

Minority Party Misery:
Political Powerlessness and
Electoral Disengagement
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Online Appendix

Online Appendix Table 2.1. Summary Statistics for OLS Model

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Seats Won	46.943	46.207	32.874	67.816	8.322
Previous Seats (percent)	49.345	47.586	33.103	67.816	8.830
Approval	50.784	50	27	76	12.871
Change in Income	3.662	3.4	-1.1	8.7	2.327
Midterm	0.514	1	0	1	0.507

Online Appendix Table 2.2. Summary Statistics for Main Models in Chapters 2 and 4

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Retiring	0.080	0	0	1	0.272
Probability of Minority ¹	0.443	0.323	0	1	0.405
Presidential Vote Lean	7.625	6.662	-54.735	54.283	10.860
Terms	5.219	4	0.167	29.542	4.038
Age	54.030	54	26	91	10.526
Redistricted Seat	0.219	0	0	1	0.414
Ideological Extremism	-0.007	0	-1.223	0.781	0.160
Seat In South	0.269	0	0	1	0.443
Quality Candidate	0.208	0	0	1	0.406

¹Probability of Minority for chapter 2, Subtract Mean and Median from 1 for chapter 4 (i.e., mean would be 0.557)

Online Appendix Table 2.3. Probability of Minority Party Status and the Decision to Retire from Congress

Variable	Weibull Fixed Effects Parametric Survival Model
Probability of Party in Minority	1.461* (0.111)
Presidential Vote Lean	0.962* (0.003)
Terms	1.073* (0.008)
Age	0.991* (0.004)
Redistricted Seat	0.950 (0.069)
Ideological Extremism	1.469 (0.333)
Seat in South	0.924 (0.060)
Constant	0.000 (0.000)
N	15,084
Log-likelihood	-8,351.986

*p<0.05, dependent variable measures whether member retires.

Online Appendix Table 2.4. Probability of Minority Party Status and the Decision to Retire from Congress, Divided into Periods

Variable	Random Effects Logit, 1946–1954 Period	Random Effects Logit, 1956–1994 Period	Random Effects Logit, 1996–2018 Period
Probability of Party in Minority	0.457 (0.242)	0.613* (0.096)	0.440* (0.159)
Presidential Vote Lean	–0.023* (0.010)	–0.014* (0.005)	–0.034* (0.007)
Terms	0.057 (0.030)	0.064* (0.013)	0.116* (0.027)
Age	–0.010 (0.011)	0.019* (0.006)	0.005 (0.007)
Redistricted since Last Election	–0.282 (0.351)	–0.053 (0.199)	0.095 (0.275)
Ideological Extremism	–0.282 (0.629)	–0.416 (0.294)	–0.257 (0.481)
Seat in South	0.019 (0.247)	–0.120 (0.105)	0.117 (0.129)
Constant	–1.994 (0.573)	–4.573* (0.353)	–3.162* (0.454)
N	1,751	8,141	5,168
Log-likelihood	–484.319	–2,136.973	–1,462.125

*p<0.05, dependent variable measures whether member retires.

Online Appendix Table 2.5. Minority Party Status and Terms Served in the *Pre- and Post-Reform Eras

Variable	*Pre-Reform Era (1956–74)	Pre-Reform Era with Interaction	Post-Reform Era (1976–1994)	Post-Reform Era with Interaction
Probability of Party in Minority	0.737* (0.150)	0.178 (0.247)	0.530* (0.146)	0.543* (0.237)
Terms Served	0.014 (0.021)	-0.032 (0.027)	0.124* (0.031)	0.124* (0.031)
Probability of Minority* Terms Served	—	0.094* (0.033)	—	-0.002 (0.034)
Presidential Vote Lean	-0.022* (0.008)	-0.020* (0.008)	-0.008 (0.007)	-0.008 (0.007)
Age	0.033* (0.008)	0.033* (0.008)	0.005 (0.008)	0.005 (0.008)
Redistricted *since Last Election	-0.062 (0.242)	-0.061 (0.242)	0.013 (0.358)	-0.013 (0.358)
Ideological Extremism	0.232 (0.456)	0.135 (0.458)	-1.138* (0.421)	-1.141* (0.422)
Seat in South	-0.112 (0.186)	-0.052 (0.187)	-0.055 (0.140)	-0.055 (0.140)
Constant	-5.085* (0.481)	-4.855* (0.489)	-3.285* (0.451)	-3.286* (0.450)
N	3,848	3,848	4,293	4,293
Log-likelihood	-912.188	-908.218	-1213.645	-1213.643

*p<0.05, dependent variable measures whether member retires.

Online Appendix Table 2.6. Safe Incumbents Retirement and Probability of Minority Status

Variable	Mayhew Non-marginal Seat (55% cutoff)	Mayhew Non-marginal Seat (60% cutoff)	Presidential Vote 5%+ More Favorable Than Nation	Mayhew 60% and Presidential Vote Cutoffs
Probability of Party in Minority	0.567* (0.084)	0.468* (0.095)	0.541* (0.105)	0.448* (0.122)
Presidential Vote Lean	-0.021* (0.004)	-0.019* (0.004)	-0.023* (0.006)	-0.018* (0.006)
Terms	0.059* (0.010)	0.045* (0.011)	0.062* (0.012)	0.048* (0.014)
Age	0.010* (0.004)	0.011* (0.005)	0.016* (0.005)	0.018* (0.006)
Redistricted *Since Last Election	-0.039 (0.157)	-0.078 (0.178)	-0.478* (0.232)	-0.491 (0.263)
Ideological Extremism	-0.204 (0.241)	-0.431 (0.273)	-0.305 (0.303)	-0.680 (0.356)
Seat in South	0.036 (0.075)	0.041 (0.083)	0.174 (0.095)	0.223* (0.105)
Constant	-3.323* (0.314)	-3.284* (0.362)	-3.665* (0.378)	-3.832* (0.445)
N	12,748	10,358	8,662	6,993
Log-likelihood	-3445.179	-2730.701	-2191.456	-1708.925

*p<0.05, dependent variable measures whether member retires.

Online Appendix Table 2.7. Vulnerable Incumbent Retirement and Probability of Minority Status¹

Variable	Mayhew Marginal Seat (55% cutoff)	Mayhew Marginal Seat (60% cutoff)	Presidential Vote Less Favorable Than Nation	Mayhew 55% and Presidential Vote Cutoffs
Probability of Party in Minority	0.416* (0.204)	0.605* (0.147)	0.830* (0.177)	0.743* (0.333)
Presidential Vote Lean	-0.008 (0.012)	-0.019* (0.009)	-0.028* (0.013)	-0.040 (0.028)
Terms	0.183* (0.025)	0.155* (0.023)	0.081* (0.025)	0.178* (0.043)
Age	0.004 (0.009)	0.005 (0.007)	0.008 (0.008)	-0.003 (0.015)
Redistricted Since Last Election	0.011 (0.377)	0.175 (0.261)	0.464 (0.250)	0.528 (0.503)
Ideological Extremism	-0.952 (0.580)	-0.040 (0.409)	-0.391 (0.497)	-0.399 (1.018)
Seat in South	-0.304 (0.242)	-0.179 (0.154)	-0.230 (0.158)	-0.216 (0.333)
Constant	-2.982* (0.621)	-3.349* (0.482)	-3.481* (0.745)	-4.014* (1.342)
N	2,275	4,702	3,381	855
Log-likelihood	-616.790	-1,320.079	-980.346	-246.251

*p<0.05, dependent variable measures whether member retires.

¹ For supervulnerable model, some years drop out of the model due to their being no retirements among supervulnerable members in those years and the year dummy predicting failure perfectly. Results are similar if year dummies are removed and all observations remain in the model.

Online Appendix Table 2.8. Legislative Effectiveness, Minority Party Status, and the Decision to Retire (1974–2018)

Variable	Legislative Effectiveness	Rank
Probability of Party in Minority	0.450* (0.121)	0.495* (0.187)
Legislative Effectiveness	-0.035 (0.033)	—
Probability of Party in Minority * Legislative Effectiveness	0.064 (0.076)	—
Rank	—	-0.000 (0.001)
Probability of Party in Minority * Rank	—	0.000 (0.001)
Presidential Vote Lean	-0.023* (0.005)	-0.023* (0.005)
Terms	0.127* (0.021)	0.120* (0.020)
Age	0.006 (0.005)	0.007 (0.005)
Redistricted Since Last Election	0.040 (0.201)	0.035 (0.200)
Ideological Extremism	-0.625* (0.315)	-0.637* (0.313)
Seat in South	-0.025 (0.095)	-0.016 (0.094)
Constant	-3.704* (0.350)	-3.658* (0.368)
N	9.885	9.885
Log-likelihood	-2808.676	-2809.008

*p<0.05, dependent variable measures whether member retires.

Online Appendix Table 2.9. Summary Statistics for Republican Retiring in 2018

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Mayhew Marginal (55% Cutoff)	0.051	0	0	1	0.223
Mayhew Marginal (60% Cutoff)	0.307	0	0	1	0.467
Seat Leans to Other Party (Presidential Vote)	0.179	0	0	1	0.389
Seat Located in South	0.41	0	0	1	0.498
Redistricted Seat	0.128	0	0	1	0.339
Seniority	6.933	5	1	17	4.543
Age	59.667	60	40	88	10.378

Online Appendix Table 3.1. Summary Statistics for Model in Chapter 3

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Party Money (in real thousands)	139.979	30.973	0	10,413.700	359.973
Party Money (Logged)	9.180	10.341	0	16.159	4.051
Probability of Minority	0.476	0.407	0.006	99.941	0.346
Party or Chamber Leader	0.012	0	0	1	0.107
Committee Leader	0.096	0	0	1	0.295
Percentage of Term Served	0.993	0	0	1	0.058
Presidential Vote Lean	9.342	8.351	-36.282	49.961	10.724
Ideological Extremism	-0.002	0	-0.841	0.514	0.146
Open Seat	0.100	0	0	1	0.300

Online Appendix Table 4.1. Probability of Minority Party Status and Candidate Quality in the Pre- and Post-Reform House

Variable	Pre-Reform Era (1956–74)	Pre-Reform Era with Interaction	Post-Reform Era (1976–94)	Post-Reform Era with Interaction
Probability of Party in Minority	–0.604* (0.118)	–0.309* (0.122)	–0.746* (0.127)	–0.616* (0.143)
Seat in South	–1.266* (0.167)	–0.029 (0.244)	–0.584* (0.133)	–0.259 (0.214)
Probability of Minority * Seat in South	—	–2.116* (0.348)	—	–0.588 (0.308)
Presidential Vote Lean	–0.047* (0.006)	–0.053* (0.006)	–0.078* (0.007)	–0.076* (0.007)
Retiring	0.827* (0.164)	0.824* (0.162)	1.686* (0.143)	1.683* (0.143)
First-Term Member	0.419* (0.132)	0.412* (0.131)	0.684* (0.130)	0.691* (0.130)
Terms	–0.075* (0.017)	–0.065* (0.016)	–0.027 (0.016)	–0.026 (0.016)
Redistricted Seat	–0.133 (0.163)	–0.123 (0.163)	0.024 (0.258)	0.028 (0.259)
Ideological Extremism	0.228 (0.388)	–0.240 (0.386)	0.827* (0.392)	0.583 (0.411)
Constant	–0.617* (0.179)	–0.798* (0.179)	–0.465* (0.178)	–0.545* (0.184)
N	3,848	3,848	4,293	4,293
Log-likelihood	–1879.151	–1860.986	–1874.132	–1872.310

*p<0.05, dependent variable measures whether candidate from party not holding seat is quality candidate

Online Appendix Table 4.2. Probability of Minority Party Status and Candidate Quality, 1994–2018

Variable	Entire Period, No Interaction	Entire Period With Interaction	1994–2016	1994–2014
Probability of Party in Minority	–0.096 (0.131)	–0.189 (0.165)	–0.177 (0.172)	–0.345 (0.185)
Presidential Vote Lean	–0.079 (0.006)	–0.085 (0.010)	–0.096 (0.010)	–0.109 (0.011)
Probability of Minority * Presidential Vote Lean	—	0.013 (0.014)	0.026 (0.015)	0.035* (0.017)
Seat Located in South	–0.706* (0.120)	–0.710* (0.120)	–0.772* (0.126)	–0.764* (0.133)
Retiring	1.347* (0.131)	1.342* (0.131)	1.360* (0.139)	1.410* (0.148)
First-Term Member	0.562* (0.123)	0.567* (0.123)	0.663* (0.127)	0.743* (0.135)
Terms	–0.035* (0.014)	–0.034* (0.014)	–0.025 (0.014)	–0.019 (0.015)
Redistricted Seat	0.159 (0.242)	0.165 (0.242)	0.250 (0.258)	0.312 (0.300)
Ideological Extremism	–0.604 (0.413)	–0.608 (0.413)	–0.414 (0.428)	–0.004 (0.459)
Constant	–1.027* (0.182)	–0.982* (0.189)	–1.029* (0.193)	–0.977* (0.202)
N	–2,107.531	–2,106.906	–1,955.412	–1,744.591
Log-likelihood	5,168	5,168	4,737	4,304

*p<0.05, dependent variable measures whether candidate from party not holding seat is quality candidate

Online Appendix Table 5.1. Summary Statistics for Chapter 5

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Recruitment Attempt	0.043	0	0	1	0.205
Recruitment Failure	0.396	0	0	1	0.490
Probability of Party in Minority	0.553	0.647	0	1	0.382
Presidential Vote Lean	8.361	7.322	-25.387	54.283	10.918
Retiring	0.088	0	0	1	0.283
First-Term Member	0.154	0	0	1	0.361
Terms	5.334	4	0.167	29.542	4.121
Redistricted Seat	0.214	0	0	1	0.410
Ideological Extremism	-0.004	0	-1.223	0.613	0.153
Seat in South	0.286	0	0	1	0.452

Online Appendix Table 5.2. Investigating a Pre- vs. Post-1994 Threshold Effect and Party Recruitment Attempts, 1990–2018

Variable	All Seats	Presidential Vote Lean Under 10	Presidential Vote Lean Under 5	Previous Incumbent Percentage Under 60
Probability of Party in Minority	−0.559 (0.453)	−0.449 (0.516)	−0.139 (0.648)	−1.001 (0.753)
Post-1994	0.543 (0.313)	0.647 (0.370)	1.004* (0.498)	−0.233 (0.478)
Probability of Minority* Post- 1994	0.901 (0.489)	1.001 (0.563)	0.824 (0.705)	1.948* (0.817)
Presidential Vote Lean	−0.049* (0.008)	−0.053* (0.012)	−0.056* (0.017)	−0.062* (0.016)
Retiring	0.686* (0.168)	0.703* (0.192)	0.834* (0.224)	0.449 (0.285)
First-Term Member	0.411* (0.163)	0.637* (0.185)	0.844* (0.225)	0.351 (0.231)
Terms	−0.014 (0.017)	−0.000 (0.020)	0.021 (0.023)	−0.021 (0.033)
Redistricted Seat	−0.799* (0.172)	−0.660* (0.197)	−0.454* (0.224)	−0.621* (0.258)
Ideological Extremism	−0.377 (0.516)	−0.352 (0.587)	0.134 (0.709)	−0.004 (0.769)
Seat in South	−0.193 (0.146)	−0.373 (0.175)	−0.321 (0.216)	−0.427 (0.242)
Constant	−3.194* (0.321)	−3.351* (0.377)	−3.940* (0.515)	−2.486* (0.508)
N	6,444	3,564	2,200	1,721
Log-likelihood	−1,344.668	−908.690	−616.454	−514.005

*p<0.05, dependent variable measures whether party committee attempts to recruit candidate; model does not include year fixed effects due to the post-1994 dummy; models with post-1994 dummy and year fixed effects are broadly similar

Online Appendix Table 5.3. Probability of Minority Party Status and Recruitment Attempts, 1996–2018

Variable	All Seats	Presidential Vote Lean Under 10	Presidential Vote Lean Under 5	Previous Incumbent Percentage Under 60
Probability of Party in Minority	0.340 (0.190)	0.455* (0.222)	0.587* (0.274)	0.895* (0.305)
Presidential Vote Lean	-0.053* (0.009)	-0.062* (0.014)	-0.064 (0.018)	-0.087* (0.018)
Retiring	0.868* (0.182)	0.856* (0.206)	0.901 (0.245)	0.605* (0.312)
First-Term Member	0.437* (0.181)	0.690* (0.204)	0.866* (0.247)	0.505 (0.258)
Terms	-0.023 (0.020)	-0.002 (0.021)	0.020 (0.025)	-0.036 (0.038)
Redistricted Seat	-0.346 (0.363)	-0.197 (0.420)	-0.177 (0.466)	-0.430 (0.580)
Ideological Extremism	-0.551 (0.591)	-0.271 (0.650)	0.397 (0.771)	0.774 (0.865)
Seat in South	-0.210 (0.165)	-0.494* (0.197)	-0.328 (0.239)	-0.431 (0.272)
Constant	-3.230* (0.296)	-3.077* (0.318)	-3.087* (0.363)	-2.832* (0.449)
N	5,143	2,671	1,579	1,393
Log-likelihood	-1,158.027	-767.913	-510.674	-426.286

*p<0.05, dependent variable measures whether party committee attempts to recruit candidate

Online Appendix Table 5.4. Probability of Minority Party Status and Recruitment Attempts, 1996–2018

Variable	All Seats	Presidential Vote Lean Under 10	Presidential Vote Lean Under 5	Previous Incumbent Percentage Under 60
Probability of Party in Minority	0.280 (0.443)	0.767 (0.511)	1.401* (0.712)	1.738* (0.716)
Presidential Vote Lean	0.001 (0.016)	0.003 (0.030)	-0.021 (0.036)	0.007 (0.032)
Retiring	-0.405 (0.392)	-0.549 (0.449)	-0.517 (0.535)	-0.464 (0.704)
First-Term Member	0.266 (0.370)	0.242 (0.393)	0.430 (0.488)	0.613 (0.496)
Terms	-0.050 (0.038)	-0.032 (0.041)	-0.054 (0.049)	0.081 (0.069)
Redistricted Seat	0.978 (0.805)	2.165 (1.149)	2.415* (1.228)	2.648 (1.464)
Ideological Extremism	-2.065 (1.114)	-1.801 (1.274)	-1.672 (1.447)	-2.534 (1.663)
Seat in South	0.469 (0.303)	-0.148 (0.391)	-0.253 (0.490)	-0.116 (0.539)
Constant	-0.881 (0.573)	-1.074 (0.602)	-1.338 (0.695)	-1.997* (0.784)
N	334	240	172	142
Log-likelihood	-208.076	-142.581	-96.073	-79.780

*p<0.05, dependent variable measures whether party committee recruitment attempt fails

Online Appendix Table 6.1. Summary Statistics for OLS Model

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Seats Won	49.341	48.958	36	68	7.597
Approval	50.784	50	27	76	12.871
Change in Income	3.630	3.4	-1.1	8.700	2.340
Sixth Year Itch	0.162	0	0	1	0.374
Previous Seats in Class	17.795	18	9	26	4.625
Ongoing Seats	33.596	33	23	47	5.957

Online Appendix Table 6.2. Summary Statistics for Main Models in Chapter 6

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Quality Candidate	0.348	0	0	1	0.476
Retiring	0.163	0	0	1	0.370
Probability of Party in Minority ¹	0.489	0.377	0.000	1.000	0.376
Presidential Seat Lean	2.719	2.278	-61.300	39.758	8.487
Seat in South	0.219	0	0	1	0.414
Terms	2.055	2	0.028	8	1.453
Age	60.252	60	32	100	10.342
Ideological Extremism	-0.007	-0.001	-0.656	0.778	0.163

¹ Probability of minority retirement models, Subtract Mean and Median from 1 for candidate quality models (i.e., mean would be 0.511).

Online Appendix Table 7.1. 2012 OLS Model

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Percentage of Seats Won by Democrats	46.100	45.644	13.333	96	19.302
Percentage of Seats Before Election Held by Democrats	45.252	43.030	13.333	96	18.732
Presidential Approval	45.373	46.45	27.9	64.2	8.862
Change in Income	4.196	4.009	0.948	16.203	1.923

Online Appendix Table 7.2. 2014 OLS Model

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Percentage of Seats Won by Democrats	41.585	40	13.333	96	18.184
Percentage of Seats *Before Election Held by Democrats	45.045	42	13.333	96	18.846
Presidential Approval	39.243	41.4	19.3	53.4	8.043
Change in Income	3.327	3.112	1.166	5.394	0.790

Online Appendix Table 7.3. 2012 State Legislative Data

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Quality Candidate	0.134	0	0	1	0.340
Probability of Minority Party Status	0.636	0.853	0	1	0.401
Presidential Vote Lean	13.726	12.818	-31.931	47.181	12.727
Incumbent Not Running	0.206	0	1	0	0.404
First-Term Incumbent	0.262	0	0	1	0.440
Located in South	0.292	0	0	1	0.455
Legislative Professionalism	0.240	0.229	0.048	0.629	0.105
Upper Chamber	0.258	0	0	1	0.438

Online Appendix Table 7.4. 2014 State Legislative Data

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Quality Candidate	0.121	0	0	1	0.326
Probability of Minority Party Status	0.645	0.951	0	1	0.431
Presidential Vote Lean	13.390	12.378	-30.190	47.181	12.616
Incumbent Not Running	0.154	0	1	0	0.361
First-Term Incumbent	0.287	0	0	1	0.452
Located in South	0.244	0	0	1	0.429
Redistricted Seat	0.137	0	0	1	0.344
Legislative Professionalism	0.212	0.190	0.027	0.626	0.131
Upper Chamber	0.199	0	0	1	0.399

Online Appendix Table 7.5. Models for High and Low Polarization States

Variable	2012 Low Polarization	2012 High Polarization	2014 Low Polarization	2014 High Polarization
Probability of Minority Party Status	0.121 (0.178)	0.606* (0.221)	0.386* (0.171)	0.560* (0.203)
Presidential Vote Lean	-0.048* (0.006)	-0.084* (0.008)	-0.055* (0.006)	-0.099* (0.010)
Incumbent Not Running	0.890* (0.179)	0.888* (0.182)	1.194* (0.189)	0.993 (0.193)
First-Term Incumbent	0.699* (0.167)	0.393* (0.181)	0.820* (0.165)	0.374* (0.174)
Located in South	-0.228* (0.346)	-0.901* (0.295)	-0.880* (0.378)	-0.602 (0.317)
Redistricted Seat	—	—	-0.042 (0.396)	0.466 (0.358)
Legislative Professionalism	4.121* (1.996)	0.918 (0.791)	1.074 (1.084)	0.226 (0.892)
Upper Chamber	0.621* (0.292)	0.230 (0.230)	0.357 (0.254)	0.597* (0.240)
Constant	-3.133* (0.552)	-1.927* (0.308)	-2.515* (0.319)	-1.982* (0.330)
N	1,947	1,938	2,276	2,055
Log-Likelihood	-691.790	-624.658	-717.890	-632.557

*p<0.05, dependent variable measures whether candidate from party not holding seat is quality candidate

Online Appendix Table 7.6. Retirement Decisions in 2014

Variable	Random Effects Logistic Regression Model
Probability of Minority Party Status	0.117 (0.155)
Presidential Vote Lean	-0.004 (0.005)
First-Term Incumbent	-2.910* (0.387)
Located in South	-0.430* (0.217)
Legislative Professionalism	-0.252 (0.727)
Upper Chamber	0.252 (0.193)
Constant	-1.776* (0.219)
N	2,773
Log-Likelihood	-855.919

*p<0.05, dependent variable measures whether incumbent retired