Does Electoral Competition Curb Party Favoritism?

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A.I Proofs

Second-order condition:

In order to have a maximum and to rule out corner solutions, we need the second-order condition to be negative in all cases:

(A.1)
$$\Lambda_{i} = -(\mu(1-\theta))^{2} \chi \phi^{r} (u'(\tau_{i}))^{2} - \eta \theta^{3} (2a_{i}-1)^{3} \phi_{i}^{\ell} u(\tau_{i}) (u'(\tau_{i}))^{2} + (\mu(1-\theta)\phi^{r} + \eta \theta (2a_{i}-1)\phi_{i}^{\ell}) u'' - c'' < 0 \qquad \forall i$$

where $\chi = (\bar{v}^{r,0} + (1-\theta)\sum_i u(\tau_i))/\sqrt{N}$. To obtain this expression we relied on the property $\partial \phi(x)/\partial x = -x$. $\phi(x)$ and on the assumptions u''' = 0 and c''' = 0.

This SOC can be evaluated for aligned and unaligned municipalities:

(A.2)
$$\Lambda_a = -\left(\mu(1-\theta)\right)^2 \chi \phi^r (u'(\tau_a))^2 - \eta \theta^3 \phi_a^\ell u(\tau_a) (u'(\tau_a))^2 + \left(\mu(1-\theta)\phi^r + \eta \theta \phi_a^\ell\right) u'' - c'' < 0$$

(A.3)
$$\Lambda_u = -\left(\mu(1-\theta)\right)^2 \chi \phi^r (u'(\tau_u))^2 + \eta \theta^3 \phi_u^\ell u(\tau_u) (u'(\tau_u))^2 + \left(\mu(1-\theta)\phi^r - \eta\theta\phi_u^\ell\right) u'' - c'' < 0$$

Note that all the expressions in Λ_a are negative. However, this is not the case for Λ_u ; in this case the expressions $\eta \theta^3 \phi_u^\ell u(\tau_a)(u'(\tau_a))^2$ and $-\eta \theta \phi_u^\ell u''$ are positive. So, for the second- order condition to hold we have to assume that these expressions are smaller in absolute value to the others (i.e., to $-(\mu(1-\theta))^2 \kappa \phi^r (u'(\tau_u))^2 + \mu(1-\theta) \phi^r u'')$. This amounts to assuming that the incentives working through local elections are bounded relative to those working through the ones working through regional elections.

Proof of Proposition 1:

To see why there is party favoritism at close local elections, we have to compare the net marginal benefit for an aligned (a) and an unaligned (u) candidate at close local elections ($v_i^{\ell,0} = 0$). Operating from expression (3) in the main text we obtain:

(A.4)
$$(\mu(1-\theta)\phi^r + \eta\theta\phi_a^\ell)u'(\tau_a) - c'(\tau_a) = (\mu(1-\theta)\phi^r - \eta\theta\phi_u^\ell)u'(\tau_u) - c'(\tau_u)$$

Then:

(A.5)
$$\mu(1-\theta)\phi^r - \frac{c'(\tau_a)}{u'(\tau_a)} = -\eta\theta\phi_a^\ell \quad \& \quad \mu(1-\theta)\phi^r(\cdot) - \frac{c'(\tau_u)}{u'(\tau_u)} = \eta\theta\phi_u^\ell$$

Given that $\eta\theta\phi_u^\ell > -\eta\theta\phi_a^\ell$ and $\kappa = \mu(1-\theta)\phi^r > 0$, this implies that $(\kappa - (c'(\tau_u)/u'(\tau_u)) > (\kappa - (c'(\tau_a)/u'(\tau_a)))$. Given that c'/u' is monotonically increasing in τ (since u'' < 0 and c'' > 0), this condition only holds if $\tau_u < \tau_a$, which is the case.

Proof of Proposition 2:

To prove this proposition we have to subtract the partial derivative of transfers (τ) with respect to the regional margin of victory ($\bar{v}^{r,0}$) for an unaligned mayor ($a_i=0$) from that of an aligned mayor ($a_i=1$), both evaluated at a zero local margin of victory ($v_i^{\ell,0} = 0$). Applying the implicit function theorem on the FOC we obtain:

$$\frac{\partial \tau_a}{\partial \bar{v}^{r,0}}\Big|_{v_i^{\ell,0}=0} - \frac{\partial \tau_u}{\partial \bar{v}^{r,0}}\Big|_{v_i^{\ell,0}=0} = -\frac{(\partial \Gamma_a)/(\partial \bar{v}^{r,0})}{\Lambda^a}\Big|_{v_i^0=0} + \frac{(\partial \Gamma_u)/(\partial \bar{v}^{r,0})}{\Lambda^u}\Big|_{v_i^0=0}$$

where Γ and Λ are the first and second order conditions, respectively, and the super-scripts *a* and *u* indicate that they are evaluated for an aligned and an unaligned mayor. If this difference is positive, less competition at the regional level increases the level of partian favoritism at close elections (the difference between the transfers to an aligned vs. an unaligned mayor when $v_i^{\ell,0} = 0$). To simplify, we omit below the reference to close elections. Operating, we obtain:

$$\frac{\partial \tau_a}{\partial \bar{v}^{r,0}} - \frac{\partial \tau_u}{\partial \bar{v}^{r,0}} = -\mu(1-\theta) \frac{\partial \phi^r(\cdot)}{\partial \bar{v}^{r,0}} \left(\frac{u'(\tau_a)}{\Lambda^a} - \frac{u'(\tau_u)}{\Lambda^u} \right)$$

where Λ^a and Λ^u denote the second-order condition evaluated at close local elections for the aligned and unaligned cases. Since $\partial \phi^r(\cdot)/\partial \bar{v}^0 < 0$, for this expressions to be positive, $u'(\tau_u)/\Lambda^u$ should be larger than $u'(\tau_a)/\Lambda^a$. Given that $u'(\tau_u) > u'(\tau_a)$, this means that the above condition will be positive if $\Lambda^u - \Lambda^a > 0$. Using (A.2) and (A.3) and by operating we obtain:

(A.6)
$$\Lambda^{u} - \Lambda^{a} = -\left(\mu(1-\theta)\chi\kappa - \eta\phi_{u}^{\ell}\theta^{3}u(\tau_{u})\right)(u'(\tau_{u}))^{2} + \left(\mu(1-\theta)\chi\kappa + \eta\phi_{a}^{\ell}\theta^{3}u(\tau_{a})\right)(u'(\tau_{a}))^{2} - (\eta\theta\phi_{u}^{\ell} + \eta\theta\phi_{a}^{\ell})u''$$

where $\chi = (\bar{v}^{r,0} + (1-\theta)\sum_i u(\tau_i))/\sqrt{N}$ and $\kappa = \mu(1-\theta)\phi^r$. If the second-order conditions for the unaligned municipalities (A.3) hold then it follows that:

(A.7)
$$-\left(\mu(1-\theta)\chi\kappa -\eta\phi_u^\ell\theta^3 u(\tau_u)\right)(u'(\tau_u))^2 = \left(\eta\theta\phi_u^\ell - \kappa\right)u'' + c'' + \delta$$

where $\delta > 0$ is a constant. Substituting (A.7) into (A.6) we obtain

(A.8)
$$\Lambda^{u} - \Lambda^{a} = -\left(\kappa + \eta\theta\phi_{a}^{\ell}\right)u^{\prime\prime} + c^{\prime\prime} + \delta + \left(\mu(1-\theta)\chi\kappa + \eta\theta^{3}\phi_{a}^{\ell}u(\tau_{a})\right)(u^{\prime}(\tau_{a}))^{2} > 0$$

This expression is positive because all terms are positive.

A.II Data and variables.

Variable	Definition	Mean (SD)	Source
Capital transfers	Capital transfers from the Regional government per capita (item 7.5, of the revenue budget) ¹	95.71 (140.48)	Spanish Ministry of Economics
Alignment (a)	Dummy equal to one if the party of the mayor is the same as that of the president of the AC (0 otherwise)	0.62 (0.48)	Local election statistics (votes and seats for all the parties) and partisan identity of the mayor,
Partner alignment	Dummy equal to one if the mayor and/or the main partner of a coalition belong to the same party as that of the president of the AC (o otherwise)	0.66 (0.47)	provided by the Spanish Ministry of Interior & Ministry of Public Administration (1995, 2003 and 2007 local elections)
Bloc alignment	Dummy equal to one if the mayor and the regional president belong to the same ideological bloc (0 otherwise)	0.66 (0.47)	Vote margin computed with the same data using an algorithm developed for this purpose that replicates the workings of the d'Hondt rule (see Table A.2 in Appendix A)
Regional incumbent's bloc vote margin (v)	% of votes cast at the local elections that have to be added (subtracted from) to the ideological bloc of the Regional incumbent to win (lose) a majority of seats in the local council	0.10 (0.32)	
Regional incumbent's bloc seat majority (d)	Dummy equal to one if the incumbent's bloc vote margin at the local elections (v) is greater than zero (0 otherwise)	0.61 (0.49)	
Debt burden	Debt burden (capital, item 9 of the spending budget, + interest, item 3), as a share of current revenues	0.06 (0.07)	Spanish Ministry of Economics (years 1996-2007)
Property tax rate	Nominal property tax rate (IBI), % on assessed property value	0.59 (0.16)	Centro de Gestión Catastral y Cooperación Triburaria, Spanish
Property value	Assessed property value (thousands of EUR) per capita	20.44 (21.70)	Ministry of Economics (years 1996-2007)
Population	Resident population	14301.95 (80848.87)	
% Old	% resident population older than 65 years	0.16 (0.05)	Population census (1991, 2001)
% Young	% resident population younger than 14 years	0.21 (0.04)	National Institute of Statistics Censo de Habitantes 2001,
% Immigrant	% resident population non-EU immigrant	0.01 (0.03)	National Institute of Statistics
% Unemployed	% resident population unemployed	0.06 (0.03)]
Income indicator	Residents' income level, as estimated from objective indicators (e.g., cars, bank deposits, etc.)	0.94 (0.14)	Anuario Económico de España,
Population density	Population per square kilometer	361.66 (1,306.99)	La Caixa (years 1996-2007)

Table A.1: Main variables: definition, descriptive statistics and data sources

Note: To facilitate the interpretation of the treatment effects presented in this paper, the descriptive statistics of "Capital transfers" refer to unaligned municipalities while those of the rest of variables refer to the whole sample.

Variable	Definition	Mean (SD)	Source
Regional revenues pc	Current revenues per capita in each region. This variable is demeaned.	0.00 (463.29)	
Regional debt	Debt burden (capital, item 9 of the spending budget, + interest, item 3) as a share of current revenues. This variable is demeaned.	0.00 (4.74)	Spanish Ministry of Economics (years 1996-2007)
Municipal density	Average population density (population per square kilometer) of the municipalities in each region. This variable is demeaned.	0.00 (243.94)	Population census (1991, 2001) National Institute of Statistics Censo de Habitantes 2001,
% Educated	Percentage of people with primary and secondary education. This variable is demeaned.	0.00 (14.46)	National Institute of Statistics
Press circulation	Newspaper copies (at the province level) per 1000 inhabitants. This variable is demeaned.	0.00 (59.43)	Oficina de Justificación de la Difusión (Circulation Audit Bureau) <u>www.introl.com</u>
Tenure in office	Dummy equal to one if it is the regional incumbent was not in office the previous term.	0.00 (0.39)	
	Difference between the seat share of the parties in the regional government and the seat share of the main opposition parties in the previous regional election. This variable is demeaned.	0.00 (7.45)	Regional election statistics
Regional seat margin	Difference between the seat share of the ideological bloc of the regional government and the seat share of opposition's ideological bloc in the previous regional election. This variable is demeaned.	0.00 (9.68)	obtained from web source (http://www. datos elecciones.com/parlamentos- autonomicos
	Difference between the seat share of the main party in the regional government and the seat share of the main opposition party in the previous regional election. This variable is demeaned.	0.00 (11.38)	

Table A.2: Interaction variables: definition, descriptive statistics and data sources

Explanation:
The forcing variable for our RDD is the Regional incumbent's bloc vote margin, computed as the ratio between
the minimum number of votes needed for the ideological bloc of the regional incumbent to gain/lose the majority
of seats in the local council and the total votes cast at the local elections. The computation of this measure is not
straightforward and requires a consideration of the specific allocation system used to assign votes to seats, in
this case the d'Hondt rule. Under this rule the votes for each party are divided by 1, 2, 3, 4 N, where N is the
number of seats to be assigned. The resulting quotas or comparison numbers are ranked and N seats are allocated
using this ranking.
We have developed an algebraic procedure to compute the Regional incumbent's bloc vote margin for each
$\frac{1}{1}$

municipality in the sample.⁽¹⁾ Our procedure works by subtracting votes from the regional president's ideological bloc if it holds a majority at the local level, or adding votes if it does not. We make some initial assumptions regarding the migration of these votes. First, we assume that these votes either i) go to (come from) the abstention or ii) go to (come from) both the abstention and the parties in the opposition bloc. The formulation we present here is for the first approach and the formula used in the second approach and the Stata code are available upon request. Second, we assume that the votes lost by (added to) the regional incumbent's bloc are allocated between the parties belonging to this bloc in proportion to their initial vote share. Below we present the formulation used for the close election cases –i.e., the seat margin is -1 or +1. Derivations for non-close elections are available upon request².

Notation and definitions:

 $v_I^i \& v_O^k$: votes for parties *i* and *k*, from the regional incumbent's (*I*) and opposition's (*O*) blocs.

 $\alpha_i^i \& \alpha_0^k$: votes for parties *i* and k as a proportion of the votes for the bloc they belong to.

 $s_i^i \& s_o^k$: seats for parties *i* and *k*.

 $c_I^i(s_I^i) = v_I^i/s_I^i$: comparison number for the last seat won by party *i*.

 $c_I^i(s_I^i + 1) = v_I^i/(s_I^i + 1)$: comparison number for the next seat to be won by party *i*.

 $c_I^{min}(s_I) = min_i(c_I^i(s_I^i))$: smallest comparison number for the last seat won by a party in *I*.

 $c_I^{max}(s_I + 1) = min_i(c_I^i(s_I^i + 1))$: largest comparison number for the next seat to be won by a party in *I*.

 $c_0^k(s_0^k), c_0^k(s_0^k+1), c_0^{min}(s_0)$ and $c_0^{max}(s_0+1)$: comparison numbers for the opposition's bloc.

Formulation:

If the regional incumbents's bloc holds a majority in the council and, so, a party from the opposition bloc has to win a seat, its comparison number for the next seat to be gained, $c_0^{max}(s_0 + 1)$, must be larger than the comparison number for the last seat distributed to a party in the regional incumbent's bloc, once v votes are subtracted from that bloc. The condition for party z in the opposition gaining a seat is:

$$c_{I}^{min*}(s_{I}) < c_{O}^{max}(s_{O}+1)$$
 [A.i]

where $c_l^{min*}(s_l)$ is the smallest comparison number for the last seat originally gained by a party, say party x, among the parties from the regional incumbent's bloc once v votes have been subtracted. z is the party that has the highest comparison number for the next seat to be gained among all the parties of the opposition bloc. Expression [A.i] can be rewritten as $v_l^x - v^x/s_l^x < v_0^x/(s_0^x + 1)$, where v^x are the votes subtracted from party x.⁽²⁾ Under the assumption that all the parties from the regional incumbent's bloc lose votes according to the votes originally cast, expression [A.i] determines that the total amount of votes that the regional incumbent's bloc has to lose to lose one seat is equal to:

$$v = (v^{x}/\alpha_{L}^{x}) + 1$$
 where $v^{x} = (c_{L}^{min}(s_{L}) - c_{0}^{max}(s_{0} + 1)) s_{L}^{x}$ [A.ii]

If the regional incumbent's ideological bloc is in a minority in the local council, the votes to be added to the opposition bloc for a party, say part *y*, in this bloc to gain a seat are such that:

$$c_0^{\min}(s_0) < c_l^{\max}(s_l+1)$$
 [A.iii]

where $c_l^{max*}(s_l + 1)$ is the largest comparison number for the next seat to be gained by party y from the regional incumbent's bloc, once δ votes are added to the opposition bloc. Party y is the one that has the highest comparison number for the next seat to be gained. Expression [A.iii] can be re-written as:

$$\delta = (\delta^{y}/\alpha_{l}^{y}) + 1 \quad \text{where} \quad \delta^{y} = \left(c_{0}^{min}(s_{0}) - c_{l}^{max}(s_{l}+1)\right)\left(s_{l}^{y}+1\right) \quad [\text{A.iv}]$$

Table A.3: Calculation of the forcing variable (continued)

Party classification

To compute the forcing variable we need to classify parties according to their ideology. Most parties are classified as either left or right, based on party statements and knowledge of their recent experience of coalition formation. There are a few small regional parties for which classification is difficult, particularly as their decisions sometimes run counter to formal statements of their ideology. What we have opted to do is to classify these parties as left-wing (right-wing) if they currently support a left-wing (right-wing) regional president at the moment and according to their ideology if not. Local parties are also difficult to classify. Some are classified as right- or left-wing parties on the basis of their party name. This is especially true in the case of left-wing parties, whose names often contain explicit labels (e.g., 'communist' or 'green') of their ideology.

Notes: (1) When the seat margin is larger than one, the procedure is iterated until there is a switch in the bloc holding the majority. Then, the final measure is an aggregation of votes needed to lose (win) all these seats. (2) Party x is such that equation [A.i] and $\min_M (v_M^i - v^i)/s_M^i$ holds. Party x will typically be the party that won the last seat. If there is another party with a larger vote share that won a seat (but not the last one) this party should be the one considered

	Oppositic	on bloc	Bloc in	power
	Party 1	Party 2	Party 3	Party 4
Votes of party x	95	957	247	1333
Vote share of party x	0.04	0.36	0.09	0.51
Seats of party x	0	5	1	7
1	95.00	957.00	247.00	1333.00
2	47.50	478.50	123.50	666.50
3	31.67	319.00	82.33	444.33
4	23.75	239.25	61.75	333.25
5	19.00	191.40	49.40	266.60
6	15.83	159.50	41.17	222.17
7	13.57	136.71	35.29	190.43
8	11.88	119.63	30.88	166.63
9	10.56	106.33	27.44	148.11
10	9.50	95.70	24.70	133.30
11	8.64	87.00	22.45	121.18
12	7.92	79.75	20.58	111.08
13	7.31	73.62	19.00	102.54

 Table A.4: Numerical example

Note: In this municipality there are 13 seats to be allocated amongst 4 parties. Figures in columns 3-5 are the so-called 'comparison numbers'. The value 47.50 in column 2 is obtained by dividing the total number of seats of party 1 (95) by the seat number (2). Cells highlighted in grey represent the number of seats held by each party.

		Store	1.			Stage	2:			Stage	3:		
		Stage Initial seat a				Seat allocation once δ_1 votes have been subtracted to the bloc in power				Seat allocation once $\delta_1 + \delta_2$ votes have been subtracted to the bloc in power			
	Oppositio	n bloc	Bloc in J	power	Oppositio	n bloc	Bloc in	power	Oppositio	n bloc	Bloc in power		
	P1	P2	P3	P4	P1	P2	P3	P4	P1	P2	P3	P4	
v^i	95	957	247	1333	95	957	207	1116	95	957	152	820	
v^i/V	0.04	0.36	0.09	0.51	0.04	0.40	0.09	0.47	0.05	0.47	0.08	0.41	
S ⁱ	0	5	1	7	0	6	1	6	0	7	1	5	
α_i			0.16	0.84			0.16	0.84					
1	95.00	957.00	247.00	1333.00	95.00	957.00	207.00	1116.00	95.00	957.00	152.00	820.00	
2	47.50	478.50	123.50	666.50	47.50	478.50	103.50	558.00	47.50	478.50	76.00	410.00	
3	31.67	319.00	82.33	444.33	31.67	319.00	69.00	372.00	31.67	319.00	50.67	273.33	
4	23.75	239.25	61.75	333.25	23.75	239.25	51.75	279.00	23.75	239.25	38.00	205.00	
5	19.00	191.40	49.40	266.60	19.00	191.40	41.40	223.20	19.00	191.40	30.40	164.00	
6	15.83	159.50	41.17	222.17	15.83	159.50	34.50	186.00	15.83	159.50	25.33	136.67	
7	13.57	136.71	35.29	190.43	13.57	136.71	29.57	159.43	13.57	136.71	21.71	117.14	
8	11.88	119.63	30.88	166.63	11.88	119.63	25.88	139.50	11.88	119.63	19.00	102.50	
9	10.56	106.33	27.44	148.11	10.56	106.33	23.00	124.00	10.56	106.33	16.89	91.11	
10	9.50	95.70	24.70	133.30	9.50	95.70	20.70	111.60	9.50	95.70	15.20	82.00	
11	8.64	87.00	22.45	121.18	8.64	87.00	18.82	101.45	8.64	87.00	13.82	74.55	
12	7.92	79.75	20.58	111.08	7.92	79.75	17.25	93.00	7.92	79.75	12.67	68.33	
13	7.31	73.62	19.00	102.54	7.31	73.62	15.92	85.85	7.31	73.62	11.69	63.08	
distance			257.62				350.56						
δ_i			40	217			55	296					
Δ			$\delta_1 = 257$				$\delta_2 = 351$						

Table A.5: Example of how the Regional Incumbent's bloc vote margin is computed (votes lost by the bloc in power go to electoral abstention)

Note: For example, the distance to lose the last seat is computed as $257.62 = [(190.43-159.5) \cdot 7/0.84]+1$

		G .	4		Stage 2:			Stage 3:					
	i	Stage Initial seat a				Seat allocation once δ_1 votes have been subtracted to the bloc in power				Seat allocation once $\delta_1 + \delta_2$ votes have been subtracted to the bloc in power			
	Opposition	n bloc	Bloc in p	Bloc in power		Opposition bloc		Opposition bloc		Bloc in power		Bloc in power	
	P1	P2	P3	P4	P1	P2	P3	P4	P1	P2	P3	P4	
v^i	95	957	247	1333	102	1028	222	1198	113	1144	181	979	
v^i/V	0.04	0.36	0.09	0,51	0.04	0.39	0.09	0.49	0.04	0.42	0.08	0.45	
S ⁱ	0	5	1	7	0	6	1	6	0	7	1	5	
α_i	0.09	0.91	0.16	0.84	0.09	0.91	0.16	0.84					
abstention	1096												
φ^O	0.49												
1	95.00	957.00	247.00	1333.00	102.00	1028.00	222.00	1198.00	113.00	1144.00	181.00	979.00	
2	47.50	478.50	123.50	666.50	47.50	514.00	111.00	599.00	56.50	572.00	90.50	489.50	
3	31.67	319.00	82.33	444.33	31.67	342.67	74.00	399.33	37.67	381.33	60.33	326.33	
4	23.75	239.25	61.75	333.25	23.75	257.00	55.50	299.50	28.25	286.00	45.25	244.75	
5	19.00	191.40	49.40	266.60	19.00	205.60	44.40	239.60	22.60	228.80	36.20	195.80	
6	15.83	159.50	41.17	222.17	15.83	171.33	37.00	199.67	18.83	190.67	30.17	163.17	
7	13.57	136.71	35.29	190.43	13.57	146.86	31.71	171.14	16.14	163.43	25.86	139.86	
8	11.88	119.63	30.88	166.63	11.88	128.50	27.75	149.75	14.13	143.00	22.63	122.38	
9	10.56	106.33	27.44	148.11	10.56	114.22	24.67	133.11	12.56	127.11	20.11	108.78	
10	9.50	95.70	24.70	133.30	9.50	102.80	22.20	119.80	11.30	114.40	18.10	97.90	
11	8.64	87.00	22.45	121.18	8.64	93.45	20.18	108.91	10.27	104.00	16.45	89.00	
12	7.92	79.75	20.58	111.08	7.92	85.67	18.50	99.83	9.42	95.33	15.08	81.58	
13	7.31	73.62	19.00	102.54	7.31	79.08	17.08	92.15	8.69	88.00	13.92	75.31	
Distance			159.79				259.54						
δ_i			25	135			41	219					
δ			$\delta_1 = 160$				$\delta_2 = 260$						
μ_i	7	71			11	116		. (0.01/0.04)					

Table A.6: Example of how the Regional Incumbent's bloc vote margin is computed (votes lost go to abstention and to the opposition bloc).

Note: For example, the distance to lose the last seat is computed as $159.79 = [(190.43 - 159.5) \cdot 7/0.84] \cdot [1/(1 + (7/(5+1)) \cdot (0.91/0.84) \cdot 0.49)] + 1; \mu_i$ are the votes transferred to the opposition block ($\mu_i = \alpha_i \times \delta_1 \times \varphi^o$).

					(iv)		1	Regional seat margi	n
	Period	(i) President's Coalition	(ii) Opposition's Coalition	(iii) Other parties in President's bloc	Other parties in Opposition's bloc	(v) Not Classified	(vi) President's v. Opposition's coalition	(vii) President's v. Opposition's bloc	(viii) Main two parties
Andalucía	1998-99	PSOE (52), <u>PA</u> (4)	PP (40)	IU (13)			16/109=0.147	29/109=0.266	12/109=0.110
	2002-03	PSOE (52), <u>PA</u> (5)	PP (46)	IU (6)			11/109=0.101	17/109=0.156	6/109=0.055
	2006-07	PSOE (61)	PP (37)	IU (6), <u>PA</u> (5)			24/109=0.220	35/109=0.321	24/109=0.220=
Aragon	1998-99	PP (27), <u>PAR</u> (14)	PSOE (19), IU (5), CHA (2)				15/67=0.223	15/67=0.223	8/67=0.119
	2002-03	PSOE (23), <u>PAR</u> (10), IU (1)	PP (28)	<u>CHA</u> (5)			6/67=0.089	11/67=0.164	-5/67=-0.074
	2006-07	PSOE (27), <u>PAR</u> (8)	PP (22)	IU (1), <u>CHA</u> (9)			13/67=0.194	23/67=0.343	5/67=0.074
Asturias	1998-99	PP (21)	PSOE (17)		IU (6), <u>PAS</u> (1)		4/45=0.089	-3/45=-0.067	4/45=0.089
	2002-03	PSOE (24), IU (3)	PP (15)			<u>URAS (</u> 3)	12/45=0.267	12/45=0.267	9/45=0.200
	2006-07	PSOE (22), IU (4)	PP (19)				7/45=0.156	7/45=0.156	3/45=0.067
Baleares	1998-99	PP (30)	PSOE (16), <u>PSM</u> -IU- <u>EV</u>	<u>AIPF</u> (1)		<u>UM</u> (2)	4/59=0.068	5/59=0.084	14/59=0.237
	2002-03	PSOE (13), <u>PACTE-PSM</u> - <u>EUEV-COP</u> (15), <u>UM</u> (3)	PP (28)				3/59=0.051	3/59=0.051	-13/59=-0.220
	2006-07	PP (29), <u>UM</u> (3)	PSOE (15), <u>PACTE</u> - <u>PSM-EUEV (11)</u>	<u>AIPF</u> (1)			6/59=0.102	7/59=0.119	14/59=0.237
Canarias	1998-99	<u>CC (21)</u> , PP (18)	PSOE (16)	<u>AHI</u> (1)		<u>PCN (</u> 4)	23/60=0.383	24/60=0.4	5/60=0.083
	2002-03	<u>CC (24)</u> , PP (15)	PSOE (19)	<u>AHI</u> (2)			20/60=0.333	22/60=0.367	5/60=0.083
	2006-07	<u>CC (23),</u> PP (17)	PSOE (17)			<u>FNC</u> (3)	23/60=0.383	23/60=0.383	6/60=0.1
Cantabria	1998-99	PP (13), <u>PRC</u> (6), <u>UPCA</u> (7)	PSOE (10), IU (3)				13/39=0.333	13/39=0.333	3/39=0.077
	2002-03	PP (19), <u>PRC</u> (6)	PSOE (14)				11/39=0.282	11/39=0.282	5/39=0.128
	2006-07	PSOE (13), <u>PRC</u> (8)	PP (18)				3/39=0.077	3/39=0.077	-5/39=-0.128

Table A.7: Calculation of Regional Electoral Competition proxies

Notes: (1) Party acronyms in capital letters (see Table A.8 for an explanation). (2) In red: Left-wing parties; In blue: right-wing parties; In green: Parties not classified (either because their ideology is ambiguous or because they have also been supporting, or are expected to support, both right- or left-wing presidents; Underlined: regionally based parties. (3) In parentheses: number of seats held by the party. (4) (i) President's coalition: parties supporting the regional president in the parliament; (ii) Opposition's coalition: parties belonging to a different ideological bloc to that of the regional president and that support, with a high degree of likelihood, the second party's candidate; (iii) Other parties in the President's bloc: rest of the parties belonging to the same ideological bloc as that of the president; (iv) Other parties in the Opposition's bloc: rest of the parties belonging to a different ideological bloc to that of the president's coalition but that cannot be classified in one of the two ideological blocs, either because their ideology is ambiguous, or because they entered coalitions with parties in both blocs in different elections, or because of specific issues that impede them entering into coalition: seats of the President's coalition: seats of the Opposition's coalition (5) (vi) *President's v. Opposition's coalition:* seats of the President's coalition (ii) he seats of the parties in column (i)) less seats of the Opposition's coalition (ii) + seats of other parties in her bloc (iii) less seats in the opposition's bloc: seats of the parties in the bloc: we for an explenence of the parties in that bloc (iv), divided by the total number of seats; (viii) Two main parties: difference between the seats of the most voted party in (i) and the most voted party in (ii), divided by the total number of seats.

				(iii)	(iv)		R	egional seat margin	
	Period	(i) President's Coalition	(ii) Opposition's Coalition	Other parties in President's bloc	Other parties in Opposition's bloc	Not	(vi) President's v. Opposition's coalition	(vii) President's v. Opposition's bloc	(viii) Main two parties
Castilla-La	1998-99	PSOE (24)	PP (22)	IU (1)			2/47=0.042	3/47=0.063	2/47=0.042
Mancha	2002-03	PSOE (26)	PP (21)				5/47=0.106	5/47=0.106	5/47=0.106
	2006-07	PSOE (29)	PP (18)				11/47=0.234	11/47=0.234	11/47=0.234
Castilla-León	1998-99	PP (50)	PSOE (27), IU (5)			<u>UPL</u> (2)	18/84=0.214	18/84=0.214	23/84=0.274
	2002-03	PP (48)	PSOE (30), IU (1)		<u>TC</u> (1)	<u>UPL</u> (3)	17/83=0.205	16/83=0.193	18/83=0.217
	2006-07	PP (48)	PSOE (32)			<u>UPL</u> (2)	16/82=0.195	16/82=0.195	16/82=0.195
Catalunya	1998-99	<u>CiU</u> (60)	PSOE (34), IU (11)	PP (17)	<u>ERC</u> (13)		15/135=0.111	19/135=0.141	26/135=0.192
	2002-03	<u>CiU</u> (56), PP (12)	PSOE (52), IU (3)		<u>ERC</u> (12)		13/135=0.096	1/135=0.007	4/135=0.029
	2006-07	PSOE (42), IU (9), <u>ERC</u> (23)	<u>CiU</u> (46), PP (15)				13/135=0.096	13/135=0.096	-4/135=-0.030
Extremadura	1998-99	PSOE (31)	PP (27)	IU (6)		<u>CE</u> (1)	4/65=0.061	10/65=0.153	4/65=0.061
	2002-03	PSOE (34)	PP (28)	IU (3)			6/65=0.092	9/65=0.138	6/65=0.092
	2006-07	PSOE (36)	PP (26)	IU (3)			10/65=0.154	13/65=0.200	10/65=0.154
Galicia	1998-99	PP (42)	PSOE (18), BNG				9/75=0.12	9/75=0.12	24/75=0.320
	2002-03	PP (41)	PSOE (17), BNG				7/75=0.093	7/75=0.093	24/75=0.320
	2006-07	PSOE (25), BNG (13)	PP (37)				1/75=0.013	1/75=0.013	-12/75=-0.16
Madrid	1998-99	PP (54)	PSOE (32), IU (17)				5/103=0.048	5/103=0.048	22/103=0.213
	2002-03	PP (55)	PSOE (39), IU (8)				8/102=0.078	8/102=0.078	16/102=0.157
	2006-07	PP (57)	PSOE (45), IU (9)				3/111=0.027	3/111=0.027	12/111=0.108
Murcia	1998-99	PP (26)	PSOE (15), IU (4)				7/45=0.155	7/45=0.155	11/45=0.244
	2002-03	PP (26)	PSOE (18), IU (1)				7/45=0.155	7/45=0.155	8/45=0.178
	2006-07	PP (28)	PSOE (16), IU (1)				11/45=0.244	11/45=0.244	12/45=0.267
Rioja (La)	1998-99	PP (17)	PSOE (12), IU (2)	<u>PR</u> (2)			3/33=0.091	5/33=0.151	5/33=0.151
	2002-03	PP (18)	PSOE (13)	<u>PR</u> (2)			5/33=0.151	7/33=0.212	5/33=0.151
	2006-07	PP (17)	PSOE (14)	<u>PR</u> (2)			3/33=0.091	5/33=0.151	3/33=0.091
Valencia	1998-99	PP (42), <u>UV</u> (5)	PSOE (32), IU (10)				5/89=0.056	5/89=0.056	10/89=0.112
	2002-03	PP (49)	PSOE (35), IU (5)				9/89=0.101	9/89=0.101	14/89=0.157
	2006-07	PP (48)	PSOE (35), IU (6)				7/89=0.079	7/89=0.079	13/89=0.146

Table A.7 Calculation of Regional Electoral Competition proxies (continued)

Acronym	Party Name	Ideology	Representation in the sample			
			% Regional presidents	% Regional seats		
PSOE	Partido Socialista Obrero Español	Socialism	17/45=38%	1193/3169=37.66%		
PA	Partido Andalucista	Nationalism, progressiveness	0%	14/3169=0.44%		
PP	Partido Popular (People's Party)	Conservative liberalism	23/45=51%	1331/3169=42.32%		
IU	Izquierda Unida	Former Communist Party	0%	153/3169=4.83%		
PAR	Partido Aragonés Regionalista	Nationalism, center	0%	32/3169=1.01%		
СНА	Chunta Aragonesista	Republicanism, nationalism socialdemocracy	0%	16/3169=0.50%		
URAS	Unión Renovadora Asturiana	Regionalism, conservatism	0%	3/3169=0.09%		
PAS	Partíu Asturianista	Nationalism, social democracy	0%	1/3169=0.03%		
PSM-IU-EV	Partit Socialista de Mallorca /Menorca – Esquerra Unida	Coalition between the socialist party in Mallorca and Menorca and the former communist party	0%	10/3169=0.32%		
PACTE-PSM -EUEV-COP	Pacte Progressista – Partit Socialista de Mallorca/Menorca – Esquerra Unida	Coalition between the socialist party in Mallorca and Menorca and several left-wing parties	0%	26/3169=0.82%		
UM	Unió Mallorquina	Liberalism, regionalism, center- right	0%	8/3169=0.25%		
AIPF	Agrupació Independent Popular de Formentera	Conservatism, center-right	0%	2/3169=0.06%		
CC	Coalición Canaria	Nationalism, conservatism	3/45=7%	68/3169=2.15%		
AHI	Agrupación Herreña Independiente	Nationalism, close to Coalición Canaria with whom they ran jointly in some elections	0%	3/3169=0.09%		
PNC	Partido Nacionalista Canario	Nationalism	0%	4/3169=0.13%		
FNC	Federación Nacionalista Canaria	Nationalism	0%	3/3169=0.09%		
PRC	Partido Regionalista de Cantabria	Regionalism, social democracy	0%	20/3169=0.63%		
UPCA	Unión para el Progreso de Cantabria	Regionalism. Founded by former People's Party's deputies	0%	7/3169=0.22%		
TC	Tierra Comunera	Nationalism, environmentalism, progressiveness	0%	1/3169=0.03%		
UPL	Unión del Pueblo Leonés	Regionalism	0%	7/3169=0.22%		
CiU	Convergència i Unió	Nationalism, liberalism, Christian Democrats	2/45 = 4%	162/3169=5.11%		
ERC	Esquerra Republicana de Catalunya	Republicanism, secessionism	0%	48/3169=1.51%		
CE	Coalición Extremeña	Regionalism, social democracy	0%	1/3169=0.03%		
BNG	Bloque Nacionalista Galego	Nationalism, socialism	0%	45/3169=1.42%		
PR	Partido Riojano	Progressiveness, regionalism	0%	6/3169=0.19%		
UV	Unión Valenciana	Regionalism, conservatism	0%	5/3169=0.16%		

Table A.8: Political parties

Table A.9: Full specification of the equations used to estimate the HLATE

	Specifications:
Sec	cond-stage estimates (one equation)
$ au_{it}$	$= \eta_1 a_{it} z_{rt} + \eta_2 z_{rt} + \sum_r \eta_{3r} a_{it} f_r + \sum_r \eta_{4r} f_r + \sum_r \eta_{5r} f_r v_{it}^0 + \sum_r \eta_{6r} a_{it} f_r v_{it}^0 + \eta_7 z_{rt} v_{it}^0 + \eta_8 z_{rt} a_{it} v_{it}^0 + \varepsilon_{it}$
Firs	st-stage estimates (two equations for each region + two)
a _{it.}	$f_r = \sum_r \mu_{1r} d_{it} f_r + \mu_{2r} d_{it} z_{rt} + \sum_r \mu_{3r} f_r + \mu_{4r} z_{rt} + \sum_r \mu_{5r} f_r v_{it}^0 + \sum_r \mu_{6r} f_r d_{it} v_{it}^0 + \mu_{7r} z_{rt} v_{it}^0 + \mu_{8r} z_{rt} d_{it} v_{it}^0 + \varsigma_{it}$
a _{it.}	$f_r v_{it}^0 = \sum_r \pi_{1r} d_{it} f_r + \pi_{2r} d_{it} z_{rt} + \sum_r \pi_{3r} f_r + \pi_{4r} z_{rt} + \sum_r \pi_{5r} f_r v_{it}^0 + \sum_r \pi_{6r} f_r d_{it} v_{it}^0 + \pi_{7r} z_{rt} v_{it}^0 + \pi_{8r} z_{rt} d_{it} v_{it}^0 + \varrho_{it}$
a _{it}	$z_{rt} = \sum_{r} \rho_{1r} d_{it} f_{r} + \rho_{2} d_{it} z_{rt} + \sum_{r} \rho_{3r} f_{r} + \rho_{4} z_{rt} + \sum_{r} \rho_{5r} f_{r} v_{it}^{0} + \sum_{r} \rho_{6r} f_{r} d_{it} v_{it}^{0} + \rho_{7} z_{rt} v_{it}^{0} + \rho_{8} z_{rt} d_{it} v_{it}^{0} + \omega_{it}$
a _{it} :	$z_{rt}v_{it}^{0} = \sum_{r}\sigma_{1r}d_{it}f_{r} + \sigma_{2}d_{it}z_{rt} + \sum_{r}\sigma_{3r}f_{r} + \sigma_{4}z_{rt} + \sum_{r}\sigma_{5r}f_{r}v_{it}^{0} + \sum_{r}\sigma_{6r}f_{r}d_{it}v_{it}^{0} + \sigma_{7}z_{rt}v_{it}^{0} + \sigma_{8}z_{rt}d_{it}v_{it}^{0} + \zeta_{it}$
	Notation and definitions:
f_r :	region dummies
v_{it}^0 :	Regional incumbent's bloc vote margin (forcing variable)
a_{it} :	Alignment (dummy = 1 if the regional president and the mayor belong to the same party)
$a_{it}z_{i}$	$_{rt}$: Alignment × Regional seat margin
d_{it} :	Regional incumbent's bloc seat majority (dummy =1 if forcing variable>0)
z_{rt} :	Regional seat margin
η,π,	μ, ρ and σ : coefficients

A.III Additional Tables and Figures

	Coef.	SE	Bandwidth	Observations
Debt burden	-0.01	(0.01)	21.9%	2,889
Property tax rate	-0.02	(0.02)	17.1%	2,326
Property value	-0.82	(1.22)	21.6%	2,860
Population	3,566	(10,120)	19.7%	2,622
Population density	27.45	(77.56)	17.1%	2,323
% Old	0.01	(0.01)	18.5%	2,479
% Young	-0.01	(0.01)	18.3%	2,466
% Immigrant	0.00	(0.00)	22.3%	2,925
% Unemployed	-0.07	(0.18)	23.7%	3,059
Income indicator	-0.00	(0.01)	22.9%	2,997
Press circulation p.c.	3.55	(3.75)	25.3%	3,284
Regional revenues p.c	0.04	(19.46)	24.7%	3,209
Regional debt	0.05	(0.24)	24.5%	3,172
Municipal density (regional)	-0.06	(1.71)	27.5%	3,522
Education	0.10	(0.15)	34.7%	4,112
Tenure in office	-0.03	(0.02)	28.7%	3,601
Regional seat margin	0.26	(0.28)	24.7%	3,209

Table A.10: Covariates' discontinuity tests

Notes: (1) RD estimates are obtained using local linear regressions using the optimal bandwidth (Calonico, Cattaneo, and Titiunik (2014)). (2) See Table A.1 for description of variables.

	(1)	(2)	(3)	(4)	(5)	(6)		
	RD							
	Global		Lo	cal		DinD		
	()	a) Second stag	e (Dep. varial	ole: Capital tr	ansfers per cap	pita)		
Alignment	98.35 (14.98) [0.000]	94.86 (13.06) [0.000]	97.45 (17.64) [0.001]	83.94 (22.13) [0.003]	76.39 (30.60) [0.049]	57.30 (6.31) [0.000]		
		(b) First	stage (Dep. v	ariable: Aligni	ment status)			
Regional incumbent's bloc seat majority	0.70 (0.02) [0.000]	0.71 (0.02) [0.000]	0.72 (0.03) [0.000]	0.73 (0.04) [0.000]	0.72 (0.05) [0.000]			
\mathbb{R}^2	0.749	0.684	0.610	0.567	0.573			
Polynomial order	2	1	1	1	1			
Bandwidth	100%	38.6%	19.3%	9.65%	4.8%			
Observations	6,050	4,410	2,576	1,383	683	6,050		

Table A.11: Average effect of partisan alignment. With controls.

Notes: (1) See Table 1. (2) Control variables included: log(Population), Population density, Property tax rate, Assessed Property Value p.c., and Local Debt p.c.

	(1)	(2)	(3)			
	(a) Second stage (Dep. variable: Capital transfers per capita)					
Alignment	82.28 (10.54) [0.000]	(10.54) (15.71)				
	(b) First stage (Dep. variable: Alignment status)					
Regional incumbent's bloc seat majority	0.74 (0.01) [0.000]	0.70 (0.02) [0.000]	0.71 (0.02) [0.000]			
Polynomial order	1	2	3			
Observations	6,050	6,050	6,050			

Table A.12: Average effect of partisan alignment. Order of Global polynomial.

Notes: (1) All columns include *Region fixed effects*. (2) The coefficients correspond to RD estimates of the LATE (second stage of the 2sls regression in panel a, and first stage in panel b) using the whole sample and different polynomial orders of the forcing variable -as indicated at the bottom of the table. (3) Robust standard errors in parentheses, clustered at the municipal level; P-values from wild bootstrapping (with regional clusters) in brackets.

	(1)	(2)
	DinD	DinD
Alignment	69.73	53.99
	(9.72)	(8.71)
	[0.000]	[0.000]
Future alignment	-4.94	
	(5.26)	
	[0.355]	
Past alignment		-5.49
		(14.21)
		[0.705]
Terms	1 st & 2 nd	2 nd & 3 rd
Observations	3,636	3,565

Table A.13: DinD falsification and placebo test.

Notes: (1) 1st term refers to years 1995-99, 2nd to 2000-03, and 3rd to 2004-07. (2) The dependent variable is capital transfers per capita granted to municipality *i* over the two years prior to local elections. (3) All coefficients are difference-in-differences estimates. (4) Municipality and time effects included in all columns. (5) Robust standard errors in parentheses, clustered at the municipal level; P-values from wild bootstrapping (with regional clusters) in brackets.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
			RD						DinD		
	Alternative Forcing var.	No regional Parties	No local Parties	Partner Alignment	Bloc Alignment	Concurrent elections	No regional Parties	No local Parties	Partner Alignment	Bloc Alignment	Concurrent elections
				(a)	Local averag	e treatment eff	fect				
Alignment	108.29 (19.16) [0.000]	97.16 (17.67) [0.000]	113.84 (20.60) [0.054]	88.06 (16.42) [0.000]	96.65 (17.38) [0.000]	102.75 (22.86) [0.000]	51.92 (6.30) [0.000]	62.05 (8.55) [0.000]	53.97 (5.88) [0.000]	55.69 (6.00) [0.000]	82.23 (9.74) [0.000]
				(b) <i>I</i>	Heterogeneou	s treatment eff	fects				
Align. × Regional seat margin	8.65 (3.56) [0.026]	9.23 (3.89) [0.010]	9.00 (3.16) [0.002]	5.67 (4.07) [0.187]	5.63 (4.37) [0.238]	10.18 (2.66) [0.000]	4.06 (1.32) [0.007]	4.80 (1.52) [0.002]	2.97 (1.87) [0.111]	2.76 (1.80) [0.131]	4.37 (1.87) [0.025]
Regional seat margin	0.75 (1.23) [0.585]	3.15 (0.91) [0.000]	2.58 (2.18) [0.251]	1.81 (1.49) [0.193]	1.99 (1.01) [0.047]	-0.18 (1.39) [0.898]	-0.02 (1.48) [0.991]	-1.07 (1.34) [0.422]	-0.51 (1.40) [0.720]	-0.25 (1.36) [0.868]	-2.06 (1.33) [0.118]
Observations	2,465	2,549	1,740	3,312	2,980	1,545	5,651	4,564	6,731	6,796	3,399

Table A.14: Robustness checks. Alternative alignment measures and forcing variable

Notes: (1) The estimates correspond to the second stage of 2SLS regressions. (2) Equations in column 1–5 have been estimated using a local linear regression using the optimal bandwidth. (3) Alternative forcing variable = distance to change in seat majority computed allowing migration of votes between parties; No regional parties = municipalities where regional parties not classified in Table A.5 in any of the ideological blocs obtaining representation are excluded from the analysis; No local parties = municipalities where local parties (who only run in local elections and have no clear ideological position) obtaining representation are excluded from the analysis; Partner alignment = the regional and the local government are considered to be aligned if the mayor and/or the main partner of a coalition belong to the same party; Bloc alignment = the regional and the local government belong to the same ideological bloc; Concurrent elections = regions where local and regional elections take place on the same day. (4) Municipality and time effects included in columns 7–11. (5) In panel (b) we include *Region* and *Alignment* × *Region fixed effects*. (6) Robust standard errors in parentheses, clustered at the municipal level; P-values from wild bootstrapping (with regional clusters) in brackets.

	(1)	(2)	(3)		
	R	DinD			
	Global	Global Local			
	(a) Presid	on's blocs			
Alignment $ imes$ Regional seat margin	6.40 (3.69) [0.145]	8.61 (4.11) [0.053]	1.42 (1.85) [0.463]		
Regional seat margin	-0.55 (1.60) [0.737]	-0.41 (1.27) [0.759]	0.36 (1.26) [0.773]		
	(b) Main two parties				
Alignment × Regional seat margin Regional seat margin	0.63 (2.21) [0.779] -0.68 (1.18) [0.591]	-0.18 (2.93) [0.938] 0.25 (1.09) [0.832]	0.59 (1.18) [0.615] 0.35 (0.67) [0.607]		
Polynomial order	2	1			
Bandwidth Observations	100% 6,050	19.3% 2,576	 6,050		

Table A.15: Robustness checks. Alternative measures of the Regional seat margin

Notes: (1) 1995-99, 2000-03 and 2004-07 terms. (2) The dependent variable is capital transfers per capita granted to municipality *i* over the two years prior to local elections. (3) Coefficients in columns 1 and 2 correspond to RD estimates and those of column 3 are difference-in-differences estimates. (4) Explanatory variable: Alignment dummy *a*; in columns 1 and 2 *a* instrumented with *d* (see Table 1); columns 1-2 include interactions between *a* and the *Regional competition* variable, and a polynomial of the forcing variable fitted separately on either side of the zero threshold using the whole sample and also fully interacted with the *Regional competition* variable. (5) In Panel (a) the Regional seat margin is computed as the difference between the seat share of the president's party minus the seat share of the main opposition party in the last regional election (this variable is demeaned); in Panel (b) the Regional seat share is computed as the difference between the seats hold by the ideological bloc of the president's party minus those of the other ideological bloc; see Tables A.4 and A.5 for details on the calculation of these variables. (6) Time dummies are included in column 3. (7) Alignment × region fixed effects included in all columns. (8) Robust standard errors in parentheses, clustered at the municipal level; P-values from wild bootstrapping (with regional clusters) in brackets.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Align. × Reg. seat marg.	6.46 (2.54) [0.021]	8.48 (2.77) [0.000]	8.25 (2.69) [0.000]	7.55 (3.30) [0.016]	8.04 (2.30) [0.000]	6.51 (2.39) [0.010]	5.56 (2.54) [0.063]
Align. × Revenues p.c.	0.13 (0.06) [0.062]						0.08 (0.13) [0.596]
Align. \times Debt burden		2.01 (5.49) [0.737]					3.00 (3.12) [0.362]
Align. \times Population density			0.22 (0.49) [0.707]				-1.15 (0.71) [0.132]
Align. \times Tenure in office		,		-50.86 (46.89) [0.350]			-33.05 (57.30) [0.586]
Align. × Press circulation p.c.		,			-0.42 (0.20) [0.046]		0.14 (0.23) [0.550]
Align. \times % Educated						-16.24 (10.53) [0.185]	-23.40 (19.58) [0.246]
Regional seat margin	-0.89 (1.17) [0.532]	-0.79 (2.13) [0.749]	-1.00 (1.91) [0.628]	-0.30 (1.68) [0.873]	-0.03 (1.49) [0.985]	-1.02 (1.18) [0.497]	0.63 (1.05) [0.582]
Observations	6,050	6,050	6,050	6,050	6,050	6,050	6,050

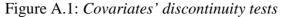
Table A.16: Controlling for time-varying covariates. Global RD estimates.

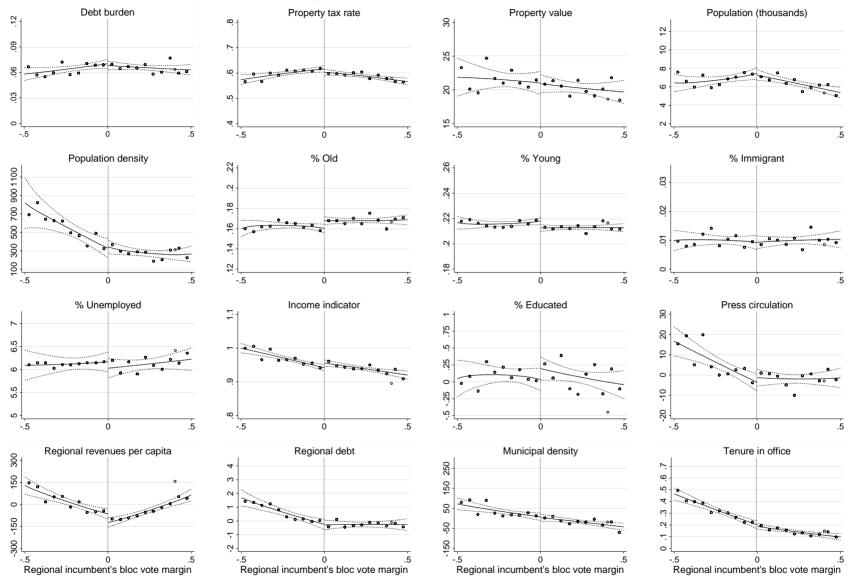
Notes: (1) The polynomial order of the forcing variable is two (2) *Revenues p.c.* = current revenues of the regional government per capita (demeaned); *Debt burden* = regional debt burden (principal + interest) as share of current revenues (demeaned), *Population density* = average population density of municipalities in the region (demeaned), *Tenure in office* = Dummy equal to one if the regional incumbent was not in office the previous term, *Press circulation* = newspaper copies per 1,000 inhabitants (in the province; demeaned), *% Educated* = share of people with primary and secondary education (demeaned). (3) Robust standard errors in parentheses, clustered at the regional level; P-values from wild bootstrapping in brackets. (4) All columns include *Alignment* × region fixed effects. (5) *Revenues p.c.*, *Debt burden*, *Population density*, *Tenure in office*, *Press circulation p.c.*, and *% Educated* are included in the regressions and they are fitted separately on either side of the zero threshold and fully interacted with the forcing variable

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Align. \times Reg. seat marg.	2.77 (1.42) [0.057]	3.68 (1.72) [0.025]	3.12 (1.72) [0.068]	3.15 (1.74) [0.060]	3.76 (1.30) [0.000]	2.69 (1.46) [0.061]	2.63 (1.56) [0.086]
Align. × Revenues p.c.	0.11 (0.04) [0.000]						0.05 (0.04) [0.262]
Align. \times Debt burden		1.08 (2.47) [0.664]	,		,		1.79 (1.80) [0.305]
Align. \times Population density			0.09 (0.15) [0.569]				-0.22 (0.34) [0.702]
Align. \times Tenure in office				-29.54 (12.21) [0.008]			-14.39 (23.42) [0.563]
Align. \times Press circulation p.c.					-0.37 (0.14) [0.011]		-0.13 (0.12) [0.294]
Align. \times % Educated						0.81 (6.80) [0.010]	-7.42 (11.07) [0.557]
Regional seat margin	-0.32 (1.48) [0.830]	-0.47 (1.51) [0.766]	-0.63 (1.87) [0.723]	-0.09 (1.62) [0.950]	-0.95 (1.35) [0.498]	-1.06 (1.28) [0.443]	-0.77 (1.65) [0.647]
Observations	6,050	6,050	6,050	6,050	6,050	6,050	6,050

Table A.16: Controlling for time varying covariates. (cont.). DinD estimates.

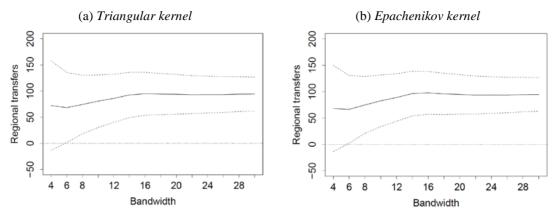
Notes: (1) Difference-in-differences estimates (2) *Revenues* p.c. = current revenues of the regional government per capita (demeaned); *Debt burden* = regional debt burden (principal + interest) as share of current revenues (demeaned), *Population density* = average population density of municipalities in the region (demeaned), *Tenure in office* = Dummy equal to one if it is the regional incumbent was not in office the previous term, *Press circulation* = newspaper copies per 1,000 inhabitants (in the province; demeaned), *% Educated* = share of people with primary and secondary education. (3) Robust standard errors in parentheses, clustered at the regional level; P-values from wild bootstrapping in brackets. (4) All columns include *Alignment* × region fixed effects. (5) *Revenues p.c.*, *Debt burden*, *Population density*, *Tenure in office*, *Press circulation* p.c., and % *Educated* are included in the regressions.





Note: (1) The solid line represents the predicted values of a local linear polynomial smoothing on each side of the threshold. (2) The dashed lines are 95% confidence intervals.





Note: (1) The solid line represents the estimates from Eq. (7) using local linear regression with for different bandwidths as indicated on the horizontal axis. (2) The dashed lines are 95% confidence intervals

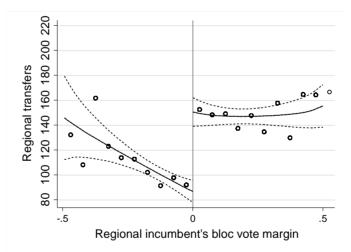


Figure A.3: *RD* with the alternative forcing variable

Notes: (1) Regional transfers = Capital transfers per capita from the Regional to the Local government during the last two years of the 1995-99, 2000-03, and 2004-07 municipal terms. (2) The dots are bin averages of 5% bin size. (3) The solid line represents the predicted values of a local linear polynomial smoothing on each side of the threshold. (4) The dashed lines are 95% confidence intervals. (5) Vote margin computed assuming vote migration towards both abstention and opposition's ideological bloc.

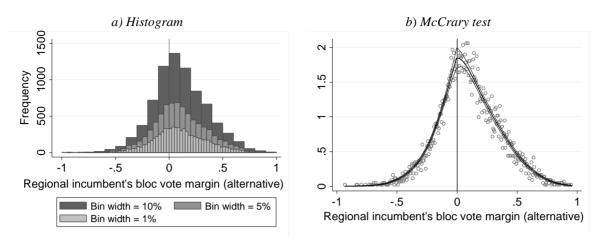
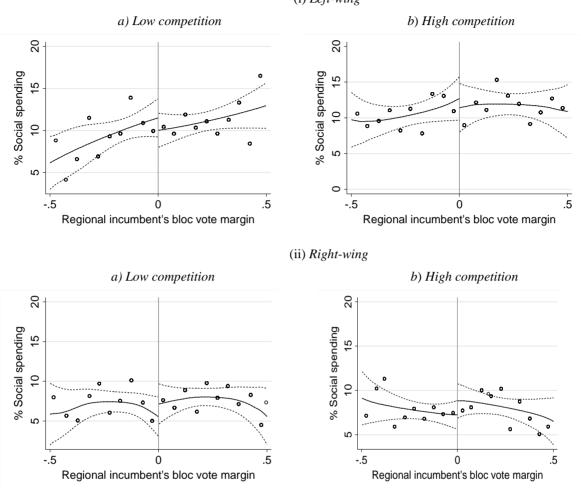


Figure A.4: Histogram and McCrary of the Alternative forcing variable

Figure A.5: Preference-based mechanism. Effect of the Regional Electoral Competition in Left and Right-wing regional governments



Notes: (1) The solid line represents the predicted values of a local linear polynomial smoothing on each side of the threshold. (2) Regions are divided into "low" ("high") competition if the *Regional seat margin* is above (below) the median and into Leftwing and Right-wing regional governments if the regional president belongs to a party classified as left-wing or right-wing. (3) The dashed lines are 95% confidence intervals

(i) Left-wing