

*Web Appendix for:*

# Electoral Rules and Politicians' Behavior: A Micro Test

Stefano Gagliarducci      Tommaso Nannicini  
Paolo Naticchioni\*

This version, February 2010

## Abstract

Web Appendix containing additional robustness checks discussed in the paper, as well as examples of individual bills classified as targeted, general interest, and narrowly targeted.

---

\*Gagliarducci: University of Rome Tor Vergata, Department of Economics, Via Columbia 2, 00133 Roma (Italy), stefano.gagliarducci@uniroma2.it. Nannicini: Bocconi University, Department of Economics, Via Rontgen 1, 20136 Milan (Italy), tommaso.nannicini@unibocconi.it. Naticchioni: University of Cassino, Department of Economics, Via Sant'Angelo Loc. Follara, 03043 Cassino (Italy). We gratefully acknowledge financial support for data collection from "ERE – Empirical Research in Economics". We thank Manuel Arellano, Stephane Bonhomme, Giovanna Iannantuoni, Andrea Moro, Michele Pellizzari, Thomas Stratmann, Guido Tabellini, and seminar participants at AEA 2009 San Francisco, Bocconi, Bologna, Brucchi Luchino 2007, Carlos III, CEMFI, EEA 2008 Milan, IMF Research Department, IMT, Pompeu Fabra, Public Choice 2008 San Antonio, RTN Microdata 2007 Amsterdam, SAE 2007 Granada, and Tor Vergata for their insightful comments. We are also grateful to Antonella Mennella and Giuliana Zito for excellent research assistance. The usual caveat applies. Corresponding author: Tommaso Nannicini.

# Appendix I (Not for Publication): Robustness Checks

Table 1: Bill sponsorship (general interest), RDD estimates

	(I) All sample			(II) $MV_i \in [-h, h]$		
	Effect of majoritarian system	No. of treated obs.	No. of control obs.	Effect of majoritarian system	No. of treated obs.	No. of control obs.
<b>Without covariates</b>						
Share of general interest bills	-0.082** [0.036]	1,305	141	-0.066** [0.030]	845	99
Share of general interest (first year)	-0.090** [0.037]	1,305	141	-0.073** [0.032]	845	99
Share of general interest (last year)	-0.066* [0.037]	1,305	141	-0.041 [0.031]	845	99
<b>With covariates</b>						
Share of general interest bills	-0.081** [0.032]	1,305	141	-0.062** [0.028]	845	99
Share of general interest (first year)	-0.084** [0.035]	1,305	141	-0.072** [0.030]	845	99
Share of general interest (last year)	-0.057 [0.037]	1,305	141	-0.030 [0.033]	845	99

Notes. Terms XII, XIII, and XIV; ministers excluded. Dependent variable: *Share of general interest bills*, i.e., the fraction of bills that are targeted neither geographically nor at individual entities (over the term, in the first year, and in the last year, respectively). Estimation (I): split polynomial approximation ( $p=3$ ). Estimation (II): local linear regression, where  $h$  is the optimal bandwidth selected using cross-validation methods;  $h = 15$  for all outcome measures. The estimations with covariates include the variables listed in Table 1 as controls. Standard errors clustered at the individual level are in brackets. Significance at the 10% level is represented by \*, at the 5% level by \*\*, and at the 1% level by \*\*\*.

**Table 2: Bill sponsorship (narrowly targeted), RDD estimates**

	(I) All sample			(II) $MV_i \in [-h, h]$		
	Effect of majoritarian system	No. of treated obs.	No. of control obs.	Effect of majoritarian system	No. of treated obs.	No. of control obs.
<b>Without covariates</b>						
Share of narrowly targeted bills	0.055*** [0.018]	1,305	141	0.061*** [0.019]	691	86
Share of narrowly targeted (first year)	0.056** [0.022]	1,305	141	0.059*** [0.022]	733	92
Share of narrowly targeted (last year)	0.025 [0.022]	1,305	141	0.012 [0.021]	803	95
<b>With covariates</b>						
Share of narrowly targeted bills	0.058*** [0.018]	1,305	141	0.057*** [0.020]	691	86
Share of narrowly targeted (first year)	0.053** [0.022]	1,305	141	0.053** [0.021]	733	92
Share of narrowly targeted (last year)	0.016 [0.022]	1,305	141	-0.004 [0.023]	803	95

Notes. Terms XII, XIII, and XIV; ministers excluded. Dependent variable: *Share of narrowly targeted bills*, i.e., the fraction of bills targeted at sub-regional entities in the region of election (over the term, in the first year, and in the last year, respectively). Estimation (I): split polynomial approximation ( $p=3$ ). Estimation (II): local linear regression, where  $h$  is the optimal bandwidth selected using cross-validation methods;  $h = 11$  for the term average,  $h = 12$  for the first year,  $h = 14$  for the last year. The estimations with covariates include the variables listed in Table 1 as controls. Standard errors clustered at the individual level are in brackets. Significance at the 10% level is represented by \*, at the 5% level by \*\*, and at the 1% level by \*\*\*.

**Table 3: Additional balance tests of pre-treatment characteristics**

	RDD-I sample			RDD-II sample		
	Jump at the threshold	No. of treated obs.	No. of control obs.	Jump at the threshold	No. of treated obs.	No. of control obs.
Male	-0.046 [0.045]	845	99	-0.072 [0.056]	773	89
Age	1.498 [1.839]	845	99	1.816 [1.873]	773	89
Years of schooling	-0.360 [0.384]	845	99	-0.263 [0.439]	773	89
Different residence	-0.063 [0.045]	845	99	-0.002 [0.029]	773	89
Local govt. experience	0.061 [0.097]	845	99	0.134 [0.103]	773	89
National politician	0.069 [0.075]	845	99	0.037 [0.083]	773	89
Freshman	0.169** [0.081]	845	99	0.152* [0.088]	773	89
Incumbent	-0.112 [0.095]	845	99	-0.142 [0.104]	773	89
Center-right	-0.036 [0.097]	845	99	-0.087 [0.104]	773	89
Parl. appointment	-0.013 [0.051]	845	99	0.019 [0.055]	773	89
Clerk	0.006 [0.029]	845	99	0.019 [0.028]	773	89
Lawyer	0.002 [0.072]	845	99	0.002 [0.067]	773	89
Executive	-0.102 [0.076]	845	99	-0.078 [0.089]	773	89
Politician	-0.045 [0.063]	845	99	-0.040 [0.067]	773	89
Entrepreneur	-0.070 [0.060]	845	99	-0.098 [0.071]	773	89
Teacher	0.060 [0.053]	845	99	0.078 [0.064]	773	89
Self employed	0.112*** [0.038]	845	99	0.141*** [0.045]	773	89
Physician	-0.008 [0.069]	845	99	-0.033 [0.070]	773	89

Notes. Terms XII, XIII, and XIV; ministers excluded. Dependent variables: pre-treatment characteristics (see Table 1 for a description of each variable). *RDD-I sample* is the sample used in the RDD estimation for the share of targeted bills (see Table 5). *RDD-II sample* is the sample used in the RDD estimation for the absenteeism rate (see Table 6). Estimation method: local linear regression with optimal bandwidth;  $h = 15$  in *RDD-I*, and  $h = 14$  in *RDD-II*. Standard errors clustered at the individual level are in brackets. Significance at the 10% level is represented by \*, at the 5% level by \*\*, and at the 1% level by \*\*\*.

## Appendix II (Not for Publication): Examples of Bills

Legislature	Politician	Electoral System (REGION)	Bill No.	Title of the Bill	TESEO	Definition
XIII	Fortunato Aloï	majoritarian (CAL-ABRIA)	918	Protecting the identity of Greek and Albanian ethnic-linguistic minorities in CALABRIA ( <i>Norme per la tutela dell'identita' nazionale delle minoranze etnico-linguistiche grecaniche ed albanesi nella regione Calabria</i> )	CALABRIA, ethnic minorities, linguistic minorities <i>Regione CALABRIA, minoranze etniche, minoranze linguistiche</i>	Targeted
XIII	Tullio Grimaldi	majoritarian (CAMPANIA)	1500	Foundation of an archeological superintendence in Campi Flegrei (CAMPANIA) ( <i>Istituzione della soprintendenza archeologica dei Campi Flegrei</i> )	Superintendence for arts and culture, archeology, intuition of public offices <i>Sovrintendenze dei beni culturali, beni archeologici e archeologia, istituzione di sedi ed uffici pubblici</i>	Targeted (also narrowly)
XIII	Maria Celeste Nardini	proportional (CAL-ABRIA)	2000	Foundation of a marine park in Riviera dei Cedri (CAL-ABRIA) ( <i>Istituzione del parco marino della Riviera dei Cedri</i> )	Province of Cosenza (CALABRIA), marine parks, government marine property, transfer of properties ( <i>Provincia di Cosenza, parchi e riserve marine, demanio marittimo, cessione di beni</i> )	Targeted (also narrowly)
XIII	Edouard Ballaman	majoritarian (FRIULI-VENEZIA GIULIA)	3000	Postponment of the municipal elections in Naples (CAMPANIA) ( <i>Norme per il rinvio delle elezioni del consiglio comunale e del sindaco di Napoli</i> )	Naples (CAMPANIA), municipal elections, municipal councils, mayors and municipalities ( <i>Napoli, elezioni amministrative, consigli comunali, sindaci di comuni</i> )	None
XIII	Francesco Amoruso	majoritarian (APULIA)	5000	Fiscal subsidies for private security systems ( <i>Agevolazioni fiscali per i servizi di vigilanza privata</i> )	Security guards, fiscal deposits, fiscal subsidies ( <i>Guardie giurate, oneri deducibili, deposito e custodia, detrazioni di imposte</i> )	General interest
XIII	Mario Tassone	proportional (CAL-ABRIA)	7000	Foundation of an archeological superintendence in Benevento (CAMPANIA) ( <i>Istituzione in Benevento della soprintendenza per i beni ambientali, architettonici, archeologici, artistici e storici</i> )	Superintendence for arts and culture, archeology, Benevento (CAMPANIA) ( <i>Sovrintendenze dei beni culturali, beni archeologici e archeologia, Benevento</i> )	None
XIV	Andrea Gibelli	majoritarian (LOMBARDY)	1451	Institution of the province of Crema (LOMBARDY) ( <i>Istituzione della provincia di Crema</i> )	Institution of new provinces, Crema (LOMBARDY) ( <i>Istituzione di nuove province, Crema</i> )	Targeted (also narrowly)
XIV	Francesco Romano	majoritarian (SICILY)	2000	Reorganization of the pedagogue profession and institution of a national register ( <i>Ordinamento della professione di pedagoga e istituzione del relativo albo professionale</i> )	Pedagogy, self-employed ( <i>Pedagogia, liberi professionisti</i> )	General interest

Legislature	Politician	Electoral System (REGION)	Bill No.	Title of the Bill	TESEO	Definition
XIV	Aldo Cennamo	majoritarian (CAMPANIA)	2500	Foundation of a consortium “La città vesuviana” (CAMPANIA) ( <i>Istituzione del consorzio “La città vesuviana”</i> )	Province of Naples (CAMPANIA), consortium, Vesuvian villas of the XVIIIth century (CAMPANIA), artistic and historical buildings ( <i>Provincia di Napoli, consorzi, ville vesuviane del xviii secolo, immobili artistici e storici</i> )	Targeted (also narrowly)
XIV	Luciano Violante	majoritarian (PIEDMONT)	3000	Institution of a parliamentary committee on terrorism ( <i>Istituzione di una Commissione parlamentare di inchiesta sul fenomeno del terrorismo</i> )	Board of enquiry, parliamentary enquiry, terrorism related crimes ( <i>Commissione d’inchiesta, commissione parlamentare, reati di terrorismo ed eversione</i> )	General interest
XIV	Fabio Garagnani	proportional (EMILIA-ROMAGNA)	5000	Fiscal subsidies for middle-class families ( <i>Interventi fiscali in favore della famiglia media italiana</i> )	Family, family income, fiscal subsidies, subsidized loans ( <i>Famiglia, reddito familiare, agevolazioni fiscali, credito agevolato</i> )	General interest

Notes. Bills randomly chosen by taking those coded with a multiple of 1,000 (excluding bills presented by the government). *Title of the Bill* is the official title. *TESEO* is the official classification by the Congressional Library (*Biblioteca della Camera dei Deputati*), which reports each administrative level that was interested by the bill. *Definition* refers to our classification of bills as “targeted” (at the region of election), “general interest” (targeted neither geographically nor at individual entities), and “narrowly targeted” (at sub-regional entities in the region of election).