The Impacts of Xi's Anti-corruption Campaign on Politically Connected Firms

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Introduction

- China has experienced fast growth in recent decades.
- At the same time:

  -- China officials have been seen as corrupted.

  -- Many companies are connected with politicians in some ways.
- However, studies regarding the value of political connection in China have different findings.

The value of political connection in China

- Li et al. (2008) find that political connections have a positive effect on firm performance.

  Connection : owner's party membership

  Performance: ROA, ROE

- Fan et al. (2007), on the other hand, find that political connections have a negative effect.

  Sample: Newly privatized SOE

  Connection : CEO is former or current government bureaucrat.

  Performance: three year post-IPO stock return

  Explanation: larger size employment, less efficient

The value of political connection in China

- It's not easy to empirically identify the value of political connection because both politicians and companies have incentives to build connection

-- politicians prefer to be connected with firms with better potential (rent-seeking, the government aims to split the profit with firms etc).

-- unobservable ability related to party membership/political background

Purpose of this study

- We would like to investigate the role of political connection by
  -- estimate the effects of Xi's anti-corruption policy on politically connected firms.
  -- explore heterogeneous effects of anti-corruption policy by ownership, industry, business environment.

Related Literature

- The value of political connection

  Event study;

- The effects of anti-corruption policies

Brazil: No effect on company (Ramalho (2007)

Impacts on incumbents' reelected prob. (Ferraze and Finan (2008))

China: Impacts of Xi's anti-corruption campaign on luxury good sales

Impacts on firms by SOE/nonSOE, locations (Lin et al, 2016) : event study, and event day was Dec, 4th, 2012.

Contribution of this paper

- Xi's anti-corruption policy was implemented stronger and longer than most people expected.

Therefore, we do not take a single event to conduct event study.

- We develop weekly measures of anti-corruption policy strength, construct measures of political connections, and use long-run CAR (cumulative abnormal return) as our outcome variable.

- With these measures, we are able to estimate the dynamic impacts of Xi's anti-corruption policy on firms with political connections in China.

Today's talk

- Background information
- Measures of anti-corruption policy intensity
- Measures of political connection
- Graphical evidence
- Empirical Analysis

  Specification & Results
- Discussion

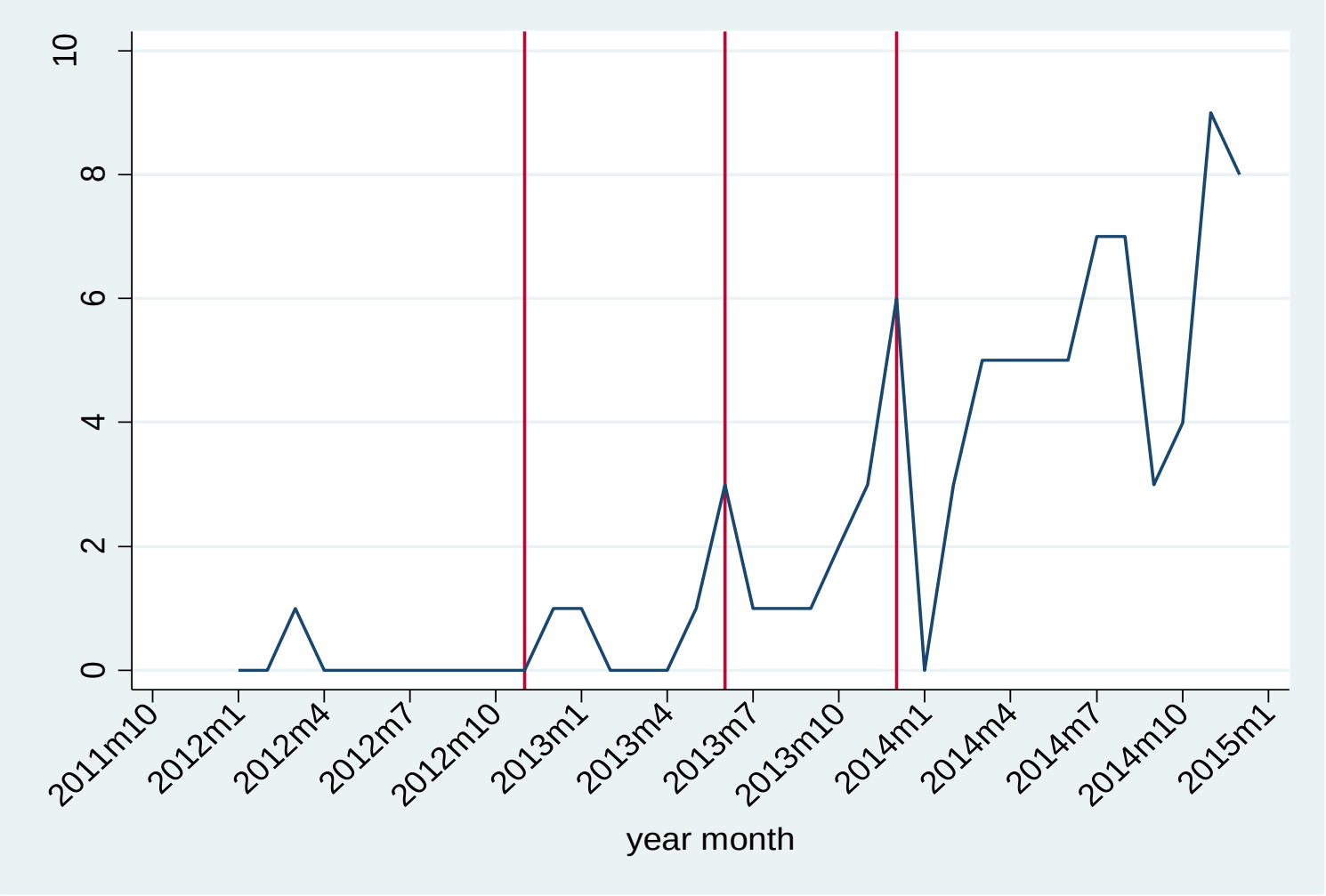
Xi's Anti-Corruption Campaign

- Nov. 6, 2012 : Announcement in 18th National Congress of the Communist Party

Since then, the question has been how high Xi would aim.

- Dec. 6, 2012, the vice secretary of Sichuan province was investigated.
- From June/2013: Many provincial-level officials were investigated for corruption and removed from office.
- From Dec/2013: More investigations targeting high-level officials.

Number of officials with higher level got caught (above Sub-Ministerial level)



Anti-Corruption Policy Intensity Index

- Measure the strength of policy by the amount of news reports about the policy over time.
- News reporting is highly controlled by the government.
- 256 Chinese Newspapers in WiseNews Database.
- weekly ratio of the newspaper articles talking about corruption :

(1) Calculate the ratio of articles including the key words that refer to corruption in each newspaper each week.

(2) Take the weekly mean of the ratio from all selected newspapers

Anti-Corruption Policy Intensity Index

- Two measures:

1. *General Anti-Corruption Index* :

-- key word is only **corruption**(腐败)

-- could include many official statements/talks

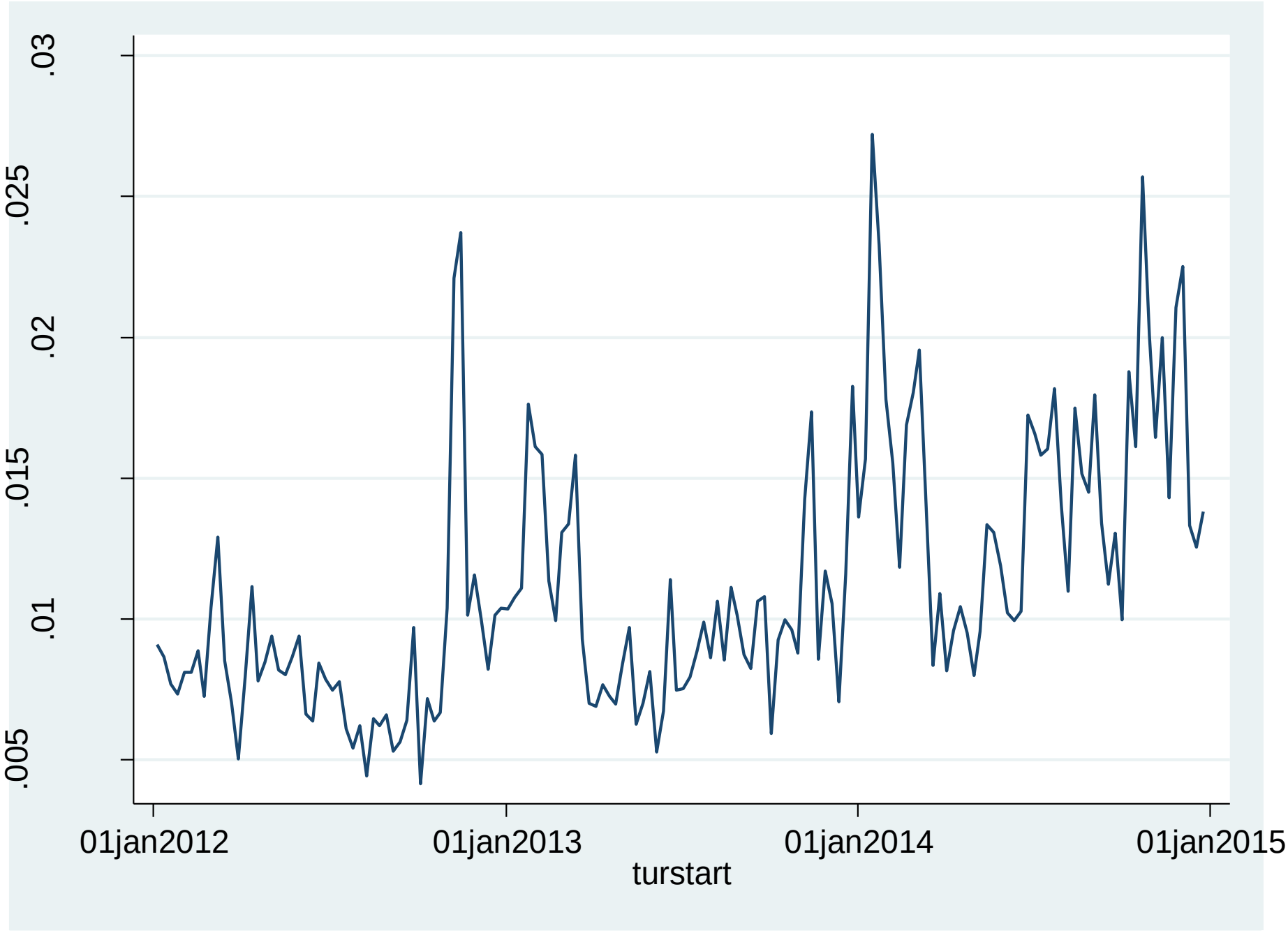
2. *Anti-Corruption Implementation Index* :

-- key words include **terms related to corruption and investigation**:

(corruption or embezzlement or bribe-taking or money) and (double-regulating or investigate or audit or procuratorate) and (dismiss or remove or investigate or punish or penalize or discipline or discharge or repel)

-- "(腐败 or贪污 or受贿 or 金钱) and (双规 or 调查 or 审查 or 检察机关) and (免去 or 罢免 or 查处 or 惩处 or 撤消 or 撤除)"

-- more investigation specific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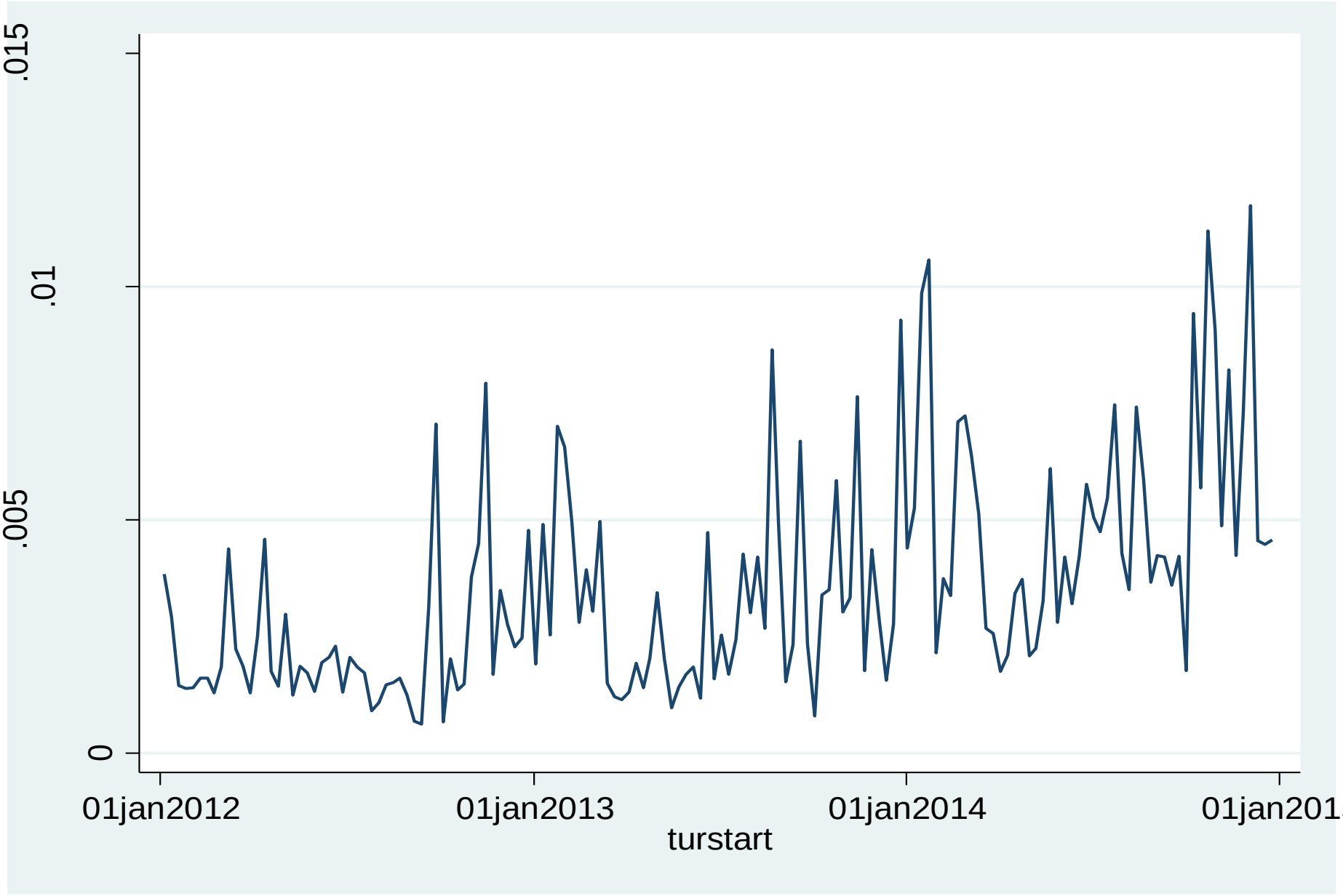
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Top Anti-corruption news reports

- General Anti-Corruption Index

1. 2014, Jan 16: Policy talks & cases reports
2. 2014, Oct, 23: Progress Report to NPC
3. 2012, Nov. 12: first announcement

- Implementation Index

1. 2014, Dec 5 : Zhou Yongkang was arrested and expelled from the party; (BBC: one of the nine most senior politicians in China until 2012)
2. 2014, Oct 23: Progress Report to NPC
3. 2014, Jan 24: Xi became the chair of national security; 25 officials were investigated.

Political connection of listed firms

- Sample: Listed firms in Shanghai & Shenzhen Stock Exchange
- We obtain the following information of the firms from the Taiwan Economic Journal (TEJ) database.
- Basic Info: starting date, location, industry, ownership
- Financial info: stock price, market value, ROE,

  liability Ratio…etc
- Personal: names of the board members, chairman, top managers…etc and their background including previous working experience.
- Excluding firms went on market after 2012 January.

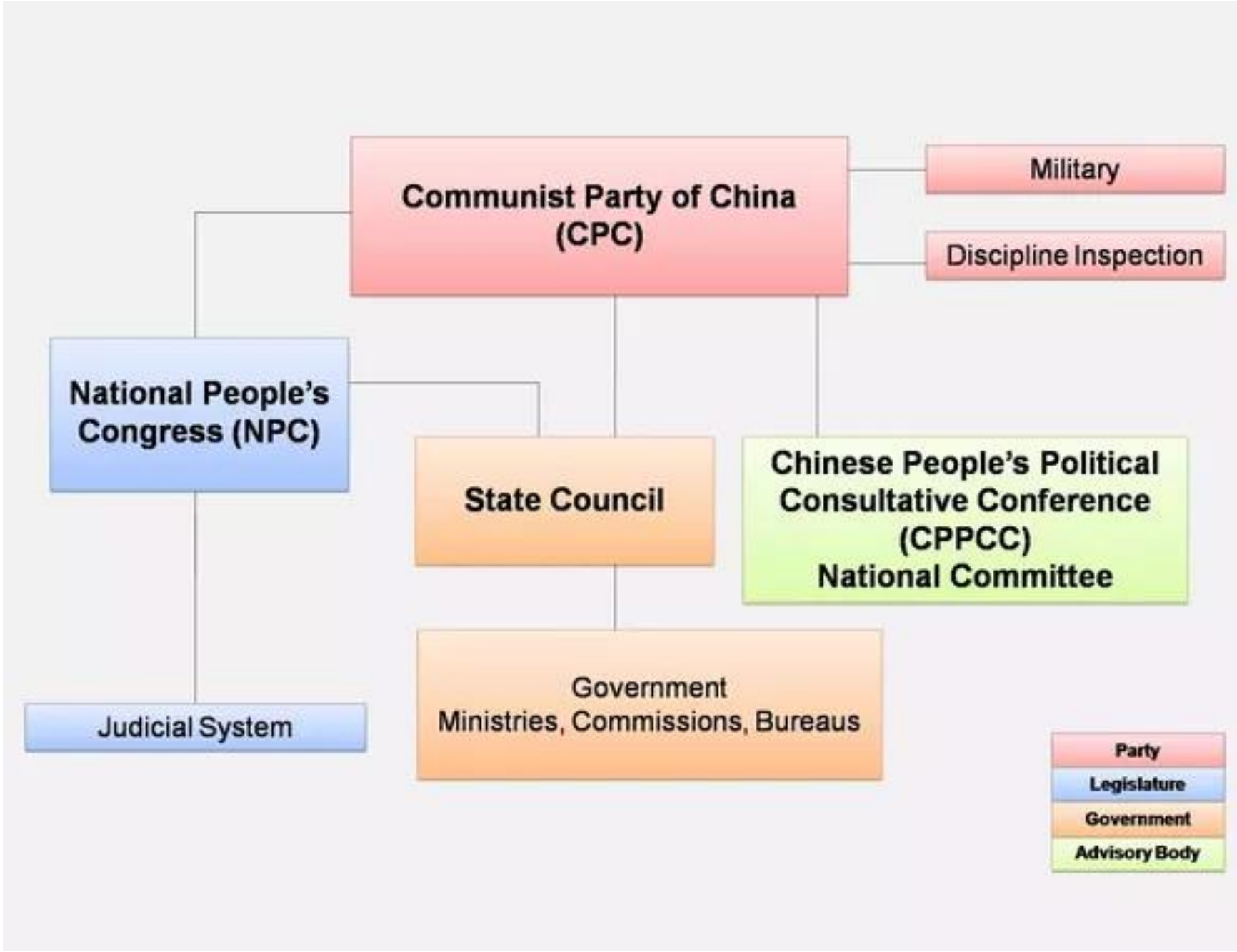
  → 2131 firms.

Measure of Political Connection

- We construct measures of two types of political connection:

I. Explicit connection with NPC or CPPCC: board members are delegates of National People's Congress (NPC) or of Chinese People's Political Consultative Conference (CPPCC).

II. Implicit connection with top leaders from the State Council or Central Committee of the Communist Party (based on previous working experience)


Communist Party of China (CPC)
Military
Discipline Inspection
National People's Congress (NPC)
State Council
Chinese People's Political Consultative Conference (CPPCC) National Committee
Government Ministries, Commissions, Bureaus
Judicial System
Party
Legislature
Government
Advisory Body

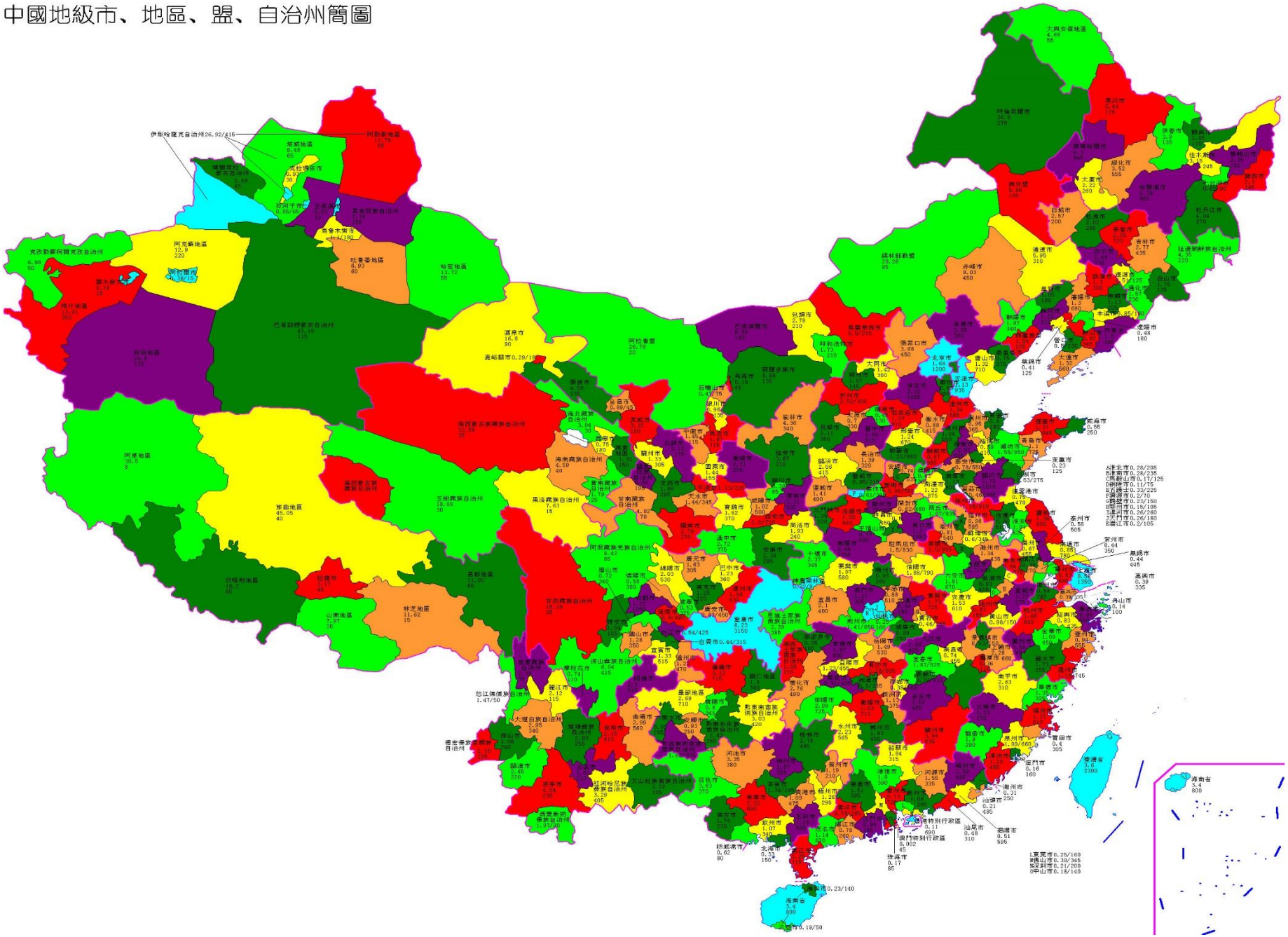
Explicit connection with CPC or CPPCC

- We collect the name lists of NPC and CPPCC members, verify with the firm leaders' names and birth years to identify if the firm leader is a current NPC/CPPCC member. (2800; 2200)
- A firm is defined as politically connected at time t if at least one of its firm leader is a NPC or CPPCC member at that time .
- Less than 2% of firms have more than one delegates of NPC/CPPCC
- $Connection_{it} = 1 \ / \ 0.$

Implicit connection with top political leaders

- Top leaders in the State Council (i.e. heads of departments) or Standing Committee of the Communist Party are not allowed to have explicit connection with listed firms.
- However, many top leaders have working experiences in the local government or industries.
- We focus on (vice) heads of the economic/financial related departments in State Council or Central Committee of the Communist Party.
- We collect their CVs from Baidu or People.com.cn., and keep their birth year and prefecture/prefecture city they have worked in.

中國地級市、地區、盟、自治州簡圖



Implicit connection with top political leaders

- In Nov. 2012 when Xi announced the anti-corruption campaign, there are 331 top leaders.

  202 only had positions in the Central Committee of CCP

  75 only had the positions in the State Council

  54 of them hold the positions in both Central Committee and State Council.

- In China, there are 324 prefectures (half of them are cities)
- We have 405 state/party leaders, worked in 185 locations.

Implicit connection with top political leaders

- We also collected background information of firm leaders (board members, CEO, chair) from TEJ database.
- From firm leaders, we have their previous working experience on locations without starting time and ending time.

- We defined the firm leader is potentially connected with a state/party leader if they have worked in the same location, and the age difference is less than 15.

Implicit connection with top political leaders

Two Variables:

1. The number of potentially connected state leaders of a firm at some point of time ranges from 0 to 3.

-- less than 1% firm have ever had more than 1

-- Connection with State, denoted as $State_{it} = 1/0$

2. The number of potentially connected Party leaders of a firm at some point of time ranges from 0 to 4.

-- less than 1% firm have ever had more than 1

-- Connection with State, denoted as $Party_{it} = 1/0$

- The variation over time is likely to be exogenous

Time Trend of Stock Prices

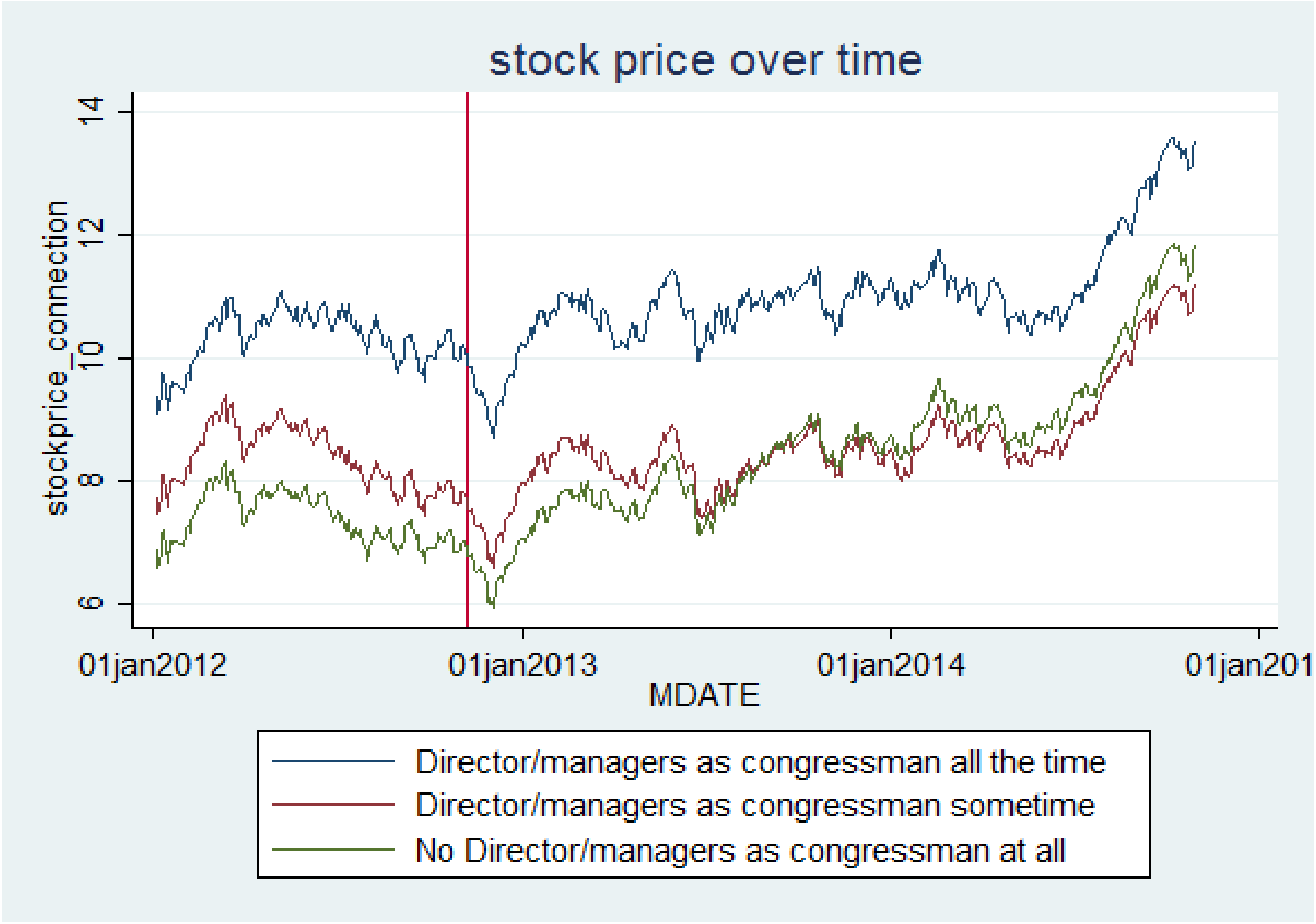
- We classify firms into three groups based on explicit connection with CPC or CPPCC:

  Connected all the time (7 %)

  Connected at some points of time (18%)

  Not connected all the time (75%)

  And then calculate the average stock price at time t for each group.


stock price over time
stockprice_connection
6
8
10
12
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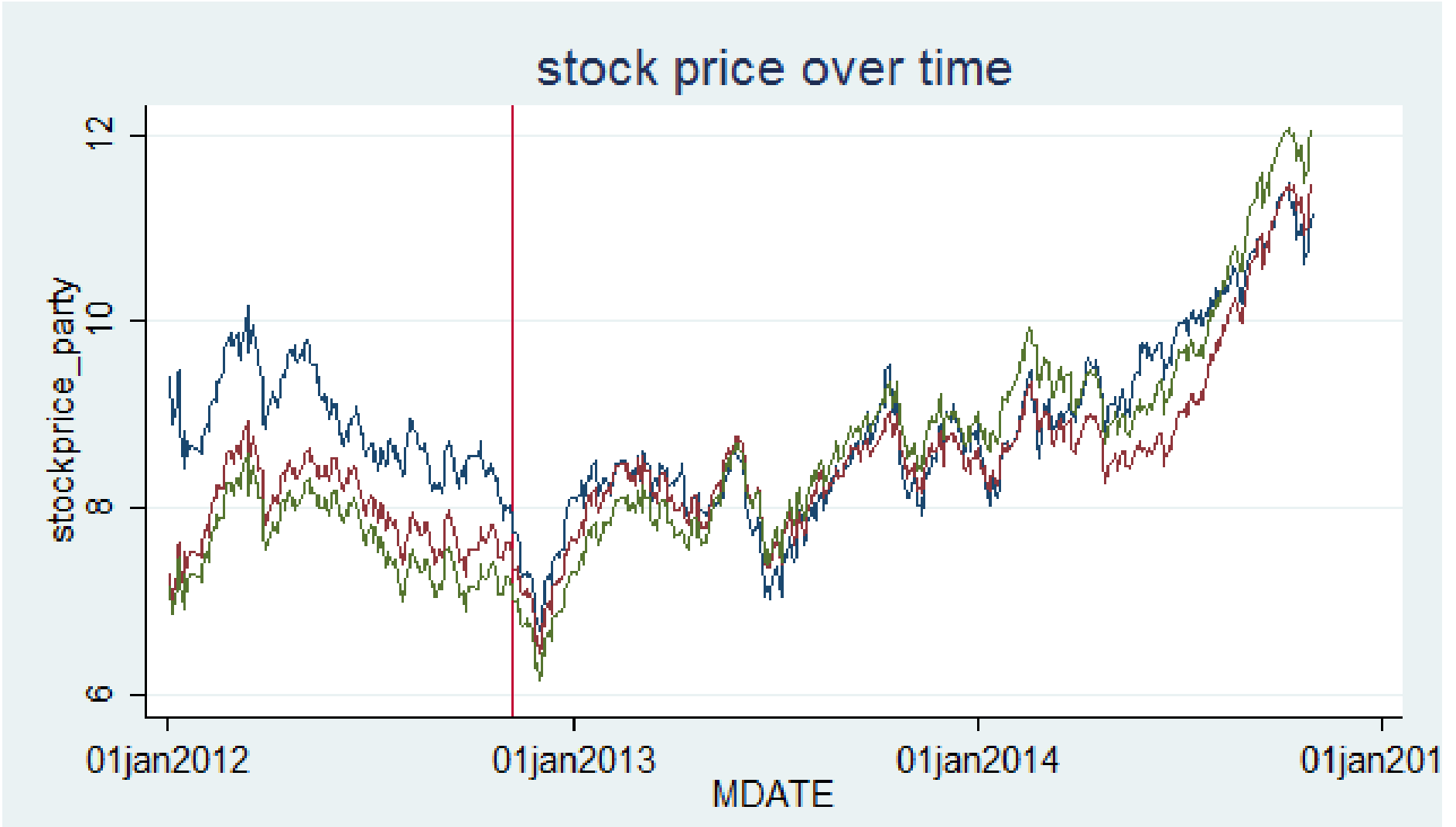
01jan201
MDATE
Director/managers as congressman all the time
Director/managers as congressman sometime
No Director/managers as congressman at all


stock price over time
stockprice_party
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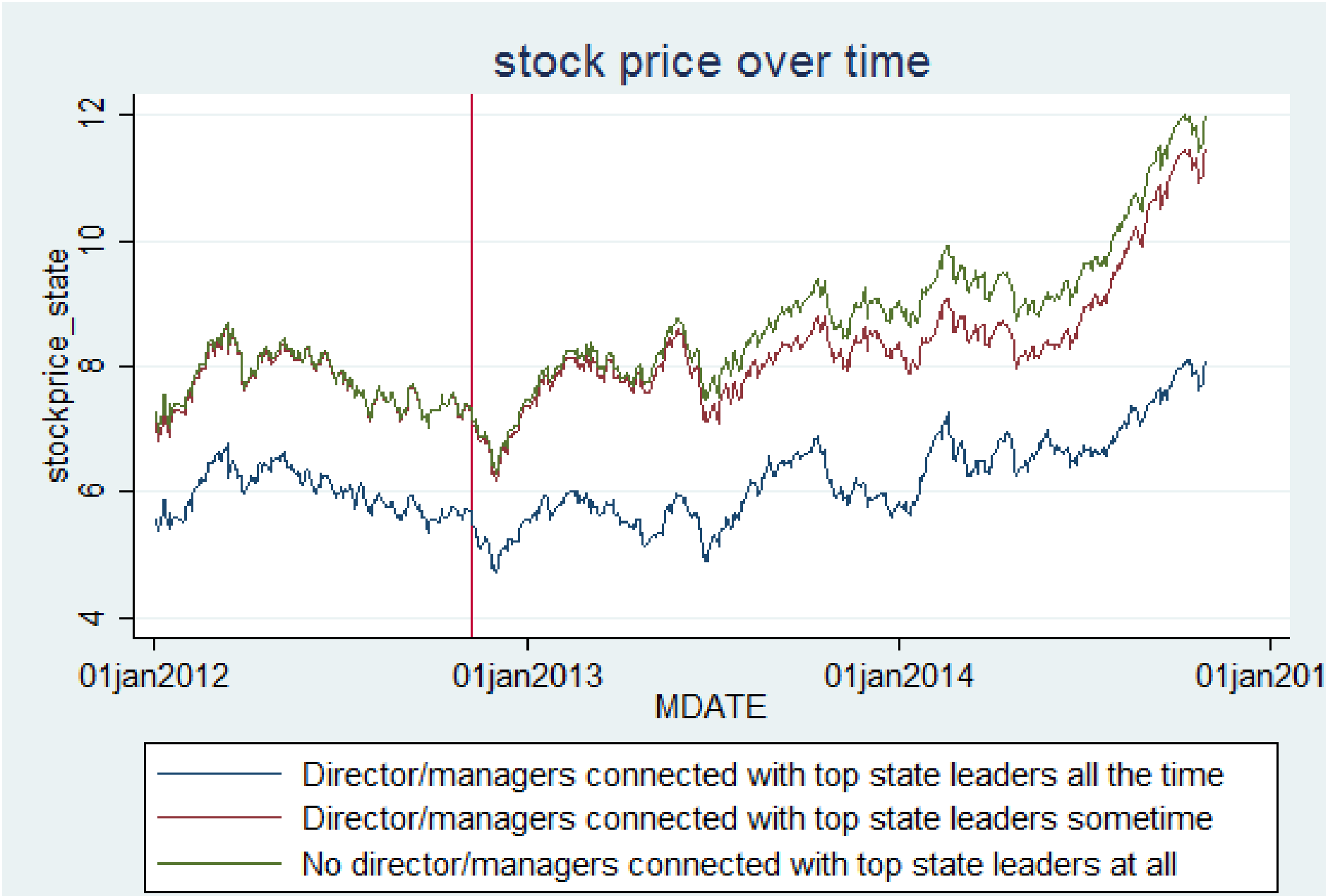
8
10
12
01jan2012
01jan2013
01jan2014
01jan201
MDATE
Director/managers connected with top party leaders all the time
Director/managers connected with top party leaders sometime
No director/managers connected with top party leaders at all


stock price over time
stockprice_state
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01jan2014
01jan201
MDATE
Director/managers connected with top state leaders all the time
Director/managers connected with top state leaders sometime
No director/managers connected with top state leaders at all

Summary Statistics at firm level

Company Level:	Number of firms	Mean	Std
connection_ever	2,131	0.237	0.425
party_ever	2,131	0.330	0.470
state_ever	2,131	0.221	0.415
Government owned	2,131	0.504	0.5

Performance Variable

- The cumulative abnormal return (CAR) developed by Malmendier et al.(2012)
- For weeks after Nov. 2012

$$CAR_{it} = \prod_{s=1}^{t}(1 + r_{is}) - \prod_{s=1}^{t}(1 + r_{is}^{bm}) \; for \; t \geq 0 \; (3)$$

- For weeks before Nov. 2012

$$CAR_{it} = \prod_{s=0}^{t+1}(1 + r_{is})^{-1} - \prod_{s=0}^{t+1}(1 + r_{is}^{bm})^{-1} \; for \; t < 0$$

- Sample period: Jan 2012 – Dec 2014

Empirical Specification

- Specification:

$$Performance_{it} = \alpha + \beta Connect_{it} + \theta Connect_{it} \times anticorruption_t + \gamma Post_t \times Connect_{it} \times anticorruption_t + \eta_i + \phi_t + u_{it}$$

- Performance: CAR_mkt (Relative to the market)
- or CAR_ind (Relative to the industry)
- We allow connection measures (*Connection; State; Party*) *vary* across time and company.

	(1)	(2)	(3)	(4)
	General Anti-corruption		Anti-corruption implementation	
Dependent variable	CAR_mkt	CAR_mkt	CAR_mkt	CAR_ind
Connection	0.060**	0.0592***	0.040*	0.0380*
	(0.0233)	(0.0199)	(0.0205)	(0.0194)
Connection X anticorruption	-14.02***	0.943	10.18	7.903
	(3.181)	(2.988)	(6.274)	(6.079)
Post X connection X anticorruption		-6.859**	-22.82***	-17.52**
		(3.196)	(8.393)	(8.045)
Party	0.064***	0.00801	0.012	0.00985
	(0.0234)	(0.0171)	(0.015)	(0.0141)
State	0.068**	0.00358	0.0092	0.00798
	(0.0297)	(0.0221)	(0.0187)	(0.0184)
Party X anticorruption	-6.777***	4.764	11.91*	11.46*
	(1.797)	(3.234)	(6.316)	(6.151)
State X anticorruption	-6.428**	5.112	13.98**	15.15**
	(2.653)	(3.620)	(6.732)	(6.728)
Post X party X anticorruption		-8.993***	-24.67***	-22.02***
		(3.322)	(8.347)	(8.066)
Post X state X anticorruption		-8.517**	-24.50***	-25.27***
		(3.322)	(8.853)	(8.901)
Constant	-0.0254***	-0.0358***	-0.0208**	-0.00278
	(0.00880)	(0.00995)	(0.00871)	(0.00992)
Observations	313,190	313,190	313,190	313,190

Results

- The mean of general index and the mean of the implementation index in year 2014 are 0.0148 and 0.043

- Under this level of policy strength,

Based on column (2), Xi's anti-corruption policy lowered the CAR of firms with explicit connection by 0.08

Based on column (3), Xi's anti-corruption policy lowered the CAR of firms with explicit connection by 0.054

Heterogeneous Effects

- Ownership

There are many large state-owned companies. In general, it's hard for private companies to compete with them.

- Industry

Firms in highly regulated industry may be more sensitive to the change.

- Business Environment

For places where institution is not well-established, people rely on connection to get things done.

	(1)	(2)	(3)	(4)
	General Anti-Corruption		Anti-Corruption Implementation	
Sample	Gvt-owned	Non-Gvt	Gvt-owned	Non_Gvt
Connection	0.0349	0.0760**	0.0283	0.0393
	(0.0214)	(0.0368)	(0.0226)	(0.0364)
Connection X anticorruption	-0.502	-1.227	1.506	10.19
	(3.924)	(4.463)	(8.139)	(9.381)
Post X connection X anticorruption	-1.420	-7.523	-5.765	-27.06**
	(4.098)	(4.837)	(10.64)	(12.80)
Party	-0.0166	0.0238	-0.00310	0.0149
	(0.0201)	(0.0296)	(0.0177)	(0.0245)
State	0.0132	-0.00532	-0.00904	0.0376
	(0.0270)	(0.0391)	(0.0256)	(0.0271)
Party X anticorruption	5.011	3.637	8.396	14.50
	(3.524)	(5.690)	(7.327)	(10.50)
State X anticorruption	-2.447	13.49**	1.478	25.40**
	(4.571)	(5.905)	(9.432)	(9.847)
Post X party X anticorruption	-6.915*	-9.979*	-16.50*	-30.53**
	(3.813)	(5.559)	(9.896)	(13.47)
Post X state X anticorruption	-2.772	-12.86***	-11.22	-32.25**
	(4.628)	(4.771)	(11.96)	(13.01)
Constant	-0.0266**	-0.0344**	-0.0274**	-0.0375**
	(0.0110)	(0.0161)	(0.0114)	(0.0166)
Observations	158,147	154,565	158,147	154,565
R-squared	0.219	0.342	0.219	0.344
Number of companies	1,087	1,062	1,087	1,062

Industry

- No effect: finance, retailing, real estate
- Some effects (negative): Mining, Manufacture, Energy supply, Transport/post/storage, Information software, Construction
- Positive effect: agriculture

Financial industry: more firms with explicit connection

more state owned (73%)

	(1)	(2)	(3)	(4)
	Anti-corruption implementation			
Sample: Industry	Finance	Real Estate	Manufacture	Construction
Connection	-0.00569	0.0510	0.0277	0.0861
	(0.0414)	(0.0649)	(0.0271)	(0.0854)
Connection X anticorruption	-0.894	-14.44	5.711	60.65**
	(19.37)	(12.18)	(8.908)	(27.90)
Post X connection X anticorruption	-13.54	6.331	-14.34	-86.70**
	(27.40)	(15.26)	(11.87)	(34.19)
Party	0.0617*	-0.0681**	0.00164	0.0574
	(0.0343)	(0.0284)	(0.0178)	(0.0661)
State	-0.0245	0.000363	0.0147	-0.0789
	(0.0444)	(0.0449)	(0.0229)	(0.149)
Party X anticorruption	-34.81	-13.40	8.603	11.59
	(21.13)	(20.52)	(8.203)	(16.43)
State X anticorruption	-3.141	5.690	17.03*	33.33
	(38.56)	(19.64)	(8.978)	(21.92)
Post X party X anticorruption	27.18	16.09	-20.45*	-42.13
	(21.34)	(23.63)	(10.78)	(26.66)
Post X state X anticorruption	3.291	-12.45	-25.81**	-42.53
	(38.71)	(23.02)	(11.86)	(26.11)
Number of companies	41	146	1293	52

Business Environment/Reginal Variation

- Based on Corruption index developed by Qin et al (2014), we split all prefectures into two:

  high-corruption area

  low-corruption area

- The index is based on frequency of mentioning corruption in the social media in China from 2011/7 to 2012/1.

- High corruption index: corruption is more prevalent and observable

	(1)	(2)	(3)	(4)
	General Anticorruption		Anticorruption Implementation	
Sample: regional corruption index	Low	High	Low	High
Connection	0.0442	0.0693**	0.0356	0.0404
	(0.0283)	(0.0284)	(0.0289)	(0.0297)
Connection X anticorruption	0.995	1.012	6.475	13.84*
	(4.670)	(3.803)	(9.541)	(8.308)
Post X connection X anticorruption	-3.780	-10.05**	-12.46	-33.26***
	(4.674)	(4.403)	(11.98)	(11.86)
Party	0.00541	0.00726	0.00851	0.0128
	(0.0206)	(0.0292)	(0.0173)	(0.0256)
State	0.00453	-0.00200	0.0124	-0.00232
	(0.0285)	(0.0314)	(0.0258)	(0.0242)
Party X anticorruption	3.263	5.739	7.141	15.32
	(4.097)	(5.269)	(8.096)	(10.03)
State X anticorruption	4.981	4.338	12.64	13.69
	(4.838)	(5.435)	(9.108)	(9.643)
Post X party X anticorruption	-6.492	-9.995*	-16.87	-28.33**
	(4.166)	(5.380)	(10.48)	(13.38)
Post X state X anticorruption	-8.123*	-8.327*	-23.16**	-24.28*
	(4.562)	(4.706)	(11.43)	(13.14)
Constant	-0.0252	-0.0438***	-0.0267*	-0.0472***
	(0.0154)	(0.0125)	(0.0159)	(0.0129)

Discussion: Channel

- Look at the effects on profits, liability…etc.

- Usage of political connection:
  getting more contracts/favor (not efficiency improving)
  lower costs due to unreasonable regulations
  (efficiency improving)
- Exports

Discussion: Perceived Policy Strength over time

- Perceived Policy Strength at time t:

  a. Completely Update:

$$Anti\ Corruption\ Strength_m = Anti\ Corruption\ Index_m$$

  b. Partially Update:

$$Anti\ Corruption\ Strength_m = \sum_{k=0}^{m} w_k * Anti\ Corruption\ Index_k$$

using equal weight: Average News Index from week 0 to week m

Conclusion

- We study the impacts of anti-corruption policy on firms' long term CAR.
- Overall all, the anti-corruption policy has reduced the benefits from being connected with NPC, CPPCC, and State council.
- Xi's anti-corruption policy lowered the CAR of firms with explicit connection by 0.054
- The effects were particularly strong for private firms and firms in areas with prevalent and observable corruption cases.