

Long-Run Effects of Incentivizing Work After Childbirth

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Gender Inequality and Child Penalty

- ▶ Growing evidence that children affect gender gap (Chung et al. (2017); Angelov et al. (2016); Lundborg et al. (2017))
 - US women experience 40 p.p. ↓ employment and 30% ↓ earnings, up to 10 years post-birth (Kuziemko et al. (2018), Kleven et al. (forth))

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 - US women experience 40 p.p. ↓ employment and 30% ↓ earnings, up to 10 years post-birth (Kuziemko et al. (2018), Kleven et al. (forth))
- ▶ Is penalty driven by time off after birth? Are there returns to experience for new moms?
 - Debatable in theory; mixed evidence (mainly from paid leave)
⇒ But, paid leave not representative
 - What about policies that induce work for mothers?

Earned Income Tax Credit (EITC)

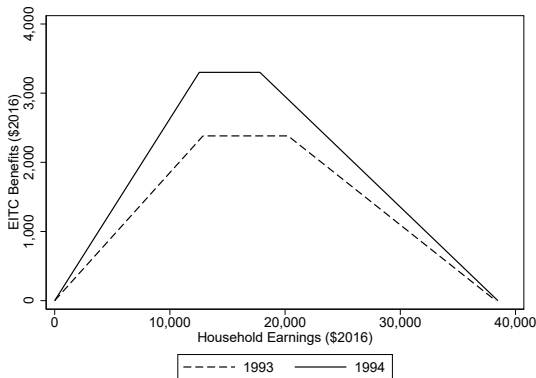
- ▶ Largest cash transfer program in US for low-income families
 - 1 in 5 tax filers (Bitler et al 2017)
 - ~ half of benefits to single mothers (Eissa and Leibman, 1996)

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- ▶ Largest cash transfer program in US for low-income families
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 - ~ half of benefits to single mothers (Eissa and Leibman, 1996)
- ▶ Strong labor supply incentives for parents:
 - Subsidy in “phase-in” region incentivizes work
 - Benefits 6-10x higher for parents than non-parents
- ▶ Much work on EITC effects on short-run employment, little about new mothers or long-run effects (Bastian (2018); Eissa and Liebman (1996); Meyer and Rosenbaum (2001); Kleven (2019))

- ▶ **Research Question:** Are there lasting returns to going to work sooner post-birth?
 - What are the LR earnings effects of the 1993 EITC expansion?
- ▶ **Contribution:**
 - 1 Provide causal evidence of positive returns to experience for low-income mothers
 - 2 Document the long-term consequences of welfare programs that incentivize work

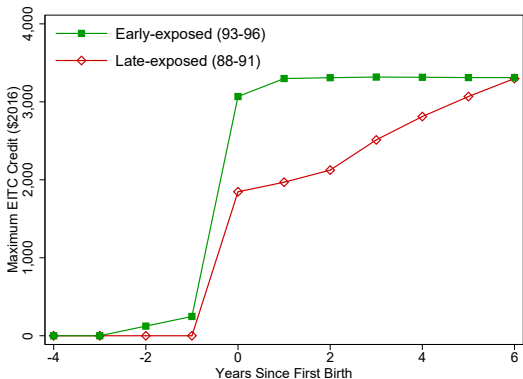
EITC Schedule and 1993 Expansion



- ▶ In 1994, largest EITC expansion:
 - Benefits for 1-child fams. ↑ by \$919, from \$2,381

Intuition for Empirical Strategy

- ▶ Stronger work incentives for women that become moms after 1993:



- “Early-exposed” moms (1st birth 93-96) \$1,000 ↑ max. EITC relative to “late-exposed” (1st birth 88-91)

Data: admin. earnings panel linked to CPS

- ▶ 1991, 1994, 1996-2016 ASEC (March) CPS respondents
 - Marital status, # children, hrs/wks work (at point-in-time), other demographics
- ▶ Linked to panel of SSA admin. earnings (→ 10x obs in CPS):
 - W-2 and self-employment earnings for 1978-2015, birth dates

Main Sample:

- ▶ Mothers w/ 1st birth b/w 1988-91 or 1993-96
- ▶ Never-married (DD), and married (DDD) mothers

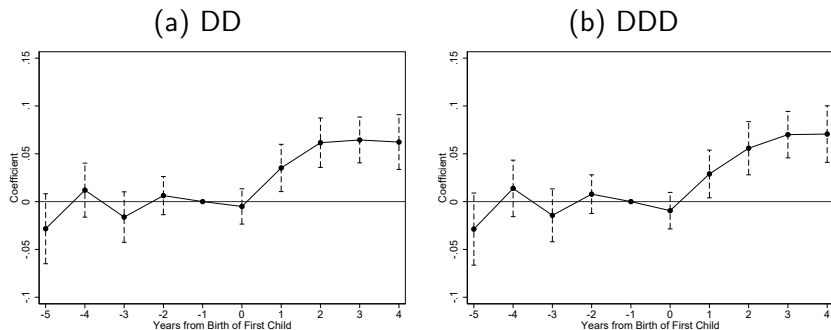
Goal: Identify effect of work incentives at birth on labor market outcomes

- 1 Difference-in-Difference (DD): Compare likely eligible women (NM) with early ('93-96 births) vs. late ('88-91 births) exposure to reform, before and after birth
 - ▶ Note: Comparing early- vs. late-exposed women at each child age implies across-year comparisons

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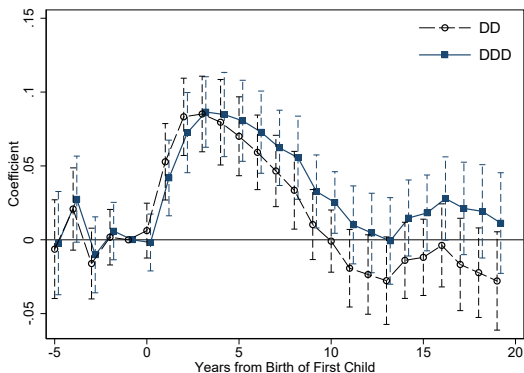
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 - ▶ Note: Comparing early- vs. late-exposed women at each child age implies cross-year comparisons
- ② Triple Differences (DDD): Add less-eligible women to control for changes in earnings across years
 - Use married mothers with '93-96 or '88-91 1st births

SR employment: 0-4 years post-birth



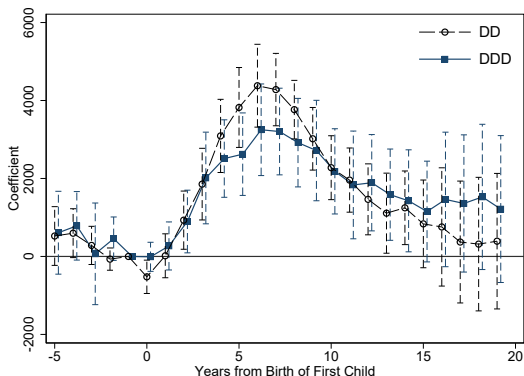
- ▶ 3.4–3.7 p.p. \uparrow working (5.9%, given 63.1 p.p. mean)
 \implies recover 28% of initial drop in $\text{pr}(\text{working})$

Long-run employment: up to 20 years post-birth



- ▶ Insignificant effects 10+ yrs post-birth
 - CPS shows no effects on LR hours
- ▶ Summing: 0.45 to 0.68 years of add'l experience

Long-run earnings: up to 20 years post-birth



- ▶ \$1,206–\$1,393 ↑ earnings 10-20 years post-birth
- ▶ 4.2% ↑ earnings if working in LR

Why are earnings higher in the long-run?

Leading explanation: \uparrow years of experience

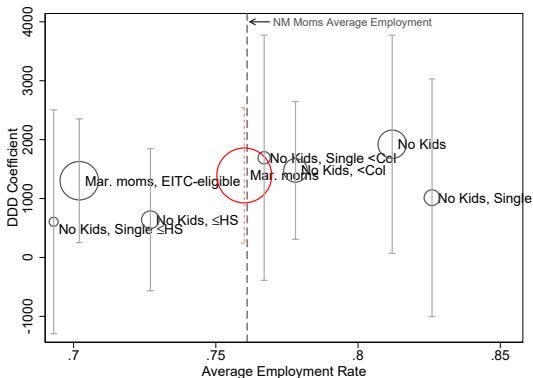
- ▶ \uparrow in “high earnings” if work first 3 years post-birth (“high exp.”)
 - No \uparrow in ‘high earnings’ for low-exp. mothers
- ▶ Implied return to exp: $\frac{\Delta \text{earnings cond'l working}}{\Delta \text{exp}} = \frac{4.2}{.68} = 6\%$

Weak evidence for other explanations:

- ▶ Avoiding skill atrophy
- ▶ Higher return to experience
- ▶ Income/substn. effects

Robustness to Alternative Comparisons

- ▶ Long-run DDD on earnings w/ childless women and low-income married moms:



- ▶ Estimates stable across comparisons

More Robustness

Parallel trends

- ▶ *Post-birth* labor supply not increasing pre-1994

Ruling out contemporaneous shocks

- ▶ Can drop welfare waiver states + post-1997; high-employment growth states
- ▶ Effects by # of children proportional to EITC amt.
- ▶ Can add more detailed unemp. & policy controls, or p-score reweight
- ▶ Results hold within-year using a calendar-year event study

Plausibility of married comparison:

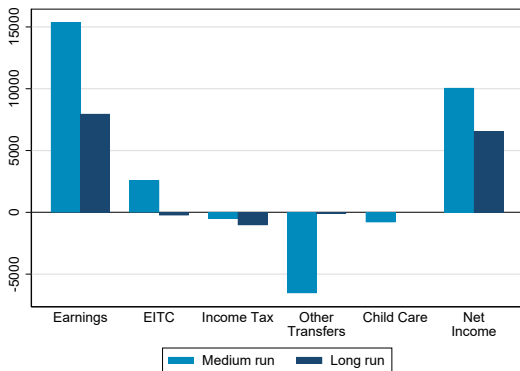
- ▶ Married and never-married have similar:
 - child penalty prior to reform
 - changes in observables across early- and late-exposure

Ruling out selection into being single

- ▶ Use SIPP to show no effect on marriage rates
- ▶ Can restrict to earlier CPS surveys (in first 8...20 yrs from birth)
- ▶ Show early-exposed trend in chars. across CPS's same as late-exposed

Earnings gains translate into higher net income

- ▶ To get closer to effects on *well-being*, calculate effects on *net income*



- ▶ Net income \uparrow \$10,060 in MR, \$6,560 in LR \implies \$16,620 total
- ▶ Suggestive that early-exposed mothers are financially better off

Summary

- ▶ Work incentives at birth raise SR employment by 3.4 p.p.
- ▶ Over the long run:
 - Increases in emp. amount to 0.5- 0.6 years of add'l experience
 - Earnings are \$1,200 to \$1,400 higher
 - Suggestive evidence effects driven by increased years of experience
 - Increase in PV of net income by over \$16K
- ▶ Implications for policy
 - Steep returns to work incentives at birth that accumulate over the life-cycle
 - Policies to promote work after childbirth could have meaningful effects over the long run

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