Selection and election of policies

Davide Cipullo
Master's course in Political and Public Economics

Università Cattolica del Sacro Cuore

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Do voters affect or elect policy?

What does theory tell us?

- Median voter models
  - Policy convergence when politicians are office motivated and when politicians are policy motivated
- Meltzer and Richard model
  - Let poorer people vote results in more «left-leaning» policies
- Probabilistic voting models
  - Policy convergence when politicians are office motivated but policy divergence (with some degrees of moderation) when politicians are policy motivated
- Citizen-candidate models
  - Policy divergence: the only position each candidate can credibly commit to is the implementation of her most preferred policy
- Political agency models
  - Elections are a tool to select better quality politicians and to provide politicians with incentives to boost their productivity

Do voters affect or elect policy? Evidence from the US House (Lee, Moretti, and Butler – 2004, QJE)

Introduction

- Research question
  - Does electing a Democratic vs. a Republican candidate affects how the elected representative votes once in the House?
- Empirical challenge
  - Disentangling voters' with parties preferences: more conservative votes are cast by representatives of districts where the median voter is more conservative
  - It is not possible to observe what **would have happened**, in the same district in the same year, had the voters selected a candidate belonging to the party that lost the election

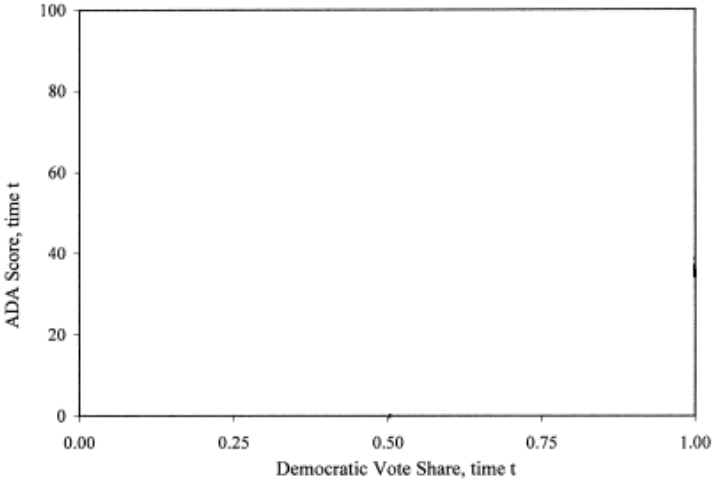
Do voters affect or elect policies? Evidence from the US House (Lee, Moretti, and Butler – 2004, QJE)

Empirical strategy

- Lee, Moretti, and Butler (2004) is the first example of what today is considered as one of the gold standard techniques in political economy: **close elections analysis**
- Idea: even if it is true that more conservative representatives are elected by more conservative voters (and vice-versa) there must be **some districts in which around 50% of citizens are Republican and around 50% of citizens are Democrats**
- In those districts, whether one party just receives one more votes and wins or gets one fewer votes and loses can be assumed to be «as good as random»
- In turn, we can estimate the effect of party affiliation on policy outcome by comparing a (barely) Blue and a (barely) Red district, holding voters' preferences constant

Do voters affect or elect policies? Evidence from the US House (Lee, Moretti, and Butler – 2004, QJE)

Main result



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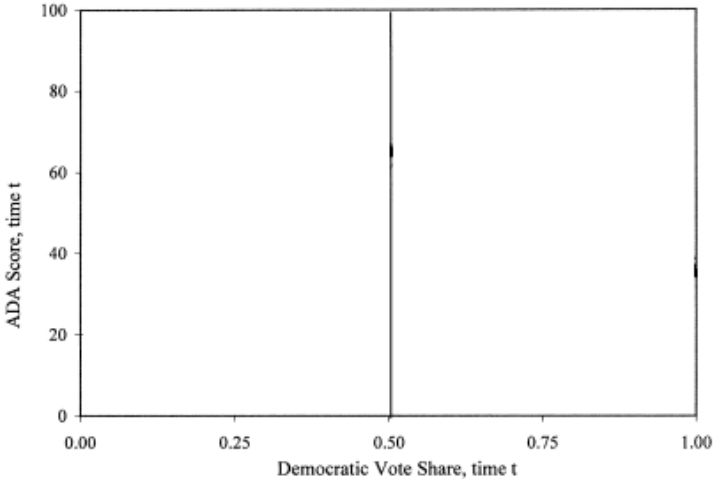

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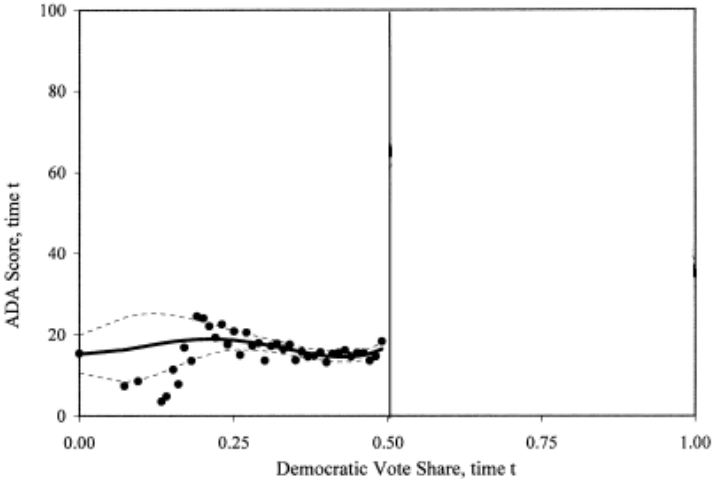

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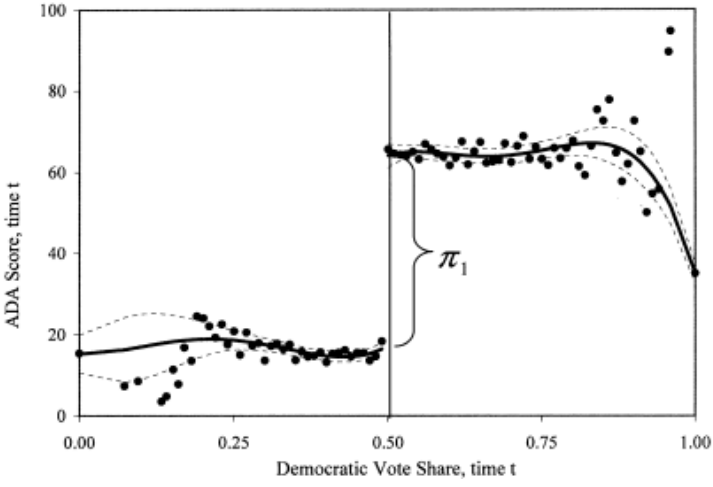


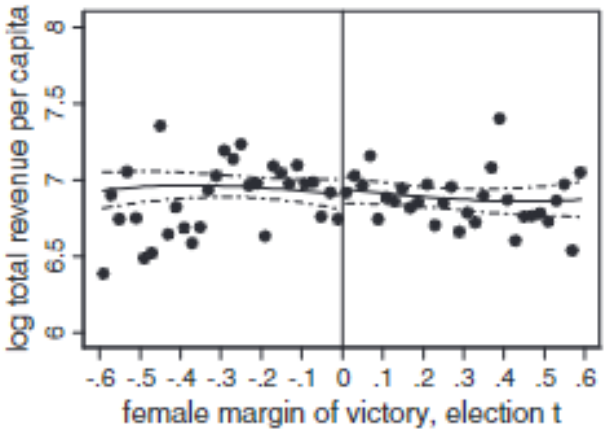
Does gender matter for political leadership? The case of US mayors (Ferreira and Gyourko – 2014, JPubE)

Introduction

- Research question
  - Does electing a female vs. a male mayor affects the policy implemented by the municipality administration?
- Empirical challenge
  - Disentangling voters' with individual politicians' preferences: women might be more likely to be elected by voters that prefer more progressive policies
- Empirical strategy
  - **Close-election Regression-discontinuity resign**

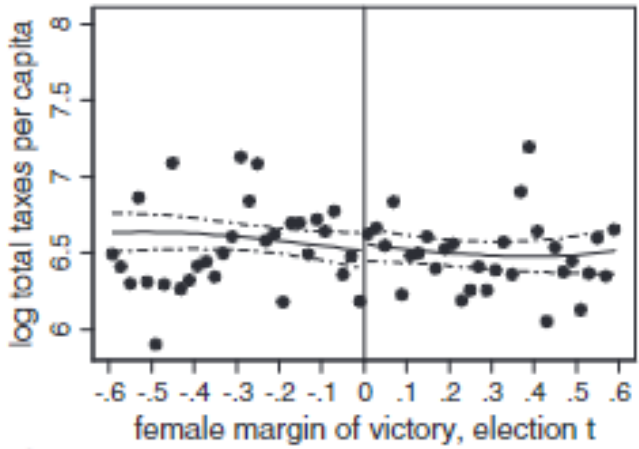
Does gender matter for political leadership? The case of US mayors (Ferreira and Gyourko – 2014, JPubE)

Results 1: Collected revenues do not depend on the mayor's gender



Does gender matter for political leadership? The case of US mayors (Ferreira and Gyourko – 2014, JPubE)

Results 2: Taxes levied do not depend on the mayor's gender



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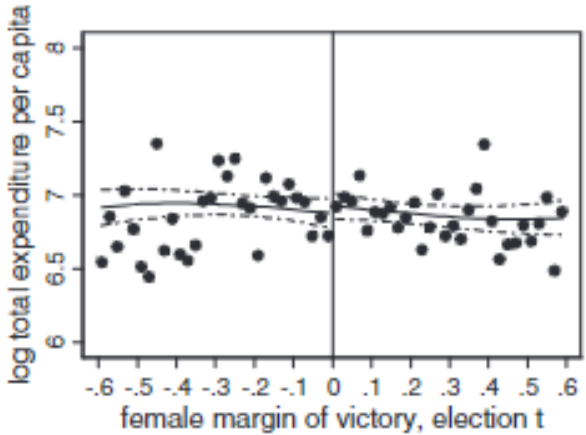
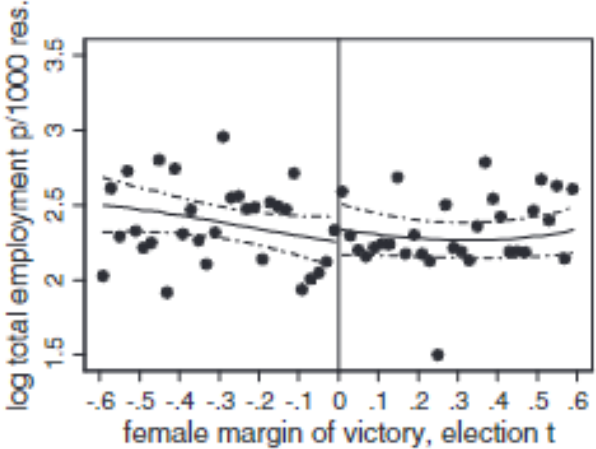
Results 3: Total expenditures do not depend on gender



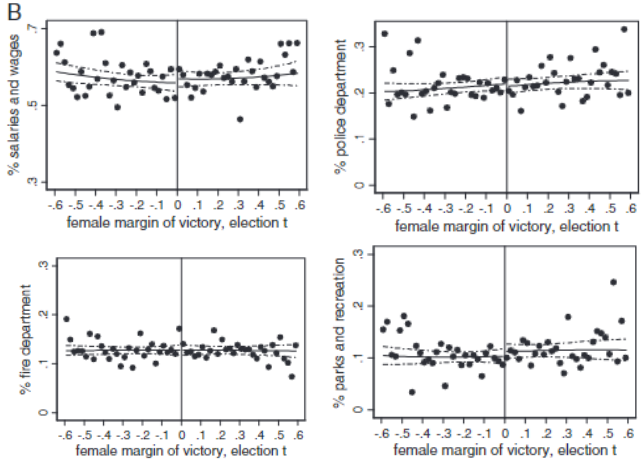
Does gender matter for political leadership? The case of US mayors (Ferreira and Gyourko – 2014, JPubE)

Results 4: Public employment does not depend on the mayor's gender



Does gender matter for political leadership? The case of US mayors (Ferreira and Gyourko – 2014, JPubE)

Results 5: Composition of public spending does not depend on the mayor's gender



Does electoral competition curb party favoritism? (Curto-Grau, Solé-Ollé, and Sorribas-Navarro – 2018, AEJ: Applied Econ)

Introduction

- Focus on allocation of transfers to municipalities in Spain
- Workhorse theoretical models (e.g., probabilistic voting) predict that central government allocates resources to local units based on population; density of swing voters; how voters living in that unit react to transfers received
- It should not matter whether the same party that rules at the upper level is also in power at the local level or not

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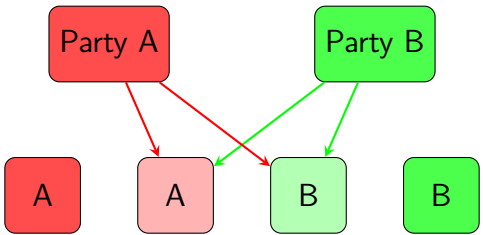
Introduction



Does electoral competition curb party favoritism? (Curto-Grau, Solé-Ollé, and Sorribas-Navarro – 2018, AEJ: Applied Econ)

Empirical strategy

- Compare municipalities in which the mayor is (barely) politically aligned with the regional government and municipalities in which the mayor is (barely) not politically aligned with the regional government
- Additional empirical challenges:
  (1) Spain has a multi-party system $\rightarrow$ not necessarily winner receives $>50\%$ and there might be more than 1 loser party
  (2) Spain has a PR system at all election levels $\rightarrow$ not necessarily one more vote results in one more seats
  (3) Government coalitions might be in power
  (4) Mayors are not directly elected by voters

Does electoral competition curb party favoritism? (Curto-Grau, Solé-Ollé, and Sorribas-Navarro – 2018, AEJ: Applied Econ)

Challenge 1: Multi-party system

- When only two parties run, the **sum of their vote shares is 1**
  - Moving 2 percent of the electorate swings a 51-49 majority to 49-51
- With more than 2 parties, this is not true
  - Moving 2 percent of the electorate can swing a 45-43-12 election to a 43-45-12 election but may also result in a 43-43-14
- Solution: **simulate counterfactual elections** in which each extra votes received by most voted party is re-assigned at random until a change in rank occurs
  - Notice: probability of assigning a vote to each party is assumed to be proportional to vote share received in the actual election

Does electoral competition curb party favoritism? (Curto-Grau, Solé-Ollé, and Sorribas-Navarro – 2018, AEJ: Applied Econ)

Challenge 2: Proportional election system

- In majoritarian elections, receiving more votes than the other candidates is a **sufficient condition** to win
- This is not necessarily true in PR system
  - For instance, one party may receive more votes but the same number of seats as another
- Solution: define the running variable to measure the **distance to a change in seat majority** (rather than being the distance to a change in vote share majority)
  - Need to take into account the electoral system specifity (allocation rule, entry threshold) and calculate both the actual and any counterfactual seat distributions

Does electoral competition curb party favoritism? (Curto-Grau, Solé-Ollé, and Sorribas-Navarro – 2018, AEJ: Applied Econ)

Challenge 3: Government coalitions

- In Spain it is quite common that a **coalition of parties** supports the regional government
- Parties supporting the regional government run **separately** in local elections
  - Solution: calculate the **aggregate share of seats** assigned to the regional government coalition and define alignment to be equal 1 if such coalition holds the majority (rather than a single party)

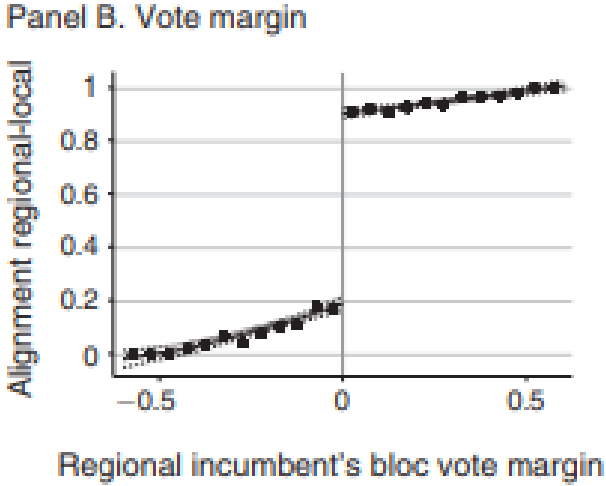
Does electoral competition curb party favoritism? (Curto-Grau, Solé-Ollé, and Sorribas-Navarro – 2018, AEJ: Applied Econ)

Challenge 4: Mayors are not directly elected

- Likewise parliamentary democracies (and pre-1993 Italian municipalities), mayors in Spain are **not directly elected by voters**
  - Voters elect **members of the council** who, in turn, elect the mayor
- In the bargaining stage, it may happen that the **mayor does not belong to the most voted** party/coalition
  - There is no sharp treatment: moving alignment council from 0 to 1 does not move from 0 to 1 the probability that mayor is aligned
- Solution: Fuzzy-RD $\rightarrow$ use alignment of the majority in congress as an **instrument** for the mayor's alignment

Does electoral competition curb party favoritism? (Curto-Grau, Solé-Ollé, and Sorribas-Navarro – 2018, AEJ: Applied Econ)

Results: First stage



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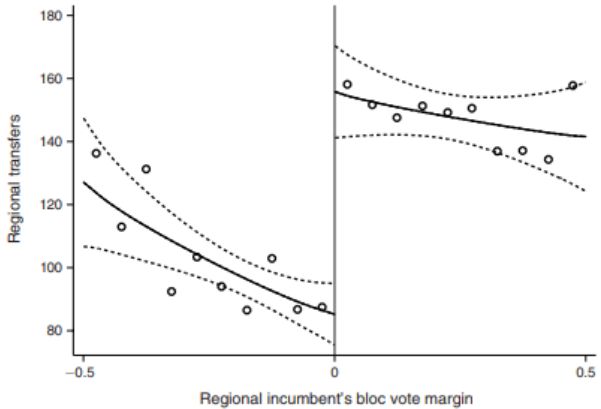
Results: Reduced form



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Results: 2SLS

TABLE 1—AVERAGE EFFECT OF PARTISAN ALIGNMENT ON CAPITAL TRANSFERS

	RD				
	Global (1)	Local (2)	Local (3)	Local (4)	Local (5)
Panel A. Second stage (dependent variable: capital transfers per capita)					
Alignment	98.06	94.79	102.57	86.99	71.70
	(15.71)	(13.72)	(18.65)	(23.40)	(31.40)
	[0.000]	[0.000]	[0.001]	[0.000]	[0.049]
Polynomial order	2	1	1	1	1
Bandwidth (percent)	100	$2h^* = 38.6$	$h^* = 19.3$	$h^*/2 = 9.65$	$h^*/4 = 4.8$
Observations	6,050	4,410	2,576	1,383	683

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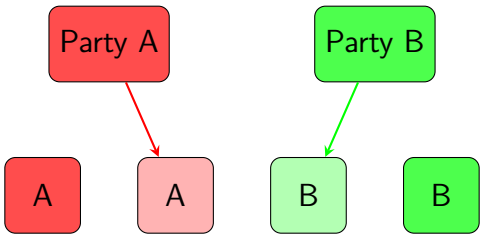
Results



Voting technology, political responsiveness, and infant health: Evidence from Brazil (Fujiwara – 2015, Econometrica)

Introduction

- Research question
  - Does reducing the difficulty of casting a vote for undereducated people affect policy outcomes and children health?
- Empirical challenge
  - The decision to reduce the difficulty of casting a vote (disproportionately for undereducated people) can be endogenous to voters' preferences
- Empirical strategies
  (i) Regression-discontinuity design based on a population threshold
  (ii) Difference-in-differences

Voting technology, political responsiveness, and infant health: Evidence from Brazil (Fujiwara – 2015, Econometrica)

Background

- During the 1990s, 23 percent of Brazilian population was illiterate
- Originally a person had to write manually the name of the candidate and read written instruction
- In 1998, electronic voting was introduced in state elections, only for municipalities with more than 40500 inhabitants
- In 1992, electronic voting was extended to all municipalities

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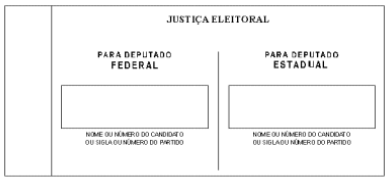
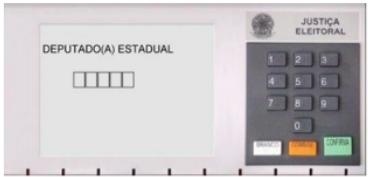
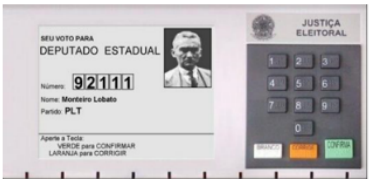


Paper ballot

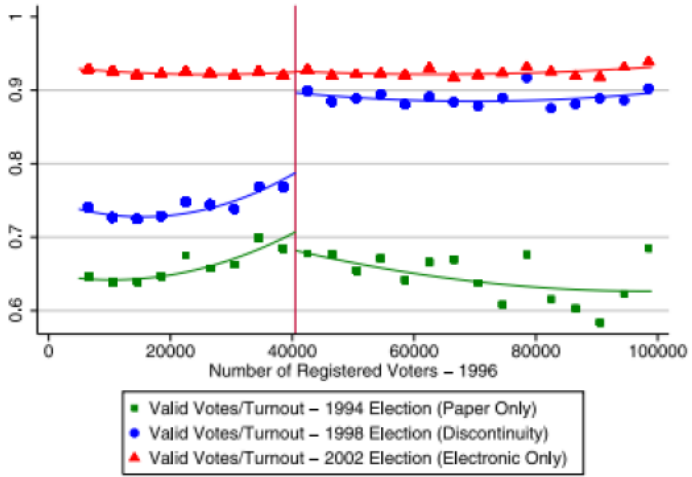


Initial screen of the voting technology



Voting technology, political responsiveness, and infant health: Evidence from Brazil (Fujiwara – 2015, Econometrica)

RD result



Voting technology, political responsiveness, and infant health: Evidence from Brazil (Fujiwara – 2015, Econometrica)

RD result

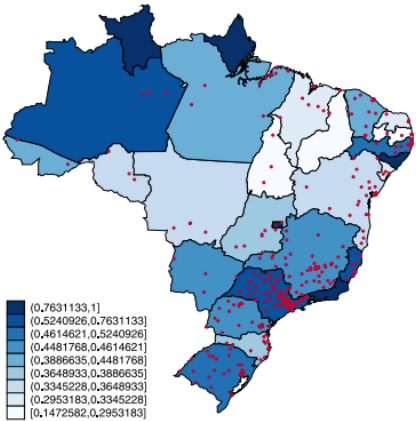
TABLE III

TREATMENT EFFECTS OF ELECTRONIC VOTING, BY ILLITERACY RATE[a]

	Pre-Treat. Mean	IKBW {Obs.}	(1)	(2)	(3)	(4)
Panel A: Municipalities With Above-Median Illiteracy						
Valid Votes/Turnout	0.759	11,873	0.147	0.150	0.152	0.176
	(0.017)		(0.019)	(0.015)	(0.020)	(0.031)
N	—	—	116	279	103	49
Panel B: Municipalities With Below-Median Illiteracy						
Valid Votes/Turnout	0.799	11,873	0.092	0.113	0.096	0.089
	(0.018)		(0.020)	(0.016)	(0.022)	(0.032)
N	—	—	149	279	126	67
Test of Equality in TEs (p-Value)	—	—	0.049	0.090	0.056	0.054
Bandwidth	—	—	IKBW	20,000	10,000	5000

Voting technology, political responsiveness, and infant health: Evidence from Brazil (Fujiwara – 2015, Econometrica)

Heterogeneity by illiteracy rate



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Effect of electronic voting on policy outcomes

- States with an higher share of voters treated by electronic voting in 1998 experienced an higher growth rate of helthcare spending (% of total) in the 1998–2002 period (relative to 1994–1998 growth) than states with a lower share of treated voters
- In turn, the share of low-weight new births decreased more in states with an higher share of treated individuals than in states with a lower share of treated individuals

Do better paid politicians perform better? Disentangling incentives from selection (Gagliarducci and Nannicini – 2013, JEEA)

Introduction

- We might expect that raising politicians' wage might increase their performance once in office through an **incentive effect** and a **selection effect**
  - Selection effect: the political career becomes more attractive to better quality individuals
  - Incentive effect: the cost of losing the next election increases and the incumbent politician exerts more effort to avoid being unseated
- You will see these channels more in details with Prof. Bordignon towards the end of the course
- Today: look at a clever way of separating the selection and the incentive components of a wage increase empirically

Do better paid politicians perform better? Disentangling incentives from selection (Gagliarducci and Nannicini – 2013, JEEA)

Introduction

- Several empirical challenges
  (1) The decision to raise/reduce wage is endogenous to the incumbent politician's quality and expectation about future election results
  (2) Separating the selection and the incentive components of a wage increase is often **unfeasible in practice** and researchers are forced to limit themselves to suggestive evidence
- Solutions
  (1) Exploit an exogenous **wage increase due to a population threshold**
  (2) Exploit the presence of **term limits** (incumbents cannot run for a third consecutive term)

Do better paid politicians perform better? Disentangling incentives from selection (Gagliarducci and Nannicini – 2013, JEEA)

Background

TABLE 1. Legislative thresholds for Italian municipalities.

Population	Wage Mayor	Wage Ex. Com.	Fee Council	Ex. Com. Size	Council Size	Electoral Rule	Neighbor. Councils	Hospital/ Health
Below 1,000	1,291	15%	18	4	12	single	no	no/no
1,000–3,000	1,446	20%	18	4	12	single	no	no/no
3,000–5,000	2,169	20%	18	4	16	single	no	no/no
5,000–10,000	2,789	50%	18	4	16	single	no	no/no
10,000–15,000	3,099	55%	22	6	20	single	no	no/no
15,000–20,000	3,099	55%	22	6	20	runoff	no	no/no
20,000–30,000	3,099	55%	22	6	20	runoff	no	yes/no
30,000–50,000	3,460	55%	36	6	30	runoff	allowed	yes/no
50,000–60,000	4,132	75%	36	6	30	runoff	allowed	yes/no
60,000–100,000	4,132	75%	36	6	30	runoff	allowed	yes/yes
100,000–250,000	5,010	75%	36	10	40	runoff	yes	yes/yes
250,000–500,000	5,784	75%	36	12	46	runoff	yes	yes/yes
Above 500,000	7,798	75%	36	14-16	50-60	runoff	yes	yes/yes

Do better paid politicians perform better? Disentangling incentives from selection (Gagliarducci and Nannicini – 2013, JEEA)

RD effect on selection of crossing 5,000 residents

TABLE 3. Candidates and mayor selection, RDD estimates.

Population	Female	Age	Years school	Not employed	Entrepreneurs	White collar	Blue collar
				All candidates			
Effect	0.005	−0.903	0.905***	−0.025	−0.037	0.082**	−0.018
	(0.018)	(0.587)	(0.279)	(0.025)	(0.028)	(0.039)	(0.025)
Δ	1,300	1,700	900	900	1,700	1,300	1,400
Obs.	4,805	6,405	3,295	3,295	6,405	4,805	5,191
				Mayors			
Effect	−0.014	−0.847	0.879**	−0.007	−0.023	0.074	−0.035
	(0.022)	(0.822)	(0.346)	(0.033)	(0.046)	(0.046)	(0.035)
Δ	1,700	1,700	1,100	1,000	1,400	1,700	1,400
Obs.	2,971	2,971	1,905	1,738	2,396	2,971	2,396

Do better paid politicians perform better? Disentangling incentives from selection (Gagliarducci and Nannicini – 2013, JEEA)

RD effect on fiscal policy

TABLE 4. Budget components per capita, RDD estimates.

		Expenditure				Revenues			
	Deficit	Total	Investments	Personnel and debt	Goods and services	Total	Transfers	Taxes	Tariffs
A. Overall (no term limit)	−2.121	−165.318**	−65.748*	−14.011	−86.455***	−223.187***	−17.272	−23.355	−121.854***
	(8.041)	(65.940)	(38.315)	(14.502)	(25.596)	(67.977)	(65.748)	(15.722)	(42.225)
B. Composition (term limit)	4.635	−202.773***	−65.631	−23.398	−95.301***	−243.303***	−46.472	−47.406**	−116.855***
	(4.859)	(65.834)	(42.787)	(19.497)	(22.781)	(81.588)	(53.795)	(19.882)	(44.992)
C. Re-election (A − B)	−6.755	37.455	−0.117	9.388	8.846	20.116	29.200	7.155	−4.999
	(8.478)	(54.759)	(36.776)	(16.300)	(15.357)	(50.558)	(63.103)	(8.787)	(19.529)
Δ	1,300	1,500	1,700	1,400	1,500	1,000	1,400	1,700	1,100
Obs.	880	1,016	1,168	950	1,016	696	950	758	758

- Caveat: is a mayor in her second term in office equal to herself during the previous term, apart from re-election incentives?
- Caveat: is it really the case that a term-limited mayor does not have any stakes in the next election?