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## When Do Strong Parties “Throw the Bums Out”? Competition and Accountability in South African Candidate Nominations

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Supplementary Information for

When do Strong Parties ‘Throw the Bums Out’?  
Competition and Accountability in South African Candidate Nominations

June 11, 2021

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Table 1: Summary Statistics for Ward-Level Analysis (Gauteng Province)

	N obs	Min	Max	Range	Median	Mean	Std. Dev.
Renomination	478	0.00	1.00	1.00	1.00	0.60	0.49
Years Incumbent	478	5.00	15.00	10.00	5.00	6.22	2.36
Switched Party	478	0.00	1.00	1.00	0.00	0.04	0.19
Service Coverage $\Delta$ (2013-2015)	478	-4.44	2.74	7.18	-0.06	0.00	0.79
Councillor Satisfaction	477	1.00	4.33	3.33	2.65	2.67	0.55
Service Satisfaction Index	478	-4.26	1.76	6.02	0.19	-0.02	0.96
Formal Housing $\Delta$ (2013-2015)	478	-0.36	0.32	0.68	0.00	0.02	0.09
Employment $\Delta$ (2013-2015)	478	-0.37	0.37	0.74	0.03	0.04	0.11
High Income (%)	478	0.03	0.88	0.85	0.26	0.32	0.20
Post Secondary (%)	478	0.00	0.64	0.64	0.14	0.19	0.14
Ethnicity - African (%)	478	0.19	1.00	0.81	0.97	0.81	0.24
Civic Engagement	478	-1.84	1.43	3.27	0.06	0.01	0.55
Log Population (2011)	478	6.80	11.43	4.63	10.10	9.88	0.69
Win Margin (2011)	478	0.00	0.95	0.94	0.71	0.63	0.24

Table 2: Summary Statistics for Municipal-Level Analysis (National)

	N obs	Min	Max	Range	Median	Mean	Std. Dev.
Renomination	8377	0.00	1.00	1.00	1.00	0.52	0.50
Promotion	4157	0.00	2.00	2.00	0.00	0.45	0.71
Years Incumbent	8377	5.00	15.00	10.00	5.00	6.68	2.66
Switched Party	8377	0.00	1.00	1.00	0.00	0.11	0.32
Service Coverage $\Delta$	234	-1.31	1.64	2.94	-0.01	-0.00	0.54
Service Rating Index	234	-2.20	1.70	3.91	-0.09	-0.00	0.85
Audit Opinion	224	1.00	5.00	4.00	4.00	3.24	1.30
Formal Housing $\Delta$	234	-0.25	0.48	0.73	0.09	0.09	0.08
Post Secondary (%)	234	-0.07	0.32	0.40	0.06	0.06	0.06
Ethnicity - African (%)	234	0.01	1.00	0.98	0.90	0.76	0.31
Log Population $\Delta$	234	0.01	0.11	0.10	0.03	0.04	0.01
Win Margin (2011)	234	0.01	0.92	0.91	0.49	0.46	0.25

Table 3 shows results from models including an interaction between *Councillor Satisfaction* and the ward-level margin of victory in 2011. Column 1 shows the results for the full sample of Gauteng wards, while columns 2 and 3 show results for the ANC and DA subsets, respectively. Consistent with the notion of party responsiveness, the interaction coefficients are negative and (with the exception of the DA subset) statistically significant, indicating that the predictive power of citizen satisfaction for councillor renomination decreases as elections become less competitive. Table 4 shows results from similar analysis at the municipal level. Table 5 shows results at the municipal level among top 10 PR councillors only. Table 6 shows the interaction effects between service ratings and 2011 electoral margins among top 10 PR councillors.

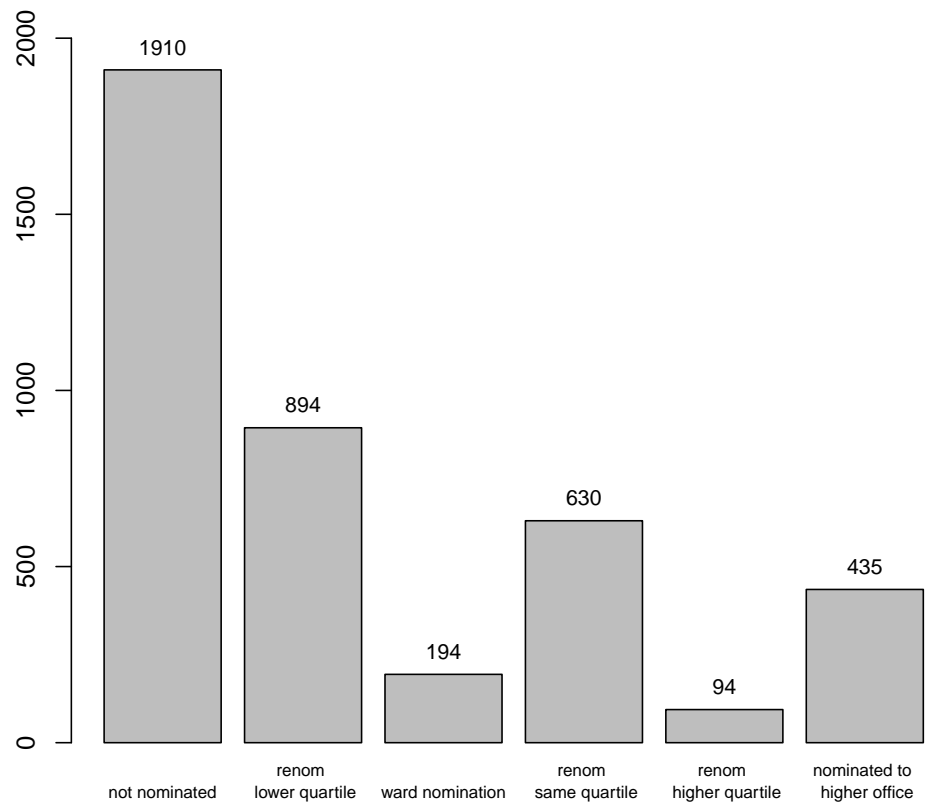


Figure 1: Distribution of 2016 promotion outcomes for PR councillors elected in 2011, all municipalities in South Africa. Quartile refers to councillors' position on the party's PR list. Source: Author analyses of candidate lists furnished by Electoral Commission of South Africa (IEC).

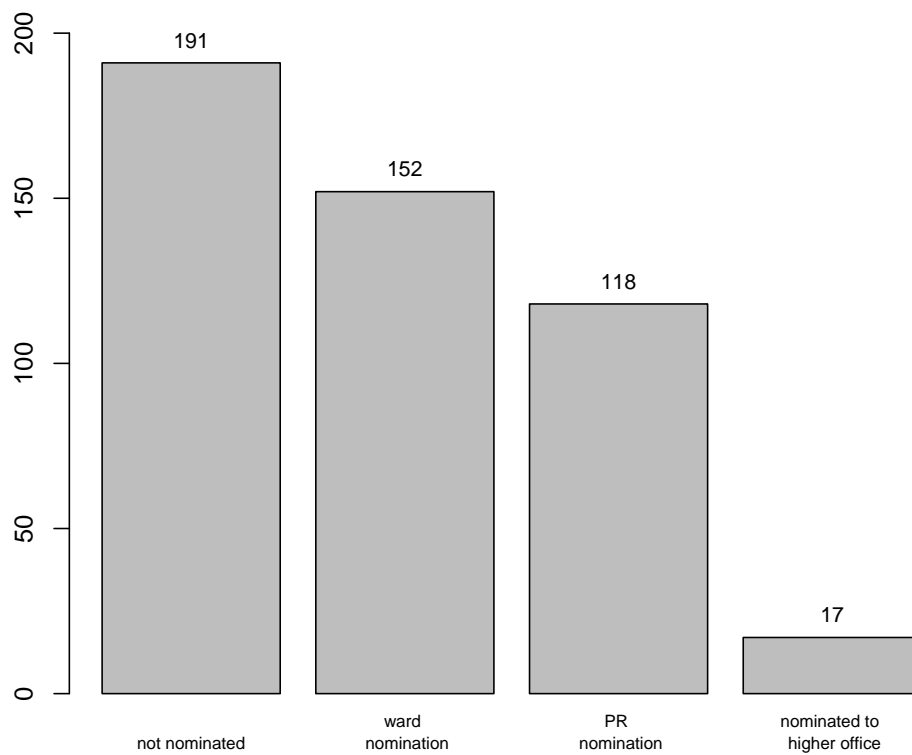


Figure 2: Distribution of 2016 nomination outcomes for ward councillors elected in 2011 in Gauteng province. Source: Author analyses of candidate lists furnished by Electoral Commission of South Africa (IEC).

Table 3: Citizen Satisfaction, Councillor Renomination, and Political Competition in Gauteng (Logit)

	Dependent variable: Renomination		
	All	ANC	DA
	(1)	(2)	(3)
Councillor Satis. x Win Margin	-2.274*	-3.098*	-2.124
	(0.877)	(1.225)	(2.230)
Councillor Satisfaction	1.968*	2.725*	2.566
	(0.611)	(0.898)	(1.679)
Win Margin (2011)	5.716*	8.022*	3.443
	(2.351)	(3.150)	(5.929)
Service Satisfaction Index	-0.100	-0.080	-0.339
	(0.144)	(0.161)	(0.291)
Service Coverage $\Delta$	0.127	0.203	0.839
	(0.162)	(0.182)	(0.440)
Formal Housing $\Delta$	-3.888*	-3.385*	-8.385*
	(1.440)	(1.530)	(3.762)
Employment $\Delta$	0.233	0.473	-2.038
	(0.912)	(1.001)	(2.166)
High Income	-2.374	-2.944	-2.023
	(1.269)	(1.548)	(3.058)
Post Secondary Education	1.515	1.772	-1.482
	(1.744)	(2.407)	(3.743)
Ethnicity - African	-2.176*	-1.031	-4.597*
	(0.800)	(1.927)	(1.725)
Civic Engagement	-0.106	-0.151	0.363
	(0.233)	(0.273)	(0.553)
Log Population (2011)	0.252	-0.154	0.794
	(0.326)	(0.374)	(0.730)
Years Incumbent	0.006	0.015	0.206
	(0.043)	(0.049)	(0.113)
Switched Party	-1.726*	-0.908	-3.366*
	(0.589)	(1.283)	(1.210)
Municipality FE	Yes	Yes	Yes
Observations	477	343	142

\* $p < 0.05$

Table 4: Councillor Renomination and Political Competition - All Municipalities (Logit)

	Dependent variable: Renomination		
	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)
Svc. Rating Index x Win Margin	0.096 (0.260)	0.194 (0.274)	0.250 (0.297)
Service Rating Index	0.038 (0.159)	-0.038 (0.166)	0.047 (0.144)
Win Margin (2011)	0.139 (0.300)	0.127 (0.336)	-0.085 (0.370)
Service Coverage $\Delta$	-0.048 (0.105)	-0.041 (0.107)	0.078 (0.148)
Formal Housing $\Delta$	0.205 (0.506)	0.048 (0.458)	-0.518 (0.718)
Log Population $\Delta$	1.581* (0.716)	1.524* (0.732)	-0.338 (1.255)
Ethnicity - African (%)	-0.367 (0.402)	-0.329 (0.440)	0.696 (0.494)
Post Secondary (%)	-10.106* (2.703)	-8.716* (2.798)	14.245* (4.962)
Ward Councillor	-0.171* (0.061)	-0.174* (0.064)	0.080 (0.101)
Years Incumbent	0.031* (0.011)	0.032* (0.011)	0.077* (0.019)
Switched Party	-0.981* (0.142)	-1.182* (0.168)	-0.919* (0.112)
N Councillors	5841	5315	2536
N Municipalities	234	202	234
Province FE	Yes	Yes	Yes
RSE clustered at municipal level			* $p < 0.05$



Table 5: Determinants of Councillor Renomination - Top 10 PR Councillors, All Municipalities (Logit)

	Dependent variable: Renomination					
	All Ruling	ANC	Non-Ruling	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)	(4)	(5)	(6)
Service Rating Index	0.220*	0.173	0.139	0.225*	0.177*	0.148
	(0.092)	(0.090)	(0.100)	(0.091)	(0.089)	(0.101)
Service Coverage $\Delta$				0.116	0.045	0.038
				(0.148)	(0.151)	(0.148)
Formal Housing $\Delta$				-0.062	-0.189	-1.177
				(0.703)	(0.732)	(0.739)
Log Population $\Delta$	2.473*	2.391*	-0.663	2.522*	2.427*	-0.455
	(1.182)	(1.205)	(1.293)	(1.194)	(1.210)	(1.319)
Ethnicity - African (%)	0.206	0.473	0.586	0.255	0.500	0.569
	(0.572)	(0.637)	(0.536)	(0.577)	(0.648)	(0.542)
Post Secondary (%)	-14.127*	-9.557*	12.516*	-13.605*	-9.318*	12.970*
	(4.666)	(4.378)	(5.309)	(4.693)	(4.436)	(5.432)
Win Margin (2011)	-0.749	-0.897*	-0.296	-0.710	-0.890*	-0.221
	(0.409)	(0.433)	(0.383)	(0.406)	(0.435)	(0.389)
Years Incumbent	0.022	0.028	0.103*	0.023	0.029	0.104*
	(0.021)	(0.022)	(0.020)	(0.021)	(0.022)	(0.020)
Switched Party	-0.935*	-1.386*	-0.841*	-0.936*	-1.383*	-0.847*
	(0.234)	(0.295)	(0.128)	(0.235)	(0.297)	(0.129)
N Councillors	1433	1297	1695	1433	1433	1695
N Municipalities	224	194	224	224	194	224
Province FE	Yes	Yes	Yes	Yes	Yes	Yes

RSE clustered at municipal level

\* $p < 0.05$

Table 6: Councillor Renomination and Political Competition - Top 10 PR Councillors, All Municipalities (Logit)

	Dependent variable: Renomination		
	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)
Svc. Rating Index x Win Margin	-0.325 (0.413)	-0.143 (0.390)	0.307 (0.328)
Service Rating Index	0.400 (0.253)	0.256 (0.238)	0.012 (0.171)
Win Margin (2011)	-0.888 (0.453)	-0.971* (0.472)	-0.063 (0.418)
Service Coverage $\Delta$	0.104 (0.147)	0.041 (0.150)	0.046 (0.148)
Formal Housing $\Delta$	-0.065 (0.697)	-0.180 (0.737)	-1.191 (0.741)
Log Population $\Delta$	2.456* (1.193)	2.398* (1.210)	-0.435 (1.312)
Ethnicity - African (%)	0.415 (0.600)	0.566 (0.667)	0.450 (0.543)
Post Secondary (%)	-13.719* (4.633)	-9.498* (4.421)	13.072* (5.458)
Ward Councillor	0.022 (0.021)	0.028 (0.022)	0.104* (0.020)
Years Incumbent	-0.927* (0.236)	-1.381* (0.296)	-0.840* (0.130)
N Councillors	1433	1297	1695
N Municipalities	224	194	224
Province FE	Yes	Yes	Yes
RSE clustered at municipal level			* $p < 0.05$

Table 7 shows that our main ward-level results are robust to the exclusion of Midvaal, the only municipality that was not governed by the ANC between 2011 and 2016. Note, however, that wards are single member districts and the party of a ward councillor can be considered to be the “ruling” party for that district. In Table 8, we investigate whether the relationship between citizen public opinion and councillor renomination is attenuated by participation in service delivery protests, which have become a prominent feature of local politics in recent years.<sup>1</sup> Rather than monitoring public opinion directly (i.e. through public opinion polling), parties may seek to replace councillors whose actions prompt high-profile protests. Participation in protest (specifically, the percentage of survey respondents in a ward who reported participating in a service delivery protest in 2015) is included in the *Civic Engagement Index* in our main analysis, and as shown in Table 8, our results remain similar when we substitute the protest variable. We also note that protest itself is not a significant predictor of renomination in Gauteng wards, neither in the full sample nor in either party subset.

<sup>1</sup>See, for example <https://citizen.co.za/news/south-africa/1976829/service-delivery-protests-reach-a-record-high-for-2018/>

In Tables 9 and 10, we show that “objective” improvements in public services are not significant predictors of renomination at the ward and municipal levels, even when public opinion indicators are excluded from the analysis. Furthermore, as shown in columns 4-6 of both tables, the relationship between improvements in local public services and renomination does not change significantly based on the level of political competition. In Table 11, we repeat our main municipal-level analysis without province fixed effects. Here we find that the coefficients on citizen satisfaction with services increase in size and become statistically significant, but only for ruling party councillors.

Table 7: Determinants of Councillor Renomination in Gauteng (Logit) - ANC-ruled Municipalities Only

	Dependent variable: Renomination								
	All	All	All	ANC	ANC	ANC	DA	DA	DA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Councillor Satisfaction	0.463 (0.243)	0.529* (0.258)	0.531* (0.261)	0.635* (0.299)	0.700* (0.319)	0.688* (0.322)	0.918 (0.551)	1.179* (0.598)	1.187 (0.622)
Service Satisfaction Index		-0.115 (0.143)	-0.109 (0.147)		-0.097 (0.159)	-0.104 (0.163)		-0.353 (0.295)	-0.415 (0.306)
Service Coverage $\Delta$			0.134 (0.167)			0.184 (0.181)			0.767 (0.436)
Formal Housing $\Delta$			-3.175* (1.477)			-2.731 (1.517)			-6.006 (3.775)
Employment $\Delta$			0.404 (0.919)			0.583 (1.000)			-2.025 (2.211)
High Income (%)	-2.538* (1.235)	-2.329 (1.263)	-2.441 (1.277)	-2.733 (1.467)	-2.544 (1.501)	-2.559 (1.522)	-1.610 (2.875)	-1.483 (2.883)	-1.704 (2.936)
Post Secondary (%)	1.920 (1.737)	2.016 (1.743)	2.048 (1.767)	2.098 (2.334)	2.288 (2.357)	2.409 (2.390)	-1.527 (3.534)	-0.789 (3.604)	-0.910 (3.737)
Ethnicity - African (%)	-1.800* (0.763)	-1.734* (0.765)	-1.713* (0.770)	-1.521 (1.818)	-1.431 (1.828)	-1.573 (1.846)	-3.685* (1.618)	-3.663* (1.583)	-4.027* (1.613)
Civic Engagement	-0.214 (0.231)	-0.199 (0.232)	-0.186 (0.233)	-0.196 (0.269)	-0.180 (0.270)	-0.180 (0.271)	0.095 (0.536)	0.156 (0.541)	0.266 (0.560)
Log Population (2011)	0.165 (0.333)	0.138 (0.335)	0.148 (0.339)	-0.138 (0.367)	-0.148 (0.367)	-0.151 (0.372)	0.877 (0.715)	0.839 (0.714)	0.741 (0.729)
Win Margin (2011)	-0.389 (0.478)	-0.309 (0.488)	-0.283 (0.491)	0.285 (0.779)	0.374 (0.794)	0.484 (0.805)	-2.365* (1.177)	-2.050 (1.205)	-1.880 (1.211)
Years Incumbent	-0.013 (0.042)	-0.013 (0.042)	-0.012 (0.042)	-0.005 (0.048)	-0.004 (0.049)	-0.002 (0.049)	0.193 (0.111)	0.188 (0.113)	0.175 (0.114)
Switched Party	-1.819* (0.631)	-1.787* (0.631)	-1.787* (0.628)	-0.698 (1.262)	-0.666 (1.263)	-0.800 (1.267)	-3.401* (1.404)	-3.297* (1.346)	-3.356* (1.338)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	463	463	463	338	338	338	134	134	134

\* $p < 0.05$

Table 8: Determinants of Councillor Renomination in Gauteng (Logit) - Including Protest Participation

	Dependent variable: Renomination								
	All	All	All	ANC	ANC	ANC	DA	DA	DA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Councillor Satisfaction	0.499*	0.564*	0.577*	0.640*	0.695*	0.671*	0.998	1.168*	1.115
	(0.239)	(0.251)	(0.255)	(0.298)	(0.315)	(0.319)	(0.556)	(0.589)	(0.608)
Service Satisfaction Index		-0.120	-0.105		-0.089	-0.091		-0.264	-0.271
		(0.141)	(0.145)		(0.155)	(0.160)		(0.278)	(0.290)
Service Coverage $\Delta$			0.128			0.198			0.781
			(0.161)			(0.179)			(0.435)
Formal Housing $\Delta$			-3.711*			-3.124*			-7.663*
			(1.429)			(1.495)			(3.651)
Employment $\Delta$			0.312			0.533			-1.584
			(0.909)			(0.996)			(2.195)
High Income (%)	-2.232	-2.028	-2.198	-2.741	-2.577	-2.606	-0.978	-0.845	-1.368
	(1.202)	(1.227)	(1.245)	(1.463)	(1.493)	(1.515)	(2.839)	(2.842)	(2.896)
Post Secondary (%)	1.870	1.939	1.890	2.250	2.397	2.455	-1.675	-1.293	-1.778
	(1.688)	(1.691)	(1.718)	(2.334)	(2.351)	(2.389)	(3.532)	(3.559)	(3.678)
Ethnicity - African (%)	-1.795*	-1.718*	-1.704*	-1.514	-1.414	-1.524	-3.693*	-3.632*	-4.126*
	(0.739)	(0.742)	(0.748)	(1.807)	(1.817)	(1.836)	(1.558)	(1.536)	(1.609)
Protest Participation	0.595	0.311	-0.088	-0.069	-0.282	-0.596	5.646	4.615	3.793
	(2.073)	(2.102)	(2.133)	(2.254)	(2.284)	(2.327)	(5.405)	(5.542)	(5.903)
Log Population (2011)	0.324	0.301	0.324	-0.155	-0.161	-0.142	0.904	0.885	0.762
	(0.320)	(0.321)	(0.324)	(0.362)	(0.363)	(0.368)	(0.693)	(0.696)	(0.723)
Win Margin (2011)	-0.489	-0.399	-0.329	0.036	0.123	0.239	-2.404*	-2.151	-1.999
	(0.454)	(0.466)	(0.471)	(0.761)	(0.777)	(0.785)	(1.135)	(1.166)	(1.183)
Years Incumbent	-0.008	-0.008	-0.005	0.003	0.004	0.007	0.188	0.191	0.182
	(0.042)	(0.042)	(0.042)	(0.048)	(0.048)	(0.049)	(0.111)	(0.112)	(0.113)
Switched Party	-1.592*	-1.568*	-1.620*	-0.750	-0.722	-0.876	-2.927*	-2.864*	-3.187*
	(0.565)	(0.565)	(0.565)	(1.264)	(1.265)	(1.270)	(1.138)	(1.120)	(1.180)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	477	477	477	343	343	343	142	142	142

\* $p < 0.05$

Table 9: Service Improvement and Councillor Renomination in Gauteng (Logit)

	Dependent variable: Renomination					
	All	ANC	DA	All	ANC	DA
	(1)	(2)	(3)	(4)	(5)	(6)
Service Coverage $\Delta$ x Win Margin				0.398 (0.527)	0.510 (0.626)	1.628 (1.645)
Service Coverage $\Delta$	0.181 (0.159)	0.210 (0.178)	0.688 (0.406)	-0.035 (0.327)	-0.091 (0.412)	-0.355 (1.115)
Win Margin	-0.229 (0.461)	0.516 (0.781)	-1.897 (1.148)	-0.226 (0.461)	0.507 (0.783)	-1.943 (1.173)
Formal Housing $\Delta$	-3.811* (1.411)	-2.815 (1.501)	-5.979 (3.593)	-3.893* (1.416)	-2.923 (1.512)	-6.022 (3.648)
Employment $\Delta$	0.171 (0.893)	0.527 (0.985)	-1.840 (2.102)	0.264 (0.903)	0.598 (0.990)	-2.021 (2.123)
High Income (%)	-1.989 (1.191)	-1.930 (1.429)	-0.618 (2.753)	-1.926 (1.194)	-1.864 (1.431)	-0.383 (2.759)
Post Secondary (%)	1.976 (1.697)	2.557 (2.389)	-1.578 (3.578)	1.962 (1.697)	2.520 (2.391)	-1.552 (3.585)
Ethnicity - African (%)	-1.733* (0.748)	-1.604 (1.816)	-3.948* (1.628)	-1.700* (0.749)	-1.469 (1.827)	-3.780* (1.633)
Civic Engagement	-0.195 (0.227)	-0.217 (0.268)	0.081 (0.551)	-0.185 (0.227)	-0.209 (0.268)	0.156 (0.565)
Log Population (2011)	0.215 (0.317)	-0.229 (0.367)	0.753 (0.722)	0.225 (0.318)	-0.217 (0.367)	0.804 (0.717)
Years Incumbent	-0.006 (0.042)	-0.002 (0.048)	0.178 (0.109)	-0.006 (0.042)	-0.002 (0.048)	0.202 (0.113)
Switched Party	-1.578* (0.560)	-0.784 (1.258)	-3.274* (1.303)	-1.586* (0.562)	-0.695 (1.263)	-3.235* (1.312)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	478	338	134	478	338	134

\* $p < 0.05$

Table 10: Service Improvement and Councillor Renomination - All Municipalities (Logit)

	Dependent variable: Renomination					
	All Ruling	ANC	Non-Ruling	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)	(4)	(5)	(6)
Svc. Coverage $\Delta$ x Win Margin				-0.423 (0.453)	-0.696 (0.492)	0.608 (0.628)
Svc. Coverage $\Delta$	-0.059 (0.104)	-0.051 (0.106)	0.064 (0.149)	0.168 (0.280)	0.349 (0.306)	-0.181 (0.280)
Win Margin	0.102 (0.275)	0.033 (0.291)	-0.134 (0.341)	0.129 (0.268)	0.065 (0.280)	-0.184 (0.354)
Formal Housing $\Delta$	0.274 (0.505)	0.120 (0.458)	-0.450 (0.720)	0.300 (0.510)	0.131 (0.458)	-0.546 (0.709)
Log Population $\Delta$	1.513* (0.719)	1.425 (0.738)	-0.304 (1.233)	1.834* (0.762)	1.941* (0.759)	-0.702 (1.287)
Ethnicity - African (%)	-0.527 (0.357)	-0.408 (0.384)	0.453 (0.441)	-0.468 (0.376)	-0.349 (0.389)	0.373 (0.437)
Post Secondary (%)	-9.461* (2.762)	-8.398* (2.835)	15.434* (4.880)	-9.484* (2.753)	-8.726* (2.819)	15.465* (4.828)
Ward Councillor	-0.173* (0.061)	-0.175* (0.064)	0.089 (0.101)	-0.172* (0.061)	-0.174* (0.064)	0.091 (0.100)
Years Incumbent	0.030* (0.011)	0.032* (0.011)	0.076* (0.019)	0.030* (0.011)	0.032* (0.011)	0.076* (0.019)
Switched Party	-0.981* (0.142)	-1.182* (0.168)	-0.920* (0.110)	-0.987* (0.143)	-1.187* (0.168)	-0.923* (0.110)
N Councillors	5841	5315	2536	5841	5315	2536
N Municipalities	234	202	234	234	202	234
Province FE	Yes	Yes	Yes	Yes	Yes	Yes

RSE clustered at municipal level

\* $p < 0.05$

Table 11: Determinants of Councillor Renomination - All Municipalities (Logit) without Province FE

	Dependent variable: Renomination					
	All Ruling	ANC	Non-Ruling	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)	(4)	(5)	(6)
Service Rating Index	0.145*	0.128*	0.136	0.134*	0.113*	0.139
	(0.056)	(0.055)	(0.086)	(0.056)	(0.056)	(0.089)
Service Coverage $\Delta$				-0.065	-0.090	0.042
				(0.099)	(0.100)	(0.138)
Formal Housing $\Delta$				0.073	0.125	0.049
				(0.524)	(0.499)	(0.725)
Log Population $\Delta$	1.505*	1.307	-0.457	1.453	1.236	-0.386
	(0.742)	(0.737)	(1.145)	(0.747)	(0.738)	(1.168)
Ethnicity - African (%)	-0.624*	-0.076	1.043*	-0.680*	-0.134	1.072*
	(0.274)	(0.281)	(0.265)	(0.293)	(0.299)	(0.277)
Post Secondary (%)	-8.971*	-8.001*	14.226*	-9.204*	-8.249*	14.335*
	(2.661)	(2.579)	(3.680)	(2.670)	(2.588)	(3.868)
Win Margin (2011)	-0.146	-0.271	-0.116	-0.171	-0.299	-0.090
	(0.255)	(0.257)	(0.255)	(0.256)	(0.263)	(0.273)
Ward Councillor	-0.168*	-0.166*	0.091	-0.168*	-0.166*	0.092
	(0.061)	(0.064)	(0.102)	(0.061)	(0.064)	(0.102)
Years Incumbent	0.033*	0.036*	0.076*	0.033*	0.036*	0.076*
	(0.011)	(0.012)	(0.018)	(0.011)	(0.012)	(0.018)
Switched Party	-0.957*	-1.232*	-0.915*	-0.957*	-1.238*	-0.914*
	(0.149)	(0.168)	(0.109)	(0.149)	(0.169)	(0.109)
N Councillors	5841	5315	2536	5841	5315	2536
N Municipalities	234	202	234	234	202	234
Province FE	No	No	No	No	No	No

RSE clustered at municipal level

\* $p < 0.05$

Figure 3 shows the distributions of estimates for the effects of objective service coverage change and councillor satisfaction in our main ward-level models, obtained by re-sampling from survey responses within each ward. This analysis was conducted to ensure that our main findings at the ward level are not an artefact of sampling error.



Table 12: Determinants of Councillor Renomination - All Municipalities (Logit), Ward vs. PR

	Dependent variable: Renomination					
	All Ruling	ANC	Non-Ruling	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)	(4)	(5)	(6)
Service Rating Index	0.051 (0.078)	0.038 (0.080)	0.199 (0.160)	0.152 (0.080)	0.120 (0.080)	0.130 (0.101)
Service Coverage $\Delta$	-0.131 (0.130)	-0.096 (0.130)	0.469 (0.282)	0.076 (0.138)	0.034 (0.140)	-0.013 (0.155)
Formal Housing $\Delta$	0.292 (0.652)	0.128 (0.613)	2.382 (1.364)	0.159 (0.652)	0.079 (0.677)	-1.123 (0.750)
Log Population $\Delta$	1.261 (0.888)	1.154 (0.903)	1.839 (2.602)	1.897 (1.028)	1.807 (1.042)	-0.797 (1.311)
Ethnicity - African (%)	-0.473 (0.481)	-0.370 (0.518)	1.074 (0.817)	-0.001 (0.498)	0.030 (0.568)	0.613 (0.594)
Post Secondary (%)	-7.694* (3.707)	-6.763 (3.905)	10.886 (7.613)	-14.367* (3.840)	-12.587* (3.911)	14.377* (5.473)
Win Margin (2011)	0.278 (0.356)	0.207 (0.374)	-0.043 (0.602)	-0.259 (0.342)	-0.306 (0.371)	-0.200 (0.405)
Years Incumbent	0.038* (0.015)	0.038* (0.015)	0.024 (0.039)	0.025 (0.015)	0.027 (0.016)	0.090* (0.019)
Switched Party	-1.131* (0.168)	-1.297* (0.209)	-1.451* (0.270)	-0.778* (0.197)	-1.061* (0.238)	-0.848* (0.123)
N Councillors	3554	3214	666	2287	2101	1870
N Municipalities	234	202	234	234	202	234
Province FE	Yes	Yes	Yes	Yes	Yes	Yes

RSE clustered at municipal level

\* $p < 0.05$

Table 13: Councillor Renomination and Political Competition - All Municipalities (Logit), Ward vs. PR

	Dependent variable: Renomination					
	All Ruling	ANC	Non-Ruling	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)	(4)	(5)	(6)
Svc. Rating Index x Win Margin	0.177 (0.362)	0.254 (0.396)	-0.162 (0.720)	-0.061 (0.339)	0.101 (0.339)	0.452 (0.338)
Service Rating Index	0.374 (0.388)	0.346 (0.436)	-0.058 (0.599)	-0.290 (0.379)	-0.254 (0.399)	0.025 (0.432)
Win Margin (2011)	-0.126 (0.131)	-0.092 (0.131)	0.465 (0.288)	0.074 (0.138)	0.036 (0.141)	0.001 (0.152)
Service Coverage $\Delta$	0.279 (0.663)	0.091 (0.614)	2.376 (1.366)	0.159 (0.651)	0.073 (0.678)	-1.151 (0.754)
Formal Housing $\Delta$	1.313 (0.876)	1.231 (0.888)	1.799 (2.653)	1.878 (1.035)	1.835 (1.045)	-0.752 (1.299)
Log Population $\Delta$	-0.560 (0.503)	-0.474 (0.543)	1.117 (0.836)	0.033 (0.526)	-0.018 (0.585)	0.436 (0.587)
Ethnicity - African (%)	-7.603* (3.695)	-6.368 (3.991)	10.925 (7.621)	-14.395* (3.852)	-12.463* (3.913)	14.579* (5.496)
Post Secondary (%)	0.038* (0.015)	0.039* (0.015)	0.023 (0.038)	0.024 (0.015)	0.028 (0.016)	0.091* (0.019)
Years Incumbent	-1.130* (0.169)	-1.292* (0.210)	-1.457* (0.271)	-0.776* (0.197)	-1.063* (0.238)	-0.837* (0.125)
Switched Party	-0.044 (0.202)	-0.100 (0.219)	0.245 (0.253)	0.187 (0.217)	0.062 (0.214)	-0.070 (0.181)
N Councillors	3554	3214	666	2287	2101	1870
N Municipalities	234	202	234	234	202	234
Province FE	Yes	Yes	Yes	Yes	Yes	Yes

RSE clustered at municipal level

\* $p < 0.05$

Table 12 shows our main municipal-level analyses for ward councillors only (columns 1-3) and PR councillors only (columns 4-6). In Table 13, we repeat the municipal-level analysis comparing the effects of citizen evaluation of services on the probability of renomination for ward and PR councillors, incorporating the interaction between service ratings and political competition. In Table 14, we re-estimate our ward-level interaction models, incorporating an interaction between political competition and citizen evaluations, operationalizing political competition as a binary function of 2011 constituency-level vote margin. Columns 1-3 use a threshold of 25% vote margin to define “competitive” jurisdictions, while columns 4-6 use a threshold of 35%. Consistent with our main results, we see a significant coefficient on the interaction between political competitiveness and councillor satisfaction for the full sample and for the ANC subset and a similarly sized but non-significant interaction in the DA subset. The 25% threshold is the same as that used by Wegner (2016) for South African municipalities following the 2006-2011 election cycle. And while 35% may seem like a large vote margin to be considered competitive, we note that this is a substantively meaningful cut-point for political competition. Panel (a) in Figure 4 shows the probability of re-election in 2016 as a function of 2011 vote margin for Gauteng wards. Although this analysis is post hoc in the sense that we analyze data on election returns in 2016 that were of course not available to parties at the time of candidate selection,

Table 14: Councillor Renomination and Political Competition (Binary) in Gauteng (Logit)

	Dependent variable: Renomination					
	All	ANC	DA	All	ANC	DA
	(1)	(2)	(3)	(4)	(5)	(6)
Councillor Satisfaction x Competitive (25%)	1.850*	2.289*	2.153			
	(0.706)	(0.998)	(1.470)			
Councillor Satisfaction x Competitive (35%)				1.209*	1.804*	1.699
				(0.588)	(0.848)	(1.244)
Councillor Satisfaction	0.364	0.449	0.154	0.388	0.439	0.144
	(0.266)	(0.332)	(0.553)	(0.271)	(0.336)	(0.570)
Competitive (25%)	-4.745*	-5.968*	-6.621			
	(1.886)	(2.673)	(4.248)			
Competitive (35%)				-2.875	-4.179	-4.590
				(1.566)	(2.176)	(3.617)
Service Satisfaction Index	-0.110	-0.075	-0.969	-0.098	-0.054	-0.929
	(0.143)	(0.159)	(0.638)	(0.143)	(0.159)	(0.629)
Service Coverage $\Delta$	0.134	0.198	0.619	0.119	0.196	0.356
	(0.161)	(0.180)	(0.810)	(0.162)	(0.180)	(0.772)
Formal Housing $\Delta$	-3.810*	-3.264*	-9.192	-3.731*	-3.107*	-8.675
	(1.433)	(1.507)	(7.776)	(1.438)	(1.524)	(7.654)
Employment $\Delta$	0.306	0.519	-0.635	0.213	0.478	-1.174
	(0.914)	(0.999)	(3.548)	(0.913)	(0.998)	(3.438)
High Income (%)	-2.098	-2.724	-1.701	-2.246	-2.775	-1.468
	(1.248)	(1.513)	(3.095)	(1.251)	(1.515)	(3.084)
Post Secondary (%)	1.281	1.943	-0.991	1.547	1.597	-0.248
	(1.734)	(2.425)	(3.719)	(1.736)	(2.398)	(3.781)
Ethnicity - African (%)	-2.144*	-0.849	-1.336	-1.965*	0.152	-1.848
	(0.796)	(1.867)	(2.226)	(0.786)	(1.925)	(2.187)
Civic Engagement	-0.090	-0.103	0.200	-0.121	-0.144	0.038
	(0.229)	(0.268)	(0.659)	(0.228)	(0.267)	(0.626)
Log Population (2011)	0.321	-0.115	2.135*	0.276	-0.144	2.162*
	(0.326)	(0.373)	(1.044)	(0.325)	(0.372)	(1.058)
Years Incumbent	0.004	0.018	-0.091	0.002	0.018	-0.089
	(0.043)	(0.049)	(0.113)	(0.042)	(0.049)	(0.112)
Switched Party	-1.703*	-0.693	-2.468*	-1.788*	-0.735	-2.798*
	(0.591)	(1.279)	(0.828)	(0.596)	(1.263)	(0.886)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	477	343	133	477	343	133

\* $p < 0.05$

it provides an indication of what party elites may have reasonably considered a “safe” seat in this context. Among wards where ANC councillors won with a margin between 30 and 35% in 2011, the probability of an ANC victory in 2016 was approximately 50% on average. Elections at or below this competitiveness threshold in 2011 were no safer than a coin-flip in 2016. Panel (b) presents results from a similar analysis at the municipal level. While elections were generally more competitive and less volatile at this level, municipalities with 2011 vote margins under 33% were, on average, no more than 60% likely to be won a second time.

Tables 15 and 17 incorporate baseline levels of service provision into the main analysis for Gauteng ward councillors and executive PR councillors, both as additive terms and interacted with the change in service coverage variables. This analysis is intended to probe the finding of a lack of a relationship between change in public service coverage and councillor renomination, and specifically to investigate the possibility that this null finding is in part a result of ceiling effects, where service provision is not relevant in places that are already well-serviced. Even when we do this, our main finding – that citizen views are a positive predictor of renomination but “objective” services are not – remains intact. As shown in Table 16, the results are similar when we exclude “fully-serviced” wards in Gauteng, defined as wards with more than 90% coverage for any of the four public services included in our index in 2013 (piped water, flush toilets, refuse removal, and electricity). Note, however, that the coefficients on councillor satisfaction drop below the .05 statistical significance threshold for this subset.

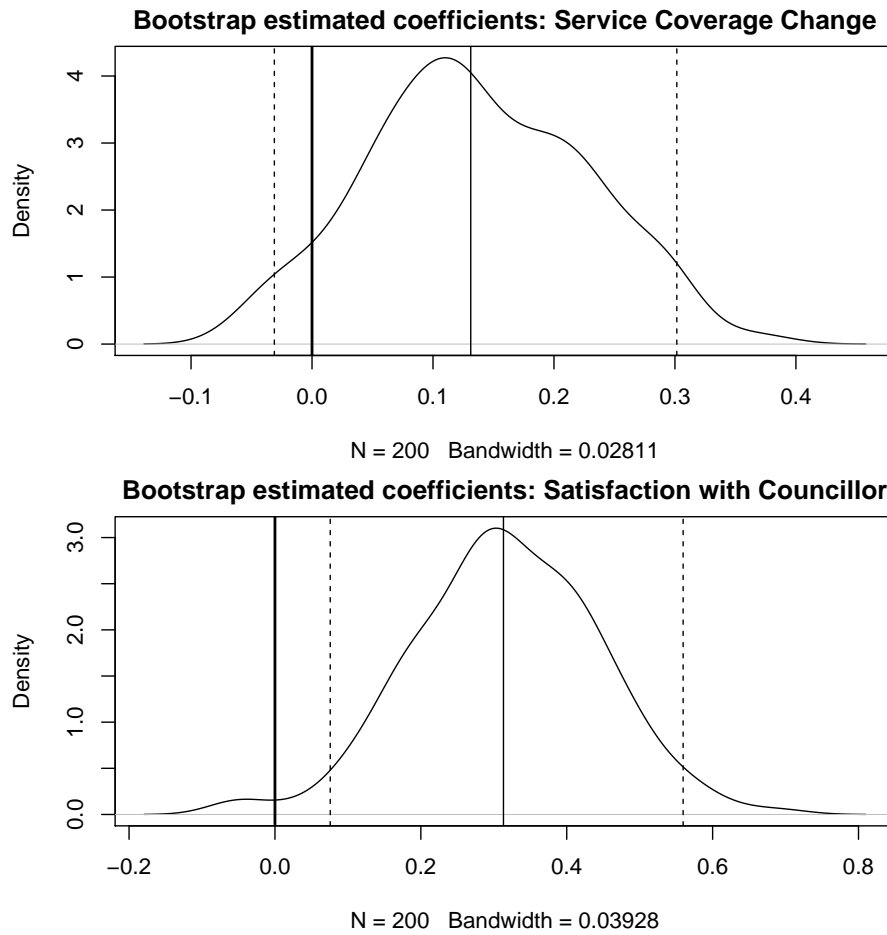
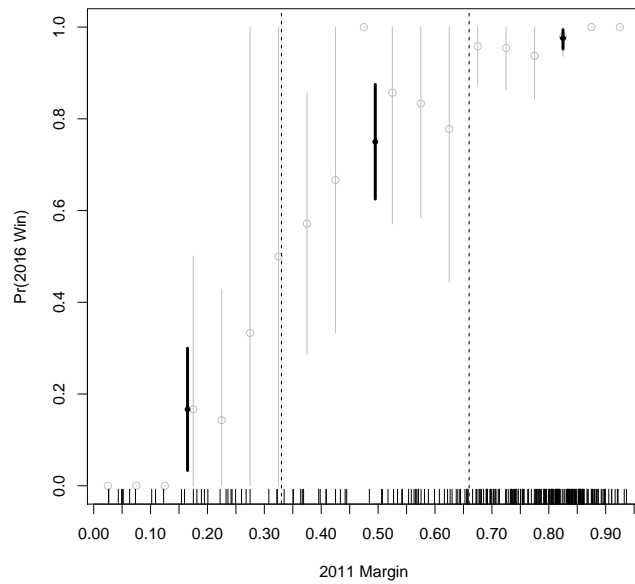
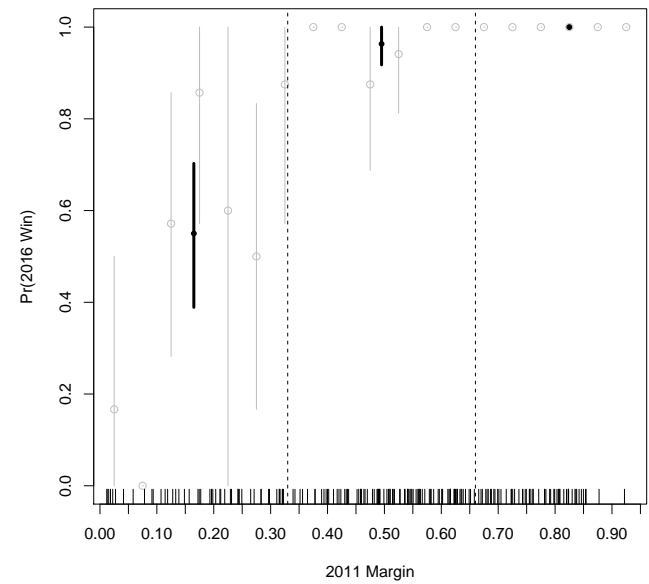


Figure 3: Distribution of estimates of coefficients for *Service Coverage Change* and *Councillor Satisfaction* with clustered bootstrap. Dotted lines represent 95% confidence intervals



(a) 2011 ANC vote margin and 2016 win probability for Gauteng wards controlled by the ANC in the 2011-2016 term.



(b) 2011 ANC vote margin and 2016 win probability in all South African municipalities controlled by the ANC in the 2011-2016 term.

Figure 4: Gray lines represent probabilities of victory with 5 percentage-point margin bins. Black lines represent probabilities within 33 percentage-point bins. Lines represent 95% confidence intervals obtained by re-sampling within each bin.

Table 15: Determinants of Councillor Renomination in Gauteng with Baseline Levels (Logit)

	Dependent variable: Renomination					
	All	ANC	DA	All	ANC	DA
	(1)	(2)	(3)	(4)	(5)	(6)
Councillor Satisfaction	0.569*	0.661*	0.419	0.570*	0.668*	0.442
	(0.256)	(0.320)	(0.518)	(0.256)	(0.321)	(0.521)
Service Satisfaction Index	-0.012	-0.017	-1.067	-0.012	-0.014	-1.055
	(0.267)	(0.313)	(0.996)	(0.267)	(0.313)	(0.993)
Service Coverage $\Delta$	0.088	0.170	0.680	0.076	0.253	0.548
	(0.199)	(0.223)	(0.907)	(0.220)	(0.252)	(0.920)
Service Coverage (2013)	-0.104	-0.070	0.092	-0.100	-0.100	0.137
	(0.273)	(0.325)	(1.033)	(0.274)	(0.328)	(1.060)
Formal Housing $\Delta$	-3.706*	-3.116*	-10.753	-3.697*	-3.147*	-10.191
	(1.427)	(1.493)	(8.132)	(1.429)	(1.500)	(8.043)
Employment $\Delta$	0.315	0.553	-0.790	0.311	0.607	-0.638
	(0.906)	(0.992)	(3.347)	(0.906)	(0.998)	(3.359)
High Income (%)	-2.171	-2.662	-1.589	-2.162	-2.759	-1.516
	(1.251)	(1.524)	(3.041)	(1.253)	(1.535)	(3.052)
Post Secondary (%)	1.735	2.489	-0.512	1.725	2.629	-0.490
	(1.721)	(2.407)	(3.800)	(1.723)	(2.420)	(3.812)
Ethnicity - African (%)	-1.595*	-1.463	-0.286	-1.588*	-1.460	-0.195
	(0.760)	(1.847)	(2.561)	(0.763)	(1.851)	(2.542)
Civic Engagement	-0.125	-0.177	-0.023	-0.126	-0.162	0.031
	(0.233)	(0.275)	(0.610)	(0.233)	(0.276)	(0.621)
Log Population (2011)	0.314	-0.160	2.262*	0.316	-0.193	2.223*
	(0.325)	(0.370)	(1.046)	(0.326)	(0.373)	(1.056)
Win Margin (2011)	-0.259	0.351	0.951	-0.260	0.352	0.949
	(0.481)	(0.804)	(1.744)	(0.481)	(0.807)	(1.745)
Years Incumbent	-0.006	0.004	-0.089	-0.006	0.006	-0.098
	(0.042)	(0.049)	(0.115)	(0.042)	(0.049)	(0.118)
Switched Party	-1.601*	-0.831	-2.499*	-1.598*	-0.770	-2.423*
	(0.568)	(1.267)	(0.851)	(0.568)	(1.273)	(0.855)
Service $\Delta$ X Service Coverage (2013)				-0.016	0.101	-0.431
				(0.125)	(0.138)	(0.750)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	477	343	133	477	343	133

Note:

\* $p < 0.05$

Table 16: Determinants of Councillor Renomination in Gauteng - Excluding Fully Serviced Wards (Logistic Regression)

	Dependent variable: Renomination	
	All	ANC
	(1)	(2)
Councillor Satisfaction	0.532 (0.411)	0.673 (0.464)
Service Satisfaction Index	-0.049 (0.206)	-0.010 (0.224)
Service Coverage $\Delta$	0.313 (0.199)	0.352 (0.230)
Formal Housing $\Delta$	-5.463* (1.817)	-4.832* (1.909)
Employment $\Delta$	0.535 (1.318)	1.107 (1.457)
High Income (%)	-2.791 (1.873)	-4.054 (2.237)
Post Secondary (%)	1.530 (2.700)	5.701 (3.502)
Ethnicity - African (%)	-1.774 (1.330)	-1.900 (2.295)
Civic Engagement	-0.039 (0.345)	-0.437 (0.404)
Log Population (2011)	0.208 (0.396)	-0.122 (0.445)
Win Margin (2011)	0.109 (0.688)	1.777 (1.054)
Years Incumbent	0.019 (0.064)	-0.003 (0.072)
Switched Party	-1.842 (1.013)	-13.959 (882.744)
Municipality FE	Yes	Yes
Observations	231	192

\* $p < 0.05$



Table 17: Determinants of Councillor Renomination with Baseline Levels - Top 10 PR Councillors, All Municipalities (Logit)

	Dependent variable: Renomination					
	All Ruling	ANC	Non-Ruling	All Ruling	ANC	Non-Ruling
	(1)	(2)	(3)	(4)	(5)	(6)
Service Rating Index	0.277*	0.213*	0.172	0.280*	0.214*	0.173
	(0.103)	(0.101)	(0.114)	(0.103)	(0.100)	(0.116)
Service Coverage $\Delta$	0.069	0.015	0.015	0.076	0.020	0.016
	(0.155)	(0.156)	(0.160)	(0.154)	(0.155)	(0.158)
Service Coverage Index (2011)	-0.148	-0.100	-0.060	-0.154	-0.103	-0.061
	(0.146)	(0.145)	(0.155)	(0.147)	(0.147)	(0.158)
Formal Housing $\Delta$	-0.021	-0.177	-1.149	-0.050	-0.184	-1.152
	(0.700)	(0.730)	(0.748)	(0.698)	(0.732)	(0.750)
Log Population $\Delta$	2.699*	2.545*	-0.393	2.799*	2.574*	-0.382
	(1.220)	(1.225)	(1.336)	(1.224)	(1.229)	(1.355)
Ethnicity - African (%)	-0.118	0.227	0.433	-0.094	0.232	0.440
	(0.718)	(0.790)	(0.635)	(0.719)	(0.790)	(0.624)
Post Secondary (%)	-12.768*	-8.927*	13.538*	-12.697*	-8.922*	13.549*
	(4.640)	(4.421)	(5.526)	(4.625)	(4.424)	(5.543)
Win Margin (2011)	-0.744	-0.918*	-0.218	-0.751	-0.923*	-0.219
	(0.404)	(0.432)	(0.392)	(0.407)	(0.435)	(0.393)
Years Incumbent	0.024	0.029	0.104*	0.024	0.029	0.105*
	(0.021)	(0.022)	(0.020)	(0.021)	(0.022)	(0.020)
Switched Party	-0.937*	-1.384*	-0.848*	-0.946*	-1.386*	-0.849*
	(0.236)	(0.298)	(0.130)	(0.237)	(0.297)	(0.130)
Service $\Delta$ X Service Coverage (2011)				0.074	0.026	0.011
				(0.170)	(0.174)	(0.156)
N Councillors	1433	1297	1695	1433	1297	1695
N Municipalities	224	194	224	224	194	224
Province FE	Yes	Yes	Yes	Yes	Yes	Yes

RSE clustered at municipal level

\* $p < 0.05$

Tables 18 and 19 present results from sensitivity analysis for the main ward-level specification (Column 3 in Table 1, re-estimated using OLS). Table 18 reports three sensitivity statistics: the partial  $R^2$  of the treatment with the outcome ( $R_{Y \sim D|X}^2$ ), the robustness value for the point estimate  $RV_{q=1}$ , and the robustness value for the confidence interval  $RV_{q=1, \alpha=0.05}$ .  $R_{Y \sim D|X}^2$  tells us, for “extreme” confounding that explains all the residual variation in the outcome, what percentage of the residual variance in the treatment it would need to explain to reduce the treatment effect to zero. In this case, such confounding would need to explain at least 1.06% of the residual variance in citizen approval to fully account for the observed effect of citizen approval on renomination. We note, however, that such an extreme confounder is unlikely in this case; indeed, past party switching, a proxy for party loyalty and the single strongest predictor of renomination explains less than 2% of its residual variance.

$RV_{q=1}$  indicates (in terms of partial  $R^2$ ), the strength of association between a hypothetical confounder and both the treatment and the outcome that would be necessary to reduce the “treatment effect” to zero, while  $RV_{q=1, \alpha=0.05}$  the strength of association that would be necessary to reduce the treatment effect below statistical significance at the  $\alpha = 0.05$  level. In this case, any confounder that explains less than 9.84% of the residual variance in both councillor satisfaction and renomination would fail to reduce the treatment effect to zero, while any confounder that explains less than 1.12% of the residual variance would fail to reduce the treatment effect to a level below statistical significance.

To interpret these results substantively, we benchmark them against observed covariates. Table 19 shows, for each of the (observed) covariates included the model, the consequences of including a hypothetical confounder comparable to that covariate for the estimated effect of citizen satisfaction on councillor renomination. For each observed covariate, we also include the consequences of including a hypothetical confounder two and three times as strong as that covariate (in terms of the relationship to both councillor satisfaction and renomination).

Table 18: Sensitivity Statistics (Gauteng)

Outcome: <i>Renomination</i>						
Treatment:	Est.	S.E.	t-value	$R_{Y \sim D X}^2$	$RV_{q=1}$	$RV_{q=1, \alpha=0.05}$
<i>Councillor Satisfaction</i>	0.12	0.054	2.207	1.1%	9.8%	1.1%
df = 454						

Table 19: Omitted Variable Bias Bounds (Sensitivity)

bound.label	r2dz.x	r2yz.dx	adjusted_estimate	adjusted_se	adjusted_t
1x Councillor Satisfaction	0.09	0.00	0.11	0.06	1.90
2x Councillor Satisfaction	0.19	0.00	0.10	0.06	1.59
3x Councillor Satisfaction	0.28	0.00	0.08	0.06	1.27
1x Service Coverage $\Delta$	0.01	0.00	0.12	0.05	2.11
2x Service Coverage $\Delta$	0.02	0.00	0.11	0.06	2.02
3x Service Coverage $\Delta$	0.03	0.00	0.11	0.06	1.92
1x Formal Housing $\Delta$	0.00	0.01	0.12	0.05	2.16
2x Formal Housing $\Delta$	0.00	0.03	0.11	0.05	2.12
3x Formal Housing $\Delta$	0.00	0.04	0.11	0.05	2.08
1x Employment $\Delta$	0.00	0.00	0.12	0.05	2.18
2x Employment $\Delta$	0.01	0.00	0.12	0.05	2.15
3x Employment $\Delta$	0.01	0.00	0.12	0.05	2.13
1x High Income (%)	0.02	0.01	0.11	0.05	1.92
2x High Income (%)	0.04	0.01	0.09	0.06	1.64
3x High Income (%)	0.06	0.02	0.08	0.06	1.36
1x Post Secondary (%)	0.00	0.00	0.12	0.05	2.14
2x Post Secondary (%)	0.01	0.01	0.11	0.05	2.07
3x Post Secondary (%)	0.01	0.01	0.11	0.05	2.00
1x Ethnicity - African (%)	0.00	0.01	0.12	0.05	2.12
2x Ethnicity - African (%)	0.00	0.02	0.11	0.05	2.03
3x Ethnicity - African (%)	0.01	0.03	0.10	0.05	1.95
1x Civic Engagement	0.00	0.00	0.12	0.05	2.16
2x Civic Engagement	0.01	0.00	0.12	0.05	2.11
3x Civic Engagement	0.01	0.00	0.11	0.05	2.06
1x Log Population (2011)	0.01	0.00	0.11	0.05	2.09
2x Log Population (2011)	0.02	0.00	0.11	0.06	1.97
3x Log Population (2011)	0.04	0.01	0.10	0.06	1.85
1x Win Margin (2011)	0.01	0.00	0.12	0.05	2.15
2x Win Margin (2011)	0.01	0.00	0.11	0.05	2.09
3x Win Margin (2011)	0.02	0.00	0.11	0.05	2.03
1x Years Incumbent	0.00	0.00	0.12	0.05	2.20
2x Years Incumbent	0.00	0.00	0.12	0.05	2.20
3x Years Incumbent	0.00	0.00	0.12	0.05	2.20
1x Switched Party	0.00	0.02	0.12	0.05	2.21
2x Switched Party	0.00	0.04	0.12	0.05	2.21
3x Switched Party	0.00	0.05	0.12	0.05	2.21

In Table 20 and 21, we examine predictors of satisfaction with local councillors, first using nationally-representative data from Afrobarometer Round 6 and next using the GCRO data at the individual level. In the Afrobarometer data, we measure satisfaction with councillor performance using the question, ‘Do you approve or disapprove of the way that the following people have performed their jobs over the last twelve months, or haven’t you heard enough to say? ... Your elected local government councillor’. We measure trust in local council using the question, ‘How much do you trust each of the following, or haven’t you heard enough about them to say? ... Your Local Government Council’. These outcomes are coded on a 4-point scale. Index 1 is a summary index of access to piped water, electricity, sewage, and paved roads in the respondent’s enumeration area. Index 2 is a summary index of the presence of a post office, school, police station, health clinic, and cell service. The Household Service Index is a summary index of household access to water, toilets, and electricity. In the national Afrobarometer sample, we do not find the quality of public services within the enumeration area nor the household to be predictive of satisfaction with one’s local councillor. In Gauteng, individual access to services is significantly predictive of satisfaction; however, ward-level change in service coverage – a more accurate indicator of councillor performance over the last term – is not.

Table 20: Objective Service Provision and Councilor Satisfaction - Afrobarometer R6 (Individual)

	DV: Approval of Councillor Performance					
	(1)	(2)	(3)	(4)	(5)	(6)
Municipal Services $\Delta$	0.002 (0.064)					
Municipal Services 2016		-0.001 (0.060)				
Enumeration Area Services: Index 1			0.030 (0.022)			
Enumeration Area Services: Index 2				0.019 (0.017)		
Household Service Index					0.035 (0.023)	0.028 (0.022)
Evaluation of Living Conditions						0.067* (0.014)
Think Councillors Listen						0.321* (0.034)
Contacted Councillor						0.076 (0.047)
Think Councillors Corrupt						-0.187* (0.027)
Trust Ruling Party						0.173* (0.020)
Female	-0.026 (0.032)	-0.026 (0.032)	-0.027 (0.035)	-0.026 (0.035)	-0.026 (0.038)	-0.019 (0.029)
Ethnicity - African	0.248 (0.156)	0.247 (0.148)	0.269* (0.052)	0.243* (0.051)	0.271* (0.049)	0.043 (0.080)
Education	0.012 (0.015)	0.012 (0.015)	0.010 (0.013)	0.011 (0.013)	0.008 (0.013)	0.006 (0.012)
Employed	0.018 (0.057)	0.018 (0.056)	0.016 (0.043)	0.019 (0.043)	0.017 (0.042)	-0.003 (0.046)
Asset Index	0.031 (0.032)	0.031 (0.032)	0.027 (0.024)	0.029 (0.024)	0.025 (0.022)	-0.007 (0.021)
Observations	2299	2299	2299	2299	2299	2216
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Mun	Mun	EA	EA		Mun

\* $p < 0.05$

Table 21: Objective Service Provision and Local Councillor Satisfaction in Gauteng (Individual)

	DV: Satisfaction with Local Councillor Performance					
	(1)	(2)	(3)	(4)	(5)	(6)
Service Coverage $\Delta$	0.039 (0.027)					
Piped Water		0.149* (0.034)				
Flush Toilet			0.435* (0.045)			
Electricity				0.173* (0.045)		
Refuse Removal					0.402* (0.039)	
Service Index (2015)						0.186* (0.019)
Female	-0.014 (0.026)	-0.016 (0.025)	-0.019 (0.025)	-0.016 (0.025)	-0.019 (0.025)	-0.019 (0.025)
Education (Matric)	0.026 (0.028)	0.025 (0.026)	0.014 (0.026)	0.024 (0.026)	0.015 (0.026)	0.014 (0.026)
Ethnicity - African	-0.425* (0.062)	-0.409* (0.043)	-0.412* (0.043)	-0.421* (0.043)	-0.414* (0.043)	-0.407* (0.043)
Income	0.054* (0.007)	0.053* (0.006)	0.051* (0.006)	0.054* (0.006)	0.052* (0.006)	0.051* (0.006)
Formal Dwelling	0.378* (0.046)	0.307* (0.038)	0.144* (0.042)	0.303* (0.040)	0.228* (0.037)	0.122* (0.043)
Unemployed	-0.203* (0.030)	-0.201* (0.028)	-0.193* (0.028)	-0.201* (0.028)	-0.195* (0.028)	-0.193* (0.028)
Observations	11253	11253	11253	11253	11253	11253
Cluster	Ward	None	None	None	None	None

\* $p < 0.05$