



STUDY ON IPO UNDERPRICING AND LONG-RUN AFTERMARKET PERFORMANCE IN HONG KONG

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Abstract

This study examines initial public offering (IPO) underpricing and long-run aftermarket performance in Hong Kong using a sample of 598 IPOs listed on the Stock Exchange of Hong Kong (SEHK) between 2006 and 2013. IPO performance is measured using initial returns, raw returns, and market-adjusted returns over holding periods of up to two years. The study further investigates whether IPO performance varies by listing year, subscription ratio, and the final offer price's position within the indicative price range. The results indicate that IPO underpricing remains a significant feature of the Hong Kong market. The average first-day return is 16.2%, suggesting substantial initial gains for investors. However, these gains are not sustained, as IPOs generate an average two-year market-adjusted return of approximately -8%, indicating significant long-run underperformance. This pattern suggests that initial investor optimism leads to temporary overvaluation, followed by subsequent price corrections. Cross-sectional analyses show that IPOs issued during periods of high issuance activity, those with higher subscription ratios, and those priced closer to the upper bound of the filing price range generate stronger initial returns but weaker long-run performance. These findings support the asymmetric information, ex-ante uncertainty, investor sentiment, hot issue market, and partial adjustment hypotheses. Overall, the study provides evidence that strong investor demand contributes to IPO underpricing while increasing the likelihood of long-run underperformance in the Hong Kong market.

Keywords

IPO, Underpricing, Cross-Sectional Analysis, Offer Price, Subscription Ratios

JEL classification: G10, M21

1. Introduction

Initial Public Offerings (IPOs) have long attracted considerable attention from academics, investors, and policymakers because of two persistent phenomena: IPO underpricing and long-run aftermarket underperformance. IPO underpricing occurs when shares are offered below the price investors are willing to pay once trading begins, generating positive first-day returns. While investors often benefit from these initial gains, numerous studies show that newly listed firms tend to underperform the broader market over longer investment horizons.

Although these patterns are documented in developed markets, particularly the United States, and in developing markets, particularly China (Chan et al., 2004; Chi and Padgett, 2005), it remains important to investigate whether established IPO theories apply to Hong Kong (Chan et al., 2001; McGuinness, 1992; Vong and Zhao, 2008). As a leading international financial centre and a major fundraising platform for Chinese firms, Hong Kong provides a unique setting for examining IPO performance (Lam et al., 2007;

Lin and Hsu, 2008; McGuinness, 2012). Using a sample of 598 IPOs listed on the Stock Exchange of Hong Kong (SEHK) between 2006 and 2013, this study investigates the determinants of IPO underpricing and long-run performance.

Hong Kong has played an important role in the development of China's capital markets. Since the early 2000s, many mainland Chinese firms, especially state-owned enterprises, have raised capital through Hong Kong listings, making the city one of the world's largest IPO markets (Chong et al., 2010). However, market conditions varied considerably during the sample period. The 2008 global financial crisis weakened investor confidence and reduced IPO activity, while concerns over corporate governance and financial reporting among some mainland issuers during 2010 and 2011 increased market uncertainty. Despite these challenges, the IPO market recovered in 2013 as regulatory oversight and investor confidence improved.

Previous studies consistently report positive initial returns and weak long-run performance among IPOs (Vong and Trigueiros, 2010). In Hong Kong, Dawson (1987) finds average market-adjusted initial returns of 13.8% and one-year underperformance of 9.3%. Cheng et al. (2006) report average initial returns of 19.06% and three-year market-adjusted returns of -58.19% for IPOs listed between 1986 and 1998. Vong (2006) and McGuinness (1992) document mean underpricing of 18.32% and 17.6%, respectively. Examining Chinese state-owned enterprises, McGuinness (2012) finds an average initial return of 22.22%. Collectively, these studies suggest that IPO underpricing is a persistent feature of the Hong Kong market.

Several theories explain IPO underpricing and aftermarket performance. Rock's (1986) asymmetric information hypothesis argues that informed investors possess superior information about firm value, while uninformed investors face adverse-selection risk. To attract sufficient participation from both groups, issuers and underwriters price IPOs below their expected market value, resulting in underpricing.

Beatty and Ritter's (1986) ex-ante uncertainty hypothesis predicts a positive relationship between uncertainty and underpricing. Because newly listed firms often have limited operating histories and publicly available information, investors face greater valuation uncertainty and require larger discounts. Subscription ratios are commonly used as a proxy for ex-ante uncertainty and investor demand (for example, Vong, 2006). While highly subscribed IPOs tend to generate greater initial returns, they may subsequently experience weaker long-run performance as valuations adjust toward their fundamental values.

Investor sentiment provides another explanation for IPO performance. Aggarwal and Rivoli (1990) argue that speculative or fad behavior can temporarily push IPO prices above fundamental values. As more information becomes available, these inflated valuations are corrected, leading to long-run underperformance. This explanation is closely related to Ritter's (1984) hot issue market hypothesis, which suggests that periods of unusually high IPO activity are often associated with excessive optimism and weaker subsequent returns.

Hanley's (1993) partial adjustment theory focuses on the bookbuilding process. During bookbuilding, underwriters revise offer prices in response to investor demand but only partially incorporate favourable information into the final offer price. As a result, IPOs priced near the upper bound of the indicative price range are expected to exhibit greater underpricing than those priced near or below the lower bound. This theory provides a useful framework for examining the relationship between offer-price positioning and IPO performance.

Following Ritter (1991) and Allen et al. (1999), this study examines the initial and long-run performance of 598 IPOs listed on the SEHK between 2006 and 2013. IPO performance is measured using initial returns, raw aftermarket returns, and market-adjusted returns over a two-year holding period. To identify the determinants of IPO performance, the sample is classified by listing year, subscription ratio, and the final offer price's position within the filing price range. Cross-sectional analyses assess whether these factors systematically influence IPO returns and whether the evidence supports established IPO theories.

This study contributes to the literature in three ways. First, it provides updated evidence on IPO underpricing and long-run performance in Hong Kong during a period of significant economic and regulatory change. Second, it evaluates the applicability of leading IPO theories in one of Asia's most important financial markets. Third, it offers practical insights for investors into the characteristics associated with IPO performance.

The remainder of the paper is organized as follows. Section 2 describes the data and sample selection procedures. Section 3 outlines the methodology. Section 4 presents the empirical results and discusses their implications. Section 5 concludes and suggests directions for future research.

2. Data

The sample comprises 598 IPOs issued between 2006 and 2013 and satisfies the following criteria: (1) the company was listed on either the Main Board or the GEM, of the SEHK; (2) the offering represented the company's first listing on the SEHK, and funds were raised through Introduction, Offer for Subscription, Offer for Sale, or Placing; and (3) equity securities, including common shares, preference shares, and Real Estate Investment Trusts (REITs), were included, whereas debt securities, such as iBonds and RMB sovereign bonds, and derivative securities, such as warrants and callable bull/bear contracts (CBBCs), were excluded. In addition, all IPOs included in the sample had the required data available, including offer prices and share prices over different time horizons.

Table 1 presents the distribution of IPOs by year and shows that 70.4% of the IPOs are included in the long-run (two-year) performance. Most data used in this study come from the Yahoo! Finance database. Information on offer dates and offer prices comes from the HKEx Fact Books covering 2006 to 2013.

Table 1. Distribution of IPOs by year during 2006 to 2013

Year	Total Number of IPOs	Number of IPOs in the Sample	% included
2006	60	56	93.33
2007	79	72	91.14
2008	31	27	87.10
2009	69	65	94.20
2010	103	100	97.09
2011	90	87	96.67
2012	62	14	22.58
2013	104	0	0.00
Total	598	421	70.40

Source: HKEx Fact Book

3. Methodology

The methodology employed in this study follows the approaches of Allen et al. (1999) and Ritter (1991). First, both initial returns and market-adjusted returns are calculated to assess IPO performance. Subsequently, a series of cross-sectional analyses is conducted to examine the factors influencing IPO performance.

Following Ritter (1991) and Allen et al. (1999), the IPO underpricing phenomenon is measured over two distinct intervals: (1) the initial return period, typically defined as the interval from the offering date to the close of the first trading day, and (2) the aftermarket period, defined as the two years following the IPO, excluding the initial return period. To address inconsistency in aftermarket measurement arising from different listing dates within a month, we adopt the approach proposed by Allen et al. (1999). For IPOs that do not commence trading on the first trading day of a month, the period from the second trading day after listing to the last trading day of the listing month is designated as month 0. For example, for an IPO that begins trading on 15 March 2010, month 0 spans from 16 March 2010 to the last trading day of March 2010. The aftermarket period therefore begins on 16 March 2010 and ends on 30 March 2012, the last trading day of the IPO's 24th month following listing.

The initial return of IPO_i, denoted by IR_i is defined as the percentage change between the IPO subscription price (offer price) and the closing price on the first trading day. It measures the immediate performance of an IPO upon listing and can be expressed as follows:

$$IR_i = \frac{P_{i,1} - S_{i,0}}{S_{i,0}} \quad (1)$$

where $P_{i,1}$ is the closing price on the first trading day of IPO_i and $S_{i,0}$ is the subscription price of IPO_i.

In line with Agarwal et al. (2008), aftermarket returns are measured over 1-, 6-, 12-, and 24-month horizons, and the corresponding average market-adjusted returns are reported. While performance across

all horizons is examined, particular emphasis is placed on the 24-month aftermarket return, the principal measure of long-run IPO performance. All returns are equally weighted and adjusted for corporate actions arising from bonus issues and stock splits. By contrast, dividend reinvestments, rights issues, and share placements are not incorporated into the return calculations, as their effects on aftermarket performance are assumed to be negligible.¹

The market-adjusted return is calculated by adjusting an IPO's raw return for the corresponding market return over the same period. This measure captures the IPO's performance relative to the overall market. The raw return of IPO_{*i*} is calculated as:

$$R_{it} = \frac{P_{i,L}}{P_{i,1}} - 1 \quad (2)$$

where R_{it} is the return of IPO_{*i*} over the aftermarket period t (e.g., the 24-month aftermarket period), $P_{i,L}$ is the closing price of IPO_{*i*} on the last trading day of the aftermarket period, and $P_{i,1}$ is the closing price of IPO_{*i*} on the first trading day.

The corresponding market-adjusted return is calculated using the same approach, with the Hang Seng Index (HSI) as the market benchmark. The market-adjusted return of IPO_{*i*} during the aftermarket period is defined as:

$$MAR_{it} = R_{it} - R_{mt} \quad (3)$$

where MAR_{it} is the market-adjusted return of IPO_{*i*} during the aftermarket period, and R_{mt} is the market (HSI) return during the same period.

The average raw (AR_t) and market-adjusted return ($AMAR_t$) on a portfolio of n IPOs during the aftermarket period t is calculated as the arithmetic mean of the individual market-adjusted returns:

$$AR_t = \frac{1}{n} \sum_{i=1}^n R_{it} \quad (4)$$

$$AMAR_t = \frac{1}{n} \sum_{i=1}^n MAR_{it} \quad (5)$$

This paper conducts cross-sectional analyses of IPO performance using initial returns, two-year returns, and corresponding market-adjusted returns. The sample is classified by listing year, subscription ratio, and the final offer price's position within the filing price range to examine whether these factors are systematically related to IPO performance in Hong Kong.

4. Empirical Results

This section presents and discusses the empirical results. The findings are reported in the following tables and interpreted in the context of established IPO theories.

4.1 Initial and Aftermarket Performance

Table 2 presents the statistical analysis of IPO initial returns in Hong Kong from 2006 to 2013. The mean initial return for the sample of 598 IPOs listed on the SEHK was 16.2%, indicating significant underpricing. IPO underpricing varied considerably over the sample period. The mean initial return declined from 25.08% in 2006 to 7.92% in 2008, while the median fell from 20.69% to 3.23%. This sharp decline may be attributed to the 2008 U.S. subprime mortgage crisis and the subsequent global financial

¹ To account for the effects of bonus issues and stock splits, share prices are adjusted prior to the calculation of IPO returns. The adjusted pre-issue share price is then used in place of the original share price when comparing aftermarket prices with the subscription (offer) price. The adjusted price before issue = (price per share after issue x number of shares after issue) / number of shares before issue. The adjusted price before issue represents the share price prior to the bonus issue or stock split. This adjustment ensures that return calculations are not distorted by changes in share capital arising from bonus issues or stock splits.

crisis, which weakened investor demand for new issues. As market conditions improved, underpricing rebounded in 2009, with the mean and median initial returns rising to 14.82% and 7.14%, respectively.

The prevalence of positive initial returns is consistent with Rock's (1986) asymmetric information hypothesis. According to this theory, informed investors possess superior information about an IPO's intrinsic value, whereas uninformed investors face adverse-selection risk. To attract sufficient participation from uninformed investors, issuers and underwriters must offer shares at a discount to their expected market value, resulting in systematic underpricing. The average initial return of 16.2% therefore suggests that information asymmetry is an important feature of the Hong Kong IPO market

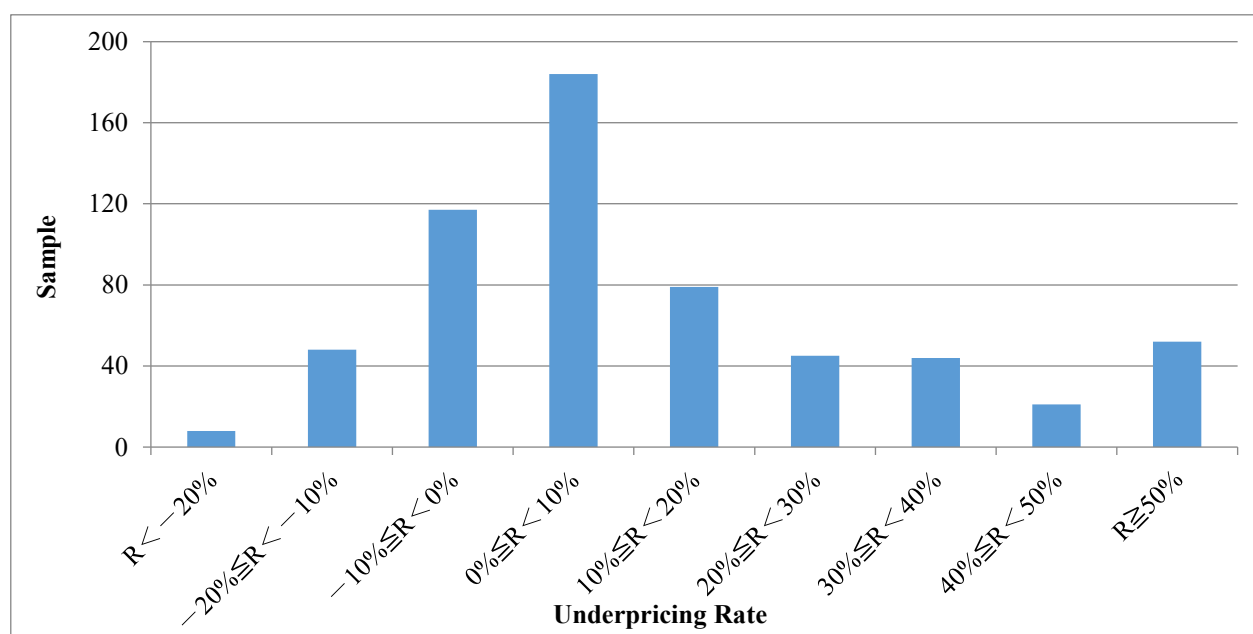
From 2010 to 2012, median initial returns fell below 1.6%, possibly because many newly listed firms were small and medium-sized enterprises, some of which were later found to have overstated their financial performance. IPO activity recovered in 2013, with the median initial return increasing to 5.73%, although the dispersion of returns remained substantial. Figure 1 further shows a positively skewed distribution of initial returns. Overall, 71.07% of IPOs generated positive initial returns, while only 1.34% recorded returns below -20%, providing further evidence of widespread IPO underpricing.

Table 2. Statistical Analysis of IPOs' Initial Returns (IR_i)

Year	No. of IPOs	Mean (%)	Median (%)	S.D. (%)	Max. (%)	Min. (%)
2006	60	25.08	20.69	23.63	85.45	-19.53
2007	79	25.03	12.46	36.34	162.31	-19.7
2008	31	7.92	3.23	24.67	117.65	-19.23
2009	69	14.82	7.14	30.63	156.52	-61.09
2010	103	8.29	1.23	21.2	108.33	-29.82
2011	90	4.42	1.12	17.44	70	-39.19
2012	62	7.4	1.57	22.36	140	-27
2013	104	31.03	5.73	88.02	537.8	-32.5
Total	598	16.2	5	44.44	537.8	-61.09

Source: HKEx Fact Book

Figure 1: Distribution of IPO underpricing rate



Source: HKEx Fact Book

Table 3 reports IPO performance over horizons ranging from one month to two years after listing. The mean initial return was 16.20%, while the corresponding market-adjusted return was 16.27%. However, this strong initial performance was not sustained. One month after listing, the mean and median returns were -0.30% and -1.40%, respectively, suggesting that the initial underpricing was largely

corrected in the early aftermarket period. After 24 months, the mean and median returns declined to -7.39% and -7.27%, indicating long-run underperformance. Notably, the mean exceeds the median despite both being negative (except for the initial return), suggesting a right-skewed return distribution in which a small number of strongly performing stocks raise the sample average.

Table 3. Statistical analysis of mean raw (AR_t), median raw and average market-adjusted return ($AMAR_t$) for IPOs listed during 2008 to 2012

Month	No. of IPOs	Mean or AR_t (%)	Median (%)	$AMAR_t$ (%)
Initial Return	598	16.20	5.00	16.27
1	578	-0.30	-2.72	-1.40
6	509	-0.36	-8.94	-3.04
12	480	-0.25	-16.05	-3.76
24	421	-7.39	-33.58	-7.27

Source: HKEx Fact Book

Comparing Tables 2 and 3 suggests a negative relationship between initial and long-run performance. IPOs that generated higher initial returns tended to perform more poorly in the aftermarket, particularly during 2009-2011. This pattern is consistent with investor sentiment and overreaction explanations, whereby overly optimistic valuations at issuance are gradually corrected as more information becomes available. The effect may have been amplified by the "Storm of Private Enterprises" in 2011-2012, which raised concerns about the financial reporting quality and corporate governance of some Mainland Chinese firms listed in Hong Kong, weakening investor confidence and depressing subsequent stock performance.

4.2 Aftermarket Performance Categorized by Year

Table 4 classifies IPOs by listing year. Results for 2012 are not reported because the number of IPOs in that year is insufficient to produce meaningful statistical results. The findings indicate that IPO returns vary across listing years. Nevertheless, both the mean and median initial returns are positive in every year, suggesting that IPO underpricing is a common phenomenon throughout the sample period.

Table 4. Initial and aftermarket Performance categorized by Year

Year	Numbers of IPOs	Initial Return (%)	Initial Market-adjusted Return (%)	Two-year Return (%)	Two-year Market-Adjusted Return (%)
2006	56	25.63	25.68	-9.42	-22.72
2007	72	24.58	24.49	-39.74	-20.08
2008	27	7.66	8.69	18.99	23.3
2009	65	15.74	15.72	6.86	4.79
2010	100	8.95	8.91	-27.47	-23.67
2011	87	4.41	4.35	17.79	8.61
Overall (Mean)		14.04	14.07	-8.92	-8.34
Overall (Median)		6	5.77	-33.71	-29.06

Source: HKEx Fact Book

The two-year raw and market-adjusted returns for IPOs listed in 2008 were 18.99% and 23.30%, respectively, the highest levels recorded during 2006-2011. Despite this strong aftermarket performance, 2008 had the lowest IPO issuance volume in the sample, with only 27 listings, largely due to the adverse effects of the U.S. subprime mortgage crisis on Hong Kong's financial market. In contrast, IPO activity rebounded sharply in 2010, with 100 firms going public on the SEHK amid improved market conditions, supported by Quantitative Easing (QE) policies and stronger investor confidence. However, the corresponding two-year raw and market-adjusted returns were -27.47% and -23.67%, respectively, the lowest in the sample period. This poor performance may be partly attributable to the "Storm of Private

Enterprises," which raised concerns about the reliability of corporate financial reporting.² IPO issuance volumes in 2009 and 2011 fell between the levels observed in 2008 and 2010, and their two-year returns exhibited a similar pattern. Overall, these findings suggest an inverse relationship between IPO issuance volume and long-run aftermarket performance, consistent with Allen et al. (1999).

4.3 Aftermarket Performance Categorized by Subscription Ratio

The subscription ratio is defined as the ratio of shares subscribed for by investors to the number of shares offered for subscription. In general, a higher subscription ratio indicates stronger demand for the offering among retail investors, as this is the primary channel in IPOs (McGuinness, 2009). The study excludes IPOs listed by introduction because their subscription ratios are recorded as zero, which may introduce noise and bias the results.

Table 5 presents descriptive statistics for subscription ratios by listing year. Subscription demand varied considerably over the sample period. The mean subscription ratio fell to 27.79 times in 2008, the lowest level observed, reflecting weak market conditions during the global financial crisis. A similar decline occurred in 2011, possibly owing to the loss of investor confidence associated with the "Storm of Private Enterprises." In contrast, IPOs issued in 2006 and 2007 were heavily oversubscribed, with average subscription ratios exceeding 200 times, partly driven by strong demand for Chinese firms seeking listings in Hong Kong. Moreover, the large gap between the mean and median subscription ratios indicates a positively skewed distribution, with a small number of IPOs attracting exceptionally strong demand.

Table 5 Statistical Analysis of Subscription Ratio by Year

Year	Numbers of IPOs	Mean (Times)	S.D. (Times)	Median (Times)	Max. (Times)	Min. (Times)
2006	50	246.21	308.79	130.35	1703.00	0.54
2007	70	225.38	256.87	150.00	962.50	0.41
2008	23	27.79	66.58	2.00	293.00	0.07
2009	55	160.93	241.35	45.72	1248.26	0.29
2010	83	173.96	277.75	24.30	1459.77	0.13
2011	67	65.99	279.82	1.73	2179.50	0.01
Overall	348	162.18	271.83	40.90	2179.50	0.01

Source: HKEx Fact Book

Vong (2006) argues that the subscription ratio is a useful proxy for ex-ante uncertainty. Consistent with this view and the ex-ante uncertainty hypothesis of Beatty and Ritter (1986), Table 6 shows that IPOs with higher subscription ratios generally generated higher initial returns. For example, IPOs issued in 2006 and 2007 were oversubscribed by more than 225 times on average and recorded initial returns of approximately 24%, whereas IPOs issued in 2008 had an average subscription ratio of only 27.79 times and an initial return of 6.48%. These findings suggest that greater ex-ante uncertainty is associated with stronger investor demand and higher IPO underpricing.

Further, subscription ratios appear to be negatively related to long-run performance. IPOs issued in 2007 recorded an average subscription ratio of 225.38 times but generated a two-year raw (market-adjusted) return of -39.17% (-19.60%), whereas IPOs issued in 2008 had the lowest subscription ratio and the highest two-year raw (market-adjusted) return of 26.95% (32.16%). Similarly, IPOs issued in 2010 were heavily oversubscribed, with an average subscription ratio of 173.96 times, yet produced poor two-year raw (market-adjusted) returns of -29.86% (-26.12%). These findings suggest that exceptionally high subscription ratios may reflect not only ex-ante uncertainty but also excessive investor optimism, leading to temporary overvaluation and subsequent price corrections. Therefore, the positive relationship between subscription ratios and initial returns, coupled with their negative relationship with long-run performance, supports the ex-ante uncertainty hypothesis of Beatty and Ritter (1986), the investor sentiment hypothesis of Aggarwal and Rivoli (1990), and the findings of Aggarwal et al. (2008).

² Around 2010-2011, numerous Chinese private enterprises faced allegations of accounting irregularities, weak corporate governance, and inflated earnings, undermining credibility in the financial system (Shu, 2011). Given Hong Kong's role as a major listing and fundraising centre for Chinese companies, these incidents eroded investor confidence, depressed China-related stock prices, and increased skepticism towards mainland enterprises listed on the SEHK.

Table 6. Aftermarket returns categorized by Subscription Ratio

Year	Mean (Times)	Initial Return (%)	Two-year Raw Return (%)	Two-year Market-Adjusted Return (%)
2006	246.21	24.69	-0.26	-10.54
2007	225.38	24.38	-39.17	-19.60
2008	27.79	6.48	26.95	32.16
2009	160.93	10.99	0.31	-0.35
2010	173.96	7.73	-29.86	-26.12
2011	65.99	1.36	60	-2.63
Overall	162.18	12.72	-11.94	-10.12

Source: HKEx Fact Book

4.4. Aftermarket Performance Categorized by Price Range

Underwriters typically use a price range to determine an offer price that balances shareholders' interests and facilitates the full subscription of IPO shares (McGuinness, 2009). Strong investor demand is generally associated with offer prices set closer to the upper bound of the range. Cassia (2004) classifies offer pricing into three categories: (i) prices set at the upper bound; (ii) prices set between the midpoint and the upper bound; and (iii) prices set below the midpoint, sometimes even below the lower bound.

The results in Table 7 are consistent with Hanley's (1993) prediction. IPOs priced at the upper bound generated an average initial raw (market-adjusted) return of 24.63% (24.59%), significantly higher than the 11.12% (11.27%) recorded by IPOs priced between the midpoint and the upper bound and the 0.54% (0.63%) recorded by IPOs priced below the midpoint, which are not statistically different from zero. These findings suggest that offer-price positioning serves as a proxy for investor demand and the extent of favourable information revealed during the bookbuilding process.

Table 8 shows that IPOs priced at the upper end of the filing range subsequently experienced the weakest long-run performance. IPOs issued at the upper bound generated average two-year raw (market-adjusted) returns of -23.34% (-15.72%), compared with -1.78% (-4.21%) for IPOs priced below the midpoint, both of which are statistically insignificant. This pattern suggests that strong demand reflected in upward price revisions may also capture excessive investor optimism and temporary overvaluation. As additional information becomes available, valuations gradually converge toward their fundamental values, resulting in weaker long-run performance. Therefore, while the findings support Hanley's (1993) partial adjustment theory in explaining cross-sectional differences in IPO underpricing in Hong Kong, they also support the investor sentiment, or fad, hypothesis of Aggarwal and Rivoli (1990), which predicts that aggressively priced IPOs are more likely to experience subsequent price corrections during the aftermarket period.

Table 7: Relationship between initial underpricing and the offer price within the price range

	Sample Size	Initial Underpricing	
		Raw (%)	Market-adjusted (%)
The offer price is equal to the maximum price	160	24.63*	24.59*
The offer price is between the maximum price and midpoint price	95	11.12*	11.27*
The offer price is lower than the midpoint price	202	0.54	0.63
All IPOs within the price range	457	11.18*	11.23*

Source: HKEx Fact Book

t-statistics test the null of zero and are calculated as the estimated return divided by the sampled cross-sectional standard deviation in the aftermarket periods.

* Significant at the 1% level

Table 8. Relationship between two-year return and the offer price within the price range

	Sample Size	Two-Year Return	
		Raw (%)	Market-adjusted (%)
The offer price is equal to the maximum price	131	-23.34*	-15.72*
The offer price is between the maximum price and midpoint price	68	-17.08**	-15.52**
The offer price is lower than the midpoint price	134	-1.78	-4.21
All IPOs within price range	333	-13.39*	-11.05*

Source: HKEx Fact Book

t-statistics test the null of zero and are calculated as the estimated return divided by the sampled cross-sectional standard deviation in the aftermarket periods.

** Significant at the 5% level

* Significant at the 1% level

5. Conclusion

This study examines IPO underpricing and long-run aftermarket performance in Hong Kong using a sample of 598 IPOs listed on the Stock Exchange of Hong Kong (SEHK) between 2006 and 2013. Following Ritter (1991) and Allen et al. (1999), IPO performance is measured using initial returns, raw returns, and market-adjusted returns over a two-year holding period.

The results indicate that IPO underpricing remains a significant feature of the Hong Kong market. IPOs generate an average first-day return of 16.2%, reflecting substantial initial gains for investors. However, these gains are not sustained over time, as the average two-year market-adjusted return is approximately -8%, indicating significant long-run underperformance. This pattern suggests that initial investor optimism may lead to temporary overvaluation, which the market subsequently corrects. Further cross-sectional analyses reveal that IPO performance varies systematically with listing year, subscription ratio, and offer-price positioning. IPOs issued during periods of high issuance activity tend to exhibit poorer long-run performance, supporting Ritter's (1984) hot issue market hypothesis. Similarly, IPOs with higher subscription ratios generate stronger initial returns but weaker long-run performance, consistent with the ex-ante uncertainty hypothesis proposed by Beatty and Ritter (1986) and the investor sentiment explanation of Aggarwal and Rivoli (1990). Moreover, IPOs priced near the upper bound of the filing price range experience greater underpricing but poorer long-run performance, supporting Hanley's (1993) partial adjustment theory.

Overall, the findings support the asymmetric information, ex-ante uncertainty, investor sentiment, and hot issue market hypotheses, suggesting that strong investor demand and optimistic market sentiment contribute to IPO underpricing but also lead to subsequent price corrections. The study provides further evidence on the determinants of IPO performance in Hong Kong and offers practical insights for investors evaluating IPO opportunities. Future research may extend the sample period and examine additional determinants of IPO performance, including firm characteristics, underwriter reputation, ownership structure, corporate governance, and macroeconomic conditions.

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