The Rise of the *In-Work* Safety Net: Implications for Families in Strong and Weak Labor Markets

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Association Lecture
Southern Economic Association
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Overview

- The U.S. social safety net for lower income families has shifted to one based on *in-work* assistance (welfare reform, EITC expansion)
- The EITC leads to substantial increases in income for lower income families – against a backdrop of falling wages for low skilled workers
- Here I review what is known about the effects of the EITC on employment, the distribution of income and family and child health
- I also discuss the limitations of the reliance on in-work assistance and potential for policies moving forward

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Roadmap

1. Motivating context: falling wages and incomes
2. Policy setting: The rise of the *in-work* safety net
3. Findings: What are the impacts of the EITC?
4. Limitations of an in-work safety net

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1. Motivating Context: Falling Wages and Declines in Labor Force Participation

- Since the mid 1970s, there has been little gain in wages for less skilled workers, especially for men
- Additionally, labor force participation rates are declining for prime age men, and more recently, prime age women
- The implication is stagnant family incomes for the bottom of the distribution

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Wages declines, or lack of gains for less skilled workers

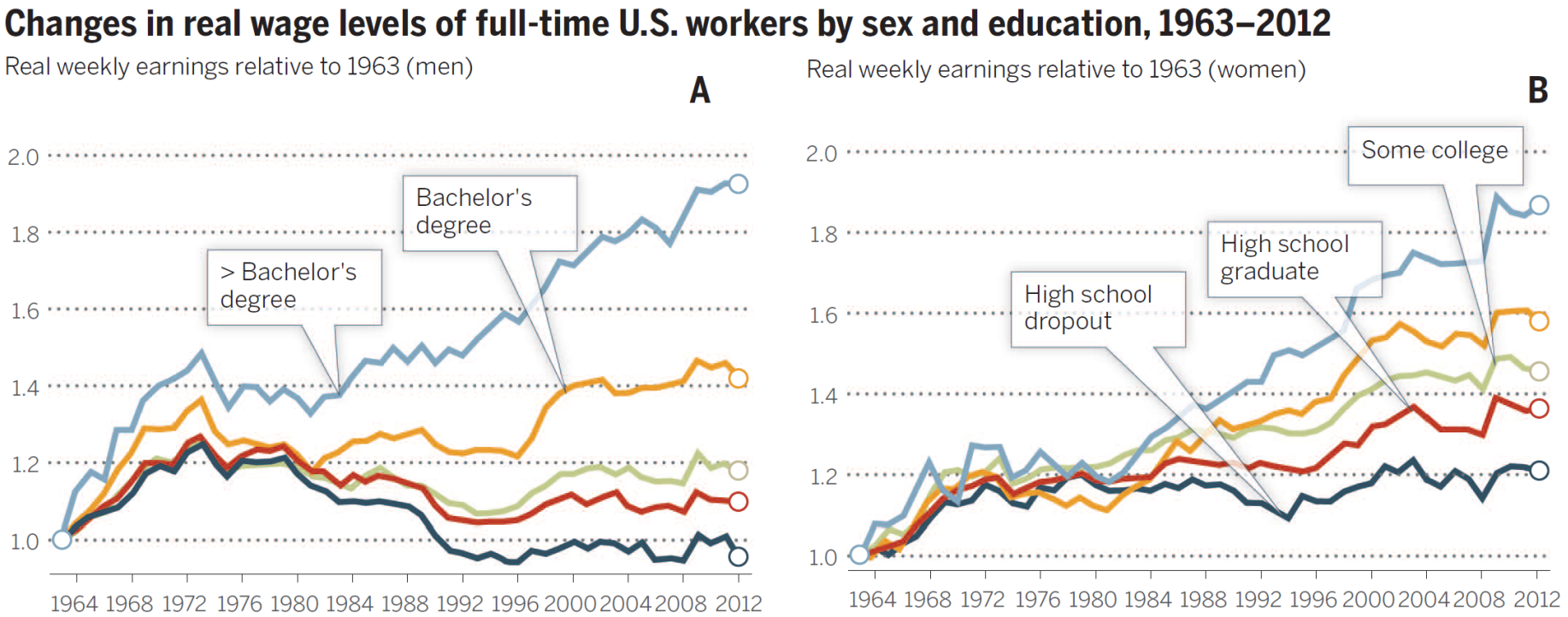


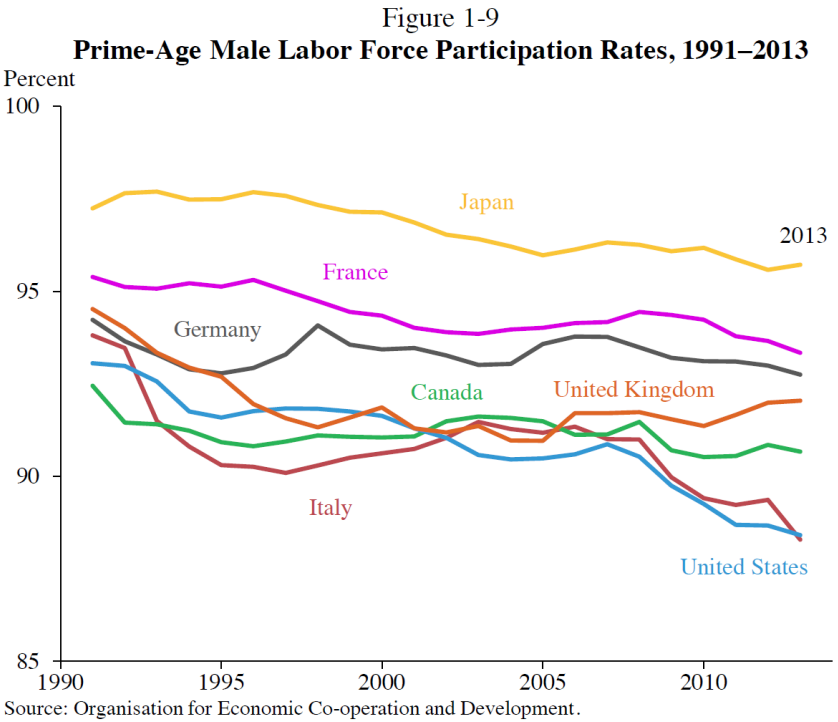
Fig. 6. Change in real wage levels of full-time workers by education, 1963–2012. (**A**) Male workers, (**B**) female workers. Data and sample construction are as in Fig. 3.

MEN

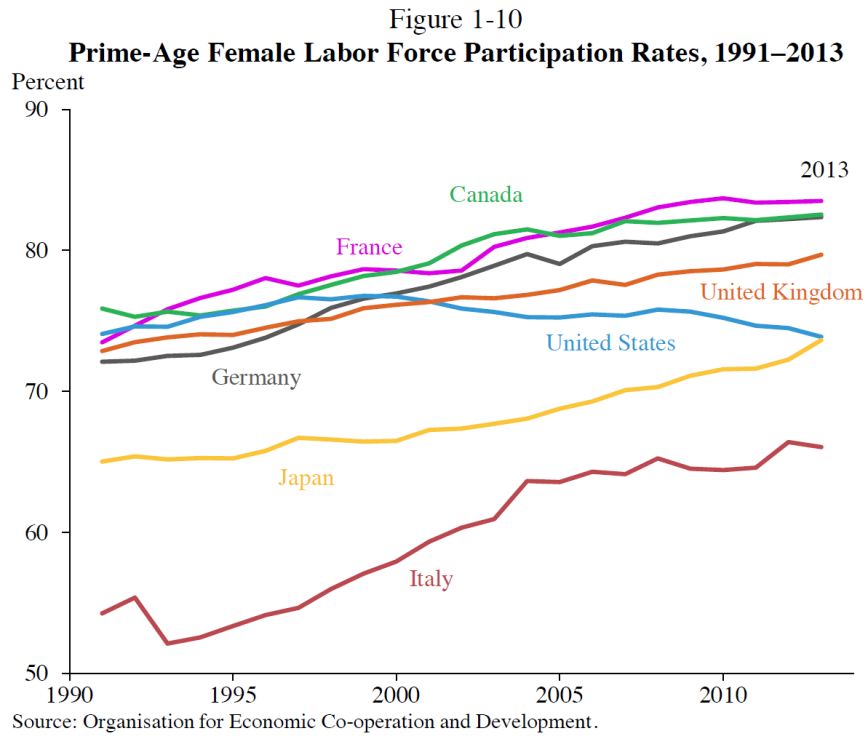
WOMEN

David Autor, Science.

Labor force participation rate declines in the U.S.



MEN



WOMEN

Economic Report of the President, 2015.

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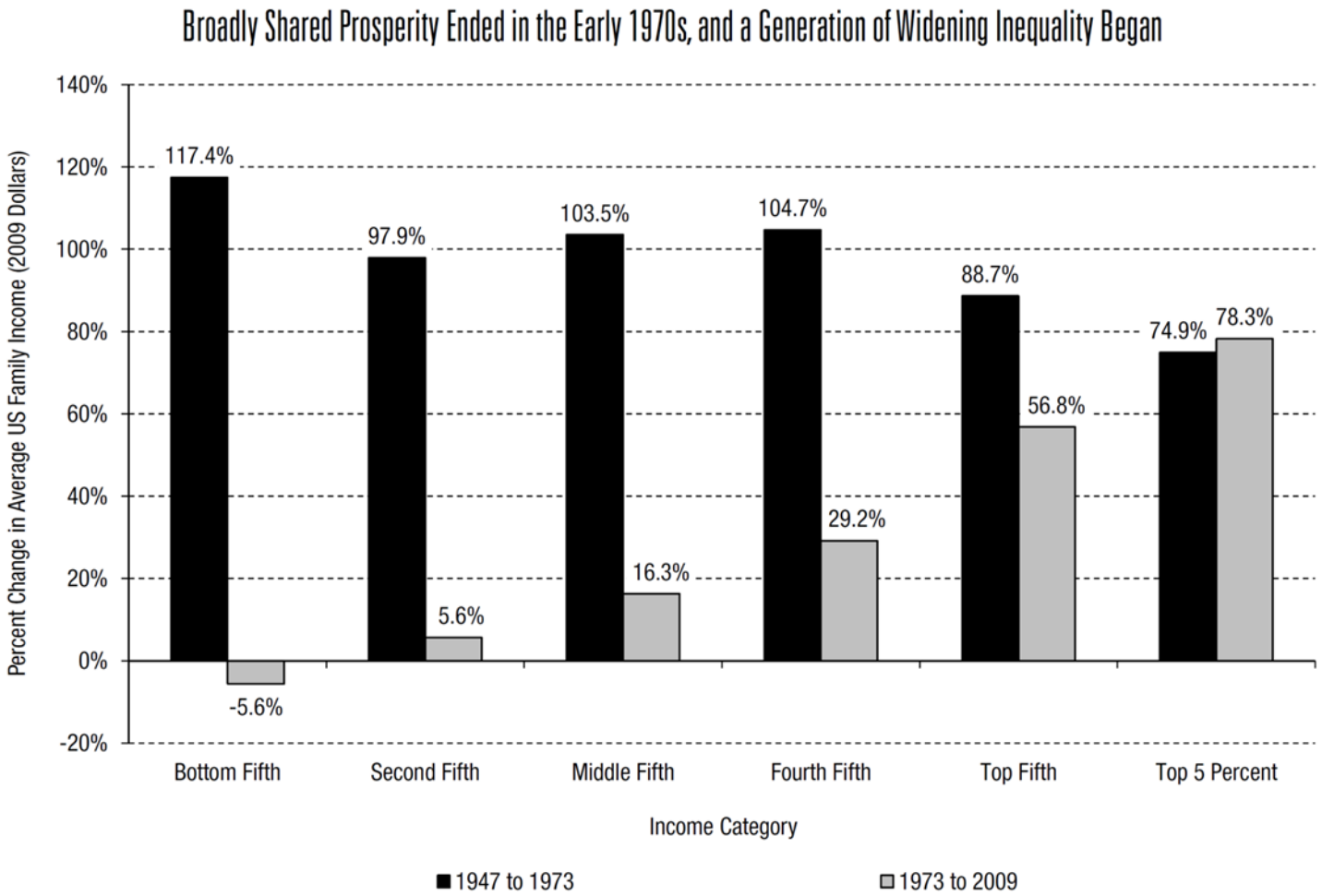
The result: Little gain in family incomes below median



CALIFORNIA BUDGET PROJECT

Source: Economic Policy Institute

- The implication is an increasing need to supplement earnings with social safety net to maintain family income levels.
- The Earned Income Tax Credit (and SNAP) are central here
- More generally, the EITC is the main *post-market* policy that affects the twin concerns of low employment and stagnant income

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2. Policy Setting:
Changes in the Social Safety Net

The U.S. has experienced a tremendous change in the social safety net for low income families with children:

- Decline in the *out-of-work* safety net (1996 welfare reform)
- Rise of the *in-work* safety net (the EITC)

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The decline of welfare

- Up until the early 1990s the U.S. relied primarily on *traditional cash welfare*, Aid to Families with Dependent Children
  - The generosity of the program varied across states, but was never funded at a very high level (maximum benefit for average family was never much higher than 40% of poverty)
  - AFDC consisted of a guaranteed income and a high benefit reduction rate (~100%). Eligibility was limited to single mothers.
  - This led to a (longstanding) concern that AFDC discourages work and marriage, and causes long term dependence.
- Federal welfare reform was passed in 1996 which consistent of: lifetime limits for receipt, work requirements, sanctions for noncompliance, and strengthening of work incentives (Temp. Assistance for Needy Families TANF)

The rise of the EITC

- In-work, tax based assistance
- Refundable tax credit for low income families
- Must have earned income to be eligible
- Credit varies by number of children (small credit for childless), earnings (and AGI)
- The EITC is received by 28 million tax filing units, almost 20 percent of all tax filers and 44 percent of filers with children receive the EITC.

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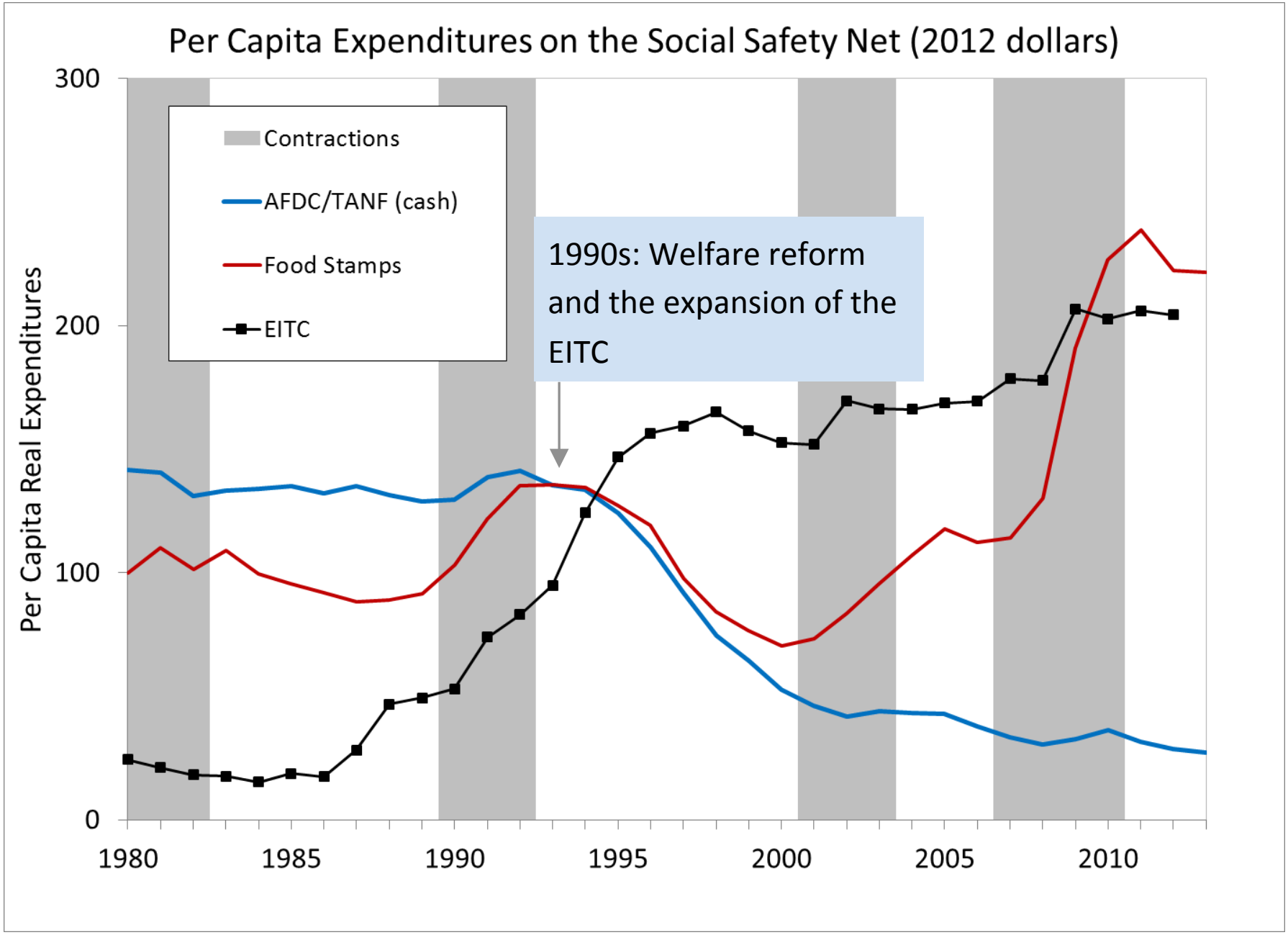
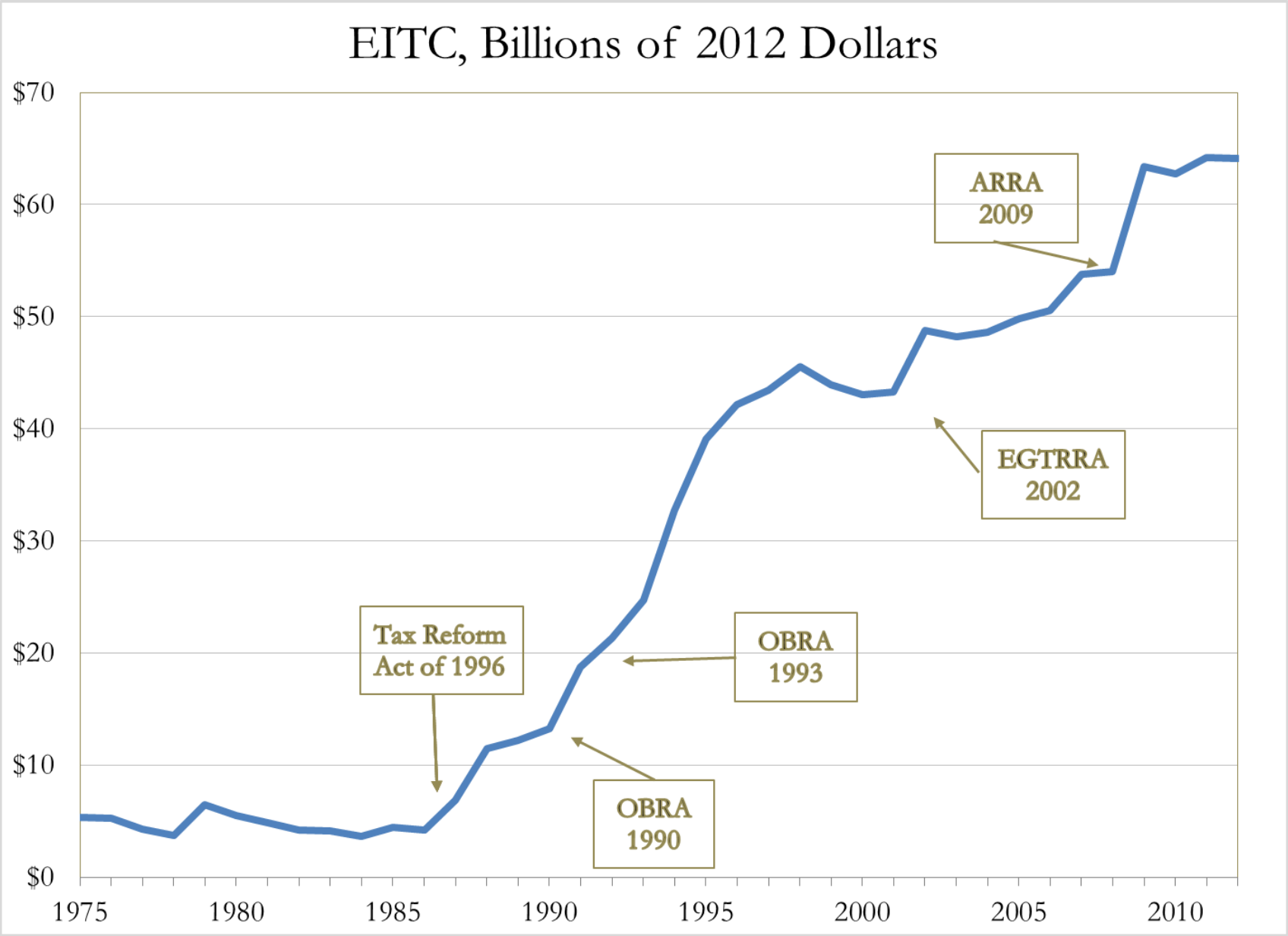


Source: Bitler and Hoynes "The More Things Change, the More They Stay the Same? The Safety Net and Poverty in the Great Recession," forthcoming *Journal of Labor Economics*.



Source: U.S. Department of Health and Human Services *Indicators of Welfare Dependence.* 2013

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In-work credits are on the rise across the OECD

- More than 15 OECD countries have in-work credits
  - Early adopters: UK (1971), US (1975), Ireland (1984)
  - Past decades have seen many countries adopting these policies
  - They vary significantly in terms of <u>generosity</u> and the degree to which they are <u>targeted</u> or universal
- [More than half of U.S. states offer "add on" EITCs]

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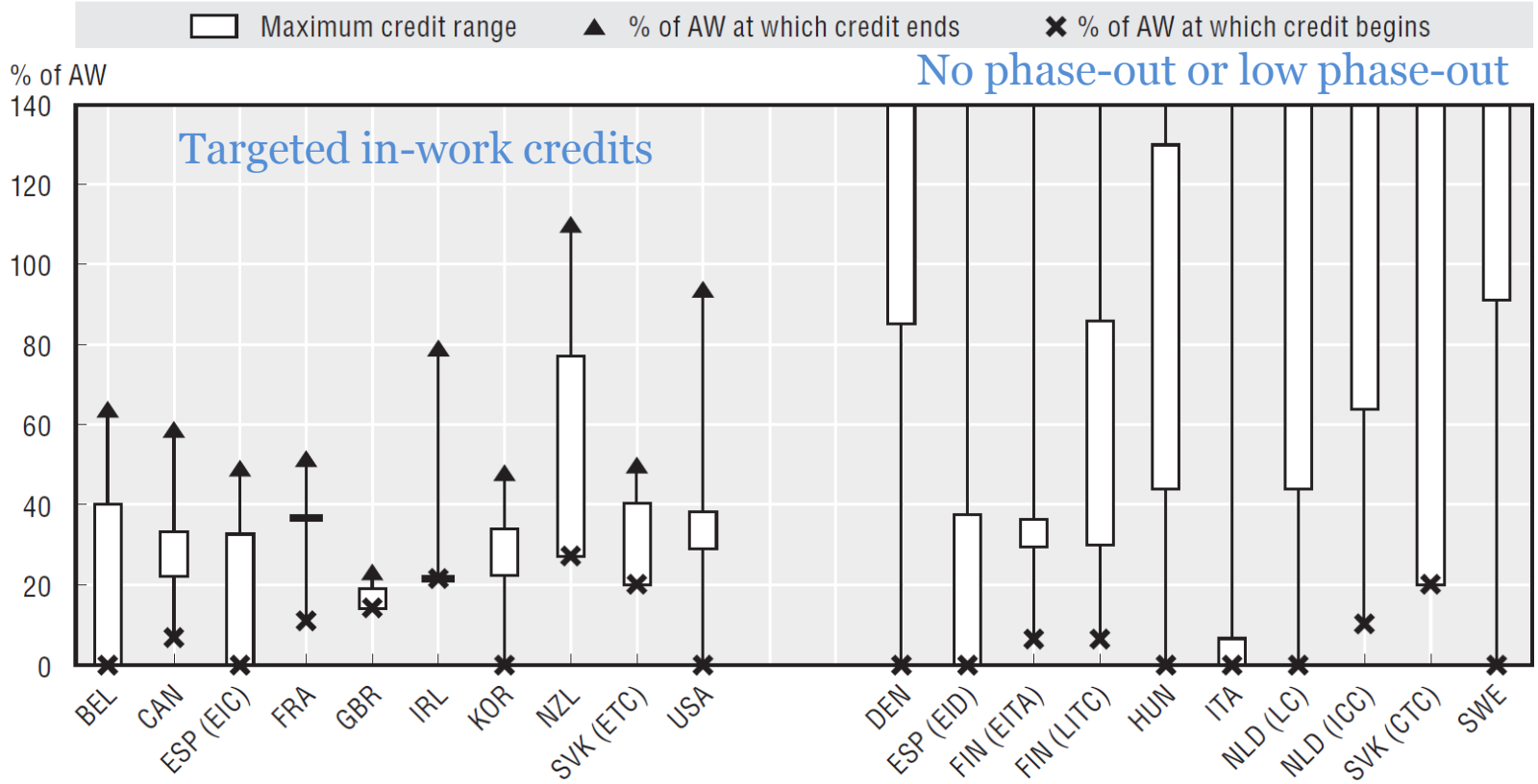
In-work credits are also on the rise across the OECD

Figure 2.7. **Targeting of in-work credits in OECD countries (for single parent with two children), 2010**[1]



1. EIC: Earned Income Credit; ETC: Employee Tax Credit; EID: Earned Income Deduction; EITA: Earned Income Tax Allowance; LITC: Labour Income Tax Credit; LC: Labour Credit; ICC: Income Dependent Combination Credit; CTC: Child Tax Credit.

Source: OECD (2011), *Taxation and Employment*, OECD Tax Policy Studies, No. 21,

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Figure 2.8. **Maximum credit size of in-work tax credit schemes (for single parent with two children), 2010**[1]

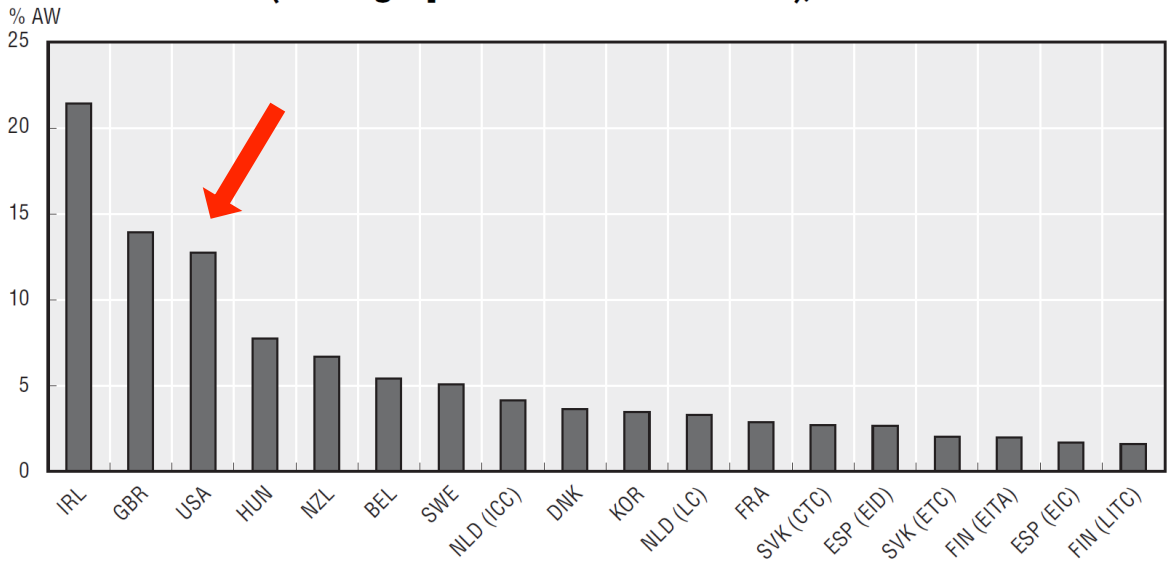
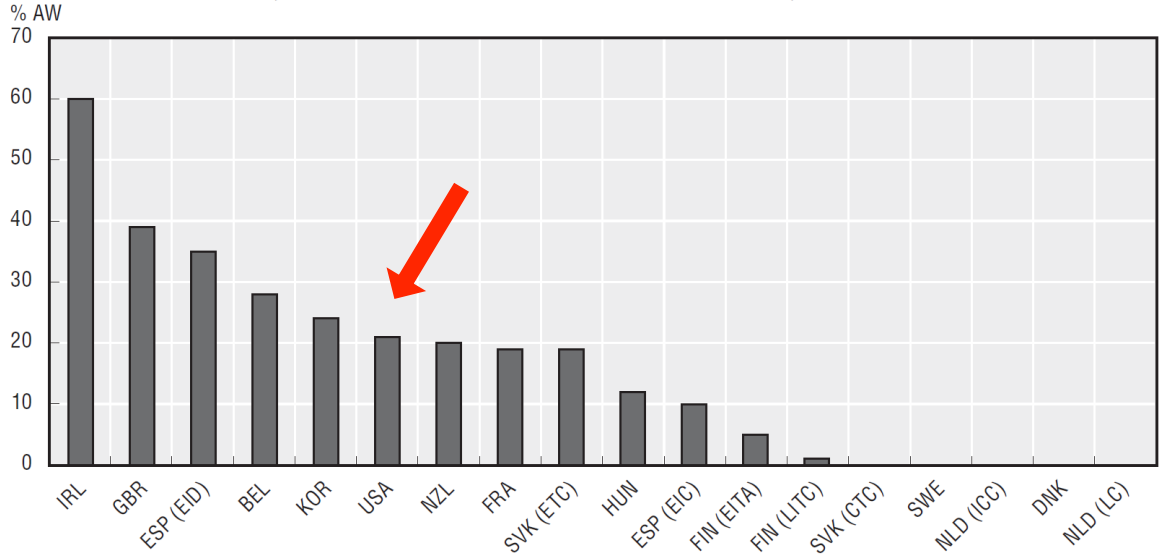


Figure 2.9. **Primary phase-out rates of in-work tax credit schemes (for single parent with two children), 2010**[1]



Source: OECD (2011), *Taxation and Employment*, OECD Tax Policy Studies, No. 21,

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3. How does the EITC affect family well-being?

- Main areas of investigation:
  - Employment, earnings
  - Poverty, distribution of income
  - Downstream effects: health, human capital, education

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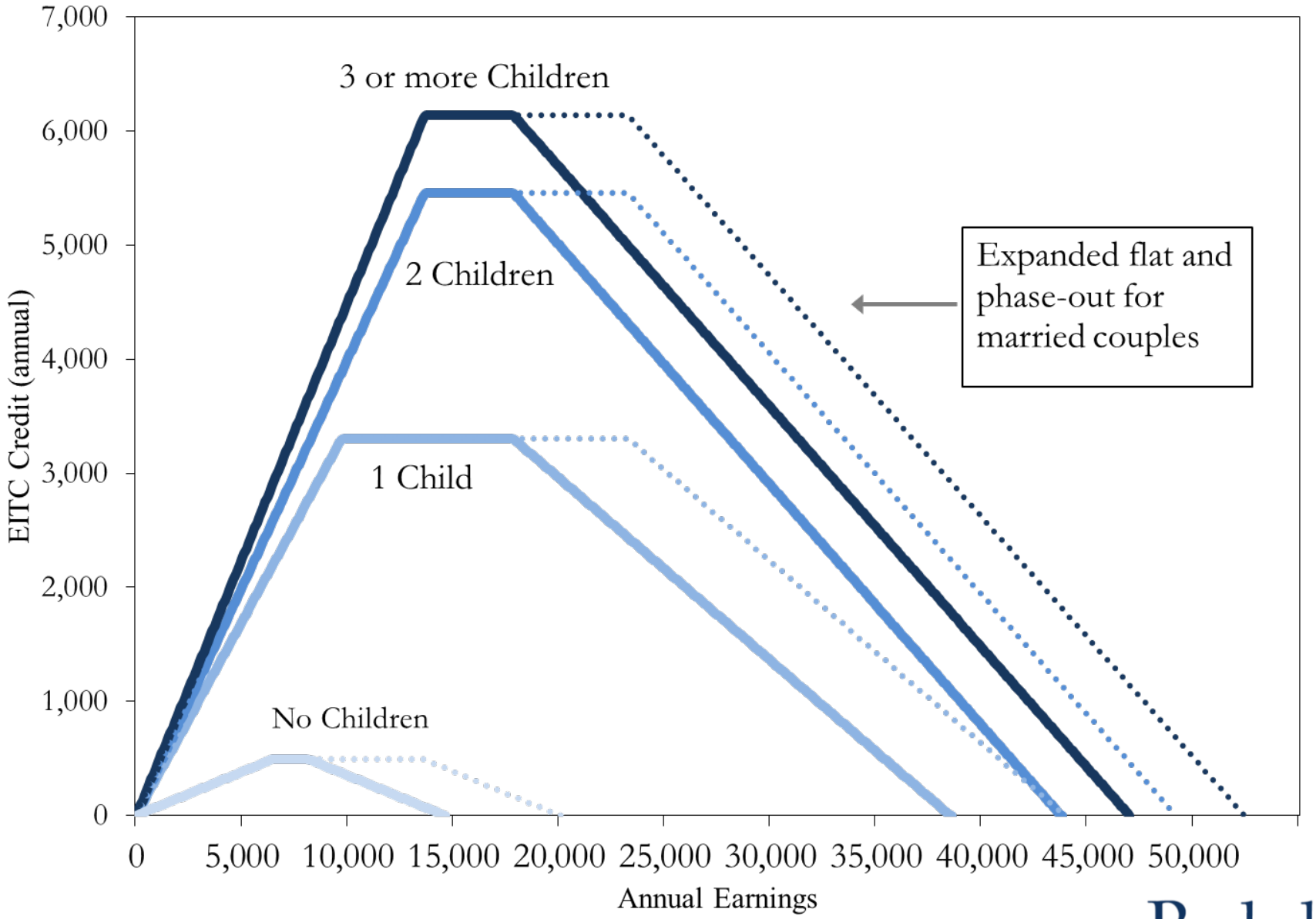
EITC Schedule 2014



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Labor supply incentives

- Due to the conditioning on earnings, employment increases with the EITC
- Earnings conditional on work is ambiguous but on net would be expected to decrease (negative in flat and phase-out, opposing income and substitution effects in phase-in)
  - The intensive margin labor supply incentives are muted due to the (relatively) low phase-out tax rate
- Labor supply predictions are more complicated for married couples; secondary earners may reduce labor supply due to new income transfer to primary earner (both income and substitution effects)
- After tax incomes can increase due to earned income as well as the credit.

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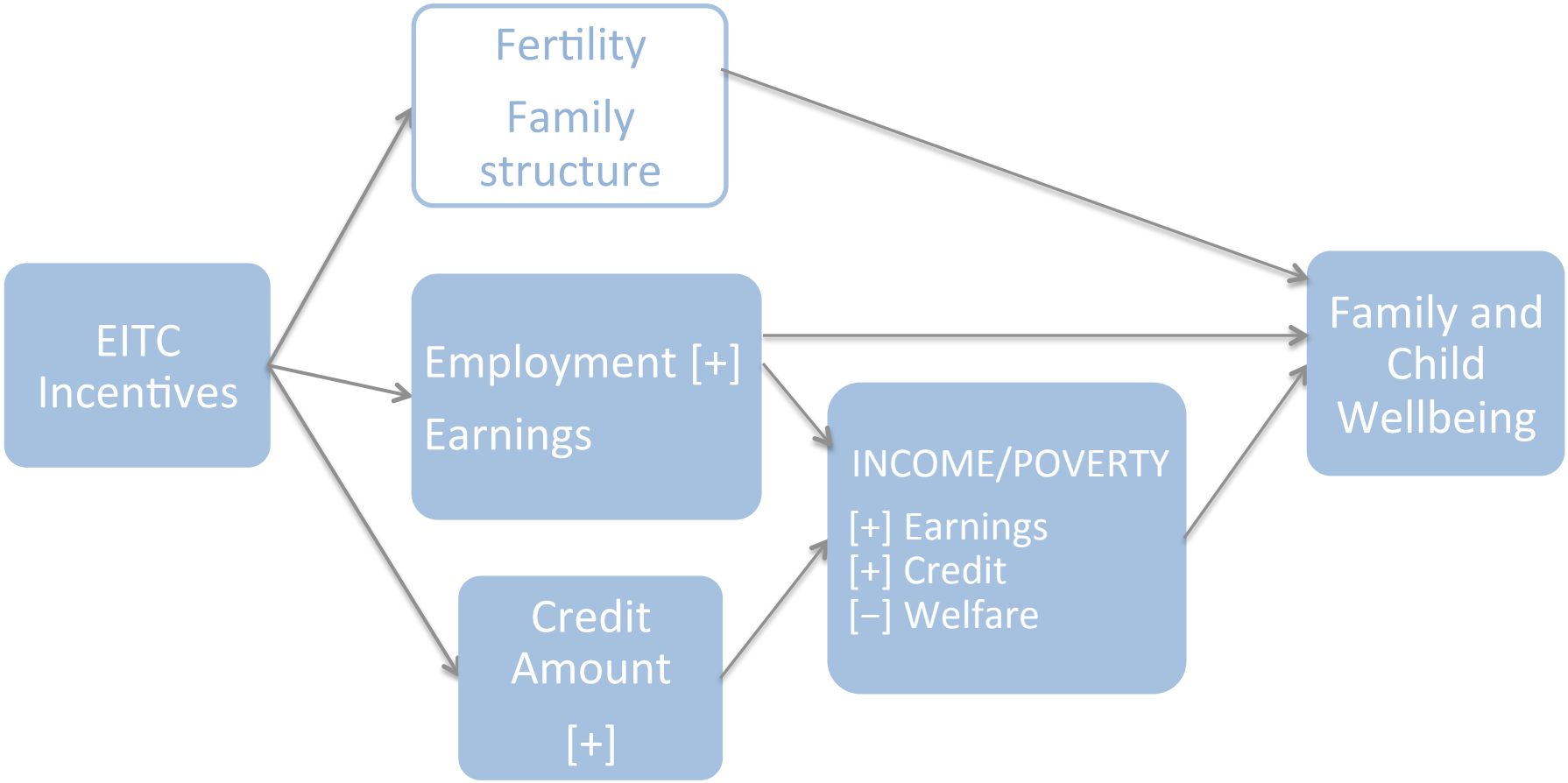
EITC, Employment, Income and Well-being



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Research Findings: Effects of the EITC on Labor Supply

- For single mothers, consistent evidence that an expansion in the EITC leads to increased employment (Eissa and Liebman QJE 1996, Meyer and Rosenbaum QJE 2001, Grogger RESTAT)
- For married couples, there is little effect on men but women reduce labor supply modestly (Eissa and Hoynes 2004)
- Little evidence of a reduction in earnings for those in the labor market (intensive margin response).
- Those with self-employment income bunch at the first EITC kink; unclear if this is a reporting response or intensive margin response in real economic activity (Saez 2010, Chetty and Saez 2013, Chetty, Friedman and Saez 2013)

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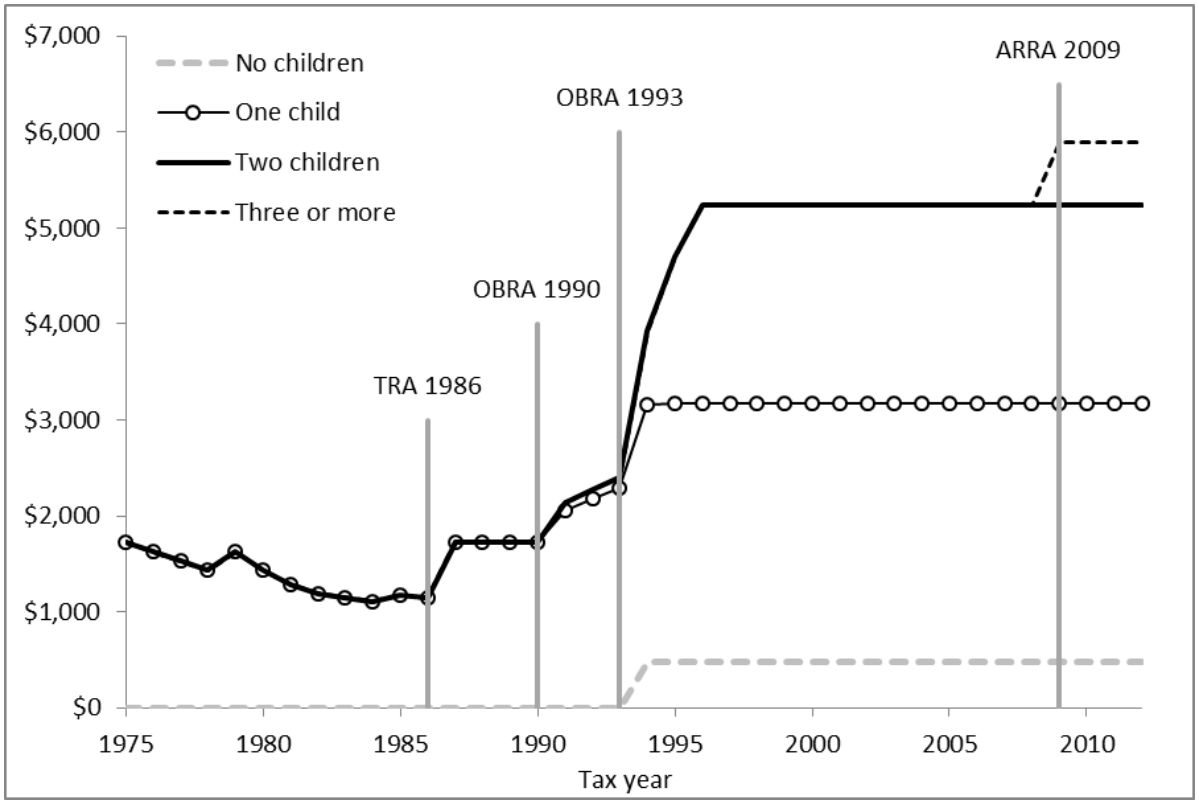
Much of the research takes advantage of the large changes in the generosity of the EITC by family size, particularly as part of the 1993 expansion of the EITC

Maximum EITC by number of children (2012 $)



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New evidence on the effects of EITC
(Hoynes and Patel 2015)

- We update the literature on labor supply, using event study models and using data through the Great Recession
- We also provide new evidence on the effects of the EITC on the distribution of income
- We use a difference-in-difference analysis of the 1993 expansion and a generalized DD covering 1984-2012. Here I focus on the 1993 DD.
- In our work we focus on single mothers (with less than a college degree) because they account for the vast majority of the costs of the program.

	% Dist. of Recipients	% Dist. of Expenditure
Single, with children	58.7%	74.1%
Married, with children	19.4%	23.2%
No Children	21.9%	2.7%

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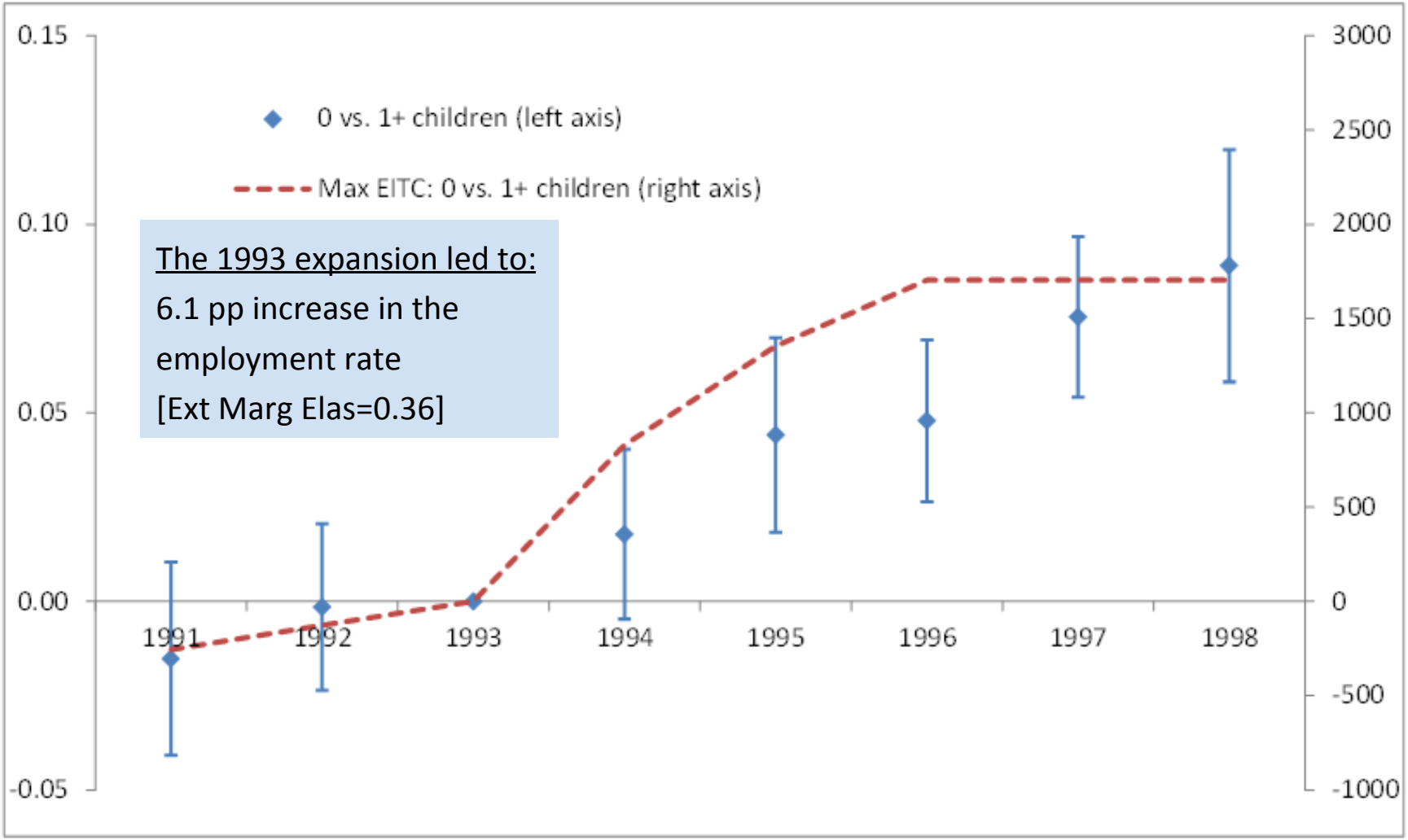
Event Study Estimates of the Effects of OBRA1993 on Employment



The 1993 expansion led to:
6.1 pp increase in the employment rate
[Ext Marg Elas=0.36]

Source: Hoynes and Patel (2015). "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income"

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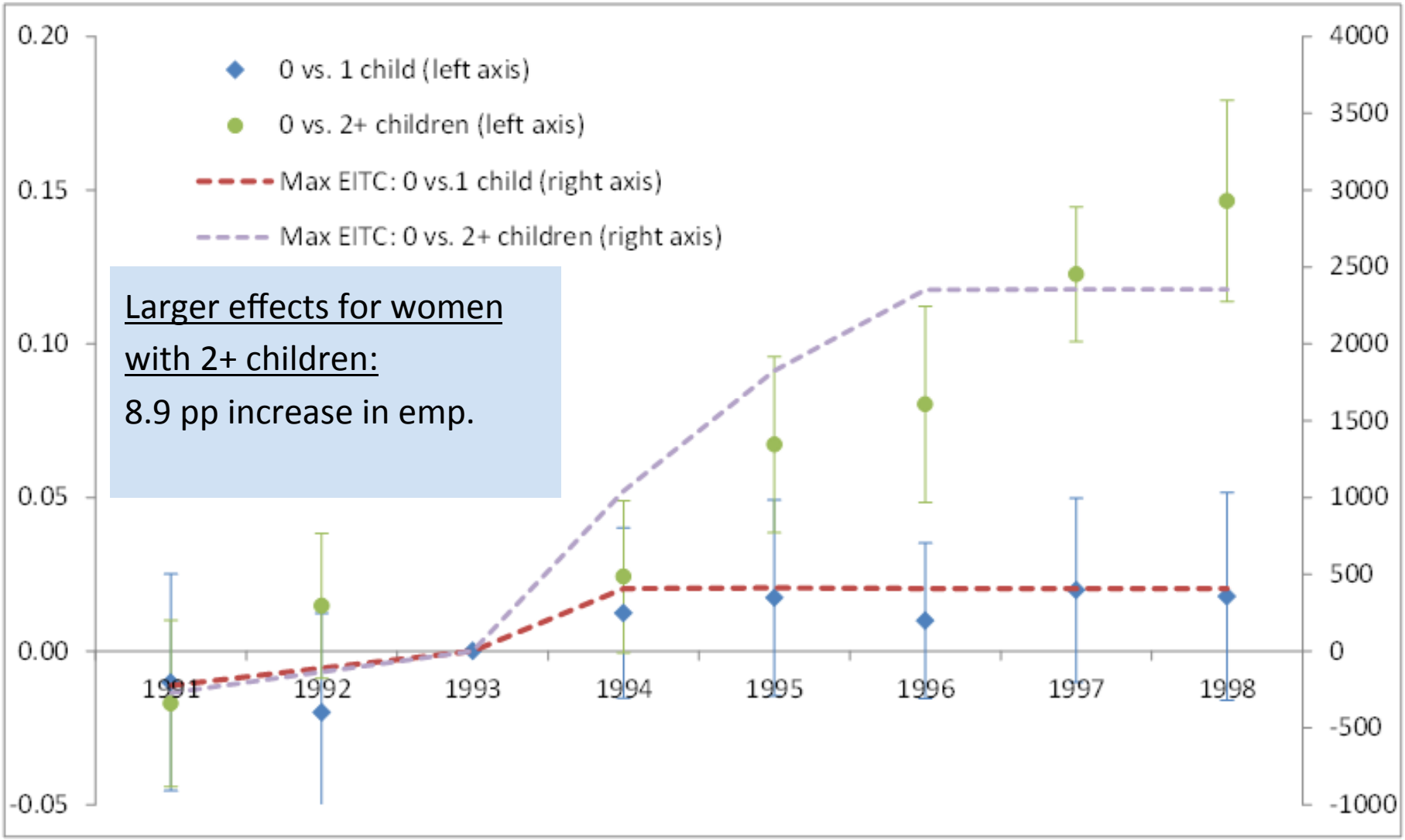
Event Study Estimates of the Effects of OBRA1993 on Employment



Larger effects for women with 2+ children:

8.9 pp increase in emp.

Source: Hoynes and Patel "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income"

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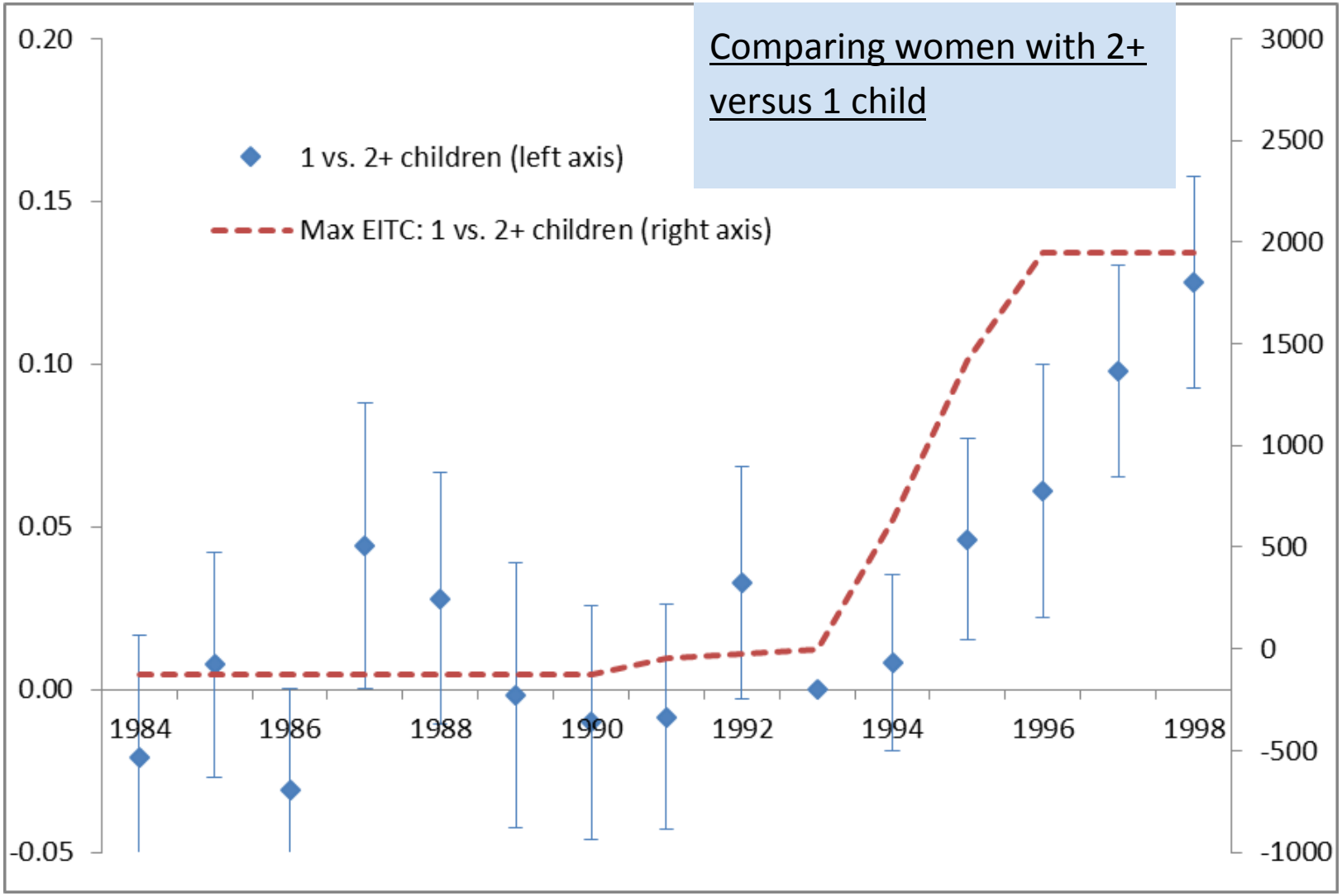
Event Study Estimates of the Effects of OBRA1993



Source: Hoynes and Patel "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income"

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Research Findings Effects of the EITC on Income and Poverty

- The EITC can affect after tax and transfer (ATT) income through multiple channels

Static Effect

  - *Credit effect*: direct EITC payments

Dynamic Effects

  - *Earnings effect*: extensive margin leads to increase in earnings
  - *Income adjustment effect*: offsetting reduction in public assistance (SNAP, TANF) as earnings increases

- Static calculations from the Supplemental Poverty Measure show that the EITC is the largest anti-poverty program for children in the U.S.
- Hoynes and Patel (2015) provide new evidence on the full effects of the EITC on the distribution of after-tax and transfer income.

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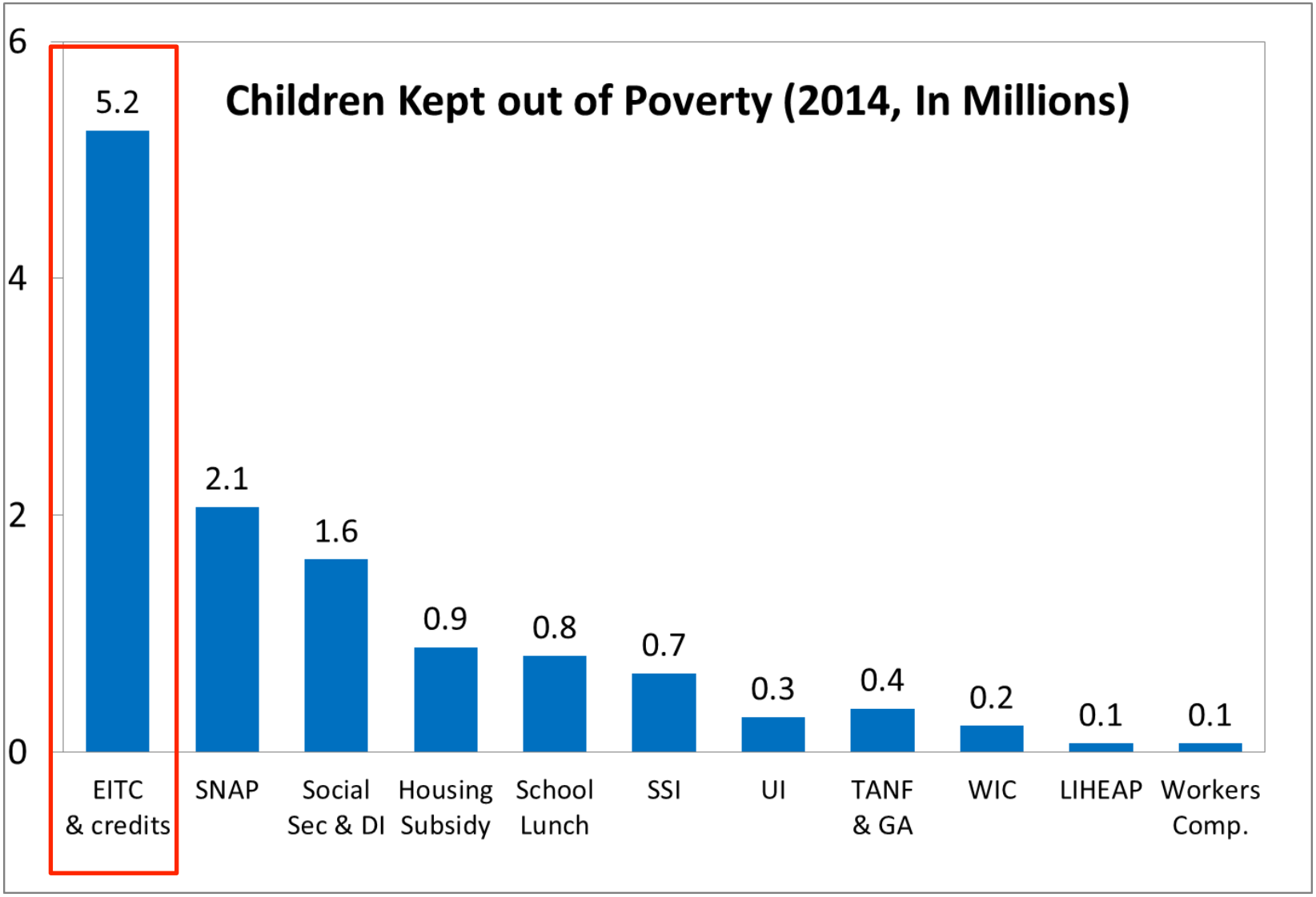
Static calculations of the antipoverty effects (based on SPM)



Source: Calculations based on *Supplemental Poverty Measure, 2014* (Kathleen Short), U.S. Department of Census, Current Population Report P60-254.

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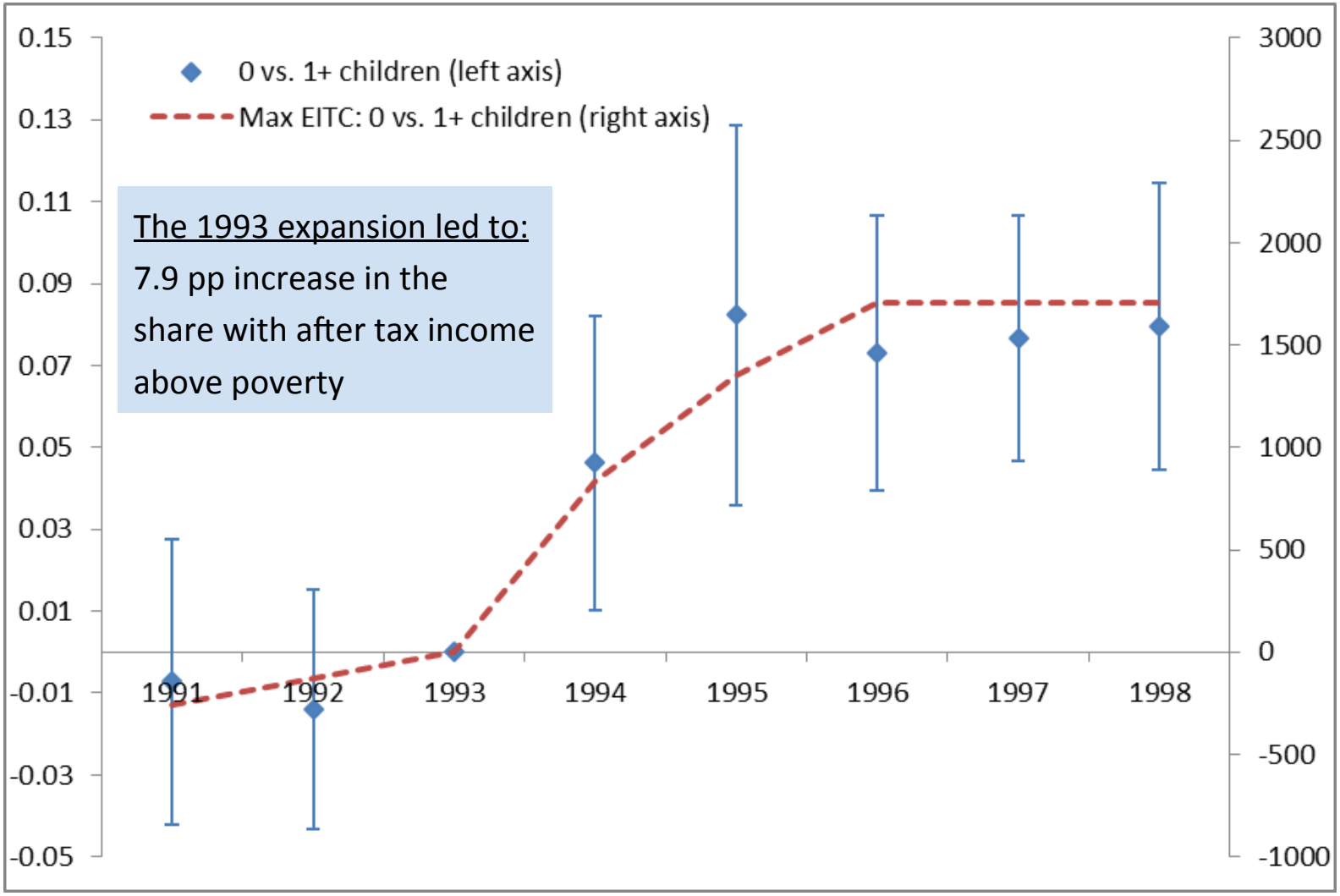
Event study estimates of EITC above 100% poverty, OBRA93



Source: Hoynes and Patel "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income"

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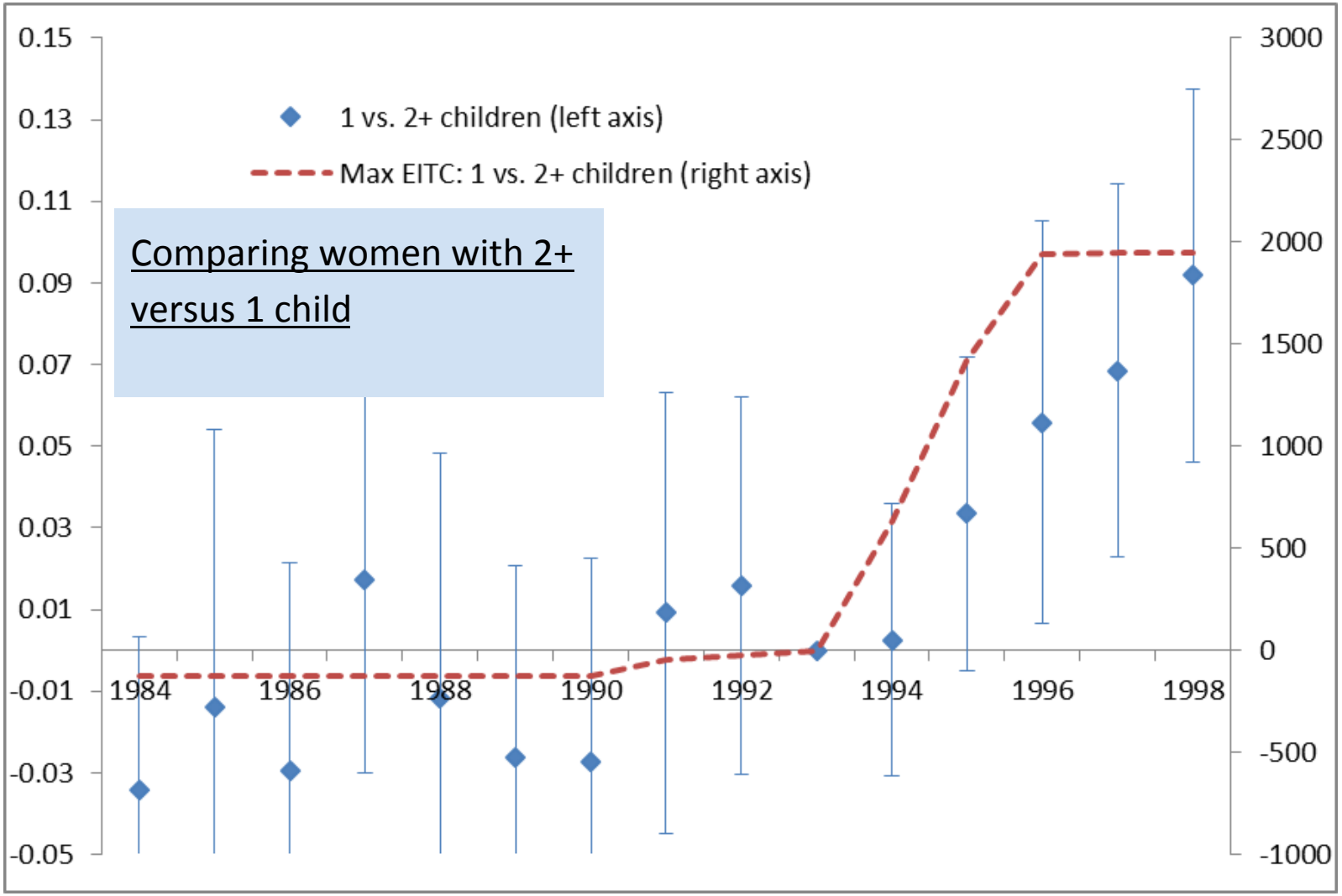
Event Study Estimates of EITC above 100% poverty, OBRA93



Source: Hoynes and Patel "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income"

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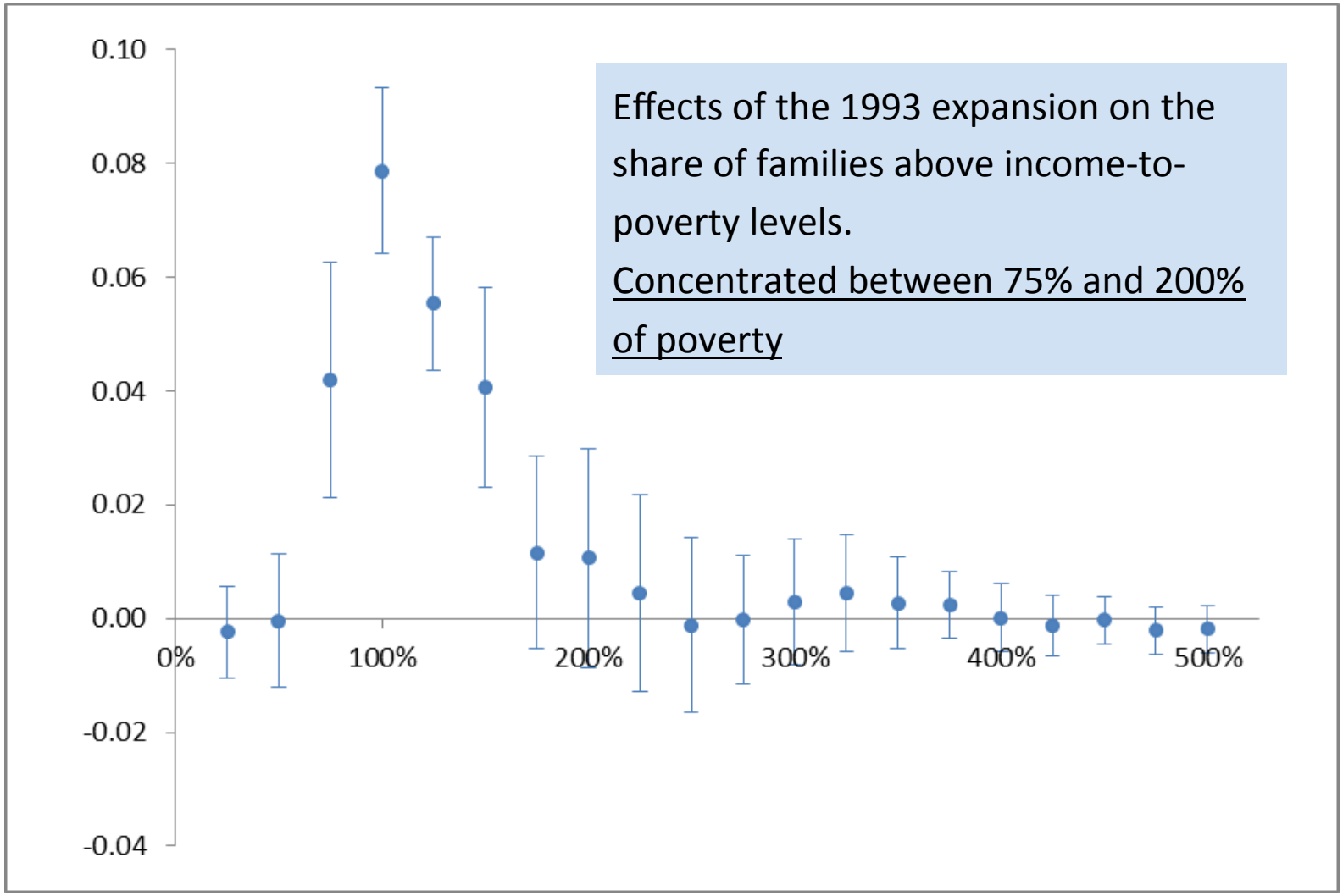
Estimating the effect of the EITC on the distribution of income



Source: Hoynes and Patel (2015). "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income"

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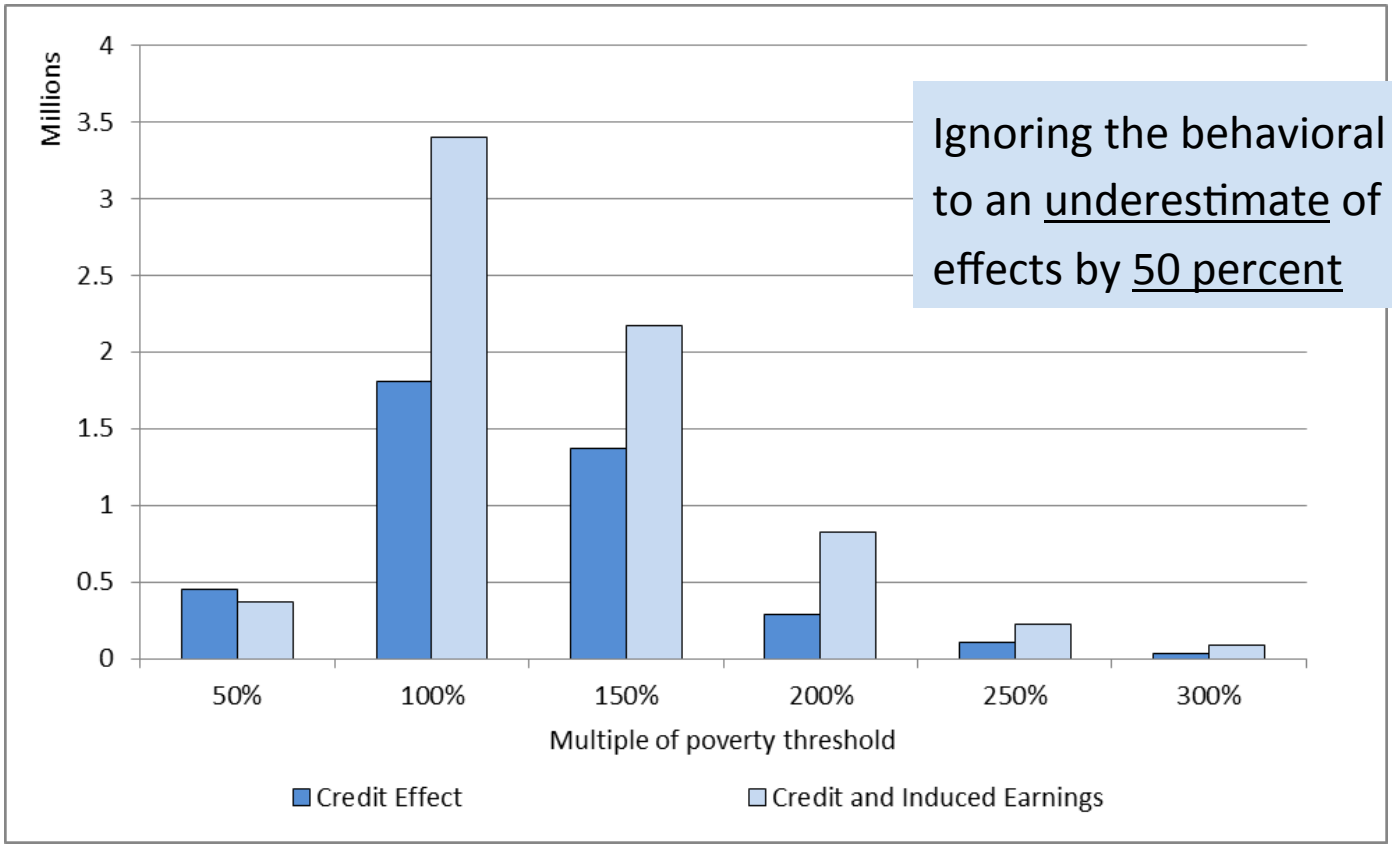
Static versus Dynamic Calculations of Anti-Poverty Effects

Simulated number of children raised above income-to-poverty cutoffs



Ignoring the behavioral response leads to an underestimate of the anti-poverty effects by 50 percent

Source: Hoynes and Patel (2015). "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income"

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Research Findings Downstream effects of the EITC

- We know that the EITC leads to increases in employment and net income
- Does this package of income and employment effects show benefits in other domains?
- New work seeks to quantify effects of safety net programs beyond labor supply and income
- In this setting (the EITC), it is difficult to identify the particular channel for the effects (*income versus employment*)
- Yet quantifying these effects is important for estimating the full benefits of this program (and of redistribution more generally)

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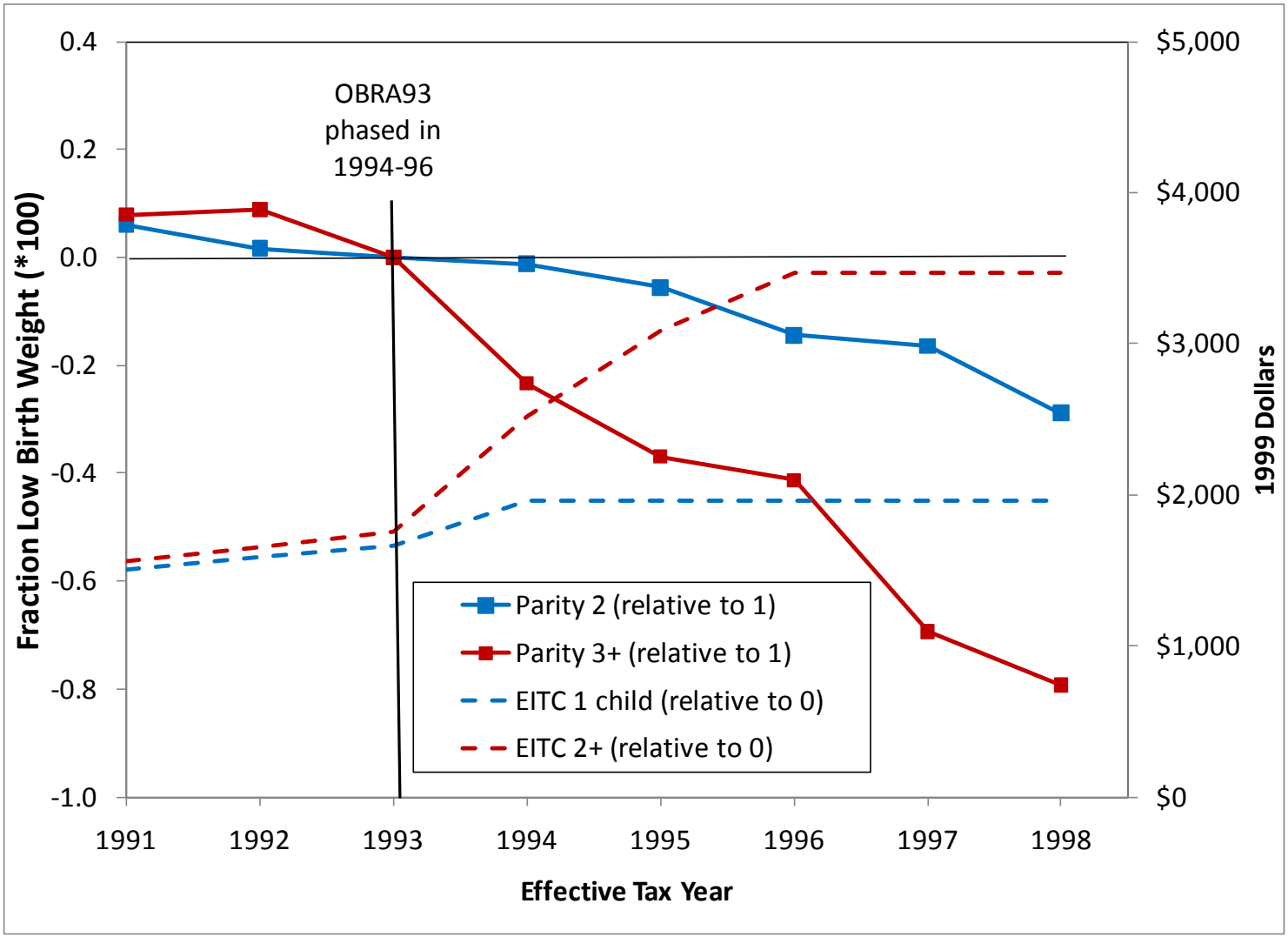
Effects of the EITC on health

- Expansion of the EITC is associated with a reduction in risky biomarkers in mothers (Evans and Garthwaite 2014).
  - This suggests that increases in income can reduce cortisol.
  - Chronic elevations of cortisol can lead to dysfunction in metabolic and immune systems
- Hoynes, Miller and Simon (2015) find that EITC expansions lead to reductions in low birth weight births
  - Some evidence that this may operate through reductions in smoking and increases in prenatal care

Effect of OBRA93 on low birth weight
Single women with <=12 years of education



Source: Hoynes, Miller and Simon "Income, the Earned Income Tax Credit, and Infant Health", *American Economic Journal: Economic Policy*, 2015.

Magnitudes for effects on low birth weight

- The1993 expansion led to a 0.4 percentage point decrease in the rate of low birth weight birth
- This implies that a $1000 increase in policy-driven EITC leads to a 7 percent reduction in the risk of LBW
- Comparison to other near-cash interventions:
  - Food stamps: 4% for whites, 2% for blacks [Almond et al 2011]
  - WIC: 10 – 20% [Hoynes, Page and Stevens 2011, and others]
  - Layoffs: 4.7% [Lindo 2011]

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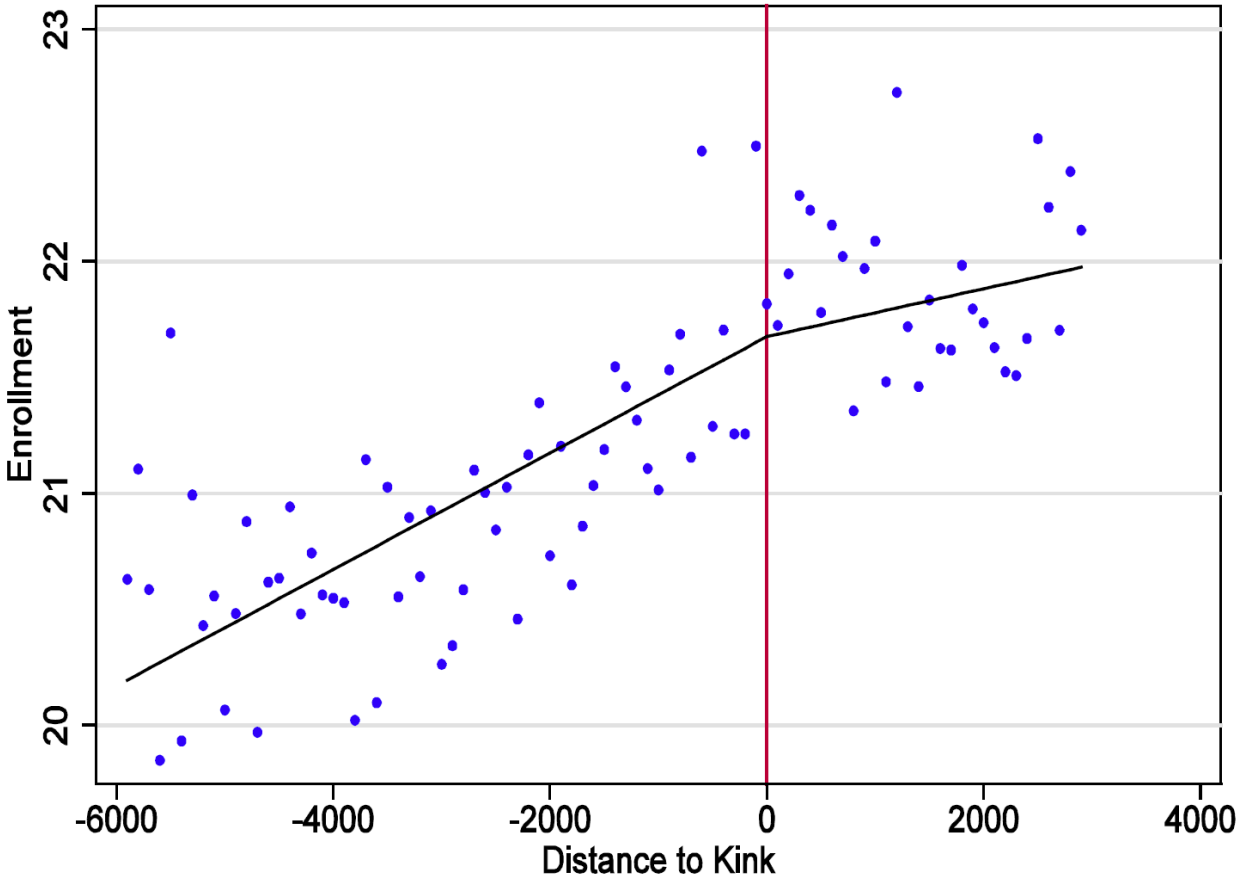
Effects of the EITC on educational outcomes

- Dahl and Lochner (2012) find that the EITC leads to an increase in reading and math test scores. A $1,000 increase in family income due to EITC expansions raises combined math and reading test scores by about 0.06 standard deviations.
- Chetty, Friedman, and Rockoff (2011) use the nonlinearity of the EITC to identify the effect of EITC receipt on New York City schoolchildren's test scores. They find that $1,000 in EITC income raises test scores by 0.06–0.09 standard deviations.
- Bastian and Michelmore (2015), Maxfield (2013) and Manoli and Turner (2014) find that the EITC leads to increases in educational attainment and college going.

EITC and college enrollment 1 and 2 years after HS
Foundation for *Regression Kink Design*



Source: Manoli and Turner (2015) "Cash-on-Hand and College Enrollment: Evidence from Population Tax Data and the Earned Income Tax Credit."

Work in progress on the EITC and child well-being
(Figlio, Hoynes, Karbownik and Simon)

- We are using data on all children attending schools in Florida
  - Panel data with yearly math and reading tests, covering birth cohorts 1992 to 2002 and school records for 1998-2013.
  - Linked to birth certificates, with detailed residential location
- Our work hopes to contribute to the literature in several ways:

1. We are leveraging different EITC expansions to learn something about <u>when in the life cycle money matters</u>. (*in-utero*, pre-school years, contemporaneous while in school)
2. We have data for a large and diverse state allowing us to have the <u>power to examine the effects by subgroup</u>

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4. Limitations of an In-Work Safety Net

4. Limitations of an In-Work Safety Net

- *In-work* safety nets do not work well in times of no work
- The U.S. lacks an adequate safety net for extreme poverty (SNAP and disability)
- Wage capture: Part of the benefit of the subsidy is captured by employers (in lower wages). A higher minimum wage can help counter this incidence pathway.
- Compliance: Administering the social safety net through the tax system can lead to noncompliance (overclaimed EITC payments 22%–26% of total program payments)

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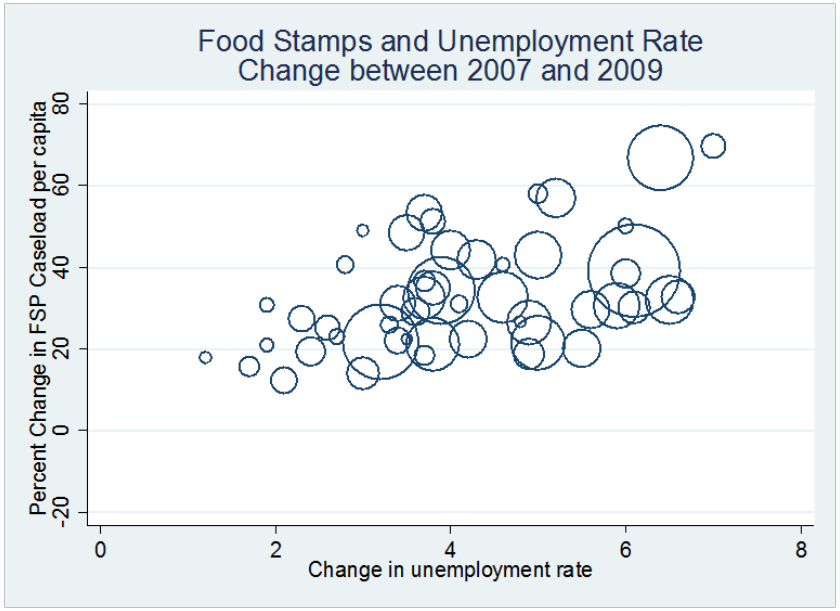
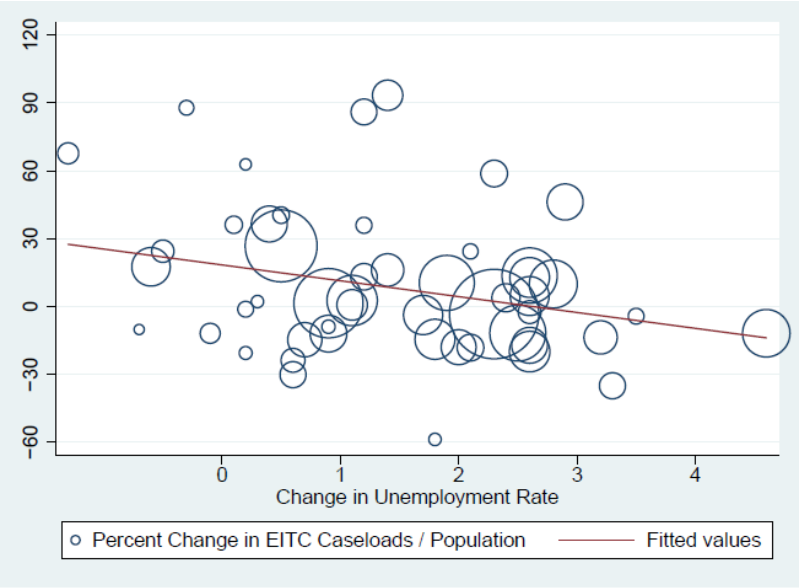
Changes in caseloads, by state change in UR, in the Great Recession

SNAP (Food Stamps)



EITC (single parents)



- SNAP expanded with need in the Great Recession. For the largest group of EITC recipients (single parents) the program is pro-cyclical

Source: Bitler, Hoynes and Kuka "Do In-Work Tax Credits Serve as a Safety Net?" forthcoming *Journal of Human Resources*, Bitler and Hoynes *Brookings Papers on Economic Activity* 2010.

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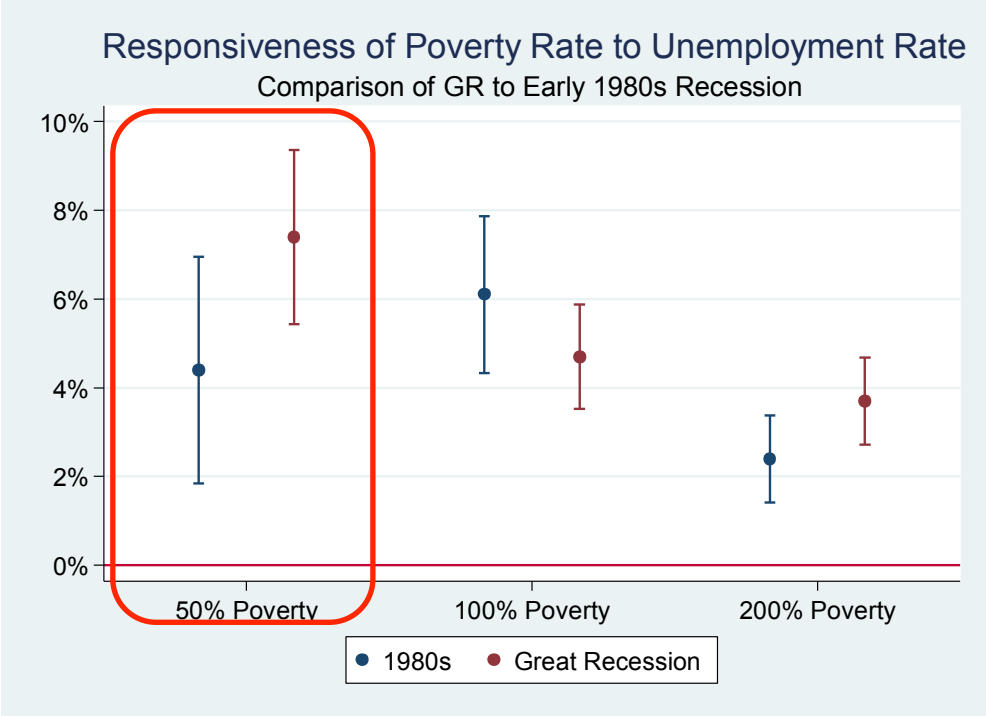

- The share of families falling below 50% poverty (*extreme poverty*) was <u>more affected</u> in the Great Recession than we would have predicted from prior cycles
- Most likely explanation → welfare reform and the loss of the "out of work" safety net

Source: Bitler and Hoynes "The More Things Change, the More They Stay the Same? The Safety Net and Poverty in the Great Recession," forthcoming *Journal of Labor Economics*; Bitler and Hoynes *AER Papers and Proceedings* 2015.

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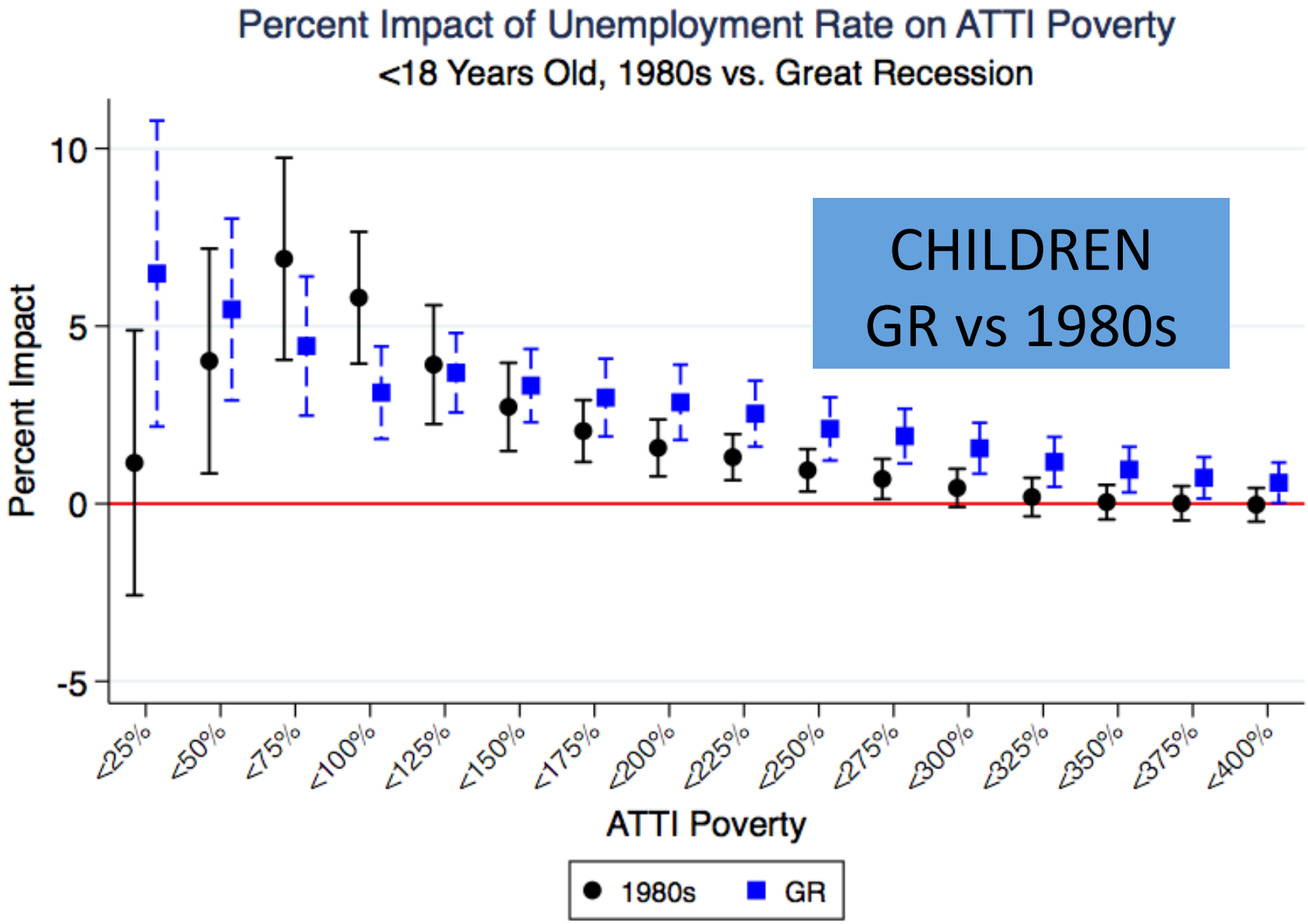
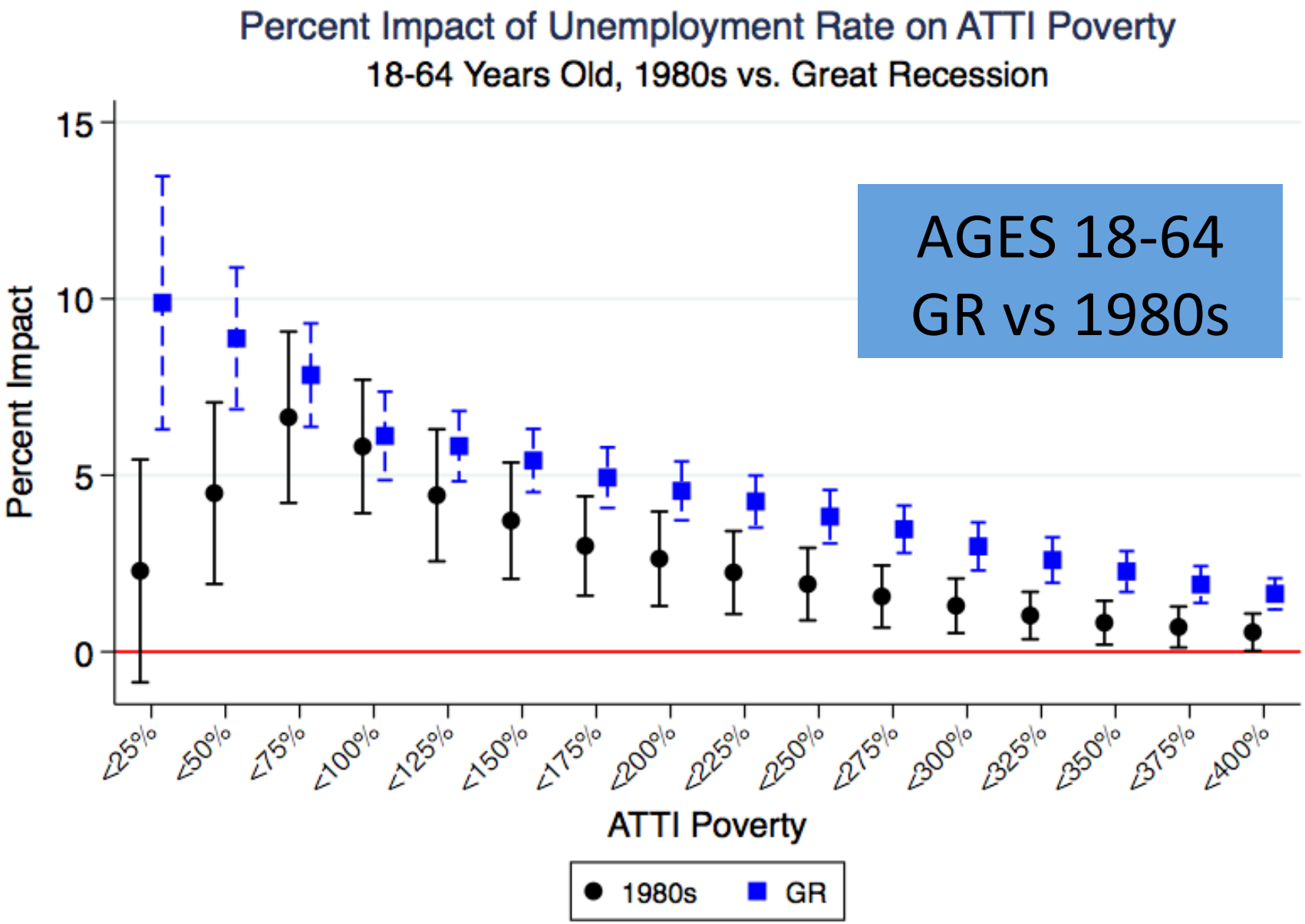


Source: Bitler and Hoynes *AER Papers and Proceedings* 2015.



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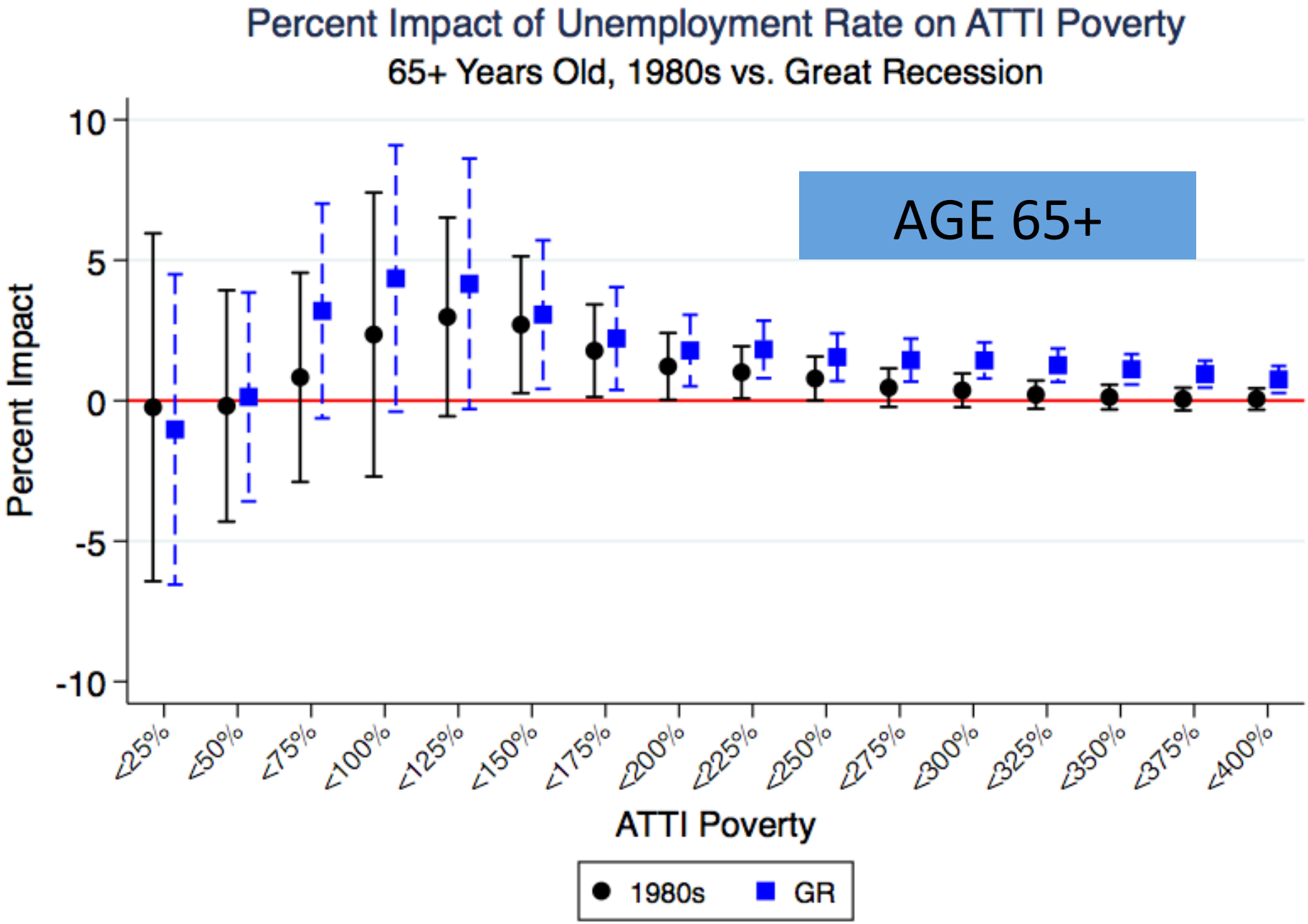
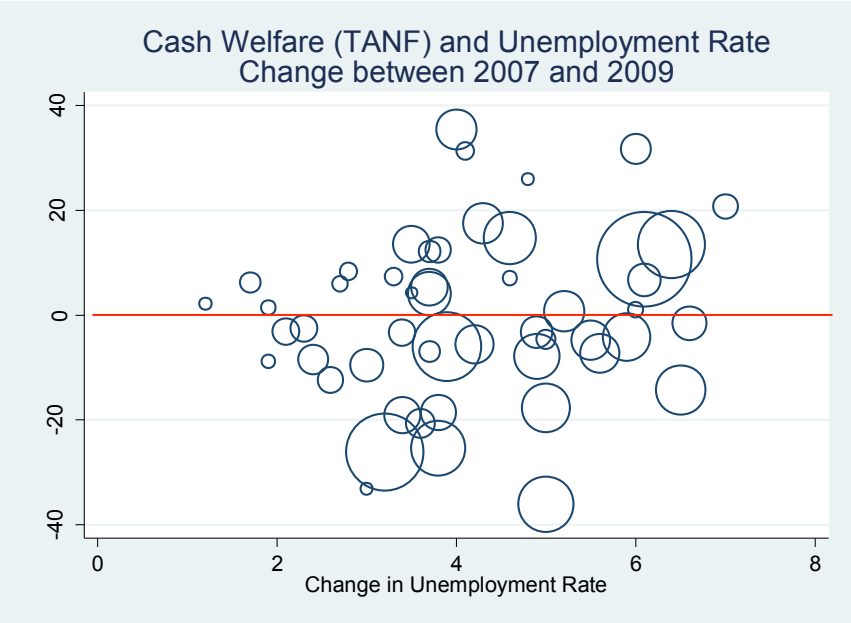

Percent Impact of Unemployment Rate on ATTI Poverty
65+ Years Old, 1980s vs. Great Recession
AGE 65+
Percent Impact
10
5
0
-5
-10
<25%
<50%
<75%
<100%
<125%
<150%
<175%
<200%
<225%
<250%
<275%
<300%
<325%
<350%
<375%
<400%
ATTI Poverty
1980s
GR

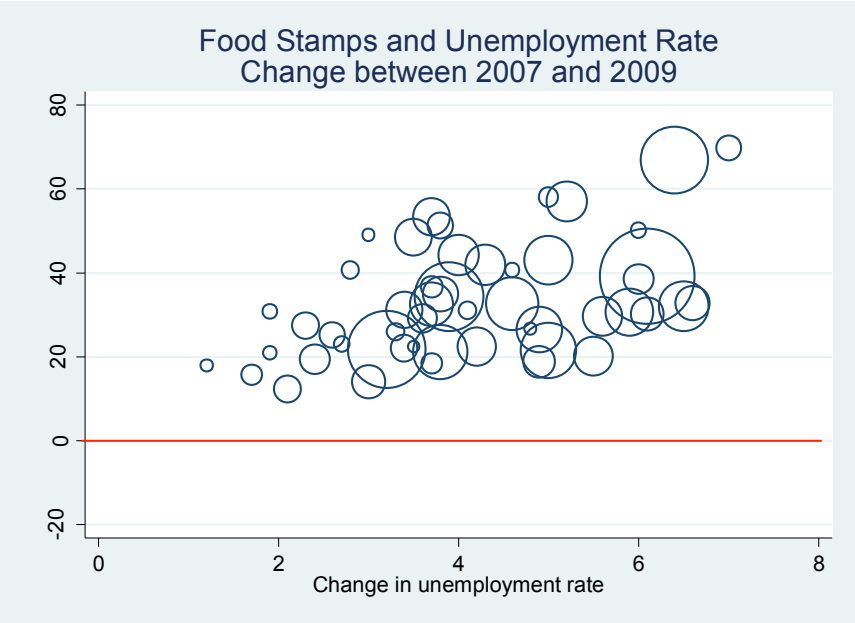
TANF not responding to need

Safety net response to the Great Recession

2007-2009 TANF



2007-2009 Food Stamps



Source: Bitler and Hoynes, *Brookings Papers on Economic Activity* 2010.

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Conclusions

- The EITC is an important component of the tax-and transfer social safety net
- It has been very successful in increasing employment and reducing inequality (below two times the poverty line)
- Additionally, these gains translate into better health and cognitive outcomes, implying that benefits of safety net are broader than previously thought. Positive external benefits to taxpayers.
- Yet relying on an in-work safety net leads to concerns about protection when there is no work and to whether employers capture part of the benefits of the credit.

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