

# Proceedings of the 2022 7th International Conference on Social Sciences and Economic Development (ICSSED 2022)

# **Does Going Public in Different Stock Markets Affect the First-Day Return of Chinese IPO?**

Ju Guan<sup>1,†</sup>, Zaoxing Hu<sup>2,\*,,†</sup>, Tianyi Wang<sup>3,†</sup>, Banglin Yin<sup>4,†</sup>,

#### **ABSTRACT**

This paper talks about the relationship between going public and Chinese listed companies' first-day return. The dual listing becomes a more popular choice for companies to get equity financing because it can help companies receive a higher initial return on the first day of going public and approach a higher financial market efficiency. To investigate this relationship, we collect data of companies who choose to dual list from wind databases. Our results found that going public in both the Hongkong market and A-shares, companies can have higher first-day returns. However, when companies go public in both the Hongkong and U.S. markets, the result is not statistically significant.

Keywords: Initial Public offering, Dual-listing, First-day return, Political economics, Overpricing.

# 1. INTRODUCTION

Ongoing globalization has enabled firms that seek to go public overseas to stem from different parts of the world. As the second-largest economy globally, China has also had other firms go public on foreign soils. In general, overseas listings give rise to the globalization of Chinese companies, and these companies benefit through various aspects through an overseas listing.[1] However, the locational choice of overseas listing remains a myth as to why different firms choose to go public in other trade markets. In our opinion, besides various economic and financial benefits of overseas listing[2][3][4][5], is there a locational variance of overseas listing across different industries, and if there is any, what other considerations do the companies have in terms of choosing the optimal strategy to go public. In Guo's paper, he discussed the fact that initial public offering first-day return (IPOFDR) is a good predictor of future market return, which translates to future market performance. [6] Based on his findings, we would like to assess the relationship between the locational choice of overseas listing and the IPOFDR of various Chinese public companies. Then we will compare similar companies with their short term and long-term performance across different trade markets.

# 2. INSTITUTIONAL BACKGROUND

# 2.1. Overview of the Dual listing in China

From 1993 to 2021, we have seen 138 companies dual-listed on the mainland China market and the Hong Kong Exchange. Yet, the first-day return for the same company in the same market differs significantly. According to the public data, over a quarter of these companies received a negative first-day return in the HKEX market. In contrast, only one per cent of them received a negative first-day return in the mainland market. On average, IPOs in the mainland market will grant the company a closing price double its issue price and the companies receive a 96.03% over-price in the mainland market.

In a nutshell, these numbers suggest that in the sample that we have, companies are more likely to receive a higher initial return on the first day of going public in the mainland stock market. This phenomenon is related closely to financial market efficiency, political economics and other relatable factors. Due to sample size constraints, we would be focusing on the companies that dual-listed their shares on the mainland China stock exchange and Hong Kong Exchange.

<sup>&</sup>lt;sup>1</sup>Tsinghua University, Beijing, China

<sup>&</sup>lt;sup>2</sup> Wenzhou-Kean University, Wenzhou, China

<sup>&</sup>lt;sup>3</sup> University of California Irvine, Los Angeles, USA

<sup>&</sup>lt;sup>4</sup> University of Melbourne, Melbourne, Australia

<sup>\*</sup>Corresponding author. Email: zaoxingh@kean.edu

<sup>&</sup>lt;sup>†</sup>These authors contributed equally.



## 2.2. Reasons for dual listing

## 2.2.1. Dual listing creates an extra chance

From the actual operation of the stock market, the stock listed in two different markets has many advantages. First, listing stocks on multiple stock markets will rapidly expand the shareholder base and get more shareholder resources. Secondly, the listing of stocks in different markets will enhance the company's popularity in the listed place and improve the confidence and desire of customers who want to buy stocks [KY1], which will make customers feel that they can make money. Moreover, "A-share dual-listing may also increase or reduce the corresponding H-share stock liquidity. Pagano et al. (2002) argue that while some markets may be better than others in liquidity production, cross-listing may not always enhance liquidity due to market segmentation.[3] An increased supply of equity shares may reduce the liquidity of existing shares in circulation. In contrast, Lee and Yuhong (2003) conducted several tests on the issuance of A-shares and its effect on the turnover of Hshares.[4] They find that the issuance of A-shares either has no effect on or appears to raise the turnover of Hshares. This possible spillover effect on liquidity could result from the increased visibility due to the issuance of A-shares, a broadened investor base, and enlarged market capitalization, etc.1 Thus, whether A-share dual-listing increases or decreases H-share liquidity is an empirical question." Based on the literature's empirical model and evidence. "Our study contributes to the literature on cross-listing by investigating the changes in information and trading quality in the setting of Chinese A- and Hdual-listed firms, where firms first list on the developed Hong Kong market and then dual-list on the less developed domestic A-share market."

In the data research, I found that the return rate of Ashares is very low, even negative. A good article helps me to explain this phenomenon. The research results of the literature have particular empirical value for investors to invest in the future, considering that the fact of dual listing in the Hong Kong stock market depresses the Ashare price. As the integration between the Chinese market and Hong Kong deepens, the arbitrage opportunities increase and the price of A shares and H shares will converge.

# 2.2.2. A better legal environment and favourable policies

Dual-listing companies may face a better legal environment and favourable policies in the developed market. Compared with the China stock market, developed markets such as the U.S. and Hong Kong could provide the following advantages.

#### 2.2.2.1. Sound supervision system

In terms of information disclosure, China's stock market is relatively Inaccurate, inadequate and sometimes delayed. The supervision system is not strong enough to deal with illegal acts in information disclosure, and the market lacks incentive mechanisms to promote timely disclosure. Investors can not get the accurate and timely information of listed companies, so they are not trusted to make correct investment judgments, which is harmful to the efficiency of the market.

In contrast, mature markets have sound supervision systems with well-established laws, which can supervise the information disclosure of listed companies to ensure their fairness, transparency and authority. The court will severely punish fraud or delay, which can also deal a fatal blow to the company's reputation and economy.

#### 2.2.2.2. Flexible and mature trading rules

The U.S. and Hong Kong stock market carries out the T+0 trade rule, while China's stock market follows the T+1 trade rule.

T+0 trade rule means stocks can be bought and sold on the same day. Investors can easily control investment risks and expand profits, while companies could gain higher market efficiency and have a timelier control of market news.

China's stock market follows the T+1 trade rule, which means companies shall not sell the securities purchased on the same day. China adopted the rule to stabilize its stock market and made the market less efficient.

T+0 trading is a sign of a mature market. For example, if you buy a stock and profit in the short term, you can leave the market. If you make a mistake, you can also timely avoid the risk and exit the market. China's stock market is not mature enough to adopt such a rule. In 1992, China's stock market adopted the T+0 trade rule to be on track with the international stock market. One month after the launch, Shanghai A-share's average daily trading volume rose by 173.1%. From November 18, 1992, to February 16, 1993, the Shanghai Composite Index rose from 390 points to 1,559 points, leaping 299.74%. There are plenty of investment capitals but too few stocks to invest in. It can be evaluated that China stock market will not change this rule in the short term.

Daily price limit rules are also strict in China's stock market. Since December 14, 1996, China stock market has been carrying out the 10% daily price limit, which means the trading price in a single trading day shall not rise or fall by more than 10% from the closing price of the previous trading day. It's often discussed that such a rule would provide an opening for speculators, where they could push the stock price to its ceiling to avoid the individual buyers purchasing the stock, then sell them the



next day to make a profit. Such behaviour would harm the interest of individual buyers and restrain the stock market. In contrast, the U.S. and Hong Kong stock markets have no daily price limit. They are mature enough to rely on the market to adjust themselves.

#### 2.2.2.3. Rich trading derivatives

Hong Kong stock market supports warrants, nest round, Callable Bull/Bear Contracts and other trading derivatives, making it easier for the market to regulate and adjust itself. Unlike a stock option, a stock warrant is issued directly by the company. When a stock option is exercised, the shares usually are received or given by one investor to another; when a stock warrant is exercised, the shares that fulfil the obligation are not received from another investor but directly from the company. Such a product has high risk and high return and also provides the company with more opportunities to obtain capital.

In the U.S. stock market, trading derivatives mainly include forward futures, options, swaps and other categories. In 2011, the trading volume of futures and options in the United States was 7.7 billion, up 11% year on year, among which the trading volume of options was 4.4 billion, accounting for nearly 60%.

#### 3. EMPIRICAL STRATEGY

We collect data from the wind database to investigate the relationship between the companies' first-day return and its places for going public, the primary pooling panel data ordinary lease square (OLS) regression model is

$$FRSTDRT_{it} = \alpha_i + \lambda_1 LC_{it} + \lambda_2 Size_{it} + \lambda_3 PFTBLT_{it} + \varepsilon_{it}$$

FRSTDRT<sub>it</sub> is the 1<sup>st</sup>-day return of the company, L.C. is the location of going public, which is a dummy variable and should be 0 for going public in the H.K. market and 1 for going public in other markets (A shares or U.S.

markets including NYSE and Nasdaq).  $Size_{it}$  is the log firm size (million) when it goes public.  $PEFBLT_{it}$  is the profitability (revenue, million) of the firm when it is going public.  $\alpha$ ,  $\lambda_1$ ,  $\lambda_2$  and  $\lambda_3$  are regression coefficients, and  $\epsilon$  is the error term.

#### 4. RESULTS

In table 1, we make a summary statistic for our variables. We can see that companies going public in the Hongkong market and A-shares have a lower mean of FSTDRT and a smaller range. This is probably because the Hongkong market and A-shares are less risky than U.S. markets. Comparing the 1st and 3rd quarters of FSTDRT, we can assume that going public in H.K. and A can bring more FSTDRT on average. Additionally, we find companies going public in Hongkong, and A-shares have larger sizes but less average PFTBLT. This is likely because investors in the U.S. are more aggressive in investing strategy, and smaller companies can get more financing from them.

In table 2, we calculated the correlation between each variable, and we found only FSTDRT and L.C. of companies going public in Hongkong, and A-shares have a weak correlation. There is a positive relationship between FSTDRT and L.C. when companies choose to go public in both the Hongkong market and A-shares, which means that a company goes public in both the Hongkong market and A-shares, it is highly possible that they could have a positive First Day Return.

In our regression results, we found that there is a positive relationship between FSTDRT and L.C. when companies choose to go public in both the Hongkong market and A-shares, which means that when a company goes public in both the Hongkong market and A-shares, it is highly possible that they could have a positive First Day Return.

 Table 1. summary statistic

| HKA           |      |         |           |         |           |         |          |
|---------------|------|---------|-----------|---------|-----------|---------|----------|
| Variables     | Obs. | Mean    | StdDev    | Min     | Max       | 1st Qu. | 3rd. Qu. |
| LC            | 162  | 0.500   | 0.110     | 0       | 1         | 0       | 1        |
| FSTDRT        | 162  | 0.370   | 0.729     | -0.311  | 6.627     | 0.001   | 0.440    |
| Size(million) | 162  | 3128833 | 4.330e-08 | 71      | 10088347  | 4559    | 90250    |
| PFTBLT        | 162  | 226544  | 4.882e-08 | 26      | 9516211   | 5026    | 63790    |
| HKUS          |      |         |           |         |           |         |          |
| Variables     | Obs. | Mean    | StdDev    | Min     | Max       | 1st Qu. | 3rd. Qu. |
| LC            | 162  | 0.500   | 4.340     | 0       | 1         | 0       | 1        |
| FSTDRT        | 162  | 1.767   | 13.599    | -20.820 | 85.670    | -0.091  | 0.214    |
| Size(million) | 162  | 82186.0 | 1.367e-05 | 11.750  | 1073743.6 | 593.3   | 48459.4  |
| PFTBLT        | 162  | 51188.9 | 2.217e-05 | -37.5   | 630596.8  | 4885.1  | 28588.3  |



Table 2. correlation

| НКА    |        |        |       |        |
|--------|--------|--------|-------|--------|
|        | LC     | FSTDRT | Size  | PFTBLT |
| LC     | 1      |        |       |        |
| FSTDRT | -0.097 | 1      |       |        |
| Size   | -0.064 | 0.021  | 1     |        |
| PFTBLT | 0.424  | -0.221 | 0.174 | 1      |
| HKUS   |        |        |       |        |
|        | LC     | FSTDRT | Size  | PFTBLT |
| LC     | 1      |        |       |        |
| FSTDRT | -0.065 | 1      |       |        |
| Size   | -0.059 | 0.626  | 1     |        |
| PFTBLT | -0.140 | 0.256  | 0.313 | 1      |

Table 3. regression result

|          | HKA        | HKUS       |
|----------|------------|------------|
| LC       | 0.618***   | -3.554     |
|          | (5.640)    | (-0.819)   |
| Size     | -2.074e-09 | -2.220e-06 |
|          | (-0.048)   | (1.269)    |
| PFTBLT   | -5.816e-09 | 2.068e-07  |
|          | (-0.119)   | (0.009)    |
| Constant | 0.062      | 3.715      |
|          | (0.783).   | (1,269)    |
| Obs.     | 157        | 42         |
| Adj-R2   | 0.165      | -0.050     |

Our results found that going public in both the Hongkong market and A-shares, companies can have higher first-day returns. However, when companies go public in both the Hongkong and U.S. markets, the result is not statistically significant. The potential reason is that both Hongkong and U.S. markets are more developed than A-shares. This is possible because companies are going public in both Hongkong, and A-shares usually have a larger size than companies going public in both Hongkong and U.S. What's more, we found that the last group has a more extensive range of first day-returns, which are typically higher than the other group as well. It may indicate that the U.S. market is more profitable but more dangerous for listed companies. Further study needs more data to investigate the relationship between listed companies' first-day return and more choice of location.

## 5. CONCLUSION

We have discussed the overview of dual listing in

China, which has become a more popular method for companies to get financed and expand. We moved on to discuss the underlying reason behind dual-listing and its significance. We also talked about the importance of first-day return and the existing problems of choosing a secondary market to be on the list. Thus, it is important to consider the places for firms to choose dual listing. In our empirical methods, we find that firms listed on both A-shares and Hongkong markets have had a positive effect on their first-day return, while U.S. markets and Hongkong markets have negative influence. This is useful for future literature studies to examine how alluring going public is for Chinese mainland companies. This is useful for future literature studies to examine how alluring going public is for Chinese mainland companies

#### **AUTHORS' CONTRIBUTIONS**

In this paper, Yin wrote the introduction, overview, bibliography and the conclusion section of the paper, and he was also responsible for the proofreading of the entire



paper. Hu analyzed the data of the listed companies and made the tables. Wang was responsible for collecting data and helped to write background. Guan wrote the better legal environment and favourable policies section of the paper.

#### REFERENCES

- [1] H. Guo, "IPO First-Day Return and Ex Ante Equity Premium", Journal of Financial and Quantitative Analysis, vol. 46, no. 3, pp. 871-905, 2011. Available: 10.1017/s002210901100010x.
- [2]L. Switzer, "The Benefits and Costs of Listing Canadian Stocks in U.S. Markets, in L. Sarna, ed", Corporate Structure, Finance and Operations, vol. 4, pp. 241-254, 1986.
- [3]K. Torabzadeh, W. Berlin and T. Zivney Maxon, "Valuation effects of international listings", Global Finance Journal, vol. 3, no. 2, pp. 159-170, 1992. Available: 10.1016/1044-0283(92)90011-9
- [4]G. Karolyi, "Why Do Companies List Shares Abroad?: A Survey of the Evidence and Its Managerial Implications", Financial Markets, Institutions and Instruments, vol. 7, no. 1, pp. 1-60, 1998. Available: 10.1111/1468-0416.00018
- [5]S. Foerster and G. Karolyi, "Multimarket Trading and Liquidity: A Transaction Data Analysis of Canada U.S. Interlistings", SSRN Electronic Journal, 1998. Available: 10.2139/ssrn.136715
- [6]F. Pan and D. Brooker, "Going Global? Examining the Geography of Chinese Firms' Overseas Listings in International Stock Exchanges", SSRN Electronic Journal, 2013. Available: 10.2139/ssrn.2303715