Online Appendix: Who Do You Trust? The Consequences of Partisanship and Trust for Public Responsiveness to COVID-19 Orders

December 31, 2020

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1 Summary Statistics and Balance Table

Table 1 presents summary statistics for the variables used in the analysis.

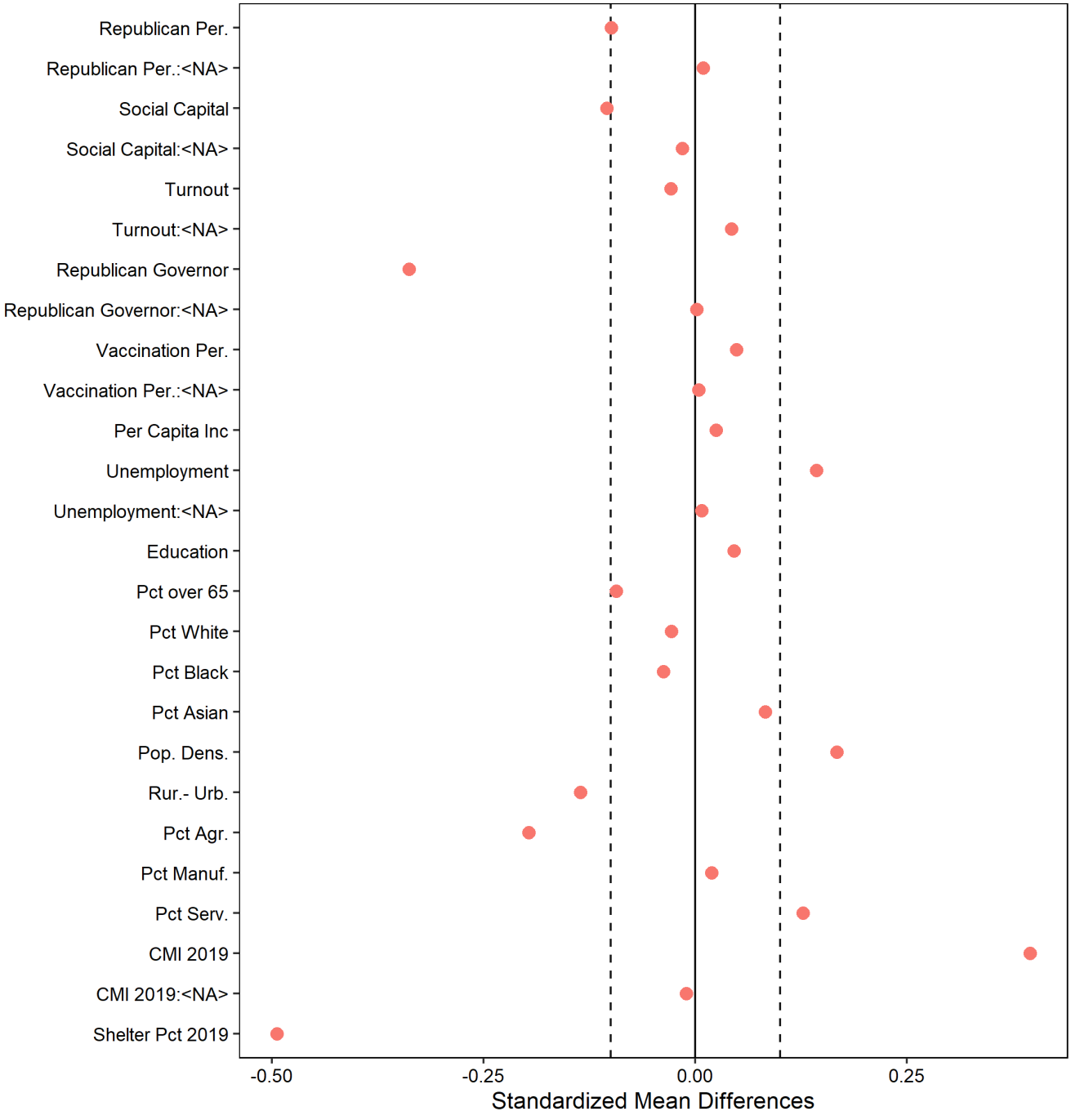
Table 1: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Median	Pctl(75)	Max
CMI 2020	50,272	3.676	0.489	0.442	3.429	3.815	4.019	4.566
CMI 2019	50,268	3.791	0.328	1.054	3.647	3.850	4.011	4.515
Pct Shelter 2020	50,272	0.273	0.087	0.029	0.204	0.244	0.335	0.944
Pct Shelter 2019	50,268	0.270	0.045	0.000	0.239	0.265	0.295	0.679
Republican Per.	49,792	0.632	0.157	0.041	0.544	0.663	0.749	0.960
Social Capital	47,232	0.009	1.001	−4.315	−0.649	0.008	0.673	2.971
Turnout	49,584	0.592	0.096	0.131	0.527	0.593	0.657	0.925
Repub. Governor	50,256	0.568	0.495	0.000	0.000	1.000	1.000	1.000
Vaccination Per.	50,016	0.417	0.099	0.000	0.360	0.430	0.490	0.680
Income p.c.	50,272	10.141	0.229	9.141	9.990	10.137	10.279	11.149
Unemployment	50,256	0.041	0.015	0.013	0.031	0.039	0.048	0.199
Education	50,272	0.212	0.093	0.047	0.147	0.190	0.253	0.781
Pct White	50,272	0.783	0.199	0.027	0.669	0.858	0.942	0.992
Pct Black	50,272	0.087	0.144	0.000	0.004	0.019	0.097	0.854
Pct Asian	50,272	0.011	0.025	0.000	0.003	0.005	0.010	0.430
Pct over 65	50,272	0.159	0.042	0.035	0.131	0.156	0.182	0.434
Pop. Dens.	50,272	3.860	1.635	0.038	2.884	3.832	4.741	11.149
Rur.-Urb.	50,272	5.009	2.708	1	2	6	7	9
Pct Agr.	50,272	0.051	0.064	0.000	0.011	0.029	0.063	0.602
Pct Manuf.	50,272	0.123	0.072	0.000	0.067	0.114	0.169	0.551
Pct Serv.	50,272	0.429	0.070	0.051	0.382	0.427	0.474	0.822

'Republican Per.,' 'Turnout,' 'Vaccination Per.,' 'Unemployment,' 'Pct over 65,' 'Pct White,' 'Pct Black', 'Pct Asian,' 'Pct Agr,' 'Pct Manuf,' 'Pct Sev.,' 'Pct Shelter' are measured as percentages. 'Social capital' is measured by the JEC Social Capital Index. 'Education' is the share of population with at least a college degree. Population density and income per capita are logged.

Figure 1 provides a balance table for the variables used in our analysis. The balance table shows that counties with high employment in agriculture, more rural counties, and counties with older populations appear to be less likely to receive a stay-at-home order or receive one later. Counties with Republican governors are over-represented in the non-treated data. Treated counties display greater mobility values in the 2019 control weeks (calendar weeks 1-16 in 2019).

Figure 1: Balance Table

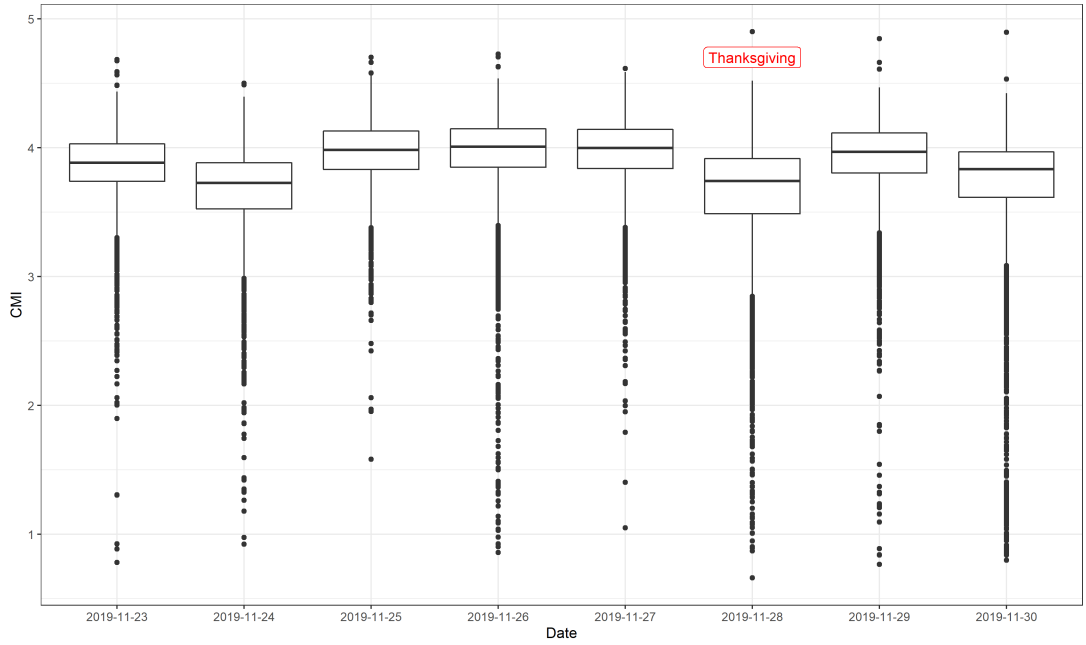


Standardized mean differences for covariates used in the analysis. See Table 1 for explanation of variables. Dashed lines mark standardized mean differences of -0.1 and 0.1 respectively.

2 Validity Check of Mobility Measure

Figure 2 provides a validity check for the mobility CMI measure, which represents our main dependent variable. We check whether we can detect increased movement around Thanksgiving (Wednesday before and Friday/Saturday after). This is the case, which reaffirms our trust in the data that our analysis relies upon.

Figure 2: CMI Validity Check



Box plot of mobility values as measured by CMI for all counties and days in the week of Thanksgiving 2019. Thanksgiving day 2019 is marked with "Thanksgiving" box.

3 Sensitivity Analyses of Parallel Trends Assumption

Tables 2 and 3, as well as Figures 3 through 6 further explore the sensitivity of the parallel trends assumption, which is the assumption that our identification strategy relies upon. Tables 2 and 3 examine the magnitude of placebo treatment effects for lags and leads of treatment timing (with and without controls). The figures are explained below.

Table 2: Placebo Treatment Effects

	Model 1	Model 2	Model 3	Model 4	Model 5
Order	-0.24^{***}				
	(0.05)				
Order Lag		-0.17^{***}			
		(0.04)			
Order Lag 2			-0.07^{**}		
			(0.03)		
Order Lead				-0.14^{***}	
				(0.05)	
Order Lead 2					-0.12^{***}
					(0.05)
Num. obs.	50272	50272	50272	50272	50272
Adj. R^2 (full model)	0.83	0.83	0.82	0.83	0.82
Adj. R^2 (proj model)	-0.01	-0.04	-0.06	-0.05	-0.06

Dependent variable is mobility, measured by CMI. All models include county and week fixed effects. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week, 'Order Lag' is the placebo treatment one week before the actual treatment took place, 'Order Lag 2' is a placebo treatment effect two weeks before the actual stay-at-home order was given. 'Order Lead' and 'Order Lead 2' have analogous interpretations as placebo treatment effects after the actual stay-at-home order had been given. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

Table 3: Placebo Treatment Effects (with controls)

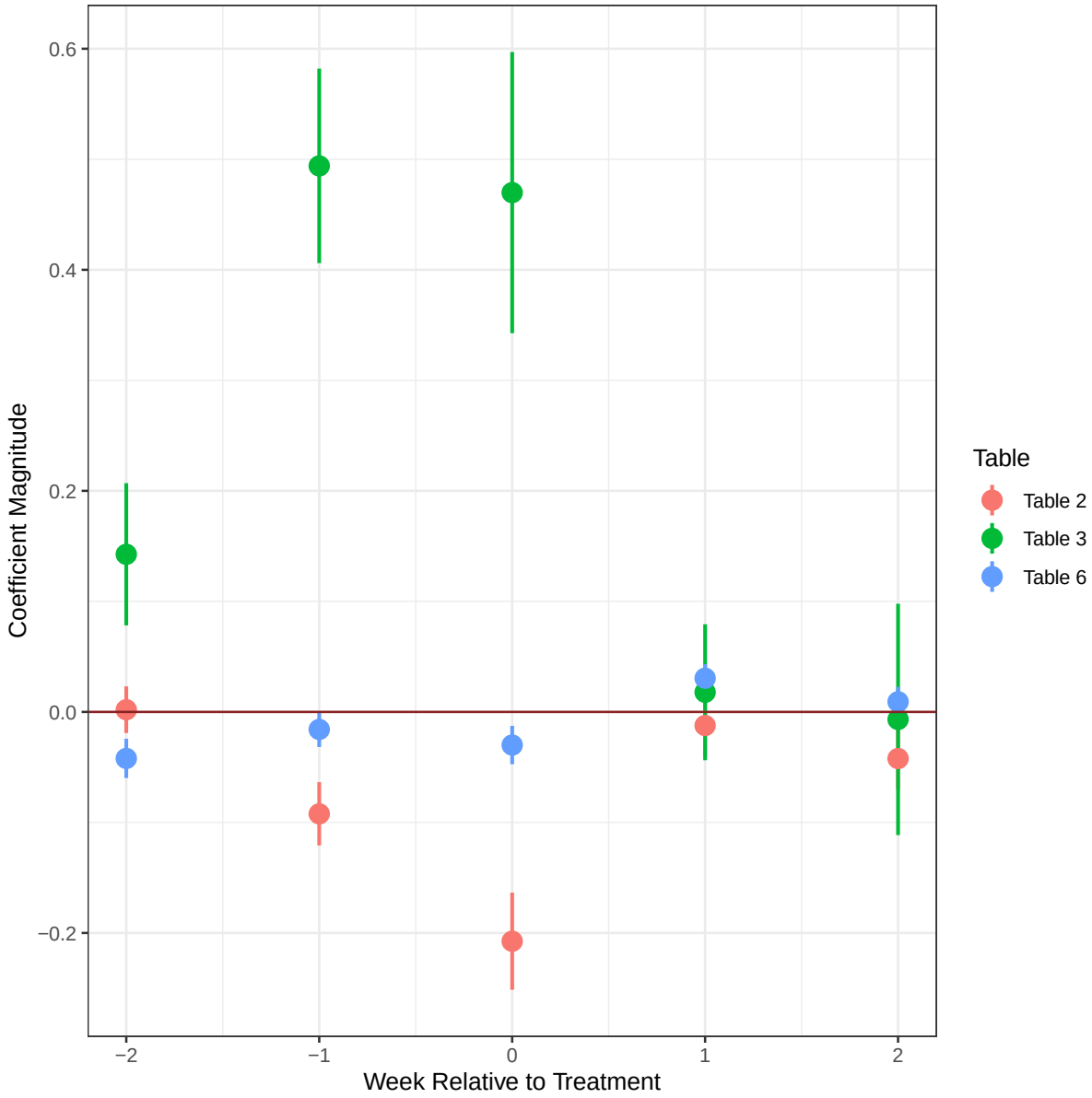
	Model 1	Model 2	Model 3	Model 4	Model 5
Order	-0.24^{***}				
	(0.05)				
Pct over 65	-1.35^{***}	-1.35^{***}	-1.35^{***}	-1.35^{***}	-1.35^{***}
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Pop. Dens.	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Income p.c.	0.09	0.09	0.09	0.09	0.09
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Unemployment	-1.21	-1.21	-1.21	-1.21	-1.21
	(0.92)	(0.92)	(0.92)	(0.92)	(0.92)
Education	-1.13^{***}	-1.13^{***}	-1.13^{***}	-1.13^{***}	-1.13^{***}
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Pct White	0.42^{***}	0.42^{***}	0.42^{***}	0.42^{***}	0.42^{***}
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Pct Black	0.41^{***}	0.41^{***}	0.41^{***}	0.41^{***}	0.41^{***}
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Pct Asian	-1.58^{***}	-1.58^{***}	-1.58^{***}	-1.58^{***}	-1.58^{***}
	(0.52)	(0.52)	(0.52)	(0.52)	(0.52)
Rur.-Urb.	-0.01^{**}	-0.01^{**}	-0.01^{**}	-0.01^{**}	-0.01^{**}
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Pct Agr.	-0.65^{**}	-0.65^{**}	-0.65^{**}	-0.65^{**}	-0.65^{**}
	(0.32)	(0.32)	(0.32)	(0.32)	(0.32)
Pct Manuf.	0.22^{*}	0.22^{*}	0.22^{*}	0.22^{*}	0.22^{*}
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Pct Serv.	-0.27^{**}	-0.27^{**}	-0.27^{**}	-0.27^{**}	-0.27^{**}
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Order Lag		-0.17^{***}			
		(0.04)			
Order Lag 2			-0.07^{**}		
			(0.03)		
Order Lead				-0.14^{***}	
				(0.05)	
Order Lead 2					-0.12^{***}
					(0.05)
Num. obs.	50256	50256	50256	50256	50256
Adj. R^2 (full model)	0.73	0.73	0.72	0.72	0.72
Adj. R^2 (proj model)	0.19	0.17	0.16	0.17	0.16

Dependent variable is mobility, measured by CMI. All models include county and week fixed effects. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week, 'Order Lag' is the placebo treatment one week before the actual treatment took place, 'Order Lag 2' is a placebo treatment effect two weeks before the actual stay-at-home order was given. 'Order Lead' and 'Order Lead 2' have analogous interpretations as placebo treatment effects after the actual stay-at-home order had been given. Models include controls. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

3.1 Sensitivity Checks for Parallel Trends Assumption: Graphical Evidence

Figure 3 provides our main effects of interest, estimated in specifications with lag and lead treatment dummies. Figure 4 provides graphical evidence from a sensitivity analysis based on Rambachan and Roth (2019) (see explanations below). We find that one needs to assume a fairly non-linear shape of pre-existing trends (captured by larger values of M) for the effects to lose significance.

Figure 3: Main Effects of Interest for Models with Lag and Lead Treatment Dummies

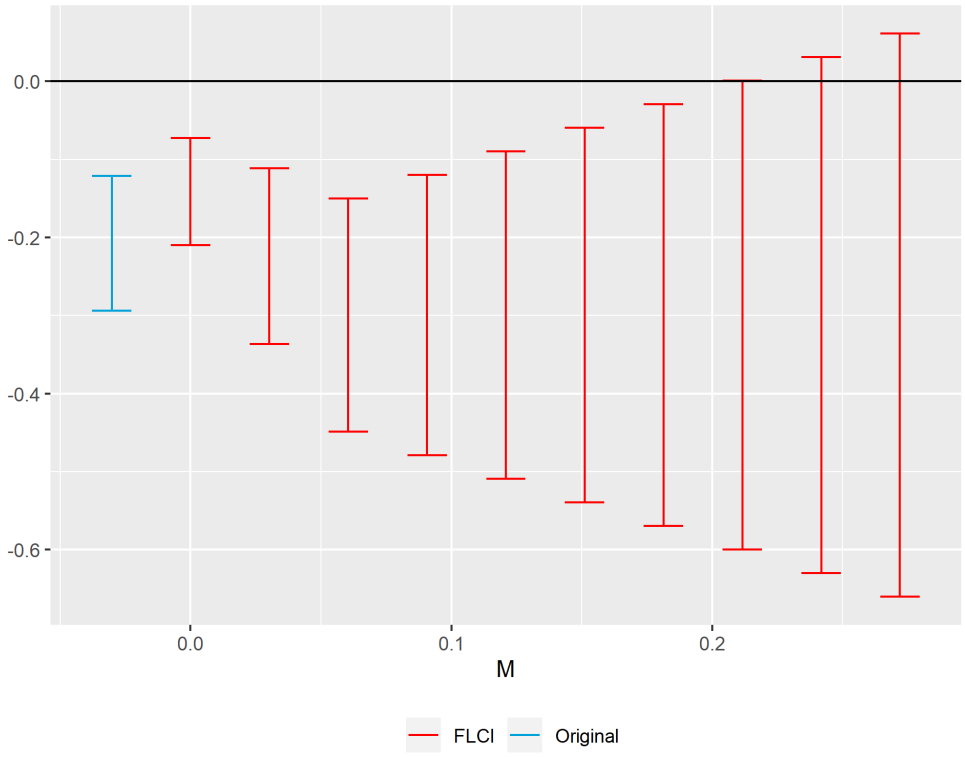


Graphical representations of coefficients of main variables of interest, when including six lags and four leads of these variables into the models. The figure plots the coefficient magnitudes of Model 1 from Table 1, Table 2, and Table 4 in the main body, when including these lag and lead variables. For ease of presentation, only the coefficients for two periods before and after treatment are shown.

In Figure 3, we run model 1 (without controls) from Table 1 (baseline effects of stay-at-home orders), Table 2 (stay-at-home order effects by partisanship), and Table 4 (stay-at-home order effects by social capital) in the main body, respectively. This time we additionally include six pre-treatment and four post-treatment periods placebo dummies into our specification (for presentation purposes, we only present two pre-treatment and two post-treatment coefficients). The red dots in the graph represent the unconditional

treatment effect for Table 1 (model 1), the interaction effect of the stay-at-home order with partisanship and social capital from the other two tables are colored green and red, respectively. As the figure shows, there are some pre-treatment trends.

Figure 4: Parallel Trends Sensitivity Analysis



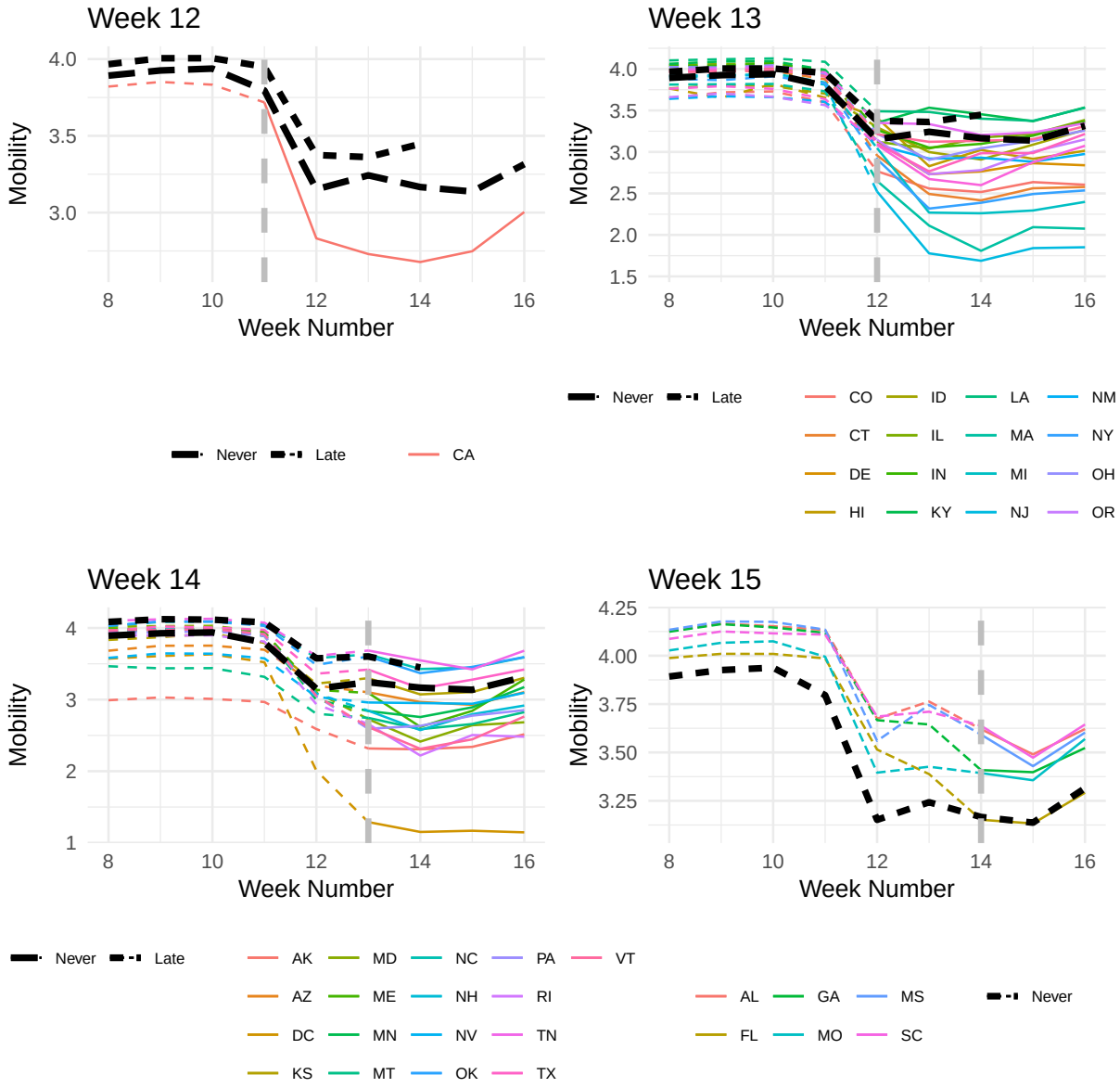
Sensitivity analysis for the parallel trends assumption. Based on the method proposed byRambachan and Roth (2019), the graph provides treatment effects and confidence intervals for these treatment effects for model 1 in Table 1 (however without controls, but with additional six pre-treatment placebo treatment dummies, and four post-treatment placebo treatment dummies), assuming that pre-existing differences in trends persisted. The M parameter relaxes the linearity assumption of pre-existing trends. We follow the Rambachan and Roth (2019) in choosing M values (i.e. shape restrictions for pre-treatment trends) using estimates for the largest change in slope in the pre-period.

Given the existent pre-treatment trends, Figure 4 provides a sensitivity analysis for the parallel trends assumption. We estimated a regression based on the following regression equation: $y_{i,s,t} = \mu_t + \lambda_s + \sum_{t=-6}^{4} \beta_t D_t + \epsilon_{i,s,t}$. In other words, we estimate model 1 from Table 1 in the paper, however without any control variables, but with additional six pre-treatment and four post treatment placebo treatment dummies. Based on Rambachan and Roth (2019), we then assess how much the linearity assumption in the pre-existing trends would have to be relaxed in order for our treatment effects to change/lose significance. The presented estimated coefficients and confidence intervals in Figure 4 show that one needs to assume a fairly non-linear shape of pre-existing trends (captured by larger values of M) for our treatment effect to lose significance. Note that we followed Rambachan and Roth (2019) in selecting the upper bound for M to consider for our sensitivity analysis. The results presented here also add to our confidence that the stay-at-home orders and compliance therewith, in fact, drives most of the mobility effects we pick up in our data.

3.2 Parallel Trends: Further Graphical Explorations

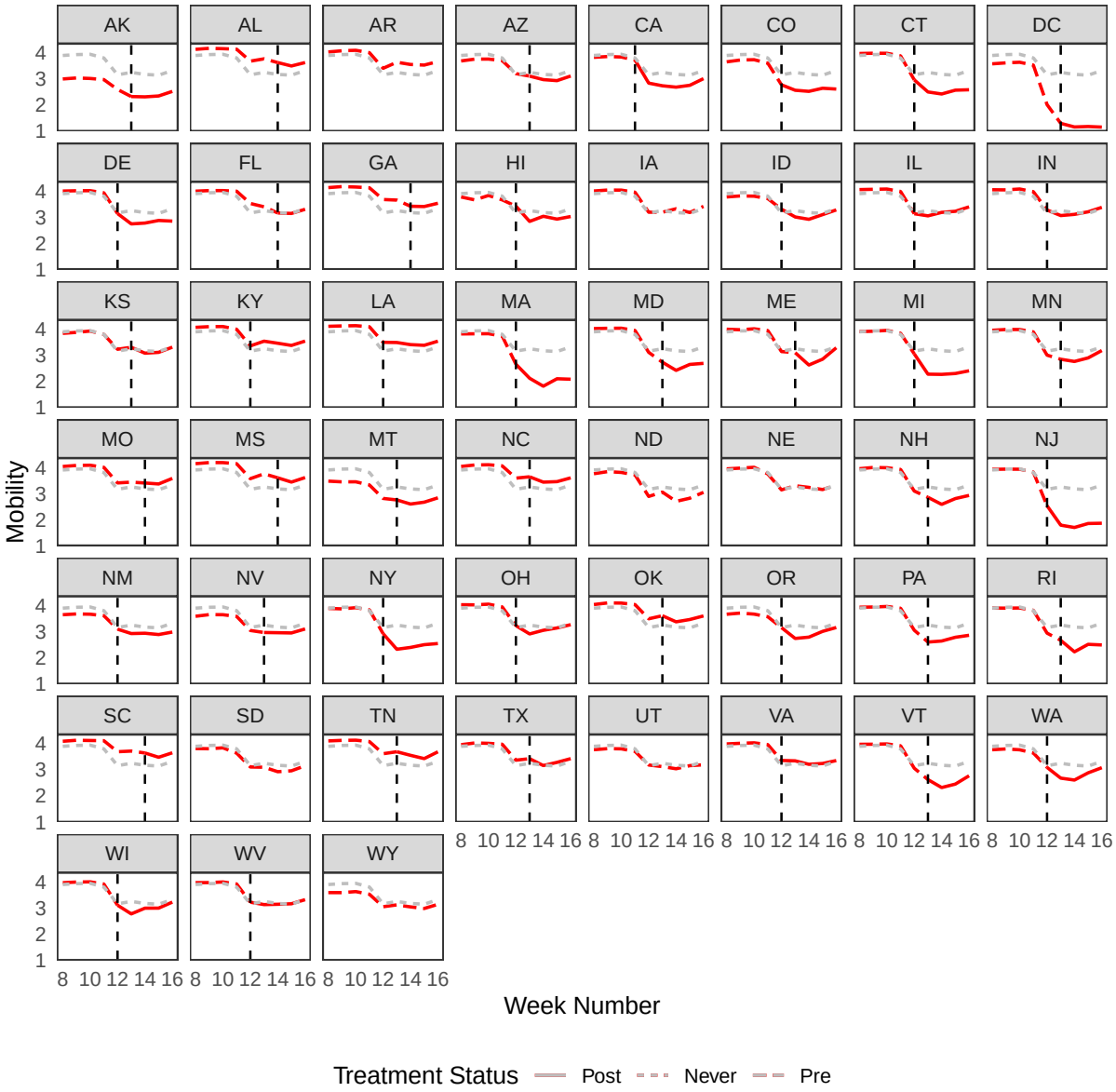
Figures 5 and 6 explore the parallel trends assumption further. Figure 5 presents mobility trends by treatment week and states, while Figure 6 presents Trends for all states separately.

Figure 5: Separate Mobility Trends by Treatment Week and States



Mobility trends as measured by CMI for each state, by week in which states implemented stay-at-home orders. The black lines stand for states that implemented stay-at-home orders later and never, respectively. The horizontal gray line marks the last pre-treatment week.

Figure 6: Parallel Trends for All States



Mobility trends as measured by CMI by state. The red line represents the average mobility values for counties in the state; pre-treatment, the line is dashed, post-treatment it turns solid. The gray line represents mobility trends for never treated counties. The dashed black line marks the last pre-treatment week.

4 Alternative Dependent Variable (Sheltering Percentage)

Tables 4 through 10 replicate the regression tables from the main text, replacing the CMI with 'percentage of population sheltering in place' as the dependent variable.

Table 4: Treatment Effect (Sheltering Pct)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	0.03***	0.03***	0.03***	0.03***	0.03***	0.05***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income p.c.		0.02***		−0.00	0.00	0.01
		(0.01)		(0.01)	(0.00)	(0.01)
Unemployment		0.62***		0.52***	0.32***	0.31***
		(0.11)		(0.10)	(0.07)	(0.11)
Education		0.05***		0.09***	0.08***	0.05***
		(0.01)		(0.01)	(0.01)	(0.01)
Rur.-Urb.		0.00		−0.00***	−0.00***	−0.00
		(0.00)		(0.00)	(0.00)	(0.00)
Pct Agr.		0.07*		0.02	−0.01	−0.00
		(0.04)		(0.04)	(0.02)	(0.03)
Pct Manuf.		−0.06***		−0.06***	−0.04***	−0.07***
		(0.02)		(0.02)	(0.01)	(0.02)
Pct Serv.		0.01		−0.03*	−0.02**	0.01
		(0.02)		(0.02)	(0.01)	(0.02)
Pct over 65			0.22***	0.23***	0.11***	0.15***
			(0.03)	(0.02)	(0.02)	(0.03)
Pop. Dens.			−0.00	−0.00**	−0.00	0.00
			(0.00)	(0.00)	(0.00)	(0.00)
Pct White			−0.03**	−0.03*	−0.01	−0.01
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Black			−0.01	−0.01	−0.01	0.01
			(0.02)	(0.01)	(0.01)	(0.01)
Pct Asian			0.20**	0.17**	0.13***	0.05**
			(0.08)	(0.08)	(0.04)	(0.02)
Shelter 2019					0.45***	
					(0.03)	
Num. obs.	50272	50256	50272	50256	50256	50256
Adj. R^2 (full model)	0.90	0.84	0.83	0.84	0.86	0.92
Adj. R^2 (proj model)	−0.01	0.09	0.07	0.12	0.25	0.14

Dependent variable is percentage of population sheltering in place. Model 1 includes county and week fixed effects, all other models include state and week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

Table 5: Partisan Effects (Sheltering Pct)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	0.14***	0.14***	0.14***	0.14***	0.14***	0.14***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Republican Per.	0.00	0.01	−0.04***	−0.02*	−0.00	−0.02**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Order x Rep. Per.	−0.18***	−0.18***	−0.18***	−0.18***	−0.17***	−0.21***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
Income p.c.		0.02***		−0.00	−0.00	0.01
		(0.01)		(0.01)	(0.00)	(0.01)
Unemployment		0.58***		0.48***	0.31***	0.29**
		(0.12)		(0.10)	(0.06)	(0.11)
Education		0.03*		0.07***	0.07***	0.03*
		(0.02)		(0.01)	(0.01)	(0.01)
Rur.-Urb.		0.00		−0.00***	−0.00***	−0.00
		(0.00)		(0.00)	(0.00)	(0.00)
Pct Agr.		0.07*		0.03	0.00	0.01
		(0.04)		(0.04)	(0.02)	(0.03)
Pct Manuf.		−0.07***		−0.07***	−0.05***	−0.09***
		(0.02)		(0.02)	(0.01)	(0.02)
Pct Serv.		0.01		−0.04**	−0.03***	−0.03*
		(0.02)		(0.02)	(0.01)	(0.02)
Pct over 65			0.20***	0.21***	0.10***	0.13***
			(0.03)	(0.02)	(0.02)	(0.03)
Pop. Dens.			−0.00**	−0.00***	−0.00	0.00
			(0.00)	(0.00)	(0.00)	(0.00)
Pct White			0.01	0.01	0.01	0.02
			(0.02)	(0.01)	(0.01)	(0.01)
Pct Black			−0.02	−0.02	−0.01	0.00
			(0.02)	(0.02)	(0.01)	(0.01)
Pct Asian			0.14	0.11*	0.10***	0.05**
			(0.09)	(0.06)	(0.04)	(0.02)
Shelter 2019					0.43***	
					(0.02)	
Num. obs.	49792	49792	49792	49792	49792	49792
Adj. R^2 (full model)	0.85	0.86	0.86	0.86	0.88	0.94
Adj. R^2 (proj model)	0.13	0.18	0.18	0.22	0.34	0.33

Dependent variable is percentage of population sheltering in place. All models include state and week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week. 'Republican per.' is the vote share for Republicans in the 2016 presidential election, and 'Order x Rep. Per.' stands for the interaction effect of stay-at-home orders and Republican vote share. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

Table 6: Governor and Partisan Effects (Sheltering Pct)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	0.17***	0.17***	0.17***	0.17***	0.16***	0.14***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
Republican Governor	−0.02	0.00	0.00	0.01	0.01	0.00
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Republican per.	−0.01	0.01	−0.08***	−0.07***	−0.01	−0.06***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
Order x Republican Gov.	−0.04	−0.04	−0.04	−0.04*	−0.04*	−0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
Order x Rep. per.	−0.21***	−0.21***	−0.21***	−0.21***	−0.20***	−0.21***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Rep. Gov x Rep. per.	−0.01	−0.02	−0.02	−0.02	−0.02	−0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)
Order x Rep. Gov. x Rep. per.	0.06*	0.07**	0.07*	0.08**	0.07**	0.03
	(0.04)	(0.03)	(0.04)	(0.04)	(0.03)	(0.03)
Income p.c.		0.05***		0.00	0.00	0.01
		(0.01)		(0.01)	(0.00)	(0.01)
Unemployment		0.59***		0.60***	0.34***	0.43***
		(0.19)		(0.15)	(0.09)	(0.11)
Education		−0.01		0.04	0.06***	−0.00
		(0.03)		(0.03)	(0.02)	(0.03)
Rur.-Urb.		0.00**		−0.00**	−0.00***	0.00
		(0.00)		(0.00)	(0.00)	(0.00)
Pct Agr.		0.11**		0.05	−0.00	0.04
		(0.04)		(0.04)	(0.02)	(0.04)
Pct Manuf.		−0.03		−0.09***	−0.05***	−0.07*
		(0.04)		(0.03)	(0.01)	(0.04)
Pct Serv.		0.07**		−0.04**	−0.03***	−0.00
		(0.03)		(0.02)	(0.01)	(0.02)
Pct over 65			0.20***	0.19***	0.08***	0.13***
			(0.04)	(0.03)	(0.02)	(0.03)
Pop. Dens.			−0.00*	−0.00	0.00	0.01**
			(0.00)	(0.00)	(0.00)	(0.00)
Pct White			0.03**	0.05***	0.02***	0.07***
			(0.01)	(0.01)	(0.00)	(0.01)
Pct Black			−0.06***	−0.06***	−0.02***	−0.01
			(0.02)	(0.02)	(0.01)	(0.01)
Pct Asian			0.03	−0.00	0.03	−0.04*
			(0.09)	(0.06)	(0.04)	(0.02)
Shelter 2019					0.52***	
					(0.03)	
Num. obs.	49776	49776	49776	49776	49776	49776

Dependent variable is percentage of population sheltering in place. All models include week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week, 'Republican Governor' if 1 if a state is governed by a Republican, and 'Republican per.' stands for Republican vote share in the 2016 presidential election. Rows 4 through 6 capture the two-way interaction effects of these three variables, and Row 7 the triple interaction effect. Adj. R^2 is omitted to save space. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

Table 7: Social Capital Effects (Sheltering Pct)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	0.03***	0.03***	0.03***	0.03***	0.03***	0.05***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Social Capital	0.00	−0.00	0.00	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Order x Soc. Cap.	0.00	0.00	0.00	0.00	0.01**	0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Income p.c.		0.02***		0.00	0.00	0.00
		(0.01)		(0.01)	(0.00)	(0.01)
Unemployment		0.59***		0.49***	0.30***	0.30***
		(0.11)		(0.10)	(0.06)	(0.11)
Education		0.04**		0.08***	0.07***	0.06***
		(0.01)		(0.01)	(0.01)	(0.01)
Rur.-Urb.		0.00		−0.00***	−0.00***	−0.00
		(0.00)		(0.00)	(0.00)	(0.00)
Pct Agr.		0.06		0.00	−0.01	−0.00
		(0.04)		(0.04)	(0.03)	(0.03)
Pct Manuf.		−0.05**		−0.06***	−0.03***	−0.07***
		(0.02)		(0.02)	(0.01)	(0.02)
Pct Serv.		0.02		−0.02	−0.02**	0.01
		(0.02)		(0.02)	(0.01)	(0.02)
Pct over 65			0.23***	0.25***	0.11***	0.15***
			(0.03)	(0.03)	(0.02)	(0.03)
Pop. Dens.			0.00	−0.00*	0.00	0.00
			(0.00)	(0.00)	(0.00)	(0.00)
Pct White			−0.02**	−0.02	−0.01	−0.01
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Black			−0.00	−0.01	−0.01	0.01
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Asian			0.17**	0.18**	0.14***	0.05**
			(0.07)	(0.08)	(0.04)	(0.02)
Shelter 2019					0.48***	
					(0.03)	
Num. obs.	47232	47232	47232	47232	47232	47232
Adj. R^2 (full model)	0.84	0.85	0.85	0.85	0.88	0.92
Adj. R^2 (proj model)	0.03	0.08	0.08	0.12	0.26	0.15

Dependent variable is percentage of population sheltering in place. All models include state and week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week, 'Social Capital' is measured by the JEC Social Capital Index, and 'Order x Soc. Cap.' reports the interaction effect of stay-at-home orders and social capital. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

Table 8: Social Capital and Partisan Effects (Sheltering Pct)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	0.16***	0.16***	0.16***	0.16***	0.16***	0.16***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Social Capital	−0.01**	−0.01	−0.01***	−0.01***	−0.01***	−0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Republican Per	0.00	0.01	−0.04***	−0.02**	−0.00	−0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Order x Soc. Cap.	0.04***	0.04***	0.04***	0.04***	0.04***	0.02**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Order x Rep.	−0.21***	−0.21***	−0.20***	−0.20***	−0.20***	−0.24***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Soc. Cap. x Rep.	0.02***	0.01*	0.01**	0.01**	0.01***	0.01**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
Order x Soc. Cap. x Rep.	−0.05***	−0.05***	−0.05***	−0.05***	−0.04***	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Income p.c.		0.02***		−0.00	0.00	0.00
		(0.01)		(0.01)	(0.00)	(0.01)
Unemployment		0.57***		0.47***	0.29***	0.32***
		(0.12)		(0.09)	(0.06)	(0.12)
Education		0.01		0.05***	0.05***	0.04***
		(0.02)		(0.01)	(0.01)	(0.02)
Rur.-Urb.		0.00		−0.00***	−0.00***	−0.00
		(0.00)		(0.00)	(0.00)	(0.00)
Pct Agr.		0.04		0.01	−0.01	0.01
		(0.05)		(0.04)	(0.03)	(0.03)
Pct Manuf.		−0.06***		−0.07***	−0.04***	−0.08***
		(0.02)		(0.02)	(0.01)	(0.02)
Pct Serv.		0.01		−0.04***	−0.03***	−0.04**
		(0.02)		(0.02)	(0.01)	(0.02)
Pct over 65			0.21***	0.22***	0.10***	0.13***
			(0.03)	(0.02)	(0.01)	(0.03)
Pop. Dens.			−0.00	−0.00*	0.00	0.00
			(0.00)	(0.00)	(0.00)	(0.00)
Pct White			0.02**	0.02*	0.02***	0.03*
			(0.01)	(0.01)	(0.01)	(0.02)
Pct Black			−0.02	−0.02	−0.01	0.00
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Asian			0.12	0.12*	0.10**	0.05**
			(0.08)	(0.07)	(0.04)	(0.02)
Shelter 2019					0.45***	
					(0.03)	
Num. obs.	46912	46912	46912	46912	46912	46912

Dependent variable is percentage of population sheltering in place. All models include state and week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week, 'Social Capital' is measured by the JEC Social Capital Index, 'Republican Per.' stands for Republican vote share in the 2016 presidential election. The two-way interaction effects of these three variables are reported in Rows 4 through 6, Row 7 reports the triple interaction effect. Adj. R^2 is omitted to save space. *** p $<$ 0.01,** p $<$ 0.05,* p $<$ 0.1.

Table 9: Vaccination Effects (Sheltering Pct)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	−0.07***	−0.07***	−0.07***	−0.07***	−0.07***	−0.07***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)
Vaccination Per.	−0.07***	−0.07***	−0.06***	−0.06***	−0.05***	−0.09***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)
Order x Vacc. per.	0.24***	0.24***	0.24***	0.24***	0.24***	0.25***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.05)
Income p.c.		0.02***		−0.00	0.00	0.00
		(0.01)		(0.01)	(0.00)	(0.01)
Unemployment		0.62***		0.51***	0.32***	0.32***
		(0.11)		(0.10)	(0.07)	(0.10)
Education		0.05***		0.10***	0.09***	0.07***
		(0.01)		(0.01)	(0.01)	(0.02)
Rur.-Urb.		0.00		−0.00***	−0.00***	−0.00
		(0.00)		(0.00)	(0.00)	(0.00)
Pct Agr.		0.06		0.02	−0.01	0.00
		(0.04)		(0.04)	(0.02)	(0.03)
Pct Manuf.		−0.06***		−0.06***	−0.04***	−0.06***
		(0.02)		(0.02)	(0.01)	(0.02)
Pct Serv.		0.02		−0.02	−0.01	0.02
		(0.02)		(0.01)	(0.01)	(0.02)
Pct over 65			0.21***	0.22***	0.10***	0.15***
			(0.03)	(0.03)	(0.02)	(0.04)
Pop. Dens.			0.00	−0.00*	−0.00	0.00
			(0.00)	(0.00)	(0.00)	(0.00)
Pct White			−0.02*	−0.02	−0.01	−0.00
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Black			−0.00	−0.01	−0.01	0.01
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Asian			0.16*	0.07	0.08**	0.05*
			(0.10)	(0.06)	(0.03)	(0.03)
Shelter 2019					0.45***	
					(0.02)	
Num. obs.	50016	50016	50016	50016	50016	50016
Adj. R^2 (full model)	0.84	0.85	0.85	0.86	0.88	0.92
Adj. R^2 (proj model)	0.09	0.15	0.13	0.18	0.31	0.18

Dependent variable is percentage of population sheltering in place. All models include state and week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week. 'Vaccination per.' is the influenza vaccination rate amongst Medicaid recipients, and 'Order x Vacc. per.' stands for the interaction effect of stay-at-home orders and vaccination rate. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

Table 10: Turnout Effects (Sheltering Pct)

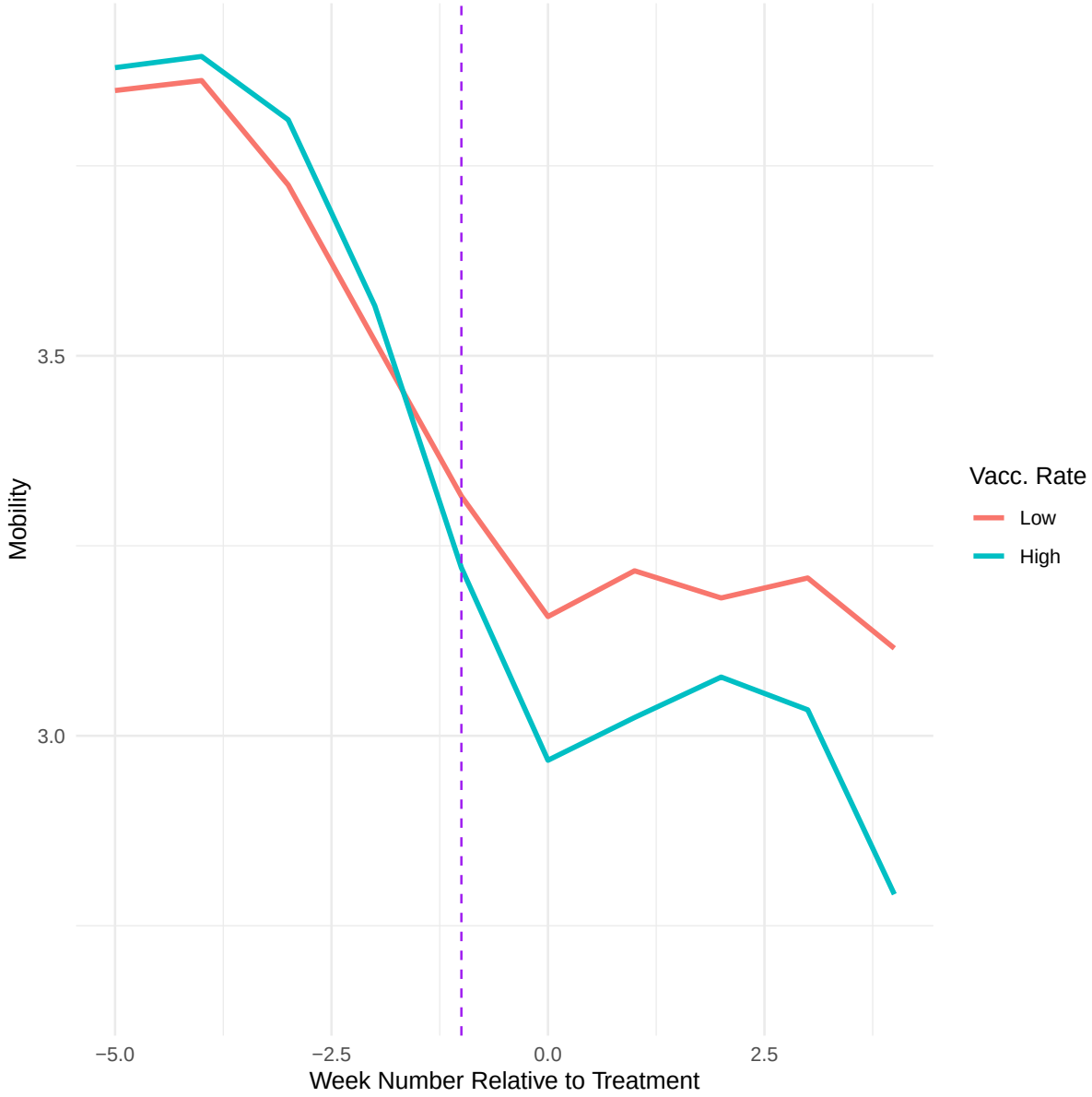
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	−0.04**	−0.04**	−0.04**	−0.04**	−0.04**	−0.08**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.04)
Turnout per.	0.04***	0.02	0.02	−0.01	−0.00	−0.05***
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Order x Turnout per.	0.12***	0.13***	0.13***	0.13***	0.12***	0.21***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.06)
Income p.c.		0.01		−0.01	−0.00	0.01
		(0.01)		(0.01)	(0.00)	(0.01)
Unemployment		0.56***		0.50***	0.30***	0.32***
		(0.11)		(0.10)	(0.06)	(0.11)
Education		0.04***		0.08***	0.07***	0.06***
		(0.01)		(0.01)	(0.01)	(0.01)
Rur.-Urb.		0.00		−0.00***	−0.00***	−0.00
		(0.00)		(0.00)	(0.00)	(0.00)
Pct Agr.		0.06		0.02	−0.00	0.00
		(0.04)		(0.04)	(0.02)	(0.03)
Pct Manuf.		−0.05**		−0.06***	−0.04***	−0.07***
		(0.02)		(0.02)	(0.01)	(0.02)
Pct Serv.		0.02		−0.02	−0.01	0.01
		(0.02)		(0.01)	(0.01)	(0.02)
Pct over 65			0.20***	0.22***	0.10***	0.15***
			(0.03)	(0.02)	(0.02)	(0.03)
Pop. Dens.			0.00	−0.00**	−0.00	0.00
			(0.00)	(0.00)	(0.00)	(0.00)
Pct White			−0.03**	−0.02*	−0.01	−0.01
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Black			−0.01	−0.01	−0.01	0.02
			(0.01)	(0.01)	(0.01)	(0.01)
Pct Asian			0.15**	0.18**	0.14***	0.05*
			(0.07)	(0.08)	(0.04)	(0.03)
Shelter 2019					0.45***	
					(0.03)	
Num. obs.	49584	49584	49584	49584	49584	49584
Adj. R^2 (full model)	0.83	0.84	0.84	0.85	0.87	0.92
Adj. R^2 (proj model)	0.06	0.11	0.10	0.14	0.27	0.18

Dependent variable is percentage of population sheltering in place. All models include state and week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week, 'Turnout per.' is measured based on the 2012 and 2016 turnout rates, and 'Order x Turnout per.' reports the interaction effect of stay-at-home orders and turnout. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

5 Alternative Measure of Mistrust of Science (Vaccination Rates)

Figure 7 presents mobility trends before and after stay-at-home orders were implemented, by our alternative measures of mistrust in science (i.e., vaccination rates).

Figure 7: Mobility Trends by Vaccination Rate

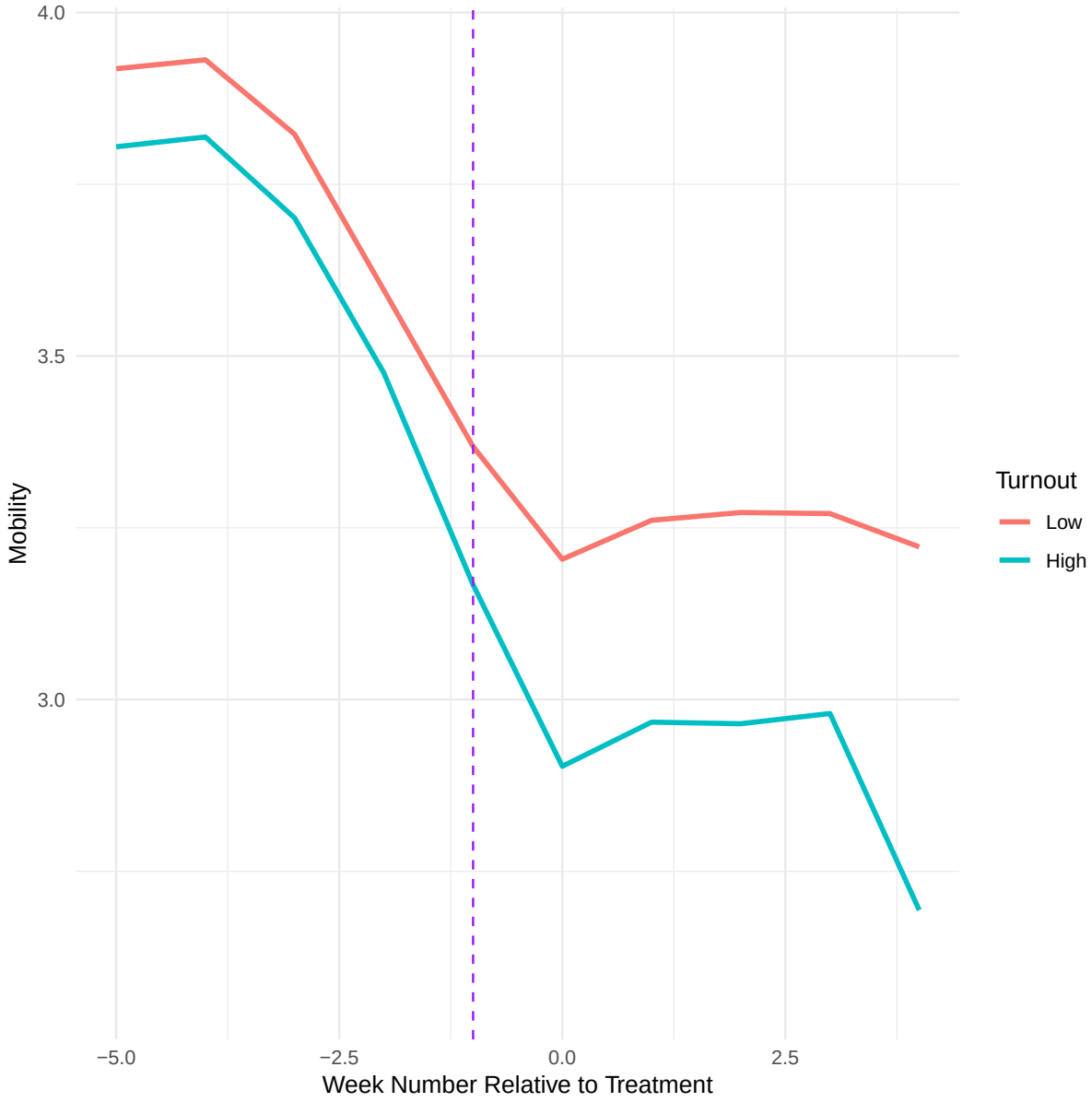


Mobility trends as measured by CMI for counties with high and low vaccination rates respectively, where the sample was split at the median vaccination rate. The dashed line marks the last pre-treatment week.

6 Alternative Measure of Social Trust (Turnout)

Figure 8 presents mobility trends before and after stay-at-home orders were implemented, by our alternative measures of social trust (i.e., turnout). Table 11 presents regression results of the effects of stay-at-home orders on mobility (as measured by the CMI) by election turnout.

Figure 8: Mobility Trends by Turnout



Mobility trends as measured by CMI for counties with high and low turnout rates respectively, where the sample was split at the median turnout rate. Turnout measured based on 2012 and 2016 presidential election. The dashed line marks the last pre-treatment week.

Table 11: Stay-at-Home Order Effects by Turnout

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Order	0.62***	0.61***	0.61***	0.60***	0.64***	1.05**
	(0.13)	(0.13)	(0.13)	(0.13)	(0.12)	(0.49)
Turnout per.	−0.06	0.41***	−0.03	0.46***	0.27***	0.79***
	(0.09)	(0.09)	(0.09)	(0.09)	(0.05)	(0.15)
Order x Turnout per.	−1.46***	−1.44***	−1.45***	−1.43***	−1.49***	−2.55***
	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.75)
Income p.c.		−0.00		0.02	−0.05*	−0.13**
		(0.06)		(0.04)	(0.03)	(0.05)
Unemployment		−1.82**		−1.24	−0.91**	−1.31**
		(0.81)		(0.83)	(0.42)	(0.64)
Education		−1.09***		−1.12***	−0.68***	−0.84***
		(0.14)		(0.14)	(0.07)	(0.11)
Rur.-Urb.		−0.01***		−0.01*	−0.00	−0.02***
		(0.00)		(0.00)	(0.00)	(0.01)
Pct Agr.		−0.94***		−0.67**	−0.11	−0.92***
		(0.29)		(0.31)	(0.17)	(0.23)
Pct Manuf.		0.14		0.22	0.18**	0.23*
		(0.20)		(0.13)	(0.07)	(0.13)
Pct Serv.		−0.48***		−0.28***	−0.02	−0.50***
		(0.13)		(0.11)	(0.06)	(0.16)
Pct over 65			−1.27***	−1.43***	−0.61***	−0.84***
			(0.20)	(0.20)	(0.12)	(0.15)
Pop. Dens.			−0.01	0.01	−0.00	−0.02
			(0.01)	(0.01)	(0.01)	(0.02)
Pct White			0.43***	0.41***	0.22***	0.38***
			(0.09)	(0.10)	(0.06)	(0.05)
Pct Black			0.39***	0.37***	0.19***	0.19**
			(0.11)	(0.10)	(0.06)	(0.08)
Pct Asian			−2.73***	−1.69***	−1.22***	−0.68***
			(0.82)	(0.53)	(0.27)	(0.12)
CMI 2019					0.53***	
					(0.02)	
Num. obs.	49584	49584	49584	49584	49584	49584
Adj. R^2 (full model)	0.70	0.73	0.72	0.75	0.80	0.83
Adj. R^2 (proj model)	0.07	0.18	0.14	0.22	0.39	0.32

Dependent variable is mobility, measured by CMI. All models include state and week fixed effects. Model 6 is weighted by population. Standard errors are clustered by state. 'Order' captures whether a stay-at-home order was in place in a given county in a given week, 'Turnout per.' is measured based on the 2012 and 2016 turnout rates, and 'Order x Turnout per.' reports the interaction effect of stay-at-home orders and turnout. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

7 Further Sensitivity Analysis and Effect Decomposition

7.1 Sensitivity Analysis of Rural-Urban Differences

Table 12 replicates our main results for stay-at-home orders, partisanship, and social capital, splitting the sample into urban and rural counties. We find that there is some heterogeneity in the effect magnitudes, yet they appear to be significant for urban and rural counties alike.

Table 12: Sensitivity of Results to Rural-Urban Differences

	Rural	Urban	Rural	Urban	Rural	Urban
Order	-0.11^{*}	-0.30^{***}	-0.65^{***}	-1.08^{***}	-0.12^{*}	-0.33^{***}
	(0.06)	(0.05)	(0.17)	(0.13)	(0.06)	(0.05)
Pct over 65	-1.43^{***}	-1.11^{***}	-1.34^{***}	-1.03^{***}	-1.43^{***}	-1.04^{***}
	(0.34)	(0.16)	(0.32)	(0.16)	(0.36)	(0.17)
Pop. Dens.	0.09^{***}	-0.03^{**}	0.09^{***}	-0.03^{**}	0.10^{***}	-0.02^{*}
	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
Income p.c.	0.16^{**}	0.06	0.17^{**}	0.05	0.12	-0.03
	(0.08)	(0.06)	(0.08)	(0.05)	(0.08)	(0.03)
Unemployment	-2.10^{*}	-0.96	-1.16	-0.98	-2.69^{**}	-0.71
	(1.08)	(0.63)	(0.84)	(0.62)	(1.15)	(0.51)
Education	-0.83^{***}	-1.04^{***}	-0.75^{***}	-0.93^{***}	-0.94^{***}	-1.05^{***}
	(0.23)	(0.14)	(0.24)	(0.12)	(0.21)	(0.11)
Pct White	0.20	0.43^{***}	0.09	0.32^{***}	0.15	0.38^{***}
	(0.15)	(0.08)	(0.17)	(0.10)	(0.14)	(0.08)
Pct Black	0.46^{***}	0.40^{***}	0.31^{***}	0.42^{***}	0.47^{***}	0.45^{***}
	(0.14)	(0.07)	(0.10)	(0.07)	(0.15)	(0.07)
Pct Asian	-2.62^{***}	-0.88^{**}	-6.06^{***}	-0.81^{**}	-3.13^{***}	-1.04^{**}
	(0.49)	(0.39)	(1.61)	(0.39)	(0.38)	(0.42)
Rur.-Urb.	0.06^{***}	-0.02^{***}	0.06^{***}	-0.02^{***}	0.07^{***}	-0.02^{***}
	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
Pct Agr.	-0.40	-0.60	-0.44	-0.66	-0.40	-0.66
	(0.30)	(0.52)	(0.32)	(0.52)	(0.27)	(0.52)
Pct Manuf.	0.20	0.01	0.32^{**}	0.03	0.20	-0.02
	(0.18)	(0.12)	(0.15)	(0.12)	(0.20)	(0.12)
Pct Serv.	-0.31	-0.40^{***}	-0.45^{**}	-0.32^{***}	-0.20	-0.35^{***}
	(0.22)	(0.10)	(0.18)	(0.11)	(0.19)	(0.09)
Republican Per.			-0.14	-0.04		
			(0.12)	(0.08)		
Order x Rep. Per.			0.77^{***}	1.32^{***}		
			(0.20)	(0.18)		
Social Capital					0.02	0.06^{***}
					(0.01)	(0.01)
Order x Soc. Cap.					-0.04^{**}	-0.11^{***}
					(0.02)	(0.02)
Num. obs.	17232	33024	16832	32960	15136	32096
Adj. R^2 (full model)	0.72	0.77	0.73	0.79	0.75	0.78
Adj. R^2 (proj model)	0.13	0.25	0.16	0.35	0.15	0.27

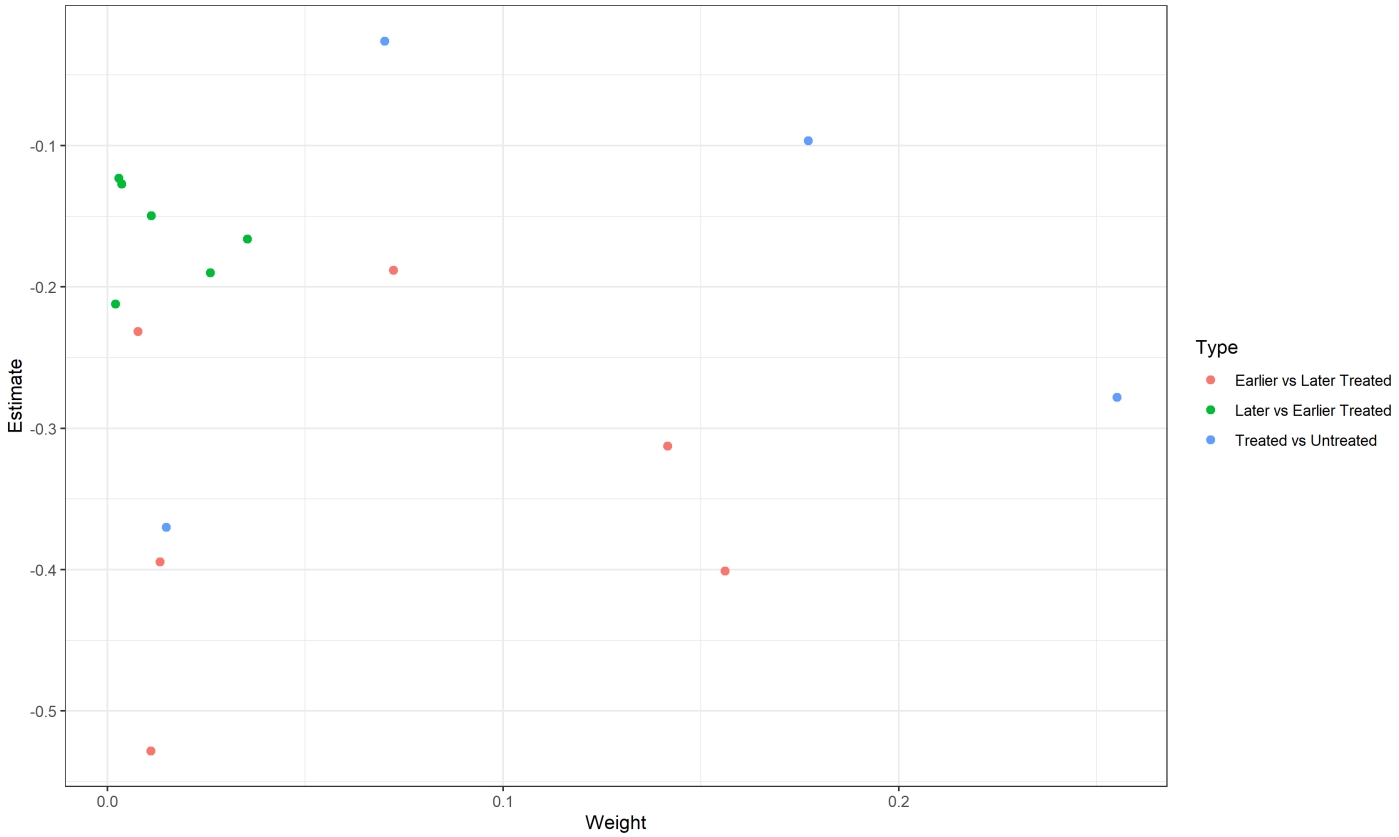
Dependent variable is mobility, measured by CMI. All models include state and week fixed effects. Model 1, Model 3, and Model 5 are regressions for our main results on the effect of stay-at-home orders, partisanship, and social capital respectively, run for the subset of rural counties; Model 2, Model 4, and Model 6 replicate these exercices for urban counties. Standard errors are clustered by state. Variable descriptions unchanged from the main results presented. *** $p < 0.01$,** $p < 0.05$,* $p < 0.1$.

7.2 Goodman-Bacon Treatment Effect Decomposition

Figure 9 provides a Goodman-Bacon Treatment Effect Decomposition (Goodman-Bacon 2018). In particular, Figure 9 illustrates the weight and the point estimates that the respective comparisons of counties in treated and never-treated states (blue), early and later-treated states (red), and later and early-treated states (green) yields, and that in their combination make up the total treatment effect presented in Table 1 of the main body (the baseline effects of stay-at-home orders).

Overall, 51% of the treatment effect comes from comparing treated to untreated units; the average point estimate of these comparisons is -0.18. Another 40% of the effect stems from the comparisons of early and later treated units, whose average point estimate is -0.33. Investigating the results of the decomposition more closely, we find that for our effect the comparison of counties in states treated in week 13 with counties in never-treated states gets the highest total weight with about 27%; the estimate that the comparison between these groups yields is about -0.27. The comparison groups with the next highest weights are counties in states treated in week 14 versus counties in never-treated states (18%), with a treatment effect of merely -0.09, counties in states treated in week 13 compared to counties in states treated in week 15, with weight 16% and a treatment effect of -0.4, and counties in states treated in week 14 compared to counties in states treated one week later in week 15. This last comparison group has a weight of 14% in the total treatment effect and an individual point estimate of -0.31. Notice that the largest compliance effect in our data is -0.52, and comes from comparing counties in California, which was the only state to be treated in week 12, with counties in states that were to be treated in week 15. However, as California counties make up only a small share of the total number of counties in our sample, the weight the generated estimate gets in our treatment effect is only about 1%.

Figure 9: Goodman-Bacon Treatment Effect Decomposition



Treatment effect decomposition based on Goodman-Bacon (2018). The red dots indicate the relative weights and the average effect sizes that the comparisons of earlier and later treated counties yield; the green dots represent the relative weights and average effect magnitudes from the comparison of later and earlier treated counties. The blue dots represent weights and average effect magnitudes when comparing treated counties vs never treated counties.

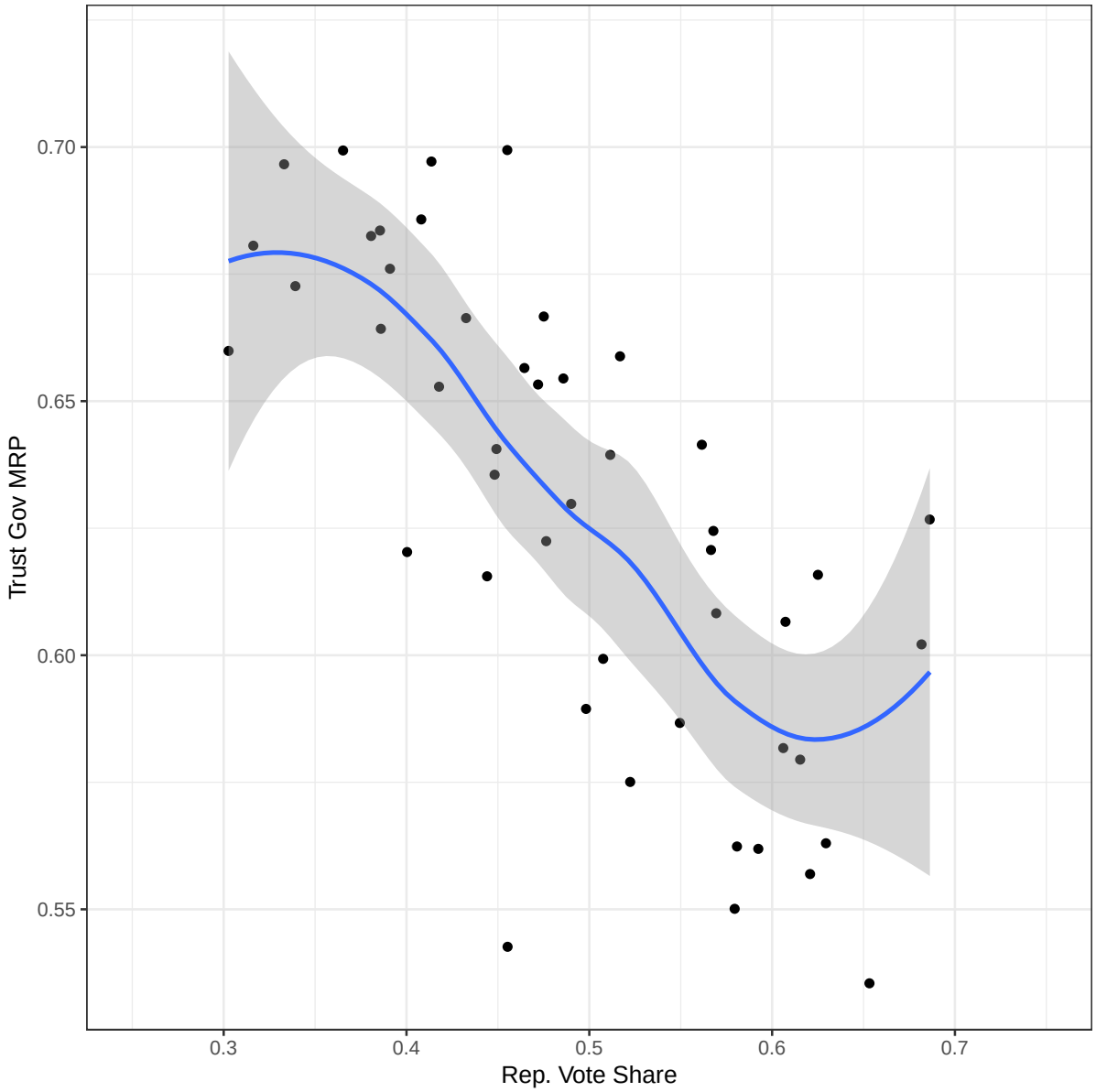
8 Multilevel Regression and Post-Stratification Analysis

Tables 7 and Table 8 in the main body rely on social trust and political trust variables constructed using Multilevel Regression and Post-Stratification (MRP) analysis. We next elaborate on construction of the MRP variables. First, we note that we rely heavily on the explanation and code provided by Kastellec et al. (2019). We built and expanded on their code provided on the website https://scholar.princeton.edu/sites/default/files/jkastellec/files/mrp_prime and utilize the census and state-level data provided in their replication files.

We ran an individual-level opinion model, using the ANES questions 'Generally speaking, how often can you trust other people?' and 'How many people running government are corrupt?' (ANES 2016) to generate social trust and political trust variables, respectively. Due to data limitations, states are our unit of analysis. This is because ANES does not include county-level identifiers for respondents. The individual-level opinion model takes sex by race, age by education, partisanship, ideology, and vote choice in the 2004 presidential elections as predictors, as well as state effects. The outcome variables (social trust and political trust) are coerced into a binary. We then create social trust and political trust predictions respectively for each corresponding cell in the census data. These cells are then weighted by relative frequencies by state, which then yields state-level social trust and political trust variables.

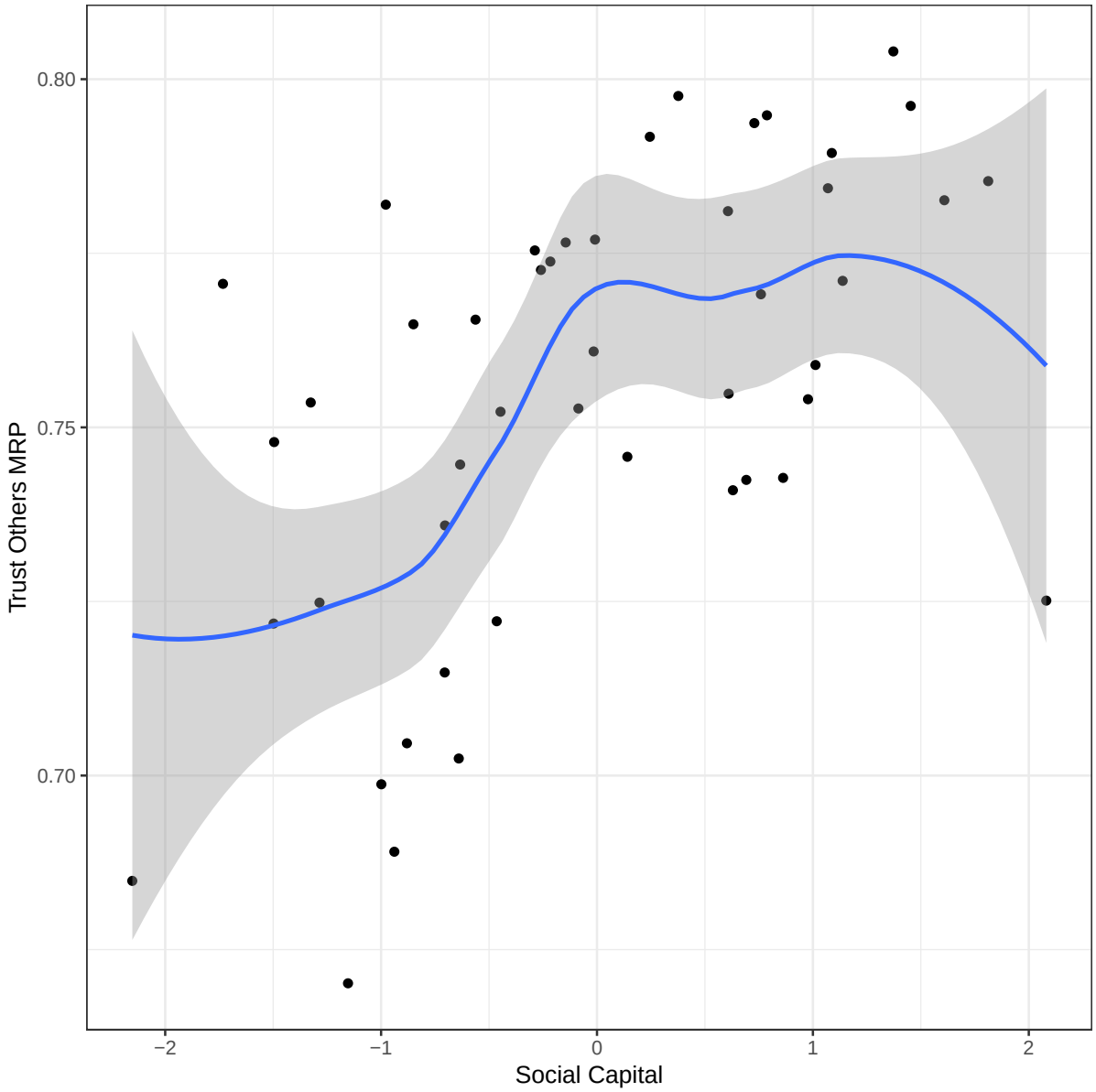
In addition, Figure 10 provides graphical evidence for the correlations of political trust, as measured by the MRP variable, and partisanship. Figure 11 presents the correlation between social trust, as measured by the MRP variable, and social capital.

Figure 10: Correlation between Political Trust (MRP Variable) and Partisanship



Correlation of political trust as measured by MRP on the state level and Republican vote share on the state-level. Political trust MRP was implemented based on the ANES question: "How many of the people running government are corrupt?" The scale has been reversed such that higher values stand for higher trust.

Figure 11: Correlation between Social Trust (MRP Variable) and Social Capital



Correlation of social trust as measured by MRP on the state level and social capital on the state-level. Social trust MRP was implemented based on the ANES question: "Generally speaking, how often can you trust other people?"

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