

# What we know—and are learning—about the EITC

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# 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

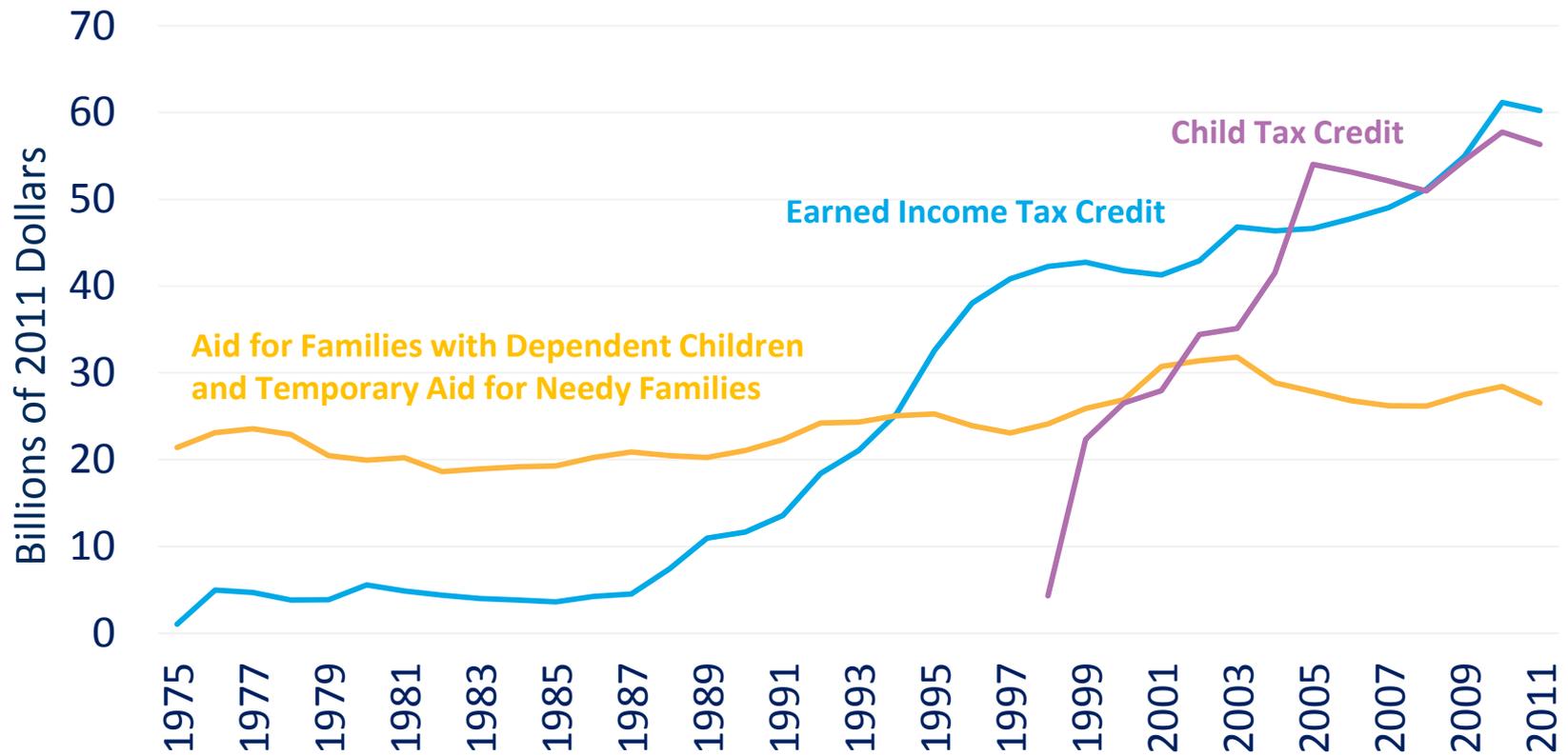
# Overview of Federal EITC

- Refundable tax credit for working, low-income tax filers
- Value varies with earned income and number of children, with larger credit amounts for families with children
  - The average credit in 2014 was \$2,407.
- Nearly 28 million families received EITC in 2013, amounting to over \$66 billion.

Source: [www.eitc.irs.gov/EITC-Central/eitcstats](http://www.eitc.irs.gov/EITC-Central/eitcstats)

# Spending on EITC

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



Source: [www.taxpolicycenter.org/briefing-book/key-elements/family/eitc.cfm](http://www.taxpolicycenter.org/briefing-book/key-elements/family/eitc.cfm)

# EITC Recipients

Number of Families Receiving Federal EITC, 1975-2012



Source: [www.taxpolicycenter.org](http://www.taxpolicycenter.org)

# EITC in the Fifth District (2013)

State	Number of Claims as a Percentage of Returns Filed	Sum of EITC received	Average Amount
District of Columbia	18%	\$124,102,119	\$2,323
Maryland	16%	\$951,070,545	\$2,299
North Carolina	23%	\$2,281,311,301	\$2,466
South Carolina	26%	\$1,232,559,485	\$2,509
Virginia	17%	\$1,396,562,025	\$2,291
West Virginia	21%	\$347,260,721	\$2,214

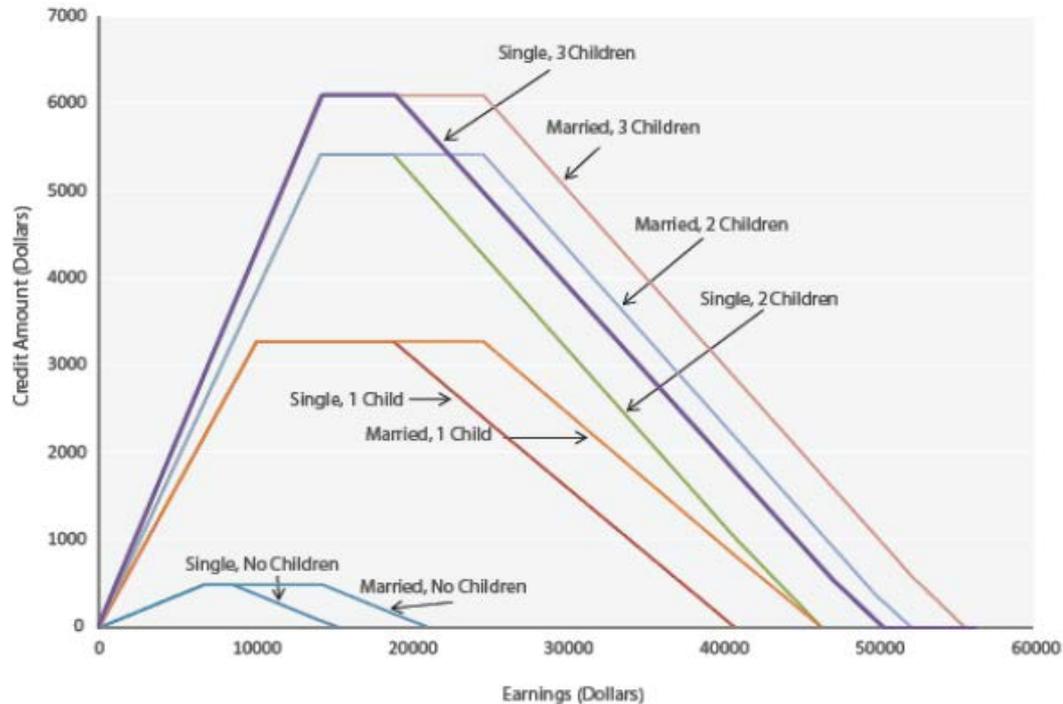
Source: Author's calculations using data from <http://www.brookings.edu/research/interactives/eitc>

# 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

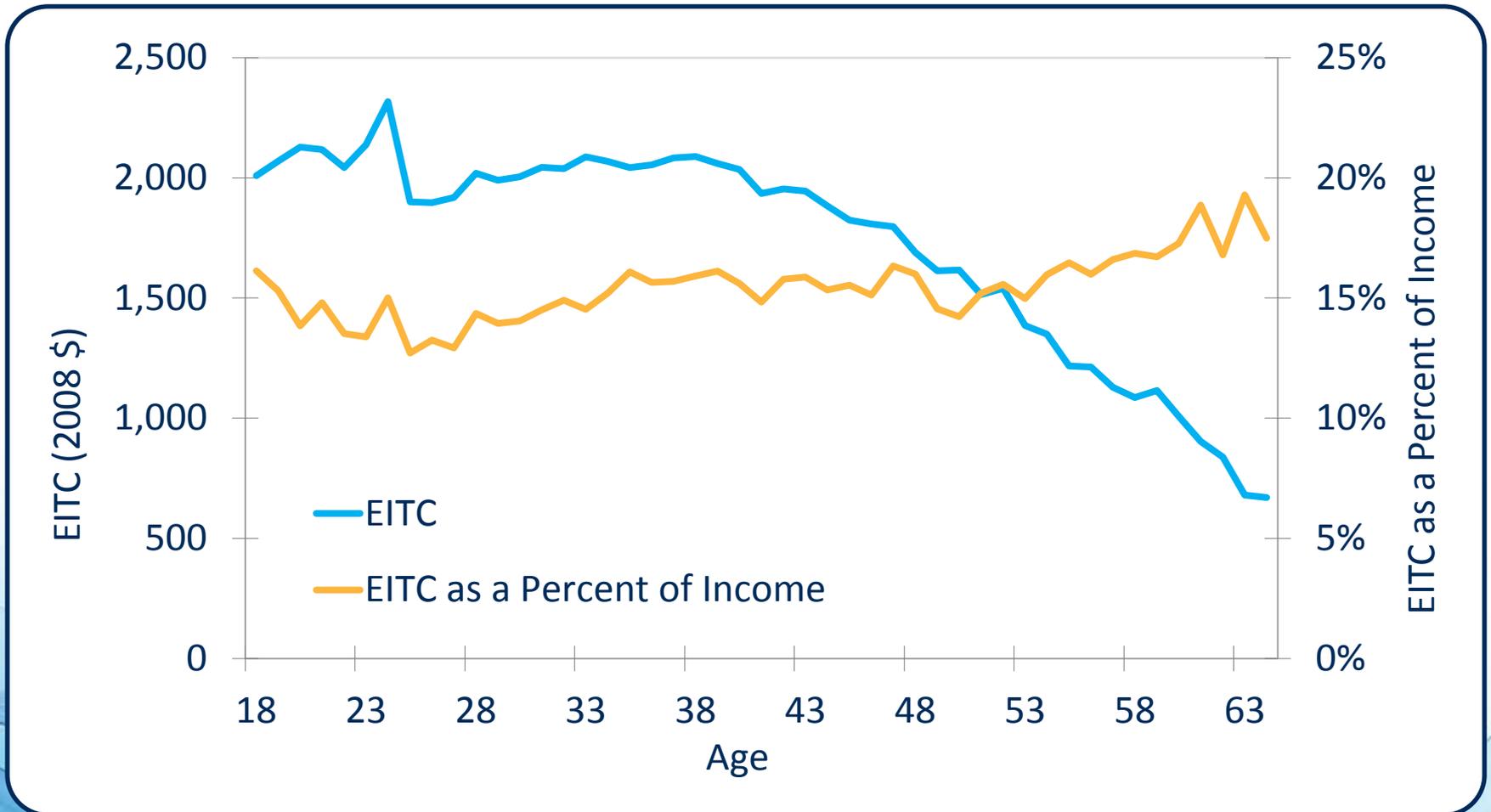
Earned Income Tax Credit by Number of Children and Filing Status, 2014



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

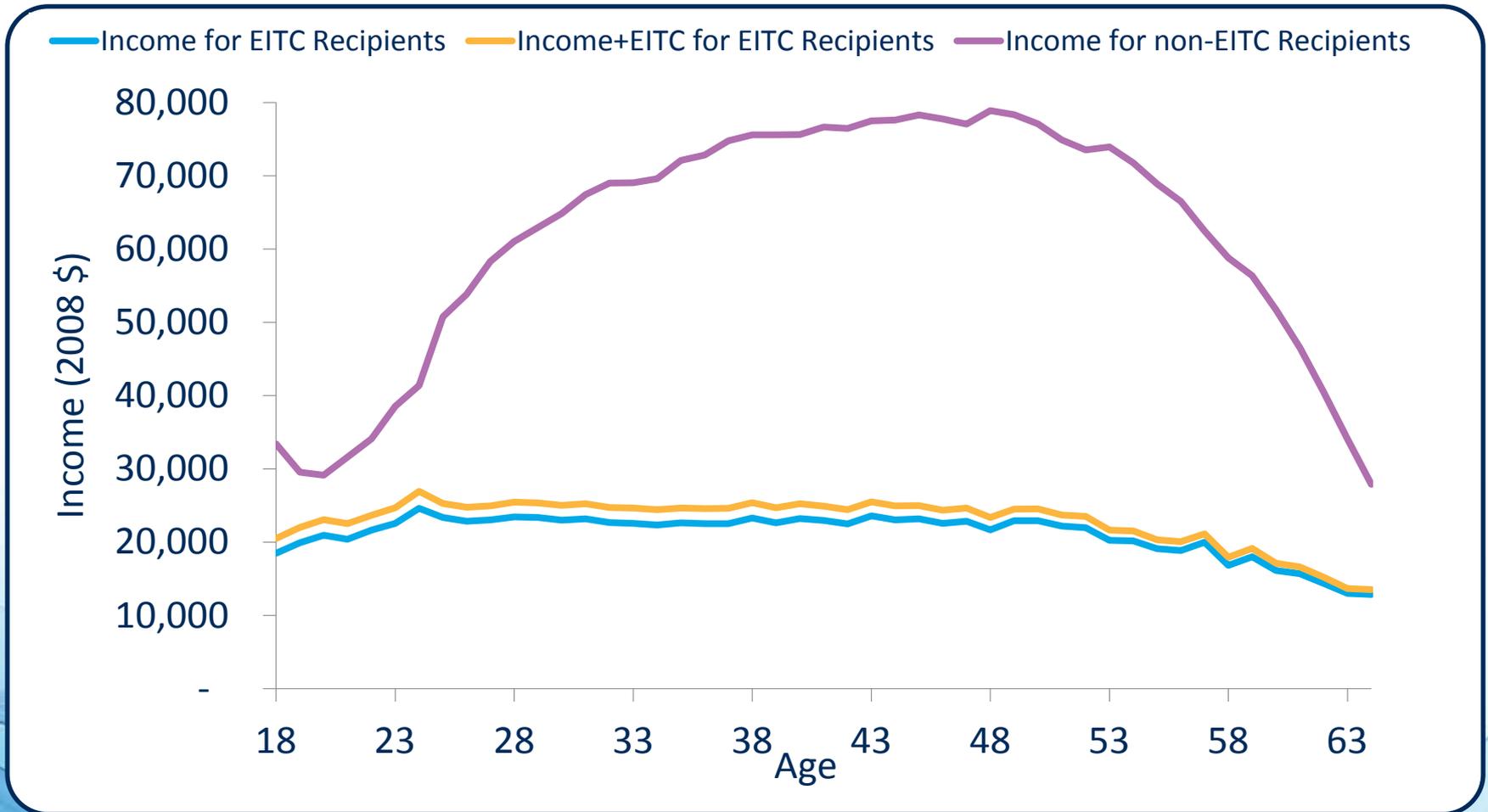
Source: <http://www.taxpolicycenter.org/briefing-book/key-elements/family/eitc.cfm>

# EITC by Age for Recipient Households



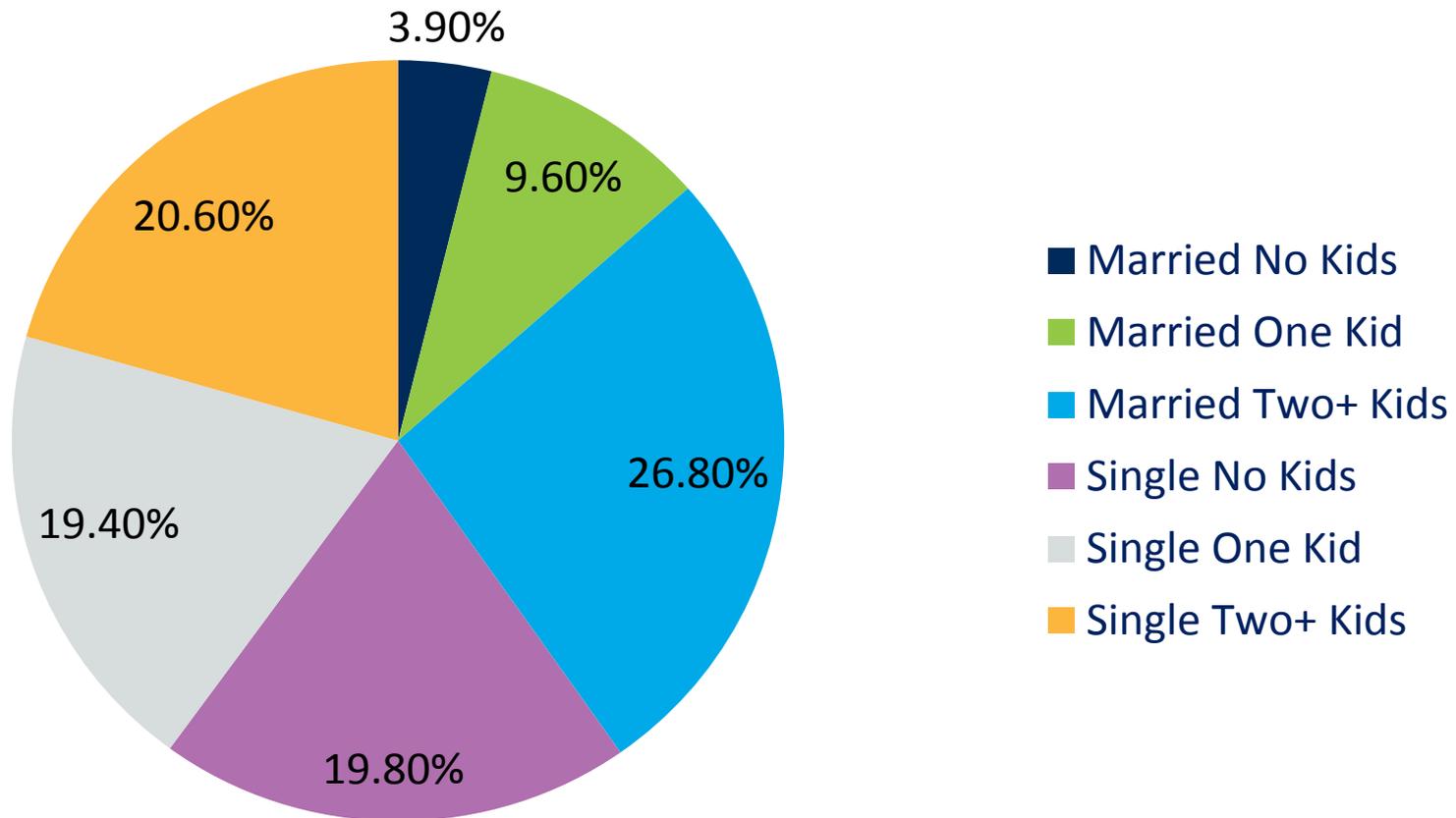
Source: Athreya, Reilly and Simpson (2010)

# EITC by Age for Recipient Households, contd.



Source: Athreya, Reilly and Simpson (2010)

# Demographic Composition of EITC Recipients



Source: Athreya, Reilly and Simpson (2010)

# 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

Source: Athreya, Reilly and Simpson (2010)

# Credit Conditions for Recipients

	Mean	Std. Dev
<b>EITC Recipients:</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%

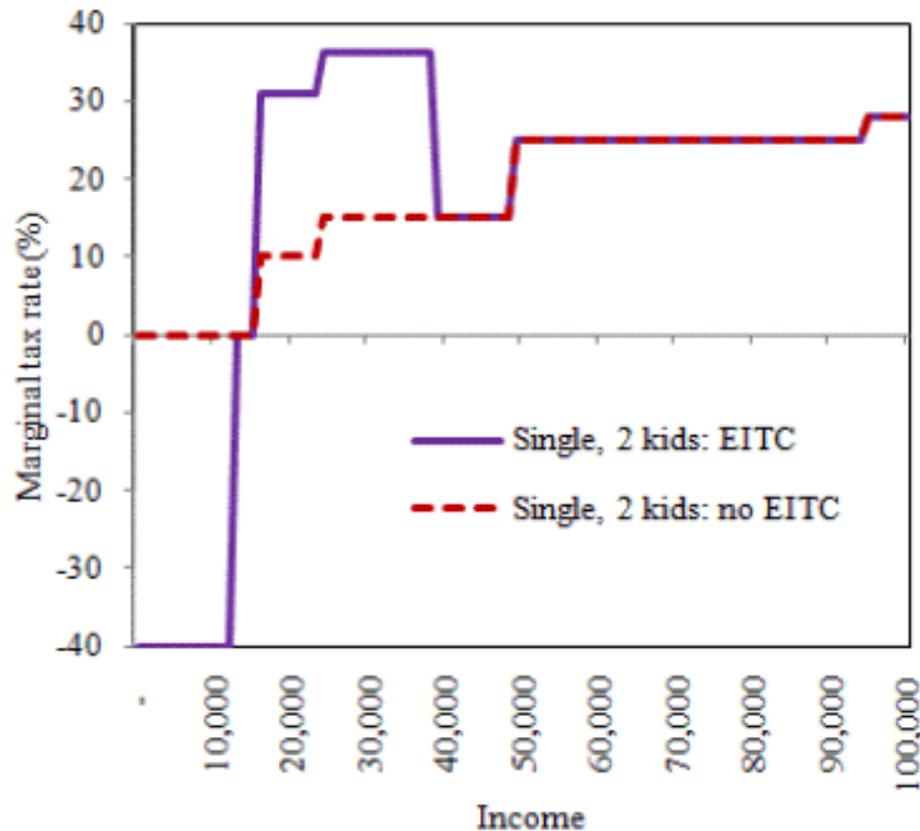
*Source: Athreya, Reilly and Simpson (2010)*

# 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

Source: Athreya, Reilly and Simpson (2010)

# Marginal Tax Rates with and without EITC



Source: Athreya, Reilly and Simpson (2010)

# State EITC

- 25 states and the District of Columbia have EITC
- Set as a percentage of the Federal credit
- Refundable in some states, not in others



# State EITC Based on Federal EITC (Tax Year 2015)

State	% of Federal	Refundable?	State	% of Federal	Refundable?
Colorado	10%	Yes	Nebraska	10%	Yes
Connecticut	30%	Yes	New Jersey	20%	Yes
Delaware	20%	No	New Mexico	10%	Yes
District of Columbia	40%	Yes	New York	30%	Yes
Illinois	10%	Yes	North Carolina	5%	Yes
Indiana	9%	Yes	Ohio	5%	No
Iowa	14%	Yes	Oklahoma	5%	Yes
Kansas	17%	Yes	Oregon	6%	Yes
Louisiana	3.5%	Yes	Rhode Island	25%	Partially
Maine	5%	No	Vermont	32%	Yes
Maryland	25%	Yes	Virginia	20%	No
Massachusetts	15%	Yes	Wisconsin	4% - one child	Yes
Michigan	6%	Yes		11% - two children	
Minnesota	Average 33%	Yes		34% - three children	

Source: [www.taxpolicycenter.org](http://www.taxpolicycenter.org)

Questions so far?

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
  - “Income” and “substitution” effects...what do we mean?



# Pros of EITC

- Directly increases the reward to working
- Keeps people connected to work—experience
- Potentially insures workers more generally



# Cons of EITC

- 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’s this?)



# Hurdles to Learning about the Effects of EITC

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

# The EITC's Effect on Work

- 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, 2004):
  - Labor force participation of married women decreases by a full percentage point, and is not offset by the increase in participation by married men by 0.2 percentage points.
  - Married women facing highest tax rates are 2.1 percentage points less likely to work.



# The EITC's Effect on Wages (Rothstein, 2010)

- Builds model of tax incidence and uses it to assess effect of hypothetical increase in EITC.
- Findings
  - Increase in EITC leads to increase in labor supply of low-skilled women, which reduces wages in this labor market
  - Each dollar spent on EITC leads to:
    - \$1.07 increase in incomes net of taxes for women with children
    - *Decrease* of \$0.34 for women without children
    - “Gain” of \$0.36 for employers of low-wage workers due to reduced wage bill

# The EITC's Effect on Poverty and Health

- 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).
- \$1000 in EITC income is associated with 6.7% to 10.8% reduction in the rate of low birth weights, with larger impacts for births to African American mothers (Hoynes, Miller and Simon, 2012).

# EITC and Employment of Single Mothers (Hotz et al., 2011)

- Hotz, Mullin and Scholz:
  - Observe that expansion of the EITC in the 1990s coincided with increase in employment rates of single women with children
  - Use administrative and longitudinal data to assess whether EITC played a role in the increase.
    - Take advantage of the fact that expansion was more generous for families with 2+ children than for those with 1 child
- Findings:
  - Greater increases in employment for families with 2+ children than for families with 1 child
  - 77% of the difference in the increase can be explained by the differential rate of EITC expansion across the two groups.



# Using Simulations (Chan, 2013)

- Sets up and simulates model (what do I mean?)
- Findings
  - “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.”

# Using Simulations (Kosar, 2014)

- Sets up and simulates rich model (skill accumulation, savings choices, etc.)
- Finds that EITC boosts wage growth for single women over the life-cycle
- Works primarily by boosting their experience
- EITC acts like a form of debt relief for indebted single women.

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

- Everything that economists say about the potential effects of EITC is premised on workers knowing:
  - About the EITC
  - How to get it and use it
- Practitioners have long recognized that it takes work to get the word out.

# EITC Knowledge (Chetty et al., 2013)

- Chetty, Friedman and Saez (2013) measure the degree of “bunching”—that is, people reporting income at exactly the level that maximizes EITC payouts—within zip codes.
- Zip codes vary greatly in their degree of bunching, which appears to proxy very well for knowledge of EITC.
  - Neighborhoods with high bunching have larger share of EITC recipients and professional tax preparers.
  - When people move from low bunching to high bunching neighborhoods, they change their reporting of income to increase EITC refunds.
  - When people move from high to low bunching neighborhoods, they do not change their reporting behavior, suggesting that they take knowledge with them.
- Bunching getting larger and more widespread over time! Outreach may be working...

# The EITC as an “Insurance” program (Athreya et al., 2014)

- The structure of the EITC is set up to provide insurance against productivity loss (Athreya, Reilly and 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

# Big Picture Questions/Issues

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

# Big Picture Questions/Issues, contd.

- **The** tradeoff: low level of no-questions-asked assistance vs. high level of targeted assistance
  - US shifting towards the latter
- Job matching: ideally, paying single people 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.

# EITC: A recap of what (I know about) what we know

- Research suggests that the EITC:
  - Affects work hours (though it need not), but not by much
    - Does not change men's work hours
  - Encourages single moms to enter workforce
  - May lead married women to leave work
  - Can alleviate poverty and improve health outcomes
  - May boost later-life wages by increasing work experience

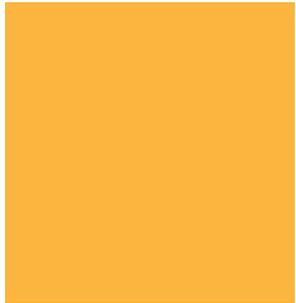


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