Gender Equality in Political Decision-Making

Paola Profeta, Bocconi University and Axa Research Lab on Gender Equality, Dondena

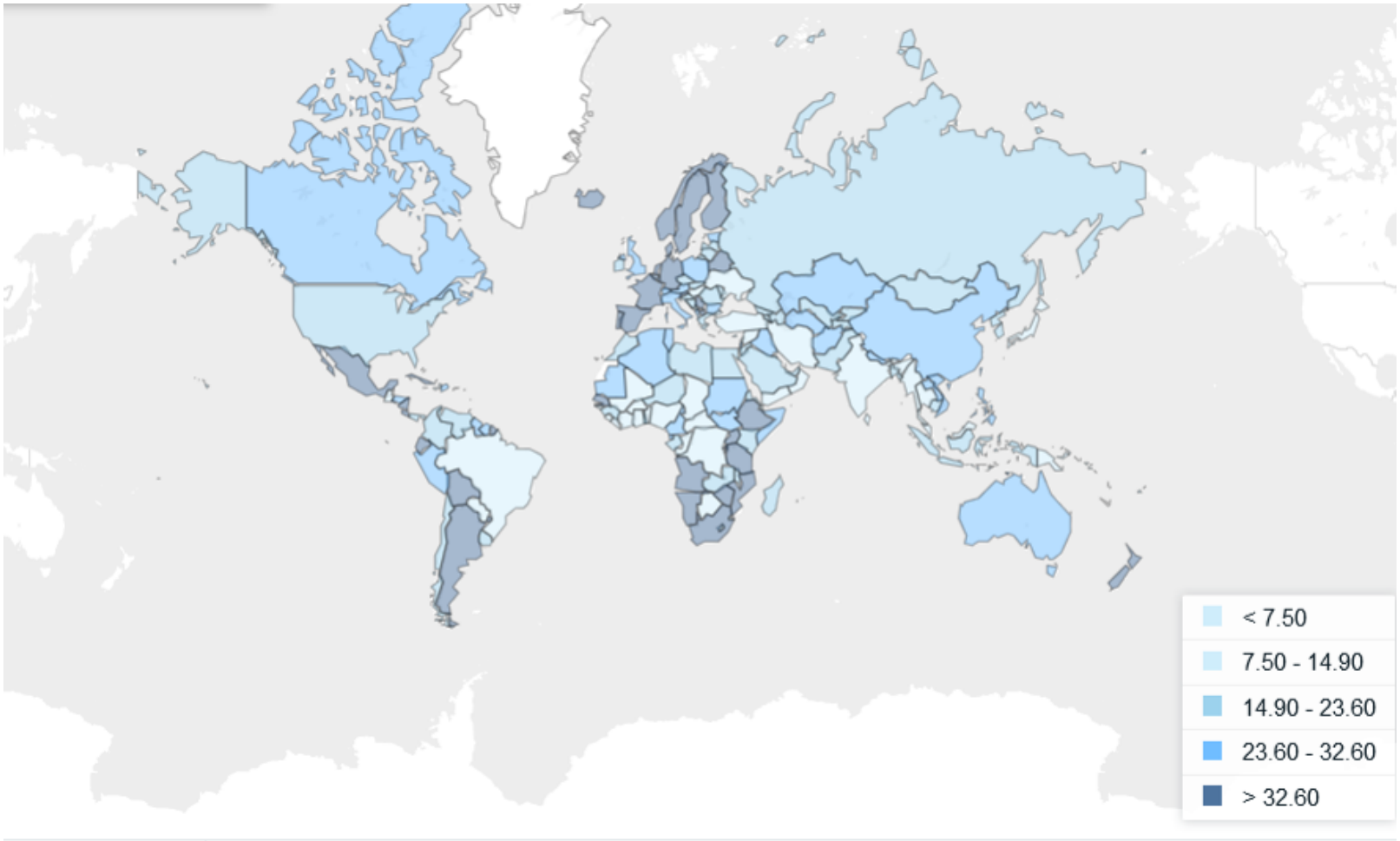
EPCS 2021 Annual Conference, University of Lille

Gender gaps around the world

World Economic Forum, Global Gender Gap Index 2021
No country in the world has achieved gender equality
The world has closed:

- 96% of the gap in health
- 95% of the gap in education
- 58% of the gap in economic participation and opportunities
- 22% of the gap in politics

Women's representation in politics



How to increase women's representation in politics

- Gender Quotas
- Electoral Rules
- Double Preference Voting

Why to increase women's representation in politics

- Quality and Selection
- Style of leadership, Performance
- Agenda

Testing the causal links

- Difficult to identify causality from the presence of women to outcomes
- Exploit the effects of the introduction of exogenous variations or policy
- Policy evaluation of the effectiveness of the measures
- Using different methods of analysis:DiD, RDD...
- In parallel with women's representation in business

Outline of the talk

- Recap
- Electoral rules, women's representation and the quality of politicians
- Women, public policy and the style of leadership

What we know: women's representation and the quality of politicians

- Target party. Gender quotas may increase (rather than decrease) the quality of politicians, because they induce a better selection of men
  - Baltrunaite, Bello, Casarico, Profeta "Gender quotas and the quality of Politicians" Journal of Public Economics 2014
  - Besley, Folke, Persson, Rickne "Gender quotas and the crisis of the mediocre men" American Economic Review 2017
- Target voters. Double preference voting conditioned on gender increases women's representation
  - Baltrunaite, Casarico, Profeta, Savio "Let the voters choose women" Journal of Public Economics 2019

Electoral Rules, Women's representation and the qualification of politicians

Paola Profeta, Bocconi University and Eleanor Woodhouse, UCL.CESifo wp 7101

- Are more female politicians elected under a proportional electoral system than under a majoritarian system?
- Is the quality of elected politicians affected by electoral rules?
- Does culture contribute to explain the effects of the reform on both female representation and the quality of politicians?

Preview of findings

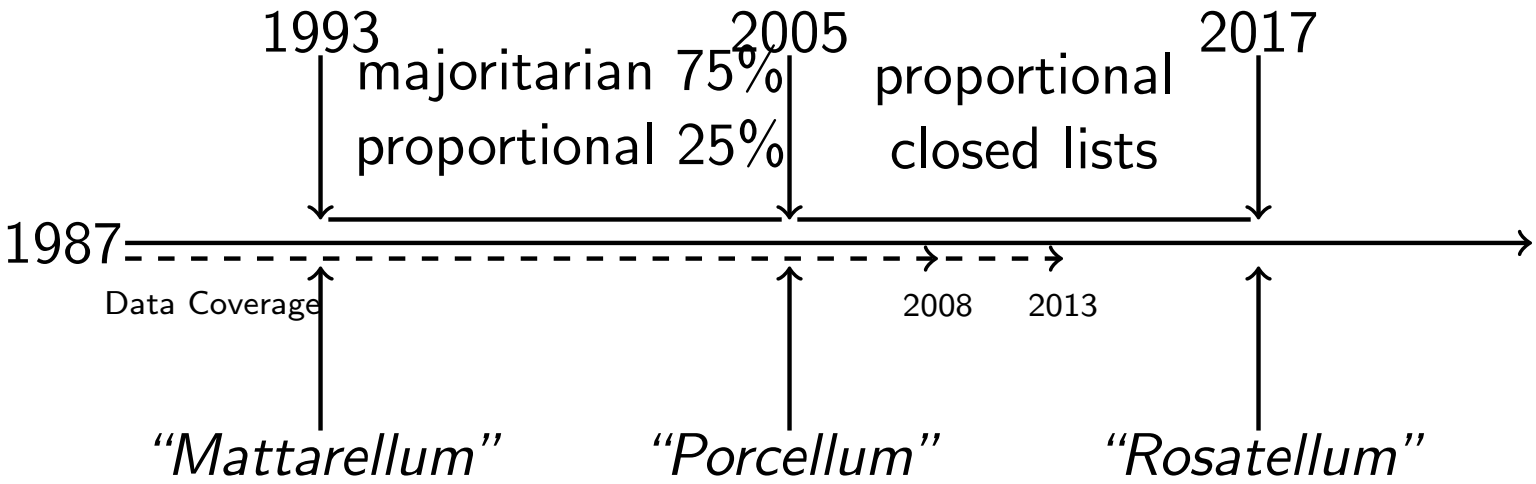
- Within-country evidence for Italy that proportional electoral rules do favour the election of women.
- The quality of elected politicians is not affected by the electoral reform and the increase in female representation (if anything, quality slightly increases).
- However, the best female candidates are **not** selected.

Related literature: gender and electoral rules

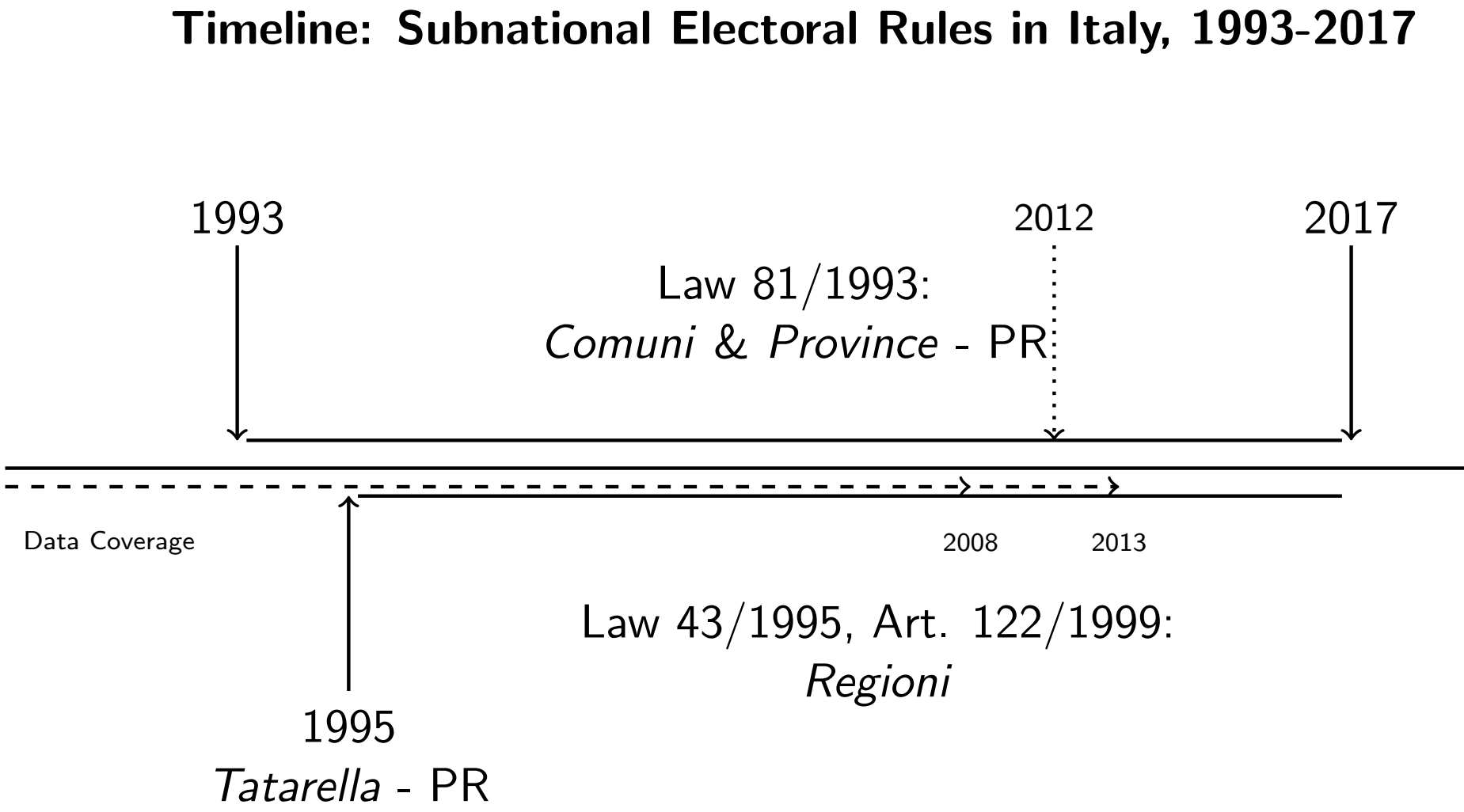
- Many factors influence female political representation: culture, party ideology, FLFP, size of welfare, quotas...
- Electoral rules matter, proposed mechanisms:
  - Candidate characteristics: PR promote a balanced and diverse ticket, MAJ the strongest candidate. (Norris, 1985)
  - Incumbency: fewer incumbents are re-elected under PR. (Norris, 2006)
  - District magnitude: PR have higher district magnitude. (Rule, 1987; Welch and Studlar, 1990; Meireles et al., 2017)
  - Nomination procedures: in PR the recruitment process is more centralised, less need for self-nomination. (Norris and Lovenduski, 1995; Matland and Studlar, 1996)
  - Left of centre governments: more likely under PR. (Iversen and Soskice, 2006; Rosenbluth et al., 2006)
- Majoritarian electoral rules favour the quality of elected politicians (Galasso and Nannicini, 2011)

The Italian electoral system: national

Timeline: National Electoral Reforms in Italy, 1993-2017



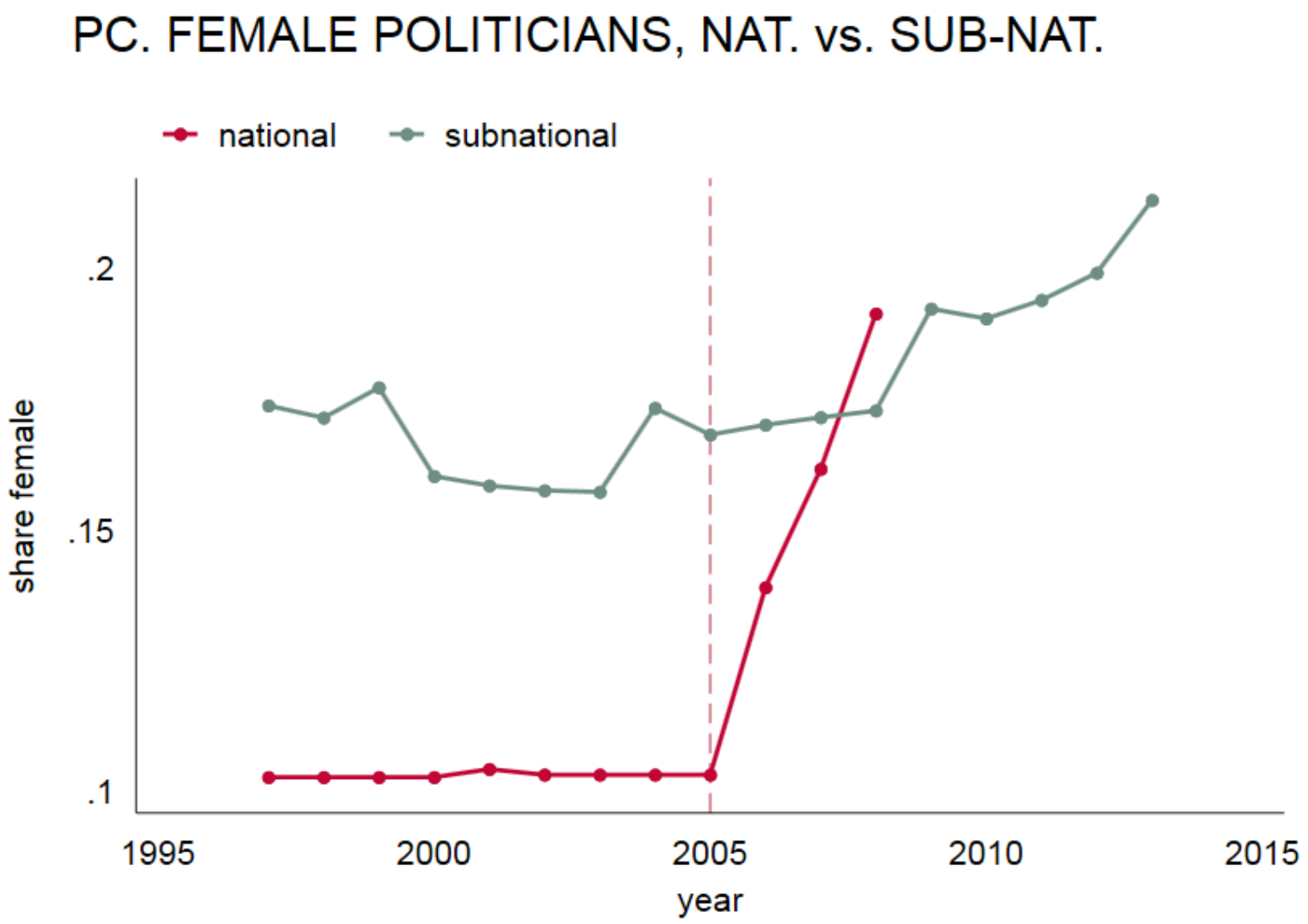
The Italian electoral system: sub-national



Electoral rules and women: empirical strategy

- Difference-in-Differences (DiD).
- 2 groups:
  - Treated group: national level politicians exposed to the 2005 reform of the electoral rule.
  - Control group: sub-national politicians not exposed to the reform.
- Aggregate regression and individual level.
- Analysis: pre-reform = 1994-2005, post-reform = 2006-2011.

Parallel trends



Methodology

- Aggregate model:

$$Y_{lt} = \alpha + \gamma TREAT_l + \lambda POST_t + \delta_{DiD}(TREAT_l \times POST_t) + \boldsymbol{X}'_{lt}\beta + e_{lt} \quad (1)$$

  - Where Y_{lt} is the share of women in political level l and year t.

- Individual model:

$$Y_{ilt} = \alpha + \gamma TREAT_{il} + \lambda POST_{it} + \delta_{DiD}(TREAT_{il} \times POST_{it}) + \boldsymbol{X}'_{i}\beta_i + e_{ilt} \quad (2)$$

  - Where Y_{ilt} is a dummy variable equal to 1 if the politician i elected at level l and year t is a woman and 0 if the politician is a man.

Results: Women's representation

Share of Women Elected and Female Election Probability

VARIABLES	(1) No Controls	(2) Time Trend	(3) Controls	(4) No Controls	(5) Time Trend	(6) Controls
post	0.0161**	-0.0121	-0.00956	0.0163***	-0.00654***	-0.00577***
	(0.00705)	(0.0121)	(0.0110)	(0.000863)	(0.00107)	(0.00107)
treated	-0.0584***	-0.0584***	-0.0355***	-0.0592***	-0.0591***	-0.0543***
	(0.00669)	(0.00726)	(0.00782)	(0.00753)	(0.00753)	(0.00799)
post*treated	0.0552***	0.0552***	0.0563***	0.0545***	0.0546***	0.0578***
	(0.0170)	(0.0150)	(0.0115)	(0.00971)	(0.00970)	(0.0104)
Constant	0.161***	-6.119**	-4.617**	0.162***	-4.860***	-4.689***
	(0.00549)	(2.760)	(2.178)	(0.000698)	(0.207)	(0.207)
Observations	36	36	108	2,731,303	2,731,303	2,729,675
R-squared	0.694	0.748	0.637	0.001	0.001	0.007
Time Trend	NO	YES	YES	NO	YES	YES
Controls	NO	NO	YES	NO	NO	YES

Note: dependent variable (DV), Columns 1-3: share of female politicians, aggregate data. DV, Columns 4-6: politician: female (1)/male (0), individual data. Standard errors are clustered at the national-sub-national levels (Columns 1-3) and at the individual level (Columns 4-6) and are reported in parenthesis. Controls described in main text. ***p¡0.01, **p¡0.05, *p¡0.1

Electoral rules and women: robustness checks

- Different levels of sub-nationals as control;
- Party level analysis;
- Change the time span;
- Inclusion of Senators;
- Eliminate outliers (e.g. in terms of sub-national experience);
- Proof of concept with 1993 reform;
- Lags and leads.

The qualification of politicians

Table: Table 1. Qualification of Politicians, Pre- and Post-Reform

Panel A: Pre/Post Comparisons			
Measure of Qualification	*Pre vs. Post: Overall*	*Pre vs. Post: Men*	*Pre vs. Post: Women*
Education Level	No Difference	No Difference	No Difference
Years of Sub-Nat. Exp.	+3.13***	+3.26***	+2.86***
Parachuters	-.08***	-.11***	+.04*

Panel B: Absolute Measures						
Measure of Qualification	*Pre vs. Post: Overall*		*Pre vs. Post: Men*		*Pre vs. Post: Women*	
Education Level	3.831	3.835	3.832	3.831	3.817	3.853
Years of Sub-Nat. Exp.	6.078	9.210	6.145	9.406	5.328	8.195
Parachuters	0.353	0.271	0.356	0.248	0.331	0.375

Note: Education level: ranges from 1 (primary education), to 5 (PhD or equivalent). Subnational experience: measured in years. A parachuter politician (binary variable) is one who arrives at the national level with 0 years of subnational experience; figures shown represent the share of parachuters over the total of national politicians. ***p $<$ 0.01, **p $<$ 0.05, *p $<$ 0.1

The qualification of politicians

- Selection effect:
  - Non-elected women are the most educated of all the categories of politicians i.e. unelected women $>$ elected male counterparts.
  - The highest quality female candidates are **not** being elected.
  - No such effect for male politicians.
- No evidence of voter bias. Voter Bias

The role of gender culture

- Culture matters. Add the cultural element into the analysis.
- Italy has heterogeneous gender culture: the South is more traditionalist than the North.
- The institutional setting is the same.
- Rare opportunity to have these kinds of differences within the borders of the same country.
- When we add culture, more gender traditional regions increase more their female representation with the reform, but also show the stronger divergence between the qualification levels of candidates and elected female politicians

Women and public policy decisions

- Do male and female politicians make different decision?
  - On the size and allocation of public spending
- Do male and female have a different style of political leadership /different strategies?
  - Along the political budget cycle

Gender Differences in Political Strategies: Local Public Spending Along the Political Budget Cycle

Carmela Accettura, Carlos III University and Paola Profeta, Bocconi University. Paper in progress

- Political budget cycles: just prior to an election, incumbents are found to engage in expansionary manoeuvres
- This can improve chances of reelection, either of their own candidacy or of the candidates they support
- But can generate adverse economic effects, which typically result in higher deficit

Does gender matter for the political budget cycle? This question has remained so far unexplored.

Theoretical background /1

Why gender-biased political budget cycles?

- The 'politics of presence' (Phillips, 1995): female politicians bring different interests and values to politics, especially on issues directly related to women's interests.
- Women are expected to take different policy choices because they generally hold distinct preferences and can produce diverse types of groups and societies (Ranehill and Weber, 2017), for example women are more leftist than men (Edlund and Pande, 2002; Inglehart and Norris, 2000).

Theoretical background /2

As a consequence:

- Female policymakers may prefer a larger size of public spending and a different allocation of items, with larger shares of expenditures in health, social spending and education
- See review in Zohal and da Fonseca (2020) and, among the others, Chattopadhyay and Duflo (2004); Clots-Figueras (2011); Brollo and Troiano (2016); Baskaran and Hessami (2018); Baskaran et al. (2018); Funk and Gathmann (2015); Ferreira and Gyourko (2014); Carozzi and Gago (2017); Bagues and Campa (2017); Gagliarducci and Paserman (2012).....
- In line with gender preferences for size of government (Aidt and Dallal, 2008; Lott and Kenny, 2009)

Theoretical background /3

Women have a particular way of doing politics which corresponds to different political styles and/or strategies

- female politicians are more collaborative, inclusive and sensitive to others' needs (Franceschet et al., 2016; Barnes, 2016)
- have a lower rate of absenteeism are more cooperative and less conflictual (Bochel and Briggs, 2000; Childs, 2004; Epstein et al., 2005), as they tend to seek solutions rather than create disputes (Footitt, 2002)
- are more honest and principled (Norris, 1996) and less corrupted (Dollar et al., 2001; Brollo and Troiano, 2016)

Theoretical background: Our hypothesis

Women are less engaged than men in political budget cycles

- Strategy: women strategically forego electoral cycles to avoid punishment at the ballot. Voters may expect women to spend more than men in social policies and public health, or to be more cooperative and less corrupted, or to be less keen to opportunistic behaviors. Female politicians may figure out and strategically anticipate these expectations.
- Traits: women are more public-spirited and have a stronger sense of public mission than men. Rooted into the psychological literature

Our paper

- We exploit mixed gender close races for mayors in small Italian municipalities
- We use a Regression Discontinuity Design to show that male mayors who are elected by a small margin against a female opponent are more likely to engage in strategic spending at pre-electoral and electoral years, as compared to female mayors
- Strategic spending appear for highly visible policies that yield benefits in the immediate: public employment, transportation and road infrastructure, road cleaning and maintenance, waste disposal and green areas.

Institutional setting

- 8,127 municipal administrations in Italy
- Mayors are elected every 5 years. The date of election is exogenous
- The mayor has strong influence on policy-making
- We focus on municipalities with less than 5,000 residents in the period 2002-2017
  - At 15,000 the rule for electing the mayor changes from single to dual ballot
  - Below 5,000 the municipalities are not subject to the Domestic Stability Pact, a fiscal rule that constrains growth in spending and limits PBC
  - Mayors are directly elected. They are closer to voters
- Restrict to municipalities with mixed gender elections. N=1,551

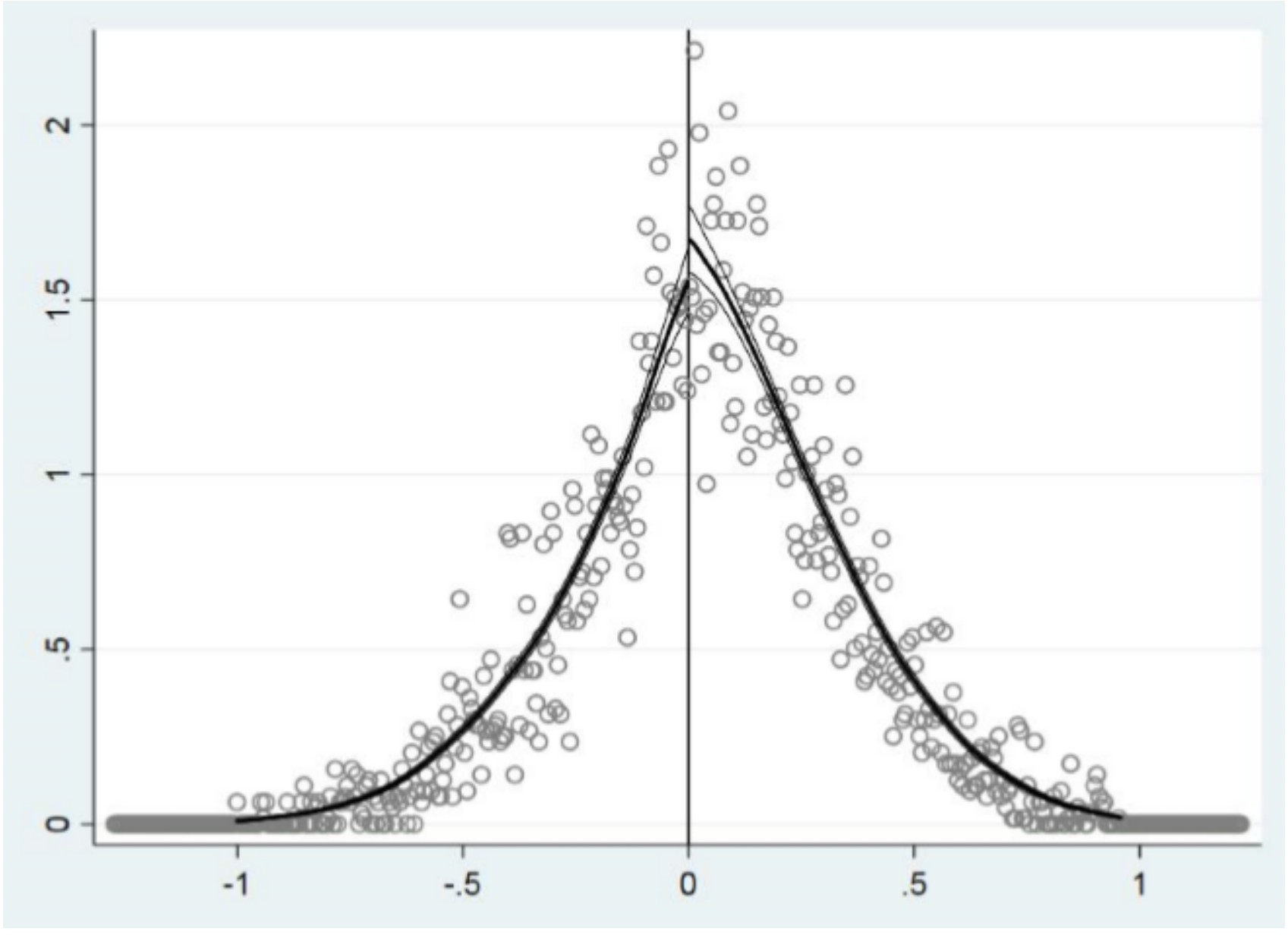
Data

- Politicians: mayors (gender, place and year of birth, educational attainment, profession, appointment date), electoral races (name and gender of candidates, number of votes obtained), 'civic' or party-affiliated list, reelected
- Spending: local spending commitments of municipalities, current and capital expenditures, aggregate and disaggregate and budget balance
- Municipal characteristics: geographical area, population by age

Methodology: Regression Discontinuity Design

- We implement a sharp regression discontinuity design with mixed gender closed mayor elections
- A male mayor wins with $MV_{it} > 0$, Formally, assignment to the treatment group is defined as $D_{it} = 1(MV_i > 0)$.
- Margin of victory = share of votes obtained by the male candidate minus the share of votes obtained by the female opponent
- We estimate the outcome of municipality i at year t if led by men or woman: difference $Y_{it}(1) - Y_{it}(0)$
- We adopt a nonparametric approach with linear and quadratic polynomials and use observations between $-h$ and $+h$ (bandwith) with MSE-optimal bandwidth (CCT; see Calonico et al., 2014). Lee and Lemieux, 2014

Validity of RDD: discontinuity in density



Validity of RDD

- Balance tests
- Sensitivity to the choice of bandwith

Estimate

Estimating the treatment effect on outcomes (log of real capital and current expenditures per capita, aggregate and disaggregate level; deficit variation)

$$Y_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 MV_{it} + \beta_3 D_{it} MV_{it} + \delta_t + \upsilon_{it} \qquad (3)$$

Include year and municipality fixed effects. Robust standar errors clustered at the municipality level. Bonferroni-correction for multiple testing.

Results: no electoral timing, current expenditure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total		Administration		Social policies		Environment	
Treatment	0.155	0.172*	0.145	0.151	-0.131	-0.060	0.225	0.242
	(0.095)	(0.101)	(0.096)	(0.102)	(0.171)	(0.218)	(0.220)	(0.241)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	9,632	9,632	9,632	9,632	9,632	9,632	9,632	9,632

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Education		Transportation		Culture		Leisure	
Treatment	-0.163	-0.032	0.136	0.137	0.051	0.010	-0.035	-0.029
	(0.142)	(0.168)	(0.072)	(0.084)	(0.348)	(0.379)	(0.306)	(0.341)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Obs.	9,632	9,632	9,632	9,632	9,632	9,632	9,632	9,632

Current expenses are neutral to mayor's gender.

Results: no electoral timing, capital expenditure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total		Administration		Social policies		Environment	
Treatment	-0.073	-0.172	-0.562	-0.675*	-0.286	0.009	0.304	0.213
	(0.130)	(0.171)	(0.288)	(0.319)	(0.305)	(0.415)	(0.237)	(0.333)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	7,836	7,836	7,836	7,836	7,836	7,836	7,836	7,836

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Education		Transportation		Culture		Leisure	
Treatment	-0.309	-0.393	-0.061	-0.016	0.108	0.603	0.430	-0.182
	(0.393)	(0.469)	(0.293)	(0.335)	(0.290)	(0.421)	(0.301)	(0.477)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Obs.	7,836	7,836	7,836	7,836	7,836	7,836	7,836	7,836

Capital expenses are neutral to mayor's gender.

Results: electoral timing, current expenditure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	t		t+1		t+2		t+3		t+4	
Total	0.026	0.049	0.044	0.056	0.117	0.115	0.259*	0.276*	0.277*	0.330*
	(0.079)	(0.098)	(0.076)	(0.089)	(0.083)	(0.086)	(0.144)	(0.154)	(0.160)	(0.188)
Administration	0.033	0.034	0.045	0.054	0.115	0.101	0.239*	0.231	0.271*	0.310*
	(0.082)	(0.098)	(0.078)	(0.092)	(0.083)	(0.090)	(0.138)	(0.168)	(0.153)	(0.176)
Social policies	-0.241*	-0.201	-0.192	-0.176	-0.325	-0.446*	0.247	0.346	-0.307	-0.024
	(0.132)	(0.177)	(0.138)	(0.179)	(0.225)	(0.249)	(0.354)	(0.464)	(0.223)	(0.338)
Environment	0.104	0.088	0.167*	0.170	0.060	0.062	0.334	0.382	0.194	0.419
	(0.098)	(0.115)	(0.091)	(0.105)	(0.218)	(0.256)	(0.376)	(0.460)	(0.414)	(0.519)
Education	-0.235**	-0.138	-0.245**	-0.066	-0.212	-0.168	-0.166	-0.070	0.060	0.151
	(0.119)	(0.146)	(0.115)	(0.151)	(0.142)	(0.167)	(0.174)	(0.238)	(0.177)	(0.213)
Transportation	0.111*	0.106	0.105	0.091	0.115*	0.116	0.128*	0.159**	0.204***	0.220**
	(0.065)	(0.079)	(0.065)	(0.081)	(0.067)	(0.081)	(0.069)	(0.079)	(0.071)	(0.087)
Culture	-0.214	0.254	-0.084	0.186	-0.086	0.059	-0.174	-0.016	0.420	0.338
	(0.276)	(0.404)	(0.302)	(0.413)	(0.316)	(0.415)	(0.333)	(0.433)	(0.370)	(0.402)
Leisure	0.112	0.225	0.110	0.130	0.153	0.235	-0.269	-0.296	-0.336	-0.378
	(0.257)	(0.332)	(0.246)	(0.313)	(0.283)	(0.347)	(0.276)	(0.345)	(0.300)	(0.329)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	1,924	1,924	1,924	1,924	1,924	1,924	1,924	1,924	1,924	1,924

One year before the elections and at the election time male mayors spend on average 25% more for transportation than female ones.

Results: electoral timing, current expenditure, robustness

	(1)	(2)	(3)	(4)	(5)
Total $(t+3)$	0.259*	0.276*	0.262**	0.288**	0.170
	(0.144)	(0.154)	(0.105)	(0.139)	(0.194)
Total $(t+4)$	0.277*	0.330*	0.274**	0.281*	0.222
	(0.160)	(0.188)	(0.117)	(0.147)	(0.197)
Administration $(t+4)$	0.271*	0.310*	0.272**	0.261*	0.186
	(0.153)	(0.176)	(0.112)	(0.140)	(0.188)
Transportation $(t+3)$	0.128*	0.159**	0.132**	0.165**	0.239***
	(0.069)	(0.079)	(0.061)	(0.070)	(0.089)
Transportation $(t+4)$	0.204***	0.220**	0.193***	0.252***	0.228**
	(0.071)	(0.087)	(0.060)	(0.069)	(0.090)
Bandwidth	CCT	CCT	0.3	0.2	0.1
Polynomial	Linear	Quadratic	Linear	Linear	Linear
Observations	1,924	1,924	1,924	1,924	1,924

Results: electoral timing, capital expenditure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	t		t+1		t+2		t+3		t+4	
Total	0.031	0.084	-0.078	-0.175	-0.271	-0.418*	0.211	0.094	-0.257	-0.387
	(0.147)	(0.184)	(0.152)	(0.199)	(0.178)	(0.217)	(0.172)	(0.227)	(0.228)	(0.298)
Administration	-0.684	-0.755	-0.938*	-1.301*	-0.754	-0.788	-0.199	-0.251	-0.463	-0.324
	(0.450)	(0.503)	(0.412)	(0.590)	(0.439)	(0.558)	(0.470)	(0.540)	(0.481)	(0.553)
Social policies	-0.042	0.193	-0.808*	-0.197	-0.549	-0.707	0.327	1.089	-0.219	-0.270
	(0.508)	(0.663)	(0.484)	(0.693)	(0.506)	(0.704)	(0.481)	(0.700)	(0.410)	(0.492)
Environment	-0.045	-0.180	-0.059	-0.128	0.127	0.085	0.915***	0.947**	0.478	0.509
	(0.365)	(0.465)	(0.390)	(0.458)	(0.383)	(0.517)	(0.297)	(0.339)	(0.471)	(0.603)
Education	-0.014	-0.123	-0.195	-0.674	-0.108	-0.155	-0.575	-0.699	-0.130	-1.100
	(0.535)	(0.629)	(0.497)	(0.736)	(0.547)	(0.682)	(0.521)	(0.641)	(0.506)	(0.746)
Transportation	0.247	-0.198	-0.007	0.029	0.061	0.150	0.217	0.327	-0.741	-0.709
	(0.361)	(0.533)	(0.456)	(0.548)	(0.460)	(0.603)	(0.544)	(0.668)	(0.538)	(0.621)
Culture	0.167	0.765	0.182	0.824	0.038	0.408	0.092	0.015	0.274	0.775
	(0.378)	(0.495)	(0.349)	(0.518)	(0.388)	(0.497)	(0.422)	(0.464)	(0.383)	(0.527)
Leisure	0.239	0.171	-0.299	-0.403	-0.268	-0.860	1.363**	0.750	0.506	0.107
	(0.681)	(0.771)	(0.699)	(0.806)	(0.664)	(0.858)	(0.531)	(0.764)	(0.576)	(0.729)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566

The year before the election, male mayors more than double the investment in Environment (parks, green areas and waste disposal)

Results: Electoral timing, Capital expenditure, robustness

	(1)	(2)	(3)	(4)	(5)
Environment ($t+3$)	0.915***	0.947***	0.900***	0.838***	0.754**
	(0.297)	(0.339)	(0.224)	(0.272)	(0.374)
Bandwidth	CCT	CCT	0.3	0.2	0.1
Polynomial	Linear	Quadratic	Linear	Linear	Linear
Observations	1,566	1,566	1,566	1,566	1,566

Fiscal deterioration

Table: Budget balance variation from $t+2$ to $t+4$

	(1)	(2)	(3)	(4)	(5)
Treatment	-0.004**	-0.006**	-0.004*	-0.005**	-0.007**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Bandwidth	CCT	CCT	0.3	0.2	0.1
Polynomial	Linear	Quadratic	Linear	Linear	Linear
Observations	1,924	1,924	1,924	1,924	1,924

Municipalities run by male mayors significantly increase deficit levels as elections get closer.

Conclusions

- We causally show that male mayors are more likely to engage in PBC than female
- The cycle appears for spending items which are highly visible and salient to voters: expenses for public transport and road viability and investment for green areas and waste disposal
- Gender-biased PBCs are related to higher deficit levels

A different style of political leadership by gender
Additional argument for the desirability of a gender-balanced political representation.