

Original Article

A Study on Long-run Price Performance of Initial Public Offerings in India from 2012 – 2022

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ABSTRACT: *This study attempted to analyse the price performance of Initial Public Offerings in India from 2012 to 2022. This study employs data from the NSE website and analysed aftermarket performance of 236 IPOs. Data has been analysed using raw returns on the listing day, one year after the issue, two years after the issue and three years after the issue. The wealth relative index has been used to measure the extent of under-pricing of the issue. Analysis resulted that the issues are under-priced on the listing day and yielding good returns, but after two years and three years, the issues over performed.*

KEYWORDS: *IPOs, Long Run Performance, Wealth Relative Index.*

1. INTRODUCTION

Initial Public Offerings are attractive and interesting investment opportunities for investors to gain good returns in the short run. Generally, investors are envisaged to know their returns after one year, or two years, or three years or in subsequent years. If the investors are buying and holding the IPOs for the long run, instead of selling them to gain profits in the short period, are they really underpriced for the long run? Do they have the same profit in the long run period? To answer these questions, the long-run price performance of the selected IPOs has been studied and presented below.

Initial Public Offerings (IPOs) represent a critical milestone in a firm's lifecycle, marking its transition from a privately held entity to a publicly traded company. IPOs are often perceived as attractive investment opportunities, particularly for retail and institutional investors seeking abnormal returns in the short run. Empirical evidence across global markets suggests that IPOs are frequently underpriced at the time of listing, resulting in significant first-day gains, a phenomenon widely documented in financial literature (Loughran & Ritter, 2004; Ritter, 1991).

While short-run IPO performance has been extensively studied, the long-run price performance remains a subject of ongoing debate and academic inquiry. Investors often expect to evaluate returns over extended holding periods such as one year, two years, or even longer horizons. However, the sustainability of initial gains and the persistence of abnormal returns in the long run are uncertain. Several studies indicate that IPOs tend to underperform benchmark indices over extended periods, raising concerns about market efficiency and investor behavior (Ritter, 1991; Loughran & Ritter, 1995).

In the context of emerging markets like India, IPO activity has witnessed substantial growth between 2010 and 2025, driven by economic expansion, regulatory reforms, and increased participation from retail investors. The Indian primary market has experienced cycles of boom and slowdown, influenced by macroeconomic conditions, liquidity factors, and investor sentiment. Despite the surge in IPO listings, questions remain regarding whether IPOs continue to deliver consistent returns in the long run or whether initial underpricing dissipates over time.

Investors who adopt a buy-and-hold strategy may face different outcomes compared to those who capitalize on short-term listing gains. This raises important questions: Do IPOs remain underpriced in the long run? Do they generate sustained abnormal returns over multiple years? Or do they eventually align with or underperform the broader market? Addressing these questions is essential for understanding the true investment potential of IPOs.

Against this backdrop, the present study examines the long-run price performance of selected IPOs in India over the period 2010–2025. By analyzing post-listing performance across multiple time horizons, the study aims to provide empirical insights into whether IPO investments yield consistent long-term gains or exhibit patterns of underperformance.

2. EXISTING LITERATURE ON SHORT-RUN ANALYSIS OF IPOs

Jay Ritter(1991): Studied 1,526 IPOs in US and revealed that the offer price is not too low for the issues; initial after-market performance is higher than the long run, and it underperforms.

Brownhilder N. Neneh and A. Van Aardt Smit (2013) revealed that to gain profits in the short run, an investor has to sell his shares after one month of listing, and the issues are mostly underpriced in a hot issue market by studying 360 IPOs in the JSE.

Libison K.B and N.V.Narasimham (2010): Tested the winner curse hypothesis and found that there is no relation between issues and investors, and also found that the informed and uninformed investors will gain in the initial days due to underpricing and up to eight weeks.

Himanshu Puri (2012): Analysed 100 IPOs issued between 2008 to 2011 and stated that initial returns are high and investors will get decent returns on 7th day after listing and go to negative returns on the 30th day.

Sanjay Dessai (2015) analyzed the post listing performance from 6 months to 36 months by dividing the issues into 6 different sectors and revealed that the returns are positive during the initial days and decreasing year by year. Except the jewellery sector, all the sectors are showing negative returns.

Smruthi vakil(2018):By considering different factors, conducted a survey on retail investors and found that the investors are satisfied nowadays with IPOs and their performance.

2.1. OBJECTIVES OF THE STUDY

The study analyses both initial day performance and short-run performance of IPOs, therefore the objectives are

1. To ascertain the initial day performance of Book Built IPOs in India.
2. To analyse the post-listing performance (up to 12 months after listing) of Book-built IPOs in India.

3. RESEARCH METHODOLOGY

3.1. SAMPLE AND DATA

A sample of 236 Book Built IPOs listed in NSE from April 2012 to March 2022. 275 issues went for public through the book building method in NSE, but finally 39 issues were not listed and traded and finally the sample of the study got restricted to 236. The data has been collected from the NSE website, and the details of issues have been taken from different secondary sources.

3.2. METHODOLOGY

The methodology used in the present study is consistent and many researchers used in their past studies. Return on a particular day is the difference between the closing price of the first day and the offer price, divided by the offer price.

$$R_i = P_1 - P_0 / P_0 \times 100$$

Where R_i = Subscribers initial return (Raw return)
 P_1 = Closing price on the first day of trading
 P_0 = Offer price

The Individual stock returns for the different time gaps, like after (1 month, 3 months, 6 months, 9 months and 12 months), have been calculated by using the formula

$$R_Ret_t = P_t - P_0 / P_0 \times 100$$

Where R_Ret_t = Raw return of the stock I at time t after listing day
 P_t = Closing price at time t
 P_0 = Closing price on listing day

The raw returns have been adjusted with the market returns by using the below formula,

$$MAER = (P_t - P_0 / P_0) - (M_t - M_0 / M_0) \times 100$$

Where MAER = Market Adjusted Excess Return
 M_t = Market index on the first day of trading
 M_0 = Market index on the offer date

Similarly, as raw returns for different periods, the market adjusted excess returns for different time periods, like (1 month, 3 months, 6 months, 9 months, 12 months), have been calculated by using the formula.

$$MAER_{it} = (P_t - P_0 / P_0) - (M_t - M_0 / M_0) \times 100$$

Where $MAER_{it}$ = Market Adjusted Excess Return at time t
 M_t = closing value of the index at time period t
 M_0 = closing value of the index on listing day

The time taken for the listing varies for different companies, so to normalize for this annualized return has been calculated by multiplying the the raw and MAER by the following formula.

$$\text{Annualizing factor} = \frac{365}{\text{After-market trading lead time}}$$

The wealth relative index is another measure to indicate the performance of IPOs in the market. A wealth relative of value 1 or greater than 1 implies that the IPOs outperformed the market in that period. If the value is less than 1, it indicates the underperformance of the issues.

4. DATA ANALYSIS AND INTERPRETATION

TABLE 1 Returns over the long run

Time Frames	R Ret(%)	MAER(%)
On the listing day	20.56	20.38
1 year after listing day	15.3	5.78
2 years after listing day	29.76	8.17
3 years after listing day	44.45	4.75

The overall returns obtained for the long run are shown in the Table 1. The returns that are calculated are raw returns and market returns on the listing day of the issue, after one year, after 2 years, and after 3 years. The market returns are calculated by considering the NSE Nifty Index so as to represent the market behaviour during the same time period.

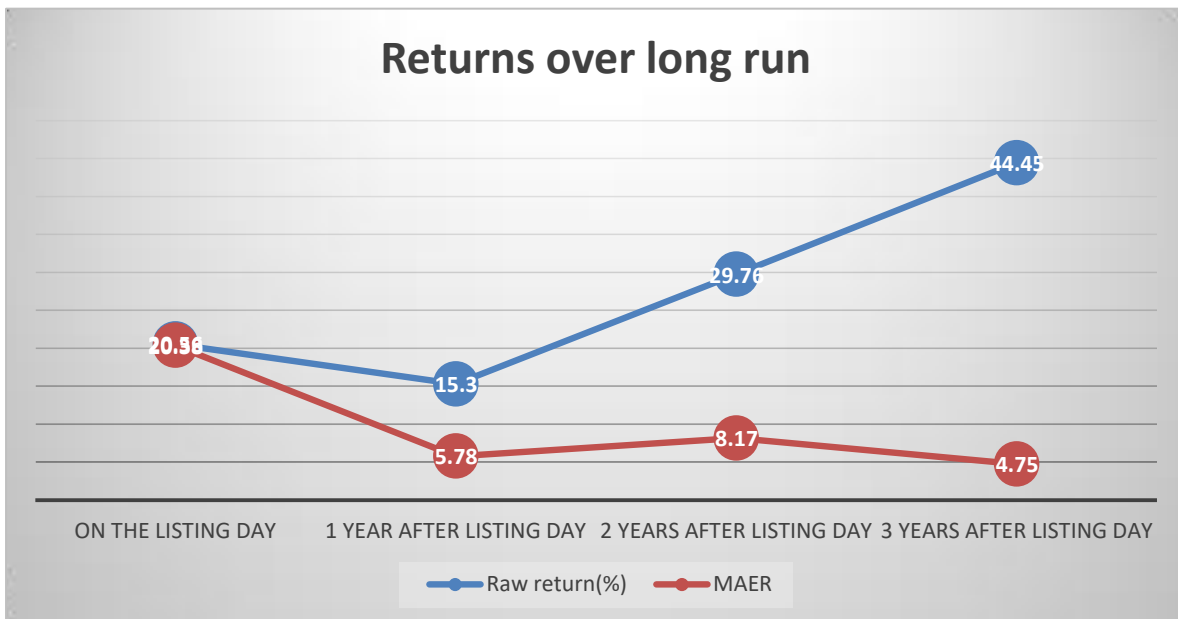


FIGURE 1 Comparison of raw return and market return

In the previous studies it is generally observed that the long run performance of IPOs, the IPOs would come to their intrinsic value and it is the real value of stocks, But the returns in the long run depends upon various factors like Market trends, Market sentiments, Sectorial performances, Individual company performances etc., This study shows 236 IPOs were taken from 2012 to 2022 for the study and there are so many factors which are affecting the market like Demonetisation in 2016, NPAs in banking sector, global weaknesses, Covid pandemic etc., and so many factors are affecting the companies which went for IPOs for their survival. The same thing can be found in this study, the raw returns are less than the market returns for the above taken periods.

TABLE 2 Max. And Min .R. Ret and MR Ret.

TIME FRAMES	N	Max R_ret	Max MR_ret	Min R_Ret	Min MR_Ret
On the listing day	236	267.17	10.47	-27.4	-17.38

1 year after listing day	236	397.38	62.11	-91.46	-28.75
2 years after listing day	236	807.27	84.56	-99.45	-23.88
3 years after listing day	236	1145.18	39.69	-99.72	-6.27

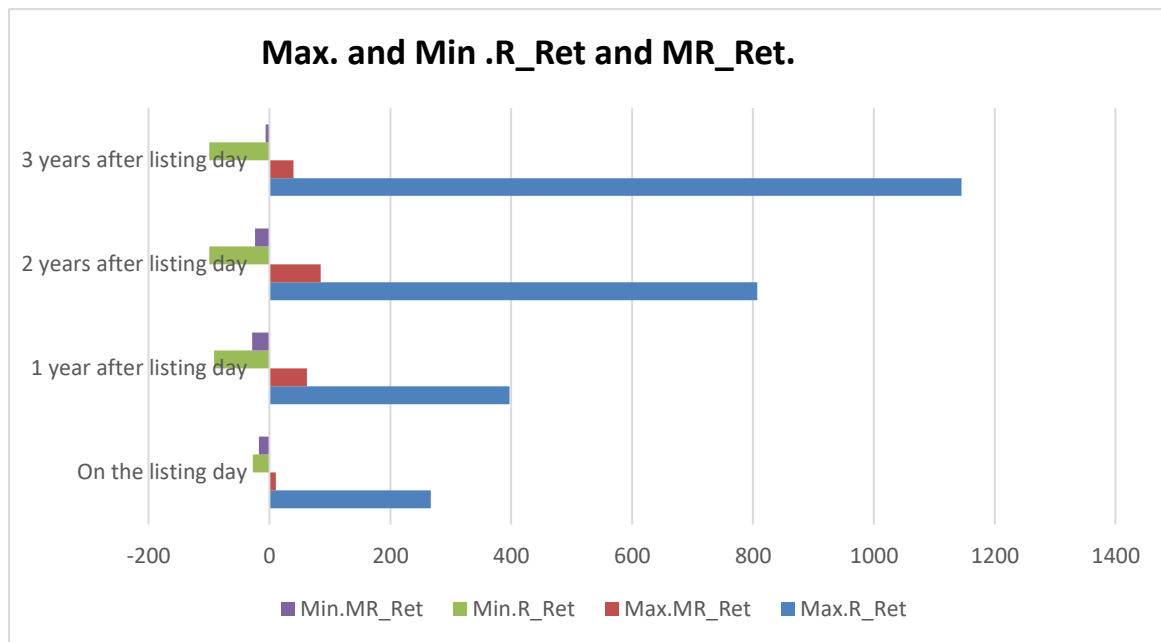


FIGURE 2 Comparison of Max. And Min .R_Ret and MR_Ret

Figure 2 explains the comparison of maximum and minimum raw returns and market returns. The issues yielded positive returns in the long run compared to the initial day returns. For example, the maximum returns in the listing day gained by **Sigachi Industries** with a (267%) listing gain, and **the Mazagon Dock Shipbuilders Limited** is the biggest gainer after 3 years, with very high returns during the third year after listing, i.e., (1145.18%). Compared to the max raw returns and the min raw returns, the market returns are slightly different.

4.1. COMPARISON BETWEEN Ann. R_Ret and Ann. Mr_Ret

The listing lead time has been considered, and the annualised raw returns for both IPOs and the market have been calculated. It provides returns obtained from IPOs that are more comparable. The inclusion of this listing lead time factor will nullify the effect of the time taken to list in the market or varying the number of days taken by the companies to list in the exchange on the extent of underpricing.

TABLE 3 Ann. R Ret and Ann. Mr Ret

TIME FRAMES	MEAN	
	Ann R_Ret	Ann MR_Ret
On the listing day	786	4.15
1 year after listing day	566.9	367.74
2 years after listing day	1043.49	794.09
3 years after listing day	1651.5	1494.23

The Table 3 along with the Figure 3 depicts that the investor earns better returns on the listing day than the market returns. Investor gains returns not only on the listing day, but he remains in the profit for the three years continuously. Individual returns have grown very fast compared to market returns for all the years. **Mazagoan dock ship builders** made the highest annualized raw returns with (37999.40) during the 3-year period.

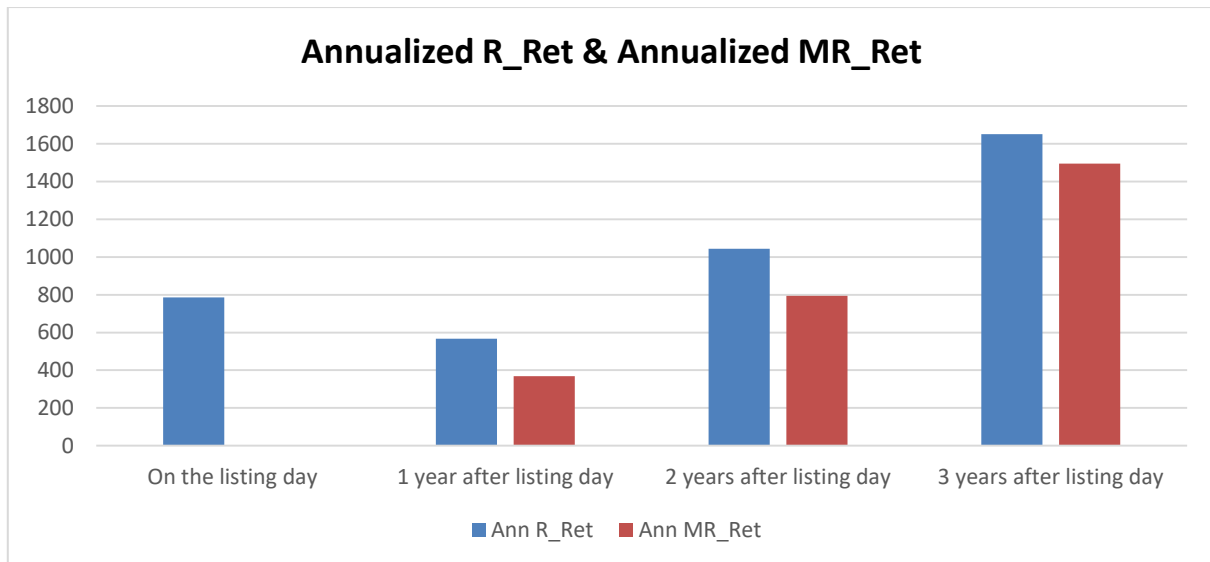


FIGURE 3 Comparison between Ann R_Ret & Ann MR_Ret:

The highest gainer after one year is **Happiest Mind Technologies** with (13672.5 %) of and **IRCTC** gained (21592%) of returns in the 2 years.

TABLE 4 Values of Annualized Max and Min R_Ret and MR_Ret

Time	N	MaxAnnR_Ret	Min Ann R_Ret	Ann Max MR_Ret	Ann MR_Ret	Min
On the listing day	236	8276	-1250	250.97	-576.84	
1 year after listing day	236	13762.5	-3516.4	2654.88	-1236.13	
2 years after listing day	236	21592.91	-3896.81	2806.08	-1089.64	
3 years after listing day	236	37999.4	-3977.5	3440.34	-265.58	

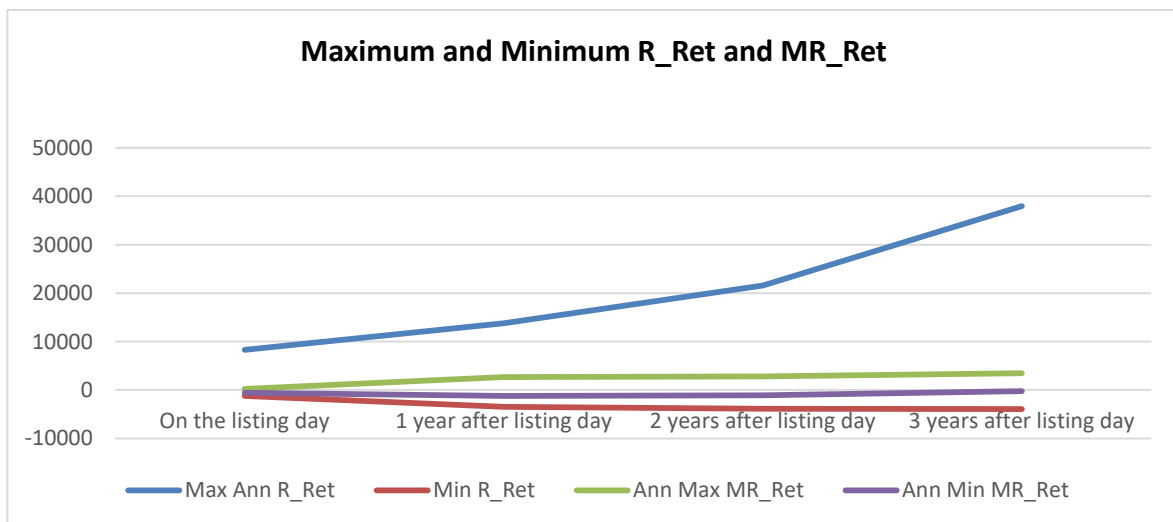


FIGURE 4 Comparison of max and min R_Ret and MR_Ret

The above table and figure represent the max and min of annualized Raw returns and Market returns are good on the listing day, and they improve in all the consecutive years after the listing day.

4.2. VALUES OF MAER AND ANN MAER

By studying the values of Market adjusted excess returns and Annualized Market adjusted excess returns, the effect of listing delays will be nullified and the extent of underpricing will be understood clearly, and it shows how much of the returns the

investor took from the market. In MAER, there is an effect in listing delays, but in the long run, it is completely wiped off and shows the real picture of the returns.

TABLE 5 Values of MAER and Annualized .MAER:

Time Frame	MAER	Ann MAER
On the listing day	20.38	781.01
1 year after listing day	5.78	199.15
2 years after listing day	8.17	249.4
3 years after listing day	4.75	157.2

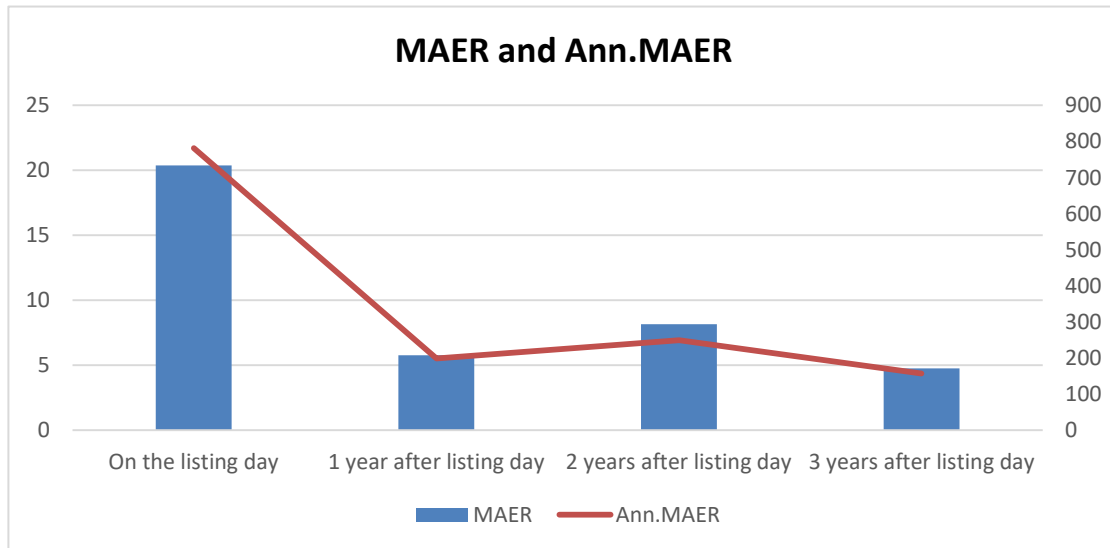


FIGURE 5 Comparison of MAER and Ann.MAER

The result shows that the real picture of underpricing in the long run, and the values are completely lower than the annualized market adjusted excess returns, and the listing day delays will be nullified completely. It shows the extent of underpricing existing in the market.

4.3. WEALTH RELATIVE INDEX

The Wealth Relative is an efficient measure to evaluate the long-run price performance of IPOs. Simply Raw returns and Market returns are shown in figure 1 and its percentages are shown in its annualized raw returns and Market returns. In the below figure 6, the values of underpricing have been compared with unity, i.e., 1. If the wealth relative value is greater than 1, it is underpriced.

TABLE 6 Values of wealth relative

Time Frame	Benchmark value	Value of wealth relative
On the listing day	1	1.087
1 year after listing day	1	1.105
2 years after listing day	1	1.217
3 years after listing day	1	1.356

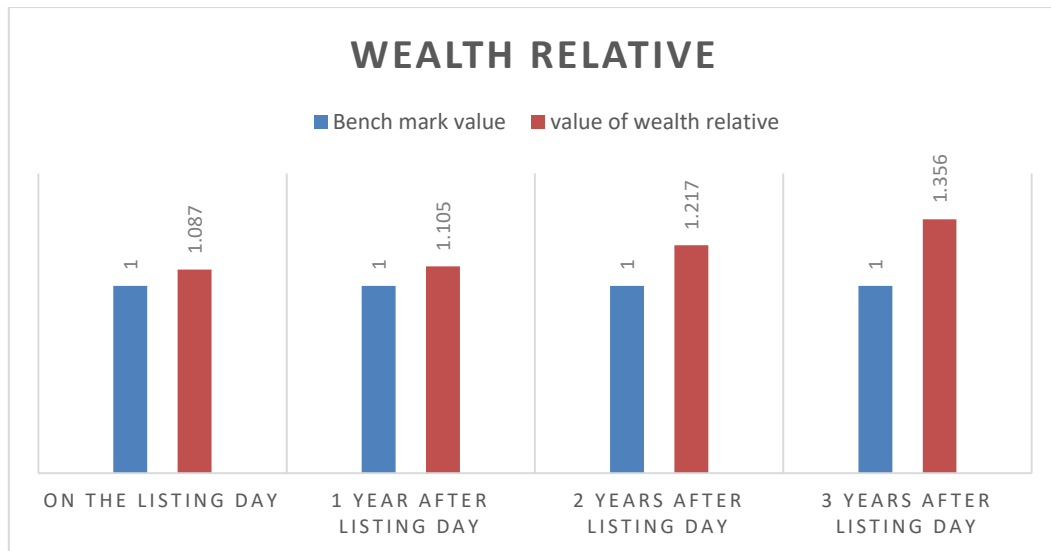


FIGURE 6 Wealth index

5. FINDINGS

1. The Individual returns and the Market returns are provided in the Table 1. The Raw returns were given good returns on the listing day, along with the market returns. Normally, research shows raw returns will gradually decrease over time, Inferior to that, this study shows companies are performing well in the long run also.
2. Sigachi Industries gave the highest gains with (267%) in the listing day, One 97 Communications was the biggest loser with (-27.4%) in the listing day.
3. The Mazagon Dock Ship builders Limited listed in 2020 October 12, with an issue price of 145/- and a closing price on the listed day of 171.95/-, resulting (25.95%) listed gain. After three years, the closing price of the issue is 2141.10/- with (1145.18%).
4. VKS Projects is the ultimate loser with (-99.72%) after 3 years, the issue provided zero returns on the listing day itself.
5. There are a few issues that performed very well in later years due to companies' individual performance and coping with the market behavior.
6. The wealth relative index provides that the value is 1.087 on the initial day, which means on the initial day, the returns are 87% to the investors. Later, within months, it comes down to the benchmark 1. The index provided good value even after one year.

6. SUGGESTIONS

1. The performance of the issues depends on the market conditions and movements; Hence, it is suggested that if the borrowers raise the capital in a bullish market, the investors will be positive to buy, and the returns for the investors will be high.
2. From the previous studies and literature, it is very clear that the initial day performance is very high and returns are also very high, but the same trend is not continuous due to several reasons. It is suggested that the companies should care about the investors in the future also for gaining good returns.
3. It is suggested that the SEBI should monitor the Book Building process of the issues, because the price band fixation and its performance should be clearly known to the uninformed investors.

7. CONCLUSION

From the above analysis, it is clearly concluded that the performance of the issues is very high on the initial day and the investors will gain good returns. Later, the trend is not continuous, and the investors will definitely lose after a few weeks if they are buying and holding the shares. But in the long run, the investors also gain good returns and cope with the market conditions.

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