



UNDERPRICING OF HOMECOMING A-SHARE IPOs BY CHINESE FIRMS ALREADY LISTED ABROAD

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Abstract

Many Chinese firms have pursued overseas listings in Hong Kong or U.S. without being first listed in China's domestic market, mainly due to the regulatory constraints imposed by the Chinese government. Some of them eventually returned to mainland China through an A-share offering to Chinese investors. This unique feature of cross-listed Chinese stocks offers an experiment field to test some of the conventional theories of IPO underpricing. Homebound IPOs are expected to be less underpriced than domestic only IPOs that are not cross-listed because being already listed in a developed market can mitigate the information asymmetry and issue uncertainty associated with their A-share IPOs. Nevertheless, we find that homecoming A-share IPOs are still substantially underpriced, with an average market adjusted first-day return of 96.53%. Furthermore, their first-day returns are not significantly different from those of domestic only IPOs once firm- and offer-characteristics are controlled. This is in sharp contrast to the lukewarm aftermarket performance experienced in their overseas debuts. Overall, our results suggest the importance of local market structures and norms as influential factors of IPO underpricing.

Homecoming vs. Pure Domestic IPOs

IPO theories suggest that homecoming IPOs should experience lower first-day returns because

1. With a HK or US listing, they have less uncertainty
2. Their H-share and ADR prices are directly observable
3. They return from overseas markets with more stringent standards of accounting, disclosure, and corporate governance

The purpose of this study is to test this hypothesis using Chinese domestic and overseas IPOs.

Data and Sample

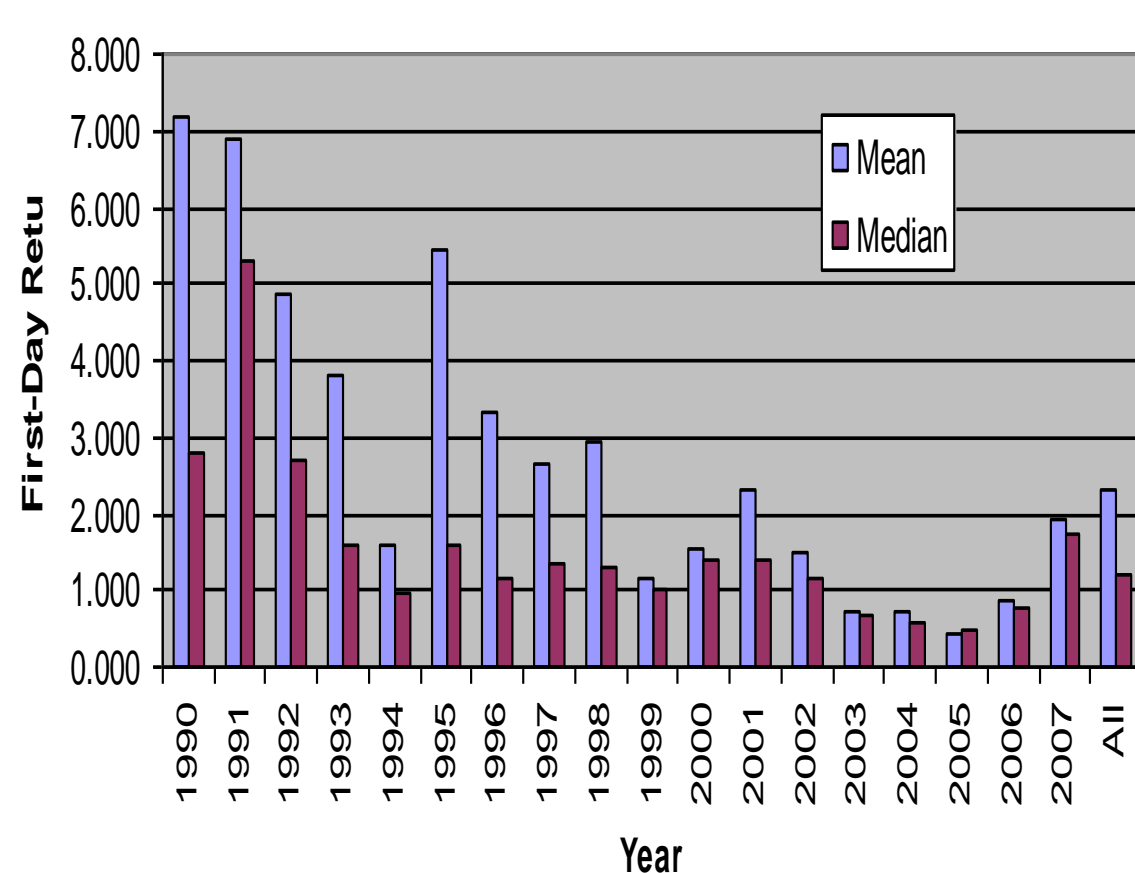
Three data samples are used in the paper:

1. Chinese domestic A-share IPOs
2. H-Share IPOs by Chinese firms
3. ADR IPOs by Chinese firms

First-day adjusted returns of Chinese domestic A-Share IPOs (see figure below):

Mean = 230.8% and Median = 119.6%

First-Day Returns of Chinese Domestic IPOs: 1990-2007

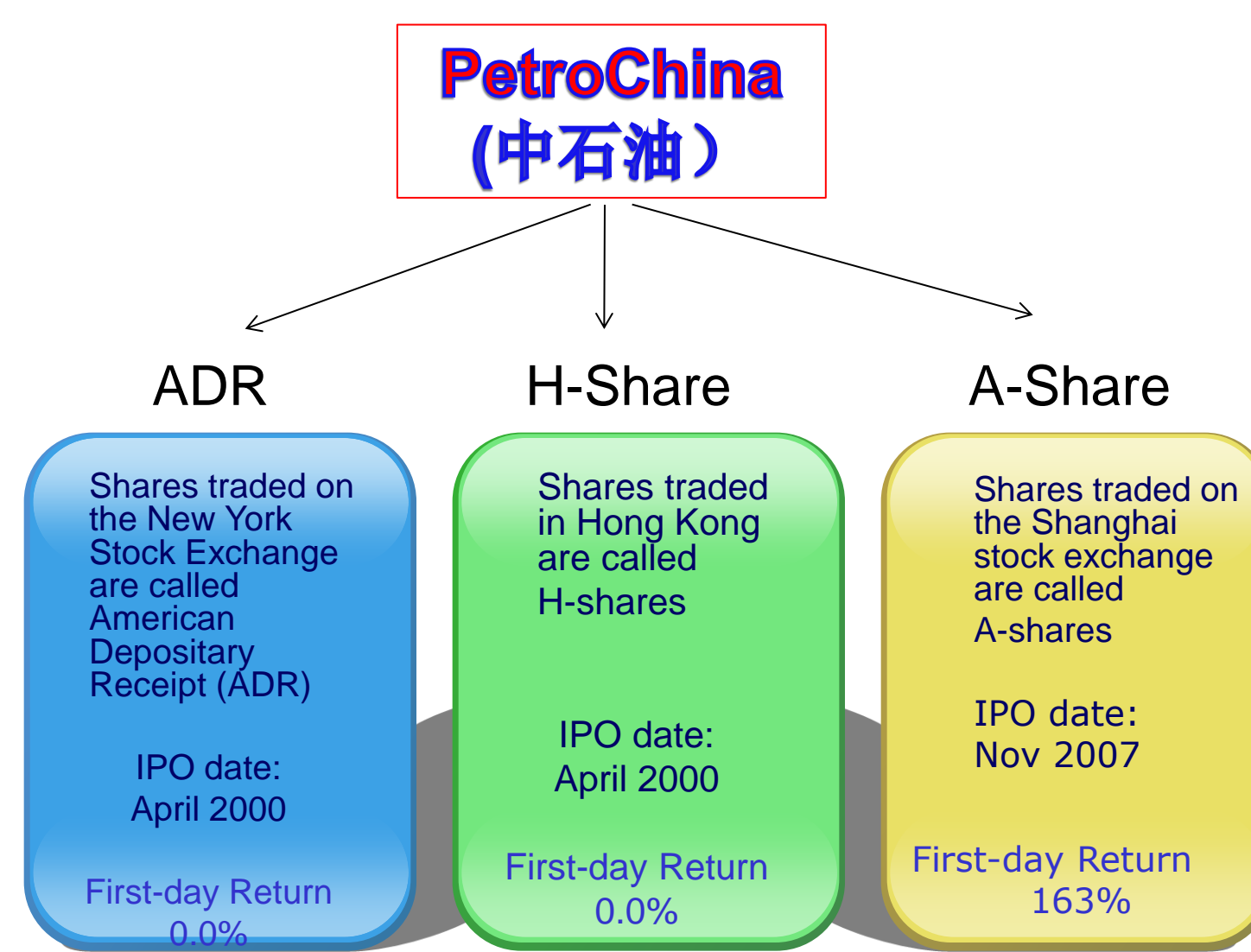


Shanghai and NYSE Dual Listed Firms

Mean ADR first-day return = 5.35%
Mean A-Share first-day return = 105.45%

| Company | ADR listing date | ADR first-day return | A-share IPO date | Waiting time between A-share and ADR dates | A-share IPO first-day return |
|--------------------------------|------------------|----------------------|------------------|--|------------------------------|
| Sinopec Shanghai Petrochemical | 7/26/1993 | 0.09% | 11/8/1993 | 105 | 90.91% |
| Huaneng Power International | 10/6/1994 | 0.26% | 12/6/2001 | 2618 | 71.93% |
| Guangshen Railway | 5/13/1996 | 5.14% | 12/22/2006 | 3875 | 64.07% |
| China Eastern Airlines | 2/4/1997 | 14.96% | 11/5/1997 | 274 | 200.28% |
| China Southern Airlines | 7/30/1997 | 1.68% | 7/25/2003 | 2186 | 44.76% |
| Yanzhou Coal Mining | 3/31/1998 | 0.84% | 7/1/1998 | 92 | 129.90% |
| PetroChina | 4/6/2000 | -0.94% | 11/5/2007 | 2769 | 164.94% |
| China Petroleum & Chemical | 10/18/2000 | 1.06% | 8/8/2001 | 294 | 3.76% |
| Aluminum Corporation of China | 12/11/2001 | 3.56% | 4/30/2007 | 1966 | 178.33% |
| China Life Insurance | 12/17/2003 | 26.85% | 1/9/2007 | 1119 | 105.57% |
| Mean | | 5.35% | | 1530 | 105.45% |

An Illustration: PetroChina IPOs



Shanghai and Hong Kong Cross-Listed Chinese Firms

Fifty-one Chinese firms are A-H cross-listed. When these companies listed their shares in HK, the average IPO first-day adjusted return is only **11.63%**; But when they returned to the mainland for their A-share IPO debuts, the average initial adjusted return is **96.53%**. The difference is substantial and significant.

Panel A: All 51 A-H Cross-Listings

| | First-day adjusted return (H-share IPOs) | First-day adjusted return (A-share IPOs) | Univariate test in the difference |
|--------------------|--|--|---|
| Mean | 11.63% | 96.53% | t-test: t-value = 6.93 p-value < 0.001 |
| Median | 4.02% | 77.20% | Mann-Whitney test: z-value = 7.08 p-value < 0.001 |
| Minimum | -27.64% | 0.30% | |
| Maximum | 206.76% | 347.70% | |
| Standard deviation | 35.04% | 77.78% | |

Panel B: Three Simultaneous A-H Cross-Listings

| Company | First-day return (H-share IPOs) | First-day return (A-share IPOs) |
|---|---------------------------------|---------------------------------|
| Industrial and Commercial Bank of China | 14.6% | 5.1% |
| China CITIC | 14.0% | 96.0% |
| China Railway Group | 128.7% | 68.5% |

Econometric Model

We use a complex regression model that is designed to correct for self-selection bias:

$$R = \alpha + \delta * \text{Cross-listing} + \beta * X + \mu \quad (1)$$

$$\text{Cross-listing}^* = \gamma Z + \varepsilon \quad (2)$$

$$\text{Cross-listing} = 1 \text{ if } \text{Cross-listing}^* > 0 \\ = 0 \text{ if } \text{Cross-listing}^* \leq 0$$

In Eq. (1), R is the adjusted first-day return, Cross-listing is a dummy variable that equals 1 for cross-listed firms and 0 for others, and X is a vector of dependent variables which include P/E, Sales, State ownership, and others.

Eq. (2) is a probit model used to determine the likelihood for a firm to choose cross-listing.

Empirical Results

Panel A of the table presents the probit model results. Panel B presents the self-selection corrected regression results in which the dependent variable is the adjusted first-day return. The coefficient estimate on the Cross-Listing dummy represents the different in first-day return between homecoming and pure domestic IPOs. The results show no significant difference in IPO first-day returns between the two types of IPOs.

Panel A: Result of the Probit Model

| | Constant | State ownership | Log(Offer size) | Market runup |
|---------------------------------------|-----------|-----------------|-----------------|--------------|
| Coefficient | -5.38 | 0.237 | 0.559 | -0.472 |
| t-value | -13.82*** | 0.81 | 9.30*** | -1.06 |
| Chi-squared= 120.3 p-value < 0.000 | | | | |

Panel B: Results of the following regression:
Adjusted First-day Return = $\alpha + \delta * \text{Cross-listing} + \beta * X + \eta$

| | (1) | | (2) | |
|-----------------|-------------|----------|-------------|-----------|
| | Coefficient | t-value | Coefficient | t-value |
| Constant | 4.337 | 6.20*** | 4.857 | 6.72*** |
| Cross-listing | -0.479 | -0.39 | -0.051 | -0.04 |
| P/E | -0.016 | -7.02*** | -0.026 | -10.14*** |
| State ownership | -0.145 | -0.44 | -0.577 | -1.69* |
| Log(Sales) | -0.421 | -4.21*** | -0.20 | -1.93* |
| Log(Employee) | 0.09 | 0.89 | -0.150 | -1.44 |
| Exchange | | | 0.277 | 1.40 |
| Market runup | | | 0.124 | 0.24 |
| Year dummies | No | No | Yes | Yes |

Conclusion

Significant underpricing still prevails for A-share IPOs by Chinese companies returning from Hong Kong or the U.S. The mean adjusted first-day return of the homecoming A-share IPOs is 96.53%. After control for firm size and other features, the A-share IPOs made by those firms already listed abroad do not appear to differ on the first day of trading than domestic offerings that are not cross-listed. The result is inconsistent with traditional IPO theories which suggest less underpricing for homecoming IPOs. In sum, there exists a stark discrepancy in first-day performance between domestically and overseas listed Chinese IPOs, even by the same companies. Our results are consistent with the notion that cross-listed Chinese IPOs behave more like American or Hong Kong IPOs when listed in the two markets, but more like Chinese IPOs when return to China.

结论：淮南为橘；淮北为枳