

# The EITC: What Have Economists Learned?

Kartik Athreya, Dec 8<sup>th</sup>, 2014



Richmond • Baltimore • Charlotte

# Disclaimer

- The view expressed today are mine alone.
- They do not necessarily reflect those of the Federal Reserve Bank of Richmond, or the Federal Reserve System

# Roadmap for the Talk

- Overview and facts
- What have economists learned?

# The EITC: Overview and Facts

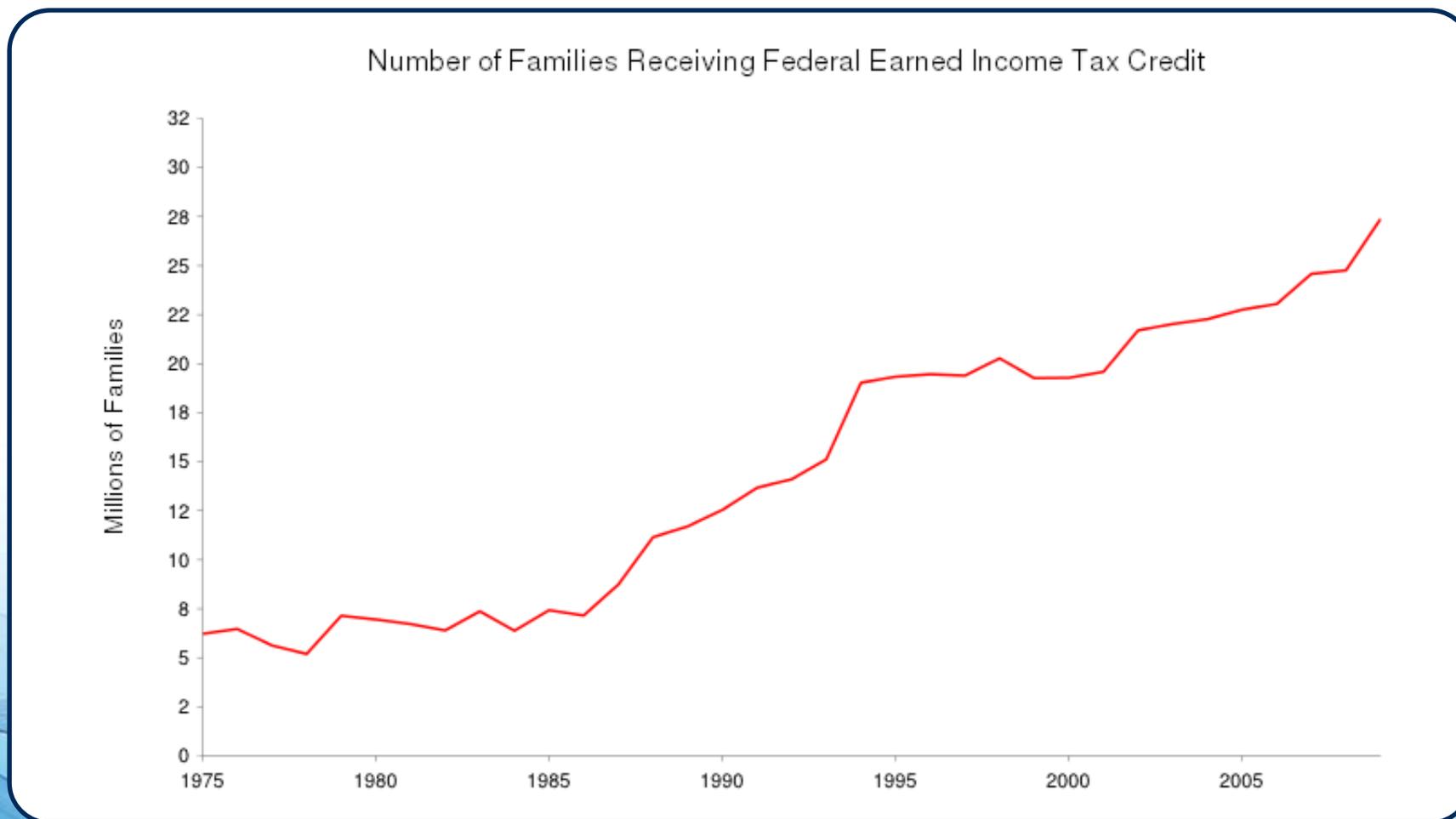
# Overview of EITC

- Refundable tax credit for working, low-income tax filers
- The value of the credit varies with earned income and number of children, with larger credit amounts for families with children.
  - The average credit in 2010 was \$2,805.
- Largest cash or near cash program for low-income families in the US (2011 data).

# History of EITC

- Started in 1975 as modest “work bonus,” made permanent in 1978
- Substantial expansions have taken place:
  - 1986 Tax Reform Act: general expansion and indexed for inflation
  - 1990 OBRA: general expansion and added separate schedule for families with 2 or more children
  - 1993 OBRA: general expansion (larger expansion for families with 2 or more children) and added EITC for childless filers
  - 2001 EGTRRA: extended flat/phase-out regions for married couples
  - 2009 ARRA: expand EITC for families with 3 or more children and for married couples
- About half of all states now offer “add on” EITCs
  - MD: 25% of Federal credit+50% of Fed EITC as nonrefundable credit

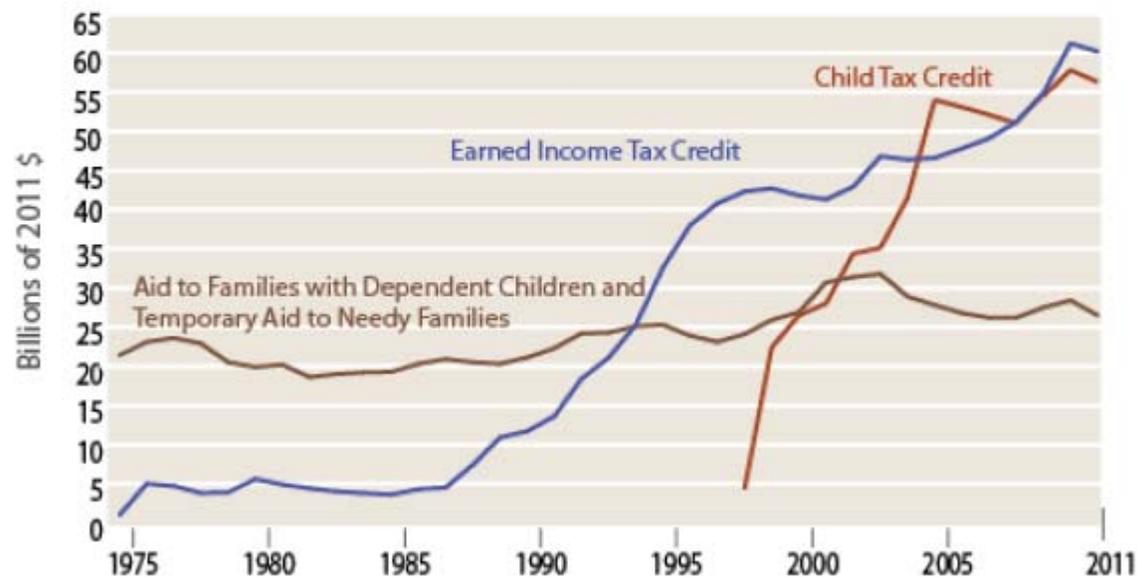
# EITC Recipients, 1975-2009



Source: Tax Policy Center

# Spending on EITC, 1975-2011

Figure 3. Real Federal Spending on EITC, CTC, and Welfare, 1975-2011



Source: Budget of the United States Government, Fiscal Year 2014, for AFDC/TANF; Internal Revenue Service Statistics of Income, various years for EITC and CTC; Bureau of Labor Statistics for CPI Deflator.

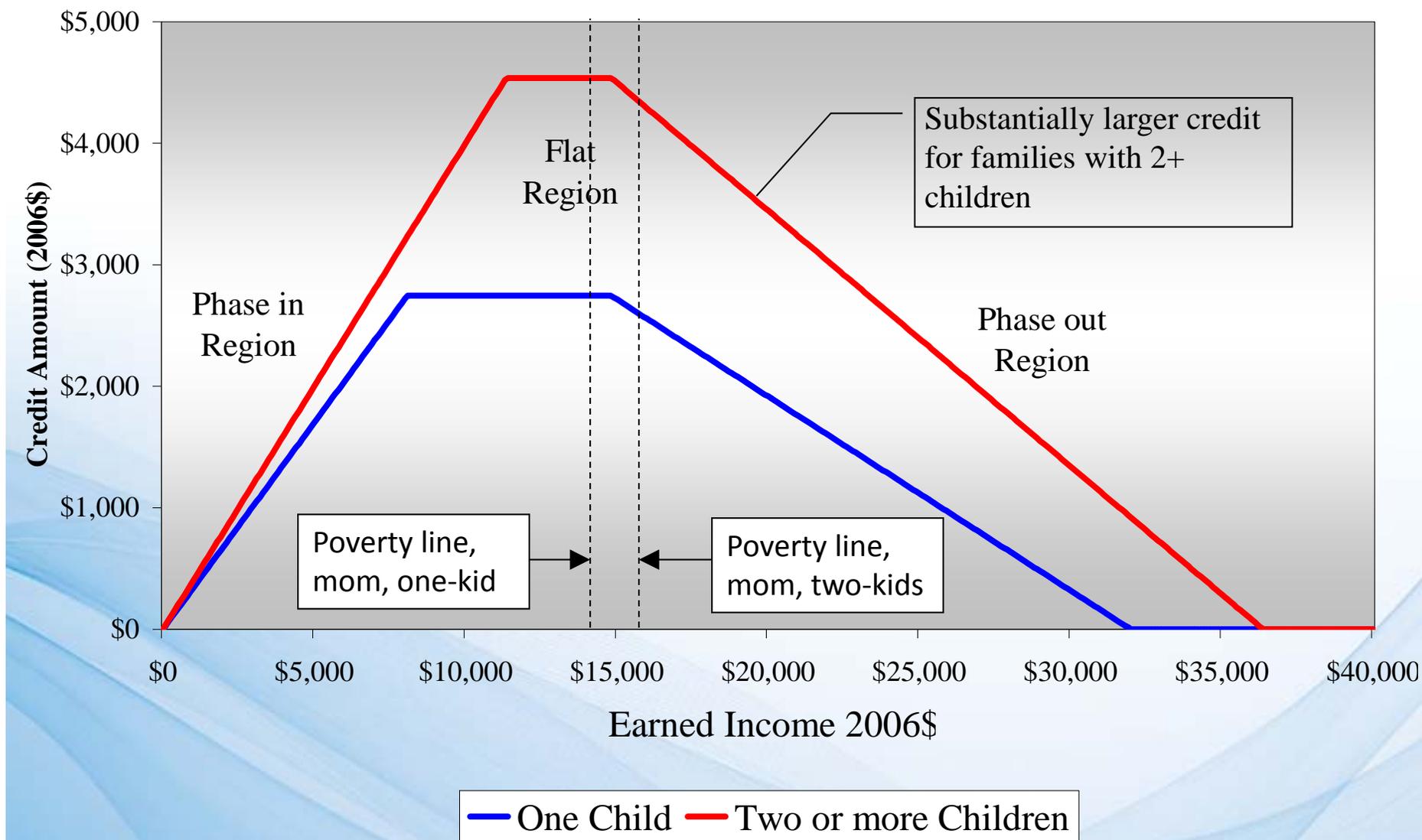
# EITC Eligibility and Payments

- EITC Eligibility:
  - Positive earned income; below limit
- Earned income and adjusted gross income (AGI) must each be less than (in 2014):
  - \$14,590 (\$20,020 married filing jointly) with no qualifying children
  - \$38,511 (\$43,941 married filing jointly) with one qualifying child
  - \$43,756 (\$49,186 married filing jointly) with two qualifying children
  - \$46,997 (\$52,427 married filing jointly) with three or more qualifying children
- Maximum credit:
  - \$6,143 with three or more qualifying children
  - \$5,460 with two qualifying children
  - \$3,305 with one qualifying child
  - \$496 with no qualifying children

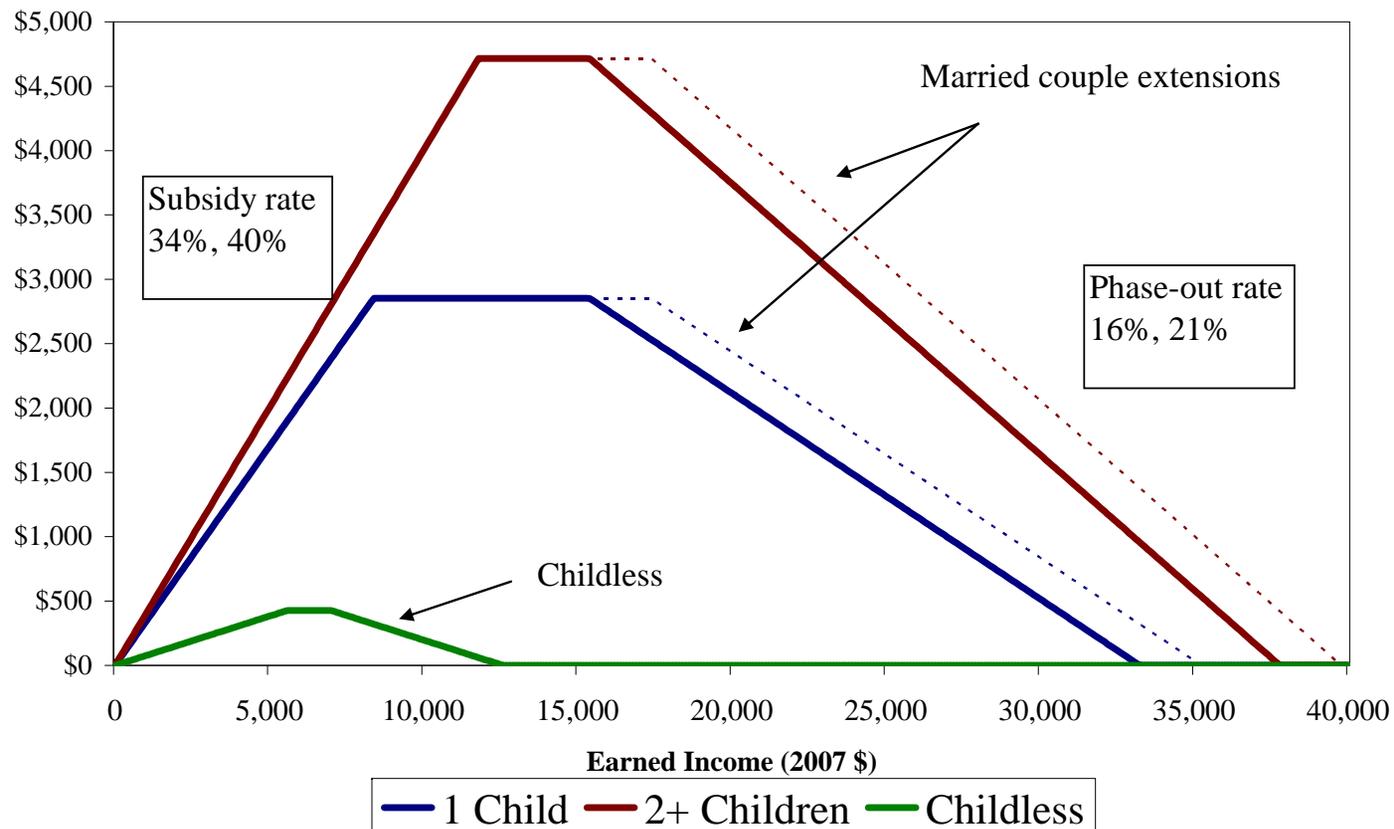
# EITC Eligibility and Payments, contd.

- Credit amount depends on family earnings and number of children:
  - Phase-in: credit is flat percentage of earned income
  - Flat range: receive maximum credit
  - Phase-out: credit is phased out at a flat rate

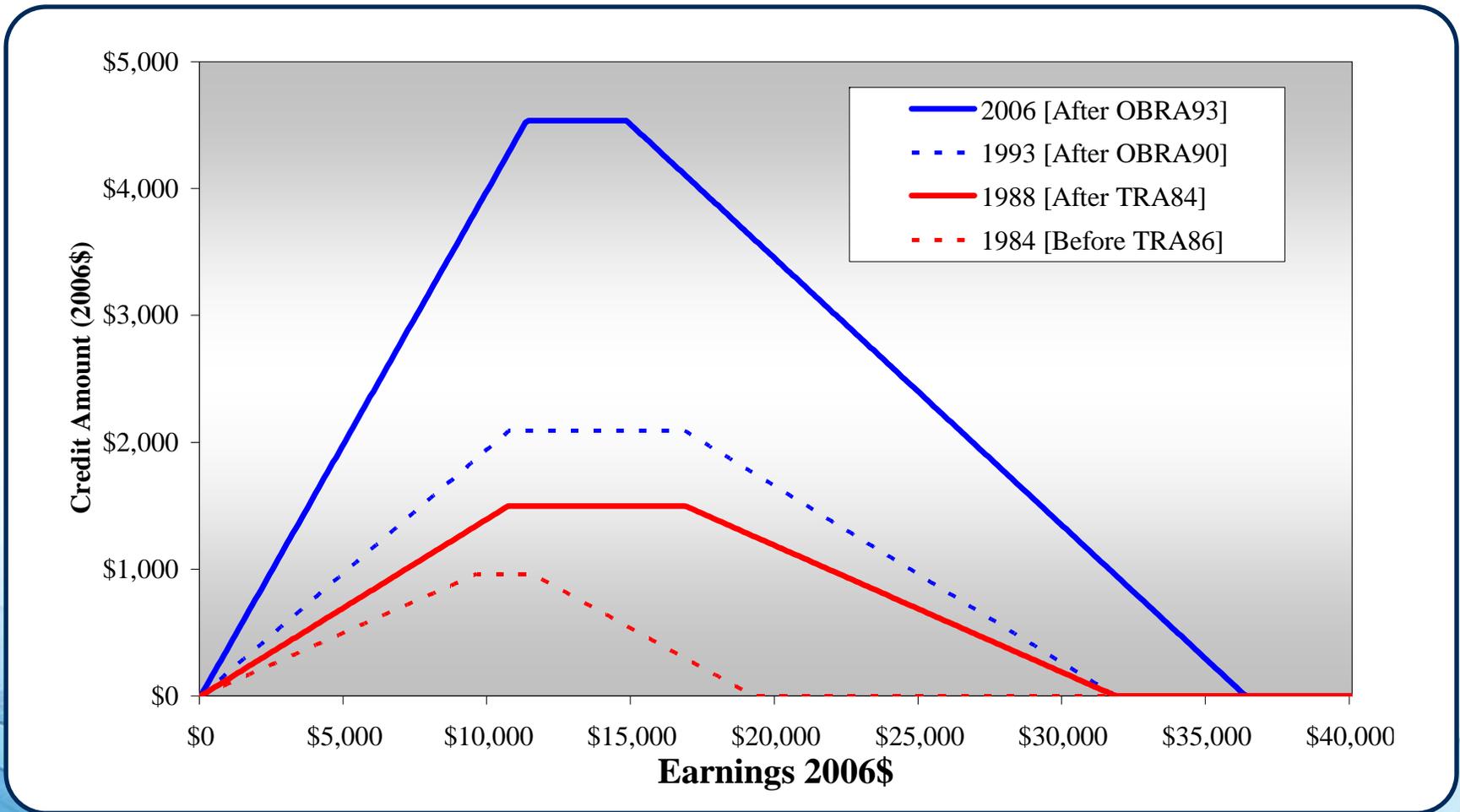
# EITC Benefit Structure: Single mothers



# EITC Benefit Structure: Married Couple Extensions and Credit for Childless



# Real EITC Benefits Increasing over Time (2+ children)

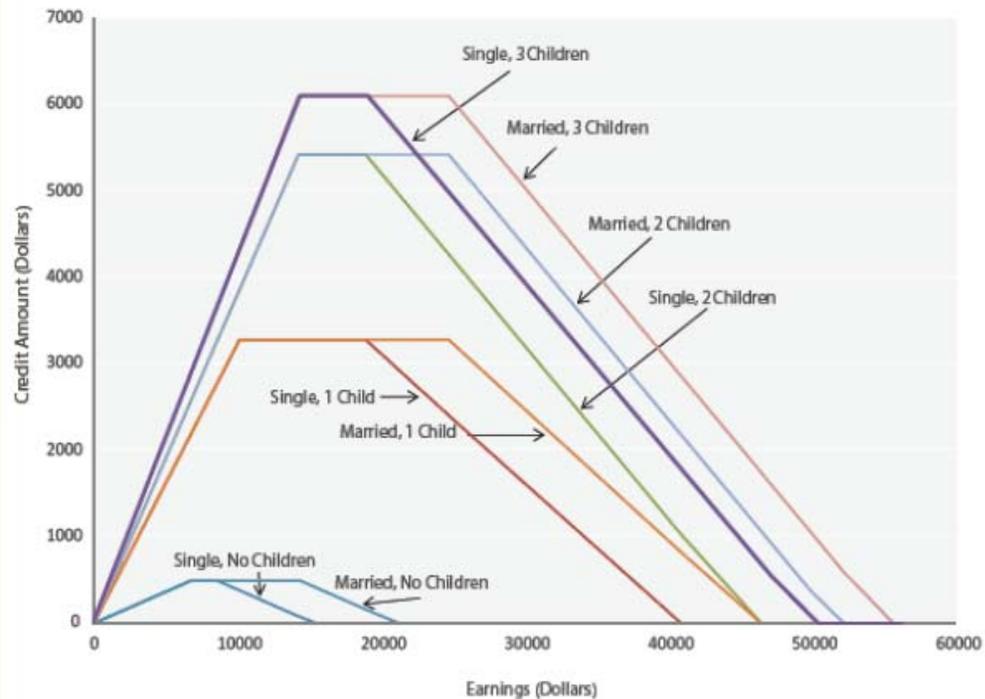


# EITC Sensitivity: It's about Kids!

- Until 2001, EITC parameters were identical for single and married filers.
  - EGTRRA extended flat/phase-out regions for married couples; now \$3100 higher than for singles.
- Q: What's the biggest source of sensitivity?
- A: Kids

# Current EITC Structure

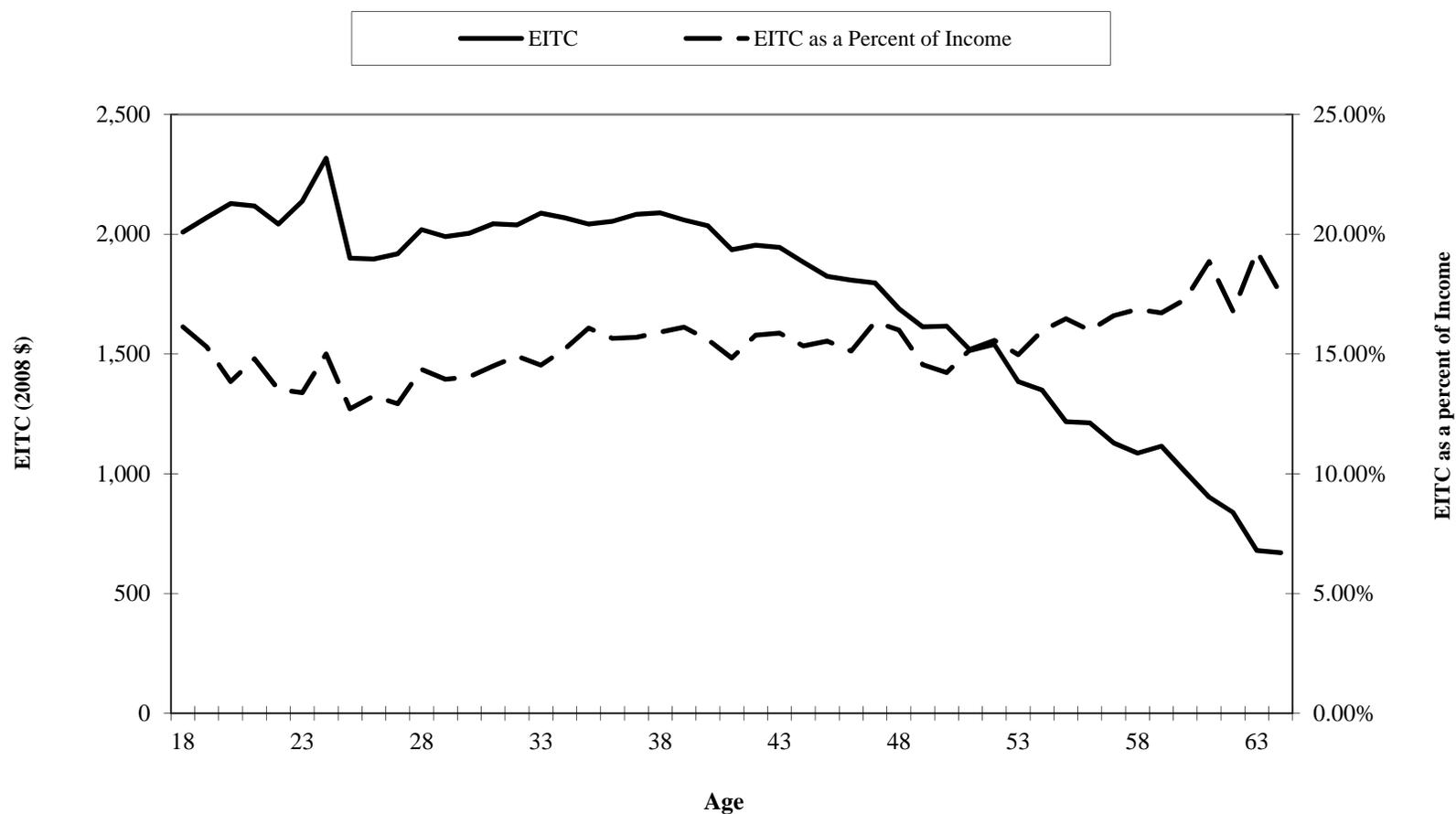
Figure 1: Earned Income Tax Credit by Number of Children and Filing Status, 2014



Source: 2014 EITC parameters taken from <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=36>

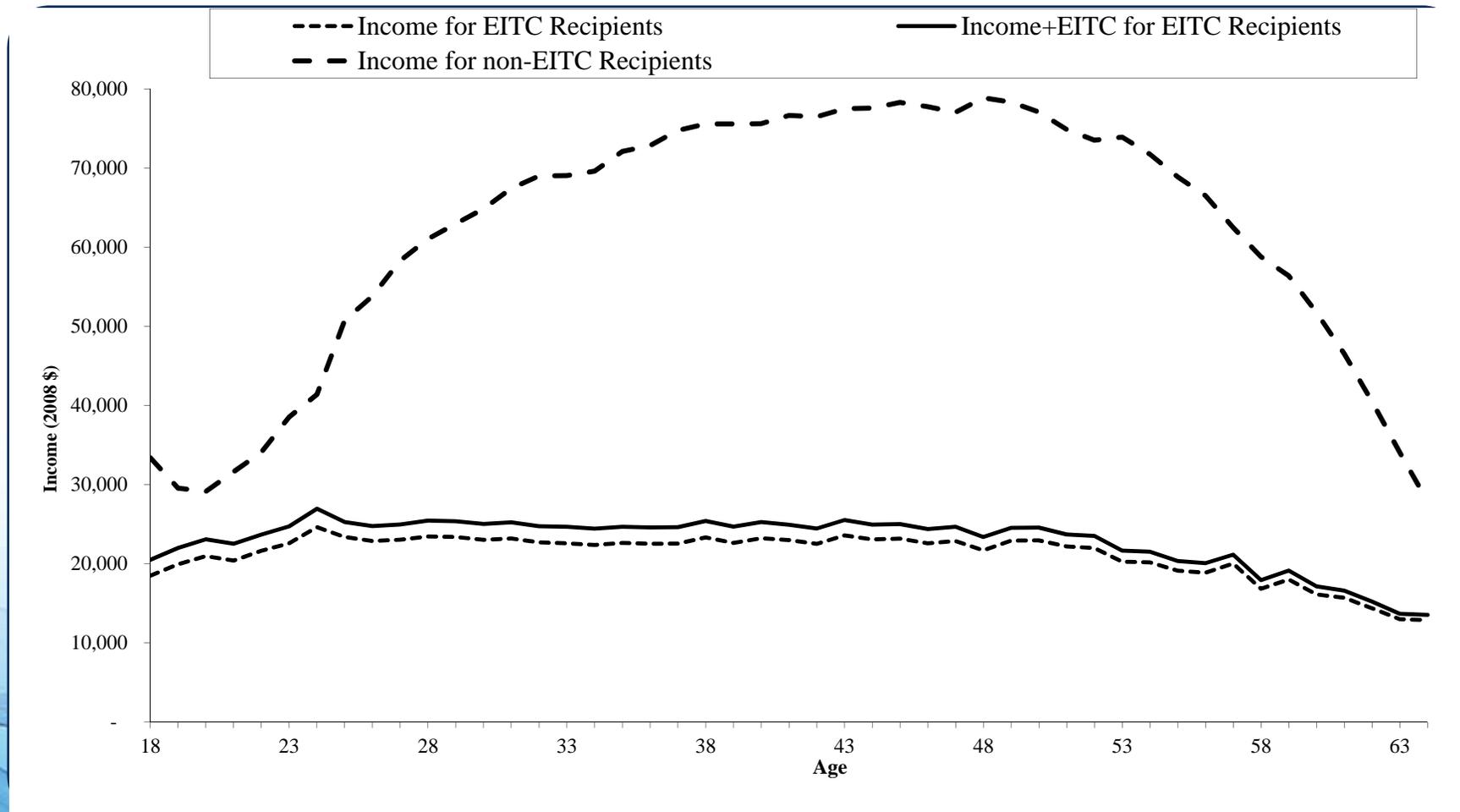
Eligibility extends well into moderate earning ranges. Median household income for 2013 was about \$52,000 (US Census Bureau, 2014).

# EITC by Age for Recipient Households



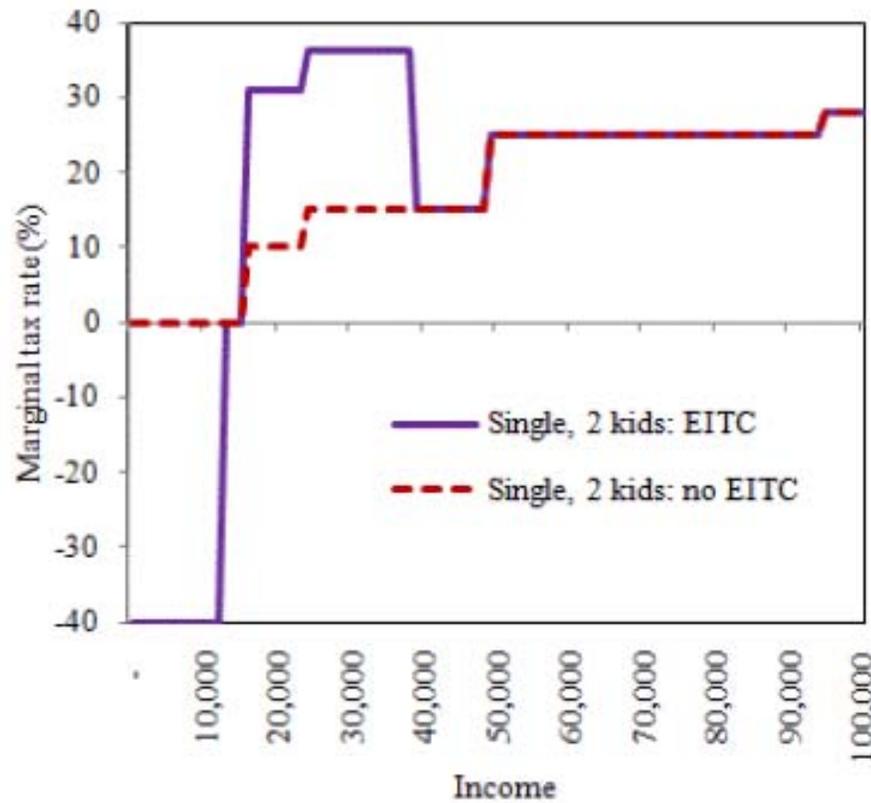
Source: Figure 2a, Athreya, Reilly and Simpson (2010)

# EITC by Age for Recipient Households, contd.



Source: Figure 2b, Athreya, Reilly and Simpson (2010)

# Marginal Tax Rates with and without EITC



# Labor Market Characteristics of EITC Recipient vs. non-Recipient Households

	All	Married, no kids	Married, 1 kid	Married, 2+kids	Single, no kids	Single, 1 kid	Single, 2+kids
<b>EITC Recipients:</b>							
Mean Household Income	\$15,194	\$8,325	\$18,700	\$21,212	\$7,024	\$15,761	\$17,421
Average EITC	\$1,782	\$495	\$1,812	\$2,623	\$423	\$1,808	\$2,728
EITC as % of Income	11.7%	5.9%	9.7%	12.4%	6.0%	11.5%	15.7%
<b>Non-EITC Recipients:</b>							
Mean Household Income	\$47,235	\$68,549	\$83,372	\$94,271	\$23,696	\$32,125	\$31,723

# Assets, Debt and Net Worth of EITC Recipient vs. non-Recipient Households

	All	Married, no kids	Married, 1 kid	Married, 2+kids	Single, no kids	Single, 1 kid	Single, 2+kids
<b>EITC Recipients:</b>							
Mean Net Worth	\$103,753	\$284,403	\$204,918	\$118,468	\$67,574	\$56,102	\$49,837
Mean Assets	\$149,507	\$359,963	\$255,239	\$179,050	\$86,545	\$89,365	\$96,465
Mean Debt	\$45,755	\$75,560	\$50,321	\$60,582	\$18,971	\$33,263	\$46,628
<b>Non-EITC Recipients:</b>							
Mean Net Worth	\$580,245	\$803,447	\$621,345	\$737,654	\$275,437	\$351,416	\$223,309
Mean Assets	\$708,564	\$929,270	\$790,176	\$933,762	\$334,930	\$448,206	\$296,280
Mean Debt	\$128,319	\$125,823	\$168,830	\$196,108	\$59,493	\$96,790	\$72,971

# Credit Constraints

<b>EITC Recipients:</b>	<b>Mean</b>	<b>St Dev</b>
Bad credit	2.3%	0.3%
Credit card balance (2007 \$)	\$2,131	\$140
Late payment for 60+ days	11.2%	0.6%
Has no checking account	27.9%	0.9%
<b>Non-EITC Recipients:</b>		
Bad credit	0.5%	0.1%
Credit card balance (2007 \$)	\$4,174	\$91
Late payment for 60+ days	5.4%	0.2%
Has no checking account	7.0%	0.3%

Source: Table 7, Athreya, Reilly and Simpson (2010)

# What Have Economists Learned About the effects of EITC?

# What can we say about how EITC should work?

- In a one-earner household, the effect of the EITC on labor force participation is unambiguously positive, but:
  - The EITC may increase **or decrease** total household work hours!
  - Especially applies to “second” earner

# Pros

- Directly increases the reward to working
- Keeps people connected to work
- Insures workers—more on this later

# Cons

- Phase-out acts like a tax on work.
- Historically, about half of claimants have been in the phase-out region.
- Recent expansions have made this less problematic.
- Wage subsidies can discourage human capital.

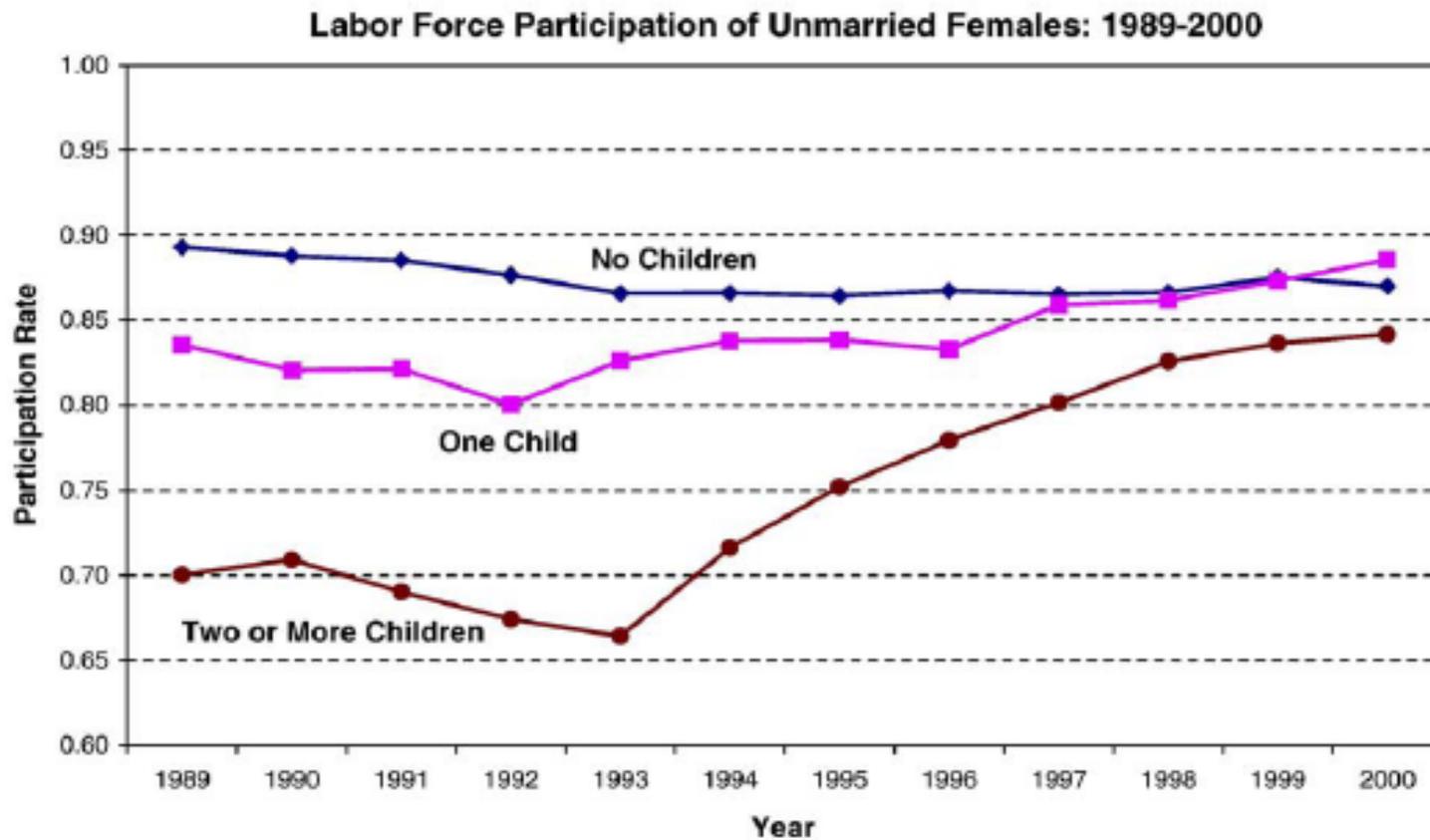
# What are the hurdles to learning about what the EITC is doing?

- Problem:
  - Never see the “counterfactual”!
- Have to be clever:
  - Natural experiments
  - Simulate artificial economies

# The EITC's Effect on Work

- The EITC
  - Does affect work hours!
  - Convinces people to enter workforce: single moms!
  - Does not change men's work hours.
  - Seems to lead married women to leave work.
- This is because the EITC acts the same way as welfare from the perspective of the second earner.
  - Eissa and Hoynes (1998) :
    - Married women in phase-out region are 2 percentage point (5 percent) less likely to work
    - If they work, work as much as 276 hours (20 percent) less annually!

# Single moms are key...



# The EITC's Effect on Poverty

- Earlier CEA studies: in late 1990s, the EITC removed 4.3 million individuals from poverty (Hotz and Scholz, 2003).
- More than 60% of EITC payments go to families below poverty line based on pre-EITC income (Hotz and Scholz, 2003).

# EITC and Child Poverty

- Studies (e.g., Liebman, 1998) have found that EITC not critical for antipoverty. Why?
  - EITC aims to keep a household with a FULL-TIME worker out of poverty
  - Many poor kids in household without full-time worker
  - Only 40% of households with income equal to 1/2 of poverty line got EITC. (no elig. earnings + nonfiling)

# Do the “right” people get EITC?

- EITC does seem to go to low-wage, high-hours workers, not high wage earners who choose to work limited hours. (Scholz, 1996)
- Using the SIPP, two-thirds of EITC payments go to workers with wages less than \$6.43/hr. (Scholz, 1996).
- In 1990, 60% of EITC recipients worked more than 1500 hours (Liebman, 1998).

# Distributional Consequences

- Between 1976 and 1996, the share of income to the lowest fifth in the US fell from 4.4% to 3.7% (Liebman, 1998).
- Liebman (1998) finds that, for families with children, the EITC offsets 29% of that decline.

# Using Simulations (Chan 2013)

- Sets up and simulates model (what do I mean?)
- “Policy simulations reveal that the economy accounts for half of the increase in the labor supply of female heads of family between 1992 and 1999.”
- “Between 1992 and 1999, time limits and EITC explain 5.8 and 4.5 percent of the increase in employment and 16.0 and 3.4 percent of the decline in welfare participation, respectively.”

# What do economists know about what people know about the EITC?

- All that economists say about the effects that EITC “should” have is premised on workers knowing:
  - About the EITC
  - How to use it, and get it.
- Practitioners have long recognized that it takes work to get the word out.

# Chetty, Friedman, Saez (2013)

- Very interesting use of special IRS Optimal use of EITC means self-employed people (especially) should “bunch” at the income level that maximizes EITC payouts
- But this is not seen: people vary
- But: people who move to areas where more bunching is happening tend to bunch more!
- Bunching getting sharper and more widespread over time! Outreach working?!

# The EITC as an “Insurance” program

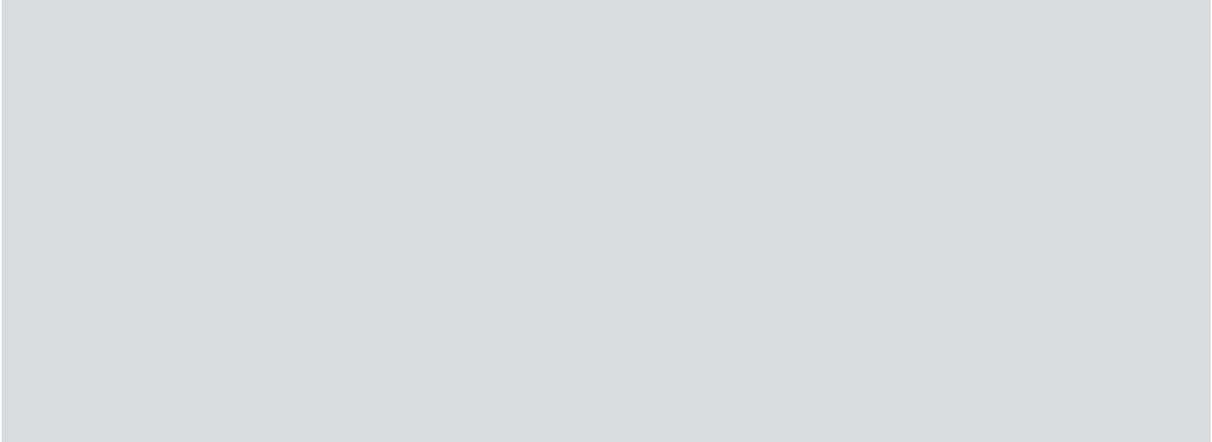
- The structure of the EITC is set up to provide insurance against productivity loss. (Athreya, Reilly, Simpson 2014).
- Why?
  - Keeps wage fluctuations from being passed through
  - Benefits workers no matter what the source of the wage fluctuation is.
  - Sensitivity to kids “insures” against dependent composition changes

# Open Questions/Issues

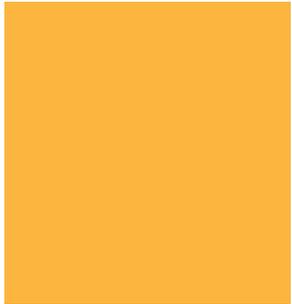
- How does EITC fit into overall tax/transfers schemes?
- What should we be trying to get low-market-productivity individuals to do?
- EITC discouraging human capital accumulation?

## Open Questions/Issues, contd.

- “Big picture” tradeoff : low level of no-questions asked assistance vs. high level of targeted assistance
  - US shifting towards the latter (PRWORA, especially)
- Job matching: ideally, paying single moms facing low wages to work may have costs
  - Depends on substitute opportunities—attaching strings sounds good, but it might be inefficient relative to other ways to help this group.



Thank you!



**FEDERAL RESERVE BANK  
OF RICHMOND®**

Richmond ▪ Baltimore ▪ Charlotte