Political Network and Muted Insider Trading

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Motivation

- The benefits and costs of political network
 - Benefits: Better firm performance (Faccio 2006; Cooper, Gulen, and Ovtchinnikov 2010), lower cost of capital (Francis, Hasan, and Zhu 2014), greater gov't investment and preferrable policy (Goldman, Rocholl, and So 2009; Cohen, Coval, and Malloy 2011), etc.
 - Costs: political contribution and lobbying, to use corporate resources to enhance politicians' agendas (Faccio, 2006; Bertrand et al., 2018)
- The situation can be more prominent yet subtle in China due to the void of political campaign and explicit political contribution
 - The manager-politician partnership in China relies on the long-term cultivation and reciprocity
 - Benefits and costs of political network in the context of insider trading



Research Question

- The benefits and costs of political network in the context of insider trading
 - Whether political network empowers and enhances insider trading, from the perspective of legal protection, or discourages the insider trading, from its potential negative reputational and career impact on connected politicians
 - How are the effects different in state-owned firms or non-state-owned firms?

- New measure of political network (a comprehensive picture of the connections between the private sector and government)
 - CVs of listed-firm chairmen and politicians (national, provincial, city- and county-level)
 - In addition to the existing measure of state ownership and CEO's political affiliation (Fan, Wong and Zhang, 2007)
- Understanding how private sector patrons protect the political interests of their connected politicians
 - Novel evidence that in China, having political connections suppresses insider trading, contrary to previous evidence in the US and other western countries where political connections provide legal protections and increase insider trading

Preview of findings

- New measure of political network
 - On average, a listed-firm chairman is connected to 36 politicians through education, and 21 politicians through work experience
- On average, stronger political networks discourage insider trading
 - One-standard-deviation increase in total network link (or being connected to 164 more politicians) is associated with 21.8 percent decrease in trading shares
 - The effect is more prominent for long-standing connections, connections to high-level politicians
- The effect of political network on insider trading is mitigated for central and local SOEs
 - Political network is more valuable for non-SOEs

- When there is private information
 - Right before M&As
 - Shortly after the announcement of "Four trillion" stimulus plan (when politically connected managers may be informed on the details of the plan)
 - In both cases, insiders with stronger political network are willing to forgo capital gain when possessing private information
- Identification
 - Chairman turnover
 - Increases of high-level political connections
 - Turnover of provincial leaders (governors and party-secretaries)
- Mechanism
 - Rewarding or disciplining



- Enforcement on insider trading in China
- Data
 - Political network
 - Insider trading
- Empirical results
- Conclusion

Insider trading enforcement in China

Year	No. Cases	Profit/Loss (Median)	Tipper Fine (Median)	Tippee Fine (Median)
2004	2	90,000	25,000	N/A
2007	1	N/A	200,000	N/A
2008	4	41,357	52,553	N/A
2009	4	21,110	67,023	40,000
2010	11	98,632	60,000	118,204
2011	11	25,693	N/A	110,000
2012	14	96,194	75,000	167,600
2013	35	54,632	30,000	164,096
2014	47	171,013	67,900	200,000
2015	20	223,337	150,000	262,204
2016	55	320,391	100,000	616,748
2017	32	644,693	2,748,649	921,159
2018	44	30,376	333,555	400,000
2019	54	118,640	594,566	200,000

Note: The SEC reported 51 insider trading cases in 2018.



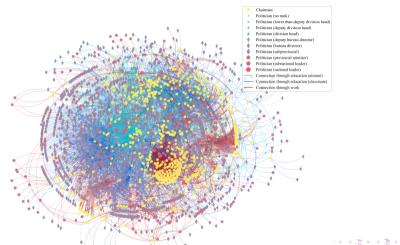
Data

- Chinese Political Elite Database (CPED)
 - Including politicians' personal features, education background, and work experience
- iFinD
 - Chairmen's CVs
- CSMAR and WIND
 - Firm financial information
 - Insider trading information
- Procuratorial Yearbook of China
 - Provincial-level corruption data

- 4,057 politicians
- 74,397 transactions for 2,687 listed firms
 - 61% of the transactions are sales: 39% are purchases
- Firm-year panel of 2,216 listed firms in China from 2007 to 2017

- An education link exists if a chairman and a politician attended the same university, either through years of studying together or via an alumni network
- A working link exists if chairman and politician have overlapping working years
- Over 2.3 million links from 1990 to 2015 within 2,834 firms
- We use chairmen's network as the firm's political connections
- Each firm has on average 36 connections through education and 21 connections through work

Chairman's political network



Summary statistics

Variable	Mean	STD	Min	Max
Insider trading				
Trading shares (thousands)	2,181.52	12,531.91	0	588,512.35
Trading amount (k RMB)	26,165.00	134,498.01	0	5,354,282.30
Trading permille (‰)	4.401	20.951	0	1,350.04
Log trading shares (thousands)	2.556	3.344	0	13.285
Log trading amount (k RMB)	3.725	4.416	0	15.493
Log trading permille (‰)	0.53	1.084	0	7.209
Firm characteristics				
Central SOE	0.134	0.34	0	1
Local SOE	0.24	0.427	0	1
Total asset	21,095.18	315,282.52	0.05	19,570,060
Firm size (Log total assets)	8.09	1.346	0.05	16.79
Net cash flow	0.082	0.153	-0.401	0.573
EBITDA	0.078	0.05	0.008	0.355
Leverage	0.438	0.22	0.034	1
Stock volatility	0.034	0.021	0	0.728
Herfindahl-Hirschman index	0.493	0.228	0.101	1
Annual market returns	0.085	0.388	-0.921	0.813

Variable	Mean	STD	Min	Max
Firm network				
Education link	36.14	139.731	0	2,367
Work link	21.491	66.137	1	937
Network link	57.631	163.917	1	2,417
Network link (long)	55.167	156.895	0	2,258
Network link (short)	2.464	15.862	0	289
Network link (high)	50.322	151.363	0	2,103
Network link (low)	7.309	20.5	0	390
Alumni link	34.751	138.178	0	2,366
School friends link	1.389	6.19	0	306
Chairman characteristics				
List 985	0.077	0.267	0	1
Education abroad	0.015	0.12	0	1
Work abroad	0.039	0.193	0	1
Female	0.043	0.203	0	1
Age	51.974	7.091	23	85
Foreign citizenship	0.022	0.146	0	1
Educational level	2.502	0.857	1	4

Note: The number of observations is 18,547.



Difference in political network:

central SOE / local SOEs vs. non-SOEs

	Central SO	E	Local SOE		Non-SOE		Diff:	Diff:
							Central-NonSOE	Local-NonSOE
	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean	Mean
	(std. dev.)		(std. dev.)		(std. dev.)		(std. err.)	(std. err.)
Education link	75.900	2,478	46.346	4,447	23.758	11,622	-52.1422***	-22.5884***
	(228.614)		(179.323)		(84.775)		(2.7196)	(2.0935)
Work link	62.431	2,478	21.638	4,447	12.705	11,622	-49.7260***	-8.9329***
	(111.311)		(59.588)		(50.465)		(1.4469)	(0.9371)
Network link	138.331	2,478	67.984	4,447	36.463	11,622	-101.8682***	-31.5213***
	(269.121)		(199.991)		(101.305)		(3.2205)	(2.3977)



• One-standard-deviation increase in total network link (or being connected to 164 more politicians) is associated with 21.8 percent decrease in trading shares

Dep. Var.	Log trading shares			Log	trading amo	ount	Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log educ link	-0.0462**			-0.0781***			-0.0201***		
	(0.0200)			(0.0268)			(0.00597)		
Log work link		-0.0611**			-0.0735**			-0.0245***	
		(0.0261)			(0.0361)			(0.00757)	
Log network link			-0.0765***			-0.118***			-0.0298***
			(0.0223)			(0.0301)			(0.00682)
Central SOE	-1.641***	-1.578***	-1.566***	-1.955***	-1.894***	-1.845***	-0.426***	-0.402***	-0.399***
	(0.118)	(0.125)	(0.121)	(0.163)	(0.172)	(0.168)	(0.0314)	(0.0330)	(0.0321)
Local SOE	-1.497***	-1.461***	-1.463***	-1.844***	-1.802***	-1.792***	-0.421***	-0.407***	-0.408***
	(0.0963)	(0.0969)	(0.0967)	(0.131)	(0.132)	(0.132)	(0.0269)	(0.0271)	(0.0269)
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.182	0.182	0.183	0.190	0.189	0.190	0.156	0.156	0.156

Cons./Firm Controls/Chairman Controls/Industry FE/Province FE/Year FE: YES



Baseline results (continued): Chairman's characteristics

Dep. Var.	Log trading shares	Log trading amount	Log trading permille
	(3)	(6)	(9)
List 985	0.327**	0.469***	0.104**
	(0.134)	(0.178)	(0.0403)
Education abroad	-0.664***	-0.901***	-0.191***
	(0.253)	(0.344)	(0.0648)
Work abroad	0.164	0.330	-0.0371
	(0.179)	(0.229)	(0.0540)
Female	0.0250	-0.0697	-0.0188
	(0.160)	(0.207)	(0.0515)
Log age	0.321	0.482	0.0142
	(0.263)	(0.353)	(0.0838)
Foreign citizenship	-1.053***	-1.518***	-0.303***
	(0.236)	(0.310)	(0.0730)
Educational level	0.0176	0.0335	-0.0129
	(0.0449)	(0.0602)	(0.0138)
Obs.	18,547	18,547	18,547
adj. R-sq	0.183	0.190	0.156

Cons./Firm Controls/Industry FE/Province FE/Year FE: YES



- Decompose the education links and construct the variables Log school friends link and Log alumni link
- One-standard-deviation increase in the school friend connections is associated with 40.2% decrease in trading shares, while one-standard-deviation increase in alumni connections is associated with 21.7% decrease in trading shares

Dep. Var.	Log tradi	ing shares	Log tradin	ig amount	Log tradin	ng permille	
	(1)	(2)	(3)	(4)	(5)	(6)	
Log alumni link	-0.0487**		-0.0814***		-0.0205***		
	(0.0199)		(0.0267)		(0.00595)		
Log school friends link		-0.101**		-0.114*		-0.0522***	
		(0.0511)		(0.0678)		(0.0149)	
Central SOE	-1.640***	-1.651***	-1.954***	-1.982***	-0.426***	-0.429***	
	(0.118)	(0.118)	(0.163)	(0.163)	(0.0314)	(0.0314)	
Local SOE	-1.497***	-1.499***	-1.844***	-1.848***	-0.421***	-0.422***	
	(0.0963)	(0.0963)	(0.131)	(0.131)	(0.0269)	(0.0270)	
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	
adj. R-sq	0.182	0.182	0.190	0.189	0.156	0.156	

Cons./Firm Controls/Chairman Controls/Industry FE/Province FE/Year FE: YES



Influence of the connections:

long-standing, connections to high-level politicians, and financial regulatory connections

 One-standard-deviation increase in Network link (long) or Network link (high) is associated with 22.2% or 23.2% decrease in trading shares

Dep. Var.	Trading	Trading	Trading	Trading	Trading	Trading	Trading	Trading	Trading
	Shares	Amount	Permille	Shares	Amount	Permille	Shares	Amount	Permille
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Long-term connections									
Log network link (long)	-0.0789***	-0.119***	-0.0286***				-0.0780***	-0.113***	-0.0286***
	(0.022)	(0.0295)	(0.0067)				(0.024)	(0.032)	(0.00729)
Log network link (short)				-0.0598**	-0.107**	-0.0200***	-0.00469	-0.0265	0.000246
				(0.0293)	(0.0429)	(0.00761)	(0.032)	(0.0459)	(0.00837)
Chi-sq							2.361	1.75	4.656**
(P-value)							(0.1244)	(0.1858)	(0.031)
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.183	0.19	0.156	0.182	0.189	0.155	0.183	0.19	0.156
High-level connections									
Log network link (high)	-0.0735***	-0.110***	-0.0248***				-0.0790***	-0.114***	-0.0242***
	(0.0191)	(0.0258)	(0.00584)				(0.0208)	(0.0283)	(0.00624)
Log network link (low)				-0.0268	-0.0546	-0.0186**	0.0246	0.0197	-0.00287
				(0.0333)	(0.0449)	(0.00891)	(0.0364)	(0.0493)	(0.00949)
Chi-sq							4.561**	4.101**	2.675
(P-value)							(0.0327)	(0.0429)	(0.102)
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.183	0.191	0.156	0.181	0.189	0.155	0.183	0.191	0.156
Cons./Firm Controls/Cha	airman Contr	ols/Industry	FE/Province	e FE/Year F	E: YES			4 1 1 4 6	

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Weighted measure of political network

- Weighted measure: Squared value of politician's position rank multiplied by the length (in years) of the connection between chairman and politician as weights
- One-standard-deviation increase in the Network link (weighted) is associated with 16.6% decrease in trading shares

Dep. Var.	Log trading shares			Log trading amount			Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log educ link (weighted)	-0.0254**			-0.0411***			-0.0109***		
	(0.0103)			(0.0137)			(0.00309)		
Log work link (weighted)		-0.0455***			-0.0528**			-0.0167***	
		(0.0167)			(0.0226)			(0.00518)	
Log network link (weighted)			-0.0595***			-0.0847***			-0.0219***
			(0.0173)			(0.0231)			(0.00546)
Central SOE	-1.642***	-1.546***	-1.539***	-1.960***	-1.860***	-1.819***	-0.427***	-0.394***	-0.391***
	(0.118)	(0.127)	(0.124)	(0.163)	(0.174)	(0.171)	(0.0314)	(0.0341)	(0.0329)
Local SOE	-1.499***	-1.431***	-1.432***	-1.847***	-1.768***	-1.752***	-0.422***	-0.397***	-0.398***
	(0.0962)	(0.0984)	(0.0974)	(0.131)	(0.134)	(0.133)	(0.0269)	(0.0276)	(0.0272)
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.182	0.182	0.183	0.190	0.189	0.190	0.156	0.156	0.156

Cons./Firm Controls/Chairman Controls/Industry FE/Province FE/Year FE: YES

40 + 40 + 43 + 43 +

Heterogeneity: state ownership

• The effect of political network on insider trading is mitigated for central and local SOEs.

Dep. Var.	Log trading shares			Log	Log trading amount			Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Log educ link	-0.0572**			-0.0955**			-0.0283***			
	(0.0291)			(0.0383)			(0.00935)			
Log work link		-0.128***			-0.156***			-0.0469***		
		(0.0402)			(0.0532)			(0.0128)		
Log network link			-0.108***			-0.164***			-0.0436***	
			(0.0311)			(0.0407)			(0.0100)	
Central SOE	-1.751***	-1.812***	-1.879***	-2.143***	-2.235***	-2.391***	-0.485***	-0.511***	-0.572***	
	(0.141)	(0.201)	(0.222)	(0.200)	(0.279)	(0.320)	(0.0383)	(0.0520)	(0.0581)	
Local SOE	-1.500***	-1.743***	-1.657***	-1.842***	-2.115***	-2.029***	-0.434***	-0.481***	-0.475***	
	(0.116)	(0.150)	(0.160)	(0.157)	(0.207)	(0.218)	(0.0331)	(0.0408)	(0.0457)	
Link×Central SOE	0.0550	0.115*	0.0950*	0.0930	0.160*	0.163**	0.0298**	0.0488***	0.0513***	
(edu/work/network)	(0.0478)	(0.0611)	(0.0550)	(0.0660)	(0.0852)	(0.0784)	(0.0127)	(0.0170)	(0.0148)	
Link×Local SOE	0.00437	0.161***	0.0770*	0.00263	0.181**	0.0965	0.0104	0.0441***	0.0275**	
(edu/work/network)	(0.0401)	(0.0599)	(0.0462)	(0.0555)	(0.0851)	(0.0643)	(0.0114)	(0.0163)	(0.0130)	
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	
adj. R-sq	0.182	0.183	0.183	0.190	0.190	0.191	0.156	0.156	0.157	

⁻ Cons./Firm Controls/Chairman Controls/Industry FE/Province FE/Year FE: YES

⁻ Columns of the SOE interaction: (1) (4) (7) for education link, (2) (5) (8) for work link, (3) (6) (9) for network link



• Firm-related private information: M&A

• Macro-level private information: "Four-trillion" Stimulus in 2008



Political network, insider trading and M&As

 M&A is defined as one if within 15 days before M&A announcements, and zero if within 30-90 days before M&A announcements.

Dep. Var.	Log tradi	ing shares	Log tradi	ng amount	Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	
Log network link	0.042	0.029	0.0192	0.00145	0.0157	-0.00123	
	(0.0331)	(0.042)	(0.0441)	(0.0554)	(0.0114)	(0.0148)	
M&A	1.762***	1.999***	2.026***	2.296***	0.807***	0.882***	
	(0.138)	(0.156)	(0.178)	(0.2)	(0.0532)	(0.0619)	
Log network link×M&A	-0.244***	-0.221***	-0.300***	-0.255***	-0.101***	-0.0790***	
	(0.0469)	(0.0608)	(0.0615)	(0.0781)	(0.0169)	(0.0229)	
Central SOE		-0.812**		-0.913*		-0.341***	
		(0.367)		(0.517)		(0.109)	
Local SOE		-0.382		-0.334		-0.192**	
		(0.24)		(0.335)		(0.0754)	
Log network link×M&A×Central SOE		0.242*		0.208		0.0975**	
		(0.144)		(0.198)		(0.0407)	
Log network link×M&A×Local SOE		0.244**		0.265*		0.0472	
		(0.114)		(0.158)		(0.033)	
Obs.	10,778	10,778	10,778	10,778	10,778	10,778	
adj. R-sq	0.0728	0.077	0.0655	0.0695	0.112	0.118	

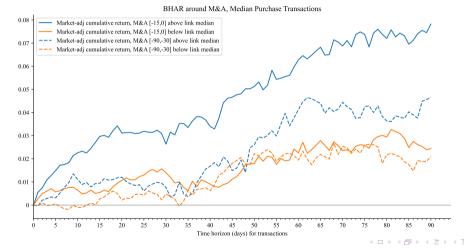
⁻ Cons./Firm Controls/Chairman Controls/Industry FE/Province FE: YES; Year FE: NO



⁻ The coefficients of the two-way interaction terms are not presented in this table

Buy-and-hold abnormal return for M&As

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"Four-trillion" stimulus in 2008 in China

- Timeline:
 - November 8, 2008: announcement of the Stimulus Plan, in response to the GFC
 - Mid-November 2008: it was revealed that the central government would only provide 1.2 trillion RMB funds, with the rest reallocated by provincial and city local governments
 - March 2009: a revision of the stimulus and published a breakdown of how the funds would be distributed, announced by National Development Reform Commission (NDRC)
- Outcome: majority of the loans flowed to and supported SOEs (Cong, et al. 2019)

The "Four-trillion" Stimulus in 2008

• Stimulus is defined as one for 60 days (i.e. [0,60]) after November 8, 2008 and zero for the 90 to 150 days before that (i.e. [-150, -90]).

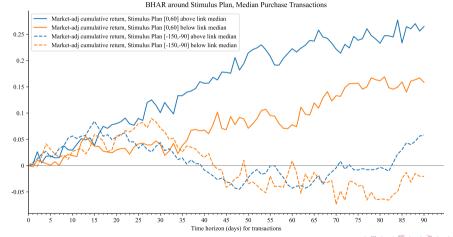
Dep. Var.	Log trad	ing shares	Log tradi	ng amount	Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	
Log network link	0.125	0.203	0.0565	0.0387	0.0738	0.0933	
	(0.146)	(0.237)	(0.186)	(0.294)	(0.0529)	(0.084)	
Stimulus	2.236***	2.876***	2.541***	3.213***	0.769***	0.973***	
	(0.692)	(0.898)	(0.849)	(1.072)	(0.23)	(0.319)	
Log network link×Stimulus	-0.332	-0.648*	-0.314	-0.608	-0.140**	-0.221**	
	(0.212)	(0.335)	(0.247)	(0.382)	(0.0612)	(0.103)	
Central SOE		-0.325		-1.035		-0.273	
		(1.637)		(2.318)		(0.37)	
Local SOE		-1.37		-2.11		-0.461	
		(0.974)		(1.311)		(0.316)	
Log network link×Stimulus×Central SOE		1.095*		1.198		0.300**	
		(0.607)		(0.768)		(0.122)	
Log network link×Stimulus×Local SOE		0.531		0.453		0.166	
		(0.459)		(0.566)		(0.122)	
Obs.	300	300	300	300	300	300	
adj. R-sq	0.0729	0.0626	0.0706	0.0587	0.0952	0.0793	

⁻ Cons./Firm Controls/Chairman Controls/Industry FE/Province FE: YES; Year FE: NO



⁻ The coefficients of the two-way interaction terms are not presented in this table

Buy-and-hold abnormal return for the Stimulus Plan





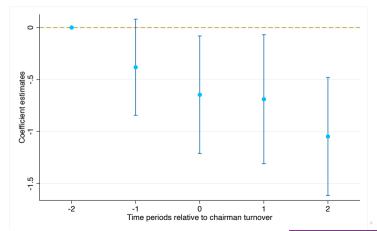
- Link increase: = 1 for a firm's turnover when the mean values of the chairman's high-level work connections in the two years after a turnover is higher than those in the two years before the turnover, = 0 otherwise
- Turnover is a time indicator, = 1 for the two years after the chairman turnover, = 0 for the two years before

Dep. Var.	Log tradi	ng shares	Log trading amount Log trading permi				
	(1)	(2)	(3)	(4)	(5)	(6)	
Link increase	0.108	-0.217	0.06	-0.259	0.0502	0.0462	
	(0.26)	(0.378)	(0.349)	(0.518)	(0.0721)	(0.105)	
Turnover	0.0384	0.367**	-0.0215	0.336*	-0.0382	0.056	
	(0.148)	(0.151)	(0.196)	(0.201)	(0.0445)	(0.0453)	
Link increase×Turnover	-0.670**	-0.543*	-0.906**	-0.758**	-0.137*	-0.093	
	(0.28)	(0.282)	(0.375)	(0.358)	(0.0771)	(0.0746)	
Firm FE	NO	YES	NO	YES	NO	YES	
Industry FE	YES	NO	YES	NO	YES	NO	
Province FE	YES	NO	YES	NO	YES	NO	
Obs.	2,879	2,879	2,879	2,879	2,879	2,879	
adj. R-sq	0.163	0.0359	0.165	0.0454	0.127	0.0155	

Cons./Firm Controls/Chairman Controls/Year FE: YES



Dynamic effects of political network on insider trading around chairman turnover



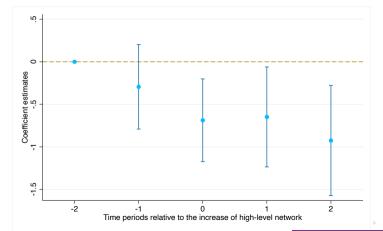
- Increases of high-level political network
 - When there is a promotion for the connected politicians to a high-level rank position
 - When there is a new high-level political connection created
- *Treated_chairman*: = 1 for the chairmen whose high-level network increased in the sample, = 0 otherwise
- Define control group of chairmen: one-to-one propensity score matching with the caliper of 0.015 based on chairman and firm characteristics



• Post high-level increase: time indicator = 1 for the two years after the increase of high-level political network, = 0 for the two years before

Dep. Var.	Log trading shares	Log trading amount	int Log trading permille		
	(1)	(2)	(3)		
Treated_chairman	0.0206	-0.109	0.00885		
	(0.193)	(0.262)	(0.0569)		
Post high-level increase	0.260	0.155	0.0732		
	(0.199)	(0.266)	(0.0619)		
Treated_chairman×Post high-level increase	-0.576**	-0.543*	-0.151**		
	(0.244)	(0.329)	(0.0736)		
Obs.	1,878	1,878	1,878		
adj. R-sq	0.182	0.176	0.165		

Cons./Firm Controls/Chairman Controls/Industry FE/Province FE/Year FE: YES



- Turnover of political leadership is less likely driven by a firm's political network; and can bring political uncertainty a firm's network
- In our sample, there are 102 turnovers of local provincial leaders (governors and party secretaries) in 28 provinces
- Firm, especially those with strong network before turnovers are likely to be more cautious in opportunistic behaviors (including their insider trading) in the first few years following the turnover



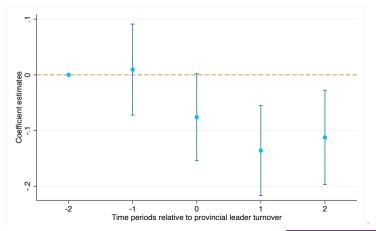
Identification 3: Provincial leader turnovers (continued)

 P_Turnover: a time indicator, defined as one for the two years after the turnovers of provincial governors or party secretaries, or zero for the two years before

Dep. Var.	Log trading shares	Log trading amount	Log trading permille
	(1)	(2)	(3)
Log network link	-0.0278	-0.0702*	-0.00371
	(0.0295)	(0.041)	(0.00933)
P_Turnover	0.383***	0.409***	0.142***
	(0.117)	(0.154)	(0.0396)
Log network link×P_Turnover	-0.120***	-0.125***	-0.0458***
	(0.0323)	(0.0432)	(0.0105)
Obs.	11,045	11,045	11,045
adj. R-sq	0.177	0.183	0.153

Cons./Firm Controls/Chairman Controls/Industry FE/Province FE/Year FE: YES

Dynamic effects of political network on insider trading around provincial leader turnover





Reward channel

- Insiders might trade less to preserve the firm's political connections, especially when political connections are not strong
- Disciplining channel
 - Chinese SOEs have a two-parallel personnel system, the regular corporate management system and the party system (Lin and Milhaupt, 2013)
 - The disciplinary role of the double systems can have stronger negative effect on opportunistic behavior for insiders in SOEs than those in non-SOEs, which can lead to less insider trading

"Carrot" - Preferable support

• Future gov't subsidy is the amount of government subsidy that the firm receives in year t+1, scaled by firms' total assets

Dep. Var.		Log tra	ding shares	
	(1)	(2)	(3)	(4)
Log network link	-0.107***	-0.135***	-0.0632***	-0.0876***
	(0.0248)	(0.0355)	(0.023)	(0.0323)
Future gov't subsidy			2.382***	2.931***
			(0.695)	(1.034)
Log network link×Future gov't subsidy			-0.402***	-0.508**
			(0.153)	(0.214)
Log network link×Future gov't subsidy×Central SOE				0.689
				(0.576)
Log network link×Future gov't subsidy×Local SOE				0.116
				(0.31)
Obs.	17,324	17,324	18,547	18,547
adj. R-sq	0.206	0.221	0.184	0.184

⁻ Cons./Firm Controls/Chairman Controls/Industry FE/Province FE/Year FE: YES



⁻ The coefficients of other two-way interaction terms are not presented in this table

"Stick" - Disciplining effect

• *Marketization*, is an index for market versus government force, from Wang et al. (2021). *Law institutions* = 1 if the number of law institutions in a province is at the top 33% of the sample, = 0 if at the bottom 33%

Dep. Var.		Log trad	ing shares					
	(1)	(2)	(3)	(4)				
Log network link	-0.0686	-0.310***	-0.0992***	-0.191***				
	(0.0745)	(0.112)	(0.0325)	(0.0485)				
Marketization	0.177***	0.153***						
	(0.0361)	(0.0469)						
Log network link×Marketization	-0.00583	0.0241*						
	(0.00956)	(0.0141)						
Law institutions			0.502***	0.294				
			(0.163)	(0.209)				
Log network link×Law institutions			-0.0197	0.134*				
			(0.0498)	(0.0736)				
Log network link×Marketization×Central SOE		-0.0185						
		(0.0252)						
Log network link×Marketization×Local SOE		-0.0601***						
		(0.0206)						
Log network link×Law institutions×Central SOE				-0.210				
				(0.129)				
Log network link×Law institutions×Local SOE				-0.275**				
				(0.113)				
Obs.	14,807	14,807	12,038	12,038				
adj. R-sq	0.127	0.129	0.135	0.137				

⁻ Cons./Firm Controls/Chairman Controls/Industry FE: YES; Province FE/Year FE: NO



⁻ The coefficients of other two-way interaction terms are not presented in this table

- The information of CEOs and CFOs are also collected, with 4,952 CEOs and 4,361 CFOs in our sample
- Constructing the network following the same methodology

Dep. Var.	Log	g trading sh	ares	Log	Log trading amount			Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Log educ link (CEO)	-0.0293			-0.108			-0.00215			
	(0.0787)			(0.106)			(0.0238)			
Log work link (CEO)		-0.0300*			-0.0422*			-0.0045		
		(0.0171)			(0.0226)			(0.00537)		
Log network link (CEO)			-0.0295*			-0.0420*			-0.00415	
			(0.0172)			(0.0227)			(0.00537)	
Central SOE	-1.627***	-1.620***	-1.620***	-1.959***	-1.953***	-1.953***	-0.425***	-0.423***	-0.423***	
	(0.118)	(0.118)	(0.118)	(0.163)	(0.163)	(0.163)	(0.0311)	(0.0312)	(0.0312)	
Local SOE	-1.503***	-1.500***	-1.500***	-1.851***	-1.848***	-1.848***	-0.419***	-0.418***	-0.418***	
	(0.0954)	(0.0955)	(0.0955)	(0.13)	(0.13)	(0.13)	(0.0266)	(0.0266)	(0.0266)	
Obs.	19,170	19,170	19,170	19,170	19,170	19,170	19,170	19,170	19,170	
adj. R-sq	0.176	0.176	0.176	0.182	0.182	0.182	0.149	0.149	0.149	

Cons./Firm Controls/CEO Controls/Industry FE/Province FE/Year FE: YES



The network of CEO/CFO and insider trading (*continued*)

Dep. Var.	Log trading shares			Log	Log trading amount			Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Log educ link (CFO)	0.0534			0.0597			-0.0232			
	(0.113)			(0.16)			(0.0375)			
Log work link (CFO)		-0.006			0.00206			0.004		
		(0.019)			(0.0251)			(0.00609)		
Log network link (CFO)			-0.00562			0.00239			0.00397	
			(0.019)			(0.0251)			(0.00611)	
Central SOE	-1.707***	-1.708***	-1.708***	-2.082***	-2.083***	-2.083***	-0.440***	-0.439***	-0.439***	
	(0.138)	(0.138)	(0.138)	(0.189)	(0.189)	(0.189)	(0.036)	(0.036)	(0.036)	
Local SOE	-1.547***	-1.547***	-1.547***	-1.918***	-1.918***	-1.918***	-0.432***	-0.431***	-0.431***	
	(0.106)	(0.106)	(0.106)	(0.144)	(0.144)	(0.144)	(0.0295)	(0.0296)	(0.0296)	
Obs.	16,844	16,844	16,844	16,844	16,844	16,844	16,844	16,844	16,844	
adj. R-sq	0.168	0.168	0.168	0.175	0.175	0.175	0.139	0.139	0.139	

Cons./Firm Controls/CFO Controls/Industry FE/Province FE/Year FE: YES

Additional tests: Managers' work experience in public sectors

- Chairman_Pol is defined as one for chairmen who have worked in public sectors at the county, city, provincial, or higher levels, or zero otherwise
- We also control for the work experience for CEOs/CFOs in public sectors, and the results are similar

Dep. Var.	Log trading shares			Log t	Log trading amount			Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Central SOE	-1.669***		-1.571***	-2.004***		-1.852***	-0.439***		-0.400***	
	(0.118)		(0.122)	(0.163)		(0.168)	(0.0314)		(0.0322)	
Local SOE	-1.500***		-1.461***	-1.849***		-1.789***	-0.423***		-0.408***	
	(0.0964)		(0.0967)	(0.131)		(0.132)	(0.027)		(0.0269)	
Chairman_Pol		0.127	0.193		0.218	0.289		0.0511	0.0636	
		(0.251)	(0.252)		(0.321)	(0.327)		(0.0625)	(0.0617)	
Log network link			-0.0765***			-0.118***			-0.0297***	
			(0.0223)			(0.0301)			(0.00681)	
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	
adj. R-sq	0.182	0.145	0.183	0.189	0.158	0.19	0.155	0.129	0.156	
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Cons./Firm Controls/CEO&CFO Controls/Industry FE/Province FE/Year FE: YES



Key takeaways

- New measure of political network of the private sector (i.e. listed firms)
- New evidence of potential *costs* of political connections
- Political networks discourage insider trading, in contrary to the findings in western countries where political connections reduce litigation risk and increase insider trading
 - The effect is more pronounced for long-standing connections, high-level connections and regulatory connections
 - The muted effect is mitigated in SOEs
 - "Carrot" and "Stick": a combination of reward and discipline
 - Insiders with stronger political network may trade less in exchange for more preferable policy and financial support
 - Insider trading, solicits public attentions, and may cause unwanted reputation damage to themselves/to their connected politicians

