price on the first trading day as under:

$$IR_t = (P_1 - P_0/P_0)$$

Here, P_1 = Closing price of the securities on the first day of trading

P_0 = Offer price of security

Afterwards, MAER/Underpricing is computed as the initial raw return from the IPO minus the return on the market benchmark over the same time period which is computed as under:

$$MAER = (P_1 - P_0/P_0 - M_1 - M_0/M_0) * 100$$

MAER= Market adjusted Excess Return

M_1 = BSE sensitive closing market index on the first day of trading

M_0 = BSE sensitive closing market index on offer closing date of IPO.

FPO underpricing

The present research study uses Offer to close measures for computing FPO underpricing which is explained as under:

$$MAER = (P_1 - P_0/P_0 - M_1 - M_0/M_0) * 100$$

M_0 = BSE sensitive opening market index on the FPO opening day.

M_1 = BSE sensitive closing market index on the FPO opening day.

Empirical Results

1. Magnitude of underpricing in disinvestment oriented IPOs and FPOs

As depicted in the table 1, average price discount figure is 36.51percent for IPOs of 8 CPSEs, 14.54 percent for 25 CPSEs which have introduced FPOs at stage one, 2.61 percent for 10 companies being involved at FPO stage two and finally 1.47 percent for 3 CPSEs which have been extended to third stage offerings also. Overall comparison between the IPOs and successive rounds of FPOs shows a declining trend of underpricing.

Table 1: Magnitude of underpricing across IPOs and different stages of further public offerings

Underpricing	IPOs (8)	FPO-I (25)	FPO-II (10)	FPO-III (3)
Average Underpricing	36.517	14.543	2.612	1.469

p-value	0.004***	0.100*	0.025**	0.185

(***Significant at 1%, **Significant at 5%, *Significant at 10%)

2. To compare the degree of underpricing across IPOs and subsequent stages of FPOs

As the number of IPOs and FPOs are changing at IPOs and successive levels of FPOs, the comparison shown above cannot be considered as a standard one. In order to compare the degrees of underpricing, those CPSEs are taken and compared which have been involved commonly at IPOs and different stages of FPOs. Different panels of table 2 as shown below depict the same.

Table 2: Average underpricing comparison across IPOs and FPOs

(Panel A)	IPO versus FPO-I underpricing	
Underpricing	IPO Underpricing	FPO-I Underpricing
Average Underpricing	32.942	3.787
(Panel B)	FPO-I versus FPO-II Underpricing	
Underpricing	FPO-I Underpricing	FPO-II Underpricing
Average Underpricing	12.561	2.612

Panel A of table 2 shows the average figures depicting the comparison across seven CPSEs which have seen to be out with both IPO and first stage further public offering for the purpose of divesting its equity stake. Empirical results depict the average figure i.e. 32.94 percent at the primary offering stage, and the same percentage gets reduced to 3.787 percent at the very first stage of follow-on public offerings which is quite low as compare to former number. Further, Panel B of the table 2 shows the comparisons between 10 CPSEs which are commonly involved at stage one and stage two of follow-on public offerings with the purpose of divestment of shares. Here, average calculations are observed to be 12.56 percent in the case of FPO-I and 2.61 for FPO-II. The latter figure is approximately one-fifth of the former. Hence, represents the same declining picture.

Comparison across underpricing levels at stage one, two and three of FPOs

Table 2 (Panel C): FPO-I versus FPO-II versus FPO-III

Underpricing	FPO-I Underpricing	FPO-II Underpricing	FPO-III Underpricing
Average Underpricing	15.794	1.481	1.469

Lastly, Panel C of table 2 shows the average figures of comparison between 3 central public sector enterprises which have gone through the all three stages of further public offerings i.e. first, second and third. It shows the average statistical results for all the three subsequent stages. At first stage, average price discount is 15.79 percent, at second stage it is 1.48 percent and at third one it is 1.46 percent. Thus, there is a huge gap between the level of underpricing at first stage and at next two levels in the descending order. The overall comparison in this pair also represents a picture of fall in the level of underpricing from one through other successive rounds of public offerings

Summary and Conclusion

In this article, an attempt has made to examine the underpricing in disinvestment oriented IPOs and FPOs. Afterwards, in order to have a true picture of either increasing or declining trend of average underpricing, different CPSEs being involved commonly at IPO and various stages of FPOs have been taken out and compared. Empirical analysis confirms the declining trend of underpricing from IPO through successive stages of FPOs. Also the results represent that average underpricing decline from IPO through subsequent FPO stages is relatively moderate. As explained by Beatty & Ritter (1986) the stock issues are usually underpriced to invite investor's attention and this level of underpricing is directly linked to the degree of uncertainty related to the company and its stock issue. Therefore, the reduced underpricing levels from primary offering to different stages of further offerings in the present study is justified by the fact that a company with longer trading history shall have a greater information in the public domain, hence reduced uncertainty about the concern, which ultimately leads to the lower underpricing. Based upon the statistical analysis, the current study gives the following policy recommendations: Here, the reduced underpricing levels from IPO through successive stages of further public offerings in disinvested CPSEs indicate towards high cost of raising equity at IPO stage which gets reduced at subsequent stages of FPOs. Therefore, the study recommends that the disinvestment should spread across the different stages of offerings, that is, primary issue (IPO), and further stages of public offerings in order to save the high cost of raising equity.

References:

- Ariff, M., Prasad, D., & Vozikis, G. S. (2007). Are government-linked IPOs underpriced? A three country privatization effort comparison. *International Entrepreneurship and Management Journal*, 3(3), 293-307.
- Beatty & Ritter, J. R. (1986). Investment banking, reputation, and the underpricing of initial public offerings. *Journal of financial economics*, 15(1-2), 213-232.
- Dewenter, K.L., & Malatesta, P.H.(1997). Public offerings of state-owned and privately-owned enterprises: an international comparison. *The Journal of Finance*, 52(4),1659-1679.
- Ghosh, S. (2005). Underpricing of initial public offerings: The Indian experience. *Emerging Markets Finance and Trade*, 41(6), 45-57.
- Gong, N., & Shekhar, C. (2001). Underpricing of privatised IPOs: the Australian experience. *Australian Journal of Management*, 26(2), 91-106.
- Jain, N., & Padmavati, C. (2012). Underpricing of initial public offerings in Indian capital market. *Vikalpa*, 37(1), 83-96.
- Menyah, K., Paudyal, K., & Inyangete, C.G. (1995). Subscriber return, underpricing, and long-term performance of UK privatization initial public offers. *Journal of Economics and Business*, 47(5), 473-495.
- Omran, M. (2005). Underpricing and long-run performance of share issue privatizations in the egyptian stock market. *Journal of Financial Research*, 28(2), 215-234.
- Perotti, E.C., & Guney, S.E. (1993). The structure of privatization plans. *Financial Management*, 84-98.
- Peter, S. (2007). Performance of initial public offerings and privatized offers: Evidence from a developing country. *Managerial Finance*, 33(10), 798-809.
- Sehgal, S., Kumar, M., & Gupta, P. (2014). Public Sector Disinvestment in India: Price Reactions and Underpricing Issues. *Global Journal of Emerging Market Economies*, 6(2), 181-202.
- Setiobudi, M., Warganegara, D.L., & Warganegara, D.S. (2011). Empirical investigation of the underpricing phenomenon on IPOs in privatization of SOEs: evidence from Indonesia. *Journal of Applied Finance and Accounting*, 3(2), 109-135.