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## Unpacking retail investor behaviour in Sme Ipos: What fuels the frenzy?

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### Abstract

Small and Medium Enterprises (SMEs) drive India's economy, contributing one-third of its GDP. In 2023 alone, SMEs raised over ₹5,500 crore through more than 120 IPOs, fueling growth and competitiveness. Despite extensive research on SME IPO performance, ownership structures, and information asymmetry, researchers have largely overlooked the factors influencing retail subscription in SME IPOs, leaving a critical research gap. This study analyzes the factors that influence retail subscriptions in SME IPOs in India, focusing on issue attributes, subscription rates, and external influences. An analysis was conducted on 506 SME IPOs listed between 2021 and 2024. JMP software was used to evaluate the effects of issue attributes, QIB and NII subscription patterns, and external factors on retail subscription rates. The findings indicate that issue price and issue size negatively impact retail subscriptions, while GMP, NII subscriptions, and QIB subscriptions positively influence them. The model explains 66% of the variance in retail subscriptions, highlighting the importance of market sentiment and institutional participation. The study expands the literature by incorporating a wider range of factors to provide a more comprehensive understanding of SME IPO subscriptions. It emphasizes the need for strategies to attract retail investors by enhancing transparency, improving pricing approaches, and mitigating risks, offering valuable insights for policymakers and market participants.

**Keywords:** India, Institutional investors, Investor behaviour, IPO subscription, Market sentiment, Retail investors, SME IPO.

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**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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### 1. Introduction

The MSME sector holds a pivotal role in driving economies forward due to its capacity to generate employment opportunities with minimal capital investment, consequently improving the quality of life for a significant portion of the population. Its significance is particularly pronounced in emerging economies like India, where financial limitations are often cited as a significant obstacle to development [1, 2]. Within this context, Small and Medium Enterprises (SMEs) grappling with limitations in tangible assets and profitability, often struggle to secure financing from banks.

In response, the Securities and Exchange Board of India (SEBI) has established specialised platforms on both the BSE and NSE to encourage SMEs to raise capital through the primary market and pursue listing. These platforms come with relaxed listing requirements, as per amended SEBI regulations, with the objective of incentivizing SMEs to access capital more easily. Since 2022, there has been a significant surge in interest surrounding SME IPOs in India, evidenced by the substantial increase in subscription rates from 323.05 times in 2022 to 641 times in 2023, driven by active engagement from HNI, retail, and QIB sectors. Furthermore, the average issue size surged to approximately Rs 32 crore in 2024, compared to Rs 26 crore in 2023 [3]. Despite the minimum investment threshold being higher at Rs 1 lakh for SME IPOs compared to the usual minimum bid size of around Rs 15,000 for mainboard IPOs, this hasn't deterred investor enthusiasm. This growing trend underscores the heightened enthusiasm for SME IPOs, fueled by robust market listings and propelled by high speculative and retail demand, leading investors to willingly pay premium prices for these investments [4, 5]. However, in March 2024, SEBI sounded the alarm on potential price and subscription manipulation within the SME sector, emphasizing the safeguarding of retail investors who perceive this arena as a fast track to financial gain. Given this context, an intriguing inquiry emerges: Is the decision to subscribe to SME IPOs solely motivated by the promise of gains on listing day, or are there additional factors influencing investors' choices in selecting specific IPOs? This study goes beyond the factors analyzed in prior research on SME IPO subscriptions [6, 7]. It incorporates additional relevant factors, drawing insights from the study by Shetty, et al. [8], which explored mainboard IPO subscriptions in the Indian context.

### 2. Conceptual Framework and Hypotheses Development

The SME IPO market in India has garnered significant attention in recent years, particularly among retail investors, despite the inherent uncertainties and information asymmetries that often characterise the new issues market [2, 9, 10]. Initial public offerings (IPOs), especially in the SME segment, have become a focal point of market dynamics, where investor sentiment, regulatory developments, and investment preferences intertwine. One critical aspect of this market is IPO subscription, which reflects the influence of market sentiment and investor confidence. The interplay between these factors—combined with external elements such as issue-specific attributes, subscription patterns and broader market conditions—plays a pivotal role in determining the success and retail subscription levels of IPOs. A deeper analysis of these elements is crucial to ensure that the platform remains a viable mechanism for genuine capital raising, rather than devolving into a risky investment landscape. Figure 1 illustrates the conceptual framework used in this study.

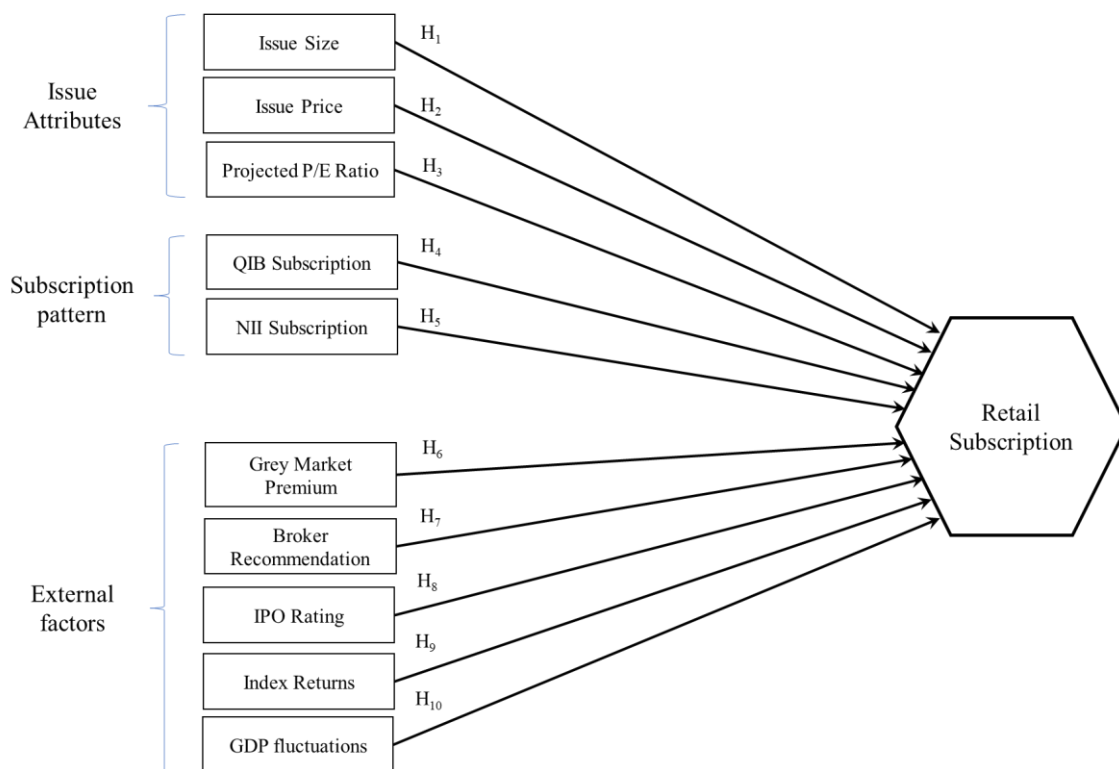


Figure 1. Conceptual framework.

### 2.1. Retail Subscription

In India, retail investors are classified based on an investment threshold, defined as those who invest ₹2,00,000 or less in the primary market [11]. They make up the largest group in SME IPOs, with a reserved allocation of 50% in fixed price issues and 35% in book-built issues. The increasing enthusiasm of retail investors has contributed significantly to the IPO boom in the country, as shown by retail investments totalling over ₹83,000 crore in 36 IPOs in 2024. This surge led to oversubscriptions by more than 12 times, with 7 IPOs experiencing oversubscriptions exceeding 50 times (*Rise of Retail Investors Interest in IPOs*, 2024). However, SME IPOs are viewed as riskier investments compared to mainboard IPOs [12], and as a result, smaller firms often rely more on retail investors, as institutional investors tend to avoid these higher-risk offerings [13].

While the efficient market hypothesis suggests that stock prices reflect all available information, Park, et al. [14] argue that retail investors often make decisions based on incomplete information. This is especially true in the case of SME IPOs, where retail investor participation is strongly influenced by institutional investors' involvement, as demonstrated by Neupane and Poshakwale [15]. Aneesh, et al. [16] further asserts that retail investors rely on alternative signals to assess a company's quality when deciding on IPO investments. Given the significant role of retail investors in SME IPOs, it is crucial to understand the factors that influence their investment decisions.

### 2.2. Issue Attributes

In Indian SME IPOs, the allotment process operates on a non-discretionary basis, resulting in greater clarity in subscription levels. This openness enables investors to genuinely evaluate a company's quality and demonstrates their willingness to invest in IPOs from SME firms. Moreover, the visibility in subscription levels closely relates to the attributes of the issue, allowing investors to effectively assess characteristics such as issue size, issue price, and projected P/E ratio, which significantly influence their investment decisions. While informed investors, such as institutional investors, exist, retail investors who are often uninformed play a crucial role in ensuring full subscription of IPOs, particularly in the case of SME IPOs in India [6].

#### 2.2.1. Issue Size

The issue size of small and medium-sized enterprises (SMEs) plays a crucial role in attracting investment, reflecting their growth potential and financial stability. Larger issue sizes can enhance a firm's visibility and credibility in the market, which increases investor interest and participation. According to Hedau [17], the issue size significantly affects the IPO offer price. Furthermore, the initial returns of IPOs are notably influenced by the issue size [18, 19]. However, Sandhu and Guhathakurta [20] found that larger IPO sizes reduce the likelihood of full subscription or oversubscription among Retail Individual Investors (RIIs) and Non-Institutional Investors (NIIs). In contrast, firms with larger IPO sizes tend to experience oversubscription primarily in the Qualified Institutional Buyer (QIB) category. This indicates that issue size can significantly influence retail subscription levels. Given this context, the current study aims to explore the relationship between issue size and retail subscription rates. Thus, we propose the following hypothesis:

*H<sub>1</sub>*: The issue size of SMEs significantly affects the level of retail subscriptions.

#### 2.2.2. Issue Price

Price anomalies frequently occur in IPO markets, particularly in emerging economies. The perception of underpricing among investors leads to excessive market momentum during the offering period, exhibiting an asymmetric impact across various issue sizes Suresha, et al. [19]. While issuers often deliberately underprice IPOs to signal quality and subsequently recover losses through higher prices in follow-on offerings; however, this strategy is not feasible for SMEs, as it risks exposing their true financial condition before they return to the market [21]. Conversely, when informed investors recognise that an issue is overpriced, they actively reject the investment and turn their attention to other opportunities that are more reasonably priced [22]. Furthermore, buyers and investors typically do not possess the same level of information as the seller or issuer, and their ability to interpret technical data is crucial, with corporate investors often having an advantage over individuals. This information asymmetry at all levels significantly influences security valuation [23].

In this context, the issue price is likely to encourage higher retail subscription levels, as investors are more inclined to participate in offerings they perceive as undervalued. Thus, it is hypothesised that:

*H<sub>2</sub>*: The issue price positively influences retail subscription levels.

#### 2.2.3. Projected P/E Ratio

The price-to-earnings (P/E) ratio is a widely used metric for evaluating a company's value and determining whether its stock is overvalued or undervalued. It helps investors assess the stock's market value and consider its potential for future earnings growth. However, the accuracy of P/E ratios can vary, particularly in the context of IPOs. Kim and Ritter [24] IPO valuations using P/E ratios from comparable firms are imprecise when based on historical data, though they improve when using forecasted earnings. Similarly, E R [25] evaluated the P/E ratio's ability to predict IPO prices for firms in Turkey from 1993 to 2010, finding an average forecast error of 35%, although the ratio showed strong explanatory power in regression analysis. Moreover, when the price exceeds the average P/E ratio, individual investors often become more cautious and may adopt a conservative approach, potentially leading to lower fundraising outcomes [26]. These findings highlight that while the P/E ratio is an essential tool for assessing company value, its accuracy, especially in IPO contexts, warrants further investigation. Therefore, it is hypothesised that

*H<sub>3</sub>*: The projected P/E ratio significantly influences the retail subscription levels.

### 2.3. Subscription Pattern

The Indian book building process demonstrates that institutional investor patterns influence retail and non-institutional bids Khurshed, et al. [27]. Sahoo [28] highlights a positive link between IPO underpricing and subscription rates, showing that institutional investors prefer underpriced IPOs, while retail investors exhibit varied responses to underpriced and overpriced offerings. This trend is further reflected in the subscription patterns of Qualified Institutional Buyers (QIBs) and Non-Institutional Investors (NIIs), who often exhibit under-subscription tendencies, especially toward overpriced IPOs. This is reflected in the subscription patterns of Qualified Institutional Buyers (QIBs) and Non-Institutional Investors (NIIs), who tend to under-subscribe, particularly to overpriced IPOs. Singh and Kalra [29] found that QIB subscription rates negatively correlate with stock volatility, while NII and Retail Individual Investor (RII) subscription rates positively correlate with volatility. Additionally, Mahalakshmi, et al. [30] reveal that QIB subscriptions influence both NII and RII subscriptions. Together, these studies suggest that institutional investor behaviour, particularly that of QIBs and NIIs, plays a significant role in shaping retail investor subscriptions. However, these findings are largely confined to mainstream IPOs, and it is important to explore whether this relationship holds for SME IPOs as well. Hence, it is hypothesised that:

*H<sub>4</sub>*: The QIB subscription influences the retail subscription levels.

*H<sub>5</sub>*: The NII subscription influences the retail subscription levels.

### 2.4. External Factors

External factors play a pivotal role in IPO subscription as they shape investor perceptions, influence market sentiment, and provide additional insights into the potential success and valuation of an offering. This study considers external factors such as Grey Market Premium (GMP), IPO ratings, broker recommendations, index returns, and GDP growth to examine their potential influence on retail IPO subscription rates and investor behaviour.

#### 2.4.1. Grey Market Premium

The grey market has been an informal part of India's trading landscape for a long time, playing a significant role in shaping IPO activities in the official market [31]. It offers early insights into market sentiment, where institutional investors focus on firm quality, while retail investors are heavily influenced by market sentiment, even in transparent markets [32]. Although research on developed markets emphasizes the significant role of investor sentiment in IPO grey markets, studies on this aspect in emerging markets remain relatively limited [33]. Specifically, the impact of the GMP on retail subscription levels, particularly in the case of SME IPOs, has been underexplored. Goyal and Dhiman [34] observed a relationship between the grey market premium and offer price, influenced by both retail and institutional subscription levels. This suggests a potential connection between the grey market premium and retail subscription, leading to the hypothesis:

*H<sub>6</sub>*: Grey Market Premium influences the retail subscription levels.

#### 2.4.2. Broker Recommendation and IPO Rating

Stock brokerage firms are essential in maintaining the health of the stock market by acting as intermediaries that link investors to the market. They help attract new participants and provide valuable guidance on stock market investments [35]. According to McNichols, et al. [36], recommendations from affiliated sources often fail to differentiate between strong and weak IPO stocks, while those from unaffiliated sources tend to be untimely and provide minimal valuable trading insight. On the other hand, Sahoo [28] demonstrated that positive analyst recommendations, IPO grading, and pre-issue analyst coverage not only boost investor confidence but also reduce underpricing and enhance oversubscription rates. This suggests that broker recommendations may play a significant role in shaping investor behaviour and influencing retail subscription rates.

When an IPO is launched in the Indian market, reviews and evaluations are typically posted on two popular websites: ipowatch.in and chittorgarh.com. Chittorgarh.com, a leading IPO review platform, includes an IPO Rating system that is based on user feedback. According to the website, the user ratings for an Initial Public Offering (IPO) reflect the assessments provided by various financial institutions, independent brokers, and analysts registered with SEBI (Securities and Exchange Board of India) [37]. The list features prominent players in India's financial sector, including Capital Market, ICICI Securities, Nirmal Bang, Motilal Oswal, HEM Securities, Ventura, Reliance Securities, Angel One, and Aditya Birla Money. User ratings for IPOs offer several advantages, such as sharing valuable information, providing peer perspectives, assessing risks, capturing market sentiment, and serving as community-driven insights. These elements enable users to compare various IPOs effectively. However, it's important to remember that these ratings are based on individual opinions. Based on the aforementioned literature, two hypotheses emerge:

*H<sub>7</sub>*: Broker recommendations significantly influence retail subscription to IPOs.

*H<sub>8</sub>*: IPO ratings impact retail subscription decisions.

#### 2.4.3. Index return and GDP

A stock market index reflects significant fluctuations in the stock market and is constructed using stocks chosen according to factors such as market capitalization, industry classification, and market size (Mani, 2023). Retail investors are increasingly drawn to IPOs for potential listing gains, but caution is crucial during volatile markets. Numerous empirical studies conducted in the past Bandi and A S [38]; Duraipandian and Suresh [39] and Sahoo and Rajib [40] have analysed the relationship between IPO returns and index performance. These studies have sought to provide investors with insights regarding factors such as underpricing, and the influence of robust QIB subscriptions on IPO returns. However, there is a

noticeable gap in the literature regarding the impact of index returns on retail subscriptions in SME IPOs. Therefore, it is hypothesised that:

*H<sub>9</sub>*: Index returns influence retail investor participation in SME IPOs.

India ranked as the fifth-largest economy in the world based on nominal GDP, has a developing mixed economy with a significant public sector in key strategic areas. The country's GDP growth has averaged between 6% and 7% annually since the beginning of the 21st century. Approximately 70% of this growth is driven by domestic and private consumption, with government spending, investments, and exports also contributing significantly to economic expansion [41]. However, India's GDP growth has recently declined from over 8% in early 2023 to just above 5%, a trend reminiscent of the drop from 9% to 3% observed in 2018-2019 [42]. Research has shown that GDP growth influences the size of Initial Public Offerings (IPOs), suggesting a causal relationship between the two Rani and Kaurmann [43]. Bhullar and Sahoo [44] further support this by showing that factors such as GDP, business confidence, the BSE index performance, and foreign direct investment all significantly impact IPO activities. This suggests that fluctuations in GDP could play a crucial role in influencing the subscription rates of retail SME IPOs. Therefore, it is hypothesised that:

*H<sub>10</sub>*: Changes in GDP influence retail investor participation in SME IPOs.

Arora and Singh [6] and Srivastava, et al. [7] investigated the factors influencing SME oversubscription and found that oversubscription is negatively impacted by issue price, pricing mechanism, and listing delay, while positively influenced by firm size, underwriter reputation, market conditions, and underpricing. However, they acknowledged the study's limitation in considering only a limited set of variables and recommended the inclusion of additional macroeconomic factors for a more comprehensive analysis. Meanwhile, Srivastava, et al. [7] undertook a qualitative analysis of expert opinions on SME IPO subscriptions, revealing that aside from risk and return considerations, investor and issue-based characteristics significantly sway investor decisions. However, they expressed reservations regarding the generalizability of their results due to the research technique employed. Given these limitations, this study seeks to expand on the extant literature by incorporating a wider array of factors to offer a more thorough understanding of SME IPO subscriptions.

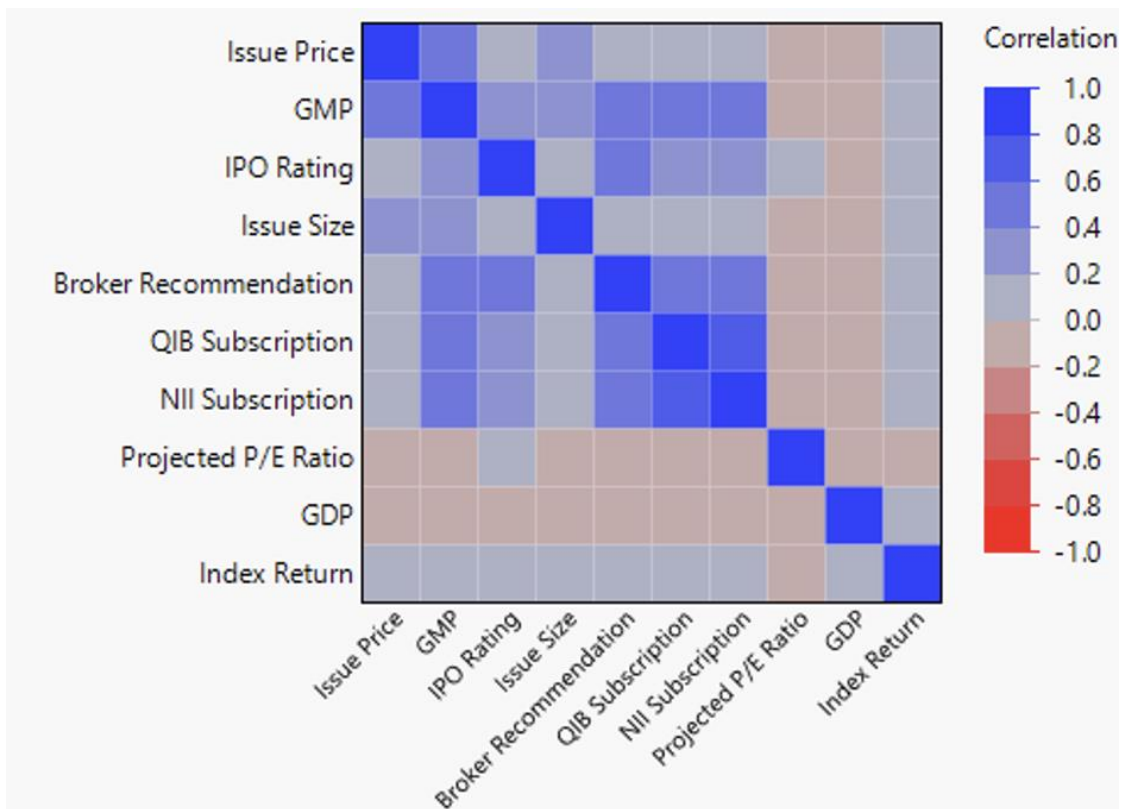
### **3. Research Methodology**

The literature highlights several factors that affect the retail subscription rate in SME IPOs. In this study, the retail subscription rate is considered the dependent variable, influenced by three primary sets of independent variables: Issue attributes, Subscription patterns, and External factors. Issue attributes encompass variables such as issue size, issue price, and projected P/E ratio. Subscription patterns include the levels of QIB and NII subscriptions for each listed IPO. External factors involve Grey Market Premium (GMP), Broker Recommendations, IPO Ratings, Index Returns, and GDP fluctuations, which all serve as indicators of stock market performance.

The dataset for the study includes 506 IPOs issued between January 1, 2021, and December 31, 2024. The study gathered secondary data from various online sources. Information on issue size, issue price, and projected P/E ratio was obtained from the bsesme.com and NSE Emerge website(<https://www.nseindia.com/market-data/sme-market>). Data on Grey Market Premium (GMP), IPO ratings, broker recommendations, QIB and NII subscription rates were collected from financial research websites such as <https://www.chittorgarh.com/>, <https://ipowatch.in/>, <https://www.sptulsian.com/f/ipo-analysis>. Monthly index returns (NIFTY 50) and historical data were sourced from the National Stock Exchange of India (<http://www.nseindia.com/>). Data analysis was conducted using JMP Pro software, and multiple linear regression was applied to quantify the impact of the identified independent variables on the retail SME IPO subscription rate.

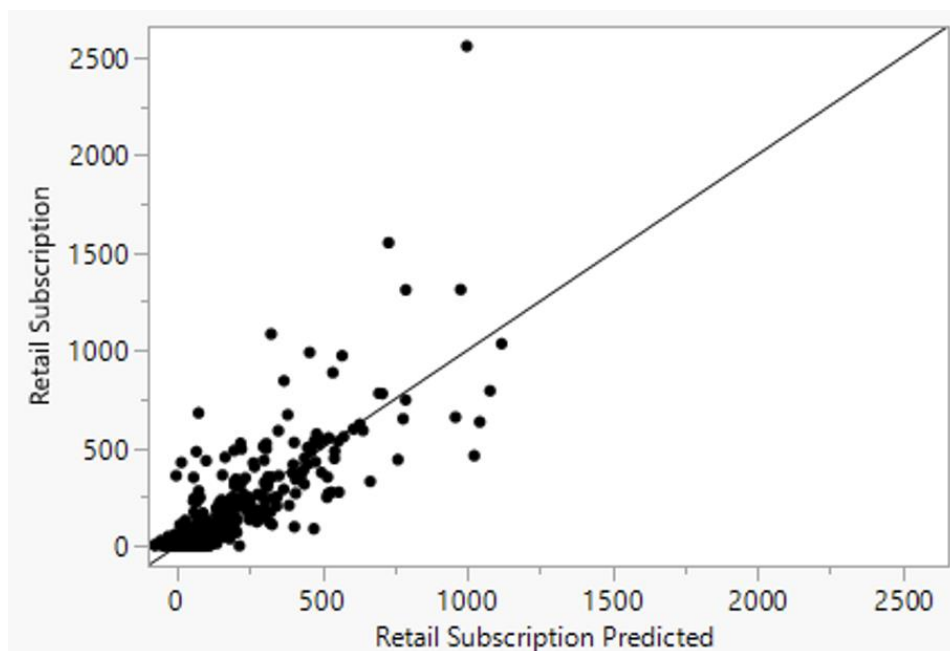
### **4. Results**

Since all variables in this study are continuous, correlation estimates were first calculated to assess the relationships between the variables before conducting the multiple regression analysis. Figure 2 presents a summary of the pairwise correlations between the key variables analysed in the study.



**Figure 2.**  
Pairwise correlations.

The correlation analysis (Figure 2) shows that Issue Price is moderately correlated with GMP (0.56) and Issue Size (0.39), indicating higher issue prices are linked to larger issue sizes and better GMPs. GMP also correlates strongly with Broker Recommendation (0.50), QIB Subscription (0.56), and NII Subscription (0.49), suggesting better GMPs attract more favorable recommendations and institutional interest. IPO Rating is positively correlated with Broker Recommendation (0.49) and QIB Subscription (0.34). QIB and NII Subscription show a strong correlation (0.73), while the Projected P/E Ratio has weak correlations with other variables. GDP and Index Return have minimal impact on the IPO characteristics. These results highlight the strong relationship between GMP, Issue Size, and subscription activity.



**Figure 3.**  
Actual vs Predicted plot.

Figure 3 suggests that the apparent outliers, where retail investors have subscribed in unusually high volumes, are not anomalies; however, they reflect natural variations in investor behaviour. These deviations likely result from specific

factors, such as market booms, promotions, or external influences, that drive higher subscriptions. The increasing scatter with higher predicted values indicates that variability grows with larger subscription levels, which is common when a small number of high-value investors significantly impact the totals.

The regression model includes 506 rows and 12 parameters. The R-squared value of 0.66 indicates that approximately 66% of the variance in the data is explained by the model. The Adjusted R-squared (0.65) slightly accounts for the number of predictors.

**Table 1.**  
Parameter estimates.

Term	Estimate	Std Error	t Ratio	Prob> t	Lower 95%	Upper 95%
Intercept	1.4404608	30.609233	0.0470597	0.9625	-58.69958	61.580502
Issue Price	-0.292276	0.1028275	-2.84239	0.0047*	-0.494308	-0.090244
GMP	0.7551389	0.1861745	4.0560811	<.0001*	0.3893492	1.1209285
IPO Rating	6.8509131	6.0618752	1.130164	0.259	-5.059265	18.761091
Issue Size	-0.564611	0.1579656	-3.574266	0.0004*	-0.874977	-0.254245
Broker Recommendation	15.791536	11.14524	1.4168861	0.1571	-6.106275	37.689347
QIB Subscription	-0.616372	0.1568884	-3.928728	<.0001*	-0.924621	-0.308123
NII Subscription	0.5723894	0.0290027	19.735756	<.0001*	0.5154059	0.6293729
Projected P/E Ratio	0.0499266	0.1669174	0.2991096	0.765	-0.278027	0.3778806
GDP	18.914697	207.27693	0.0912533	0.9273	-388.3364	426.16577
Index Return	29.692412	16.578046	1.7910682	0.0739	-2.879603	62.264427

Note: Dependent variable- Retail subscription, \* — significant at  $p < 0.01$ .

The regression analysis (see Table 1) identifies key predictors of the dependent variable based on the provided estimates. The Intercept ( $\beta_0 = 1.44$ ,  $p = 0.9625$ ) is not statistically significant, suggesting no strong baseline effect in the model. Issue Price ( $\beta_1 = -0.29$ ,  $p = 0.0047$ ) demonstrates a significant negative relationship, indicating that higher issue prices are associated with a decrease in the dependent variable. Similarly, Issue Size ( $\beta_4 = -0.56$ ,  $p = 0.0004$ ) and QIB Subscription ( $\beta_6 = -0.62$ ,  $p < 0.0001$ ) also have significant negative effects.

Conversely, GMP ( $\beta_2 = 0.76$ ,  $p < 0.0001$ ) and NII Subscription ( $\beta_7 = 0.57$ ,  $p < 0.0001$ ) show significant positive relationships, with NII Subscription being the strongest predictor based on its t-ratio (19.74). These results highlight that higher GMP and NII Subscription values are strongly associated with increases in the dependent variable. In contrast, IPO Rating ( $\beta_3 = 6.85$ ,  $p = 0.259$ ), Broker Recommendation ( $\beta_5 = 15.79$ ,  $p = 0.1571$ ), Projected P/E Ratio ( $\beta_8 = 0.05$ ,  $p = 0.765$ ), and GDP ( $\beta_9 = 18.91$ ,  $p = 0.9273$ ) are not statistically significant, indicating these variables do not have a meaningful impact. Index Return ( $\beta_{10} = 29.69$ ,  $p = 0.0739$ ) is marginally significant, suggesting a potential but weak influence.

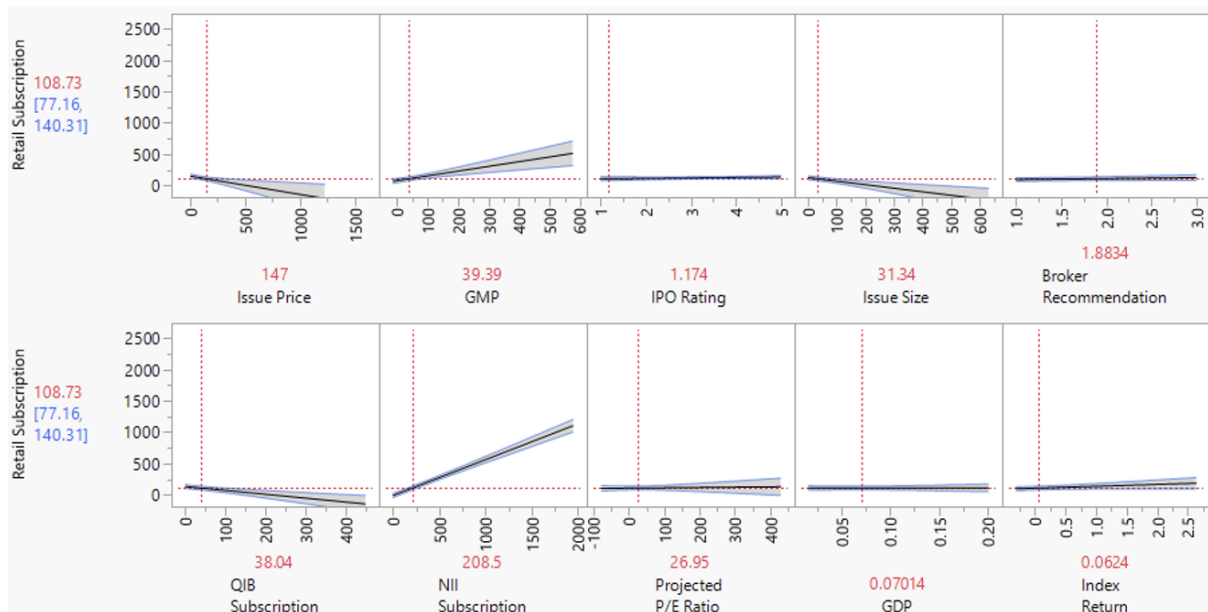
Overall, Issue Price, GMP, Issue Size, QIB Subscription, and NII Subscription are the most influential predictors, with NII Subscription showing the strongest positive impact on the dependent variable.

**Table 2.**  
ANOVA.

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	10	18887144	1888714	95.0653
Error	495	9834438	19868	Prob > F
C. Total	505	28721582		<0.0001

Note: \* — significant at  $p < 0.01$ .

The ANOVA results (Table 2) show that the model significantly explains the variability in retail subscriptions ( $F = 95.0653$ ,  $p < 0.0001$ ). The predictors account for a substantial portion of the total variation (Sum of Squares: 18,887,144 out of 28,721,582), with the remaining error (9,834,438) reflecting unexplained variability. While the model demonstrates strong predictive capability, the residual error may stem from inherent variability in retail investor behaviour or unusual subscription patterns.



**Figure 4.**  
Prediction profiler.

The prediction profiler (Figure 4) illustrates how key factors influence retail subscriptions for IPOs. Elevated GMP and NII subscriptions positively impact retail subscriptions, while a higher issue price, larger issue size, and increased QIB subscriptions negatively affect retail subscriptions. Macroeconomic factors, such as GDP and index returns, along with IPO ratings and the projected P/E ratio, have a minimal impact. The model explains 65.7% of the variability in retail subscriptions, emphasizing the significant role of market sentiment and institutional participation in driving retail investor interest.

## 5. Discussion

With rising retail participation in the Indian SME IPO market, SEBI has proposed increasing the application size to protect smaller retail investors, citing higher risks and inflated valuations [45]. The proposal aims to attract investors with a greater risk appetite while addressing issues like fund misutilization by listed SMEs and enhancing the segment's credibility. Against this backdrop, this study is conducted to examine the factors, derived from the literature, driving retail subscription in SME IPOs. This study analysed the impact of various factors, including Issue price, Issue size, GMP, IPO rating, Broker recommendation, QIB Subscription, NII Subscription, Projected P/E ratio, GDP, and Index return, on retail subscription.

The analysis identified apparent outliers in retail subscription volumes, which are not anomalies but instead reflect natural variations in investor behaviour. These variations can be attributed to factors such as market optimism, promotional efforts, or external influences that drive higher subscription levels. For instance, the IPO of Hariom Atta, issued at ₹5 crores, emerged as a notable outlier. In this instance, QIBs were not permitted to participate, while NII oversubscription reached an extraordinary 1432.60 times, and retail subscriptions surged to 2556.46 times. This case highlights that smaller issue sizes often result in disproportionately high retail subscription rates, potentially giving the appearance of outliers and contributing to greater errors or unexplained variability in the model.

The findings of this study reveal that the GMP and NII subscriptions positively influence retail investors. Retail investors often interpret a higher GMP as a sign of strong market sentiment and confidence in the IPO's success, which makes them more likely to subscribe. In the context of SME IPOs, where perceived risks are higher, GMP serves as a crucial indicator of potential short-term gains, further encouraging retail participation. On the other hand, high levels of NII Subscription signal strong demand and confidence from more informed or sophisticated investors. Retail investors tend to view this as a validation of the IPO's potential, creating a bandwagon effect where they follow the investment behaviour of NIIs. In SME IPOs, where information asymmetry is common, retail investors often rely on NII actions as a proxy for due diligence, increasing their likelihood of subscribing.

While the issue size and issue price have a negative impact on retail investor participation. Larger issue sizes often reduce the perceived value and potential returns for investors, deterring retail participation. This is likely because a higher volume of shares can dilute potential gains, which are a key attraction for retail investors. Additionally, larger issue sizes might indicate greater funding requirements or less exclusivity, potentially raising doubts about the issuing company's financial health and future performance. Such concerns are particularly relevant in the SME segment, where retail investors are more cautious due to the higher levels of risk involved. The negative effect of the issue price suggests that retail investors are highly sensitive to the cost of investment. High issue prices may discourage participation by creating a financial barrier, especially for small-scale investors. Moreover, retail investors might view elevated prices as a sign that the company could be overvalued, reducing their confidence in the potential for meaningful returns.



Additionally, the QIB subscription was observed to be negatively impacting the retail subscription. Strong QIB participation can signal increased competition for shares, discouraging retail investors who fear lower allotment chances. In some cases, QIBs are not allowed to participate due to the smaller issue size, which may also affect retail behaviour. The absence of QIB participation in such instances could raise concerns about the IPO's credibility, further deterring retail investors. This dual dynamic highlights the complex relationship between retail and QIB subscriptions, especially in SME IPOs, where retail investors are highly sensitive to market signals.

The results also suggest that IPO rating, Broker recommendations, and Projected P/E ratio did not significantly impact retail investor participation. This may be because retail investors often prioritize straightforward and easily understood indicators, such as GMP or NII subscriptions, over technical or analytical metrics. Limited financial knowledge or access to resources might further reduce the relevance of these factors to retail decision-making. Moreover, IPO ratings and Broker recommendations could be perceived as subjective or influenced by external interests, leading to skepticism among retail investors. Similarly, the projected P/E Ratio is typically associated with long-term valuation rather than the short-term gains that retail investors often prioritize in SME IPOs.

Similarly, GDP and Index return did not significantly influence retail subscriptions. Despite the potential relevance of these macroeconomic factors, the data suggests that they do not have a direct or strong impact on retail investor behaviour in this context. The GDP variable, which typically reflects broader economic conditions, showed no significant relationship with retail participation, likely because retail investors are more focused on short-term IPO-specific factors rather than long-term macroeconomic indicators. Additionally, Index return, while indicative of overall market performance, did not significantly affect retail investment decisions in SME IPOs. This could be because retail investors may perceive these broader market movements as less relevant to the specific characteristics and risks of individual IPOs.

Arora and Singh [6] found that while issue price negatively impacted oversubscription, issue size had a positive influence on overall subscription. However, the current study diverges, revealing that both issue price and issue size negatively affected retail subscriptions, possibly due to concerns about affordability and perceived risk. Whereas, these results are consistent with Srivastava, et al. [7], who also identified a negative impact of these factors on overall subscriptions. This suggests that while issue price and size may influence general subscription trends, they play a particularly deterrent role for retail investors. Additionally, the other factors considered in this study, such as GMP, NII subscription, and QIB participation, have been underexplored in similar contexts, highlighting the need for further investigation into their specific impact on retail subscriptions in SME IPOs.

## 6. Conclusions

The findings of this study provide several important insights into the factors influencing retail subscriptions in SME IPOs. The analysis suggests that both issue price and issue size negatively impacted retail investor participation, indicating that higher prices and larger issue sizes may deter retail investors due to concerns about affordability and perceived risk. In contrast, higher GMP and NII subscription levels were found to positively influence retail subscriptions, with retail investors often interpreting strong GMPs as a sign of market confidence and relying on NII actions as a proxy for due diligence, particularly in the SME sector. The study also highlights the complex relationship between retail and QIB subscriptions, with strong QIB participation discouraging retail investors, while in cases where QIBs are excluded, the absence of their participation may raise concerns about the credibility of the IPO. Interestingly, factors such as IPO rating, broker recommendations, projected P/E ratio, GDP, and index return were found to have no significant impact on retail subscriptions. These results suggest that retail investors prioritize more direct indicators, such as GMP and NII subscriptions, and are less influenced by technical or macroeconomic factors. This study contributes to the existing literature by offering a contrasting view on the impact of issue price and size on retail subscriptions, which deviates from previous findings while also highlighting the need for further research into underexplored factors such as GMP, NII subscription, and QIB participation.

This study did not exclude any IPO issues merely because they were identified as outliers; rather, these outliers were acknowledged as reflecting real-world variations in investor behaviour. Moreover, the inclusion of these outliers ensures that the analysis accounts for the full spectrum of retail investor behavior, without disregarding genuine occurrences that are influenced by specific market conditions or external factors. A potential limitation of this study is its reliance on publicly available data, which may overlook factors like investor sentiment. Additionally, the study does not account for investor demographics or behavioural biases that could influence retail participation. The analysis is also confined to a specific period, which may limit its applicability to future market conditions or regulatory changes. Moreover, the model's assumptions could affect the robustness of the findings, particularly in understanding the complex relationships between the various factors influencing retail subscriptions.

Future research could expand the scope of analysis by incorporating additional factors or variables that might influence the subject matter under study such as market sentiment, or behavioural biases on investor decision-making, which may not have been fully captured in the current research. Additionally, it would be beneficial to extend the research to include a larger and more diverse sample of IPOs across different market conditions, regions, or countries, which would enhance the generalisability of the findings. Finally, a closer look at investor education and awareness could offer practical implications for improving retail participation and ensuring better outcomes for investors in future IPOs.

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