Securities Market Regulation and Private Equity Placements in China

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Motivation

"The biggest drop in Chinese stocks in eight years Monday is another sign that Beijing's efforts to prop up prices have failed. Moreover, the interventions themselves have made China's equity markets more volatile and damaged their credibility in the long run."

– The Wall Street Journal
July 27th, 2015

Motivation

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"The Chinese government's proper role is to eliminate accounting fraud, encourage better corporate governance, and require full and fair disclosure."

– Burton G. Malkiel

Author of "A Random Walk Down Wall Street"

Motivation

- Equity market regulation
  - Equity investors are subject to the risk that stock issuers will sell bad securities to the public (La Porta et al. 2006)
  - The appropriate level of regulatory requirement can reduce information asymmetry (Carpentier et al. 2012)
  - The objective is to promote fairness, prevent abuse, eliminate mispricing, and enhance firm value

Motivation

- Facts in developed countries
  - Commonly believed that the market outcome without government intervention, at least in most circumstances, is efficient (Tobin 1982)
  - The apparent periodic failure of stock markets is often used to justify the remedial introduction of market regulation (Ramano 1998; Daniel, Hirshleifer & Subrahmanyam 1998)

Motivation

- Private equity placement (PEP)
  - Non-underwritten stock offering sold directly to a small group of investors
  - Exempt from registration with the SEC
  - The lack of regulatory oversight and disclosure reduces the refinancing cost and saves time and auditing resources.
  - Information about PEP transactions are limited

Private Equity Placement

Dong, Gu, He

Motivation

Literature

Hypothesis

Data and Method

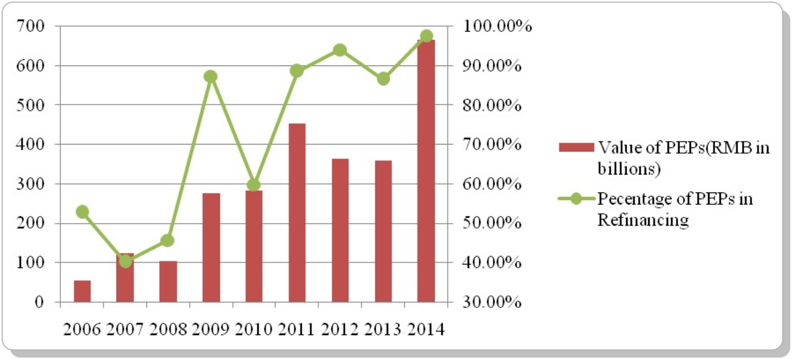
Results

Discussions

Motivation

- Challenges in China
  - Financial market is underdeveloped
  - Highly state-controlled
  - Seeks to promote economic development
  - Private placement of equity has shorter history and more strict regulation
    - On May 8, 2006, China Securities Regulatory Commission (CSRC) issued ”The Administration of the Issuance of Securities by Listed Companies”
    - Regulatory approval
    - Limited number of participants
    - Different lock-in periods

Motivation


700
600
500
400
300
200
100
0
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
2006 2007 2008 2009 2010 2011 2012 2013 2014
Value of PEPs(RMB in billions)
Pecentage of PEPs in Refinancing

Previous Studies

- Private placements have market discounts
  - Wruck (1989); Hertzel and Smith (1993), Chen et al. (2002), Wu et al. (2005)
- Positive announcement effects
  - Hertzel and Smith (1993), Kato and Schallheim (1993), Krishnamurthy et al. (2005), Renneboog et al. (2007), Lu et al. (2011), Fonseka et al. (2014)
- The literature attributes the discounts and abnormal announcement returns of private placements to
  - Monitoring effect: Wruck (1989)
  - Certification effect: Hertzel & Smith (1993)
  - Managerial entrenchment: Barclay et al. (2007)
  - Investor over-optimism: Hertzel et al. (2002)

Previous Studies

- Long-term underperformance of private equity placements firms are documented in
  - US Market: Hertzel et al. (2002), Krishnamurthy et al. (2005), Barclay et al. (2007), Brophy et al. (2009), and Chen el at. (2010)
  - Japan Market: Kang et al. (1999)
- However, they are inconsistent with underreaction hypothesis in Daniel et al. (1998)
  - Investors overreact to private information signals due to overconfidence and underreact to public information signals

Hypothesis

- Research questions
  - Does the stringent regulation in equity issuance in China has an impact, good or bad, on market participants in a long term?
  - Are the short- and long-term effects of private placements in China similar to those in the developed countries?
  - Who actually benefit from them?

Hypothesis

- Hypothesis
  - PEP issuing firms perform better than non-issuing firms following private placements in both short- and long-term
    - The perceived and real effects of monitoring and certification
  - Long-term abnormal returns to all shareholders are higher if controlling shareholders participate in PEPs
    - The active role of large investors to exert governance and urge better performance
  - Long-term operating performance improves when controlling shareholders participate in PEPs
    - Participating investors who are best informed and positioned to monitor are likely to be approved

Data and Method

- We compare firms issuing PEPs with those not issuing PEPs over the same time: event study and BHAR
- All A-share listed firms that had private equity placements between 2006 and 2012 from the Wind Dataset
- 580 firm-year observations (544 firms) that have successfully completed PEPs
- Financial accounting information from China Stock Market Accounting Research (CSMAR)
- Identifying control firms based on size and BM, and measuring long-run returns (Krishnamurthy et al. 2005)
- Classifying 108 observations as the PEPs bought only by controlling shareholders of the issuing firms or any other firm controlled by the controlling shareholders, based on investor identity information from RESSET

Data and Method

Sample Selection

We consider the case that A-share listed firms only issue A-share from year 2006 to 2012.	Initial sample: 846 firm-year observations	
We eliminate the offerings by utility and finance firms and Chinese firms dual-listed in Hong Kong.	91 firm-year observations deducted	755 firm-year observations
We eliminate the multiple issues in the same month and observations where the firm had a previous private placement in the last three years.	121 firm-year observations deducted	634 firm-year observations
We eliminate firms with insufficient data to calculate other measures discussed in the latter section.	54 firm-year observations deducted	Final sample: 580 firm-year observations

Data and Method
Industry Breakdown

Year	firm-year observation	Industry	firm-year observation
2006	40	Agriculture	10
2007	97	Mining	26
2008	69	Manufacturing	368
2009	77	Construction	18
2010	100	Transportation	18
2011	120	Information Technology	31
2012	77	Wholesales and Retails	30
		Real Estate	51
		Service	19
		Media	6
		Conglomerate	3
Total	580	Total	580

Results
Short-term Returns

	Mean	Median	25 percentile	75 percentile
SIZE(million)	4290.16	2726.31	1424.09	5361.07
BM	0.64	0.65	0.43	0.86
AGE	8.34	8.17	4.38	11.96
PROCEEDS(million)	1165.88	638.24	395.37	1377.22
FRACTION(in percentage)	29.75	26.62	15.33	40.24
DISCOUNT(in percentage)	23.21	22.96	6.43	38.88
CAR(-3, 0) (in percentage)	2.05	1.00	-2.00	4.75
CAR(-3, 0)-Adj (in percentage)	12.44	8.91	1.65	24.35

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Paper Citation	Sample Country	Sample Period	Measure	Mean Return
Wruck (1989)	USA	1979-1985	CAR(-3, 0)	4.41%
Hertzel and Smith (1993)	USA	1980-1987	CAR(-3, 0)	1.72%
Hertzel et al. (2002)	USA	1980-1996	CAR(-3, 0)	2.40%
Krishnamurthy et al. (2005)	USA	1983-1992	CAR(-3, 0)	2.21%
Chen et al. (2010)	USA	1997-2003	CAR(-3, 0)	3.41%
			Average =	2.83%
Lu et al. (2011)	China	2006-2009	CAR(-3, 0)	5.40%
Fonseka et al. (2014)	China	2006-2010	CAR(-3, 0)	1.20%
This paper	China	2006-2012	CAR(-3, 0)	2.05%
			Average =	2.88%

Results

Short-term Returns by Participant Type

	Controlling shareholders (observation=108)		Non-controlling shareholders (observation=472)		Mean differences of controlling *minus* non-controlling	
	Mean	median	Mean	median	Difference in Mean	t-stat
SIZE (million)	4878.85	3141.43	4155.46	2679.86	723.39*	1.64
BM	0.71	0.75	0.62	0.64	0.09***	3.50
AGE	9.60	9.96	8.05	7.63	1.56***	3.43
PROCEEDS ($m)	1863.51	1236.64	1006.26	590.64	857.25***	5.08
FRACTION (%)	42.05	43.27	26.93	23.44	15.11***	7.77
DISCOUNT (%)	36.50	44.43	20.16	20.71	16.34***	4.83
CAR(-3, 0) (%)	2.84	1.84	1.87	0.81	0.97**	2.08
CAR(-3, 0)-Adj (%)	19.95	26.88	10.72	7.36	9.23***	7.64

The market may view the PEPs to controlling shareholders as a better signal (monitoring effect of Wruck 1989 and certification effect of Hertzel and Smith 1993), although there might exist potential insider self-dealing in the form of deeper discounts to controlling shareholders investors

Results

Size and BM-adjusted Long-term Returns

Period	Obs	BHAR Mean (%)	t-stat	BHAR Median (%)
Panel A: Returns to non-participating investors				
(0, 250)	580	2.13	0.90	-0.86
(0, 500)	548	5.95*	1.69	2.14
(0, 750)	466	10.24**	2.41	7.19
Panel B: Returns to participating investors				
(0, 250)	580	26.85**	2.02	18.57
(0, 500)	548	31.38***	4.10	20.95
(0, 750)	466	38.99***	5.52	29.78

The participating investor returns are calculated by compounding the non-participating investor returns and the returns from the offer price to the closing price of the announcement day

Results

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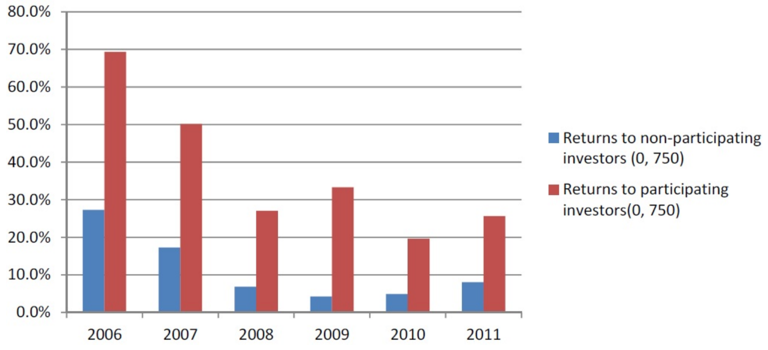

Results

Long-term Abnormal Returns by Participant Type

	PEP Participation by Controlling Shareholders			PEP Participation by Non-Controlling Shareholders			Mean Difference and T-test	
	Obs	Mean	Median	Obs	Mean	Median	Difference	t-stat
BHAR to non-participating investors (0, 250)	108	5.59%	3.05%	472	1.34%	-1.64%	4.35%**	2.25
BHAR to non-participating investors (0, 500)	108	10.37%	9.53%	440	4.87%	0.50%	5.50%*	1.84
BHAR to non-participating investors (0, 750)	108	15.60%	12.55%	358	8.63%	5.38%	6.97%*	1.78
BHAR to participating investors(0, 250)	108	47.73%	40.00%	472	19.79%	14.85%	27.94%***	6.02
BHAR to participating investors(0, 500)	108	52.40%	46.01%	440	24.27%	18.64%	28.13%***	5.89
BHAR to participating investors(0, 750)	108	61.14%	50.47%	358	30.08%	26.45%	31.06%***	4.97

Long-term returns to all investors with controlling shareholders participation are higher than the returns without their participation

Results

Participation Effect of Controlling Shareholder

Dependent Variable: Post-issue 3-year abnormal returns	(1)	(2)	(3)
controlling_dummy	0.54***	0.50**	0.53**
	(2.67)	(2.56)	(2.11)
log(SIZE)	0.26	0.24	0.27
	(1.44)	(1.25)	(1.34)
log(BM)	0.14	0.14	0.14
	(0.34)	(0.36)	(0.33)
log(AGE+1)	-0.07	-0.08	-0.08
	(-0.23)	(-0.24)	(-0.24)
FRACTION	-0.17		0.11
	(-0.72)		(0.10)
DISCOUNT		-0.51	-0.54
		(-0.72)	(-0.71)
Obs	466	466	466
Adj R-square (%)	7.15	7.35	9.30

Cross-sectional evidence that long-term returns to all investors with controlling shareholders participation are higher than the returns without their participation

Results

Improvement in Operating Performance after PEPs

Year	*ROA* (%)	*M/B*	*CE + RD/Assets* (%)
	Panel A: Full Sample		
-3	-1.04	-0.07	1.81
-3	-1.04	-0.07	1.81
-2	-1.57	-0.18	1.10
-1	-1.20	-0.40	2.52
0	-0.19	-0.37	1.23
1	2.21	0.02	0.43
2	2.09	0.04	0.22
3	1.24	0.19	-1.05
	Panel B: Controlling shareholders		
-3	-2.16	-0.12	2.52
-2	-4.28	-0.79	3.40
-1	-5.48	-0.83	7.32
0	-1.42	-0.52	5.32
1	4.38	-0.15	-0.53
2	4.41	-0.05	-2.44
3	2.44	0.00	-1.23
	Panel C: Non-controlling shareholders		
-3	-0.83	-0.06	1.52
-2	-1.28	-0.01	0.76
-1	-0.99	-0.26	1.81
0	0.16	-0.32	1.05
1	1.76	0.06	0.78
2	1.54	0.09	0.84
3	0.60	0.24	-0.96

Discussions

- PEPs in China are different in many respects from those in other countries (both developed and developing)
  - Requiring regulatory approval
  - Limited number of participating investors
  - Different lock-in periods for different investor categories
- Economic significance
  - Both short- and long-term abnormal returns following private equity placements
  - Participating shareholders benefit more from long-term returns than other shareholders
  - General investors benefited more when controlling shareholders participate in the placements
  - Operating performance improved after the PEPs

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The objective of regulation is to promote

- Fairness
- Prevent abuse
- Eliminate mispricing
- Enhance firm value