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The Strategic Role of Issue Composition and Market Sentiment in Determining Initial Public Offer (IPO) Underpricing and Valuation in India

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ABSTRACT

This study investigates the strategic interplay between Issue Composition (Proportion of Fresh Capital vs. Offer for Sale (OFS)), Market Sentiment ("hot" vs. "cold" markets), and the resulting Underpricing and Valuation of 236 Initial Public Offerings (IPOs) in the Indian capital market during 2009-2020. The analysis confirms a negative relationship between the proportion of fresh capital and underpricing, with full OFS issues (0% fresh) recording the highest average underpricing (20.61%) and 100% fresh issues recording the lowest (8.04%). Critically, a mean comparison shows that issuers opportunistically float a significantly lower proportion of fresh shares during hot market periods (51.62%) compared to cold periods (63.51%), suggesting the exploitation of market waves for existing shareholder exit. Furthermore, Ordinary Least Squares (OLS) regression analysis reveals that a lesser proportion of fresh issue is significantly associated with a higher Price-to-Book (P/B) Ratio, indicating more aggressive valuation when existing shareholders dominate the offering. The findings support the notion that issue structure acts as a signal to investors and that issuers strategically utilize market conditions to maximize proceeds for both the company and selling shareholders, reinforcing the relevance of prospect theory in the Indian IPO context.

Keywords: Underpricing, IPO, Offer for Sale, Price-to-Book (P/B) Ratio

INTRODUCTION AND REVIEW OF LITERATURE

The Underpricing Puzzle and Offer Size Components

The initial underpricing of IPOs remains one of the most studied anomalies in financial economics (Chhabra et al., 2017, p. 202322; Habib & Ljungqvist, 2001; Ljungqvist, 2007; Mumtaz & Smith, 2021; Rock, 1986). Underpricing is the phenomenon where the offer price is significantly lower than the price at which the stock begins trading on the exchange, resulting in immediate gains for investors who receive allotment. While numerous theories—including information asymmetry, signalling, and prospect theory—have attempted to explain this return, empirical focus on the composition of the offer size is crucial for understanding issuer intent.

An IPO's total offer size is typically a composition of two types of shares: Fresh Issue (new shares, the proceeds of which go to the company for investment) and Secondary Shares (Offer for Sale or OFS, the proceeds of which go to the selling shareholders). The motivation for offering these two components differs: fresh capital is raised primarily to finance investment and rebalance capital structure, while secondary shares are often offered to increase liquidity and provide an exit route for existing owners(Brau et al., 2007).

Global and Indian Contextual Evidence

Signalling and Secondary Shares

A significant stream of literature, particularly in the U.S. market, has explored the signalling effect of secondary shares(Allen & Faulhaber, 1989; Ljungqvist, 2007). The prevalent notion is that a larger portion of shares sold by existing shareholders sends a negative signal to prospective investors, implying that the firm's true value may

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be lower, and insiders are opportunistically cashing out. Some studies suggest firms employ strategies to conceal this negative signalling. Conversely, other findings suggest that selling is motivated by the existing owners' desire for portfolio diversification rather than opportunistic timing. In the Japanese market, a study reported that a lesser proportion of secondary shares was associated with greater underpricing, adding complexity to the signalling hypothesis (Bannenberg, 2019).

Issue Composition and Underpricing

(Habib & Ljungqvist, 2001) proposed that if the secondary share portion is lower, existing owners are less motivated to fix a high issue price, potentially leading to greater underpricing. Conversely, (Dhamija & Arora, 2017)conducted one of the few studies in India, finding a negative relationship between the proportion of OFS and underpricing. Their result implied that when OFS is part of an IPO, the issue is more likely to be fairly priced or overpriced, leading to lower underpricing, based on the assumption that selling owners are aware of the intrinsic value and try to fix a higher price band. The Indian context, where secondary shares are defined as OFS, therefore requires a dedicated investigation.

Market Timing and Research Objectives

The decision of *when* to go public is also influenced by market sentiment, known as the "hot" or "cold" market phenomenon. Academic literature and newspaper reports indicate an increasing trend of OFS in Indian new issues, often viewed as an exit route for founders and venture capitalists when market conditions are favourable. This raises questions about the issuer's ability to maximize proceeds by leveraging market sentiments while determining the issue structure.

Considering the existing literature and the specific dynamics of the Indian market, this study seeks to address the following research questions:

1. Do issuers sell a lesser proportion of fresh shares (more secondary shares) during hot periods compared to cold periods?

2. Does the impact of the proportion of fresh issue on underpricing differ during hot and cold markets in India?

3. Do issuers set maximum prices for the shares offered during hot markets, and does the proportion of fresh issue affect this pricing strategy?

DATA AND RESEARCH METHODOLOGY

Sample and Data Collection

The study utilized a sample of 236 IPOs listed on the Indian stock exchanges over a specified study period. Data were meticulously collected from the official websites of the National Stock Exchange (NSE) and the Securities and Exchange Board of India (SEBI). Specifically, crucial data points like the final offer price, NAV (Book Value), and details of the offer composition were collected from the Red Herring Prospectuses (RHP) filed with SEBI.\

Measurement of Key Variables

- Underpricing (MAAR): Measured as the Mean Adjusted Abnormal Return (MAAR), the initial return calculated on the listing day.

- Proportion of Fresh Issue (FRESH): The percentage of new shares in the total issue size. The sample was categorized into three groups based on this variable: 100% Fresh Issue (n=86), 0% Fresh Issue or 100% OFS (n=57), and Combination (n=93).

- Market Sentiment (HOT/COLD): Market conditions were classified into "Hot" (n=149) and "Cold" (n=87) periods based on a pre-established methodology Following (Mumtaz & Smith, 2021) who identified the hot

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market by comparing the number of IPOs in a quarter with the *highest number* of IPOs in the previous five years in the same quarter. In this study the *average number* of IPOs in the previous 5 years of the same quarter is taken as a base for comparison. For instance, 2009 Q1 has been compared with the average number of IPOs in the first quarter of years 2008, 2007, 2006, 2005, and 2004 and for 2009 Q2, the number of IPOs in the second quarter (Q2) of the previous 5 years (2008-2004) has been taken and so on. There were 48 quarters out of which 17 quarters were identified as hot periods

- Pricing Strategy (P/B Ratio): The Price-to-Book Ratio (P/B) was used to indicate the issuer's ability to set the offer price in multiples of the intrinsic value (Net Asset Value/Book Value).

P/B ratio = Offer Price/Net Asset Value per share

- Control Variables: Variables included in the OLS model to control for firm-specific and issue-specific characteristics were Log of Assets (LNASSETS), Underwriter Reputation (UR)

Research Hypotheses and Analytical Techniques

The study employed both descriptive statistics (mean, standard deviation) and inferential statistics:

1. ANOVA F-test and Welch F-test: Used to test the null hypothesis of no significant difference in the mean underpricing among the three categories of issue composition (100% Fresh, 0% Fresh, Combination).

2. t-tests: Used to test the equality of mean proportions of fresh issue between hot and cold markets.

3. Ordinary Least Squares (OLS) Regression: Used to test the relationship between the proportion of fresh issue and the pricing strategy (P/B Ratio).

4. Diagnostic Tests: Multi-collinearity was checked using Variance Inflation Factors (VIF), and heteroscedasticity using the Breusch-Pagan-Godfrey (BPG) Test.

Results

Underpricing and Proportion of Fresh Issue

The descriptive statistics provided the initial evidence of the inverse relationship between the proportion of fresh issue and underpricing.

Table 1: Proportion of Fresh issue in IPOs and Underpricing

Variables	100% Fresh Issue	0% Fresh Issue (Full OFS)	Both Fresh and OFS	Observations (n)
Proportion of Fresh Issue (%) (Mean)	100	0	48.56 (SD 24.85)	N.A.
Underpricing (MAAR) (Mean)	8.04 (SD 33.64)	20.61 (SD 34.82)	16.59 (SD 31.21)	236
Observations	86	57	93	
ANOVA F-test (Prob.)	0.0622*			
Welch F-test (Prob.)	0.0737*			

(* indicates Significant at 10%)

The results clearly indicated that the average underpricing (MAAR) was the highest (20.61%) in the 0% fresh issue (full OFS) category, followed by the combination category (16.59%). The lowest underpricing was found in the 100% fresh issue category (8.04%). The ANOVA and Welch F-tests confirmed that the difference in underpricing among the three categories was statistically significant at the 10% level, thus rejecting the null

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hypothesis of no difference. This primary result suggested a negative relationship between the proportion of fresh issues and initial returns.

Market Timing and Issue Composition (Opportunistic Selling)

To address the first research question, the proportion of fresh issue was compared between the hot and cold market periods.

Table 2: Test of Equality of Mean Fresh Issue Proportion

Variable	Cold Period	Hot Period	t-test Probability
Mean Proportion of Fresh Issue (%)	63.511 (SD 40.687)	51.616 (SD 41.58)	0.0336 (**)
Observations	87	149	

(** indicates significant at 5%)

The results showed that the mean proportion of fresh issue was significantly lower in the hot period (51.62%) than in the cold period (63.51), statistically different at the 5% level. This confirmed the first research question: issuers tend to sell more secondary shares (fewer fresh shares) during the hot market, suggesting the use of favourable market sentiment as a partial exit route for existing owners.

A further segregated analysis of underpricing among the three categories during hot and cold markets was performed. The ANOVA F-test showed that the difference in mean underpricing was significant during the cold period (0.0687 at 10% level) but not significant during the hot period (0.4605). Specifically, in the cold period, the 100% fresh issue category had very low underpricing (3.52%), while the other two categories were above 20%. This suggested that the hot market does not offer excess returns to investors across different issue compositions.

OLS Regression: Determinants of Pricing (P/B Ratio)

To test the third research question, the OLS regression model was applied to determine the factors influencing the Price-to-Book (P/B) Ratio.

Table 3: Determinants of P/B Ratio

Dependent Variable: P/B RATIO	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	30.245	7.689	3.933	0.000	NA
FRESH	-0.049	0.03	-1.615	0.108*	1.2830
HOT	0.615	2.388	0.257	0.797	1.0668
LNASSETS	-2.675	0.866	-3.091	0.002***	1.9155
UR	0.302	0.133	2.269	0.024**	1.6971
R-squared: 0.056	Adj. R-squared: 0.027	F-statistic Prob: 0.068**			

(*, **, *** represent significance at 10%, 5% and 1% respectively)

Key Findings:

1. Fresh Issue Proportion (FRESH): The coefficient for the FRESH variable was negative (-0.049) and significant at the 10% level. This was a crucial finding, suggesting that as the proportion of fresh capital in an IPO increases, the P/B ratio tends to be lower. Conversely, a higher OFS portion implies that issuers price the shares at a much higher multiple of their Net Asset Value.

2. Market Sentiment (HOT): The HOT variable was not statistically significant (Prob. 0.797), failing to prove the hypothesis of generally higher P/B ratios in hot markets.

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3. Control Variables: Underwriter Reputation (UR) had a significant positive influence on the P/B ratio, supporting the Signalling theory that high-repute underwriters are used to indicate firm quality and justify a higher issue price.

4. Log of Assets (LNASSETS) had a significant negative relation with P/B ratio, indicating that for companies with a large asset base, the offer price may not be proportionally high, resulting in a lower P/B ratio.

5. Model Fit: The overall model was significant at the 10% level (F-statistic Prob. 0.068). Diagnostic tests confirmed the absence of multi-collinearity and heteroscedasticity.

DISCUSSION AND IMPLICATIONS

Signaling, Prospect Theory, and Opportunistic Exit

The collective evidence strongly suggests that the composition of the IPO issue is a strategic choice used by issuers to interact with both market sentiment and investor perception.

The significant inverse relationship between the proportion of fresh issue and underpricing, coupled with the high P/B ratios in high-OFS issues, aligns with the argument that existing shareholders, confident in their valuation (P/B ratio), attempt to maximize the offer price when selling their holdings. This aggressive pricing strategy, however, results in higher initial returns (underpricing) for investors, contradicting the idea that a high OFS portion should deter investors.

The finding that issuers significantly increase the secondary share component during hot markets confirms the use of IPOs as an opportunistic exit route. Even though underpricing was not statistically different across market categories in hot markets, the low P/B ratio for high-fresh-issue IPOs compared to high-OFS IPOs during cold markets suggests a strategic divergence in pricing depending on the issue's intent. Signalling has been used by the issuers to mitigate the information asymmetry between the issuers and prospective investors(Colombo, 2021; Connelly et al., 2011). The present study reported that the firm uses underwriter reputation as a positive signal of the quality of the issuing firm and thereby raise maximum amount from the investors by increased valuation and pricing especially during positive market waves. This finding support the observations of (Neupane & Poshakwale, 2012) on Indian IPOs.

This behaviour supports the Prospect Theory (Loughran & Ritter, 2002), which posits that issuers are not overly concerned with leaving "money on the table" due to the overall wealth appreciation in their retained equity and the benefit of successfully completing the offering. Issuers are primarily focused on the success of the offer and the strategic benefits of going public, which include funding growth (fresh issue) and providing liquidity (OFS). The use of Underwriter Reputation as a positive signal to mitigate information asymmetry and justify higher valuation further underscores the sophistication of the Indian IPO process.

Practical and Policy Implications

This study offers critical insights for market participants:

- For Investors: Short-term investors seeking maximum listing-day returns are statistically better off by prioritizing IPOs with a higher proportion of secondary shares (OFS), as these issues demonstrate the highest average underpricing. Conversely, IPOs with a large proportion of fresh shares, intended for growth financing, may offer lower immediate returns but potentially higher long-run returns for long-term investors.

- For Regulators and Issuers: The study provides evidence that issue structure is a key signalling and pricing mechanism. While issuers can use a lower fresh issue proportion to achieve higher valuations (P/B ratio), this comes at the cost of higher initial returns for investors. Issuers must carefully consider

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the preferred investor base; a higher fresh issue may attract institutional and long-term investors, while a higher OFS may be more attractive to retail investors looking for quick returns.

In conclusion, this research confirms that the underpricing of Indian IPOs is strongly and negatively influenced by the proportion of fresh capital in the issue. The strategic use of the OFS component, particularly during favourable market conditions, allows existing shareholders to realize a successful exit, thereby reinforcing the importance of issue structure as a key financial signal in capital market research.

REFERENCES

1. Allen, F., & Faulhaber, G. R. (1989). Signalling by Underpricing in the IPO Market. Journal of Financial Economics, 23, 303–323. https://doi.org/10.1016/0304-405X(89)90060-3
2. Bannenberg, L. J. (2019). The interplay of IPO underpricing and offer size. 45. https://dx.doi.org/10.2139/ssrn.3322012
3. Brau, J. C., Li, M., & Shi, J. (2007). Do secondary shares in the IPO process have a negative effect on aftermarket performance? Journal of Banking & Finance, 31(9), 2612–2631. https://doi.org/10.1016/j.jbankfin.2006.09.016
4. Chhabra, S., Kiran, R., Sah, A. N., & Sharma, V. (2017). Information and performance optimization: A study of Indian IPOs during 2005-2012. Program, 51(4), 458–471. https://doi.org/10.1108/PROG-05-2017-0035
5. Colombo, O. (2021). The Use of Signals in New-Venture Financing: A Review and Research Agenda. Journal of Management, 47(1), 237–259. https://doi.org/10.1177/0149206320911090
6. Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. Journal of Management, 37(1), 39–67. https://doi.org/10.1177/0149206310388419
7. Dhamija, S., & Arora, R. K. (2017). Impact of Quality Certification on IPO Underpricing: Evidence from India. Global Business Review, 18(2), 428–444. https://doi.org/10.1177/0972150916668611
8. Habib, M. A., & Ljungqvist, A. P. (2001). Underpricing and Entrepreneurial Wealth Losses in IPOs: Theory and Evidence. The Review of Financial Studies, 14(2), 26.
9. Ljungqvist, A. (2007). Chapter 7—IPO Underpricing. In B. E. Eckbo (Ed.), Handbook of Empirical Corporate Finance (pp. 375–422). Elsevier. https://doi.org/10.1016/B978-0-444-53265-7.50021-4
10. Mumtaz, M. Z., & Smith, Z. A. (2021). IPO cycles in Pakistan. Borsa Istanbul Review, S2214845021000016. https://doi.org/10.1016/j.bir.2021.01.001
11. Neupane, S., & Poshakwale, S. S. (2012). Transparency in IPO mechanism: Retail investors' participation, IPO pricing and returns. Journal of Banking & Finance, 36(7), 2064–2076. https://doi.org/10.1016/j.jbankfin.2012.03.010
12. Rock, K. (1986). Why new issues are underpriced. Journal of Financial Economics, 15(1–2), 187–212. https://doi.org/10.1016/0304-405X(86)90054-1