# 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:

$$
\begin{gather*}
\Lambda_{i}=-(\mu(1-\theta))^{2} \chi \phi^{r}\left(u^{\prime}\left(\tau_{i}\right)\right)^{2}-\eta \theta^{3}\left(2 a_{i}-1\right)^{3} \phi_{i}^{\ell} u\left(\tau_{i}\right)\left(u^{\prime}\left(\tau_{i}\right)\right)^{2}  \tag{A.1}\\
+\left(\mu(1-\theta) \phi^{r}+\eta \theta\left(2 a_{i}-1\right) \phi_{i}^{\ell}\right) u^{\prime \prime}-c^{\prime \prime}<0 \quad \forall i
\end{gather*}
$$

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

This SOC can be evaluated for aligned and unaligned municipalities:

$$
\begin{align*}
& \Lambda_{a}=-(\mu(1-\theta))^{2} \chi \phi^{r}\left(u^{\prime}\left(\tau_{a}\right)\right)^{2}-\eta \theta^{3} \phi_{a}^{\ell} u\left(\tau_{a}\right)\left(u^{\prime}\left(\tau_{a}\right)\right)^{2}  \tag{A.2}\\
& \quad+\left(\mu(1-\theta) \phi^{r}+\eta \theta \phi_{a}^{\ell}\right) u^{\prime \prime}-c^{\prime \prime}<0 \\
& \Lambda_{u}=-(\mu(1-\theta))^{2} \chi \phi^{r}\left(u^{\prime}\left(\tau_{u}\right)\right)^{2}+\eta \theta^{3} \phi_{u}^{\ell} u\left(\tau_{u}\right)\left(u^{\prime}\left(\tau_{u}\right)\right)^{2}  \tag{A.3}\\
& +\left(\mu(1-\theta) \phi^{r}-\eta \theta \phi_{u}^{\ell}\right) u^{\prime \prime}-c^{\prime \prime}<0
\end{align*}
$$

Note that all the expressions in $\Lambda_{a}$ are negative. However, this is not the case for $\Lambda_{u}$; in this case the expressions $\eta \theta^{3} \phi_{u}^{\ell} u\left(\tau_{a}\right)\left(u^{\prime}\left(\tau_{a}\right)\right)^{2}$ and $-\eta \theta \phi_{u}^{\ell} u^{\prime \prime}$ 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 $\left.-(\mu(1-\theta))^{2} \kappa \phi^{r}\left(u^{\prime}\left(\tau_{u}\right)\right)^{2}+\mu(1-\theta) \phi^{r} u^{\prime \prime}\right)$. 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:

$$
\begin{equation*}
\left(\mu(1-\theta) \phi^{r}+\eta \theta \phi_{a}^{\ell}\right) u^{\prime}\left(\tau_{a}\right)-c^{\prime}\left(\tau_{a}\right)=\left(\mu(1-\theta) \phi^{r}-\eta \theta \phi_{u}^{\ell}\right) u^{\prime}\left(\tau_{u}\right)-c^{\prime}\left(\tau_{u}\right) \tag{A.4}
\end{equation*}
$$

Then:

$$
\begin{equation*}
\mu(1-\theta) \phi^{r}-\frac{c^{\prime}\left(\tau_{a}\right)}{u^{\prime}\left(\tau_{a}\right)}=-\eta \theta \phi_{a}^{\ell} \quad \& \quad \mu(1-\theta) \phi^{r}(\cdot)-\frac{c^{\prime}\left(\tau_{u}\right)}{u^{\prime}\left(\tau_{u}\right)}=\eta \theta \phi_{u}^{\ell} \tag{A.5}
\end{equation*}
$$

Given that $\eta \theta \phi_{u}^{\ell}>-\eta \theta \phi_{a}^{\ell}$ and $\kappa=\mu(1-\theta) \phi^{r}>0$, this implies that $\left(\kappa-\left(c^{\prime}\left(\tau_{u}\right) / u^{\prime}\left(\tau_{u}\right)\right)>\right.$ ( $\kappa-\left(c^{\prime}\left(\tau_{a}\right) / u^{\prime}\left(\tau_{a}\right)\right.$ ). Given that $c^{\prime} / u^{\prime}$ is monotonically increasing in $\tau$ (since $u^{\prime \prime}<0$ and $c^{\prime \prime}>$ 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 ( $\tau$ ) 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 $\left(a_{i}=1\right)$, both evaluated at a zero local margin of victory $\left(v_{i}^{\ell, 0}=0\right)$. Applying the implicit function theorem on the FOC we obtain:

$$
\left.\frac{\partial \tau_{a}}{\partial \bar{v}^{r, 0}}\right|_{v_{i}^{\ell, 0}=0}-\left.\frac{\partial \tau_{u}}{\partial \bar{v}^{r, 0}}\right|_{v_{i}^{\ell, 0}=0}=-\left.\frac{\left(\partial \Gamma_{a}\right) /\left(\partial \bar{v}^{r, 0}\right)}{\Lambda^{a}}\right|_{v_{i}^{0}=0}+\left.\frac{\left(\partial \Gamma_{u}\right) /\left(\partial \bar{v}^{r, 0}\right)}{\Lambda^{u}}\right|_{v_{i}^{0}=0}
$$

where $\Gamma$ and $\Lambda$ 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 partisan 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:

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

where $\Lambda^{a}$ and $\Lambda^{u}$ 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, $u^{\prime}\left(\tau_{u}\right) / \Lambda^{u}$ should be larger than $u^{\prime}\left(\tau_{a}\right) / \Lambda^{a}$. Given that $u^{\prime}\left(\tau_{u}\right)>u^{\prime}\left(\tau_{a}\right)$, 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:

$$
\begin{align*}
\Lambda^{u}-\Lambda^{a} & =-\left(\mu(1-\theta) \chi \kappa-\eta \phi_{u}^{\ell} \theta^{3} u\left(\tau_{u}\right)\right)\left(u^{\prime}\left(\tau_{u}\right)\right)^{2}  \tag{A.6}\\
& +\left(\mu(1-\theta) \chi \kappa+\eta \phi_{a}^{\ell} \theta^{3} u\left(\tau_{a}\right)\right)\left(u^{\prime}\left(\tau_{a}\right)\right)^{2}-\left(\eta \theta \phi_{u}^{\ell}+\eta \theta \phi_{a}^{\ell}\right) u^{\prime \prime}
\end{align*}
$$

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

$$
\begin{equation*}
-\left(\mu(1-\theta) \chi \kappa-\eta \phi_{u}^{\ell} \theta^{3} u\left(\tau_{u}\right)\right)\left(u^{\prime}\left(\tau_{u}\right)\right)^{2}=\left(\eta \theta \phi_{u}^{\ell}-\kappa\right) u^{\prime \prime}+c^{\prime \prime}+\delta \tag{A.7}
\end{equation*}
$$

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

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

This expression is positive because all terms are positive.

## A.II Data and variables.

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

| Variable | Definition | Mean (SD) | Source |
| :---: | :---: | :---: | :---: |
| Capital transfers | Capital transfers from the Regional government per capita (item 7.5, of the revenue budget) ${ }^{1}$ | $\begin{gathered} 95.71 \\ (140.48) \end{gathered}$ | 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) | $\begin{gathered} 0.62 \\ (0.48) \end{gathered}$ | Local election statistics (votes and seats for all the parties) and partisan identity of the mayor, provided by the Spanish <br> Ministry of Interior \& Ministry of Public Administration (1995, 2003 and 2007 local elections) 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) |
| 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) | $\begin{gathered} 0.66 \\ (0.47) \end{gathered}$ |  |
| Bloc alignment | Dummy equal to one if the mayor and the regional president belong to the same ideological bloc (0 otherwise) | $\begin{gathered} 0.66 \\ (0.47) \end{gathered}$ |  |
| 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 | $\begin{gathered} 0.10 \\ (0.32) \end{gathered}$ |  |
| 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) | $\begin{gathered} 0.61 \\ (0.49) \end{gathered}$ |  |
| Debt burden | Debt burden (capital, item 9 of the spending budget, + interest, item 3), as a share of current revenues | $\begin{gathered} 0.06 \\ (0.07) \end{gathered}$ | Spanish Ministry of Economics (years 1996-2007) |
| Property tax rate | Nominal property tax rate (IBI), \% on assessed property value | $\begin{gathered} 0.59 \\ (0.16) \\ \hline \end{gathered}$ | Centro de Gestión Catastral y Cooperación Triburaria, Spanish |
| Property value | Assessed property value (thousands of EUR) per capita | $\begin{gathered} 20.44 \\ (21.70) \\ \hline \end{gathered}$ | Ministry of Economics (years 1996-2007) |
| Population | Resident population | $\begin{gathered} 14301.95 \\ (80848.87) \\ \hline \end{gathered}$ | Population census (1991, 2001) <br> National Institute of Statistics Censo de Habitantes 2001, National Institute of Statistics |
| \% Old | \% resident population older than 65 years | $\begin{gathered} 0.16 \\ (0.05) \\ \hline \end{gathered}$ |  |
| \% Young | \% resident population younger than 14 years | $\begin{gathered} \hline 0.21 \\ (0.04) \\ \hline \end{gathered}$ |  |
| \% Immigrant | \% resident population non-EU immigrant | $\begin{gathered} 0.01 \\ (0.03) \\ \hline \end{gathered}$ |  |
| \% Unemployed | \% resident population unemployed | $\begin{gathered} \hline 0.06 \\ (0.03) \\ \hline \end{gathered}$ |  |
| Income indicator | Residents' income level, as estimated from objective indicators (e.g., cars, bank deposits, etc.) | $\begin{gathered} 0.94 \\ (0.14) \end{gathered}$ | Anuario Económico de España, La Caixa (years 1996-2007) |
| Population density | Population per square kilometer | $\begin{gathered} 361.66 \\ (1,306.99) \end{gathered}$ |  |

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.

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

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

Table A.3: Calculation of the forcing variable

## 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 $1,2,3,4 \ldots N$, 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 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 request ${ }^{2}$.

## 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 $k$.
$c_{I}^{i}\left(s_{I}^{i}\right)=v_{I}^{i} / s_{I}^{i}$ : comparison number for the last seat won by party $i$.
$c_{I}^{i}\left(s_{I}^{i}+1\right)=v_{I}^{i} /\left(s_{I}^{i}+1\right)$ : comparison number for the next seat to be won by party $i$.
$c_{I}^{\min }\left(s_{I}\right)=\min _{i}\left(c_{I}^{i}\left(s_{I}^{i}\right)\right):$ smallest comparison number for the last seat won by a party in $I$.
$c_{I}^{\max }\left(s_{I}+1\right)=\min _{i}\left(c_{I}^{i}\left(s_{I}^{i}+1\right)\right)$ : largest comparison number for the next seat to be won by a party in $I$.
$c_{O}^{k}\left(s_{O}^{k}\right), c_{O}^{k}\left(s_{O}^{k}+1\right), c_{O}^{\min }\left(s_{O}\right)$ and $c_{0}^{\max }\left(s_{O}+1\right)$ : 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, $c_{o}^{\max }\left(s_{O}+1\right)$, 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:

$$
\begin{equation*}
c_{I}^{\min *}\left(s_{I}\right)<c_{O}^{\max }\left(s_{O}+1\right) \tag{A.i}
\end{equation*}
$$

where $c_{I}^{\min *}\left(s_{I}\right)$ 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 $v_{I}^{x}-v^{x} / s_{I}^{x}<v_{o}^{x} /\left(s_{o}^{x}+1\right)$, 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:

$$
\begin{equation*}
v=\left(v^{x} / \alpha_{I}^{x}\right)+1 \quad \text { where } \quad v^{x}=\left(c_{I}^{\min }\left(s_{I}\right)-c_{O}^{\max }\left(s_{O}+1\right)\right) s_{I}^{x} \tag{A.ii}
\end{equation*}
$$

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:

$$
\begin{equation*}
c_{O}^{\min }\left(s_{O}\right)<c_{I}^{\max *}\left(s_{I}+1\right) \tag{..iii}
\end{equation*}
$$

where $c_{I}^{\operatorname{max*}}\left(s_{I}+1\right)$ is the largest comparison number for the next seat to be gained by party $y$ from the regional incumbent's bloc, once $\delta$ 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:

$$
\delta=\left(\delta^{y} / \alpha_{I}^{y}\right)+1 \quad \text { where } \delta^{y}=\left(c_{o}^{\min }\left(s_{o}\right)-c_{I}^{\max }\left(s_{I}+1\right)\right)\left(s_{I}^{y}+1\right)
$$

[A.iv]

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


#### Abstract

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 $\min _{M}\left(v^{i}{ }_{M}-v^{i}\right) / s^{i}{ }_{M}$ 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

Table A.4: Numerical example

|  | Opposition 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 |

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.

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)

|  | Stage 1: <br> Initial seat allocation |  |  |  | Stage 2: <br> Seat allocation once $\delta_{1}$ votes have been subtracted to the bloc in power Opposition bloc <br> Bloc in power |  |  |  | Stage 3: <br> Seat allocation once $\delta_{1}+\delta_{2}$ votes have been subtracted to the bloc in power Opposition bloc <br> 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 |
| $\alpha_{i}$ |  |  | 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 |  |  |  |  |  |
| $\delta_{i}$ |  |  | 40 | 217 |  |  | 55 | 296 |  |  |  |  |
| $\Delta$ |  |  | $\delta_{1}=257$ |  |  |  | $\delta_{2}=351$ |  |  |  |  |  |

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).

|  | Stage 1: <br> Initial seat allocation |  |  |  | Stage 2: <br> Seat allocation once $\delta_{1}$ votes have been subtracted to the bloc in power |  |  |  | Stage 3: <br> Seat allocation once $\delta_{1}+\delta_{2}$ votes have been subtracted to the 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 |
| $\alpha_{i}$ | 0.09 | 0.91 | 0.16 | 0.84 | 0.09 | 0.91 | 0.16 | 0.84 |  |  |  |  |
| abstention | 1096 |  |  |  |  |  |  |  |  |  |  |  |
| $\varphi^{\circ}$ | 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 |  |  |  |  |  |
| $\delta_{i}$ |  |  | 25 | 135 |  |  | 41 | 219 |  |  |  |  |
| $\delta$ |  |  | $\delta_{1}=160$ |  |  |  | $\delta_{2}=260$ |  |  |  |  |  |
| $\mu_{i}$ | 7 | 71 |  |  | 11 | 116 |  |  |  |  |  |  |

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 ( $\left.\mu_{i}=\alpha_{i} \times \delta_{1} \times \varphi^{O}\right)$.

Table A.7: Calculation of Regional Electoral Competition proxies

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

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; (v) Not classified: regional parties not belonging to 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 agreements with some or all of the parties (e.g., conflictive scissions from other parties, parties with extreme positions on other issues as e.g., secessionism). (5) (vi) President's v. Opposition's coalition: seats of the President's coalition (sum of the seats of the parties in column (i)) less seats of the Opposition's coalition (sum of the seats of the parties in column (ii)) divided by the total number of seats in the regional parliament (vii) President's $v$. Opposition's bloc: seats of the presidents' coalition (i) + seats of other parties in her bloc (iii) less seats in the oppositions' coalition (ii) + seats of other 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.

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

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

Table A.8: Political parties

| 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\% |
| CHA | 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 <br> -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, centerright | 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.9: Full specification of the equations used to estimate the HLATE

## Specifications:

## Second-stage estimates (one equation)

$$
\tau_{i t}=\eta_{1} a_{i t} z_{r t}+\eta_{2} z_{r t}+\sum_{r} \eta_{3 r} a_{i t} f_{r}+\sum_{r} \eta_{4 r} f_{r}+\sum_{r} \eta_{5 r} f_{r} v_{i t}^{0}+\sum_{r} \eta_{6 r} a_{i t} f_{r} v_{i t}^{0}+\eta_{7} z_{r t} v_{i t}^{0}+\eta_{8} z_{r t} a_{i t} v_{i t}^{0}+\varepsilon_{i t}
$$

First-stage estimates (two equations for each region + two)

$$
\begin{aligned}
& a_{i t} f_{r}=\sum_{r} \mu_{1 r} d_{i t} f_{r}+\mu_{2 r} d_{i t} z_{r t}+\sum_{r} \mu_{3 r} f_{r}+\mu_{4 r} z_{r t}+\sum_{r} \mu_{5 r} f_{r} v_{i t}^{0}+\sum_{r} \mu_{6 r} f_{r} d_{i t} v_{i t}^{0}+\mu_{7 r} z_{r t} v_{i t}^{0}+\mu_{8 r} z_{r t} d_{i t} v_{i t}^{0}+\varsigma_{i t} \\
& a_{i t} f_{r} v_{i t}^{0}=\sum_{r} \pi_{1 r} d_{i t} f_{r}+\pi_{2 r} d_{i t} z_{r t}+\sum_{r} \pi_{3 r} f_{r}+\pi_{4 r} z_{r t}+\sum_{r} \pi_{5 r} f_{r} v_{i t}^{0}+\sum_{r} \pi_{6 r} f_{r} d_{i t} v_{i t}^{0}+\pi_{7 r} z_{r t} v_{i t}^{0}+\pi_{8 r} z_{r t} d_{i t} v_{i t}^{0}+\varrho_{i t} \\
& a_{i t} z_{r t}=\sum_{r} \rho_{1 r} d_{i t} f_{r}+\rho_{2} d_{i t} z_{r t}+\sum_{r} \rho_{3 r} f_{r}+\rho_{4} z_{r t}+\sum_{r} \rho_{5 r} f_{r} v_{i t}^{0}+\sum_{r} \rho_{6 r} f_{r} d_{i t} v_{i t}^{0}+\rho_{7} z_{r t} v_{i t}^{0}+\rho_{8} z_{r t} d_{i t} v_{i t}^{0}+\omega_{i t} \\
& a_{i t} z_{r t} v_{i t}^{0}=\sum_{r} \sigma_{1 r} d_{i t} f_{r}+\sigma_{2} d_{i t} z_{r t}+\sum_{r} \sigma_{3 r} f_{r}+\sigma_{4} z_{r t}+\sum_{r} \sigma_{5 r} f_{r} v_{i t}^{0}+\sum_{r} \sigma_{6 r} f_{r} d_{i t} v_{i t}^{0}+\sigma_{7} z_{r t} v_{i t}^{0}+\sigma_{8} z_{r t} d_{i t} v_{i t}^{0}+\zeta_{i t}
\end{aligned}
$$

## Notation and definitions:

$f_{r}$ : region dummies
$v_{i t}^{0}$ : Regional incumbent's bloc vote margin (forcing variable)
$a_{i t}$ : Alignment (dummy $=1$ if the regional president and the mayor belong to the same party)
$a_{i t} z_{r t}$ : Alignment $\times$ Regional seat margin
$d_{i t}$ : Regional incumbent's bloc seat majority (dummy $=1$ if forcing variable $>0$ )
$z_{r t}:$ Regional seat margin
$\eta, \pi, \mu, \rho$ and $\sigma$ : coefficients

## A.III Additional Tables and Figures

Table A.10: Covariates' discontinuity tests

|  | 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 |

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.

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

|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RD |  |  |  |  | DinD |
|  | Global | Local |  |  |  |  |
|  | (a) Second stage (Dep. variable: Capital transfers per capita) |  |  |  |  |  |
| Alignment | $\begin{gathered} 98.35 \\ (14.98) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 94.86 \\ (13.06) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 97.45 \\ (17.64) \\ {[0.001]} \end{gathered}$ | $\begin{gathered} 83.94 \\ (22.13) \\ {[0.003]} \end{gathered}$ | $\begin{gathered} 76.39 \\ (30.60) \\ {[0.049]} \end{gathered}$ | $\begin{gathered} 57.30 \\ (6.31) \\ {[0.000]} \end{gathered}$ |
|  | (b) First stage (Dep. variable: Alignment status) |  |  |  |  |  |
| Regional incumbent's bloc seat majority | $\begin{gathered} 0.70 \\ (0.02) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 0.71 \\ (0.02) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 0.72 \\ (0.03) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 0.73 \\ (0.04) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 0.72 \\ (0.05) \\ {[0.000]} \end{gathered}$ | --.-- |
| $\mathrm{R}^{2}$ | 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 |

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.

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

|  | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
|  | (a) Second stage <br> (Dep. variable: Capital transfers per capita) |  |  |
| Alignment | $\begin{gathered} 82.28 \\ (10.54) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 98.06 \\ (15.71) \\ {[0.000]} \end{gathered}$ | $\begin{aligned} & 106.35 \\ & (18.02) \\ & {[0.002]} \end{aligned}$ |
|  | (b) First stage (Dep. variable: Alignment status) |  |  |
| Regional incumbent's bloc seat majority | $\begin{gathered} 0.74 \\ (0.01) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 0.70 \\ (0.02) \\ {[0.000]} \end{gathered}$ | $\begin{gathered} 0.71 \\ (0.02) \\ {[0.000]} \end{gathered}$ |
| Polynomial order <br> Observations | $\begin{gathered} 1 \\ 6,050 \end{gathered}$ | $\begin{gathered} 2 \\ 6,050 \end{gathered}$ | $\begin{gathered} 3 \\ 6,050 \end{gathered}$ |

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.

Table A.13: DinD falsification and placebo test.

|  | $(1)$ <br> DinD | $(2)$ <br> DinD |
| :--- | :---: | :---: |
| Alignment | 69.73 | 53.99 |
| Future alignment | $(9.72)$ | $(8.71)$ |
|  | $[0.000]$ | $[0.000]$ |
| Past alignment | -4.94 |  |
|  | $(5.26)$ | .--- |
|  | $[0.355]$ |  |
|  |  | -5.49 |
| Terms | .---- | $(14.21)$ |
| Observations |  | $[0.705]$ |

Notes: (1) $1^{\text {st }}$ term refers to years 1995-99, $2^{\text {nd }}$ to 2000-03, and $3^{\text {rd }}$ to 200407. (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.

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 $\times$ Region fixed effects. (6) Robust standard errors in parentheses, clustered at the municipal level; P -values from wild bootstrapping (with regional clusters) in brackets.

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

|  | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
|  | RD |  | DinD |
|  | Global | Local |  |
| Alignment $\times$ Regional seat margin | (a) President's v. Opposition's blocs |  |  |
|  | $\begin{gathered} \hline 6.40 \\ (3.69) \\ {[0.145]} \end{gathered}$ | $\begin{gathered} \hline 8.61 \\ (4.11) \\ {[0.053]} \end{gathered}$ | $\begin{gathered} 1.42 \\ (1.85) \\ {[0.463]} \end{gathered}$ |
| Regional seat margin | $\begin{gathered} -0.55 \\ (1.60) \\ {[0.737]} \end{gathered}$ | $\begin{aligned} & -0.41 \\ & (1.27) \\ & {[0.759]} \end{aligned}$ | $\begin{gathered} 0.36 \\ (1.26) \\ {[0.773]} \end{gathered}$ |
|  | (b) Main two parties |  |  |
| Alignment $\times$ Regional seat margin | $\begin{gathered} 0.63 \\ (2.21) \\ {[0.779]} \end{gathered}$ | $\begin{gathered} -0.18 \\ (2.93) \\ {[0.938]} \end{gathered}$ | $\begin{gathered} 0.59 \\ (1.18) \\ {[0.615]} \end{gathered}$ |
| Regional seat margin | $\begin{gathered} -0.68 \\ (1.18) \\ {[0.591]} \end{gathered}$ | $\begin{gathered} 0.25 \\ (1.09) \\ {[0.832]} \end{gathered}$ | $\begin{gathered} 0.35 \\ (0.67) \\ {[0.607]} \end{gathered}$ |
| Polynomial order <br> Bandwidth <br> Observations | $\begin{gathered} \hline 2 \\ 100 \% \\ 6,050 \end{gathered}$ | $\begin{gathered} \hline 1 \\ 19.3 \% \\ 2,576 \end{gathered}$ | $\begin{gathered} --.-- \\ ---- \\ 6,050 \end{gathered}$ |

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 $\times$ region fixed effects included in all columns. (8) Robust standard errors in parentheses, clustered at the municipal level; Pvalues from wild bootstrapping (with regional clusters) in brackets.

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

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

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 $\times$ 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

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

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

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 $\times$ 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.

Figure A.1: Covariates’ discontinuity tests


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.

Figure A.2: RD with non-parametric estimation


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: $R D$ 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

