

# The Effects of Fraternity Moratoriums on Alcohol Offenses and Sexual Assaults

## Advancement to Candidacy

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2022-02-07

# Background: A wide-spread tradition

## Benefits of Fraternities:

- Community service, volunteering, graduation rates, and future income (Mara, Davis, and Schmidt 2018; Hayek et. al. 2002; Asel, Seifert, Pascarella 2009)

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- Risky Behavior (e.g., hazing, sexual assault) (Hechinger 2017; Seabrook 2019; Minow and Einolf 2009)
- Binge drinking and college partying (DeSimone 2007; Routon and Walker 2014)
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**Question:** How do these moratoriums affect alcohol offenses and sexual assaults?

# Moratoriums

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## Moratorium Definition:

A temporary *campus-wide* halt on fraternity social events with alcohol.

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## Sources of Enforcement:

- University Administration (62%)
- IFC Council → student enforced (38%)

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## Moratoriums may be beneficial:

- College partying leads to more rape and alcohol (Lindo, Siminski and Swensen 2018)
- Restricting alcohol + higher penalty leads to less drinking (Liang and Huang 2008)
- Alcohol increases mortality, poor academics, and crime. (Carpenter and Dobkin 2009; Carrell et. al. 2011; Ha and Smith 2019)

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## Moratoriums may be detrimental:

- Displacement of crime
  - Partying in riskier places
- May cause large increases after moratorium is over → net effect could be worse due to pent up demand (Brassiolo 2016)

# Research Question

## Question:

- How do fraternity moratoriums affect campus-wide police reports of alcohol offenses and sexual assault?

## Novel Data:

- Construct data set from Daily Crime Logs from university-specific police departments (2014-2019).

## Identification:

- Exploit the variation in timing of the moratoriums using a difference-in-differences design.

# Contribution

- First study to evaluate moratoriums.
- Novel data constructed.
  - Mitigates the shortcomings of other fraternity works using Campus Safety Security Data + survey data ([Raghav and Diette 2021](#); [DeSimone 2007](#); [Routon and Walker 2014](#)).
- Further the college partying literature (e.g., [Lindo, Siminski and Swensen 2018](#)).
  - Fraternities are a major partying source at universities → provides evidence what their impact on partying is.
  - Represent decrease in partying → reason to expect asymmetries ([Cunningham and Shah 2018](#))
  - Closely links [student](#) behavior to partying.

# Sample Construction

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## Criteria:

- Must have some media coverage (web-searchable by Google/Lexis-Nexis).
- Must have temporary campus-wide ban of alcohol from fraternity parties for IFC fraternities (can be more extensive).
- Moratorium must be in sample period of [2014-2019](#) → Daily Crime Log archive length + avoid pandemic.

# Sample Construction

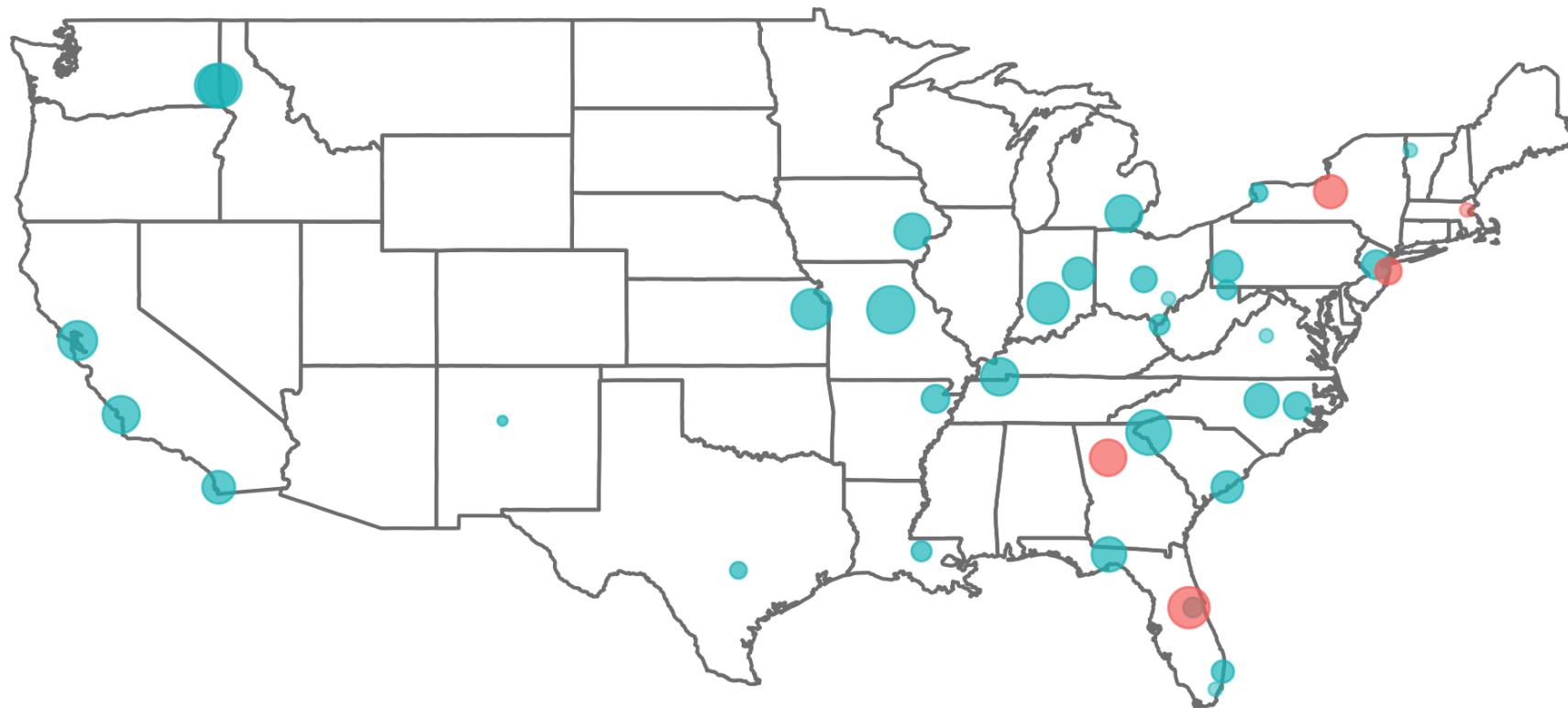
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## Final Sample:

- 38 universities with 45 moratoriums total ([Mean: 1.36; Max = 3](#)).
  - Large universities ([Enrollment Mean: 28k, Min: 3k, Max: 60K](#))
  - Differences in selectivity ([Graduation Rate Mean: 70, Min: 39, Max: 95](#))
  - Do not represent the universe of moratoriums.

# Locations of Moratoriums



University Type: ● Private not-for-profit ● Public

Fraction of Total Enrollment in IFC Fraternities: ● 0.025 ● 0.050 ● 0.075 ● 0.100

# The Pathway to a Moratorium

Triggering Event → Announcement/Implementation of Moratorium → End Date.

- Small delay between triggering event and implementation.
- Announcement/Enforcement can be from one of two sources of jurisdiction:
  - University Administration
  - IFC council → students from fraternities at university

Summary Statistics of Moratoriums

	<b>Mean</b>	<b>SD</b>	<b>Median</b>	<b>Min</b>	<b>Max</b>
Number of Moratoriums per-University	1.36	0.61	1.00	1	3
Length of Moratoriums	63.89	79.98	46.00	6.00	541.00

- Academic-calendar days vs. calendar days.

# Triggering Events



# Data Construction

# Data Construction

Indiana University, Bloomington Police Department Student Right To Know CAD Daily Log			
From Jan 20, 2014 to Jan 20, 2014.			
Date Reported:	01/20/14 - MON at 12:22	Location :	EIGENMANN HALL Event #: 14-01-20-001434
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 17:03	Location :	ALL OTHER ROADWAYS/INTERNS Event #: 14-01-20-001446
Date and Time Occurred From - Occurred To	01/20/14 - MON at 17:02 - 01/20/14 - MON at 17:03		
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #: 140154
Disposition:	CLOSED BY ARREST		
Date Reported:	01/20/14 - MON at 19:30	Location :	EIGENMANN HALL Event #: 14-01-20-001464
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 20:22	Location :	EIGENMANN HALL Event #: 14-01-20-001466
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 20:45	Location :	FOSTER HARPER HALL Event #: 14-01-20-001468
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 21:38	Location :	ALL OTHER NON-UNIVERSITY Event #: 14-01-20-001476
Date and Time Occurred From - Occurred To			
Incident :	ALL OTHER OFFENSES - HARASSMENT/INTIMIDATION		Report #:
Disposition:	NO CASE REPORT		
Date Reported:	01/20/14 - MON at 21:53	Location :	ROSE AVE RESIDENCE HALL Event #: 14-01-20-001479
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 22:30	Location :	COLLINS COMMON AREA Event #: 14-01-20-001486
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 23:02	Location :	FOREST QUAD Event #: 14-01-20-001487
Date and Time Occurred From - Occurred To	01/20/14 - MON at 22:45 - 01/20/14 - MON at 23:02		
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #: 140157
Disposition:	CLOSED NO ARREST.		
Date Reported:	01/20/14 - MON at 23:07	Location :	FOSTER JENKINSON HALL Event #: 14-01-20-001491
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 23:35	Location :	ALL OTHER OPEN AREAS Event #: 14-01-20-001494
Date and Time Occurred From - Occurred To	01/20/14 - MON at 23:35 - 01/20/14 - MON at 23:41		
Incident :	ASSAULT - OTHER ASSAULTS - SIMPLE, NOT AGGRAVATED		Report #: 140159
Disposition:	CLOSED BY ARREST.		

11 Incidents Listed.

# Data Construction

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Print Date and Time 1/21/2014 12:23:52PM at Page No. 1			

## Construction + Benefits:

- Incidence-level reports mandated by Federal government.
- All reports—caveat: needs harmonization.
- Use unique university police-department Daily Crime Logs
- Match on specific offenses using regular expressions
- Merge with moratorium dates (public records requests/news articles/fraternity advisers), IPEDS, and academic-calendars.

# Matching Process:

Words and Phrases used to Pattern Match	
Outcome	Words to Match
Alcohol Violations	alcohol, dwi, intox, drink, dui, drunk, liquor, driving under the influence, dip, abcc, underage, dwi, underage, pula, owi, mip, under age, beer, wine, booze, minor in possession, ovi
Sexual Assault	sex, rape, fondling, fondle

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## Example of the Matching Process:

- East Carolina Crime Logs:
  - Incident Report 1: "Underage Possession of Liquor (1)"
  - Incident Report 2: "Consume Alcohol < Age 21"
- Change to lowercase, match on word:
  - Incident Report 1: "**underage** possession of **liquor** (1)" → counts as 1.
  - Incident Report 2: "consume **alcohol** < age 21"

# Empirical Strategy

## Baseline specification:

$$Y_{u,t} = \beta Moratorium_{u,t} + \gamma_u + \lambda \mathbb{X}_t + \epsilon_{u,t}$$

- $Y_{u,t}$  is an outcome of alcohol offenses or sexual assaults per-25000 enrolled students per academic-calendar day at university  $u$  in time  $t$ .
- $Moratorium_{u,t}$  is an indicator variable equal to one when university  $u$  is undergoing a moratorium at time  $t$ .
- $\gamma_u$  is a university-specific fixed effect.
- $\mathbb{X}_t$  is a vector of time-varying controls that are shared across universities.
- Standard errors clustered by university.

*Intuition:* comparing academic-calendar days with a moratorium to academic calendar-days without a moratorium, while adjusting for fixed differences in universities and times of the year.

# Main Results:

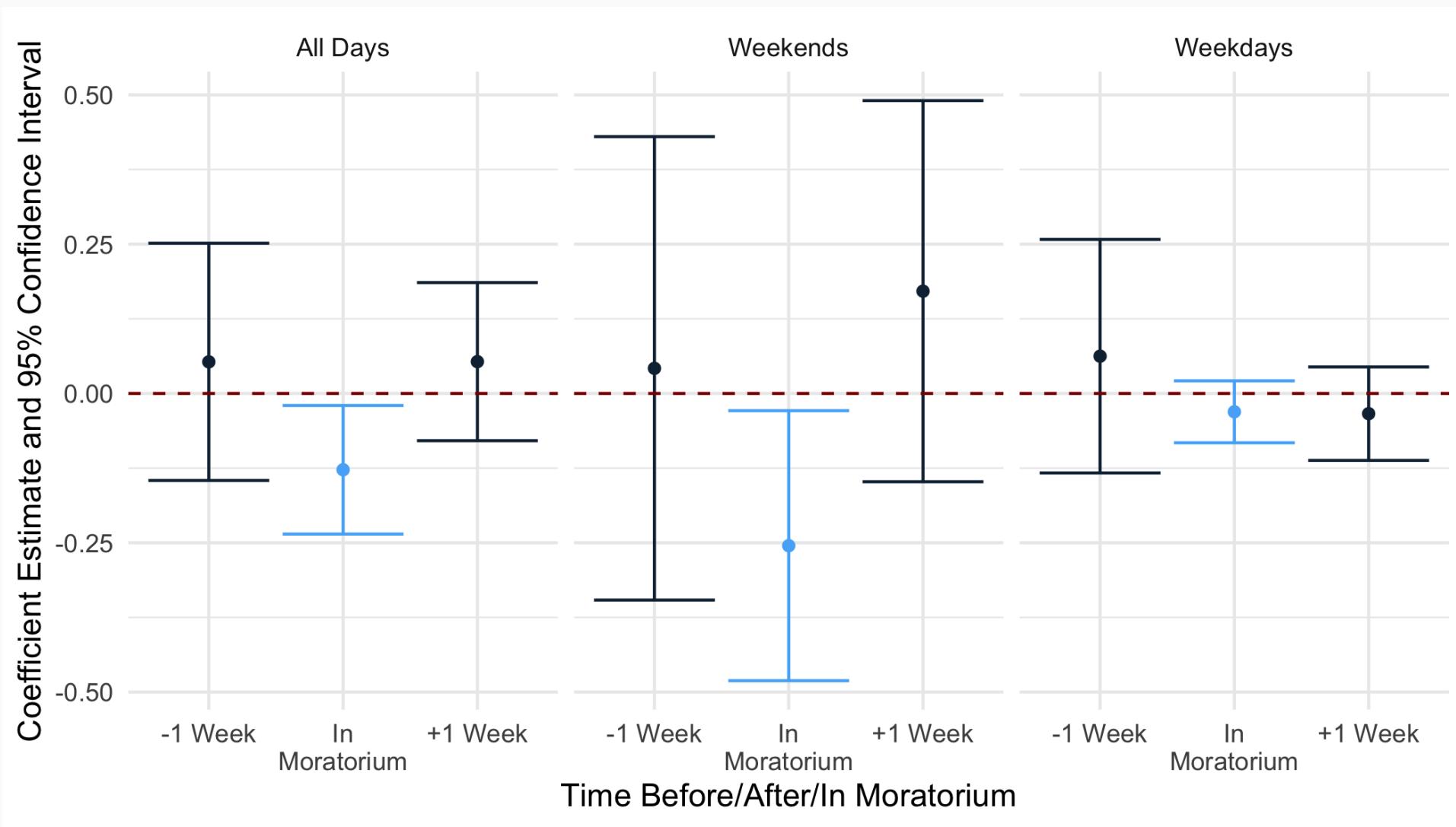
## Alcohol Offenses

- Large decreases in reports of alcohol offenses during moratoriums (27%).
  - Driven by the weekends (Friday-Sunday).
  - Transient effects.

## Sexual Assaults

- Weaker evidence of decreases in sexual assault
  - Large decreases (26%) of 10% significance on weekends only.
  - Likely lacking power.

# Alcohol Offenses: Main Results



# Sexual Assaults: Weekend vs. Weekday

Effect of Moratoriums on Sexual Assaults by Weekend/Weekdays (OLS)

	Days of the Week		
	All Days	Weekends	Weekdays
In Moratorium	-0.010 (0.006)	-0.017+ (0.010)	-0.004 (0.006)
Observations	56514	24244	32270
Mean of Dependent Variable	0.055	0.064	0.047
FE: Day of Week	X	X	X
FE: Holiday	X	X	X
FE: Semester (Spring/Fall)	X	X	X
FE: University by Academic Year	X	X	X

Standard errors are clustered by university and each offense is defined as per-25000 enrolled students. The column 'All Days' represents specification (2) from the main results table. Weekends consist of Fridays, Saturdays, and Sundays. Weekdays consist of Monday through Thursday. Holiday controls include controls for Veterans Day, Thanksgiving, Labor Day, Halloween, and MLK Day. Christmas/New Years/July 4th are not included since no university's academic calendar contains them. A moratorium is a temporary halt on fraternity-related activities with alcohol.

+ p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

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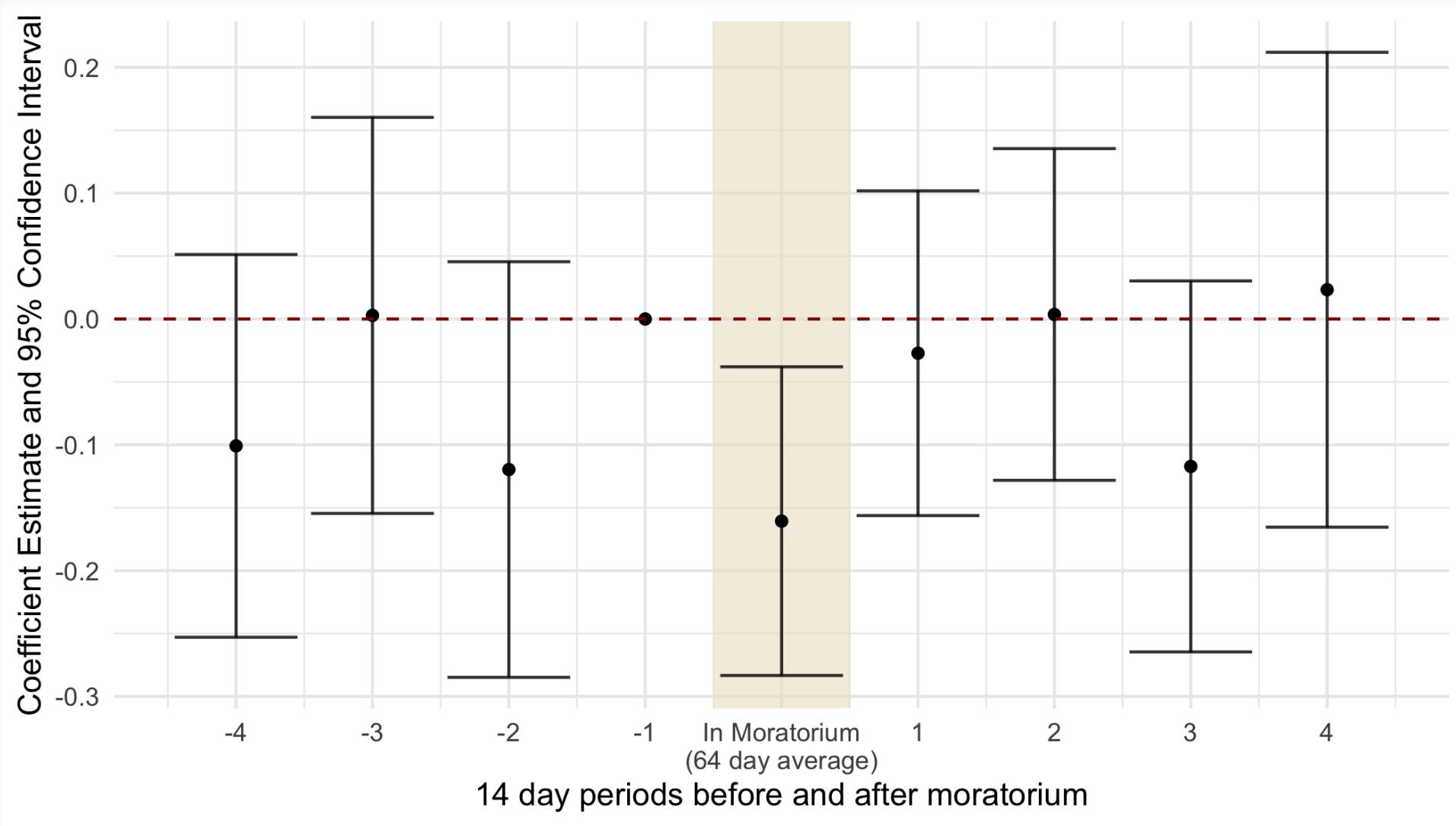
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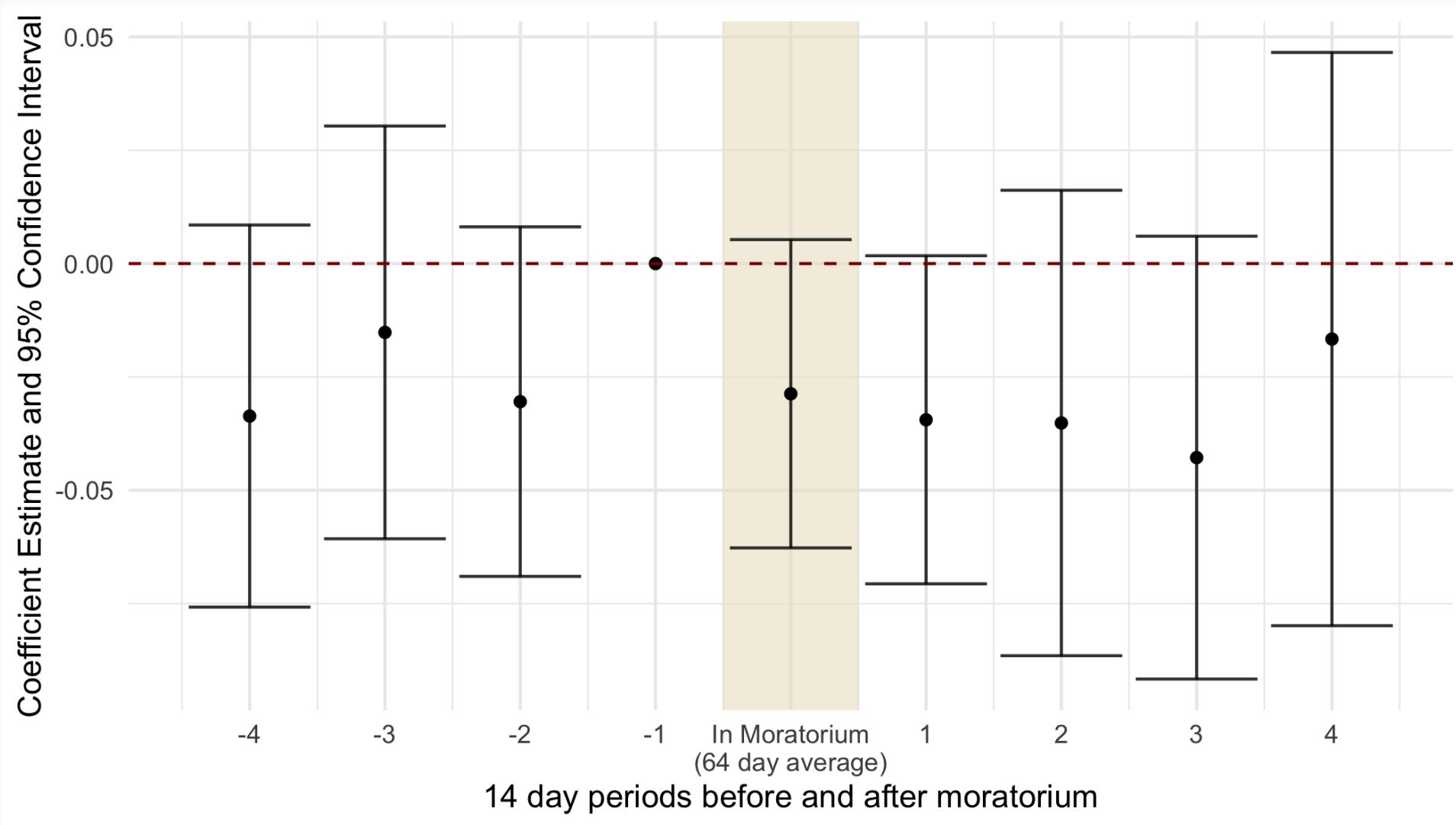
## 3. No lasting effects of the moratorium

- Event studies + Further Analysis

# Event Study: Alcohol Offenses



# Event Study: Sexual Assaults



# Robustness:

## Poisson Estimation

- Good for count-data with non-negative outcomes.

## Leave-one-out Estimation

- Makes certain not one university is driving the results.

## TWFE Literature

- Heterogeneous treatment effects likely → estimate a new model that has 0 negative weights.

## Inclusion of Never-Treated

- Read about in the paper!

# Potential Mechanism

## Is the moratorium displacing crime?

- Difficult to answer with the Daily Crime Logs.

## Indirect Test:

- Use the Campus Safety and Security Data (CSS)
  - Downfall: Calendar year aggregation.
  - Benefits: Contains good location data: delineate between where on-campus crimes occur.

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This is not causal, only speculative!

# Potential Mechanism: Results

Effect of Moratoriums on Alcohol Offenses and Sexual Assaults: Comparison of Daily Crime Logs and Campus Safety and Security (OLS).

	Daily Crime Logs		Campus Safety and Security
	Full Sample	Full Sample	Residence Halls
<b>Panel A: Alcohol Offenses</b>			
In Moratorium	-0.142+	0.282*	0.249*
	(0.077)	(0.111)	(0.119)
Observations	226	228	228
Mean of Dependent Variable	0.388	1.042	0.979
<b>Panel B: Sexual Assaults</b>			
In Moratorium	-0.015	-0.049	-0.035*
	(0.011)	(0.040)	(0.014)
Observations	226	228	228
Mean of Dependent Variable	0.043	0.081	0.041
FE: University	X	X	X
FE: Year	X	X	X

+ p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

# Heterogeneity:

What type of triggering event causes the largest effects?

- Behavior Violation
- Sexual Assault
- Fraternity-related Death → shows largest effects for decreases in alcohol.

How long until a moratorium is effective?

- Diminishing returns?
- Split into 3 quantiles: [0, 32 days], [33, 57 days], [58, 541 days].

What type of oversight works best?

- University vs. IFC Council
- Evidence that university oversight is best, although possibly not enough power for this heterogeneity.

# Conclusion

## Main Takeaways:

- First study to estimate the causal effects of fraternity moratoriums.
  - Find 27% decrease in alcohol offenses → effects are transient.
  - Find weaker evidence of decreases in reports of sexual assaults (10% significance), although large magnitude (26%) on weekends.
  - Possible mechanism is displacement of crime to safer areas (e.g., residence halls).
- I construct a novel dataset.
  - Mitigates issues with commonly used data such as NIBRS/UCR.
- Potential research → deferred recruitment/barring of singular fraternities.
- This study does not advocate for removal of fraternities.

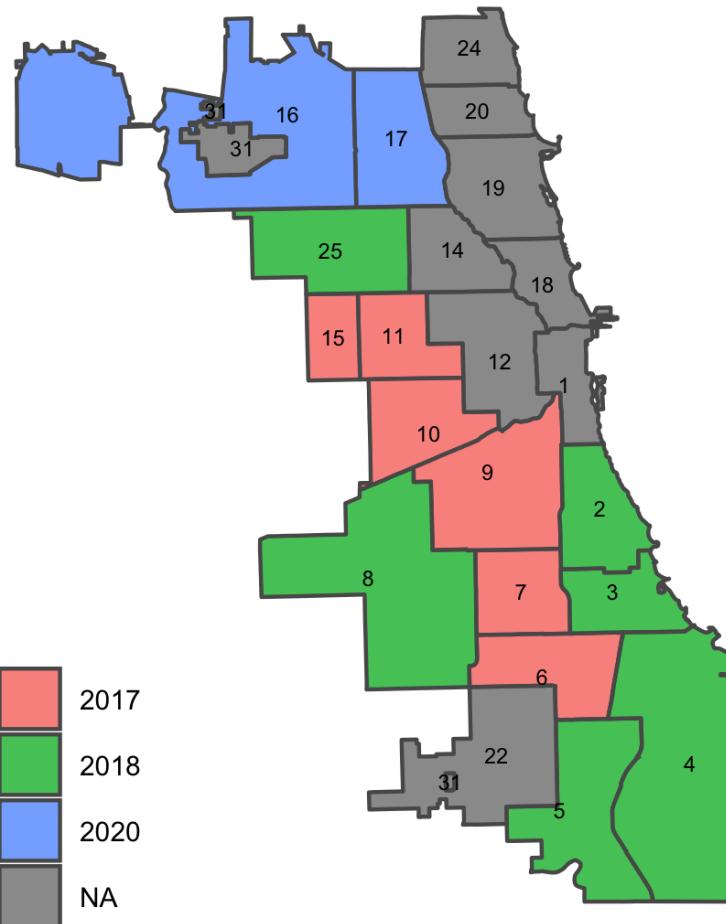
# Gunshot Violence and Birth Outcomes

## Gunshot Violence and Birth Outcomes with Anna Jaskiewicz

- **Motivation:** Maternal stress during gestation can have negative effects such as pre-term delivery and low birth weight ([Aizer et. al. 2015](#))
  - Fear of being victim → stress. Hearing gunshots → fear ([Robinson and Keithley 2000](#))
- **Question:** How does exposure to gunshot violence affect birth outcomes?
- **Data:**
  - Shotspotter: uses microphones to identify exact location of gunshots. Rollout in 2017.
  - Illinois Birth Data: Contains mother characteristics + home address
- **Main Idea:** Match mothers to exposure of gunshot violence and compare birth outcomes from mothers on one street who received more exposure to those on a street slightly further away that did not receive as much exposure.

# District Rollouts:

Chicago Police Districts: Rollout of Shotspotter



# Police Shifts and Use of Force

## Police Shifts and Use of Force with Toshio Ferrazares

- Motivation: Previous work has shown how shift length can affect performance (Brachet et. al 2012).
- Question: How does length of police shift affect police use-of-force?
  - Variation: 12 hour shifts vs. 8 hour shifts.
  - Variation: Multiple shifts in a row (e.g., 3 days) vs. fewer shifts in a row (2 days).
  - Setting: Chicago Police Department + Louisville Metro Police + LAPD (pending decision)
- Data: Universe of police shift lengths beginning in 2014 from 3 large police departments in addition to use-of-force reports.
  - Detailed use-of-force incidents allows for positional analysis.

# Example of Use of Force Report

**Incident Officers**  
Police Officer Donald Styles - 5166  
Assignment at time of incident: Police Officer Patrol Bureau/4th Division/4th Division/2nd Platoon [None Entered]  
Role: [None Entered]

Force used by this Officer against Citizen

- De-escalation Techniques - Force Effective: No
- Verbal Directions - Force Effective: No
- Empty Hand Control - Force Effective: No
- Take Down - Force Effective: Yes
- Come-along - Force Effective: No

Less lethal force used by this Officer against Citizen

Force Used	Force Effective	Region	Point of Contact
De-escalation Techniques	No	1	4
Verbal Directions	No	1	1
Empty Hand Control	No	4	2
Take Down	Yes	7	3
Come-along	No	6	5

**FRONT**      **BACK**

The diagram illustrates the front and back of a human figure for mapping injuries. The front view shows points 1 through 13 numbered around the body. The back view shows lettered regions A through L. A large rectangular box containing an 'X' is placed over point 12 on the front figure.

Injuries Sustained By Officer	Injury	Region	Injury Location