

IPO Underpricing and Long-Run Performance: Theories and Evidence

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ABSTRACT

Initial public offerings (IPOs)—the first sale of a company's shares to the public on a stock exchange—present one of corporate finance's most studied and most robust empirical regularities: IPO underpricing. On average, IPO shares are priced approximately 15–20% below their first-day market close—leaving substantial 'money on the table' for initial buyers at the expense of issuing companies. Rock's (1986) winner's curse explanation, Benveniste and Spindt's (1989) bookbuilding information extraction model, and signaling theories provide competing explanations for why rational issuers tolerate such large discounts. A second IPO regularity—long-run underperformance—was documented by Ritter (1991) in the *Journal of Finance*: IPO issuers significantly underperform comparable firms over the three to five years following issuance, raising questions about whether IPO markets efficiently price growth potential. This paper reviews IPO theories, evidence on underpricing and long-run performance, hot versus cold market dynamics, and the evolution of IPO mechanisms including direct listings and SPACs.

Keywords: IPO; Underpricing; Long-Run Performance; Winner's Curse; Bookbuilding; Rock; Ritter; Hot Issue Market; SPAC

1. INTRODUCTION

The IPO is the defining moment in a company's transition from private to public ownership—the event through which growth capital is raised from public investors and the founders, employees, and early investors achieve liquidity on their equity holdings. IPOs are high-profile financial events: Apple's 1980 IPO raised \$96 million and valued the company at \$1.78 billion; Facebook's 2012 IPO raised \$16 billion; and Alibaba's 2014 IPO raised \$25 billion—the largest in history at the time. These high-profile transactions obscure the reality that IPO markets are cyclical (hot markets with many IPOs and high underpricing alternate with cold markets with few IPOs), and that many IPOs perform poorly for investors who hold shares beyond the first day.

Ibbotson and Jaffe (1975) in the *Journal of Finance* first documented the 'hot issue market' phenomenon: periods in which IPO underpricing is unusually high, often clustering around bull market periods with high investor sentiment. Ritter (1984) extended this by documenting that hot issue markets are followed by periods of below-average IPO returns for investors who purchase at the IPO price—implying that issuers time their IPOs to take advantage of investor overvaluation during hot markets, accepting higher underpricing to complete offerings during the window of opportunity.

2. IPO UNDERPRICING THEORIES

2.1 Rock's Winner's Curse

Rock (1986) in the *Journal of Financial Economics* proposed the most influential theory of IPO underpricing: uninformed investors face a winner's curse in IPO allocation because informed investors preferentially bid for underpriced IPOs and withdraw from overpriced ones. In equilibrium, uninformed investors only receive allocations when informed investors do not want shares—in overpriced offerings—so uninformed investors must be compensated with underpricing sufficient to generate positive expected returns despite the allocation bias. This model predicts that underpricing is larger when the information advantage of informed investors is larger—consistent with higher underpricing for smaller, less-known issuers.

2.2 Bookbuilding and Information Extraction

Benveniste and Spindt (1989) in the *Journal of Financial Economics* develop an information extraction theory of bookbuilding (the IPO roadshow and preliminary price discovery process): underwriters induce institutional investors to reveal positive information about the offering's demand by rewarding information revelation with IPO allocations at the

final offer price. Underpricing is the cost of information revelation—issuers leave money on the table to induce truthful demand revelation that enables more accurate pricing. This theory predicts partial adjustment: issuers partially adjust IPO prices upward in response to strong demand (capturing some of the information rent for themselves) while maintaining underpricing to reward information providers.

3. LONG-RUN PERFORMANCE

Table 1. Evidence on IPO long-run underperformance.

Study	Sample	Long-Run Underperformance
Ritter (1991) JF	1526 U.S. IPOs, 1975–84	–16.9% vs. matched firms over 3 years
Loughran & Ritter (1995) JF	4753 U.S. IPOs, 1970–90	Significantly lower 5-year returns vs. size-matched firms
Brav & Gompers (1997) JF	U.S. IPOs, 1972–92	Underperformance disappears with Fama-French controls; style bias explains
Chambers & Dimson (2009)	UK IPOs, 1917–2007	Consistent underperformance; long historical evidence

4. ALTERNATIVE IPO MECHANISMS

Traditional bookbuilding IPOs—where underwriters manage the price discovery and allocation process—have been challenged by alternative mechanisms. Direct listings (Spotify 2018, Palantir 2020) allow companies to list shares already outstanding without raising new capital or using underwriters for allocation, avoiding IPO underpricing at the cost of no new capital raising and no lockup on insider selling. SPACs (Special Purpose Acquisition Companies) experienced a dramatic surge in 2020–2021, raising over \$160 billion in U.S. SPACs in 2020 alone, providing an alternative path to public markets through blank-check companies that subsequently merge with operating businesses. Evidence on SPAC performance shows consistently poor outcomes for post-merger shareholders, with typical SPACs losing 50% or more of value within two years of the initial SPAC listing.

5. CONCLUSION

IPO underpricing—one of corporate finance’s most robust empirical regularities—reflects the compensation required to attract uninformed investors (Rock’s winner’s curse), the cost of information extraction through bookbuilding (Benveniste-Spindt), and signaling by high-quality issuers who can afford to underprice and recover through subsequent seasoned equity offerings. Long-run IPO underperformance is less robust to risk adjustment and may reflect style biases rather than genuine mispricing, though the hot-market timing evidence suggests that issuers strategically choose favorable market conditions that are associated with subsequent return underperformance. Alternative IPO mechanisms (direct listings, SPACs) have gained market share but show their own pricing problems. Future research should examine how machine learning-based IPO pricing (using broader information sets than traditional bookbuilding) can improve first-day pricing efficiency and reduce underpricing cost for issuers.

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