

**Time Dependent, Information Asymmetry
and Valuation Uncertainty,
– A Study on China's IPO Allocation Procedures**

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1

1. Introduction

■ **Initial Public Offer (IPO)**

■ **IPO Underpricing**

Why the firms set the offering price lower than the market accepting price?

■ **IPO Allocation Mechanism/Procedure**

Fixed price offering

Auction

Bookbuilding

Which is the optimal IPO allocation mechanism?

What are the determinations of choosing a specific IPO allocation procedure?

2

2. Literature

- **Information Asymmetry**

Market participants are unequal in access to information.

- **Valuation Uncertainty**

Either the firms are unsure on their share value evaluated by the investors or the investors doubt the true value of the firms.

- **Relevant research**

Benveniste and Busaba (1997)
Vandemaele (2003)
Derrien and Womack (2003)
Chemmanur and Fulghieri (1999)
Akerlof (2002)

3

3. China's IPO Market

- **Private Placement (– 4/1994)**

A sort of public offer in China

- **Local Public Offerings (1/1991 – 4/1998)**

i. Limited warrant; ii. Unlimited warrant; iii. Deposit certificate

- **National Public Offerings (5/1994 –)**

i. Online public offerings, ii. Prepayment in full & balance refund or transfer; iii. Secondary proportional offerings

- **Bookbuilding (11/1999 –)**

Online or offline soliciting demand

4

4. Sample Construction

Year: 1991 1993 1995 1997 1999 2001 2003

Private placement (Fixed price)

Public offering locally (Fixed price)

Public offering nationally (Fixed price)

Bookbuilding

5

5. The Model

- Logit Model

$$I_{i,t} = \alpha_t + X_{i,t}\beta_{1,t} + Y_{i,t}\beta_{2,t} + D_{i,t}\gamma_{i,t} + \ell_{i,t}$$

i indicates a firm,

t notices one of the three periods,

I is the dependent variable,

X is a vector of experimental variables, Y is a vector of control variables,

D is a vector of IPO years dummies,

e is the error term.

6

6. The Result

	1/1991-4/1994 Local public offering =1 (1)	5/1994-4/1998 National public offering =1 (2)	11/1999-12/2003 Bookbuilding=1 (3)
Constant	4.2545 (0.7047)	-1.3843 (0.8249)	-6.0525 (0.3230)
<i>Panel A. Experimental variables</i>			
Adjustreturn	-0.1494** (0.0322)	-0.9676** (0.0213)	-0.3003 (0.6693)
LGap	-0.8225** (0.0410)	-1.1707** (0.0123)	-1.2614 (0.1460)
LAge	-0.2140 (0.4157)	0.1616 (0.1163)	1.0908** (0.0484)
LCapitalisation	0.3184* (0.0678)	0.7750** (0.0289)	0.1713* (0.0920)
LNoffer	1.4059 (0.1195)	0.3900 (0.6130)	1.0316 (0.3437)
LProceeds	1.3176* (0.0604)	1.0111* (0.0989)	0.1393* (0.0937)
RTradablea	-6.4025* (0.0225)	-0.2013 (0.9591)	-1.7171** (0.0143)
RState	0.2508 (0.9008)	-1.4831** (0.0460)	2.2690** (0.0504)

7

7. The Findings

- First, when only private placements and local public offerings are applicable (from January 1991 to April 1994), the firms with more information asymmetry and valuation uncertainty are most likely select private placements.
- Second, when only local public offerings and national public offerings are applicable (from May 1994 to April 1998), the firms with more information asymmetry and valuation uncertainty are most likely select local public offerings.
- Third, when only national public offering and bookbuilding are applicable (from November 1999 to December 2003), the firms choosing national public offerings rather than bookbuilding imply more information asymmetry and valuation uncertainty of their IPOs.

8