The Birth of a Fellow:

Social Ties and Favoritism in Chinese Science

Raymond Fisman
Boston University

Jing Shi
RMIT University

Yongxiang Wang
University of Southern California

Rong Xu
Renmin University of China

To Be Or Not To Be?
That is the question

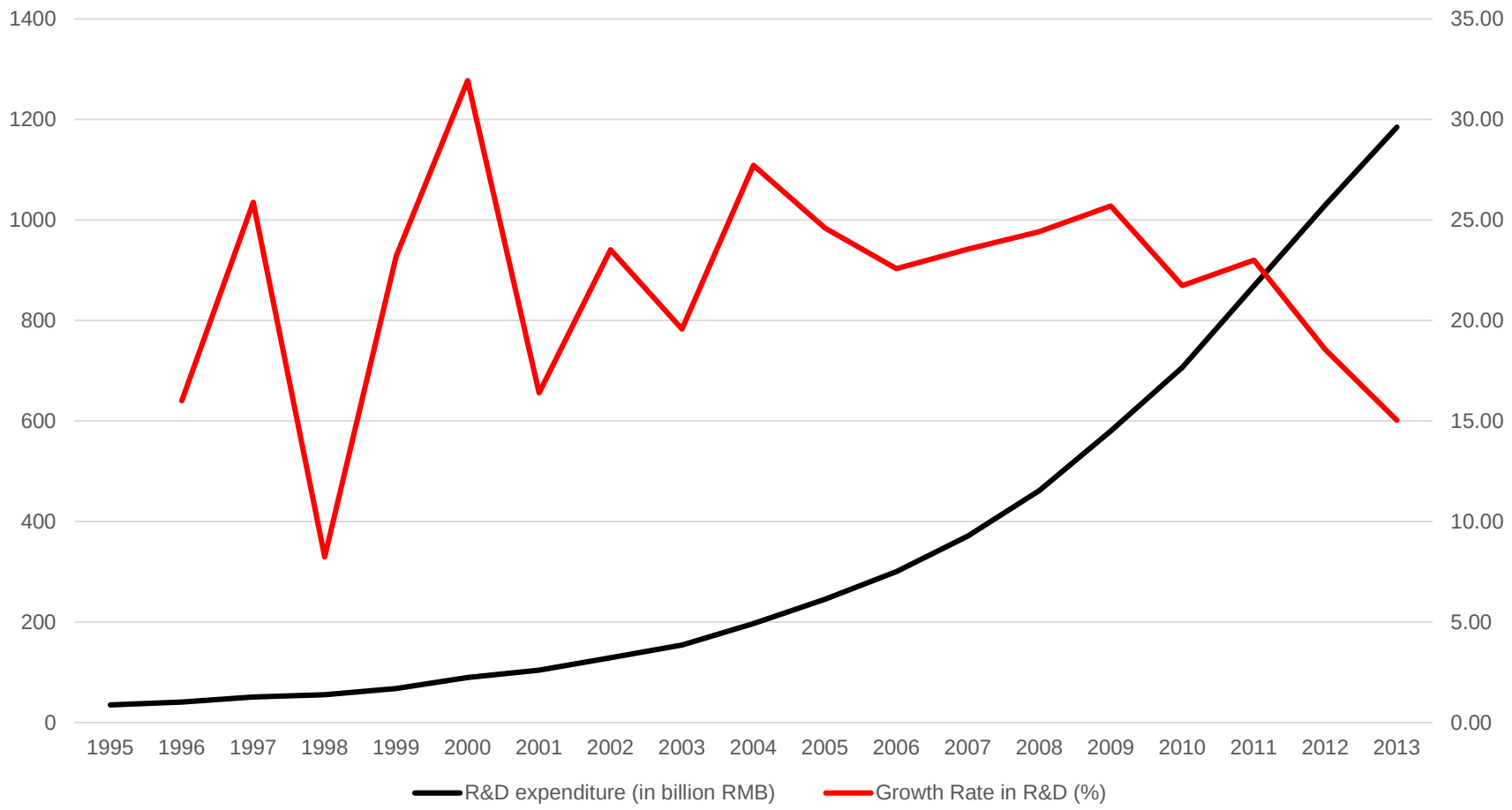
---Death (Trilogy)

- The mortality cost of political connections (*RES*, 2015)
- The economics of death ceilings (working paper, 2015)
- The political economy of collective killings (in process)

---Life

The Birth of a fellow

China's Great Leap Forward in Science and Engineering



China’s Great Leap Forward in Science and Engineering

- China leaped from bit player in global science and engineering to become

1. the world's largest source of S&E graduates,
2. second largest spender on R&D
3. second largest producer of scientific papers
4. the largest patent producer (WIPO, 2014).

Problems and Issues in China Science

"China's research culture…wastes resources, corrupts the spirit, and stymies innovation… researchers spend too much time on building connections and not enough time attending seminars, etc etc."

Source: Shi and Rao, *Science* 2010

Different Types of Misallocation

- Blatant ones:
  - In 2014, Dr. Ning Li of the Chinese Academy of Engineering (CAE) was convicted of misappropriating funds of 20 million RMB (3.17 million USD)
- Subtle ones: favor-seeking and favor-trading in selection of and/or funding
- We focus on favoritism in appointments to the CAE and its sister organization, the CAS, which are associated with prestige and resources

Corruption in the fellow appointment process

- Shuguang Zhang accepted US$7.5 million in bribes in his capacity as vice chief engineer of China's Ministry of Railway
- Nearly half of proceeds were spent to attempt to buy CAE membership (missed by 1 vote! Zero Pubs)
- Convicted in 2014 and now serving a suspended death sentence

Favoritism in the CAS/CAE

- Background
  - **The importance of being a fellow**
  - Structure of CAS/CAE and fellow election
  - Measuring favoritism
- Data collection
- Regression results
- Conclusions/questions

The Chinese Academies

- CAS and CAE represent the highest honor for Chinese scientists
- Enjoy similar benefits to vice-minister level officials (e.g., access to elite hospitals)
- Given resources they control, universities are often willing to offer salary premia in the hundreds of thousands (dollars) to attract them

Resources under CAS/CAE control

- 2014 CPC budget allocated to the CAS "$423 million for 20 'strategic priority projects' in areas ranging from neuroscience to studies of the Tibetan Plateau."

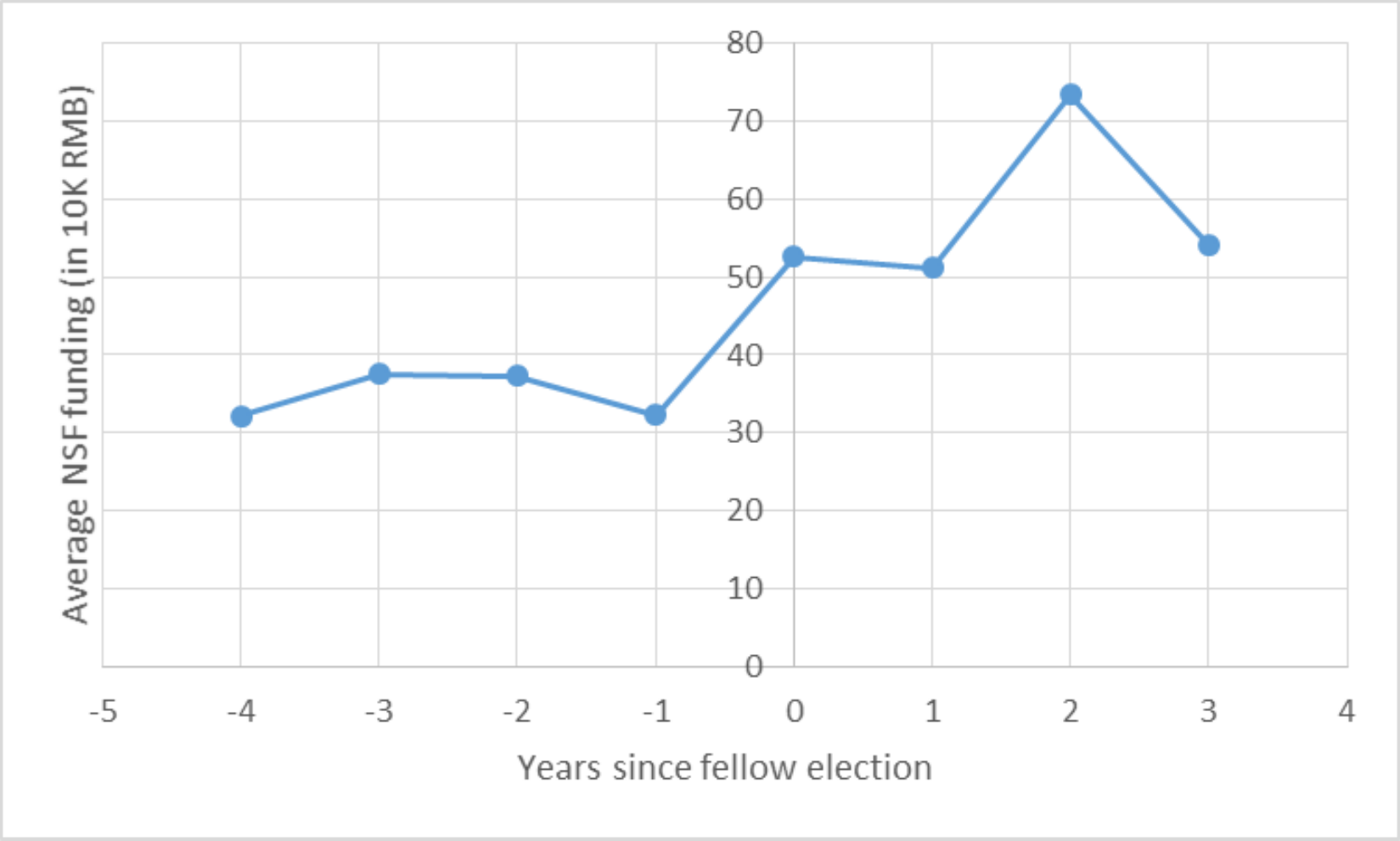
- In addition, "megagrant" projects from the Ministry of Science and Technology (MOST), budget ~ US$8 billion, typically require CAS fellow recommendations (or recs from a short list of comparable experts, e.g., Yangtze Rive Scholars)

- Many MOST projects are administered by CAS/CAE fellows, e.g., 863 "National High-tech R&D Program" administered by Ning Li (recall from earlier corruption slide!)

Resources under CAS/CAE control

- *Every* NSF director since 1999 has been a CAS member; every vice-director since 1999 has been a CAS member or party secretary

NSF funding following CAS election



Resources under CAS/CAE control

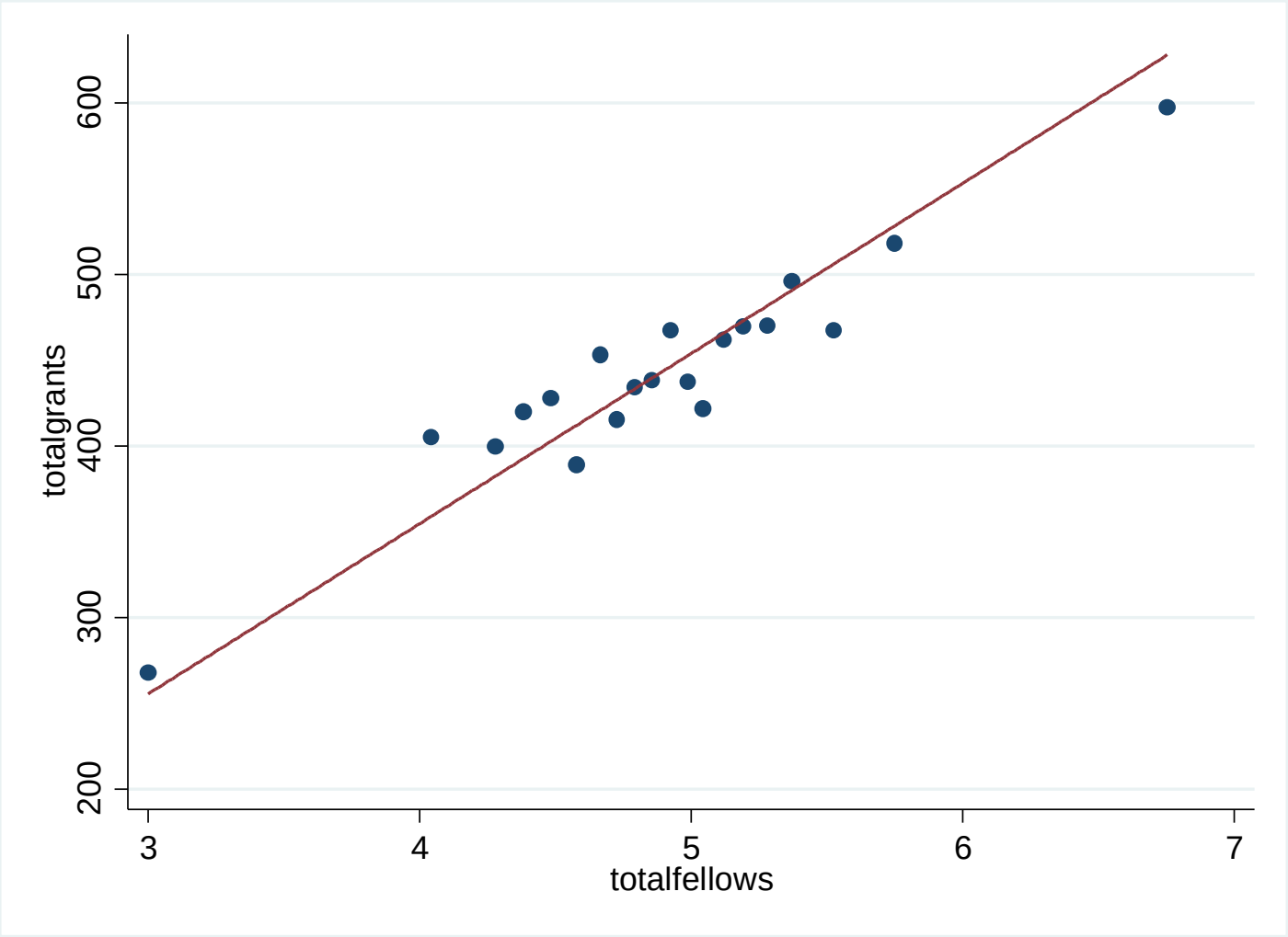
- *Every* NSF director since 1999 has been a CAS member; every vice-director since 1999 has been a CAS member or party secretary

- Correlation between fellow headcount and university-level funding…

```
binscatter totalfunding totalfellows,

    absorb(universityid) controls(yr* faculty)
```

Resources under CAS/CAE control



Resources under CAS/CAE control

- *Every* NSF director since 1999 has been a CAS member; every vice-director since 1999 has been a CAS member or party secretary

- Correlation between fellow headcount and university funding…

  If we take these estimates seriously, a fellow is worth ~100 million RMB in extra funding per year (~US$16 million)

Favoritism in the CAS/CAE

- Background
  - The importance of being a fellow
  - **Structure of CAS/CAE and fellow election**
  - Measuring favoritism
- Data collection
- Regression results
- Conclusions/questions

CAS/CAE structure

- Organized by department:
  - **CAS** Math and Physics; Chemistry; Biological and Medical Sciences; Earth Sciences; Tech Sciences, Info Tech
  - **CAE** has 9 departments: Engineering Management; Energy and Mining Engineering

- Department composition (fellows ≥ 80 have no voting rights)
  - 62-103 fellows below age 80 for CAS
  - 35-93 fellows below age 80 for CAE

CAS selection procedure (CAE similar)

- Up to 60 new fellows selected in biennial elections in odd years

- Selection is done at the department-level, organized by its main governing body, the **standing committee (SC)**
  - Comprised of 12-23 fellows, nominated and selected by fellows within each department
  - Pre-2008: Up to 3 two-year terms, with mandatory 1/3 turnover every 2 years
  - Post-2008; Up to 2 four-year terms, with mandatory 1/2 turnover every 4 years thereafter.

CAS selection, continued

- *Nomination*
- *Stage 1: Written evaluations and voting*
- *Stage 2: In-person discussion and voting*

CAS selection, continued

- *Nomination*: either via current fellow, or by current institution (vetted via ministry)

- *Stage 1: Written evaluations and voting*
  - SC sends nominee's packet to at least 15 current fellows who work in similar subfield (e.g., organic vs inorganic chemistry)
  - Fellows mail in (a) yes-no vote; (b) written eval
  - Evaluations are sent to *all* committee members for yes-no votes, candidates ranked based on # of votes
  - ~60% dropped (retained candidates should be ≤ 2.5 x (# of slots)

CAS selection, continued

- *Stage 2: Written evaluations and voting*
  - Presentation by 3 department members selected by the SC
  - Two rounds of voting:
    - Round 1: Winnow applicants to 1.2x available slots
    - Round 2: Final vote, with top candidates (subject to 2/3 yes votes, 1/2 before 2006) selected as new fellows

But how to measure favoritism?

This paper: Favoritism in the CAS/CAE

Hometown Ties (*Laoxiang Guanxi*) between the candidate and the members of standing committee of each department within CAS/CAE

---Hometown ties play a central role in the culture of favor-exchange (*Guangxi*) in China

Favoritism in the CAS/CAE

- Background
  - The importance of being a fellow
  - Structure of CAS/CAE and fellow election
  - **Hometown ties in China**
- Data collection
- Regression results
- Conclusions/questions

Hometown Ties and Guanxi

[**t]he cultivation of hometown ties is part and parcel of the Chinese culture of establishing *guanxi*,** or relationships of mutual obligation between individuals, and is therefore also an inherent part of the social structure in which doing business in China is embedded at present.

--- anthropologist Leo Douw

hometown ties are among the most common and distinctive bases for *guanxi* to build upon

---Chen and Chen (2004)

Hometown ties and *guanxi*

- Almost any list of guanxi /“favor-trading” networks implicates hometown connections

- Economic impact is *very* significant, e.g., ~80% of printing shops in China are owned by entrepreneurs from the same city!

Influence via hometown associations

- Hometown associations, by various names, are a common conduit for influence-seeking and favor-trading
- More than 5000 liaison offices of local governments in Beijing, a primary purpose being to "***organize parties and meetings with high-rank central government officials from the same hometown***" (The Central Commission for Discipline Inspection report)
- Some cities forbade the formation of hometown associations with express purpose of curtailing corruption
- In October of last year, the CPC banned hometown associations entirely!

Hometown ties and fellow election: example

- Mingxian Chen, a CAE candidate in 2011 (arrested in 2012 for corruption), was nominated by hometown fellow, a vice director of his CAE department.

- Mr. Chen passed the first stage, but was rejected in the second stage after anonymous informant provided CAE with tip on fabricated publications

- (Came out in the case that Mr. Chen also tried to approach another fellow his hometown and sent him some gifts, which were declined.)

What we find

1. Hometown Ties increase the probability of being elected successfully as a fellow at both CAS and CAE, by 36%.

--Hometown connections to non-standing committee member fellows have no effect on being elected (thus not because of “genius towns”)

--Hometown connections to standing committee members from other departments have no effect on being elected.

2. The election takes two stages:

First stage: filtering out obviously non-qualified candidates to come up with a list of “formal” candidates by mailing-in votes from department fellows;

Second stage: in-person meetings to cast votes where standing committee members chair the meeting

What we find

--Hometown ties do not matter for the first stage, and it mainly work through the second stage.

3. Such an effect gets weaker after 2007 when the voting rule changes: Before 2007, only ½ participating votes is needed at the second stage for a successful election; After 2007, this threshold value is raised to 2/3.

What we find

4. Alternative explanation(s)

Insider information held by the standing committee members?

---positive selection on non-connected, while not on connected candidates

---Why hometown ties lead to insider information about research quality?

---Then it might not be affected by the 2007 rule changes

---School ties between candidates and standing committee members don't matter who are supposed to have better insider information about candidates

Connections to the literature

Our paper: Rent-seeking and distortions in knowledge production

1. A growing literature on the role of personal bias on resource allocation in scientific research. (Li (2011), Zinovyeva and Bagues (2015) and Durante et al (2011))
2. Rent-seeking and resource misallocation (Murphy, Shleifer, and Vishny (1991), Acemoglu (1995))
3. Resource misallocation in China (Young (2003). Hsieh and Klenow (2009), Brandt et al (2012))
4. Role of culture in exchange (Guiso, Sapienza, and Zingales (2009) and Fisman, Paravisini, and Vig (2015))
5. Distortionary effects of in-group favoritism (Burgess et al (2015),Mauro (1995), Olken (2006), Easterly and Levine (2007), and Alesina and Zhuravskaya (2011))

Favoritism in the CAS/CAE

- Background
  - CAS/CAE
  - Hometown ties in China
- **Data collection**
- Regression results
- Conclusions/questions

Data Collecting

1. Candidate list from CAS/CAE website (and before 1997, CAS candidate information was published at an internal journal *CAS Bulletin*)

2. Also information on first stage=1 or 0; second stage=1 or 0

3 No public info for “first” for the CAE candidates in 2001, and we got it from CAE.

4 CAS didn’t provide “first” information for the 2001 and also the 2013 elections.

---Requested info via China's freedom of information laws (“Regulation of the People's Republic of China on the Disclosure of Government Information,” in effect since May 1, 2008) with no success.

Data Collecting

5. Hand collect information on 4455 unique scientists (fellows and candidates) from official websites and also Baidu/Baike:

--when and where they were born,

--undergraduate institute; master program, phd program,

--current employer,

--a dean or even president?

--is/was a high-rank government official (Tingju Ji and above)

--H-index at the time of the election (only for candidates) from *Web of Science Core Collection*

6. From CAS official websites and *Yearbooks of CAE*, standing committee member info for each department in each election year

Data Collecting

7. Variables

CommitteeTie: 1=Candidate has hometown tie with any of the standing committee members in his department

NonCommitteeTie: 1=Candidate has hometown tie with any of non-standing committee member fellows in his department

First: 1=getting into the second stage

Second: 1=elected as a new fellow

Summary Statistics: By Committee Ties

Table 1a: Summary Statistics, Full Sample

Varible Name	Mean	StdDev	Observations
$CommitteeTie$	0.099	0.299	4922
$NonCommitteeTie$	0.334	0.472	4922
$Elected$	0.143	0.350	4922
$FirstStage$	0.404	0.491	4358
$Elected \vert FirstStage = 1$	0.338	0.473	1760
$log(1 + HIndex)$	1.597	1.256	4922
$HasPhD$	0.457	0.498	4922
Age	58.384	8.849	4845
$PoliticallyConnected$	0.048	0.214	4922
$Dean$	0.403	0.491	4922
$Committee\_CollegeTie$	0.246	0.431	4922
$NonCommittee\_CollegeTie$	0.448	0.497	4922

Summary Statistics: By Committee Ties

	$CommitteeTie = 1$		$CommitteeTie = 0$		Difference	
Varible Name	Mean	StDev	Mean	StDev	Difference	t-statistic
$Elected$	0.197	0.398	0.137	0.344	0.060	3.627
$FirstStage$	0.388	0.488	0.406	0.491	-0.018	-0.694
$Elected \vert FirstStage = 1$	0.497	0.502	0.322	0.467	0.175	4.493
$log(1 + HIndex)$	1.601	1.204	1.596	1.262	0.005	0.076
$HasPhD$	0.398	0.490	0.463	0.499	-0.065	-2.726
Age	59.698	8.458	58.239	8.880	1.459	3.432
$PoliticallyConnected$	0.035	0.184	0.049	0.217	-0.014	-1.419
$Dean$	0.372	0.484	0.406	0.491	-0.035	-1.480
$Committee\_CollegeTie$	0.402	0.491	0.229	0.420	0.174	8.504
$NonCommittee\_CollegeTie$	0.544	0.499	0.437	0.496	0.107	4.523

The role of *CommitteeTie* over time

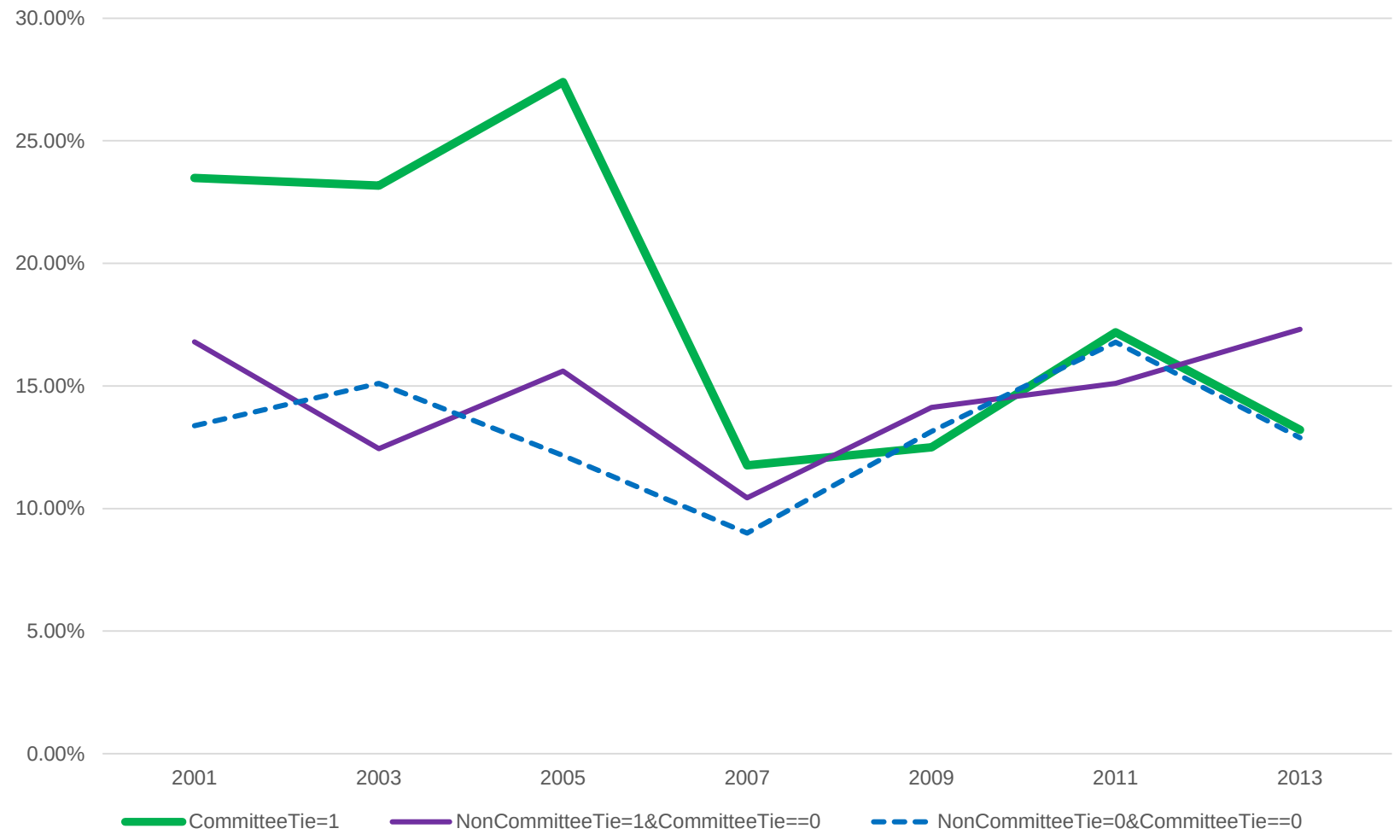


Table 2: Hometown Ties and Fellow Election

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable				*Elected*			
CommitteeTie	0.049**	0.048**	0.048**	0.047*	0.064***	0.052	0.045*
	(0.020)	(0.020)	(0.020)	(0.024)	(0.025)	(0.032)	(0.025)
NonCommitteeTie	0.005	0.007	0.015	-0.018	-0.002	-0.010	0.017
	(0.011)	(0.011)	(0.011)	(0.017)	(0.014)	(0.020)	(0.013)
$log(1 + HIndex)$	0.031***	0.028***		0.025***	0.033***	0.034***	0.025***
	(0.005)	(0.005)		(0.007)	(0.007)	(0.009)	(0.006)
HasPhD	0.025**	0.023*		0.019	0.020	0.032	0.020
	(0.012)	(0.012)		(0.016)	(0.017)	(0.024)	(0.014)
Dean	0.006	0.010		0.009	0.002	0.021	0.005
	(0.010)	(0.010)		(0.013)	(0.014)	(0.021)	(0.012)
PoliticallyConnected	0.026	0.033		0.061**	0.041	0.130	0.028
	(0.023)	(0.024)		(0.029)	(0.032)	(0.136)	(0.024)
$log(Age)$	0.110***	0.119***		0.192***	0.231***	0.136**	0.118***
	(0.037)	(0.037)		(0.048)	(0.051)	(0.067)	(0.045)
Committee_CollegeTie	0.018	0.016		0.025	-0.009	0.038	0.003
	(0.014)	(0.014)		(0.016)	(0.019)	(0.024)	(0.017)
NonCommittee_CollegeTie	0.014	0.016		0.026*	-0.010	0.006	0.020
	(0.011)	(0.011)		(0.014)	(0.018)	(0.020)	(0.014)
Department; Year FEs	Yes						
Department X Year FEs		Yes	Yes	Yes	Yes	Yes	Yes
Hometown FEs				Yes			
College FE					Yes		
Sample	Full	Full	Full	Full	Full	CAS	CAE
Observations	4845	4845	4922	4844	4656	1800	3045
R-Squared	.0246	.0339	.0238	.176	.151	.0334	.023

Table 3: Hometown Ties and First-stage Election Outcome

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable				*FirstStage*			
CommitteeTie	-0.015	-0.019	-0.020	-0.010	-0.009	0.017	-0.037
	(0.028)	(0.028)	(0.028)	(0.033)	(0.035)	(0.050)	(0.034)
NonCommitteeTie	-0.015	-0.013	0.000	-0.053**	-0.020	0.007	-0.020
	(0.019)	(0.019)	(0.019)	(0.027)	(0.023)	(0.039)	(0.022)
$log(1 + HIndex)$	0.068***	0.061***		0.056***	0.068***	0.062***	0.060***
	(0.008)	(0.009)		(0.011)	(0.011)	(0.017)	(0.011)
HasPhD	0.063***	0.057**		0.056**	0.056*	0.024	0.067***
	(0.022)	(0.023)		(0.026)	(0.029)	(0.047)	(0.026)
Dean	-0.014	-0.011		-0.019	-0.029	-0.047	0.003
	(0.018)	(0.018)		(0.021)	(0.022)	(0.036)	(0.021)
PoliticallyConnected	0.000	0.014		0.032	0.001	0.029	0.015
	(0.039)	(0.040)		(0.044)	(0.046)	(0.203)	(0.041)
log(Age)	0.147**	0.169**		0.214***	0.284***	-0.010	0.256***
	(0.068)	(0.067)		(0.080)	(0.088)	(0.131)	(0.079)
Committee_CollegeTie	0.010	0.009		0.010	-0.041	-0.003	0.011
	(0.022)	(0.022)		(0.025)	(0.029)	(0.040)	(0.027)
NonCommittee_CollegeTie	0.051***	0.052***		0.065***	0.004	0.011	0.072***
	(0.019)	(0.019)		(0.022)	(0.028)	(0.036)	(0.023)
Department; Year FEs	Yes						
Department X Year FEs		Yes	Yes	Yes	Yes	Yes	Yes
Hometown FEs				Yes			
College FE					Yes		
Sample	Full	Full	Full	Full	Full	CAS	CAE
Observations	4285	4285	4358	4284	4110	1240	3045
R-Squared	.0457	.0652	.0442	.27	.247	.0417	.0434

Table 4: Hometown Ties and Second-stage Election Outcome: Conditioning on First==1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable				*Elected*			
CommitteeTie	0.151***	0.153***	0.156***	0.134**	0.159***	0.119*	0.177***
	(0.040)	(0.043)	(0.043)	(0.058)	(0.056)	(0.065)	(0.056)
NonCommitteeTie	0.031	0.037	0.044*	-0.012	0.016	-0.032	0.075**
	(0.024)	(0.026)	(0.025)	(0.042)	(0.035)	(0.042)	(0.033)
$log(1 + HIndex)$	0.018*	0.016		0.016	0.022	0.023	0.014
	(0.010)	(0.011)		(0.016)	(0.016)	(0.019)	(0.015)
HasPhD	0.015	0.012		0.022	-0.003	0.045	-0.004
	(0.028)	(0.030)		(0.043)	(0.042)	(0.050)	(0.037)
Dean	0.032	0.035		0.061*	0.029	0.074*	0.015
	(0.023)	(0.025)		(0.035)	(0.034)	(0.039)	(0.032)
PoliticallyConnected	0.070	0.081		0.155**	0.136	0.240	0.067
	(0.053)	(0.056)		(0.070)	(0.083)	(0.237)	(0.057)
$log(Age)$	0.158*	0.179**		0.400***	0.346***	0.293**	0.122
	(0.085)	(0.091)		(0.139)	(0.126)	(0.138)	(0.122)
Committee_CollegeTie	0.028	0.021		0.050	0.007	0.074	0.001
	(0.029)	(0.031)		(0.042)	(0.045)	(0.053)	(0.039)
NonCommittee_CollegeTie	-0.021	-0.020		-0.016	-0.035	-0.037	-0.020
	(0.024)	(0.025)		(0.038)	(0.042)	(0.040)	(0.033)
Department; Year FEs	Yes						
Department X Year FEs		Yes	Yes	Yes	Yes	Yes	Yes
Hometown FEs				Yes			
College FE					Yes		
Sample	Full	Full	Full	Full	Full	CAS	CAE
Observations	1742	1742	1760	1742	1702	658	1084
R-Squared	.0366	.0528	.0464	.31	.249	.0665	.0523

Summary of regression results

- Candidates with standing committee ties are ~36 percent more likely to be elected
- Results are largely consistent across estimations, samples.
- Hard to square with unobserved quality differences in science across cities, e.g., due to city FE results, placebo results, lack off non-committee effect
- Result derives entirely from differential selection in second (in-person) stage

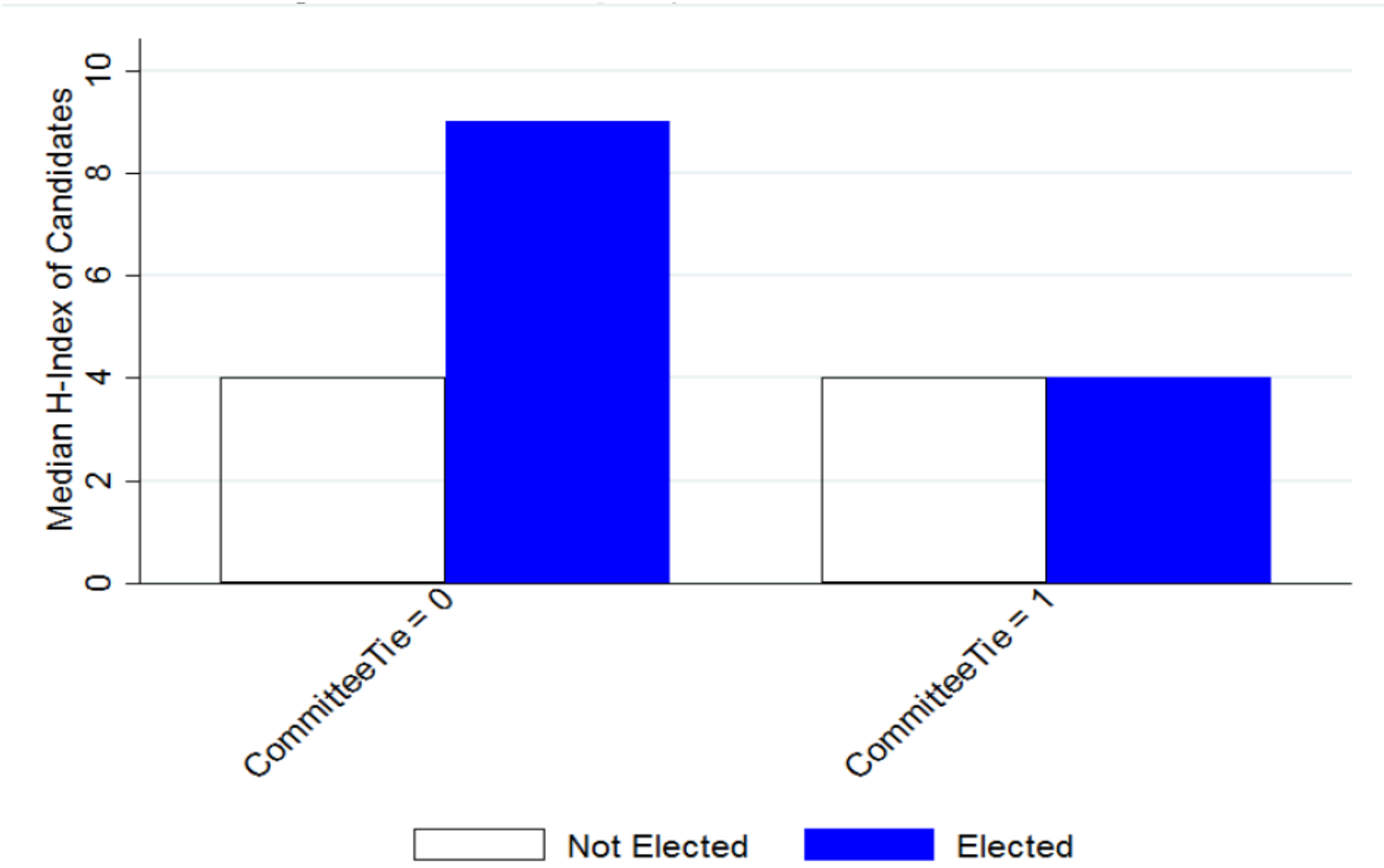
Candidates' quality

Two conjectures:

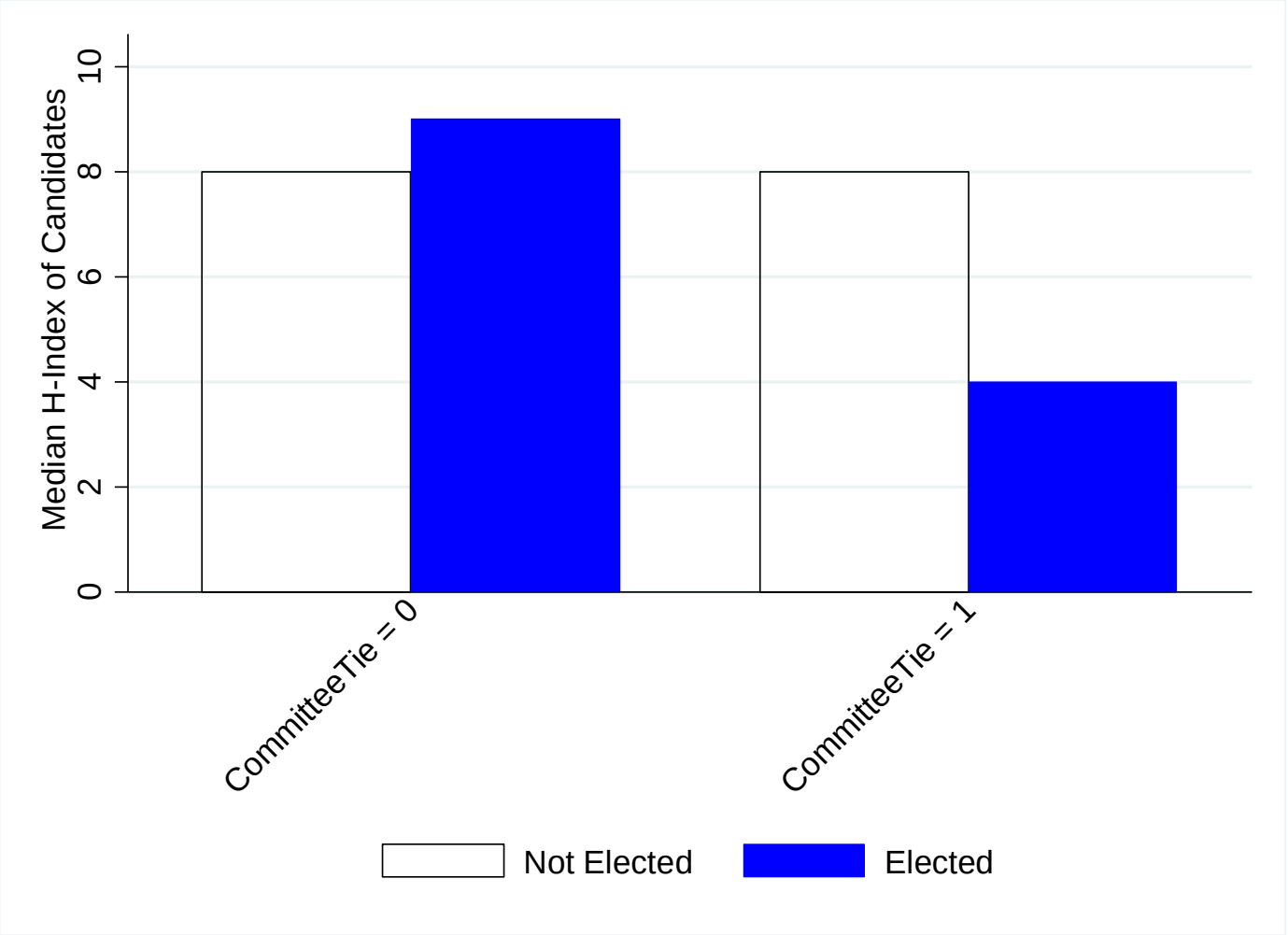
1. The average quality of a connected nominee will be lower. (Not true in data)

2. The quality of Elected candidates (conditional on the pool of nominees) will be lower for connected candidates. (True in data)

Candidates' quality



Candidate quality, ties, and 2nd-stage success



Regressional analyses on selection on quality

Table 5: Interaction of Candidate Quality and Hometown Ties in Predicting Candidate Success

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable			*Elected*			
$log(1 + HIndex)$	0.031***	0.025***	0.028***	0.032***	0.024***	0.026***
	(0.005)	(0.006)	(0.007)	(0.007)	(0.008)	(0.009)
$CommitteeTie$	0.101***	0.119***	0.120***	0.125***	0.138***	0.139***
	(0.033)	(0.034)	(0.034)	(0.038)	(0.039)	(0.039)
$NonCommitteeTie$	0.006	-0.031*	-0.031*	-0.023	-0.055**	-0.055**
	(0.011)	(0.017)	(0.017)	(0.017)	(0.023)	(0.024)
$CommitteeTie * log(1 + HIndex)$	-0.032**	-0.043***	-0.043***	-0.049***	-0.055***	-0.056***
	(0.015)	(0.016)	(0.016)	(0.018)	(0.018)	(0.018)
$NonCommitteeTie * log(1 + HIndex)$		0.023**	0.023**		0.021*	0.020*
		(0.009)	(0.010)		(0.012)	(0.012)
Department X Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Hometown FEs				Yes	Yes	Yes
Controls Included?	Yes	Yes	Yes	Yes	Yes	Yes
College Interactions Incl?			Yes			Yes
Observations	4845	4845	4845	4844	4844	4844
R-Squared	.035	.0362	.0368	.178	.179	.179

Pre-post 2007 analyses

	(1)	(2)	(3)	(4)
$CommitteeTie$	0.088***	-0.008	0.231***	0.132***
	(0.028)	(0.037)	(0.060)	(0.042)
$NonCommitteeTie$	0.012	0.013	0.031	-0.009
	(0.016)	(0.026)	(0.037)	(0.022)
$log(1 + HIndex)$	0.036***	0.054***	0.041**	0.033***
	(0.008)	(0.013)	(0.018)	(0.010)
$HasPhD$	0.005	0.029	-0.015	0.004
	(0.011)	(0.020)	(0.026)	(0.011)
$Dean$	0.006	-0.016	0.028	0.007
	(0.010)	(0.018)	(0.024)	(0.010)
$PoliticallyConnected$	0.033	0.010	0.080	0.034
	(0.023)	(0.040)	(0.054)	(0.024)
$Committee\_CollegeTie$	0.017	0.010	0.024	0.017
	(0.014)	(0.022)	(0.031)	(0.014)
$NonCommittee\_CollegeTie$	0.017	0.057***	-0.016	0.017
	(0.011)	(0.019)	(0.025)	(0.011)
$CommitteeTie * I(Year \geq 2007)$	-0.091**	-0.034	-0.164*	-0.062
	(0.039)	(0.054)	(0.090)	(0.063)
$NonCommitteeTie * I(Year \geq 2007)$	-0.000	-0.038	0.021	-0.044
	(0.022)	(0.036)	(0.051)	(0.033)
$log(1 + HIndex) * I(Year \geq 2007)$	-0.010	0.018	-0.038	-0.014
	(0.011)	(0.017)	(0.023)	(0.012)
$CommitteeTie * log(1 + HIndex)$				-0.034
				(0.024)
$NonCommitteeTie * log(1 + HIndex)$				0.016
				(0.015)
$CommitteeTie * log(1 + HIndex) * I(Year \geq 2007)$				-0.002
				(0.032)
$NonCommitteeTie * log(1 + HIndex) * I(Year \geq 2007)$				0.017
				(0.020)
Full Sample	Yes	Yes		Yes
FirstStage = 1 Sample			Yes	
Dep Var Elected	Yes		Yes	Yes
Dep Var FirstStage		Yes		
Observations	4922	4358	1760	4922
R-Squared	.0341	.0656	.0536	.0362

College Tie and Employer Tie

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable				*Elected*			
CommitteeTie	0.048**	0.048**	0.048**	0.048**	0.058**	0.050	0.046*
	(0.020)	(0.020)	(0.020)	(0.024)	(0.025)	(0.032)	(0.026)
NonCommitteeTie	0.003	0.005	0.011	-0.020	-0.003	-0.013	0.015
	(0.011)	(0.011)	(0.011)	(0.017)	(0.015)	(0.020)	(0.013)
$log(1 + HIndex)$	0.026***	0.024***		0.022***	0.025***	0.030***	0.022***
	(0.005)	(0.005)		(0.007)	(0.008)	(0.009)	(0.007)
HasPhD	0.024**	0.023*		0.019	0.015	0.033	0.019
	(0.012)	(0.012)		(0.016)	(0.019)	(0.024)	(0.014)
Dean	0.008	0.010		0.010	0.024	0.025	0.005
	(0.010)	(0.010)		(0.013)	(0.015)	(0.021)	(0.012)
PoliticallyConnected	0.031	0.036		0.064**	0.050	0.135	0.030
	(0.023)	(0.024)		(0.029)	(0.039)	(0.137)	(0.024)
$log(Age)$	0.117***	0.124***		0.194***	0.217***	0.156**	0.114**
	(0.037)	(0.037)		(0.048)	(0.054)	(0.067)	(0.045)
Committee_CollegeTie	0.012	0.011		0.021	0.009	0.029	0.002
	(0.014)	(0.014)		(0.016)	(0.018)	(0.024)	(0.017)
NonCommittee_CollegeTie	0.011	0.013		0.022	0.021	0.005	0.017
	(0.011)	(0.011)		(0.014)	(0.016)	(0.020)	(0.014)
Committee_EmployerTie	0.034**	0.030**	0.033**	0.017	0.024	0.068***	-0.003
	(0.015)	(0.015)	(0.015)	(0.018)	(0.022)	(0.023)	(0.020)
NonCommittee_EmployerTie	0.023*	0.020	0.032***	0.029*	-0.027	0.003	0.031**
	(0.012)	(0.013)	(0.012)	(0.015)	(0.019)	(0.022)	(0.015)
Department; Year FEs	Yes						
Department X Year FEs		Yes	Yes	Yes	Yes	Yes	Yes
Hometown FEs				Yes			
Employer FE					Yes		
Sample	Full	Full	Full	Full	Full	CAS	CAE
Observations	4845	4845	4922	4844	4845	1800	3045
R-Squared	.0277	.0363	.0284	.178	.19	.0395	.0246

Summary

- Evidence of favoritism dictating selection into scientific leadership in China
- Welfare consequences? Hard to measure directly, but results suggest selection of "type" likely to engage in favor-trading once a fellow
- Have the CAS/CAE cleaned up their acts? At least on this observable dimension…