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# A Figures and Tables

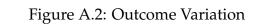
#### Figure A.1: Investors Discussion on Anticorruption Campaign

全球指数 上记	证指数: 3478.17	-0.36% ↓ 深证成指: 1	13425.20 -0.26%	湾加权指数: 18213.20	-0.10% 韩国:	2741.94
餐 同花顺	股票					
			行业			

#### 反腐概念股



反腐。即反对腐败,倡导廉政。政治伦理学术语,属政治道德范畴。廉政建设的基本内容。思想 道德建设的集中体现。要廉政就必须反腐,而反腐才能廉政,古今中西概莫能外。中国共产党历 来坚持"反腐倡廉",尤其在经济体制转换的改革开放的时期,更是把"反腐倡廉"作为党风廉政建 设的行动纲领。



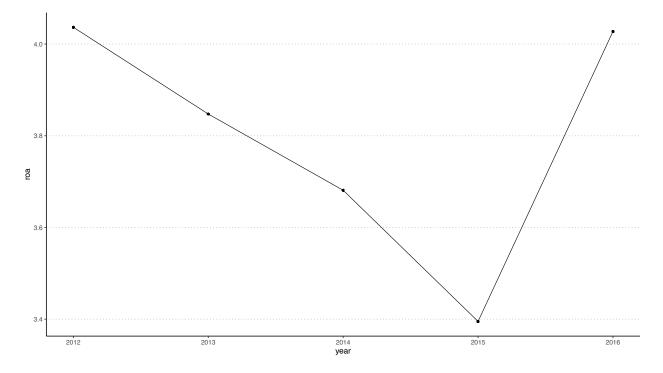
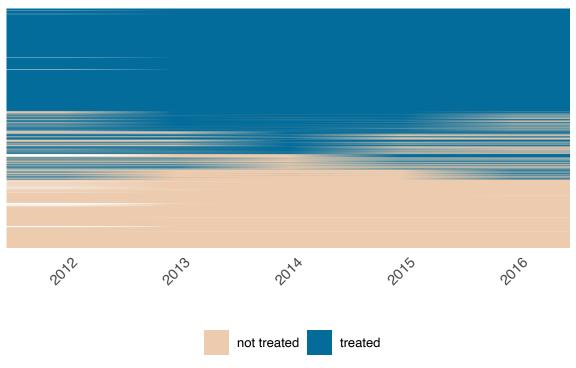


Figure A.3: Treatment Status

## Treatment Distribution Across Units and Time



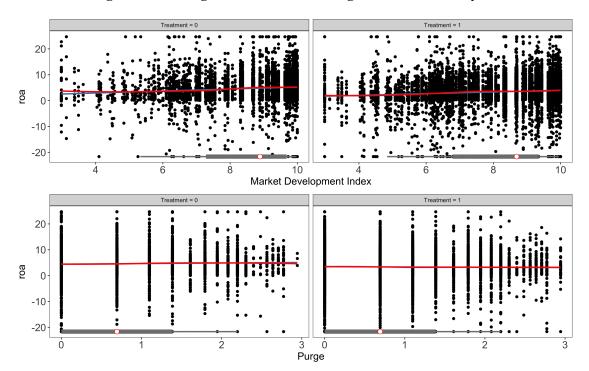


Figure A.4: Diagnostic Tests for Marginal Effects Analysis

Note: Dependent variable is ROA (%). Treatment is Revolving Door.

	Revolving-Door Officials Other Directors or Executives							
Statistic	Ν	Mean	St. Dev.	Ν	Mean	St. Dev.	Dif	P-Value
Female	12982	0.10	0.30	139769	0.17	0.37	-0.07	0.00
Age	12875	50.91	8.86	136029	44.59	8.42	6.32	0.00
Years of Education	12316	13.31	2.13	127788	13.16	2.21	0.15	0.00
CPC Member	12982	0.55	0.50	139769	0.27	0.44	0.28	0.00
People Congress Member	12982	0.05	0.21	139769	0.01	0.12	0.03	0.00
CPPCC Member	12982	0.04	0.19	139769	0.01	0.12	0.02	0.00
Length of Tenure	12982	4.29	2.77	139769	4.58	3.05	-0.29	0.00

Table A.1: Summary Statistics for Revolving-Door Officials vs Others (2000-2016)

Table A.2: Summary Statistics

Statistic	Ν	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Returns on Asset (Returns on Equity (Profit Margin	13,426	8.37	18.40	-93.30	2.43	14.26	87.62
Earnings Per Share	16,653	0.46	0.80	-6.70	0.12	0.66	50.83
Revolving Door (binary)	17,194	0.59	0.49	0	0	1	1
Revolving Door (continuous)	17,194	1.43	2.05	0	0	2	20
Communist Party Member	17,194	0.62	0.48	0	0	1	1
People's Congress Deputy	17,194	0.33	0.47	0	0	1	1
People's Consultative Conference Member	17,194	0.31	0.46	0	0	1	1
Firm Size (logged)	17,194	21.72	1.52	18.44	20.65	22.56	26.59
Revenue (logged)	17,194	21.08	1.57	0.00	20.00	21.96	28.69
Tax (logged)	16,034	16.94	1.72	6.67	15.82	17.91	25.04
Real Estate Investment	6,705	16.78	3.64	0.00	15.78	18.54	24.47
Bank Loan (logged)	13,197	19.11	2.75	0.00	18.06	20.52	25.84
Investor Mentality	17,194	0.65	0.17	0.00	0.50	0.77	1.00
Purge (Continuous)	17,194	2.14	3.12	0	0	3	18
Purge (Dummy)	17,194	0.58	0.49	0	0	1	1
Market Development	16,696	8.25	1.62	2.98	7.08	9.63	10.00

			ROA		
	(1)	(2)	(3)	(4)	(5)
Revolving Door	-0.634	-0.588	-0.623	-0.568	-0.602
Standard Error Cluster					
Province	(0.263)	(0.243)	(0.247)	(0.241)	(0.245)
Sector	(0.232)	(0.245)	(0.270)	(0.230)	(0.257)
Firm and Year FE	Y	Y	Y	Y	Y
Firm Controls	Ν	Y	Y	Y	Y
Sector-Specific Time Trend	Ν	Ν	Y	Ν	Y
Province-Specific Time Trend	Ν	Ν	Ν	Y	Y

Table A.3: Using Alternative Standard Errors Clusters

Note: The dependent variable is ROA (%). Controls are operating revenue (logged), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses.

	Sector Name	Frequency
1	Agriculture, forestry, animal husbandry or fishery	40
2	Mining	76
3	Manufacturing	2174
4	Electric power, heat, gas or water production and supply	104
5	Construction industry	91
6	Wholesale and retail industry	163
7	Transport, storage and postal services industry	93
8	Accommodation and catering industry	9
9	Information transmission, software& technology	261
10	Financial industry	85
11	Real estate	123
12	Leasing and commercial services industry	51
13	Scientific research and technical services industry	48
14	Water conservancy, environment and public facility management	49
15	Education	8
16	Health and social work	13
17	Culture, sports and entertainment	58
18	Diversified industries	21

### Table A.4: Sectoral Distribution of Listed Chinese Firms

Notes: Industrial classification of national economic activities, GB/T 4754-2017

Table A.5: Flexible Estimation

			ROA		
	(1)	(2)	(3)	(4)	(5)
Hire in 4+ yrs	0.015	-0.065	-0.002	-0.138	-0.054
2	(0.192)	(0.191)	(0.194)	(0.193)	(0.195)
Hire in 3 yrs	0.145	0.025	0.073	-0.021	0.036
-	(0.194)	(0.183)	(0.184)	(0.183)	(0.184)
Hire in 2 yrs	-0.180	-0.220	-0.202	-0.269	-0.239
-	(0.167)	(0.164)	(0.166)	(0.167)	(0.168)
Hire in 1 yrs	0.040	-0.003	0.001	-0.034	-0.021
-	(0.216)	(0.212)	(0.211)	(0.212)	(0.211)
Hire for 1 yr	-0.692**	-0.716**	-0.697**	-0.723**	-0.698**
-	(0.296)	(0.288)	(0.290)	(0.287)	(0.289)
Hire for 2+ yrs	-0.598**	-0.574**	-0.571**	-0.592**	-0.580**
-	(0.274)	(0.268)	(0.270)	(0.269)	(0.271)
Used to hire 1 yr ago	-0.103	-0.158	-0.179	-0.159	-0.172
	(0.286)	(0.279)	(0.281)	(0.280)	(0.281)
Used to hire 2 yrs ago	0.215	0.191	0.238	0.186	0.229
	(0.251)	(0.243)	(0.244)	(0.243)	(0.245)
Used to hire 3 yrs ago	-0.363	-0.382	-0.370	-0.435*	-0.403
	(0.260)	(0.254)	(0.256)	(0.255)	(0.257)
Observations	13,128	13,128	13,128	13,128	13,128
R-squared	0.564	0.582	0.585	0.584	0.587
Firm and Year FE	Y	Y	Y	Y	Y
Firm Controls	Ν	Y	Y	Y	Y
Sector-Specific Time Trend	Ν	Ν	Y	Ν	Y
Province-Specific Time Trend	Ν	Ν	Ν	Y	Y
Adjusted R-squared	0.444	0.468	0.471	0.469	0.472

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and are reported in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

	(1)	(2)
	ADL	ECM
DOA I	0 400***	0 500***
ROA = L	0.480***	-0.520***
	(0.0183)	(0.0183)
Revolving Door	-0.576***	
	(0.201)	
Revolving Door = L	0.0569	-0.519***
	(0.200)	(0.112)
Revolving Door = D		-0.576***
		(0.201)
Constant	1.702**	1.702**
	(0.845)	(0.845)
Observations	10,327	10,327
		,
Number of Symbols	2,801	2,801
Firm and Year FE	Y	Y
Firm Controls	Y	Y

Table A.6: ADL and ECM Specifications

Note: The dependent variable is ROA (%) and the first derivative of ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

	Profit Margins	Returns on Equity	Earnings Per Share
	(1)	(2)	(3)
Revolving Door	-1.985***	-1.047***	-0.047**
<u> </u>	(0.620)	(0.310)	(0.020)
Observations	13,128	17,143	16,651
Adjusted R-squared	0.376	0.532	0.454
Firm and Year FE	Y	Y	Y
Firm Controls	Y	Y	Y
Sector-Specific Time Trend	Y	Y	Y
Province-Specific Time Trend	Y	Y	Y

Table A.7: Alternative Measures of Firm Performance

Note: The dependent variables are profit margins, returns on equity, and earnings per share. The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

	ROA					
	(1)	(2)	(3)	(4)	(5)	
Revolving Door (Continuous)	-0.120**	-0.147***	-0.156***	-0.152***	-0.157***	
	(0.055)	(0.055)	(0.055)	(0.055)	(0.055)	
Observations	13,128	13,128	13,128	13,128	13,128	
Adjusted R-squared	0.444	0.467	0.471	0.469	0.472	
Firm and Year FE	Y	Y	Y	Y	Y	
Firm Controls	Ν	Y	Y	Y	Y	
Sector-Specific Time Trend	Ν	Ν	Y	Ν	Y	
Province-Specific Time Trend	Ν	Ν	Ν	Y	Y	

Table A.8: Continuous Measure of the Revolving Door

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. p<0.1; p<0.05; p<0.01.

	ROA					
	(1)	(2)	(3)	(4)	(5)	
Revolving Door (Ratio)	-3.710***	-3.852***	-4.058***	-3.992***	-4.108***	
	(1.329)	(1.315)	(1.319)	(1.306)	(1.311)	
Observations	13,108	13,108	13,108	13,108	13,108	
Adjusted R-squared	0.445	0.467	0.471	0.469	0.472	
Firm and Year FE	Y	Y	Y	Y	Y	
Firm Controls	Ν	Y	Y	Y	Y	
Sector-Specific Time Trend	Ν	Ν	Y	Ν	Y	
Province-Specific Time Trend	Ν	Ν	Ν	Y	Y	

Table A.9: Ratio Measure of the Revolving Door

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. p<0.1; p<0.05; p<0.05.

		ROA	
	(1)	(2)	(3)
People's Congress Member	-0.045 (0.210)		
CPPCC Member		0.068 (0.195)	
CPC Member		· · ·	-0.211 (0.209)
Observations	13,128	13,128	13,128
R-squared	0.586	0.586	0.587
Firm and Year FE	Y	Y	Y
Firm Controls	Y	Y	Y
Sector-Specific Time Trend	Y	Y	Y
Province-Specific Time Trend	Y	Y	Y
Adjusted R-squared	0.472	0.472	0.472

Table A.10: Alternative Political Background as Fake Treatment

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

	ROA						
	(1)	(2)	(3)	(4)	(5)		
Revolving Door	-0.614***	-0.542**	-0.564***	-0.508**	-0.520**		
	(0.224)	(0.214)	(0.217)	(0.215)	(0.218)		
Observations	7,827	7,827	7,827	7,827	7,827		
Adjusted R-squared	0.445	0.478	0.479	0.481	0.482		
Firm and Year FE	Y	Y	Y	Y	Y		
Firm Controls	Ν	Y	Y	Y	Y		
Sector-Specific Time Trend	Ν	Ν	Y	Ν	Y		
Province-Specific Time Trend	Ν	Ν	Ν	Y	Y		

#### Table A.11: Non-SOE Subsample

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

			ROA		
	(1)	(2)	(3)	(4)	(5)
Revolving Door	-0.630***	-0.600***	-0.634***	-0.582***	-0.614***
	(0.187)	(0.180)	(0.181)	(0.180)	(0.180)
Observations	13,126	13,126	13,126	13,126	13,126
Adjusted R-squared	0.447	0.470	0.474	0.472	0.475
Firm and Year FE	Y	Y	Y	Y	Y
Firm Controls	Ν	Y	Y	Y	Y
Sector-Specific Time Trend	Ν	Ν	Y	Ν	Y
Province-Specific Time Trend	Ν	Ν	Ν	Y	Y

Table A.12: Regression Using Propensity Score-Matched Sample

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. p<0.1; p<0.05; p<0.01.

	Subsidy	Taxes	Land
	(1)	(2)	(3)
Revolving Door	-0.009	-0.040	-0.023
	(0.038)	(0.028)	(0.132)
Observations	12,518	15,991	6,453
Adjusted R-squared	0.740	0.855	0.784
Firm and Year FE	Y	Y	Y
Firm Controls	Y	Y	Y
Province-Specific Time Trend	Y	Y	Y
Sector-Specific Time Trend	Y	Y	Y

Table A.13: Preferential Treatment

Note: The dependent variables are subsidy (in logs), tax (in logs), and land. Controls are revenue, firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

Table A.14: Marginal Effects Analysis

			RC	DA		
	(1)	(2)	(3)	(4)	(5)	(6)
Revolving Door * Purge (logged)	-0.298**	-0.260**	-0.264**			
	(0.120)	(0.112)	(0.112)			
Revolving Door	-0.428**	-0.443**	-0.419**	-2.421**	-2.722***	-2.805***
0	(0.195)	(0.190)	(0.189)	(1.020)	(0.998)	(0.983)
Purge (dummy)	-0.199	-0.150	-0.216			
<u> </u>	(0.165)	(0.163)	(0.175)			
Purge (logged)	0.394***	0.374***	0.421***			
	(0.147)	(0.143)	(0.146)			
Size		-1.204***	-1.172***		-1.280***	-1.251***
		(0.348)	(0.345)		(0.356)	(0.352)
Revenue		2.236***	2.215***		2.259***	2.235***
		(0.275)	(0.274)		(0.283)	(0.281)
NPC Member		-0.011	-0.016		-0.054	-0.077
		(0.219)	(0.216)		(0.223)	(0.221)
CPPCC Member		0.155	0.130		0.198	0.178
		(0.196)	(0.198)		(0.199)	(0.200)
CPC Member		-0.219	-0.176		-0.205	-0.162
		(0.211)	(0.211)		(0.212)	(0.212)
Revolving Door * Market Development				0.221*	0.259**	0.272**
				(0.119)	(0.117)	(0.115)
Market Development				-0.189	-0.315*	-0.219
				(0.178)	(0.169)	(0.443)
Observations	13,128	13,128	13,128	12,700	12,700	12,700
Adjusted R-squared	0.445	0.471	0.473	0.446	0.472	0.473
Firm and Year FE	Y	Y	Y	Y	Y	Y
Firm Controls	Y	Y	Y	Y	Y	Y
Sector Specific Time Trend	Ν	Y	Ν	Ν	Y	Ν
Province Specific Time Trend	Ν	Ν	Y	Ν	Ν	Y

Note: The dependent variable is ROA (%). Standard errors are clustered at the firm level and reported in parentheses. p<0.1; p<0.05; p<0.05; p<0.01.

	RC	DA
	(1)	(2)
Revolving Door*Government Dependence	-1.331**	-1.268**
	(0.644)	(0.636)
Revolving Door	-0.509***	-0.469**
	(0.196)	(0.189)
Observations	13,128	13,128
R-squared	0.564	0.582
Firm and Year FE	Y	Y
Firm Controls	Ν	Y
Adjusted R-squared	0.445	0.468

Table A.15: Cross-Sector variation

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

## **B** Computing the Cumulative Abnormal Returns

Specifically, I calculate the CARs using the method developed by Campbell et al. (1997). First, I fit a return model using the following specification:

$$R_{it} = \hat{\alpha}_i + \hat{\beta}_i R_{mt} + \epsilon_t \tag{1}$$

where  $R_{it}$  is the return of stock *i* on day *t* and  $R_{mt}$  is the market return of the Shanghai and Shenzhen markets on day *t*. After fitting the model, I calculate the abnormal returns,  $AR_{it}$ , of stock *i* on day *t* by taking the difference between the actual return  $R_{it}$  and the estimated return  $\hat{R}_{it}$ . The model is specified as follows:

$$AR_{it} = R_{it} - \hat{R}_{it}.$$
 (2)

Last, I calculate the CARs using the following specification:

$$CAR[0,n]_i = \sum_{t=0}^{n} AR_{it}.$$
 (3)

where  $CAR[0, n]_i$  is the CAR of stock *i* from day 0 through day *n*. Overall, the CARs show the extent to which the actual returns of each firm differ from the predicted returns of a stock given the performance of the market as a whole and the stock's actual value within the estimation window. In this paper, I estimate the CAR based on a pre-event period of 200 (t = -60) trading days, ending 10 trading days (t = -10) before the event day (t = 0).

	CAR						
	3 days	5 days	10 days	20 days			
	(1)	(2)	(3)	(4)			
Base Group: Unconnected							
Connected Survivors	-0.0137***	-0.0177***	-0.0281***	-0.0369***			
	(0.00528)	(0.00518)	(0.00597)	(0.00553)			
Losers	-0.0285***	-0.0364***	-0.0515***	-0.0645***			
	(0.00549)	(0.00570)	(0.00669)	(0.00686)			
Constant	0.0111**	0.0153***	0.0247***	0.0327***			
	(0.00457)	(0.00469)	(0.00558)	(0.00581)			
Observations	408	612	1,122	2,128			
R-squared	0.123	0.139	0.161	0.147			
Sector and Date FE	Y	Y	Y	Y			

Note: The dependent variable is CARs. Columns 1–4 show the results for window sizes of 3, 5, 10 and 20 days from the event date, respectively. Robust standard errors are reported in parentheses.

## C Revolving Door Recruitment and Economic Development

Figure C.1 illustrates and Table C.1 quantifies the negative correlation between the logged GDP of the city where the firm is located and the average number of revolvers hired by the firm. This indicates that firms in less-developed areas hire more former officials than firms elsewhere, suggesting a greater reliance on political connections in underdeveloped regions, which is in alignment with this paper's theoretical narrative.

Figure C.1: Correlation Between Economic Development and Revolving-Door Recruitment

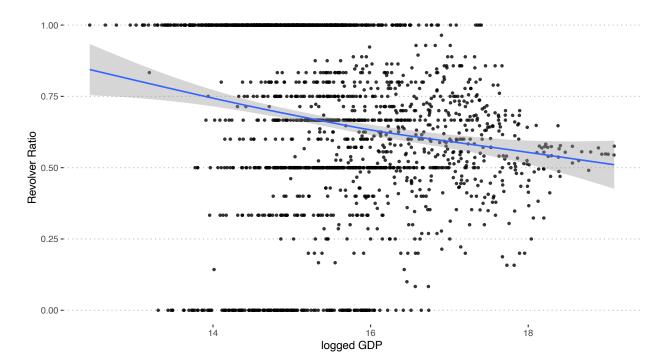


Table C.1: Negative Correlation between Economic Development and Revolving-Door Recruitment

	<b>Revolver</b> Ratio		Average Nur	nber of Revolvers
	(1)	(2)	(3)	(4)
Log GDP	-0.050***		-0.261***	
C	(0.006)		(0.035)	
Log GDP per Capita		$-0.065^{***}$		$-0.301^{***}$
		(0.011)		(0.064)
Constant	$1.434^{***}$	1.347***	5.792***	4.897***
	(0.099)	(0.121)	(0.551)	(0.674)
Ν	1,947	1,948	1,947	1,948
Adjusted R-squared	0.030	0.016	0.027	0.011

## **D** Text Mining of Equity Research Reports

### D.1 Data Preprocessing

I collect 1,647,206 equity research reports released by China's major finance institutions from 2008 to 2016 from the CSMAR database. The data processing is conducted as follows. To identify firm-related sentiments, I extract 578,411 sentences containing the names of listed firms. Examples of report summaries follow.

- 新能源汽车产业有望成为战略性新兴产业的龙头,我们看好该产业的发展前景,继续推荐产业中具有核心竞争优势、强大发展潜力、目前估值较低的上市公司,如杉杉股份、比亚迪....
- 铁路运输: 推荐大秦铁路、广深铁路和铁龙物流....
- 从内生增长来看:达刚路机主要产品养路机械面对国内巨大的公路维护市场,2015
  年国内公路网进入周期性养护高峰,同时出口将受益于"一路一带"投资拉动,尤其
  是公司斯里兰卡市场开发较早,预期未来还有工程订单....
- 2015年1季度,海通证券实现净利润41.02亿元,同比增长238.88%,环比增长48.53%,符合预期,当期摊薄每股收益为0.43元....
- 事件:美克家居披露14年报告期内公司预计2014年度实现归属于上市公司股东的净利润与上年同期相比,将增加35%左右...
- 長会主题宏观与策略】宏观日报:警惕二季度外占回落风险宏观日报:十评央行行长周小川五道口讲话债市日评:确定性的货币流动性放松和不确定的经济复苏预期行业与公司】广告营销行业系列研究之三:高景气度支持外延扩张信质电机(002664)快评:不仅仅是进入Tesla产业链海信科龙(000921)分析:盈利能力有望持续改善

Then, I separate the sentences into tokens using jieba, a Python package for Chinese word segmentation. Last, I remove the punctuation and stop words. Figure D.1 shows the word cloud for the keywords used to predict the sentiments.

Figure D.1: Word Cloud



Next, I use a semisupervised learning approach to measure the sentiment in these investor reports. The next two sections describe how I conduct the manual annotation and sentiment classification.

#### **D.2** Manual Annotation of Sentiments

Because of the high cost of annotation, I randomly select 10,000 sentences to be manually labeled with sentiment labels by five research assistants. I code the sentence as "2" if it

contains positive sentiments, "1" if it contains neutral sentiments, and "0" if it contains negative sentiments. Given that neutral sentences contain large amounts of noise, which reduces the accuracy of the model, we remove these sentences and train the text classification model by focusing on sentences with positive or negative sentiments. After the manual annotation, we obtain 1,344 negative sentences and 3,634 positive sentences.

#### D.3 Sentiment Classification of Unlabeled Data

*Feature Extraction*: In this paper, I use Term Frequency–Inverse Document Frequency (TF-IDF), one of the most frequently used algorithms, to extract features from the data. For the computer programming, I use scikit-learn, a machine learning Python package, to covert tokens to vectors using the TF-IDF algorithm, which is shown as follows:

$$TF_{ij} = \frac{w_{ij}}{v_j}$$
$$IDF_i = loga(\frac{T}{D_i + 1})$$
$$TF - IDF_{ij} = TF_{ij} \times IDF_i$$
$$= \frac{w_{ij}}{v_j} \times loga(\frac{T}{D_i + 1})pe$$

where  $w_{ij}$  is the number of occurrences of term *i* in document *j*.  $v_j$  is the total number of terms in document *j*, and *T* is the total number of documents.  $D_i$  is the total number of documents with the term *i*.

*Training*: I split the labeled sentences into a 90% training set and a 10% test set. The training set is input into the classification model, while the test set is used to evaluate the model. To train the sentiment classifier, I use the multinomial na ive Bayes model in the scikit-learn package.

In the first trial, the accuracy, precision and recall of the classifier on the test set were

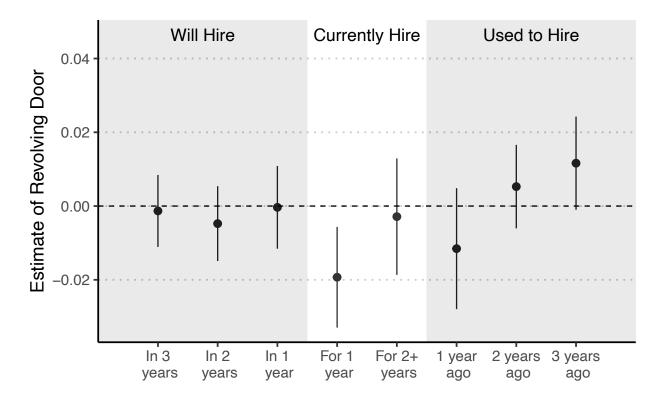
74%, 76% and 74%, respectively. The performance of the classifier did not meet our standard, which was an accuracy greater than 80%.

I then return to the descriptive analysis of the sentence-level data and find that there is an imbalance between the number of positive sentences (3,270) and negative sentences (1,210) in the training set. To account for this problem, I apply the synthetic minority oversampling technique (SMOTE) algorithm and generate new negative samples to resolve the imbalance. I then conduct a second trial and find that the SMOTE algorithm improved the performance of the classifier. The accuracy, precision and recall of the classifier on the test set were 81%, 83% and 83%, respectively.

*Prediction* : The remaining unlabeled data are automatically annotated with sentiment labels by the classifier. I also present the probability of each sentence being assigned each label.

I apply the prediction algorithm to all reports. I then match these reports with the firm information and aggregate the number of positive reports. I construct the measure of positive sentiment by computing the ratio of positive reports to the total number of reports. The ratio measure ranges from 0 to 1. I assign a neutral value, 0.5, to those firms that are not evaluated by market analysts in a specific year.

In addition to the main result for investor sentiment, I also use a dynamic specification to examine the parallel trends assumption in the main text. Figure D.2 shows the result. None of the leads are statistically significant, supporting the validity of the parallel trends assumption. Additionally, the effect of revolving-door hiring on investor sentiment is a short-term effect that lasts for only one year.



## Figure D.2: Flexible Estimation

## **E** Market Development Index

China's provincial market development index is an index system that measures the market progress of Chinese provinces. The index has five sub-indices that include governmentbusiness relations, development for non-state enterprises, the development of product market, the development of factor market, and legal institutions. Some of these subindices also have second-tier sub-indices. This index reflects the ongoing development of the market in different Chinese provinces along various dimensions including property rights protection, the tax burden, and government interference.

In total, the index system currently consists of a total of 18 underlying indices. The index is constructed by using a principal component analysis of these sub-indices. According to Fan, Wang and Ma (2012), the index measures the relative process of marketization across the country, not the absolute degree of marketization, but each index can be comparable horizontally (between provinces) and vertically (cross-year data of each province). The index is correlated with GDP growth and total factor productivity.

To further verify the validity of this index, I check the correlation between market development index and alternative cross-sectional indicators of market environment. Specially, we use four indicators of business environment constructed by World Bank in their Doing Business 2008 report, including days of starting business, data of business registration, cost of enforcing contract, and cost of getting credit. Figure E.1 shows a strong, negative correlation between market development index and four business environment indicators, suggesting that market development significantly reduce the cost of doing business and time of dealing with government agencies in China. This analysis provides further validity for the usage of market development index as a proxy for the quality of market development.

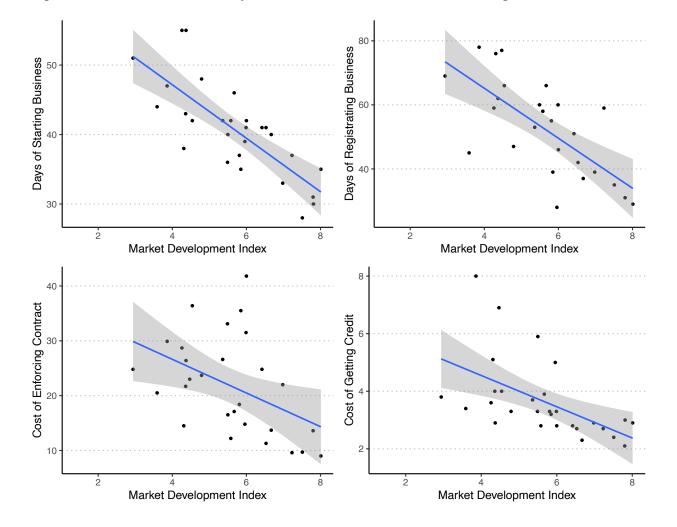


Figure E.1: Correlational Analysis Between Market Index and Doing Business 2008 Data

## **F** Interview Details

The two interviews were conducted in Shanghai, August 2019. They both said that they did not know that the anticorruption campaign would last for years, as there were so many shorter and less intense campaigns launched by the Party before 2012.

Interviewee No.19081, a retired official who hold consultant position in a firm said:

"Campaigns are common. If the center has clear guidance (on revolving-door recruitment), I strictly follow and leave the firm. But in 2012 or 2013, we didn't know what will happen. It was a new era....."

Interviewee No. 19091, a senior firm manager, said:

"Sometimes it is good to do nothing to maintain the status quo when we do not know clearly what the top leader thought."

# G Comparison of Outcomes Before and During the Campaign

	Return on Assets (%)				
	(1)	(2)	(3)	(4)	(5)
Revolving Door	0.026	0.066	0.044	0.089	0.065
	(0.372)	(0.373)	(0.371)	(0.369)	(0.369)
Observations	7,410	7,409	7,409	7,409	7,409
Adjusted R-squared	0.381	0.393	0.395	0.396	0.398
Firm and Year FE	Y	Y	Y	Y	Y
Firm Controls	Ν	Y	Y	Y	Y
Sector-Specific Time Trend	Ν	Ν	Y	Ν	Y
Province-Specific Time Trend	Ν	Ν	Ν	Y	Y

Table G.1: Pre-2012 Analysis

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

The model is specified as follows:

$$Y_{it} = \beta_1 Revolving Door_{it} * Campaign Period_t + \delta X_{it} + \lambda_i + \gamma_t + \epsilon_{it}.$$

Note that one caveat with this functional form is that revolving-door recruitment is not orthogonal to the campaign period dummy because firms adjust their recruitment strategy after perceiving the increasing political risk.

	Return on Assets (%)					
	(1)	(2)	(3)	(4)	(5)	
Revolving Door*Campaign Period	-0.412*	-0.336	-0.436*	-0.313	-0.430*	
	(0.222)	(0.219)	(0.225)	(0.218)	(0.223)	
Revolving Door	-0.075	-0.124	-0.089	-0.134	-0.090	
	(0.227)	(0.223)	(0.225)	(0.221)	(0.223)	
Observations	20,776	20,775	20,775	20,775	20,775	
R-squared	0.437	0.452	0.457	0.454	0.459	
Firm and Year FE	Y	Y	Y	Y	Y	
Firm Controls	Ν	Y	Y	Y	Y	
Sector Specific Time Trend	Ν	Ν	Y	Ν	Y	
Province Specific Time Trend	Ν	Ν	Ν	Y	Y	

Table G.2: Comparison of Outcomes Before and During the Campaign

Note: The dependent variable is ROA (%). The controls are operating revenue (in logs), firm size, People's Congress membership, CPPCC membership, and CPC membership. Standard errors are clustered at the firm level and reported in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

## **H** Detailed Text of Extensions

This section shows several extensional analyses that further support political risk theory. The first set of analyses focuses on effect heterogeneity. As political connections serve as the nexus of government and market, both the local political and economic environment can marginally determine the returns on political connections. Given that the anticorruption campaign is the key driver for firm-level political risk, an empirical support for political risk theory is that the cost of revolving-door recruitment is higher in areas with purge intensity of political leaders. To test this conjecture, I construct the purge intensity measure by counting officials who (1) work in a firm's headquarters city, (2) hold a rank at least at the division level (处级), and (3) were dismissed for corruption. From 2012 to 2016, on average, approximately two officials with a rank at or above the division level were dismissed for corruption per year in these cities. Examples of officials with such a rank are the department heads of city governments, city mayors, or CPC secretaries for prefectural cities. The purges of these officials create enormous political uncertainty because they are the key decision-makers for local economic policies. I estimate the effect heterogeneity across areas with different purge intensities (logged number of purged officials) by performing a marginal effect analysis.<sup>25</sup> Following Hainmueller, Mummolo and Xu (2019), I first verify that the raw data follow a linear distribution (Figure A.4). Then, I conduct the analysis and present the marginal effect of revolving-door recruitment and its corresponding confidence interval. I present the result of the kernel estimator to show the real shape of the marginal effect (Hainmueller, Mummolo and Xu, 2019).

The upper panel of Figure H.1 presents the results, which show that the marginal cost of revolving-door recruitment increases with purge intensity. To obtain a better sense of the magnitude, I conduct interaction analyses, reported in Table A.14, which include all

<sup>&</sup>lt;sup>25</sup>The number of city-level purges ranges from 0 to 18 during the period studied in this paper. While the idea measure is the ratio of purged officials to the total number of officials who hold a rank at or above the division level, the data on the total number of officials are unavailable. As the distribution of purged officials is right skewed, I take its logarithms as the measure of purge intensity.

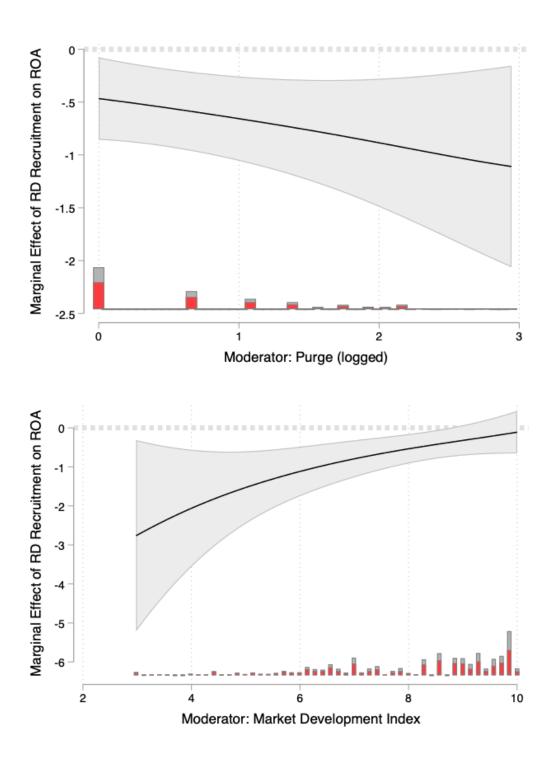


Figure H.1: Marginal Effect Analysis

Note: The line and gray zone denote the kernel estimates and confidence intervals for the marginal effect of revolving-door recruitment on ROA.

baseline fixed effects, the time trends, and the binary measure of purge intensity. The coefficients on *RevolvingDoor* \* *Purge* range from -0.27 to -.30, and are all statistically significant. That is, revolving-door firms located in cities with a one-standard deviation increase in corruption dismissals experience an additional 0.31% to 0.35% drop in ROA. As a back-of-the-envelope estimation shows, for a politically connected firm with average assets, a one-standard deviation increase in the intensity of the corruption crackdown leads to an extra 7.1 million RMB (1.14 million USD) in losses. Overall, the within-campaign analysis indicates that the marginal cost of revolving-door recruitment increases as future political risk rises due to local corruption crackdowns.

In addition to the political environment, market environment are another set of important moderators that affect corporate political strategy and its outcomes in the context of weak institutions (Markus, 2012; Gehlbach, Sonin and Zhuravskaya, 2010). Although China has a unitary legal system to regulate the market, the enforcement of law and the progress of market development in China vary significantly across regions. According to World Bank (2008)'s Doing Business Report, establishing a business in the northwestern provinces costs entrepreneurs over 100% more in expenses and takes 48% more time than in the southeastern provinces. As numerous studies have shown, a benign market environment and political connections are substitutes (Kung and Ma, 2018; Li et al., 2008). In places with advanced market environment, firms can access resources such as land and labor without seeking help from government officials. Therefore, firms do have to rely on political connections. In contrast, in poor business environment, firms are more likely to establish political connections to secure their property rights (Hou, 2019). To document this substitution effect, I use the province-level market development index developed by Fan (2018) as a proxy for the strength of the market development. Accounting to Fan, Wang and Ma (2012), this index reflects the ongoing development of the market in different Chinese provinces along various dimensions including property rights protection, the

tax burden, and government interference.<sup>26</sup> The market development index ranges from 0 to 10, with a larger value indicating overall stronger market development progress.

The lower panel of Figure H.1 shows the results of the marginal effect analysis using market development as a moderator (the regression results are in Table A.14). The estimation shows that the cost of revolving-door recruitment diminishes with greater market development. Better market development can almost completely offset the negative effect of revolving-door recruitment. Firms located in provinces with advanced market environment (those in the first quantile of the market development index, e.g., Zhejiang or Shanghai) have approximately 0.3% higher ROA than their peers in areas with weak market environment (those in the fourth quantile of the market development index, e.g., Hebei or Xinjiang). The marginal effect analysis shows that market development acts as a salient moderator that reduces the cost of political uncertainty.<sup>27</sup>

#### **Comparison of Losses Before and During the Campaign**

Finally, I demonstrate that political risks are the key driver of the profit losses incurred by politically connected firms by conducting an analysis using firm data from both before and during the anticorruption campaign. As political risk theory suggests, the scale and intensity of the anticorruption crackdown created a distinctive high-risk environment that imposes costs on firms that exchange favors with revolving-door officials. Therefore, I expect that firms with revolvers do not experience profit losses in periods of low purge intensity. In other words, the cost of revolving-door recruitment is expected to appear only during the campaign period and not during the precampaign period.

<sup>&</sup>lt;sup>26</sup>The details of this market index are provided in Appendix E I also verify the measurement validity by showing a strong correlation between the market development index and the business environment indicators constructed by the World Bank in 2008. I choose to use the early Doing Business report because the latest reports (2018 and 2020) suffer from data irregularities.

<sup>&</sup>lt;sup>27</sup>I also examine the heterogeneity of the cross-industry effect. While market development offset the negative impact of political risk, firm reliance on government intervention increases the cost of revolving-door recruitment. I show that the cost of revolving-door recruitment is greater for firms in sectors with greater reliance on the government and higher entry barriers, including the natural resource, construction, finance, and real estate sectors, than for firms in other sectors (Table A.15).

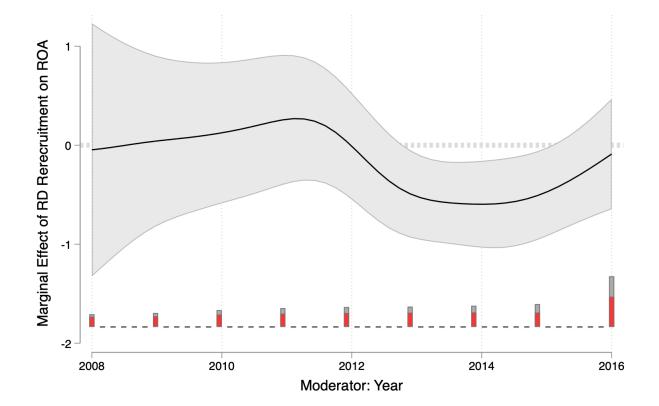


Figure H.2: Kernel Estimation for Comparison of Outcomes Before and During the Campaign

To empirically examine this key conjecture, I first estimate the effect of revolving-door employment on firm performance before the start of the ongoing anticorruption campaign (200–2011). The results are presented in Table G.1. Across the different specifications, the estimates of revolving-door recruitment are positive but not statistically significant in the precampaign period when political risk is low. I also adopt a flexible estimation strategy to obtain the marginal effect of revolving-door recruitment in the years before and during the campaign. To do so, I employ a kernel smoothing estimator and visualize the local marginal effects in Figure H.2. The marginal effect of revolving-door recruitment, which is closer to zero and statistically insignificant before 2012, declines sharply from 2012 onward and is significant at the 5% level for most of the years during the campaign. I also use a model that interacts the key independent variable *RevolvingDoor* with *CampaignPeriod* (equal to 1 if *year*  $\geq$  2012 and 0 otherwise; the detailed specification is in Appendix G). Table G.2 shows the results. The estimate of the coefficient on the interaction term is significant in 3 out of 5 specifications, including the full model with various controls, time trends and fixed effects (Column 5). The results are consistent with those of the flexible estimation, suggesting that political risk increased drastically after the start of the campaign. Taken together, the findings support the hypothesis that political risks imposed a cost on firms that recruit revolving-door officials during the anticorruption campaign.