

**The Behavioral Consequences of Public Appeals:
Evidence on Campaign Fundraising from the 2018 Congressional Elections**

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Online Appendix – Supplementary Materials

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Table A.1: Summary Statistics

Variable	Obs.*	Mean	S.D.	Min	Max
<i>Donation Data</i>					
Daily Receipts	292,651	6,741	61,477	-210,498	8,030,548
Daily Receipts (R)	140,248	4,947	72,563	-10,800	8,030,548
Daily Receipts (D)	152,403	8,391	49,054	-210,498	6,001,250
Log Daily Receipts	292,651	3.785	4.094	0	15.899
Log Daily Receipts (R)	140,248	2.758	3.897	0	15.899
Log Daily Receipts (D)	152,403	4.730	4.044	0	15.607
<i>Messaging Data</i>					
A. RT @realDonaldTrump					
Daily Support by Rep	1421	0.00659	0.119	0	13
Daily Support by Dem	50	0.00018	0.015	0	2
Daily Oppose by Rep	17	0.00001	0.008	0	2
Daily Oppose by Dem	1643	0.00667	0.096	0	6
B. Trump's Immigration Policy					
Daily Support by Rep	859	0.00381	0.081	0	11
Daily Support by Dem	23	0.00009	0.010	0	2
Daily Oppose by Rep	46	0.00017	0.014	0	3
Daily Oppose by Dem	3498	0.0175	0.185	0	9

Note: Summary statistics for messaging data are based on non-zero observations, which are equivalent to the total number of messages sent by candidates.

Table A.2: Estimated Effects with Leads (7-day Range)

	Dependent Variable: Log Daily Receipts			
	Retweet @realDonaldTrump		Trump's Immigration Policy	
	(1)	(2)	(3)	(4)
--- lead3	0.054 (0.047)	0.089 (0.054)	-0.088 (0.077)	0.007 (0.087)
--- lead2	0.109** (0.041)	0.108* (0.045)	0.011 (0.063)	0.019 (0.069)
--- lead1	0.109* (0.045)	0.045 (0.051)	0.102 (0.075)	0.016 (0.084)
Support by Rep	0.127** (0.049)	0.086 (0.047)	0.247*** (0.073)	0.167 (0.089)
--- lag 1	0.144* (0.061)	0.122 (0.062)	0.109 (0.077)	0.053 (0.083)
--- lag 2	-0.060 (0.051)	-0.051 (0.053)	0.169* (0.068)	0.160* (0.075)
--- lag 3	-0.078 (0.049)	-0.038 (0.053)	-0.009 (0.065)	0.014 (0.064)
--- lead3	0.178 (0.315)	0.325 (0.401)	0.487 (0.291)	0.774 (0.459)
--- lead2	0.540 (0.288)	0.565* (0.277)	-0.171 (0.339)	-0.062 (0.431)
--- lead1	0.299 (0.326)	0.497 (0.333)	0.863 (0.464)	0.937 (0.491)
Support by Dem	-0.032 (0.220)	0.135 (0.261)	0.388 (0.420)	0.912 (0.581)
--- lag 1	0.038 (0.264)	0.034 (0.295)	0.240 (0.367)	0.347 (0.450)
--- lag 2	-0.170 (0.284)	-0.274 (0.317)	0.230 (0.400)	0.422 (0.469)
--- lag 3	-0.408 (0.450)	-0.620 (0.481)	-0.016 (0.371)	0.189 (0.451)
--- lead3	-1.041* (0.492)	-1.045* (0.475)	0.330 (0.491)	0.431 (0.478)
--- lead2	-0.737** (0.260)	-1.262*** (0.367)	-0.321 (0.297)	-0.184 (0.287)
--- lead1	0.066 (0.675)	-0.308 (0.489)	1.139** (0.415)	0.991* (0.452)
Oppose by Rep	0.376 (0.781)	0.062 (0.720)	0.907 (0.467)	0.845 (0.460)
--- lag 1	-0.649 (0.486)	-0.747 (0.576)	-1.201** (0.386)	-1.081** (0.373)
--- lag 2	-0.446 (0.549)	-0.283 (0.555)	-0.341 (0.403)	-0.413 (0.399)
--- lag 3	-0.930* (0.446)	-1.504*** (0.402)	0.675 (0.378)	0.438 (0.384)
--- lead3	0.029 (0.063)	-0.034 (0.064)	0.017 (0.027)	-0.053 (0.030)
--- lead2	-0.053 (0.056)	-0.048 (0.057)	0.048 (0.029)	0.004 (0.029)
--- lead1	-0.119* (0.048)	-0.158** (0.055)	0.097** (0.034)	0.062 (0.035)
Oppose by Dem	-0.058 (0.054)	-0.065 (0.057)	-0.019 (0.032)	-0.012 (0.034)
--- lag 1	-0.057 (0.068)	-0.053 (0.070)	0.064 (0.035)	0.065* (0.032)
--- lag 2	0.004 (0.057)	-0.025 (0.060)	0.020 (0.029)	-0.016 (0.029)
--- lag 3	-0.104* (0.052)	-0.125* (0.056)	0.038 (0.033)	-0.011 (0.033)
Fixed Effects	Day, Candidate	Day x Party x State, Candidate	Day, Candidate	Day x Party x State, Candidate
Observations	286,741	286,741	286,741	286,741
R ²	0.551	0.615	0.551	0.615

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors are clustered by congressional race.

Table A.3: Estimated Effects with Leads (5-day Range)

	Dependent Variable: Log Daily Receipts			
	Retweet @realDonaldTrump		Trump's Immigration Policy	
	(1)	(2)	(3)	(4)
--- lead2	0.118** (0.043)	0.123** (0.046)	-0.0004 (0.062)	0.020 (0.068)
--- lead1	0.120* (0.049)	0.070 (0.055)	0.097 (0.075)	0.018 (0.085)
Support by Rep	0.129* (0.056)	0.089 (0.054)	0.236** (0.072)	0.162 (0.087)
--- lag 1	0.134* (0.058)	0.118* (0.056)	0.109 (0.075)	0.057 (0.082)
--- lag 2	-0.063 (0.057)	-0.035 (0.057)	0.156* (0.062)	0.146* (0.071)
--- lead2	0.536 (0.286)	0.559* (0.274)	-0.142 (0.351)	-0.033 (0.432)
--- lead1	0.303 (0.325)	0.497 (0.333)	0.874 (0.464)	0.962* (0.491)
Support by Dem	-0.038 (0.220)	0.131 (0.259)	0.383 (0.419)	0.900 (0.579)
--- lag 1	0.039 (0.257)	0.049 (0.288)	0.236 (0.364)	0.346 (0.445)
--- lag 2	-0.174 (0.285)	-0.280 (0.319)	0.224 (0.396)	0.427 (0.464)
--- lead2	-0.843** (0.270)	-1.436*** (0.377)	-0.315 (0.303)	-0.169 (0.293)
--- lead1	0.005 (0.669)	-0.383 (0.463)	1.153** (0.414)	1.006* (0.450)
Oppose by Rep	0.427 (0.773)	0.130 (0.724)	0.900 (0.467)	0.844 (0.461)
--- lag 1	-0.714 (0.482)	-0.810 (0.559)	-1.192** (0.386)	-1.070** (0.375)
--- lag 2	-0.559 (0.552)	-0.419 (0.546)	-0.286 (0.390)	-0.350 (0.387)
--- lead2	-0.057 (0.055)	-0.055 (0.056)	0.053 (0.030)	0.003 (0.029)
--- lead1	-0.117* (0.048)	-0.157** (0.055)	0.101** (0.034)	0.061 (0.035)
Oppose by Dem	-0.064 (0.053)	-0.069 (0.057)	-0.016 (0.033)	-0.010 (0.034)
--- lag 1	-0.059 (0.067)	-0.056 (0.069)	0.062 (0.035)	0.060 (0.032)
--- lag 2	0.002 (0.056)	-0.030 (0.060)	0.024 (0.030)	-0.018 (0.030)
Fixed Effects	Day, Candidate	Day x Party x State, Candidate	Day, Candidate	Day x Party x State, Candidate
Observations	288,795	288,795	288,711	288,711
R ²	0.549	0.613	0.549	0.613

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors are clustered by congressional race.

Table A.4. Estimated Effects with Measures of Dichotomous Support and Opposition

	Dependent Variable: Log Daily Receipts			
	Retweet @realDonaldTrump		Trump's Immigration Policy	
	(1)	(2)	(3)	(4)
Support by Rep	0.331*** (0.085)	0.256** (0.093)	0.372** (0.121)	0.246 (0.126)
--- lag 1	0.189** (0.071)	0.130 (0.074)	0.223 (0.115)	0.121 (0.130)
--- lag 2	-0.013 (0.083)	0.002 (0.084)	0.200* (0.098)	0.172 (0.108)
--- lag 3	0.003 (0.102)	0.069 (0.105)	-0.043 (0.102)	0.022 (0.098)
Support by Dem	-0.005 (0.234)	0.172 (0.270)	0.519 (0.508)	1.111 (0.645)
--- lag 1	0.106 (0.299)	0.053 (0.339)	0.381 (0.447)	0.482 (0.520)
--- lag 2	-0.231 (0.336)	-0.277 (0.375)	0.284 (0.487)	0.409 (0.544)
--- lag 3	-0.620 (0.487)	-0.862 (0.504)	-0.029 (0.468)	0.185 (0.526)
Oppose by Rep	0.762 (0.699)	0.329 (0.713)	1.286** (0.494)	1.190* (0.534)
--- lag 1	-0.509 (0.385)	-0.586 (0.518)	-1.413** (0.485)	-1.256** (0.480)
--- lag 2	-0.366 (0.408)	-0.235 (0.430)	-0.240 (0.498)	-0.306 (0.503)
--- lag 3	-0.853* (0.402)	-1.724*** (0.500)	0.727 (0.468)	0.467 (0.450)
Oppose by Dem	-0.075 (0.069)	-0.088 (0.071)	-0.026 (0.056)	-0.005 (0.058)
--- lag 1	-0.141 (0.079)	-0.145 (0.083)	0.151** (0.055)	0.147** (0.054)
--- lag 2	-0.044 (0.073)	-0.084 (0.076)	0.043 (0.051)	-0.033 (0.051)
--- lag 3	-0.153* (0.073)	-0.202** (0.079)	0.065 (0.051)	-0.028 (0.050)
Fixed Effects	Day, Candidate	Day x Party x State, Candidate	Day, Candidate	Day x Party x State, Candidate
Observations	289,780	289,780	289,696	289,696
R ²	0.550	0.614	0.550	0.614

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors are clustered by congressional race. Here, the independent variables are dichotomous—that is, coded 0 if no messages of support (or opposition) are sent, and 1 if at least one such message is sent.

Table A.5. Estimated Effects in Different Election Stages

	Dependent Variable: Log Daily Receipts			
	Retweet @realDonaldTrump		Trump's Immigration Policy	
	Primary (1)	General (2)	Primary (3)	General (4)
Support by Rep	0.127 (0.079)	0.065 (0.053)	0.245* (0.107)	0.110 (0.149)
--- lag 1	0.042 (0.071)	0.179 (0.097)	0.007 (0.100)	0.163 (0.141)
--- lag 2	-0.031 (0.085)	-0.053 (0.058)	0.129 (0.093)	0.200 (0.108)
--- lag 3	-0.057 (0.099)	0.120* (0.060)	0.043 (0.091)	0.004 (0.115)
Support by Dem	0.166 (0.467)	0.248 (0.317)	1.012 (0.894)	0.824 (0.455)
--- lag 1	0.350 (0.439)	-0.217 (0.373)	0.934 (0.633)	-0.286 (0.523)
--- lag 2	-0.430 (0.424)	0.122 (0.537)	0.235 (0.712)	0.636 (0.389)
--- lag 3	-0.928 (0.637)	-0.105 (0.405)	0.275 (0.782)	0.187 (0.321)
Oppose by Rep	-0.676 (0.677)	2.978*** (0.747)	0.227 (0.532)	1.803* (0.848)
--- lag 1	-0.741 (0.702)	-0.394 (0.684)	-0.993*** (0.284)	-1.773 (0.940)
--- lag 2	-0.554 (0.665)	0.387 (0.620)	-0.654 (0.409)	-0.214 (0.833)
--- lag 3	-1.857*** (0.496)	-0.605 (0.468)	0.356 (0.486)	0.223 (0.696)
Oppose by Dem	-0.084 (0.071)	-0.032 (0.111)	0.015 (0.043)	-0.087 (0.056)
--- lag 1	-0.160* (0.080)	0.088 (0.109)	0.042 (0.039)	0.037 (0.049)
--- lag 2	-0.026 (0.072)	-0.005 (0.083)	-0.024 (0.037)	-0.055 (0.054)
--- lag 3	-0.122 (0.077)	-0.096 (0.080)	-0.027 (0.042)	-0.034 (0.055)
Fixed Effects	Day x Party x State, Day x Party x State, Day x Party x State, Day x Party x State,			
	Candidate	Candidate	Candidate	Candidate
Observations	166,097	123,683	166,056	123,640
R ²	0.598	0.660	0.598	0.660

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors are clustered by congressional race.

Table A.6: Estimated Effects when Controlling for Number of Daily Tweets by Candidates

	Dependent Variable: Log Daily Receipts			
	Retweet @realDonaldTrump		Trump's Immigration Policy	
	(1)	(2)	(3)	(4)
Support by Rep	0.095 (0.057)	0.057 (0.056)	0.233** (0.072)	0.158 (0.087)
--- lag 1	0.126* (0.064)	0.104 (0.066)	0.104 (0.073)	0.050 (0.080)
--- lag 2	-0.051 (0.051)	-0.042 (0.052)	0.156* (0.061)	0.140 (0.072)
--- lag 3	-0.073 (0.056)	-0.033 (0.060)	-0.009 (0.066)	0.021 (0.063)
Support by Dem	-0.087 (0.219)	0.088 (0.260)	0.338 (0.413)	0.829 (0.574)
--- lag 1	0.054 (0.257)	0.037 (0.288)	0.253 (0.370)	0.343 (0.451)
--- lag 2	-0.197 (0.276)	-0.270 (0.313)	0.171 (0.406)	0.366 (0.475)
--- lag 3	-0.434 (0.453)	-0.628 (0.484)	-0.057 (0.376)	0.155 (0.456)
Oppose by Rep	0.369 (0.781)	0.026 (0.715)	0.894 (0.478)	0.842 (0.474)
--- lag 1	-0.673 (0.499)	-0.749 (0.587)	-1.215** (0.384)	-1.087** (0.372)
--- lag 2	-0.580 (0.531)	-0.452 (0.538)	-0.340 (0.393)	-0.391 (0.391)
--- lag 3	-1.013* (0.477)	-1.674*** (0.401)	0.704 (0.374)	0.472 (0.375)
Oppose by Dem	-0.086 (0.054)	-0.090 (0.056)	-0.019 (0.034)	-0.015 (0.035)
--- lag 1	-0.083 (0.069)	-0.078 (0.072)	0.050 (0.035)	0.047 (0.033)
--- lag 2	-0.016 (0.058)	-0.046 (0.061)	0.015 (0.029)	-0.025 (0.029)
--- lag 3	-0.119* (0.052)	-0.142* (0.056)	0.037 (0.034)	-0.016 (0.033)
# Daily Tweets	0.015*** (0.002)	0.013*** (0.002)	0.015*** (0.002)	0.013*** (0.002)
--- lag 1	0.004* (0.002)	0.004* (0.002)	0.005* (0.002)	0.004* (0.002)
--- lag 2	-0.001 (0.002)	-0.0003 (0.002)	-0.001 (0.002)	-0.0004 (0.002)
--- lag 3	0.001 (0.002)	0.00004 (0.002)	0.001 (0.002)	-0.0001 (0.002)
Fixed Effects	Day, Candidate	Day x Party x State, Candidate	Day, Candidate	Day x Party x State, Candidate
Observations	289,696	289,696	289,696	289,696
R ²	0.550	0.614	0.550	0.614

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors are clustered by congressional race.

Table A.7: Estimated Effects when Excluding Final Day of each Fundraising Quarter

	Dependent Variable: Log Daily Receipts			
	Retweet @realDonaldTrump		Trump's Immigration Policy	
	(1)	(2)	(3)	(4)
Support by Rep	0.170*** (0.049)	0.117* (0.048)	0.261*** (0.072)	0.181* (0.088)
--- lag 1	0.172** (0.054)	0.142* (0.059)	0.120 (0.074)	0.062 (0.081)
--- lag 2	-0.024 (0.044)	-0.019 (0.046)	0.156* (0.062)	0.140* (0.071)
--- lag 3	-0.061 (0.048)	-0.021 (0.052)	-0.022 (0.066)	0.001 (0.064)
Support by Dem	-0.027 (0.220)	0.139 (0.262)	0.437 (0.410)	0.943 (0.573)
--- lag 1	0.058 (0.259)	0.039 (0.290)	0.260 (0.380)	0.376 (0.459)
--- lag 2	-0.167 (0.277)	-0.241 (0.311)	0.216 (0.402)	0.411 (0.469)
--- lag 3	-0.416 (0.448)	-0.612 (0.480)	0.078 (0.375)	0.225 (0.468)
Oppose by Rep	0.386 (0.790)	0.046 (0.723)	1.001* (0.486)	0.946* (0.480)
--- lag 1	-0.658 (0.506)	-0.731 (0.594)	-1.190** (0.382)	-1.065** (0.370)
--- lag 2	-0.550 (0.534)	-0.423 (0.542)	-0.317 (0.396)	-0.372 (0.393)
--- lag 3	-0.967* (0.473)	-1.627*** (0.402)	0.729 (0.373)	0.493 (0.375)
Oppose by Dem	-0.065 (0.055)	-0.073 (0.057)	-0.003 (0.035)	-0.002 (0.036)
--- lag 1	-0.058 (0.069)	-0.058 (0.072)	0.062 (0.035)	0.055 (0.032)
--- lag 2	-0.005 (0.058)	-0.039 (0.061)	0.021 (0.029)	-0.020 (0.029)
--- lag 3	-0.102 (0.053)	-0.127* (0.057)	0.036 (0.034)	-0.020 (0.034)
Fixed Effects	Day, Candidate	Day x Party x State, Candidate	Day, Candidate	Day x Party x State, Candidate
Observations	286,899	286,899	286,899	286,899
R ²	0.548	0.612	0.548	0.612

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors are clustered by congressional race.

Table A.8. Effects of Retweeting Trump on Candidates' Fundraising

	Dependent Variable: Log Daily Receipts			
	Direct Retweet		Retweet with Comments	
	(1)	(2)	(3)	(4)
Support by Rep	0.169** (0.057)	0.125* (0.054)	0.160 (0.119)	0.056 (0.143)
--- lag 1	0.202** (0.068)	0.198** (0.069)	0.042 (0.122)	-0.121 (0.124)
--- lag 2	-0.020 (0.049)	-0.031 (0.053)	-0.078 (0.133)	-0.009 (0.139)
--- lag 3	-0.009 (0.050)	0.016 (0.055)	-0.274* (0.139)	-0.196 (0.150)
Support by Dem	0.240 (0.683)	-0.039 (0.799)	-0.055 (0.227)	0.177 (0.270)
--- lag 1	-0.150 (0.644)	-0.432 (0.922)	0.078 (0.282)	0.102 (0.305)
--- lag 2	-1.099 (0.606)	-1.613* (0.700)	-0.015 (0.294)	-0.057 (0.326)
--- lag 3	0.269 (0.727)	-0.770 (1.131)	-0.531 (0.500)	-0.588 (0.528)
Oppose by Rep	--	--	0.365 (0.789)	0.023 (0.722)
--- lag 1	--	--	-0.680 (0.505)	-0.748 (0.593)
--- lag 2	--	--	-0.563 (0.531)	-0.429 (0.537)
--- lag 3	--	--	-0.976* (0.469)	-1.648*** (0.398)
Oppose by Dem	--	--	-0.062 (0.053)	-0.071 (0.056)
--- lag 1	--	--	-0.060 (0.068)	-0.059 (0.071)
--- lag 2	--	--	-0.0004 (0.058)	-0.033 (0.061)
--- lag 3	--	--	-0.103* (0.052)	-0.130* (0.056)
Fixed Effects	Day, Candidate	Day x Party x State, Candidate	Day, Candidate	Day x Party x State, Candidate
Observations	289,696	289,696	289,696	289,696
R ²	0.550	0.614	0.550	0.614

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors are clustered by congressional race.