Online Appendix: Why Geographically-Targeted Spending Under Closed-List Proportional Representation Favors Marginal Districts

A Features of Japan's 11 PR Blocs

Table A.1: District Magnitudes and Prefectures in Japan's 11 PR Blocs, 1996-2012.

PR bloc	Prefectures	1996	2000	2003	2005	2009	2012
Hokkaido	Hokkaido	9	8	8	8	8	8
Tohoku	Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima	16	14	14	14	14	14
Kanto North	Ibaraki, Tochigi, Gunma, Saitama	21	20	20	20	20	20
Tokyo	Tokyo	19	17	17	17	17	17
Kanto South	Chiba, Kanagawa, Yamanashi	23	21	22	22	22	22
Hokuriku Shinetsu	Niigata, Toyama, Ishikawa, Fukui, Nagano	13	11	11	11	11	11
Tokai	Gifu, Shizuoka, Aichi, Mie	23	21	21	21	21	21
Kinki	Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama	33	30	29	29	29	29
Chugoku	Tottori, Shimane, Okayama, Hiroshima, Yamaguchi	13	11	11	11	11	11
Shikoku	Tokushima, Kagawa, Ehime, Kochi	7	6	6	6	6	6
Kyushu	Fukuoka, Saga, Nagasaki, Kumamoto, Oita, Miyazaki, Kagoshima, Okinawa	23	21	21	21	21	21
Total:		200	180	180	180	180	180

B Figure with Tohoku 2012

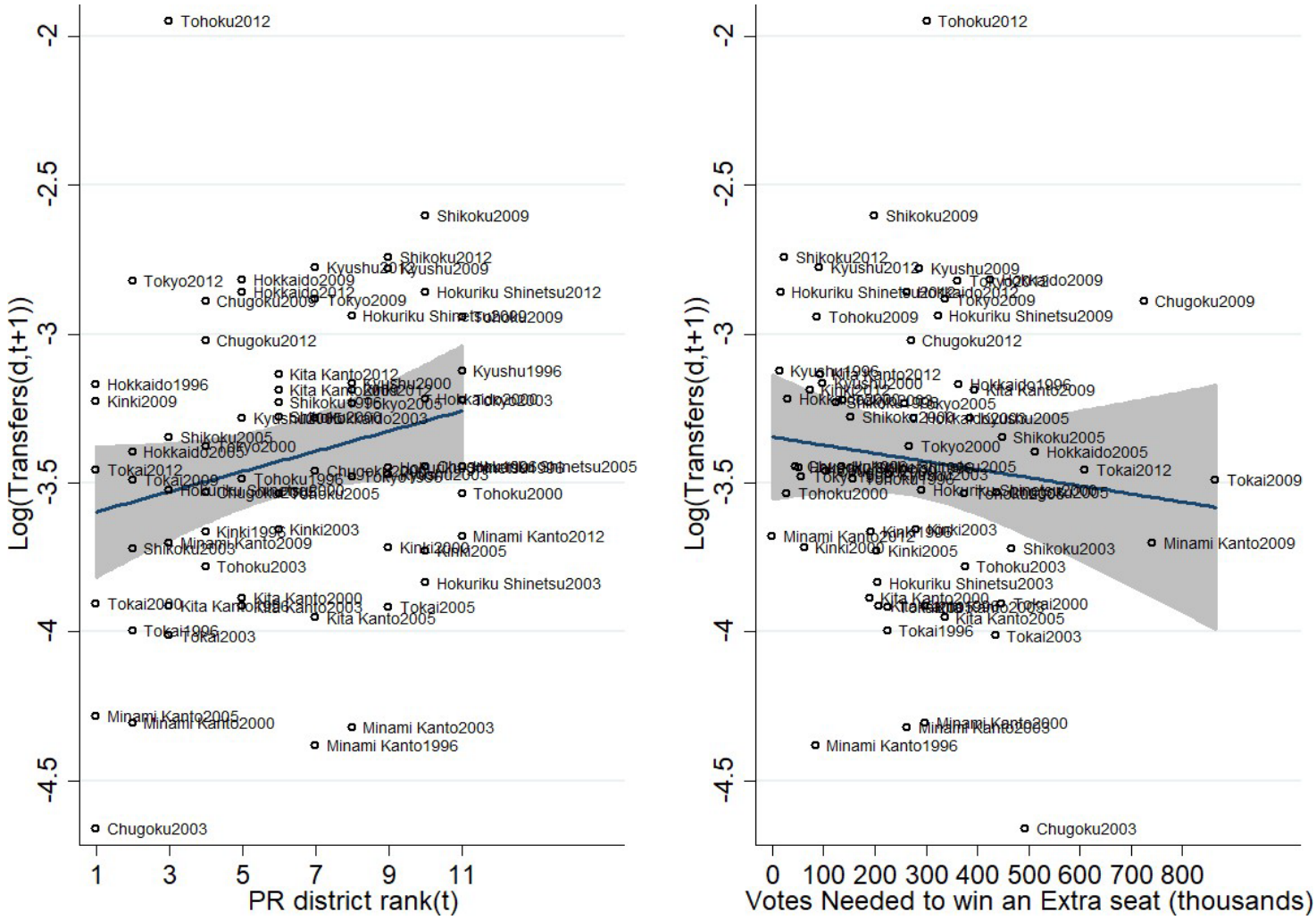

Figure B.1: For PR blocs in the 1996, 2000, 2003, 2005, 2009, and 2012 HOR elections, we plot their position in the ruling party's marginality ranking (left, x-axis) and the number of additional votes the ruling party needed to capture another seat (right, x-axis), respectively, against the size of the bloc's per capita NTD allocation in the year after the election (y -axis). PR blocs that ranked higher in marginality received larger allocations (left). PR blocs where a smaller number of additional votes were needed to net the ruling party an additional seat received larger allocations (right). This figure includes the Tohoku bloc in the 2012 election.

C Results With a Control for Natural Disasters

We compiled a list of named earthquakes that caused human casualties and/or damage to property and named floods that caused human casualties from the Japan Meteorological Agency's website. This list, called the 'List of Named Earthquakes and Meteorological Phenomena', is available here: https://www.jma.go.jp/jma/kishou/know/meishou/meishou_ichiran.html. The Fire and Disaster Management Agency's website contains PDF reports pertaining to each of the named earthquakes and floods that occurred since 1995. This list is available here: https://www.fdma.go.jp/disaster/info/. For the 1995 Kobe earthquake, the FDMA report was in a different format. For this earthquake only, we relied on the municipality-level coding from Horiuchi and Saito (2003), which listed 18 municipalities as having been affectedby this earthquake.

Using this data, we created Natural Disaster$_m$, a dummy variable coded '1' if the municipality was affected by a named earthquake or flood at any point since the previous election, and '0' otherwise. Tables C.1 and C.2 replicate Tables 5 and 6 in the paper, with this control.

To account for variation in the earthquake's intensity across municipalities, we constructed two measures. First, we created a categorical variable capturing the seismic intensity of the earthquake that affected municipalities experienced in the years since the last election. The variable has four categories: Not Affected, Low Intensity (for all municipalities affected by a seismic intensity of 5), Medium Intensity (for all municipalities affected by a seismic intensity of 6), and High Intensity (for all municipalities affected by a seismic intensity of 7). Tables C.3 and C.4 replicate Tables 5 and 6 in the paper, with this control. Note that this regression excludes the 1995 earthquake, as we do not have municipality-level seismic intensity data for this earthquake. Second, we used a continuous variable capturing the earthquake's magnitude. Tables C.5 and C.6 replicate Tables 5 and 6 in the paper with this control.

Table C.1: This table replicates Table 5 in the main paper, but includes Natural Disaster$_m$ as an additional control.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.031**	0.033**	0.028**
	[0.013]	[0.012]	[0.012]
LDP or DPJ PR VS$_{m,t}$	0.212		0.485**
	[0.128]		[0.160]
LDP or DPJ SSD VS$_{m,t}$		-0.085	-0.185**
		[0.066]	[0.070]
Log(Transfers$_{m,t}$)	0.520***	0.519***	0.519***
	[0.021]	[0.021]	[0.021]
Fiscal Strength$_{m,t}$	-0.208*	-0.195*	-0.205*
	[0.106]	[0.106]	[0.106]
Log(Population$_{m,t}$)	-0.228	-0.175	-0.248
	[0.167]	[0.178]	[0.162]
Log(Income$_{m,t}$)	-0.548**	-0.525**	-0.547**
	[0.212]	[0.210]	[0.209]
Dependent Population$_{m,t}$	0.207	0.379	0.168
	[0.602]	[0.632]	[0.584]
Agriculture$_{m,t}$	0.226	0.306	0.137
	[0.564]	[0.587]	[0.568]
Population Density$_{m,t}$	0.000*	0.000**	0.000**
	[0.000]	[0.000]	[0.000]
Natural Disaster$_m$	0.057	0.055	0.055
	[0.033]	[0.034]	[0.033]
Constant	0.536	0.025	0.735
	[1.679]	[1.788]	[1.600]
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	13,113	13,113	13,113
R-squared	0.557	0.557	0.558

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table C.2: This table replicates Table 6 in the main paper, but includes Natural Disaster$_m$ as an additional control.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.034***	0.039***	0.033***
	[0.008]	[0.008]	[0.008]
LDP or DPJ PR VS$_{m,t}$	0.466***		0.554***
	[0.088]		[0.100]
LDP or DPJ SSD VS$_{m,t}$		0.195***	-0.083
		[0.060]	[0.064]
Log(Transfers$_{m,t}$)	0.706***	0.710***	0.706***
	[0.017]	[0.018]	[0.017]
Asymmetry in Municipality Size$_{d,t}$	0.229	0.211	0.235
	[0.224]	[0.227]	[0.222]
Fiscal Strength$_{d,t}$	-0.200	-0.192	-0.203
	[0.151]	[0.160]	[0.150]
Agriculture$_{d,t}$	0.965	0.986	0.965
	[0.803]	[0.793]	[0.799]
Dependent Population$_{d,t}$	0.117	0.137	0.114
	[0.186]	[0.181]	[0.186]
Population Density$_{d,t}$	-0.059*	-0.047	-0.061*
	[0.032]	[0.033]	[0.031]
Log(Population$_{d,t}$)	0.018	0.020	0.018
	[0.059]	[0.059]	[0.059]
Log(Per Capita Income$_{d,t}$)	-0.032	-0.031	-0.032
	[0.079]	[0.085]	[0.078]
Log(Number of Municipalities$_{d,t}$)	-0.047	-0.038	-0.045
	[0.032]	[0.029]	[0.033]
LDP or DPJ Competitiveness$_{d,t}$	-0.071***	-0.120***	-0.043*
	[0.016]	[0.023]	[0.021]
Natural Disaster$_m$	0.005	0.001	0.005
	[0.020]	[0.022]	[0.020]
Constant	-1.460*	-1.382*	-1.490*
	[0.749]	[0.750]	[0.751]
Year FE	Yes	Yes	Yes
District FE	Yes	Yes	Yes
Observations	13,482	13,482	13,482
R-squared	0.756	0.756	0.756

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table C.3: This table replicates Table 5 in the main paper, but includes categorical variable Seismic Intensity$_m$ as an additional control.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.032**	0.034**	0.029**
	[0.013]	[0.012]	[0.012]
LDP or DPJ PR VS$_{m,t}$	0.226*		0.496***
	[0.119]		[0.154]
LDP or DPJ SSD VS$_{m,t}$		-0.081	-0.182**
		[0.066]	[0.070]
Log(Transfers$_{m,t}$)	0.517***	0.517***	0.517***
	[0.020]	[0.020]	[0.020]
Fiscal Strength$_{m,t}$	-0.218*	-0.204*	-0.215*
	[0.105]	[0.106]	[0.106]
Log(Population$_{m,t}$)	-0.235	-0.180	-0.254
	[0.172]	[0.182]	[0.166]
Log(Income$_{m,t}$)	-0.538**	-0.515**	-0.537**
	[0.215]	[0.213]	[0.213]
Dependent Population$_{m,t}$	0.216	0.394	0.178
	[0.598]	[0.630]	[0.581]
Agriculture$_{m,t}$	0.241	0.325	0.154
	[0.565]	[0.586]	[0.568]
Population Density$_{m,t}$	0.000*	0.000**	0.000**
	[0.000]	[0.000]	[0.000]
Seismic Intensity (Low)$_m$	-0.072	-0.068	-0.073
	[0.050]	[0.053]	[0.050]
Seismic Intensity (Medium)$_m$	0.116*	0.110*	0.113*
	[0.059]	[0.057]	[0.058]
Seismic Intensity (High)$_m$	0.127	0.136	0.139
	[0.348]	[0.337]	[0.330]
Constant	0.583	0.050	0.774
	[1.716]	[1.817]	[1.635]
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	13,097	13,097	13,097
R-squared	0.557	0.557	0.558

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table C.4: This table replicates Table 6 in the main paper, but includes categorical variable Seismic Intensity$_m$ as an additional control.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.034***	0.039***	0.033***
	[0.008]	[0.008]	[0.008]
LDP or DPJ PR VS$_{m,t}$	0.466***		0.556***
	[0.087]		[0.098]
LDP or DPJ SSD VS$_{m,t}$		0.194***	-0.084
		[0.060]	[0.065]
Log(Transfers$_{m,t}$)	0.706***	0.710***	0.706***
	[0.017]	[0.018]	[0.017]
Asymmetry in Municipality Size$_{d,t}$	0.237	0.218	0.243
	[0.228]	[0.231]	[0.226]
Fiscal Strength$_{d,t}$	-0.209	-0.199	-0.212
	[0.149]	[0.160]	[0.148]
Agriculture$_{d,t}$	0.960	0.980	0.960
	[0.809]	[0.798]	[0.806]
Dependent Population$_{d,t}$	0.117	0.138	0.114
	[0.186]	[0.181]	[0.186]
Population Density$_{d,t}$	-0.055	-0.044	-0.058*
	[0.031]	[0.032]	[0.030]
Log(Population$_{d,t}$)	0.016	0.019	0.017
	[0.060]	[0.059]	[0.060]
Log(Per Capita Income$_{d,t}$)	-0.025	-0.025	-0.024
	[0.078]	[0.085]	[0.077]
Log(Number of Municipalities$_{d,t}$)	-0.047	-0.039	-0.045
	[0.032]	[0.029]	[0.033]
LDP or DPJ Competitiveness$_{d,t}$	-0.070***	-0.119***	-0.042*
	[0.016]	[0.023]	[0.021]
Seismic Intensity (Low)$_m$	-0.054	-0.053	-0.053
	[0.046]	[0.050]	[0.046]
Seismic Intensity (Medium)$_m$	0.004	-0.003	0.004
	[0.023]	[0.023]	[0.023]
Seismic Intensity (High)$_m$	0.318	0.304	0.324
	[0.432]	[0.430]	[0.425]
Constant	-1.443*	-1.366	-1.474*
	[0.759]	[0.760]	[0.761]
Year FE	Yes	Yes	Yes
District FE	Yes	Yes	Yes
Observations	13,467	13,467	13,467
R-squared	0.756	0.756	0.756

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table C.5: This table replicates Table 5 in the main paper, but includes Earthquake Magnitude$_m$ as an additional control.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.031**	0.033**	0.028**
	[0.013]	[0.012]	[0.012]
LDP or DPJ PR VS$_{m,t}$	0.212		0.485**
	[0.128]		[0.160]
LDP or DPJ SSD VS$_{m,t}$		-0.085	-0.184**
		[0.066]	[0.070]
Log(Transfers$_{m,t}$)	0.519***	0.519***	0.519***
	[0.020]	[0.020]	[0.020]
Fiscal Strength$_{m,t}$	-0.208*	-0.195*	-0.205*
	[0.106]	[0.106]	[0.106]
Log(Population$_{m,t}$)	-0.228	-0.176	-0.248
	[0.169]	[0.179]	[0.163]
Log(Income$_{m,t}$)	-0.547**	-0.524**	-0.546**
	[0.211]	[0.208]	[0.208]
Dependent Population$_{m,t}$	0.210	0.382	0.170
	[0.603]	[0.632]	[0.585]
Agriculture$_{m,t}$	0.232	0.312	0.144
	[0.560]	[0.581]	[0.563]
Population Density$_{m,t}$	0.000*	0.000**	0.000**
	[0.000]	[0.000]	[0.000]
Earthquake Magnitude$_m$	0.008	0.008	0.008
	[0.005]	[0.005]	[0.005]
Constant	0.534	0.022	0.732
	[1.685]	[1.794]	[1.605]
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	13,113	13,113	13,113
R-squared	0.557	0.557	0.558

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table C.6: This table replicates Table 6 in the main paper, but includes Earthquake Magnitude$_m$ as an additional control.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.033***	0.039***	0.032***
	[0.008]	[0.008]	[0.008]
LDP or DPJ PR VS$_{m,t}$	0.465***		0.553***
	[0.087]		[0.099]
LDP or DPJ SSD VS$_{m,t}$		0.195***	-0.083
		[0.060]	[0.065]
Log(Transfers$_{m,t}$)	0.706***	0.711***	0.706***
	[0.017]	[0.018]	[0.017]
Asymmetry in Municipality Size$_{d,t}$	0.229	0.211	0.235
	[0.225]	[0.228]	[0.223]
Fiscal Strength$_{d,t}$	-0.197	-0.189	-0.200
	[0.152]	[0.161]	[0.151]
Agriculture$_{d,t}$	0.953	0.974	0.953
	[0.804]	[0.793]	[0.800]
Dependent Population$_{d,t}$	0.118	0.138	0.115
	[0.186]	[0.181]	[0.186]
Population Density$_{d,t}$	-0.059*	-0.048	-0.062*
	[0.032]	[0.033]	[0.031]
Log(Population$_{d,t}$)	0.017	0.019	0.017
	[0.060]	[0.059]	[0.060]
Log(Per Capita Income$_{d,t}$)	-0.037	-0.036	-0.036
	[0.082]	[0.089]	[0.081]
Log(Number of Municipalities$_{d,t}$)	-0.047	-0.039	-0.046
	[0.032]	[0.030]	[0.033]
LDP or DPJ Competitiveness$_{d,t}$	-0.071***	-0.120***	-0.043*
	[0.016]	[0.023]	[0.021]
Earthquake Magnitude$_m$	-0.001	-0.002	-0.001
	[0.003]	[0.003]	[0.003]
Constant	-1.451*	-1.373	-1.481*
	[0.757]	[0.758]	[0.759]
Year FE	Yes	Yes	Yes
District FE	Yes	Yes	Yes
Observations	13,482	13,482	13,482
R-squared	0.756	0.756	0.756

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

D Results with Another Measure of SSD Marginality

As the paper explains, $\text{Zombie}_{d,t}$ is a dummy variable that takes the value of 1 for municipalities in SSDs where the ruling party's candidate lost but was able to enter parliament via the PR tier, and 0 otherwise. Tables D.1 and D.2 replicate Tables 5 and 6 in the paper, replacing LDP or DPJ $\text{Competitiveness}_{d,t}$ with $\text{Zombie}_{d,t}$.

Table D.1: This table replicates Table 5 in the main paper, but includes Zombie$_{d,t}$ as an additional control.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.030**	0.032**	0.027**
	[0.013]	[0.013]	[0.012]
LDP or DPJ PR VS$_{m,t}$	0.214		0.486**
	[0.129]		[0.161]
LDP or DPJ SSD VS$_{m,t}$		-0.086	-0.185**
		[0.067]	[0.070]
Log(Transfers$_{m,t}$)	0.522***	0.521***	0.522***
	[0.022]	[0.022]	[0.023]
Fiscal Strength$_{m,t}$	-0.208*	-0.195*	-0.205*
	[0.107]	[0.107]	[0.107]
Log(Population$_{m,t}$)	-0.225	-0.172	-0.245
	[0.166]	[0.176]	[0.160]
Log(Income$_{m,t}$)	-0.554**	-0.533**	-0.554**
	[0.217]	[0.215]	[0.214]
Dependent Population$_{m,t}$	0.184	0.357	0.145
	[0.597]	[0.632]	[0.581]
Agriculture$_{m,t}$	0.204	0.281	0.114
	[0.572]	[0.598]	[0.578]
Population Density$_{m,t}$	0.000*	0.000**	0.000**
	[0.000]	[0.000]	[0.000]
Zombie$_{d,t}$	0.008	0.002	0.004
	[0.009]	[0.009]	[0.009]
Constant	0.526	0.014	0.724
	[1.679]	[1.789]	[1.600]
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	13,113	13,113	13,113
R-squared	0.557	0.557	0.558

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table D.2: This table replicates Table 6 in the main paper, but includes $Zombie_{d,t}$ as an additional control.

	Dependent Variable: $Log(Transfers_{m,t+1})$		
	Model 1	Model 2	Model 3
Marginal Bloc	0.034***	0.039***	0.032***
	[0.008]	[0.008]	[0.008]
LDP or DPJ PR $VS_{m,t}$	0.422***		0.615***
	[0.089]		[0.092]
LDP or DPJ SSD $VS_{m,t}$		0.061	-0.152***
		[0.056]	[0.047]
$Log(Transfers_{m,t})$	0.706***	0.713***	0.706***
	[0.017]	[0.018]	[0.017]
Asymmetry in Municipality $Size_{d,t}$	0.242	0.233	0.244
	[0.228]	[0.234]	[0.226]
Fiscal $Strength_{d,t}$	-0.200	-0.195	-0.207
	[0.155]	[0.162]	[0.149]
$Agriculture_{d,t}$	1.178	1.191	1.035
	[0.810]	[0.781]	[0.822]
Dependent $Population_{d,t}$	0.085	0.108	0.101
	[0.182]	[0.181]	[0.190]
Population $Density_{d,t}$	-0.063*	-0.053	-0.065*
	[0.031]	[0.031]	[0.032]
$Log(Population_{d,t})$	0.018	0.021	0.018
	[0.060]	[0.059]	[0.059]
Log(Per Capita $Income_{d,t}$)	-0.026	-0.025	-0.028
	[0.080]	[0.084]	[0.077]
Log(Number of $Municipalities_{d,t}$)	-0.053	-0.037	-0.045
	[0.031]	[0.030]	[0.033]
$Zombie_{d,t}$	0.010	0.005	0.006
	[0.008]	[0.010]	[0.009]
Constant	-1.507*	-1.472*	-1.528*
	[0.750]	[0.743]	[0.752]
Year FE	Yes	Yes	Yes
District FE	Yes	Yes	Yes
Observations	13,482	13,482	13,482
R-squared	0.756	0.755	0.756

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

E Results With Another Measure of PR Bloc Marginality

To examine whether our findings are better explained by the ruling party's efforts to prevent a narrowly-won seat from being lost, we constructed an alternative marginality ranking. This calculates, for PR blocs where the ruling party captured the last seat allocated in the bloc, the number of votes it would have to *lose* for this seat to go to another party. We exclude PR blocs where the ruling party did not capture the last seat from this calculation because by definition, these are not blocs where the last seat won by the ruling party was 'narrowly-won'. For example, if the last seat won by the ruling party in an 8-seat district was the 7th seat, losing votes would likely relegate it to winning the 8th (and last) seat instead of the 7th. Only the loss of a relatively *large* number of votes would mean the total loss of this seat.

For PR blocs in which the ruling party captured the last seat, we calculated the number of additional votes each of the *other* parties contesting the bloc would need to capture it. For each bloc, the minimum of these indicates how narrowly-won the last seat was. We construct an alternative marginality ranking, which ranges from '1' to '*n*', where *n* is the number of blocs in which the ruling party captured the last seat. The bloc coded 1 is the bloc whose last seat was most narrowly-won by the ruling party. Using this, we constructed 'Bloc (Narrowly-Won Last Seat)', a dummy coded '1 if the municipality's PR bloc was at the highest or second-highest position in this ranking and '0' otherwise. In 'Bloc (Narrowly-Won Last Seat)', we re-include PR blocs where the ruling party did not capture the last seat and code all of these '0'.

Tables E.1 and E.2 replicate Tables 5 and 6 but use 'Bloc (Narrowly-Won Last Seat)' instead of Marginal Bloc. The coefficient on Bloc (Narrowly-Won Last Seat) is significant in two of the three specifications leveraging over-time variation in the same municipality's location in a PR bloc, but not in the specifications that control for time-invariant and time-varying SSD-level differences. On balance, the evidence suggests that transfers are used to win the ruling party an additional seat, not to prevent a narrowly-won seat from being lost.

Table E.1: This table replicates Table 5 in the main paper, but replaces Marginal Bloc with Bloc (Narrowly Won Last Seat). Its coefficient is significant in Models 1 and 3.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Bloc (Narrowly Won Last Seat)	0.041*	0.036	0.038*
	[0.020]	[0.020]	[0.020]
LDP or DPJ PR VS$_{m,t}$	0.273**		0.543***
	[0.106]		[0.145]
LDP or DPJ SSD VS$_{m,t}$		-0.074	-0.185**
		[0.069]	[0.073]
Log(Transfers$_{m,t}$)	0.519***	0.519***	0.519***
	[0.022]	[0.022]	[0.023]
Fiscal Strength$_{m,t}$	-0.220*	-0.205*	-0.216*
	[0.110]	[0.110]	[0.110]
Log(Population$_{m,t}$)	-0.233	-0.169	-0.253
	[0.162]	[0.173]	[0.156]
Log(Income$_{m,t}$)	-0.549**	-0.529**	-0.548**
	[0.233]	[0.230]	[0.228]
Dependent Population$_{m,t}$	0.239	0.432	0.197
	[0.620]	[0.655]	[0.595]
Agriculture$_{m,t}$	0.188	0.299	0.100
	[0.587]	[0.615]	[0.588]
Population Density$_{m,t}$	0.000	0.000*	0.000*
	[0.000]	[0.000]	[0.000]
Constant	0.580	-0.042	0.778
	[1.658]	[1.778]	[1.577]
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	13,113	13,113	13,113
R-squared	0.557	0.557	0.558

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table E.2: This table replicates Table 6 in the main paper, but replaces Marginal Bloc with Bloc (Narrowly Won Last Seat). Its coefficient is not significant in any specification.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Bloc (Narrowly Won Last Seat)	0.025	0.023	0.025
	[0.017]	[0.017]	[0.016]
LDP or DPJ PR VS$_{m,t}$	0.486***		0.589***
	[0.088]		[0.097]
LDP or DPJ SSD VS$_{m,t}$		0.198***	-0.098
		[0.059]	[0.061]
Log(Transfers$_{m,t}$)	0.705***	0.709***	0.705***
	[0.017]	[0.018]	[0.017]
Asymmetry in Municipality Size$_{d,t}$	0.210	0.192	0.218
	[0.221]	[0.224]	[0.220]
Fiscal Strength$_{d,t}$	-0.227	-0.219	-0.230
	[0.149]	[0.159]	[0.147]
Agriculture$_{d,t}$	1.075	1.112	1.073
	[0.909]	[0.906]	[0.901]
Dependent Population$_{d,t}$	0.114	0.130	0.111
	[0.216]	[0.212]	[0.215]
Population Density$_{d,t}$	-0.064*	-0.052	-0.068**
	[0.030]	[0.031]	[0.029]
Log(Population$_{d,t}$)	0.025	0.027	0.025
	[0.058]	[0.058]	[0.058]
Log(Per Capita Income$_{d,t}$)	-0.025	-0.027	-0.024
	[0.080]	[0.092]	[0.078]
Log(Number of Municipalities$_{d,t}$)	-0.051	-0.042	-0.049
	[0.031]	[0.029]	[0.033]
LDP or DPJ Competitiveness$_{d,t}$	-0.069***	-0.118***	-0.036*
	[0.016]	[0.023]	[0.019]
Constant	-1.538*	-1.452*	-1.573*
	[0.742]	[0.743]	[0.745]
Year FE	Yes	Yes	Yes
District FE	Yes	Yes	Yes
Observations	13,482	13,482	13,482
R-squared	0.756	0.755	0.756

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

F Results Without PR Blocs Where the Ruling Party Captured the Last Seat

Table F.1: This table replicates Table 5 in the main paper, but excludes municipalities located in PR blocs where the ruling party captured the last seat.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.037**	0.038**	0.033**
	[0.014]	[0.014]	[0.014]
LDP or DPJ PR VS$_{m,t}$	0.442**		0.767***
	[0.188]		[0.188]
LDP or DPJ SSD VS$_{m,t}$		-0.064	-0.218**
		[0.106]	[0.085]
Log(Transfers$_{m,t}$)	0.454***	0.454***	0.452***
	[0.018]	[0.018]	[0.018]
Fiscal Strength$_{m,t}$	-0.187	-0.165	-0.186
	[0.127]	[0.128]	[0.126]
Log(Population$_{m,t}$)	-0.121	-0.017	-0.161
	[0.269]	[0.275]	[0.253]
Log(Income$_{m,t}$)	-0.563*	-0.539*	-0.562*
	[0.282]	[0.279]	[0.289]
Dependent Population$_{m,t}$	0.428	0.656	0.358
	[0.734]	[0.754]	[0.697]
Agriculture$_{m,t}$	0.388	0.504	0.272
	[0.797]	[0.851]	[0.819]
Population Density$_{m,t}$	0.000	0.000*	0.000*
	[0.000]	[0.000]	[0.000]
Constant	-0.926	-1.896	-0.528
	[2.684]	[2.740]	[2.514]
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	9,290	9,290	9,290
R-squared	0.474	0.473	0.476

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table F.2: This table replicates Table 6 in the main paper, but excludes municipalities located in PR blocs where the ruling party captured the last seat.

	Dependent Variable: Log(Transfers$_{m,t+1}$)		
	Model 1	Model 2	Model 3
Marginal Bloc	0.037***	0.040***	0.035***
	[0.010]	[0.011]	[0.011]
LDP or DPJ PR VS$_{m,t}$	0.524***		0.630***
	[0.075]		[0.100]
LDP or DPJ SSD VS$_{m,t}$		0.226***	-0.098
		[0.050]	[0.067]
Log(Transfers$_{m,t}$)	0.700***	0.706***	0.700***
	[0.022]	[0.023]	[0.022]
Asymmetry in Municipality Size$_{d,t}$	-0.062	-0.083	-0.051
	[0.262]	[0.255]	[0.266]
Fiscal Strength$_{d,t}$	-0.121	-0.101	-0.128
	[0.170]	[0.188]	[0.171]
Agriculture$_{d,t}$	0.419	0.364	0.454
	[1.294]	[1.320]	[1.290]
Dependent Population$_{d,t}$	0.132	0.180	0.118
	[0.304]	[0.293]	[0.303]
Population Density$_{d,t}$	0.042	0.066	0.037
	[0.064]	[0.066]	[0.064]
Log(Population$_{d,t}$)	0.051	0.060	0.049
	[0.076]	[0.071]	[0.076]
Log(Per Capita Income$_{d,t}$)	-0.190*	-0.255*	-0.173
	[0.103]	[0.115]	[0.100]
Log(Number of Municipalities$_{d,t}$)	-0.070	-0.064	-0.067
	[0.042]	[0.036]	[0.044]
LDP or DPJ Competitiveness$_{d,t}$	-0.052	-0.104**	-0.021
	[0.031]	[0.035]	[0.020]
Constant	-1.860*	-1.834*	-1.869*
	[0.962]	[0.920]	[0.968]
Year FE	Yes	Yes	Yes
District FE	Yes	Yes	Yes
Observations	9,460	9,460	9,460
R-squared	0.749	0.748	0.749

Robust standard errors clustered at the bloc level in brackets
*** p<0.01, ** p<0.05, * p<0.1