Political Beliefs affect Compliance with COVID-19 Social Distancing Orders

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Abstract
Social distancing is vital to mitigate the spread of the novel coronavirus. We use geolocation data to document that political beliefs present a significant limitation to the effectiveness of state-level social distancing orders. Residents in Republican counties are less likely to completely stay at home after a state order has been implemented relative to those in Democratic counties. We also find that Democrats are less likely to respond to a state-level order when it is issued by a Republican governor relative to one issued by a Democratic governor. These results are robust to controlling for other factors including time, geography, local COVID-19 cases and deaths, and other social distancing orders. We conclude that bipartisan support is essential to maximize the effectiveness of social distancing orders.

Data description
The primary datasets we use in this study are (1) geolocation data from SafeGraph, (2) government-sanctioned social distancing orders, and (3) county-level election results from the 2016 Presidential election.

Geolocation Data - To create a measure of social distance compliance, we rely on anonymized location data from SafeGraph Inc. SafeGraph partners with mobile application services that have opt-in consent from users to collect location data. The partnerships allow SafeGraph to see location data from approximately 35 million unique devices in a given month. To preserve anonymity, the data is aggregated to the census block group (CBG) level and all CBG’s with fewer than five observations are omitted. This geolocation data is advantageous as it allows us to see the movement behavior of a large sample of Americans. Further, prior studies using SafeGraph data find the data are generally representative of the US population (Chen, Haggag, Pope, and Rohla, 2019) and in particular representative of voting patterns in the US (Chen and Rohla, 2018).

Government Social Distancing Orders - There are a few sources that track the social distancing policies at varying geographical levels. We choose to use the data assembled by the New York Times because it is comprehensive and provides precise information on both the timing and geography of the social distancing order. Importantly for our study, it also provides official documentation for the order, allowing us to identify the policy announcer in each case. We merge the political affiliation of all governors with the NYT data as it is not included in their report. We also gather daily data on the number of reported cases and deaths in each county from the NYT.

Political Affiliation and Demographic Data - Our setting also requires a proxy for the political preference of US residents. We use the results of the 2016 US Presidential election to measure a county’s political preference. Specifically, we collect county-level voting data from the MIT Election Data and Science Lab (MIT, 2018) and use the vote share won by Donald Trump to measure the degree to which a county leans Republican or Democrat. Lastly, we collect county-level demographic data for the project

JEL codes for the project
P16, C55

Key-words
COVID-19, Coronavirus, Political polarization, Geolocation data
Working paper link