The Heterogeneous Effects of COVID-19 Lockdowns on Crime across the World

MC results with US cities NOT excluded after May 25th

Trajtenberg et al. (2024)

This version: June 03, 2024
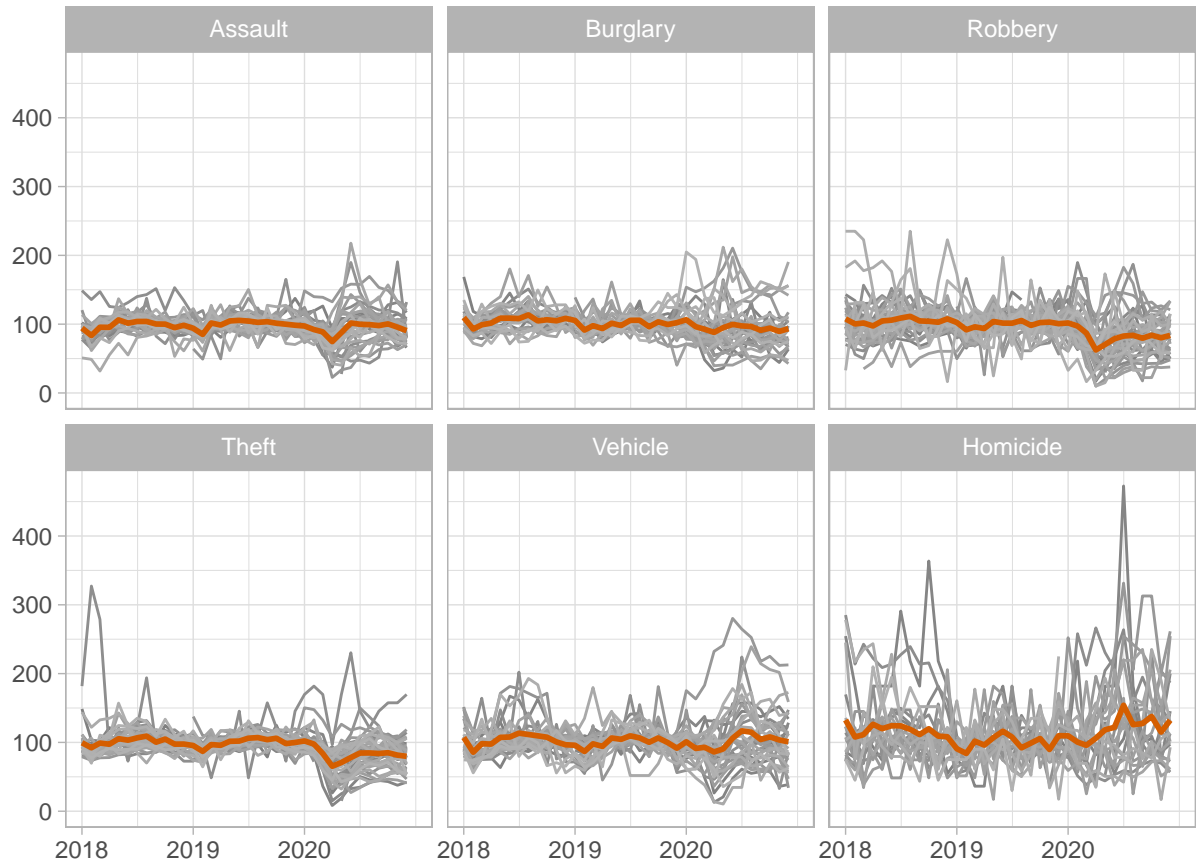
Main results

Crime and stay-at-home indexes

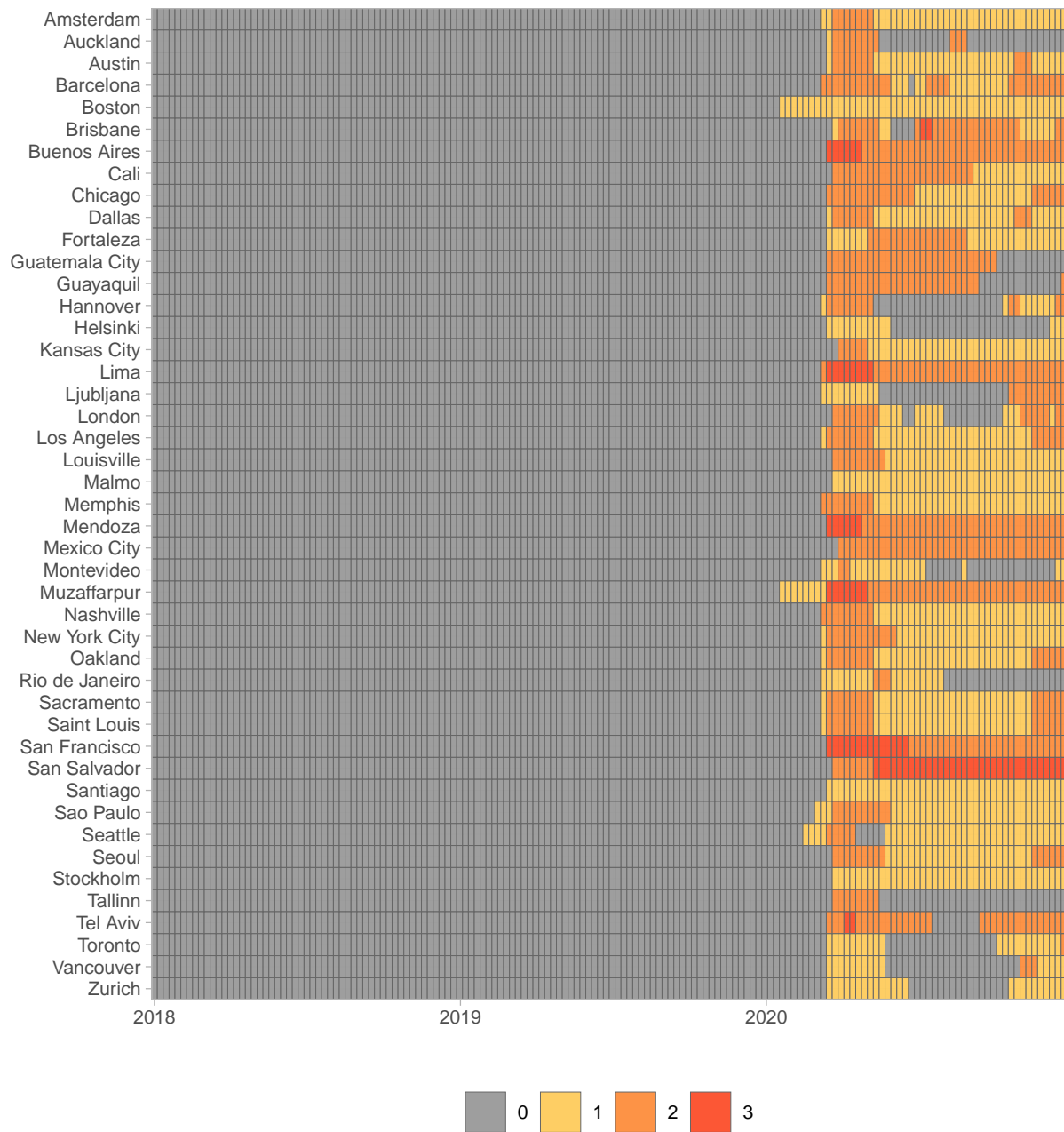Figure 1: Crime indexes (monthly).

Figure 2: Stay-at-home index (weekly).

Table 1: Estimated effects March/2020 - December/2020.

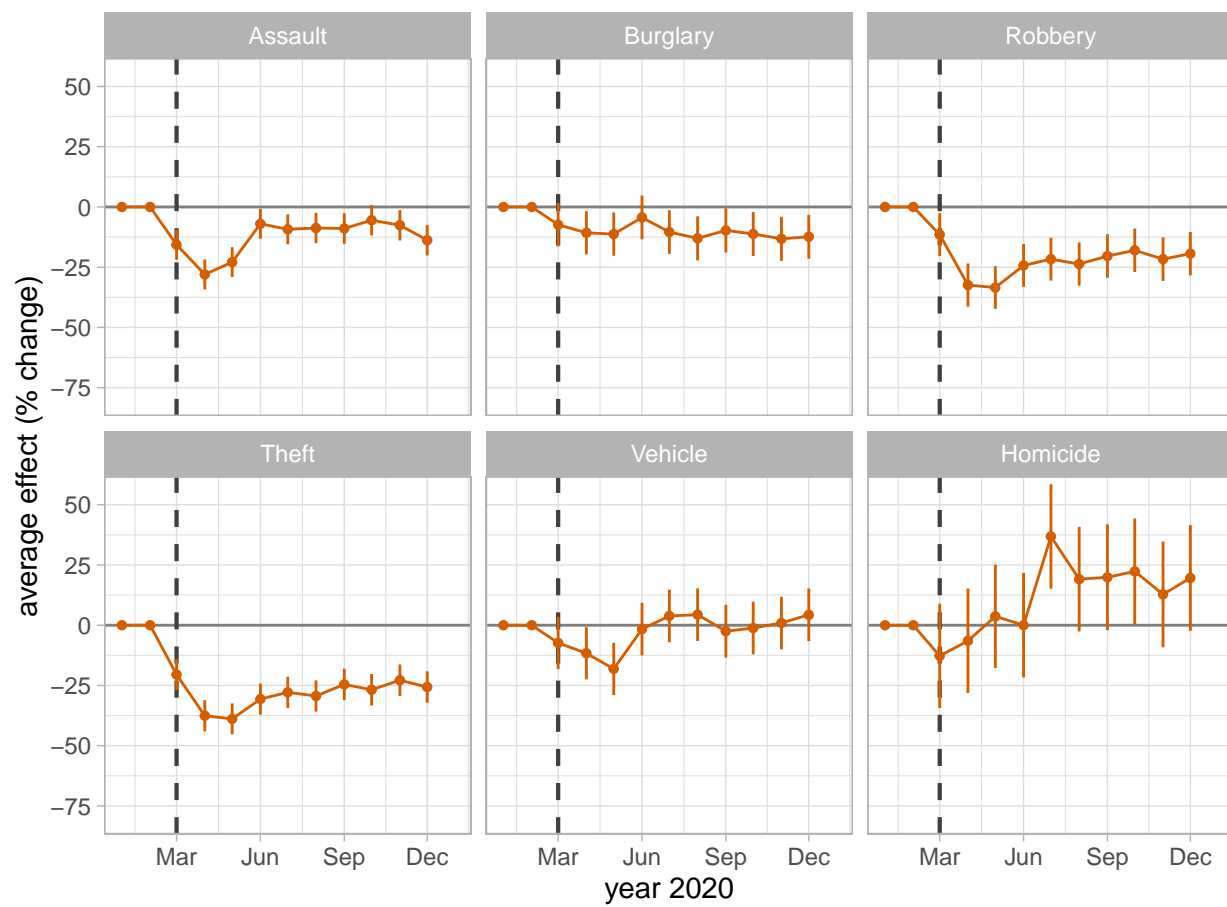|	Assault	Burglary	Robbery	Theft	Vehicle	Homicide
Treatment 1	−12.89	−10.34	−22.69	−28.52	−2.97	11.32
	2.74	5.25	4.81	3.29	4.74	5.55
	−18.44	−21.06	−32.40	−35.17	−12.63	−0.13
	−7.33	0.39	−12.99	−21.87	6.69	22.78
	0.00	0.06	0.00	0.00	0.54	0.05
Temperature	1.08	0.40	0.55	0.81	1.05	1.41
	0.15	0.19	0.20	0.11	0.28	0.39
	0.79	0.00	0.15	0.58	0.48	0.60
	1.38	0.80	0.95	1.03	1.61	2.22
	0.00	0.05	0.01	0.00	0.00	0.00
Rain	−0.02	0.01	0.00	0.00	0.01	0.04
	0.02	0.02	0.01	0.01	0.02	0.03
	−0.07	−0.03	−0.03	−0.02	−0.03	−0.03
	0.02	0.05	0.02	0.03	0.04	0.10
	0.30	0.48	0.82	0.96	0.75	0.25
Num.Obs.	1273	1026	1415	1397	1129	845
R2	0.304	0.291	0.314	0.439	0.274	0.260
R2 Adj.	0.274	0.258	0.285	0.416	0.241	0.223
RMSE	15.14	19.39	22.56	16.30	24.50	41.72
Std.Errors	by: city	by: city	by: city	by: city	by: city	by: city
FE: city	X	X	X	X	X	X
FE: year	X	X	X	X	X	X
FE: month	X	X	X	X	X	X

Impact of COVID-19 on crime

Figure 3: Average post effects, by month.
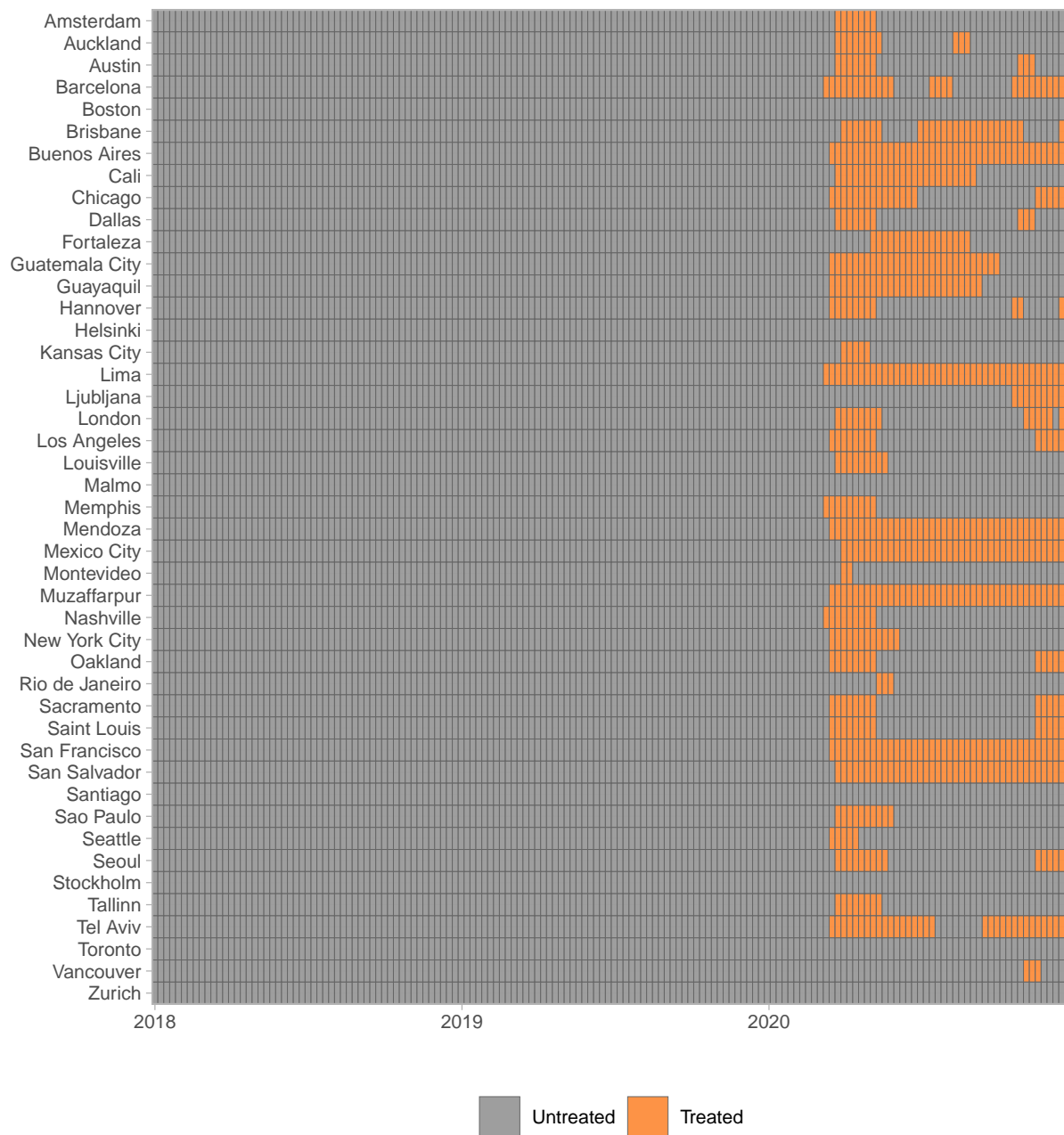
Impact of strict lockdowns on crime

Figure 4: Stay-at-home index (weekly): require not leaving house with exceptions for daily exercise, grocery shopping, and 'essential' trips.
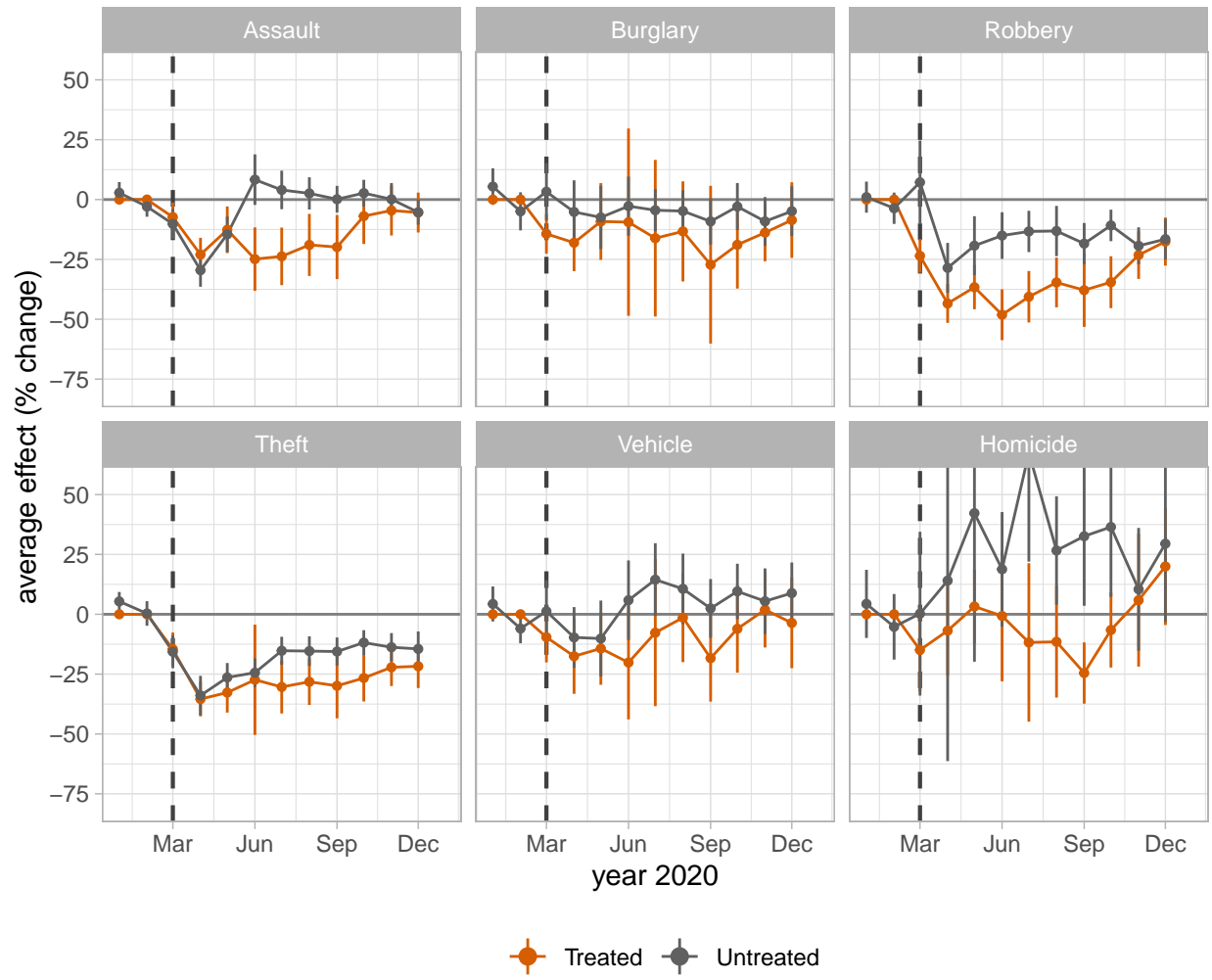
MC results

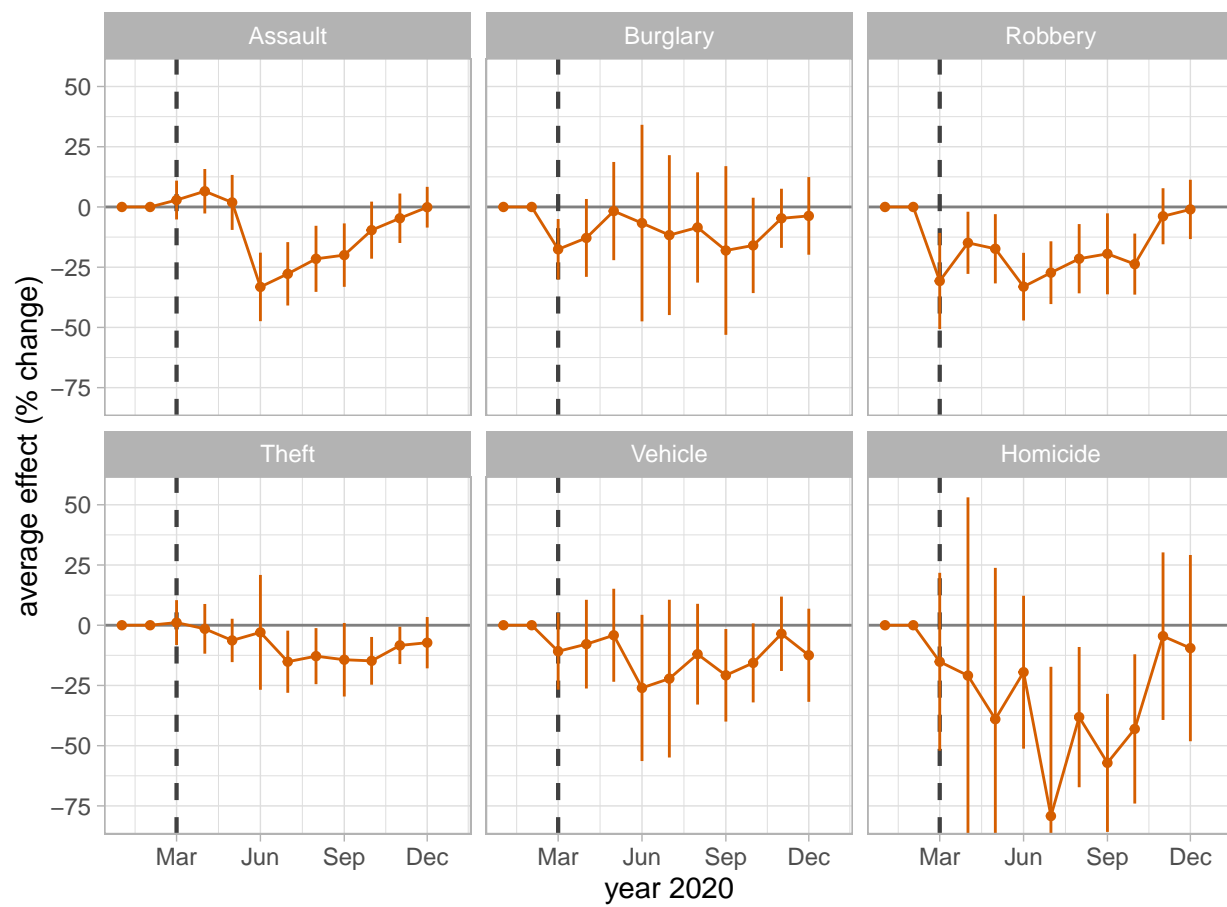Figure 5: Average post effects for each group of cities, by month.
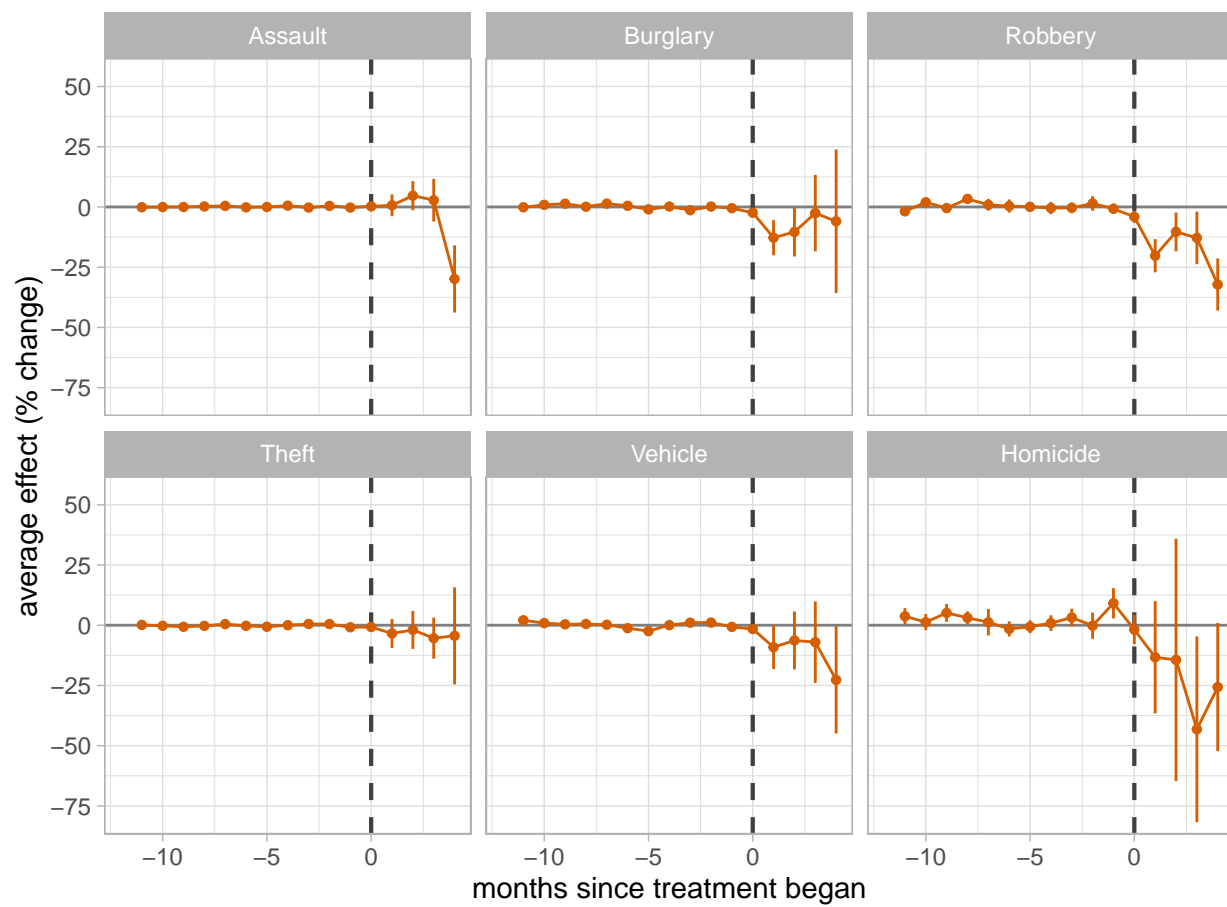
Figure 6: Average treatment effects, by month.

Figure 7: Average treatment effects relative to beginning of lockdown.

	Assault	Burglary	Robbery	Theft	Vehicle	Homicide
ATT.avg	-5.02	-9.65	-18.77	-6.33	-10.69	-29.35
S.E.	3.85	7.20	3.71	3.75	6.56	13.75
CI.lower	-11.36	-21.49	-24.88	-12.49	-21.48	-51.97
CI.upper	1.31	2.18	-12.67	-0.17	0.09	-6.73
p.value	0.19	0.18	0.00	0.09	0.10	0.03
Cities	38.00	31.00	42.00	41.00	33.00	25.00
Months	36.00	36.00	36.00	36.00	36.00	36.00

MC placebo tests

	Assault	Burglary	Robbery	Theft	Vehicle	Homicide
Coef	-1.24	-17.76	-5.35	1.02	2.14	-1.93
S.E.	3.13	7.21	4.72	2.15	6.18	11.42
CI.lower	-6.38	-29.61	-13.12	-2.51	-8.03	-20.70
CI.upper	3.90	-5.90	2.42	4.56	12.31	16.85
p.value	0.69	0.01	0.26	0.63	0.73	0.87
Cities	38.00	31.00	42.00	41.00	33.00	25.00
Months	36.00	36.00	36.00	36.00	36.00	36.00

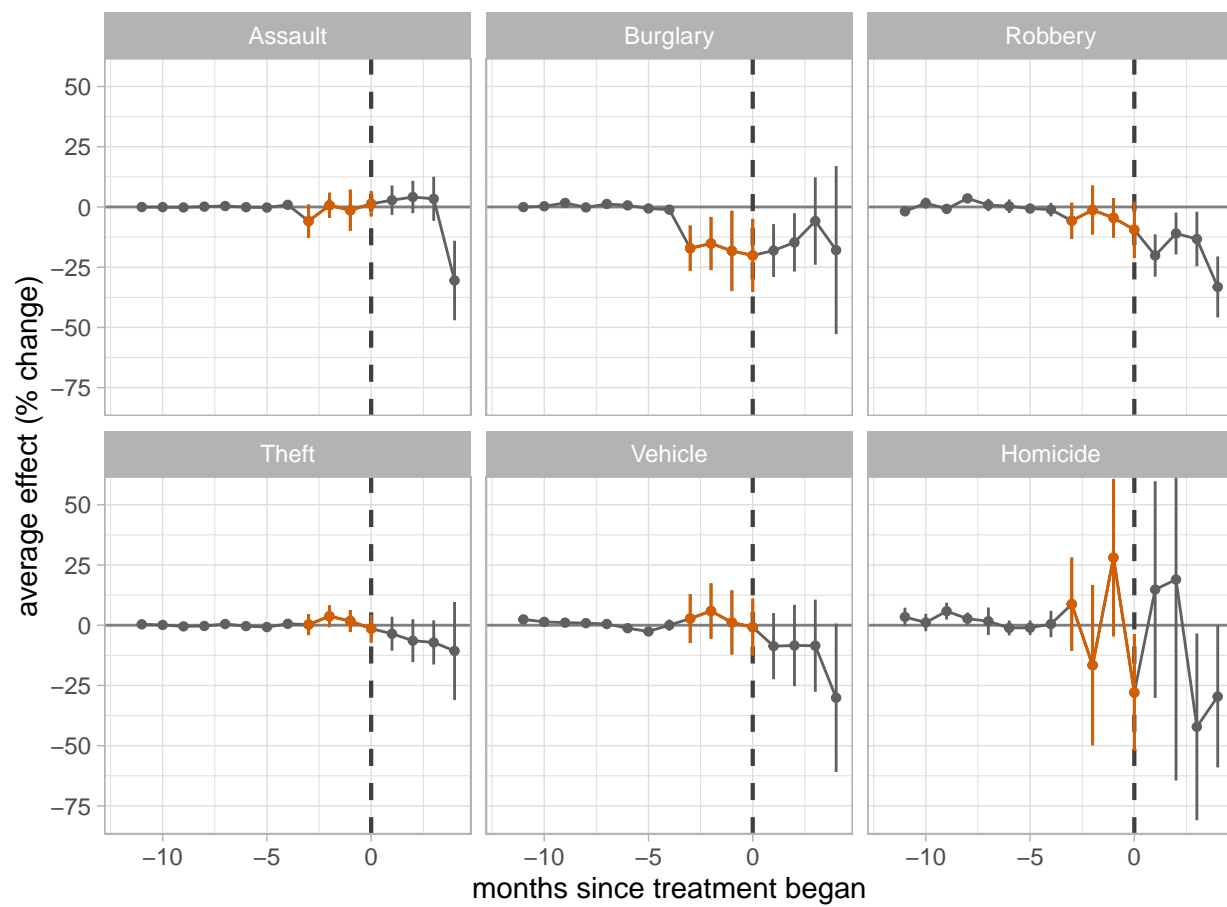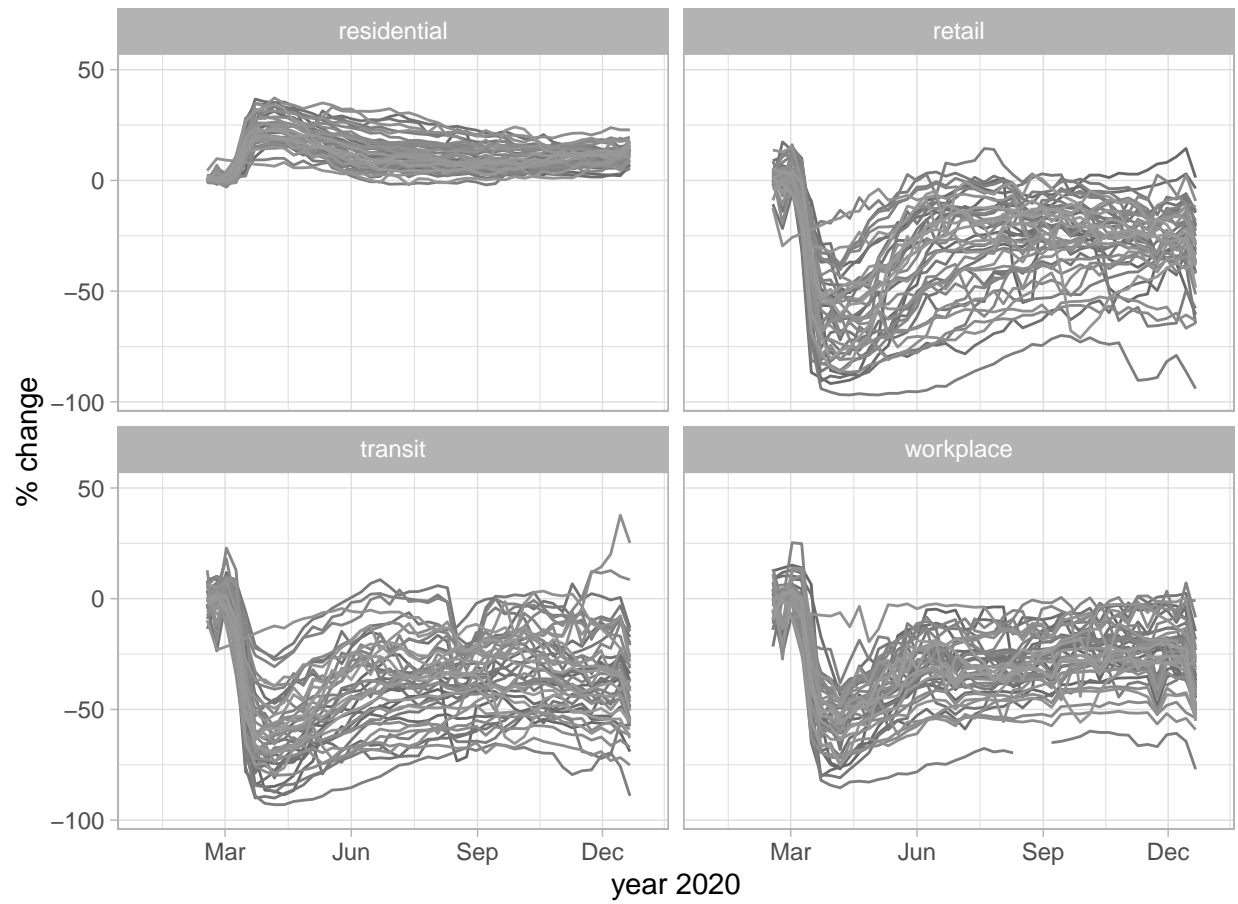Figure 8: Placebo plot.

Additional results

Mobility indexes

Figure 9: Google mobility indexes (weekly).

Table 2: Estimated effects of treatment on mobility.

	Residential	Retail	Transit	Workplace
Treatment 1	8.76	−25.39	−32.08	−24.01
	0.65	2.29	2.40	1.91
	0.00	0.00	0.00	0.00
Treatment 2	8.59	−22.79	−18.85	−15.54
	0.72	2.21	1.79	1.58
	0.00	0.00	0.00	0.00
Num.Obs.	1980	2025	2025	2022
R2	0.586	0.615	0.630	0.558
R2 Adj.	0.577	0.606	0.622	0.548
RMSE	5.15	14.93	13.96	12.35
Std.Errors	by: city	by: city	by: city	by: city
FE: city	X	X	X	X