

Cyclicalality of the Safety Net

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Motivation

- In the past 2 decades, the safety net for low income families with children has been transformed:
 - Welfare reform has led to historic lows in cash welfare caseloads (TANF), SNAP has expanded
 - The EITC has expanded such that about 20 percent of tax filers now receive the credit
- Thus in-work aid has largely replaced out-of-work aid for this population

Motivation (II)

- Given this, how does the EITC perform as a “safety net,” do other programs still work and what about poverty?
 - How does the EITC adjust in times of greater economic need?
 - How do TANF, FS, and UI do and what about poverty?
- The Great Recession provides a good setting for testing the safety net
- Based on work in JOLE, JHR and JPAM

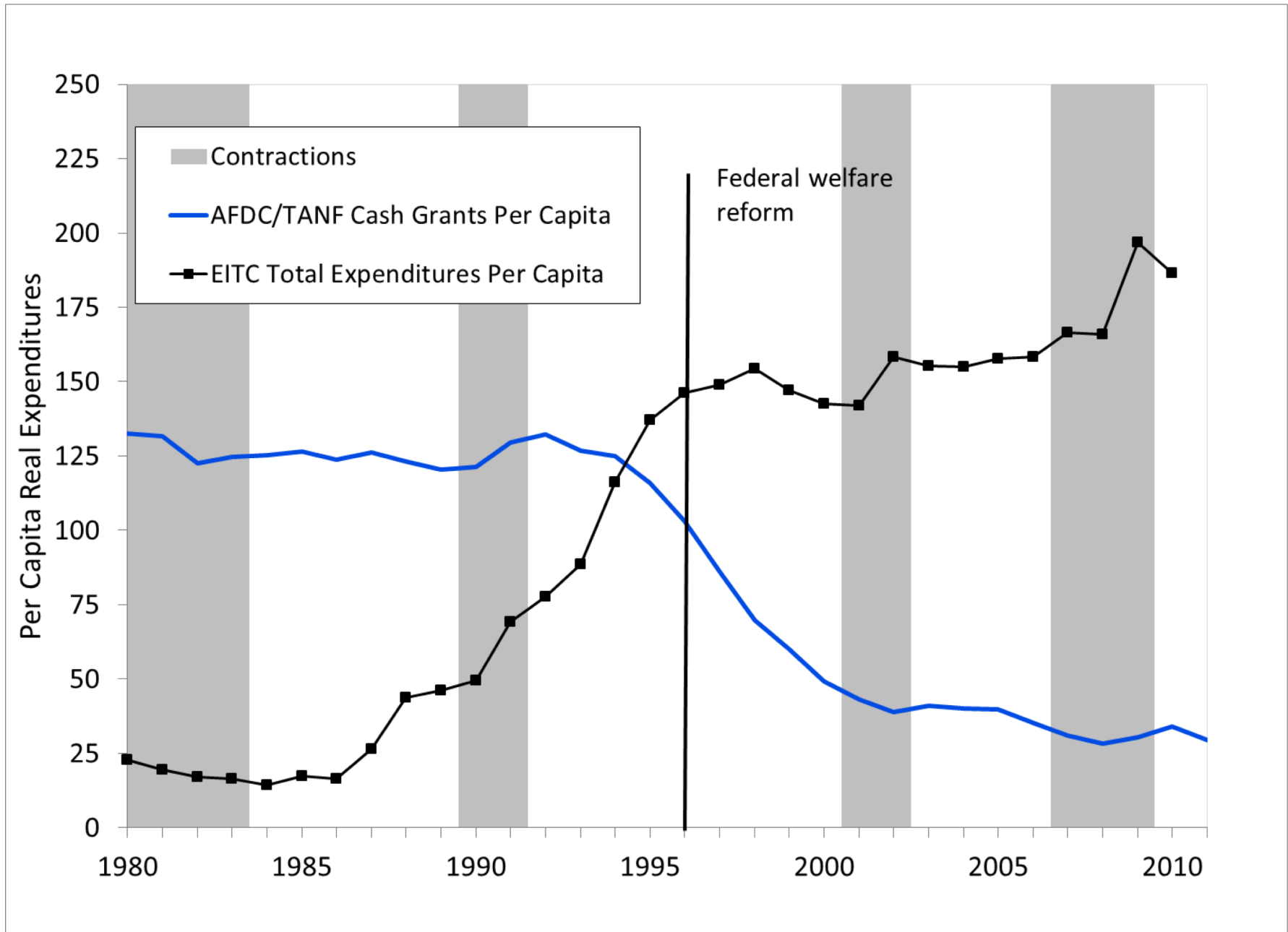
Overview and Findings: EITC

- Empirical strategy:
 - Exploit differences in timing and severity of cycles across states
 - Use administrative micro-level data on tax returns
- Preview of results:
 - EITC is countercyclical for married couples with children and weakly procyclical (but insignificant) for single filers with children
 - Compared to food stamps, TANF and UI, the EITC is the least responsive to the business cycle

Overview and Findings: The Safety Net, Poverty and the Unemployment Rate

- Construct poverty using private income, after tax and transfer income, and incorporate in-kind where possible in the latter; for children
- Look at how these are affected by shocks in GR (unemployment rate)
 - Private income is more cyclical than net of tax and transfer (safety net provides protection)
 - Extreme poverty more cyclical than poverty, and also holds up the distribution
 - Most cyclical for children in single parent families, HH with Hispanic heads, and HH with immigrant heads or spouses
- How does it matter if use SPM/Official/OECD measures; other choices
 - Not much above poverty, more for extreme poverty for SPM/etc.
 - Medical care treatment doesn't matter

Cash and Near Cash Safety Net Spending per Capita, 2009\$



Cash and Near-Cash Safety Net, 2010 (for families with children)

	Number of recipients (thousands)	Payments (millions)	Average monthly benefit
TANF, Cash benefits	1,911	\$10,699	\$402
Federal EITC	26,170	\$58,620	\$187
Food Stamps	18,618	\$64,702	\$285
SSI, nonaged caseload	6,728	\$45,618	\$518
Social Security Disability Income	9,398	\$114,854	\$1,068

Background on 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
- Expansions due to tax acts in 1986, 1990, and 1993
- In tax year 2009, the credit was received by 27 million filers at a cost of \$59 billion (average credit of \$2194)

Food Stamps, TANF

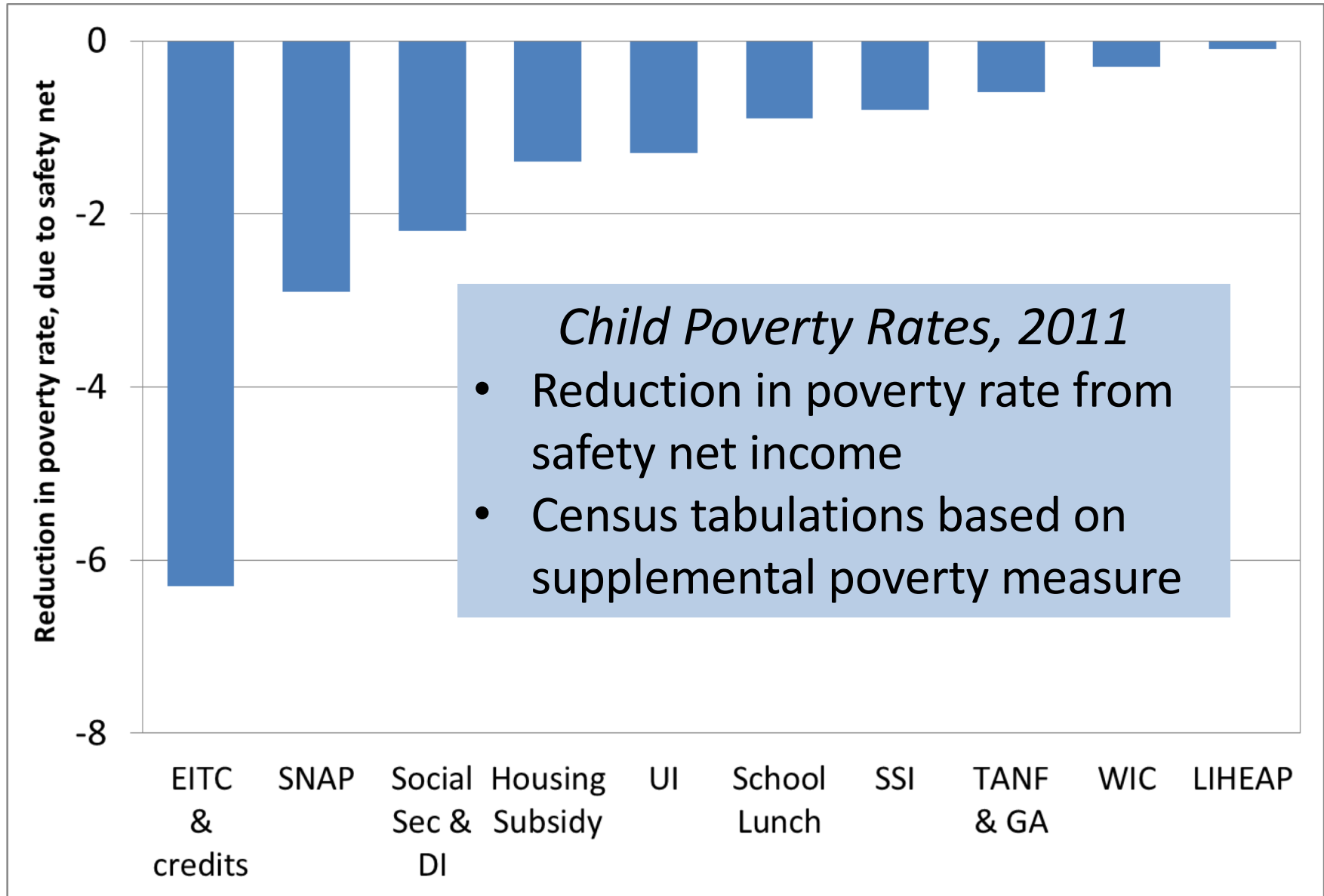
- FS: EBT for unprepared food, only universal part of safety net, gross income <130% of poverty guideline (BBCE); net income <100%
- TANF: Funding stream, some states still provide limited cash benefits for low income families with children but much of benefit repurposed by states (block grant)

(2) Features of a safety net

- Increases net of tax and transfer income at the bottom of the distribution, reduces poverty (or poverty gaps)
- Provides protection in times of economic need (insurance)
- [Countercyclical benefit]

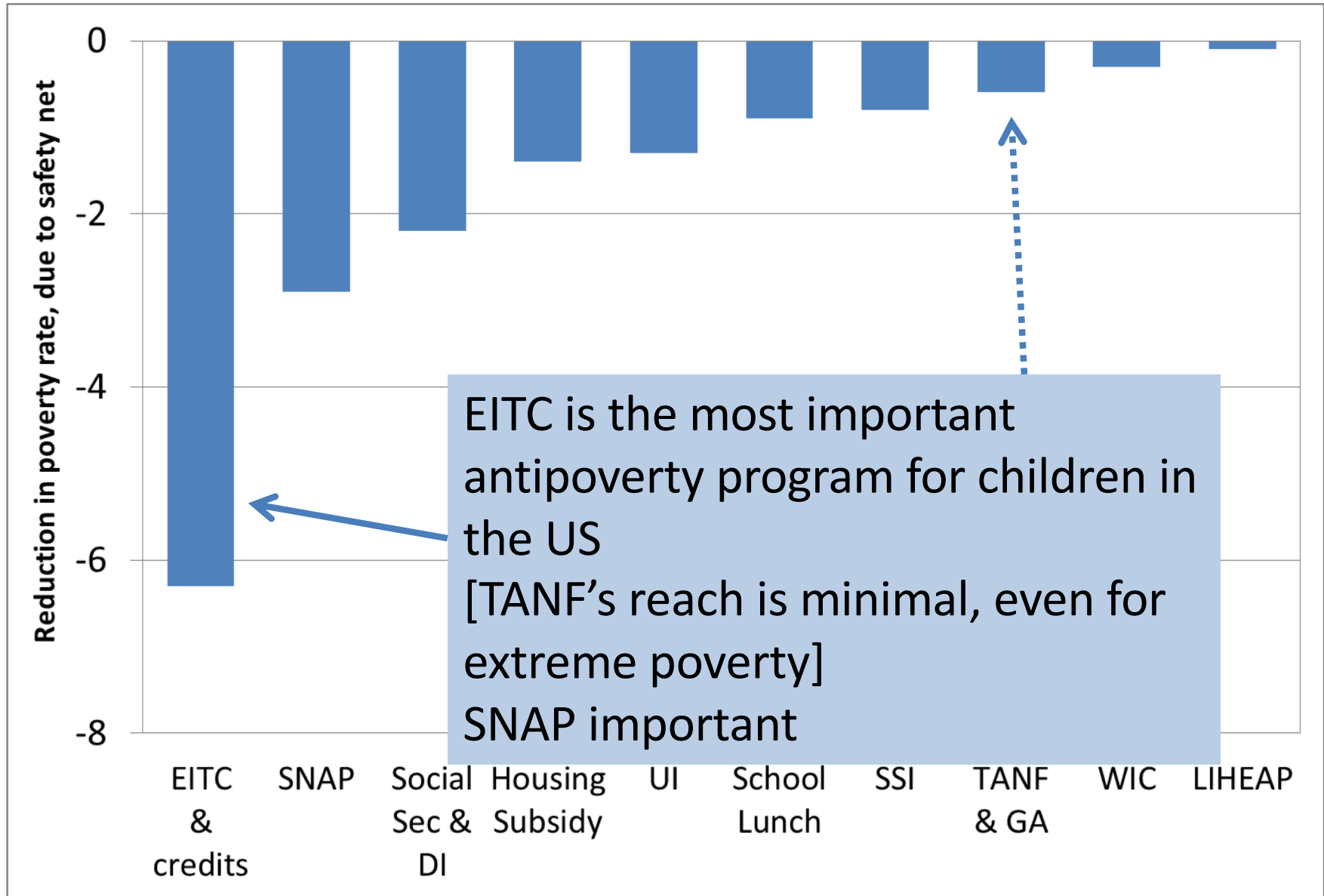
Features of a safety net? (Static)

Increase income, reduce poverty



Features of a safety net? (Static)

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Features of a safety net?

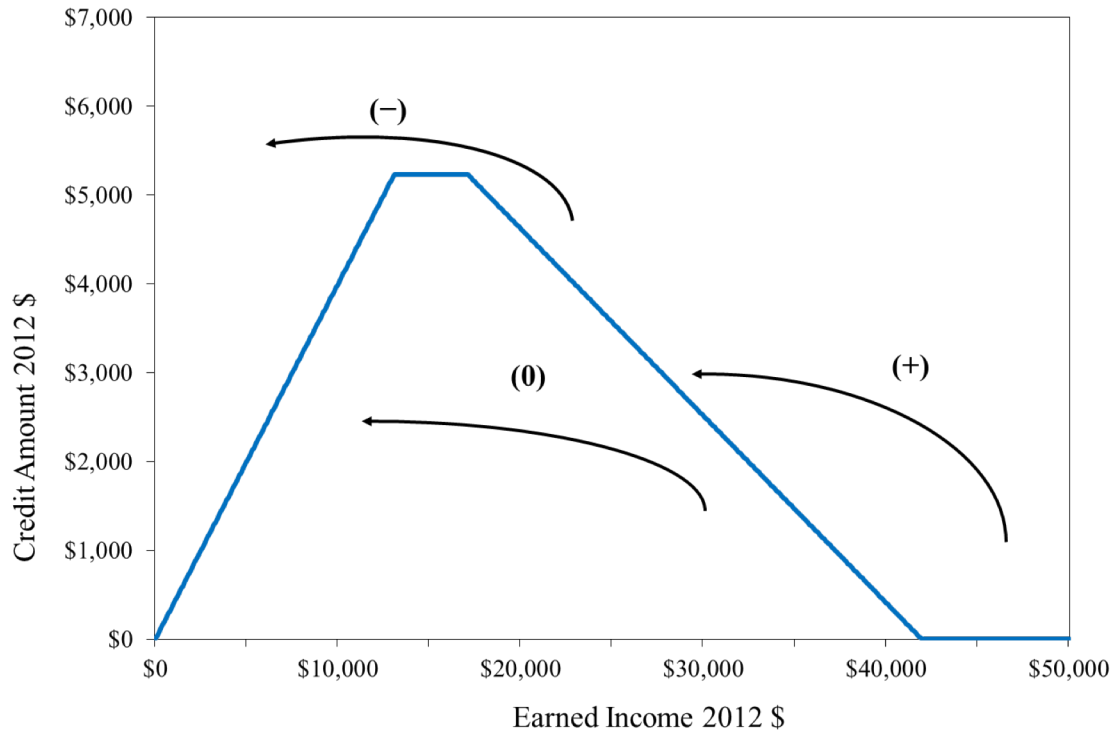
Provide protection in times of economic need

- We know very little about this aspect of the EITC, TANF.
- Income insurance is not an explicit goal of the EITC
 - Goal is to increase income at the lower end of the income distribution (offset payroll taxes) while encouraging work
 - Prior work (Eissa and Leibman 1996, Meyer and Rosenbaum 2001 and others) shows that the program clearly meets this goal
- Still, in the new era of income redistribution (less welfare, more in-work tax credits) it is important to examine this issue
- Previously SNAP, TANF both did this, what about now?
- Role of UI in GR (99 weeks)

Main Data for EITC: Statistics of Income (SOI) Microdata

- Representative sample of all U.S. tax filers, admin. data
- Data contains: filing status, number of dependents, earned income, EITC credit amount, number of children for EITC, state of residence
- Sample restrictions/construction:
 - Exclude: high income earners, late filers, married filing separately and filers from territories or living abroad
 - Collapse to cells based on year, state, marital (filing) status and number of children (0/1/2+)
- In each cell, capture (weighted): number of filers, number of filers claiming EITC, total EITC dollars claimed

Expected Effects



Labor market downturn
leads to:

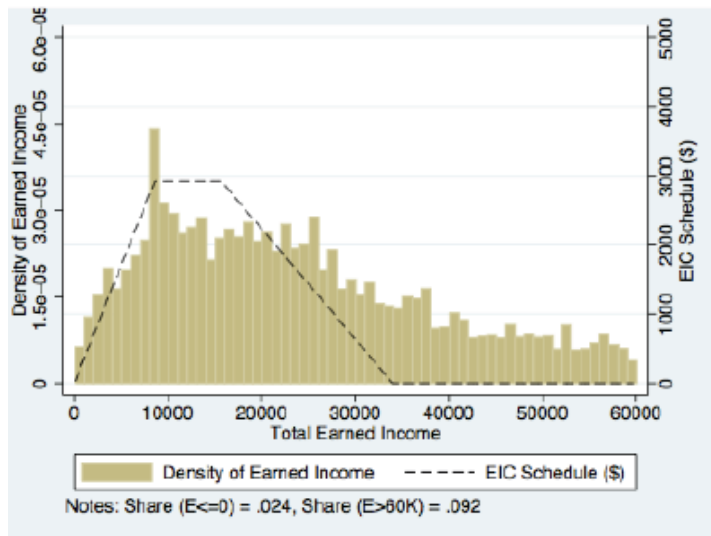
Reduction in employment
Reduction in earned
income

This could lead to:

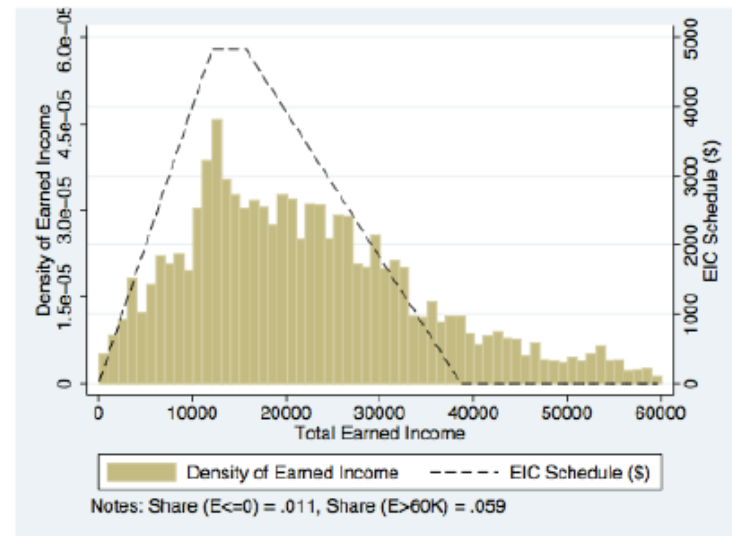
↑ EITC eligibility if
earnings are > EITC range
↓ EITC eligibility if
earnings are in EITC range

Tabulations of Tax Filers (0,\$80,000] in 2006

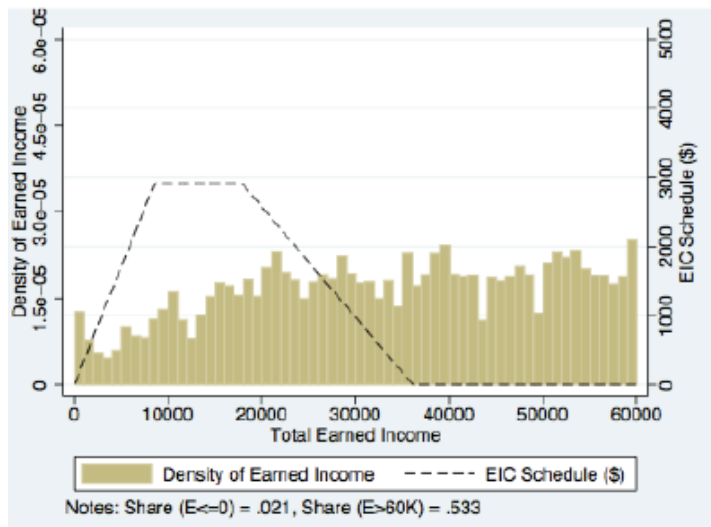
(b) Single, One Child



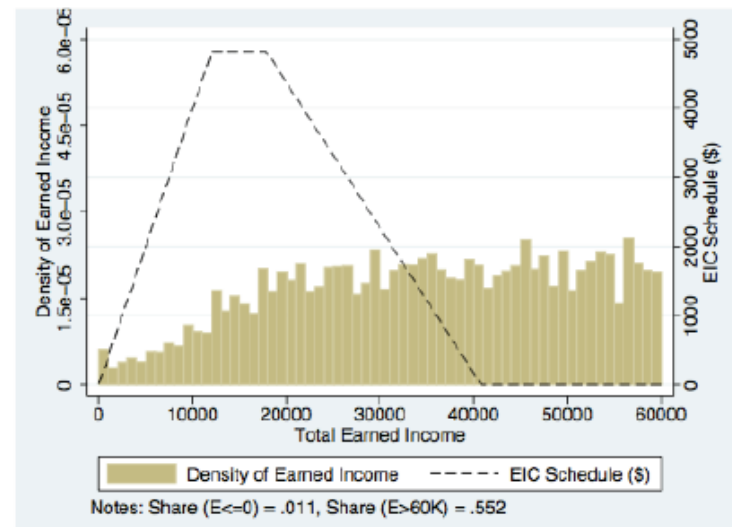
(c) Single, Two+ Children



(e) Married, One Child



(f) Married, Two+ Children



Overall Predictions:

- Single parents: higher risk of losing EITC eligibility because of low average earnings and single earner status (risk of earnings falling to zero)
- Married couples with children: likely increase in EITC eligibility because of high average earnings and two earners (less risk of earnings falling to zero)
- Hence we expect caseloads of married couples to be more countercyclical than those of single parents

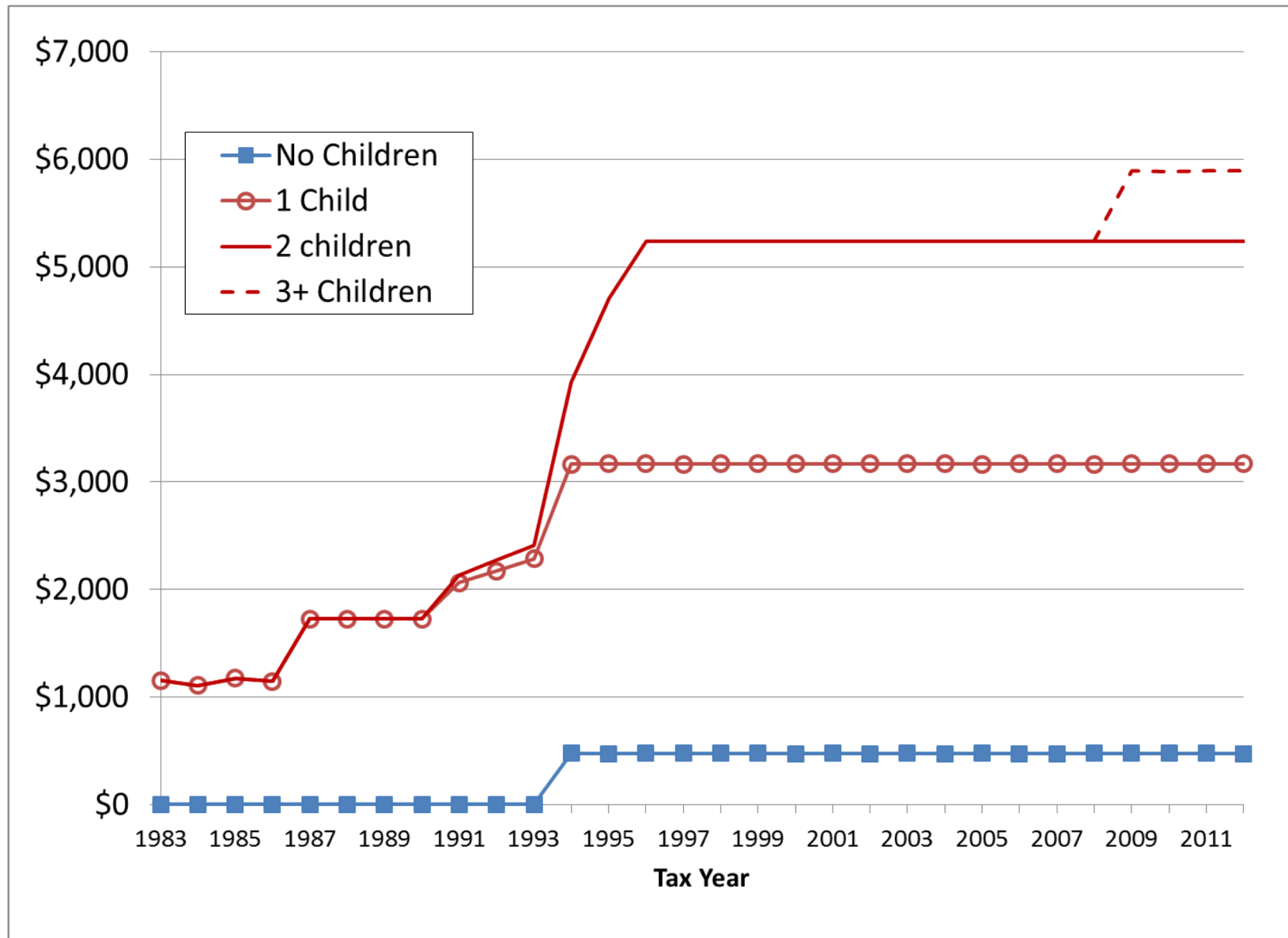
Empirical model

$$y_{gst} = \beta * UR_{st} + \theta_g + \alpha_s + \delta_t + Z_{st} * \pi + t * YR_t + \varepsilon_{gst}$$

- State panel fixed effects model
- Business cycle measured by state by year unemployment rate
- Outcomes: EITC caseload, EITC \$, total filers, all divided by the “at-risk” population
- Overall and stratified into single with children, married with children and childless
- Denominators from CPS counts, weighted by denominators and clustered by state

Sample period: 1996-2008

Start point chosen so have stable EITC schedule



Main results (Table 2)

	(1)	(2)	(3)	(4)
	All	Kids, Married	Kids, Single	No Kids
<i>A: EITC Recipients</i>				
Unemployment Rate	0.385*	0.881***	-0.820	0.252*
	(0.220)	(0.270)	(1.306)	(0.133)
Mean Y	0.220	0.144	0.855	0.079
Percent Impact (%)	1.8	6.1	-1.0	3.2
Observations	663	1326	1326	1326

One percentage point increase in UR →

- 6.1 percent increase in caseloads/pop for married w/ children
- Insignificant 1 percent decrease for single w/ children

Effect of UR on Filers and Eligibility (Table 3)

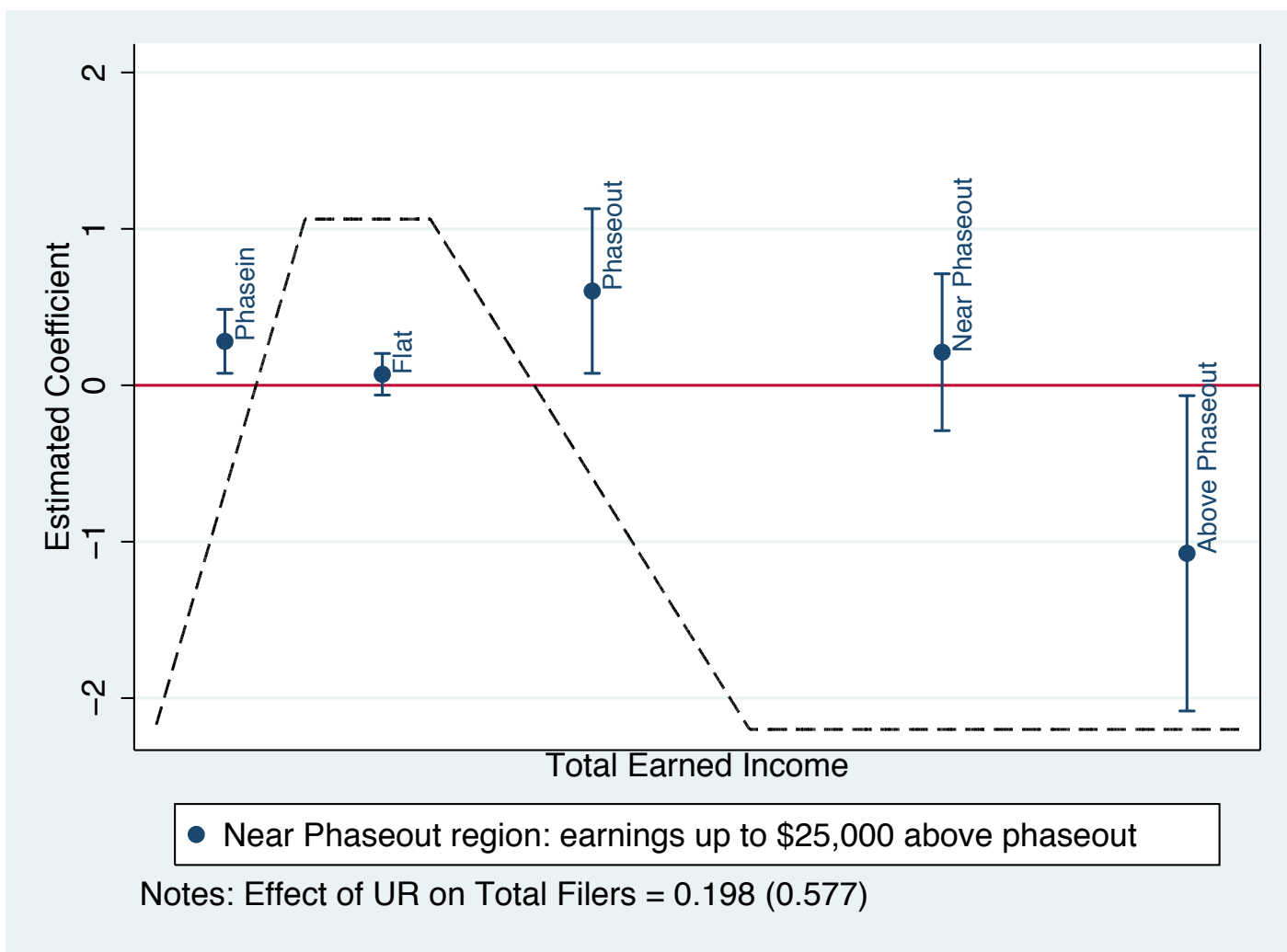
	(1)	(2)	(3)
	Kids, Married	Kids, Single	No Kids
<i>A: Total Filers</i>			
Unemployment Rate	0.198 (0.577)	-1.775* (1.053)	-1.466*** (0.519)
Share of Filers	1.00	1.00	1.00
Mean Y	0.818	1.135	1.021
Percent Impact (%)	0.2	-1.6	-1.4
Observations	1326	1323	1326
<i>B: Filers in the Eligible Region</i>			
Unemployment Rate	1.035*** (0.322)	-0.537 (1.031)	-0.147 (0.210)
Share of Filers	0.24	0.74	0.25
Mean Y	0.192	0.839	0.273
Percent Impact (%)	5.4	-0.6	-0.5
Observations	1326	1323	1326

Consistent story, ↑UR leads to:

- More eligibility and no change in filing for married w/ children
- No change in eligibility and a reduction in filing for single w/children

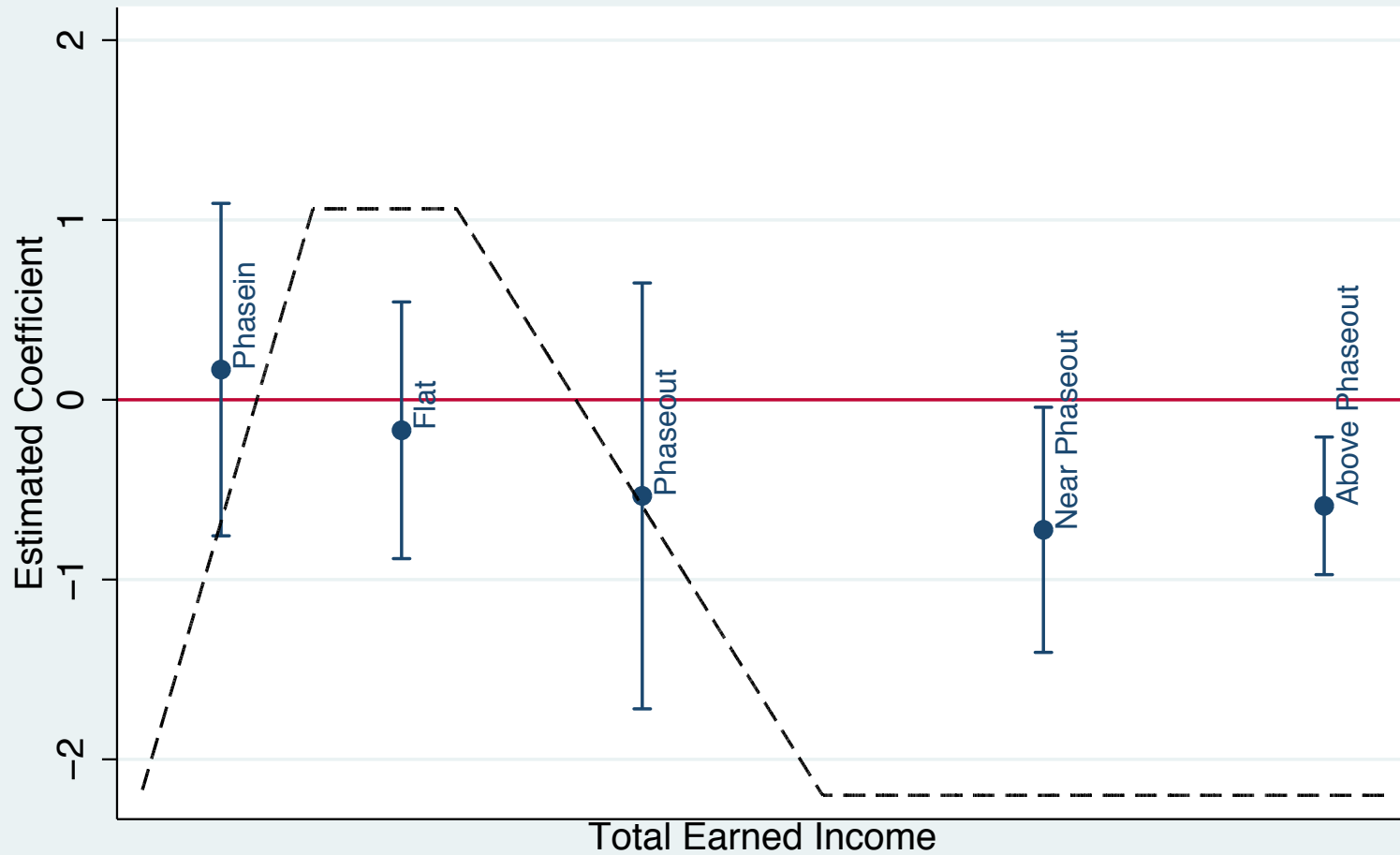
Figure 6: Effect of Cycles on EITC Eligibility According to Earned Income

(a) Married with Children



[Full Table](#)

(b) Single with Children



● Near Phaseout region: earnings up to \$25,000 above phaseout

Notes: Effect of UR on Total Filers = -1.775 (1.053)

How does the cyclical nature of EITC compare to other programs?

Table 4: Effect of Unemployment Rate on Other Safety Net Programs

	(1) EITC All	(2) EITC With Kids	(3) AFDC/TANF	(4) Food Stamps	(5) UI
Unemployment Rate	0.163** (0.068)	0.108* (0.063)	0.066* (0.033)	0.285*** (0.061)	0.135*** (0.012)
Mean Y	0.072	0.058	0.009	0.034	0.009
Percent Impact (%)	2.2	1.8	7.7	8.4	14.5
Observations	663	663	663	663	663

Much smaller response for the EITC. Even the largest response (6.1 percent for married w/children) is smaller than AFDC/TANF, Food Stamps, UI.

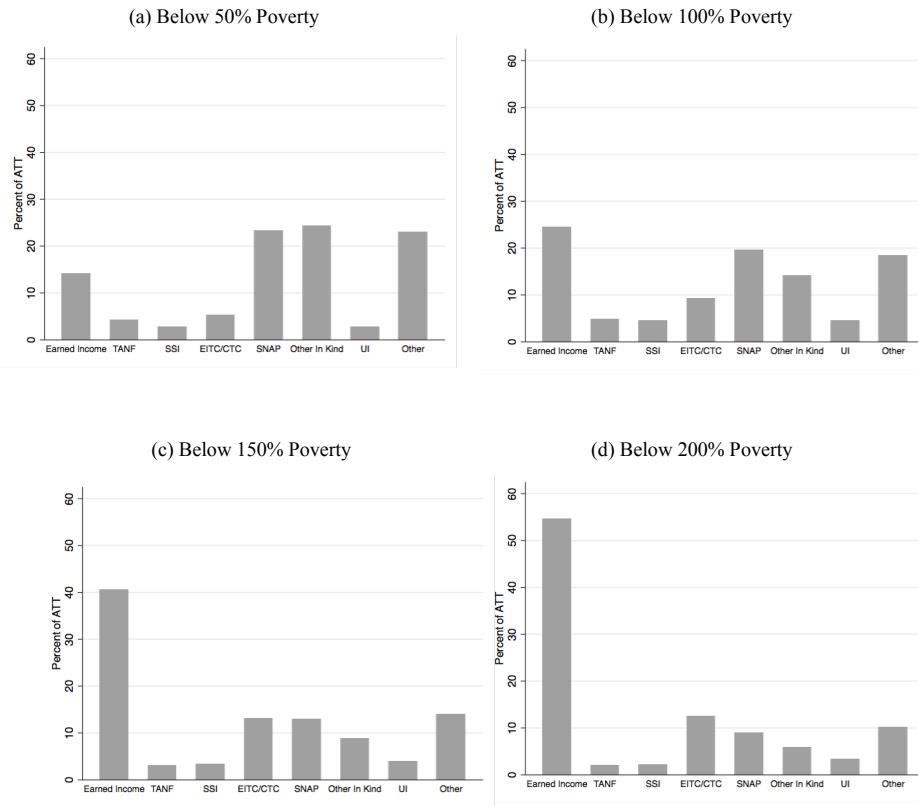
All models use state-year data, 1996-2008, population denominators, weighted using population.

How is the cyclicalality of poverty affected by the EITC?

- Look at various cuts of official poverty with and without the imputed maximum EITC (TAXSIM)
- Also explore version with SPM equivalence scales, net of all taxes and transfers
- EITC reduces the cyclicalality of poverty for married couples with children, little or no effect for singles with children

Overall Safety Net and Poverty

Figure 4: Composition of After-Tax-and-Transfer Income by Source for Children, 2010



Notes: Data are from the 2010 ASEC (income from calendar year 2010). Poverty multiples refer to the sample of children living in households with income below multiples of the Historical SPM poverty line, using ATT income. The percentages sum to one hundred. Other in-kind sources are School Lunch and LIHEAP. “Other” sources of income include Social Security (Old Age and Disability benefits), veterans payments, workers’ compensation, unearned private income (asset income, child support, alimony, private retirement and private disability) and federal and state taxes other than the EITC and Child Tax Credits.

Cyclicalities have changed with GR

- Bitler and Hoynes (JOLE) look at cyclicalities of programs using admin. data, how has changed post welfare reform; also UI
- AFDC/TANF no longer countercyclical, FS and UI the same (or more), sum of all slightly smaller in point estimate in GR period

Conclusion

- Since the late 1990s, big shift from out of work aid to in work aid in the safety net
- The EITC is the largest in-work program, plays important role in reducing poverty
- Does the EITC act as a safety net program/automatic stabilizer?
- Not for single parents with children, yes for married couples with children
- Less cyclical than other programs (UI/TANF/SNAP)
- TANF less countercyclical after