

# Evaluation of Scheduling Policy: Key Lessons from Minimum Wage Research

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**Sylvia A. Allegretto, PhD**  
Chair, Center on Wage & Employment Dynamics  
Institute for Research on Labor & Employment  
University of California, Berkeley





# Experimental Design

- Classical experiment
  - Clinical drug trial
  - Random assignment of treatment
  - Control group—what would have happened regardless of treatment
- MW as a natural experiment
  - MW policy is not random
  - Allegretto, Dube, Reich & Zipperer (2017)
  - Nonrandom distribution of state minimum wage policies thus poses a serious challenge

**Key Lesson: Valid Control Group**



# Validation

- Growth rates of treatment & control groups
  - Identical *but for* the MW policy
  - Biased results if trends are not ‘parallel’
  - No guarantee post-treatment trends would be identical absent the policy
- Validity checks for treatment and control
  - Are pre-policy characteristics reasonably similar?
  - Have outcomes tended to move together in the past?
  - Was the policy more or less ‘exogenous’ or was it triggered by something that differentially affects the groups?

**Key Lesson: Evidence of Parallel Trends**



# Is This a Thing?

- Is there a bite to the policy?
  - Otherwise, a first stage
  - Are you looking in the right place?
  - May need outside data or survey data
  - Wage example on teens and restaurant industry
- Helps to validate estimates on outcomes of interest
  - A strong first stage lends credibility to the design
  - Examples: ADR (2011), ADRZ (2017) criticism

**Key Lesson: Show That This is a Thing**



# Why should we believe you?

- A first stage check
  - Are you looking in the right place?
  - May need outside data or survey data
  - Wage example on teens and restaurant industry
- Robustness checks
  - Run various specification for sensitivity checks
- Falsification tests
  - Run analysis on groups where there should be no effect
  - Provides insight into the validity of estimates on outcomes of concern
- Helps to validate estimates on outcomes of interest
  - A strong first stage gives credibility to the design
  - Examples: ADR (2011), ADRZ (2017) criticism

**Key Lesson: Additional evidence that lends credibility**

# Card & Krueger PA-NJ Study

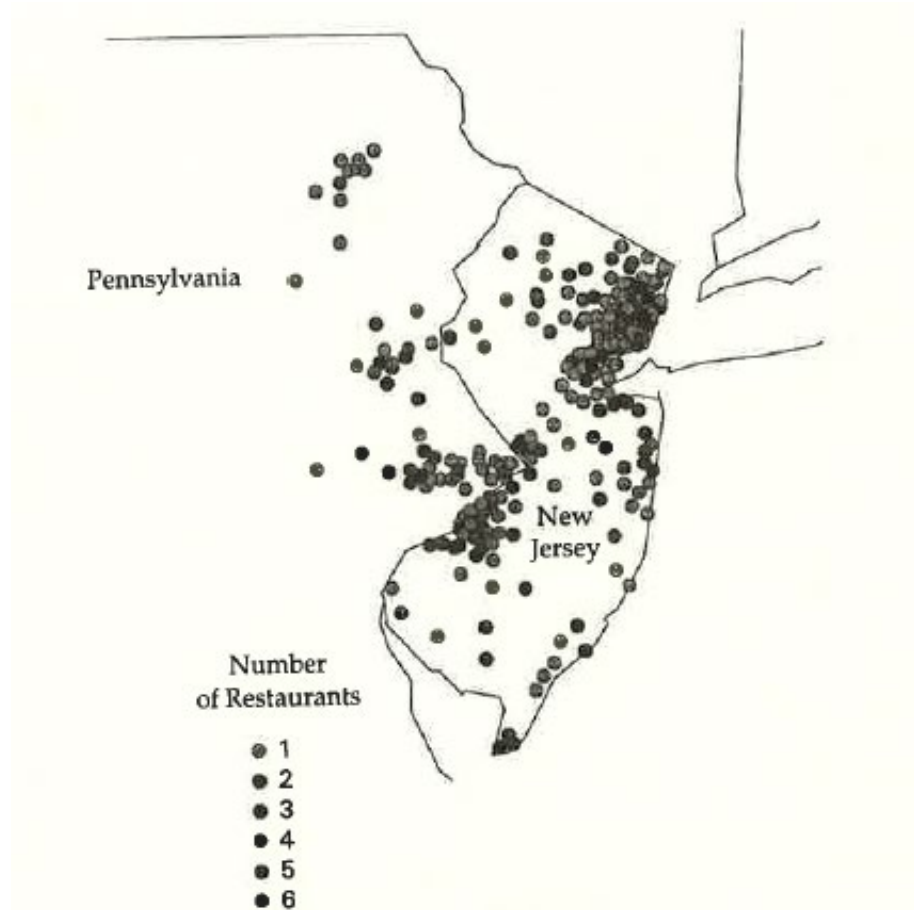
- NJ passes highest MW in the US after a decade of federal inaction
- 1992 NJ MW from \$4.25 to \$5.05 highest in country!
- Passed in good times, implemented during recession thus effects of MW not overshadowed by a rising tide of general economic conditions...a legitimate natural experiment
- Prior to certain passage & amidst fight to repeal C&K fielded surveys



# Card & Krueger's Control Group

- Fielded survey before & after the policy intervention
- FF Restaurants: compliance, heavy user of MW workforce, no tips, homogeneous job requirements, high response rates (TX research)
- Two designs—data from surveys
  - PA as control: survey NJ & PA FFRs
  - NJ FFRs as contrast: survey those paying >\$5 and those paying lower than \$5 before
- Usable sample 410

# Card & Krueger PA-NJ Sample





# Card & Krueger PA-NJ

Variable	NJ	PA	T-stat
<u>Wave 1</u>			
Starting wage	\$4.61	\$4.63	-0.4
Wage = \$4.25 (%)	30.5	32.9	-0.4

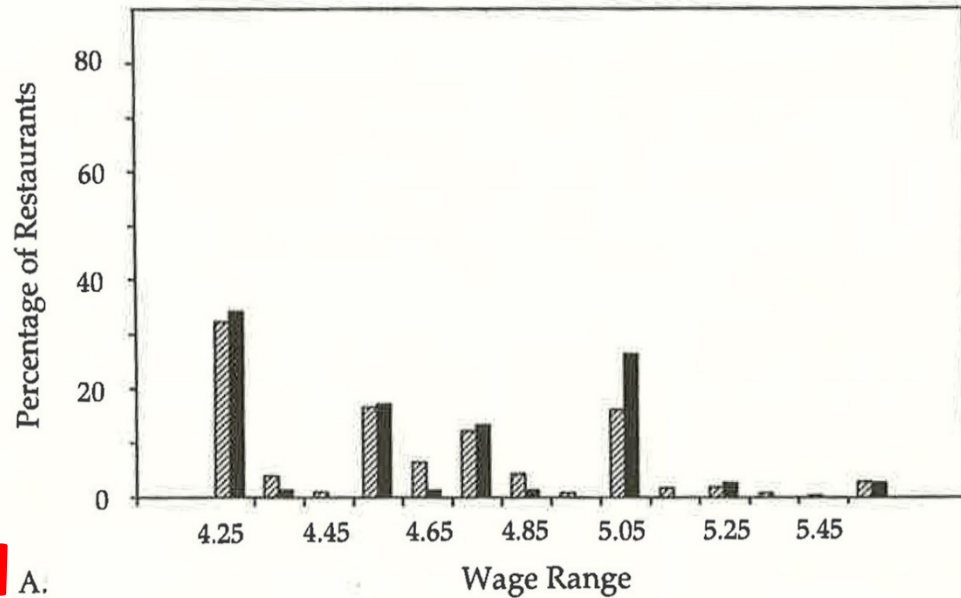
# Card & Krueger PA-NJ

Variable	NJ	PA	T-stat
<b><u>Wave 1</u></b>			
Starting wage	\$4.61	\$4.63	-0.4
Wage = \$4.25 (%)	30.5	32.9	-0.4
<b><u>Wave 2</u></b>			
Starting wage	\$5.08	\$4.62	10.8
Wage = \$4.24 (%)	0.0	25.3	--
Wage = \$5.05 (%)	85.2	1.3	36.1

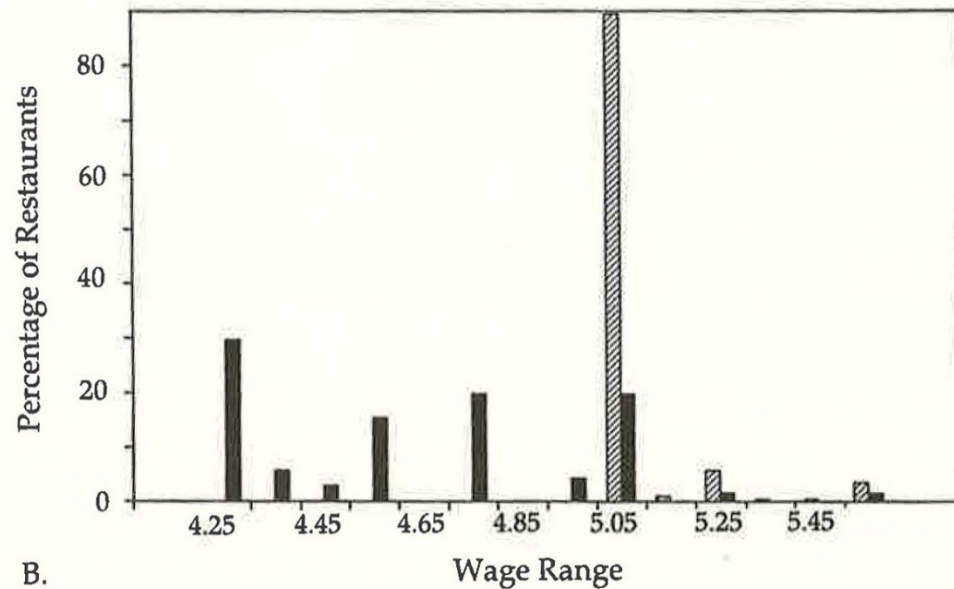
Source: Card and Krueger (1994) data from Table 2.

# C&K PA-NJ Wages

**This is a thing!** A.



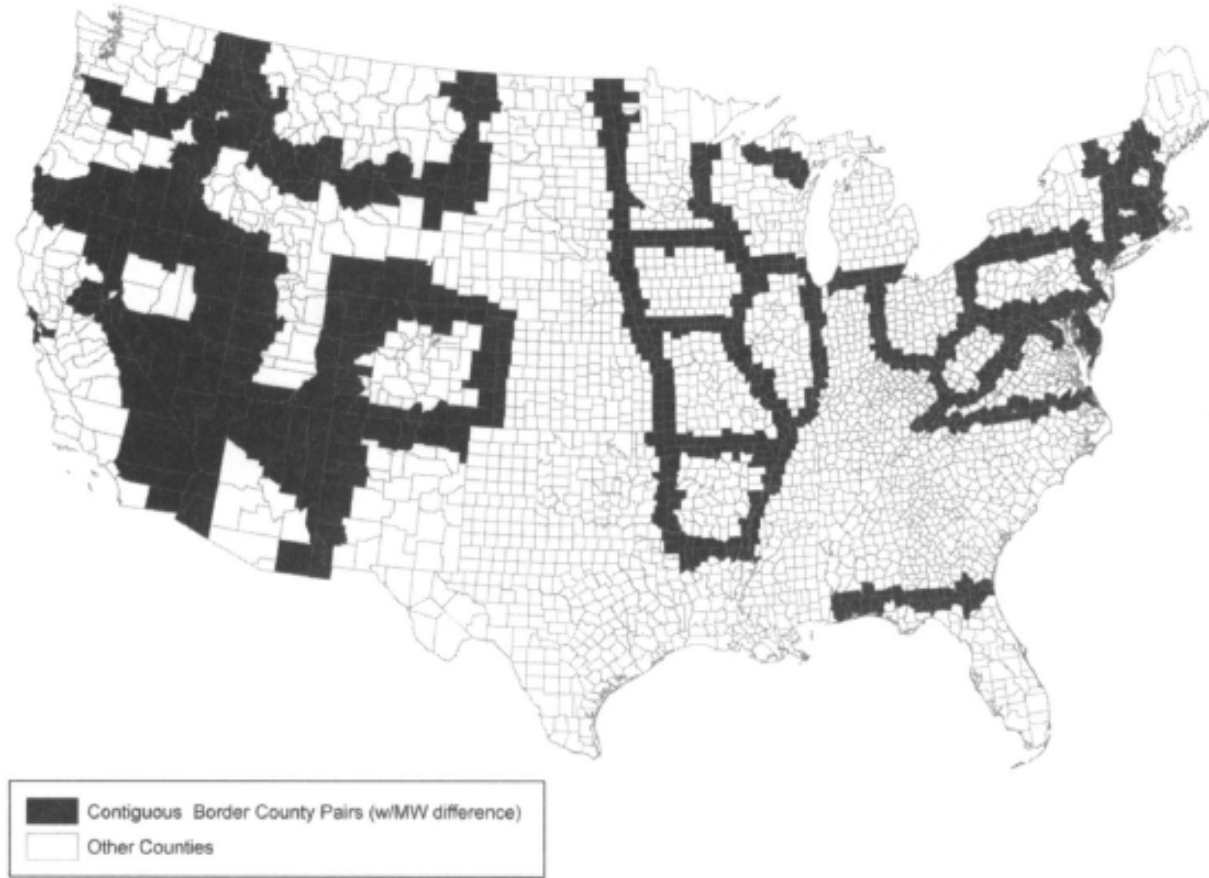
**Employment in  
affected FF  
restaurants in NJ  
*increased!***



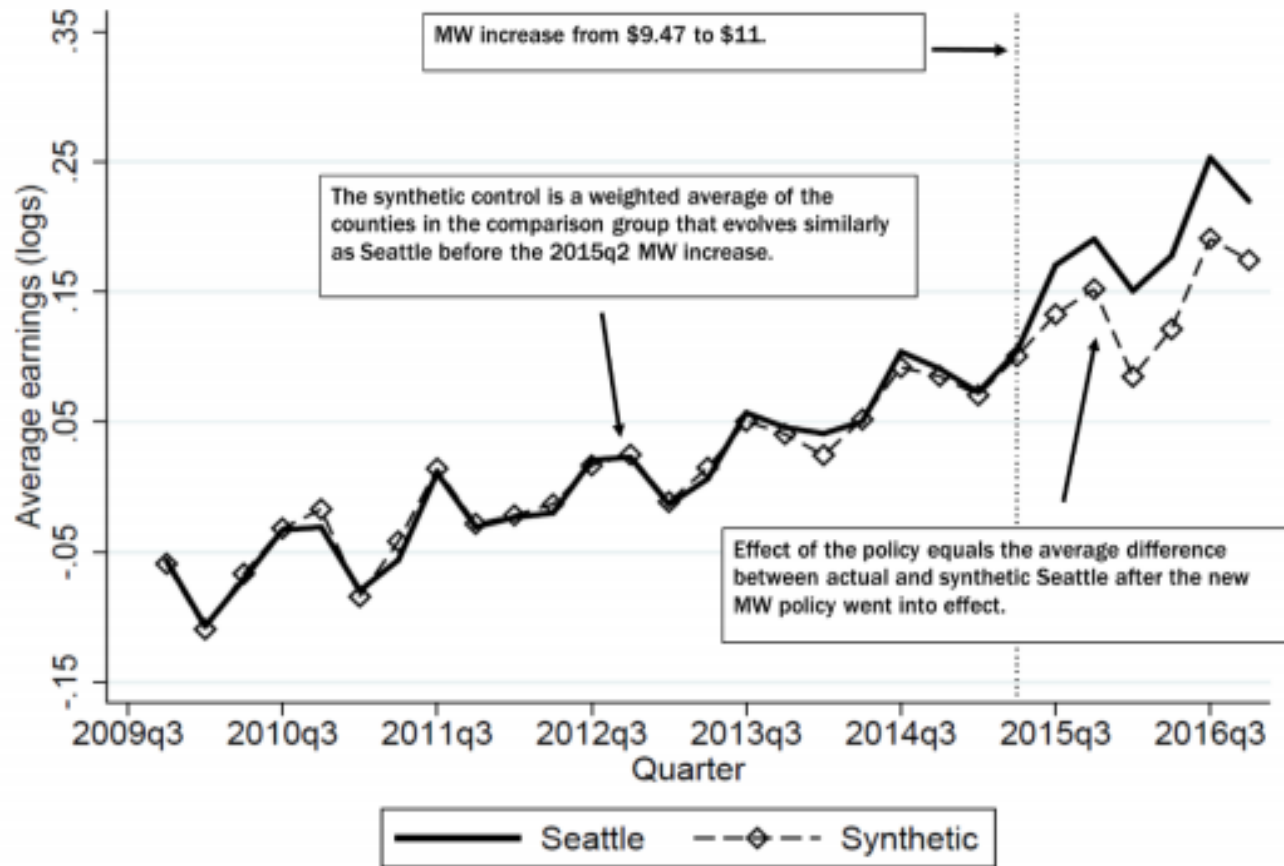
Legend:  New Jersey  Pennsylvania

# Extensions

FIGURE 2.—CONTIGUOUS BORDER COUNTY-PAIRS IN THE UNITED STATES WITH A MINIMUM WAGE DIFFERENTIAL, 1990–2006Q2

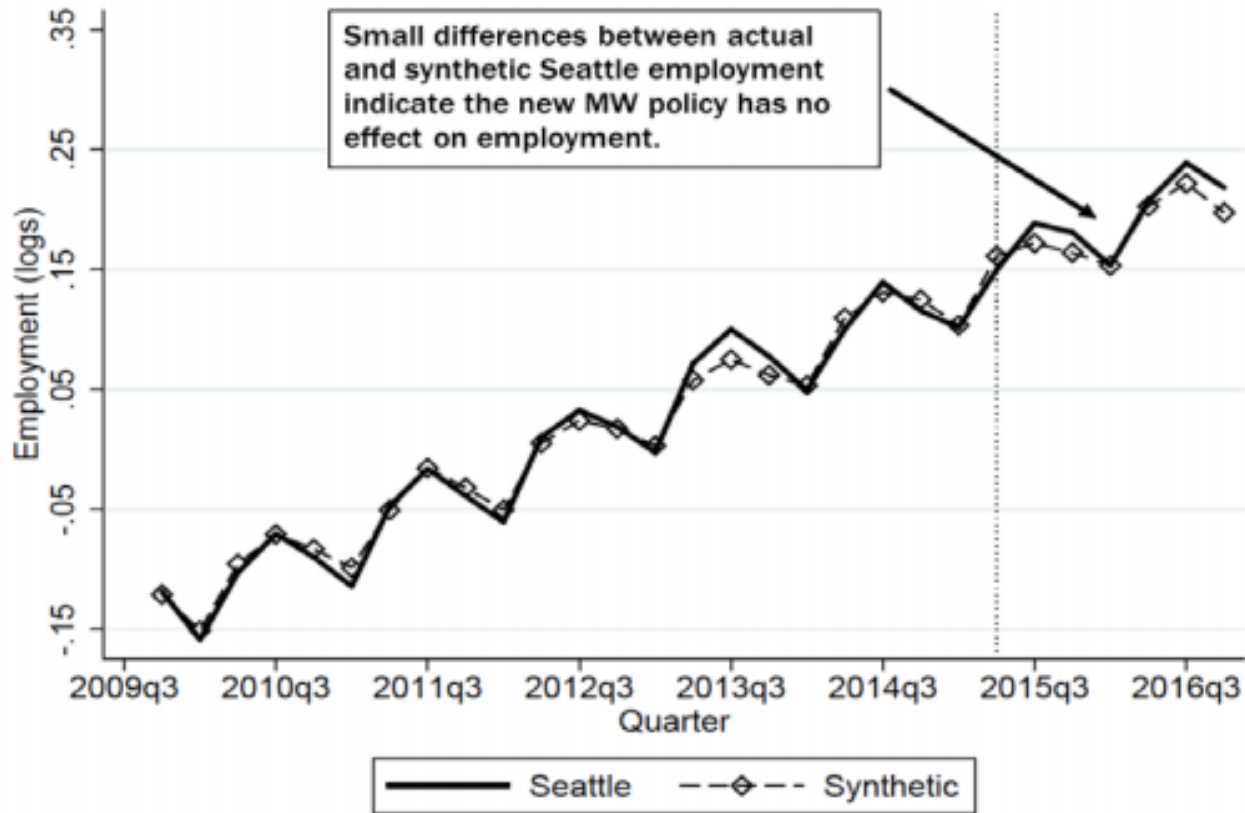


# Trouble in paradise (or finding a good control group)



# Same result as Card & Krueger

Figure 7 Seattle synthetic control employment analysis



Source: Allegretto, Godoey, Nadler, Reich (2018). CWED Report: The New Wave of Local Minimum Wage Policies: Evidence from Six Cities.

## Number of people impacted by recently passed state and local comprehensive fair workweek laws

Jurisdiction	Laws	Industries covered	Number of workers covered
<i>San Francisco</i>	Formula Retail Employee Rights Ordinances (March 2016)	Retail trade	23,000
<i>San José</i>	Opportunity to Work Ordinance (March 2017)	Private sector	175,000
<i>Emeryville, Calif.</i>	Fair Workweek Ordinance (July 2017)	Retail trade and fast food	2,500
<i>Seattle</i>	Secure Scheduling Ordinance (July 2017)	Retail trade and fast food	40,000
<i>Oregon</i>	Fair Work Week Act (August 2017)	Retail trade and accommodation & food services	172,000
<i>New York City</i>	Fair Workweek Law (November 2017)	Retail trade and fast food	327,000
<b>Total</b>			739,500

Source: Economic Policy Institute. Wolfe, Jones and Cooper. July 2018



# Scheduling Policy

- Much on the horizon: policy design, legislation, implementation, evaluation
- Challenge's concerning small area, limited coverage
- Good work so far:
  - Schneider & Harknett 2016
    - Document situation for workers via survey
  - Williams, Lambert, et al. 2017
    - Firm analysis: sales and productivity
  - Golden 2015
    - Use of General Social Survey data



# Thank you!



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