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# Do SMEs and Main Board IPO Firms Behave Differently on Listing?

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**Abstract:**

The study investigates the factors driving listing returns and simultaneously compares the performance in both the short and the long-term of India's SME IPO firms with main board IPO firms. The study primarily employs multivariate regression on a sample of 216 main board and 602 SME segment IPO firms listed on the respective segments of both the major stock exchanges of India between January 2012andDecember 2021to assess whether the short-run and long-run performance of these segments vary. Further, it employs the listing segment as an independent variable along with size and subscription levels (overall, institutional and retail) as control variables to determine the impact of the listing segment on performance. The study suggests that main board IPO firms outperform the SME segment in the short term whereas both segments perform similarly in the long run. It also demonstrates that both size and subscription (both retail and institutional) are significant factors determining short-run performance. The study has implications for the investor community by showing that on the listing day, the main board IPOs outperform SME IPOs, which will help build their perception.

## 1. Introduction

Small and medium businesses play a crucial part in fostering the nation's, all-inclusive economic growth. However, operating and financial conditions pose a challenging environment to these enterprises, making it arduous to access the multiple financing options available thereby impeding their growth. Therefore, in an additional effort to make capital more accessible to these enterprises, the government modified the prerequisites of issuance and listing and established a separate platform for the SME segment. SEBI devised a separate set of eligibility requirements for the firms to get listed under these segments. With the establishment of the dedicated listing segment for small and medium enterprises on both NSE and BSE in 2012, the entire scenario in the IPO market appears to have changed.

The SME segment helps visionary leaders and innovators transform their entrepreneurial aspirations into tangible achievements simultaneously providing investors seeking untapped potential and diverse portfolios with a unique avenue. The segment has however seen extremely low volume and occasional trading, which raises the likelihood that some shady investors and promoters might manipulate prices to further their agendas, eventually leading to the underperformance of IPOs listed in the SME segment, in the long run. Thus, the investors in these SME IPO firms are at higher risk than they would be in main board IPOs.

Majority companies, when issuing new shares, intentionally underprice them to gain humongous profits. This strategy ensures the subscription of a large portion of the issue and subsequent making of profits.

IPO underpricing is an act of issuing shares at a price lower than their listing price. While the long-term benefits of IPO underpricing may not be immediately apparent, it is widely accepted and established that IPOs resulting in favourable returns on the day of listing, help issuers generate wealth. Multiple theories have been laid out to explain this anomaly of the equity market- information asymmetry theory by Rock, (1986),(Beatty & Ritter, (1986), Signalling theory by Allen&Franklin (1989), Grinblatt & Hwang (1989), Marshall (1998), and Agency theory to name a few. There is no single explanation describing the difference in short-run performance of both the main board and SME segment. In light of these contradictions, a comparison of the performance of IPOs of both segments will help in comprehending and managing the related risk. The study also seeks to understand how the sentiment of knowledgeable and ignorant investors determines performance of IPO since the long and short run.

Succeeding paragraphs of this research article have been organised in this manner: Section two discusses the existing studies related to IPOs of small and medium enterprises, with international studies first and then Indian studies. Section three identifies the research gap, lays objectives and establishes hypotheses. Sample, data and research methodology employed herein are comprehensively presented in section four. The fifth section presents the data analysis while section six discusses the results and section seven presents the outcome and the last section summarizes and concludes the study with implications, limitations along with the potential for additional study in this field.

## 2. Review of Literature

Researchers worldwide have examined IPO underpricing; several hypotheses and determinants have been established to determine the causes and characteristics of underpricing. Also, various studies focused on the IPOs listed on the AIM or SME segment: meant for small-size companies with less stringent eligibility requirements. Brau & Osteryoung (2001) discuss the issue of micro-IPOs to determine the factors impacting the likelihood of success or failure by assessing and analysing documents of small corporate offering registration known as SCOR documents in the US market. On empirical investigation using logistic regression: ownership and governance aspects, marketing mechanism and expenses, business cycle stages and signalling factors were found to be crucial factors impacting the likelihood of success or failure of micro-IPO.

Gao et al ( 2015)suggested that high levels of discretionary accruals immediately before the IPO transforms into high levels of underpricing on listing and poor long-run performance in SME IPO firms of China, listed between 2006 and 2010 on the SME board of Shenzhen Stock Exchange. Similarly, Goergen et al (2003)also conclude that the underpricing of IPOs listed on Euro NM is 2-3 times more on average than in major markets and the fraction of IPOs with negative initial returns is substantially larger. The study further concludes that both the types of long run returns- the Cumulative abnormal returns and the Buy and Hold abnormal returns are highly negative and significantly different from that of IPO firms of the main segment.

Bradley et al (2006) also suggest in a similar way about the small or penny stock IPOs having higher levels of underpricing than regular main board IPOs in the US from 1990 to 1998 and significantly inferior long-run performance. Additionally, the study suggests that these IPO stocks have a prolonged lock-up period and higher margins.

Jiming & Xing (2012)looked at the causal connection and the resulting impact among the shift in operating performance and ownership concentration after IPO of the SME firms which got listed on the China's Shanghai Stock Exchange. The results indicate towards a strong positive association among ownership concentration and operating performance of the firms post the IPO.

However, Burrowes & Jones (2004) report a low level of underpricing in IPOs which got listed on the newly introduced AIM segment of the London Stock Exchange contrary to what is normally associated with small, young, and expanding firms. Furthermore, in comparison with the IPOs which were listed on the main segment over major stock exchanges of US, UK, and other developed nations, the initial returns (measured as raw and adjusted with market return) demonstrate that IPOs registered on the AIM segment of the London Stock Exchange exhibit to be cautiously and prudently ill-priced. The study further reports that these IPOs underperformance in the long-run is similar to firms listed on the main segment**.** On similar lines as this, Chorruk & Worthington (2013)also suggested that underpricing is significantly lower in IPOs listed on the Market for Alternative Investments (MAI) in Thailand than that for IPOs of companies listed on the main Stock Exchange. This study suggests that small firms perform good post listing, with market-adjusted positive returns until second-year of listing.

Similarly, Gao et al (2015)while studying the performance of SME IPO firms in China in long run, suggested that Chinese SME IPOs outperform the market and behave differently than the main board IPOs in China. However, SME firms with earnings manipulation in the pre-IPO period continued showing underperformance in the long run post-listing. Yang et al. ( 2020)concluded that family firms listed on SME platforms in China exhibit lower underpricing levels than non-family firms and further reports more pronounced inverse relation of family involvement with underpricing where the family members have political ties and this gets moderated with the presence of state ownership.

Among studies in India, Dhamija & Arora (2017) suggested a lower level of underpricing in SME IPOs than what is exhibited and reported by other studies of main board IPOs. The reason listed by the study emphasises that being a new segment, it has not caught the eye of the investors and, that investors might be a bit sceptical about investing in these young firms. Furthermore, underpricing seems to be intentional, as both- the issuers and the underwriters are unsure of the market response. This is further supported by the low oversubscription rate of these IPOs. On analysing the factors by employing regression analysis, it finds that the offer type, stock exchange, size of the issue, the reputation of the lead managers, promoter shareholding, and the oversubscription rate appear to be the significant factors impacting underpricing. The performance of SME IPO firms in the long run was computed using holding period return (HPR) for one year holding after the listing and the study shows 123.67 % raw holding period return and 99.7% excess holding period return, which is in contradiction with other international and Indian studies.

The average age of the board members, relationship between board members and their directorships, size of the board, proportion of board directors and board committees are the significant governance factors impacting underpricing in SME IPOs in India, according to Arora & Singh (2020). Further referencing the entrenchment hypothesis, it reports a quadratic linkof underpricing with promoter ownership, where underpricing first rises with an increase in promoter ownership before beginning to decrease with an increase in promoter ownership.

Arora & Singh (2021)also examined the pattern of performance in the long-runof SME Initial Public Offerings (IPOs) in India along with determining and analysing issues and firm-related characteristics, impacting this performance. Their research reveals a long-run overperformance of IPOs in this segment which contradicts with existing international studies on SME IPOs but is similar with the findings of Dhamija & Arora (2017) in India and studies of some Asian markets – China, Malaysia and Korea. The findings further include that subscription rate and size of the issue are negatively impacting the buy and hold abnormal return, while reputation of the underwriter, market conditions (hot or cold), first day returns, auditors' reputation, profits prior to issue and inverse of issue price have a significant and substantive positive impact on BHAR. However, firms' age and size, volatility and leverage have no significant relationship with BHAR.

Dhamija & Arora (2017) also concluded that in comparison to main board IPOs, SME IPOs gave a very high holding period abnormal return. Arora & Singh (2021) too concluded on the same lines that in India, SME IPOs outperform the market index over a one-year time period.

The studies on first day returns and the long-term performance of Small and Medium Enterprise IPOs document mixed results. In some markets (UK, China, Thailand, India) they exhibit lower underpricing than mainstream IPOs, whereas in some markets (USA, EuroNM) they exhibit a higher level of underpricing and different reasons have been attributed to these mixed sets of results.

## 3 Research Gap:

The extensive review of international and Indian literature in this area, confirms that underpricing exists both in the main board IPOs as well as the SME IPOs. However, to solve investor's dilemma of whether to invest in main board IPOs or SME segment IPOs for better returns, a comparison of the returns of IPOs of the main segment with that of SME segment in India needs to be examined in depth. There is a dearth of studies comparing the performance of these two segments.

## 4. Objective and Hypotheses

To address the research gap, the broad objective crystallized is:Is there any difference in the short- and long-term performance between the main board and the SME segment IPO firms listed in India. The short run performance has been measured as - raw returns and returns adjusted with market returns between the day of issue closing and the day of listing on the respective segment of the stock exchange whereas long run performance has been measured using Buy and Hold Return (BHR) and Buy and Hold Abnormal Return (BHAR i.e. BHR adjusted with market returns during the contemporaneous period). The long-term performance has been measured for six holding period ranging from 1 week to 3 years from the day of listing. The study further aims at determining whether the first day returns and the long-term performance of these IPO firms are impacted by listing segment, size of the firm and the subscription levels (overall as well as bifurcated into retail and institutional subscription levels).

### *Hypothesis 1*

*$H_0$: The listing day returns of IPOs on the main board and those of the IPOs in the SME segment do not significantly differ with each other.*

*$H_a$: The listing day returns of IPOs on the main board and those of the IPOs in the SME segment significantly differ with each other.*

### *Hypothesis 2*

$H_0$: The BHARsof six holding periods spanning from one week tothree years, of IPOs of the Main Board and SME segment show no significant difference.

$H_a$: The BHARs of six holding periods spanning from one week tothree years, of IPOs of the Main Board and SME segment show significant difference.

## 5. Research Methodology

The current study unties the performance of 216 main board IPOs and 602 SME segment IPOs issued between January 2012 to December 2021 at the Small and Medium Enterprises segment and the main board segment of NSE and BSE- the major stock exchanges of India. As the SME segment was launched in 2012 in India and had its first listing in February 2012 only, therefore, for comparison and analysis the sample period begins from January 2012 to provide the widest coverage to the activities of the Indian IPO market, and includes all equity issues till December 2021.

To test hypothesis 1 and hypothesis 2, regarding significant differences in listing day gains (both measures- raw returns as well as returns adjusted with market returns between the day of issue closing and the day of listing) and the BHARs (of six holding periods) of the firms registered for stock trading on the main and the SME segments of the Indian stock exchanges, students t-test has been used. (Kumar & Totla, 2023b).

To determine the impact of the listing segment on underpricing, first day returns and returns adjusted with market return were taken as the dependent variable in a multiple regression analysis(Maheshwari & Kumar, 2022). The listing segment, a dummy variable of the Main board/ SME segment, is the independent variable that we are interested in. Total Assets were taken to be the proxy for size and overall subscription level was taken as the control variables. Another regression model using retail subscription level and institutional subscription level instead of overall subscription level was also analyzed to determine the impact of informed and uninformed investor sentiment separately on the IPO underpricing of these two segments(Kumar & Totla, 2023a)

$$LDR_i = \alpha + \beta_1 mainboard + \beta_2 \ln(sub_i) + \beta_3 lnTA + \varepsilon_i \quad \text{(Eq. no.1)}$$

$$LDR_i = \alpha + \beta_1 \text{mainboard} + \beta_2 \, ln(Rsub_i) + \beta_3 ln(Isub_i) + \beta_4 lnTA + \varepsilon_i \quad \text{(Eq. no.2)}$$

$$MAER_i = \alpha + \beta_1 \text{mainboard} + \beta_2 \ln(sub_i) + \beta_3 lnTA + \varepsilon_i \quad \text{(Eq. no.3)}$$

$$MAER_i = \alpha + \beta_1 \text{mainboard} + \beta_2 \, ln(Rsub_i) + \beta_3 ln(Isub_i) + \beta_4 lnTA + \varepsilon_i \quad \text{(Eq. no.4)}$$

$$BHAR_{iT} = \alpha + \beta_1 (dinitialreturns_i) + \beta_2 \ln(assetsize_i) + \beta_3 (dmainboard_i) + \varepsilon_i$$
(Eq. no.5)

## 6. Data Analysis

The descriptive statistics (Table 1) suggest that the average listing day return for IPO firms which got listed on the main board is 19.75% whereas it is 6.15% for IPO firms listed in SME Segment. The average return in excess of the market return for the contemporaneous time for main board and SME segment IPOs is 19.69% and 5.94% respectively. This shows that both segments yield positive returns on the when they get listed as compared to the returns the market index yields during contemporaneous period. However, the first day returns of IPO firms on the Main Board are higher than that of the IPO firms on SME segment.

**Table 1: Descriptive Statistics of Main Board and SME IPOs**

| Variable | Main Board IPOs | SME Segment IPOs |
|---|---|---|
| Average Listing Day Return | 19.75% | 6.15% |
| Average Market adjusted Excess Return | 19.69% | 5.94% |
| Average Overall Subscription Level (in times) | 37.21 | 8.63 |
| Average Retail Subscription Level (in times) | 9.55 | 7.25 |
| Average Institutional Subscription Level (in times) | 18.14 | 10.07 |
| Average Total Assets (in crores) | 6484.09 | 91.62 |
| Average Age (in years) | 22 | 12 |
| Average Issue Size (in millions) | 12110.34 | 115.18 |
| N | 216 | 602 |

Source: Constructed by authors

The average issue size is approximately Rupees 1200 crores and 12 crores for the main board and SME segments respectively. Similarly, the average subscription level of the main board IPOs is almost 4 times the subscription level of SME segment IPOs. The difference in average age and asset size of IPO firms of the two segments is because of the different listing requirements of the two segments. Young and small companies get listed in the SME segment and old and big companies get listed in the main board segment. The difference in all the variables between the main board and the SME segment IPOs is extremely high.

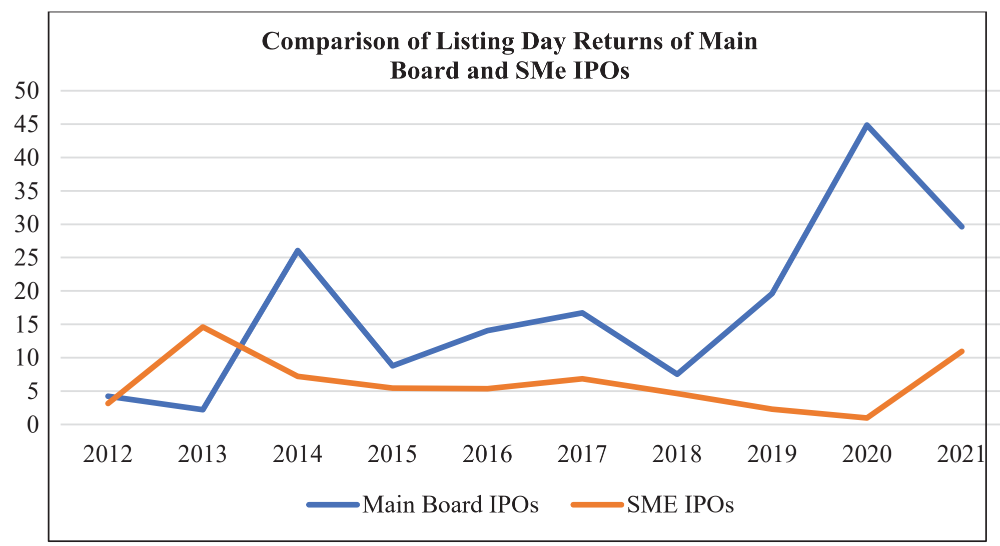
**Table 2: Year-wise Average Listing Day Returns Main Board and SME IPOs**

| Year | Main Board IPOs | SME IPOs |
|---|---|---|
| 2012 | 4.23% | 3.14% |
| 2013 | 2.21% | 14.60% |
| 2014 | 26.08% | 7.22% |
| 2015 | 8.78% | 5.46% |
| 2016 | 14.08% | 5.36% |
| 2017 | 16.70% | 6.85% |
| 2018 | 7.53% | 4.64% |
| 2019 | 19.59% | 2.28% |
| 2020 | 44.86% | 0.97% |
| 2021 | 29.63% | 10.94% |

Source: Constructed by authors

The year-wise first day returns of IPOs on the main board and the SME segment (Table 2 and Figure 1) show that in all years except the year 2013, listing day returns on Main Board IPOs are far higher than that of SME IPOs. The two series move in the same direction except in the year 2020 where the first day returns of the IPOs on SME segment plunged whereas that of the main board IPOs have increased. This change in direction may be due to the breaking of the COVID-19 Pandemic which adversely hit small and medium enterprises more.

**Figure 1:Average Listing Day Returns of Main Board and SME IPOs**




## 7. Result and Discussion

### *7.1 Main Board and SME IPOs performance*

The sample was split into two groups in order to investigate the differences in the underpricing and long-term performance of initial public offerings listed on the Main and the SME segment. The first group is of the IPO firms which got listed on the main board segment and the second group consists of firms which got listed on the SME segment of the stock exchanges in India.

The student t-test results (Table 3) for the difference in first day raw returns and the returns in excess of market returns between the Main Board and the SME segment IPOs are significant at 1%. This indicates a discernible difference in the first day returns of the IPOs of the two segments. The first hypothesis (hypothesis 1) assuming that there is no significant difference in the first day returns of main board IPOs and SME segment IPOs stands rejected.

The Initial Public Offerings on the Main Board Segment of the major Indian stock exchanges generate significant returns for investors who purchased at the offer price and sold on listing and these returns are significantly greater than what an investor could earn by investing in the IPOs listed on the SME segment.

**Table 3: Difference in Listing Day Returns of Main Board and SME IPOs**

| | | Mean | N | t statistics | Significance |
|---|---|---|---|---|---|
| **Listing Day Raw Returns** | Main Board IPOs | 19.75% | 216 | 5.369 | .000 *** |
| | SME IPOs | 6.14% | 602 | | |
| **Market-Adjusted Excess Returns** | Main Board IPOs | 19.69% | 216 | 5.483 | .000 *** |
| | SME IPOs | 5.94% | 602 | | |

Source: Constructed by authors

The table reports the student t-test for the difference in average listing day returns of Main Board IPOs and SME IPOs Significant at ***1%

The BHR of the IPOs of these two segments are statistically different only in a holding period of 1 week while in a holding period of more than one week, the two segments generate similar buy and hold returns (Table 4).

**Table 4: Difference in Average BHRs of IPOs of Main Board and SME Segment**

| Holding Period Average BHR | Segment | Mean BHRs | N | Standard Error | t statistics | Significance |
|---|---|---|---|---|---|---|
| 1week BHR | Main Board | 1.2333 | 216 | .0318 | 3.959 | .000*** |
| | SME Segment | 1.0972 | 602 | .0128 | | |
| 1-month BHR | Main Board | 1.2338 | 216 | .0318 | 1.374 | .170 |
| | SME Segment | 1.1768 | 602 | .0221 | | |
| 3 months BHR | Main Board | 1.3184 | 198 | .04267 | .941 | .347 |
| | SME Segment | 1.2588 | 595 | .03363 | | |
| 6 months BHR | Main Board | 1.4662 | 183 | .05763 | .605 | .545 |
| | SME Segment | 1.3867 | 582 | .0713 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1-year BHR | Main Board | 1.5077 | 158 | .0823 | -.135 | .893 |
| | SME Segment | 1.5270 | 557 | .0722 | | |
| 3 years BHR | Main Board | 1.3957 | 126 | .1119 | -.712 | .477 |
| | SME Segment | 1.5585 | 265 | .1484 | | |

Source: Constructed by authors

The table reports the output of the t-test determining difference of average BHRs of IPOs of the main board and SME Segment for all six holding periods. Significant at 1% ***

The independent sample t-test results (Table 4) suggest that the long-term abnormal returns (BHAR) of IPOs of the two segments do not significantly differ with each other for a holding period of more than a week. Thus, we fail to reject the second hypothesis (Hypothesis2) of no significant difference in long-term abnormal returns of IPOs of the main board and SME segment for 1-, 3- and 6-month period along with 1 and 3-year holding period. The mean BHAR levels for IPOs of the main board segment are significantly more than the IPOs listed on the SME segment only for 1 week of the holding period. However, for a holding period greater than one week, the difference between both the segments is of no statistical significance and the null hypothesis cannot be rejected.

**Table 5: Difference in Average BHARs of IPOs between Main Board and SME Segment**

| Holding Period Average BHAR | Segment | Mean BHARs | N | Standard Error | t statistics | Significance |
|---|---|---|---|---|---|---|
| 1week BHAR | Main Board | .2315 | 216 | .03187 | 3.959 | .000*** |
| | SME Segment | .0938 | 602 | .01289 | | |
| 1month BHAR | Main Board | .2205 | 216 | .03189 | 1.312 | .190 |
| | SME Segment | .1662 | 602 | .02214 | | |
| 3 months BHAR | Main Board | .2811 | 198 | .04267 | 1.362 | .174 |
| | SME Segment | .1862 | 595 | .03363 | | |
| 6 months BHAR | Main Board | .4004 | 183 | .05763 | .397 | .691 |
| | SME Segment | .3479 | 582 | .07138 | | |
| 1year BHAR | Main Board | .3916 | 158 | .07806 | -.237 | .813 |
| | SME Segment | .4251 | 557 | .07186 | | |
| 3 years BHAR | Main Board | .0670 | 126 | .11110 | -.574 | .566 |
| | SME Segment | .1976 | 265 | .14761 | | |

Source: Constructed by authors

The table reports the output of the t-test determining difference of average BHARs between IPOs of the main board and SME Segment for all six holding periods.

Significant at ***1% .

## 7.2 Impact of Main Board/ SME Segment on first day returns

To assess the effect of the listing segment on IPO Underpricing variables, regression specifications given in equation no.1 to equation no.4 were tested. Table 6 reports the results for the given regression specifications. All the given regression specifications have been tested for the assumptions of multicollinearity, heteroskedasticity and autocorrelation problems amongst the residuals. Cross section data so no issue of auto correlation and for multicollinearity -VIF values are less than 3 (in tolerance limit). For heteroskedasticity white consistent errors have been reported.

The regression analysis findings indicate that the magnitude of first day returns depends on the segment on which the IPO is listed. The coefficient (beta) for the ***mainboard*** is significantly positive (models i, ii, and iv) which means that the firms which got listed on the main board segment of the stock exchanges exhibit significantly higher listing day returns in comparison to those which got listed on the SME segment. Further ***lnTA*** is also significant but with the negative sign which means that listing day returns will be lower for firms with higher total assets. Overall subscription level(***lnsubscription)*** is also a significant factor determining listing day returns. The higher the subscription level higher is the listing day return. Similar is the relationship between retail subscription and institutional subscription levels.

Table 6: Multiple Regression Results for Impact of Main Board/ SME Segment Listing on IPO Underpricing (Listing Day returns)

| Dependent Variable / Independent Variable | Model (i) First Day Raw Returns | Model (ii) First Day Raw Returns | Model (iii) Returns in Excess of Market Returns | Model (iv) Returns in Excess of Market Returns |
|---|---|---|---|---|
| Mainboard | 4.785 (1.695) (.090)* | 10.581 (3.798) (.000)*** | 4.358 (1.550) (.122) | 10.146 (3.659) (.000)*** |
| lnSubscription | 8.796 (15.504) (.000)*** | - | 8.735 (15.457) (.000)*** | - |
| lnTA | -1.063 (-2.071) (.039)** | -1.726 (-3.201) (.001)** | -.901 (-1.762) (0.078)* | -1.583 (-2.951) (.003)*** |
| lnretailsubscription | - | 1.882 (2.635) (.009)** | - | 1.780 (2.504) (.012)** |
| lninstitutionalsubscription | - | 7.376 (9.410) (.000)*** | - | 7.428 (9.519) (.000)*** |
| C | 1.591 | 4.031** | .947 | 3.424* |
| $R^2$ | 27.2% | 26.2% | 27.2% | 26.3% |
| Adjusted $R^2$ | 27% | 25.9% | 26.9% | 25.9% |
| F-statistic | 101.407 | 71.926 | 101.219 | 72.207 |
| Probability (F stat) | .000*** | .000*** | .000*** | .000*** |
| Sample | 818 | 818 | 818 | 818 |

Source: Constructed by authors

The table summarizes the results of regression equations 7-10. Values in the first brackets are t values followed by p values.

Significant at *** 1%, **5%, *10%

**Table 7: Multiple Regression Results for Long Run Abnormal Returns of IPOs**

| Dependent Variable / Independent Variable | BHAR1W | BHAR1M | BHAR3M | BHAR6M | BHAR1Y | BHAR3Y |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| *dinitialreturns* | .319 (.000)*** | .425 (.000)*** | .495 (.000)*** | .688 (.000)*** | .752 (.000)*** | .174 (.485) |
| *lnassetsize* | -.012 (.145) | -.007 (.529) | -.005(.811) | -.039 (.306) | -.120 (.002)*** | .009 (.985) |
| *dmainboard* | .207 (.000)*** | .113 (.066)* | .150 (.161) | .254 (.210) | .521 (.014)** | -.130 (.738) |
| C | -.108 (.002)*** | -.128 (.012)** | -.166 (.053)* | -.042 (.798) | .233 (.164) | .021 (.954) |
| $R^2$ | .175 | .130 | .069 | .039 | .056 | .002 |
| Adjusted $R^2$ | .172 | .127 | .065 | .035 | .052 | -.006 |
| F-statistic | 57.550 | 40.676 | 19.204 | 10.297 | 13.831 | .263 |
| Probability (F stat) | .000*** | .000*** | .000*** | .000*** | .000*** | .852 |
| Sample | 818 | 818 | 787 | 759 | 709 | 390 |

Source: Constructed by authors

The table summarizes the results of the OLS estimation of the regression specifications 3-5. Figures in the first brackets are p values.

Significant ***1%, **5%, *10%

### 7.3 Outcome

The results indicate a considerable disparity in underpricing levels between main board and SME category IPOs. Firms listed on the SME segment have significant lower first day returns. This finding is similar to the findings of Dhamija & Arora (2017), Burrowes & Jones (2004), Gao et al. (2015). However, the outcome of the study, run counter to the idea that listing segment influences the performance of the IPOs in the long term. It implies that the IPO firms which got listed on these two segments produce comparable long-term returns. This is in contradiction with the findings of Arora & Singh (2021).

While analysing the IPO underpricing levels of firms listed on these two different segments, it is clear that old and large companies listed on the main board segment have higher subscription levels, resulting in significantly higher levels of underpricing than young and small companies tapping the market on SME segment.

## 8. Conclusion

The study empirically investigates if there is a significant difference in the short and long run performance of IPOs listed on the main board and SME segment in Indian stock exchanges by using data of 818 IPO firms listed on main board and SME segments of both BSE and NSE between January 2012 and December 2021. The results suggest a significant difference in underpricing levels of the main board and SME segment IPOs. Firms listed in the SME segment exhibit lower levels of first-day returns.

However, the findings of the study suggest otherwise for the effect of listing segments over the long-term abnormal returns of these IPOs. It suggests that IPO firms listed on the SME and the Main Board segment generate matching returns over the long term.

All existing previous studies have studied only a single segment- SME at a time and have not compared the performance over long-term of these two segments. Our study observed a positive BHAR of the SME segment IPOs. However, no statistically significant difference was observed in the performance over long-run of IPOs listed on the SME Platform and the main board segment of the Indian stock exchanges could be observed.

For investors: The study's findings indicate that the probability of generating profit in the short term is high in main board IPOs as compared to SME segment IPOs and therefore short-term investors should invest in main board IPOs. However, as IPOs which got listed on the main board and the SME platform yield similar long-run returns, from an investment point of view, investors should be indifferent about listing segments for long-run investment.

For policy making: With the IPO market still being dominated by large-sized companies, SEBI should strengthen the SME segment more and incentivize investors to participate in small IPOs thereby increasing efficiency in this segment.

For corporates: Smaller companies need to improve subscription levels, for which they need to incentivize investors to participate in their IPOs.

The major limitation of the study is concerning the measurement of Buy and Hold Abnormal Returns (BHAR). The implicit assumption of measuring BHAR is that the IPO's systematic risk is the same as that of the market index used, in this case, it is NIFTY i.e., the average betas of the IPOs is equal to 1. However, the betas are suggested to be higher than 1 and therefore the BHAR has an upward bias. Also, the calculation of BHAR uses the index as a benchmark which suffers from new listing bias and rebalancing bias. Also, BHAR suffers from skewness bias as long-term abnormal returns suffer from positive skewness. Also, the study is limited to IPOs in India only and therefore the findings cannot be generalized to other economies.

The growing role of the IPO market in driving economic growth in the country suggests many new areas of research. Cross-country comparison between main board and SME IPO performance across emerging economies or Asian countries seems to be an intriguing area for further study. Further studies could also focus on comparing IPO performance of main board and SME segment of sectoral firms.

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