The Interplay of Valuations: A Study of the Impact of Selected Variables on Listing Day Discounts of IPOs

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Abstract

An initial public offering (IPO) is the sale of shares by a firm to the public for the first time in the primary market. Companies do this in order to raise money for a variety of reasons which include expansion, diversification, working capital financing, asset acquisition, debt restructuring, and so on. Many investors participate in IPOs with an eye to generate wealth in the long term whereas some others invest with the hope of earning through premium listing of IPOs. However, several factors influence the listing price of an IPO and, therefore, not every IPO lists at a premium. Whereas a substantial corpus of literature is available as regards the several facets of the post-IPO stock return performance of new listings, there is negligible documentation available about the factors that result in discount listing of an IPO as also the impact of factors like Grey Market Premium, Financial Performance and Subscriptions of retail investors on the discount listing of an IPO. This research study aims to fill this gap by identifying and analysing the relationship between the above mentioned factors and the discount listing of selected IPOs. The study was performed using secondary data collected from Chittorgarh.com, Moneycontrol.com, Ipocentral.in, Ipowatch.in and Tradingview.com, Livemint.com, nseindia.com and from the annual reports of companies which debuted with IPOs during the period 2019- 2021.

Keywords: IPO, Under-pricing, Listing Day Discounts, Grey Market Premium, Retail investors, Subscription to IPO

Introduction

A country's capital market is its primary economic indicator, reflecting the state of the economy. As opposed to a money market, it is a financial market where long-term debt (over a year) or equity-backed securities are purchased and sold. The British East India Company was the first company to sell its shares to the general public. Since then, markets have seen significant transformations. The way the market works, the asset classes, the exchange architecture, and everything else has changed over time. The adjustments have been phased in over time to suit the needs of investors and market players. The suppliers and users of funds make up the capital markets. Households, through their bank savings accounts, as well as institutions such as pension and retirement funds, life insurance firms, charity foundations, and non-financial corporations that create excess income, are all suppliers. Home and automobile buyers, non-financial enterprises, and governments supporting infrastructure investment and running expenses are among the "users" of funds distributed on capital markets. Capital markets are generally utilised to offer financial products such as stocks and bonds. Stocks, or ownership shares in a firm, are referred to as equities whereas bonds and other debt securities are interest-bearing IOUs.

These markets are separated into two groups: primary markets and secondary markets. The primary market is a market that allows issuers (government companies or corporations) to raise funds by issuing new securities (for eg: an IPO). Securities (financial instruments) can be issued at face value or at a discount/premium in a variety of forms, including equity, debt, and so on. The secondary market is where securities are traded after they have been first offered to the public in the primary market and/or listed on the Stock Exchange. It includes both equities and debt markets and is where the majority of trading takes place.

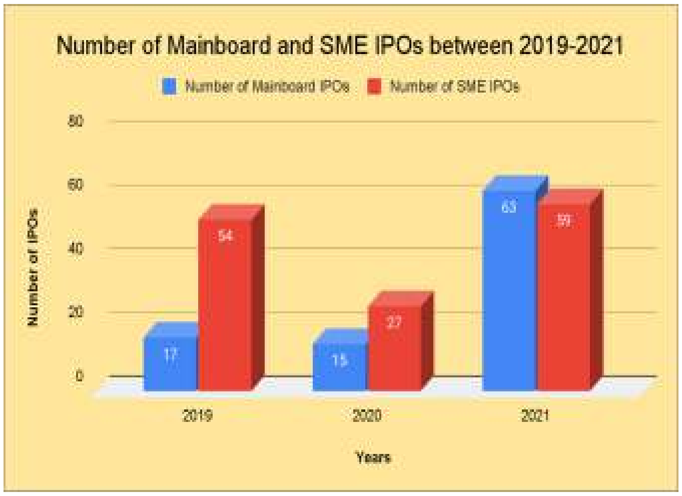
The sale of shares by a firm to the public for the first time in the primary market is known as an initial public offering (IPO). A company remains a privately held company with a small number of shareholders without an IPO. These shareholders could include the company's promoters, as well as their family members, friends, and relatives. Some strategic or professional investors, such as venture capitalists, angel investors, or private equity investors, may own shares in a private company. When compared to a privately held firm, the number of shareholders increases multifold after the IPO process, which is also known as becoming public. A company's share becomes eligible for a stock exchange listing after this first offering, which allows the public to buy and sell its shares. According to Chittorgarh.com, companies with minimum post-issue paid-up capital of Rs 10 crores can raise funds and get listed at the BSE and NSE exchanges through Mainboard IPO. Companies with minimum post-issue capital of Rs 1 crore and maximum Rs 25 crores are eligible for SME IPO. BSE SME and NSE Emerge platform allows Small and medium enterprises (SME) to raise funds and get listed at the exchange through an SME IPO.

Table 1: Difference between Mainboard IPOs and SME IPOs

Basis of Differenc e	Main Board IPO	SME IPO
Post-issue paid up capital	Minimum post issue paid up capital of Rs 10 crore	Minimum post issue capital of Rs 1 crore and maximum Rs 25 crore
Minimum Allottees in IPO	Minimum number of allottees should be 1000	Minimum number of allottees should be 50
IPO Underwriting	Mandatory except in the cases where 50% of the total issue is offered for compulsory subscription by Qualified institutional buyers (QIB)	IPO is underwritten 100% with 15% being on the books of merchant bankers
Track Record	Stringent norms	Relaxed norms
Offer Document Vetting	By SEBI	By Stock Exchange
IPO Application Size	Rs 10,000 - Rs 15,000	Rs 1,00,000
IPO Timeframe	6 months onwards	3 to 4 months
Reporting Requirement	Quarterly	Half yearly

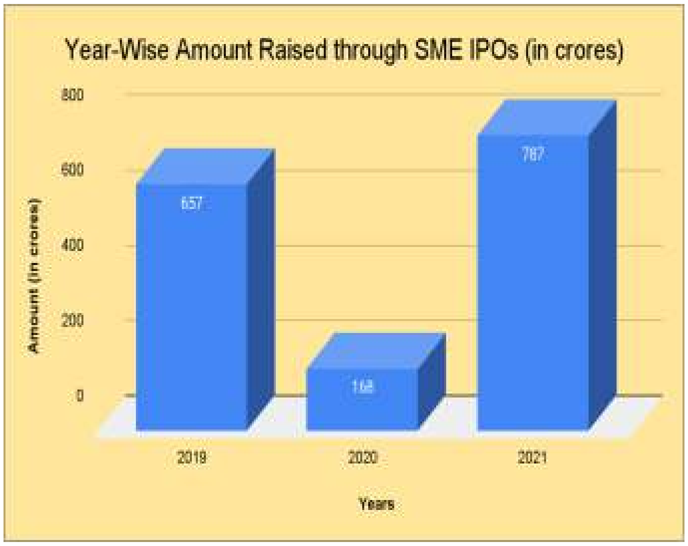
The Securities and Exchange Board of India (SEBI) had simplified restrictions, resulting in a record amount of money being raised in the form of an Initial Public Offering (IPO) by new-age technology companies, which are generally loss-making. Companies raise money for a variety of reasons, including expansion, diversification, working capital financing, asset acquisition, debt restructuring, and so on. Previously, in order to be listed on the stock exchanges, a company had to have a profitable track record. However, companies that are making losses can now be listed under certain circumstances. As a result, throughout the year 2021, the Indian primary market was a hive of activity. 65 companies raised a total of 1,19,882 crore (USD 15.4 billion) through initial public offerings (IPOs) as seen in Figure 3 below. This is the most money ever generated in a calendar year through initial public offerings. 2017 was the previous best year for IPO when 68,827 crore were raised. The aim of this study is to identify and study the reasons that result in discount listing of mainboard IPOs.

Figure 1: *Number of Mainboard IPOs and SME IPOs between the year 2019-2021 from Chittorgarh.com*



The number of mainboard IPOs issued in the years 2019 and 2020 remained the same whereas the number of SME IPOs dropped by 50% in the year 2020. According to Financial Express, SME IPOs had been losing sheen post the DHFL crisis in 2018 after gaining traction between 2016 and 2018. In fact, in those years the mid-cap and small-cap indices had started outperforming the broader markets. "There was also a consequent sharp surge in secondary

Figure 2: *Year-Wise Amount Raised through SME IPOs (in crores) from Chittorgarh.com*



markets which led to easy money raised in the primary markets. Almost sixty per cent of the money raised in the SME IPO was in the years 2018 and 2019," said Vikas Jain, Senior Research Analyst at Reliance Securities.

The pandemic resulted in the SME companies reporting poor results which further added fuel to the fire. "The pandemic has affected the earnings of the smaller companies in the worst possible manner and this is seen in the listings," Pranav Haldea, Managing Director at PRIME Database Group told Financial Express Online. The number of listings is comparable to that of FY2013, the early years when SME listing platforms were instituted. NSE Emerge began in September 2012 and BSE SME was launched in March 2012. The fiscal year 2013 saw 24 SME listings with an average issue amount being Rs 8.6 crore (similar to the year 2020-2021).

As mentioned previously, 2021 was the year that recorded the highest amount of money being

Figure 3: *Year-Wise Amount Raised through Mainboard IPOs (in crores) from Chittorgarh.com*

raised through IPOs. The amount raised through mainboard IPOs increased by 350.21% in 2021 compared to 2020 and 109.88% in 2020 compared to 2019. The amount raised by SME IPOs fell by 74.43% in 2020 compared to 2019 and increased by 368.45% in 2021 compared to 2020.

Figure 4: *Chart comparing Total Mainboard IPOs with Mainboard IPOs that had Negative Listing from Chittorgarh.com*

Figure 4 shows that 7 (41%), 4 (26.67%) and 17 (26.15%) mainboard IPOs had negative listings in the year 2019, 2020 and 2021 respectively.

Review of Literature

K. S. Manu and Chhavi Saini (2020): This researcher examines the short-term price movement of chosen IPOs in order to determine the impact of factors such as the company's sector, age, promoter ownership post-issue, and IPO issue size on IPO performance in the near term. The researcher concludes that the above listed independent variables have no impact on the short-run IPO performance using the Pearson Correlation and Regression model.

Beierlein, Jaclyn J. and B., Libison K. and Narasimham, N. V. (2018): Grey market, as an unauthorised market, has long existed in India and has influenced IPO trades on the official market. The intriguing aspect of grey market trading is that, because it is a completely illegal sector, there is no structure in place to provide legal consequences if there are violations. The researcher splits the IPOs into high GMP and low GMP IPOs to see if there are any noteworthy variations between them. When it comes to the degree of underpricing, the researcher discovered that high GMP IPOs had a higher level of underpricing than low GMP IPOs.

Shelly and Singh (2008): For 1,963 IPOs listed on the BSE, the researcher looked at the association between oversubscription and numerous characteristics. For certain IPOs, they discovered a positive association between underpricing, the reputation of the lead manager, the company's age, and oversubscription.

A S, Suresh. (2012): The goal of the study was to see if there was any link between Qualified Institutional Investors' (QIB) IPO subscriptions and IPO returns. Following a thorough examination of the IPO process, it was discovered that there are two primary signs that can assist an investor in selecting the appropriate IPOs. The QIB subscription is the first indicator (Qualified Institutional Buyers). This information is available to the public on the NSE website, and it is updated daily while the offer is active. Investors should only invest in IPOs that have received a lot of interest from QIB. The IPO grade is the second metric. This information can be found in the IPO prospectus. Investors should steer clear of IPOs that have received a poor rating. The study compared IPO results in 2010 to the Sensex and Nifty indices. IPOs, although being a risky option, yielded lower returns than the Sensex and Nifty, according to the study.

Batnini, Firas & Hammami, Moez. (2015): The purpose of the study was to see how stock markets affected initial public offerings (IPOs). Several studies have found that the need for capital is not the primary driver of an IPO; rather, favourable market circumstances may play a larger role. This study establishes a significant link between past stock market results and the number of initial public offerings (IPOs). The researcher discovered that directors studied market fluctuations before deciding on the date of the IPO's launch, and so concluded that there is a strong link between IPO waves and market performance.

Krishnamurti, Chandrasekhar, Thong, Tiong Yang and Ramanna, Vishwanath (2012): The following are the main results of the research conducted by Chandrasekhar Krishnamurti, Tiong Yang Thong and Vishwanath Ramanna. Firstly, the grey market prices are extremely predictable and are linked to investor subscription levels. Secondly, the sentiment factor contained in grey market premium is favourably and significantly connected to initial listing returns. Thirdly, when grey market prices are utilised as the basis, aftermarket returns begin to correct significantly from the day of listing. This results in a winning trading technique of selling at grey market levels and short-covering when the stock is listed.

Neupane, S., Paudyal, K., Thapa, C. (2014): IPO investors in India have access to an independent assessment of the firm's quality as well as information about the participation of other investors, including institutional investors, thanks to special regulatory provisions. Simultaneously, before the application for subscription is closed, an active grey market provides market sentiment. Even in a highly transparent market where both sets of information are freely available, the results, which are robust to alternative model specifications, suggest that institutional investors' decisions are almost entirely guided by firm quality, whereas retail investors' decisions to participate in IPOs are heavily influenced by market sentiment.

Research Methodology

After reviewing the work done by previous researchers on the valuation and performance of Initial Public Offerings (IPOs), we will now outline the hypotheses, tools and techniques, universe and sample of the study.

Hypotheses of the Study

The hypotheses of the study are:

- There is no significant impact of Grey Market Premium (GMP) on discount listing of an IPO.
- There is no significant impact of financial performance on discount listing of an IPO.
- There is no significant impact of subscriptions by Retail Investors on discount listing of an IPO.

Tools and Techniques

In order to test the hypothesis, Multiple Regression Technique is used. Multiple regression is a statistical method for examining the relationship between numerous independent variables and a single dependent variable. The goal of multiple regression analysis is to predict the value of a single dependent variable by using known independent variables. The formula for calculation of Multiple Regression, as per Investopedia, is as follows

$Yi = \beta 0 + \beta 1xi1 + \beta 2xi2 + ... \beta pxip + \epsilon$

Where for i=n observations,

Yi = Dependent Variable

xi = Independent Variable

B0 = Y intercept (Constant Term)

Bp = Slope coefficients for each independent variable

ϵ = The model's error term (standard error):

Universe and Sample of the Study

For the purpose of this study, the universe comprises all the IPOs launched between the years 2019-2021 on the National Stock Exchange of India and the sample comprises all the IPOs that are listed on a discount on the National Stock Exchange of India.

Data Analysis and Interpretation

Table 2: *Table showing the listing loss %, percentage change in GMP, percentage change in profits after tax (PAT) and subscriptions by retail individual investors (RII) for the mainboard IPOs launched in the years 2019, 2020 and 2021 on the National Stock Exchange from Chittorgarh.com.*

Year	Name of the Company	Listing Loss (%)	GMP %	PAT %	RII (times oversubscribed)
2019	Prince Pipes and Fittings Ltd IPO	-10.11%	-46.67%	12.36%	1.89
	IRCTC Limited IPO	-60.88%	20.00%	19.00%	14.83
	Vishwaraj Sugar Industries Ltd IPO	-79.58%	-	-390.64%	0.64
	Sterling and Wilson Solar Ltd IPO	-9.49%	-50.00%	268.15%	0.3
	Spandana Sphoorty Financial Ltd IPO	-3.62%	-75.00%	-30.37%	0.09
	MSTC Limited IPO	-4.17%	-66.67%	-320.70%	2.95
	Xelpmoc Design and Tech Limited IPO	-13.64%	-	-78.49%	2.64
2020	Equitas Small Finance Bank Ltd IPO	-5.76%	-75.00%	665.40%	2.08
	UTI Asset Management Company Ltd IPO	-9.75%	-25.00%	-31.75%	2.32
	Angel Broking Ltd IPO	-10.13%	-66.67%	-14.28%	4.31
	SBI Cards and Payment Services Ltd IPO	-12.45%	-40.91%	107.08%	2.5
2021	Metro Brands Limited IPO	-12.60%	-72.22%	-57.69%	1.13
	Shriram Properties Limited IPO	-23.73%	-40.00%	-239.74%	12.72
	Rategain Travel Technologies Limited IPO	-15.29%	-20.00%	-358.97%	8.08
	Star Health and Allied Insurance Company Ltd IPO	-6.11%	-50.00%	-743.85%	1.1
	One 97 Communications Limited IPO	-9.30%	-40.00%	59.80%	1.66
	Fino Payments Bank Limited IPO	-5.66%	-	132.82%	5.92
	Aptus Value Housing Finance India Ltd IPO	-5.67%	25.00%	139.45%	1.35
	Nuvoco Vistas Corporation Ltd IPO	-14.91%	-60.00%	2.15%	0.73
	CarTrade Tech Limited IPO	-1.12%	-62.50%	289.99%	2.75
	Windlas Biotech Limited IPO	-5.00%	-33.33%	-75.60%	24.22
	Macrotech Developers Limited IPO	-10.29%	-60.00%	-97.09%	0.4
	Barbeque Nation Hospitality Limited IPO	-2.03%	-	-139.37%	13.13
	Suryoday Small Finance Bank Ltd IPO	-4.26%	-14.29%	-86.31%	3.09
	Kalyan Jewellers India Limited IPO	-15.00%	-11.11%	-24.79%	2.82
	Craftsman Automation Limited IPO	-8.79%	-47.06%	-2.17%	3.44
	Anupam Rasayan India Limited IPO	-6.31%	-40.74%	39.94%	10.77
	Indian Railway Finance Corporation Limited IPO	-4.23%	-33.33%	106.36%	3.66

Three independent variables and one dependent variable have been considered for the purpose of this study, which are shown as under:

Table 3: Table showing dependent and independent variables considered for the purpose of the study

Dependent Variable	Independent Variable
IPO Listing Loss %	Percentage change in GMP
	Percentage change in PAT
	RII Subscription

Multiple regression is a statistical method for examining the relationship between numerous independent variables and a single dependent variable. The goal of multiple regression analysis is to predict the value of a single dependent variable by using known independent variables.

Formula for calculation of Multiple Regression, as per Investopedia, is as follows:

$Yi = \beta 0 + \beta 1xi1 + \beta 2xi2 + ... \beta pxip + \epsilon$

Where for i=n observations,

Yi = Dependent Variable

xi = Independent Variable

B0 = Y intercept (Constant Term)

Bp = Slope coefficients for each independent variable

ϵ = The model's error term (standard error)

For the purpose of or study, the formula will modified in the following way:

Listing Loss = $\beta 0 + \beta 1$GMP + $\beta 2$PAT + βpRII + ϵ

Here, GMP refers to the percentage change in the grey market premium, PAT refers to percentage change in profits after tax and, refers to the subscriptions by retail individual investors and Listing Loss refers to listing loss percent.

Table 4: Model Summary for Listing Loss, GMP, PAT and RII

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.458[a]	.210	.111	16.05256
a. Predictors: (Constant), RII, PAT, GMP				

The R^2 value (the "R Square" column) indicates how much of the total variation in the dependent variable, Listing Loss, can be explained by the independent variables, GMP, RII and PAT. In this case, R^2 designates that change in Listing Loss can be explained by change in GMP, RII and PAT. The adjusted R value of .111 implied that the model is 11.1% goodness fit. A unit change in the GMP, RII and PAT leads to about .210 unit change or 21% changes in Listing Loss of the selected IPO.

Table 5: ANOVAa for Listing Loss and GMP, RII, and PAT

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1643.827	3	547.942	2.126	.023[b]
	Residual	6184.436	24	257.685		
	Total	7828.262	27			
a. Dependent Variable: Listing Loss						
b. Predictors: (Constant), RII, PAT, GMP						

In order to test the validity of data, a multiple regression model is used which shows whether all the independent variables have regression coefficients equal to 0 or in other words, if the explained variance is not due to a random. The regression coefficients of the sample are β1, β2 and β3. Now, in order to test the null hypothesis, F-test is applied which shows an analysis of the variance identified in the above ANOVA table. The data depicts that the value of the calculated F is 2.126 for the variance generated by the regression. The critical value of F at the significance level of 0.05 with df 3 at numerator and 24 at denominator is 5.18. By comparing the values of F, it results that the alternative hypothesis is accepted which means that not all the regression coefficients are equal to 0.

So, we can state that a significant influence of independent variables like GMP, PAT and RII over the dependent variable, i.e. listing loss.

Table 6: Coefficients for Listing Loss and GMP, RII, and PAT

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-21.726	6.276		-3.462	.002
	GMP	-.234	.114	-.395	-2.059	.051
	PAT	.014	.012	.208	1.133	.268
	RII	.152	.579	.050	.262	.795
a. Dependent Variable: Listing Loss						

Based on the non standard coefficients, we obtain the following regression equation:

$$Y_i = -21.726 + -.234\,x1 + .014\,x2 + .152\,x3 + \epsilon$$

where, x1 = percentage change in grey market premium (GMP), x2 = percentage change in profits after tax (PAT), x3 = retail individual investors subscriptions (RII).

Conclusion

Based on this research paper, it can be concluded that there is a significant influence of independent variables like grey market premium (GMP), profits after taxes (PAT) and subscriptions by retail individual investors (RII) over the dependent variable, i.e. percentage of listing loss. However, these are just a few parameters whose influence was tested on the percentage of listing loss. The capital markets are highly dynamic and there are more than one factors impacting the percentage of listing gain/loss of an IPO. Therefore, there is scope for further research by taking multiple parameters into account and testing their impact on the listing performance of an IPO.

References

- Manu KS, Saini C. Valuation Analysis of Initial Public Offer (IPO): The Case of India. Paradigm. 2020;24(1):7-21. doi:10.1177/0971890720914100
- Beierlein, Jaclyn J. and B., Libison K. and Narasimham, N. V., Grey Market for IPOs in India: Its Trading Mechanism and Implications for IPO Underpricing (December 14, 2016). World Finance and Banking Symposium December 2016, University of Dubai., Available at SSRN: https://ssrn.com/abstract=3095354
- Batnini, Firas & Hammami, Moez. (2015). IPO waves: How market performances influence the market timing of IPO?. Journal of Applied Business Research. 31. 1679-1692. 10.19030/jabr.v31i5.9382.
- Krishnamurti, Chandrasekhar and Thong, Tiong Yang and Ramanna, Vishwanath, Grey Market for Indian IPOs: Investor Sentiment and After-Market Performance (August 14, 2011). 2012 Financial Markets & Corporate Governance Conference,

Available at SSRN: https://ssrn.com/abstract=1972478 or http://dx.doi.org/10.2139/ssrn.1972478

- Neupane, S., Paudyal, K., Thapa, C., Firm Quality or Market Sentiment: What Matters More for IPO Investors?, Journal of Banking & Finance (2014), doi: http://dx.doi.org/10.1016/j.jbankfin. 2014.04.01
- (2021, December 28). The great IPO rush set to continue in 2022, with all eyes on LIC. Livemint. https://www.livemint.com/market/ipo/the-great-ipo-rush-set-to-continue-in-2022-with-all-eyes-on-lic-11640623020367.html
- (2021, December 25). Highest amount of money raised through IPOs in 2021. See list of blockbusters. Livemint. https://www.livemint.com/market/ipo/highest-amount-of-money-raised-through-ipos-in-2021-see-list-of-blockbusters-11640428123197.html
- Wikipedia contributors. (2022, January 15). Primary market. In Wikipedia, The Free Encyclopedia. Retrieved 11:15, March 15, 2022, from
- https://en.wikipedia.org/w/index.php?title=Primary_market&oldid=1065903810
- Fernando, J. (2021, November 30). Initial Public Offering (IPO) Definition. Investopedia. https://www.investopedia.com/terms/i/ipo.asp