

A Natural Experiment Evaluating the Effects of Subsidized Childcare on Mothers' Employment

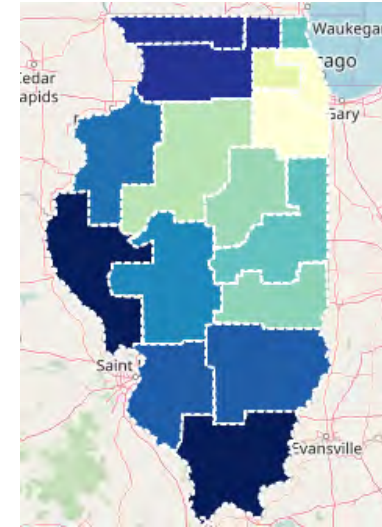
Uneven Outcomes in the Labor Market Virtual Conference
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Motivation

- The availability and cost of childcare is a key contributor to the labor force participation of women with young children.
- Labor force participation rate is 67.9% for mothers with children 0-5 and 76.7% for mothers with children aged 6-17 (U.S. Bureau of Labor Statistics, 2023).
- This gap does not exist for fathers.
- The average cost of childcare (per child) exceeds 19% of median family income in urban areas, pricing many families out of standard forms of paid childcare (U.S. Department of Labor, 2023).
- This study uses a natural experiment to measure how the provision of subsidized childcare impacts the employment and wages of low-income mothers with young children in an Illinois sample.

Natural experiment in subsidized childcare provision



2014 data system change altered childcare subsidy eligibility periods for specific cohorts of program recipients, effectively granting them **6+ months of additional subsidized childcare**.

Program recipients were assigned additional subsidized childcare eligibility by virtue of the month of program recertification and the quasi-random rollout of the system change to different regions in Illinois.



Data

- Child Care Assistance Program (CCAP) data
- Unemployment Insurance (UI) data
- American Community Survey (ACS) data



Study Sample

- Treatment = 42,800 parents
 - 69,400 children
- Control = 15,700 parents
 - 26,000 children
- Study period 2011 – 2017



Method

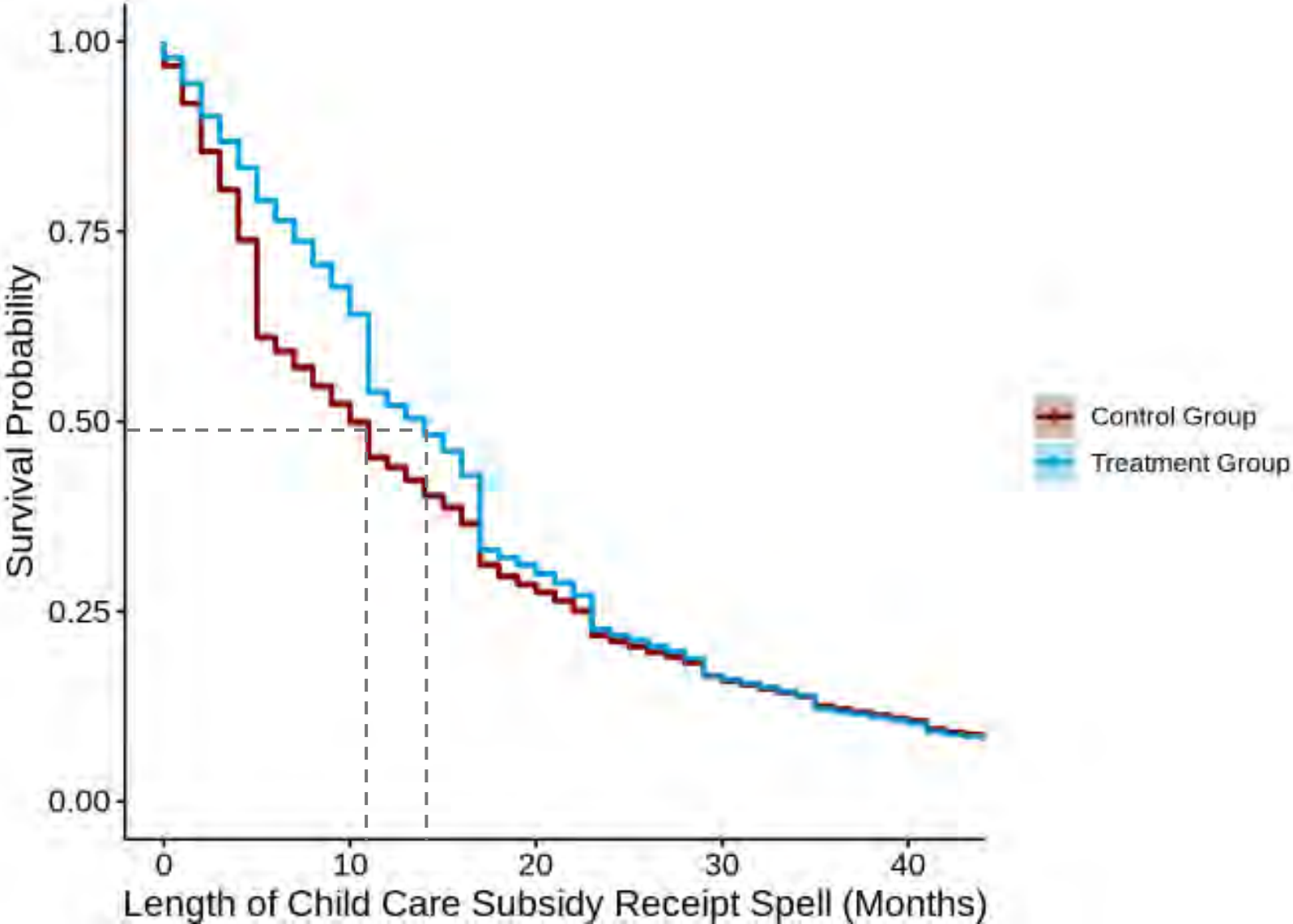
- Descriptive comparisons of treatment and control
- Duration analysis
- Difference-in-Difference

Sample Characteristics

	Treatment	Control
Female	97.3%	96.5%
Parent age (years)	28.6	28.3
Child age (years)	4.8	4.6
Number of children in subsidized childcare	1.6	1.7
Pre-period parent employment	58.2%	61.3%
Pre-period quarterly earnings (2018 dollars)	\$2331.50	\$2334.80
Pre-period childcare subsidy participation	34.6%	35.0%
Pre-period TANF participation	21.7%	18.8%
Observations (# of head of household parents)	42,797	15,713

Note: Pre-period defined as the 12 quarters preceding the scheduled childcare subsidy program eligibility redetermination.

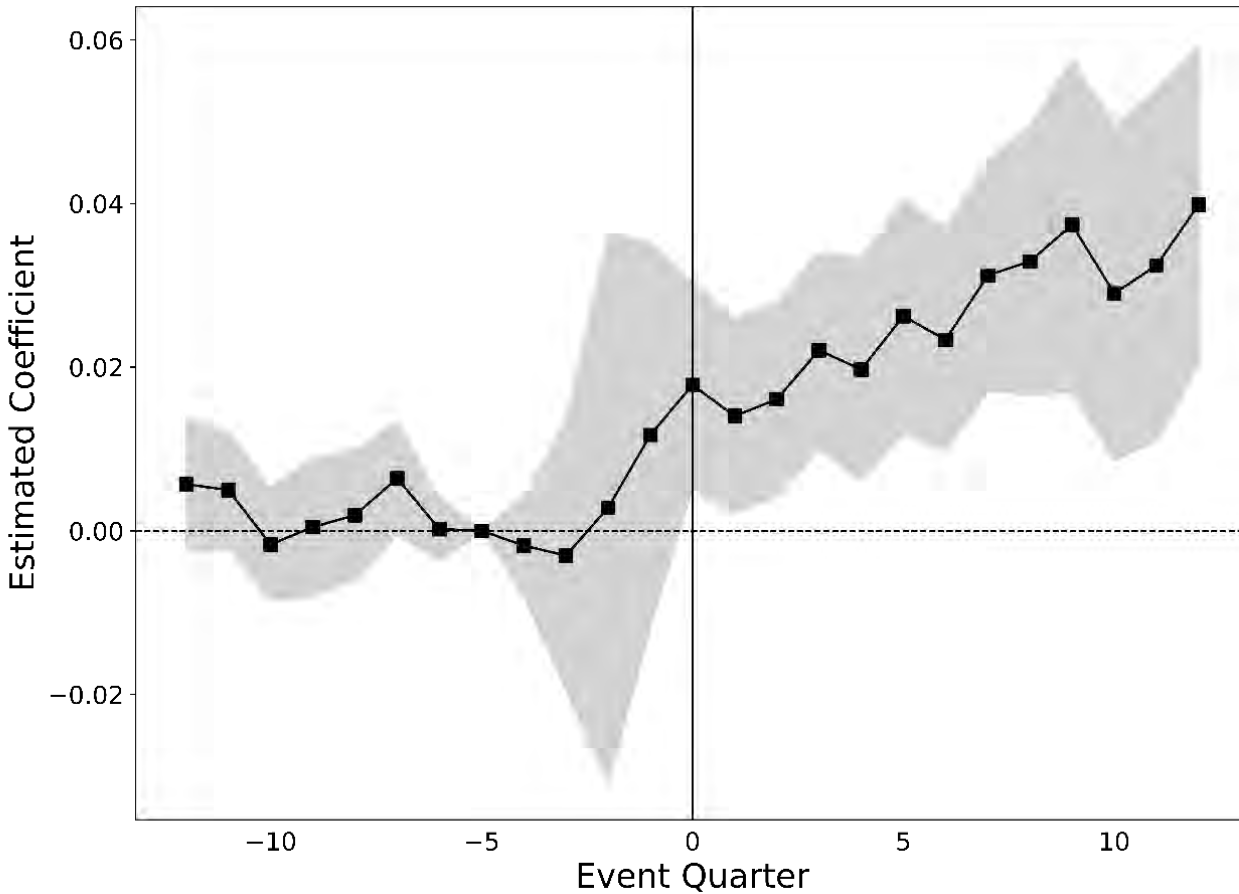
Duration Estimates for Childcare Subsidy Spell Length



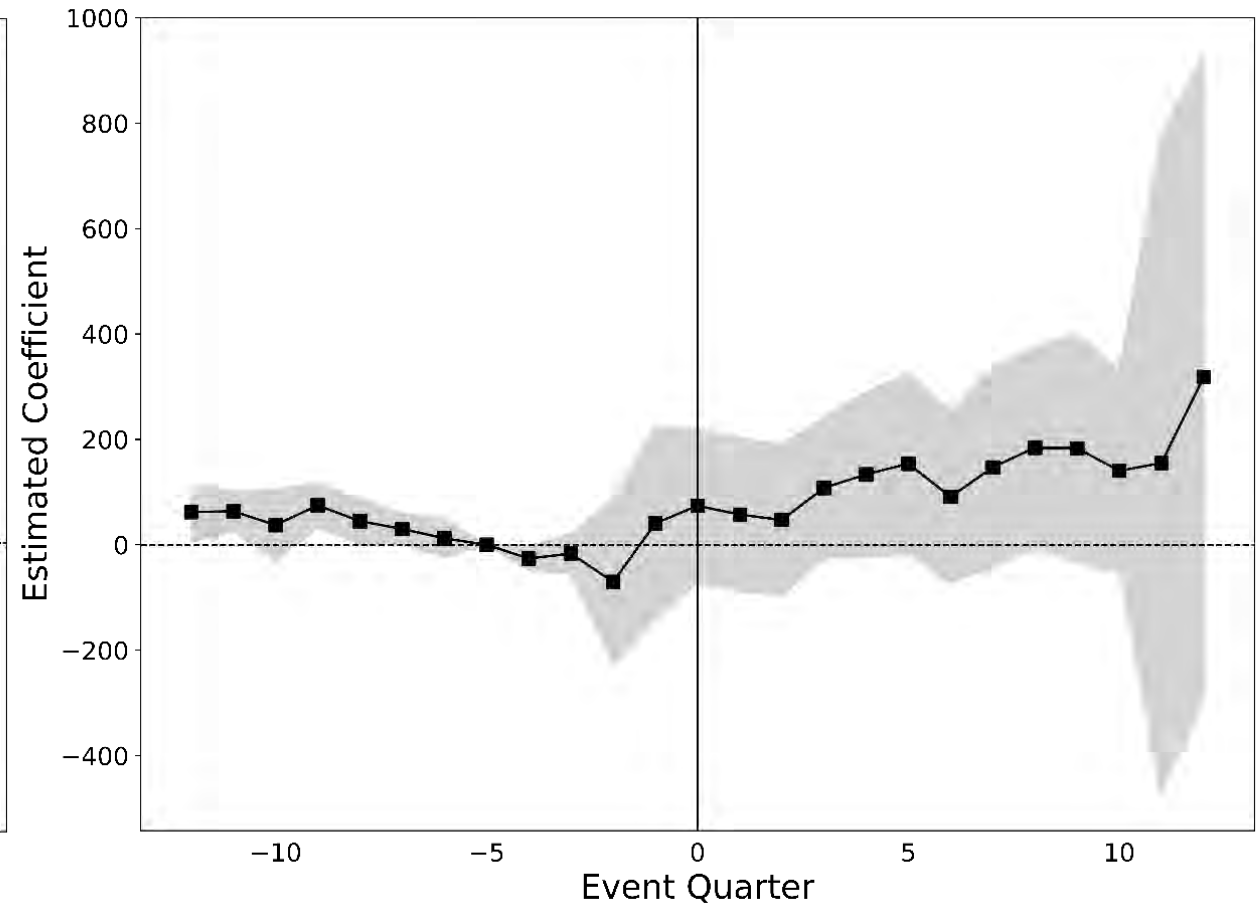
Notes: Cox regression. Model includes controls for child age and Census tract characteristics race/ethnicity, employment, education, transportation, and income-to-poverty ratio.

Difference-in-Differences Year-by-Year Regression Estimates

Employment



Earnings (\$)



Summary of Findings & Implications

Additional access to childcare subsidy led to:

- A 5 month increase in the median amount of time children spent in subsidized childcare.
- A 25% increase in the likelihood that a child's subsidy receipt spell >6 months.
- A 13% (6 percentage point) increase in the extensive margin likelihood of childcare subsidy receipt for parents.
- A 4% (2.5 percentage point) increase in the probability of parental employment.
- A statistically insignificant 5% increase in annual parental earnings (\$591 in 2023 dollars).
- Provided stability in childcare arrangements to low-income working mothers, many of whom were unable to afford market-rate childcare.
- Appears to have increased the probability of parental employment.
- Extrapolating to national gaps in labor force participation and assuming constant treatment effects, our results imply that if CCDF childcare subsidies were available for all young children, it could reduce the gap in labor force participation between mothers and fathers of young children from 26.5% to 24% (by 9%).

Acknowledgments

This study utilizes data from the Division of Early Childhood, Illinois Department of Human Services. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Illinois Department of Human Services.

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