A Longitudinal study on Performance Evaluation of Initial Public Offering (IPO)

^[1] Falguni Prajapati, ^[2] Dr. Farana Kureshi, ^[3] Margi Choksi

^[1] Research Scholar H.N.G. University, Patan, Gujarat, India ^{[2][3]} Assistant Professor, SAL Institute of Management, Ahmedabad, Gujarat. India Email: ^[1] falguniprajapati88@gmail.com, ^[2] farana.kureshi15@gmail.com, ^[3] margisoni2712@gmail.com

Abstract---Financial markets are now a day"s has become more fluctuating and volatile due to many factors; so investor needs knowledge of market before investing. Investment in stocks has turned out to be more profitable, if investor have proper analysis and definite strategy of when to enter and exit in the market then probability of having more return increases. Sometimes due to lack of knowledge and wrong influencing factors investors may divert their funds and that may lead them to losses. IPO is one of the general source to earn short term profits in stock markets. Investor may hold their position in market from very beginning of the market by applying in an IPO. Investor may sale their stock on after the stock gets listed or hold it for long term to earn higher returns. This research paper focused on the number of factors that highlights investors" perception about IPO. It was found that IPOs are profitable if investors apply for the same after fundamental analysis and research of particular IPO. At the end, IPO remains choice of investors as they are profitable in short term and may more profitable in long term. Thus, from this research, it can be accomplished that IPO is considered as one of the choice in the market for profit building.

Key Words--- Initial Public Offering, listing Open price, listing Close price, current market price.

I. INTRODUCTION

Initial public offer means a company sell its share first time or offering its share in public. The initial public offer (IPO) is considered to be the investor's favorite investments. Companies arrived with the IPO to raise the fund for their prerequisite. Investment in IPO is one of the hazardous investments. Initial public offering execution relies upon the market. Interests of the investor are affected by the trend in the market. It is a difficult for investors to predict the performance of any stock or on the early trading day and near future as well. Most IPOs of companies are experiencing momentary growth phase, and they are in this way subject to supplementary uncertainty with respect to their future worth.

a. Definition of IPO

A private company can become a public company through Initial public offering process; in which it sale its equity shares to general public.1 Any newly formed or or an old company goes public by listing their stocks on an exchange.2

Company fall into two categories: private and public. A private company has fewer shareholders and limited information of the company has to be disclosed to its proprietor. A thousand of shareholders in the public company are subject to strict rules and regulation.

Mostly, smaller companies issue IPO seeking capital to expand, but largely private companies became publicly traded can also be done. The issuer receives the assurance of the underwriting company in the IPO, which help the companies to determine the type of securities issue (common or preferred)3.

In order to meet short term requirement, company can approach the bank and the lenders. To fulfill the long term requirement company raise the fund either through loan from bank, lender etc. or through capital issue. Capital may be raised from the private placement of the share, the public issue or the right issue. Public issue means raising fund from public. The primary aim of the public issue is to increase cash by the public and to get it share listed in stock exchange. The following are the other reason for the company to go public.

- Raising funds to finance capital expenditure program like expansion, diversification, modernization etc.
- Full fill the required working capital.
- Branding and visibility

II. LITERATURE REVIEW

1 https://medium.com/swlh/a-successful-ipo-means-yourstock-price-goes-down-fd3c1aa53f00

- 2 https://economictimes.indiatimes.com
- 3 https://www.investopedia.com

This article evaluates the performance of 438 IPOs listed on



the Bombay Stock Exchange from 1992 to 2001 in India. It also seeks to discover factors that describe the long-term results of IPOs of various companies. The result found was differing from developed countries where in the abnormal return (184.64%) is quite substantial. Lot of variations have been found across companies of different life span and industries. Performance of IPO firms varies when companies are segmented as per their profitability in beginning, price of issue, and size of issue. Yields generated in beginning, size of issue and market conditions describes the fluctuations in the long run results of IPOs in India [(1)]. The article found statistically significant negative relationship between listing return and issue price, size of issue, tenure of firm, issued capital. However, the link between the yield, foreign equity and the rating of issue was found to be positive. Further it also concluded that in the long run (listing for more than five years) there was a sharp drop in IPO yields, and the IPO yields were negative from the 2nd to the 5th year of listing (2)].

IPOs are preferred worldwide as a crucial source of funds for the firms to enhance their growth with the help of mobilized funds and it also supports implementation of innovative strategies. Further it is also analyzed as a vital tool for investment due to the huge profits offered on the listing day. This study examines the short run as well as long run performance of the companies to examine the abnormal returns and its long term performance as an investment tool. This study covers a period starting from January 2013 and ending on December 2014 where in 9 companies listed in NSE were considered as sample units. The study has focused on the final results of the IPO"s describing it as a speculative tool and giving assistance to investors in their decision making. Thus the findings revealed that IPOS can be considered as an a investment tool for long term offering a speculative opportunity to earn booming substantial profits [(3)].

In the study, the researcher has examined the post IPO performances of the issuing firms and their relationship with the promoter"s shareholding. Considering a sample of 481 issues during 1997 and 2006, the study concludes that the post IPO performances deteriorated over time. The results elaborated that revenue, return on capital employed, returns on net worth and profits before depreciation, interest and taxes decrease after the issue. The operating profits exhibited an upward trend in first year after the issue, but then follow the downward trend. The authors further correlate the results with the insider ownership and deduce that the performance has been lowest when promoters held minimal proportion in the ownership of the issuing firm [(4)].

The researcher has studied 55 new issues on NSE starting

from March 2004 and ending on Oct 2006 for the impact of listing delay, demand for stock and marketing expenses on under pricing. The listing delay is found to impact IPO under pricing whereas no significant results could be found for marketing expenses. The authors also concluded that the initial returns get diffused within a month of listing [(5)].

This study tried to evaluate the performance of IPOs in long run by considering the sample size of 15 companies for the period of 2006 to 2011 in Pakistan country. In this research, secondary data derived from KSE, SBP are considered in which data related to returns of stocks of IPO companies are taken as dependent variables while explanatory variable includes size of the company, tenure of company, profitability and leverage ratios in the long term performance of IPOs. As per the literature done in the past, it can be concluded that IPOs performance is not satisfactory in the long run. Moreover size of the firm and profitability has substantial positive correlation with the IPOs long run performance while on the contrary the leverage ratio and tenure of the company have negative correlation with the same [(6)].

This article focused on the price performance of 27 IPOs in India on book compilation for a period from 1990 to 2004. Further the IPOs were categorized into low premium and high premium IPOs. The issues whose price were five times the par value of their shares were considered as low paying IPOs while the issues whose price were ten times the par value of their shares were considered as high paying IPOs. The sample comprised of 5 low premium paying IPOs and 22 high premium paying IPOs. In this for analysing that data collected, Shapiro Wilks "W" test and Mann Whitney "U" test were carried out. The study concluded that there is no significant difference between low and high premium paying IPOs. It also suggested that majorly the low premium issues are underpriced and are more consistent in comparison of high premium issues [(7)].

This article analyzed the results of the Initial public Offerings during the fiscal year 2010-2011 and ascertains the influencing factors towards the under pricing or overpricing of IPO in India. It also tried to discover the causal variables contributing towards the high initial earnings of IPOs by considering the past studies. It also test them on a sample of Indian IPOs to evaluated the influence of nonfunctional towards the under pricing of IPOs. This study comprises of 54 IPOs out of which 2 IPOs were rejected prior to listing. The analysis of statistics showed that the IPOs of various firms following the book-building method were under priced. Thus it helped in analysing that whether the stocks are underpriced or overpriced [(8)].

In this study, the results of IPOs of 156 firms on NSE platform issued in the Indian market using the book building



mechanism over the period 1999- 2006 has been considered by the researcher. It was found out that on average positive returns were gained by the investors upon listing the IPOs after making adjustments for market movements. Thus it can be concluded that in the long term the IPOs offered positive returns till two years but they have underperform ed the market subsequently [(9)

This article concludes that though there are multiple ways by which companies can raise funds from primary market but still IPOs are the widely preferred tool by the firms for raising finance from open market. The main objective of this study is to understand the reasons of under pricing of issues and evaluate the impact of the administrative system towards IPO under pricing. In this study, the company's data have been bifurcated using descriptive and comparative method. The results showed that the IPOs in Indian market were more under priced than overpriced [(10)].

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The study tried to examine empirically the scenario of IPOs first day under pricing during the creation of the issue book. It also analysed the listing delays between closing of the book building process, the first day of listing of issue, and funds spent by firms for marketing the IPO. The researchers even seek to evaluate any evolving patterns in the IPO market in India with reference to earlier studies. In addition, it aims to find yield generated post-IPO within one month on the NSE platform. The findings showed that the demand for issue during book formation and the delay in listing had a positive effect on the undervaluation of the first day, while the effect of money spent on IPO marketing was negligible. They also found that post-IPO results within one month of listing were negative for the firms in question, according to existing literature [(12)].

III. RESEARCH METHODOLOGY:

a. Research Gap:

In the past era due to lake of information technology and less communication there was no such sudden data for analysis. But in last few years information is available near free of cost so one can get any data in one touch. In past the analyst should rely on last one year listed IPOs data but they do not give certain conclusion. The researcher has covered here data of 217 companies to get reasonable conclusion about how IPO is profitable for investors.

b. Research objective

To evaluate the results of Initial Public Offerings.

To analyze the short term and long term profit given by the initial public offerings (IPO"s).

c. Research Design:

A descriptive longitudinal study is a research design that implies repeated observations of the same variables. This research is based on studying the issue price, listing opening and closing price of IPO.

d. Research Process:

The secondary data is collected of last 10 years listed companies from the moneycontrol.com, bseindia.com, nse.com, online website.The study includes all the companies" which offer public issue as the initial public offerings (IPO) during the period February 2010 to June 2019.

e. Sample pattern:

The sample of 217 IPOs that offered to public from financial year 2009 to 2019 is selected for the study. The samples restricted to IPOs are listed on BSE from

2010 to 2019 maximum number of IPO reported in the year October- 2010.

f. Statistical tool & techniques:

The Statistical Package for the Social Sciences (SPSS) is used for complicated statistical data analysis by different types of researcher which facilitates to manage and analyze social science information statistically.



IV. DATA ANALYSIS:

TABLE I. DESCRIPTIVE STATISTICS

Descriptive Statistics											
	Ν	Range	Mini.	Maxi.	Mean	Std.					
		_				Deviation					
	Statistic										
Issue size	217	15452.0	23.00	15475.0	827.1180	1724.914					
(in crore)						47					
Issue price	217	1756.00	10.0	1766.0	307.972	306.7673					
Listing	217	2715.50	9.50	2725.00	344.1470	362.2502					
Listing	217	2891.23	1.57	2892.80	308.5236	353.1881					
СМР	217	2942.96	.04	2943.00	300.8625	440.7419					
Valid N	217										
(list wise)											
(Duran and hu Bagagnah an)											

(Prepared by Researcher)

The performance of the IPOs during the study period was analyzed in terms of the returns of IPOs on the open -closed price, issue price listing, CMP during the study period of 2010-2019. From the above table, Maximum size of IPO amounting Rs.15475 Crs. reported in the Year Nov-2010 from Coal India and Maximum issue price of an IPO Rs.1766 Minimum Rs.10 from future consumer.

Further, maximum listing open price of an IPO was Rs.2725 Minimum Rs.9.50. Maximum listing close price of an IPO was Rs.2892.80 Minimum Rs.1.57.

Descriptive Statistics						
	Mean	Std. deviation	N			
Issue price	307.972	306.7673	217			
Listing open	344.1470	362.25029	217			
Listing close	308.5236	353.18812	217			
СМР	300.8625	440.74193	217			
		(Propared by Res	oarchor			

TABLE II. DESCRIPTIVE STATISTICS

(Prepared by Researcher)

The average of the issue price, listing open, listing close and CMP are very close and the average of the CMP (Current market price) is lower than the issue price, listing open, listing close but the standard deviation of the CMP is higher.

TABLE III. CORRELATIONS)
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Correlat	tions				
		Issue price	Listing open	Listing close	CMP
Issue price	Pearson Correlation	1	*.970*	*.849*	.673**
-	Sig. (2-tailed)		.000	.000	.000
	Ν	217	217	217	217
	Pearson	.970*	1	.894*	.687**
Listing	Sig. (2-tailed)	.000		.000	.000

open	Ν	217	217	217	217	
-	Pearson	.849*	.894*	1	.773**	
Listing	Sig. (2-tailed)	.000	.000		.000	
close	Ν	217	217	217	217	
	Pearson	*	*	*	1	
CMP	Sig. (2-tailed)	.000	.000	.000		
	Ν	217	217	217	217	

Correlation means determining the relationship between two sets of data or observations. Karl Pearson''s coefficient correlation is the most commonly used technique of estimating correlation between two data sets. The above table outcome shows that there is significant correlation among of the issue price, listing open, listing close, and CMP.

In the table III. ,Correlation of the issue price, listing open, listing close, CMP with itself (r=1), and numbers of observations for issue price, listing open, listing close, CMP is 217 which indications of strong significant correlations of issue price with listing open price, listing close price and CMP and itself.

Correlation of the issue price and listing open (r=0.970), correlation of the issue price and listing close (r=0.849), correlation of the issue price and CMP (r=0.673), correlation of the listing open and listing close (r=0.894), correlation of the listing open and CMP (r=0.687), correlation of the listing close and CMP (r=0.773) and all based on the 217 observation with non-missing values that are indication of significant relationship of variable to each other.

INSERT TABLE: IV PAIRED TEST

Here in the analysis in Pair-1 Pair-3 Pair-5. So Researcher concluded that there is a significance difference between in the Pair-1 Pair-3 Pair-5 and Pair-2 and Pair-4 significance values is higher than 0.05 so null hypotheses is accepted and we concluded that there is a no significance difference between in the Pair-2 and Pair-4.

TABLE V. HYPOTHESIS

Variable	Variable	Hypothesis	Sig.	Alternative				
			value	hypothesis				
				Decision				
Issue	Listing	H1: there is a	.000	Accepted				
Price	open	significance difference						
		between Issue price						
		and listing open price						
		of IPO						



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Issue	Listing	H1: There is a	.965	Rejected
Price	close	significant difference		
		between Issue price		
		and listing close price		
		of IPO		
Listing	Listing	H1: There is a	.002	Accepted
open	close	significant difference		
-		between listing open		
		and listing close price		
		of IPO		
Issue	CMP	H1: There is a	.748	Rejected
Price		significant difference		Ū
		between Issue price		
		and CMP current		
		market price of IPO		
Listing	CMP	H1: There is a	.032	Accepted
open		significant difference		-
		between listing open		
		and CMP of IPO		

(Prepared by Researcher)

On the basis of table V paired sample T test, finding reveals that in the most companies listing open price is higher than issue price. (Mean of the Issue price

307.972 and listing open 344.1470) where the issue price and listing close price value is very close. (Mean of issue price 307.972 and listing close 308.5236). Furthermore examining, in the most companies listing open price is higher than listing close price. So at the end of the first day most of the company price is decreasing. (Mean of listing open 344.1470and listing close 308.5236) and issue prices and CMP are very small difference in most companies. (Mean of issue price 307.972 and CMP 300.8625). Most companies listing open price is higher than CMP. (Mean of listing open 344.1470 and CMP 300.8265)

V. CONCLUSION

The purpose of this study was to analyses the IPO performance. Investment in the IPO is the risky. Patience is as the most significant part and research as the most significant task for effective investment. The study shows that the majority of the company can make a high price on the first day of the listing and that investors get profit, but some time investors suffer losses because the IPO is market-based. For good return the investor need to invest for the longer time.

The investor can earn more profit by investing in short term profitable IPOs. The investor by holding large number of shares can have advantage at later stage. Investors should opt for stop loss as a caution step. Investor must have brief company background in which he/she is investing and also they should analyze the company financials as a primary instrument. Investor should attend the seminar conducted for awareness by BSE and other companies which is freely organized from investor education and protection fund.

REFERENCES

- [1] Bhatia, S. (2018). A study on the long run performsnce of initial public offering. SSRN electronic journal.
- [2] Madan. (2003). Investment in IPO's in indian capital market. s chand publishing.
- [3] Dr.S.Poornima, A. J. (2016). A STUDY ON THE PERFORMANCE OF INITIAL PUBLIC OFFERING OF COMPANIES LISTED IN NSE, INDIA & Gulf Base GCC Index. . International Journal of Research in Finance and Marketing (IJRFM).
- [4] Mayur, M. a. (2009). "Ownership and Performance in an Emerging Market. The IUP Journal of Applied Finance,, Vol. 15, No.7, pp.of Applied Finance, Vol. 15, No. 1.
- [5] Pande, A. a. (2009). "Determinants of IPO Underpricing in the. *The Icfai Journal of Applied Finance*, Vol. 15, No. 1
- [6] Batool, Z. (2018). long run performance of Initial public offerings(IPO). business and management horizons.
- [7] Fernando, A. R., Deo, M., & Zhagaiah. (2013). "Stock Price Performance of Initial Public Offerings: Evidence from India". International Journal of Research in Social Sciences 3.2, 358-377.
- [8] Divya. (2013, july). A Study on Performance of Indian IPO''s During. International Journal of Marketing, Financial Services & Management Research.
- [9] Kumar, S. S. (2010). "Is Bookbuilding an Efficient IPO pricing Mechanism"? The IndianEvidence InternationalReasearch Journal of Finance and Economics, 174-188.
- [10] Ajay Yadav, S. G. (2019, September). Research on Underpricing Concept of IPO (Initial Public Offering) in Indian Stock Market. International Journal of Innovative Technology and Exploring Engineering (IJITEE), 8(11S).
- [11] Aalaa J.Haji, D. (2016, November). A STUDY ON THE PERFORMANCE OF INITIAL PUBLIC OFFERING OF COMPANIES LISTED IN NSE, INDIA & Gulf Base GCC Index. International Journal of Research in Finance and Marketing (IJRFM), 6(11), 31-36. Retrieved from http://euroasiapub.org/current.php?title=IJRFM
- [12] Vaidyanathan, A. P. (2007). A STUDY ON THE PERFORMANCE OF INITIAL PUBLIC OFFERING OF COMPANIES LISTED IN NSE, INDIA & Gulf Base GCC Index, 31-46



Table-IV. Paired Sample test									
Paired Sample test									
	Paired Difference							df	Sig(2-tailed)
		Mean	Std. Deviation	Std. Error mean	95 % Confidence Interval of the Difference				
					Lower	Upper			
Pair-1	IP- LO	-36.17465	98.85355	6.71062	-49.40133	-22.94798	-5.391	216	.000
Pair-2	IP- LC	55124	186.68099	12.67273	-25.52929	24.42680	043	216	.965
Pair-3	LO-LC	35.62341	165.1479	11.21097	13.5265	57.72032	3.17	216	.002
Pair-4	IP- CMP	7.10982	325.96154	22.12771	-36.50407	50.72370	.321	216	.784
Pair-5	LO- CMP	43.28447	325.89680	22.12332	32075	86.88969	1.957	216	.032

(*IP: issue price, LO: listing open price, LC: listing close price, CMP: current market price) (*Prepared by Researcher*)

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