

Market Turmoil and IPO Listings: The Effect of Volatility in The Indian Market

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Abstract

IPOs are essential for companies to raise capital and offer growth potential to investors. Despite global uncertainties and liquidity challenges, IPO activity is expected to rebound, driven by stronger momentum and larger deals. This study analyzes factors influencing IPO listing prices in the Indian stock market from 2020 to 2024, a period marked by global disruptions and domestic political changes. Using data from 271 IPOs, the study explores the impact of macroeconomic factors, IPO-specific variables, and secondary market conditions. Multiple linear regression shows that GDP growth, IPO size, subscription rates, and P/E ratios positively affect listing prices, while higher interest rates have a negative impact. Larger IPO sizes and higher subscription rates further reflect strong investor confidence and demand. Market volatility and index performance have minimal direct effects, suggesting their influence may be mediated by other factors. These findings offer insights for policymakers, companies, and investors navigating IPO markets.

Keywords: IPO; Listing Price; Market Volatility; GDP; Inflation; Stock Market.

1. Introduction

Initial Public Offerings (IPOs) are strongly influenced by movements in the broader economic and market environment, making them sensitive to shifts in investor sentiment and policy conditions. The period from 2020 to 2024 provides a unique context for examining these dynamics in India, as the market was shaped by pandemic-led disruptions, geopolitical uncertainty, and major domestic political transitions. Events such as COVID-19, the Ukraine conflict, state and national elections, and Union Budget announcements continually altered liquidity conditions, sectoral expectations, and capital-market behaviour. These fluctuations created notable volatility in IPO activity, particularly affecting subscription levels and listing performance.

While prior studies acknowledge the influence of macroeconomic and market conditions, limited research has analysed how these forces jointly shape IPO listing prices during periods of heightened uncertainty. The recent phase in India offers an opportunity to evaluate how economic indicators, IPO-specific features, and secondary-market conditions interact under rapidly changing policy and market environments. This study examines these relationships using data from IPOs issued between 2020 and 2024, providing evidence on the key factors that influence listing outcomes in a volatile setting. The findings aim to support policymakers, firms, and investors in understanding the determinants of IPO performance during periods of economic and market transition.

2. Literature Review

In this study, the literature review is organised into three broad themes: (i) macroeconomic indicators, (ii) IPO-specific metrics, and (iii) secondary market conditions. These three themes form the foundation of the conceptual framework presented in Figure 1, which summarises how these factors collectively shape IPO outcomes. The framework serves as a bridge between the literature and the variables examined in this study, and it provides a structured path for discussing each factor in detail. The following section begins with macroeconomic indicators, before gradually moving toward IPO-specific determinants and market conditions.



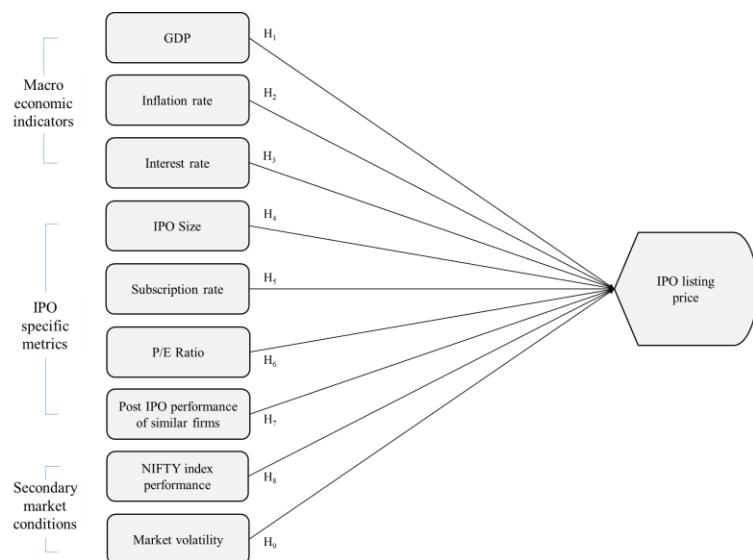


Fig. 1: Conceptual Framework.

2.1. Macroeconomic indicators

2.1.1. Gross domestic product

Macroeconomic factors, including GDP growth, play a significant role in influencing IPO activity. India is the fifth-largest economy in the world. Its GDP growth has shown significant fluctuations. These changes directly impact the size and frequency of IPOs. (Ibbotson & Ritter, 1995) Research shows a direct relationship between GDP growth and IPO size, with other factors such as business confidence, index performance, and foreign direct investment also contributing to IPO dynamics.(Zhao et al., 2022a), (Song et al., 2014). Periods of robust economic growth are often accompanied by increased investor confidence and higher subscription levels, whereas economic slowdowns can dampen market activity and reduce IPO success rates. Research by (Poonam Rani et.al., 2017) Indicates a strong link between GDP growth and the size of IPOs, suggesting a causal relationship. (Sahoo & Rajib, 2010) Further affirm this by highlighting those factors, such as GDP, business confidence, BSE index performance, and foreign direct investment significantly influence IPO activities. These findings suggest that fluctuations in GDP may play a pivotal role in determining the IPO listing price. Therefore, it is assumed that:

H1: Changes in GDP growth rate influence IPO listing price.

2.1.2. Interest rate

Interest rates are another critical determinant of IPO performance, as they influence investor preferences between equity and fixed-income securities. Higher interest rates can make IPOs less attractive by increasing the opportunity cost of investing in equities, thereby reducing demand for newly issued shares.(Alzoubi, 2022). This is particularly evident in rising rate environments, where market uncertainty and risk aversion among investors tend to increase. (Shetty & Yadav, 2019) Emphasize that interest rate fluctuations create additional challenges for issuers, necessitating careful timing and pricing strategies to mitigate potential negative impacts. Thus, it can be posited that:

H2: Changes in Interest rates influence IPO listing price.

2.1.3. Inflation

Inflation also plays a significant role in shaping IPO outcomes, particularly in its impact on the cost of capital and market conditions. Low inflation rates are generally favorable for IPOs, as they reduce economic uncertainty and associated costs, making it easier for firms to raise capital. By contrast, high inflation introduces greater uncertainty and can complicate business planning, discouraging companies from going public. (Ong et al., 2020)Highlights how inflation expectations can influence the timing and structure of IPOs, with issuers often preferring periods of stable or declining inflation to minimise costs and maximise proceeds. Hence, it is hypothesised that:

H3: Changes in Inflation rates influence IPO listing prices.

2.2. IPO-specific metrics

2.2.1. Issue size

The amount raised by an IPO, commonly referred to as the issue size, is a crucial indicator of the success of the offering and reflects investor confidence in the company. Prior research has shown contrasting perspectives on the relationship between issue size and oversubscription levels. Some studies argue that there is a direct, linear relationship between the two, suggesting that larger issue sizes attract higher investor demand. For instance, research highlights the positive correlation. However, others, such as(Lefebvre, 2023a), (Low & Yong, 2011), (Nuryasman MN & Brigitta Brigitta, 2022), and (Yong, 2007), (Sushma K S et al.) Found no such association, suggesting that factors other than issue size may play a significant role in influencing oversubscription. Furthermore, the potential link between issue size and listing price has been explored in numerous studies, but findings remain inconclusive. Researchers like and (Alanazi et al., 2016) Examined the relationship between how issue size might impact the initial trading performance. These varied conclusions call for further investigation to better understand the dynamics between issue size, oversubscription, and listing price. Observed that larger IPO sizes decrease the likelihood of full subscription or oversubscription among Retail Individual Investors (RIIs) and Non-Institutional Investors (NIIs). Conversely, firms with larger IPO sizes are more likely to experience oversubscription in the Qualified Institutional Buyer (QIB) category. This suggests that issue size plays a significant role in influencing retail subscription levels. Considering this, the present study seeks to examine the relationship between issue size and retail subscription rates. Accordingly, the following hypothesis is proposed:

H4: The issue size of the IPO influences the IPO listing price.

2.2.2. Price-earnings (P/E) ratio

The P/E ratio is often considered a critical factor influencing IPO outcomes. It is widely used to assess the value of a stock and is believed to reflect investor sentiment about future earnings potential. A high P/E ratio typically signals optimism regarding the company's growth prospects, but it can also raise concerns about overvaluation if growth expectations are not met. Conversely, a low P/E ratio may indicate undervaluation, often attributed to temporary issues such as company-specific challenges, industry headwinds, or broader market conditions. (Kim, 2024) Emphasised that P/E multiples based on projected earnings provide more accurate valuations compared to those derived from historical earnings. This distinction is crucial for IPO pricing, as investor expectations are influenced by factors such as the industry average P/E ratio and the company's earnings per share. When IPO pricing exceeds the average P/E level, individual investors may exhibit caution, resulting in more conservative participation and potentially lower fundraising outcomes. As highlighted by (Loughran et al., 2003), (Charithra C.M., 2021) and (Chen et al., 2004) Incorporating projected P/E ratios into IPO evaluations can offer a more precise understanding of subscription levels and overall market behaviour. These findings emphasise that while the P/E ratio is a vital tool for evaluating company value, its accuracy, particularly in IPO scenarios, requires further examination. Accordingly, it is hypothesised that: H5: IPOs with P/E ratios significantly influence listing price.

2.2.3. Listing gain and subscription

Listing gains or losses, a key metric of IPO performance, is determined by the difference between the stock's opening price on its listing day and the allotment price. If the stock opens at a higher price than the allotment, the resulting gain is referred to as a listing gain; otherwise, it is a listing loss. Market sentiment at the time of listing is a critical factor, as bearish conditions often reduce the likelihood of listing gains. (Bansal & Khanna, 2012) Highlight that sentiment-driven dynamics emphasise the importance of timing in achieving favourable listing outcomes. Investors determine subscription levels, a crucial aspect of IPO performance, by indicating the total number of shares they demand on the offering day. Additionally, (Shetty, 2025) Demonstrate that QIB subscriptions impact both NII and RII subscriptions. Collectively, these studies indicate that the behaviour of institutional investors, particularly QIBs and NIIs, significantly influences retail investor subscriptions. These findings are predominantly focused on mainstream IPOs. This leads to the formulation of the following hypothesis:

H6: Subscription rates influence IPO listing price.

2.2.4. Post-IPO performance of firms

Post-IPO performance has been widely studied across various markets and industries, offering insights into the long-term implications of going public. Common findings (Loughran et al., 2003), (Dhamija & Arora, 2017), and (Zhao et al., 2022b) Suggest that firms often experience a decline in financial performance after their IPOs, with factors such as increased market pressures and shifting managerial priorities contributing to this trend. However, the impact of venture capital (VC) backing has been shown to mitigate some of these challenges, as VC-backed firms tend to outperform their non-VC-backed counterparts in the long term. This is attributed to the strategic guidance and resources provided by VC firms, which help IPO firms navigate the complexities of public markets. Additionally, (Silva & Silva, 2024) Research highlights that the growth-enhancing phase for IPO firms typically occurs three years after the offering, characterised by significant increases in sales but not necessarily in employment levels. (Lefebvre, 2023b) Notes that these growth episodes underscore the importance of financing decisions in shaping the long-term trajectories of IPO firms, with careful planning and execution being key to sustained success. Building on the prior discussion, the following hypothesis is proposed:

H7: Post-IPO performance of similar firms influences IPO listing price.

2.3. Secondary market conditions

2.3.1. Index performance

Stock market indices play a significant role in shaping IPO performance, as they serve as benchmarks for market sentiment and investor confidence. Historical data underscores the importance of index performance in determining IPO success. (Jacob & Agarwalla, 2015) Reports that the average IPO listing gain sharply declined in recent years, dropping from 43.82% in 2020 to 10% in 2022. Empirical studies by (Gupta et al., 2023), (Howton, 2006), (sundara willy, manurung adler, ulupiu i gusti, 2022), (Sahoo & Rajib, 2010) Have explored the relationship between IPO returns and index performance, shedding light on factors such as stock exchange selection, underpricing strategies, and strong QIB subscriptions. Moreover, the negative performance of the S&P BSE IPO index in 2022 highlights the risks associated with treating IPOs as short-term investments. These findings demonstrate that index performance plays a pivotal role in influencing IPO listing prices, regardless of subscription levels. Nonetheless, a significant gap exists in the literature concerning the effect of Nifty index returns on IPO listing prices. Therefore, it is hypothesised that:

H8: Performance of the Nifty index before IPO significantly influences IPO listing price.

2.3.2. Market volatility

Market volatility significantly influences IPO performance, particularly in the aftermarket phase. Research by (Degeorge et al., 2010) Highlights how demand elasticity from different investor groups affects price variability. Institutional investors, with their more informative bids, contribute to reduced price volatility, whereas retail investors, who tend to be less informed, introduce noise and increase variability. Comparative analyses between book-built and auctioned IPOs further reveal that book-building mechanisms are associated with greater underpricing and higher aftermarket volatility. (Helwege et al., 2001), and (Bernini et al., 2015). Book-building enables more flexible pricing based on investor demand, but also increases uncertainty for firms. On the other hand, fixed-price IPOs offer greater predictability in proceeds but may limit pricing flexibility. (Mortazian, 2022). Under-pricing, a common feature of IPOs, serves as a proxy for pre-market uncertainty and is often linked to aftermarket volatility. (Deangelo et al., 2006) Suggests that it can mitigate aftermarket uncertainty by incentivising information production among investors. (Manu & Saini, 2020) Found that firms with higher levels of under-pricing often experience greater price risk in the aftermarket, indicating a complex interplay between pricing strategies and market dynamics. Based on the literature, the following hypothesis is proposed:

H9: Market volatility significantly influences IPO listing price.

Although prior studies examine how macroeconomic indicators, firm-level characteristics, and market conditions influence IPO outcomes, the existing evidence remains fragmented and sometimes contradictory. Research on GDP, interest rates, inflation, issue size, subscription levels, P/E ratios, and post-IPO performance often focuses on individual factors in isolation, leading to mixed conclusions regarding their combined effect on listing prices. Studies on index performance and market volatility highlight their relevance, yet little is known about how these variables operate specifically in the Indian context during periods of heightened economic and political uncertainty. Importantly, recent IPO behaviour in India, especially between 2020 and 2024, has occurred in an environment shaped by post-pandemic recovery, liquidity shifts, and policy changes, but this unique period has not been examined through an integrated model. As a result, there is limited empirical work that simultaneously considers macroeconomic indicators, IPO-specific metrics, and secondary market conditions to explain listing price movements. This study addresses these gaps by analysing all three dimensions together using recent data from the Indian market.

3. Methodology

This research utilised a quantitative approach to investigate the influence of secondary market conditions on IPO listing prices, analysing data from 271 IPOs launched between 2020 and 2024. The primary aim was to assess the impact and significance of various predictors on IPO outcomes, specifically focusing on listing prices and subsequent market performance. The study relied on secondary data, with key variables grouped into the following categories: macroeconomic indicators (GDP, inflation rates, and interest rates), IPO-specific metrics (IPO size, subscription rates, price-to-earnings (P/E) ratios, and post-IPO performance of comparable companies), and secondary market conditions (performance of the Nifty index and market volatility).

The IPO listing price served as the dependent variable. It refers to the process through which the shares of a private company are officially listed on a stock exchange, allowing them to be traded publicly. Once listed, any stock market investor can buy or sell these shares through a registered stockbroker. IPO listing takes place after the IPO allotment is completed and the allotted shares have been credited to investors' demat accounts. Data were gathered from reputable sources such as the Reserve Bank of India (RBI, <https://website.rbi.org.in/web/rbi>) and the National Stock Exchange of India (NSE, <https://www.nseindia.com/market-data/all-upcoming-issues-ipo>). The research utilised both correlation and multiple regression analyses to examine the relationships between the variables. Correlation analysis was applied to assess the strength and direction of the associations between variable pairs, while multiple linear regression was conducted to measure the impact of macroeconomic indicators, IPO-specific metrics, and secondary market conditions on IPO subscription levels. Data analysis was carried out using JMP Pro software.

4. Result

To examine the relationships between the key factors influencing IPO listing prices, correlation estimates were computed. This analysis sought to uncover how macroeconomic indicators, IPO-specific variables, and market conditions interact to affect IPO outcomes, particularly during periods of economic uncertainty and market volatility. Since all variables in this study are continuous, correlation estimates were calculated to explore the relationships between them. An overview of the pairwise correlations among the key variables analysed is presented in Figure 2.

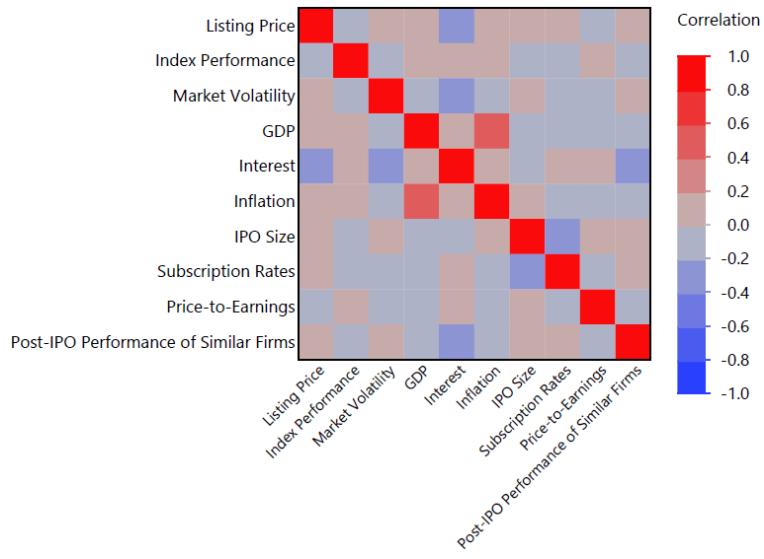


Fig. 2: Pairwise Correlations.

Positive Correlations between GDP and Inflation (0.4415) suggest that as GDP increases, inflation tends to increase moderately, which is economically intuitive. A weak positive correlation between IPO size and Listing Price (0.1976), and Post-IPO Performance and Listing Price (0.1933), indicating that larger IPOs tend to have slightly higher listing prices and companies with higher listing prices show slightly better post-IPO performance. Subscription Rates and Listing Price (0.1445). Higher listing prices are weakly associated with better subscription rates. Notable Negative Correlations between Interest Rates and Market Volatility (-0.3889), Interest Rates and Post-IPO Performance (-0.2608), and Subscription Rates and IPO size (-0.2412). These findings suggest that higher interest rates are associated with lower market volatility and negatively affect post-IPO performance. Additionally, larger IPOs tend to have lower subscription rates, likely due to the higher capital requirements involved. Most correlations are relatively weak (<0.3), indicating that IPO-related variables are independent of one another. Market conditions (GDP, Interest Rates, Inflation) have some influence on IPO outcomes, but the relationships aren't very strong. The listing price has weak but positive correlations with most performance indicators, suggesting it might be a minor

predictor of IPO success. Index Performance has surprisingly weak correlations with most variables, indicating that overall market performance may not be a strong determinant of IPO outcomes.

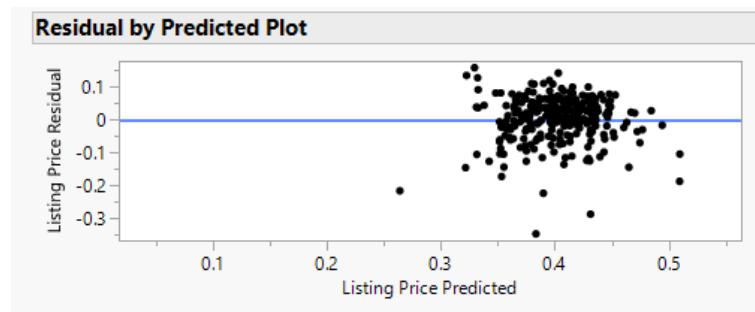


Fig. 3: Actual vs Predicted Plot.

Figure 3 indicates that the apparent outliers, where listing prices appear randomly distributed, are not anomalies but rather reflect natural variations in securities listing prices. These deviations are likely influenced by factors such as market booms, promotional activities, or external forces that drive higher listing prices. The increasing scatter at higher predicted values suggests that variability tends to grow with larger subscription levels—a common occurrence when a small number of high-value investors have a disproportionate impact on the totals.

The regression model explains 56% of the variance (Adjusted R-squared = 0.55), with predictors collectively demonstrating statistical significance ($p < 0.0001$).

Table 1: Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	0.0915875	0.109597	0.84	0.4041
Index Performance	-0.008815	0.011107	-0.79	0.4281
Market Volatility	-0.005558	0.032244	-0.17	0.8633
GDP	0.2933428	0.077501	3.79	0.0002**
Interest Rate	-0.109973	0.050293	-2.19	0.0297*
Inflation	-0.093162	0.076999	-1.21	0.2274
IPO Size	0.1386408	0.061014	2.27	0.0239*
Subscription Rates	0.0268041	0.012776	2.1	0.0369*
Price-to-Earnings	0.2263764	0.046606	4.86	<.0001**
Post-IPO Performance of Similar Firms	0.1037879	0.053399	1.94	0.053

Significant at: *0.05, ** 0.01 levels.

The results indicate that index performance ($\beta = -0.0088$, $p = 0.4281$) suggests a negative relationship, although it is not statistically significant. This implies that changes in index performance may not have a predictable effect on the response variable, or other influencing factors could overshadow its impact. Similarly, market volatility ($\beta = -0.0056$, $p = 0.8633$) shows a negligible and non-significant relationship, suggesting that market volatility does not have a considerable effect on the listing price of the IPO. This could be due to investors relying more on broader signals like index performance and economic conditions when assessing IPOs, leaving limited scope for volatility to show a distinct effect. GDP ($\beta = 0.2933$, $p = 0.0002$) reveals a strong and highly significant positive relationship, meaning that higher GDP, reflecting better economic conditions, tends to improve the response variable, likely due to a more favorable environment for IPOs and post-IPO performance. The interest rate ($\beta = -0.1100$, $p = 0.0297$) demonstrates a statistically significant negative relationship, implying that rising interest rates tend to reduce the response, likely because higher rates diminish liquidity and create less favorable investment conditions. Inflation ($\beta = -0.0932$, $p = 0.2274$) exhibits a negative but non-significant effect, suggesting that although inflation often reduces purchasing power and investor confidence, it does not significantly drive changes in the response here. IPO size ($\beta = 0.1386$, $p = 0.0239$) shows a positive and statistically significant relationship, indicating that larger IPOs, typically linked to more established companies, tend to have a positive effect on the response, likely reflecting higher investor confidence. Subscription rates ($\beta = 0.0268$, $p = 0.0369$) also exhibit a positive and statistically significant relationship, suggesting that higher subscription rates, indicative of stronger investor demand, correlate with better post-IPO performance. The price-to-earnings ratio ($\beta = 0.2264$, $p < 0.0001$) reveals a significant positive relationship, indicating that companies with higher P/E ratios tend to perform better, likely due to market optimism and growth expectations. Finally, the post-IPO performance of similar firms ($\beta = 0.1038$, $p = 0.053$) is not statistically significant at 5% level, indicating that the predictor does not meaningfully influence IPO listing price. Hence, this study does not support the hypotheses H₂, H₃, H₇, H₈, and H₉. While H₁, H₄, H₅, and H₆ are found to significantly impact the dependent variable IPO Listing price. Thus, there is adequate evidence to support the hypotheses.

Table 2: ANOVA

Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	9	0.318681	0.035409	7.3409
Error	262	1.2637629	0.004824	Prob > F
C. Total	271	1.5824439		<.0001**

Significant at: ** 0.01 levels.

The ANOVA results (Table 2) show that the model is highly significant, with $p < 0.0001$, indicating that the predictors collectively explain a substantial portion of the variance in the response variable. The F-ratio is 7.3409, which indicates a strong overall relationship between predictors and the outcome.



Fig. 4: Prediction Profiler.

The prediction profiler (Figure 4) illustrates how each predictor influences the "Listing Price" while other factors remain constant. GDP shows a significant positive effect, with an estimated impact of 0.06315 per unit increase. Similarly, IPO Size (0.45918), Subscription Rates (0.0367), and Price-to-Earnings Ratio (0.16545) exhibit upward trends, indicating strong positive relationships with the listing price. Post-IPO Performance of Similar Firms (0.41378) also demonstrates a mild positive slope, contributing modestly to the prediction. On the other hand, Interest Rate (-1.26484) and Inflation (0.04794) show negative impacts, with higher interest rates lowering the listing price significantly. Predictors such as Market Volatility (-2.1022) and Index Performance (0.0975) display relatively flat slopes, indicating negligible effects on the listing price.

5. Discussion

The Indian IPO market between 2020 and 2024 witnessed significant volatility, shaped by unprecedented global disruptions such as the COVID-19 pandemic and geopolitical events like the Ukraine conflict. These factors created a unique landscape for IPOs, where macroeconomic shifts, investor behaviour, and firm-specific characteristics intertwined to influence listing price performance. Despite these uncertainties, the IPO market demonstrated resilience, with significant participation from both institutional and retail investors. The findings of this study provide critical insights into the factors shaping IPO listing prices during this period while also revealing areas that require further exploration.

A key result of the analysis was the strong positive association between GDP growth and IPO listing prices. This outcome reflects the role of macroeconomic stability in fostering investor confidence and driving IPO demand. As GDP growth typically signifies economic recovery and expansion, it attracts both domestic and foreign investors, who view a strong economic environment as conducive to investment. During the study period, India experienced a marked recovery from the economic contraction caused by the pandemic. This was driven by pro-growth government initiatives, including infrastructure development, green energy projects, and reforms aimed at encouraging foreign investment. Such measures bolstered market confidence, translating into higher investor participation and better IPO valuations. The findings align with earlier research indicating that strong macroeconomic indicators are closely linked to successful IPO outcomes, as they create an environment where investors are more likely to trust and invest in public offerings.

Conversely, the study observed a negative relationship between interest rates and IPO listing prices. Higher interest rates generally make equity investments less attractive compared to fixed-income securities, leading to reduced demand for IPOs. This is especially evident in environments where rising interest rates increase borrowing costs, diminish market liquidity, and discourage speculative investments. The results align with theoretical and empirical studies, such as those by (Alzoubi, 2022), which demonstrates that high interest rates dampen investor enthusiasm for IPOs. This relationship was particularly relevant during the study period, as central banks worldwide, including the Reserve Bank of India, adjusted interest rates to address inflationary pressures. These adjustments often created tighter liquidity conditions, adversely impacting IPO performance. Although interest rates were shown to have a significant negative effect, the results suggest that the extent of this impact may vary based on other market conditions and investor behaviour. While inflation is traditionally considered an important macroeconomic factor affecting financial markets, its influence on IPO listing prices in this study was negative but statistically insignificant. Inflation typically erodes purchasing power, increases uncertainty, and affects investment sentiment, particularly during periods of high volatility. However, the lack of a significant impact, in this case, suggests that inflationary effects may have been mitigated by the ability of issuers to time IPOs during relatively stable periods or by the market's focus on other key growth indicators. This finding adds nuance to the discussion, highlighting that while inflation remains an important consideration, it may not always emerge as a primary determinant of IPO outcomes in certain economic contexts.

IPO-specific metrics emerged as critical determinants of listing price performance. Among these, the size of the IPO demonstrated a significant positive relationship with listing prices. Larger IPOs are often associated with well-established companies that carry greater investor trust and credibility. This trust, in turn, leads to higher demand and better listing performance. During the study period, larger IPOs attracted substantial interest from institutional investors, particularly in sectors such as technology and pharmaceuticals, which were viewed as high-growth areas.

The results align with prior studies, such as those by, which highlight the importance of issue size as a signal of company stability and potential. Moreover, the positive association between issue size and listing price reflects investor confidence in the ability of larger firms to withstand market fluctuations and deliver strong post-IPO performance. Subscription rates also played a significant role in determining listing prices, with higher subscription levels correlating positively with better IPO outcomes. Oversubscription, often viewed as an indicator of heightened demand and positive investor sentiment, directly influences listing gains. For FY24, the oversubscription rate for Indian IPOs reached an extraordinary 50 times, far exceeding the levels observed in prior years. This robust demand, particularly from retail and institutional investors, contributed to strong listing gains and underscored the critical role of subscription levels in shaping IPO success.

The results resonate with findings by (Mahalakshmi et al., 2024), who demonstrated that high subscription rates signal strong market interest, which in turn influences investor behaviour and listing outcomes.

The P/E ratio also emerged as a significant predictor of IPO listing prices. Firms with higher P/E ratios were perceived as having strong growth potential, attracting greater investor attention and achieving better listing performance. While high P/E ratios can sometimes raise concerns about overvaluation, they often signal optimism regarding a company's future earnings and market prospects. This was particularly relevant for sectors experiencing rapid growth during the study period, such as information technology, pharmaceuticals, and renewable energy. The results align with the view that investors place significant weight on valuation metrics, using them to gauge the attractiveness of IPOs in the context of broader market conditions. In contrast to the strong influence of macroeconomic indicators and IPO-specific metrics, secondary market conditions, such as market volatility and index performance, showed negligible direct effects on IPO listing prices. Market volatility is often viewed as a proxy for investor uncertainty, with higher volatility expected to deter risk-averse investors and dampen IPO performance. Nonetheless, the results of this study indicate that volatility might not directly influence IPO outcomes. Instead, its impact could be influenced by intermediary factors, including firm-specific attributes or investor sentiment. Similarly, the weak correlation between index performance and listing prices indicates that broader market trends are not always reliable predictors of individual IPO outcomes. These results highlight the importance of examining IPO-specific and macroeconomic factors in greater detail, as they appear to exert a more direct influence on listing price performance.

The findings of this study also underscore the complexity of factors influencing IPO outcomes, as evidenced by the unexplained variance in the regression model. While the model accounted for 56% of the variance in listing prices, the remaining unexplained variance suggests the presence of additional factors not captured in the analysis. These could include regulatory changes, sector-specific dynamics, or qualitative factors such as the reputation of the issuing company and the quality of underwriters. The Institutional engagement in the IPO was also seen as a significant contributing factor in earlier studies.(Agarwal, A., Arya, P. K., Patil, H., & Laheri, 2025). The Issue price, the reputation of the underwriters, had a positive association with subscription levels, and the delay in listing and the pricing mechanism had a negative association. (Das, 2023). The regulators can apply GDP and interest-rate models to identify the periods with market conditions favorable for public offerings. For instance, industries with strong policy support, such as renewable energy, may experience unique IPO trends driven by investor expectations of sustained growth. SEBI may consider mandating disclosures that can link firm-level risks with macroeconomic changes; such disclosures enhance transparency and support informed decision-making. Similarly, regulatory changes affecting capital markets can significantly influence IPO performance, creating opportunities for further research.

Another area for exploration is the interplay between macroeconomic indicators and secondary market conditions. The relationship between GDP growth and market volatility may provide insights into how external shocks influence investor behaviour and market outcomes. Additionally, understanding how retail and institutional investors respond to periods of heightened uncertainty could shed light on variations in IPO performance under different economic scenarios. Comparative analyses with other emerging markets could also provide valuable context, helping to identify whether the observed trends are unique to India or part of broader global patterns. The study highlights the pivotal role of investor behaviour in determining IPO success. The strong correlation between subscription rates and listing prices underscores the importance of market sentiment and demand dynamics. Institutional investors play a critical role in shaping IPO outcomes, as their participation often serves as a signal of credibility and quality for retail investors. However, the behaviour of retail investors, especially during periods of market exuberance, can also introduce variability, as seen in instances of oversubscription driven by speculative enthusiasm. Investors should evaluate the fundamentals of the firm rather than sentiment during unstable periods. Subscription levels and careful examination of the grey market signals reduce the exposure to wrong pricing. Disclosure of Information, Nature, Information technology, and perception were found in earlier studies to have an impact on the investor's decision-making.(Nema, 2023). Overall, this study offers valuable insights into the factors influencing IPO listing prices in the Indian stock market during a period of significant global uncertainty and domestic political shifts. The findings underscore the importance of macroeconomic indicators, particularly GDP growth, in fostering investor confidence and driving positive IPO outcomes. At the same time, IPO-specific metrics such as issue size, subscription rates, and P/E ratios emerged as critical determinants, reflecting their strong influence on market expectations and performance. The limited direct effects of secondary market conditions suggest that broader market trends may play a more peripheral role, with firm-specific and macroeconomic factors taking center stage.

6. Conclusion

This study provides valuable insights into the factors influencing IPO listing prices in the Indian stock market during 2020–2024, a period marked by significant global uncertainty and domestic political shifts. Among IPO-specific metrics, issue size, subscription rates, and Price-to-Earnings ratios emerged as critical determinants, reflecting their strong influence on investor confidence and market expectations. Interestingly, market volatility showed negligible direct effects on IPO listing prices, suggesting its impact may be mediated by other variables like institutional engagement, age of the company, issue price, underwriters' reputation, or may be mitigated by market mechanisms. Similarly, weak correlations with market indices indicate that broader market trends are not always reliable predictors of individual IPO performance. These findings underscore the intricate interplay between macroeconomic factors and firm-specific metrics, illustrating the multifaceted nature of IPO dynamics in shaping market outcomes.

While the results provide a comprehensive understanding of the key drivers of IPO listing prices, they also point to the need for further research. Future studies could explore sector-specific trends, regulatory impacts, and the role of qualitative factors such as corporate governance and transparency. These areas of investigation would not only enrich the understanding of IPO dynamics but also provide actionable insights for policymakers, investors, and companies planning public offerings. By addressing these gaps, future research can contribute to a more nuanced understanding of the complex interplay of factors shaping IPO outcomes in emerging markets like India.

Future research could expand on this study by exploring several areas to deepen the understanding of IPO dynamics. Investigating sector-specific trends could provide granular insights into how industry characteristics influence IPO outcomes, offering a more nuanced perspective. Additionally, analyzing the impact of regulatory changes and government policies would help illuminate their role in shaping IPO success, particularly during periods of economic reform. Comparative studies with other emerging economies could also contextualise the findings and identify unique and shared patterns in IPO markets. These avenues of research would further enrich the understanding of IPO performance and provide valuable guidance for policymakers, investors, and companies planning public offerings.

Competing Interests

The authors declare no competing interests.

Author Contributions

The first, second, and third authors contributed to the conceptualisation and methodology of the study. The third and fourth authors led the data analysis and manuscript writing. All authors were involved in interpreting results, reviewing, and editing the manuscript.

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