

ONLINE APPENDIX: NOT FOR PUBLICATION

1. Computation of elasticity

Let r be the daily DNC registrations and H be the number of households (for brevity we omit the county and time subscripts). Then, the dependent variable is $\ln\left(\frac{1+r}{H}\right)$. Let β be the estimated coefficient. Then,

$$\Delta \ln\left(\frac{1+r}{H}\right) = \frac{\Delta\left(\frac{1+r}{H}\right)}{\text{avg}\left(\frac{1+r}{H}\right)} = \beta,$$

or

$$\Delta\left(\frac{r}{H}\right) = \beta \cdot \text{avg}\left(\frac{1+r}{H}\right) = \beta \cdot \text{avg}\left(\frac{1}{H}\right) + \beta \cdot \text{avg}\left(\frac{r}{H}\right)$$

since $\Delta\left(\frac{1+r}{H}\right) = \Delta\left(\frac{r}{H}\right)$. Hence, the precise elasticity,

$$\frac{\Delta\left(\frac{r}{H}\right)}{\text{avg}\left(\frac{r}{H}\right)} = \beta + \beta \cdot \frac{\text{avg}\left(\frac{1}{H}\right)}{\text{avg}\left(\frac{r}{H}\right)}.$$

2. Unreported regressions

Table A1. Daily Registrations

VARIABLES	(1) Counties in border states	(2) All U.S. counties	(3) Days 6 to 25	(4) Add quadratic cumreg
Reports of DNC	0.005 (0.009)	0.018*** (0.003)	0.089*** (0.016)	0.038** (0.017)
Internet only	-0.511*** (0.018)	-0.454*** (0.010)	-0.353*** (0.059)	-0.764*** (0.065)
Cumulative registrations (t-1)				-0.317** (0.132)
Cumulative registrations (t-1) squared				-0.015 (0.010)
Observations	22,675	78,125	2,180	2,725
Adjusted R-squared	0.814	0.818	0.762	0.817
Number of fips	907	3,125	109	109

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Data Appendix

Variable	Sources	Construction
DNC registration, by county and day	Federal Trade Commission; North American Local Exchange NPA-NXX Database.	Logarithm of (one plus number of registrations divided by number of households). We identified the counties served by each telephone exchange using the North American Local Exchange NPA-NXX Database. We matched the DNC registrations to counties because we could not identify the households who made the registrations. So, we could only use their geographical location – county – to identify their demographic characteristics. For telephone exchanges spanning multiple counties, we allocated the registrations to the respective counties based on the relative number of households as reported by the U.S. Census 2000. We excluded mobile phone registrations as U.S. mobile phone numbers are not associated with geographical location.
Newspaper reports of the DNC registry, by county and day	Factiva; Audit Bureau of Circulation	Logarithm of (one plus number of newspaper reports weighted by circulation in the county divided by number of households). Following Goh et al. (2011), we used the newspaper database, Factiva, to compile all newspaper reports of the “do not call” registry. For each county and day, we weighted the number of reports by the circulation of the newspaper in that county, using circulation as reported by the Audit Bureau of Circulation.
Newspaper reports mentioning toll-free DNC registration, by county and day	Factiva; Audit Bureau of Circulation	Similar as for newspaper reports above, except that we manually read and identified newspaper reports of the “do not call” registry that also mentioned toll-free registration.
Newspaper reports that easterners could register through toll-free call from July 7 onward, by county and day	Factiva; Audit Bureau of Circulation	Similar as for newspaper reports above, except that we manually read and identified newspaper reports that easterners could register for the “do not call” registry through toll-free call from July 7 onward.
Demographic data (income, age, education, etc.)	U.S. Census 2000	We compiled the data by county. Age, education, unemployment, Hispanic, and blacks were measured by percentages. We took logarithm for median household income.