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Limited Internationalization of Capital Market and Corporate Finance: Evidence from Chinese B-Share Firms

Mamoru Nagano

早稲田大学
ファイナンス総合研究所
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Limited Internationalization of Capital Market and Corporate Finance
—Evidence from Chinese B-Share Firms—

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Mamoru Nagano[1]
Mitsubishi Research Institute, Inc.

Abstract

Due to the segmentation into markets for domestic and foreign investors, China has had a unique stock market. This paper examines what determines Chinese firms' decision to undertake initial public offerings (IPOs) in the B-share market. The empirical results are as follows. First, it is found that the purpose of IPOs in the B-share market is to relieve the borrowing constraint and strengthen bargaining power with banks in determining the cost of credit. Second, the size of Chinese firms is positively related to both IPOs and the number of capital stock issued in the B-share market. Third, a firm's profitability positively influences the IPO decision in the B-share market, but reverses after additional issuances are made. Fourth, A-share firms that have better growth opportunities and higher stock prices go to B-share market.

JEL Classification Code: G32; O16; O23
Keyword: Corporate Finance, Capital Market, Chinese Firm, Financial Deregulation, Initial Public Offering

[1] Senior Economist, Mitsubishi Research Institute, Inc. 2-3-6 Otemachi Chiyoda-ku Tokyo 100-8141, Japan, Email: nagano@mri.co.jp Tel: +813-3277-0594, Fax; +813-3277-0521

Introduction

It is commonly known that there are three stock markets in People of Republic of China, i.e., Shanghai, Shenzhen, and Hong Kong Stock Exchanges. Shanghai and Shenzhen stock exchange respectively have two equity markets, i.e., the A-share market which only allows the participation of domestic investors, and the B-share market which only permits foreign investors[2]. It is considered that this unique bilateral system has not only prevented the rapid increase of foreign capital inflows through the equity market, but also imposed a substantial administrative burden to domestic firms. This paper focuses on what determines the decision of A-share firms to undertake initial public offerings (IPOs) in the B-share market and the size of capital stock issued.

There are many previous studies on the determinants of IPOs in developed countries such as Pagano et al. (1998), and Maksimovic and Pichiler (2001). Taking into consideration the above ideas, this paper studies the uniqueness of the Chinese stock market and funding environment. The following hypotheses are tested. First, from a viewpoint of information costs, is whether a firm's profitability and internal funding ability influence the B-share IPO decision. Second, under the strict bank borrowing regulation and non-performing loan (NPL) problems, is whether firms that face serious financing constraints have incentives to do an IPO in the B-share market. Third is whether Chinese firms that have better growth opportunities and higher stock prices also have incentives to go to the B-share market. Fourth is whether firm size influences the decision to do an IPO. The last hypothesis is whether the bargaining power with banks, in terms of determining interest rates, is strengthened with an IPO.

Empirical analyses in the following sections used two datasets. One dataset consists of financial panel data of the listed firms in the A-share and B-share markets from 1994 to 2001. The other dataset contains information on the number of capital stock issued in addition to the financial data of listed firms. Data on the issuance of capital stock are not available before 1996, hence, the time period for dataset is from 1997 to 2001. To verify the above hypotheses, the former dataset is used for panel probit estimation while the latter for panel tobit estimation.

The empirical results indicate that firm profitability, a proxy variable for a firm's internal funding ability, is positively related to the decision to do an IPO, but shows a negative relationship with the number of capital stock issued in the B-share market.

[2] Since February 2001, Chinese Stock Regulatory Commission permitted domestic investors to join the B-share market and allowed only qualified foreign investors to take part in the A-share market since December 2002. However, until now, the principal players in the A-share market are still domestic, and foreign in the B-share market.

Second, the firm's financing constraint is relaxed once firms issued B-stocks. As a result, B-share firms statistically have higher debt to equity ratios than A-share firms. Third, under the assumption that large firms have less asymmetric information problems, better reputations and low probability of bankruptcy, firms prefer to do an IPO in the B-share market. Fourth, because of the borrowing constraint described above, firms with higher debt to equity ratios are generally imposed higher credit cost by banks. Consequently, firms that have higher growth opportunity do IPOs in the B-share market.

I. Finding Environment in China

1. Overview of Stock Market

As discussed earlier, the Chinese stocks are principally traded in the Shanghai, Shenzhen, and Hong Kong stock markets. As of February 2003, the market capitalization of the A-share and B-share markets both in Shanghai and Shenzen totals 4.1 trillion Rmb (500 billion USD) and 43.1 billion USD, respectively. The market capitalization of the H-share market is 14.8 billion USD.

The law that regulates Chinese stock market is called Security Law enacted July in 1999. Generally, a company must meet the following conditions to issue A-shares.

a) Its production and operation must conform with the government's industrial policies;
b) It must issue only one class of common shares, and the rights of common shares must be the same for all holders of common shares;
c) The sponsor of the shares must be committed to buying no less than 35% of the total stock that the company plans to issue;
d) The value of the total stock the sponsor is committed to buy shall generally be no less than 30 million Rmb;
e) The portion of the stock issued among the public shall be no less than 25% of the total stock that the company plans to issue; the portion that the workers are committed to buy shall not exceed 10% of the issue to the public; and
f) The sponsor must not have any major law violation record in the three preceding years.

As for the B-share listing rule, the State Council issued 28 clauses of national rules in early 1996. Under its terms, all issuances of B-shares must be approved by the

People's Bank of China (PBC). In addition, state companies that wish to issue B-shares must obtain the approval of the State Council Securities Policy Committee. PBC is made a supervisor of B-share issuances because, with the denomination of trading of B-shares in the Shanghai and Shenzen Stock Exchanges being US dollar and HK dollar, respectively, issuing companies must open a foreign exchange account at a Chinese bank authorized to deal in foreign currencies. The requirement of the B-share issuance is that, in addition to the conditions for the issuance of A-shares, a firm must have a stable and relatively adequate source of foreign exchange reserves since the firm must pay annual dividends abroad in foreign currency after the payment of taxes.

The investor must underwrite a minimum of 35% of the total amount and make at least 25% of the total shares available to the public, or 15% if the total shares are 400 million Rmb or more. Once listed, no single party can acquire more than 5% of the outstanding shares without the approval of the PBC.

Table 1 Overview of the Equity Markets in China

	Shanghai Stock Exchange		Shenzhen Stock Exchange		Hong Kong Stock Exchange	
	A-share	B-share	A-share	B-share	H-share	Red Chip
Market Participants	Domestic Investors	Foreign Investors	Domestic Investors	Foreign Investors	Hong Konger, Foreign Investors	Hong Konger, Foreign Investors
Establishment	Novermber, 1990	February, 1992	August, 1991	February, 1992	July, 1993	July, 1993
Transaction Currency	Chinese Yuan	US Dollar	Chinese Yuan	Hong Kong Dollar	Hong Kong Dollar	Hong Kong Dollar

Source：China Stock Market Web

Table 2 The Number of Listed Firms in Shanghai and Shenzhen Stock Exchange

	Shanghai A	Shanghai B	Shenzhen A	Shenzhen B
1995	184	36	127	34
1996	287	42	227	43
1997	372	50	348	51
1998	425	52	400	54
1999	471	54	450	54
2000	559	55	499	58
2001	636	54	494	56
2002	701	54	493	57

Source: CEIC

Table 3 Funding Amount by Issuance of Equity Issuance

	A-share	B-share	H-share
1998	44,534	312	461
1999	55,754	46	569
2000	97,890	169	6,790
2001	66,726	0	849
2002	64,027	0	2,183

Source: CEIC

A-share—Million RMB、B-share, H-share—Million USD

2. Funding Environment of the Chinese Firms

Although the PBC abolished long-term loan limits in October 1997, the most common type of funding facility in China is still the one-year bank loan.[3] Borrowing over one year is quite rare and is permitted only when the borrowers are involved in national development projects planned by central government. On the other hand, short-term loans (which are less than one-year) are obtained from the Bank of China or other specialized banks.

In January 1998, the PBC abolished the quota system through which it controlled commercial bank lending. But it continues to influence lending practices by monitoring the asset quality of each bank and publishing guidelines for credit allocation. Bank loans in China fall into three categories: (1) temporary loans for three months or less; (2) short-term loans of more than three months but less than one year; and (3) medium-term loans for one to three years. Revolving credit lines with the Bank of China and other specialized banks became more common. Interest rates on bank loans are based on the PBC's reference rate and are allowed to fluctuate within a range of 10% above and below the reference rate.

The General Rules on Loans of 1996 lay out a host of "common sense" requirements for lending, such as borrowers proving the viability of their products in the market place and providing guarantees for their loans. The type of security demanded by Chinese lenders is based on a number of factors, the most obvious being the creditworthiness of the business. There have been recent changes in the rules on loan collateral. In 1998, the State Administration of Foreign Exchange (SAFE) prohibited loan security in the form of foreign bank guarantees or standby letters of credit since banks had become reluctant to grant renminbi loans against any collateral less solid than a foreign currency cash deposit for the full amount of the loan. In 1999, SAFE relaxed its rules and allowed only Foreign Invested Enterprises to finance fixed asset investment with foreign currency-backed renminbi loans under Circular 223.

As described above, although deregulation on bank loans progressed in recent years, there are still many restrictions on lending rates, loan maturities, and collaterals in China. Coupled with the stagnant domestic lending market caused by extreme high NPL ratios of the top four largest commercial banks, these bank regulations are possibly among the factors that impose serious financing constraints on Chinese firms. The debt to equity ratios of listed Chinese firms is generally about 30 percent. This suggests how difficult it is for firms to obtain funding from commercial banks.

[3] Prior to that date, all lending activities were basically restricted to one-year tenors.

II. Hypotheses

External funding tools of Chinese firms is unique. For instance, until recently, equity financing was historically segmented between a market for domestic investors and foreign investors. In addition, having severe bank loan regulations and high NPL ratios in the lending market is another aspect of the Chinese funding environment. Under these circumstances, this paper verifies what determines Chinese firms listed in the market for domestic investors to decide to enter the B-share market.

Pagano et. al (1998) focused on the determinants of IPOs by Italian firms and suggested the following possibilities. First, as advantages of an IPO, they pointed out overcoming financing constraints, strengthening bargaining power in lending rate negotiations with banks, diversification of corporate shareholders, enhancement of managerial discipline, improvement of access to financing when the firm has a high growth opportunity, and recognition of investors. As disadvantages of IPOs, they mentioned the negative influence of adverse selection, financial cost of listing procedures, and a loss of business privacy. Based on these, this paper examines four hypotheses focusing on overcoming financing constraints, strengthening bargaining power in interest rate negotiations with banks, access to financing of firms with high growth opportunities, and existence of adverse selection caused by information asymmetry.

Before discussing the above hypotheses, we first add the following hypothesis. Our first hypothesis is that the Chinese firm utilizes funds generated from internal sources prior to funds generated from external sources because of its low information cost. According to Myers and Majluf (1984), firms generally choose financing techniques in ascending information costs in cases where asymmetric information problems exist between corporate insiders and outsiders. In this hypothesis, we assume corporate insiders and foreign investors have large asymmetric information and this causes firms with smaller internal funds to be more aggressive in doing IPOs in the B-share market.

The second hypothesis is that the financing constraint forces Chinese firms to go to the B-share market. As described in the previous section, it is considered that the stagnant lending market and severe bank regulations may hinder bank lending from responding to a firm's strong funding demand. Empirical results of Pagano et al. (1998) support this hypothesis for Italian firms and this paper verifies this by using same explanatory variable. With reference to this second hypothesis, this paper examines the hypothesis that IPOs in the B-share market enable firms to enhance bargaining power with banks with respect to the determination of interest rates. As Rajan (1992) notes,

firms that have high dependency on single bank borrowing must pay rent to the bank in the form of an addition to the lending interest rate. However, firms with diversified financing techniques enable themselves to minimize this rent because the bargaining power is strengthened.

The fourth hypothesis of this study is, as pointed out by Leland and Pyle (1977) and Rock (1986), the number of blue-chip firms decreases and lower stock prices are offered in a stock market when there is substantial information asymmetry between corporate insiders and investors in the market. Chemmanur and Fulghieri (1995) suggested that firms that are smaller and newer generally face larger information costs arising from adverse selection in the stock market. This hypothesis assumes that there exists information asymmetry between corporate insiders and foreign participants in the B-share market. With this assumption, the size of the firm, i.e., a proxy variable which is inversely related to the firm's information asymmetry, is positively related to the firm's initial public offering in the B-share market.

The fifth hypothesis concerns the firm's growth opportunity and financial distress. As noted by Rajan and Zingales (1995), to avoid increasing financing cost caused by the firm's high financial leverage, firms with promising investment opportunities prefer equity financing to an additional bank borrowing. In China, this hypothesis is more plausible, because the domestic lending market has gotten stagnant because of the NPL problems of the four largest commercial banks that have approximately a 90% share of domestic lending market. In addition, regulations on bank lending are very strict.

III. Data

The data used in this study are obtained from Net China Limited. For the empirical analysis of the determinants of IPOs in the B-share market, the dataset consists of all A-share firms, excluding finance-related businesses, from 1994 to 2001 except financial business. After doing IPOs in the B-share market, financial data of the firms are eliminated from the sample. For the empirical estimates of the determinants of the number of B-shares issued, the dataset consists of both A-share and B-share firms from 1997 to 2001 since the data from 1994 to1996 could not be obtained.

Descriptive statistics in Tables 4 and 5 suggest that size of A-share firms are statistically larger than B-share firms in terms of sales and total assets. On the other hand, profitability of A-share firms is statistically higher than B-share firms in terms of return on assets. As for growth opportunity, the MBR (=[market value of capital + book value of liability]) / book value of total assets) of A-share firms is also higher than that of B-share firms. Fourth, the debt to equity ratio of B-share firms is continuously higher than

that of A-share firms since 1995. Fifth, the ratio of individual firm's interest payment to total liabilities of B-share firms is also higher than that of A-share firms. There are no significant differences in sales growth and capital expenditure on property and equipment between A-share and B-share firms.

Table 4 Average of Major Financial Indicators of the Sample Firms

	DER_M	ROA	ASSET	RCC	MBR	Growth	B_Share	B_IPO
1994	0.413	9.253	6.346	0.917	2.009	34.1	N.A.	18
1995	0.548	7.490	6.407	0.992	1.907	27.2	N.A.	23
1996	0.313	7.611	6.411	1.061	2.529	28.6	N.A.	15
1997	0.273	7.608	6.585	1.208	2.794	22.9	0.311	13
1998	0.283	5.206	6.728	1.061	2.793	14.1	0.309	15
1999	0.253	5.381	6.846	0.850	3.010	18.4	0.304	16
2000	0.182	4.141	6.991	0.823	4.088	23.9	0.314	5
2001	0.243	2.430	7.098	0.916	3.048	18.7	0.331	2
Total	0.272	5.281	6.791	0.960	3.019	24.6	0.329	13.375

Source: Author's calculation based on financial data of Net China, Inc.

DER_M: Debt to Equity Ratio, ROA: Return on Asset(%), ASSET: Logarithm of Total Asset, RCC: Relative Cost of Credit, MBR: Growth Opportunity, Growth: Sales Growth, B_share: Number of B-share stock issued, B_IPO: Number of IPO firms

Table 5 Result of t-test of Major Financial Indicators of the Chinese Listed Firms

	DER_M		DER_B		ROA		MBR		Sales		Asset		Growth	INV	RCC		Number of A-share Firms	Number of B-share Firms
1994					A>B	**			A<B	***	A<B	***			A<B	***	143	51
1995	A<B	*			A>B	**			A<B	***	A<B	***			A<B	***	233	57
1996	A<B	***			A>B	*	A>B	***	A<B	***	A<B	***			A<B	**	376	79
1997	A<B	***			A>B	***	A>B	***	A<B	***	A<B	***			A<B	***	526	94
1998	A<B	***			A>B	***	A>B	***	A<B	***	A<B	***			A<B	***	626	92
1999	A<B	***			A>B	***	A>B	***	A<B	***	A<B	***			A<B	***	719	93
2000	A<B	***	A<B	**	A>B	***	A>B	***	A<B	***	A<B	***			A<B	***	821	100
2001	A<B	***	A<B	***	A>B	***			A<B	***	A<B	***					875	99

***, **, * indicate 1 percent, 5 percent, and 10 percent significant level as a result of t-test of difference between A-share and B-share firm's average.

IV. Model

Using the two datasets introduced in the previous section, this study estimates the following two equations, i.e., (1. 1) and (2. 1), to verify the hypotheses.

$$y_{it} = const + \alpha_1 ROA_{it} + \alpha_2 DER\_M_{it} + \alpha_3 MBR_{it} + \alpha_4 Asset_{it} + \alpha_5 INV_{it} + \alpha_6 Growth_{it} + \alpha_7 RCC_{it} + \alpha_8 Year_t + u_i + v_{it} \quad (1.\ 1)$$

$$z_{it} = const + \phi_1 ROA_{it} + \phi_2 DER\_M_{it} + \phi_3 MBR_{it} + \phi_4 Asset_{it} + \phi_5 INV_{it} + \phi_6 Growth_{it} + \phi_7 RCC_{it} + \phi_8 Year_t + u'_i + v'_t \quad (2.\ 1)$$

y_{it} equals 0 if firm i only stays in the A-share market and equals 1 if it goes to the B-share market. At any time t, the sample includes all the A-share firms. After a firm had an IPO in the B-share market, the firm is dropped from the sample. On the other hand, z_{it} is the number of B-shares issued as a ratio to total outstanding stock. As explained in the previous section, time-series of dataset for (1.1) is 1994-2001 and for (2.1) is 1997-2001.

ROA and DER_M are the lagged return on assets and debt to equity ratio, respectively. ROA is a proxy variable for internal funds and DER_M is financial leverage. MBR is the sum of market value of capital and book value of liabilities as a ratio of the book value of total assets, and is used as a proxy variable for growth opportunity. ASSET is the natural logarithm of total assets and is a proxy variable for firm size. INV is capital expenditure over property and equipment, Growth is sales growth, and RCC is the relative cost of credit, i.e., $=(1+r_{it})/(1+\underline{r}_t)$ where r is the credit cost of firm i and $\underline{r}$ is the average of the sample firms. Year is a calendar year dummy.

To estimate equation (1. 1), a random-effects probit model is employed since a sufficient statistic allowing the fixed effects to be conditioned out of the likelihood function does not exist and unconditional fixed-effects estimates are biased. Assuming a normal distribution, $N(0, \sigma_v^2)$, for the random effects v_i, we have

$$\Pr(y_{it} \mid x_{it}) = \int_{-\infty}^{\infty} \frac{e^{-v_i^2/2\sigma_v^2}}{\sqrt{2\pi\sigma_v}} \left\{ \prod_{t=1}^{n_i} F(x_{it}\beta + v_i) \right\} dv_i \quad (1.\ 2)$$

where

$$F(x_{it}\beta + v_i) = \begin{cases} \Phi(x_{it}\beta + v_i) & \cdots y_{it} \neq 0 \\ 1 - \Phi(x_{it}\beta + v_i) \cdots & y_{it} = 0 \end{cases} \quad (1.\ 3)$$

where Φ is the cumulative normal distribution. We can approximate the integral with M-point Gauss-Hermite quadrature

$$\int_{-\infty}^{\infty} e^{-x^2} f(x)dx \approx \sum_{m=1}^{M} w_m^* f(a^* m)$$

where w^*_m denotes the quadrature weights and a_m^* denotes the quadrature abscissas. The log-likelihood function L, where $\rho = \sigma^2_v/(\sigma^2_v+1)$, is then calculated using the quadrature

$$\begin{aligned} L &= \sum_{i=1}^{n} w_i \log\{\Pr(y_i \mid x_i)\} \\ &\approx \sum_{i=1}^{n} w_i \log\left\{\frac{1}{\sqrt{\pi}} \sum_{m=1}^{M} w_m^* \prod_{t=1}^{n_i} F(x_{it}\beta + \sqrt{2\frac{\rho}{1-\rho}} a_m^*)\right\} \end{aligned} \qquad (1.\ 4)$$

where w_i is a user-specified weight for panel i.

A random-effects tobit model of (2. 1) is also estimated assuming normal distribution, $N(0, \sigma_v^2)$, for the random effects v_i, as in the random-effects probit model of (1.1). However, (1. 3) is replaced by

$$F(\Delta_{it}) = \begin{cases} (-1/\sqrt{2\pi\sigma_\varepsilon^2}) e^{-(z_{it}-\Delta_{it})^2/(2\sigma_\varepsilon^2)} & if\ z_{it} \in C \\ \Phi\left(\dfrac{z_{it}-\Delta_{it}}{\sigma_\varepsilon}\right) & if\ z_{it} \in L \\ 1-\Phi\left(\dfrac{z_{it}-\Delta_{it}}{\sigma_\varepsilon}\right) & if\ z_{it} \in R \end{cases} \qquad (2.\ 2)$$

where C is the set of noncensored observations, L is the set of left-censored observations, and R is the set of right-censored observations.

V. Empirical Results and Discussion

The first hypothesis concerning the relationship between firm's profitability and B-share IPO is, as pointed out by Rajan and Zingales (1995), that a firm's high profitability discourages the intention of doing an IPO in the B-share market. Empirical results of (1.1) indicate that A-share firms with higher profitability does IPOs in the B-share market, while that of (2.1) suggest that profitability is negatively influenced by the number of B-shares issued. The difference of results is to have originated from the difference in datasets. The dataset of (1.1) eliminates firms from the sample after the first year of the B-share IPO after the B-share IPO, while the dataset of (2.1) does not. Therefore, it is inferred, although, institutionally, IPOs of B-share do not require high profitability, A-share firms have incentives to improve it to be able to do an IPO in the B-share market for some reasons which may or may not be related to the legal framework. The results of (2.1) support the hypothesis that a firm with ample internal funds is passive to do an IPO in the B-share market once it is permitted to issue B-shares.

Second, our hypothesis expects a firm's debt to equity ratio to positively related to the B-share IPO decision, but empirical results of (1.1) do not support this. However, in (2.1), the coefficient of this variable is significantly related to the number of B-shares issued. In Table 5, t-tests on the average of A-share and B-share firms' debt to equity ratios and relative credit cost indicate that B-share firms significantly have higher average debt to equity ratios and pay higher interest rates. Therefore, it is suggested that B-share firms generally have stronger funding demand and attain higher debt to equity ratios and higher ratios of interest payments. Empirical results concerning the firm's bargaining power with banks also support the hypothesis. This implies that, for A-share firms, doing IPOs in the B-share market enable them to relax financing constraints and strengthen their bargaining power with banks.

Third, with respect to the relationship between firm size and IPOs, both empirical results support our hypothesis. Since Table 5 also indicates that B-share firms statistically have higher average firm size both in terms of total assets and sales. Therefore, it is concluded that firm size influences B-share IPOs in China. However, it must be recognized that, since the larger firms have diversified businesses, they have better reputations and lower probabilities of bankruptcy.

Last, a proxy variable for a firm's growth opportunity has a significant positive relationship with both doing an IPO in the B-share market and number of shares issued. Accordingly, it is concluded that firms with high financial leverage have incentives to

issue B-shares, and firms with high stock prices in the A-share market have incentives to go to the B-share market as well.

Table 6 Determinants of the Decision to Go B-share Market

Variables	Parameter	s.e.	Z-value
DER	-0.097	0.166	-0.580
ROA	0.085 ***	0.012	6.960
Asset	0.178 **	0.078	2.280
RCC	0.909 ***	0.132	6.860
Growth	1.020	0.679	0.440
INV	0.444	0.708	0.180
MBR	0.110 ***	0.093	5.450
Const	-7.650	0.522	-0.112
N. Obs			4,082
Number of firms			951
Wald χ2			9,131.3
rho			0.100
Log Likelihood			-252.5
Likelihood ratio of rho			3.86 **

*** indicates the coefficient is significantly different from zero at the 1 % level or less;
** indicates the coefficient is significantly different from zero at the 5 % level;
* indicates the coefficient is significantly different from zero at the 10 % level;

Table 7 Determinants of the Number of Issuance in the B-share Market

	係数	**標準誤差**	**漸近的t値**
DER	0.006 **	0.002	2.430
MBR	0.003 ***	0.005	6.520
ROA	-0.002 ***	0.009	-3.230
Sales	0.000 ***	0.000	2.780
Growth	0.001	0.001	0.538
INV	0.000	0.001	0.070
RCC	0.006 ***	0.000	9.190
Const	-0.017 ***	0.002	-6.680
標本数			3,574
企業数			1,106
WaldChi^2			61.820
rho			0.689
Log Likelihood			-360.266
Likelihood ratio of sigma_u			51.67***

Conclusion

As discussed in the previous sections, this paper analyzed the determinants of IPOs and the magnitude of equity finance in the limited internationalized equity market in China. A summary of the implications that this paper derived from its empirical analysis is as follows.

What we should recognize about corporate finance in China, other than the equity market being segmented for a long period, is that one of the external funding sources, i.e., bank lending, is inaccessible for firms with strong demand because of strict regulations and NPL problems in the lending market. Consequently, firms generally have low debt to equity ratios and depend on internal funds for corporate finance. Under these circumstances, the empirical results of this paper suggest that IPOs in the B-share market relax borrowing constraints and strengthen bargaining power with banks. These imply that accessibility of the B-share market is synchronized with accessibility of the stagnant lending market.

It is considered that a listing in the limited internationalized market improves the firm's reputation and it consequently strengthens relationships with investors. Therefore, listed firms in the B-share market are statistically larger and have smaller asymmetric information problems. On the other hand, since A-share firms generally have higher growth opportunities and profitability, it is suggested that A-share firms are smaller, but have better investment opportunities compared with B-share firms.

This study has certain limitations. First, with limited data on Chinese firms, we could not examine what determines unlisted Chinese firms to go public in the A-share market. Second, as stocks previously owned by government are released, dramatic changes in the ownership structure might influence Chinese corporate finance. We would like to recommend the above themes for future research.

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