

COLLECTIVE BARGAINING RIGHTS, POLICING, AND CIVILIAN DEATHS

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INTRODUCTION AND MOTIVATION

- ▶ Over 1,200 individuals are killed by law enforcement each year in the United States.
- ▶ Black men are 2.5 times more likely to be killed and Black women are 1.4 times more likely. (Edwards et al., 2019)
- ▶ Racial disparities in police killings have been linked to:
 - ▶ Black protest movements (Cunningham & Gillezeau, 2019)
 - ▶ Economic inequality (Jacob, 1998)
 - ▶ Political empowerment (Jacob, 1998)
 - ▶ Race of the responding police officer (Hoekstra & Sloan, 2020; Wright & Headley, 2020; Ba et.al., 2021)
- ▶ Economic history has an important role to play in understanding this situation as civilian deaths drastically escalate in the 1960s and 1970s.

INTRODUCTION AND MOTIVATION

- ▶ There has been concern raised over the ability to prosecute police officers for potentially unjustified killings of civilians, principally linked to:
 - Protections granted through police unions and their collective agreements
 - Law Enforcement Officers' Bills of Rights (LEOBRS) and other legal protections
 - A culture of mutual protection amongst officers
- ▶ Police unions provide:
 - Direct protection to officers, including legal and financial support
 - Political engagement (Kadlec, 2014) and the opportunity to drive legislative change
 - Professionalized communications support
- ▶ Lack of literature on police unions and misconduct linked to:
 - Endogeneity \implies unionization could be tied to police-community relations.
 - Police culture, spillover, and external validity in newly treated departments.

WHAT WE DO

- ▶ Our work examines the roll-out of collective bargaining rights for law enforcement in the United States through the 1960s and 1970s and how it shifts police behaviour.
- ▶ We are principally interested in whether access to collective bargaining and its associated protections, particularly the duty to bargain, drives any change in the number of civilians killed by the police.
- ▶ We focus on the race of the decedent and also consider what underlying dynamics may influence any such change, including: total crime, types of crime, police employment, and officers killed in the line of duty.

PREVIEW OF FINDINGS

- Our preliminary results indicate that:

- Exposure to collective bargaining rights increases police killings of non-white civilians by approximately 70 percent above baseline levels in the medium and long run.
 - This can explain approximately 10 percent of non-white civilian deaths by law enforcement from the 1960s through the 1980s.
 - There is no change in killings of white civilians.
 - No impact on total crime, violent crime, and officers killed, however, we do find suggestive evidence of lower levels of police per capita.
 - Effects are greatest in counties where unions are actually formed by the 1980s, but there is evidence of threat effects in non-union counties.

THE HISTORY OF POLICE UNION FORMATION

- ▶ The earliest attempts for police to organize began in the late 1800s (Levine, 1988).
- ▶ The first AFL charter was in Cleveland in 1897. By 1919, nearly 40 police unions were certified (Kearney and Carnevale, 2001).
- ▶ These unions were broken after WWI as part of a general anti-labor crackdown and in response to the Boston Police Strike of 1919.
- ▶ While AFL unions are eliminated, fraternal orders and benevolent associations survive the interwar period.

THE HISTORY OF POLICE UNION FORMATION

- ▶ Police gained bargaining rights when other public sector workers gained bargaining rights. Establishing A Union
- ▶ Successful organizing begins in the 1960s when officers face a number of new challenges:
 - ▶ Uprisings in urban areas.
 - ▶ Rising crime rates.
 - ▶ Calls for community civilian review boards and external oversight.
 - ▶ Changing legal environment surrounding policing.
- ▶ Today, police, along with teachers and core public sector workers, have the highest levels of union membership in the United States.

POLICE UNIONS IN PRACTICE

- ▶ Under the Duty of Fair Representation, police unions, as with all unions, are required to offer the best possible protections to all members of the bargaining unit.
- ▶ In the event of a death they will:
 - Pay for and facilitate legal representation
 - Meet with their member in advance of making a report
 - Potentially facilitate a “huddling” of officers
 - Implement procedural protections during interrogations
- ▶ Rushin (2016) identifies a range of contractual protections that may limit accountability in interrogations, disciplinary records, investigation timing, and civilian oversight.
- ▶ Police unions will frequently come to the public defense of officers to prevent or delay charges.

EVIDENCE ON THE IMPACTS OF POLICE UNIONS

- ▶ Police unions increase pay, improve benefits, and reduce the work week (Bartel and Lewin, 1981; Trejo, 1991; Frandsen, 2016; Brunner and Ju, 2019).
 - Impact on employment is ambiguous - more than likely a weak negative effect.
 - Benefits spillover to non-union departments (Ichniowski et al. 1989).
- ▶ Collective bargaining influences police behavior.
 - More arrests and lower crime when police unions win in arbitration compared to when they lose (Mas, 2006).
 - NYPD work slowdown in 1997 resulted in less ticketing and increased crime (Chandrasekher, 2016).

WHAT ARE THE EXPECTED EFFECTS OF COLLECTIVE BARGAINING RIGHTS ON POLICE USE OF LETHAL FORCE?

- ▶ Accountability Channel

$\uparrow\uparrow$ bargaining power $\implies \downarrow$ disciplinary action for misconduct $\implies \uparrow$ the marginal decision to shoot — especially in uncertain circumstances $\implies \uparrow$ police-related civilian fatalities

- ▶ Efficiency Wages

Union formation $\implies \uparrow$ wages $\implies \uparrow$ cost of a mistake $\implies \downarrow$ the marginal decision to shoot $\implies \downarrow$ police-related civilian fatalities

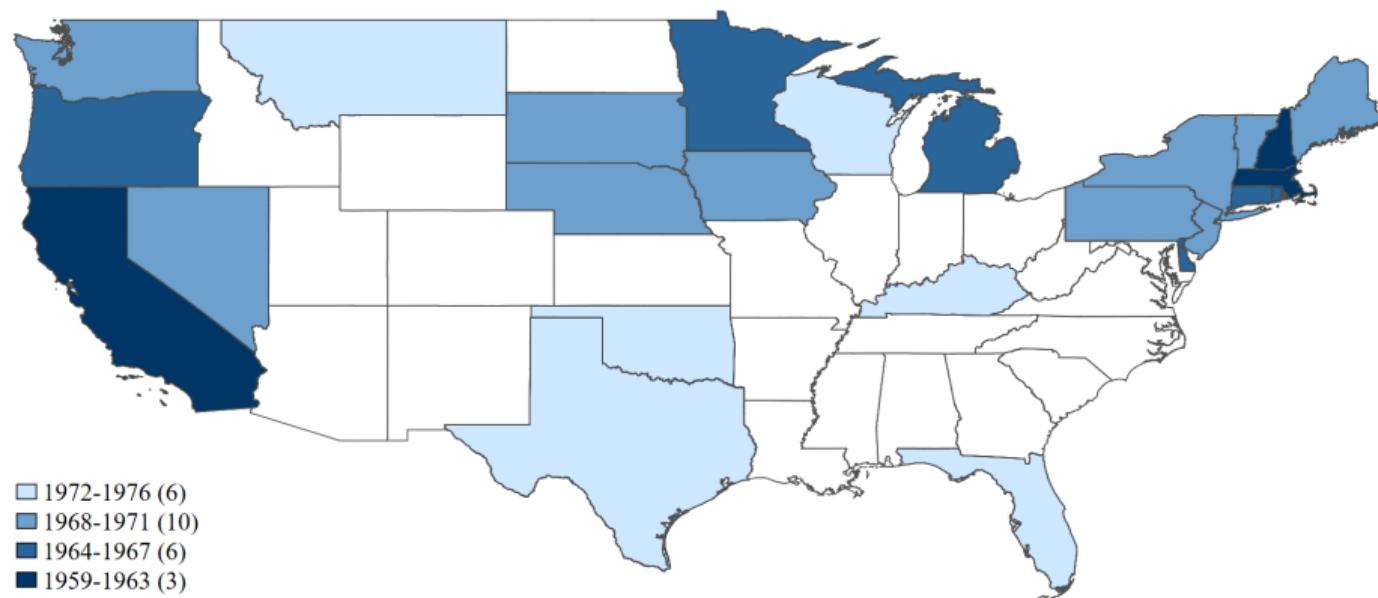
- ▶ Overall Expected Effect

Ambiguous effect on police-related civilian fatalities.

THE DATA

- ▶ Civilian deaths by law enforcement are calculated from the 1959-1988 Vital Statistics Multiple-Cause of Death Files. Deaths Over Time
- ▶ Bargaining rights data are from the NBER Collective Bargaining Law Data Set (Freeman & Valletta 1988).
- ▶ Crime and police employment are taken from the FBI's Uniform Crime Reporting dataset.
- ▶ Demographics are from the County and City Data Book (1944-1977).

THE DATA: INTRODUCTION OF DUTY TO BARGAIN PROVISIONS



THE DATA: CAVEATS ON POLICE KILLINGS DATA

- ▶ Vital Statistics data grossly under-count the number of deaths due to legal intervention (Sherman & Langworthy, 1979; Fyfe, 2002; Loftin et al., 2003). Comparison
 - Government collected data accounts for roughly 50 percent of the police-involved deaths in other non-governmental sources of police killings (Barber et al, 2016; Feldman et al. 2016).
- ▶ One way to proceed with Vital Statistics data is to assume that measurement error in the dependent variable is captured by the error term in the regression and will not bias our estimates.
- ▶ This relies on the assumption that the recording of deaths due to policing over time is exogenous to the treatment.
 - This is a strong assumption. It is possible that policy parameters are associated with unionization
 ⇒ changes how local municipalities record deaths due to policing.
 - However, it is unclear if this would lead to an increase or decrease in reporting.

SUMMARY STATISTICS

Full Sample				
	All Counties	Treatment Group	Control Group	T-Test of Differences
Population	57,996	73,963	43,875	<0.01
Population Per Square Mile	218.6	286.22	158.79	0.34
Median Income, White	7,908.85	7,948.04	7,874.18	0.42
Median Income, Black	2,498.29	2,081.64	2,866.77	<0.01
Public Assistant Recipients	2,334.09	2,873.95	1,856.66	<0.05
% of Families with Income <\$3,000	35.62	31.65	39.13	<0.01
% of the Population using Public Transportation	1.74	1.78	1.71	0.62
% of the Civilian Labor Force, Unemployed	5.18	5.19	5.16	0.71
% of the Population, Non-White	9.78	4.08	14.82	<0.01
% of Homes Owner Occupied, Non-White	26.21	19.55	32.1	<0.01
Total Crime, Per 100,000 Residents	799.74	845.85	757.22	0.19
Violent Crime, Per 100,000 Residents	40.59	33.71	46.93	<0.01
Murder, Per 100,000 Residents	3.79	3.1	4.43	<0.01
Police, Per 1,000 Residents	55.56	58.54	52.57	<0.01
Police Officers Killed, On Duty	0.03	0.03	0.02	0.16
Civilian Deaths Due to Legal Intervention	0.08	0.08	0.08	0.82
Civilian Deaths Due to Legal Intervention, Non-White	0.04	0.03	0.04	0.47
Civilian Deaths Due to Legal Intervention, White	0.04	0.05	0.03	0.24
Number of Counties	3064	1438	1626	.

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EMPIRICAL STRATEGY

- ▶ We take advantage of variation in the *location* and *timing* of when officers are granted bargaining rights to determine the impact of collective bargaining rights on police killings of civilians.
- ▶ Control for cross-sectional differences due to unobserved heterogeneity by using county fixed effects and differences across time by using year fixed effects.
- ▶ Additionally control for urban-by-year fixed effects and region-by-year fixed effects.
- ▶ Our identification strategy relies on pre-existing trends in deaths by legal intervention being exogenous from the date at which bargaining rights are granted. Timing Test

Location Test

EMPIRICAL STRATEGY

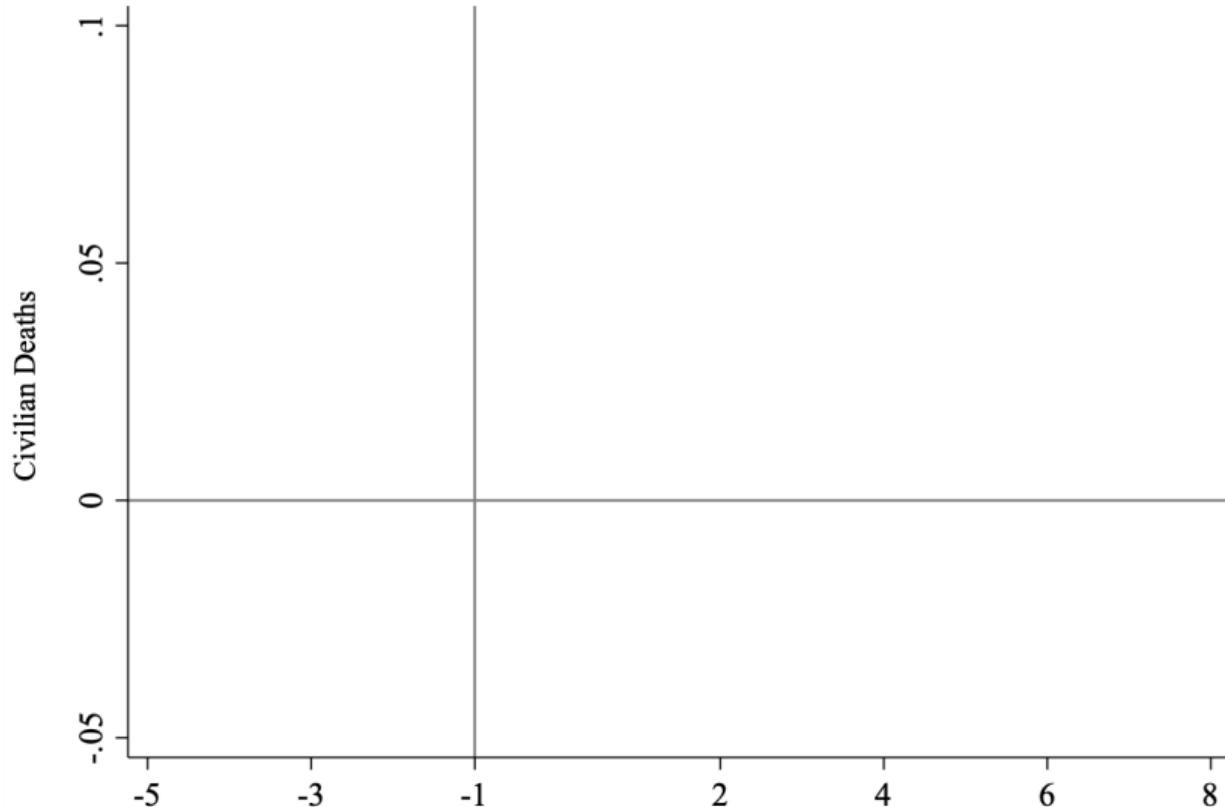
$$K_{it} = \alpha_i + \gamma_{u(i)t} + \delta_t + \sum_{-6}^{-2} \pi_y D_i 1(t - T_i^* = y) + \sum_0^9 \pi_y D_i 1(t - T_i^* = y) + \varepsilon_{it}$$

- ▶ K is the number of civilian deaths by police in county i in year t
- ▶ α is a set of county fixed effects
- ▶ γ is a set of urban status-by-year fixed effects
- ▶ D_i is an indicator variable equal to one if a county ever gains bargaining rights. The effect of bargaining rights on police killings of civilians is then captured in a set of event-year dummies $1(t - T_i^* = y)$, which are equal to one in the appropriate year.

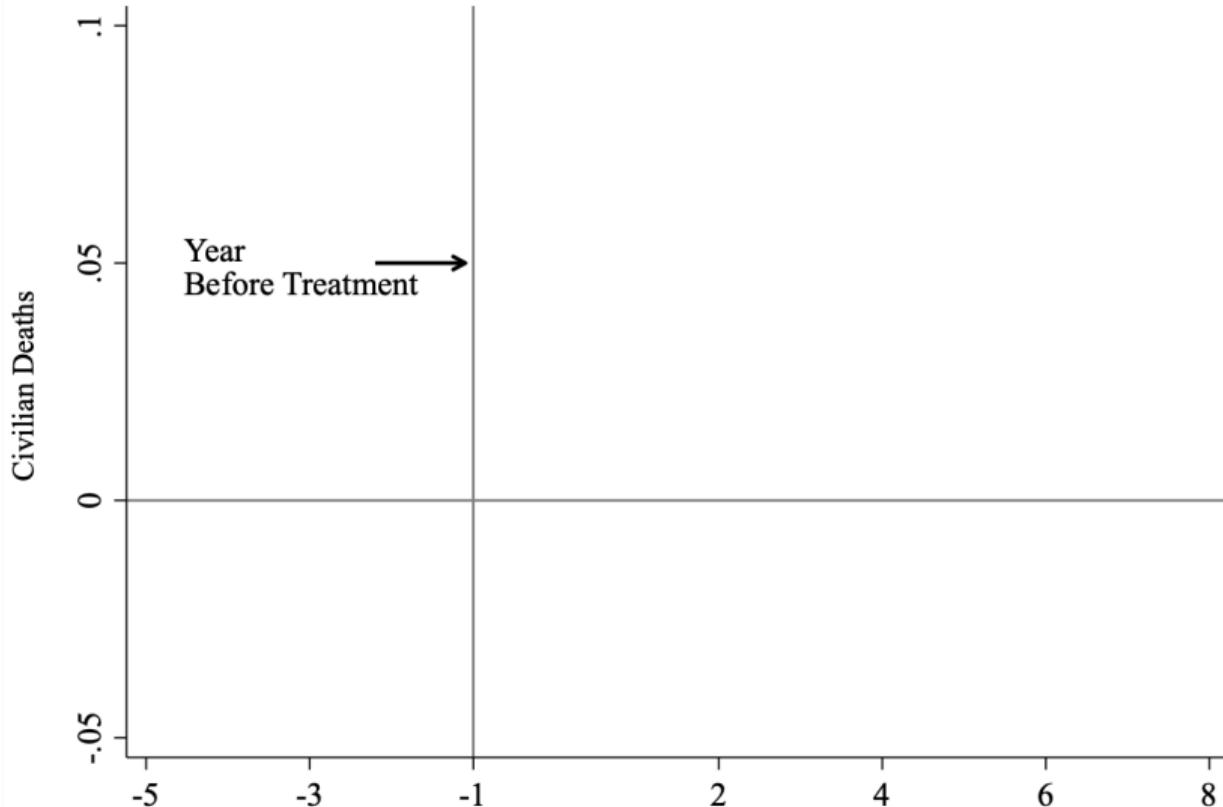
RESULTS

- ▶ The results are presented for deaths by legal intervention by race.
- ▶ Baseline results include county, urban-by-year, and region-by-year fixed effects.
- ▶ All standard errors are clustered at the state level.
- ▶ We focus on 5 years before and 8 years after treatment (date of adoption of collective bargaining rights).
 - Endpoints are omitted from presentation of results, 6 years before and 9 years after treatment.

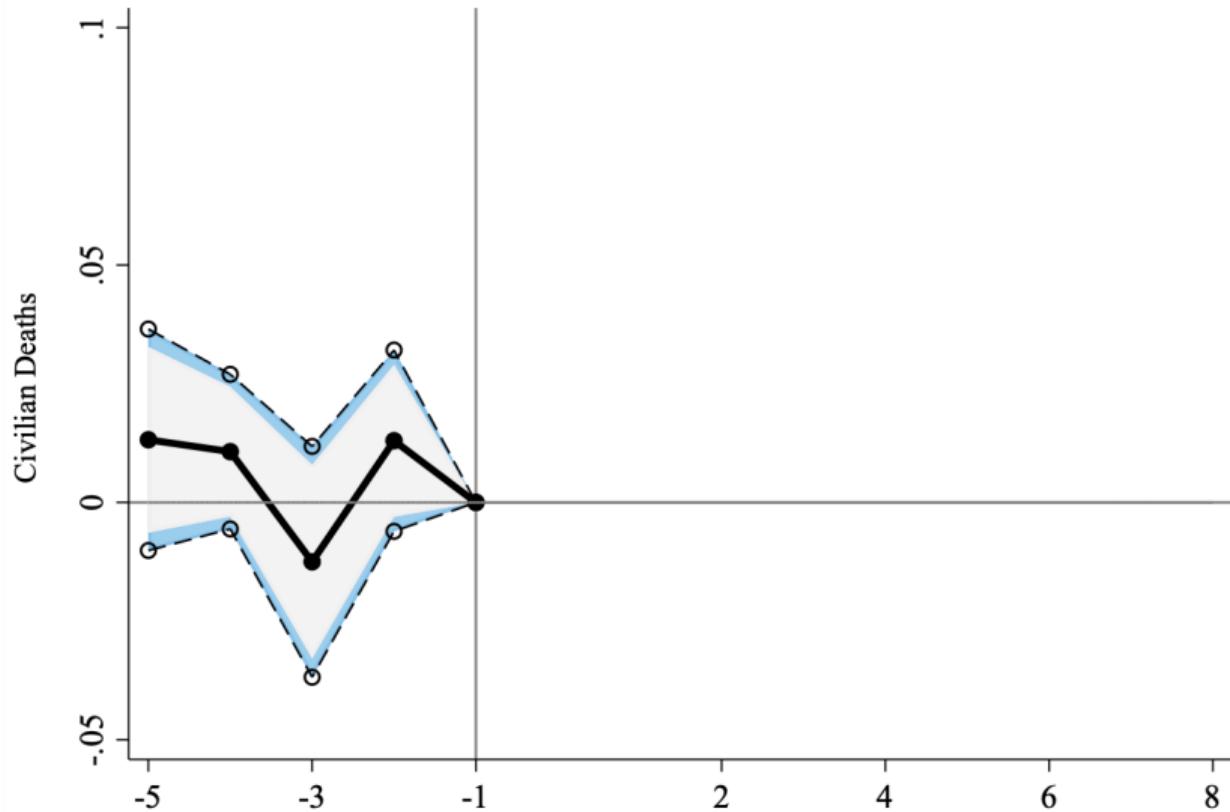
RESULTS: NON-WHITE CIVILIAN DEATHS



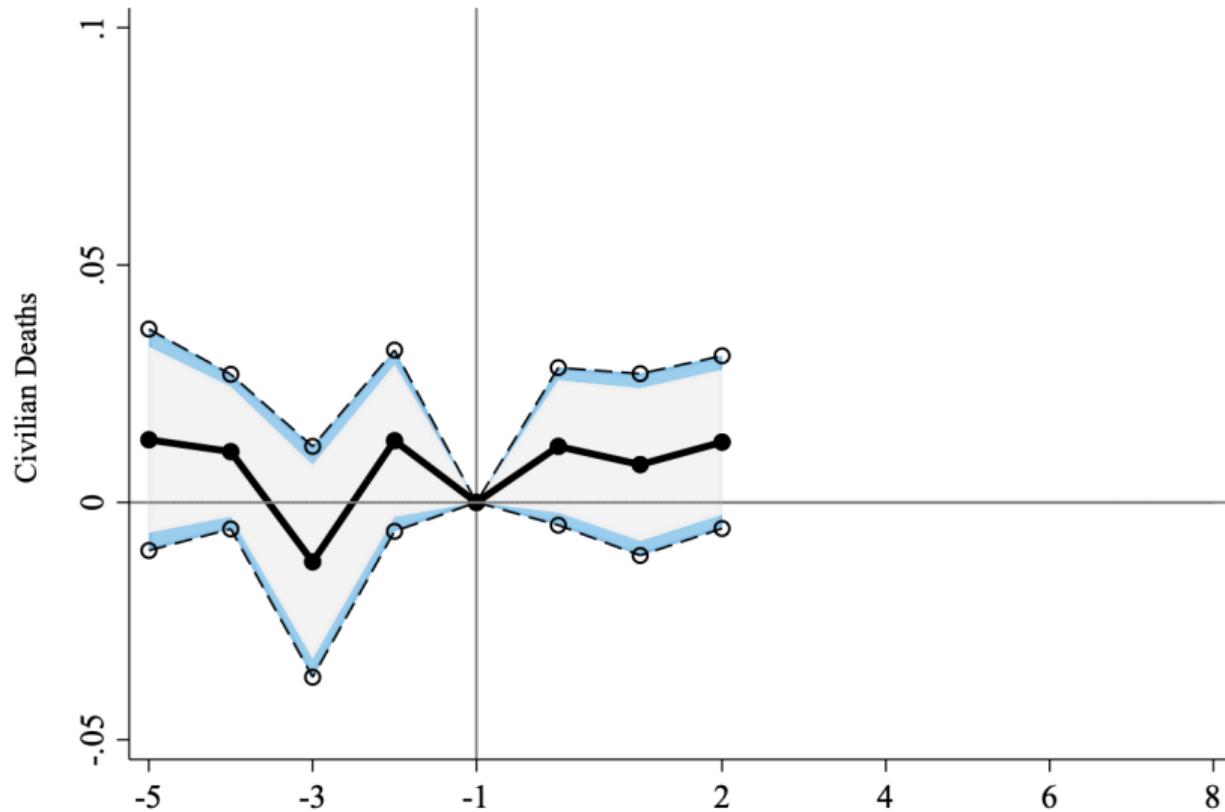
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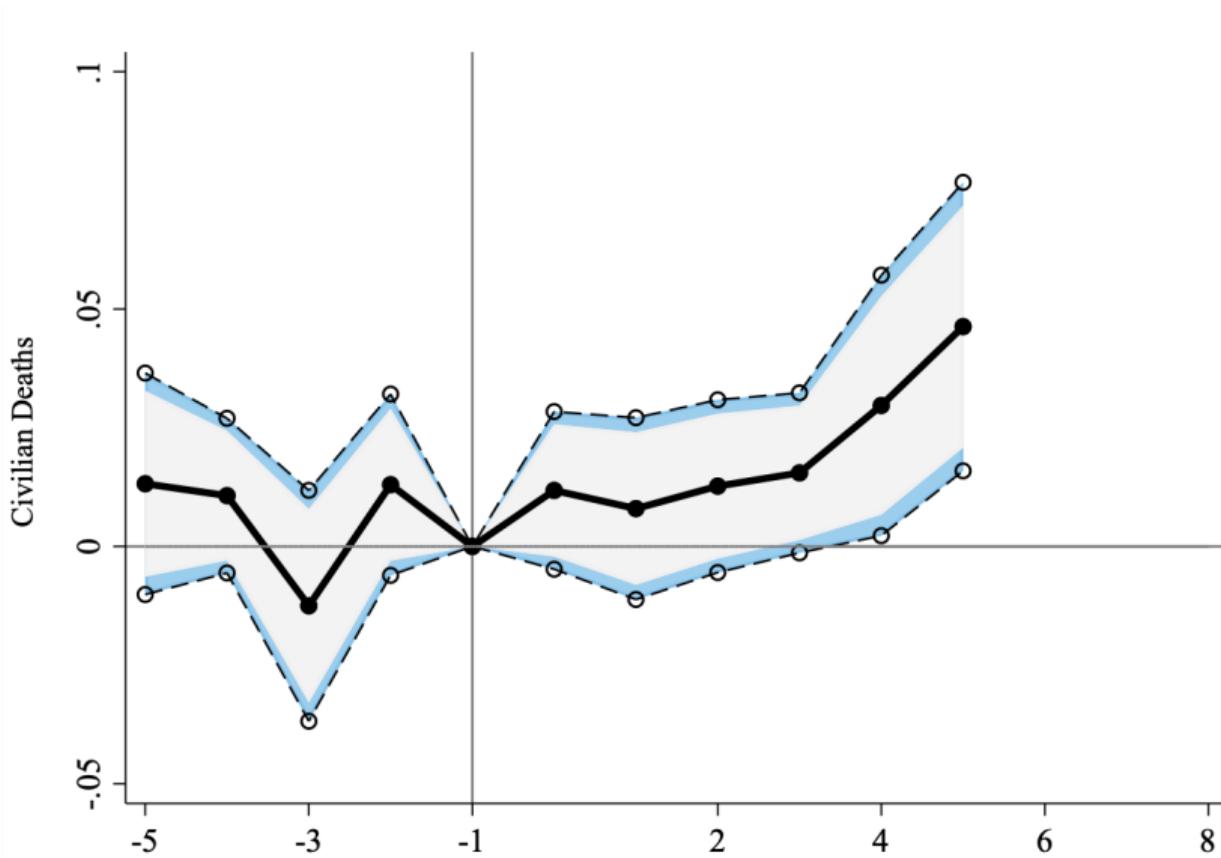
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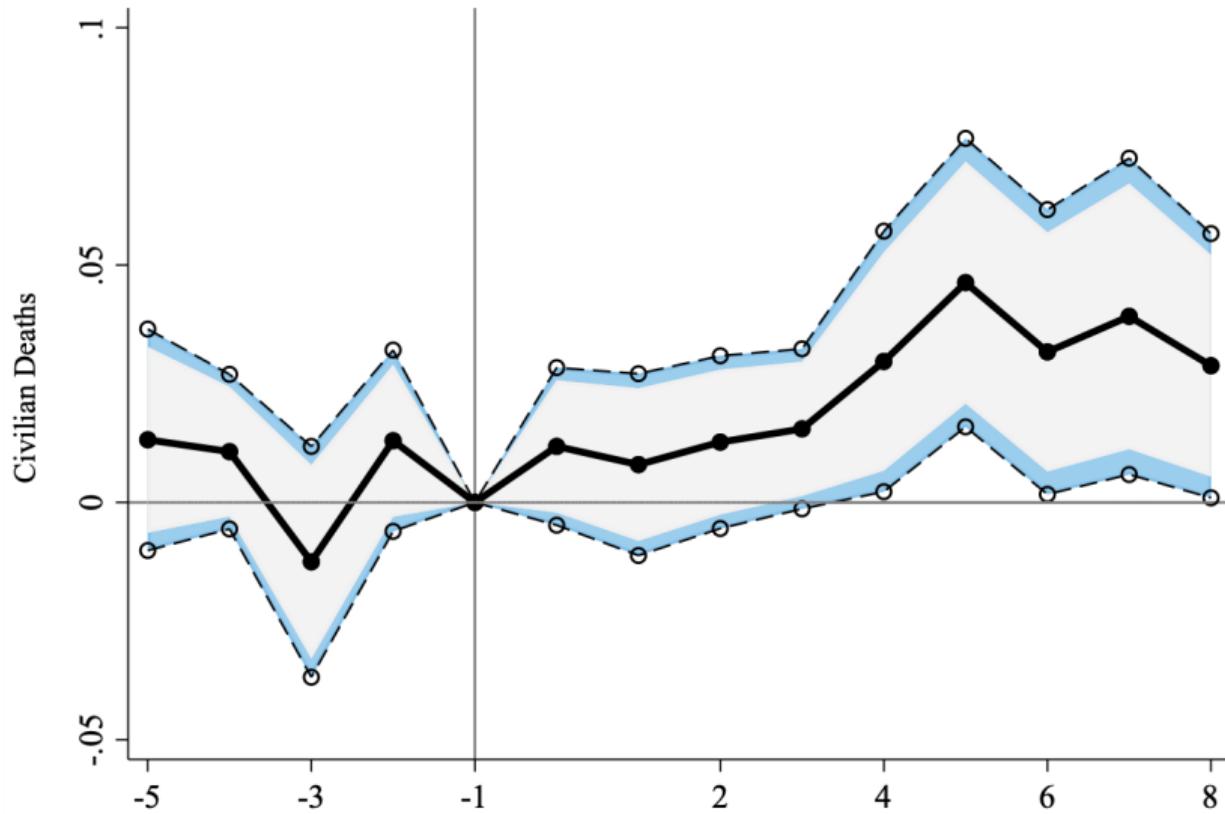
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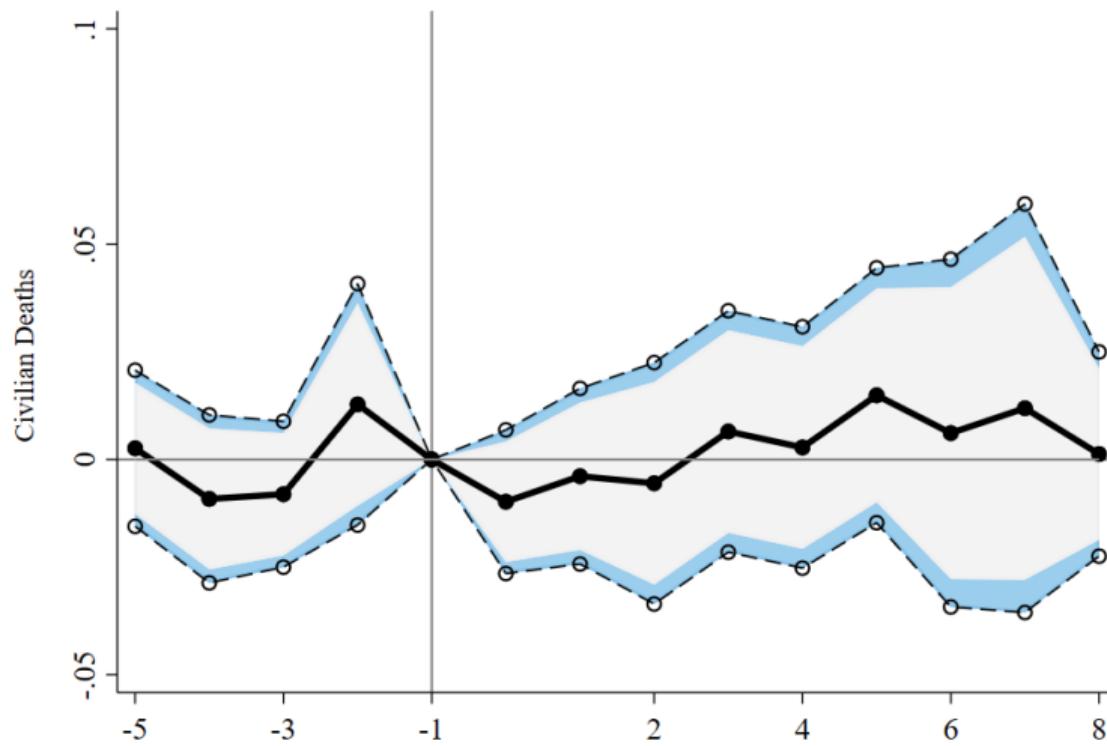
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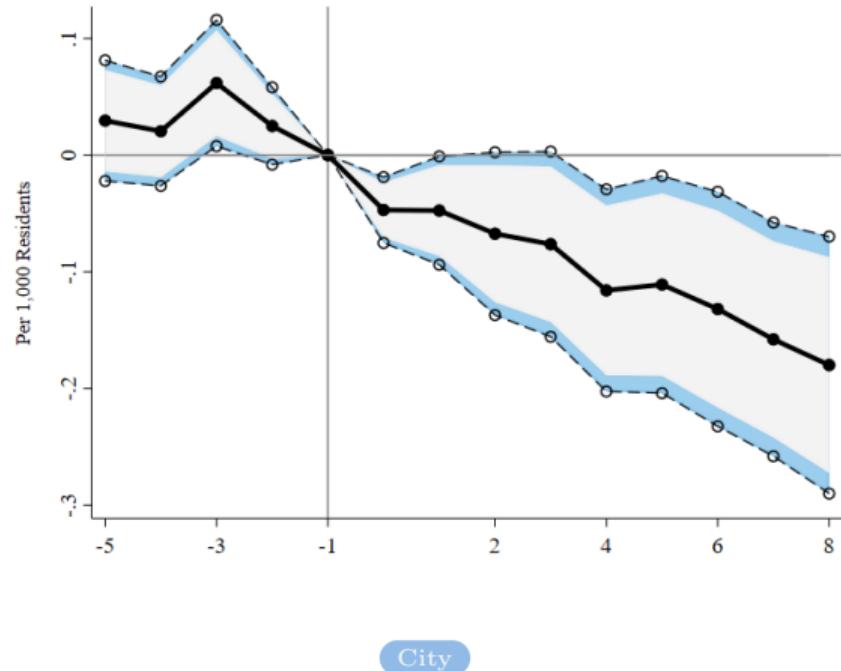
RESULTS: NON-WHITE CIVILIAN DEATHS



RESULTS: WHITE CIVILIAN DEATHS

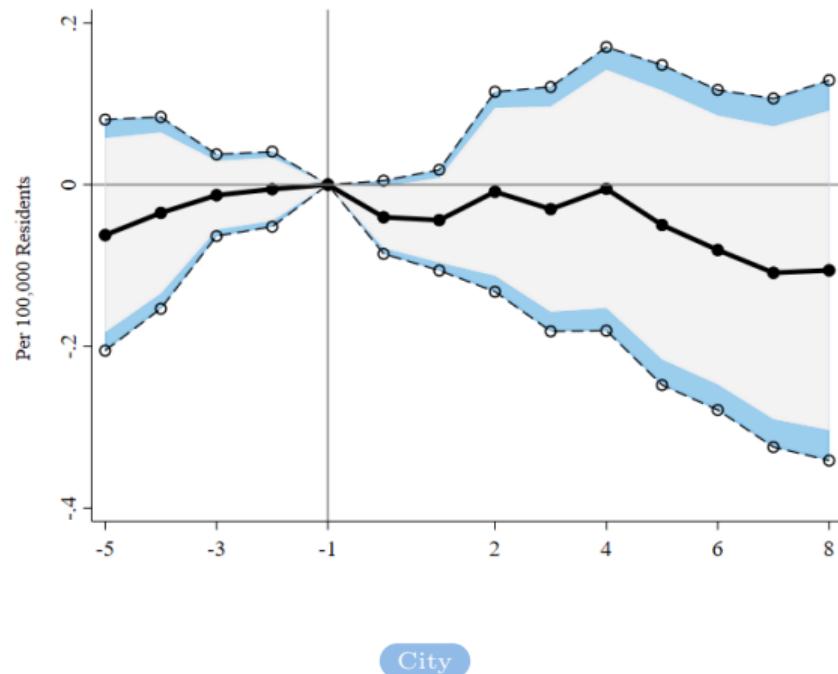


RESULTS: SWORN OFFICERS

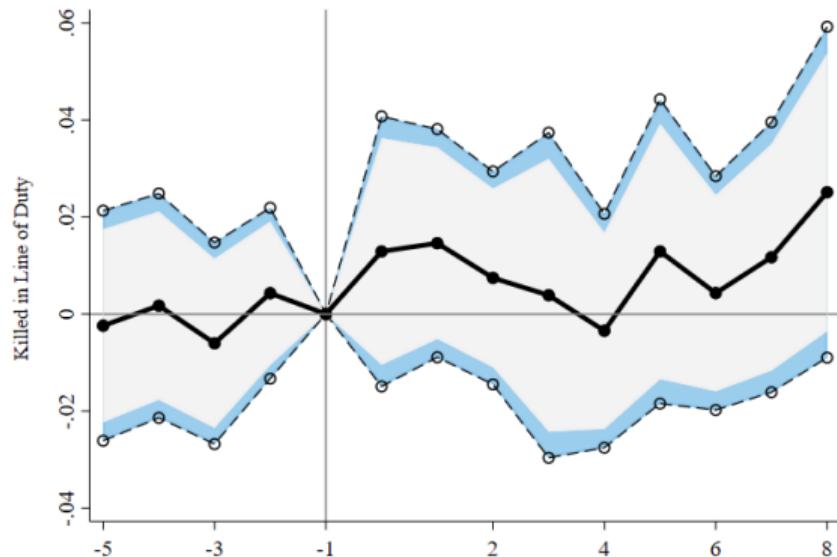


City

RESULTS: TOTAL CRIME

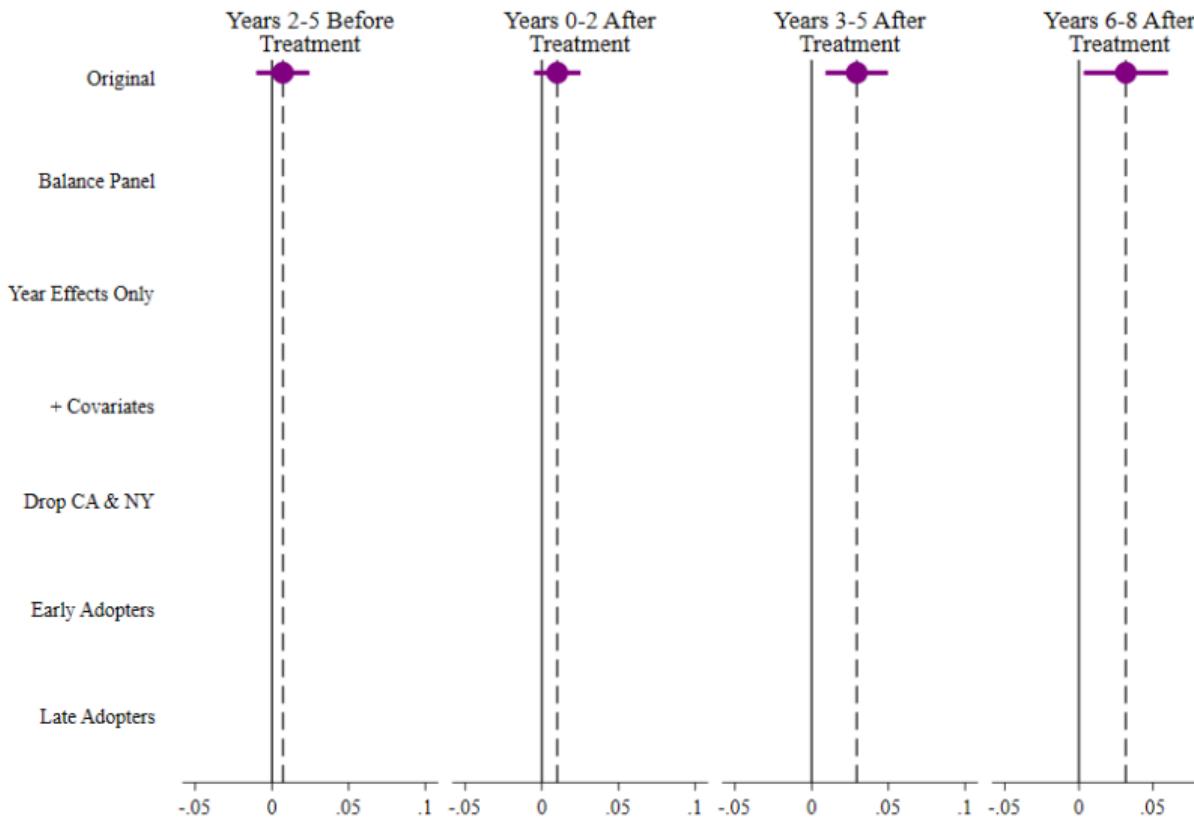


RESULTS: OFFICERS KILLED

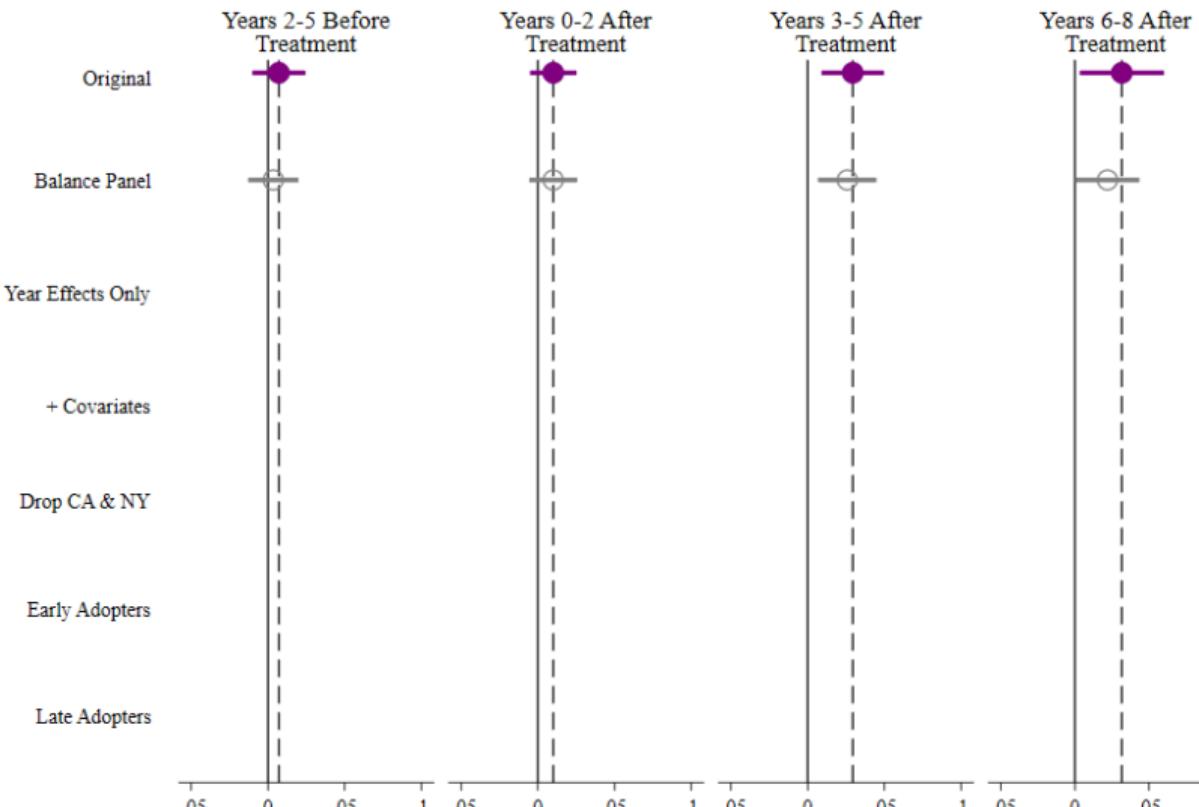


Non-White Arrests

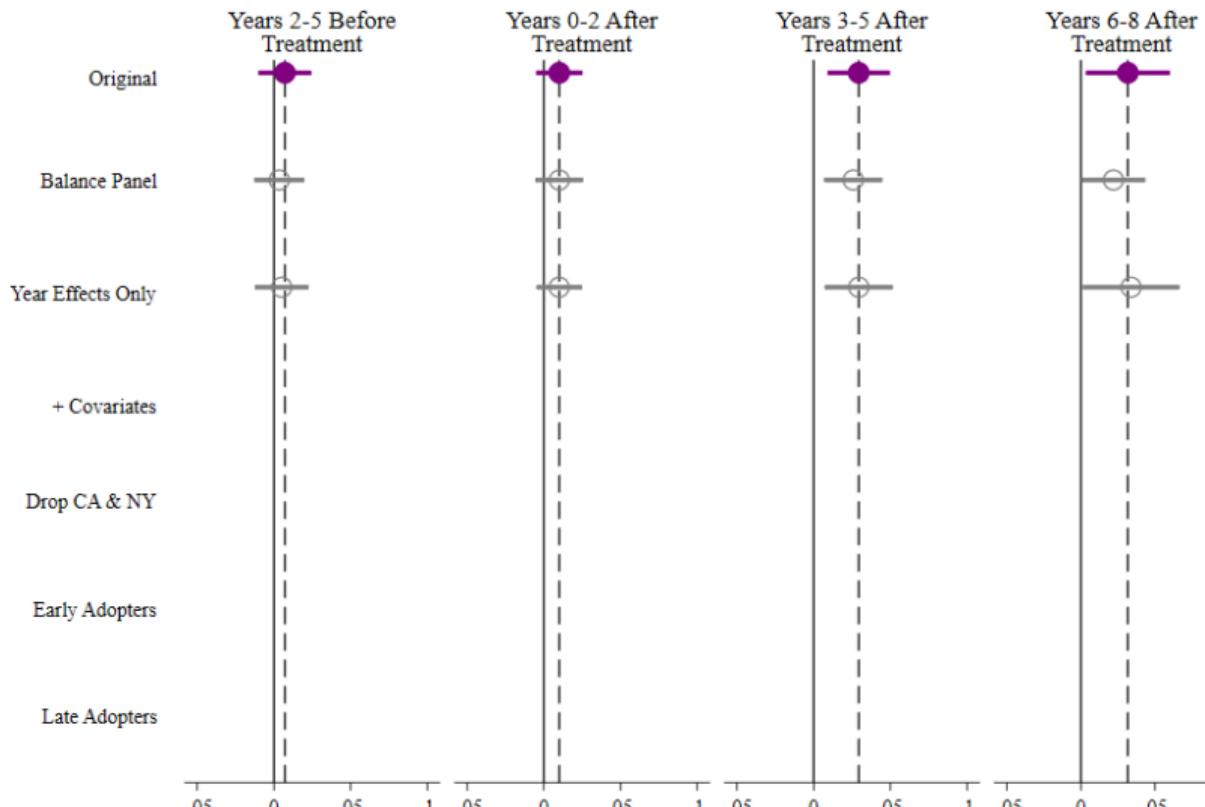
ROBUSTNESS CHECKS: NON-WHITE DEATHS



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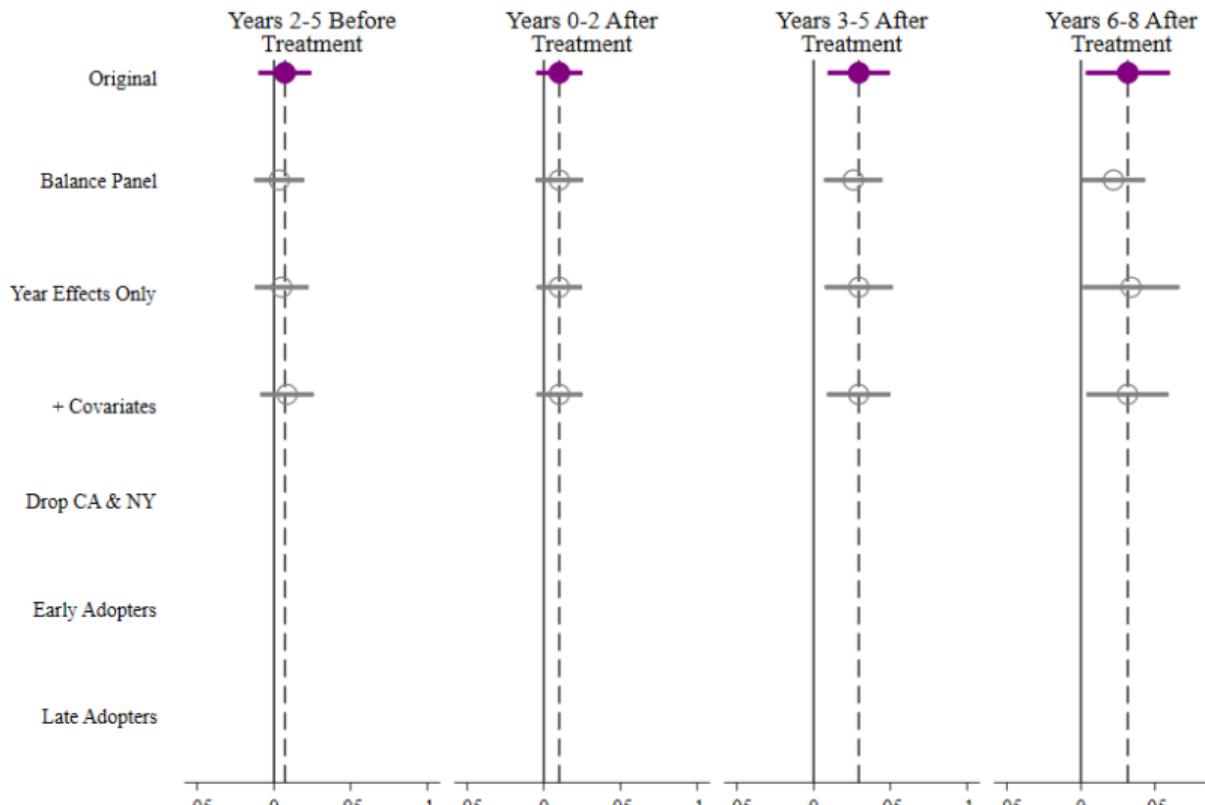
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Year Effects



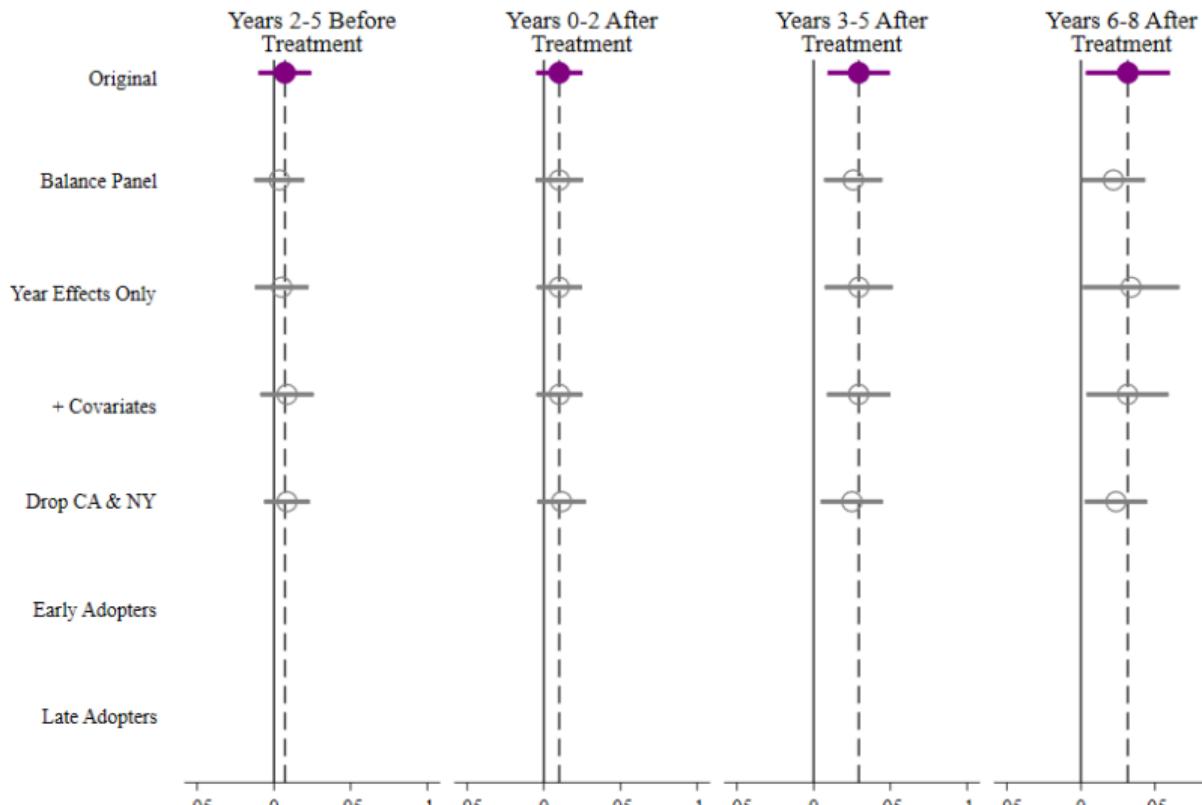
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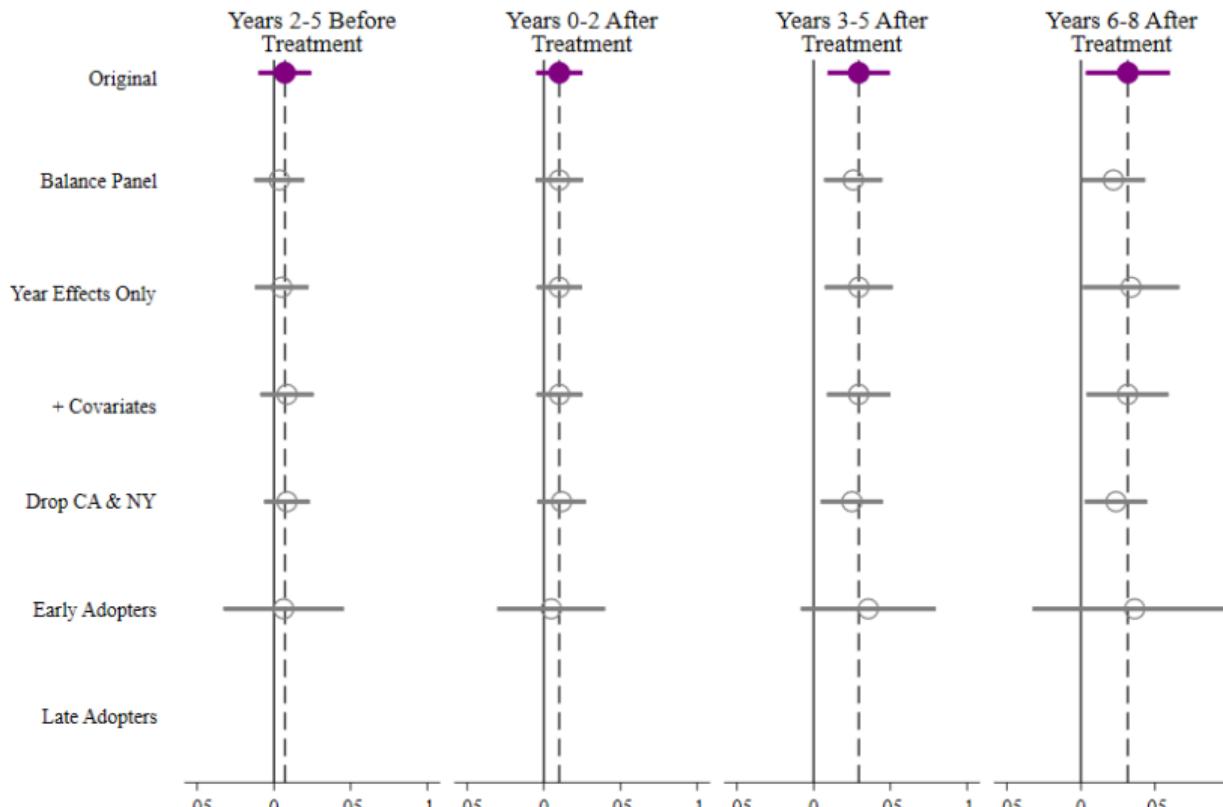
Add Covariates



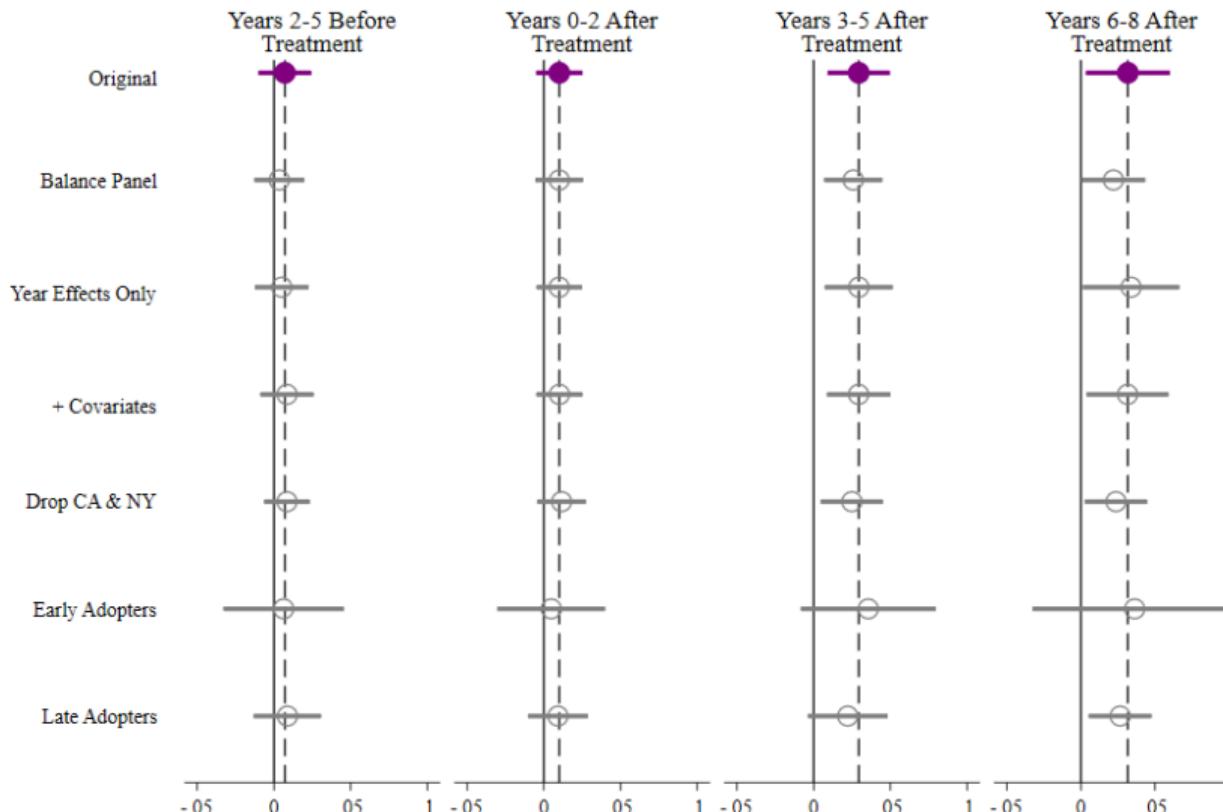
ROBUSTNESS CHECKS: NON-WHITE DEATHS



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SPECIFICATION CHECKS

① Callaway & Sant'Anna Estimator

C&S

② Law Enforcement Officers' Bill of Rights

LEOBRS

③ 1960s Uprisings

Uprisings

④ Authorization to Bargain

Authorization to Bargain

⑤ Actual Unionization

Unions

⑥ Private Sector Union Membership

Private Unions

⑦ Poisson Regression

Poisson

⑧ Mortality Rate

Deaths Per Capita

⑨ Contiguous Boarder Counties

Alternative Strategy

⑩ Arrests

Arrests

⑪ Police Expenditures

Police & Fire Expenditures

⑫ Intensive Margin

Intensive Margin

⑬ Falsification Test

Suicides Per Capita

DISCUSSION AND CONCLUSION

- ▶ **Results:** Exposure to collective bargaining rights drives a substantial increase in police killings of non-white civilians in the range of 70%. Non-white Fatalities
- ▶ **Pathways:** While our prior was that police would, in general, kill more civilians and see their own deaths decline this does not appear to be the mechanism at play.
- ▶ **Interpretation:** Collective bargaining appears to protect police officers' decision to discriminate in the use of force or otherwise encourage differential use of force against non-white civilians. Effects may be driven through bargained procedural protections or changes in officer culture.

DISCUSSION AND CONCLUSION

- ▶ **Mechanism:** We believe that this is occurring as a result of negotiated measures in collective agreements. This likely occurs as a result of the political incentives governing local governments in negotiations with police unions.
- ▶ **Policy recommendation:** The ideal way to address this finding is for employers to make public safety, particularly that of the Black population, their top priority in bargaining.
- ▶ **Alternative policy recommendation:** While we prefer the above decentralized approach, an alternative would be to restrict accountability measures as permissive subjects of bargaining.

Thank You

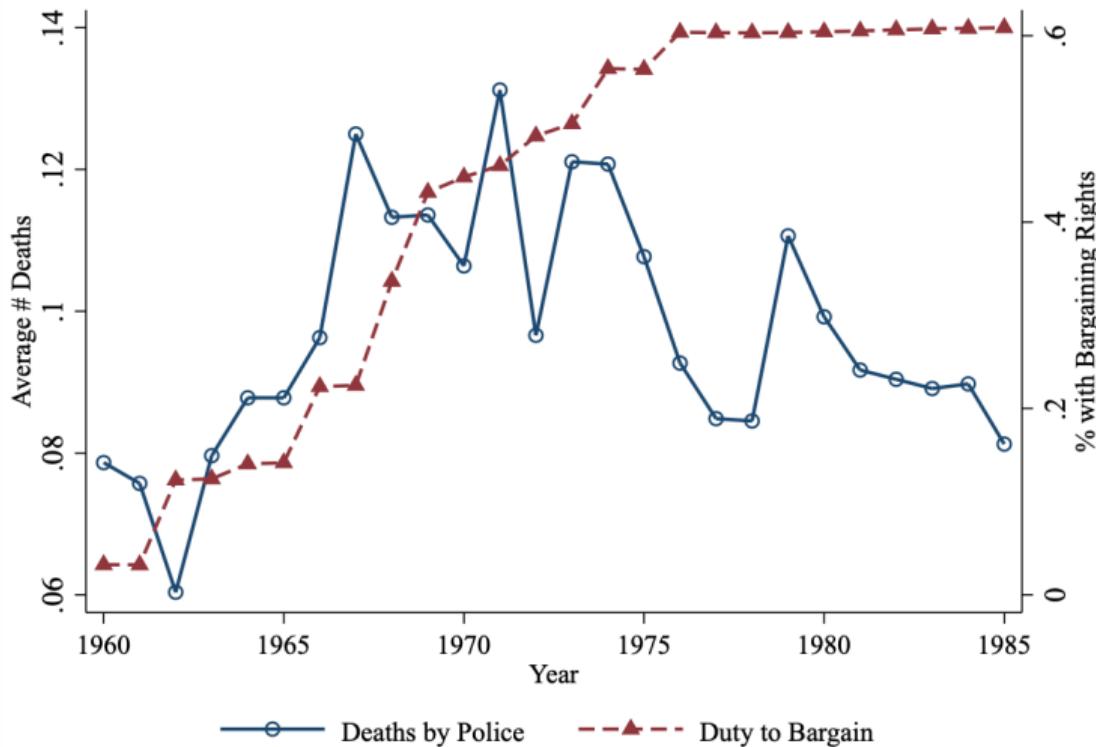
APPENDIX

FORMING A UNION

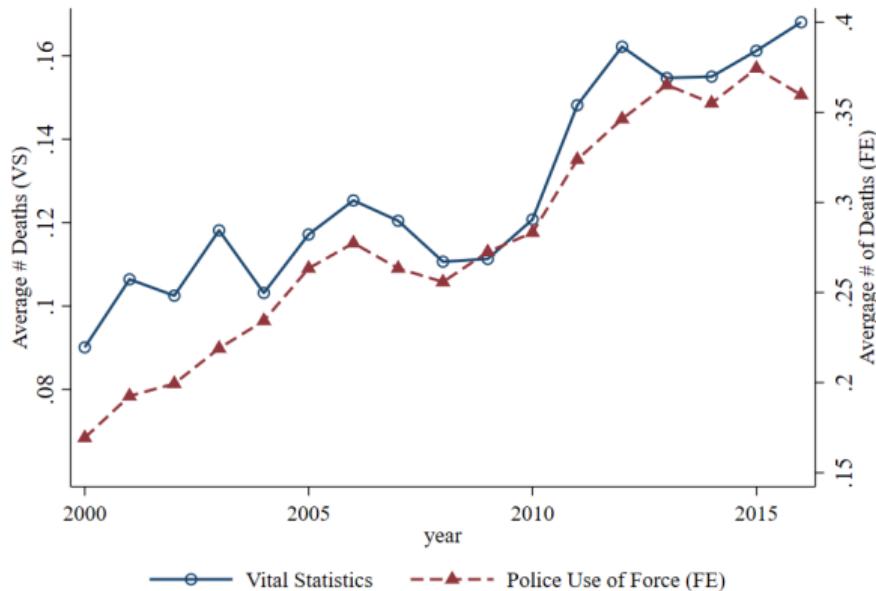
- ▶ An affiliate will launch a drive.
- ▶ Affiliate dispatches organizers.
- ▶ Establishment of an organizing committee.
- ▶ Request list of employees from employer.
- ▶ Door to door visits – collect union cards.
- ▶ Take cards to state labor board.
- ▶ State board review cards.
- ▶ Election date set (months into future).
- ▶ Election is held (Over 50% for certification).
- ▶ Establishment of a leadership team and bargaining committee.
- ▶ Surveying of members on priorities for a first contract.
- ▶ Request to the employer (or employer to union) to bargain.
- ▶ Bargaining sessions begin, spanning anywhere from 1-2 months to over a year.
- ▶ Bargaining teams reach a tentative agreement.
- ▶ Membership votes on the agreement.
- ▶ The new agreement will likely include a number of MOUs concerning bigger changes.

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POLICE KILLINGS OF CIVILIANS OVER TIME



POLICE KILLINGS OF CIVILIANS OVER TIME: VITAL STATISTICS VS. FATAL ENCOUNTERS



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INTRODUCTION OF THE DUTY TO BARGAIN OVER TIME

Treatment Status	Number of Counties	Percent of Counties	Percent of 1960 Population
Treated	1438	46.9	59.9
Year Treated			
1959	24	0.8	3.2
1962	58	2.7	12.1
1964	41	4.0	13.6
1966	181	9.9	21.6
1968	111	13.5	32.8
1969	88	16.4	42.6
1970	192	22.7	44.5
1971	99	25.9	46.1
1972	147	30.7	49.6
1973	120	34.6	51.3
1974	310	44.7	57.1
1976	67	46.9	59.9
Untreated	1626	53.1	40.1

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Treatment / Control

INTRODUCTION OF THE DUTY TO BARGAIN OVER TIME

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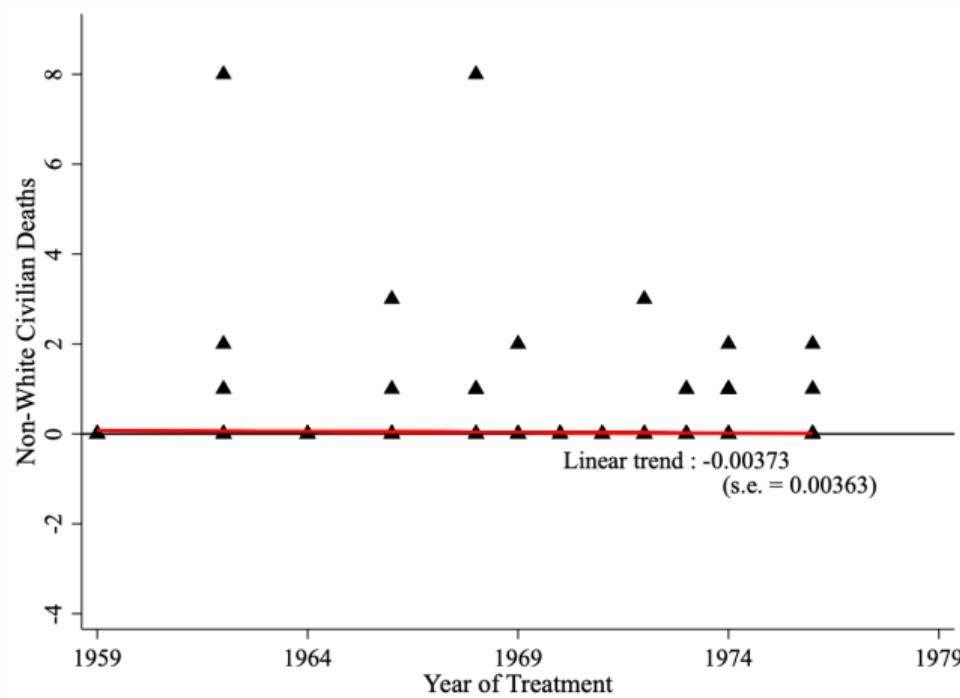
Timing

Treatment / Control

INTRODUCTION OF THE DUTY TO BARGAIN OVER TIME

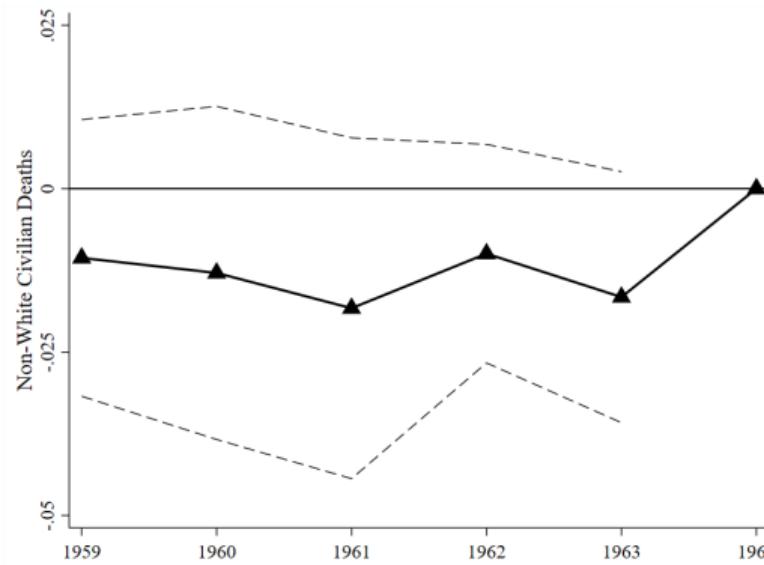
Treatment Status	Number of Counties	Percent of Counties	Percent of 1960 Population
Treated	1438	46.9	59.9
Somewhat Balanced			
Year Treated			
1959	24	0.8	3.2
1962	58	2.7	12.1
1964	41	4.0	13.6
1966	181	9.9	21.6
1968	111	13.5	32.8
1969	88	16.4	42.6
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Treatment / Control			
Timing			
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EMPIRICAL STRATEGY: VARIATION IN TIMING



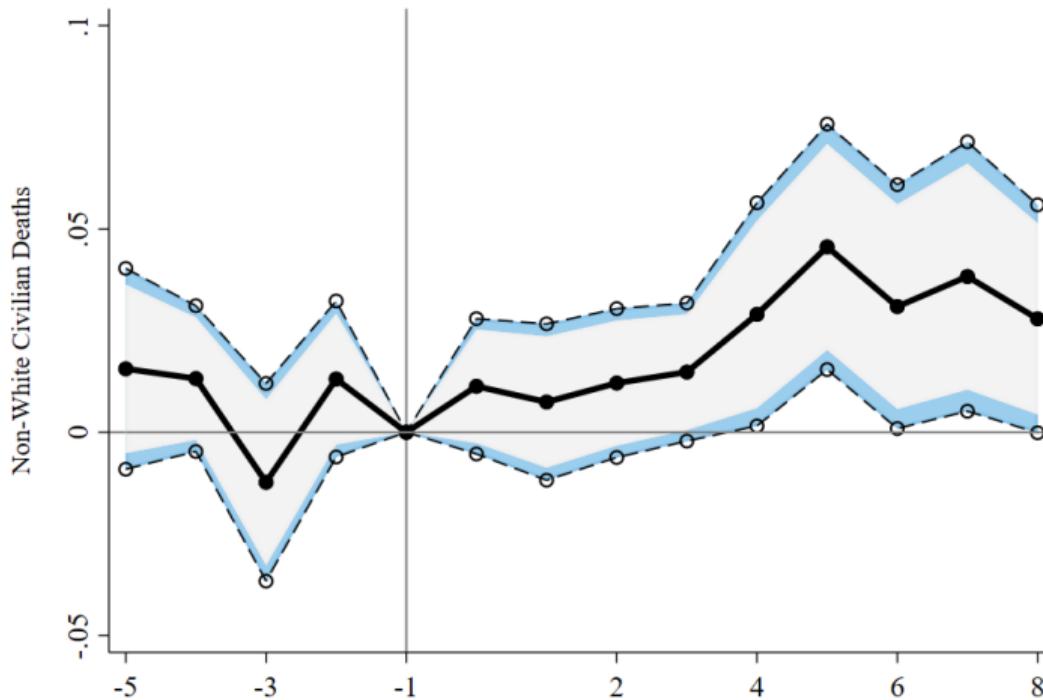
Empirical Strategy

EMPIRICAL STRATEGY: VARIATION IN LOCATION



Empirical Strategy

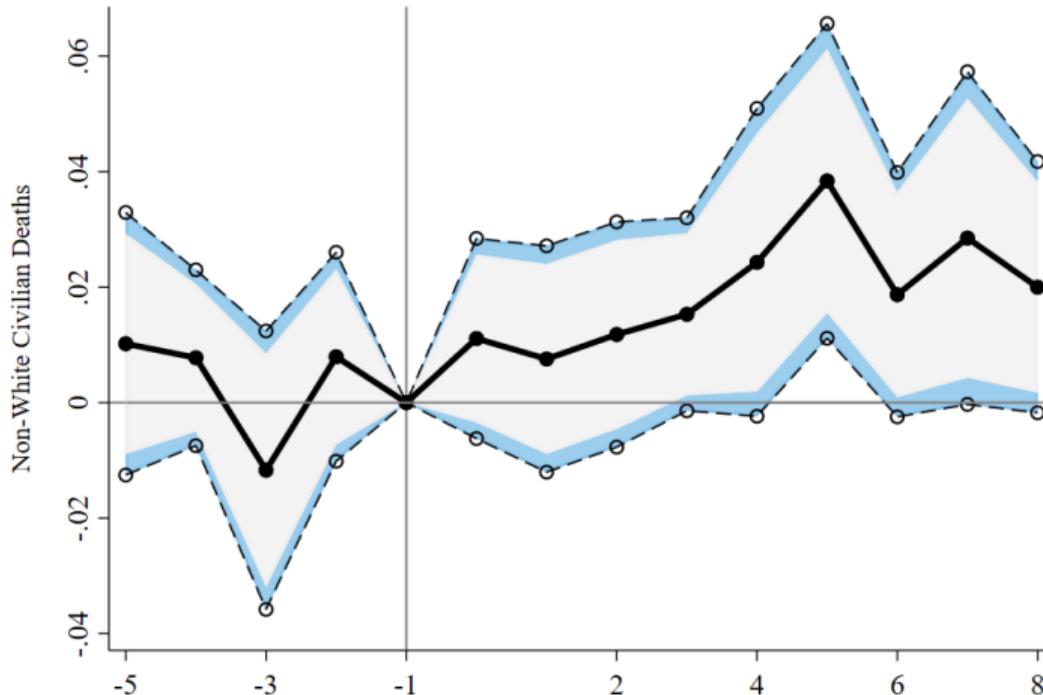
ORIGINAL: NON-WHITE DEATHS



Robustness Check

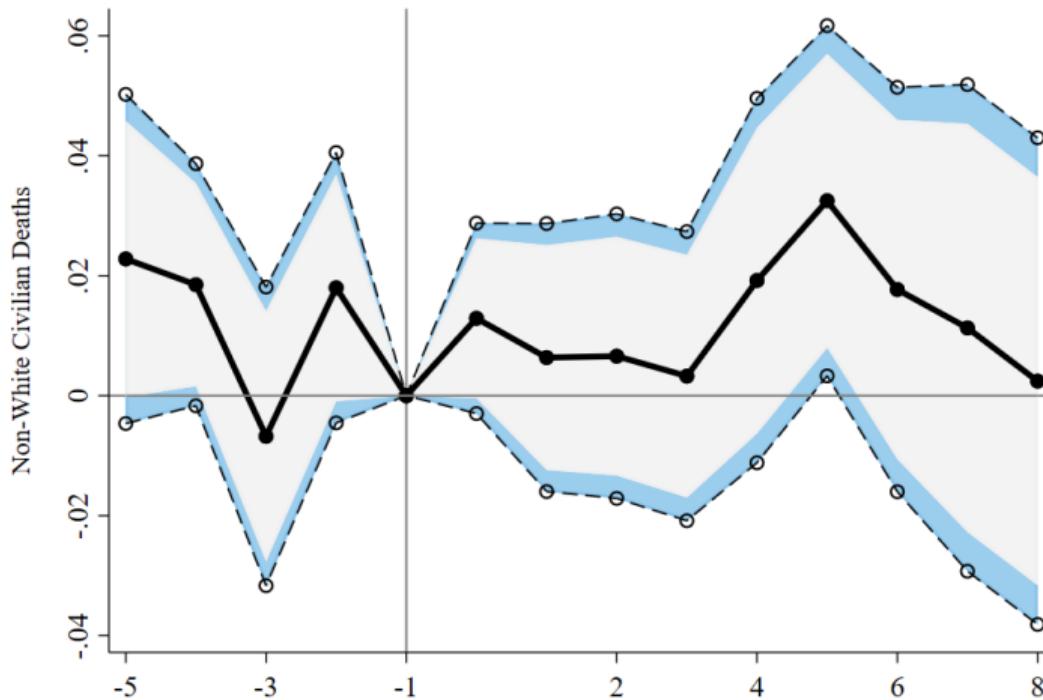


BALANCED PANEL: NON-WHITE DEATHS



Robustness Check

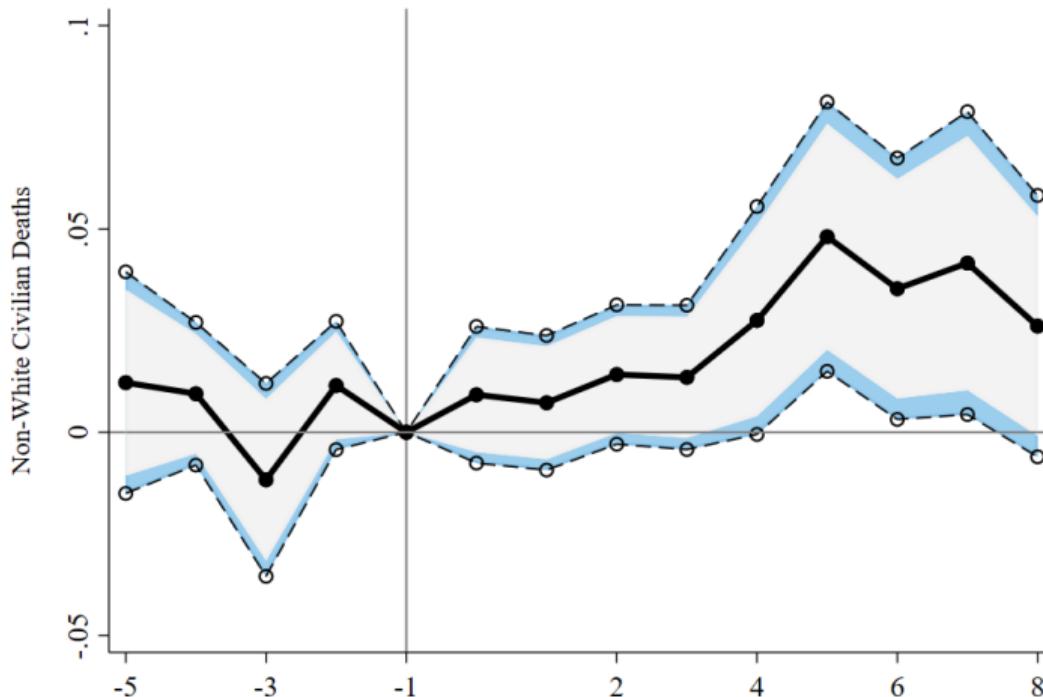
TREATED ONLY: NON-WHITE DEATHS



Robustness Check



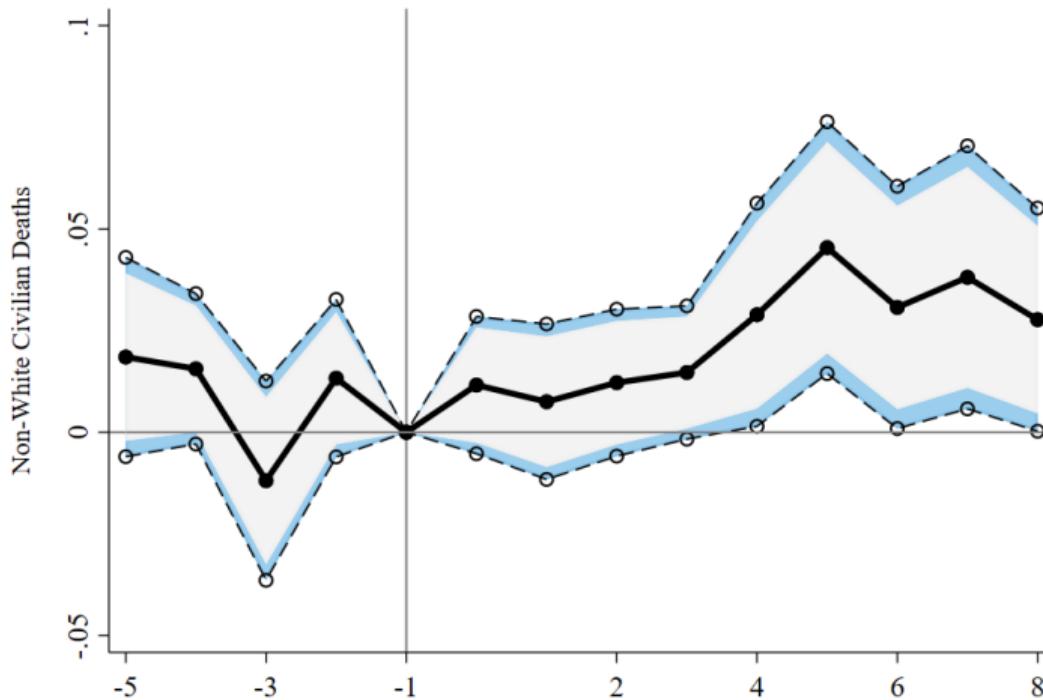
YEAR FIXED EFFECTS ONLY: NON-WHITE DEATHS



Robustness Check

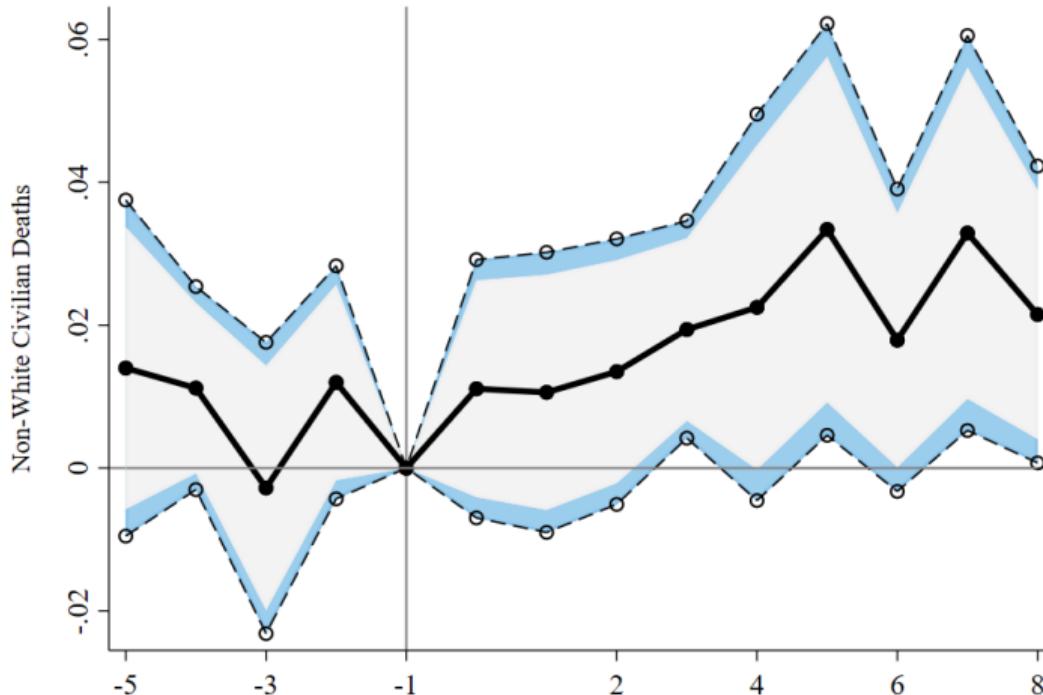


ADD COVARIATES: NON-WHITE DEATHS



Robustness Check

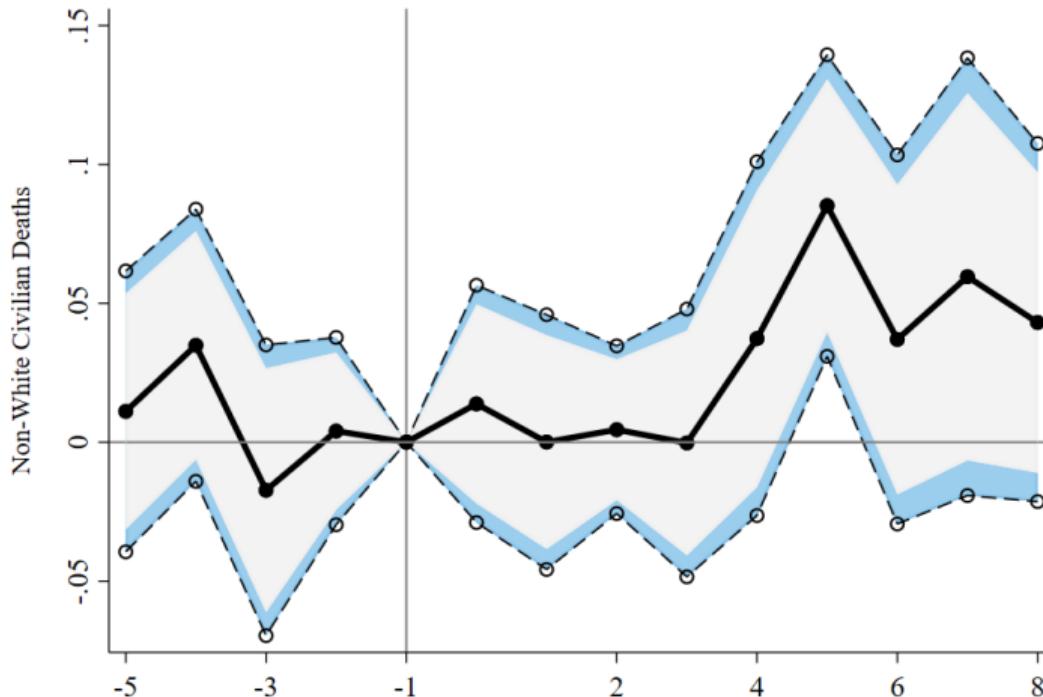
DROP CALIFORNIA & NEW YORK: NON-WHITE DEATHS



Robustness Check

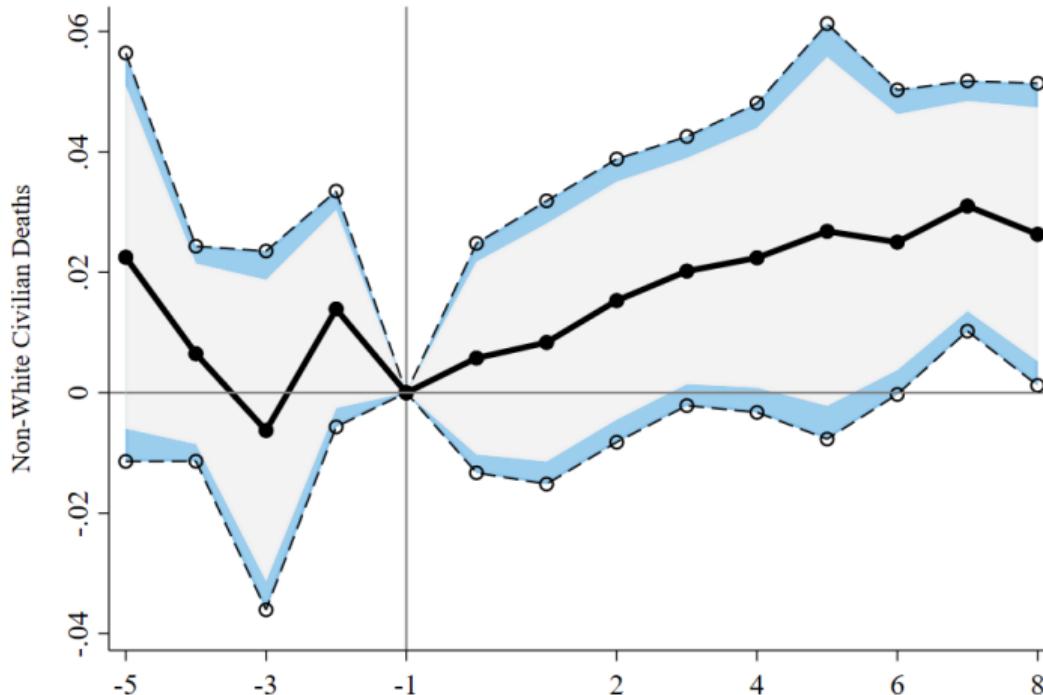


EARLY ADOPTERS: NON-WHITE DEATHS



Robustness Check

LATE ADOPTERS: NON-WHITE DEATHS

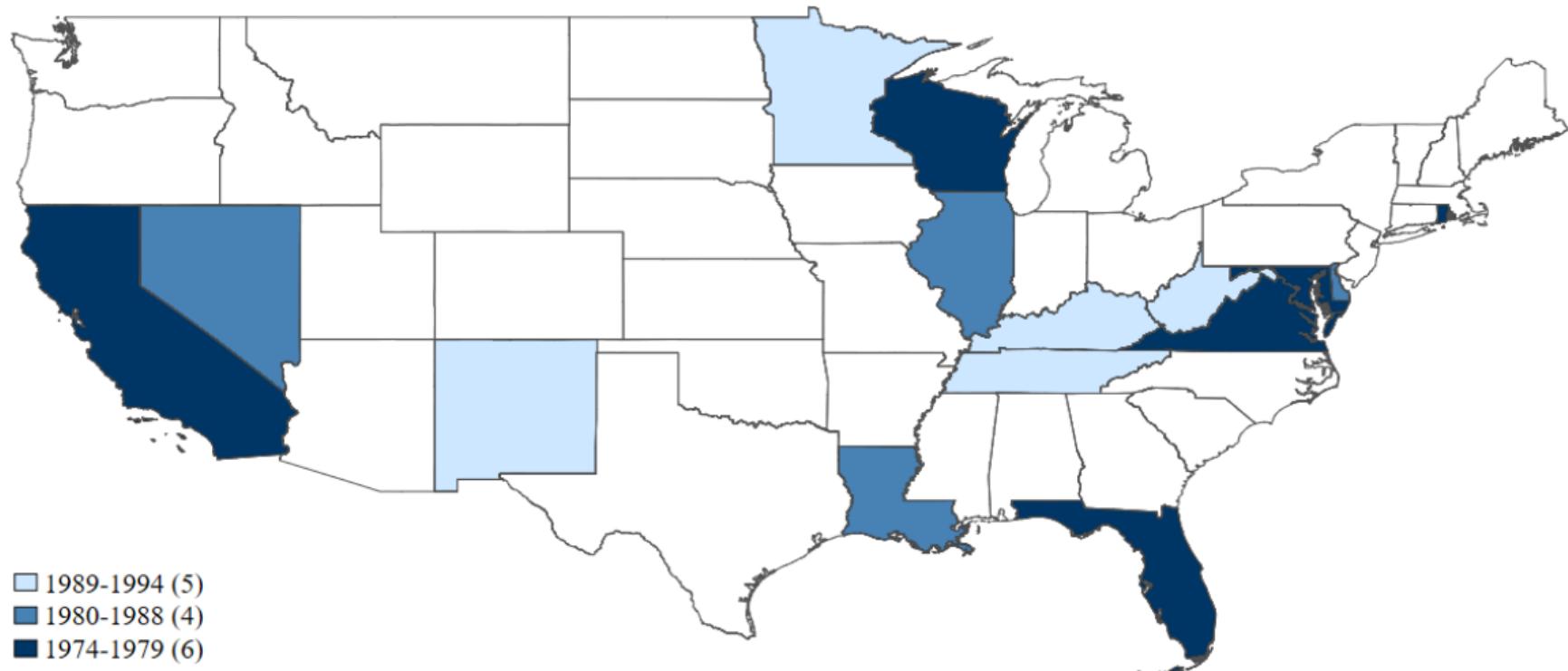


Robustness Check

LAW ENFORCEMENT OFFICERS' BILL OF RIGHTS (LEOBRS)

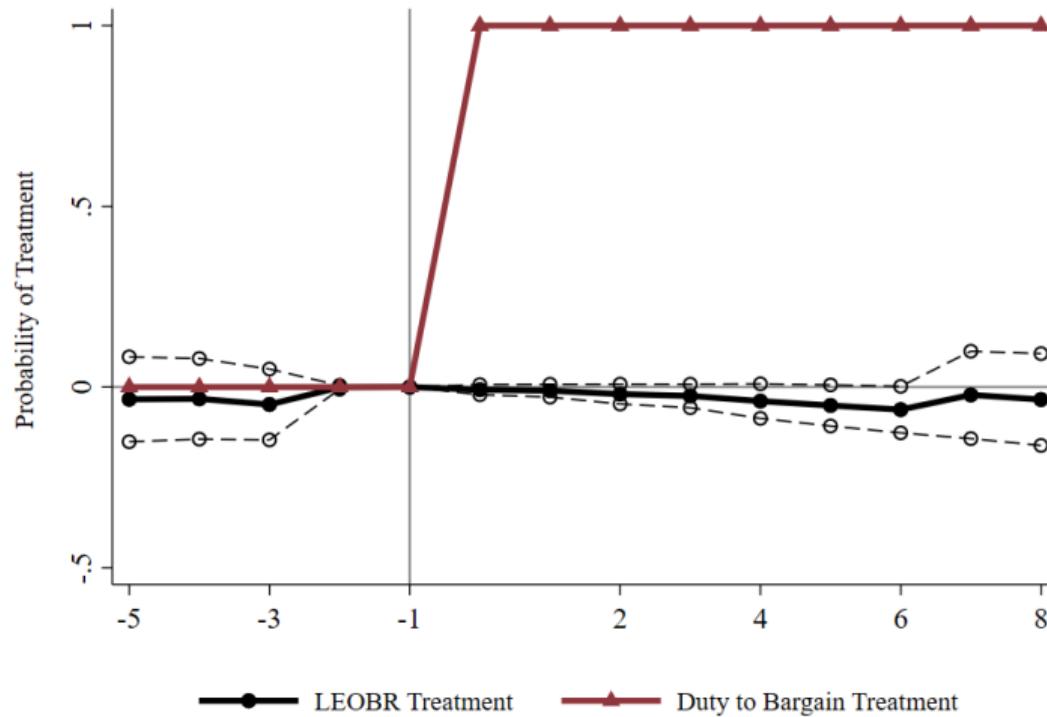
- ▶ A set of rights related to disciplinary action that supersede police union contracts and is applied statewide.
- ▶ Many of the provisions are similar to protections highlighted by Rushin (2016).
- ▶ The first states to adopt LEOBRs were Florida and Maryland, followed by California and Rhode Island.
- ▶ Currently, there are 15 states with LEOBRs (16 if we count Texas).
 - ▶ For some states such as Maryland, LEOBRs precede the adoption of collective bargaining rights.
 - ▶ However, in Tennessee, collective bargaining in the public sector is prohibited, but the state's LEOBR protects police officers statewide.

INTRODUCTION OF LAW ENFORCEMENT OFFICERS' BILL OF RIGHTS OVER TIME



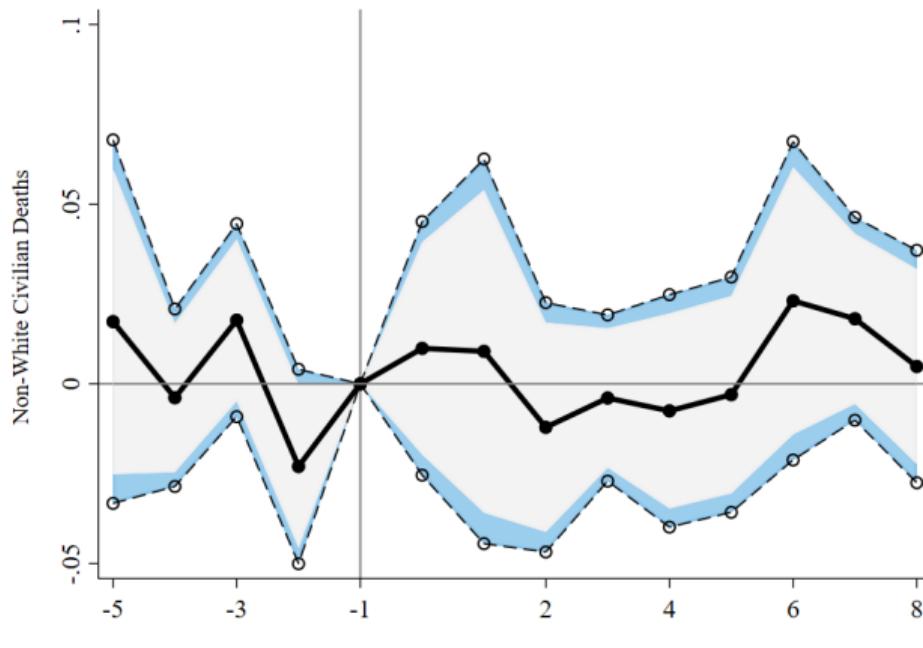
- 1989-1994 (5)
- 1980-1988 (4)
- 1974-1979 (6)

LAW ENFORCEMENT OFFICERS' BILL OF RIGHTS: TIMING



LAW ENFORCEMENT OFFICERS' BILL OF RIGHTS AND NON-WHITE CIVILIAN DEATHS

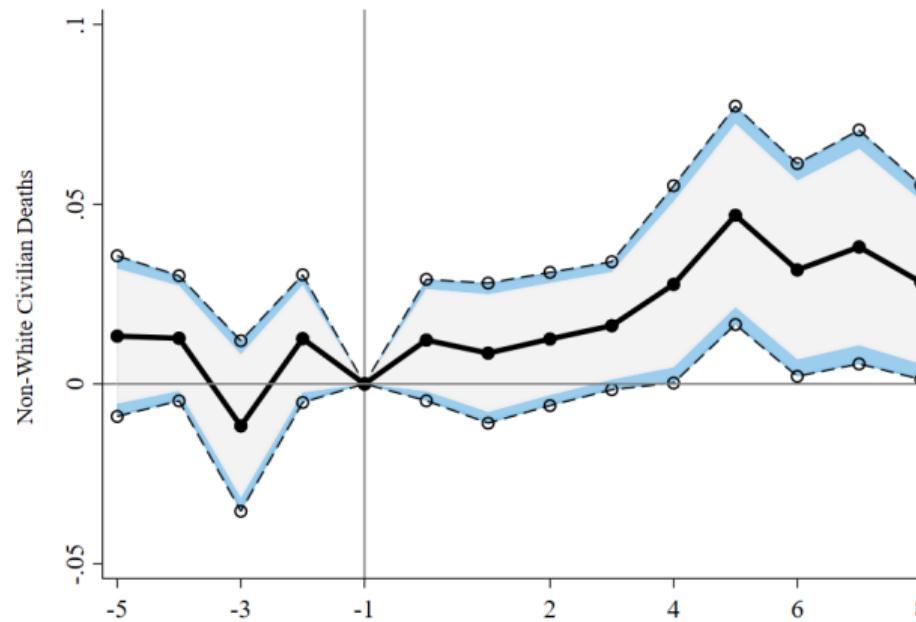
Specification Checks



Bargaining Rights

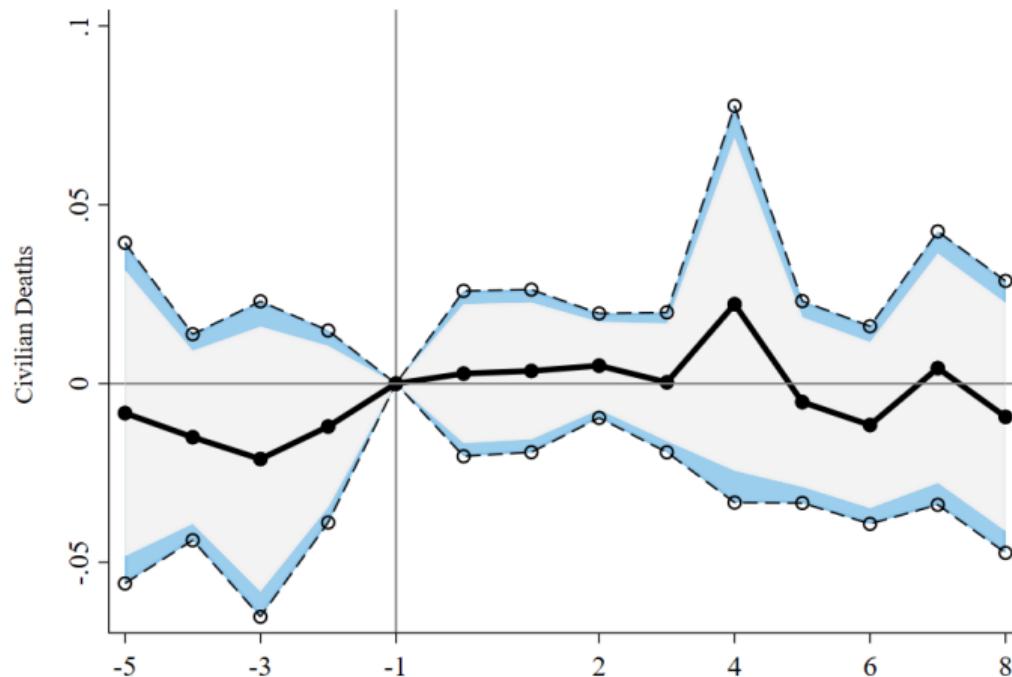
IMPACT OF BARGAINING RIGHTS ON NON-WHITE CIVILIAN DEATHS ACCOUNTING FOR LEOBRs

Specification Checks



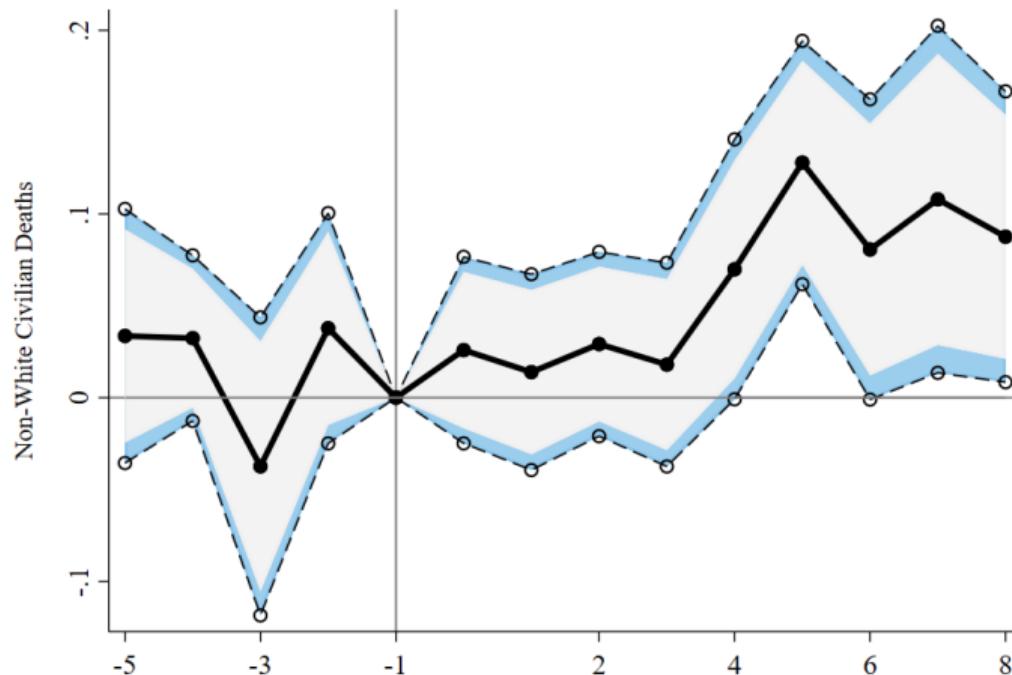
AUTHORIZATION TO BARGAIN

Specification Checks



DUTY TO BARGAIN & AT LEAST ONE UNION IN 1987

Specification Checks

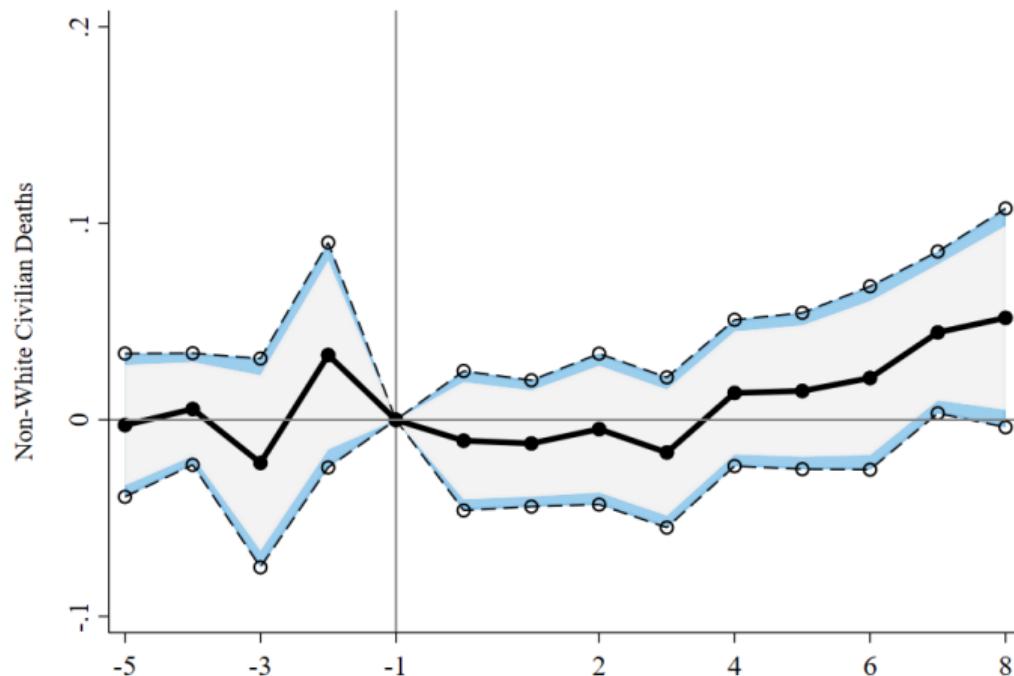


No Unions



DUTY TO BARGAIN & NO UNION IN 1987

Specification Checks

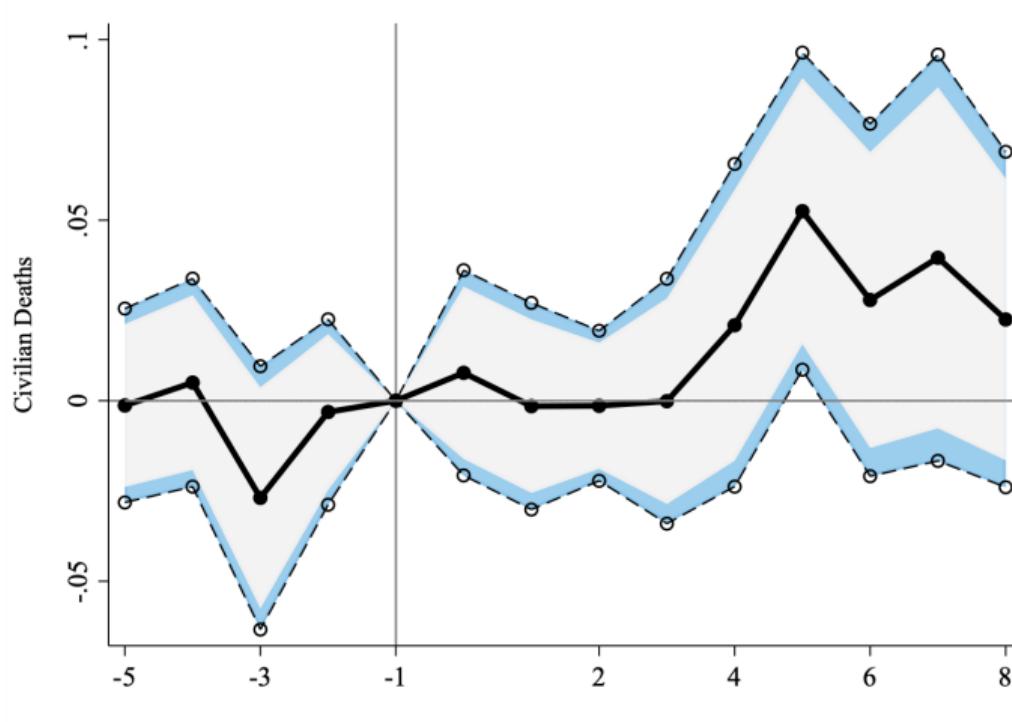


Unions



ABOVE MEDIAN PRIVATE SECTOR UNION DENSITY

Specification Checks

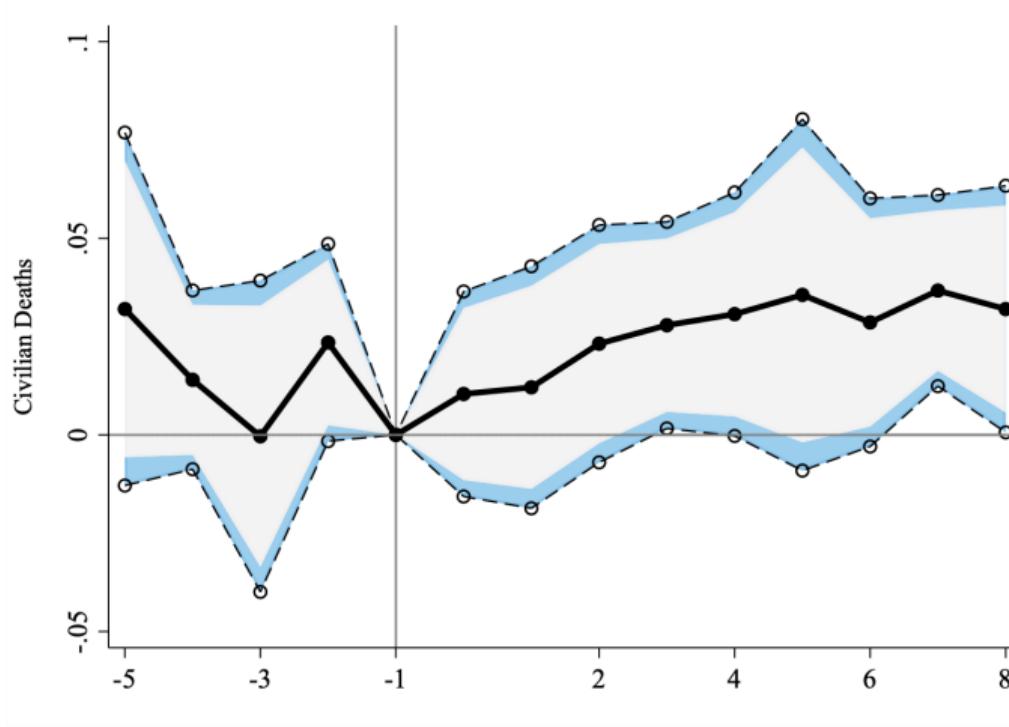


Below Median



BELOW MEDIAN PRIVATE SECTOR UNION DENSITY

Specification Checks

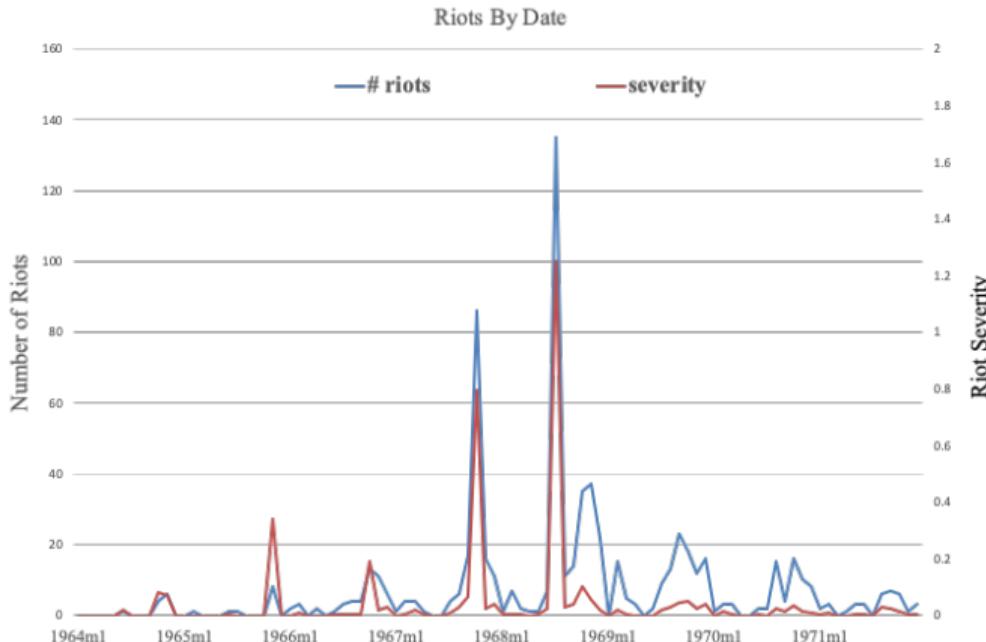


Above Median



FREQUENCY & SEVERITY OF 1960S UPRISINGS

Specification Checks



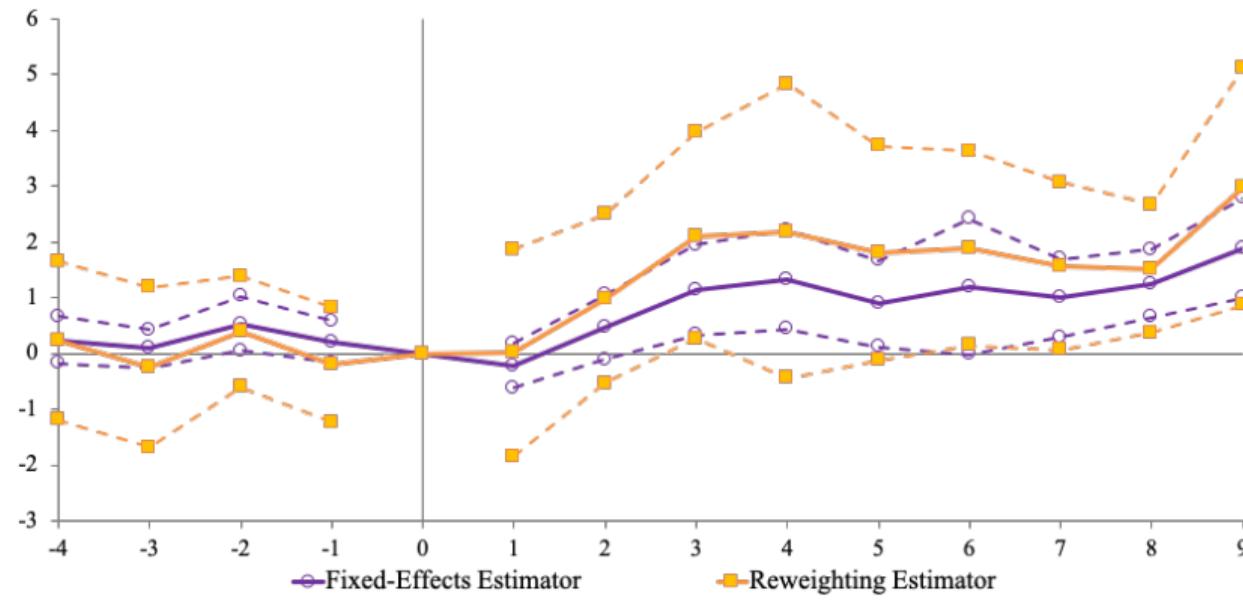
Treatment Effects

Non-White

White Deaths

UPRISINGS & POLICE-RELATED NON-WHITE CIVILIANS FATALITIES

Specification Checks

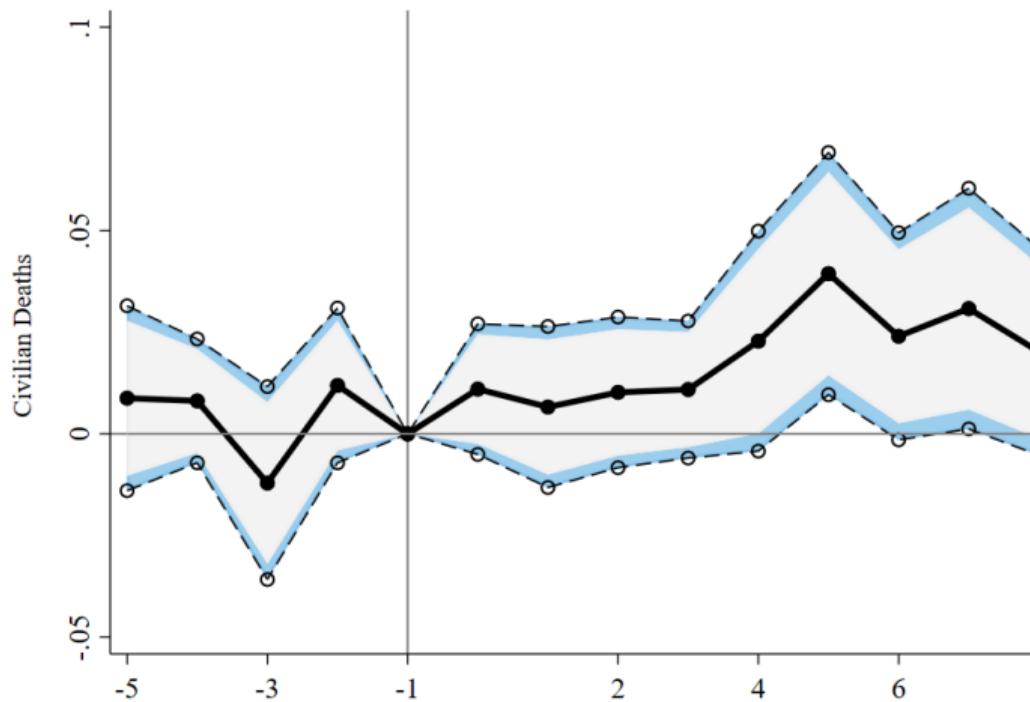


Non-White

White Deaths

ACCOUNTING FOR UPRISINGS: NON-WHITE DEATHS

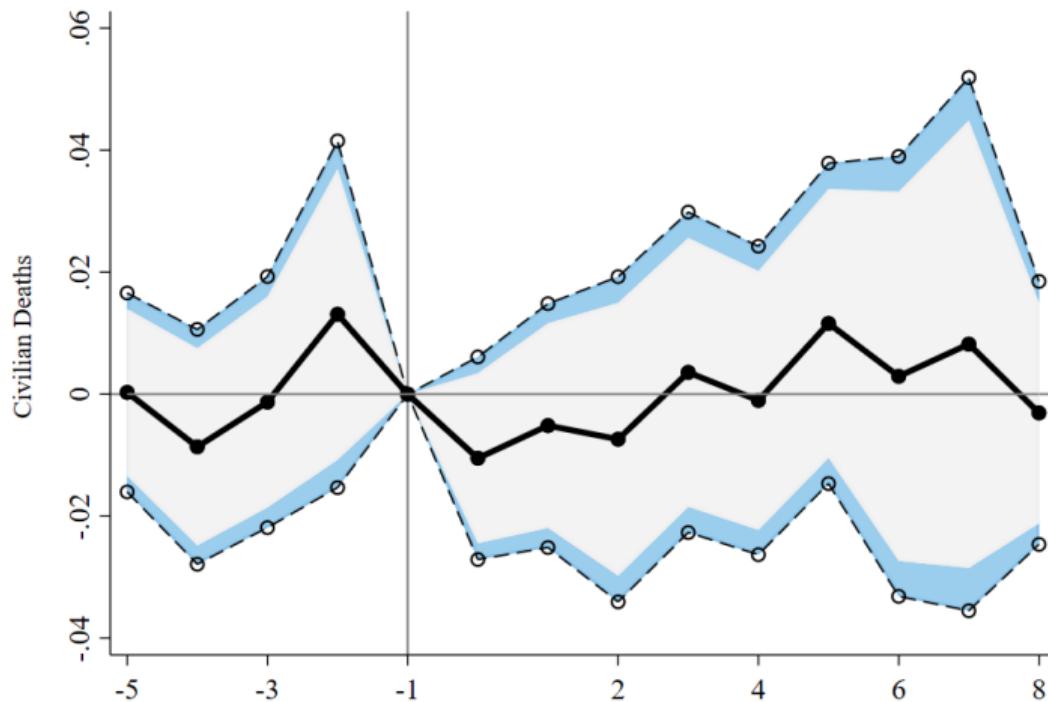
Specification Checks



White Deaths

ACCOUNTING FOR UPRISINGS: WHITE DEATHS

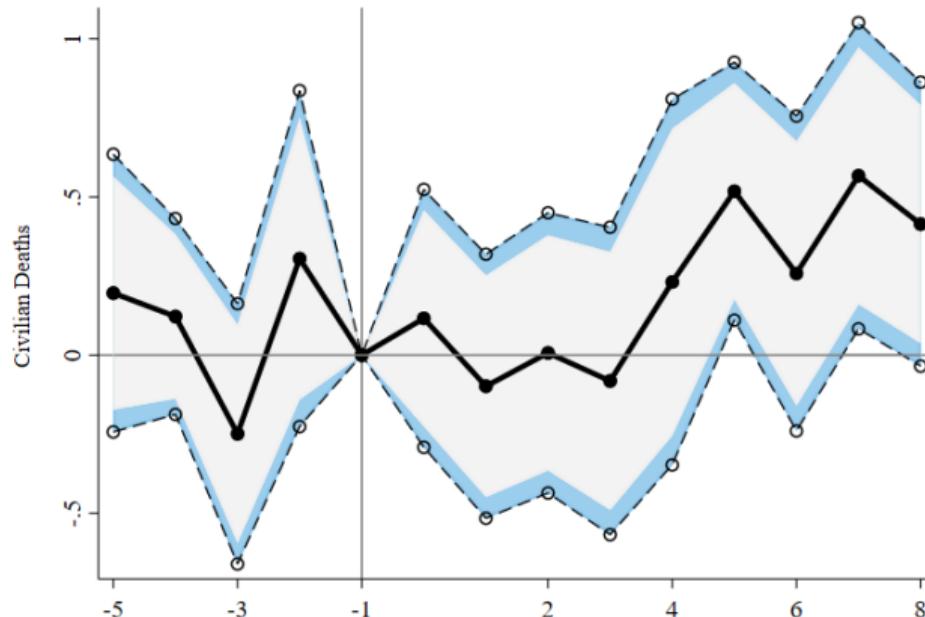
Specification Checks



Non-White

POISSON: NON-WHITE DEATHS

Specification Checks

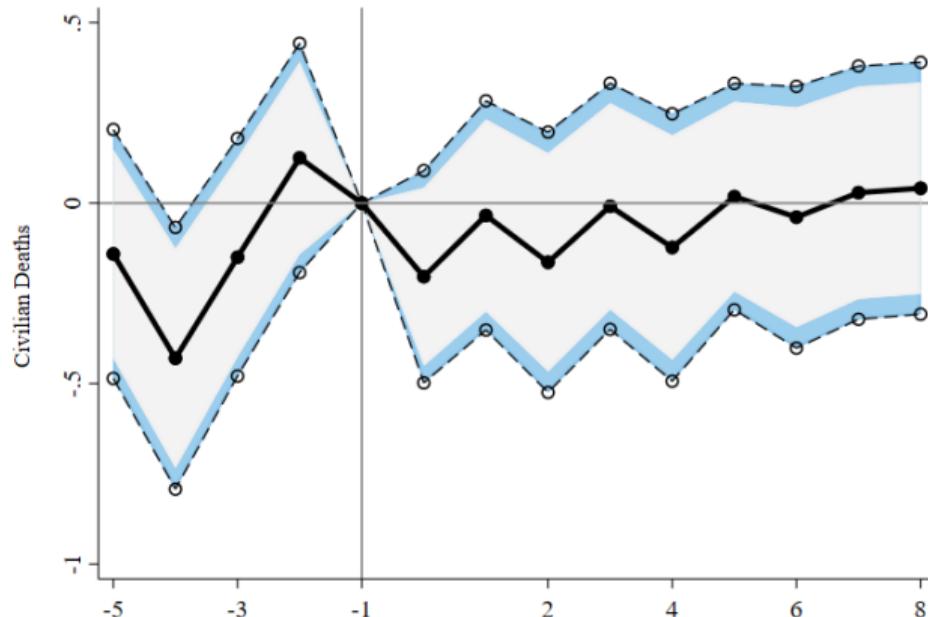


White



POISSON: WHITE DEATHS

Specification Checks

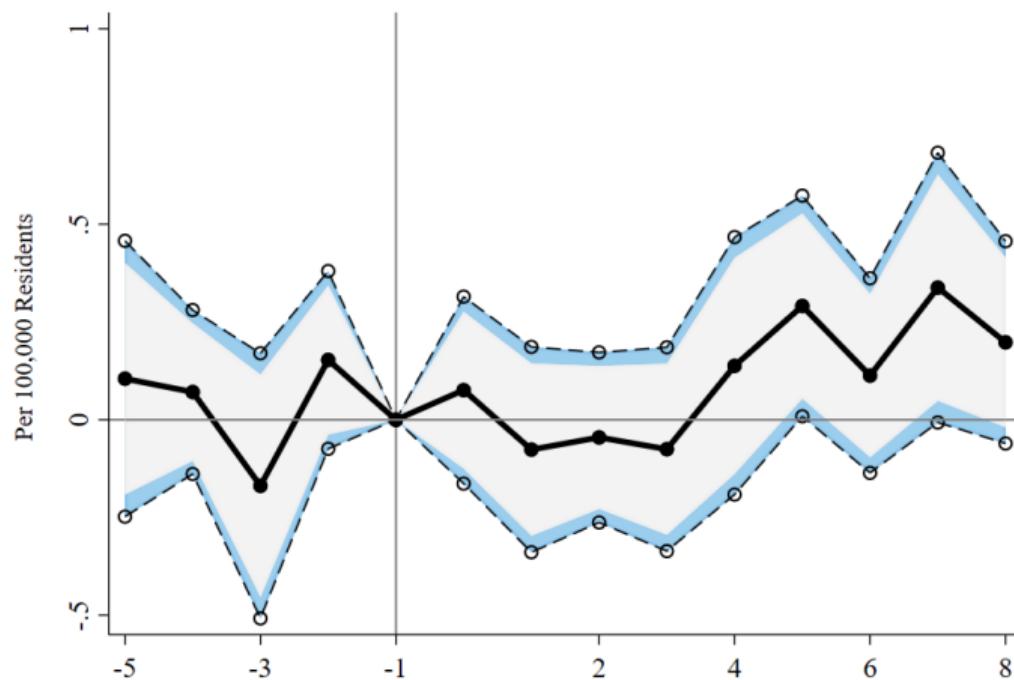


Non-White



NON-WHITE DEATHS PER 100,000 CIVILIANS

Specification Checks

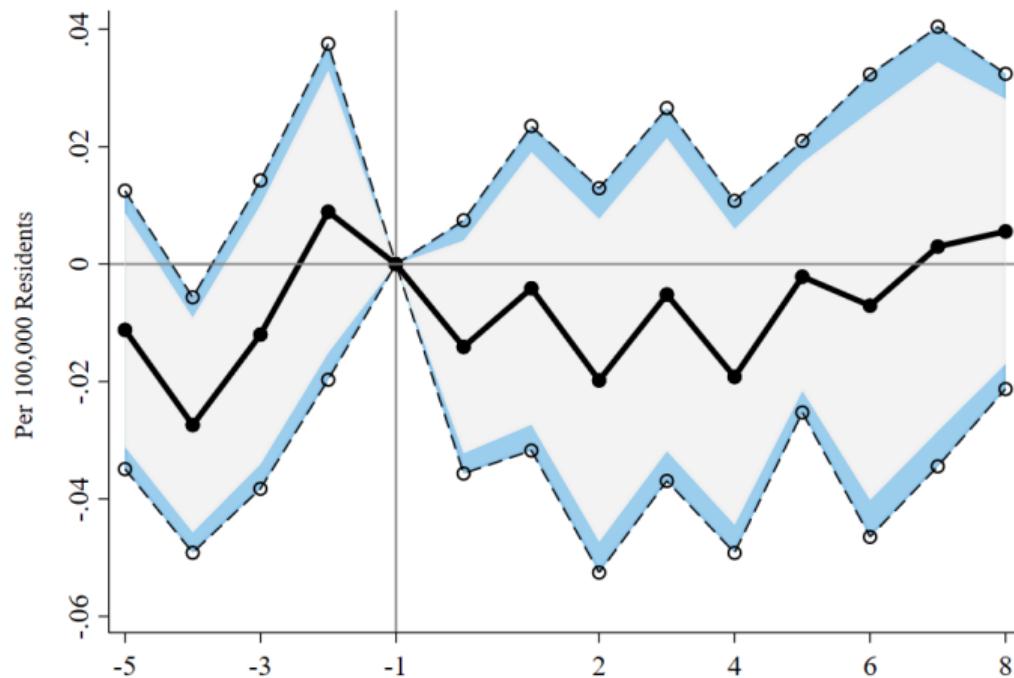


White



WHITE DEATHS PER 100,000 CIVILIANS

Specification Checks

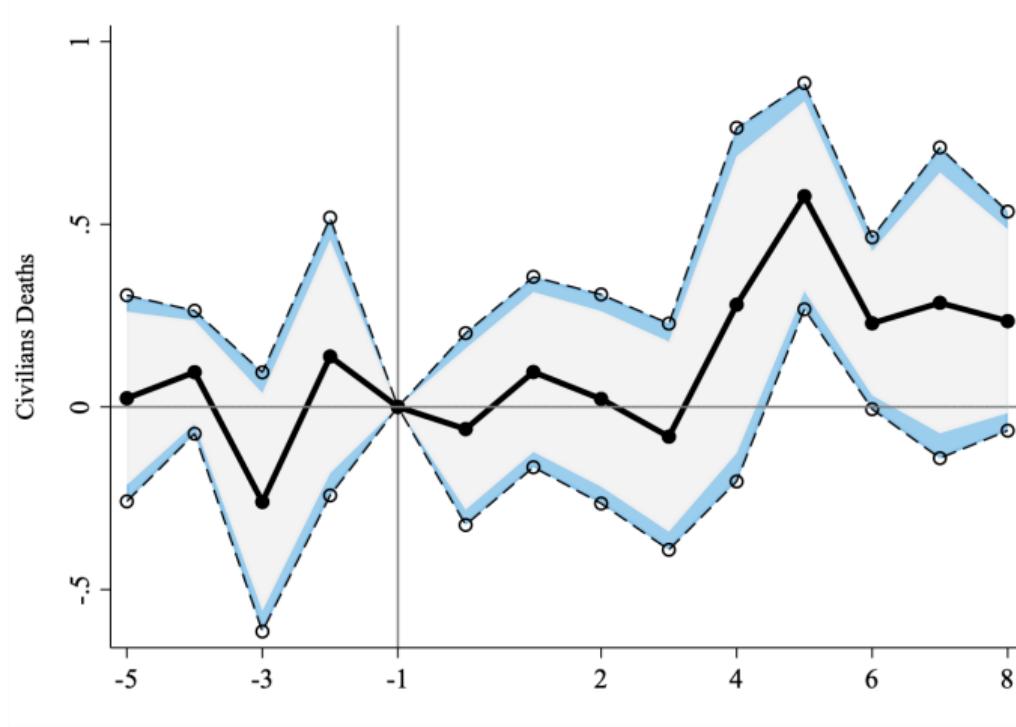


Non-White



INTENSIVE MARGIN: NON-WHITE DEATHS

Specification Checks

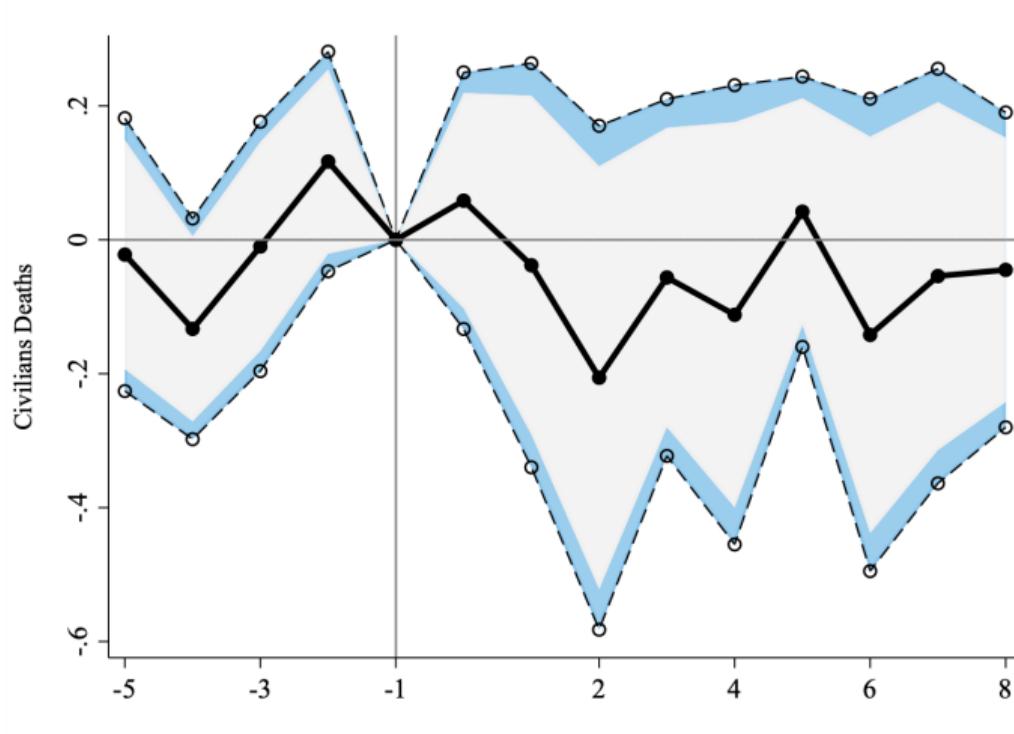


White



INTENSIVE MARGIN: NON-WHITE DEATHS

Specification Checks

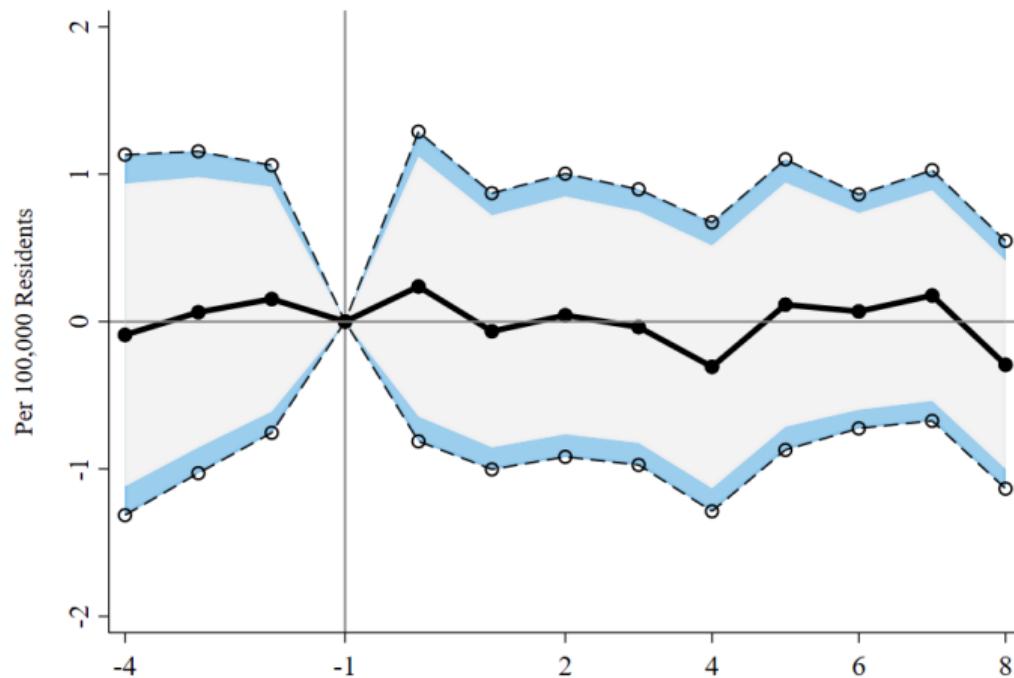


Non-White



NON-WHITE SUICIDES PER 100,000 CIVILIANS

Specification Checks

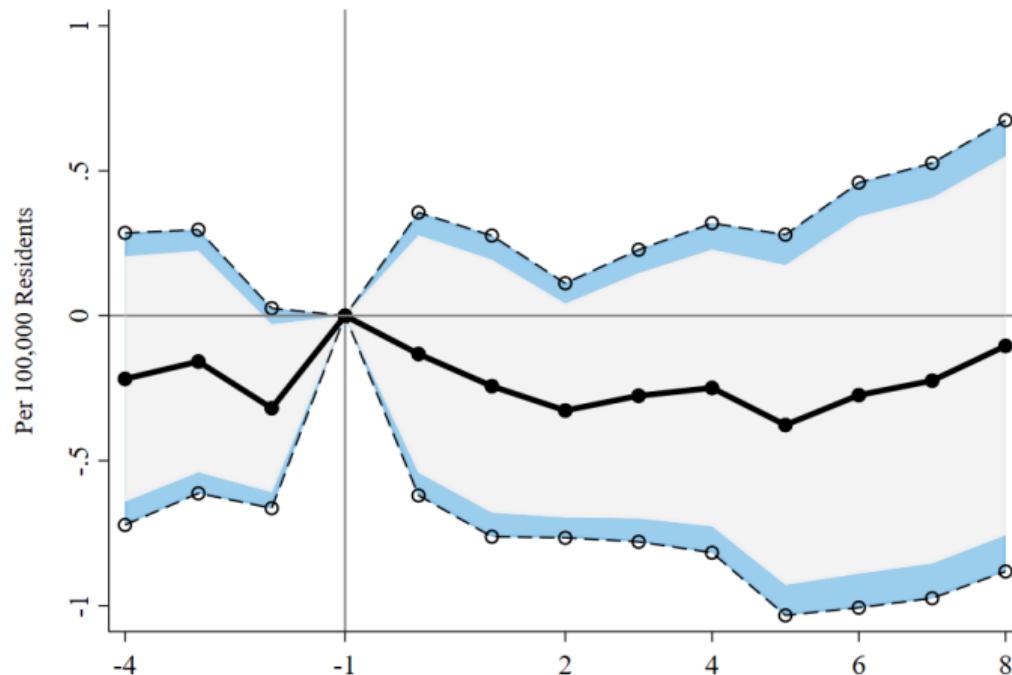


White



WHITE SUICIDES PER 100,000 CIVILIANS

Specification Checks

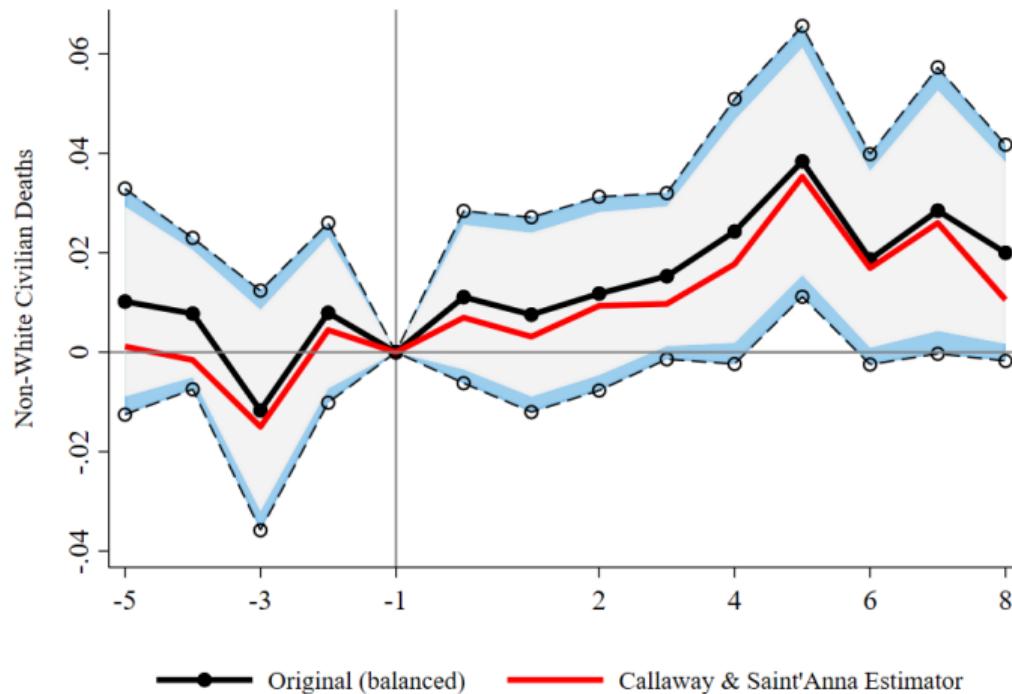


Non-White

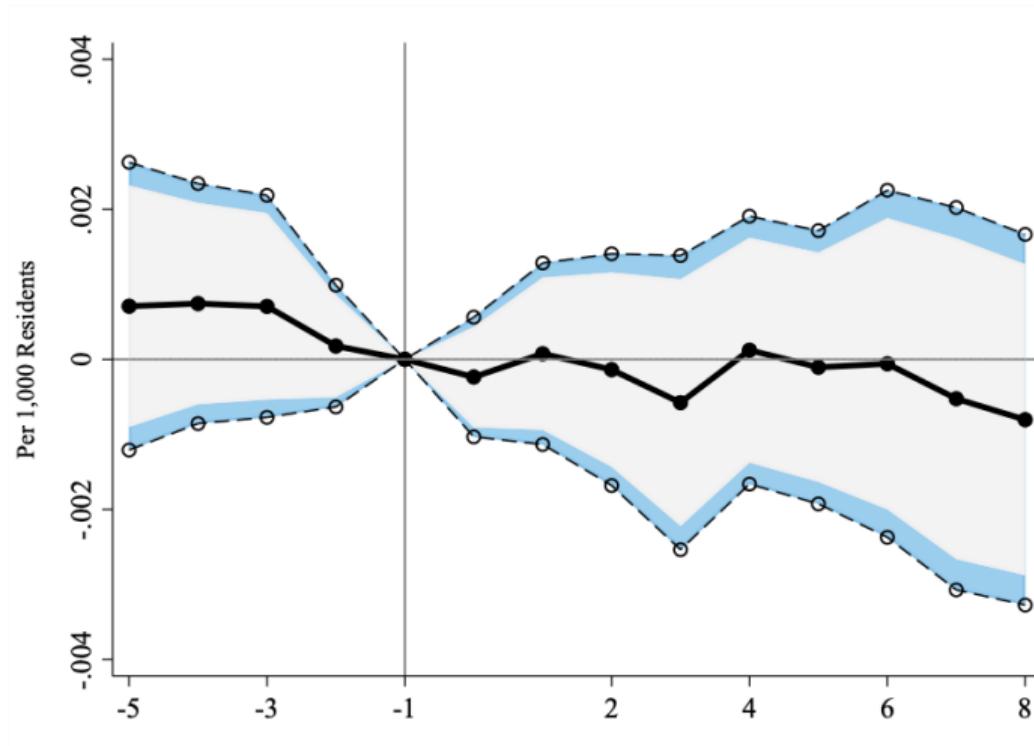


CALLAWAY & SANT'ANNA ESTIMATOR: NON-WHITE DEATHS

Specification Checks

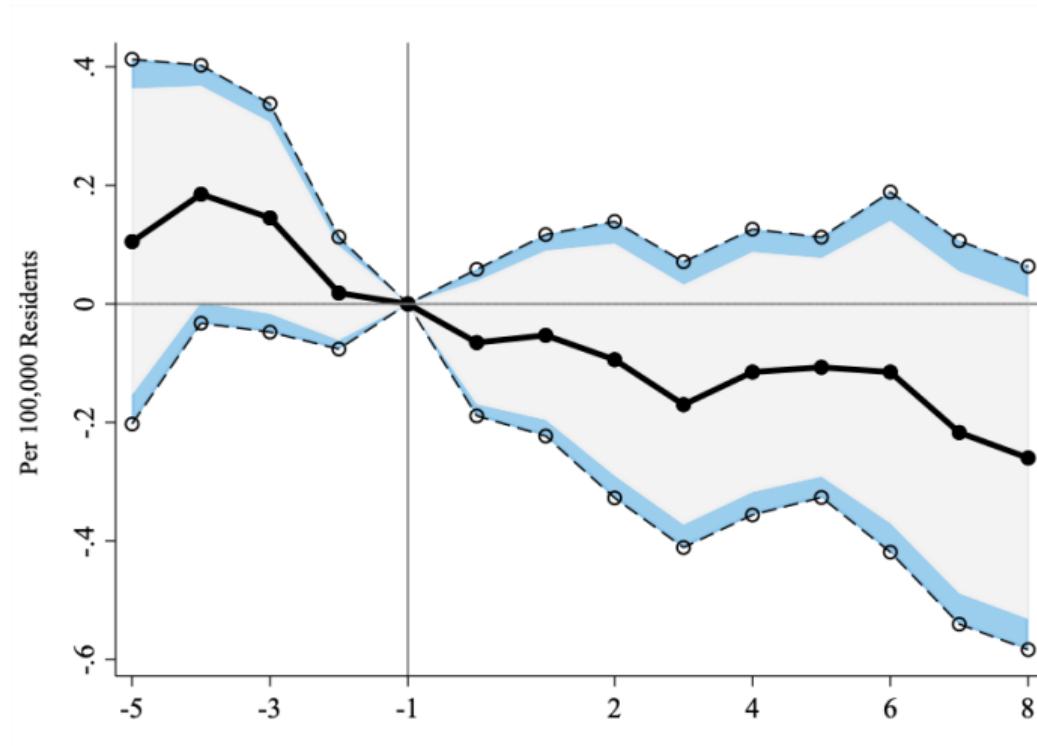


SWORN OFFICERS



Back

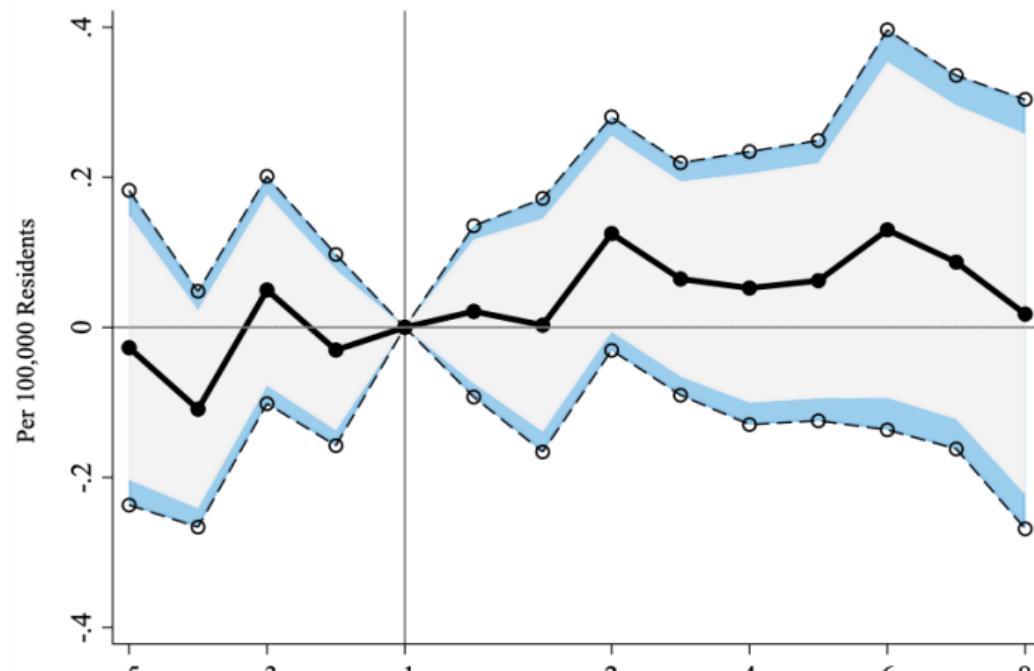
TOTAL CRIME



Back

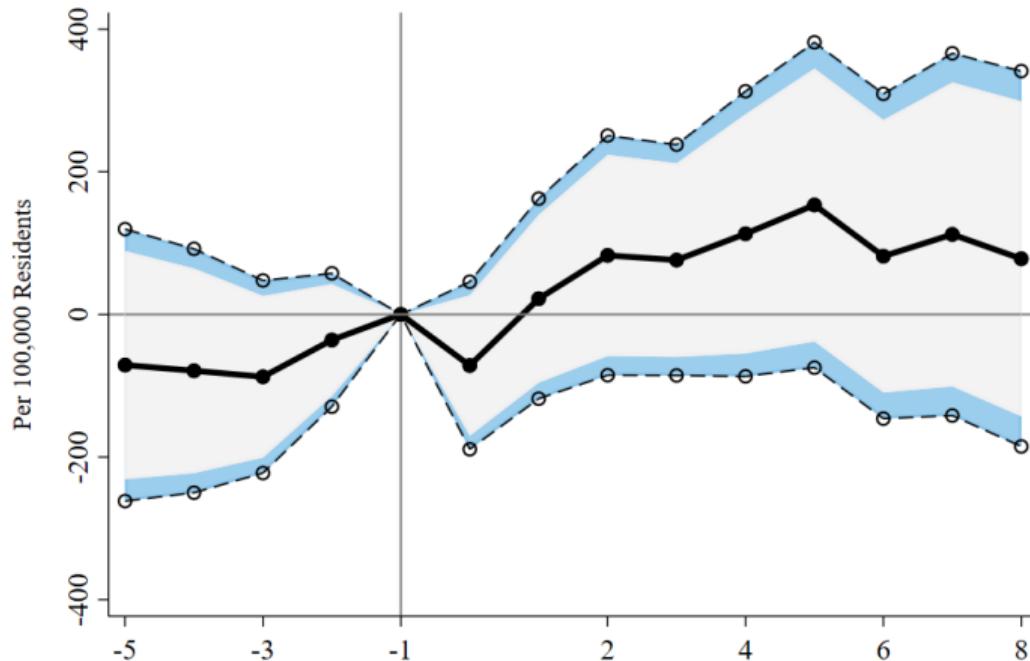


MURDERS



Back

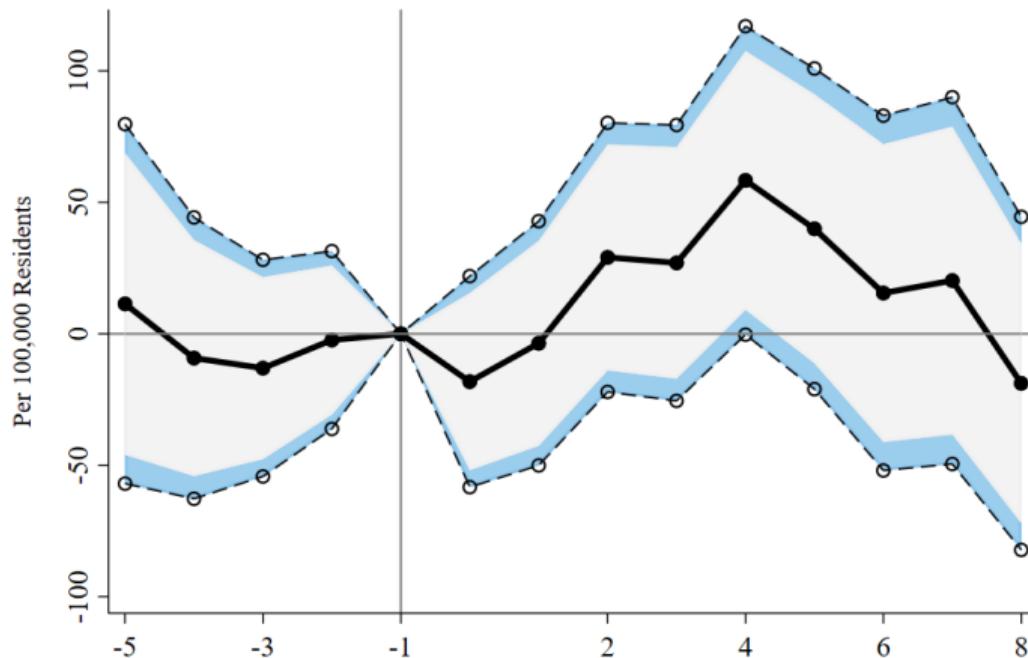
NON-WHITE ARRESTS



Back

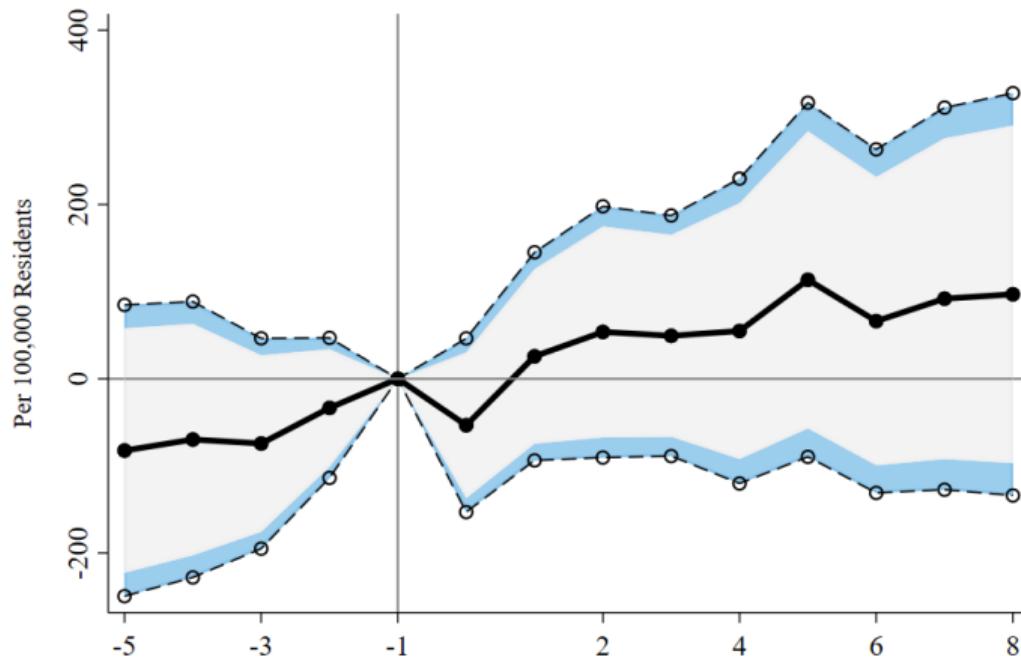


NON-WHITE ARRESTS – VIOLENT CRIME



Back

NON-WHITE ARRESTS – PROPERTY CRIME

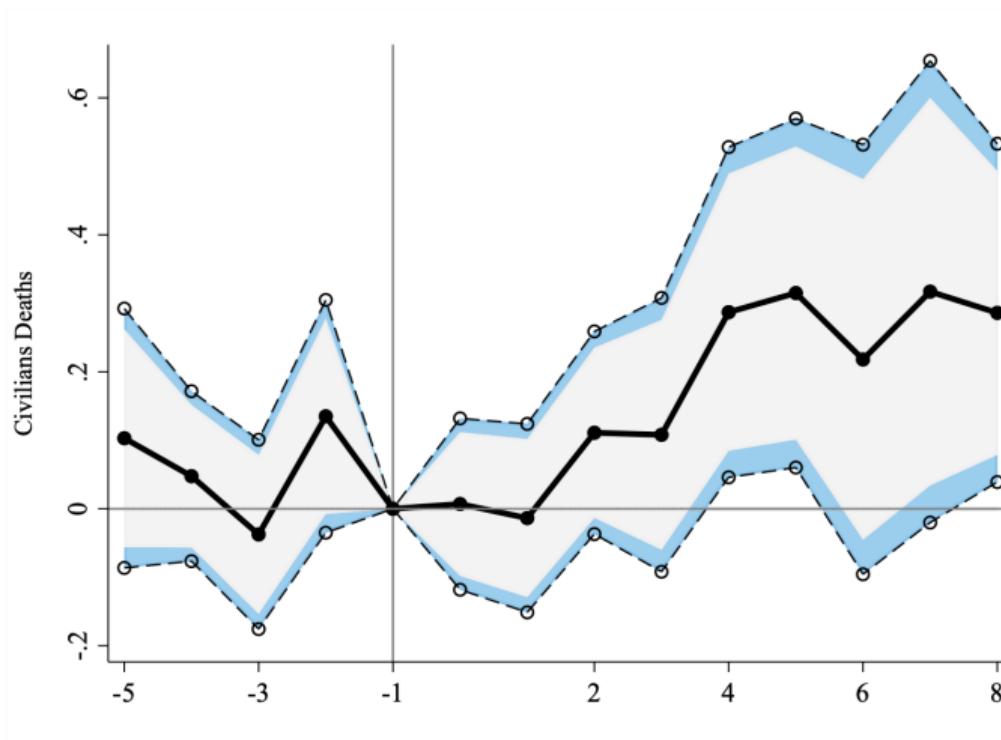


Back



CONTROLLING FOR ARRESTS: NON-WHITE DEATHS

Specification Checks

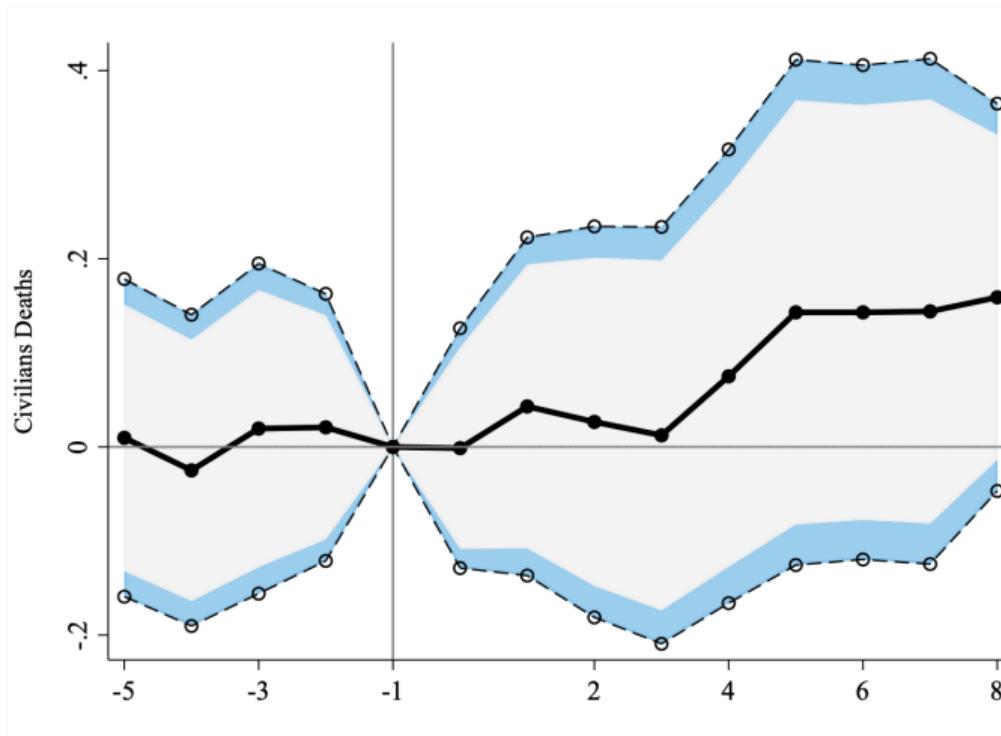


White



CONTROLLING FOR ARRESTS: WHITE DEATHS

Specification Checks

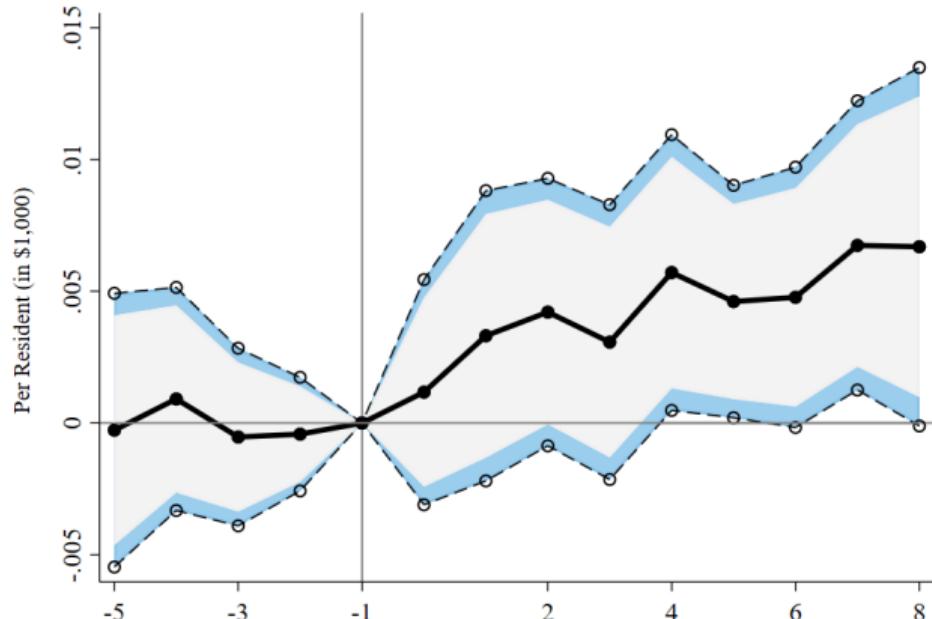


Non-White



CITY EXPENDITURES: POLICE

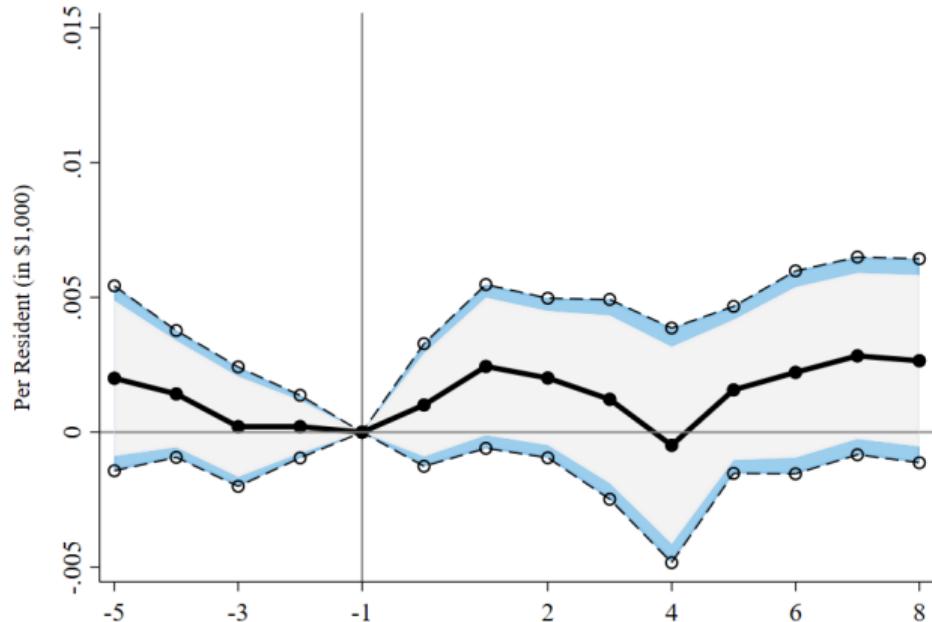
Specification Checks



Fire Department

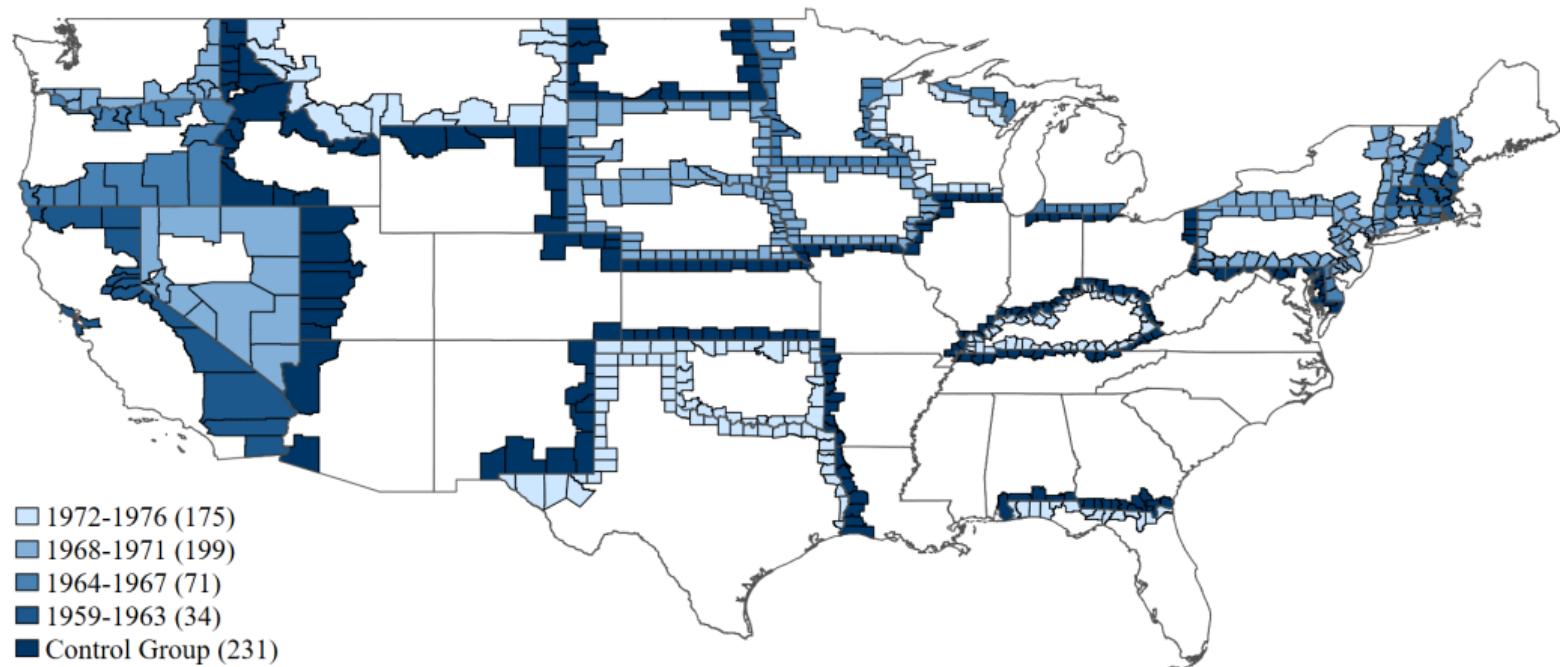
CITY EXPENDITURES: FIRE

Specification Checks



Police Department

CONTIGUOUS BORDERS EMPIRICAL STRATEGY



CONTIGUOUS BORDERS EMPIRICAL STRATEGY

- ▶ To ensure the robustness of the results, we employ the contiguous borders approach utilized in Dube et al (2010).

$$K_{ipt} = \alpha + \phi_i + \gamma_{t(p)} + \beta R_{it} + e_{ipt}$$

- ▶ K is the number of civilian deaths by police in county i , pair p , in year t
- ▶ ϕ is a set of county fixed effects
- ▶ γ is a set of year or pair-year fixed effects
- ▶ R_{it} is an indicator as to the presence of police bargaining rights

CONTIGUOUS BORDERS RESULTS: POLICE KILLINGS

Model	All	Non-White	White
	Deaths	Deaths	Deaths
Year FEs	0.024** [0.012]	0.030*** [0.010]	-0.005 [0.008]
Pair-Year FEs	0.003 [0.015]	0.01 [0.010]	-0.008 [0.008]
Obs	70,320	70,320	70,320

Notes: Each cell estimates from separate OLS regressions. Standard errors are clustered by border segment - state. *** p<.01, ** p<.05, * p<0.1

CONTIGUOUS BORDERS RESULTS: CRIME-RELATED OUTCOMES

Model	Total Crime	Violent Crime	Murders	Sworn Officers	Officers Killed
Year Fes	-0.077 [0.088]	0.185 [0.123]	0.018 [0.042]	-0.149*** [0.036]	0.001 [0.006]
Pair-Year FEs	0.01 [0.107]	0.024 [0.156]	0.032 [0.036]	-0.143*** [0.055]	-0.007 [0.011]
Obs	61,982	57,180	61,982	58,216	58,221

Notes: Each cell estimates from separate OLS regressions. Standard errors are clustered by border segment - state. *** p<.01, ** p<.05, * p<0.1

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NON-WHITE DEATHS ATTRIBUTABLE TO COLLECTIVE BARGAINING



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