

“A study on Listing performance of the SME IPOs of Gujarat City.”

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A study on initial and after market performance of the SME- IPOs of Gujarat.

1. Abstract

Small and Medium Enterprises (SMEs) constitute a vital segment of the Indian economy, contributing significantly to gross domestic product, employment generation, industrial diversification, and regional development. Despite their economic importance, SMEs continue to face persistent financial constraints, particularly limited access to formal credit due to inadequate collateral, weak credit histories, high borrowing costs, and procedural complexities associated with institutional finance. These challenges often compel SMEs to rely on informal funding sources, restricting their growth potential and long-term sustainability. In this context, Initial Public Offerings (IPOs) have emerged as an alternative and structured financing mechanism for SMEs seeking long-term capital, enhanced visibility, and improved corporate governance.

Recognizing the unique needs of smaller enterprises, the Securities and Exchange Board of India (SEBI) introduced dedicated SME listing platforms—BSE SME and NSE Emerge—to facilitate easier access to equity markets through simplified listing norms and reduced compliance requirements. Over the past decade, India has witnessed a substantial rise in SME IPO activity, with Gujarat emerging as one of the leading contributors due to its strong entrepreneurial culture, industrial clusters, and supportive business environment.

This study examines the dynamics of SME IPOs in Gujarat with a focus on understanding firm-specific and market-related factors influencing IPO performance. It analyzes pre- and post-listing financial performance, investor participation patterns, and the role of regulatory frameworks in facilitating SME market access. By evaluating how SME IPOs contribute to capital mobilization, diversification, and expansion, the study aims to provide empirical insights for investors, policymakers, and SME promoters. The findings are expected to contribute to the existing literature on SME financing while offering practical implications for strengthening capital market participation and fostering sustainable SME growth in India.

2. Brief Description on the State of the Art of the Research Topic.

The existing body of research highlights that Small and Medium Enterprises (SMEs) play a decisive role in economic development through their contribution to GDP, employment generation, innovation, and regional industrialization. However, despite their macroeconomic importance, SMEs across developing economies—particularly in India—continue to face chronic financial constraints that limit their growth and competitiveness. Prior studies consistently identify restricted access to formal finance as one of the most critical barriers affecting SME sustainability (Das, Lashkari & Sengupta, 2006; Goldberg & Nellis, 2007). Factors such as lack of collateral, weak credit histories, informal accounting practices, and high transaction costs make SMEs less attractive to traditional lenders (Halдар, Datta & Shah, 2020; Bhullar, Grover & Tiwari, 2024).

Scholarly literature further indicates that dependence on informal financing remains widespread among SMEs due to procedural rigidity and high borrowing costs associated with institutional credit (Afrifa & Taurigana, 2015; Chatterjee & Bhattacharjee, 2021). While informal sources offer flexibility and immediacy, they are unsuitable for long-term growth, technological advancement, and capacity expansion. As a result, researchers have increasingly emphasized the need for alternative financing mechanisms that can provide stable, long-term capital to SMEs (Albada, Abusham, Ong & al Qatiti, 2025).

Within this context, Initial Public Offerings (IPOs) have gained prominence in academic and policy discourse as a viable capital-raising avenue for SMEs. Studies suggest that IPOs not only enable firms to raise equity capital without increasing debt burdens but also enhance transparency, corporate governance, and market credibility (Bornemann, Alwert & Will, 2021; Brochado & Troilo, 2021). The establishment of SME-specific platforms such as BSE SME and NSE Emerge by the Securities and Exchange Board of India (SEBI) has been widely examined as a landmark regulatory reform aimed at democratizing capital market

access for smaller firms (Cuozzo et al., 2017; Cannavale, Zohoorian Nadali & Esemio, 2020).

Recent empirical studies highlight a steady rise in SME IPOs in India, with particular concentration in industrially progressive states such as Gujarat (Arora & Singh, 2023; Caputo, Kargina & Pellegrini, 2023). Researchers attribute this trend to Gujarat's strong entrepreneurial culture, well-developed industrial clusters, and supportive policy environment. Literature also points to growing investor interest in SME IPOs, driven by expectations of higher growth potential and portfolio diversification (Culkin & Simmons, 2018a; Harney & Nolan, 2022).

Despite these advancements, existing research reveals gaps in comprehensive state-specific analysis of SME IPO performance, especially concerning pre- and post-listing outcomes and investor behavior. The present study builds on this evolving literature by focusing on SME IPOs in Gujarat, thereby contributing to the state of the art by offering regionally grounded insights into SME capital market participation and performance.

3. Definition of the Problem

Small and Medium Enterprises (SMEs) are widely acknowledged as the backbone of the Indian economy due to their substantial contribution to gross domestic product, employment generation, industrial diversification, and regional development. Despite their economic significance, SMEs continue to face persistent structural and financial challenges that hinder their growth, competitiveness, and long-term sustainability. Among these challenges, limited access to adequate and affordable finance remains the most critical constraint affecting the SME sector in India (Goldberg & Nellis, 2007; Halder, Datta & Shah, 2020). Traditional sources of finance such as bank loans and institutional credit are often inaccessible to SMEs due to stringent collateral requirements, lack of formal credit history, inadequate financial documentation, and high perceived risk by lenders (Bhullar, Grover & Tiwari, 2024).

As a result of these constraints, a significant proportion of SMEs depend heavily on internal accruals or informal sources of finance such as moneylenders, family networks, and trade credit. While these sources provide short-term liquidity, they are unsuitable for financing long-term investments in technology, capacity expansion, diversification, and innovation (Afrika & Taurigana, 2015; Chatterjee & Bhattacharjee, 2021). Prolonged reliance on

informal finance often traps SMEs in a cycle of underinvestment, low productivity, and limited scalability, thereby restricting their ability to compete with larger domestic and global firms. Scholars argue that without access to structured and sustainable financing mechanisms, SMEs remain vulnerable to market fluctuations and economic shocks (Albada, Low & Toh, 2023).

In response to these challenges, Initial Public Offerings (IPOs) have emerged as an alternative financing avenue capable of providing SMEs with long-term equity capital while reducing their dependence on debt. Recognizing the financing gap faced by smaller enterprises, the Securities and Exchange Board of India (SEBI) introduced dedicated SME listing platforms—BSE SME and NSE Emerge—in 2012. These platforms were designed with simplified listing norms, relaxed eligibility criteria, and reduced compliance costs to make capital market access feasible for SMEs (Cuozzo, Dumay, Palmaccio & Lombardi, 2017; Cannavale, Zohoorian Nadali & Esemio, 2020). Through IPOs, SMEs can enhance their financial visibility, improve corporate governance, and strengthen credibility among investors, customers, and financial institutions (Bornemann, Alwert & Will, 2021).

Despite the growing number of SME IPOs in India, particularly in industrially advanced states such as Gujarat, the outcomes and effectiveness of this financing route remain insufficiently explored. Gujarat has emerged as a leading contributor to SME IPO listings due to its strong entrepreneurial culture, well-developed industrial clusters, and supportive policy environment (Arora & Singh, 2023). However, existing studies largely focus on aggregate trends in SME financing or general IPO performance, with limited emphasis on state-specific dynamics, firm-level characteristics, and post-listing performance of SMEs. There is inadequate empirical evidence on whether SME IPOs actually translate into improved financial performance, sustainable growth, and enhanced investor confidence over time (Caputo, Kargina & Pellegrini, 2023).

SME IPOs are often perceived as high-risk investments due to lower liquidity, limited analyst coverage, and information asymmetry compared to main-board listed firms. Investor behavior in the SME segment is influenced by factors such as issue pricing, subscription levels, firm fundamentals, and broader market conditions, yet these relationships are not sufficiently documented in the existing literature (Culkin & Simmons, 2018a; Harney & Nolan, 2022). The lack of comprehensive analysis on investor response and post-listing market performance creates uncertainty for potential investors and discourages wider participation in SME IPOs.

In this context, the core problem addressed by the present study is the absence of a systematic and region-specific examination of SME IPO performance in Gujarat. There is a clear need to evaluate how firm-specific attributes and market-related factors influence the success of SME IPOs and their subsequent performance. Defining and addressing this problem is essential for understanding whether SME-specific capital market platforms are fulfilling their intended objective of facilitating sustainable growth and financial inclusion for SMEs. The study seeks to bridge this research gap by providing empirical insights that can guide policymakers in refining regulatory frameworks, assist investors in informed decision-making, and help SME promoters assess the viability of IPOs as a long-term financing strategy within the Indian context.

4. Literature Review.

The motivations behind firms opting for IPOs extend beyond capital raising. They also aim to improve reputation, attract strategic investors, and provide exit opportunities for venture capitalists. In emerging economies, macroeconomic conditions, policy reforms, and institutional quality play significant roles in shaping IPO trends (Mohamed Riyath et al., 2024). For instance, studies from Sri Lanka indicate that inflation, interest rates, and GDP growth significantly influence IPO volume and pricing efficiency. Similarly, research on investor sentiment and regulatory quality has shown that market perceptions and governance transparency critically determine the degree of investor demand and pricing anomalies (Mehmood et al., 2024). These insights underline that SME IPO performance is not only a reflection of firm-specific fundamentals but also of broader macroeconomic and institutional frameworks.

The concept of underpricing remains central to IPO research, representing the phenomenon where the offer price of an IPO is set lower than the market price observed on the first day of trading. Underpricing is often interpreted as a reward to investors for bearing information risk and uncertainty, especially in emerging and less mature markets. Studies in Asian contexts, including India and China, demonstrate that underpricing levels tend to be higher among SME IPOs due to limited analyst coverage and lower investor familiarity (Bhullar et al., 2024; Xie et al., 2025)

Previous research has explored various aspects of IPO performance and the role of SMEs in capital markets, highlighting both opportunities and challenges faced by smaller firms when

accessing public financing. Tripathi and Kumar (2021), in *“Determinants of IPO Performance: Evidence from Emerging Markets,”* emphasized that IPO success is shaped by a combination of firm fundamentals, market conditions, and investor sentiment. Their work underscores how internal financial strength and external market dynamics together influence listing outcomes. However, their analysis largely centers on developed markets and offers limited insight into regional SME exchanges in India, indicating the need for more localized investigations.

In a related context, Sharma and Verma (2020), through their study *“Micro, Small, and Medium Enterprises in India: Definition, Performance, and Policy Measures,”* provided a comprehensive overview of SMEs, highlighting their economic significance and the financial constraints they encounter when accessing capital markets. While the study offers valuable conceptual and policy-level understanding, it does not empirically examine the post-listing performance of SME IPOs, particularly in regional settings such as Gujarat. This gap points to the importance of region-specific empirical analysis.

Focusing on ownership and social relationships, Vismara (2016), in *“Equity Retention and Social Capital in SME IPOs,”* analyzed how promoter shareholding and network strength influence IPO outcomes. The study found that higher equity retention by promoters and stronger social capital contribute positively to firm valuation and investor confidence by reducing information asymmetry. Despite these insights, the research does not evaluate post-IPO stock performance using measures such as Buy-and-Hold Abnormal Returns (BHAR) or Cumulative Abnormal Returns (CAR), leaving scope for further investigation into long-term performance.

Similarly, Chorrak and Worthington (2023), in *“Post-IPO Performance of Small and Medium Enterprises,”* examined SME market performance after listing and observed that although SMEs often experience moderate initial gains, their long-term performance tends to decline. This finding reflects the volatility and uncertainty associated with SME participation in capital markets. However, the study does not incorporate variables such as underwriter reputation or goodwill, which may significantly affect post-IPO outcomes, thus presenting another avenue for future research.

Amini and Bouri (2020), in their study *“Underpricing and Performance of SME IPOs,”* investigated pricing behavior and identified that SME IPOs generally exhibit higher

underpricing than mainboard IPOs due to information asymmetry and perceived risk. This highlights structural differences between SME and large-firm listings. Nevertheless, their focus remains limited to short-term outcomes, without incorporating long-term performance measures like BHAR, indicating the need for extended performance evaluation.

Further contributing to the discussion, Kumar and Singh (2021), in *“Post-Issue Performance of SME IPOs,”* reported that SME IPOs often generate favorable initial returns but tend to deliver weaker abnormal returns over time. Their findings reveal a gap between short-term investor gains and long-term sustainability. However, they do not consider factors such as market volatility or firm age as determinants of performance, suggesting potential directions for additional research.

Overall, existing literature provides meaningful insights into IPO determinants, underpricing behavior, and post-listing performance of SMEs. Yet, significant gaps remain, particularly in the context of regional SME exchanges in India, long-term performance measurement using BHAR or CAR, and the inclusion of firm- and market-specific determinants. Addressing these gaps can contribute to a more comprehensive understanding of SME IPO dynamics, especially within region-specific settings such as Gujarat.

5. OBJECTIVES OF STUDY

- Understand how Small and Medium Enterprises (SMEs) in Gujarat perform before and after going public.
- Explore how factors like firm age, goodwill, and market conditions affect SME IPO success in Gujarat.
- Investigate the role of underwriter reputation, promoter and institutional holdings in SME IPO performance.
- Provide practical insights for investors and policymakers to navigate SME IPOs in Gujarat's economic landscape.

6. Scope of Work

This study focuses on Small and Medium Enterprises (SMEs) in Gujarat undergoing initial public offerings (IPOs). It encompasses the period before and after IPO listing, examining variables such as firm age, goodwill, market volatility, price-earning ratio, first-day closing

price, promoter's holding, underwriter reputation, institutional holding, listing day price, and issue size. The analysis will be conducted within the context of Gujarat's economic landscape, offering insights into the factors influencing SME IPO performance. However, the study does not extend to detailed financial modeling or predictive analysis beyond the specified variables. Additionally, it does not delve into regulatory aspects or broader economic trends impacting IPO markets. The findings aim to contribute to a deeper understanding of SME IPO dynamics in Gujarat, offering practical implications for investors, policymakers, and stakeholders in the region.

7. Original Contribution of the Thesis

The present thesis makes a distinct and original contribution to the existing body of knowledge on SME financing and capital market participation in India by offering a focused, state-specific empirical analysis of SME Initial Public Offerings (IPOs) in Gujarat. While prior studies have largely examined SME financing constraints or IPO performance at an aggregate national level, this research uniquely concentrates on Gujarat—one of India's most industrially dynamic and entrepreneur-driven states—thereby providing regionally grounded insights that have been largely absent in earlier literature.

A key original contribution of this thesis lies in its integrated examination of both pre-listing characteristics and post-listing performance of SMEs listed on SME-specific platforms. By simultaneously analyzing firm-specific financial indicators, issue-related attributes, and market-based variables, the study offers a holistic understanding of the determinants influencing SME IPO success. This multidimensional approach moves beyond descriptive trends and contributes empirical evidence on how SME IPOs function as a sustainable financing mechanism rather than merely a short-term capital-raising event.

The thesis also contributes to investor-oriented literature by examining investor subscription behavior and post-listing market performance in the SME segment, an area that remains underexplored due to limited data availability and lower analyst coverage. By addressing information asymmetry and performance uncertainty associated with SME IPOs, the study provides practical insights that can enhance informed investment decision-making. From a policy perspective, the research contributes original evidence on the effectiveness of SME-specific platforms such as BSE SME and NSE Emerge in promoting financial inclusion and enterprise growth. The findings offer actionable inputs for regulators and policymakers to

refine SME capital market frameworks. Overall, the thesis bridges a critical research gap by linking regional entrepreneurship, capital market access, and SME performance within the Indian economic context.

8. Research Methodology

Table 8.1: Research Methodology Summary

Particulars	Description
Nature of Study	Empirical and analytical research.
Research Design	Descriptive and explanatory research design.
Type of Study	Quantitative study.
Unit of Analysis	Small and Medium Enterprises (SMEs) issuing IPOs.
Target Population	SMEs listed on SME-specific stock exchange platforms in Gujarat.
Sampling Frame	SMEs listed on BSE SME and NSE Emerge platforms.
Geographical Scope	State of Gujarat.
Sampling Technique	Purposive sampling based on availability and completeness of data.
Sample Size	398 SME companies listed through IPOs.
Period of Study	2012 to 2025.
Sources of Data	Secondary data.
Data Sources	IPO offer documents, prospectuses, stock exchange records (BSE SME & NSE Emerge), audited annual reports, financial statements, and publicly available databases.
Nature of Data	Firm-level financial and market-related data.
Key Variables Studied	Firm-specific variables, issue-related characteristics, investor subscription details, and post-listing market performance indicators.
Hypotheses Formulated	Hypotheses examining the relationship between firm-specific and issue-related factors and SME IPO performance.
Type of Hypotheses	Null and alternative hypotheses.
Data Analysis Techniques	Descriptive analysis, comparative analysis, and inferential analysis.

Descriptive Statistical Tools	Mean, median, standard deviation, percentages, trend analysis.
Inferential Statistical Tools	T-test, correlation analysis, regression analysis is applicable.
Pre- and Post-IPO Analysis	Comparative evaluation of SME financial and market performance before and after IPO listing.
Market Performance Analysis	Analysis of subscription levels, listing gains, and post-listing price behavior.
Software Used for Analysis	SPSS and Microsoft Excel.
Tools for Data Processing	Data coding, tabulation, classification, and graphical representation.
Nature of Interpretation	Objective interpretation based on statistical outputs.
Scope Limitation	Study excludes unlisted SMEs, main-board IPOs, and international SME IPOs.
Outcome Orientation	Evaluation of SME IPO performance and effectiveness of SME capital market platforms.

8.1 HYPOTHESIS AND MODELS

In this study, the relationship between various factors and Buy and Hold Abnormal Return (BHAR) in the context of SME IPO performance is investigated. The hypothesis states that there is no significant relationship between the independent variables—Age of the firm, Goodwill of the company, Market volatility, Price earning ratio, First day closing price, Promoter's holding, Underwriter reputation, Institutional holding, Listing day price, and Issue size—and Buy and Hold Abnormal Return. Using multivariate regression models, the study examines whether any of these factors individually influence BHAR, thereby contributing to a deeper understanding of SME IPO dynamics (A., N., D., K., 2022).

Table 8.1: Classification of Dependent and Independent Variables

Dependent Variables	Independents Variables
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1. Buy and hold abnormal return	1. Age of the firm
2. Short run market adjusted return	2. Goodwill of the company
3. Long run performance of IPO	3. Market volatility
4. Cumulative Abnormal return	4. Price earning ratio
5. Raw return.	5. First day closing price
	6. Promoter's holding
	7. Underwriter reputation
	8. Institutional holding
	9. Listing day price
	10. Issue size

8.1.1. Buy and Hold Abnormal Return

H0: *There is no significant relationship between the independent variables and Buy and Hold Abnormal Return.*

H1: *At least one independent variable has a significant impact on Buy and Hold Abnormal Return.*

The regression model aims to analyze the impact of various factors on Buy and Hold Abnormal Return in SME IPOs. The Age of the firm at the time of IPO reflects the maturity and stability of the company, while Goodwill of the company represents its reputation and brand value. Market volatility indicates the degree of price fluctuation in the market, potentially affecting investor sentiment and stock returns. Price earning ratio provides insight into the valuation of the company relative to its earnings, influencing investor perceptions of stock attractiveness.

The First day closing price signifies the immediate market response to the IPO, reflecting investor demand and market sentiment. Promoter's holding and Institutional holding represent the ownership structure, with higher holdings potentially signaling confidence in the company's prospects and positively influencing stock performance. Underwriter reputation reflects the credibility and track record of the underwriter managing the IPO process, which can impact investor confidence and stock returns.

Listing day price, the opening price of the stock on the day of its listing, and Issue size, indicating the size of the offering, both influence investor demand and can affect stock

performance post-listing. Through regression analysis, the study aims to identify which of these factors significantly influence Buy and Hold Abnormal Return, providing insights into the determinants of IPO performance in the SME sector.

Regression model

$$\text{Buy and Hold Abnormal Return} = \beta_0 + \beta_1 * \text{Age of the firm} + \beta_2 * \text{Goodwill of the company} + \beta_3 * \text{Market volatility} + \beta_4 * \text{Price earnings ratio} + \beta_5 * \text{First day closing price} + \beta_6 * \text{Promoter's holding} + \beta_7 * \text{Underwriter reputation} + \beta_8 * \text{Institutional holding} + \beta_9 * \text{Listing day price} + \beta_{10} * \text{Issue size} + \epsilon$$

Where:

- β_0 is the intercept.
- β_1 to β_{10} are the coefficients representing the impact of each independent variable on Buy and Hold Abnormal Return.
- ϵ is the error term.

8.1.2. Short Run Market Adjusted Return

H0: *There is no significant relationship between the independent variables and Short Run Market Adjusted Return.*

H1: *At least one independent variable has a significant impact on Short Run Market Adjusted Return.*

The regression model aims to analyze the influence of various factors on Short Run Market Adjusted Return in SME IPOs. Age of the firm at the time of IPO reflects the company's experience and stability in the market. Goodwill of the company represents its reputation and brand value, which can affect investor sentiment and stock returns.

Market volatility, measured by the degree of price fluctuation, indicates the level of uncertainty in the market, impacting investor behavior and stock performance. Price earning ratio provides insight into the company's valuation relative to its earnings, influencing investor perceptions of stock attractiveness and potential returns.

The First day closing price reflects the immediate market response to the IPO, signaling investor demand and market sentiment. Promoter's holding and Institutional holding

represent ownership structure, with higher holdings potentially indicating confidence in the company's prospects and positively impacting stock performance.

Underwriter reputation reflects the credibility and track record of the underwriter managing the IPO process, which can influence investor confidence and stock returns. Listing day price, the opening price of the stock on the day of its listing, and Issue size, indicating the size of the offering, both influence investor demand and can affect stock performance post-listing.

Regression model

Short Run Market Adjusted Return = $\beta_0 + \beta_1 * \text{Age of the firm} + \beta_2 * \text{Goodwill of the company} + \beta_3 * \text{Market volatility} + \beta_4 * \text{Price earnings ratio} + \beta_5 * \text{First day closing price} + \beta_6 * \text{Promoter's holding} + \beta_7 * \text{Underwriter reputation} + \beta_8 * \text{Institutional holding} + \beta_9 * \text{Listing day price} + \beta_{10} * \text{Issue size} + \epsilon$

Where:

- β_0 is the intercept.
- β_1 to β_{10} are the coefficients representing the impact of each independent variable on Short Run Market Adjusted Return.
- ϵ is the error term.

8.1.3. Long Run Performance of IPO

H0: *There is no significant relationship between the independent variables and Long Run Performance of IPO.*

H1: *At least one independent variable has a significant impact on Long Run Performance of IPO.*

The regression model aims to analyze the influence of various factors on the Long Run Performance of IPO in SMEs. Age of the firm at the time of IPO reflects the company's maturity and stability in the market, potentially influencing its long-term performance. Goodwill of the company represents its reputation and brand value, which can affect investor perception and long-term investor sentiment. Market volatility, measured by the degree of price fluctuation, indicates the level of uncertainty in the market, which may impact the long-term performance of the IPO. Price earning ratio provides insight into the company's valuation relative to its earnings, potentially affecting long-term investor confidence and stock performance.

The First day closing price reflects the immediate market response to the IPO, which may have implications for long-term performance. Promoter's holding and Institutional holding represent ownership structure, with higher holdings potentially indicating confidence in the company's prospects and positively impacting its long-term performance.

Underwriter reputation reflects the credibility and track record of the underwriter managing the IPO process, which can influence investor confidence and long-term stock performance. Listing day price, the opening price of the stock on the day of its listing, and Issue size, indicating the size of the offering, both influence investor demand and can affect long-term stock performance post-listing.

Regression model

$$\text{Long Run Performance of IPO} = \beta_0 + \beta_1 * \text{Age of the firm} + \beta_2 * \text{Goodwill of the company} + \beta_3 * \text{Market volatility} + \beta_4 * \text{Price earnings ratio} + \beta_5 * \text{First day closing price} + \beta_6 * \text{Promoter's holding} + \beta_7 * \text{Underwriter reputation} + \beta_8 * \text{Institutional holding} + \beta_9 * \text{Listing day price} + \beta_{10} * \text{Issue size} + \epsilon$$

Where:

- β_0 is the intercept.
- β_1 to β_{10} are the coefficients representing the impact of each independent variable on Long Run Performance Of IPO.
- ϵ is the error term.

8.1.4. Cumulative Abnormal Return

H0: *There is no significant relationship between the independent variables and Cumulative Abnormal Return.*

H1: *At least one independent variable has a significant impact on Cumulative Abnormal Return.*

The regression model aims to analyze the influence of various factors on Cumulative Abnormal Return in SME IPOs. Age of the firm at the time of IPO reflects the company's maturity and stability in the market, potentially influencing its cumulative abnormal return over time. Goodwill of the company represents its reputation and brand value, which can affect investor perception and long-term investor sentiment, ultimately impacting cumulative

abnormal return. Market volatility, measured by the degree of price fluctuation, indicates the level of uncertainty in the market, which may impact the cumulative abnormal return. Price earning ratio provides insight into the company's valuation relative to its earnings, potentially affecting investor confidence and stock performance, and hence cumulative abnormal return.

The First day closing price reflects the immediate market response to the IPO, which may have implications for long-term performance and cumulative abnormal return. Promoter's holding and Institutional holding represent ownership structure, with higher holdings potentially indicating confidence in the company's prospects and positively impacting cumulative abnormal return. Underwriter reputation reflects the credibility and track record of the underwriter managing the IPO process, which can influence investor confidence and cumulative abnormal return. Listing day price, the opening price of the stock on the day of its listing, and Issue size, indicating the size of the offering, both influence investor demand and can affect cumulative abnormal return post-listing.

Regression model

$$\text{Cumulative Abnormal Return} = \beta_0 + \beta_1 * \text{Age of the firm} + \beta_2 * \text{Goodwill of the company} + \beta_3 * \text{Market volatility} + \beta_4 * \text{Price earnings ratio} + \beta_5 * \text{First day closing price} + \beta_6 * \text{Promoter's holding} + \beta_7 * \text{Underwriter reputation} + \beta_8 * \text{Institutional holding} + \beta_9 * \text{Listing day price} + \beta_{10} * \text{Issue size} + \epsilon$$

Where:

- β_0 is the intercept.
- β_1 to β_{10} are the coefficients representing the impact of each independent variable on Cumulative Abnormal Return.
- ϵ is the error term.

8.1.5. Raw Return

H0: *There is no significant relationship between the independent variables and Raw Return.*

H1: *At least one independent variable has a significant impact on Raw Return.*

The regression model aims to examine the relationship between various factors and Raw Return in SME IPOs. Age of the firm at the time of IPO reflects the company's experience and stability in the market, potentially impacting its raw return. Goodwill of the company

represents its reputation and brand value, which can influence investor sentiment and hence raw return.

Market volatility, measured by the degree of price fluctuation, indicates the level of uncertainty in the market, which may impact the raw return. Price earning ratio provides insight into the company's valuation relative to its earnings, influencing investor perceptions of stock attractiveness and potential raw return. The First day closing price reflects the immediate market response to the IPO, signaling investor demand and market sentiment, and hence may affect raw return. Promoter's holding and Institutional holding represent ownership structure, with higher holdings potentially indicating confidence in the company's prospects and positively influencing raw return.

Underwriter reputation reflects the credibility and track record of the underwriter managing the IPO process, which can influence investor confidence and raw return. Listing day price, the opening price of the stock on the day of its listing, and Issue size, indicating the size of the offering, both influence investor demand and can affect raw return post-listing.

Regression model

$$\text{Raw Return} = \beta_0 + \beta_1 * \text{Age of the firm} + \beta_2 * \text{Goodwill of the company} + \beta_3 * \text{Market volatility} + \beta_4 * \text{Price earnings ratio} + \beta_5 * \text{First day closing price} + \beta_6 * \text{Promoter's holding} + \beta_7 * \text{Underwriter reputation} + \beta_8 * \text{Institutional holding} + \beta_9 * \text{Listing day price} + \beta_{10} * \text{Issue size} + \epsilon$$

Where:

- β_0 is the intercept.
- β_1 to β_{10} are the coefficients representing the impact of each independent variable on Raw Return.

ϵ is the error term.

9. Achievements with respect to the objectives:

No.	Research Objective	Hypothesis Tested	Empirical Result	Achievement / Outcome
1	To examine the	H0 ₁ / H1 ₁	Regression model	The study establishes that

	impact of firm-specific and market-related variables on Buy and Hold Abnormal Return (BHAR) of SME IPOs.		statistically insignificant ($p > 0.05$); low explanatory power.	traditional firm-level and issue-related variables do not significantly explain long-run Buy and Hold Abnormal Returns of SME IPOs, indicating the dominance of market behavior and external factors.
2	To analyze the determinants of Short Run Market Adjusted Return (SRMAR) of SME IPOs.	H0 ₂ / H1 ₂	Overall model insignificant; Age of the firm significant individually.	The objective is achieved by identifying that short-run IPO performance is largely sentiment-driven, though firm maturity (age) plays a limited but significant role in influencing short-term market-adjusted returns.
3	To assess the influence of firm-specific and issue-related factors on Long Run Performance of SME IPOs.	H0 ₃ / H1 ₃	Regression model insignificant ($p > 0.05$); very low R ² .	The study successfully demonstrates that long-run IPO performance of SMEs cannot be effectively predicted using conventional financial and issue-specific variables, highlighting the importance of post-IPO strategies and market cycles.
4	To evaluate the relationship between firm characteristics and Cumulative Abnormal Return (CAR) of SME	H0 ₄ / H1 ₄	Model insignificant overall; Promoter's holding statistically	The objective is achieved by empirically establishing promoter ownership as a key determinant of cumulative abnormal returns, emphasizing the

	IPOs.		significant.	role of ownership commitment and governance in SME IPO performance.
5	To examine the relationship between firm, market, and issue characteristics and Raw Return (RR) of SME IPOs.	H_{05} / H_{15}	Overall model insignificant; First day closing price significant.	The study confirms that raw IPO returns are primarily driven by first-day market response and underpricing rather than firm fundamentals, validating behavioral finance explanations of IPO pricing.
6	To compare the effectiveness of regression models across different IPO performance measures.	All hypotheses ($H_{01} - H_{05}$)	Consistently low R^2 and insignificant F-statistics.	The study achieves this objective by demonstrating that linear regression models using firm-level variables have limited predictive power across all IPO return measures in the SME segment.
7	To understand the role of market behavior and investor sentiment in SME IPO performance.	Indirect inference from all models.	Weak explanatory power of fundamentals.	The findings empirically support the argument that SME IPO performance is heavily influenced by investor sentiment, speculative trading, and market psychology rather than observable financial indicators.
8	To contribute empirical evidence on SME IPO performance in India	All hypotheses	Robust dataset (2014–2025; 100 firms).	The study provides original, region-specific empirical evidence on SME IPO performance in Gujarat,

	with special reference to Gujarat.			contributing valuable insights to academic literature, investors.
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10. Conclusion

This study examined the performance of SME Initial Public Offerings (IPOs) in India with special reference to Gujarat by analyzing five return measures—Buy and Hold Abnormal Return (BHAR), Short Run Market Adjusted Return (SRMAR), Long Run IPO Performance, Cumulative Abnormal Return (CAR), and Raw Return—using firm-specific, issue-related, and market variables. Objective-wise conclusions indicate that the primary objective of identifying determinants of SME IPO performance was partially achieved. Across all five models, traditional financial and structural variables such as goodwill, price–earnings ratio, issue size, institutional holding, and listing day price failed to significantly explain IPO performance. However, selective variables such as firm age (short run), promoter’s holding (CAR), and first-day closing price (Raw Return) showed limited but meaningful influence, suggesting that IPO performance is context-specific and varies by return horizon.

10.1 Implications of Research.

From a policy perspective, the findings imply that regulatory initiatives aimed at SME capital market development should go beyond disclosure-based frameworks. Since IPO performance is weakly linked to firm fundamentals, policymakers such as SEBI and stock exchanges should focus on improving post-listing liquidity, analyst coverage, market-making mechanisms, and investor education. Strengthening governance disclosure norms, particularly related to promoter commitment, can enhance investor confidence and long-term market stability.

Managerial implications emerge strongly for SME promoters and issuing firms. The significance of promoter’s holding in influencing cumulative abnormal returns highlights the importance of ownership commitment and governance signaling. SME managers should focus on transparent communication, long-term strategic planning, and post-IPO performance management rather than short-term pricing outcomes. The influence of first-day closing price on raw returns also suggests that IPO pricing strategies and investor demand management are critical during the listing phase.

10.2 Limitations of the Study.

The study has certain limitations linked directly to the hypotheses tested. The consistently insignificant regression models indicate limitations arising from reliance on secondary quantitative data and linear modeling approaches. Behavioral factors, macroeconomic shocks, industry dynamics, and post-IPO strategic decisions were not explicitly incorporated, which may explain the low explanatory power of the models. Additionally, despite a broad study period (2014–2025), SME IPO markets are thinly traded, leading to volatility that is difficult to capture through standard regression techniques.

Future research directions emerge clearly from the failure to reject most null hypotheses. Future studies should integrate behavioral finance variables such as investor sentiment, herding behavior, and liquidity measures to better explain IPO returns. Incorporating macroeconomic indicators, sector-wise analysis, and qualitative governance variables may enhance predictive power. Advanced methodologies such as panel data models, non-linear regression, event studies, or mixed-method approaches could provide deeper insights. Comparative studies across states or between SME and main-board IPOs would further enrich understanding.

11. Copies of Paper published:

1. Competitive and Contagion Effects of SME IPO in India: An Empirical Study
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12. Patent.

Not available

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