

Effect of Ownership Retention on Initial Returns of IPOS listed at NSE

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Abstract

IPOs are the focus of attention for many investors, analysts and researchers as they have the potential to provide huge abnormal returns on the first day of listing. Various reasons have been assigned for the initial returns generated by IPOs. The ownership structure of the companies going public for both pre and post the listing of the IPO stocks, and more specifically ownership retention by promoters and promoter groups, may have an impact on liquidity of the stocks and hence the initial returns. This paper empirically investigates the effect that the retention of ownership by promoters and promoter groups on the Market-Adjusted Initial Return (MAIR) from IPOs based on a sample of 95 IPOs issued in India and listed on National Stock Exchange (NSE) from 2010 to 2013. The findings show that the IPOs with higher ownership retention provide significantly higher MAIR.

Keywords: *IPOs, Ownership retention, Market-adjusted return, Initial return*

Introduction

Initial Public Offering (IPO) is the sale of shares by an unlisted company for the first time and the listing of its shares in the stock exchange. The shares offered through an IPO may include new issue of shares or of existing shares through an offer for sale. As a firm expands its need for long-term finances multiplies exponentially and cannot necessarily be met by existing shareholders either due to their own limited resources or due to reluctance to increase their stake in the firm. An IPO therefore enables a firm to raise finance from the primary market and at the same time provides the existing shareholders and promoters the opportunity to exit from the company or to dilute their shareholding in the company. In India there is a requirement that the post-issue shareholding by promoters should be at least 20 percent and there is a lock-in period of two years.

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It has been observed in the past that IPOs listed in India have provided positive initial returns after listing. A number of researchers have ascribed these initial returns due to the under-pricing of the IPOs. They argue that the issuing companies have issued the IPO stocks at a price which is lower than the price that investors are willing to pay for them as reflected by their market price on the first day of trading of the stocks upon the listing of the IPO. Several reasons have been assigned to this including information asymmetry between different investor groups (Rock, 1986), between the issuing companies and the investors (Benveniste & Spindt, 1989) or even between the investment bankers and the issuing companies (Baron & Holmström, 1980). Allen and Faulhaber offered the signalling theory (1989) in which they explain that IPOs by high quality firms are underpriced more as they signal the quality of their IPOs through underpricing and expect to come back to the market in the future for raising additional finance through their seasoned offerings. Low quality firms, on the other hand, cannot afford to underprice their IPOs.

Moreover, under-pricing is positively related to the probability of issuing SEOs and the size of SEOs. Theories on irrational behaviour of investors propounded by Ljungqvist et al. (2006), and informational cascades or bandwagon theory (Welch, 1992) are some of the other theories that have also been postulated to explain the existence of these initial returns.

Various factors that determine the initial returns have also been investigated including the size, age and profitability of the issuing company, the reputation of investment bankers, the existence of hot and cold markets and the level of oversubscription among others. The ownership structure of the companies going public, both pre and post the listing of the IPO stocks, and more specifically ownership retention, may also have an impact on liquidity of the stocks and hence the initial returns. Ownership retention is a signal of the quality of the IPO. A higher retention may also signal to prospective investors that the existing shareholders have not exited in the expectation of higher cash flows in the future. According to Ramirez et al. (2008), ownership retention or share retention refers to "the proportion of shares retained by the pre-IPO owners". There have not been many studies in India to research the effect of the post-IPO retention of ownership on the initial returns on IPOs. The present study, thus, attempts to study the effect of ownership retention by the promoters of the issuing company on the initial returns on IPOs.

Literature Review

Krinsky and Rotenberg (1989), based on a sample of 115 Canadian IPOs listed on the Toronto Stock Exchange, studied the relationship between insider holdings and the value of a firm's IPO. They found that the ownership retention did not significantly increase the value of the issue. On the other hand, Leland and Pyle (1977) contended that retention of shares by the entrepreneurs acted as a signal of the firm's quality and high value. The reason for this is that the founders have superior knowledge and information about the firm's cash flows in the future. Courteau (1995) found that both retention of ownership and the length of the holding period committed by the entrepreneur in the prospectus acted as a mechanism for signaling the value of the firm. Similarly, Ozcelik (2014) also found that ownership retention in Turkish IPOs listed on Istanbul Stock Exchange (ISE) between 2000 and 2010

(inclusive) acted as a positive signal leading to an increase in initial valuation.

Booth and Chua (1996) found that the ownership structure affected IPO underpricing. They observed a positive relationship between the underpricing of IPOs and the dispersion of ownership in the company. According to Brennan and Franks (1997) the management might be motivated to underprice the IPOs so that there was higher demand for the IPO shares leading to greater dispersion of ownership. This would in turn ascertain the retention of control by the management even after the IPO.

Allen and Faulhaber (1989) observed that high quality firms had more insider ownership prior to the IPO and signal their quality by underpricing their IPOs more than low quality firms. Some studies argued that ownership retention acts as a favourable signal to investors thereby necessitating less underpricing (Espenlaub & Tonks, 1998). According to these studies, the retained ownership acted as a signal of favourable information to investors about the quality of the firms, thus IPOs may be underpriced less.

Li et al. (2005) found that there was higher demand for IPOs in which the ownership retention by the existing shareholders was high. This resulted in greater liquidity after the listing of the shares. Zheng et al. (2005) argue that there had to be more underpricing of IPOs in which a higher percentage of shares were retained by the pre-IPO shareholders. The underpricing of the IPOs would increase the post-listing liquidity of the IPO stocks which would be highly beneficial to these shareholders.

Mayur and Kumar (2009) found that the performance of the firms was correlated with the insiders' ownership. They observed that the decline in post-IPO performance is greatest for firms with the least ownership retention by insiders. Sahoo and Rajib (2010) found that the IPOs issued in India from 2002 to 2006 provided a market-adjusted abnormal rate of return of 46.55 percent on the first day of listing but they did not find any significant influence of ownership retention by promoter groups on the performance of the IPOs.

There have been studies that have examined the relation between underpricing and pre-IPO insider ownership. Ljungqvist and Wilhelm (2003) have observed higher underpricing when the pre-IPO insider

ownership is lower. They have found that the ownership retention is lower in those IPOs in which the cost of underpricing is higher. Sahoo and Rajib (2010) observe an average underpricing of 46.55% from 2002 to 2006. They find a positive relationship between underpricing and the post-IPO insider holding.

Research Methodology

The study investigates how ownership retention by promoters and promoter groups affects the market performance of the IPO stocks. This is done by analysing the relationship between Market-adjusted initial returns (MAIR) and ownership retention and how MAIR differs between Indian IPOs with high ownership retention and those with low ownership retention.

Sample and Data sources:

Data comprise of 95 IPOs issued in India and listed on National Stock Exchange (NSE) during the period January 2010 – December 2013. The underlying data sources for the study are the annual reports of the IPO's, market price collected from the website of the National Stock Exchange (NSE) and the Red Herring Prospectus issued at the time of Offer available at the Securities Exchange Board of India (SEBI) website. Data on the pre and post issue ownership retention of the promoters are taken from the Red Herring Prospectus. The market performance data like initial day list price, issue price, daily returns are taken from the NSE website and Prowess, the CMIE database. SPSS and EViews statistical software have been used for the analysis.

Methodology

The initial stock return and the initial market return are first calculated in order to determine the market-adjusted initial returns. The Initial stock return (R_i) for each IPO is determined as the difference between closing price on the first day of listing of the IPO (usually referred to as listing price) and the issue price expressed as a percentage of the issue price. The issue price, which is the price at which the share is offered to the public, is decided by the firm in consultation with the Lead manager of the issue (investment bankers).

The initial stock return of security i is calculated as follows:

$$R_i = (P_L - P_o) / P_o \times 100 \dots \text{Equation (1)}$$

Where :

R_i is the initial stock return on security i

P_L is the listing price

P_o is the issue price

The initial market return (R_m) is the return earned on the market portfolio from the issue date to the listing date of the IPO. The Nifty 50, a market index of the NSE comprising of 50 stocks, has been taken as the market proxy. The initial market return is calculated as follows:

$$R_m = (I_L - I_o) / I_o \times 100 \dots \text{Equation (2)}$$

Where :

R_m is the market return on the listing day

I_L is the value of Nifty (Market index) on the issue date

I_o is the value of Nifty (Market index) on the issue date

The market adjusted abnormal rate of return (MAIR) for the IPO stock on listing day has been determined as calculated by Miller and Reilly (1987) as follows:

$$\text{MAIR1} = \left[\frac{1 + R_i}{1 + R_m} - 1 \right] \times 100 \dots \text{Equation (3)}$$

Ownership retention is the ratio of the shareholding by promoters and promoter groups post the IPO to their shareholding before the IPO.

The correlation between ownership retention and MAIR has also been determined. OLS regression has been run with MAIR as dependant variable and ownership retention as independent variable.

The Jarque-Bera test is used to test whether the distribution is normally distributed, while residuals have been tested for heteroscedasticity using the White test.

Findings

The descriptive statistics of the MAIR and the ownership retention for the 95 IPOs issued from 2010 to 2013 have been provided in Table 1. The mean ownership retention is seen to be 72 percent and has been observed to be as low as 44 percent and as high as 94 percent for some IPOs during the period of study. The IPOs during the period have provided very high MAIR

and in case of some IPOs has been seen to be as high as 191 percent. The IPOs provide a mean MAIR of 68.3 percent which is a significantly large return for investors who have been allotted the IPO shares. This is higher than the market-adjusted abnormal rate of return of 46.55 percent found by Sahoo and Rajib (2010) for

IPOs issued in India from 2002 to 2006. The results of correlation are provided in Table 2. It can be seen that there is positive correlation between MAIR and ownership retention which is statistically significant at 10 percent significance level.

Table 1: Descriptive Statistics of Ownership Retention and Market-adjusted initial Returns for IPOs during 2010-2013

	Minimum	Maximum	Mean	Std. Deviation
Initial stock return(in percentage)	-68.7	102.6	9.1	35.1
Ownership Retention (in percentage)	44	94	72	13
Market adjusted initial return (MAIR)(in percentage)	-70.6	190.9	68.3	64.2

Source: Author's calculation

Table 2: Correlation results

	MAIR	Ownership Retention	
MAIR	Pearson Correlation Sig. (2-tailed) N	1 100	.187 .063 100
Ownership Retention	Pearson Correlation Sig. (2-tailed) N	.187 .063 100	1 100

Source: Author's calculation

Table 3 provides the results of the Jarque-Bera test. The Jarque-Bera value of 4.37 is not significant ($p = 0.1122$) at 5 percent significance level. Therefore, the null hypothesis that the error terms of the regression equation with MAIR and ownership retention are normally distributed is accepted. The White test was conducted to test the null hypothesis that the distribution is homoscedastic. The

results of the test are provided in Table 3.

The observed R-squared given in Table 3 is 1.497, which is not significant at 5 percent significance level ($p=0.47$). Therefore, the null hypothesis that the distribution is homoscedastic is accepted. Thus there is no problem of heteroscedasticity in the distribution.

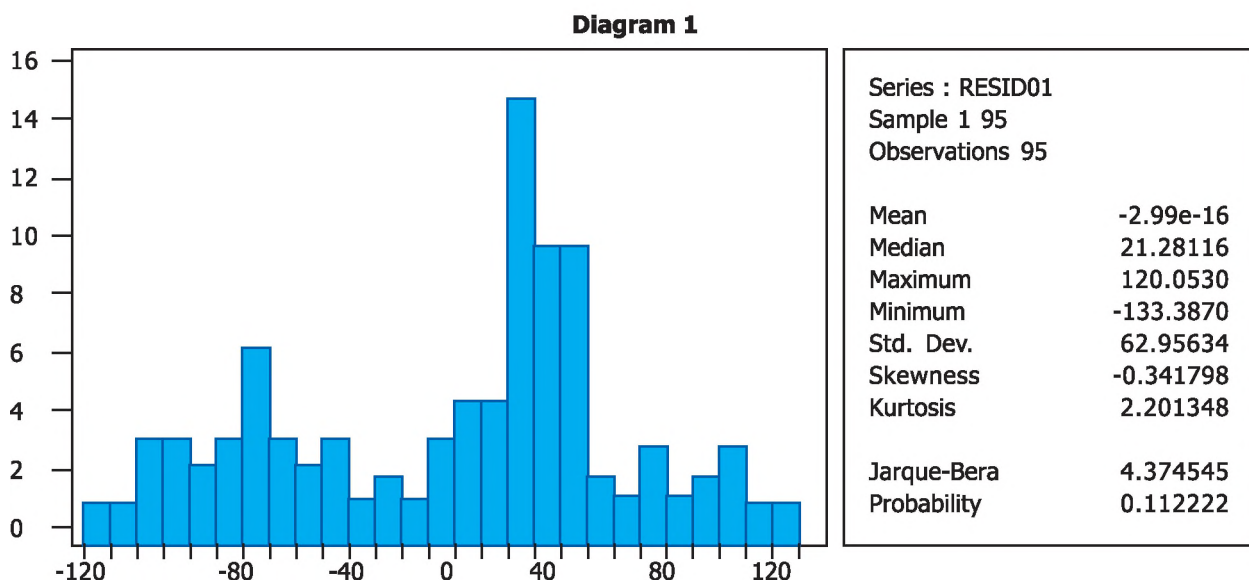


Table 3: White Test results

F-statistic	0.736	Prob. F(2,92)	0.482
Obs*R-squared	1.497	Prob. Chi-Square(2)	0.473
Scaled explained SS	0.862	Prob. Chi-Square(2)	0.65

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	-331.70	12974.14	-0.03	0.98
OWNERSHIP_RETENTION	16909.60	37938.44	0.45	0.66
OWNERSHIP_RETENTION^2	-14827.06	27080.92	-0.55	0.59

Table 3 cont...

R-squared	0.015753	Mean dependent variable	3921.78
Adjusted R-squared	-0.005643	S.D. dependent variable	4321.31
S.E. of regression	4333.486	Akaike info criterion	19.6172
Sum squared residuals	1.73E+09	Schwarz criterion	19.69785
Log likelihood	-928.8171	Hannan-Quinn criterion	19.64979
F-statistic	0.736256	Durbin-Watson stat	1.915009
Prob (F-statistic)	0.481704		

Table 4: Regression statistics

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Ownership Retention	98.148	50.904	1.928	0.057
Constant	-2.216	37.151	-0.060	0.953

R-squared	0.038
Adjusted R-squared	0.028
S.E. of regression	63.294
F-statistic	3.718
Prob(F-statistic)	0.057

The results of regression with MAIR as the dependent variable and ownership retention as the independent variable are provided in Table 4.

The results of the F-test provided indicate that the model shows Goodness of fit at 10 percent significance level ($p=0.057$). R-squared indicates that only 3.8 percent of the variation in MAIR is explained by ownership retention. Also the beta co-efficient of ownership retention (98.147) is not significant at 5% level of significance ($p=0.0569$) though it is significant at 10 percent significance level. Also the constant is

not significant ($p=0.95$). Therefore there is ownership retention by promoters after an IPO does not significantly explain the Market performance as measured by MAIR.

Since the results of regression did not show any significant relationship between ownership retention and market performance or financial performance, further analysis was done by dividing the IPOs into 2 groups: Low-retention and high-retention on the basis of median of ownership retention which is 75 percent.

Accordingly, the IPOs with ownership retention below 75% have been classified as Low-retention IPOs and

those with retention greater than 75% have been classified as High-retention IPOs.

Table 5: Descriptive Statistics of Low & High-retention IPOs

Variables	Low-Retention IPOs	High-Retention IPOs
No. of IPOs	59	36
Mean MAIR (in percentage)	58.1	85.1
Std. Deviation of MAIR (in percentage)	67.4	55.5

t-statistic of difference in MAIR of Low Retention Vs. High Retention IPOs (t(d.f))	t (93) = 2.027, p = 0.045
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As it can be seen from table 5, high-retention IPOs have higher mean MAIR (85 percent) than the low-retention IPOs. The independent sample t-test was conducted to test the null hypothesis that there is no difference in the mean MAIR of the high-retention IPOs and the low-retention IPOs. The results of the t-test provided in Table 6 show that $t = 2.027$ which is significant at 5% level of significance ($p = 0.045$). Therefore, null hypothesis is rejected. Thus, there is a significant difference in the MAIR of IPOs with low-retention & IPOs with high retention. The high-retention IPOs have significantly higher MAIR.

Conclusion

The study examined the impact of ownership retention on the market performance of the IPOs in terms of MAIR. The present study finds that IPOs where there is higher retention have performed better than the IPOs that have low retention. There is a significant difference in the MAIR of IPOs with low retention & IPOs with high retention. The IPOs with higher retention have higher mean MAIR (85.1 percent) than low retention IPOs (58.1 percent). This is contrary to the findings of Sahoo and Rajib (2010) who did not

find any significant influence of ownership retention by promoter groups on the performance of the IPOs. However, these findings are consistent with the contention of Leland and Pyle (1977) and Courteau (1995) that retention of shares by the entrepreneurs acts as a signal of the firm's quality and high value. Therefore, the IPOs with higher retention by promoters provide higher market-adjusted returns to investors on the first day of listing. Thus investors must subscribe to IPOs with higher ownership retention by promoters.

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