

Valuation Analysis of IPO's- Evidences from the Chartbuster Year of the Decade

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Abstract

With today's market so fast-paced and dynamic, short-term investors find it difficult to choose which investment path to choose. Investing in securities is an extremely dangerous endeavor for investors due to the volatility, uncertainty, complexity, and ambiguity (VUCA) associated with the future movement of share prices. The study has been carried out to evaluate the post-initial Public Offering (IPO) performance of many companies who went public in 2021 using the event study technique. Additionally, the study looks into whether these initial public offerings (IPOs) were short-term undervalued. The analysis shows that more than 60% of the selected initial public offerings (IPOs) had short-term undervaluation. Consequently, investing in initial public offerings (IPOs) for a short period of time can be highly beneficial and allow investors to realize large gains quickly.

Keywords- *Alpha returns, IPO, Total Returns, Under-priced, VUCA etc.*

Introduction

Businesses need to raise money in order to grow and take on new projects. There are a finite amount of funding sources available to all firms, despite the thousands of enterprises operating globally across all industry sectors. The three best places to look for financing are retained earnings, borrowed capital, and equity capital. Retained earnings are any net income that remains after a business pays all of its expenses and debts. Debt capital is the money a company raises via loans or the sale of corporate bonds. Equity capital is money that a publicly traded company raises or earns by selling shares to investors on the open market. Selling preferred or common stock could achieve this. Private companies can obtain capital by going public through IPOs or by awarding friends and family stock stakes in the business.

A company's decision to go public is a really entrepreneurial undertaking. Companies might sell a portion of their shares during the public offering process to receive payment for previous efforts. According to research, going public can be an affordable means of obtaining funds and exploring opportunities for growth. [1]. When a company decides to go public, it has an initial public offering (IPO). The first public offering is the issuing company's initial effort to sell stock to the wider public. Businesses can want to go public for a number of reasons, the most common of which is that they want to increase their liquidity and access more equity capital, or what's referred to as the primary market. An increase in capital will benefit not just the business but also its stakeholders and founders. so they might utilize the money they contributed later on as a return on investment or profit margin. There's also another justification related to the secondary market, namely the possibility of doing more stock trading. [2]. Of course, there could be other factors involved in a company's decision to go public. The decision is subjective and dependent on the environment in which the organization operates.

However, [3] lists the four most typical justifications for doing so: raising money, improving the company's reputation, increasing publicity, and inspiring staff members. Each of the three parties that take part in the IPO process has certain roles and responsibilities. The three actors are the issuing corporation, investors, and underwriter(s). There may naturally be conflicts between the interests of the investors and the issuing company since the investors want to buy the newly issued securities at a discount and the issuing company wants to raise as much money as possible through the flotation. But the underwriters serve as a go-between, looking out for the interests of the issuing company and the investors alike [2].

Literature Review

Till now lot of studies conducted on IPO, According to a study of [4] time period Jan 1, 2021 to April 30, 2021, found that India's IPO were undervalued at that time. One more research uses an input-process-output model that conceptually corresponds with IPO phases to systematise the body of knowledge already available on IPOs in family businesses [5]. A study revealed that approximately 70 of the chosen initial public offerings (IPOs) are undervalued in the near term, and the movement of these IPOs in the short term is unaffected by the company's age, the IPO's issue size [6]. The institutional investors' roles to disseminate knowledge about the characteristics of the companies, which in turn had fairly precise IPO prices [7]. IPOs that are book-built are less significantly undervalued than those that are fixed-priced [8]. Long-term IPO performance was predicted to be below expectations. [9]. Moreover, they found no discernible effects of business age, company size, or time lag on the IPO issue's performance. Over a two-year period, underperformance of mature enterprises was noted. [10]. IPOs are useful as a speculative and long-term investment instrument. [11]. The majority of initial public offerings (IPOs) yielded good returns, and most investments in these IPOs were made primarily based on the company's image rather than a fundamental study [12]. Variations in a certain stock's returns are impacted by a number of variables, including business performance, speculation, and other outside factors [13]. Performance of initial public offerings (IPOs) spanning a number of industries and time periods, including an attempt to ascertain how performing industries affect non-performing industries. The results of the study indicated that the public sector stocks performed well in both short run and long run and outperformed other sectors too. The manufacturing sector appeared to be performing the least in the short run as well as in the long run [14]. An analysis of 92 initial public offerings (IPOs) issued between 2002 and 2006 revealed their price performance during the 36 months including their listing day. According to the report, Indian initial public offerings (IPOs) were priced lower on listing day than the market index by 46.55 percent. The study also revealed that investors who made direct subscription investments in IPOs saw positive returns over the course of 36 months, whereas those who made listings-date investments saw negative returns for the first 12 months before seeing positive returns. [15]. The traits of businesses that went public between 1993 and 1994 and between 2008 and 2009 changed. The analysis found that even while fewer companies were going public over time, their sizes were growing at the same time. [16]. A significant number of investors, with the exception of small investors, were unaffected by the risk-free rate of return and transaction expenses, and initial public offering (IPO) returns continued to exceed anticipated returns. [17]. One more researcher worked upon 110 IPOs during the period of January 2006 to April 2007. They found that out of 110 IPOs, 104 IPOs gained on first day of trading. Additionally, they discovered that IPOs succeeded well over the long and short terms. These IPO equities provided an average return of thirty-three percent on the listing day. [18]. In the year 2007-08 the performance of 107 IPO was checked. According to the analysis, simply 86 businesses had good gains on the listing day on both the NSE and the BSE, while the remainder stocks had negative returns. Additionally, they discovered that most of the companies were traded at high prices and gave investors positive returns when the market was bullish [19]. An additional study examined the underpricing of 187 initial public offerings (IPOs) between 2001 and 2009. Despite the fact that almost half of the initial public offerings (IPOs) during the study period were underpriced, the researchers discovered that the mispricing swiftly corrected itself, preventing investors from long-term gains from excess returns. Underpricing and ex ante and ex post indices of uncertainty were shown to be strongly positively correlated by the researcher [20]. Demand created during the book-building process, the amount of money spent by businesses on marketing, and the first day underpricing and listing day all had a favourable correlation. [21]. The correlation between oversubscription and different characteristics for 1,963 BSE-listed first public offerings. They discovered that underpricing, the lead manager's reputation, the company's age, and oversubscription for particular IPOs all had a positive correlation. [22]. So, after reviewing the existing literature it has been found that according to best knowledge of researcher no study has been conducted in terms of IPO valuation in the year 2021 which is considered as the hit year of the decade. So, this study fills the gap and contributed towards valuation analysis of IPOs of blockbuster year 2021.

Research Objectives

1. To evaluate the chosen companies' post-IPO performance.
2. To determine the fairness, overvalue or undervalue of the IPOs of the chosen companies.

Research Proposition

H01: Short-term undervaluing of Indian IPOs exists.

Research Methodology

Event Research: The research was conducted through the use of an event study, in which the post-IPO short-run performance was assessed on the first, fifth, ninth, fifteenth, and thirtieth days following the IPO.

IPO Preference: The IPOs were chosen based on the year of issuance. All of the IPOs that were issued in 2021—from January 2021 to December 2021—were included in the analysis.

Data Avenues: All of the chosen IPO's data were gathered from the chosen firms' annual reports and the NSE's official website (www.nseindia.com). The Indian IPO investing portal website, (www.chittorgarh.com), was accessed to obtain information about IPOs.

Statistical Tools: The study utilized Descriptive statistics to analyse the post-performance of chosen Indian IPOs.

The study uses the following measures for the data analysis:

$$\text{Primary Market Return} = \frac{\text{First Day's Opening Price} - \text{Issue Price}}{\text{Issue Price}} \times 100$$

$$\text{Secondary Market Returns} = \frac{\text{First Day's Closing Price} - \text{First Day's Opening Price}}{\text{First Day's Opening Price}} \times 100$$

$$\text{Total Return on First Day} = \frac{\text{First Day's Closing Price} - \text{Issue Price}}{\text{Issue Price}} \times 100$$

$$\text{Raw Returns on N}^{\text{th}}\text{Day} = \frac{\text{N}^{\text{th}}\text{Day's Closing Price} - \text{Issue Price}}{\text{Issue Price}} \times 100$$

$$\text{Market Return} = \frac{\text{Closing Index Value on N}^{\text{th}}\text{Day} - \text{Closing Index Value on Last Day of Issue Period}}{\text{First Day's Opening Price}} \times 100$$

“Alpha Returns = Expected Return – Realized Return”

If the Alpha Return is “+”, then it infers that the IPO is undervalued.

If the Alpha Return is “0”, then it infers that the IPO is fairly priced.

If the Alpha Return is “-”, then it infers that the IPO is overvalued.

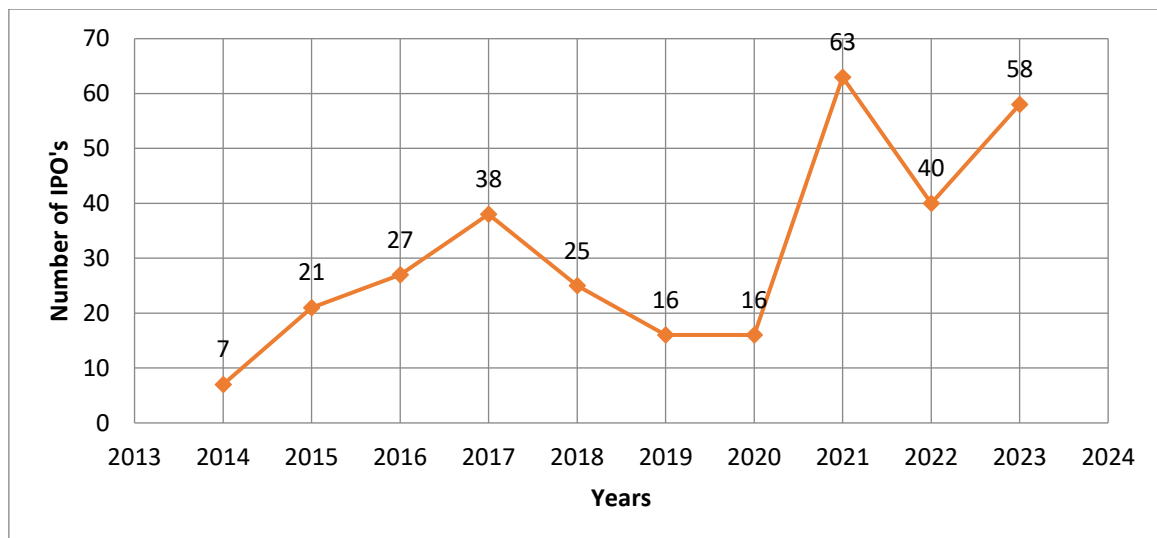
Data Analysis and Results

Table No. 1- IPO's in a year in Indian Stock Market

Year	Number of IPO's	Amt. Raised (Cr)	Successful IPO's	Failed IPO's
2023	58	49,437	57	1
2022	40	59,939	40	0
2021	63	119,882	63	0
2020	16	26,628	15	1
2019	16	12,687	16	0
2018	25	32,731	24	1
2017	38	75,279	38	0
2016	27	26,501	26	1
2015	21	13,513	21	0
2014	7	1,201	5	2

Source: www.chittorgarh.com

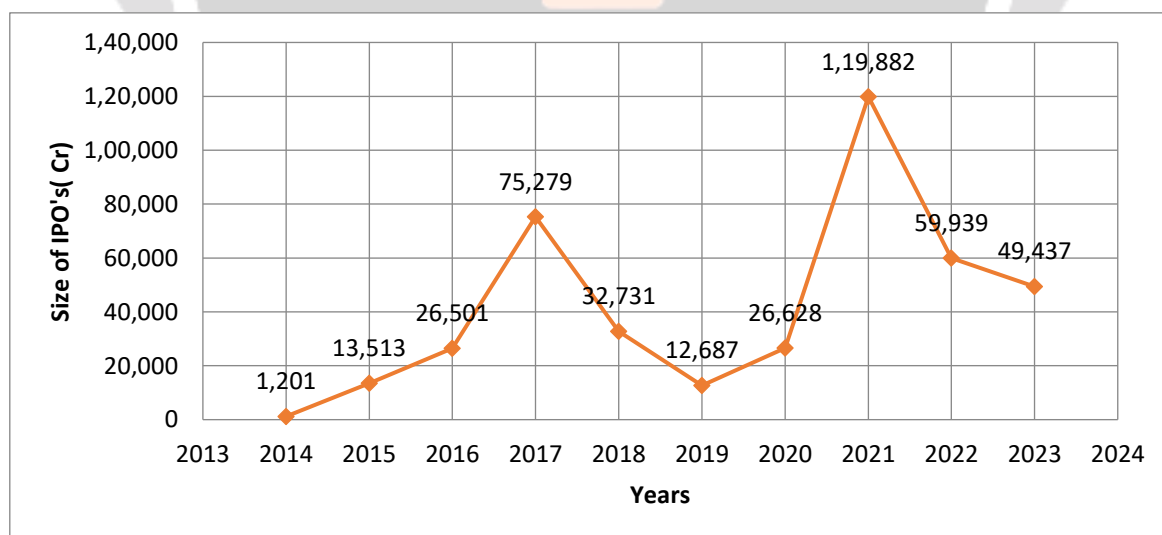
Figure No. 1- Number of IPO's in India during 2014-2023



Source- www.chittorgarh.com

The table and figure above show the total number of initial public offerings (IPOs) from 2014 to 2023. The quantity of IPOs is significantly influenced by market circumstances. Studies reveal that firms are more likely to go public during hot markets, or times when the market is rising, as opposed to cold markets, or times when the market is falling (Ritter et al., 2002). This theory holds true everywhere, not just in India. With 63 IPOs in 2021, it was the highest number ever. This fiscal year, 2021, can be regarded as the "golden year" for the Indian IPO market, with 63 companies raising a total of Rs. 1.21 lakh crore through IPOs, the most amount ever issued in a single fiscal year.

Figure No. 2- Size of all the IPO's issued during 2014-2023



Source- www.chittorgarh.com

Figure No. 2 unequivocally shows that 2021 was a record-breaking year for IPOs, with the 63 chosen companies raising over Rs 1,19,882 crore via the equity market method in that year. This raises the largest amount in any fiscal year.

Table No. 2- Descriptive Statistics of Total Return

Particulars	Primary	Secondary	Day 1	Day 5	Day 9	Day 15	Day 30
N	34.00	34.00	34.00	34.00	34.00	34.00	34.00
Mean	33.67	0.645	34.22	36.87	38.87	40.51	42.98
Median	9.456	1.543	7.44	13.56	25.32	20.45	16.71
SD	38.78	8.90	45.76	47.87	58.90	59.34	63.81
Variance	6.22	2.98	6.76	6.91	7.67	7.70	7.98
CV	2.34	14.77	2.33	2.45	2.67	2.90	3.98
Kurtosis	3.367	0.928	3.34	2.34	1.24	2.89	3.90
Skewness	1.890	0.45	1.90	1.67	1.67	1.23	1.28
Maximum	140.878	30.00	156.89	126.89	176.88	164.22	164.34
Minimum	-24.78	-15.67	-18.67	26.87	-17.66	-24.77	-22.34

Source- www.chittorgarh.com

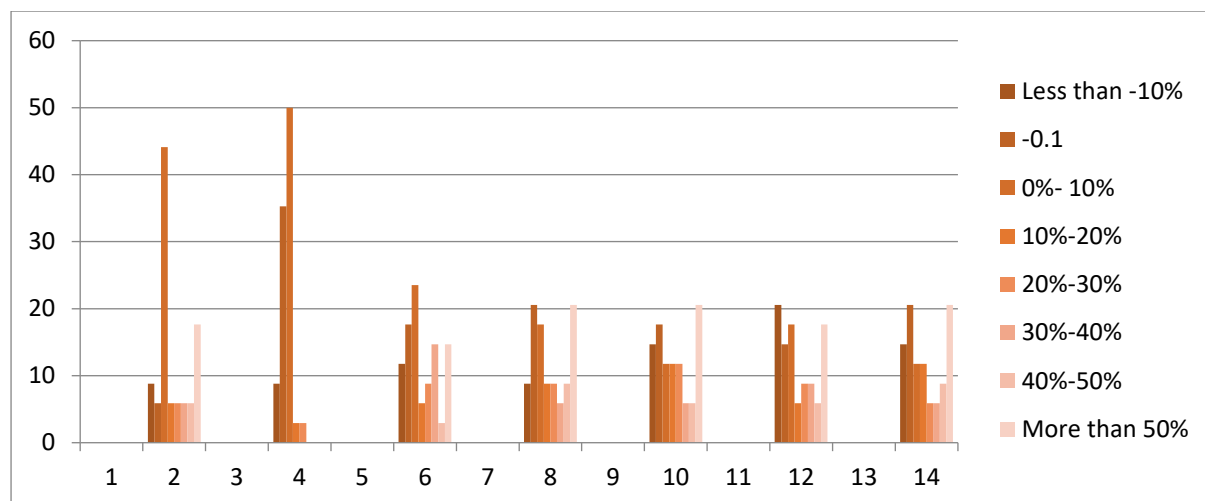
According to Table No. 2's data, the average returns of the 34 firms that were chosen for the study (whose total issue value is greater than 1000 crore) have been rising with time, with the smallest average return being recorded on the first day and the biggest average return being recorded on the thirty-first. On day thirty, there is the largest overall return, and on day one, there is the smallest return. Furthermore, a significant degree of variation is noticed and the SD and variance of the data rise over the research period, indicating that the returns are not focused towards the mean. Additionally, it is noted that positive tilt has been present during the course of the observation, indicating a rightward skewness of the data and an extended right tail than left. However, the value of kurtosis is greater than three only on day 1, indicating that the shape of the distribution is leptokurtic on that day and platykurtic on the remaining days

Table No. 3- Frequency Distribution for Total Return

Total Return		Less than - 10%	-10%- 0%	0%- 10%	10%- 20%	20%- 30%	30%- 40%	40%- 50%	More than 50%
Primary	Frequency	3	2	15	2	2	2	2	6
	Percentage	8.82	5.88	44.11	5.88	5.88	5.88	5.88	17.64
Secondary	Frequency	3	12	17	1	1	0	0	0
	Percentage	8.82	35.29	50	2.94	2.94	0.00	0.00	0.00
Day 1	Frequency	4	6	8	2	3	5	1	5
	Percentage	11.76	17.64	23.52	5.88	8.82	14.70	2.94	14.70
Day 5	Frequency	3	7	6	3	3	2	3	7
	Percentage	8.82	20.58	17.64	8.82	8.82	5.88	8.82	20.58
Day 9	Frequency	5	6	4	4	4	2	2	7
	Percentage	14.70	17.64	11.76	11.76	11.76	5.88	5.88	20.58
Day 15	Frequency	7	5	6	2	3	3	2	6
	Percentage	20.58	14.70	17.64	5.88	8.82	8.82	5.88	17.64
Day 30	Frequency	5	7	4	4	2	2	3	7
	Percentage	14.70	20.58	11.76	11.76	5.88	5.88	8.82	20.58

Source- www.chittorgarh.com

Figure No. 3- Percentage to Total Returns



Source: MS- Excel

Table and Figure No. 3 clearly show that by the end of the thirty-day period, around 19% of IPOs give investors a total return of greater than fifty percent, while 16 percent of all IPOs give investors a return of less than zero percent. Table 3 further demonstrates that, although there has been some fluctuation in the number of firms offering returns of less than 0%, there has been a discernible increase in the number of enterprises offering returns of more than 50%. Furthermore, it is noted that investors obtain returns of about 10% for roughly 23.52 percent of equities on the first day. Furthermore, it's clear that just 27% of participants.

Table No. 4- Descriptive Statistics of Alpha returns

Particulars	Primary	Secondary	Day 1	Day 5	Day 9	Day 15	Day 30
N	34.00	34.00	34.00	34.00	34.00	34.00	34.00
Mean	31.14	0.99	34.31	35.32	39.35	38.63	38.55
Median	9.57	1.50	9.26	13.02	21.10	17.19	11.56
SD	38.39	9.75	43.31	45.89	49.50	48.51	57.64
Kurtosis	4.29	0.87	4.84	0.83	3.30	3.13	2.21
Skewness	1.67	0.37	1.81	1.27	1.81	1.79	1.54
Max.	149.00	21.01	155.45	128.27	171.21	167.32	159.58
Min.	-21.14	-15.27	-19.34	-32.92	-17.53	-18.73	-29.47

Source: Research Calculation through SPSS

Table No. 4 illustrates how the average anomalous returns for the 34 companies that were chosen fluctuate over time, with the first day showing the lowest return and the ninth day showing the highest mean return. It has been noted that the SD rises with study duration. This indicates that there is a significant degree of variety in the data set and that the data are further from the mean and not focused towards the average. Additionally, it is noted that there is positive skewness throughout the duration and that the skewness value is greater than one on all days. Conversely, Kurtosis fluctuates in value every day.

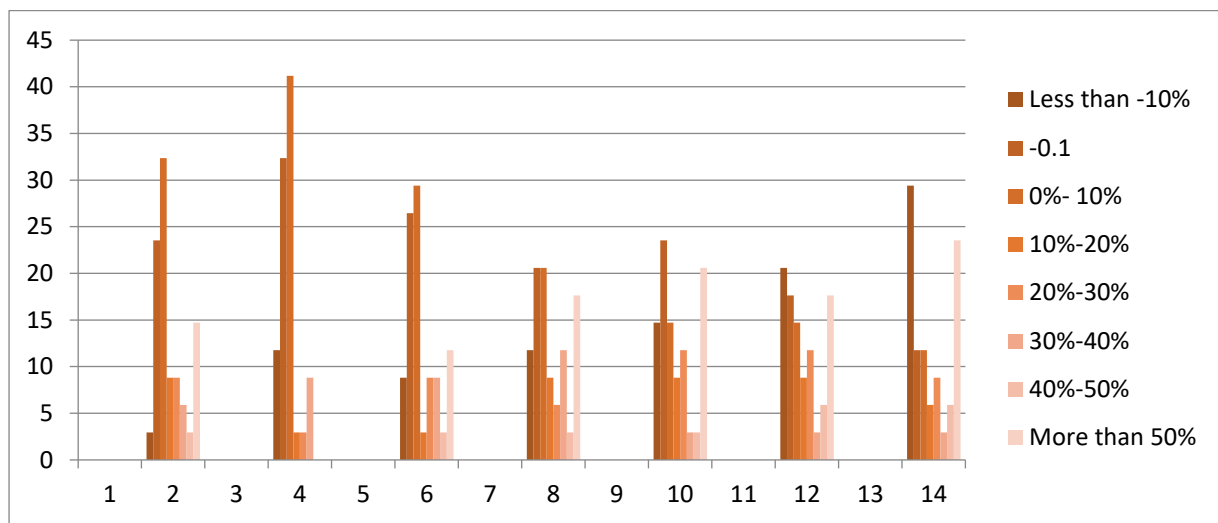
Table No. 5- Frequency Distribution for Alpha returns

Total Return		Less than -10%	-10%-0%	0%-10%	10%-20%	20%-30%	30%-40%	40%-50%	More than 50%
Primary	Frequency	1	8	11	3	3	2	1	5
	Percentage	2.94	23.52	32.35	8.82	8.82	5.88	2.94	14.70
Secondary	Frequency	4	11	14	1	1	3	0	0
	Percentage	11.76	32.35	41.17	2.94	2.94	8.82	0.00	0.00
Day 1	Frequency	3	9	10	1	3	3	1	4
	Percentage	8.82	26.47	29.41	2.94	8.82	8.82	2.94	11.76
Day 5	Frequency	4	7	7	3	2	4	1	6
	Percentage	11.76	20.58	20.58	8.82	5.88	11.76	2.94	17.64
Day 9	Frequency	5	8	5	3	4	1	1	7
	Percentage	14.70	23.52	14.70	8.82	11.76	2.94	2.94	20.58

Day 15	Frequency	7	6	5	3	4	1	2	6
	Percentage	20.58	17.64	14.70	8.82	11.76	2.94	5.88	17.64
Day 30	Frequency	10	4	4	2	3	1	2	8
	Percentage	29.41	11.76	11.76	5.88	8.82	2.94	5.88	23.52

Source- Research Calculation through SPSS

Figure No. 4- Percentage to Alpha returns



(Source- MS- Excel)

Based on the frequency distribution of alpha returns, which is displayed in Tables 5 and Figure 4, it is evident that roughly 60% of enterprises have overvalued throughout the research period, while roughly 40% have undervalued it. Businesses offering alpha returns greater than fifty percent have become increasingly common, whereas the proportion of companies offering returns less than zero percent has changed. Furthermore, it is clear that a downward trend has been noted over time, with almost 60% of businesses exhibiting positive anomalous returns on day one. Moreover, it has been observed that roughly 41.17 percent of businesses provide an abnormal return on the first day of the secondary market, ranging from 0% to 10%. For most of the selected event periods, the alpha returns of all the sample first public offerings (IPOs) for 2021 are positive. It follows that all of the Indian IPOs selected for 2021 are clearly undervalued.

Discussion and Conclusion

Our study looks at a unique and large set of data in order to understand the short-term price movement of particular initial public offerings (IPOs). This is done by calculating the performance of the initial public offering (IPO) on the first day (primary and secondary market returns) and on the fifth, ninth, fifteen, and thirty days using an event research technique. The study's conclusions support those found in the reviewed literature and provide new information on previously conducted research. Notwithstanding a rise in the number of businesses going public and the amount of capital raised through IPOs, the research shows that investors in these offerings still view them as a means of generating speculative gains rather than diversifying their holdings.

The study's findings indicate that on the listing day, the selected initial public offerings (IPOs) produced an average total return of 33.67. It's also noteworthy that these IPOs had an exceptional return of 31.14 above the market return. The fact that the total and alpha returns for the chosen IPOs are positive leads us to believe that the IPOs in 2021 were undervalued based on the research. Therefore, investing in initial public offerings (IPOs) for a short period of time can be highly advantageous and allow investors to realize substantial gains rapidly. The report also emphasizes how positive outlooks and favorable market trends help corporations keep the pricing of their initial public offerings (IPOs) higher.

Limitations of the Study

This study brings value to the various IPO market participants and makes several noteworthy contributions to the corpus of current knowledge, as was discussed and reviewed in the sections above. Despite its wide and comprehensive reach, our research on the success of Indian IPOs in the short term has the following limitations: Using an event study methodology, the research first examines the total returns and alpha returns on the first, fifth, ninth, fifteenth, and thirtieth days. A longer study period would yield far more comprehensive data and a better understanding for the many stakeholders in the initial public offering (IPO) market, as the current study period is very brief. Second, only companies that went public between January 2021 and December 2021 were included in the study. If the study had considered more initial public offerings (IPOs) over a longer time span, it could have produced far better results and contributed more to the body of current literature.

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