ECONOMIC POLICY

Politics really is ruining Thanksgiving, according to data from 10 million cellphones

Analysis by Christopher Ingraham
Reporter

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In the wake of last year's bitterly contested presidential election, "politically divided" families cut their Thanksgiving celebrations short by an average of 20 to 30 minutes. Republican voters were more likely to bail on Democratic families than vice-versa. And reductions in family time were steeper in areas that saw more political ads.

Those are among the conclusions of a new working paper by M. Keith Chen of UCLA and Ryne Rohla of Washington State University. The paper matches location data from 10 million smartphones to precinct-level voting data for the 2016 election, painting a detailed portrait of how people from predominantly Democratic and Republican areas spent their 2016 Thanksgiving holiday.

In recent years, Thanksgiving has become a politically fraught time, often pitting family members with diametrically opposed political beliefs against each other over plates of turkey and mashed potatoes. Last year, for instance, news outlets across the country published stories on how to navigate political discussion with Trump-supporting uncles and socialist nephews. A majority of Americans said they hoped to avoid Thanksgiving politics completely.

Surveys and anecdotes are great, but Chen and Rohla wanted to know if people actually altered their behavior on Thanksgiving as a result of the divisive election. Specifically, they wanted to know whether Thanksgiving dinners in politically divided households were cut short relative to Thanksgiving dinners among politically homogeneous families.

Smartphone data could answer part of the question: "A unique collection of smartphone location-tracking data from more than ten million Americans allows observation of actual (not self-reported) movement behavior, at extremely precise spatial and temporal levels," they write.

That data came from a service called Safegraph, which collected over 17 *trillion* location markers from 10 million smartphones in November 2016. Chen and Rohla used this data to identify individuals' home locations, which they defined as the places people were most often located between the hours of 1 and 4 a.m.

They also looked at where these people were located between the hours of 1 p.m. and 5 p.m. on Thanksgiving Day. If that location differed from the "home" location, you'd reasonably infer that a person traveled to spend Thanksgiving with friends or family. Even better, the cellphone data shows you exactly when those travelers arrived at a Thanksgiving location and when they left.

To capture political leanings, Chen and Rohla collected 2016 presidential voting data at the level of voting precinct, the most finely grained level of spatial detail attainable. For the purposes of their paper, they assume that people from precincts voting for Clinton are Democrats, while those from Trump precincts are Republican.

It's important to note that this represents an *approximation* of political beliefs — there are, after all, Democrats living in places that tend to vote Republican, and vice-versa. So for a sanity check, they tested the party preferences they assigned to their cellphone users against the aggregate two-party vote shares at both the state and national level.

"At a national level the data add up to a Democratic vote share of 50.3%, compared to the actual share of 51.1%," they found. Not perfect, of course, but good enough for social science research.

From there, the analysis is pretty straightforward: Do Democrats spend less time at Thanksgiving dinners in Republican households than in Democratic ones, and vice-versa? The top-line answer is "yes": even when controlling for things like travel distance and various demographic characteristics "families that were likely to have voted differently spent between 20 and 30 fewer minutes with each other," Chen and Rohla found.

But these differences were asymmetric. Relative to 2015, Democratic voters were about 5 percent less likely than Republicans to travel for Thanksgiving in 2016. However, while Republicans were more likely to show up to a distant Thanksgiving dinner, they were also more likely to bail early: "travelers from Democratic precincts do not significantly shorten their visits to Republican hosts, while Republican-precinct travelers shortened their visits by over 40 minutes," the paper found.

Chen and Rohla also found the volume of political advertising in a precinct affected these numbers. "Thanksgiving dinners are further shortened by around 1.5 minutes for every thousand political advertisements aired in the traveler's home media market," they found. In a heavily saturated state like Florida, that resulted in a 1.2 hour reduction in Thanksgiving time for politically divided families.

Overall, Chen and Rohla write, "our results suggest partisan differences cost American families 62 million person-hours of Thanksgiving time, 56.8% from individuals living in Democratic precincts and 43.2% from Republican precincts."

That's a pretty staggering number, indicative of the extent to which fierce partisan divisions are undermining family and social ties in the United States. And that's just on one day in the year — imagine how many people avoid phone calls or interactions with individuals of different political beliefs on the other 364 days.