Doing business while holding public office: Evidence from Mozambique's firm registry

Sam Jones
UNU-WIDER
(Mozambique)

Felix Schilling
Copenhagen Business School

Finn Tarp
University of Copenhagen

October 2021

(1) Motivation

Mozambique's hidden debt scandal

"... in democratic governments like ours people come and go, and everyone involved will want to have his share of the deal while in office, because once out of the office it will be difficult."

Email from Teófilo NHANGUMELE to Jean BOUSTANI (14/11/2011), quoted in USA vs. Jean Boustani et al. (Case 1:18-cr-00681)

Political corruption – definition

Political corruption: (ab)use of political office for personal gain

An ingrained problem...

Head of government		Estimates of funds allegedly embezzled
Mohamed Suharto	President of Indonesia, 1967–98	US $ 15 to 35 billion
Ferdinand Marcos	President of Philippines, 1972–86	US $ 5 to 10 billion
Mobutu Sese Seko	President of Zaire, 1965–97	US $ 5 billion
Sani Abacha	President of Nigeria, 1993–98	US $ 2 to 5 billion
Slobodan Milosevic	President of Serbia/Yugoslavia, 1989–2000	US $ 1 billion
Jean-Claude Duvalier	President of Haiti, 1971–86	US $ 300 to 800 million
Alberto Fujimori	President of Peru, 1990–2000	US $ 600 million
Pavlo Lazarenko	Prime Minister of Ukraine, 1996–97	US $ 114 to 200 million
Arnoldo Alemán	President of Nicaragua, 1997–2002	US $ 100 million
Joseph Estrada	President of Philippines, 1998–2001	US $ 78 to 80 million

Source: Transparency International, *Global Corruption Report*, 2004

Political corruption – prevalence

Precise extent and form of such corruption often hidden.

But, diverse evidence suggests it is widespread:

- Parliamentary candidates in India (Fisman et al., 2014)
- Relatives of elected municipal office holders in Phillipines (Fafchamps and Labonne, 2017)
- Conservative MPs in UK (Eggers and Hainmueller, 2009)
- Profitability of firms related to local politicians in Denmark (Amore and Bennedsen, 2013)

Large literature indicates revealed preference for firms to nurture political connections – e.g., appointment of current/former politicians – esp. in more corrupt countries (Fisman, 2001; Khwaja and Mian, 2005; Chen and Kung, 2019).

Political corruption – techniques

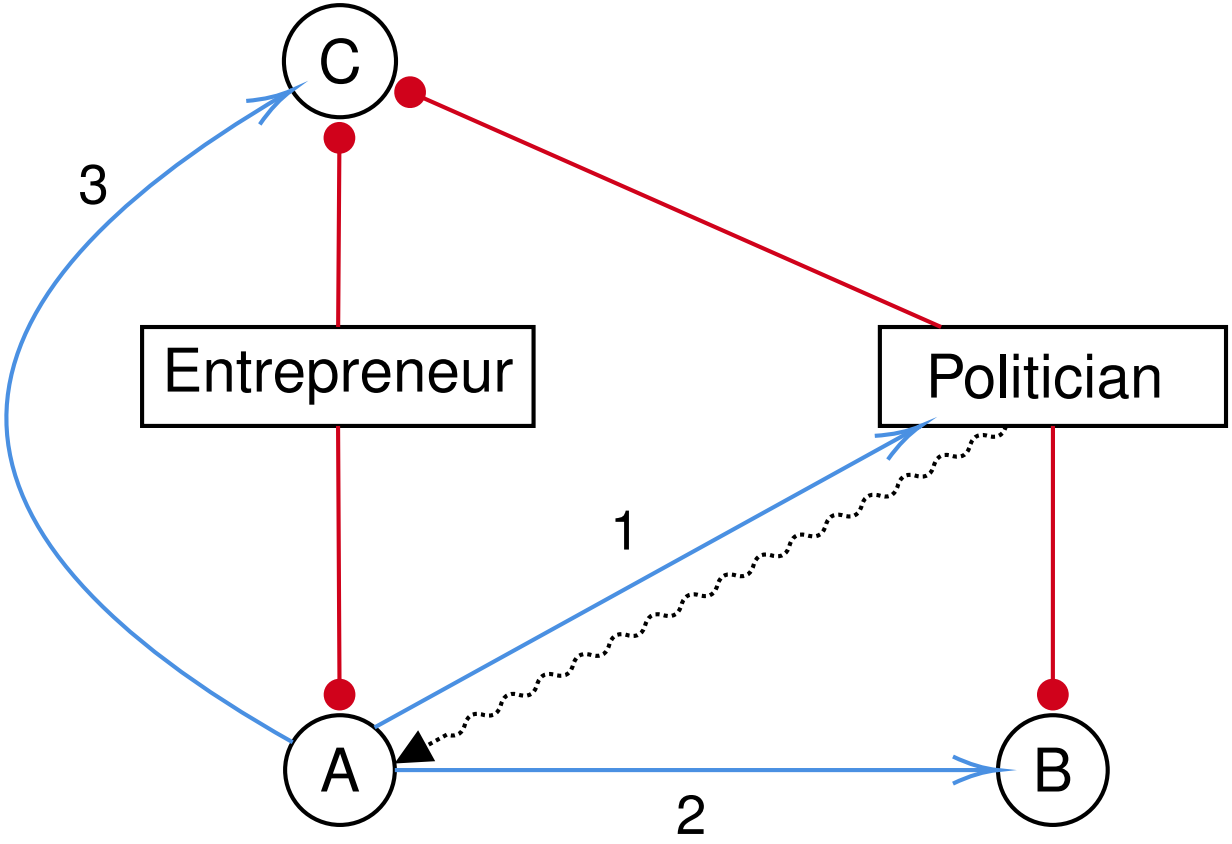
Political corruption involves a blurring of the (idealized) strict division between public and private spheres.

Multiple possible mechanisms, legal and illegal.

Distinguish between direct and indirect exchanges:

1. Politicians as direct individual beneficiaries
   - Embezzlement, bribes, kickbacks, appointments
   - One-off bipartite exchanges
2. Politicians as indirect beneficiaries, through interests in firms
   - Ongoing networked exchanges, rent sharing
   - Ex. – Berlusconi's media company (Della Vigna et al., 2016)
   - Used to launder/hide proceeds from illegal exchanges

Politician-business relations



Note: Letters in circles represent registered firms, with ownership indicated by lines with round heads (in red); financial flows indicated by solid lines with arrow heads; political support indicated by wiggly line.

Focus of our paper

In many developing countries politicians (or families) are active in business – as owners/partners in multiple firms.

Common in former socialist/communist countries – political elites involved in privatization (Ivanović et al., 2019; Xu and Wu, 2021).

Minimal economics literature *quantifies* effect of holding political office on individuals' business networks.

Our research question :-

Do Politically Exposed Persons (PEPs) experience faster growth in their business networks relative to non-PEPs?

Definition of PEPs :-

Presidents, ministers, vice-ministers, governors, and senior members of ruling party.

Focus of our paper

In many developing countries politicians (or families) are active in business – as owners/partners in multiple firms.

Common in former socialist/communist countries – political elites involved in privatization (Ivanović et al., 2019; Xu and Wu, 2021).

Minimal economics literature *quantifies* effect of holding political office on individuals' business networks.

Our research question :-

Do Politically Exposed Persons (PEPs) experience faster growth in their business networks relative to non-PEPs?

Definition of PEPs :-

Presidents, ministers, vice-ministers, governors, and senior members of ruling party.

Focus of our paper

In many developing countries politicians (or families) are active in business – as owners/partners in multiple firms.

Common in former socialist/communist countries – political elites involved in privatization (Ivanović et al., 2019; Xu and Wu, 2021).

Minimal economics literature *quantifies* effect of holding political office on individuals' business networks.

Our research question :-

Do Politically Exposed Persons (PEPs) experience faster growth in their business networks relative to non-PEPs?

Definition of PEPs :-

Presidents, ministers, vice-ministers, governors, and senior members of ruling party.

(2) Mozambique context

Historical background

Figure: (Tempografica,1975)

1975 colonial rule ends
1986 market liberalization
1992 end of war
1994 first elections
2011 FDI bonanza

Figure: (Achiles, 1974)

Historical background

FRELIMO in power since 1975.

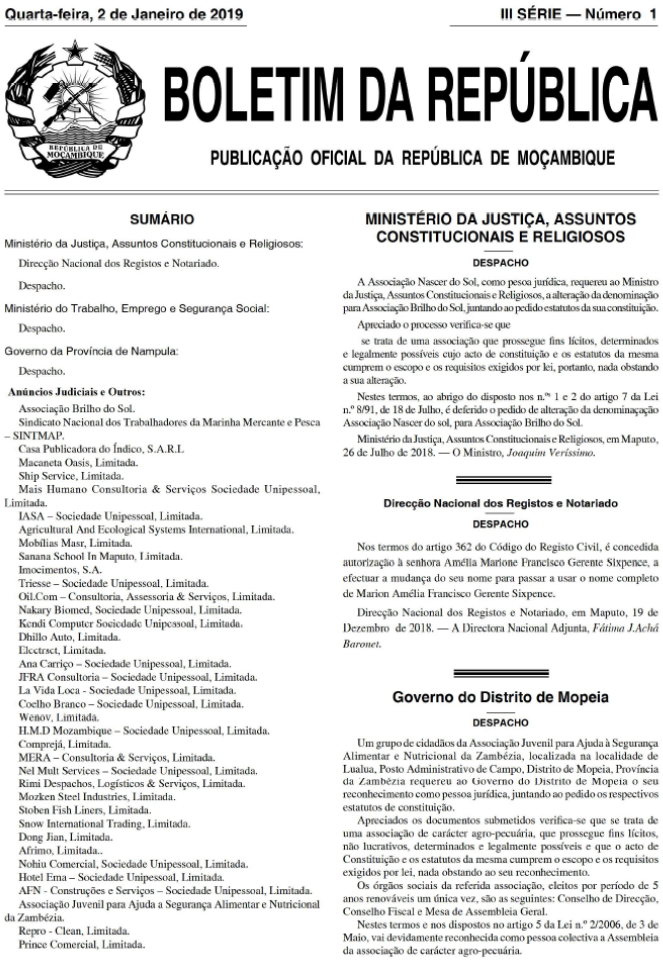
Weak private sector at time of market liberalization $\Rightarrow$ party insiders main viable option to become business leaders.

"*The business networks and the ruling Frelimo party have been closely interweaved for decades, leading to a risk of insider trading at all levels of power in Mozambique. Support or co-option between entrepreneurs and government officials puts the companies that do not have the benefit of this kind of political protection into a difficult position ... [giving] the Mozambican ruling class an air of a set of political-trading dynasties*" (Indian Ocean Newsletter, 29 June 2007)

Various examples of grand corruption – e.g., ongoing 'hidden debts' case, proceeds laundered through local businesses owned by political elites.

(3) Data & Outcomes

Unstructured primary sources



Quarta-feira, 2 de Janeiro de 2019 — III SÉRIE — Número 1

BOLETIM DA REPÚBLICA

PUBLICAÇÃO OFICIAL DA REPÚBLICA DE MOÇAMBIQUE

SUMÁRIO

Ministério da Justiça, Assuntos Constitucionais e Religiosos:

Direcção Nacional dos Registos e Notariado.

Despacho.

Ministério do Trabalho, Emprego e Segurança Social:

Despacho.

Governo da Província de Nampula:

Despacho.

Anúncios Judiciais e Outros:

Associação Brilho do Sol.
Sindicato Nacional dos Trabalhadores da Marinha Mercante e Pesca – SINTMAP.
Casa Publicadora do Índico, S.A.R.L.
Macaneta Oasis, Limitada.
Ship Service, Limitada.
Mais Humano Consultoria & Serviços Sociedade Unipessoal, Limitada.
IASA – Sociedade Unipessoal, Limitada.
Agricultural And Ecological Systems International, Limitada.
Mobilias Masr, Limitada.
Sanana School In Maputo, Limitada.
Imocimentos, S.A.
Triesse – Sociedade Unipessoal, Limitada.
Oil.Com – Consultoria, Assessoria & Serviços, Limitada.
Nakary Biomed, Sociedade Unipessoal, Limitada.
Kendi Computer Sociedade Unipessoal, Limitada.
Dhillo Auto, Limitada.
Electract, Limitada.
Ana Carriço – Sociedade Unipessoal, Limitada.
JFRA Consultoria – Sociedade Unipessoal, Limitada.
La Vida Loca - Sociedade Unipessoal, Limitada.
Coelho Branco – Sociedade Unipessoal, Limitada.
Wenov, Limitada.
H.M.D Mozambique – Sociedade Unipessoal, Limitada.
Comprejá, Limitada.
MERA – Consultoria & Serviços, Limitada.
Nel Mult Services – Sociedade Unipessoal, Limitada.
Rimi Despachos, Logísticos & Serviços, Limitada.
Mozken Steel Industries, Limitada.
Stoben Fish Liners, Limitada.
Snow International Trading, Limitada.
Dong Jian, Limitada.
Afrimo, Limitada..
Nohiu Comercial, Sociedade Unipessoal, Limitada.
Hotel Ema – Sociedade Unipessoal, Limitada.
AFN - Construções e Serviços – Sociedade Unipessoal, Limitada.
Associação Juvenil para Ajuda a Segurança Alimentar e Nutricional da Zambézia.
Repro - Clean, Limitada.
Prince Comercial, Limitada.

MINISTÉRIO DA JUSTIÇA, ASSUNTOS CONSTITUCIONAIS E RELIGIOSOS

DESPACHO

A Associação Nascer do Sol, como pessoa jurídica, requereu ao Ministro da Justiça, Assuntos Constitucionais e Religiosos, a alteração da denominação para Associação Brilho do Sol, juntando ao pedido estatutos da sua constituição.

Apreciado o processo verifica-se que

se trata de uma associação que prossegue fins lícitos, determinados e legalmente possíveis cujo acto de constituição e os estatutos da mesma cumprem o escopo e os requisitos exigidos por lei, portanto, nada obstando a sua alteração.

Nestes termos, ao abrigo do disposto nos n.os 1 e 2 do artigo 7 da Lei n.º 8/91, de 18 de Julho, é deferido o pedido de alteração da denominação Associação Nascer do sol, para Associação Brilho do Sol.

Ministério da Justiça, Assuntos Constitucionais e Religiosos, em Maputo, 26 de Julho de 2018. — O Ministro, *Joaquim Veríssimo.*

Direcção Nacional dos Registos e Notariado

DESPACHO

Nos termos do artigo 362 do Código do Registo Civil, é concedida autorização à senhora Amélia Marlone Francisco Gerente Sixpence, a efectuar a mudança do seu nome para passar a usar o nome completo de Marlon Amélia Francisco Gerente Sixpence.

Direcção Nacional dos Registos e Notariado, em Maputo, 19 de Dezembro de 2018. — A Directora Nacional Adjunta, *Fátima J.Achá Baronet.*

Governo do Distrito de Mopeia

DESPACHO

Um grupo de cidadãos da Associação Juvenil para Ajuda à Segurança Alimentar e Nutricional da Zambézia, localizada na localidade de Lualua, Posto Administrativo de Campo, Distrito de Mopeia, Província da Zambézia requereu ao Governo do Distrito de Mopeia o seu reconhecimento como pessoa jurídica, juntando ao pedido os respectivos estatutos de constituição.

Apreciados os documentos submetidos verifica-se que se trata de uma associação de carácter agro-pecuária, que prossegue fins lícitos, não lucrativos, determinados e legalmente possíveis e que o acto de Constituição e os estatutos da mesma cumprem o escopo e os requisitos exigidos por lei, nada obstando ao seu reconhecimento.

Os órgãos sociais da referida associação, eleitos por período de 5 anos renováveis um única vez, são as seguintes: Conselho de Direcção, Conselho Fiscal e Mesa de Assembleia Geral.

Nestes termos e nos dispostos no artigo 5 da Lei n.º 2/2006, de 3 de Maio, vai devidamente reconhecida como pessoa colectiva a Assembleia da associação de carácter agro-pecuária.

Firm registry (BdR3)

Bureau Político do CC do Partido Frelimo

É a seguinte a composição do Bureau Político do Comité Central do Partido Frelimo, eleito na I Sessão do CC, eleito:

1 — Samora Moisés Machel; 2 — Marcelino dos Santos; 3 — Joaquim Alberto Chissano; 4 — Alberto Joaquim Chipande; 5 — Armando Emílio Guebuza; 6 — Jorge Rebelo; 7 — Mariano de Araújo Matsinhe; 8 — Sebastião Marcos Mabote; 9 — Jacinto Soares Veloso; 10 — Mário da Graça Machungo; 11 — José Óscar Monteiro.

Polit Bureau Announcement

Panel data

Construct individual-level panel, 1985-2019, 5 year periods:

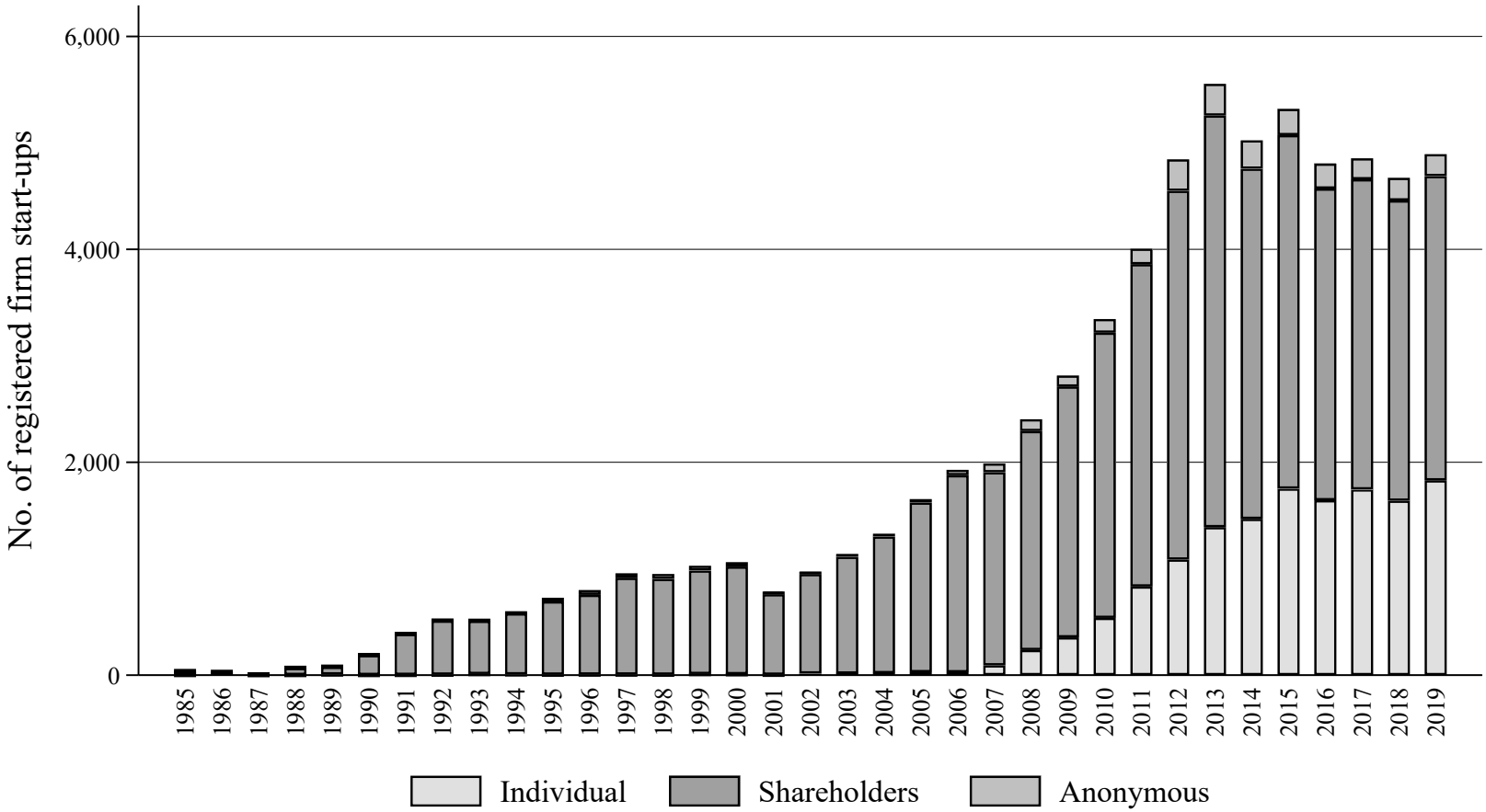
1. Firm registry : all named beneficial owners of companies
2. Archives + yearbooks: executive or political officers

Unique observations:

	(a) Company owners				(b) PEPs				
Period	Sole	Joint	Anon.	Any	<1985	≥ 1985	All	(a) & (b)	Total
1985	12	1,696	37	1,736	149	258	278	7	121,412
1990	40	7,200	299	7,434	149	355	374	58	121,412
1995	73	16,497	635	16,966	149	380	399	89	121,412
2000	147	27,571	1,144	28,416	149	508	526	127	121,412
2005	1,287	46,632	1,648	48,459	149	541	559	164	121,412
2010	7,109	73,267	2,362	79,220	149	582	599	200	121,412
2015	13,026	91,724	2,586	101,470	149	728	744	244	121,412

Note: individuals defined here as PEPs during and after holding office (kind of permanent treatment).

New firms per year, by type



Frequency of individuals in each PEP category

Type of office	$\leq$1989	'90-94	'95-99	'00-04	'05-09	'10-14	'15-19	All
Political Bureau	38	43	48	55	61	59	61	79
Central Committee	399	487	410	422	426	332	480	757
Minister	41	52	53	55	65	68	63	151
Vice-Minister	13	13	25	27	28	26	33	87
Governor	14	12	14	21	25	25	22	60
Any office	416	512	448	465	481	389	529	882

Outcomes

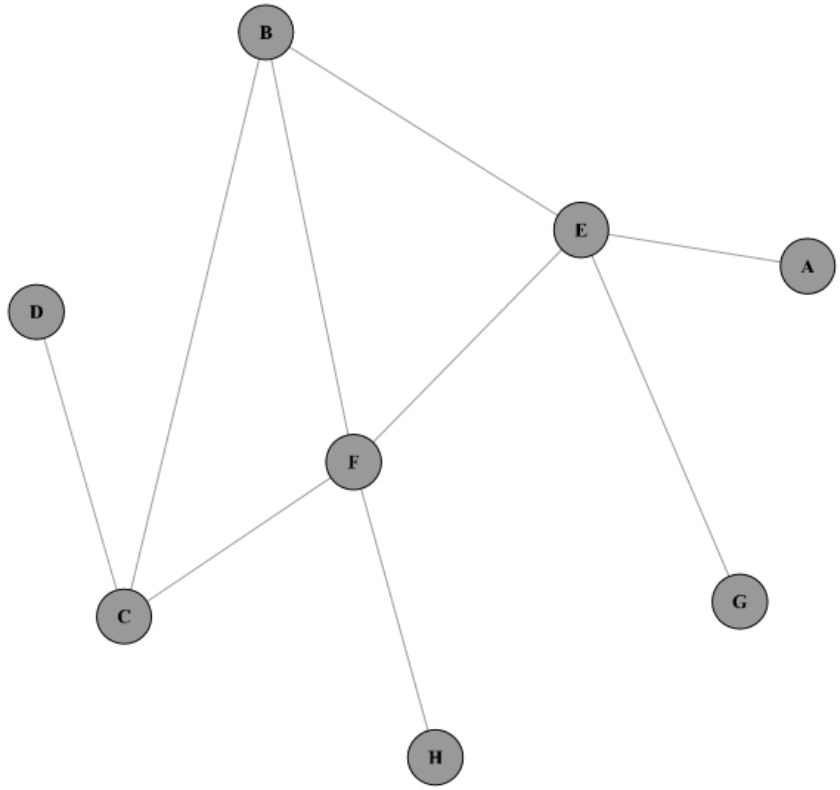
Various outcomes used to quantify individual strength/influence within the network of business owners:

1. Number of companies (split by type)
2. Network centrality:
   - Godfather centrality (brokerage capital)
   - Degree centrality (number of connections)
   - Decay centrality (access to information)

To assist interpretation, all outcomes transformed using inverse hyperbolic sine transform.

Missing values set to zero $\rightarrow$ balanced panel.

Centrality example



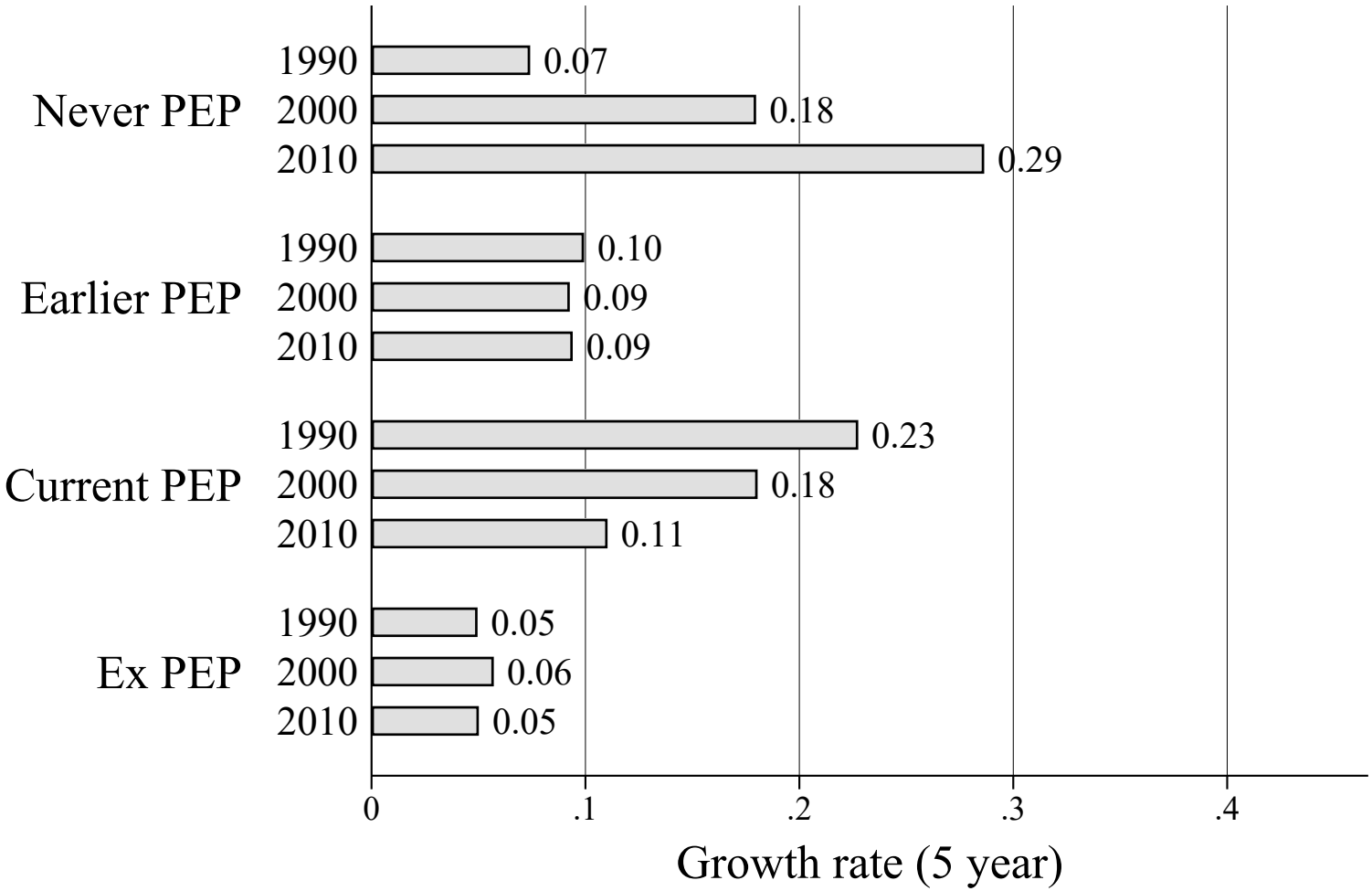
Node	Degree	Godf.	Decay
A	0.14	0	1.50
B	0.43	1	2.50
C	0.43	2	2.25
D	0.14	0	1.25
E	0.57	5	2.62
F	0.57	4	2.75
G	0.14	0	1.50
H	0.14	0	1.62

Changes in centrality for an individual reflect: (i) number of companies owned **AND** (ii) their network position ...

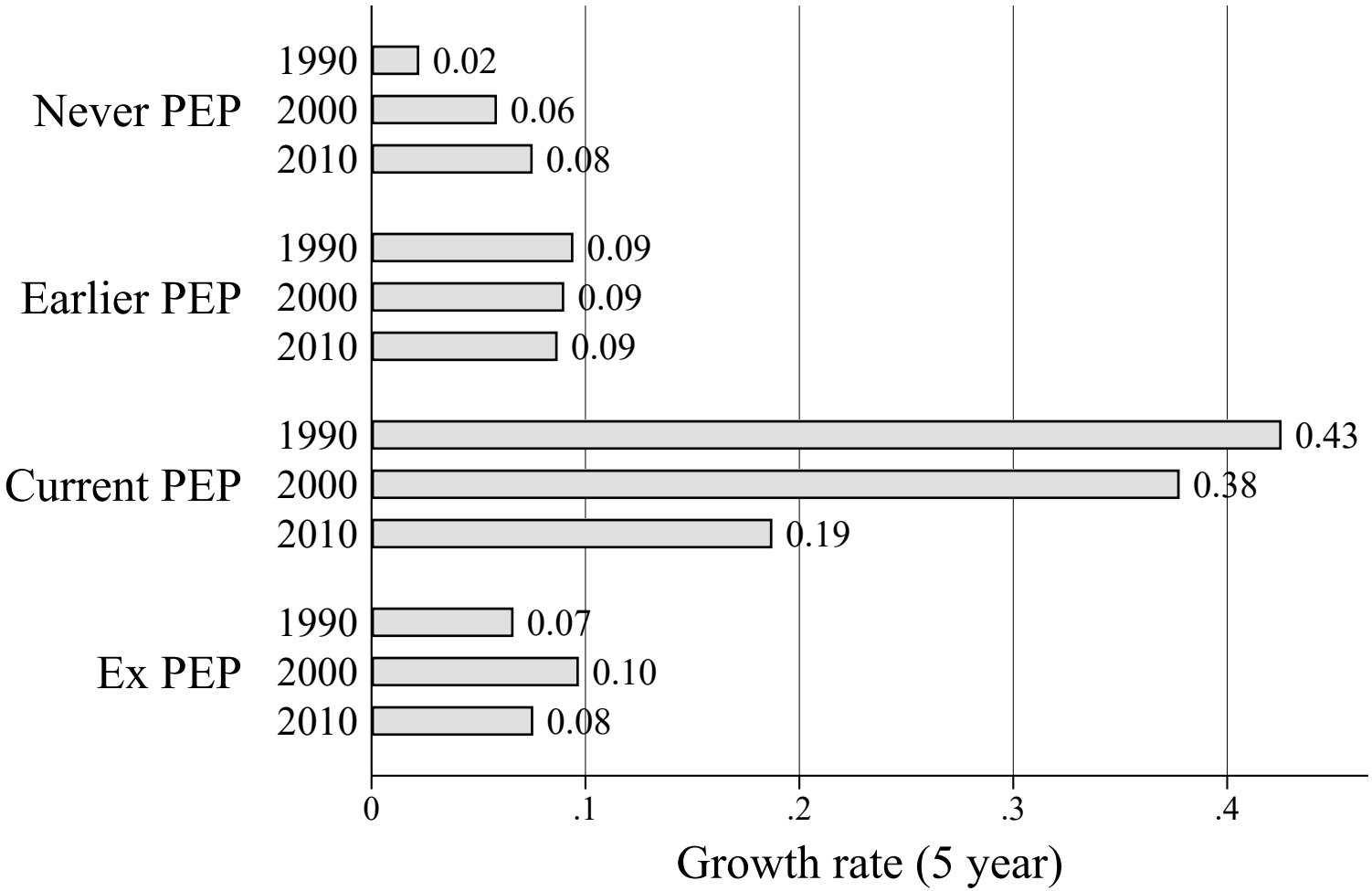
$\Longrightarrow$ centrality can increase through links of business associates

$\Longrightarrow$ centrality may not increase if number of companies increases

Changes in number of companies



Changes in Godfather centrality



(4) Empirical strategy

Empirical strategy

General model (ignoring time-varying controls):

$$\Delta y_{it} = \alpha_i + \gamma_t + (\delta - 1) y_{it-1} + \beta \mathrm{PEP}_{it} + \varepsilon_{it}$$

α_i	individual FEs
γ_t	time FEs
δ	state dependence, selection on prior outcome
β	treatment effect of interest

Identification options:

1. Under assumption $\delta \equiv 1$, conventional two-way FE model
2. Otherwise, lagged outcome (LO) model *without* unit FEs

   ... lagged outcomes implicitly incorporate $\alpha_i + \varepsilon_{it-1}$

FE + LO expected to bracket the effect of interest (Guryan, 2001)

Control group

Pertinent issue : **what is the relevant control group**?

PEPs are not picked randomly from the pool of (potential) business owners ... and overlap between firm owners and PEPs is small (< 1% of business owners ever become PEPs).

To focus on more informative comparisons we estimate propensity to become a PEP in each period, then apply:

- Inverse Probability Weights
- Matching weights (closest matches only)

We further restrict the sample in two ways:

- Exclude all individuals that never are/become a PEP
- Switchers only (controls are future PEPs)

Additional details

Limited information available at the individual-level.

We control for:

- Prior business activity (dummy)
- Non-business entries in the register (e.g., non-profit)
- Alterations to the registry
- Year by PEP-type FEs (pre-1985 PEP $\times$ post-1985 PEP)
- Period *after* holding office (split treatment effect)

For lagged outcome model we include time-invariant effects:

- Gender (approximated from first names)
- Lawyer (current members of *Ordem dos Advogados*)
- Status before 1985 (if PEP, no. companies etc.)

Standard errors clustered at family name $\times$ year level.

(5) Results

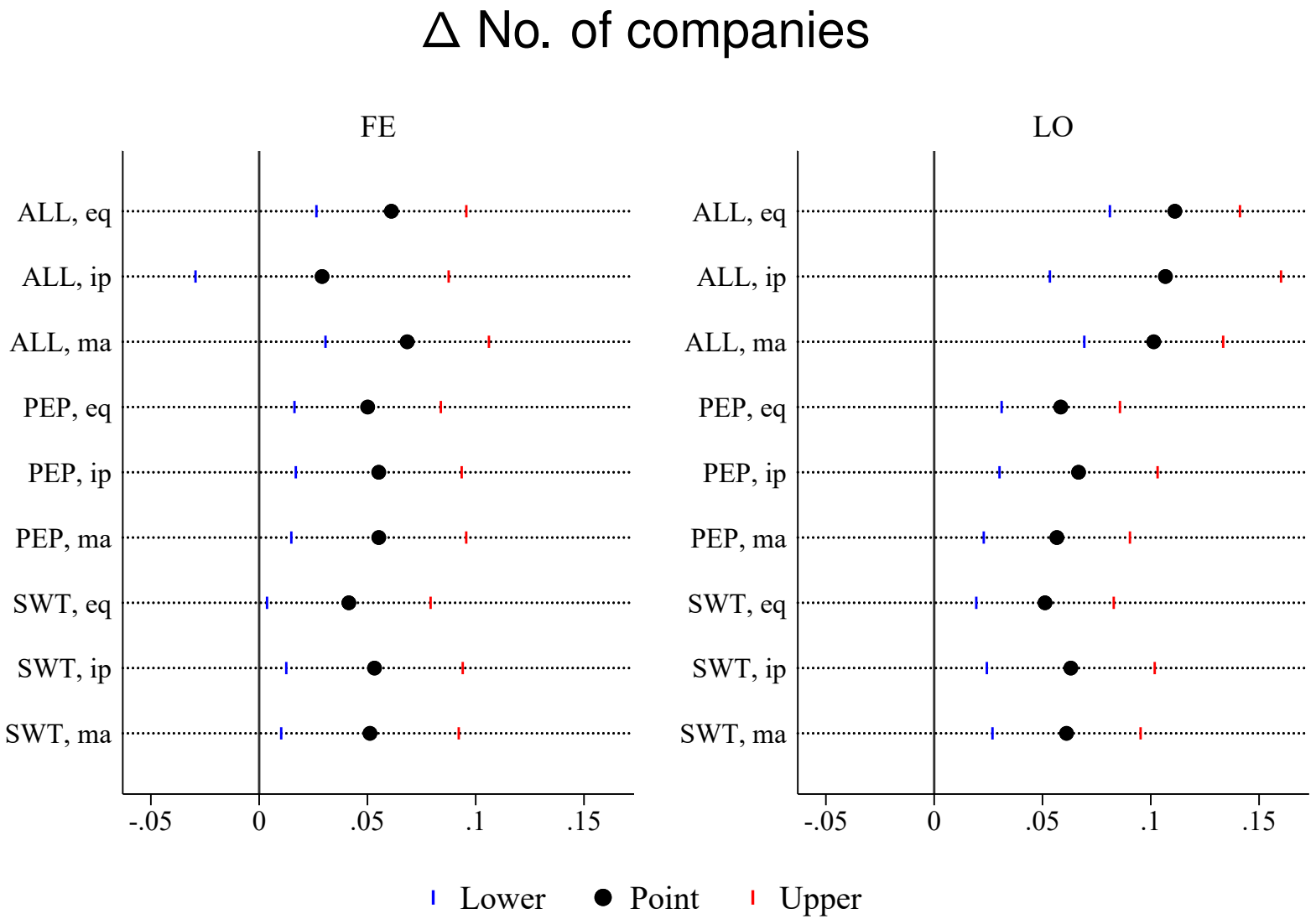
△ number of companies, full sample

Estimator →	(I) Lagged outcome				(II) Fixed effects			
	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
(i) Equal weights:								
Holds office	-0.06***	-0.08***	0.06***	0.11***	-0.16***	-0.31***	0.07***	0.06***
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Left office				-0.12***				-0.04***
				(0.01)				(0.01)
Female		-0.01***	-0.01***	-0.01***				
		(0.00)	(0.00)	(0.00)				
Constant	0.26***	0.27***	0.27***	0.27***	0.18***	0.36***	0.36***	0.36***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Obs.	728,472	728,472	728,472	728,472	728,472	728,472	728,472	728,472
RMSE	0.35	0.32	0.32	0.32	0.40	0.31	0.31	0.31
(ii) Inverse probability weights:								
Holds office	0.04*	0.05**	0.09***	0.11***	-0.02	-0.07***	0.07***	0.03
	(0.02)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)
Left office				-0.10***				-0.10**
				(0.02)				(0.05)
Female		-0.04*	-0.04*	-0.04*				
		(0.02)	(0.02)	(0.02)				
Constant	0.13***	0.12***	0.10***	0.11***	0.16***	0.34***	0.29***	0.34***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)	(0.03)
Obs.	728,472	728,472	728,472	728,472	728,472	728,472	728,472	728,472
RMSE	0.37	0.34	0.34	0.33	0.32	0.26	0.25	0.25
Yr & PEP-type FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Yr × PEP-type FEs	No	No	Yes	Yes	No	No	Yes	Yes

△ number of companies, PEP sample

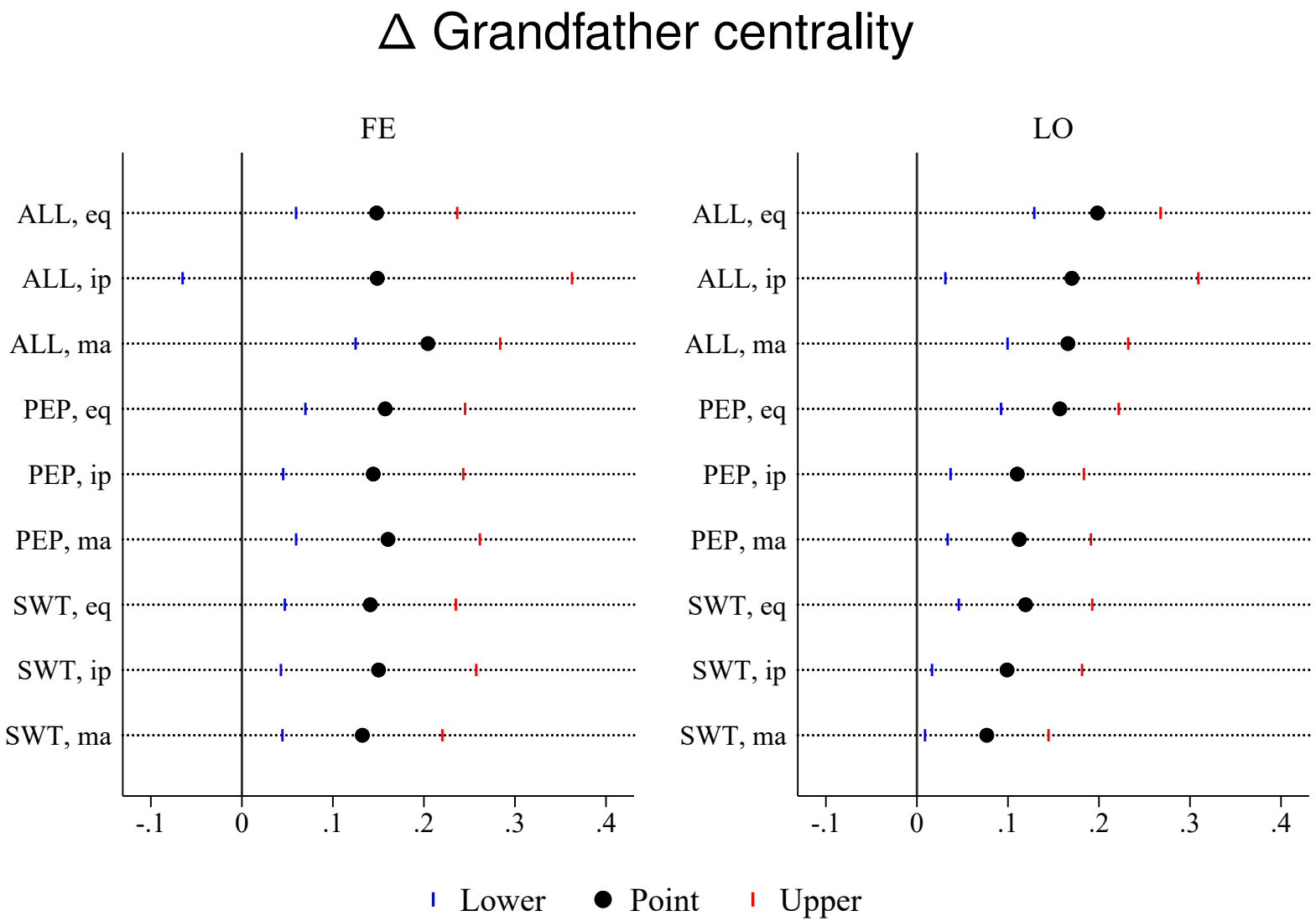
Estimator →	(I) Lagged outcome				(II) Fixed effects			
	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
(i) Equal weights:								
Holds office	0.03**	0.03***	0.03**	0.06***	0.05**	0.06***	0.06***	0.05***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
Left office				-0.08***				-0.04**
				(0.01)				(0.01)
Female		-0.02**	-0.02**	-0.03***				
		(0.01)	(0.01)	(0.01)				
Constant	0.07***	0.05***	0.05***	0.07***	0.07***	0.16***	0.16***	0.18***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Obs.	4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464
RMSE	0.32	0.28	0.28	0.28	0.30	0.26	0.26	0.25
(ii) Inverse probability weights:								
Holds office	0.04**	0.04***	0.04***	0.07***	0.07***	0.07***	0.07***	0.06***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Left office				-0.07***				-0.05***
				(0.02)				(0.02)
Female		-0.03*	-0.03*	-0.03**				
		(0.01)	(0.01)	(0.01)				
Constant	0.06***	0.05***	0.05***	0.06***	0.06***	0.15***	0.16***	0.19***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
Obs.	4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464
RMSE	0.33	0.30	0.30	0.30	0.31	0.26	0.26	0.26
Yr & PEP-type FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Yr × PEP-type FEs	No	No	Yes	Yes	No	No	Yes	Yes

Current PEP by sample, weight & estimator



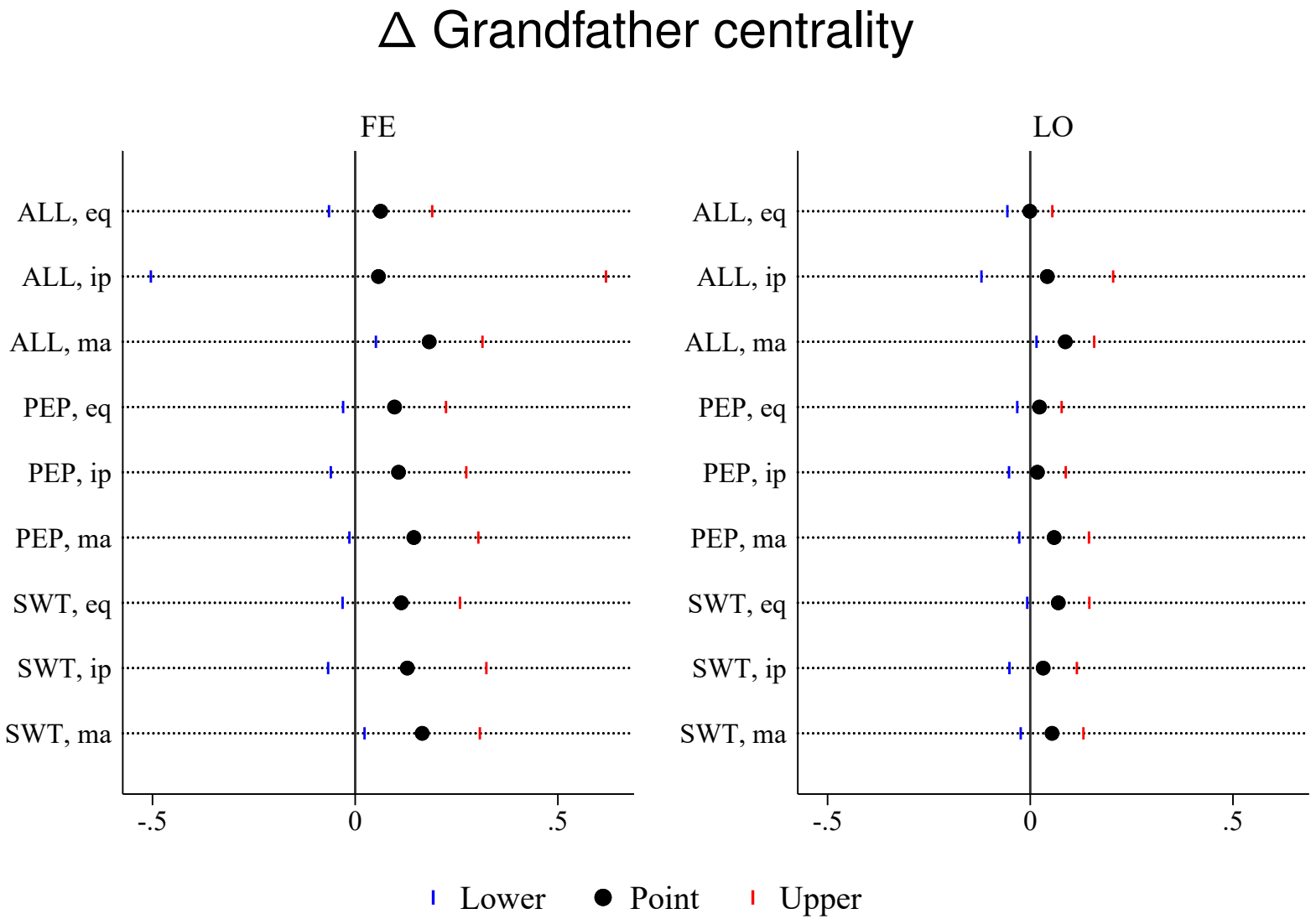
Graphs by estimator

Current PEP by sample, weight & estimator



Graphs by estimator

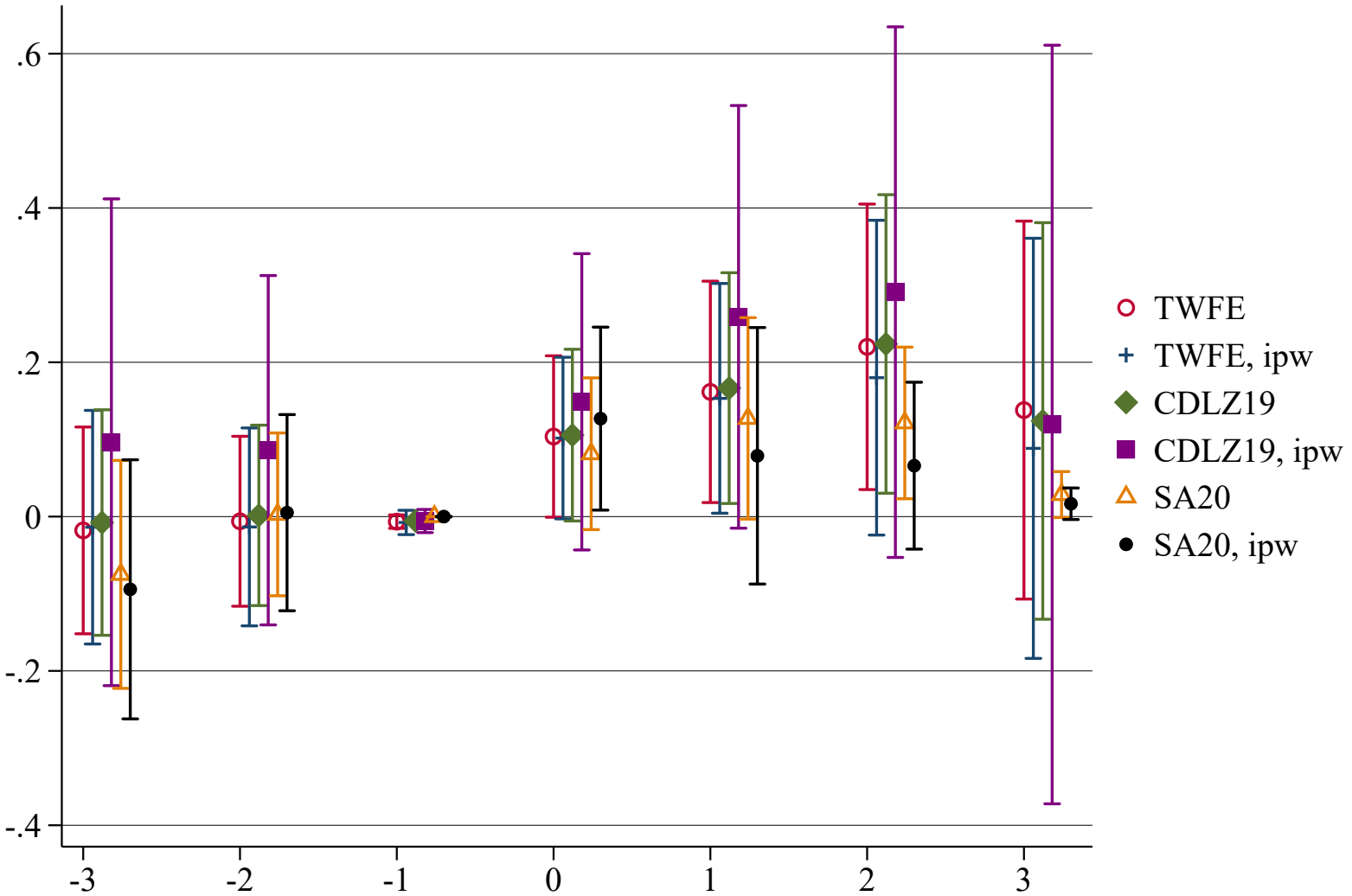
ex-PEP by sample, weight & estimator



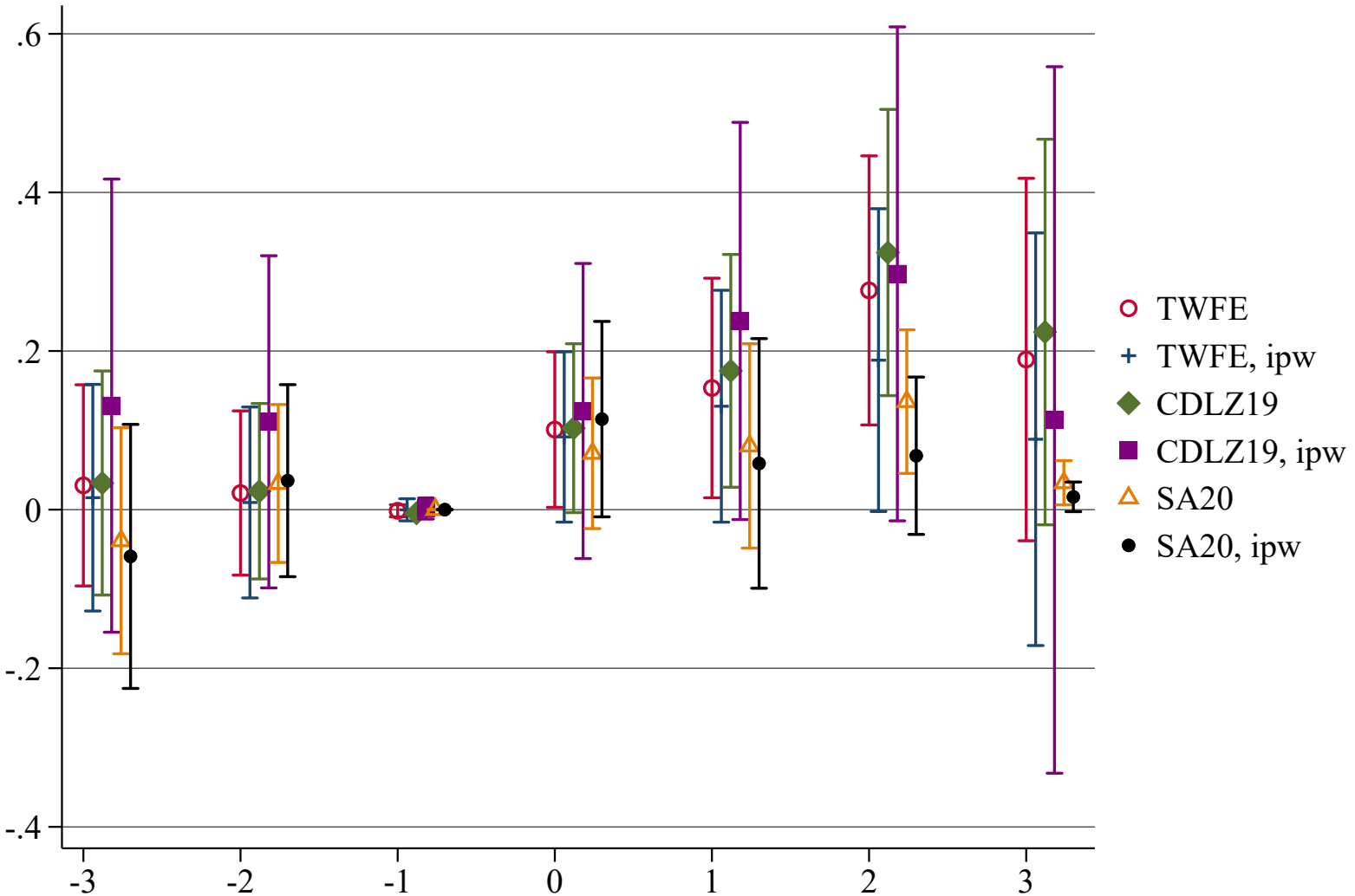
Graphs by estimator

(6) Event study

△ Grandfather centrality, FE estimator



△ Grandfather centrality, LO estimator



(7) Extensions

Results split by PEP & company type (LO model)

		(I) Legal form			(II) Named objective		
	All	Sole	Joint	Anon	Trade	Fin.	Mining
(a) *Inverse probability weighted PEPs*:							
Party PEP	0.04**	-0.00	0.02	0.01	0.01	0.00	0.00
	(0.02)	(0.00)	(0.02)	(0.01)	(0.01)	(0.00)	(0.00)
Party PEP (after)	-0.04***	0.01	-0.03**	-0.01	-0.01	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)
Executive PEP	0.14***	0.00	0.12***	0.00	0.03**	-0.01**	0.00
	(0.04)	(0.01)	(0.04)	(0.01)	(0.02)	(0.00)	(0.00)
Executive PEP (after)	-0.09**	-0.01	-0.08**	0.01	-0.05***	0.01	0.00
	(0.04)	(0.01)	(0.04)	(0.02)	(0.01)	(0.01)	(0.01)
Obs.	4,464	4,464	4,464	4,464	4,464	4,464	4,464
Current diff.	0.11	0.00	0.10	0.01	0.02	0.01	0.00
(prob.)	(0.01)	(0.56)	(0.01)	(0.57)	(0.14)	(0.02)	(0.80)
After diff.	0.06	0.01	0.05	0.01	0.02	0.00	0.00
(prob.)	(0.00)	(0.18)	(0.01)	(0.21)	(0.05)	(0.89)	(0.38)

Collapsed to family names (dynasties)

	All		PEPs		Switchers	
	LO	FE	LO	FE	LO	FE
(a) *No. of companies*:						
Holds office	0.10***	0.09***	0.06***	0.07**	0.05**	0.05*
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)
Left office	-0.13***	-0.04*	-0.08***	-0.04*	-0.06***	-0.05**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Obs.	158,712	158,712	3,534	3,534	2,034	2,034
R^2 (adj.)	0.34	0.26	0.41	0.34	0.43	0.34
RMSE	0.38	0.40	0.35	0.37	0.34	0.36
(b) *Godfather centrality*:						
Holds office	0.15***	0.16***	0.12***	0.15**	0.11**	0.15**
	(0.04)	(0.06)	(0.04)	(0.06)	(0.05)	(0.07)
Left office	-0.15***	-0.04	-0.10***	-0.05	-0.09*	-0.03
	(0.04)	(0.05)	(0.04)	(0.05)	(0.05)	(0.07)
Obs.	158,712	158,712	3,534	3,534	2,034	2,034
R^2 (adj.)	0.13	0.06	0.25	0.13	0.25	0.13
RMSE	0.54	0.56	0.77	0.82	0.76	0.82

(8) Conclusion

Conclusion

What did we do?

- Estimated effect of political exposure on size and strength of individuals' business networks in Mozambique (1985-'19)
- Use firm registry + PEP list $\rightarrow$ individual-level panel
- Outcomes – no. companies, network centrality – capture complex (networked) relations between firms and politicians, as opposed to one-off payments
- Estimation used FE and LO models (bracketing property)
- Applied re-weighting & sample restrictions
- Robustness tests (event study, placebos)
- Extensions to PEP- & firm types, as well as family dynasties

Conclusion

What did we find?

- Preferred estimates from PEP sample with IPW weights (LO and FE results not significantly different)
- Being a PEP associated with 7% faster growth in no. companies and 11% strengthening of Godfather centrality
- Effects on centrality $>>$ effects on no. companies
- Weaker results for former PEPs $\Longrightarrow$ being in power matters
- Weaker results for political PEPs $\Longrightarrow$ exec. power matters
- Results dominated by joint-stock firms, esp. those in trade
- Effects equal or larger at family dynasty level

(9) References

Amore, M.D. and Bennedsen, M. (2013). The value of local political connections in a low-corruption environment. *Journal of Financial Economics*, 110(2):387–402. doi:10.1016/j.jfineco.2013.06.002.

Chen, T. and Kung, J.K.s. (2019). Busting the "Princelings": The campaign against corruption in China's primary land market. *The Quarterly Journal of Economics*, 134(1):185–226.

Della Vigna, S., Durante, R., Knight, B. and La Ferrara, E. (2016). Market-based lobbying: Evidence from advertising spending in Italy. *American Economic Journal: Applied Economics*, 8(1):224–56.

Eggers, A.C. and Hainmueller, J. (2009). MPs for Sale? Returns to Office in Postwar British Politics. *American Political Science Review*, 103(4):513–533. doi:10.1017/S0003055409990190.

Fafchamps, M. and Labonne, J. (2017). Do politicians' relatives get better jobs? Evidence from municipal elections. *The Journal of Law, Economics, and Organization*, 33(2):268–300.

Fisman, R. (2001). Estimating the Value of Political Connections. *American Economic Review*, 91(4):1095–1102. doi:10.1257/aer.91.4.1095.

Fisman, R., Schulz, F. and Vig, V. (2014). The Private Returns to Public Office. *Journal of Political Economy*, 122(4):806–862. doi:10.1086/676334.

Guryan, J. (2001). Does Money Matter? Regression-Discontinuity Estimates from Education Finance Reform in Massachusetts. Working Paper 8269, National Bureau of Economic Research. doi:10.3386/w8269.

Ivanović, V., Kufenko, V., Begović, B., Stanišić, N. and Geloso, V. (2019). Continuity under a different name: The outcome of privatisation in Serbia. *New Political Economy*, 24(2):159–180.

Khwaja, A.I. and Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, 120(4):1371–1411.

Xu, D. and Wu, X. (2021). From political power to personal wealth: Privatization and elite opportunity in post-reform china. *Journal of Contemporary China*, 30(132):993–1013.

(10) Additional material

Main regression results for current PEP

Sample	Weights	(I) No. companies		(II) Godfather cent.		(III) Degree cent.		(IV) Decay cent.	
		LO	FE	LO	FE	LO	FE	LO	FE
All	Equal	0.111	0.061	0.198	0.148	0.232	0.116	0.234	0.123
		(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.017)	(0.000)	(0.016)
		[0.000]	[0.001]	[0.000]	[0.002]	[0.000]	[0.020]	[0.000]	[0.019]
	Inv. Prob.	0.107	0.029	0.170	0.149	0.268	0.322	0.264	0.364
		(0.000)	(0.330)	(0.016)	(0.173)	(0.000)	(0.009)	(0.000)	(0.003)
		[0.000]	[0.330]	[0.019]	[0.175]	[0.000]	[0.012]	[0.000]	[0.004]
	Matched	0.101	0.068	0.166	0.204	0.231	0.191	0.257	0.245
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
		[0.000]	[0.001]	[0.000]	[0.000]	[0.000]	[0.001]	[0.000]	[0.000]
PEPs	Equal	0.058	0.050	0.157	0.157	0.153	0.119	0.168	0.137
		(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.014)	(0.000)	(0.007)
		[0.000]	[0.005]	[0.000]	[0.001]	[0.000]	[0.017]	[0.000]	[0.009]
	Inv. Prob.	0.067	0.055	0.110	0.144	0.167	0.165	0.168	0.173
		(0.000)	(0.005)	(0.003)	(0.004)	(0.000)	(0.004)	(0.000)	(0.003)
		[0.001]	[0.007]	[0.005]	[0.006]	[0.000]	[0.006]	[0.000]	[0.005]
	Matched	0.057	0.055	0.112	0.161	0.142	0.127	0.153	0.131
		(0.001)	(0.007)	(0.005)	(0.002)	(0.001)	(0.027)	(0.001)	(0.029)
		[0.002]	[0.009]	[0.007]	[0.003]	[0.002]	[0.029]	[0.002]	[0.031]
Switchers	Equal	0.051	0.041	0.119	0.141	0.129	0.096	0.145	0.108
		(0.002)	(0.032)	(0.001)	(0.003)	(0.001)	(0.079)	(0.001)	(0.058)
		[0.003]	[0.033]	[0.003]	[0.005]	[0.002]	[0.081]	[0.002]	[0.061]
	Inv. Prob.	0.063	0.053	0.099	0.150	0.161	0.172	0.164	0.179
		(0.001)	(0.010)	(0.019)	(0.006)	(0.001)	(0.005)	(0.001)	(0.005)
		[0.003]	[0.013]	[0.021]	[0.008]	[0.002]	[0.007]	[0.002]	[0.007]
	Matched	0.061	0.051	0.077	0.132	0.156	0.184	0.182	0.222
		(0.000)	(0.014)	(0.027)	(0.003)	(0.000)	(0.001)	(0.000)	(0.000)
		[0.001]	[0.017]	[0.029]	[0.005]	[0.000]	[0.002]	[0.000]	[0.000]