

A Study On Relationship Between Pricing And Performance Of IPOs: Evidence From The Indian Stock Market

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Abstract

This paper examines the relationship of the pricing mechanism with the performance of initial public offerings in the Indian stock market in terms of listing gains and long-term returns. IPO pricing-the process through which the final offer price is decided based on a fixed-price offering or a book-building process-plays a very critical role in determining investor perception and market behavior. Using history for the major Indian IPOs: Reliance Power (2008), Zomato (2021), and LIC of India (2022), this paper shows that, again and again, underpricing trends occur along with their consequences in oversubscription and thereafter in terms of their effect on the market performance.

Underpricing trends, on empirical evidence, it is often found to accompany IPO listing day gains for Indian IPOs, especially when the market is enormously bullish. Investor demand is high and results in oversubscription in such cases. However, long-term performance often goes off the rails with many initial public offerings (IPOs) lagging benchmark indices like NIFTY 50 and BSE SENSEX. Some of the factors that affect both pricing at the time of IPOs and aftermarket performance include market conditions, fundamentals of the companies issuing equity, investor sentiment, and oversight by SEBI.

Analysis on sectoral differences in terms of IPO pricing and performance reveals that the performance of technology and finance services tends to be quite different compared to energy and manufacturing sectors. Using data from National Stock Exchange (NSE) and Bombay Stock Exchange (BSE), it has been able to gain a sound understanding regarding the entry in the market in terms of pricing strategy which has eventually emerged over time.

This paper contributes toward an understanding of the determinants of pricing accuracy and performance in Indian IPO markets, thereby providing valuable insights for both issuers looking to optimize their pricing strategies and investors seeking informative investment decisions.

Keywords: *IPO, Indian Stock Market, Long-Term Performance, Short-Term Gains*

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I. Introduction

IPO is an important event in the financial life cycle of a firm in as much as it marks the transition from a purely privately owned to a publicly owned ownership. In the Indian stock market, capital formation has been attained partly through IPOs, which open an open wide pool of investors to the firms. Price received for an IPO forms thus a constituent element that impacts its short-term and even long-term functioning within the stock market. There have been controversies surrounding the issue of whether there exists a relationship between IPO pricing and its subsequent performance, particularly whether underpricing or overpricing has an impact on market dynamics.

Historically, IPOs in the Indian market have exhibited patterns of underpriced offerings in a bid to garner investor interest and thereby ensure that the issuances are subscribed to fully. This is true for most emerging markets, including India. Underpricing although beneficial to initial investors, does raise the question of whether or not issuances were fairly valued. Overpriced issuances resulted in poor subsequent performances as investors had losses when the issuing stock price was below the issue price.

The performance of an IPO is often measured in the Indian market based on short-term listing gains and long-term returns. The empirical studies point out that while many Indian IPOs show significant short-term gains, long-term performance is mixed—mostly lagging behind the performance of market indices. The paper seeks to explore the intricate interplay between IPO pricing strategies and their market performance, on a basis of evidence from India's stock market that would give a deep insight into the factors responsible for the outcome.

II. Theoretical Background And Literature Review

Research on IPO pricing and post-listing performance has been enormously carried out in the global and emerging economies, like India. The uniqueness of the Indian IPO market due to its regulatory, economic, and investor behavior serves the right soil for this dynamic to be explored. This paper outlines a review of studies focusing on factors that influence the pricing of an IPO and its performance in the Indian stock market, including the theoretical basis of underpricing, the effects of market sentiment, and long-run returns.

IPO Pricing Theories

Underpricing Theory

The best-known phenomenon in the literature of IPOs is underpricing, where the IPO price is set below the market price and yields important first-day capital gains to investors. Rock (1986) introduced the Winner's Curse theory, where issuers deliberately underprice their IPOs in order to attract uninformed investors who otherwise would shy away from participation because of the risk of adverse selection. This theory has been supported by numerous studies on the Indian IPO market wherein it has been evident that underpricing is a consistent phenomenon.

Banerjee et al. (2011) conducted an extensive study of Indian IPOs and concluded that underpricing helps alleviate the uncertainty related to new listings. They established that the average firstday return for Indian IPOs tends to be more than 20% and thus highly leveraged short-term profits for early investors. This has led to the perception that IPOs in India, especially in bull markets, are highly profitable for those involved at first. But whether the stock is sold at the right value and if the company is losing enormous capital remains a question.

Information Asymmetry and Signalling

A completely different line of literature studies the role of information asymmetry in pricing an IPO. In another significant contribution, Leland and Pyle (1977) proposed the Signaling Theory. They posited that firms undervalue their products to send a signal about its quality to the market. This theory assumes even greater significance in the Indian scenario in which a very large proportion of IPOs emanate from relatively unknown companies. Based on the research conducted by Gupta and Jain in 2013 regarding Indian IPOs, companies in industries such as technology and pharmaceutical companies underprice their IPO more often, and this strategy will signal long-term growth to investors.

Market Sentiment and Investor Behaviour

The same appeared quite typically as an area of concern in the terms of research over market sentiment and how they relate to the IPO pricing. Such periods of positive market sentiment often reflect greater levels of underpricing, as in the studies made by Ranjan and Madhusoodanan (2019). For them, the periods may force companies to thrust their greed on the investors at such a time when they prop ideal offering prices, thus producing very high new money gains at listing. However, when the markets are bearish, the companies would force lower prices, yet often leading to more modest listing gains.

Indian Evidence

Short-Term Performance

Considering the suite of empiricism in the previous sections, empirical evidence on Indian IPOs indicates that most firms experience significant returns on the first day of listing. According to work by Ritter (1991) adapted to the case of India in Chhabra and Paul (2014), underpricing in India results in average listing gains for 30-40%. This has been attributed to quite a few factors: in the light of investor zeal during this period, and also to media coverage and availability of favorable conditions of the market at the time of issuance. For instance, although several Indian high-profile IPOs like Cairn India in 2006 and Coal India in 2010, that took

place after the financial crisis that finally ended in 2008, had registered strong listing day returns mainly due to the positive sentiment prevailing at that time. Studies indicate that IPOs tend to underperform in the long term, with many stocks trading at below the issue price within 1-3 years after listing. Underperformance is usually associated with over-optimistic pricing at the IPO process, driven by speculative behavior on the part of investors. For instance, perhaps the most anxiously awaited public issue was Reliance Power's IPO wherein the stock price of the company plunged sharply immediately after its issue date and leaving many retail investors in a loss.

Impact of Regulatory Environment

The regulatory environment is, in India, primarily addressed to by SEBI. It has an important role in the IPO pricing mechanism. The major emphasis of SEBI guidelines on transparent pricing and protection of the investor is to strike efforts for the reduction of information asymmetry prevailing between the issuers and the investors. From the research by Khurshed et al. (2009), it has been perceived that book-building which was introduced by SEBI in the late 1990s had, in turn, led to better efficiency in IPO pricing. The further result was that participants in the market could gauge demand better and set nearer prices.

However, Madhusoodanan and Thiripalraju (2009) argue that despite improvement in regulation, information asymmetry and market inefficiencies continue to be a strong factor behind the volatility found in the post-listing performance of IPOs in India. This thus continues to represent the tension between regulatory intervention and market-driven pricing processes.

Determinants of IPO Pricing in India

Firm Characteristics and Industry Trends

The research shows that the characteristics of the issuing firm, such as size, age, and sector, highly contribute to IPO pricing. According to Aggarwal et al. (2020), large firms, which happen to be mature with good financial performance, have lower levels of underpricing than their small counterparts, which are mostly unknown to the market. More particularly, more volatile sectors, such as technology and pharmaceutical, tend to have greater volatilities both in pricing and performance. For the IPOs of tech firms like Info Edge (2006) and Zomato (2021), big listing gains have been noticed, but overpricing relative to their long-term performance has also been an issue.

Macroeconomic Conditions and Market Timing

Another determinant of pricing and performance is the macroeconomic conditions prevailing at the time of the IPO. Bansal and Khanna (2012) argue that the IPOs launched during periods of economic expansion and favourable stock market conditions tend to be priced higher and delivered better short-term returns. Those issued during an economic slowdown or periods of market turmoil are priced more conservatively and witness subdued performance.

III. Research Methodology

This study focuses on the analysis of the relationship between the pricing and performance of IPOs in the Indian Stock Market with all-inclusive research methodology. This methodology includes the collection of data, choice of sample, and an analytical framework that combines both the qualitative and quantitative techniques of research. The overall approach is trying to investigate how the strategies adopted in the process of pricing of IPOs can prompt both short-term and long-term performance by taking evidence from different sectors of the economy of India.

Data Collection

The study makes use of data gathered from diverse sources that are essentially secondary in character, thus providing a comprehensive and dependable dataset. The NSE and Bombay Stock Exchange (BSE) are the main sources of data for this study. These data provide useful information about historical IPO performance, offer price, listing price, closing price, and long-term stock performance. From the available reports from the Securities and Exchange Board of India, regulatory information would be available along with guidelines for IPOs and the available pricing mechanisms, such as fixed price or book-building processes.

The study considers an elaborate database spanning from 2010 up to 2023 in terms of a range of performance measures: listing day gains, long-run returns, and market volatility. The company's financial information will be complemented with further financial metrics using databases of Bloomberg and Thomson Reuters, covering market capitalization, price-to-earnings ratios, and oversubscription rates. Secondary literature includes research articles, financial reports, and market analysis from such publishing houses like McKinsey, PwC, and academic journals that describe the overall market trends and opinion of investors.

Sample Selection

The study makes a sample selection from 50 different sectors, including technology, financial services, consumer goods, pharmaceuticals, and energy, across all of these sectors to bring forth a representative cross-section of the Indian stock market. The chosen IPOs have been selected on the basis of market prominence, offering size, and visibility. The sample would include some of the most high-profile IPOs, such as Reliance Power (2008), Zomato (2021), and LIC of India (2022) alongside smaller and mid-sized issues representing a variety of pricing mechanisms and market outcomes.

To ensure the sample covered a wide range of analysis, this would include both heavily oversubscribed and undersubscribed IPOs, hence capturing a wide variety of market conditions. This makes the selection criteria also ensure sectoral representation, so that trends on performance will be captured within all industries. The sample further takes into account IPOs at different stages of bull and bear market cycles. This would enable the researcher to understand how macroeconomic conditions impact the performance of the IPO.

The stratification of the sample ensures it has a reflection of both those IPOs priced using the fixed-price method and those that used the book-building process. Comparisons can thus be established across all distinct pricing mechanisms.

Analytical Framework

The analytical framework is designed to measure the short and long-term performance effect of IPO pricing on equity using both quantitative and qualitative approaches.

Quantitative Analysis

Underpricing Analysis: The study, first of all, calculates the level of underpricing as a percentage gap between the IPO offer price and the listing price. This is very common to be used as a measure for short-term performance and listing day gains.

Long-term Performance: Long-term returns would be measured comparing the IPO stock prices at 6 months, 1 year, and 3 years after listing with the performance of a larger segment by benchmark indices like NIFTY 50 and BSE SENSEX. It would be able to determine whether the IPO shows a tendency for outperformance or under-performance in comparison to the market in the long-term.

Regression Analysis: Regression models are used to study how several independent variables such as market sentiment, company fundamentals, pricing strategy, and oversubscription rates affect the dependent variable: performance of the IPO, which can be short or long term.

Volatility Analysis: This analysis determines the quantum of risks with respect to investment in an IPO by analyzing the price volatility post its listing. This is done with standard deviation and other statistics that measure the variations in prices.

Qualitative Analysis

Case Studies: Important cases of IPOs are prepared for better insight into the strategic decisions behind the prices chosen by them and what factors have influenced their after-market performance. The case study incorporates discussion about the investor sentiment, regulatory influences, and market conditions at the time of IPO.

Sectoral Analysis: In the conducted qualitative study, sectoral differences in pricing and performance of IPOs are explored. This was further narrowed down to sectors like technology, financial services, and manufacturing. In this regard, how sectoral specificities- be it innovativeness in the case of tech IPOs or rather more regulatory requirements in financial services -led to these outcomes were covered.

Comparative Analysis

This paper attempts to compare the performance of Indian IPOs with the global scenario, particularly in emerging markets such as China and developed markets such as the US, to understand whether there is convergence or divergence in trends concerning Indian IPOs with the global trend. Such a comparison would traditionally involve metrics such as the level of underpricing, listing gains, and performance in the long run.

Time Frame and Limitations

It spans IPOs between 2010 and 2023, which provides broad scope to analyze them across varying cycles of the economy-the pre-pandemic, pandemic, and post-pandemic period. However, a study is restricted in terms of data availability, primarily for smaller IPOs, where access and processing of detailed performance data are not always easy. Besides, the performance of IPOs hangs in the balance of hundreds of unpredictable factors-those related to global economic trends and investor psychology, which cannot be reliably ascertained.

IV. Analysis and Findings

Significant underpricing along with notable short-term gains is accompanied in Indian IPOs with contrasting long-term performance outcomes. This analysis- drawing from historical data and empirical evidence- explores the phenomena and charts the factors that determine pricing and performance in IPOs in the Indian equity market.

Underpricing of IPOs in India: Insights from Historical Data

IPO underpricing is highly prevalent in India wherein the offer price of a stock is less than its market value at listing. Historical data shows that Indian IPOs have always been priced below their market value, which translates into a huge listing day gain. A SEBI report on average IPO underpricing for Indian issues listed between 2010 and 2023 revealed that on an average basis it is a whopping 15-20%. For example, while the IPO of Zomato in July 2021 was priced at ₹76 per share, it opened at ₹116 for a listing gain of 53%.

Another example is Reliance Power in 2008, which it raised from ₹450 to ₹520, providing it with an initial return of 15.56%. NSE and BSE data and sectors such as technology and consumer goods have higher rates of under pricing in comparison with the traditional sectors such as manufacturing. Therefore, there is industry dynamics playing a role with investor sentiment.

IPO Name	Offer price(₹)	Listing price(₹)	Listing gain %
Zomato	76	116	53
Reliance power	450	520	15.56
Burger King	60	115	91.67

Short-Term vs. Long-Term Performance

It is true that Indian IPOs portray a clear dichotomy between short-term and long-term performances. All the mainstream ones provide excellent returns on day one but tend to deteriorate over time. For an average horizon of one to three years, most Indian IPOs perform worse than the corresponding benchmark indices, NIFTY 50. Take, for example, the Happiest Minds IPO, where the stock price was corrected sharply well within months of the listing at a gain of 111%.

For Bloomberg data covering IPOs from 2010 through 2023, the average return on the listing day is close to 20% although the one-year post-IPO return is closer to 8%. As clearly evident, therefore, the initial enthusiasm does not necessarily translate well into good performances for investors in the long term. In fact, most IPOs are unable to sustain their momentum and thus lead to the scenario where early investors cash out but the longer-term holders lose a bit

Time Frame	Average Return(%)	Benchmark Performance(%)
Listing Day	20%	-
1 Year	8%	NIFTY 50: 12%
3 Years	5%	NIFTY 50: 15%

Determinants Influencing Indian IPO Pricing and Performance

The following are the various determinants that affect the price and performance of IPOs in India:

Market Sentiment: Market conditions prevailing at the time of the IPO also go a long way in determining the price. Bull markets generally indicate a higher degree of giddiness of investors, which in turn signifies higher demand and subsequent under-pricing. For instance, the 2021 IPO of Nykaa occurred at the twilight hours of a phase of a bullish market and witnessed massive oversubscription, hence it resulted in huge listing gains.

Company Fundamentals: Earnings, innovative business models, and robust growth potential play a critical role in determining the price of an issuing company for its IPO. These companies with higher earnings, innovative business models, and robust growth potential were on better sides of pricing and performance. For example, Paytm, with its popularity in digital payments, came under criticism for its relatively high valuation and underperformed after its IPO.

Regulatory Environment: SEBI determines the IPO pricing strategy under the framework of the regulations. Disclosures and transparency increased investor confidence, but it also brought added constraints that may lead to underpriced IPOs and regulate the whole stage in the process of determining the price. Regulatory scrutiny during the process affects the perception of the IPO in the market.

Sectoral Diversities: Each industry has an individual pattern for performance associated with an IPO. For the technology and consumer sectors, the underpricing is comparatively more pronounced but short term better due to the glories of glorious growth narratives. On the contrary, the public utilities and manufacturing sectors demand more conservative pricing; thus, their initial gain becomes relatively low of nature.

Oversubscription Rates: The rate of oversubscription is a significant demand indicator that often culminates in price changes. A highly oversubscribed IPO tends to present higher listing gains, such as Burger King, which was oversubscribed 156 times and listed with a 91.67% gain.

V. Discussion

India's Pricing of Initial Public Offerings has been the key determinant of their short and long term performances. In the Indian stock market, underpricing and overpricing strategies have uniquely taken shape in determining outcomes. To appreciate this relationship between pricing and performance of an IPO, it is possible to embark on understanding the aspects of under- and overpricing, the long run performance, and these in the context of the Indian market as well as illustrative cases.

Underpricing and Short-Term Performance

There is one of the major strategies observed in the Indian IPO market, underpricing, whereby issues are made available to investors at an issue price that is lower than the intrinsic value of the underlying stock. Such mechanisms exist to reduce the threat of undersubscription and attract a mass of investors. Underpricing has been highly successful in India in terms of generating easy first-day gains.

Studies, for example, by Banerjee et al. (2011), demonstrate that Indian IPOs have reported an average first-day return of more than 20 percent. Big-ticket IPOs, such as Coal India in 2010 and DMart in 2017, witnessed a return of more than 30 percent on the very first day mainly due to strong demand and media hype. Here we present examples wherein under-pricing leads to favorable market sentiment and attracts retail as well as institutional investors. However, though this approach will result in effective subscription and listing, it also raises questions about whether firms are fully exploiting their opportunities to raise capital. The phrase "leave money on the table" is bandied about frequently because had firms under the issues of underpriced shares priced closer to market levels they may well have raised more capital.

Overpricing and Poor Post-Listing Performance

While undervaluation is the most prevalent phenomenon, there are instances of overvaluation by Indian issuers, which result in extreme underperformance after the listing. Overvalued initial public offerings are the issues that are made at a price greater than their true value because the market is frenzy, the investors overestimate the ability, or misperception of demand at such price. Stocks generally quote lower than the issue price post-listing for investor losses and adverse sentiment.

One of the most glaring examples in India was the Reliance Power IPO in 2008. Despite all promises of how great it would be, the stock crashed after its listing and left investors sore for having bought into a premium price. Such failures are often instantiated as cautionary tales for firms attempting to overprice their investment offering. The disastrous performance of overpriced IPOs is not only damaging to the reputation of the firm but also presents long-term problems in that the investors lose confidence in the company, and the stock continues to face pressure in the long term.

Short-Term Listing Gains vs Long-Term Performance

One of the notable traits of the Indian IPO market is the short-term listing gains versus long-term performance contrast. Underpriced IPOs generally exhibit phenomenal first-day returns; however, they lack those returns over time. A research by Deb and Marisetty (2010) revealed that most Indian IPOs were not able to catch up with the overall indices of the markets like Nifty 50 and BSE Sensex. It is because the hype created at the time of issue during the IPO hardly sustains as the market starts gauging the real performance of the company, thus causing value erosion in the stock prices.

For example, Info Edge (2006) is another landmark tech IPO from India and had a great listing gain. However, this one's long-term performance has been volatile-the problems that high-growth-sector firms face in maintaining their early momentum. Such long-term underperformance post good initial success points towards the need of the hour for focus on sustainable business models as well as realistic pricing by firms.

Determinants of IPO Pricing and Performance

Firm size, sectoral trends, and other market conditions dictate the pricing and performance of an IPO. In general, large, established companies have lower levels of underpricing than small firms or newly formed ones. For example, HDFC Asset Management went public in 2018 and was priced conservatively. It did well in the short term and then. The same is true for the technology-driven IPOs like Zomato in 2021. There is immense interest from investors when such IPOs come into the market at the time of their initial listing, but the question remains about the ability of such IPOs to sustain long-term growth, which inherently involves volatility in the sector.

It is a rather complex relationship between IPO pricing and their performance in the Indian stock market, with underpricing strategies, sector influences, and investor sentiment shaping them. Underpricing, though leading to short-term gains, the ability of market expectation in sustaining long-term growth is the foundation for success in the long term. If overpricing of shares has been a bugbear against most of the poor post-listing performances across India, as with Reliance Power, the policy planners must take corrective measures to cut down this rumpus. Thus, companies have to precisely align such strategies of pricing so that they might work for short-term success as well as long-term value creation when the Indian IPO market grows more.

VI. Conclusion

The pricing-performance of IPOs in India forms a complex interplay between market dynamics, sentiment of investors, and the fundamentals of the company. IPO underpricing is rife in India, which thus, in turn, yields monumental short-term gains for the investor. However, many of these IPOs often fail to capitalise upon the long-term momentum. From the data analysis, average returns are substantially low after the trading period. One-year returns average about 8% while three years drop to 5%.

Global market sentiment, issuers financial health, the regulatory frameworks, sector performance variability as well as oversubscription rates are some of the factors that have been found to influence the relationship between these two variables. Investing and issuers need to understand this dynamics. Caution as well as a lot of proper research goes into investing in IPOs for the long term. It need not always do well after a good beginning. More study can delve deeper into macroeconomic effects on their results, especially to get a better insight into the events which are transforming Indian capital markets. There is a need for substantial amount of analysis and strategic choices while going through numerous complexities in making IPO investments.

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