

ONLINE APPENDIX
PATRONAGE AND SELECTION IN PUBLIC SECTOR ORGANIZATIONS

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APPENDIX A.1. ADDITIONAL TABLES AND FIGURES

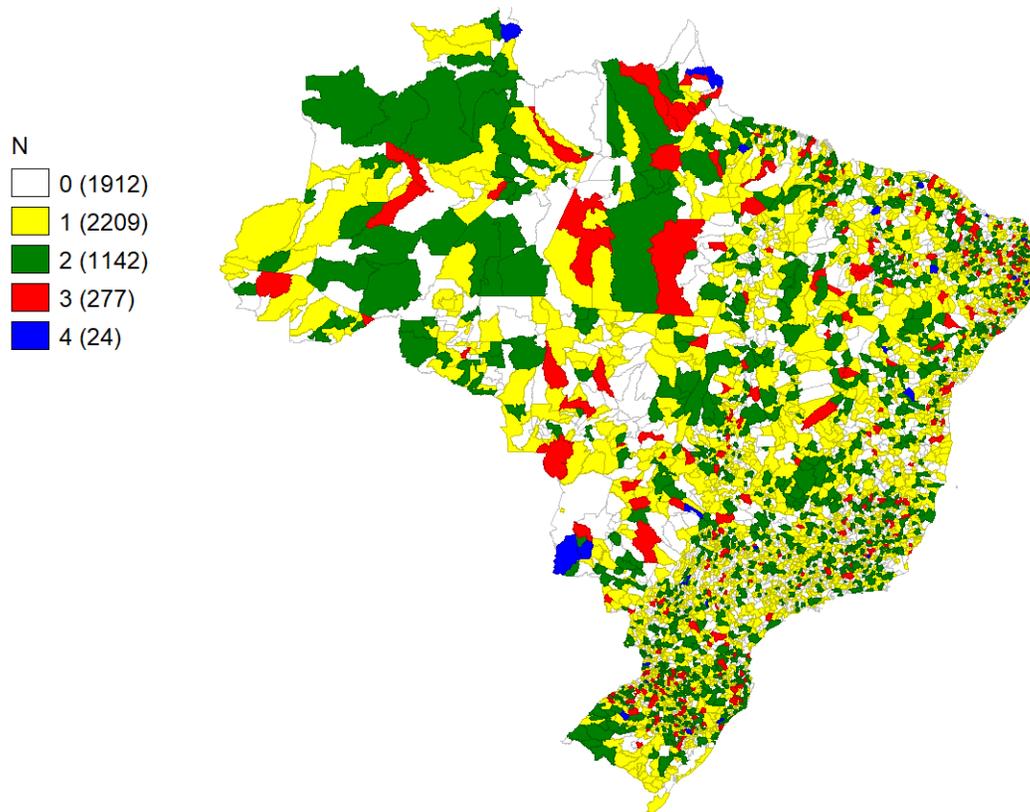


FIGURE A1. Municipalities with Close Elections

Notes: The figure shows how many times each Brazilian municipality enters the main sample of close elections, defined as elections with a 5 percentage points margin of victory or less between the winner and the runner-up, over the 4 elections in the 2000-2012 period.

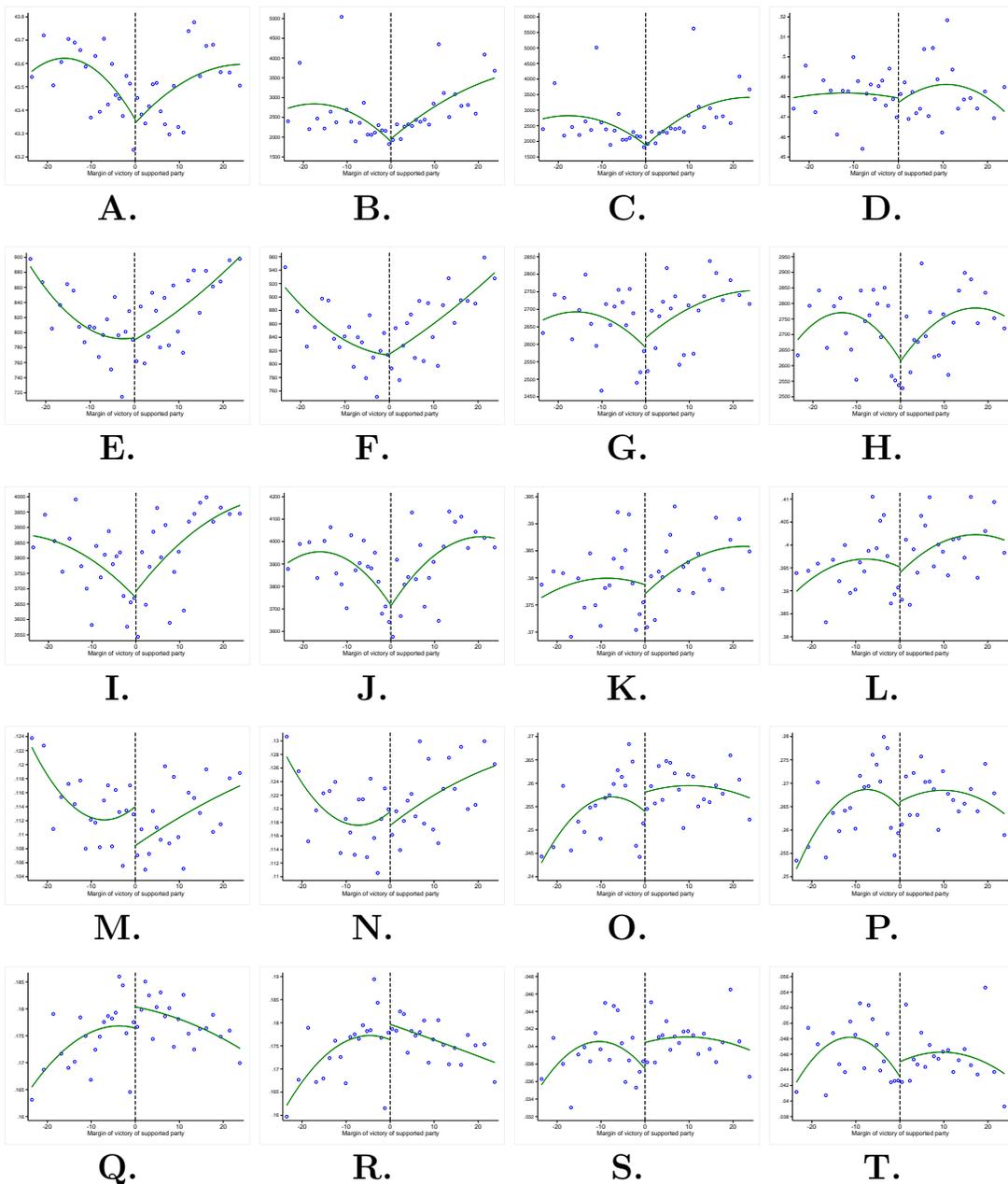


FIGURE A2. Smoothness of Covariates at the Cutoff – Candidates (Part 1)

Notes: The figure shows graphical evidence for the smoothness of candidates' covariates in the pre-election period. Panel A: Age. Panel B: Contributions Received. Panel C: Contributions Spent. Panel D: Fed. Government Party. Panel E: Earnings Private $t=0$. Panel F: Earnings Private $t=-1$. Panel G: Earnings Public $t=0$. Panel H: Earnings Public $t=-1$. Panel I: Earnings Total $t=0$. Panel J: Earnings Total $t=-1$. Panel K: Employed Any $t=0$. Panel L: Employed Any $t=-1$. Panel M: Employed Private $t=0$. Panel N: Employed Private $t=-1$. Panel O: Employed Public $t=0$. Panel P: Employed Public $t=-1$. Panel Q: Employed Public Concurso $t=0$. Panel R: Employed Public Concurso $t=-1$. Panel S: Employed Bureaucrat - Manager $t=0$. Panel T: Employed Bureaucrat - Manager $t=-1$.

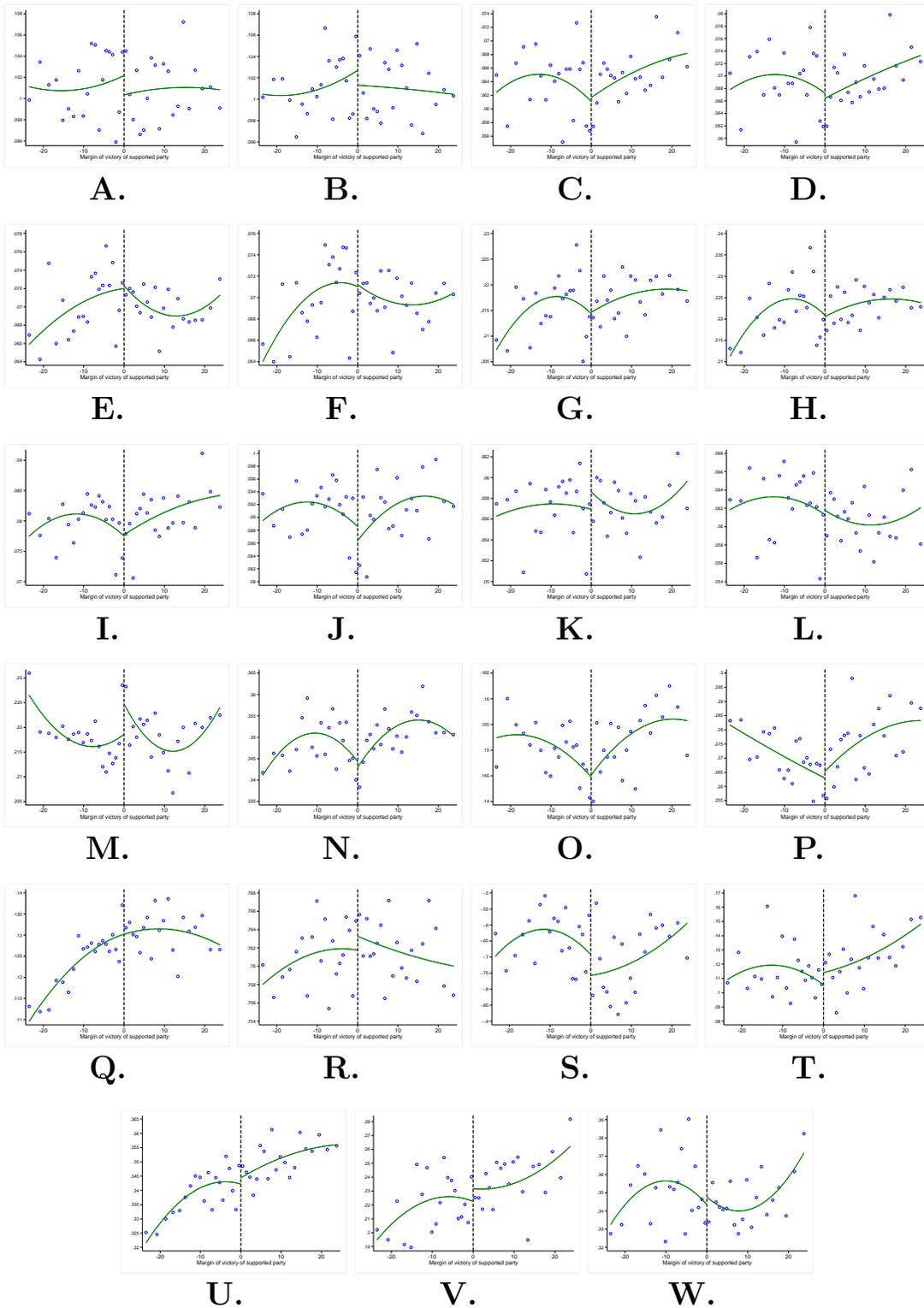


FIGURE A3. Smoothness of Covariates at the Cutoff – Candidates (Part 2)

Notes: The figure shows graphical evidence for the smoothness of candidates' covariates in the pre-election period. Panel A: Employed Frontline High Skills $t=0$. Panel b: Employed Frontline High Skills $t=-1$. Panel C: Employed Frontline High Skills $t=0$. Panel D: Employed Frontline High Skills $t=-1$. Panel E: Employed Frontline Low Skills $t=0$. Panel F: Employed Frontline Low Skills $t=-1$. Panel G: Employed Qualified $t=0$. Panel H: Employed Qualified $t=-1$. Panel I: Employed Public-Discretionary $t=0$. Panel J: Employed Public-Discretionary $t=-1$. Panel K: Employed Unqualified $t=0$. Panel L: Employed Unqualified $t=-1$. Panel M: Secondary School. Panel N: High School. Panel O: University Degree. Panel P: Mincer Sample. Panel Q: Incumbent. Panel R: Male. Panel S: Residual Ability Score. Panel T: President Party. Panel U: Run Past Election. Panel V: Governor Party. Panel W: Party Already in Power

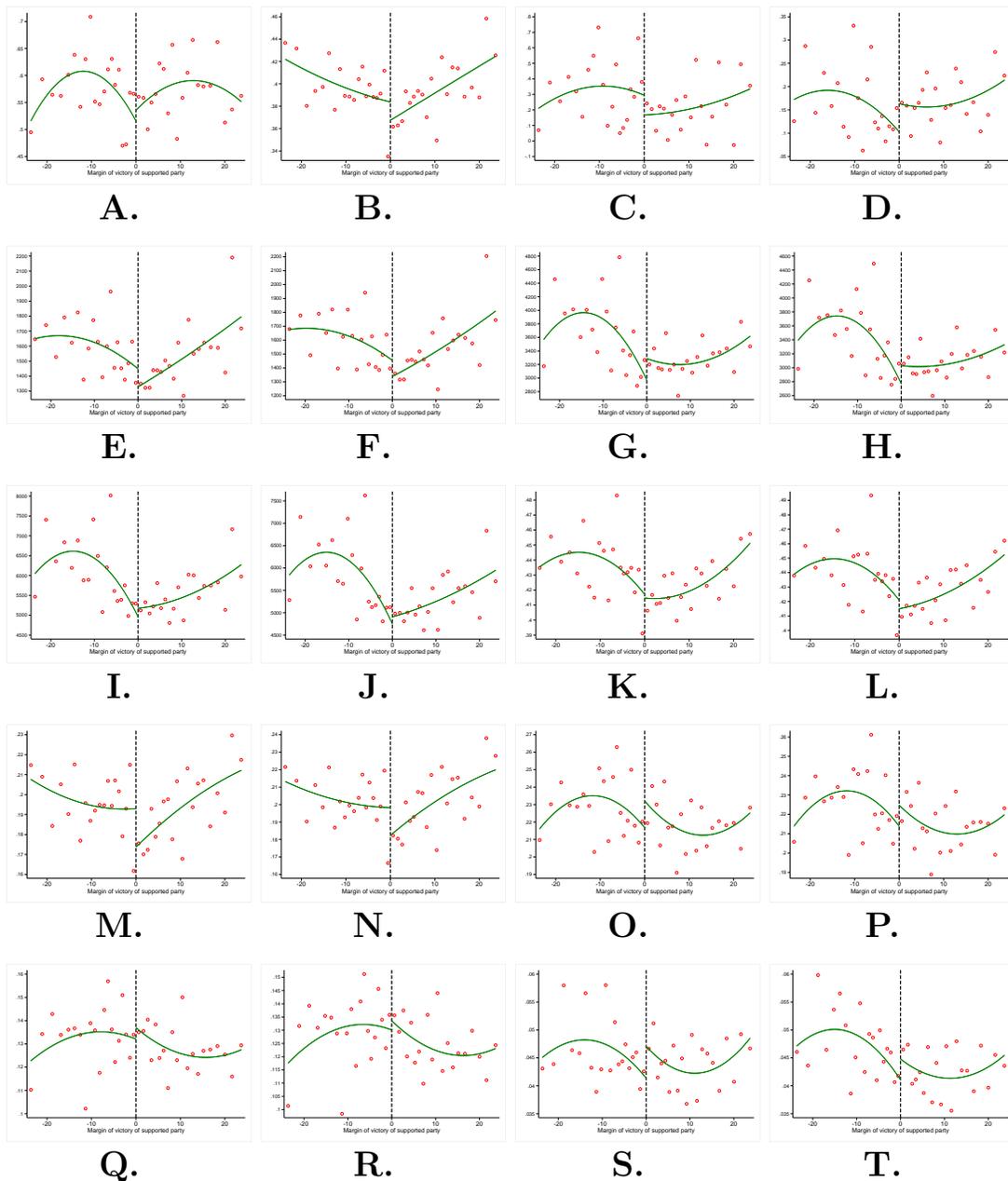


FIGURE A4. Smoothness of Covariates at the Cutoff – Donors (Part 1)

Notes: The figure shows graphical evidence for the smoothness of donors' covariates in the pre-election period. Panel A: Fed. Government Party. Panel B: Mincer Sample. Panel C: Residual Ability Score. Panel D: President Party. Panel E: Earnings Private $t=0$. Panel F: Earnings Private $t=-1$. Panel G: Earnings Public $t=0$. Panel H: Earnings Public $t=-1$. Panel I: Earnings Total $t=0$. Panel J: Earnings Total $t=-1$. Panel K: Employed Any $t=0$. Panel L: Employed Any $t=-1$. Panel M: Employed Private $t=0$. Panel N: Employed Private $t=-1$. Panel O: Employed Public $t=0$. Panel P: Employed Public $t=-1$. Panel Q: Employed Public Concurso $t=0$. Panel R: Employed Public Concurso $t=-1$. Panel S: Employed Bureaucrat - Manager $t=0$. Panel T: Employed Bureaucrat - Manager $t=-1$.

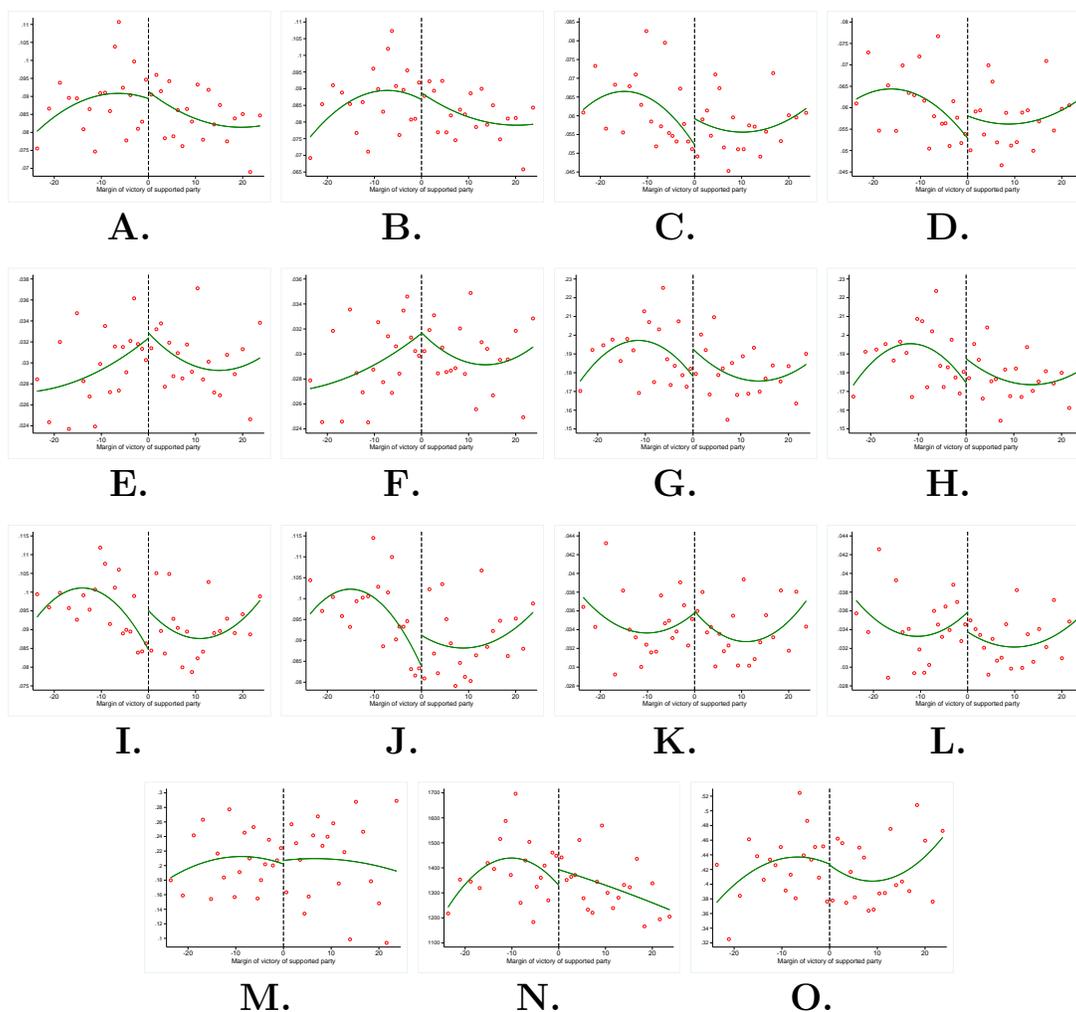


FIGURE A5. Smoothness of Covariates at the Cutoff – Donors (Part 2)

Notes: The figure shows graphical evidence for the smoothness of donors' covariates in the pre-election period. Panel A: Employed Frontline High Skills $t=0$. Panel b: Employed Frontline High Skills $t=-1$. Panel C: Employed Frontline High Skills $t=0$. Panel D: Employed Frontline High Skills $t=-1$. Panel E: Employed Frontline Low Skills $t=0$. Panel F: Employed Frontline Low Skills $t=-1$. Panel G: Employed Qualified $t=0$. Panel H: Employed Qualified $t=-1$. Panel I: Employed Public-Discretionary $t=0$. Panel J: Employed Public-Discretionary $t=-1$. Panel K: Employed Unqualified $t=0$. Panel L: Employed Unqualified $t=-1$. Panel M: Governor Party. Panel N: Amount of Contributions. Panel O: Party Already in Power.

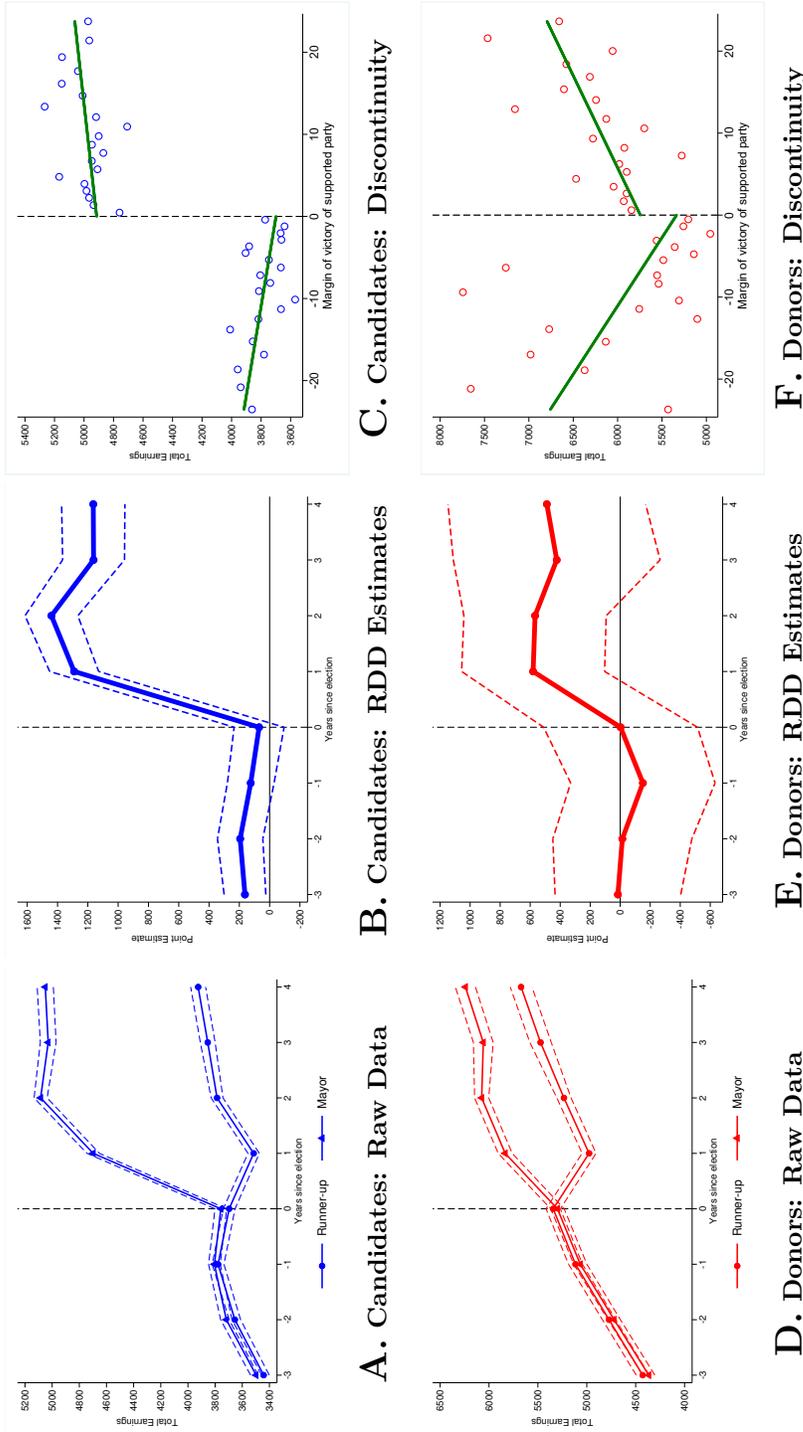


FIGURE A6. Effect of Supporting the Winning Party on Total Earnings

Notes: The figure shows the estimated effect of supporting the winning party on total earnings. The top panels focus on the sample of candidates (2000-2012 period) while the bottom panels focus on donors (2004-2012 period). Panels (a) and (d) show the raw data, namely average total earnings for supporters of the elected mayor (triangles) and for supporters of the runner-up (circles), from three years before to four years after the election, with 95% confidence intervals. Panels (b) and (e) plot the estimated β_k coefficients from equation (2), with 95% confidence intervals based on standard errors double clustered at the supporter and election level. Panels (c) and (f) show the average total earnings in the 4 years after the election, by bins of the margin of victory of the party supported, and the best-fit lines on both sides of the discontinuity computed on the underlying data. The sample in Panels (a), (b), (d), (e) is restricted to elections with a 5 percentage points margin of victory between the winner and the runner-up.

TABLE A1. Additional Descriptive Statistics on Political Supporters

Variable	(1) Mean	(2) Std. Dev.	(3) Min	(4) Max	(5) Observations
<i>Panel A: Candidates</i>					
Times Candidate	1.39	0.74	1	4	1,031,083
Times Elected	0.21	0.60	0	4	1,031,083
Ever Elected	0.14	0.35	0	1	1,031,083
Number of Parties	1.72	0.69	1	4	274,792
Amount Spent in Race	1,474	23,515	0	13,426,718	1,079,734
Age	43.48	10.85	18	100	1,435,675
Male	0.76	0.43	0	1	1,436,252
Less than Middle School	0.28	0.45	0	1	1,436,387
Middle School	0.22	0.41	0	1	1,436,387
High School	0.35	0.48	0	1	1,436,387
College	0.16	0.36	0	1	1,436,387
<i>Panel B: Donors</i>					
Number Elections	1.07	0.27	1	3	1,057,216
Number of Parties	1.08	0.41	1	21	1,057,216
Amount Donated	727.23	5,795	0	5,609,230	1,144,191
Donated to Winning Coalition	0.48	0.5	0	1	1,144,191

Notes: The table presents summary statistics on the electoral careers and demographic characteristics of the universe of candidates to a Brazilian municipal council (Panel A) and of donors in municipal elections (Panel B) analyzed in the paper. *Times Candidate* is the number of elections in which an individual runs, *Times Elected* is the number of elections in which an individual is elected to the council, *Ever Elected* is an indicator equal to one if the individual was ever elected to the council, *Number of Parties* is the number of different parties to which the candidate was affiliated (with summary statistics calculated only on the subsample of individuals running in multiple elections), *Amount Spent in Race* is the amount of money (in 2000 Brazilian Reals) spent by a candidate in the race (sample restricted to the 2004-2012 period), *Age* is the age of the individual at the time of the election, *Male* is an indicator for the candidate being male, *Less than Middle School*, *Middle School*, *High School* and *College* are indicator variables for a supporter's highest level of education. The unit of observation is an individual-election, except in the first four rows, where it is an individual. *Number Elections* is the number of elections in which an individual donated, *Number of Parties* is the number of different parties to which the individual donated, *Amount Donated* is the amount of money (in 2000 Brazilian Reals) spent by a candidate in the race, *Donated to Winning Coalition* is an indicator equal to one if the donation was directed to a party or a candidate in the coalition of the mayoral candidate who will be elected. The unit of observation is an individual for the variables *Times Candidate*, *Times Elected*, *Ever Elected*, *Number of Parties*, *Number Elections* and *Number of Parties*.

TABLE A2. Balance of Covariates: Candidates

Covariate	(1) Coefficient	(2) P-value	(3) Mean Cont. Group	(4) Observations	(5) Supporters	(6) Elections
Earnings Public t=0	66.332	0.389	2,613	254,848	233,238	5,413
Earnings Private t=0	21.740	0.454	794	254,848	233,238	5,413
Earnings Total t=0	69.593	0.407	3,697	254,848	233,238	5,413
Employed Private t=0	-0.004	0.179	0.113	254,848	233,238	5,413
Employed Public t=0	0.008	0.140	0.255	254,848	233,238	5,413
Employed Any t=0	0.002	0.696	0.379	254,848	233,238	5,413
Employed Qualified t=0	0.004	0.451	0.216	191,805	178,993	4,154
Employed Unqualified t=0	0.003	0.364	0.057	191,805	178,993	4,154
Employed Bureaucrat - Manager t=0	0.002	0.588	0.038	192,232	179,338	4,154
Employed Bureaucrat - Lower Level t=0	0.005	0.153	0.102	192,232	179,338	4,154
Employed Frontline High Skills t=0	-0.001	0.862	0.063	192,232	179,338	4,154
Employed Frontline Low Skills t=0	0.001	0.750	0.072	192,232	179,338	4,154
Employed Public-Concurso t=0	0.007	0.091	0.177	254,848	233,238	5,413
Employed Public-Discretionary t=0	0.001	0.716	0.078	254,848	233,238	5,413
Earnings Public t=-1	95.992	0.188	2,664	254,848	233,238	5,413
Earnings Private t=-1	34.461	0.234	816.5	254,848	233,238	5,413
Earnings Total t=-1	124.925	0.111	3,778	254,848	233,238	5,413
Employed Private t=-1	-0.000	0.970	0.118	254,848	233,238	5,413
Employed Public t=-1	0.007	0.172	0.267	254,848	233,238	5,413
Employed Any t=-1	0.007	0.160	0.396	254,848	233,238	5,413
Employed Qualified t=-1	0.003	0.510	0.223	191,191	178,466	4,154
Employed Unqualified t=-1	0.003	0.318	0.062	191,191	178,466	4,154
Employed Bureaucrat - Manager t=-1	0.003	0.339	0.044	191,710	178,881	4,154
Employed Bureaucrat - Lower Level t=-1	0.004	0.215	0.102	191,710	178,881	4,154
Employed Frontline High Skills t=-1	-0.001	0.656	0.069	191,710	178,881	4,154
Employed Frontline Low Skills t=-1	0.001	0.724	0.071	191,710	178,881	4,154
Employed Public-Concurso t=-1	0.007	0.075	0.178	254,848	233,238	5,413
Employed Public-Discretionary t=-1	0.000	0.953	0.089	254,848	233,238	5,413
Mincer Sample	0.004	0.242	0.264	254,848	233,238	5,413
Residual Ability Score	-0.065	0.478	-0.681	67,445	63,423	5,060
Secondary School	-0.002	0.700	0.216	252,805	231,500	5,413
High School	-0.002	0.639	0.347	252,805	231,500	5,413
University Degree	0.008	0.015	0.147	252,805	231,500	5,413
Age	0.075	0.457	43.44	254,676	233,092	5,411
Male	0.000	0.929	0.762	254,824	233,216	5,413
Run Past Election	-0.000	0.993	0.343	254,848	233,238	5,413
Incumbent	-0.002	0.651	0.129	254,848	233,238	5,413
Party Already in Power	0.013	0.457	0.354	194,252	180,895	4,154
Governor Party	0.005	0.819	0.22	254,848	233,238	5,413
Fed. Government Party	0.014	0.321	0.483	254,848	233,238	5,413
President Party	0.012	0.472	0.109	254,848	233,238	5,413
Contributions Received	98.115	0.395	2,111	194,252	180,895	4,154
Contributions Spent	94.133	0.413	2,105	194,252	180,895	4,154

Notes: The table shows balance tests for candidates' covariates in the pre-election period. The coefficients and p-values in columns 1 and 2 are from regressions of the covariate on an indicator for treatment status (supporting the winning mayor), controlling for margin of victory and including election (*i.e.* municipality times election year) fixed effects, focusing on mayoral races decided by a margin of victory of 5 percentage points or less. Column 3 reports the mean of the covariate in the control group, namely among supporters of the runner-up party. *Earnings Public/Private/Total* are annual earnings in the public, private, and formal economy, respectively, in the year of the election (t=0) or the year before the election (t=-1). *Employed Public/Private/Any* are indicators taking value one if the supporter is employed in the public, private, and formal economy, respectively, in the year of the election (t=0) or the year before the election (t=-1). *Employed Bureaucrat - Manager/Bureaucrat - Lower Level/Frontline High Skills/Frontline Low Skills* are indicators taking value one if the supporter is employed in a public sector occupation in the specific category, in the year of the election (t=0) or the year before the election (t=-1). *Employed Qualified/Unqualified* are indicators taking value one if the supporters is employed in a public sector job for which she is qualified/unqualified in terms of education, in the year of the election (t=0) or the year before the election (t=-1). *Employed Public-Concurso/Discretionary* are indicators taking value one if the supporter is employed in a "meritocratic"/discretionary public sector job in the year of the election (t=0) or the year before the election (t=-1). *Mincer Sample* is an indicator taking value one if the supporter was ever employed in the private sector before her first election. *Residual Ability Score* is a continuous measure of ability derived using the approach described in section A.3. *Secondary School*, *High School*, and *University Degree* are indicators taking value one if the supporter's highest level of education is secondary school, high school, or university, respectively. *Age* is the supporter's age at the time of the election. *Male* is an indicator for the supporter being male. *Run Past Election* is an indicator taking value one if the candidate run also in the previous election. *Incumbent* is an indicator taking value one if the candidate had a seat in the municipal council at the time of the election. *Party Already in Power*, *Governor Party*, *Fed. Government Party*, *President Party* are indicators taking value one if the candidate's party is in the ruling coalition in power in the municipality at the time of the election, is the same as the state governor's party, is in the coalition of parties in the federal government, is the party of the Federal President, respectively. *Contributions Received* are the amount of contributions received by the candidate. *Contributions Spent* are the amount of contributions spent by the candidate in the race. P-values are based on standard errors clustered at the election level.

TABLE A3. Balance of Covariates: Donors

Covariate	(1) Coefficient	(2) P-value	(3) Mean Cont. Group	(4) Observations	(5) Supporters	(6) Elections
Earnings Public t=0	181.207	0.404	3,211	180,886	177,590	3,162
Earnings Private t=0	-42.408	0.594	1,481	180,886	177,590	3,162
Earnings Total t=0	-2.222	0.993	5,344	180,886	177,590	3,162
Employed Private t=0	-0.001	0.857	0.192	180,886	177,590	3,162
Employed Public t=0	0.010	0.342	0.222	180,886	177,590	3,162
Employed Any t=0	0.009	0.359	0.423	180,886	177,590	3,162
Employed Qualified t=0	0.007	0.496	0.183	180,040	176,783	3,162
Employed Unqualified t=0	0.003	0.342	0.035	180,040	176,783	3,162
Employed Bureaucrat - Manager t=0	0.006	0.287	0.044	180,463	177,178	3,162
Employed Bureaucrat - Lower Level t=0	0.001	0.842	0.088	180,463	177,178	3,162
Employed Frontline High Skills t=0	0.001	0.758	0.056	180,463	177,178	3,162
Employed Frontline Low Skills t=0	0.002	0.473	0.032	180,463	177,178	3,162
Employed Public-Concurso t=0	0.007	0.296	0.134	180,886	177,590	3,162
Employed Public-Discretionary t=0	0.003	0.667	0.089	180,886	177,590	3,162
Earnings Public t=-1	130.829	0.517	3,013	180,886	177,590	3,162
Earnings Private t=-1	-117.652	0.126	1,487	180,886	177,590	3,162
Earnings Total t=-1	-151.033	0.539	5,116	180,886	177,590	3,162
Employed Private t=-1	-0.002	0.802	0.198	180,886	177,590	3,162
Employed Public t=-1	0.010	0.336	0.22	180,886	177,590	3,162
Employed Any t=-1	0.006	0.496	0.427	180,886	177,590	3,162
Employed Qualified t=-1	0.008	0.372	0.181	180,052	176,800	3,162
Employed Unqualified t=-1	0.001	0.630	0.036	180,052	176,800	3,162
Employed Bureaucrat - Manager t=-1	0.006	0.310	0.045	180,497	177,210	3,162
Employed Bureaucrat - Lower Level t=-1	0.001	0.762	0.087	180,497	177,210	3,162
Employed Frontline High Skills t=-1	0.000	0.917	0.055	180,497	177,210	3,162
Employed Frontline Low Skills t=-1	0.002	0.348	0.031	180,497	177,210	3,162
Employed Public-Concurso t=-1	0.006	0.344	0.132	180,886	177,590	3,162
Employed Public-Discretionary t=-1	0.004	0.598	0.088	180,886	177,590	3,162
Mincer Sample	0.002	0.745	0.384	180,886	177,590	3,162
Residual Ability Score	-0.481	0.107	0.32	68,134	67,243	2,828
Party Already in Power	0.039	0.367	0.435	180,886	177,590	3,162
Governor Party	0.005	0.909	0.208	180,886	177,590	3,162
Fed. Government Party	0.039	0.457	0.546	180,886	177,590	3,162
President Party	0.030	0.475	0.119	180,886	177,590	3,162
Amount of Contributions	-17.667	0.842	1,387	180,886	177,590	3,162

Notes: The table shows balance tests for donors' covariates in the pre-election period. The coefficients and p-values in columns 1 and 2 are from regressions of the covariate on an indicator for treatment status (supporting the winning mayor), controlling for margin of victory and including election (*i.e.* municipality times election year) fixed effects, focusing on mayoral races decided by a margin of victory of 5 percentage points or less. Column 3 reports the mean of the covariate in the control group, namely among supporters of the runner-up party. *Amount of Contributions* is the donor's amount contributed to the party and coalition of the supported mayor. See Table A2 for a description of the other covariates listed in column 1.

TABLE A4. Balance of Covariates: Mayoral Candidate-Level Variables

Covariate	(1) Coefficient	(2) P-value	(3) Mean Cont. Group	(4) Observations	(5) Elections
Governor Party	-0.027	0.288	0.217	10,842	5,421
Number of Parties in Coalition	-0.022	0.846	4.365	10,842	5,421
Incumbent Party	0.010	0.703	0.261	10,842	5,421
Number of Candidates	-0.353	0.589	23.090	10,831	5,418
Number of Donors	0.770	0.790	25.440	7,074	3,912
DEM	-0.014	0.166	0.037	10,842	5,421
PCdoB	0.001	0.762	0.005	10,842	5,421
PDT	0.008	0.523	0.061	10,842	5,421
PFL	0.003	0.861	0.078	10,842	5,421
PL	-0.004	0.651	0.025	10,842	5,421
PMDB	-0.017	0.493	0.208	10,842	5,421
PMN	-0.001	0.832	0.007	10,842	5,421
PP	0.008	0.559	0.070	10,842	5,421
PPB	-0.003	0.780	0.028	10,842	5,421
PPS	-0.002	0.845	0.036	10,842	5,421
PR	-0.002	0.870	0.031	10,842	5,421
PRB	-0.002	0.665	0.006	10,842	5,421
PSB	-0.021	0.081	0.051	10,842	5,421
PSC	0.000	0.979	0.011	10,842	5,421
PSD	0.008	0.388	0.027	10,842	5,421
PSDB	0.010	0.629	0.134	10,842	5,421
PT	0.015	0.334	0.077	10,842	5,421
PTB	0.005	0.708	0.072	10,842	5,421
PV	0.003	0.630	0.010	10,842	5,421

Notes: The table shows balance tests for donors' covariates in the pre-election period. The coefficients and p-values in columns 1 and 2 are from regressions of the covariate on an indicator for treatment status (winning the election), controlling for margin of victory and including election (*i.e.* municipality times election year) fixed effects, focusing on mayoral races decided by a margin of victory of 5 percentage points or less. Column 3 reports the mean of the covariate in the control group, namely in the party of the runner-up party. *Governor Party* is an indicator equal to one if the mayoral candidate's party is the party in power at the state level. *Number of Parties in Coalition* is the number of parties supporting the mayoral candidate. *Incumbent* is an indicator equal to one if the mayoral candidate's party is the incumbent party in the municipality. *Number of Candidates/Donors* are the number of candidates/donors who are supporters of the mayoral candidate. The covariates in rows 6 to 24 are indicators equal to one if the mayoral candidate belongs to that specific party (considering only parties involved in at least 50 close races over the sample period).

TABLE A5. Effect of Supporting the Winning Party – Winning versus Losing Candidates

Dependent Variable:	(1)	(2)	(3)	(4)
	Employed Public		Total Earnings	
Type of Candidates:	Winners	Losers	Winners	Losers
Mayor	0.025 (0.008)	0.148 (0.006)	558.741 (154.770)	1,465.270 (91.555)
Observations	160,918	705,352	160,918	705,352
Mean D.V. Runner-up	0.259	0.237	4,173	3,650
Supporters	41,841	196,802	41,841	196,802
Elections	5,322	5,412	5,322	5,412

Notes: The table presents the estimated β from equation (1), and the dependent variable is an indicator for employment in the public sector (columns 1-2) or total earnings (columns 3-4). Results in columns (1) and (3) are estimated on the sample of candidates to the council who won a seat in the council. Results in columns (2) and (4) are estimated on the sample of candidates to the council who did not win a seat. The sample is restricted to supporters of the winning party or of the runner-up in a close election, using a 5 percentage points margin of victory to define an election as close. “Mean D.V. Runner-up” shows the average of the dependent variable for the supporters of the runner-up in the post-election period. Standard errors are shown in parentheses and are double clustered at the supporter and election level.

TABLE A6. Effect of Supporting the Winning Party on Public and Private Earnings

Dependent Variable:	(1)	(2)	(3)	(4)	(5)	(6)
	Earnings Public			Earnings Private		
Group of Supporters:	All	Candidates	Donors	All	Candidates	Donors
Mayor	1,224.376 (94.321)	1,369.761 (74.758)	858.287 (188.512)	-110.537 (35.889)	-97.927 (27.366)	-145.062 (84.661)
Observations	1,447,538	867,888	550,832	1,447,538	867,888	550,832
Mean D.V. Runner-up	2,702	2,565	2,935	1,155	877	1,606
Supporters	418,146	233,238	177,590	418,146	233,238	177,590
Elections	5,419	5,413	3,162	5,419	5,413	3,162

Notes: The table presents the estimated β from equation (1), and the dependent variable is an indicator for earnings in the public sector (columns 1-3) or earnings in the private sector (columns 4-6). Results in columns (1) and (4) are estimated on the sample of all supporters. Results in columns (2) and (5) are estimated on the sample of candidates to the local council, and results in columns (3) and (6) are estimated on the sample of donors. The sample is restricted to supporters of the winning party or of the runner-up in a close election, using a 5 percentage points margin of victory to define an election as close. “Mean D.V. Runner-up” shows the average of the dependent variable for the supporters of the runner-up in the post-election period. Standard errors are shown in parentheses and are double clustered at the supporter and election level.

TABLE A7. Effect of Supporting the Winning Party – Optimal Bandwidth and 1 Percentage Points Margin of Victory Bandwidth

Dependent Variable:	(1)	(2)	(3)	(4)	(5)	(6)
	Employed Public			Total Earnings		
Group of Supporters:	All	Candidates	Donors	All	Candidates	Donors
Panel A: Optimal Bandwidth						
Mayor	0.105 (0.004)	0.125 (0.003)	0.068 (0.008)	1,106.230 (95.392)	1,244.982 (56.826)	944.790 (254.085)
Observations	2,278,488	1,806,364	1,081,180	2,634,886	1,756,230	785,970
Optimal Bandwidth	8.086	11.503	10.041	9.564	11.105	7.031
Mean D.V. Runner-up	0.226	0.239	0.203	4,458	3,733	5,607
Supporters	645,309	448,366	345,675	737,166	437,685	254,966
Elections	8,366	11,188	5,898	9,654	10,883	4,361
Panel B: 1 Percentage Point Margin of Victory Bandwidth						
Mayor	0.103 (0.011)	0.112 (0.012)	0.082 (0.019)	1,026.271 (286.876)	1,077.375 (194.306)	402.621 (454.269)
Observations	274,248	171,602	96,458	274,248	171,602	96,458
Mean D.V. Runner-up	0.223	0.240	0.197	4,260	3,751	5,249
Supporters	81,798	49,089	31,063	81,798	49,089	31,063
Elections	1,092	1,091	622	1,092	1,091	622

Notes: The table presents the estimated β from equation (1), and the dependent variable is an indicator for employment in the public sector (columns 1-3) or total earnings (columns 4-6). Results in columns (1) and (4) are estimated on the sample of all supporters. Results in columns (2) and (5) are estimated on the sample of candidates to the local council, and results in columns (3) and (6) are estimated on the sample of donors. In Panel A, the sample is restricted to supporters of the winning party or of the runner-up in a close election, using an outcome- and sample-specific margin of victory to define close races, calculated using the optimal bandwidth selection procedure following Calonico, Cattaneo and Titiunik (2014). In Panel B, the sample is restricted to supporters of the winning party or of the runner-up in a close election, using a 1 percentage points margin of victory to define an election as close. “Mean D.V. Runner-up” shows the average of the dependent variable for the supporters of the runner-up in the post-election period. Standard errors are shown in parentheses and are double clustered at the supporter and election level.

TABLE A8. Effect of Supporting the Winning Party – By Connection Type

Group of Supporters	(1) Candidates		(3)	(4) Donors		(5)
	Party	Coalition	Mayor	Party	Coalition	
Panel A: Dep. Var. is Employment Probability:						
Mayor	0.136 (0.007)	0.117 (0.006)	0.114 (0.014)	0.071 (0.016)	0.033 (0.012)	
Mean D.V. Runner-up	0.243	0.242	0.211	0.193	0.187	
Panel B: Dep. Var. is Total Earnings:						
Mayor	1,452.576 (123.499)	1,150.620 (105.860)	1,230.035 (433.514)	1,039.502 (432.049)	-138.243 (401.280)	
Mean D.V. Runner-up	3,731	3,805	5,586	5,400	4,968	
Observations	335,568	498,690	204,450	103,746	164,338	
Supporters	90,367	141,524	66,211	33,390	55,359	
Elections	5,327	4,586	2,151	1,641	1,738	

Notes: The table presents the estimated β from equation (1), and the dependent variable is an indicator for employment in the public sector (Panel A) or total earnings (Panel B). Results in column 1 consider candidates running in the mayoral candidate's party. Results in column 2 consider candidates running in other parties in the mayoral candidate's coalition. Results in column 3 consider donors to a mayoral candidate. Results in column 4 consider donors to the party of the mayoral candidate (but not to the mayoral candidate directly). Results in column 5 consider donors to other parties in the mayoral candidate's coalition. The sample is restricted to supporters of the winning party or of the runner-up in a close election, using a 5 percentage points margin of victory to define an election as close. "Mean D.V. Runner-up" shows the average of the dependent variable for the supporters of the runner-up in the post-election period. Standard errors are shown in parentheses and are double clustered at the supporter and election level.

TABLE A9. Effect of Supporting the Winning Party for Different Types of Public Sector Occupations – Candidates and Donors

Dep. Var. is Employment as:	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		
	Candidates	Donors	Bureaucrat	Manager	Bureaucrat	Lower Level	Candidates	Donors	Frontline	High Skills	Candidates	Donors	Frontline	Low Skills	Candidates	Donors	
Panel A: Type of occupation																	
Mayor	0.069 (0.004)	0.031 (0.004)	0.040 (0.003)	0.020 (0.004)	0.015 (0.003)	0.006 (0.005)	0.016 (0.003)	0.010 (0.002)									
Observations	609,018	548,694	609,018	548,694	609,018	548,694	609,018	548,694	609,018	548,694	609,018	548,694	609,018	548,694	609,018	548,694	548,694
Mean D.V. Runner-up	0.027	0.030	0.054	0.047	0.099	0.089	0.066	0.031									
Supporters	177,659	177,011	177,659	177,011	177,659	177,011	177,659	177,011	177,659	177,011	177,659	177,011	177,659	177,011	177,659	177,011	177,011
Elections	4,153	3,159	4,153	3,159	4,153	3,159	4,153	3,159	4,153	3,159	4,153	3,159	4,153	3,159	4,153	3,159	3,159
Panel B: Contract Type																	
Dep. Var. is Employment as:	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		
	Candidates	Donors	Concurso		Candidates	Donors	Discretionary		Candidates	Donors	Municipal		Candidates	Donors	State/Federal		
Mayor	0.040 (0.004)	0.019 (0.006)	0.084 (0.004)	0.048 (0.006)	0.134 (0.005)	0.075 (0.007)	-0.010 (0.002)	-0.008 (0.004)									
Observations	867,888	550,832	867,888	550,832	867,888	550,832	867,888	550,832	867,888	550,832	867,888	550,832	867,888	550,832	867,888	550,832	550,832
Mean D.V. Runner-up	0.174	0.131	0.067	0.068	0.152	0.116	0.088	0.082									
Supporters	233,238	177,590	233,238	177,590	233,238	177,590	233,238	177,590	233,238	177,590	233,238	177,590	233,238	177,590	233,238	177,590	177,590
Elections	5,413	3,162	5,413	3,162	5,413	3,162	5,413	3,162	5,413	3,162	5,413	3,162	5,413	3,162	5,413	3,162	3,162

Notes: The table presents the estimated β from equation (1), and the dependent variables are indicators for employment in the occupational category of the public sector indicated in the title of the column. Panel A focuses on the type of occupation. Panel B focuses on the type of contract. Odd columns show results for candidates, while even columns show results for donors. The sample is restricted to supporters of the winning party or of the runner-up in a close election, using a 5 percentage points margin of victory to define an election as close. “Mean D.V. Runner-up” shows the average of the dependent variable for the supporters of the runner-up in the post-election period. Standard errors are shown in parentheses and are double clustered at the supporter and election level.

TABLE A10. Public Sector Wage Premium

Type of Job	(1) All Jobs	(2) Managerial Occupations	(3) Professional Occupations	(4) White Collar Lower Lev	(5) Blue Collar Workers
<i>Panel A: Dep. Var. is Log Wage:</i>					
Public	0.072 (0.000)	0.074 (0.000)	0.219 (0.000)	0.066 (0.000)	0.037 (0.000)
R-squared	0.453	0.304	0.451	0.335	0.359
<i>Panel B: Dep. Var. is Log Hourly Wage:</i>					
Public	0.160 (0.000)	0.222 (0.000)	0.227 (0.000)	0.183 (0.000)	0.136 (0.000)
R-squared	0.478	0.297	0.424	0.345	0.353
Observations	529,460,038	23,076,149	93,673,711	101,602,667	311,107,509

Notes: The table presents the public sector wage premium across four occupational categories. The dependent variable is the log of wage in Panel A and the log of hourly wage in Panel B, and the variables are winsorized at the 1% level. All regressions include controls for the worker's job tenure, the worker's age, municipality fixed effects, year fixed effects, and 43 fixed effects for the occupational group. The sample includes all worker-job pairs in the Brazilian public and private sector over the 2003-2014 period. Standard errors are shown in parentheses.

TABLE A11. Patronage and Selection – Bureaucrats vs Frontline Providers

Panel A: Educational qualifications						
Type of Job	Bureaucrats			Frontline		
	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Var. is Employment in Public Job Requiring:	Middle School Degree	High School Degree	University Degree	Middle School Degree	High School Degree	University Degree
Mayor X Qualified	0.000 (0.000)	-0.002 (0.002)	0.011 (0.003)	-0.010 (0.002)	-0.001 (0.002)	-0.026 (0.006)
Mayor	0.000 (0.000)	0.041 (0.003)	0.058 (0.004)	0.017 (0.002)	0.006 (0.002)	0.012 (0.002)
Qualified	0.001 (0.000)	0.048 (0.002)	0.023 (0.002)	0.011 (0.001)	0.033 (0.001)	0.329 (0.005)
Observations	601,354	601,354	601,354	601,354	601,354	601,354
Mean D.V. Runner-up	0.000	0.026	0.021	0.027	0.015	0.024
Supporters	175,845	175,845	175,845	175,845	175,845	175,845
Elections	4,152	4,152	4,152	4,152	4,152	4,152
Panel B: Previous Private Earnings						
Type of Job	Bureaucrats			Frontline		
	(1)	(2)	(3)	(4)	(5)	(6)
Group of Supporters:	All Supporters	Candidates	Donors	All Supporters	Candidates	Donors
Mayor x Tertile 3	-0.020 (0.005)	-0.041 (0.008)	-0.004 (0.006)	-0.019 (0.004)	-0.026 (0.008)	-0.008 (0.005)
Mayor x Tertile 2	-0.005 (0.005)	-0.007 (0.008)	-0.002 (0.006)	-0.008 (0.004)	-0.009 (0.008)	-0.009 (0.005)
Mayor	0.086 (0.007)	0.146 (0.010)	0.034 (0.008)	0.030 (0.006)	0.035 (0.009)	0.028 (0.007)
Tertile 3	-0.006 (0.002)	-0.011 (0.004)	-0.005 (0.003)	-0.006 (0.003)	-0.010 (0.005)	-0.006 (0.004)
Tertile 2	-0.005 (0.002)	-0.005 (0.004)	-0.002 (0.003)	-0.001 (0.003)	-0.006 (0.005)	0.001 (0.004)
Observations	201,382	82,022	117,048	201,382	82,022	117,048
Mean D.V. Runner-up	0.041	0.046	0.038	0.056	0.065	0.050
Supporters	66,140	26,108	39,402	66,140	26,108	39,402
Elections	3,343	2,998	2,499	3,343	2,998	2,499
Panel C: Residual Ability Score						
Type of Job	Bureaucrats			Frontline		
	(1)	(2)	(3)	(4)	(5)	(6)
Group of Supporters:	All Supporters	Candidates	Donors	All Supporters	Candidates	Donors
Mayor x Tertile 3	-0.027 (0.004)	-0.020 (0.007)	-0.021 (0.006)	-0.004 (0.005)	0.001 (0.008)	-0.008 (0.006)
Mayor x Tertile 2	-0.017 (0.005)	-0.008 (0.007)	-0.022 (0.006)	0.002 (0.005)	0.004 (0.008)	-0.006 (0.006)
Mayor	0.117 (0.007)	0.153 (0.009)	0.073 (0.010)	0.034 (0.006)	0.039 (0.009)	0.028 (0.008)
Tertile 3	-0.037 (0.003)	-0.032 (0.004)	-0.039 (0.004)	-0.081 (0.004)	-0.080 (0.005)	-0.067 (0.005)
Tertile 2	-0.040 (0.003)	-0.033 (0.004)	-0.039 (0.004)	-0.079 (0.004)	-0.076 (0.005)	-0.068 (0.005)
Observations	376,784	170,796	204,396	376,784	170,796	204,396
Mean D.V. Runner-up	0.102	0.098	0.102	0.176	0.199	0.146
Supporters	122,806	53,731	68,683	122,806	53,731	68,683
Elections	3,945	3,865	3,084	3,945	3,865	3,084

Notes: The table presents the estimated coefficients from equation (4). In Panel A, the dependent variables are indicators for employment in a public sector job that requires a middle school degree (columns 1 and 4), high school degree (columns 2 and 5) and university degree (columns 3 and 6). *Qualified* is an indicator equal to one if the supporter has an educational level that qualifies her for the job. The sample includes candidates to the local council. In Panel B, *Tertile 2* and *Tertile 3* are indicators equal to one if supporters fall in the second or third tertile, respectively, of supporters' private sector earnings in the years before the election. In Panel C, *Tertile 2* and *Tertile 3* are indicators equal to one if supporters fall in the second or third tertile, respectively, of supporters' Residual Ability Scores, calculated as explained in Section Section V.A. Columns 1-3 focus on jobs as bureaucrats, while columns 4-6 focus on jobs as frontline providers. The sample is restricted to supporters of the winning party or of the runner-up in a close election, using a 5 percentage points margin of victory to define an election as close. "Mean D.V. Runner-up" shows the average of the dependent variable in the post-election period for the supporters of the runner-up who are unqualified for the job (Panel A) or in the bottom tertile (Panels B and C). Standard errors are shown in parentheses and are double clustered at the supporter and election level.

APPENDIX A.2. RETURNS FROM DONATIONS

In this section, we explain how we calculate the return on donors' investment, introduced in Section IV.C. Calculating returns from donations is not straightforward. Ideally, we would like to estimate the effect of being connected to the winning mayoral candidate on total earnings after the election, *conditional on the amount donated*, for the close races of our sample. This would allow us to construct, for each given donation amount, the return on investment. In practice, doing this would require a sufficiently high number of donors donating exactly the same amount who are involved in close races. We therefore approximate this computation as follows:

- We divide the donors on the two sides into BRL 50 bins, based on the amount donated. We keep the 37 such bins with at least 200 donors falling in the bin, in order to have enough power to estimate the return.
- For each bin k and year $t = \{1, 2, 3, 4\}$ after the election, we separately estimate the effect of supporting the winning mayoral candidate on total earnings, in each t ($\hat{\beta}_{kt}$) (focusing only on close elections).
- The return on investment for donor i contributing $c_i \in k$ is then:

$$Return_i = \frac{\frac{1}{2} \sum_{t=1}^4 \frac{\hat{\beta}_{kt}}{(1+r)^t} - c_i}{c_i}$$

where r is the discount rate in the election year corresponding to the given donation. This return is calculated summing the discounted total earnings caused by the donation, and multiplying this sum by the probability that the investment pays off (i.e., that the supported mayoral candidate wins), which is assumed to be 50% since these are close elections, and therefore a toss-up race.

Using this approach, we find that the median return on investment is of BRL 1.89 for BRL 1 donated. However, if we exclude donors who contributed less than BRL 50, this drops to a lower, albeit still sizable, BRL 1.18 for BRL 1 donated. This drop can be rationalized by the fact that, as documented in Figure 3 in the paper, we find a sizable treatment effect on employment probability even for donors making small contributions.

Two are the main limitations of this approach. First, we are not considering the precision of the estimates ($\hat{\beta}_{kt}$) in the computation of the expected return. Second, and as discussed in Section IV.C of the paper, the amount of money donated by a supporter cannot be considered exogenous. Our estimates should be interpreted with these caveats in mind.

APPENDIX A.3. MINCER REGRESSION APPROACH

As discussed in Section V.A., in order to obtain a measure of supporters' individual ability that goes beyond easily observable individual characteristics, we follow the approach in Besley et al. (2017) and Dal Bó et al. (2017).

We estimate a series of Mincer earnings regressions for each year between 1995 and 2014 using information on all Brazilian private sector employees. We use observations for candidates and donors only in years before the first election in which they run/donate. Specifically, we take residuals from the following regression, which is estimated for each year and separately for men and women, in order to account for gender-specific differences in labor-market outcomes :

$$(A1) \quad y_{i,m,t} = f(\text{age}_{i,t}, \text{education}_{i,t}, \text{sector}_{i,t}) + \alpha_m + \epsilon_{i,m,t}$$

where $y_{i,m,t}$ are hourly private sector earnings of individual i working in municipality m in year t , $\text{age}_{i,t}$ are a set of age fixed effects (over 5-years intervals), $\text{education}_{i,t}$ are four fixed effects for individual educational level (less than middle school, middle school degree, high school degree, university degree), $\text{sector}_{i,t}$ are fixed effects for the sector of i 's firm. We include a full-set of interactions between these variables, as well as municipality fixed effects (α_m) to account for location-specific differences in earnings. Our residual ability score is the average of each individual's residuals across all years in which she is employed in the private sector.