

# Appendix

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# A1 Descriptive and Balance Tests

## A1.1 Descriptive Statistics of Data

Candidates by Office and Race	Lost	Won	Total
Mayoral Candidates			
All candidates	24,447 (68.52%)	11,233 (31.48%)	35,680
White candidates	15,032 (66.08%)	7,715 (33.92%)	22,747
Afrodescendant candidates	8,471 (71.17%)	3,431 (28.83%)	11,902
Mayoral Candidates (Last Winner & First Loser)			
All candidates	10,847 (49.80%)	10,932 (50.20%)	21,779
White candidates	7,171 (48.82%)	7,518 (51.18%)	14,689
Afrodescendant candidates	3,414 (50.60%)	3,333 (49.40%)	6,747
City Council Candidates			
All candidates	830,628 (87.76%)	115,876 (12.24%)	946,504
White candidates	391,491 (85.93%)	64,120 (14.07%)	455,611
Afrodescendant candidates	413,520 (89.15%)	50,302 (10.85%)	463,822
City Council Candidates (Last Winner & First Loser)			
All candidates	74,250 (50.12%)	73,897 (49.88%)	148,147
White candidates	25,452 (49.28%)	26,195 (50.72%)	51,647
Afrodescendant candidates	21,468 (51.15%)	20,505 (48.85%)	41,973

Table A1: Descriptive statistics of candidates by office, race, and electoral outcome (2020 and earlier).

## A1.2 Observations used in the analyses

Office	Category	Count	% of Office Total
Mayoral	All Candidates	35,680	100.00%
	Newcomers	13,189	36.96%
	Newcomers LWFL	6,735	18.87%
	Newcomers LWFL Used	3,106	8.71%
City Council	All Candidates	946,504	100.00%
	Newcomers	625,643	66.09%
	Newcomers LWFL	36,903	3.90%
	Newcomers LWFL Used	28,604	3.02%

Table A2: Candidate Composition by Office: Counts and Percentages

### A1.3 Density Test

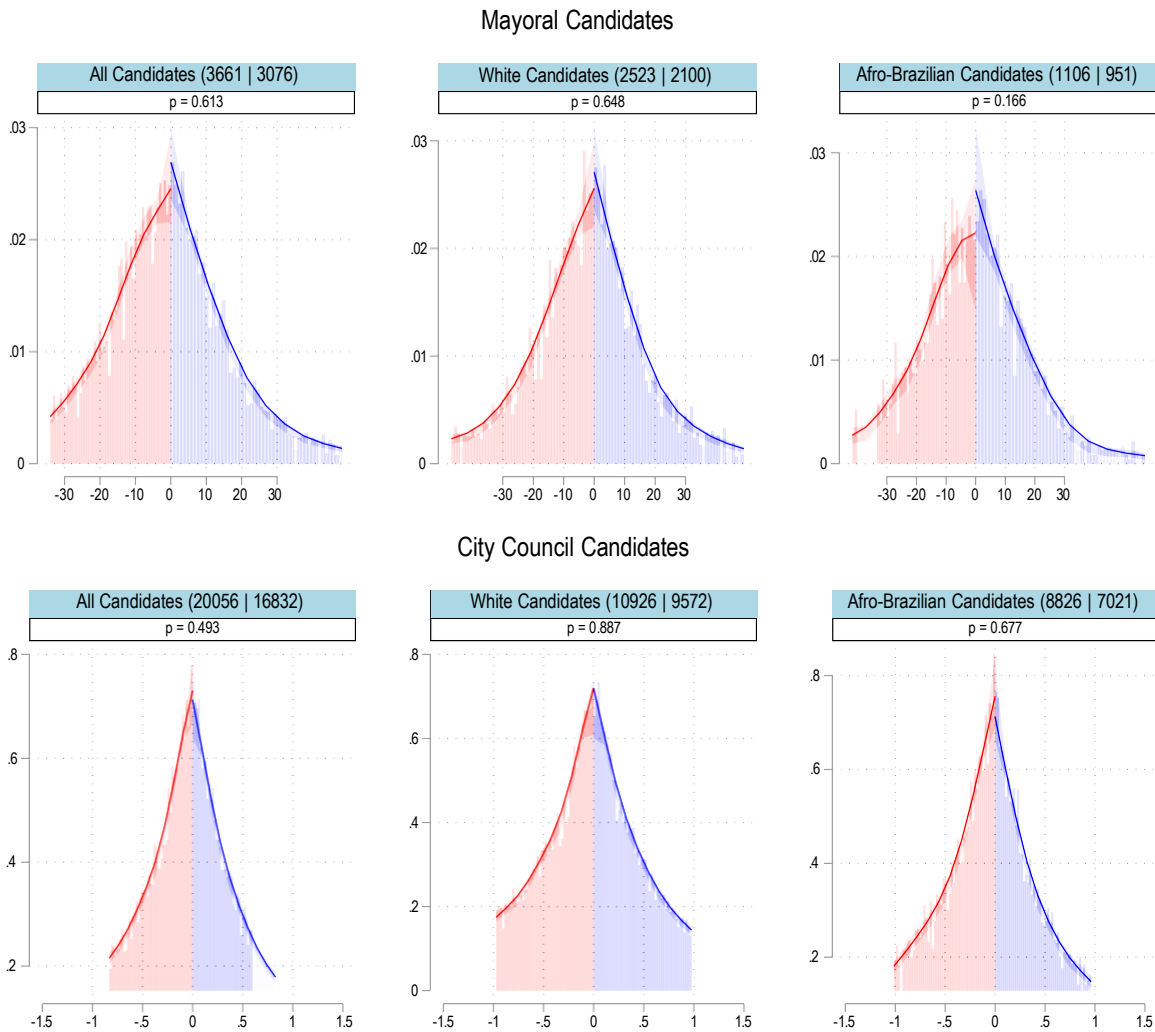


Figure A1: Density tests for mayoral (top panel) and city council candidates (bottom panel). Each plot presents the distribution of observations around the discontinuity threshold for all candidates, white candidates, and Afrodescendant (Black) candidates. The density tests evaluate whether there is any significant discontinuity or manipulation at the cutoff. The estimated  $p$ -values indicate that there is no significant manipulation around the threshold for any of the candidate groups.

## A2 Additional Results and Robustness Checks

Power analysis for treatment effect detectability. Appendix [A2.1](#) presents power analyses for the RD estimates reported in Table 1, based on the robust bias-corrected method proposed by Cattaneo et al. (2019). The results indicate that the model specifications are well powered to detect the estimated treatment effects in the full samples and among white candidates. In all cases the power of  $\tau$  is larger than conventional threshold of 80%.

Bi-quadratic regression discontinuity. Appendix [A4](#) presents the results of the bi-quadratic regression discontinuity analysis, replicating Figure 2. These estimates remain consistent with our main findings reported in Table 1.

Second-order and third-order polynomial RD estimation. Appendix [A2.3](#) replicates the results reported in Table 1, but employ second- and third-order polynomials rather than a local linear regression. These results confirm our primary findings.

RD estimations adding controls. Appendix [A2.4](#) replicates the results reported in Table 1, including additional control variables. For mayoral candidates, we control for gender (women), age, marital status (married), and college education. For city council candidates, we also add controls for coalition magnitude and district magnitude. Results with controls remain robust and consistent with those presented in Table 1.

RD estimations by election year. Appendix [A2.5](#) replicates the analysis of Table 1, separating candidates by election years (2016–2020 and 2020–2024). Findings across election cycles show stable patterns, although magnitudes of effects vary slightly.

RD estimations including all last winners and first losers. Appendix [A2.6](#) expands the analysis beyond newcomers, including all last winners and first losers regardless of their

previous electoral experience. Results align with our primary findings, demonstrating consistency in direction and significance.

Estimations using a CER-optimal bandwidth. Appendix [A2.7](#) replicates the results reported in Table 1 using the CER-optimal bandwidth instead of the MSE-optimal bandwidth, as suggested by De Magalhães et al. (2025). Results under CER-optimal bandwidth remain stable and substantively unchanged from our main findings.

Estimations disaggregating Afrodescendant candidates into preto and pardo subgroups. Appendix [A2.9](#) disaggregates Afrodescendant candidates into two racial subgroups: preto and pardo candidates. The results remain generally consistent with the main findings, although the estimate for preto mayoral candidates becomes imprecise due to a small sample size.

Estimations for rerunning in the same party. Appendix [A2.8](#) explores whether racial differences emerge in candidates' decisions to rerun specifically within the same political party. Estimates broadly replicate our main results, showing no substantial racial differences in rerunning behavior within parties.

Sensitivity to bandwidth choice. Appendix [A2.11](#) shows the sensitivity analyses for bandwidth selection. Except for extremely narrow bandwidths (resulting in fewer observations), estimates remain stable and robust. Specifically, estimates using doubled or halved bandwidths from Calonico et al. (2014), the optimal bandwidth proposed by Imbens and Kalyanaraman (2012), or manually chosen bandwidths up to 30 percentage points for mayoral candidates, and up to 3 percentage points for city council candidates, consistently yield similar conclusions.

## A2.1 Power Analysis for Treatment Effect Detectability

Group	Tau	BW	$N^- - N^+$	Power (0.2 $\tau$ )	Power (0.5 $\tau$ )	Power ( $\tau$ )
Mayoral Candidates						
All	20.45	10.72	(1575 – 1516)	0.185	0.753	1.000
White	21.51	11.69	(1176 – 1098)	0.167	0.693	0.999
Afro-Brazilian	21.11	14.21	(582 – 557)	0.103	0.387	0.917
City Council Candidates						
All	13.86	1.23	(15066 – 13491)	0.770	1.000	1.000
White	14.10	1.12	(7779 – 7311)	0.473	0.997	1.000
Afro-Brazilian	14.46	1.29	(6859 – 5828)	0.517	0.999	1.000

Table A3: Power analysis based on robust bias-corrected RD estimates using the method proposed by Cattaneo et al. (2019). The table displays the minimum detectable effect (tau), optimal bandwidths, sample sizes on either side of the cutoff, and estimated power to detect 20%, 50%, and 100% of the treatment effect.

## A2.2 Bi-quadratic regression discontinuity

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	22.71	(16.76 — 28.65)	0.00	100	(5076 — 4041)
White	23.24	(16.13 — 30.35)	0.00	100	(3385 — 2684)
Afro-Brazilian	21.85	(10.82 — 32.89)	0.00	100	(1649 — 1326)
City Council Candidates					
All	14.45	(12.75 — 16.16)	0.00	21.79	(29244 — 24153)
White	14.54	(12.20 — 16.87)	0.00	16.63	(15605 — 13499)
Afro-Brazilian	14.55	(11.95 — 17.15)	0.00	21.79	(13174 — 10295)

Table A4: Estimates using a bi-quadratic polynomial, including all observations with equal weighting. Robust confidence intervals (CIs) and p-values are presented. Models are estimated with a province-city-coalition cluster.

## A2.3 Second-order and third-order polynomial RD estimation

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	19.47	(10.53 — 27.19)	0.00	20.44	(2489 — 2259)
White	19.80	(9.16 — 28.88)	0.00	20.89	(1738 — 1543)
Afro-Brazilian	19.20	(3.72 — 32.99)	0.01	22.75	(790 — 753)
City Council Candidates					
All	13.67	(11.38 — 16.03)	0.00	1.82	(17156 — 15046)
White	14.20	(11.22 — 17.36)	0.00	2.09	(9588 — 8698)
Afro-Brazilian	13.43	(9.74 — 16.73)	0.00	1.60	(7358 — 6188)

Table A5: Sharp (conventional) RD estimates using a second-order polynomial, with robust confidence intervals (CIs) and p-values based on the MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	18.51	(9.88 — 27.57)	0.00	30.53	(3002 — 2618)
White	18.51	(7.47 — 29.21)	0.00	28.75	(2023 — 1729)
Afro-Brazilian	18.15	(2.50 — 34.87)	0.02	31.35	(916 — 843)
City Council Candidates					
All	13.71	(11.21 — 16.24)	0.00	2.63	(18550 — 15961)
White	14.43	(11.12 — 17.99)	0.00	2.74	(10120 — 9063)
Afro-Brazilian	12.82	(8.75 — 16.47)	0.00	2.16	(7961 — 6578)

Table A6: Sharp (conventional) RD estimates using a third-order polynomial, with robust confidence intervals (CIs) and p-values based on the MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

## A2.4 RD Estimations adding controls

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	20.40	(11.28 — 26.69)	0.00	10.70	(1573 — 1516)
White	20.52	(10.00 — 27.80)	0.00	11.38	(1154 — 1077)
Afro-Brazilian	21.94	(7.67 — 31.64)	0.00	14.42	(592 — 566)
City Council Candidates					
All	14.14	(12.05 — 16.00)	0.00	1.27	(15226 — 13612)
White	14.50	(11.66 — 17.41)	0.00	1.15	(7859 — 7382)
Afro-Brazilian	14.15	(10.76 — 16.96)	0.00	1.01	(6207 — 5349)

Table A7: Sharp (conventional) RD estimates with added controls. For mayoral candidates, controls include gender, age, marital status, and college education. For city council candidates, controls include gender, age, marital status, party magnitude, district magnitude, and college education. Robust confidence intervals (CIs) and p-values are based on the MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

## A2.5 RD Estimations by Election Year (2016 and 2020)

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	12.73	(1.50 — 20.41)	0.02	12.37	(1081 — 1028)
White	12.26	(-0.88 — 21.52)	0.07	12.27	(766 — 720)
Afro-Brazilian	15.36	(-4.91 — 30.49)	0.16	14.61	(345 — 342)
City Council Candidates					
All	10.90	(7.18 — 14.29)	0.00	0.75	(5724 — 5228)
White	12.13	(7.45 — 17.43)	0.00	0.73	(3091 — 2917)
Afro-Brazilian	9.87	(4.06 — 14.49)	0.00	0.69	(2395 — 2131)

Table A8: Sharp (conventional) RD estimates for candidates who ran in 2016 and decided whether to rerun in 2020. Robust confidence intervals (CIs) and p-values are presented, with MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	34.45	(21.89 — 43.05)	0.00	12.69	(706 — 650)
White	38.34	(23.90 — 48.87)	0.00	15.07	(532 — 479)
Afro-Brazilian	26.66	(5.36 — 41.24)	0.01	12.39	(222 — 211)
City Council Candidates					
All	16.66	(13.76 — 19.01)	0.00	1.33	(8271 — 7400)
White	16.79	(12.89 — 20.32)	0.00	1.38	(4462 — 4157)
Afro-Brazilian	17.47	(12.65 — 21.39)	0.00	0.95	(3209 — 2779)

Table A9: Sharp (conventional) RD estimates for candidates who ran in 2020 and decided whether to rerun in 2024. Robust confidence intervals (CIs) and p-values are presented, with MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

## A2.6 Estimations including all last winners and first losers

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	5.44	(-0.40 — 9.36)	0.07	9.00	(4282 — 4286)
White	5.63	(-1.14 — 10.23)	0.12	9.88	(3122 — 3142)
Black	7.63	(-1.05 — 14.10)	0.09	13.35	(1835 — 1823)
City Council Candidates					
All	11.28	(9.62 — 12.49)	0.00	0.70	(29149 — 29003)
White	12.06	(9.98 — 13.80)	0.00	0.91	(17603 — 18012)
Black	10.30	(7.93 — 11.98)	0.00	0.67	(13052 — 12618)

Table A10: Sharp (conventional) RD estimates including all first losers and last winners, not just newcomers. Robust confidence intervals (CIs) and p-values are presented, with MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

## A2.7 Estimations using a cer-optimal bandwidth

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	19.06	(9.59 — 27.34)	0.00	6.94	(1061 — 1078)
White	19.10	(8.39 — 28.39)	0.00	7.81	(831 — 825)
Afro-Brazilian	20.33	(5.32 — 33.03)	0.01	9.68	(420 — 428)
City Council Candidates					
All	13.69	(11.41 — 15.91)	0.00	0.73	(11735 — 10834)
White	14.17	(10.94 — 17.42)	0.00	0.68	(6093 — 5869)
Afro-Brazilian	13.64	(10.43 — 16.71)	0.00	0.80	(5533 — 4830)

Table A11: Sharp (conventional) RD estimates using CER-optimal bandwidth as proposed by De Magalhães et al. (2020). Robust confidence intervals (CIs) and p-values are presented. Models are estimated with a province-city-coalition cluster.

## A2.8 Estimations using Running for same party in t+1 as dv

dv: rr same party (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All	12.89	(5.16 — 18.07)	0.00	14.22	(1969 — 1828)
White	13.28	(3.88 — 20.10)	0.00	14.38	(1393 — 1270)
Afro-Brazilian	13.01	(-2.19 — 23.81)	0.10	11.70	(498 — 492)
City Council Candidates					
All	6.63	(4.61 — 8.52)	0.00	1.13	(14519 — 13090)
White	8.52	(5.91 — 11.43)	0.00	1.10	(7747 — 7283)
Afro-Brazilian	4.60	(1.53 — 7.57)	0.00	0.93	(5966 — 5164)

Table A12: Sharp (conventional) RD estimates for rerunning in the same party in the next election, with robust confidence intervals (CIs) and p-values based on the MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

## A2.9 Estimations disaggregating Afro-Brazilian candidates in subsamples

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
Preto	33.32	(-30.41 — 113.07)	0.26	13.91	(28 — 36)
Pardo	21.16	(5.43 — 31.76)	0.01	12.73	(516 — 495)
City Council Candidates					
Preto	11.57	(3.12 — 18.74)	0.01	0.89	(942 — 749)
Pardo	14.47	(10.77 — 17.61)	0.00	1.02	(5223 — 4576)

Table A13: Sharp (conventional) RD estimates for subgroups of Black candidates (Preto and Pardo). Robust confidence intervals (CIs) and p-values are presented, with MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

## A2.10 Subsample analyses by gender

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates					
All — Male	19.45	(9.62 — 26.01)	0.00	11.03	(1362 — 1290)
All — Female	28.04	(9.31 — 43.18)	0.00	15.40	(327 — 308)
White — Male	21.40	(10.67 — 28.63)	0.00	13.41	(1106 — 1022)
Afro-Brazilian — Male	18.20	(1.81 — 29.44)	0.03	12.83	(470 — 448)
White — Female	24.36	(2.40 — 42.34)	0.03	15.11	(229 — 209)
Afro-Brazilian — Female	35.73	(3.17 — 62.92)	0.03	17.23	(98 — 99)
City Council Candidates					
All — Male	12.30	(10.04 — 14.48)	0.00	1.23	(12050 — 10840)
All — Female	21.02	(15.78 — 25.74)	0.00	1.08	(2859 — 2530)
White — Male	12.44	(9.35 — 15.95)	0.00	1.06	(5930 — 5614)
Afro-Brazilian — Male	12.84	(9.50 — 15.71)	0.00	1.27	(5615 — 4814)
White — Female	20.96	(14.06 — 26.93)	0.00	1.12	(1711 — 1588)
Afro-Brazilian — Female	21.17	(12.89 — 28.99)	0.00	0.97	(1076 — 889)

Table A14: Sharp (conventional) RD estimates shown by gender and race within office. Robust confidence intervals (CIs) and p-values are presented, with MSE-optimal bandwidth proposed by Calonico et al. (2014). Models are estimated with a province-city-coalition cluster.

## A2.11 Sensitivity Analysis

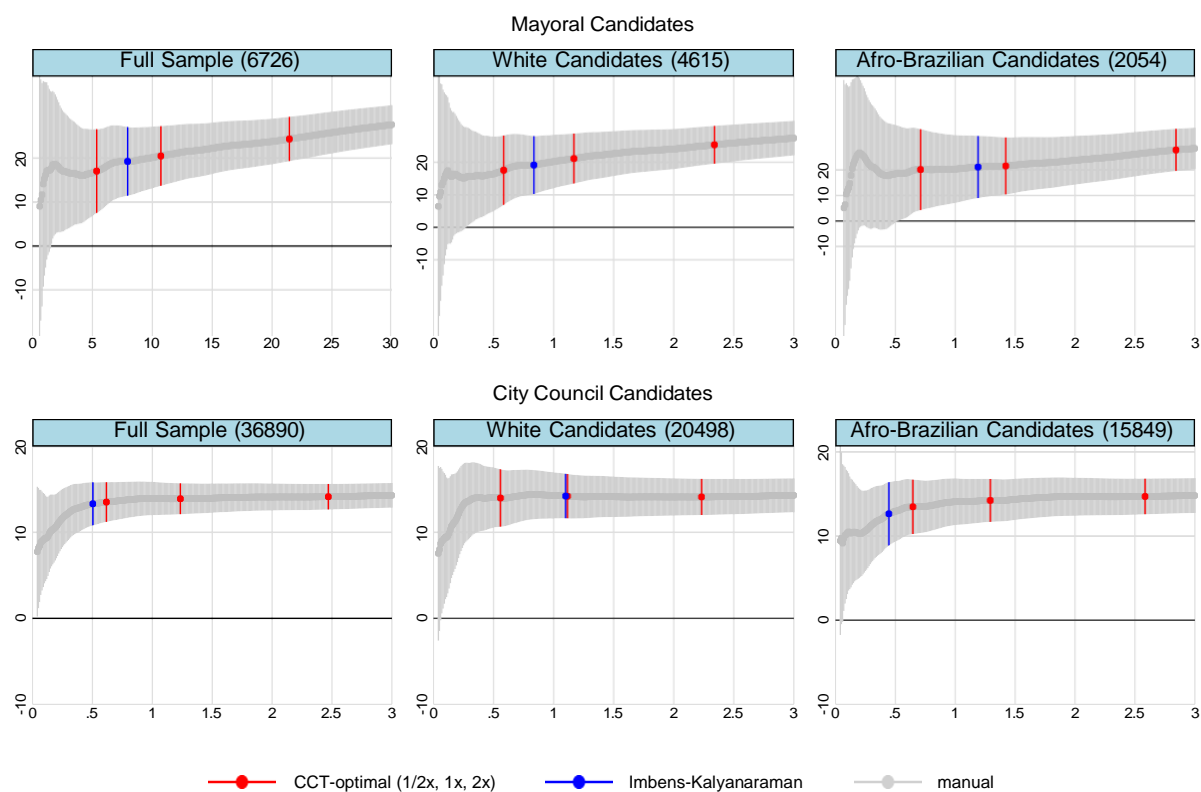


Figure A2: Sharp (conventional) rd estimates, with robust 95% cis. The running variable is the margin of victory election in  $t$  and the dependent variable is Rerunning at  $t + 1$ . To calculate the estimates, We clustered observations by province-city-coalition and fitted a separate local linear regression at both sides of the threshold, using a triangular kernel. The cct-optimal bandwidth is the (mse-optimal) bandwidth reported in Table 1. Grey dots and lines report manual bandwidths from 0 to 3 for the city council elections, and 0 to 30 for mayoral elections, red present 1x .5x and 2x of the mse bandwidth, and blue show the optimal bandwidth proposed by Imbens and Kalyanaraman (2012).

## A2.12 Heterogeneous Treatment Effects

dv: rerunning (0/100)	Estimation	95% CI	p-value	Bandwidth	N- — N+
Mayoral Candidates (newcomers)					
White	21.27	(5.75 — 28.25)	0.00	11.91	(1192 — 1108)
Afro-Brazilian	21.60	(2.73 — 36.11)	0.02	14.17	(581 — 557)
City Council Candidates (newcomers)					
White	14.20	(10.83 — 17.91)	0.00	1.12	(7790 — 7322)
Afro-Brazilian	14.24	(9.86 — 16.81)	0.00	1.30	(6868 — 5836)

Table A15: Sharp RD heterogeneous treatment effects by race among newcomer candidates. Models are estimated using the method proposed by Calonico et al. (2025). Robust confidence intervals (CIs) and p-values are based on the MSE-optimal bandwidth. Models are estimated with a province-city-coalition cluster.