

# Review of Short Term and Long Term Performance of Initial Public Offering

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## Abstract

In today's modern corporate world the concept of initial public offerings has gained much importance because it's over and under performance can significantly affect the success of company. The current study aims at conducting a nonsystematic review of literature on the concept of initial public offering in order to understand its meaning and dimensions. In this regard a thorough review of existing literature has done and it has found that initial public offering concept has been explained by theorists in different ways. Its meaning has significantly changed with changes in the business trends of corporate world. It was further found that over performance in short run and underperformance in the long run of initial public offering has remained mystified for the researchers although the performance of initial public offerings has significant effect on success or failure of a company. It is therefore concluded that the researchers should try to comprehend the conceptual nature and dimensions of initial public offering by examining its effects on the success of companies. In this way the companies in modern corporate world can ensure their success through effective utilization of initial public offerings.

**Keywords:** Initial public offerings; underpricing; under performance; nonsystematic review

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## 1.0 INTRODUCTION

An initial public offering, or IPO, occurs when a privately held company decided to issue securities to general public for the first time. The securities may be debt or equity. This paper covers only equity issuance. Usually, businesses start-out operation by raising funds from private investors with no liquid market. If a company flourish and need further funds, at some point it finds desirable to "go public" by issuing securities to general public. The rationale behind "going public" is to improve liquidity and raising more funds from diversified investors.

Numerous studies have been conducted to investigate the effectiveness of IPO issuance both in the short run and long run. Several academic researchers stated high initial return in short run and negative return in the long run of initial public offerings. Over performance or underpricing in short run and underperformance or overpricing in the long run of IPOs have been remains mystified for researchers from decades.

A lot of empirical studies have been documented by academician using different variables and tested different hypothesis to investigate the reasons of short term over performance and long term underperformance of IPOs. One of the reasons of initial high return in short run of IPOs is under-pricing, which generates high return after the first day trading but inversely in the long-run. Ibbotson (1975), Ibbotson, Sindelar, & Ritter (1988) and Ritter (1998), underpricing is common phenomena and associated with firms undertaking IPO. Underpricing is the difference between offering price and the first day closing price of stock. Researchers found overpricing or underperformance in the long run of initial public offerings. Lee, Taylor & Walter (1996) states overpricing in the long run in Australia, Aggarwal, Leal & Hernandez (1993) in Brazil, Jog and Srivistava (1987) in Canada, Ljungqvist (1997) in Germany, Levis (1993) in U.K and Loughran & Ritter (1995) in U.S.

This paper provides a brief literature review that focuses on pattern of IPO performance and theories/propositions that explain the phenomena of short term underpricing and long term underperformance. This study is not comprehensive at all but based on the studies of prominent researchers contributed in the field of finance literature.

## 2.0 SHORT-RUN PERFORMANCE OF IPOs

Numerous studies have been conducted to investigate the short-term performance of initial public offerings. Researchers stated that generally IPOs generate positive initial return in short-term. Ibbotson (1975) finds positive initial return by studying 120 IPOs during 1965-69 of US market. His study reveals 11.4% average initial return for one month after the issuance date. Ibbotson and Jaffe (1975) using a larger sample for the same period and reported 16.8% average initial return. Dimson (1979) reported 8.5% to 17% initial return by studying UK market. Ritter (1984) empirically studied over 5000 IPOs from 1960 to 1982 and reported initial return to be 18.8% more than the offering price soon

after trading started. Ibbotson, Sindelar and Ritter (1988) documented positive initial returns of initial public offerings and reported 16.4% average initial return by studying 8,668 IPOs during 1960-87. Loughran *et al.* (1994) demonstrate significant underpricing and short run excess return for 28 countries and states that short-run underpricing has been experienced in almost every country with a stock market. Ibbotson, Sindelar & Ritter (1994) reported the same in United States, Dimson; Levis (1993) in United Kingdom, Kunz & Aggarwal (1994) in Switzerland, Vos & Cheung (1992) in New Zealand, Ljungqvist (1997) in Germany, Bisgard (1997) in Denmark, Jog & Riding; Jog & Srivastava (1987) in Canada and Lee, Taylor & Walter (1996) in Australia.

Researchers stated that underpricing is associated with initial public offerings due to which it generates abnormal return in the short run. Ibbotson (1975), Ibbotson, Sindelar, & Ritter (1988) and Ritter (1998), underpricing is common phenomena and associated with firms undertaking IPO. Underpricing is the difference between offering price and the first day closing price of stock. The most prominent explanation with empirical support is that IPO underpricing happens because of informational asymmetry. Information asymmetry occurs when one party having superior information regarding the underline asset as compared to other party. There are different theories and hypothesis based on asymmetry information to explain IPO short run underpricing. Rock (1986) explain “winner curse” hypothesis of underpricing. Rock states that there are two types of investor, informed investor and uninformed investor. Uninformed investor assumes rationing and subscribes every IPO while informed investor only buy shares having issue price less than fair value. This happen "winner's curse" for the uninformed investors. Therefore, IPO must be issued at lower price than fair value to keep-in the uninformed investors in the market because none of the investors group has enough money to absorb the initial public offering.

Some theoretical models are based on “signaling hypothesis”; according to which issuing firm deliberately under price their shares to generate excess return by following subsequent seasoned issue. Allen and Faulhaber (1989), Grinblatt and Hwang (1989) and Welch (1989), presented signaling models and stated that high quality firms may pass signal to the market of their high valuation by underpricing initial public offering. The cost of these underpricing may be recovered by issuing future seasoned equity offering (SEO) at high value. Welch (1989) documented that most of the firms go for seasoned issue within a few years after initial public offering. However, the study of Jegadeesh, Weinstein and Welch (1993), does not support the signaling hypothesis as they find that successful seasoned equity issuance depends on the aftermarket return of IPOs and concluded that the underpricing is not the sole factor of successful SEO. Further, they suggest that issuer need not to rely only on the costly IPO underpricing to form favorable condition for seasoned issuance.

Another informational-based theory for short run underpricing is known as dynamic informational acquisition. This theory focus on the book-building process, which was first examined in the academic literature by Benveniste and Spindt (1989) and Benveniste and Wilhelm (1990), the method used by underwriter to builds a book of prospective investors, the demand for shares and the prices they are willing to pay. In order to motivate investors to reveal adequate information about the price and demand for shares, underwriters allocate fewer shares to potential investors who bid low price against the price set by underwriter and issuer. But underwriter still discount the stock to induce aggressive bidding and to make sure that the bids are not yet lesser since the more bids at hand are, the more information is disclosed about the correct price for the stock. This underpricing is acceptable for issuer because it enables underwriter to better estimate a higher acceptable offer price that could be included in the final prospectus. Cornelli and Goldreich (2001) empirically study a sample of 39 international equity issues to investigate how the underwriters acquire information about the demanded share, before setting a price. They state that underwriters prefer limited bids price in order to determine the variation in demand with different prices.

Welch (1992) explain “informational cascade” as IPO underpricing. He states that, investors make their decisions by keeping in view the interest of other investors. Investors prefer to buy shares at a price acceptable to others investors (potential buyers). To deal with this problem the issuers tend to underprice their offering in order to attract initial buyers and induce a bandwagon, or cascade, in which all succeeding investors want to buy irrespective of their own information. Ritter (1998) stated that IPO market is subject to bandwagon effect. When an issuer underpriced offering to induce investors it causes positive cascade effect and vice versa. Amihud, Hauser, and Kirsh (2002) supported Welch’s (1992) theory of information cascade and argue that uninformed investors can improve their performance by avoiding undersubscribed IPOs and go for those with high demand.

### ■ 3.0 LONG RUN PERFORMANCE OF IPOs

Long-run performance of IPOs is one of the most debatable issues for academic researchers. Unlike short run performance of IPOs, underperformance or overpricing is associated in the long run performance of IPOs. Researchers provide different theoretical explanation of IPOs long run performance. Ritter (1991) reported underperformance in the long run of IPOs. By using a sample of 1526 IPOs during 1975-84 for the period of 3 years, he finds 34.37% average initial return as compared to a control sample of matching firms in same industry generated 61.86%. Aggarwal and Rivoli (1991) documented -13.73% abnormal returns for investors holding shares for 250 trading days after the first day closing by using a sample of 1589 IPOs during 1977-87. Yi (1992) states that underperformance persist for the six years after the first day trading, by using the same sample as used by Ritter (1991). Loughran and Ritter (1995) use a sample of 4753 IPOs during 1970-1990 and reported underperformance for 5 years after the first day trading. However, they find less underperformance in sixth year. Purnanandam and Swaminathan (2001) investigate the long run performance of more than 2000 IPOs during 1980-1997 and reveals that IPOs are overvalued with respect to their fair value.

Various studies across the global suggest that underperformance of IPOs is associated with every capital market. Leal, and Hernandez (1993) documented average returns of -47%, -19.6% and -23.7% for Brazil, Mexico, and Chile, respectively for the period of three years after the first day closing. Aggarwal, Levis (1992) reports that the prices of IPO firms listed on UK markets tends to decline as 23% of all Share Index return for the 36 months. Uhlir (1989) documented IPOs underperformed in German market. Taylor & Walter (1996) states overpricing in the long run in Australia, Aggarwal, Leal & Hernandez (1993) in Brazil, Jog and Srivastava (1987) in Canada, McGuinness (1993) in Hong Kong, Ljungqvist (1997) in Germany, Levis (1993) in U.K and Loughran & Ritter (1995) in U.S.

Researchers documented different theories and explanations of long run underperformance. Shiller (1990) explain “impresarios” hypothesis. He argues that underwriter act as the impresario to attract investors and create fads in market by underpricing the issue. As a result the IPO underperform in the long run. However, in the support of Shiller’s hypothesis Ritter (1991) documented significant evidence

for this relation. Miller (1977) reports that uncertainty is associated with IPOs valuation because of the valuation differences given by optimistic investors and pessimistic investors. Optimistic investor assume future prospect of IPO and tends to purchase the issue above its fair value. With the passage of time as more information revealed to other investors the stock price tends to decrease to its fair value. Miller also suggests that riskier issues will poorly perform in the long run.

Ritter (1991), Loughran and Ritter (1995) explain the “windows of opportunity” hypothesis which predicts that IPOs issued in the high volume period will be highly valued than other IPOs. Taking the advantage of time, managers are likely to issue equity to decrease the cost of capital. Loughran and Ritter provide empirical evidence that IPOs issued in the high volume period will underperform in the long run. However, Kang, Kim, and Stulz (1997), Jung, Kim, and Stulz (1996) show concern about the temporary overvaluation implied by the “windows of opportunity” hypothesis. Kang, *et al.* (1997) find underpricing even after controlled market-to-book equity ratio, which contradict windows of opportunity hypothesis.

Some empirical studies examine different factors to determine variation in IPOs long run performance. Rao (1995) argue that IPO firms having high non-compulsory accounting accruals will generate negative abnormal stock returns in the long run. Brav and Gompers (1997) documented that IPOs, backed by venture capital will perform high as compared to non-venture backed IPOs. Carter, Dark and Singh (1998) highlighted that IPO with less prestigious underwriter will generate high negative return in the long run as compared to IPO having reputed underwriter. Yi (2001) reported that IPO firms with positive earnings per share at the time of issuance will perform better than IPO firms having negative earnings per share. Bildik, Yilmaz (2006) empirically examine different factors affecting long run performance of IPOs in the Istanbul Stock Exchange and found negative return. He concluded that volume of IPO, investors behavior, the dispersion of investors, market condition, underwriter reputation, allocation of shares, firm’ (unique) risk and nature of initial return can affect long term performance of IPOs. Various researchers show concern about the methodology used for measuring IPOs long term performance. Mitchell and Stafford (1999) argued that the methodology usually used by other researchers was not adequate and severely inconsistent as it assumed independence of multi-year underperformance for scrutinized firms. Kooli and Suret (2002) argue that observed patterns are not constantly statistically significant, and depend on the methodology used and on the calculating design. Gompers and Lerner (2001) examined nearly 3,661 IPOs for five years in the United States from 1935 to 1972. They found some facts of underperformance of the sample when multi-year “event-time” buy-and-hold abnormal proceeds were used. By using calendar-time analysis they concluded that IPOs returns are same as market return.

#### ■4.0 CONCLUSION

The positive first day return and long run negative return of initial public offering has remained enigma for academician and investors from the last three decades . It is revealed from the study of prior literature that the phenomena of underpricing in the short run and underperformance in the long run exist in almost every financial market across the globe. However, the magnitude of returns varies from one country to another depends on the market condition, with the same pattern of underpricing and underperformance. Various theories and propositions have been developed by the theorist to explain the performance pattern of initial public offering, which needs to be tested empirically. It is therefore concluded that the researchers should try to comprehend the conceptual nature and dimensions of initial public offering performance and related theories by examining its effects on the success of companies. In this way the companies in modern corporate world can ensure their success through effective utilization of initial public offerings.

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