Intergenerational Effects of Unemployment Insurance: Evidence from Tax Data

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Motivation and Research Question

- Job loss is common and highly detrimental to workers
  - And these harms spill over to children's education and earnings
- Unemployment insurance (UI) is the primary program to help displaced workers
  - Large and expensive program: 14 million claimants, $120 billion in 2009
- However, we know little about how UI generosity impacts children
  - Other programs such as Medicaid and EITC suggest possible spillovers
- Research question:
  - What effect does UI generosity have on displaced workers' children?

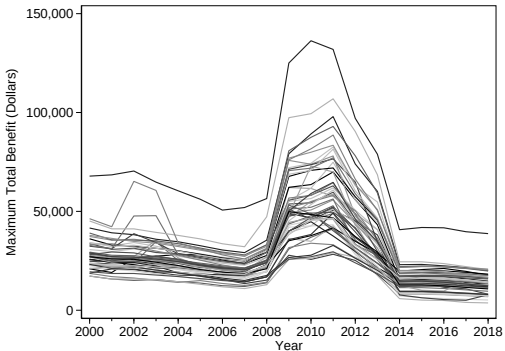
US UI Policy Background

- Typical US UI replaces ∼50% of wages for 26 weeks
  - Conditional on minimum work/earnings history
- When labor markets are bad, federal government increases UI generosity
  - Either in replacement, length, or both
  - e.g. 99 weeks max during Great Recession
  - e.g. $600 additional during peak Covid
- Often triggered by state unemployment rates
- States can also introduce variation in UI generosity

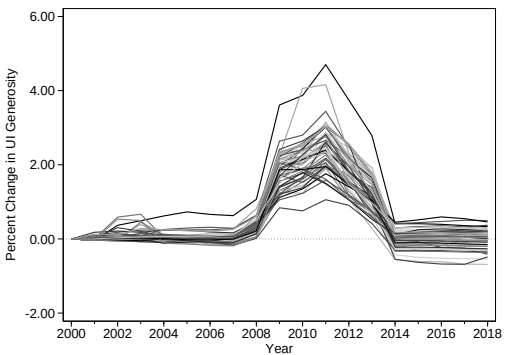
UI Policy Variation

- Source of variation:
  - State-by-year maximum benefits (max per week $\times$ max weeks)
  - Most important control: sub-state economic conditions
  - Comparing people facing same economic conditions but different UI generosity

Maximum Total Benefit



Percent Change in Benefits



Data

- Use universe of filers in US tax records to identify
  - UI claimants, 1999-2018 (1099-G)
    - State and year for merging UI generosity
  - Children of claimants (dependents from 1040)
  - Children attending higher education (1098-T)
  - Children's labor market outcomes (W-2)
  - Children's tax liability (1040)
- Child-by-parent-by-UI spell

Empirical Strategy

$$y_{pcskt} = \beta_0 + \beta_1 \times MaxUI10000_{st} + \mathbf{State_s} + \mathbf{Year_t} + \mathbf{Child_{ct}} + \mathbf{County_{kt}} + \varepsilon_{pcskt},$$

- y_{pcskt}: outcome of interest
  - child c, parent p with UI in county k, state s, year t
- $MaxUI10000_{st}$ is the max benefits in \$10,000
  - β_1 is the coefficient of interest; effect of a \$10,000 increase in max UI generosity
- $\mathbf{State_s}$ and $\mathbf{Year_t}$ are state and year FE
- $\mathbf{Child_{ct}}$ include individual-level controls
  - parent baseline wages, marital status, cumulative UI; child age, sex, birth year FE
- $\mathbf{County_{kt}}$ include county-level controls
  - unemployment rate, growth in personal income, population density, and share of the population that is white
  - **Ensures that job market faced by parents are not driving findings**

Balance test on baseline characteristics

- Assumption: UI generosity is unrelated to baseline characteristics
  - Little evidence UI generosity related to these characteristics
  - Supports causal interpretation of our estimates

	(1) Wages	(2) Years Unemp	(3) Unemp Spells	(4) Child Age	(5) Male	(6) Single	(7) County Density	(8) County White
UI Generosity	-412	0.007	0.007	-0.000	-0.000	-0.006	-254.878*	0.004
	(982)	(0.021)	(0.008)	(0.000)	(0.000)	(0.005)	(150.589)	(0.002)
N	26,966,002	26,966,002	26,966,002	26,966,002	26,966,002	26,966,002	26,966,002	26,966,002
Dep. Var. Mean	70,970	3.289	1.842	11.062	0.511	0.413	1928.219	0.788

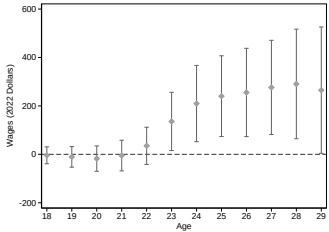
Notes: $*p < .1$, $**p < .05$, $***p < .01$. Standard errors, clustered by state, are in parentheses. All regressions include fixed effects for state, year of unemployment, and child age at unemployment as well as a control for county-level unemployment.

Main Results by Age Measured: Effects on Children

- $10,000 increase in maximum benefits for parents
  - No effect on children's college attendance regardless of age measured
  - 0.1-0.5 ppt increase probability of employment at ages 23-29
  - $300 increase in wages at ages 23-29
  - $50 increase in tax liability at ages 23-29

- Increased UI generosity for parents improves children's labor market outcomes
  - And the government recuperates much of the expenditure

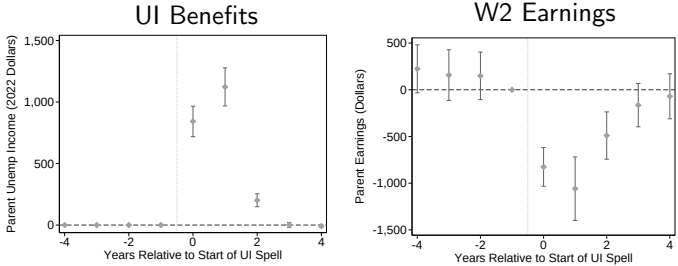
W2 Earnings



Potential Mechanisms: Effects on Parents, Event Studies

- $10,000 increase in maximum benefits for parents
  - Increases benefits collected by $1,000
  - Decreases employment by 1 ppt and earnings by $1,000 in the short-run
  - Close to 0 net effect on total net household income

- Increased UI generosity for parents extends unemployment,
  - But no change in total resources; resources not mechanism
  - Potential mechanisms: reduced stress or increased time with children



Conclusion

- More generous UI for parents improves children's long-run labor market outcomes
- Meaningful fraction of the marginal UI $ is recuperated by increased tax revenue
- Mechanisms: Not changes in resources; perhaps $\downarrow$ stress or $\uparrow$ time at home

Thank you!

All questions and comments welcome

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