My research program: Health effects of non-health safety net programs

• We are once again debating the role of government; and in particular what the safety net should include.
• Often our evaluations of the costs and benefits of the safety net are limited to examinations of labor supply and poverty.
• My research program, joint with several co-authors, seeks to illustrate and quantify the potential for health impacts of non-health programs.
We examine the two largest non-health safety net programs for low income families—the Earned Income Tax Credit and the Food Stamp Program—and find that additional resources leads to economically important improvements in health.

Demonstrates potential for positive benefits of social safety net programs that have, to date, not been quantified.

Further, the work speaks to the strong SES health gradient in the U.S., that appears to unfold in early life.
Here, I will summarize my work on the health impacts of the EITC. This work is joint with Doug Miller and David Simon (both of UC Davis)
What is the EITC?

- Refundable tax credit for low income families
- Must have earned income to be eligible
- Credit varies by number of children (small credit for childless) and earnings
- In tax year 2010, the credit was received by almost 27 million filers at a cost of $59.5 billion (average credit of about $2200)
- In 2012, maximum credit amounts are:

<table>
<thead>
<tr>
<th>Kids</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$475</td>
</tr>
<tr>
<td>1</td>
<td>$3,169</td>
</tr>
<tr>
<td>2</td>
<td>$5,236</td>
</tr>
<tr>
<td>3+</td>
<td>$5,891</td>
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</tbody>
</table>
Figure 2: Value of Federal Earned Income Tax Credit, 2011

Credit Amount

Single
- No Children
- 1 Child
- 2 Children
- 3 or More Children

Married Filing Jointly
- No Children
- 1 Child
- 2 Children
- 3 or More Children

Note: Assumes extension of current EITC provisions.

Center on Budget and Policy Priorities | cbpp.org
• By several measures, the EITC plays a central role in the U.S. safety net for families with children
Measure 1. Program Expenditures
Federal EITC Filers in California, 2010

Total tax returns 16.7 million
EITC Returns 3.2 million
Percent with EITC = 19.0%
Total EITC paid $6.9 billion
Average credit $2,166
Measure 2: Anti-poverty effectiveness
In 2011, 46 million persons or 15 percent of the population was poor.

In California, 12.8 percent of the population was poor (2009-2011 average).
Children have the highest poverty rates

- Age < 18: 21.9%
- Age 18-64: 13.7%
- Age 65+: 8.7%
→ The new Supplemental Poverty Measure (SPM) incorporates taxes and the noncash safety net into family income.
→ Result is lower poverty for children (in-kind safety net) and higher for elderly (out of pocket medical costs)
• Importantly, with the SPM, we can measure the effects the safety net programs have on poverty.
Effects of the safety net on poverty, children

- **EITC** removes 4.7 million children from poverty
- **SNAP** removes 2.1 million children from poverty
• The EITC increases income and reduces poverty through two channels:
  – The EITC represents an increase in income for the family
  – The EITC provides incentives to enter work, and thus increase earnings which increases family income.
• Given that the EITC leads to increases in income and reductions in poverty, we want to know whether this leads to (other) increases in family and child well-being.
• Here we examine the effects on infant birth weight, our main outcome is low birth weight (< 2,500 grams)
• Mother is “treated” during pregnancy with varying EITC depending on year and birth parity
• Vital statistics data on full census of births
Why infant health?

• Health at birth is an important predictor of later life economic and health outcomes
• Low birth weight measured and watched by most countries
Research Methods: Use Tax Changes to Identify the Effects of the EITC

- Focus on 1993 expansion: largest expansion, differential expansion by number of children
- Use before vs. after the 1993 expansion
- First births are the control group.
- We compare second births vs. first births, third and higher births vs. first births
<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>White</th>
<th>Black</th>
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</thead>
<tbody>
<tr>
<td><strong>A. PARITY 2+ vs. PARITY 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Effect</td>
<td>-0.354</td>
<td>-0.132</td>
<td>-0.728</td>
</tr>
<tr>
<td>EITC increase (2009$)</td>
<td>$521</td>
<td>$471</td>
<td>$624</td>
</tr>
<tr>
<td>Treatment on Treated per $1000 (2009$)</td>
<td>-0.68</td>
<td>-0.28</td>
<td>-1.17</td>
</tr>
<tr>
<td>ToTper $1000 (2009$), % impact</td>
<td>-6.69%</td>
<td>-3.44%</td>
<td>-8.09%</td>
</tr>
<tr>
<td><strong>Mean – share of births that are LBW</strong></td>
<td>10.2</td>
<td>8.2</td>
<td>14.9</td>
</tr>
</tbody>
</table>
Effect of 1993 tax reform on low birth weight

*Single women with <=12 years of education*

![Graph showing the effect of 1993 tax reform on low birth weight for single women with <=12 years of education. The graph indicates a decrease in the fraction of low birth weight cases from 1993 onwards, with a notable decrease phased in from 1994 to 1996.](image)
Magnitude of birth weight improvement lines up with predicted treatment

OUTCOME = Low birthweight, DD1

OBRA93 Increase in EITC, T relative to C group

Magnitude of birth weight improvement lines up with predicted treatment
Mechanisms

• Increases in prenatal care and reductions in smoking are part of the pathway for our results for improving infant health

• This could be generated by additional income (affordability of prenatal care), employment (less smoking)

• Overall health insurance, if anything, declines. But there could be an effect for some of an “upgrading” due to the increase in private insurance
Concluding remarks

• The goal of safety net programs is to increase incomes at the bottom of the distribution and to smooth over shocks.
• The costs of these programs needs to be weighed against the benefits.
• Our work provides new evidence on the possible health benefits of the EITC.
• In other work, we find that food stamps also leads to improvements in health at birth. We also find that greater access to food stamps in early life leads to longer term benefits – adult health and economic outcomes.