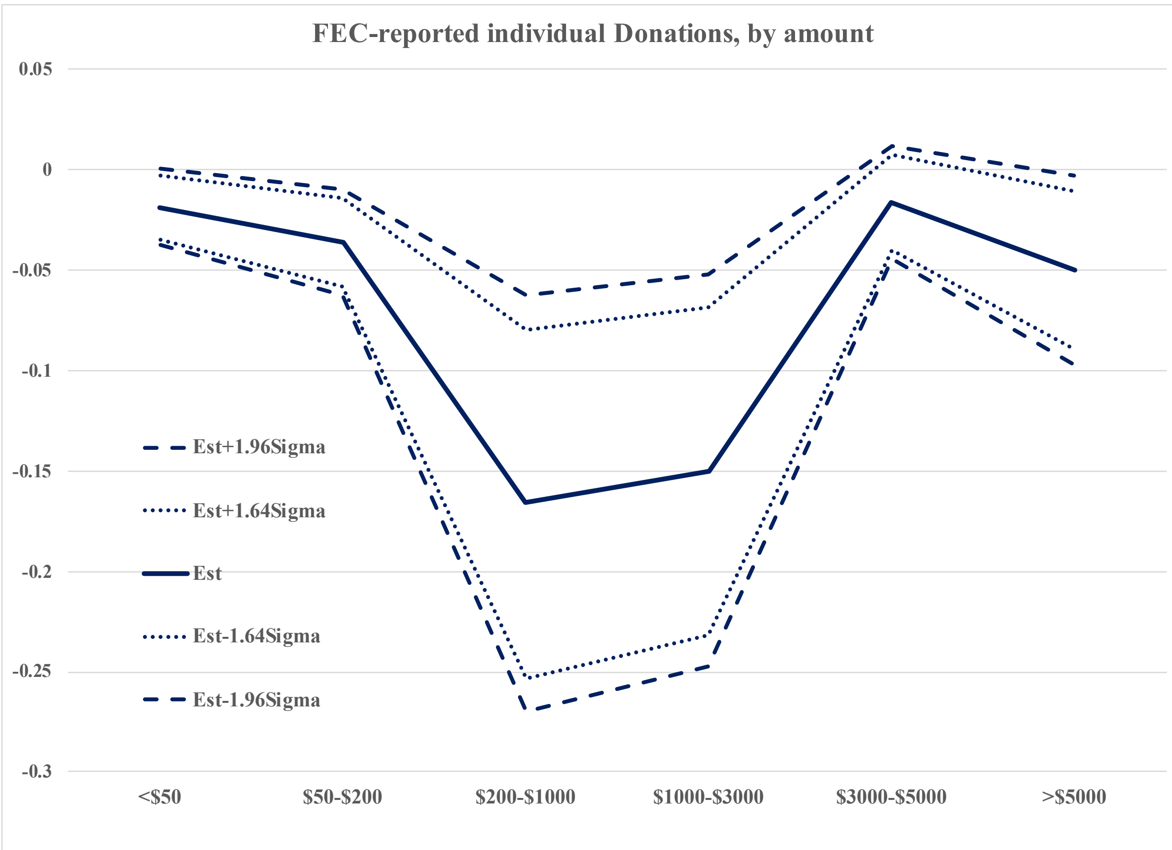
Supplemental Appendix: For Online Publication Only

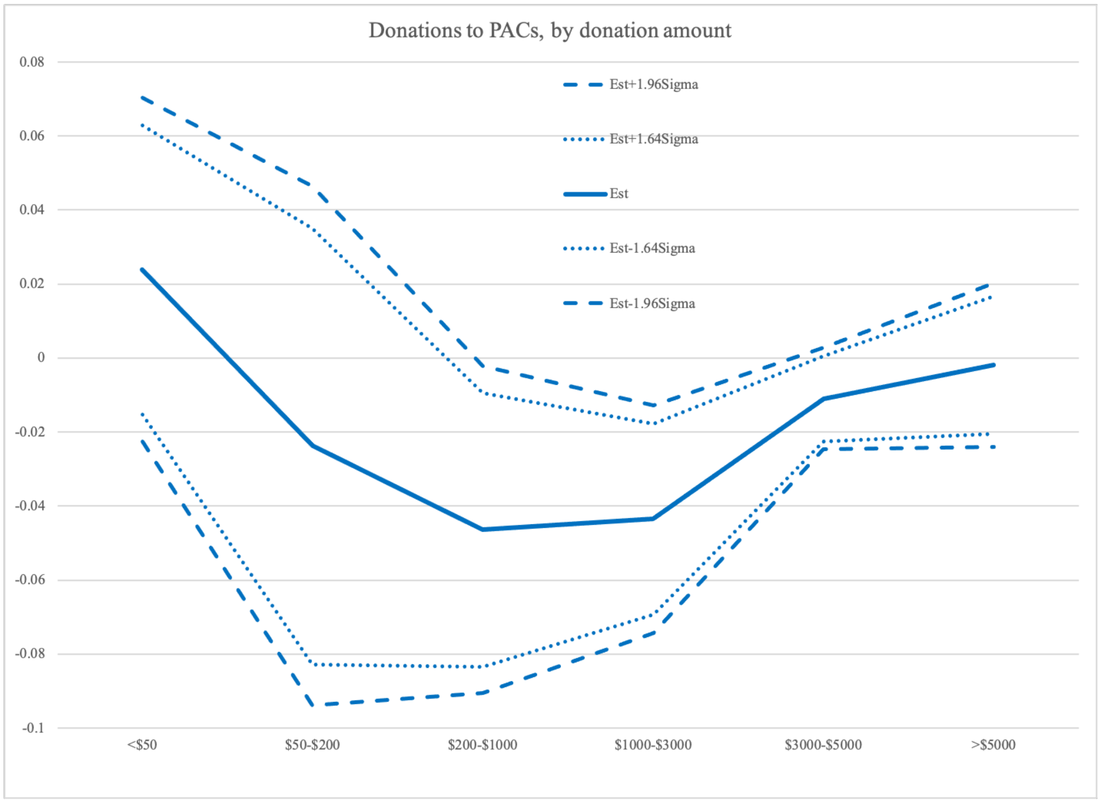
A Supplementary Figures, Tables, and Analyses

Figure A.1: Individual Donation Sensitivities to Disasters, by Political Donation Amount



Notes: The graph plots the coefficients for $I^{+0/+6}$of the specification regressing the amount of individual donations on the three dummies $I^{+0/+6}$, $I^{+7/+8}$and $I^{-2/-1}$, which respectively equal 1 for the week of disaster and the 6 weeks after that, for the weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. The regression also controls for the county, year, month, and week to election fixed effects. Solid line provides the point estimates, dashed line corresponds to the 90% confidence interval, and the dotted line corresponds to the 95% confidence interval. We also control for tropical storms originating abroad but affecting the US directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). Six regressions were run by different dollar amounts of donations, where the regressions include individuals who donate less than $50, $50-$200, $200-$1000, $3000-$5000, and more than $5000 respectively. The regressions are reported in Panel A, Table A.17 in the Appendix.

Figure A.2: Natural Disaster Shocks and Donations to Political Action Committees, by amount



Notes: The graph plots the coefficients for $I^{+0/+6}$of the specification regressing the amount of donations to Political Action Committees on the three dummies $I^{+0/+6}$, $I^{+7/+8}$and $I^{-2/-1}$, which respectively equal 1 for the week of disaster and the 6 weeks after that, for the weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. The regression also controls for the county, year, month, and week to election fixed effects. Solid line provides the point estimates, dashed line corresponds to the 90% confidence interval, and the dotted line corresponds to the 95% confidence interval. We also control for tropical storms originating abroad but affecting the US directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). Six regressions were run by different dollar amounts of donations, where the regressions include individuals who donate less than $50, $50-$200, $200-$1000, $3000-$5000, and more than $5000 respectively. The regressions are reported in Panel C, Table A.17 in the Appendix.

A.1 Summary Statistics

Table A.1 provides additional summary statistics for political donations.

Table A.1: Summary Statistics for Variables at the District-Year Level

	N	Mean	SD	Median	Min	Max	Range
Predicted logged aggregate political donations	2,456	15.85	1.07	15.93	11.69	17.67	2006-2010
Predicted future aggregate political donations, year t+1	2,456	15.39	1.21	15.43	10.85	17.74	2006-2010
Predicted future aggregate political donations, year t+2	1,615	15.98	1.04	16.16	12.77	17.67	2006-2008
Vote margin	2,437	0.27	0.19	0.26	0	0.93	2006-2010
Vote share, incumbents	1,148	0.66	0.13	0.65	0.34	1	2006-2010
Winning dummy, incumbents	1,167	0.92	0.27	1	0	1	2006-2010
Vote share, challengers	1,268	0.37	0.12	0.37	0.03	0.9	2006-2010
Winning dummy, challengers	1,269	0.16	0.37	0	0	1	2006-2010

A.2 Replication with IRS and CRS Data

Table A.2 replicates Table 5 of the main document, collapsing data at annual level as opposed to bi-annual level. The magnitudes in the two tables are very comparable (-0.017 vs -0.014) and the estimates are significant in both cases. Table A.3 replicates Table 3 using data from CRS. The estimates (0.09–0.11) are again significant. Similarly, Table A.4 replicates Table 4 using CRS data. Again, the coefficients are consistent with each other (-0.017 using CRS data (column (2)) vs. -0.013 using ARC data (column (4) of Table 4) vs. -0.014 using IRS data (column (2) of Table 5)).

Table A.2: Political Advertising Shocks and Charitable Contributions (IRS, Annual Data)

	(1) Charitable Deducted	(2) Charitable Deducted
Ads (Congressional Cycle)	-0.017** (0.008)	-0.017** (0.008)
Observations	13,439	13,439
R-squared	0.664	0.765
County Pair FE	Yes	Yes
Congressional Cycle FE	Yes	Yes
Income Group FE		Yes

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is the yearly charitable tax deductions, as reported annually to the Internal Revenue Service (IRS). Controls include county pair, congressional cycle, and income group fixed effects. Independent variable is the aggregate political advertising expenditures in a county in a year. The specification run is $Y_{c,Y} = \gamma_{countypair} + \eta_{congcycle} + \alpha_1 AdsCong_{c,Y} + \beta_{incomeg} + \varepsilon_{c,Y}$ with variables transformed via arcsinh transformation. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors are clustered by DMA-congressional cycle.

Table A.3: Disaster Information Shocks and Contributions to Catholic Relief Services (CRS)

	CRS Donations		
	(1)	(2)	(3)
$I^{+0/+6}$	0.112**	0.111**	0.0982**
	(0.0491)	(0.0487)	(0.0485)
$I^{-2/-1}$		-0.001	-0.012
		(0.0625)	(0.0623)
$I^{+7/+8}$			-0.0920*
			(0.0496)
Observations	381,574	381,574	381,574
R-squared	0.654	0.654	0.655
County FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Month FE	Yes	Yes	Yes
F-value H: $I^{+0/+6}$ $=I^{-2/-1}$		2.07	2.008
p-value		0.156	0.163
F-value H: $I^{+0/+6}$ $=$ - $I^{(+7/+8)}$			0.008
p-value			0.928

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is aggregate donations to Catholic Relief Services (CRS) in a given county and week, transformed with arcsinh transformation. $I^{+0/+6}$ is a dummy, which equals 1 for the week of disaster and the 6 weeks after that, $I^{+7/+8}$ is a dummy which equals 1 for the weeks 7 and 8 after the disaster to allow for delayed effects, and $I^{-2/-1}$ is a dummy which equals 1 for the two weeks preceding the disaster to check for (placebo) anticipation effects. We include county, year, and month fixed effects. We also control for tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). We include a control for weeks to elections. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, are in parentheses.

Table A.4: Political Advertising Shocks and Contributions to Catholic Relief Services (CRS)

	(1) Charitable	(2) Charitable
$A^{-1/+0}$	-0.015**	-0.017**
	(0.005)	(0.007)
A^{+1}		-0.003
		(0.003)
Observations	21,036	21,036
R-squared	0.943	0.943
Bi-monthly x County Pair FE	Yes	Yes
Month FE	Yes	Yes
F-value for $H : A^{-1/+0} = A^{+1}$	8.762	
p-value	0.01	

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is the aggregate charitable donations to Catholic Relief Services (CRS). The specification run is $Y_{c,t} = \gamma_{p,bt} + \eta_t + \alpha_1 A_{c,t}^{-1/+0} + \alpha_2 A_{c,t}^{+1} + \varepsilon_{c,t}$ with variables transformed with arcsinh transformation. Bi-month–county pair fixed effects are included. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by bi-monthly time and DMA, are in parentheses.

A.3 Robustness Checks and Additional Analysis

A.3.1 Alternative Transformations

Tables A.5 and A.6 repeat the estimates from Tables 3 and 4 using $log(1+x)$ transformation instead of arcsinh transformation. When we look at both the effects of natural disasters and political advertising, all results remain significant, with very comparable but slightly smaller magnitudes for charitable and political donations.

Table A.5: Disaster Information Shocks & Charitable and Political Donations (Log Transformation)

	Charitable Contributions			Political Contributions		
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+6}$	0.262***	0.253***	0.276***	-0.161***	-0.161***	-0.172***
	(0.077)	(0.081)	(0.081)	(0.054)	(0.055)	(0.056)
$I^{-2/-1}$		-0.066	-0.049		0.001	-0.005
		(0.112)	(0.111)		(0.060)	(0.060)
$I^{+7/+8}$			0.171			-0.069
			(0.104)			(0.0638)
Observations	740,280	740,280	740,280	978,432	978,432	978,432
R-squared	0.483	0.483	0.484	0.592	0.592	0.592
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	Yes	Yes	Yes	No	No	No
Disaster Controls	All	All	All	All	All	All
F-value H: $I^{+0/+6} = I^{-2/-1}$		7.818	8.164		4.767	4.964
p-value		0.007	0.006		0.029	0.026
F-value H: $I^{+0/+6}$ = - $I^{+7/+8}$			9.912			6.747
p-value			0.002			0.009

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is the aggregate charitable donations to ARC or political donations (reported by FEC) in a given county and week, transformed with $log(1+x)$ transformation. $I^{+0/+6}$ is a dummy which equals 1 for the week of disaster and the 6 weeks after that, $I^{+7/+8}$ is a dummy which equals 1 for the weeks 7 and 8 after the disaster to allow for delayed effects, and $I^{-2/-1}$ is a dummy which equals 1 for the two weeks preceding the disaster. Controls include the logged number of mailings sent by ARC in the 3 months preceding a donation and only apply to columns (1)-(3). We include county, year, month and , and weeks to elections fixed effects, as well as controls for the tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, are in brackets.

Table A.6: Political Information Shocks and Donations (Log Transformation)

	Political		Charitable	
	(1)	(2)	(3)	(4)
$A^{-1/+0}$	0.021**	0.024**	-0.013**	-0.013*
	(0.008)	(0.011)	(0.006)	(0.006)
A^{+1}		0.003		-0.003
		(0.008)		(0.005)
Observations	14,798	11,035	50,952	50,952
R-squared	0.733	0.746	0.731	0.731
Bi-monthly x County Pair FE	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes
F-value H: $A^{+1} = A^{-1/+0}$		13.058		1.112
p-value		0.004		0.314

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The specification run is $Y_{c,t} = \gamma_{p,bt} + \eta_t + \alpha_1 A_{c,t}^{-1/+0} + \alpha_2 A_{c,t}^{+1} + \varepsilon_{c,t}$. The dependent variables are the aggregate political donations from FEC, and charitable donations from ARC transformed with $log(1+x)$ transformation. Independent variable is the aggregate political ad spending in the county in the corresponding time period, with $log(1+x)$ transformation. The results for political donations (columns (1) and (2)) and ARC donations (columns (3) and (4)), are estimated for the set of counties within the same congressional district, but located on different sides of corresponding DMA border. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state, are in parentheses.

A.3.2 Robustness to Window Length

Tables A.7 and A.8 show the robustness of charitable and political donation substitution patterns to changes of one to two weeks in the definition of post-disaster window. Qualitatively, our results are robust to these small changes.

Table A.9 reproduces the main results on political advertising, but considers alternative window lengths after political ads were aired. To make small modifications to the estimation window, we focus on the 2 months after ads were aired in our baseline specification (whose results were reported in Table 4), where $A_{c,t}^{+0/+2}$ is the political ad spending in county c in the two months following the initial period. The results are qualitatively robust, while the magnitudes are smaller.

Table A.7: Disaster Information Shocks and Charitable Contributions: Robustness to Window Lengths (County Level)

	Charitable Contributions					
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+5}$	0.232**	0.215**	0.248**			
	(0.0932)	(0.0942)	(0.0934)			
$I^{+0/+7}$				0.311***	0.298***	0.311***
				(0.0888)	(0.0916)	(0.0913)
$I^{-2/-1}$		-0.0940	-0.0875		-0.103	-0.0782
		(0.124)	(0.124)		(0.125)	(0.125)
$I^{+6/+8}$			0.209*			
			(0.115)			
$I^{+8/+8}$						0.282**
						(0.126)
Observations	740,280	740,280	740,280	740,280	740,280	740,280
R-squared	0.473	0.473	0.474	0.474	0.474	0.475
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	Yes	Yes	Yes	Yes	Yes	Yes
Disaster Controls	Yes	Yes	Yes	Yes	Yes	Yes
Donations	All	All	All	All	All	All

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is the aggregate county-week ARC donations, transformed with arcsinh transformation. $I^{+0/+5}$, $I^{+0/+7}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and the 5 weeks after that, for week of the disaster and the 7 weeks after, and the two weeks before the disaster. $I^{+6/+8}$ equals 1 for the 6th and the 8th week after disaster. $I^{+8/+8}$ equals 1 for the 8th week after disaster. Year and month fixed effects are included. Mailing controls include logged numbers of mailings sent by ARC in the 3 months preceding a donation. There are no observations with zero preceding mailings in the sample. We also control for weeks to elections and tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). Time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, are in parentheses.

Table A.8: Disaster Information Shocks and Political Contributions, Robustness to Window Lengths (County Level)

	Political Contributions					
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+5}$	-0.0753**	-0.0722**	-0.0800**			
	(0.0296)	(0.0311)	(0.0321)			
$I^{+0/+7}$				-0.0689**	-0.0659**	-0.0674**
				(0.0313)	(0.0317)	(0.0316)
$I^{-2/-1}$		0.0189	0.0167		0.0259	0.0230
		(0.0348)	(0.0344)		(0.0333)	(0.0334)
$I^{+6/+8}$			-0.0404			
			(0.0290)			
$I^{+8/+8}$						-0.0264
						(0.0409)
Observations	465,898	465,898	465,898	465,898	465,898	465,898
R-squared	0.682	0.682	0.682	0.682	0.682	0.682
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	Yes	Yes	Yes	Yes	Yes	Yes
Disaster Controls	Yes	Yes	Yes	Yes	Yes	Yes
Donations	All	All	All	All	All	All

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is aggregated political donations in a given county and week from Federal Election Commission, transformed with arcsinh transformation. $I^{+0/+5}$, $I^{+0/+7}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and the 5 weeks after that, for week of the disaster and the 7 weeks after, and the two weeks before the disaster. $I^{+6/+8}$ equals 1 for the 6th and the 8th week after disaster. $I^{+8/+8}$ equals 1 for the 8th week after disaster. Year and month fixed effects are included. We also control for the weeks to elections and tropical storms which originate outside the US, but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). Time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, are in parentheses.

Table A.9: Political Advertising and Donations : Robustness to Window Lengths

	Political (1)	Political (2)	Charitable (3)	Charitable (4)
$A^{-1/+0}$	0.022***		-0.008*	
	(0.005)		(0.004)	
$A^{+0/+2}$		0.029*		-0.019**
		(0.014)		(0.008)
Observations	19,521	11,924	50,952	50,952
R-squared	0.719	0.746	0.723	0.723
Bi-monthly x County Pair FE	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The specifications are $Y_{c,t} = \gamma_{p,bt} + \eta_t + \alpha_1 A_{c,t}^{-1/+0} + \varepsilon_{c,t}$ and $Y_{c,t} = \gamma_{p,bt} + \eta_t + \alpha_1 A_{c,t}^{+0/+2} + \varepsilon_{c,t}$ with variables transformed with arcsinh transformation. The dependent variable is the monthly aggregate political donations (data from FEC), and charitable donations (data from ARC) in a county. Independent variable is the aggregate political ad spending in the county. The results for political donations (columns (1) and (2)) are estimated for the set of counties within the same congressional district, but located on different sides of corresponding DMA border. Heteroscedasticity-robust standard errors, clustered for DMA and bi-monthly time period, are in parentheses.

A.3.3 Excluding Controls

Table A.10 tests for the impact of disaster information shocks without including controls for tropical storms in the Caribbean, i.e., for natural disasters close to the US. Similarly, Table A.11 replicates columns (1)-(3) of Table A.11 excluding RC's mailing controls, while Table A.12 replicates columns (1)-(2) of Table 4 excluding these controls. For every robustness exercise reported in this section, the results are very similar, both in magnitudes and in significance, to our baseline results.

Table A.10: Disaster Information Shocks and Contributions, Without US Disaster Controls

	Charitable Contributions			Political Contributions		
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+6}$	0.284***	0.271***	0.302***	-0.0773**	-0.0751**	-0.0763**
	(0.0868)	(0.0903)	(0.0908)	(0.0306)	(0.0312)	(0.0321)
$I^{-2/-1}$		-0.0985	-0.0730		0.0193	0.0184
		(0.125)	(0.124)		(0.0336)	(0.0337)
$I^{+7/+8}$			0.219*			-0.00853
			(0.117)			(0.0325)
Observations	740,280	740,280	740,280	465,898	465,898	465,898
R-squared	0.474	0.474	0.475	0.682	0.682	0.682
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	Yes	Yes	Yes	No	No	No
Disaster Controls	No	No	No	No	No	No
Donations	All	All	All	All	All	All

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is aggregate charitable donations (from ARC data) or political donations (from FEC data) in a given county and week, transformed with arcsinh transformation. Mailing controls include the logged number of mailings sent by ARC in the 3 months preceding a donation and only apply to columns (1)-(3). $I^{+0/+6}$, $I^{+7/+8}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and the 6 weeks after that, for the weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. In this table, we do not include controls for tropical storms. We also control for weeks to elections. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, in parentheses.

Table A.11: Disaster Information Shocks and Charitable Contributions, No Mailing Controls Included

	Charitable Contributions					
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+6}$	0.278***	0.262***	0.295***	0.203***	0.211***	0.221***
	(0.0919)	(0.0959)	(0.0949)	(0.0511)	(0.0538)	(0.0542)
$I^{-2/-1}$		-0.116	-0.0884		0.0834	0.0935
		(0.131)	(0.129)		(0.0832)	(0.0830)
$I^{+7/+8}$			0.261**			0.0690
			(0.118)			(0.0620)
Observations	746,417	746,417	746,417	206,12	206,12	206,12
R-squared	0.463	0.463	0.464	0.432	0.433	0.433
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	No	No	No	No	No	No
Disaster Controls	Yes	Yes	Yes	Yes	Yes	Yes
Donations	All	All	All	Nonzero	Nonzero	Nonzero

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is aggregate Red Cross donations in a given county and week, transformed with arcsinh transformation. $I^{+0/+6}$, $I^{+7/+8}$, and $I^{-2/-1}$, respectively equal to 1 for the week of disaster and the 6 weeks after that, for the weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. Year and month fixed effects are included. We also control for weeks to elections and tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). We do not include mailing controls. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, are in parentheses.

Table A.12: Political Ads and Charitable Contributions, No Mailing Controls included

	Charitable (1)	Charitable (2)
$A^{-1/+0}$	-0.013*	-0.012*
	(0.006)	(0.006)
A^{+1}		-0.004
		(0.005)
Observations	50,952	50,952
R-squared	0.728	0.728
Bi-monthly x County Pair FE	Yes	Yes
Month FE	Yes	Yes

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is the charitable donations from ARC in a county in a month. Independent variable is the aggregate political ads expenditures in the county in the previous and same month. The specification run is $Y_{c,t} = \gamma_{p,bt} + \eta_t + \alpha_1 A_{c,t}^{-1/+0} + \alpha_2 A_{c,t}^{+1} + \varepsilon_{c,t}$ with variables transformed with arcsinh transformation. We do not include mailing controls. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by DMA and bi-monthly time period, are in parentheses.

A.3.4 Fatality Thresholds

In the benchmark specifications, we assumed that charitable information shocks come from large disasters resulting in 400 fatalities at a minimum. As a robustness check, we vary the fatality threshold in the range of 300 to 500 fatalities in Table A.13. The results from these specifications show that, for both political and charitable donations, the coefficient of the disaster information shock for a period of 6 weeks after a disaster strikes is always significant and has the same sign with fatality threshold of 300. All specifications include the falsification check of the two weeks before the disaster date, and these coefficients are insignificant in all specifications. The magnitudes of the impact of disaster information shock coefficients vary between 0.24 and 0.32 for charitable donations, and between -0.15 and -0.18 for political contributions, indicating that the effect is fairly robust to disaster thresholds set in this range.

Table A.13: Disasters & Charitable & Political Contributions (Alternate Disaster Specifications)

	Charitable Contributions				
	(1)	(2)	(3)	(4)	(5)
$I^{+0/+6}$	0.304***	0.304***	0.315***	0.324***	0.241**
	(0.0922)	(0.0922)	(0.0924)	(0.0928)	(0.0916)
$I^{-2/-1}$	-0.0712	-0.0712	-0.0627	-0.0546	-0.0915
	(0.124)	(0.124)	(0.126)	(0.129)	(0.129)
$I^{+7/+8}$	0.218*	0.218*	0.197	0.224*	0.255**
	(0.119)	(0.119)	(0.118)	(0.120)	(0.121)
Observations	740,280	740,280	740,280	740,280	740,280
R-squared	0.475	0.475	0.475	0.475	0.474
F-test H: $I^{+0/+6} = I^{-2/-1}$	8.467	8.467	8.461	8.492	6.244
p-value	0.00539	0.00539	0.00540	0.00532	0.0158
F-test H: $I^{+0/+6}$ = - $I^{+7/+8}$	10.59	10.59	10.03	11.06	9.413
p-value	0.00204	0.00204	0.00262	0.00166	0.00347
	Political Contributions				
	(6)	(7)	(8)	(9)	(10)
$I^{+0/+6}$	-0.179***	-0.179***	-0.186***	-0.181***	-0.152***
	(0.0611)	(0.0611)	(0.0604)	(0.0608)	(0.0570)
$I^{-2/-1}$	-0.0132	-0.0132	-0.00737	-0.0242	-0.0204
	(0.0641)	(0.0641)	(0.0649)	(0.0660)	(0.0664)
$I^{+7/+8}$	-0.0700	-0.0700	-0.0756	-0.0732	-0.0721
	(0.0677)	(0.0677)	(0.0686)	(0.0717)	(0.0742)
Observations	978,432	978,432	978,432	978,432	978,432
R-squared	0.580	0.580	0.580	0.580	0.580
F-test H: $I^{+0/+6} = I^{-2/-1}$	4.313	4.313	4.942	3.837	2.580
p-value	0.0386	0.0386	0.0269	0.0510	0.109
F-test $I^{+0/+6}$ = - $I^{+7/+8}$	6.240	6.240	6.846	6.036	5.322
p-value	0.0130	0.0130	0.00932	0.0146	0.0217
Disaster Fatality Threshold	300	350	400	450	500
County FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes
Donations	All	All	All	All	All

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is the aggregate donations to ARC or political donations (from FEC data) in a county and week, transformed with arcsinh transformation. $I^{+0/+6}$, $I^{+7/+8}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and the 6 weeks after that, for the weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. County, year, month-of-odd-year, and month-off-even-year fixed effects are included. Mailing controls include the log number of mailings sent by ARC in the 3 months preceding a donation and apply to columns (1)-(5). We also control for weeks to elections and tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, in parentheses.

A.3.5 Odd and Even Political Year Controls

For political races, odd and even years can be different since even years typically correspond to election years. In Table A.14, we test the contributions to the ARC and political candidates, adding month-of-even-year and month-of-odd year fixed effects in columns (1) to (6). The results are not qualitatively different from the ones reported in the main text, with comparable magnitudes.

Table A.14: Disaster Information Shocks & Charitable and Political Contributions (Odd and Even Years)

	Charitable			Political		
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+6}$	0.390***	0.387***	0.434***	-0.104*	-0.103*	-0.107*
	(0.0913)	(0.0947)	(0.0950)	(0.0538)	(0.0558)	(0.0578)
$I^{-2/-1}$		-0.0127	0.0152		0.00494	0.00267
		(0.119)	(0.117)		(0.0523)	(0.0523)
$I^{+7/+8}$			0.238*			-0.0205
			(0.119)			(0.0462)
Observations	740,280	740,280	740,280	978,432	978,432	978,432
R-squared	0.482	0.482	0.483	0.584	0.584	0.584
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Odd-Year Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Even-Year Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Disaster control	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	Yes	Yes	Yes	No	No	No
F-value H: $I^{+0/+6}$=$I^{-2/-1}$		9.359	10.42		2.795	2.847
p-value		0.00356	0.00220		0.0956	0.0926
F-value H: $I^{+0/+6}$= - $I^{+7/+8}$			16.19			2.308
p=value			0.000194			0.130

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is aggregate donations to ARC or political donations in a county and week, transformed with arcsinh transformation. $I^{+0/+6}$, $I^{+7/+8}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and the 6 weeks after that, for the weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. County, year, month-of-odd-year, and month-off-even-year fixed effects are included. Mailing controls include log of the numbers of mailings sent by Red Cross in the 3 months preceding donation and only apply to columns (1)-(3). We also control for weeks to elections and tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, are in parentheses.

A.3.6 Donation Solicitation Strategy and Political Advertising

Table A.15 tests if ARC reduces the number of solicitations sent to donors, possibly anticipating attention to political events and enhanced political advertising. The results show no significant change in the amount of donation requests mailed in response to political advertising.

Table A.15: RC Mailings as Dependent Variable and Political Ads (County Level)

	RC Mailings (1)	RC Mailings (2)
$A^{-1/+0}$	0.0003	0.0003
	(0.0004)	(0.0004)
A^{+1}		-0.0002
		(0.0002)
Observations	50,952	50,952
R-squared	0.9001	0.9001
Bi-monthly x County Pair FE	Yes	Yes
Month FE	Yes	Yes
F-test H: $A^{-1/+0} = A^{+1}$		2.812
p-value		0.122

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is the number of ARC mailings in a county in the same month, and the independent variable is the aggregate political ads spending in a county. The specification run is $Y_{c,t} = \gamma_{p,bt} + \eta_t + \alpha_1 A_{c,t}^{-/+0} + \alpha_2 A_{c,t}^{+1} + \varepsilon_{c,t}$, with variables transformed with arcsinh transformation. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state, are in parentheses.

A.3.7 Political Ad Spending and Foreign Natural Disasters

Table A.16 tests if the political ad spending by candidates changes with the foreign natural disaster events and reports no significant relationship.

Table A.16: Political Advertising (Placebo)

	Political Ads	
	(1)	(2)
$I^{+0/+1}$	-0.089	-0.029
	(0.066)	(0.070)
I^{-1}		0.074
		(0.063)
Observations	202,754	142,561
R-squared	0.441	0.410
County FE	Yes	Yes
Bi-monthly FE	Yes	Yes
F-value for H: $I^{+0/+1} = I^{-1}$		1.407
p-value		0.241

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variables is the political ad spending, constructed with arcsinh transformation. The unit of observation is county-month. County and bi-monthly fixed effects are included. $I^{+0/+1}$ is a dummy that equals 1 if there was at least one natural disaster during the one month of the political advertising spending. I^{-1} is a dummy which equals 1 if there was a disaster in the one month preceding, to check for (placebo) anticipation effects. The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, clustered by state, are in parentheses.

A.3.8 Donations to Political Action Committees (PAC) and non-PAC Committees

Table A.17 (Panel A) summarizes the results for the effect of natural disasters on all individual political donations (column (1)) or separately for donations below \$50, \$50-\$200, \$200-\$1000, \$1000-\$3000, \$3000-\$5000, above \$5000 (columns (2)-(7)). The results repeat those reported in Figure A.1 and are largely consistent with the baseline results (Table 3).

In our benchmark specification, we focus on donations from individuals to political candidates, however, a number of donations are made to Political Action Committees (PACs) and other committees. Because donations to PACs are subject to different regulations than donations to candidates, we do not expect individuals to view the two types of donations the same. Individuals with strategic motivations may choose to donate to PACs since there are fewer restrictions on PAC donations, and therefore such donations may not respond to disaster information shocks like individual donations do. We use data on contributions to PACs from Bonica (2019) (for details see Bonica (2014)) and replicate specification 1, where the left hand side is now contributions to PACs. We also replicate our baseline analysis, using (non-representative) data on individual donations below \$200.

Table A.17 also repeats the exercise for all political committees (Panel B) and for PACs (Panel C). We see that the coefficients for the dummy for the 6 weeks following the natural disasters are almost always negative, and also become statistically significant for some donation brackets above \$200. The magnitudes of the coefficients are of similar order of magnitude across all the specifications. For sake of illustration, we also report the coefficient of interest (α_2) as well as their 90% and 95% confidence intervals in Figure A.2. We cannot reject the null hypothesis that there was no change in political donations to various political committees in the six weeks following the natural disaster for any amount of donation but for the $200-1000 and $1000-3000 brackets, where the point coefficients are around -0.04. Therefore, it is likely that the donations to political committees (including PACs) have different motives than individual donations, such as influencing policy outcomes, as noted by Bertrand et al. (2018).

Table A.17: Disaster Information Shocks & Political Contributions to Individuals and Committees

	(1) All	(2) Below \$50	(3) \$50-\$200	(4) \$200-\$1000	(5) \$1000-\$3000	(6) \$3000-\$5000	(7) Above \$5000
Panel A.	Donations by individuals to candidates						
$I^{+0/+6}$	-0.186***	-0.0187*	-0.0362***	-0.166***	-0.150***	-0.0159	-0.0503**
	(0.0604)	(0.00968)	(0.0133)	(0.0528)	(0.0498)	(0.0144)	(0.0239)
$I^{-2/-1}$	-0.0073	-0.0033	-0.0083	-0.0093	0.0175	0.0232	-0.0276
	(0.0649)	(0.00940)	(0.0125)	(0.0569)	(0.0543)	(0.0179)	(0.0228)
$I^{+7/+8}$	-0.0756	0.0028	-0.0254*	-0.0846	-0.0420	-0.0101	-0.0316
	(0.0686)	(0.0111)	(0.0128)	(0.0608)	(0.0526)	(0.0167)	(0.0295)
Observations	978,432	826,488	647,712	978,120	968,448	595,608	692,640
R-squared	0.580	0.109	0.151	0.561	0.539	0.289	0.436
Panel B.	Donations by individuals to All Political Committees						
$I^{+0/+6}$	-0.0570	0.0324	-0.0829	-0.0856*	-0.0699**	-0.00813	-0.0533**
	(0.0541)	(0.0528)	(0.0594)	(0.0494)	(0.0298)	(0.0146)	(0.0227)
$I^{-2/-1}$	0.0135	0.0804	-0.0138	-0.0275	-0.0175	0.0018	-0.0152
	(0.0619)	(0.0571)	(0.0652)	(0.0557)	(0.0302)	(0.0133)	(0.0232)
$I^{+7/+8}$	-0.0265	0.0384	-0.0533	-0.0673	-0.0276	-0.0052	-0.0231
	(0.0709)	(0.0631)	(0.0712)	(0.0695)	(0.0466)	(0.0178)	(0.0297)
Observations	978,744	978,120	978,120	977,184	942,552	606,216	849,264
R-squared	0.665	0.720	0.627	0.558	0.511	0.272	0.400
Panel C.	Donations by individuals to PACs						
$I^{+0/+6}$	-0.00938	0.0239	-0.0238	-0.0464**	-0.0435***	-0.0110	-0.00193
	(0.0212)	(0.0237)	(0.0358)	(0.0225)	(0.0157)	(0.00703)	(0.0113)
$I^{-2/-1}$	0.0119	0.0398	-0.00112	-0.00280	-0.000896	0.00445	0.0102
	(0.0228)	(0.0244)	(0.0367)	(0.0267)	(0.0169)	(0.00937)	(0.0104)
$I^{+7/+8}$	0.0109	0.0336	0.0119	-0.0154	-0.00460	0.00272	-0.00722
	(0.0245)	(0.0284)	(0.0391)	(0.0263)	(0.0184)	(0.00785)	(0.0136)
Observations	3,370,536	2,596,464	1,899,768	1,819,584	1,147,536	419,952	792,168
R-squared	0.752	0.721	0.659	0.582	0.476	0.210	0.290
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Donations	All	All	All	All	All	All	All

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. Dependent variables are donations to political candidates, political committees, and political action committees (PAC), broken by dollar bracket. Controls include county fixed effects, month fixed effects, year fixed effects. $I^{+0/+6}$, $I^{+7/+8}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and the 6 weeks after that, for the weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. We include county, year, month and week to election fixed effects, as well as controls for the tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). The time period of analysis is 2006-2011. Data for political contributions are from Bonica (2019).

A.4 Heterogeneous Effects by Political Party

The literature presents some arguments that Republicans exhibit different patterns of charitable giving (Brooks, 2006) compared to Democrats. The results from county level analysis by party in Tables A.18 and A.19 suggest that the substitution pattern holds for both Republican and Democratic donations. While there may be some differences in the substitution rate when considering donation amounts including zeros (column 3 baseline coefficients, -0.461 vs -0.175), conditional on donating, the substitution rates are closer in magnitudes (baseline coefficients -0.398 and -0.365 in columns (6) of the tables). Results suggest that the substitution pattern is not driven by partisan differences.

Table A.18: Disaster Information Shocks and Political Contributions (Republicans)

	Political Contribution to Republicans					
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+6}$	-0.442***	-0.430***	-0.461***	-0.376***	-0.361***	-0.398***
	(0.118)	(0.117)	(0.116)	(0.107)	(0.104)	(0.104)
$I^{-2/-1}$	0.085	0.065		0.105	0.073	
		(0.121)	(0.118)		(0.112)	(0.109)
$I^{+7/+8}$			-0.207			-0.226*
			(0.132)			(0.115)
Observations	976,560	976,560	976,560	267,903	267,903	267,903
R-squared	0.468	0.468	0.468	0.502	0.502	0.503
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	No	No	No	No	No	No
Disaster Controls	Yes	Yes	Yes	Yes	Yes	Yes
Donations	All	All	All	Nonzero	Nonzero	Nonzero
F-value H: $I^{+0/+6} = I^{-2/-1}$		9.765	10.33		9.015	9.670
p-value		0.002	0.002		0.004	0.003
F-value H: $I^{+0/+6} =$ - $I^{+7/+8}$			13.08			14.04
p-value			0.0006			0.0004

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is aggregated political donations to the Republican congressional and presidential candidates in a given county and week from Federal Election Commission, transformed with arcsinh transformation. Columns (1)-(3) include all observations, while columns (4)-(6) include only observations with non zero values of the dependent variable. $I^{+0/+6}$, $I^{+7/+8}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and 6 weeks after that, for weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. Year, month, and county effects are included. We also control for distance to elections and tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, in parentheses.

Table A.19: Disaster Information Shocks and Political Contributions (Democrats)

	Political Contribution to Democrats					
	(1)	(2)	(3)	(4)	(5)	(6)
$I^{+0/+6}$	-0.162	-0.157	-0.175	-0.340**	-0.345**	-0.365**
	(0.110)	(0.113)	(0.112)	(0.140)	(0.141)	(0.140)
$I^{-2/-1}$		0.0377	0.0262		-0.0379	-0.0557
		(0.129)	(0.127)		(0.167)	(0.165)
$I^{+7/+8}$			-0.119			-0.128
			(0.122)			(0.139)
Observations	965,952	965,952	965,952	198,225	198,225	198,225
R-squared	0.499	0.499	0.499	0.555	0.555	0.555
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Mailing Controls	No	No	No	No	No	No
Disaster Controls	Yes	Yes	Yes	Yes	Yes	Yes
Donations	All	All	All	Nonzero	Nonzero	Nonzero
F-value H: $I^{+0/+6} = I^{-2/-1}$		1.637	1.752		2.230	2.279
p-value		0.207	0.192		0.142	0.137
F-value H: $I^{+0/+6}$ = - $I^{+7/+8}$			2.846			5.754
p-value			0.097			0.020

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The dependent variable is aggregated political donations to the Democratic congressional and presidential candidates in a given county and week from Federal Election Commission, transformed with arcsinh transformation. Columns (1)-(3) include all observations, while columns (4)-(6) include only observations with non zero values of the dependent variable. $I^{+0/+6}$, $I^{+7/+8}$, and $I^{-2/-1}$, respectively equal 1 for the week of disaster and 6 weeks after that, for weeks 7 and 8 after the disaster, and for a week and two weeks before the disaster. Year, month, and county effects are included. We also control for distance to elections and tropical storms which originate outside of the US but affect it directly (hits of homeland) or indirectly (close call, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Bermuda). The time period of analysis is 2006-2011. Heteroscedasticity-robust standard errors, adjusted for clusters by state and week, in parentheses.

A.5 Proof of Concept: Disasters, Donations, and Electoral Outcomes

The relationships that we identify in the main body of the paper also allow us to study the impact of donations on the outcomes that they are supposed to affect. As a proof of concept rather than a stand alone result on its own, here we present the results of a two stage analysis of political donations on the outcomes of the races they could affect. In particular, for the estimation we use the following three step procedure:

$$Charitable_{c,t} = \alpha_1 \cdot I_t^{+0/+6} + \left[\alpha_2 \cdot I_t^{+7/+8} + \alpha_3 \cdot I_t^{-2/-1}\right] + \mathbf{X_{c,t}}\beta_1 + \varepsilon_{c,t} \tag{A.1}$$

$$Political_{c,t} = \delta_1 \cdot Charitable_{c,t} + \mathbf{X_{c,t}}\beta_2 + \zeta_{c,t} \tag{A.2}$$

$$Outcome_{d,y} = \gamma_1 \cdot \hat{Political}_{d,y} + \mathbf{S_{d,y}}\beta_3 + \eta_{d,y} \tag{A.3}$$

Here we first estimate the relationship between political and charitable donations at county-week level using an instrumental variable strategy. We then predict political donations from this model (equation A.2), essentially using variation in the timing of natural disasters and the local relationship between charitable and political giving for prediction. Finally, we test how the election-level outcomes (at district-year level) depend on political donations, predicted by the natural disasters (equation A.3). To compute the standard errors in this nonstandard case, we use bootstrapped standard errors, adjusted for clusters by state and year. Essentially, we test whether exogenous variation in political donations over the course of the campaign predicts a better or worse performance by the incumbents. Notice that any first stage in this two stage procedure may suffer from weak instruments, and if so, robust methods for weak instrument inference should be used (Andrews et al., 2019).

Table A.20 presents the results of the last stage of the estimation. Specifically, it demonstrates how the vote share and the likelihood of winning change based on the political donations predicted, considering the interruptions from disasters which channel individual donations to charity. The table shows that lower aggregate donations improve rather than hurt the electoral prospects of incumbents: if political donations go up by 10%, vote share of challengers goes up by 1.2p.p. (column (1), coefficient significant at 1% level). Relatedly, if political donations go up by 10%, the probability of winning by a challenger goes up by 3.6p.p. (column (2), coefficient is less precise, but is still significant at 10% level). Table A.21 runs the same specification, using the predicted political donations for the next political cycle instead, as a placebo specification. As expected, the effects found in Table A.20 disappear with this modification (Andrews et al., 2019).

Overall, the results in Table A.20 are consistent with the idea that, in contrast to Avis et al. (2017), more money in politics hurt rather than help the electoral prospects of the incumbents. One potential explanation is that we observe the local average treatment effect, i.e., we only see the changes in donations which are sensitive to the presence of natural disasters. These donations can have different implications for donations from Political Action Committees or Special Interest Groups.

Table A.20: Individual Political Donations and Electoral Outcomes, 2nd Stage (District Level)

	(1) Vote share Challengers	(2) Win Challengers	(3) Vote share Incumbents	(4) Win Incumbents	(5) Vote Margin
Pol Donations, predicted by Disasters	0.129***	0.365*	0.00539	-0.0335	-0.111*
	(0.0476)	(0.191)	(0.0556)	(0.181)	(0.0651)
Observations	1,243	1,244	1,136	1,164	1,244
R-squared	0.542	0.326	0.733	0.512	0.788
District FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The results of the second stage estimation are presented. To construct an independent variable, we first predict aggregate political donations from the model with charitable donations, instrumented by natural disasters on the right hand side, with county, year, and month fixed effects included. We then aggregate predicted values to state-congressional cycle level to get "Pol Donations predicted by disasters" variable. The time period of analysis is 2006-2011. Heteroscedasticity-robust bootstrapped standard errors, adjusted for clusters by week, are in parentheses.

Table A.21: Individual Political Donations and Electoral Outcomes, 2nd Stage (District Level): Placebo

	(1) Vote share Challengers	(2) Win Challengers	(3) Vote share Incumbents	(4) Win Incumbents	(5) Vote Margin
Future Predicted Pol Donations	-0.00493	-0.109	-0.0311	0.0568	-0.0496*
	(0.0208)	(0.0729)	(0.0236)	(0.0560)	(0.0254)
Observations	1,243	1,244	1,136	1,164	1,244
R-squared	0.538	0.324	0.734	0.513	0.789
District FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The results of the second stage estimation are presented. To construct an independent variable, we predict the aggregate political donations for the next political cycle instead as a placebo, using the model with charitable donations, instrumented by natural disasters on the right hand side, with county, year, and month fixed effects included. We then aggregate predicted values to state-Congressional cycle level to get "Pol Donations predicted by disasters" variable. The time period of analysis is 2006-2011. Heteroscedasticity-robust bootstrapped standard errors, adjusted for clusters by week, are in parentheses.

A.6 Experimental Evidence

In this section, we provide experimental evidence on the relationship between political and charitable advertising.

A.6.1 Research Design

We conducted an experiment to investigate the relationship between charitable and political donations. We recruited 3,000 subjects on Amazon's MTurk. First, all MTurkers were asked to allocate a $1 bonus to one of three conditions: keep to self, donate to a Republican or Democratic candidate, or donate to the American Red Cross as the charity. After this first elicitation, we notified the subjects that they may be randomly selected to receive a message, and then we randomly assigned them with equal probability to one of three treatments: No Info (respondents were told they were not selected to receive a message and asked to proceed with the survey), Charitable Information (i.e., a message stressing the importance of the work done by Red Cross), and Political Information (i.e., a message stressing the importance of the upcoming elections in the state of Georgia Senate race in 2021). We then re-elicited their spending choices.

The experiment ran between December 11th to December 24th, 2020. The survey was advertised as a 5-minute survey about donations. Participation in the MTurk Survey was restricted to respondents located within the U.S., who self-reported to be U.S. citizens and over 18 years old. The median respondent took about 3 minutes to complete the survey. Towards the end of the survey, we introduced an attention check, similar to the one used in Bottan & Perez-Truglia (2017). A total of 99% of the respondents passed the attention check. After removing those who failed the attention check, we ended up with 2980 subjects. The payment scheme was on par with other MTurk surveys (Bottan & Perez-Truglia, 2020). Participants received a fixed fee of $0.5 for participation. The researchers made contributions in the amounts chosen by the respondents to political candidates and to charity, therefore there was no deception.

A.6.2 Results

We next present the experimental results. We test for the following hypotheses: (i) relative to the No Information group, charitable donations in the Charitable Info group will increase, and the political giving will decrease (ii) relative to the No Info group, in the Political Info group the political donations will go up and the charitable giving will go down.

Table A.22 shows balance in baseline characteristics by treatment group. Column (1) corresponds to the average characteristics for the whole subject pool, while columns (2) through (4) present the pre-treatment characteristics by respondents that were randomly assigned to the No Info, Charitable Info, and Political Info treatment groups, respectively. Column (5) reports the p-values for the test that the average of each characteristic is equal across these three treatment groups. The results show that, consistent with a successful random assignment, individuals were balanced in their observable characteristics across treatment groups, with the exception that the likelihood of being married and having children being marginally statistically different.[26]

[26] These two characteristics being significant out of the twelve tested is consistent with spurious correlation.

According to Table A.22, 50% of the subjects were female, the average age was 40, 47% (24%) self-identified as a Democrat (Republican). 73% (19%) of the subjects indicated that they donated to political (charitable) campaigns over the past 12 months.

In Figure A.3, we present the changes in the donation amount under each treatment condition. Panels (a) and (b) provide a test for our first hypothesis: relative to the "No Info" group, those who received a message about American Red Cross increased their charitable giving and decreased their political donations, calculated as the percent change with respect to the first time. In terms of the magnitudes, relative to the no-info condition, the Charitable Info treatment increased charitable giving by 4.58 pp (panel (a)) and decreased political giving by 1.82 pp (panel (b)). We interpret this finding as implying that each additional dollar in charitable giving crowds out roughly 40 cents ($= \frac{1.82}{4.58}$) of political giving (p-value<0.001) – i.e., they are seen as close substitutes. Panels (c) and (d) demonstrate a similarly strong crowd out of charitable giving for people exposed to political information. Relative to the No Info group, in the Political Info treatment, there was a statistically significant (p-value<0.001) increase in political donations. Relative to the No Info condition, Political Info treatment increased political giving by 2.47 pp (panel (c)) and decreased charitable giving by 1.69 pp (panel (d)), indicating that each additional dollar in political giving crowds out roughly 68 cents ($= \frac{1.69}{2.47}$) of charitable giving – once again, suggesting that the two types of donation are close substitutes, consistent with our second hypothesis.

Table A.23 reports the OLS specifications to estimate the effect of treatments with different sets of controls. In all specifications, we control for the initial (i.e., pre-randomization) allocation to improve power (McKenzie, 2012). Columns (1)–(3) report the benchmark estimates of the treatment effects on charitable giving (column (1)), political giving (column (2)) and consumption (i.e., amount that participants allocated to themselves, in column (3)). The dependent variables are measured in percentage point units, taking the value 0 if a subject decided to allocate 0 cents for a corresponding category and 100 if the subject allocated the whole dollar to the corresponding category. On average, respondents split the dollar in 19.92 pp for charity, 11.95 for political donations to a party of their choice, and 68.12 pp for consumption. The results suggest that the charitable info treatment increased charitable giving by an average of 4.3 pp, which was "financed" by a decrease of 1.769 in political giving and a decrease of 2.538 in consumption. In other words, the charitable shock crowded out political giving, but it crowded out consumption too. In turn, the political info treatment increased political giving by 2.415 pp, which was "financed" by a decrease of 1.812 in charitable giving and decrease of 0.603 in consumption. Put differently, the political giving shock crowded out charitable giving much more strongly. In what follows, we will describe the results pertaining to additional experiments we ran with other charitable organizations.

A.6.3 Replication with Other Charitable Organizations

To test the generalizability of our results to other charitable organizations, we replicated the experimental design described in Section A.6.1 with two alternative organizations: American Cancer Society, that raises funds to aid cancer patients and to their families, and Feeding America, that provides food aid to families with low income. We chose these organizations because both are among the largest organizations by revenue, operate nationally, and are well-known, allaying the concerns that individuals may hesitate to donate due to lack of familiarity with the organization. We recruited participants online on Amazon's Mechanical Turk (MTurk) with the same fee structure described in Section A.6.1. Likewise, the researchers made donations in the amounts chosen by the respondents to political candidates and to the relevant charities, implying that there was no deception. The first experiment ran between January 4th to January 6th, 2021, and the latter ran between January 5th to January 6th, 2021. Both experiments were advertised as a 5-minute survey about donations. The median respondent took about 4 minutes to complete the survey in both. The design was the same as in the main experiment, with the difference that participants were given the choice to donate to the charity selected for their respective experiment (i.e., American Cancer Society and Feeding America, respectively, in each experiment). As before, participants under the Charitable Information condition received a note about the importance of the work of the relevant charity (survey materials can be obtained from the authors). These results are summarized in columns (4)-(9) of Table A.23 and are consistent with the results for American Red Cross described earlier: charitable information treatment reduced donations to politics (columns 5 and 8), while political information treatment reduced donations to corresponding charity (columns 4 and 7).

A.6.4 Results from Donations to American Cancer Society Experiment

In the experiment with American Cancer Society, we recruited 1098 participants. After focusing on the responses until and including the Georgia State primary and removing those who failed the attention check (Bottan & Perez-Truglia, 2020), we ended up with 1025 subjects.[27] Table A.24 breaks down the average characteristics we used in the randomization by treatment group. Column (1) corresponds to the average characteristics for the whole subject pool, while columns (2) through (4) present the pre-treatment characteristics by respondents that were randomly assigned to the No Info, Charitable Info, and Political Info treatment groups. Column (5) reports the p-values for the null hypothesis that the average of each characteristic is equal across these three treatment groups. Consistent with random assignment, participants in the three treatment conditions did not significantly differ in observable characteristics at conventional significance levels. The only exceptions were the share of Democratic voters (p-value 0.10), and Hispanics (p-value 0.11) which were marginally different from each other. Similarly to the main experiment sample described in A.6.1, we found that the sample was almost split equally between female (49%) and men; the average age was 40.54 years old; 52% (28%) of the respondents identified as Democrat (Republican); and 29% (76%) had donated to a political (charitable) organization in the past 12 months.

In Figure A.4, we present the distribution of percent changes in donation amounts in the second elicitation with respect to the first elicitation, under each treatment condition. The top two panels show the results for the Charitable Info treatment group, compared to the No Info condition. Panel (a) shows that, relative to the No Info group, those who received the positive message about the American Cancer Society increased their allocation to charitable giving. Likewise, in panel (b) (top-right figure), we see that being exposed to information

[27] Notice that the experiment ran between January 4th to January 6th. The Georgia State Primary took place on January 5th. Since it is possible that some subjects felt it is less beneficial to donate after this date, we focus on the respondents from January 4th and 5th. Results do not change if we focus on January 4th alone, January 4th and 5th, or all days. However, we do see that the political information condition generates a weaker response in the experiments closer to the election date, which is a verification that the subjects indeed took into account the importance of the political need in their donations.

about the American Cancer Society increased donation to it, relative to not receiving any information. We also find treatment effect magnitudes similar to the findings in Figure A.3: the "Charitable Info" treatment increased charitable giving by 2.82 pp (panel (a)), and decreased political giving by 1.39 pp (panel (b)) relative to the no-info condition. Panel (b) shows that the increase in donations for the American Cancer Society came at the expense of donations to political candidates i.e., relative to the No Info group, in the Charitable Info participants' political donations declined significantly (p-value<0.001). The magnitude of the crowd out was 49% ($= \frac{1.39}{2.82}$), meaning that, for each extra dollar that the Charitable Info group donated to the American Cancer Society in the second elicitation, they decreased the political donations by 49 cents. Similarly, panels (c) and (d) demonstrate a strong crowd out of charitable giving when subjects were exposed to political information. Relative to the No Information group, in the Political Information treatment there was a statistically significant (p-value<0.05) increase of 1.72 pp in political donations (panel (c)), and a statistically significant (p-value<0.05) decrease, equal to 2.20 pp, in charitable donations (panel (d)). The implied crowd out was 80 cents ($= \frac{1.72}{2.20}$), further suggesting that participants see the two forms of giving as very close substitutes.

In columns (4)-(6) of Table A.23 we report results from the same experiment when running OLS regressions, which allows us to control for baseline allocation to increase precision. We first notice that the No Information group donated 18.83% of their bonus to charitable giving, 11.29% to political parties, and 69.87% to their own consumption, a very similar allocation to the one in the main experiment (columns (1) to (3)). In terms of treatment effects, in column (4) we report results when the outcome of interest is the percent change in donation to the American Cancer Society in the second elicitation relative to the first (pre-Treatment) elicitation. We see that the Charitable Information treatment resulted in an increase in donations to the charity by 3.284 pp (p-value<0.001) relative to the baseline allocation, while –at the same time– decreasing donations to the political party of choice by 1.412 pp (column (5)) and reducing the share devoted to their own consumption by 1.871 pp (p-value = 0.05). The Political Information treatment, by contrast, caused a decrease in charitable giving to the American Cancer Society by 1.798 pp (p-value = 0.05), while it increased political donations by 1.392 pp (p-value = 0.05). Interestingly, in the case of the Political Information treatment, we do not see a statistically significant crowd out of own consumption - if anything, participants increased their own consumption, but the coefficient is imprecisely estimated. Overall, the results are qualitatively and quantitatively consistent with the main experiment.

A.6.5 Results from Donations to Feeding America Experiment

In our last experiment, we selected FeedingAmerica as the designated charity for donations. We recruited 937 participants. After focusing on the responses until, and including, the day of the Georgia State primary, and removing those who failed the attention check, we were left with a sample size of 840 participants. In line with the two experiments described above, Table A.25 shows that participants were well balanced in terms of observable characteristics across the three treatment conditions. In column (1) of Table A.25, we show the average characteristics for the entire sample, while columns (2) to (4) report the averages for each treatment group (No Info, Charitable Info, and Political Info, respectively). Finally, column (5) reports the p-values for the null hypothesis of equality of the three sample means. We cannot reject the null hypothesis of equality for any of the observable characteristics we considered. Reassuringly, the sample is also similar in observable characteristics to the participants in the main experiment, and in the American Cancer Society Experiments: it comprised 48% of female participants, with an average age of 40.81 years, 50% of whom self-identified as Democrats, and 29% as Republicans. In line with the other samples, a large majority had donated to charities in the previous 12 months (76%), while 30% had donated to a political party.

The results of these experiments are remarkably similar to the American Red Cross and the American Cancer Society ones. Figure A.5, similarly to Figures A.3 and A.5, shows the distribution of the percent changes in donations in the second elicitation, relative to the first elicitation, under each treatment condition. In panels (a) and (b) we see that, relative to the No Information group, participants who received a message about the importance of Feeding America's work increased their charitable giving by 2.63 pp on average and decreased political donations by 1.54 pp, with both results being statistically different from the No Information group (p-value < 0.01). The implied crowding out was 59% ($= \frac{1.54}{2.63}$). Panels (c) and (d), instead, plots the distribution of the percent change in donations among the Political Treatment group, and compare it to the No Information group. We see that the former group increased their donations to their political party of choice by 0.60 pp on average, in the expected direction but imprecisely estimated, while decreasing charitable giving to Feeding America by 2.07 pp, and the latter effects were significantly different from the No Info group (p-value < 0.01).

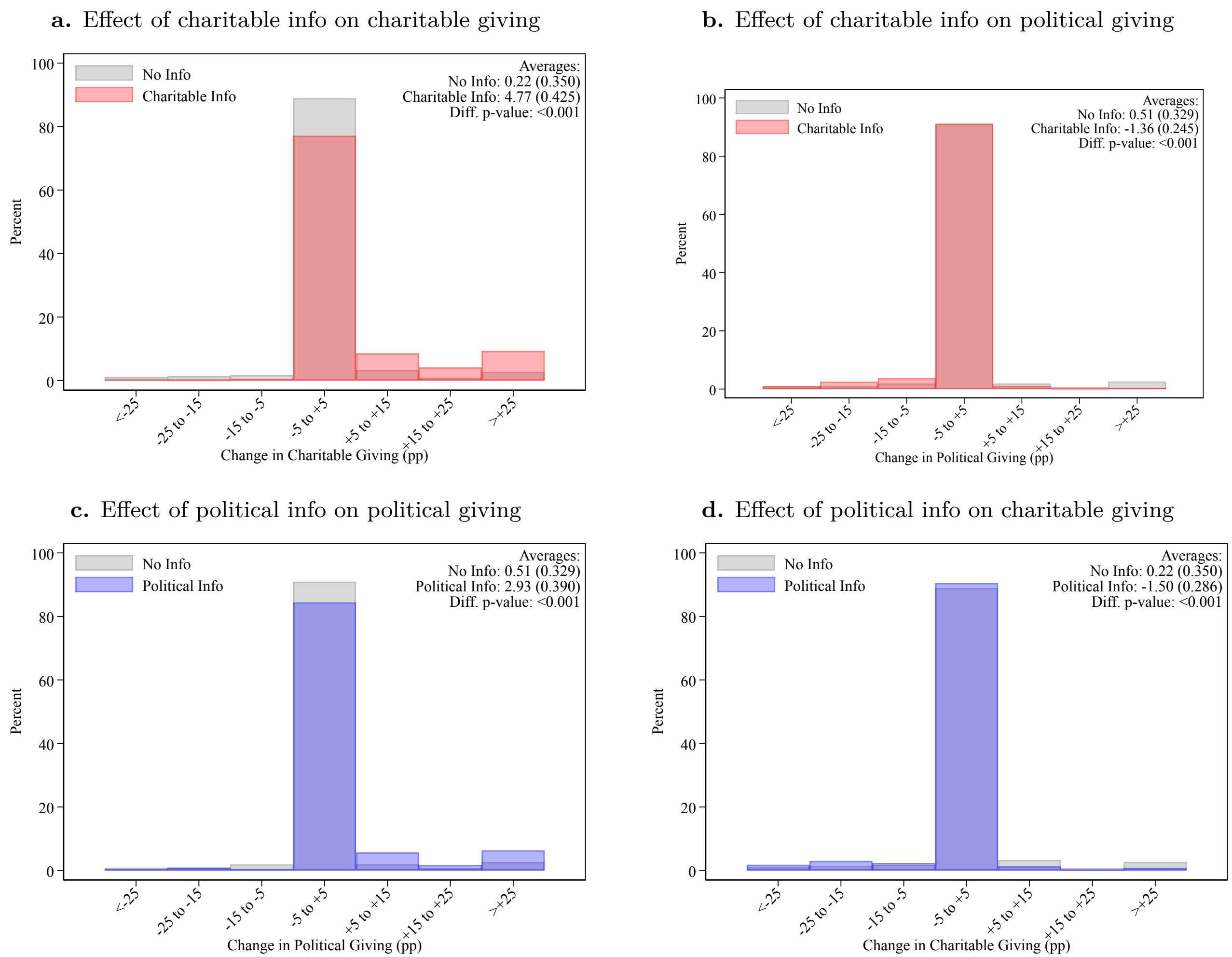
Turning to the OLS results, columns (7) to (9) in Table A.23 shows the coefficients for each treatment effect dummy on the allocation to Feeding America (column (7)), political party (column (8)), or own consumption (column (9)). We see that, relative to the No Information group, participants who received information on the importance of Feeding America's work were 2.416 pp (p-value<0.001) more likely to donate to the same charity, and 1.430 pp (p-value<0.001) less likely to donate to a political party. By contrast, those who received Political Information, were 1.942 pp less likely (p-value<0.001) to reallocate money to Feeding America in the second elicitation. Albeit imprecisely estimated, we also see that participants in the Political Information treatment arm were more likely to increase donations to their political party, which is consistent with our hypothesis.

Table A.22: Summary Statistics and Randomization Balance (American Red Cross)

	All	Information Treatment			
	(1)	(2) None	(3) Char.	(4) Pol.	(5) p-value
Female (=1)	0.50	0.52	0.51	0.49	0.48
	(0.01)	(0.02)	(0.02)	(0.02)	
Age (in years)	40.03	39.95	39.69	40.47	0.39
	(0.23)	(0.39)	(0.40)	(0.41)	
Democrat (=1)	0.47	0.46	0.47	0.47	0.72
	(0.01)	(0.02)	(0.02)	(0.02)	
Republican (=1)	0.24	0.25	0.22	0.23	0.29
	(0.01)	(0.01)	(0.01)	(0.01)	
White (=1)	0.75	0.75	0.74	0.76	0.54
	(0.01)	(0.01)	(0.01)	(0.01)	
African-American (=1)	0.10	0.11	0.10	0.09	0.23
	(0.01)	(0.01)	(0.01)	(0.01)	
Hispanic (=1)	0.05	0.04	0.05	0.05	0.75
	(0.00)	(0.01)	(0.01)	(0.01)	
Asian (=1)	0.10	0.09	0.10	0.09	0.71
	(0.01)	(0.01)	(0.01)	(0.01)	
Married (=1)	0.44	0.47	0.43	0.42	0.06
	(0.01)	(0.02)	(0.02)	(0.02)	
Has Children (=1))	0.46	0.48	0.43	0.47	0.09
	(0.01)	(0.02)	(0.02)	(0.02)	
Char. Don. in Past 12 Months (=1)	0.73	0.73	0.73	0.73	0.96
	(0.01)	(0.01)	(0.01)	(0.01)	
Pol. Don. in Past 12 Months (=1)	0.19	0.18	0.19	0.20	0.64
	(0.01)	(0.01)	(0.01)	(0.01)	
Observations	2,980	994	996	990	

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The table summarizes the characteristics of subjects in the American Red Cross experiment described in Section A.6. First column demonstrates the randomization for all subjects, columns (2), (3), and (4) summarize characteristics of the subjects randomized into the "No Info," "Charitable Info" and "Political Info" conditions, respectively. Column (5) reports the p-value for the test that the average of each characteristic is equal across these three treatment groups.

Figure A.3: Results from the Experiment in Histograms (American Red Cross)



Notes: The panels show the results of the experiment described using American Red Cross as the source of charitable organization. Panels (a) and (b) show the distribution of changes in charitable and political giving if given additional charitable information in comparison with their no additional information counterparts, respectively. Panels (c) and (d) show the distribution of changes in political and charitable giving if given additional political information in comparison with their no additional information counterparts. Average changes in donations reported with standard errors in parentheses.

Table A.23: Political and Charitable Information Shocks and Contributions (All experiments)

	Red Cross			American Cancer Society			Feeding America		
	(1) Char.	(2) Pol.	(3) Cons.	(4) Char.	(5) Pol.	(6) Cons.	(7) Char.	(8) Pol.	(9) Cons.
Treatment Dummies:									
Charitable Info (=1)	4.307***	-1.769***	-2.538***	3.284***	-1.412***	-1.871**	2.416***	-1.430***	-0.986
	(0.540)	(0.394)	(0.584)	(0.868)	(0.483)	(0.882)	(0.715)	(0.514)	(0.767)
Political Info (=1)	-1.812***	2.415***	-0.603	-1.798**	1.392**	0.405	-1.942***	0.581	1.361*
	(0.441)	(0.505)	(0.552)	(0.787)	(0.669)	(0.764)	(0.677)	(0.670)	(0.712)
Mean Dep. Var.	19.92	11.95	68.12	18.83	11.29	69.87	20.39	9.95	69.66
Observations	2,980	2,980	2,980	1,025	1,025	1,025	840	840	840

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. The table summarizes the coefficients to political and charitable information shocks in the experiments described in Section A.6. Columns (1)-(3) report the change in charitable donations, political donations, and consumption (i.e., bonus kept) where American Red Cross was the charity of donation. Columns (4) - (6) follow the format of the first three columns for the experiment where American Cancer Society was the charity of choice, and columns (7) – (9) do the same for the experiment where the charitable organization was Feeding America. First row in the table reports the results for assignment to a "Charitable Info" condition relative to assignment to "No Info" (control) condition. The second row reports the results for the "Political Info" treatment relative to the "No Info" (control) condition.

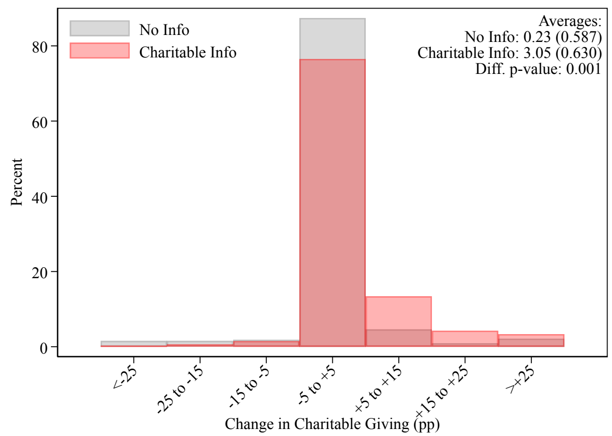
Table A.24: Summary Statistics and Randomization Balance for Experiment (American Cancer Society)

	All	Information Treatment			
	(1)	(2) None	(3) Char.	(4) Pol.	(5) p-value
Female (=1)	0.49	0.47	0.48	0.52	0.43
	(0.02)	(0.03)	(0.03)	(0.03)	
Age (in years)	40.54	40.05	40.64	40.92	0.66
	(0.41)	(0.66)	(0.72)	(0.72)	
Democrat (=1)	0.52	0.54	0.55	0.47	0.10
	(0.02)	(0.03)	(0.03)	(0.03)	
Republican (=1)	0.28	0.26	0.27	0.31	0.45
	(0.01)	(0.02)	(0.02)	(0.02)	
White (=1)	0.78	0.76	0.78	0.78	0.75
	(0.01)	(0.02)	(0.02)	(0.02)	
African-American (=1)	0.07	0.07	0.06	0.08	0.47
	(0.01)	(0.01)	(0.01)	(0.01)	
Hispanic (=1)	0.05	0.03	0.07	0.05	0.11
	(0.01)	(0.01)	(0.01)	(0.01)	
Asian (=1)	0.09	0.11	0.07	0.08	0.30
	(0.01)	(0.02)	(0.01)	(0.01)	
Married (=1)	0.51	0.54	0.50	0.47	0.18
	(0.02)	(0.03)	(0.03)	(0.03)	
Has Children (=1))	0.54	0.52	0.53	0.56	0.61
	(0.02)	(0.03)	(0.03)	(0.03)	
Char. Don. in Past 12 Months (=1)	0.76	0.74	0.79	0.76	0.30
	(0.01)	(0.02)	(0.02)	(0.02)	
Pol. Don. in Past 12 Months (=1)	0.29	0.29	0.30	0.28	0.80
	(0.01)	(0.02)	(0.02)	(0.02)	
Observations	1,025	340	341	344	

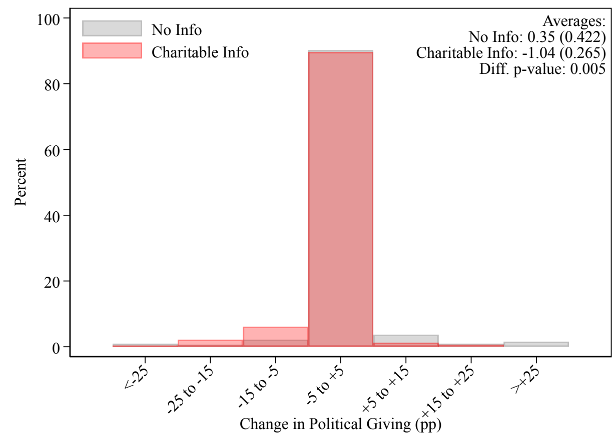
Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. This table breaks down the average characteristics we used for randomization by treatment group in the experiment using American Cancer Society as the charity. Column (1) reports the average characteristics for the whole subject pool. Columns (2) through (4) present the pre-treatment characteristics by respondents that were randomly assigned to the No Info, Charitable Info, and Political Info treatment groups. Column (5) reports the p-values for the null hypothesis that the average of each characteristic is equal across these three treatment groups.

Figure A.4: Results from the Experiment in Histograms (American Cancer Society)

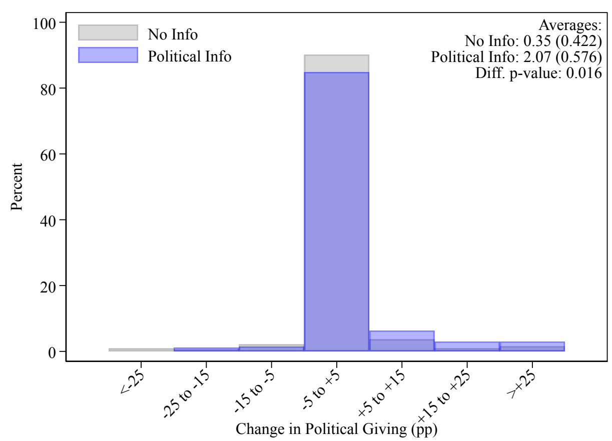
a. Effect of charitable info on charitable giving



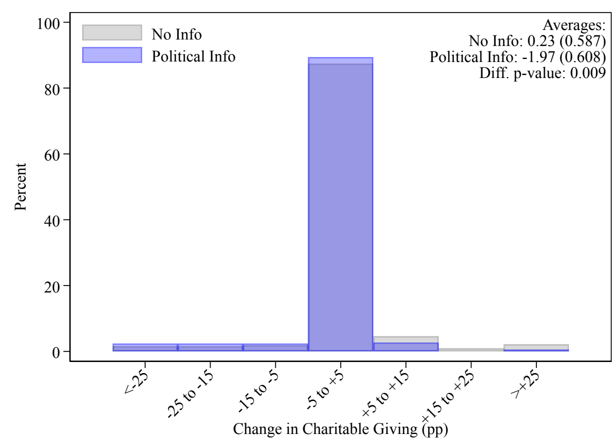
b. Effect of charitable info on political giving



c. Effect of political info on political giving



d. Effect of political info on charitable giving



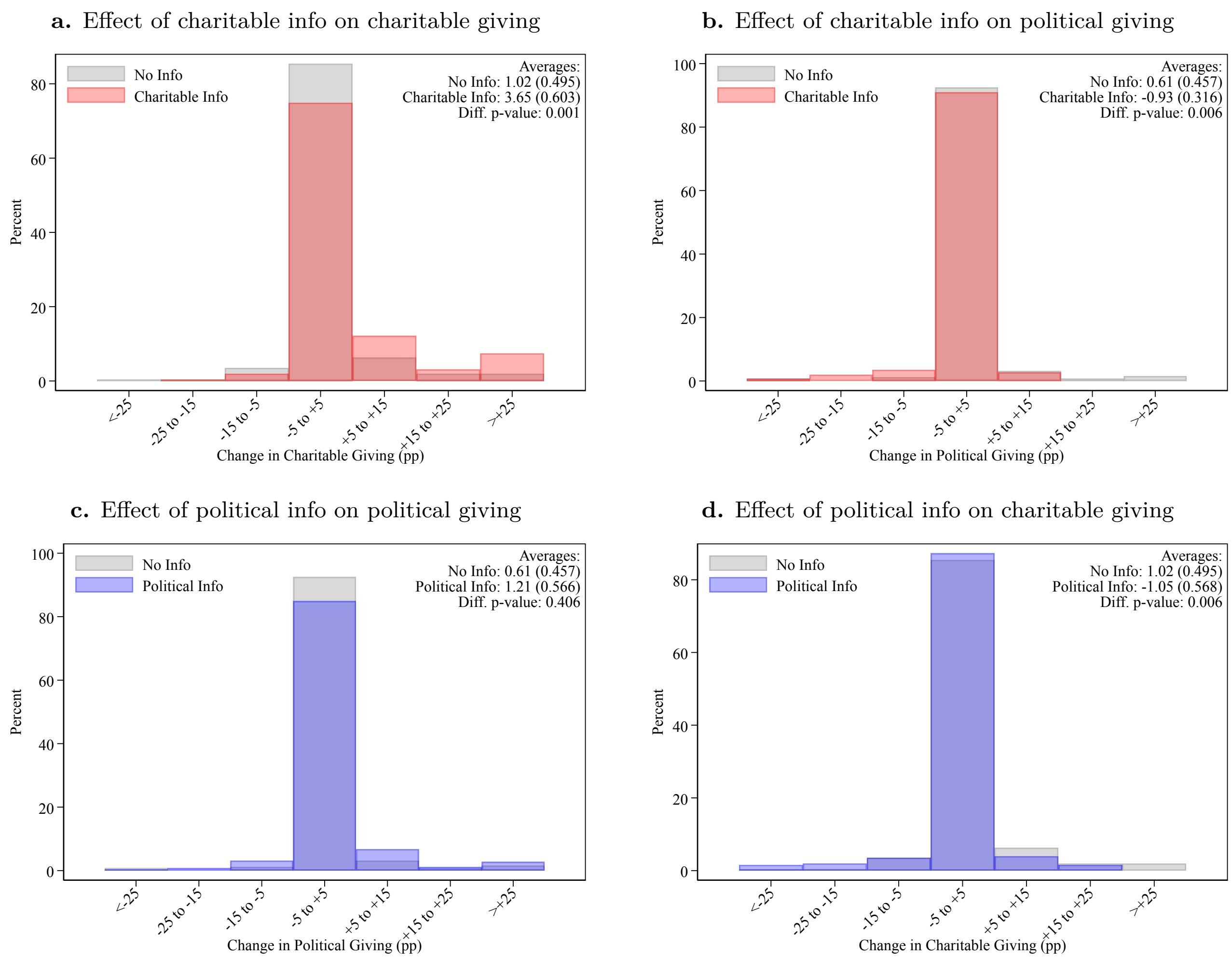
Notes: The panels show the results of the replication of the experiment described using American Cancer Society as the charity. Panels (a) and (b) show the distribution of changes in charitable and political giving if given additional charitable information in comparison with their no additional information counterparts, respectively. Panel (c) and (d) show the distribution of changes in political and charitable giving if given additional political information in comparison with their no additional information counterparts, respectively. Average changes in donations reported with standard errors in parentheses.

Table A.25: Summary Statistics and Randomization Balance for Experiment (Feeding America)

	All	Information Treatment			
	(1)	(2) None	(3) Char.	(4) Pol.	(5) p-value
Female (=1)	0.48	0.48	0.49	0.48	0.93
	(0.02)	(0.03)	(0.03)	(0.03)	
Age (in years)	40.81	41.23	40.48	40.71	0.77
	(0.43)	(0.78)	(0.73)	(0.74)	
Democrat (=1)	0.50	0.48	0.54	0.50	0.33
	(0.02)	(0.03)	(0.03)	(0.03)	
Republican (=1)	0.29	0.30	0.29	0.29	0.96
	(0.02)	(0.03)	(0.03)	(0.03)	
White (=1)	0.78	0.78	0.79	0.75	0.46
	(0.01)	(0.02)	(0.02)	(0.03)	
African-American (=1)	0.06	0.07	0.05	0.07	0.50
	(0.01)	(0.02)	(0.01)	(0.02)	
Hispanic (=1)	0.05	0.04	0.05	0.05	0.90
	(0.01)	(0.01)	(0.01)	(0.01)	
Asian (=1)	0.09	0.07	0.10	0.11	0.33
	(0.01)	(0.02)	(0.02)	(0.02)	
Married (=1)	0.53	0.50	0.53	0.55	0.45
	(0.02)	(0.03)	(0.03)	(0.03)	
Has Children (=1))	0.55	0.51	0.58	0.56	0.25
	(0.02)	(0.03)	(0.03)	(0.03)	
Char. Don. in Past 12 Months (=1)	0.76	0.73	0.79	0.76	0.34
	(0.01)	(0.03)	(0.02)	(0.03)	
Pol. Don. in Past 12 Months (=1)	0.30	0.32	0.28	0.30	0.60
	(0.02)	(0.03)	(0.03)	(0.03)	
Observations	840	282	281	277	

Notes: * significant at the 10% level, ** at the 5% level, *** at the 1% level. This table breaks down the average characteristics we used for randomization by treatment group in the experiment using Feeding America as the charity. Column (1) reports the average characteristics for the whole subject pool. Columns (2) through (4) present the pre-treatment characteristics by respondents that were randomly assigned to the No Info, Charitable Info, and Political Info treatment groups. Column (5) reports the p-values for the null hypothesis that the average of each characteristic is equal across these three treatment groups.

Figure A.5: Results from the Experiment in Histograms (Feeding America)



Notes: The panels show the results of the replication of the experiment described using Feeding America as the charity. Panels (a) and (b) show the distribution of changes in charitable and political giving if given additional charitable information in comparison with their no additional information counterparts, respectively. Panel (c) and (d) show the distribution of changes in political and charitable giving if given additional political information in comparison with their no additional information counterparts, respectively. Average changes in donations reported with standard errors in parentheses.