Do IPOs Affect the Market Price? Evidence from China

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Abstract
We examine whether sizable initial public offerings (IPOs) affect the whole market. Using a Chinese IPO sample, we find robust evidence that sizable IPOs do depress the market price on not only the listing day but also the offering (subscription) day. The impact on the market is negatively correlated with the IPO size on the listing day. However, the IPO impact is largely transitory. The China Securities Regulatory Commission (CSRC) often places a moratorium on IPOs to support the market, which seems ineffective as the negative IPO effect is transitory and moratoriums are not perceived as good news.
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INTERNET APPENDIX

Table A1
IPO Impact on the Market: Value-weighted Shanghai and Shenzhen Stock Exchange Market Return

This table reports the regression results for the following GARCH models:

$$\mathrm{MR}_t = \alpha_0 + \alpha_1 \mathrm{MR}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP} + \alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \alpha_9 h_t + \varepsilon_t$$
$$h_t = \beta_0 + \beta_1 h_{t-1} + \beta_2 \varepsilon_{t-1}^2,$$

where MR_t is the value-weighted Shanghai and Shenzhen Stock Exchange market return (in percentage) on day *t*; PRE_O, OD, FP, UFP, PRE_L, LD, and POST_L are the various testing periods defined in Table 4; h_t is the variance of ε_t conditional upon the information set ϕ at time *t*–1 and is modeled following an ARMA (1, 1) process, which is a proxy for the time-varying market risk; and ε_t is the residual on day *t*. There are two alternative definitions for the testing periods PRE_O, UFP, PRE_L and POST_L. The column labeled 1 indicates the one-day window and column 2 the two-day window. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

	Market Return	
Variables	1	2
Mean Equation		
PRE_O	-0.13**	-0.12***
	(-2.19)	(-2.62)
OD	-0.15***	-0.17***
	(-2.75)	(-2.98)
FP	-0.15***	-0.14***
	(-3.31)	(-3.16)
UFP	0.44***	0.44***
	(7.42)	(7.39)
PRE_L	-0.10*	-0.02
	(-1.71)	(-0.40)
LD	-0.19***	-0.19***
	(-3.30)	(-3.23)
POST_L	0.16***	0.16***
	(2.73)	(2.77)
Lag Dep.	0.03**	0.03**
	(1.99)	(1.97)
Const.	0.03	0.03
	(0.76)	(0.78)
h_t	0.05***	0.05***
	(3.49)	(3.51)
Variance Equation		
ARCH (1)	0.08***	0.08***
	(14.94)	(14.93)
GARCH (1)	0.91***	0.91***
	(179.01)	(177.80)
Const.	0.03***	0.03***
	(7.56)	(7.75)
No. of obs.	5,090	5,090
Q(12)	65***	65***
Q(24)	112***	113***

Table A2
Information on IPOs in the Period 2014-2016

The listing and offering dates for the 32 IPOs, their first day returns, and the number of days that the IPO firms' price continuously hits the 10% daily price limit after the listing day in the subsample period 2014-2016.

Code	List date	# of IPOs	Offer date	1st Day Ret (%)	# of days hitting the price limit after the listing day
002705	2014/1/21	8	2014/1/8	45.2	0
002706	2014/1/21	8	2014/1/10	45.5	0
002708	2014/1/21	8	2014/1/13	45.3	0
300357	2014/1/21	8	2014/1/8	45.4	3
300358	2014/1/21	8	2014/1/9	45.2	0
300359	2014/1/21	8	2014/1/13	46.2	1
300360	2014/1/21	8	2014/1/10	18.7	0
300362	2014/1/21	8	2014/1/10	45.2	2
002714	2014/1/28	9	2014/1/17	44.0	0
002716	2014/1/28	9	2014/1/17	44.0	0
002718	2014/1/28	9	2014/1/20	44.0	1
002719	2014/1/28	9	2014/1/20	44.1	0
002722	2014/1/28	9	2014/1/20	44.2	1
300379	2014/1/28	9	2014/1/20	44.0	7
300380	2014/1/28	9	2014/1/17	44.0	1
300381	2014/1/28	9	2014/1/17	44.0	1
601225	2014/1/28	9	2014/1/17	13.8	0
002723	2014/1/29	7	2014/1/20	44.1	0
002725	2014/1/29	7	2014/1/20	44.0	0
300363	2014/1/29	7	2014/1/21	440	4
300367	2014/1/29	7	2014/1/21	44.0	1
300369	2014/1/29	7	2014/1/21	44.0	4
300382	2014/1/29	7	2014/1/20	44.0	0
300383	2014/1/29	7	2014/1/21	440	4
603288	2014/2/11	1	2014/1/24	29.6	1
002772	2015/6/26	5	2015/6/17	44.0	6
002773	2015/6/26	5	2015/6/17	44.0	6
002776	2015/6/26	5	2015/6/18	44.0	5
300485	2015/6/26	5	2015/6/17	44.0	5
601211	2015/6/26	5	2015/6/18	44.0	2
300562	2016/11/16	2	2016/11/7	44.0	17
601229	2016/11/16	2	2016/11/2	44.0	1

Table A3
GARCH Analysis with Alternative Definitions of LD for the Period 2014-2016

This table reports the regression results for the following GARCH and OLS models for IPOs in the period of 2014 to 2016 by setting LD equal to 1 for the 3, 5, and 10 days starting from the listing day and zero otherwise:

$$\mathrm{MR}_t = \alpha_0 + \alpha_1 \mathrm{MR}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP} + \alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \alpha_9 h_t + \varepsilon_t$$

$$h_t = \beta_0 + \beta_1 h_{t-1} + \beta_2 \varepsilon_{t-1}^2$$

$$\mathrm{TURNOVER}_t = \alpha_0 + \alpha_1 \mathrm{TURNOVER}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP} + \alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \mathrm{YEAR} + \varepsilon_t$$

where MR_t and $\mathrm{TURNOVER}_t$ are the market return and market turnover on day *t*, respectively. Both variables are in percentages. PRE_O, OD, FP, UFP, PRE_L, LD, and POST_L are the various testing periods defined in Table 4; h_t is the variance of ε_t conditional upon the information set ϕ at time *t*–1 and is modeled following an ARMA (1, 1) process, which is a proxy for time-varying market risk; YEARs are calendar year dummies to control for the time-specific effect; and ε_t is the residual on day *t*. There are two alternative definitions for the testing periods PRE_O, UFP, PRE_L and POST_L. The columns labeled 1, 3, and 5 indicate the one-day window and 2, 4, and 6 the two-day window. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Market Return

	[L, L+2]		[L, L+4]		[L, L+9]	
Variables	1	2	3	4	5	6
Mean Equation						
PRE_O	-0.55	-0.45	-0.61	-0.49	-0.62	-0.50
	(-0.50)	(-0.56)	(-0.56)	(-0.63)	(-0.57)	(-0.64)
OD	-0.13	-0.26	0.04	-0.14	0.06	-0.13
	(-0.15)	(-0.31)	(0.04)	(-0.17)	(0.07)	(-0.16)
FP	-0.16	-0.08	-0.39	-0.27	-0.39	-0.27
	(-0.22)	(-0.12)	(-0.60)	(-0.44)	(-0.58)	(-0.42)
UFP	0.61	0.69	0.69	0.75	0.75	0.81
	(0.65)	(0.66)	(0.77)	(0.75)	(0.85)	(0.80)
PRE_L	0.04	-0.01	0.17	0.12	0.19	0.15
	(0.04)	(-0.02)	(0.29)	(0.21)	(0.34)	(0.27)
LD	-0.02	-0.02	0.24	0.24	0.12	0.11
	(-0.05)	(-0.05)	(0.77)	(0.76)	(0.49)	(0.47)
POST_L	0.71	0.73	-0.21	-0.23	-0.50	-0.50
	(0.64)	(0.69)	(-0.22)	(-0.23)	(-1.26)	(-1.25)
Lag Dep.	0.04	0.04	0.04	0.04	0.04	0.04
	(0.97)	(0.98)	(1.03)	(1.03)	(1.04)	(1.05)
Const.	0.09	0.09	0.08	0.08	0.09	0.09
	(1.51)	(1.51)	(1.44)	(1.44)	(1.51)	(1.51)
h_t	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
	(-0.44)	(-0.44)	(-0.41)	(-0.41)	(-0.42)	(-0.42)
Variance Equation						
ARCH (1)	0.07***	0.07***	0.07***	0.07***	0.07***	0.07***
	(7.56)	(7.56)	(7.57)	(7.57)	(7.60)	(7.59)
GARCH (1)	0.92***	0.92***	0.93***	0.93***	0.93***	0.93***
	(125.82)	(126.75)	(126.93)	(127.88)	(127.67)	(128.52)
Const.	0.01**	0.01**	0.01**	0.01**	0.01**	0.01**
	(2.11)	(2.10)	(2.08)	(2.07)	(2.14)	(2.13)
No. of obs.	733	733	733	733	733	733
Q(12)	39***	38***	39***	38***	40***	39***
Q(24)	94***	93***	95***	93***	96***	94***

Panel B. Turnover

	[L, L+2]		[L, L+4]		[L, L+9]	
Variables	1	2	3	4	5	6
PRE_O	-0.14***	-0.05	-0.14***	-0.05	-0.14***	-0.04
	(-2.96)	(-0.72)	(-2.97)	(-0.73)	(-2.91)	(-0.70)
OD	0.02	-0.06	0.02	-0.06	0.02	-0.05
	(0.33)	(-0.90)	(0.31)	(-0.96)	(0.34)	(-0.87)
FP	-0.10	-0.07	-0.10*	-0.08	-0.10*	-0.08
	(-1.59)	(-1.41)	(-1.68)	(-1.59)	(-1.68)	(-1.56)
UFP	0.08	0.06	0.07	0.06	0.08	0.06
	(1.22)	(1.10)	(1.16)	(1.08)	(1.15)	(1.09)
PRE_L	0.06	0.04	0.05	0.04	0.05	0.04
	(0.50)	(0.61)	(0.46)	(0.64)	(0.39)	(0.55)
LD	0.04	0.03	0.05	0.05	0.05	0.05
	(0.57)	(0.53)	(0.89)	(0.89)	(0.76)	(0.76)
POST_L	0.03	0.04	-0.05	-0.05	-0.02	-0.02
	(0.38)	(0.39)	(-0.80)	(-0.82)	(-0.21)	(-0.21)
Lag Dep.	0.85***	0.85***	0.85***	0.85***	0.85***	0.85***
	(28.69)	(28.67)	(28.62)	(28.60)	(28.56)	(28.54)
Const.	0.21***	0.21***	0.21***	0.21***	0.21***	0.21***
	(6.06)	(6.02)	(6.08)	(6.04)	(6.05)	(6.01)
No. of obs.	732	732	732	732	732	732
R^2	0.86	0.86	0.86	0.86	0.86	0.86

Table A4
Regression on IPO Size: Issuing Ratio

This table reports the regression results for the market return and the order imbalance on the IPO size measures. The regression models are as follows:

$$\mathrm{MR}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \mathrm{YEAR} + \varepsilon_t$$
$$\mathrm{ORD\_IMB}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \mathrm{YEAR} + \varepsilon_t,$$

where MR_{it} and $\mathrm{ORD\_IMB}_{it}$ are market (SSE) return and the order imbalance for the i^{th} IPO in the sample in period *t*, respectively. For the listing event (PRE_L, LD, and POST_L) regressions, SIZE_i is proxied by the IPO ISSUING RATIO. All three variables are in percentage. The IPO ISSUING RATIO is defined as the issuing proceeds divided by the listing day market trading value excluding IPO shares. YEAR dummies are used to control for the calendar year effect. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

		Const.	SIZE	YEAR	No. of obs.	R^2
MR_{it}	PRE_L	0.63*	-0.02***	Yes	597	0.05
		(1.68)	(-2.76)			
	LD	0.47	-0.01***	Yes	597	0.08
		(1.22)	(-2.97)			
	POST_L	-0.07	-0.00	Yes	597	0.05
		(-0.17)	(-0.11)			
$\mathrm{ORD\_IMB}_{it}$	PRE_L	6.88	-0.21***	Yes	211	0.10
		(0.82)	(-3.25)			
	LD	0.08	-0.40***	Yes	214	0.18
		(0.02)	(-6.32)			
	POST_L	12.19*	-0.08	Yes	214	0.09
		(1.78)	(-0.79)			

Table A5
Regression on IPO Size: Including Lagged Dependent

This table reports the regression results for the market return, turnover, and order imbalance on the IPO size measures. The regression models are as follows:

$$\mathrm{MR}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \beta * \text{Lagged Dependent} + \text{YEAR} + \varepsilon_t$$
$$\mathrm{TURNOVER}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \beta * \text{Lagged Dependent} + \text{YEAR} + \varepsilon_t$$
$$\mathrm{ORD\_IMB}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \beta * \text{Lagged Dependent} + \text{YEAR} + \varepsilon_t$$

where MR_{it}, $\mathrm{TURNOVER}_{it}$ and $\mathrm{ORD\_IMB}_{it}$ are the market (SSE) return, turnover, and order imbalance for the i^{th} IPO event in the sample in period *t*, respectively (all in percentage). For the listing event (PRE_L, LD, and POST_L) regressions, SIZE_i is proxied by the IPO TRADING RATIO. The IPO TRADING RATIO is defined as the trading value of the IPO shares divided by the market trading value excluding the IPO shares on the listing day (in percentage). For the offering event (PRE_O, OD, and FP) regressions, SIZE_i is proxied by the FROZEN RATIO, while for UFP regressions, the SIZE_i is proxied by the UNFROZEN RATIO. The FROZEN (UNFROZEN) RATIO is defined as the frozen (unfrozen) funds associated with the IPO subscription divided by the average daily trading value from *T–2* to *T* (in number of times). YEAR dummies are used to control for the calendar year effect. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

		Const.	SIZE	Lag Dep.	YEAR	No. of obs.	R^2
MR_{it}	PRE_O	0.46	0.00	-0.09*	Yes	651	0.06
		(1.41)	(0.58)	(-1.71)			
	OD	0.14	-0.00	-0.01	Yes	651	0.02
		(0.45)	(-0.89)	(-0.18)			
	FP	0.16	-0.00	-0.11***	Yes	651	0.10
		(0.85)	(-1.36)	(-3.64)			
	UFP	0.37	0.00	-0.08	Yes	651	0.09
		(1.35)	(1.23)	(-1.62)			
	PRE_L	0.71*	-0.03***	0.02	Yes	597	0.05
		(1.83)	(-2.86)	(0.27)			
	LD	0.64	-0.03***	-0.03	Yes	597	0.09
		(1.59)	(-4.10)	(-0.49)			
	POST_L	-0.00	-0.01	0.00	Yes	597	0.05
		(-0.01)	(-0.76)	(0.04)			
$TURNOVER_{it}$	FP	0.65***	-0.00	0.83***	Yes	651	0.89
		(4.31)	(-0.51)	(30.47)			
	UFP	0.42***	-0.00	0.90***	Yes	651	0.90
		(3.16)	(-0.57)	(36.59)			
ORD_IMB_{it}	PRE_O	-5.69	-0.12	0.05	Yes	221	0.12
		(-1.05)	(-1.31)	(0.76)			
	OD	-8.13*	-0.10	-0.06	Yes	221	0.10
		(-1.81)	(-1.16)	(-0.79)			
	FP	-3.13	-0.13***	-0.05	Yes	224	0.18
		(-0.69)	(-2.61)	(-0.89)			
	UFP	-6.72*	0.04	-0.01	Yes	222	0.20
		(-1.74)	(0.35)	(-0.11)			
	PRE_L	5.85	-0.32***	0.14*	Yes	208	0.12
		(0.71)	(-3.14)	(1.74)			
	LD	-1.69	-0.68***	0.09	Yes	210	0.18
		(-0.25)	(-4.70)	(1.17)			
	POST_L	8.60	-0.12	0.03	Yes	213	0.09
		(1.18)	(-0.55)	(0.36)			

Table A6
Regression on IPO Size: Value-weighted Shanghai and Shenzhen Stock Exchange Market Return

This table reports the regression results for the value-weighted Shanghai and Shenzhen Stock Exchange market return on the IPO size measures. The regression models are as follows:

$$\mathrm{MR}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \mathrm{YEAR} + \varepsilon_t,$$

where MR_{it} is the value-weighted Shanghai and Shenzhen Stock Exchange market return for the i^{th} IPO event in the sample in period t (in percentage). For the listing event (PRE_L, LD, and POST_L) regressions, SIZE_i is proxied by the IPO TRADING RATIO. The IPO TRADING RATIO is defined as the trading value of the IPO shares divided by the market trading value excluding the IPO shares on the listing day (in percentage). For the offering event (PRE_O, OD, and FP) regressions, SIZE_i is proxied by the FROZEN RATIO, while for UFP regressions, the SIZE_i is proxied by the UNFROZEN RATIO. The FROZEN (UNFROZEN) RATIO is defined as the frozen (unfrozen) funds associated with the IPO subscription divided by the average daily trading value from *T–2* to *T* (in number of times). YEAR dummies are used to control for the calendar year effect. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

		Const.	SIZE	YEAR	No. of obs.	R^2
MR_{it}	PRE_O	0.66**	0.00	Yes	651	0.06
		(2.27)	(0.63)			
	OD	0.24	-0.00	Yes	651	0.02
		(0.74)	(-1.24)			
	FP	0.36**	-0.00	Yes	651	0.07
		(2.00)	(-1.51)			
	UFP	0.66**	0.00	Yes	651	0.10
		(2.40)	(1.10)			
	PRE_L	0.81**	-0.03***	Yes	597	0.05
		(2.24)	(-3.33)			
	LD	0.75**	-0.03***	Yes	597	0.08
		(2.17)	(-4.79)			
	POST_L	0.40	-0.01	Yes	597	0.06
		(1.04)	(-1.37)			

Table A7
IPO Impact on the Market: Alternative Size Cut-off Threshold

This table reports the regression results for the following GARCH and OLS models for IPOs with proceeds larger than 1% (in Panel A) and 3% (in Panel B) of the average daily trading value in the prior month:

$$\mathrm{MR}_t = \alpha_0 + \alpha_1 \mathrm{MR}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP} + \alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \alpha_9 h_t + \varepsilon_t,$$

$$h_t = \beta_0 + \beta_1 h_{t-1} + \beta_2 \varepsilon_{t-1}^2,$$

$$\mathrm{TURNOVER}_t = \alpha_0 + \alpha_1 \mathrm{TURNOVER}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP} + \alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \mathrm{YEAR} + \varepsilon_t,$$

$$\mathrm{ORD\_IMB}_t = \alpha_0 + \alpha_1 \mathrm{ORD\_IMB}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP} + \alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \mathrm{YEAR} + \varepsilon_t,$$

where MR_t, $\mathrm{TURNOVER}_t$, and $\mathrm{ORD\_IMB}_t$ are the market return, market turnover, and market order imbalance on day *t*, respectively (all in percentage); PRE_O, OD, FP, UFP, PRE_L, LD, and POST_L are the various testing periods defined in Table 4; h_t is the variance of ε_t conditional upon the information set ϕ at time *t*–1 and is modeled following an ARMA (1, 1) process, which is a proxy for time-varying market risk; YEARs are calendar year dummies to control for the time-specific effect; and ε_t is the residual on day *t*. There are two alternative definitions for the testing periods PRE_O, UFP, PRE_L, and POST_L. The columns labeled 1, 3, and 5 indicate the one-day window and 2, 4, and 6 the two-day window. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Cut-off at 1%

	Market Return		Turnover		Order Imbalance	
Variables	1	2	3	4	5	6
Mean Equation						
PRE_O	-0.09*	-0.12***	-0.03*	-0.02	-1.07	-0.84
	(-1.86)	(-2.71)	(-1.70)	(-1.06)	(-1.40)	(-1.19)
OD	-0.13***	-0.15***	0.00	0.00	-1.40*	-1.73**
	(-2.87)	(-3.18)	(0.03)	(0.05)	(-1.77)	(-2.17)
FP	-0.17***	-0.17***	-0.04**	-0.04**	-2.14***	-2.21***
	(-4.45)	(-4.30)	(-2.44)	(-2.31)	(-2.98)	(-3.08)
UFP	0.37***	0.38***	0.05***	0.05***	0.90	0.78
	(7.52)	(7.52)	(2.85)	(2.71)	(1.12)	(0.97)
PRE_L	-0.10**	-0.01	-0.00	-0.01	-0.55	1.62**
	(-2.08)	(-0.14)	(-0.15)	(-0.77)	(-0.61)	(2.14)
LD	-0.13***	-0.13***	-0.01	-0.01	-3.09***	-3.00***
	(-2.67)	(-2.65)	(-0.44)	(-0.47)	(-3.57)	(-3.48)
POST_L	0.14***	0.14***	0.00	0.00	2.72***	2.74***
	(2.95)	(3.03)	(0.26)	(0.24)	(2.99)	(3.02)
Lag Dep.	0.02	0.02	0.90***	0.90***	0.04**	0.04**
	(1.17)	(1.16)	(87.36)	(87.23)	(2.04)	(1.99)
Const.	0.05	0.05	0.45***	0.46***	-2.19*	2.38***
	(1.49)	(1.43)	(6.11)	(6.20)	(-1.68)	(2.58)
h_t	0.02*	0.02*				
	(1.88)	(1.91)				
Variance Equation						
ARCH(1)	0.08***	0.08***				
	(21.08)	(21.18)				
GARCH (1)	0.91***	0.91***				
	(265.04)	(267.60)				
Const.	0.03***	0.03***				
	(8.58)	(8.73)				
No. of obs.	5,090	5,090	5,089	5,089	2,385	2,385
R^2			0.90	0.90	0.09	0.09
Q(12)	44***	44***				
Q(24)	96***	96***				

Panel B: Cut-off at 3%

	Market Return		Turnover		Order Imbalance	
	1	2	3	4	5	6
Mean Equation						
PRE_O	-0.13**	-0.12**	-0.04	-0.02	-1.85	-1.29
	(-1.97)	(-2.53)	(-1.37)	(-0.80)	(-1.53)	(-1.30)
OD	-0.11*	-0.11*	0.00	0.00	-0.81	-0.91
	(-1.83)	(-1.92)	(0.05)	(0.06)	(-0.64)	(-0.72)
FP	-0.16***	-0.14***	-0.06***	-0.06***	-3.00***	-2.96***
	(-3.41)	(-3.11)	(-3.19)	(-3.15)	(-3.06)	(-3.01)
UFP	0.46***	0.47***	0.04	0.04	1.11	1.11
	(6.79)	(6.99)	(1.42)	(1.38)	(0.86)	(0.85)
PRE_L	-0.09	-0.06	-0.03	-0.04*	-1.08	-0.28
	(-1.43)	(-1.07)	(-0.97)	(-1.82)	(-0.70)	(-0.26)
LD	-0.20***	-0.19***	-0.04	-0.04	-5.63***	-5.57***
	(-3.05)	(-3.02)	(-1.41)	(-1.45)	(-4.04)	(-3.98)
POST_L	0.17***	0.18***	-0.01	-0.01	2.53*	2.56*
	(2.68)	(2.71)	(-0.25)	(-0.28)	(1.68)	(1.70)
Lag Dep.	0.02	0.02	0.90***	0.89***	0.04*	0.04*
	(1.11)	(1.10)	(86.35)	(86.19)	(1.93)	(1.88)
Const.	0.02	0.03	0.48***	0.49***	-2.05	-2.89***
	(0.67)	(0.86)	(6.50)	(6.58)	(-1.64)	(-3.30)
h_t	0.02*	0.02*				
	(1.85)	(1.82)				
Variance Equation						
ARCH(1)	0.08***	0.08***				
	(21.36)	(21.34)				
GARCH (1)	0.91***	0.91***				
	(267.31)	(266.04)				
Const.	0.03***	0.03***				
	(8.38)	(8.48)				
No. of obs.	5,090	5,090	5,089	5,089	2,385	2,385
R^2			0.90	0.90	0.08	0.08
Q(12)	46***	46***				
Q(24)	100***	100***				

Table A8
IPO Size Impact on the Market: Alternative Size Cut-off Threshold

This table reports the regression results for the market return, turnover, and order imbalance on the IPO size measures for the IPOs that are larger than 1% (in Panel A) and 3% (in Panel B) of the average daily trading value in the prior month. The regression models are as follows:

$$\mathrm{MR}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \mathrm{YEAR} + \varepsilon_t$$
$$\mathrm{TURNOVER}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \mathrm{YEAR} + \varepsilon_t$$
$$\mathrm{ORD\_IMB}_{it} = \alpha_0 + \alpha_1 \mathrm{SIZE}_i + \mathrm{YEAR} + \varepsilon_t,$$

where MR_{it}, $\mathrm{TURNOVER}_{it}$, and $\mathrm{ORD\_IMB}_{it}$ are the market return, turnover, and order imbalance for the i^{th} IPO in the sample in period t, respectively (all in percentage). For the listing event (PRE_L, LD, and POST_L) regressions, SIZE_i is proxied by the IPO TRADING RATIO. The IPO TRADING RATIO is defined as the trading value of the IPO shares divided by the market trading value excluding the IPO shares on the listing day. For offering event (PRE_O, OD, and FP) regressions, SIZE_i is proxied by the FROZEN RATIO, while for UFP regressions, the SIZE_i is proxied by the UNFROZEN RATIO. The FROZEN (UNFROZEN) RATIO is defined as the frozen (unfrozen) funds associated with the IPO subscription divided by the average daily trading value from *T–2* to *T*. YEAR dummies are used to control for the calendar year effect. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Cut-off at 1%

		Const.	SIZE	YEAR	No. of obs.	R^2
MR_{it}	PRE_O	0.38	-0.00	Yes	924	0.04
		(1.26)	(-0.20)			
	OD	0.21	-0.00	Yes	924	0.01
		(0.69)	(-0.91)			
	FP	0.15	-0.00	Yes	924	0.05
		(0.99)	(-1.02)			
	UFP	0.48*	0.00	Yes	924	0.06
		(1.76)	(1.06)			
	PRE_L	0.61**	-0.03***	Yes	885	0.03
		(2.03)	(-3.48)			
	LD	0.69**	-0.04***	Yes	885	0.05
		(2.17)	(-4.75)			
	POST_L	0.34	-0.01	Yes	885	0.04
		(1.07)	(-1.47)			
$TURNOVER_{it}$	FP	4.57***	-0.02***	Yes	924	0.57
		(21.24)	(-8.40)			
	UFP	4.48***	-0.02***	Yes	924	0.54
		(20.06)	(-7.90)			
ORD_IMB_{it}	PRE_O	3.87	-0.17**	Yes	410	0.14
		(0.62)	(-2.01)			
	OD	-8.58**	-0.07	Yes	412	0.10
		(-2.55)	(-1.00)			
	FP	-13.00***	-0.11**	Yes	415	0.12
		(-5.28)	(-2.23)			
	UFP	7.05	-0.02	Yes	413	0.15
		(1.43)	(-0.16)			
	PRE_L	3.32	-0.46***	Yes	383	0.07
		(1.25)	(-4.06)			
	LD	2.37	-0.87***	Yes	384	0.14
		(1.12)	(-5.77)			
	POST_L	9.16*	-0.18	Yes	386	0.05
		(1.94)	(-0.91)			

Panel B: Cut-off at 3%

		Const.	SIZE	YEAR	No. of obs.	R^2
MR_{it}	PRE_O	0.35	0.00	Yes	496	0.06
		(1.05)	(0.59)			
	OD	0.23	-0.00	Yes	496	0.02
		(0.65)	(-0.62)			
	FP	0.20	-0.00	Yes	496	0.04
		(0.94)	(-0.61)			
	UFP	0.58**	0.00	Yes	496	0.09
		(2.03)	(0.94)			
	PRE_L	0.61	-0.03***	Yes	432	0.05
		(1.45)	(-3.18)			
	LD	0.76*	-0.03***	Yes	432	0.08
		(1.65)	(-4.33)			
	POST_L	-0.17	-0.01	Yes	432	0.04
		(-0.43)	(-0.62)			
$TURNOVER_{it}$	FP	3.88***	-0.02***	Yes	496	0.46
		(12.68)	(-6.04)			
	UFP	3.86***	-0.01***	Yes	496	0.44
		(12.38)	(-5.78)			
ORD_IMB_{it}	PRE_O	-3.26	-0.09	Yes	135	0.10
		(-0.46)	(-0.90)			
	OD	-7.41	-0.11	Yes	138	0.13
		(-1.25)	(-1.15)			
	FP	-5.02	-0.15***	Yes	140	0.23
		(-0.95)	(-2.75)			
	UFP	-11.94**	-0.02	Yes	140	0.20
		(-2.18)	(-0.15)			
	PRE_L	-17.32***	-0.34***	Yes	128	0.13
		(-185.97)	(-3.08)			
	LD	8.43***	-0.63***	Yes	130	0.26
		(68.46)	(-4.33)			
	POST_L	15.79***	-0.16	Yes	129	0.08
		(86.29)	(-0.76)			

Table A9
IPO Impact on the Market: Sub-sample Periods

This table reports the regression results for the following GARCH and OLS models for the two subsample periods: 1996-2005, 2006-2016, 1997-2016 and 2014-2016:

$$\mathrm{MR}_t = \alpha_0 + \alpha_1 \mathrm{MR}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP} + \alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} +$$

$$\alpha_8 \mathrm{POST\_L} + \alpha_9 h_t + \varepsilon_t,$$

$$h_t = \beta_0 + \beta_1 h_{t-1} + \beta_2 \varepsilon_{t-1}^2,$$

$$\mathrm{TURNOVER}_t = \alpha_0 + \alpha_1 \mathrm{TURNOVER}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP}$$

$$+\alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \mathrm{YEAR} + \varepsilon_t,$$

$$\mathrm{ORD\_IMB}_t = \alpha_0 + \alpha_1 \mathrm{ORD\_IMB}_{t-1} + \alpha_2 \mathrm{PRE\_O} + \alpha_3 \mathrm{OD} + \alpha_4 \mathrm{FP} + \alpha_5 \mathrm{UFP}$$

$$+\alpha_6 \mathrm{PRE\_L} + \alpha_7 \mathrm{LD} + \alpha_8 \mathrm{POST\_L} + \mathrm{YEAR} + \varepsilon_t,$$

where MR_t, $\mathrm{TURNOVER}_t$, and $\mathrm{ORD\_IMB}_t$ are the market return, market turnover, and market order imbalance on day t, respectively (all in percentage); PRE_O, OD, FP, UFP, PRE_L, LD, and POST_L are the various testing periods defined in Table 4; h_t is the variance of ε_t conditional upon the information set ϕ at time t–1 and is modeled following an ARMA (1, 1) process, which is a proxy for time-varying market risk; YEARs are calendar year dummies to control for the time-specific effect; and ε_t is the residual on day t. There are two alternative definitions for the testing periods PRE_O, UFP, PRE_L, and POST_L. The columns labeled 1, 3, and 5 indicate the one-day window and 2, 4, and 6 the two-day window. For subsample periods 1996-2005, 2006-2016, and 1997-2016 presented in Panels A, B, and C, the sample is based on the 2% size cutoff point, while for the subsample period 2014-2016 presented in Panel D, the sample is based on the 1% size cutoff point. The *t*-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: 1996-2005

	Market Return		Turnover		Order Imbalance	
	1	2	3	4	5	6
Mean Equation						
PRE_O	-0.14**	-0.11*	-0.04	-0.02	-3.01	-0.89
	(-2.09)	(-1.93)	(-1.41)	(-0.63)	(-1.18)	(-0.40)
OD	-0.14**	-0.16***	-0.01	-0.01	-0.02	-0.38
	(-2.29)	(-2.58)	(-0.49)	(-0.48)	(-0.01)	(-0.14)
FP	-0.09*	-0.08	-0.05**	-0.05*	-3.70*	-3.65*
	(-1.85)	(-1.54)	(-1.99)	(-1.91)	(-1.80)	(-1.75)
UFP	0.49***	0.49***	0.07**	0.06**	2.29	1.74
	(7.26)	(7.26)	(2.17)	(1.99)	(0.79)	(0.58)
PRE_L	-0.11*	-0.05	-0.01	-0.01	-1.99	-0.88
	(-1.84)	(-0.88)	(-0.26)	(-0.60)	(-0.88)	(-0.45)
LD	-0.17***	-0.17***	-0.02	-0.02	-5.48**	-5.48**
	(-2.62)	(-2.66)	(-0.83)	(-0.84)	(-2.49)	(-2.47)
POST_L	0.07	0.07	-0.00	-0.00	0.67	0.70
	(1.19)	(1.13)	(-0.11)	(-0.17)	(0.29)	(0.31)
Lag Dep.	0.00	0.01	0.90***	0.90***	0.07**	0.07**
	(0.20)	(0.22)	(69.56)	(69.37)	(2.06)	(1.99)
Const.	-0.02	-0.01	0.44***	0.44***	-1.15	-1.28
	(-0.33)	(-0.28)	(5.48)	(5.46)	(-0.84)	(-0.91)
h_t	0.04**	0.04**				
	(2.14)	(2.08)				
Variance Equation						
ARCH (1)	0.15***	0.16***				
	(16.13)	(15.22)				
GARCH (1)	0.84***	0.83***				
	(108.98)	(89.84)				
Const.	0.07***	0.08***				
	(7.36)	(7.53)				
No. of obs.	2,417	2,417	2,416	2,416	695	695
R^2			0.89	0.89	0.08	0.08
Q(12)	34***	35***				
Q(24)	79***	79***				

Panel B: 2006-2016

	Market Return		Turnover		Order Imbalance	
	1	2	3	4	5	6
Mean Equation						
PRE_O	-0.08	-0.11	-0.02	-0.03	-0.83	-0.50
	(-0.75)	(-1.31)	(-0.92)	(-1.54)	(-0.84)	(-0.62)
OD	-0.13	-0.12	-0.04	-0.04	-1.84*	-1.89*
	(-1.23)	(-1.08)	(-1.50)	(-1.47)	(-1.83)	(-1.89)
FP	-0.08	-0.07	-0.07***	-0.07***	-1.33	-1.34
	(-0.86)	(-0.76)	(-3.28)	(-3.19)	(-1.60)	(-1.61)
UFP	0.14	0.15	0.05*	0.05**	-0.48	-0.46
	(1.47)	(1.55)	(1.93)	(2.01)	(-0.49)	(-0.48)
PRE_L	-0.07	-0.06	-0.02	-0.01	-1.30	-0.24
	(-0.53)	(-0.61)	(-0.61)	(-0.23)	(-1.01)	(-0.25)
LD	-0.28**	-0.27**	-0.08**	-0.08**	-4.41***	-4.40***
	(-2.39)	(-2.29)	(-2.56)	(-2.52)	(-3.47)	(-3.45)
POST_L	0.38***	0.38***	-0.05	-0.05	3.79***	3.75***
	(2.85)	(2.92)	(-1.58)	(-1.58)	(3.06)	(3.02)
Lag Dep.	0.02	0.02	0.88***	0.88***	0.01	0.01
	(0.94)	(0.91)	(56.22)	(56.13)	(0.56)	(0.52)
Const.	0.05	0.06	0.36***	0.37***	2.53**	2.47**
	(1.23)	(1.32)	(8.08)	(8.08)	(2.51)	(2.41)
h_t	0.01	0.01				
	(0.35)	(0.37)				
Variance Equation						
ARCH (1)	0.06***	0.06***				
	(12.09)	(12.09)				
GARCH (1)	0.94***	0.94***				
	(201.33)	(201.38)				
Const.	0.02***	0.02***				
	(4.18)	(4.13)				
No. of obs.	2,673	2,673	2,672	2,672	1,689	1,689
R^2			0.91	0.91	0.10	0.10
Q(12)	38***	38***				
Q(24)	74***	75***				

Panel C: 1997-2016

	Market Return		Turnover	
Variables	1	2	3	4
Mean Equation				
PRE_O	-0.12**	-0.11**	-0.03	-0.01
	(-2.05)	(-2.49)	(-1.57)	(-0.85)
OD	-0.15***	-0.16***	-0.02	-0.02
	(-2.77)	(-2.94)	(-1.18)	(-1.22)
FP	-0.12***	-0.11**	-0.05***	-0.05***
	(-2.82)	(-2.56)	(-3.26)	(-3.20)
UFP	0.42***	0.43***	0.06***	0.06***
	(7.40)	(7.46)	(3.31)	(3.21)
PRE_L	-0.11*	-0.05	-0.01	-0.01
	(-1.90)	(-1.07)	(-0.38)	(-0.78)
LD	-0.17***	-0.17***	-0.05***	-0.05***
	(-3.01)	(-2.98)	(-2.78)	(-2.78)
POST_L	0.17***	0.18***	-0.01	-0.01
	(3.01)	(3.08)	(-0.44)	(-0.48)
Lag Dep.	0.01	0.01	0.89***	0.89***
	(0.74)	(0.71)	(74.24)	(74.09)
Const.	0.02	0.02	0.38***	0.38***
	(0.55)	(0.68)	(7.10)	(7.12)
h_t	0.02*	0.02*		
	(1.92)	(1.89)		
Variance Equation				
ARCH (1)	0.08***	0.08***		
	(18.67)	(18.57)		
GARCH (1)	0.91***	0.91***		
	(208.12)	(207.38)		
Const.	0.03***	0.03***		
	(7.93)	(8.06)		
No. of obs.	4,843	4,843	4,842	4,842
R^2			0.89	0.89
Q(12)	48***	48***		
Q(24)	93***	94***		

Panel D: 2014-2016 with size cutoff point at 1%

	Market Return		Turnover	
Variables	1	2	3	4
Mean Equation				
PRE_O	-0.39	-0.03	-0.18***	-0.12*
	(-0.68)	(-0.09)	(-4.10)	(-1.79)
OD	-0.16	-0.28	0.03	0.01
	(-0.22)	(-0.36)	(0.50)	(0.17)
FP	-0.38	-0.47	-0.06	-0.07
	(-1.20)	(-1.39)	(-0.82)	(-0.86)
UFP	0.63	0.59	0.14*	0.15*
	(1.32)	(1.18)	(1.88)	(1.94)
PRE_L	0.01	0.10	-0.00	0.01
	(0.03)	(0.30)	(-0.02)	(0.10)
LD	0.06	0.04	-0.02	-0.02
	(0.16)	(0.11)	(-0.29)	(-0.38)
POST_L	0.18	0.18	0.02	0.03
	(0.34)	(0.35)	(0.26)	(0.37)
Lag Dep.	0.03	0.03	0.85***	0.85***
	(0.85)	(0.81)	(28.83)	(28.92)
Const.	0.09	0.09	0.21***	0.21***
	(1.62)	(1.54)	(6.01)	(6.01)
h_t	-0.01	-0.01		
	(-0.41)	(-0.42)		
Variance Equation				
ARCH (1)	0.07***	0.07***		
	(7.59)	(7.55)		
GARCH (1)	0.93***	0.93***		
	(127.94)	(128.35)		
Const.	0.01**	0.01**		
	(2.04)	(2.01)		
No. of obs.	733	733	732	732
R^2			0.86	0.86
Q(12)	39***	38***		
Q(24)	95***	94***		

Table A10
Market Responses to the Beginning and Ending of IPO Moratoriums (Nine events)

This table presents the GARCH regression results with the announcement dummies. The baseline specification is

$$\mathrm{MR}_t = \alpha_0 + \alpha_1 \mathrm{MR}_{t-1} + \alpha_2 \mathrm{ANNO1} + \alpha_3 \mathrm{ANNO2} + \alpha_4 h_t + \varepsilon_t$$

$$h_t = \beta_0 + \beta_1 h_{t-1} + \beta_2 \varepsilon_{t-1}^2,$$

where MR_t is the market return of the Shanghai Stock Exchange on day t (in percentage); ANNO1 is a dummy variable, which is set to 1 for the period surrounding the announcement of a moratorium and zero otherwise; ANNO2 is another dummy, which is set to 1 for the period surrounding the day when a moratorium is lifted and zero otherwise; h_t is the variance of ε_t conditional upon the information set ϕ at time t–1 and is modeled following an ARMA (1, 1) process, which is a proxy for time-varying market risk; and ε_t is the residual on day t. Panel A reports the results when the event window is set to Day 0, while Panel B presents the results for alternative event windows. For brevity, the variance equation results are not reported in Panel A, and only the estimated coefficients for ANNO1 and ANNO2 are reported in Panel B. The t-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively. Using value-weighted Shanghai and Shenzhen Stock Exchange market return in place of the SSE market return, the results are qualitatively the same.

Panel A. ANNO1 (ANNO2) is set to 1 on the day (Day 0) when the moratorium is imposed (lifted) and 0 otherwise

	(1)	(2)
ANNO1	0.09	0.09
	(0.16)	(0.16)
ANNO2		0.38
		(0.60)
Lag Dep.	0.02	0.02
	(1.14)	(1.18)
Const.	0.01	0.01
	(0.34)	(0.34)
h_t	0.02***	0.02***
	(7.68)	(7.69)
Obs.	5,349	5,349

Panel B. ANNO1 (ANNO2) is set to 1 for the period surrounding Day 0

	(1)	(2)
(–1, 1)		
ANNO1	-0.42**	-0.42**
	(-2.22)	(-2.22)
ANNO2		0.07
		(0.29)
(–2, 2)		
ANNO1	-0.10	-0.10
	(-0.55)	(-0.56)
ANNO2		-0.09
		(-0.45)
(–3, 3)		
ANNO1	-0.20	-0.20
	(-1.07)	(-1.09)
ANNO2		-0.27
		(-1.55)
(–1, 0)		
ANNO1	0.21	0.21
	(0.64)	(0.64)
ANNO2		-0.04
		(-0.11)
(–2, 0)		
ANNO1	-0.00	-0.00
	(-0.00)	(-0.01)
ANNO2		-0.15
		(-0.49)
(0, 1)		
ANNO1	-0.82***	-0.82***
	(-3.78)	(-3.78)
ANNO2		0.32
		(1.04)
(0, 2)		
ANNO1	-0.15	-0.15
	(-0.65)	(-0.65)
ANNO2		0.12
		(0.50)

Table A11
Market Responses to the Beginning and Ending of IPO Moratoriums (Six events in our sample period)

This table presents the GARCH regression results with the announcement dummies during the sample period between 1996 and 2016. The baseline specification is

$$\mathrm{MR}_t = \alpha_0 + \alpha_1 \mathrm{MR}_{t-1} + \alpha_2 \mathrm{ANNO1} + \alpha_3 \mathrm{ANNO2} + \alpha_4 h_t + \text{other controls} + \varepsilon_t$$

$$h_t = \beta_0 + \beta_1 h_{t-1} + \beta_2 \varepsilon_{t-1}^2,$$

where MR_t is the market return of the Shanghai Stock Exchange on day t (in percentage); ANNO1 is a dummy variable, which is set to 1 for the period surrounding the announcement of a moratorium and zero otherwise; ANNO2 is another dummy, which is set to 1 for the period surrounding the day when a moratorium is lifted and zero otherwise; the other control variables are the various testing period dummies defined in Table 4; h_t is the variance of ε_t conditional upon the information set ϕ at time t–1 and is modeled following an ARMA (1, 1) process, which is a proxy for time-varying market risk; and ε_t is the residual on day t. Panel A reports the results when the event window is set to Day 0, while Panel B presents the results for alternative event windows. For brevity, the variance equation results are not reported in Panel A, and only the estimated coefficients for ANNO1 and ANNO2 are reported in Panel B. The t-statistics are in parentheses. *, **, and *** denote the statistical significance at the 10%, 5%, and 1% levels, respectively. Using value-weighted Shanghai and Shenzhen Stock Exchange market return in place of the SSE market return, the results are qualitatively the same.

Panel A. ANNO1 (ANNO2) is set to 1 on the day (Day 0) when the moratorium is imposed (lifted) and 0 otherwise

	1	2
ANNO1	-0.02	-0.02
	(-0.02)	(-0.02)
ANNO2		0.46
		(0.73)
PRE_O	-0.11*	-0.11*
	(-1.87)	(-1.86)
OD	-0.14***	-0.14***
	(-2.59)	(-2.60)
FP	-0.14***	-0.13***
	(-3.17)	(-3.16)
UFP	0.40***	0.40***
	(7.11)	(7.11)
PRE_L	-0.10*	-0.10*
	(-1.87)	(-1.86)
LD	-0.16***	-0.16***
	(-2.94)	(-2.94)
POST_L	0.15***	0.15***
	(2.72)	(2.73)
Lag Dep.	0.02	0.02
	(1.12)	(1.11)
Const.	0.03	0.03
	(0.98)	(0.97)
h_t	0.02*	0.02*
	(1.78)	(1.77)
No. of obs.	5,090	5,090

Panel B. ANNO1 (ANNO2) is set to 1 for the period surrounding Day 0

	1	2
(–1, 1)		
ANNO1	-0.71***	-0.71***
	(-3.77)	(-3.77)
ANNO2		0.21
		(0.79)
(–2, 2)		
ANNO1	-0.21	-0.21
	(-1.06)	(-1.06)
ANNO2		-0.01
		(-0.05)
(–3, 3)		
ANNO1	-0.20	-0.20
	(-1.04)	(-1.05)
ANNO2		-0.17
		(-1.01)
(–1, 0)		
ANNO1	-0.06	-0.06
	(-0.14)	(-0.13)
ANNO2		0.02
		(0.05)
(–2, 0)		
ANNO1	-0.13	-0.13
	(-0.30)	(-0.30)
ANNO2		-0.10
		(-0.32)
(0, 1)		
ANNO1	-1.06***	-1.06***
	(-5.00)	(-5.00)
ANNO2		0.52
		(1.50)
(0, 2)		
ANNO1	-0.26	-0.25
	(-1.12)	(-1.11)
ANNO2		0.22
		(0.93)