

**Table 1**  
**Parameters of the 11 Negative Income Tax Programs**

Program Number	G (\$)	$\tau$	Declining Tax Rate	Break-even Income (\$)
1	3,800	.5	No	7,600
2	3,800	.7	No	5,429
3	3,800	.7	Yes	7,367
4	3,800	.8	Yes	5,802
5	4,800	.5	No	9,600
6	4,800	.7	No	6,857
7	4,800	.7	Yes	12,000
8	4,800	.8	Yes	8,000
9	5,600	.5	No	11,200
10	5,600	.7	No	8,000
11	5,600	.8	Yes	10,360

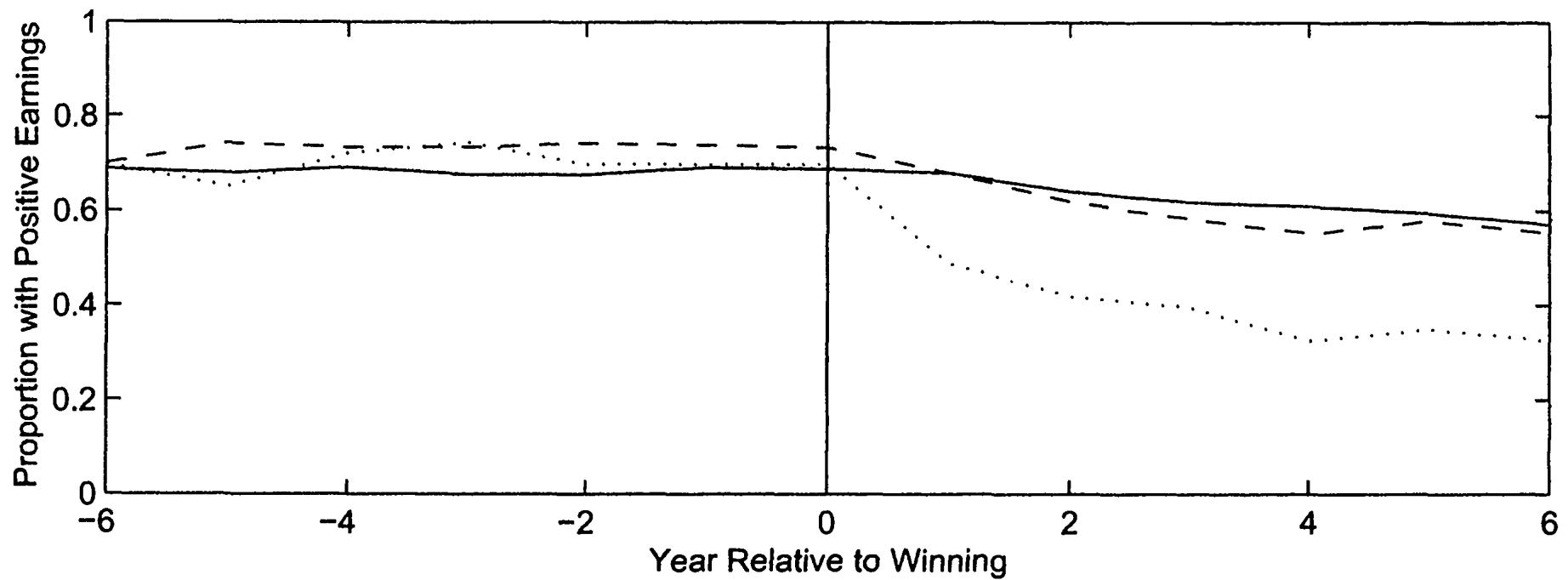


FIGURE 2. PROPORTION WITH POSITIVE EARNINGS FOR NONWINNERS, WINNERS, AND BIG WINNERS

Note: Solid line = nonwinners; dashed line = winners; dotted line = big winners.

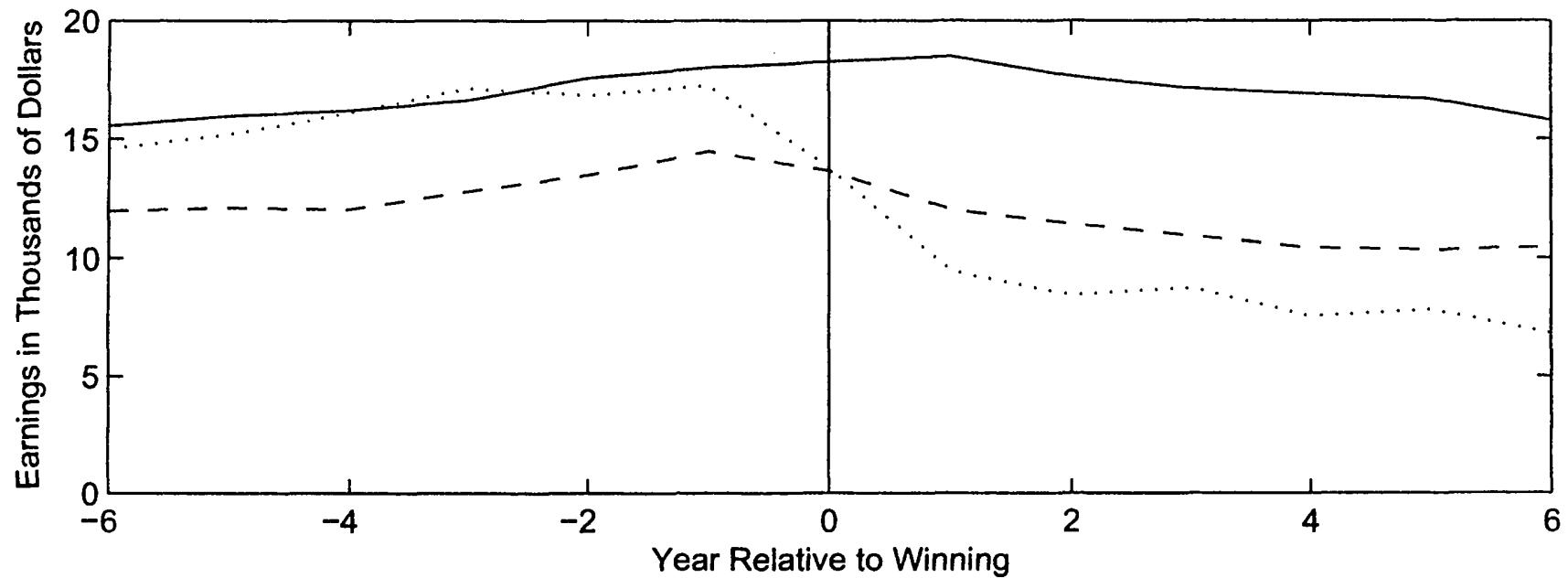
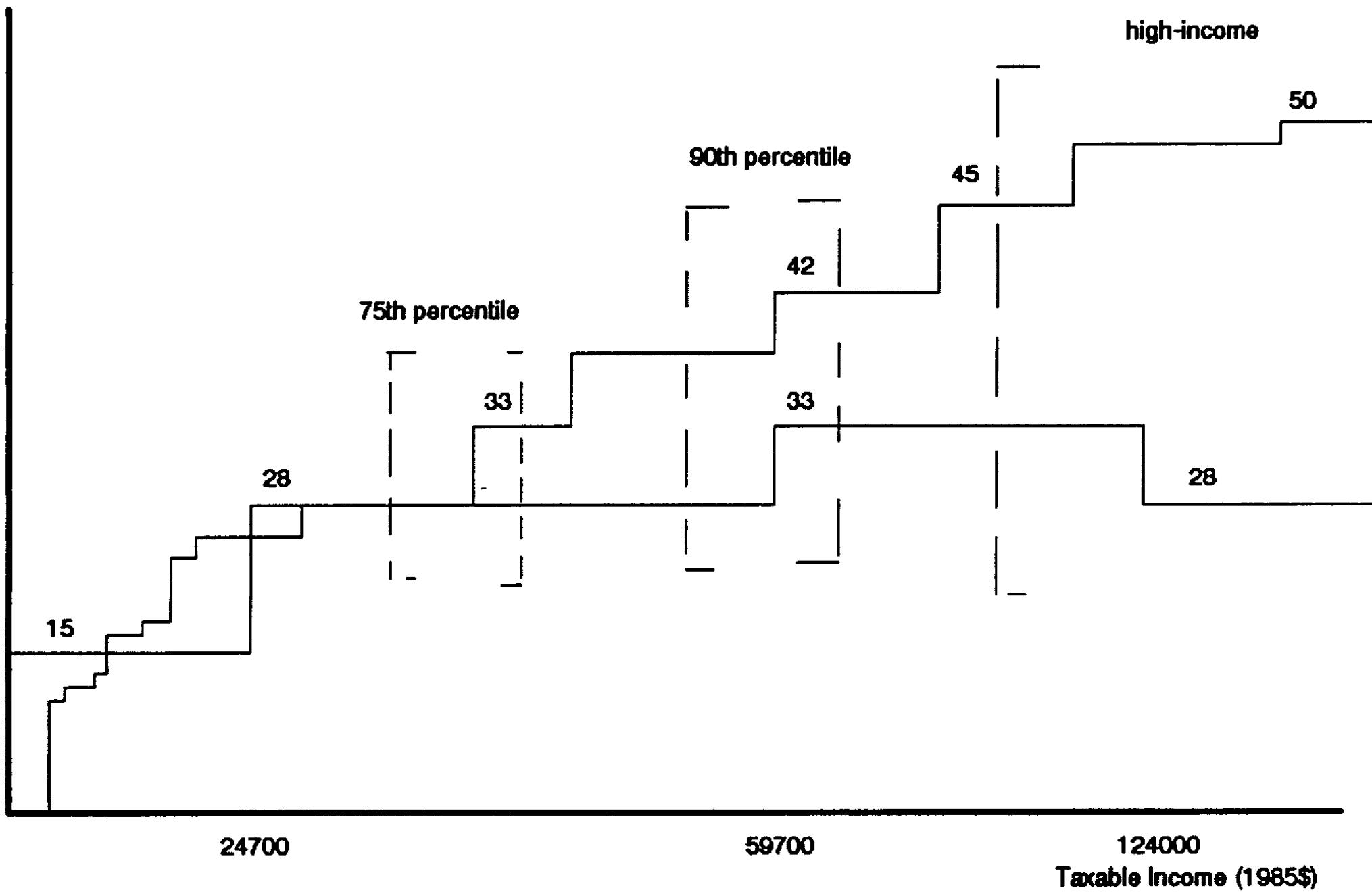


FIGURE 1. AVERAGE EARNINGS FOR NONWINNERS, WINNERS, AND BIG WINNERS

Note: Solid line = nonwinners; dashed line = winners; dotted line = big winners.

marginal  
tax rate

Figure II



Source: Federal Govt

Table IIa  
Marginal Tax Rate

Group	Before TRA86	After TRA86	Change	Relative Change
High	.521 (.002)	.382 (.001)	-.139 (.002)	
75 <sup>th</sup> Percentile	.365 (.001)	.324 (.001)	-.041 (.001)	<b>-.098</b> <b>(.002)</b>
90 <sup>th</sup> Percentile	.430 (.001)	.360 (.001)	-.07 (.001)	<b>-.069</b> <b>(.002)</b>

The marginal tax rate is calculated using family wage and salary, self-employment, interest, dividend, farm and social-security income. I assume all couples file jointly, and that all itemize their deductions. Itemized deductions and capital gains are imputed using Statistics of Income data. These figures include the secondary earner deduction, as well as social security taxes. Standard errors are in parentheses. Before TRA86 is tax years 1983-1985; After TRA86 is tax years 1989-1991.

Table III  
 Differences-in-Differences Estimates  
 CPS Married Women Before and After TRA86

A: Labor Force Participation

Group	Before TRA86	After TRA86	Change	Difference-in- Difference
High	0.464 (.018) [756]	0.554 (.018) [718]	0.090 (.025) {19.5 %}	
75 <sup>th</sup> Percentile	0.687 (.010) [3799]	0.740 (.010) [3613]	0.053 (.010) {7.2 %}	<b>0.037 (.028)</b> <b>{12.3 %}</b>
90 <sup>th</sup> Percentile	0.611 (.010) [3765]	0.656 (.010) [3584]	0.045 (.010) {6.5 %}	<b>0.045 (.028)</b> <b>{13 %}</b>

Source: Eissa 1995

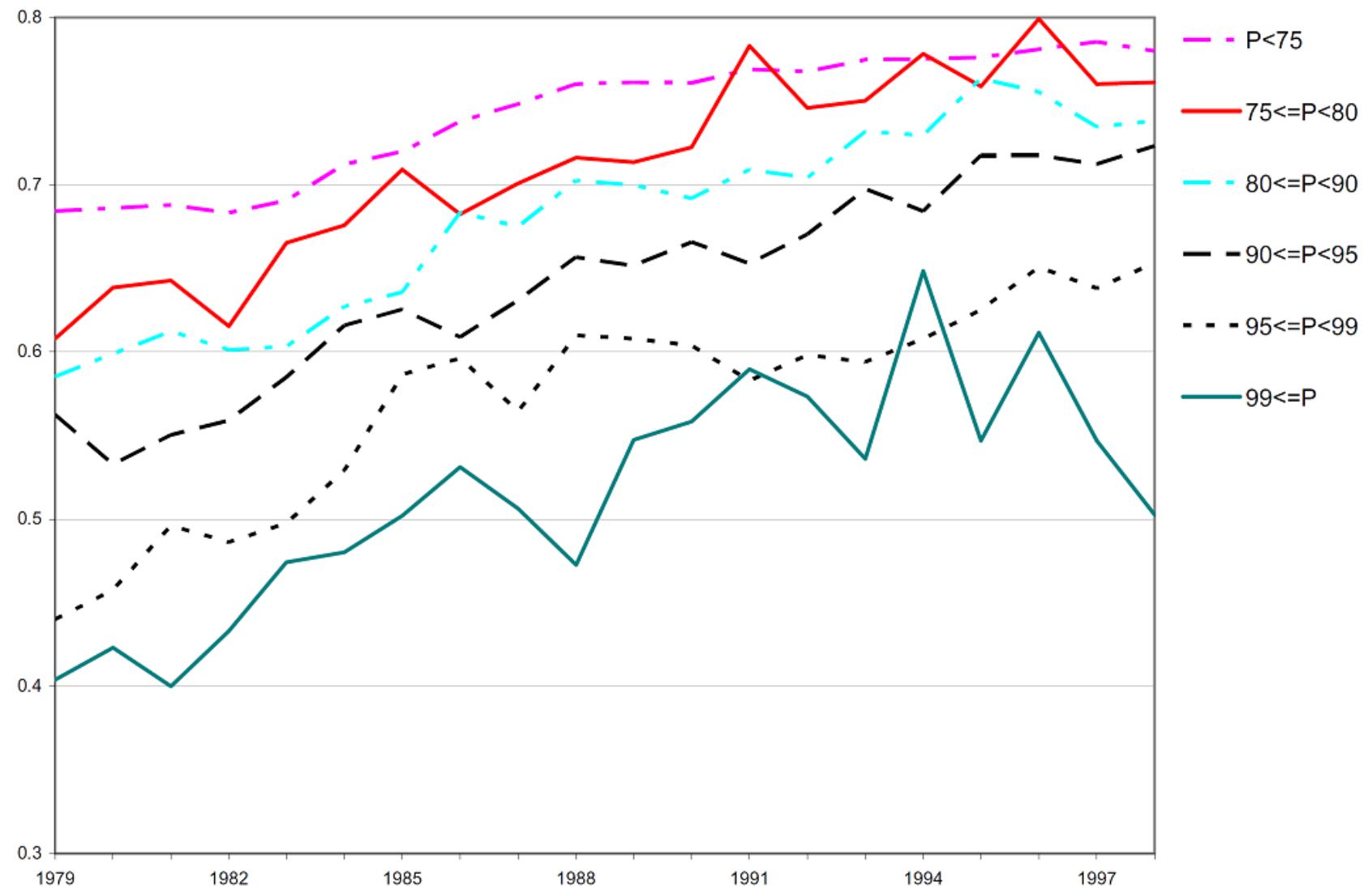
### B: Hours Conditional on Employment

Group	Before TRA86	After TRA86	Change	Difference-in- Difference
High	1283.0 (46.3) [351]	1446.3 (41.1) [398]	163.3 (61.5) {12.7%}	
75 <sup>th</sup> Percentile	1504.1 (14.3) [2610]	1558.9 (13.9) [2676]	54.8 (20.0) {3.6%}	<b>108.6 (65.1)</b> <b>{9.4%}</b>
90 <sup>th</sup> Percentile	1434.1 (16.4) [2303]	1530.1 (15.9) [2348]	96.0 (22.8) {6.8%}	<b>67.3 (64.8)</b> <b>{6.2%}</b>

Each cell contains the mean for that group, along with standard errors in (), number of observations in [], and % increase in {}. Means are unweighted.

Source: Eissa 1995

Figure 10  
 Fraction of Married Women with Positive Annual Earnings by Income Group  
 in March CPS



Notes: Groups are based on other household income (husband's earnings plus asset income) as described in Eissa (1995). Group 1  $\leq$  75<sup>th</sup> percentile. Group 75 is  $>$  75<sup>th</sup> percentile and  $\leq$  80<sup>th</sup> percentile. Group 80 is  $>$  80<sup>th</sup> and  $\leq$  90<sup>th</sup>. Group 90 is  $>$  90<sup>th</sup> and  $\leq$  95<sup>th</sup>. Group 95 is  $>$  95<sup>th</sup> and  $\leq$  99<sup>th</sup>. Group 99 is  $>$  99<sup>th</sup>.

Source: Liebman and Saez (2006)

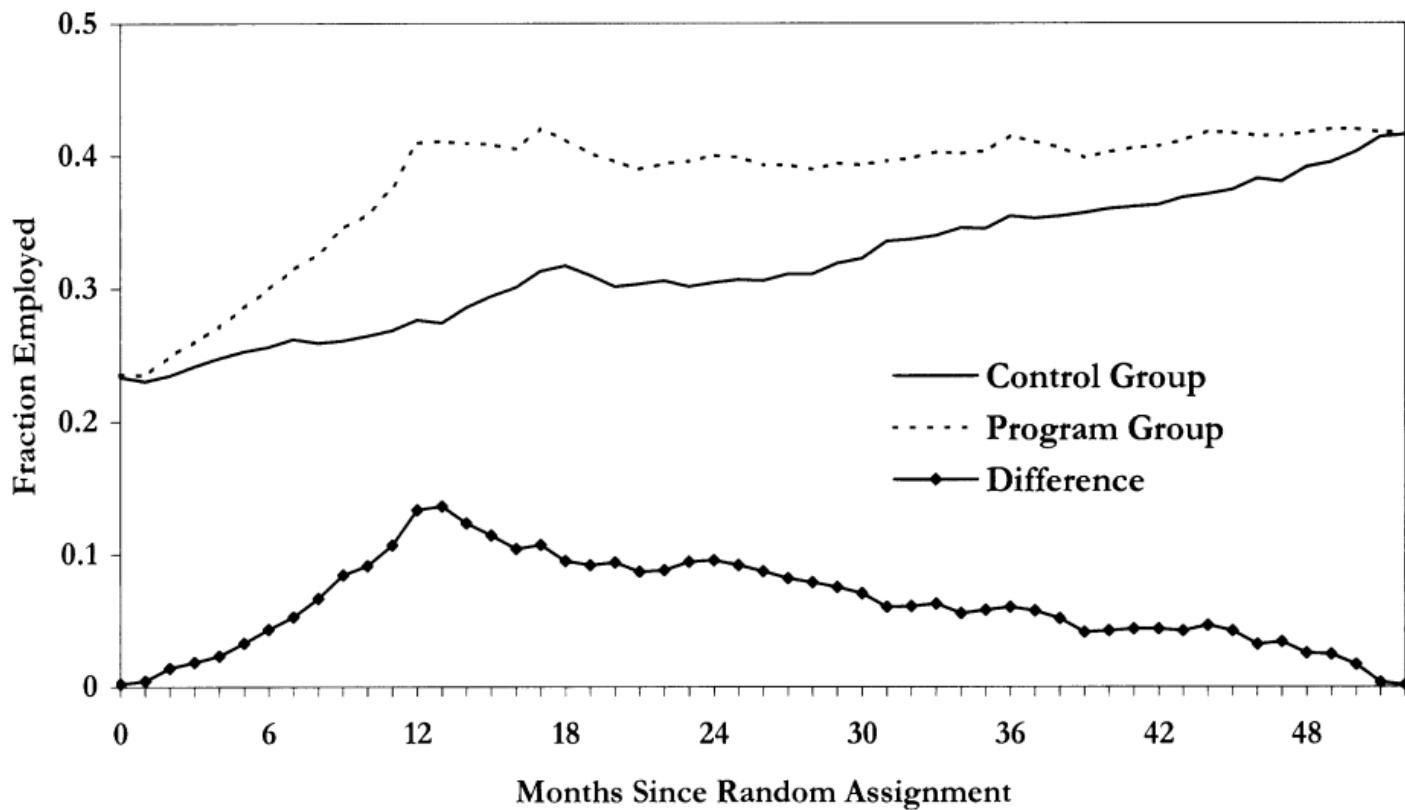
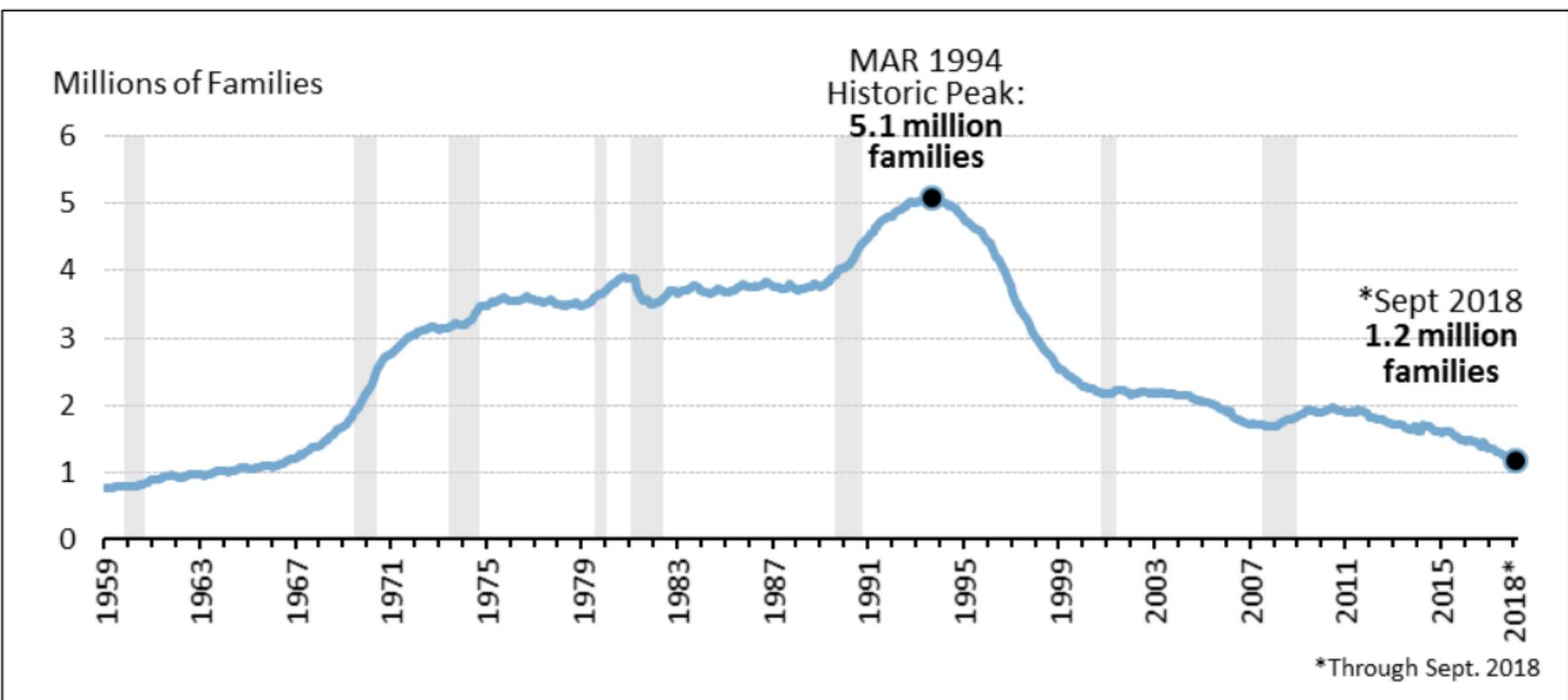


FIGURE 3.—Monthly employment rates.

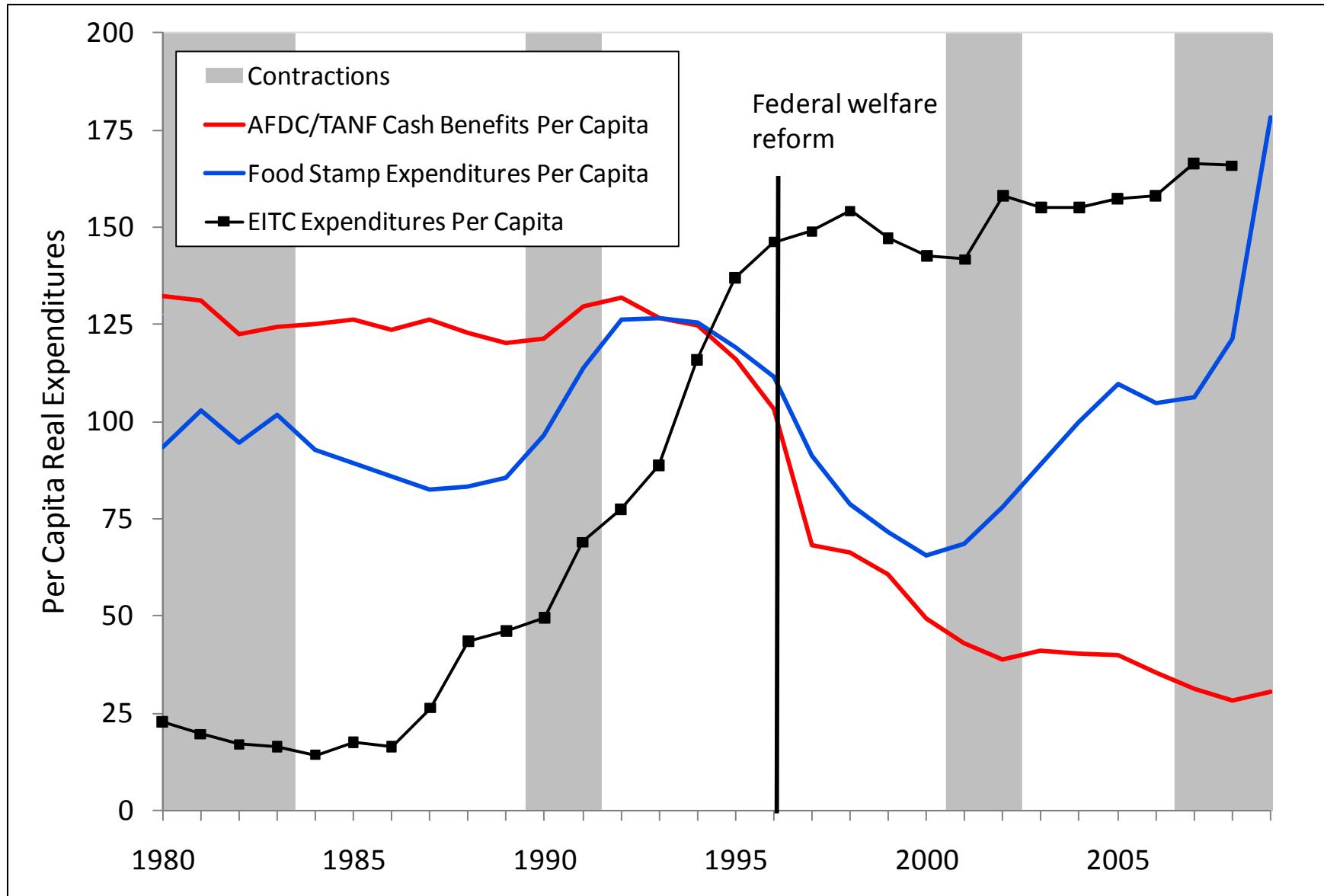
Source: Card and Hyslop, 2005, p. 1734

**Figure 2. Number of Families Receiving Cash Assistance, July 1959-September 2018**



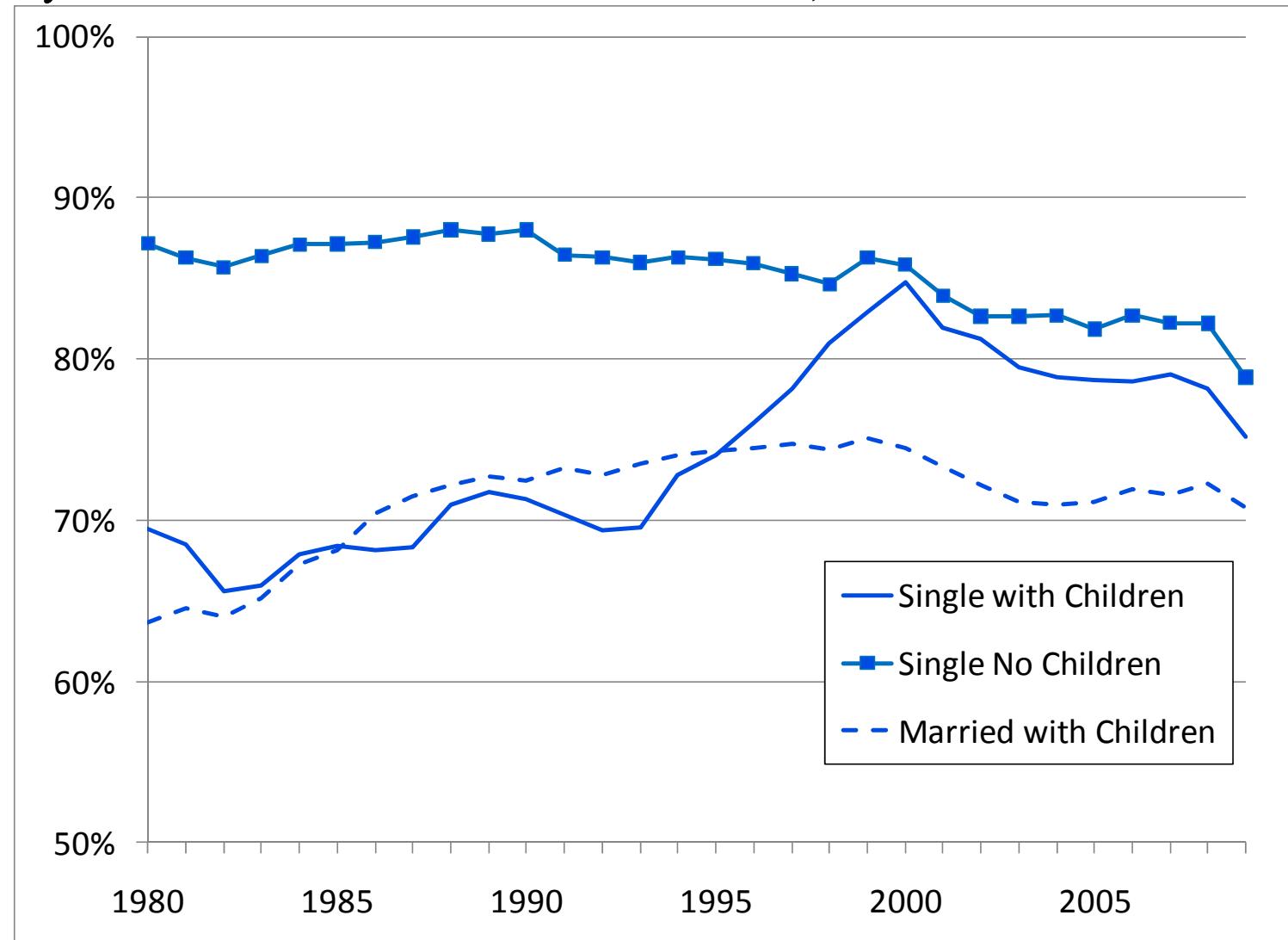
**Source:** Congressional Research Service (CRS) with data from the U.S. Department of Health and Human Services (HHS).

# The landscape providing assistance to poor families with children has changed substantially



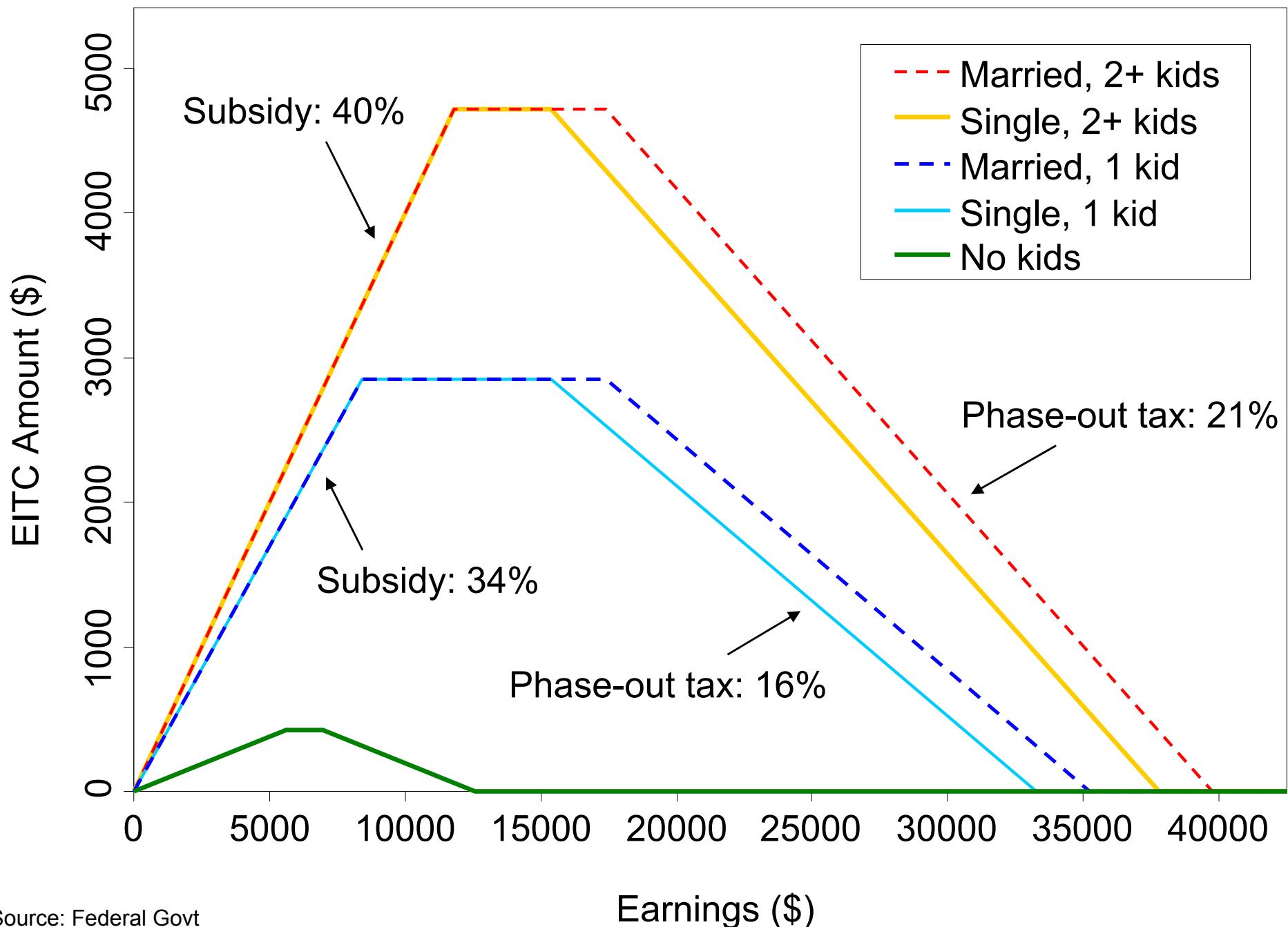
Source: Bitler and Hoynes, Brookings Papers on Economic Activity, 2011.

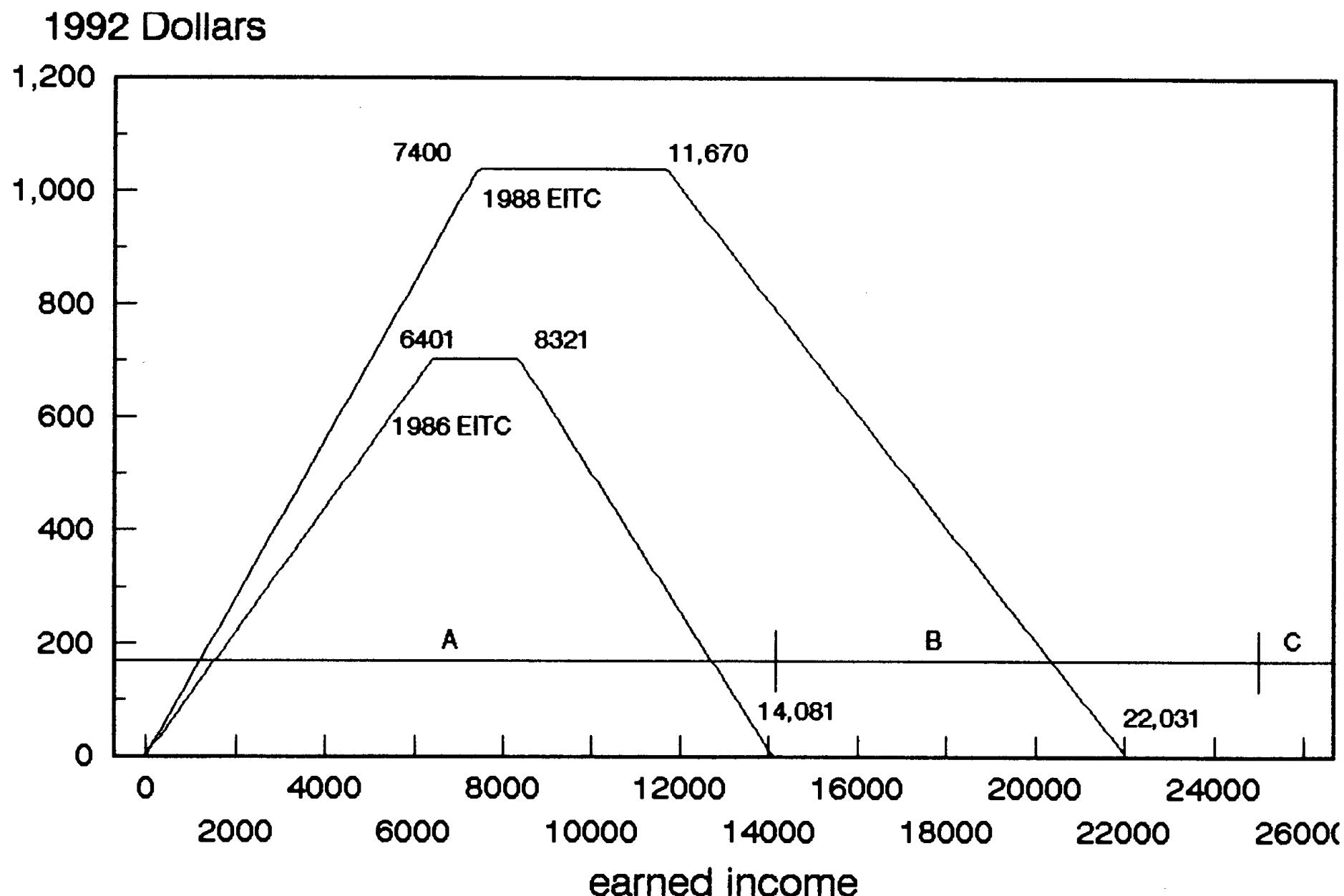
## Annual Employment Rates for Women By Marital Status and Presence of Children, 1980-2009



Source: Bitler and Hoynes, Brookings Papers on Economic Activity, 2011.

## EITC Amount as a Function of Earnings





Source: Eissa and Liebman (1996), p. 631

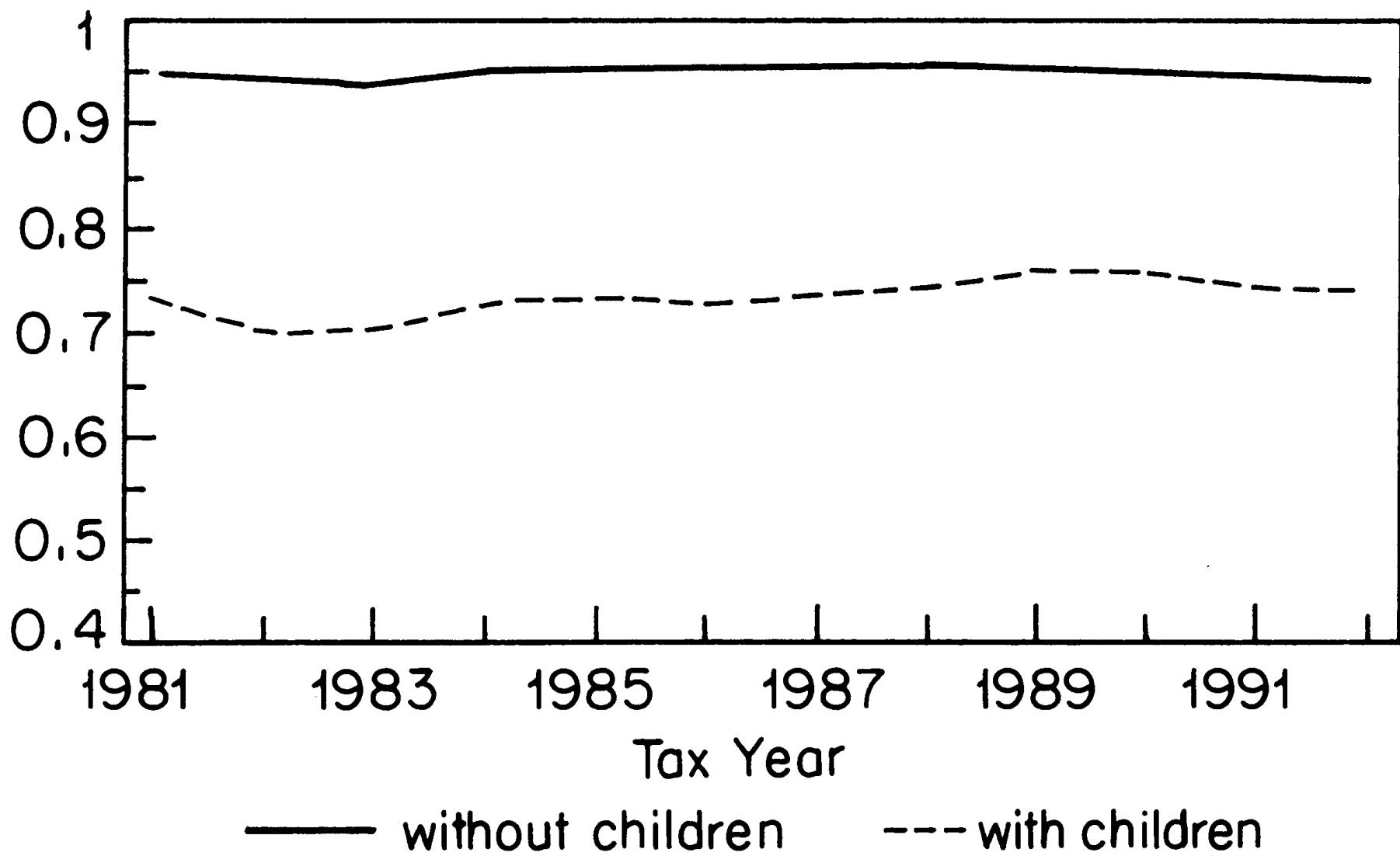
FIGURE IV  
1986 and 1988 Earned Income Tax Credit

**TABLE II**  
**LABOR FORCE PARTICIPATION RATES OF UNMARRIED WOMEN**

	Pre-TRA86 (1)	Post-TRA86 (2)	Difference (3)	Difference-in- differences (4)
<b>A. Treatment group:</b>				
With children [20,810]	0.729 (0.004)	0.753 (0.004)	0.024 (0.006)	
<i>Control group:</i>				
Without children [46,287]	0.952 (0.001)	0.952 (0.001)	0.000 (0.002)	0.024 (0.006)
<b>B. Treatment group:</b>				
Less than high school, with children [5396]	0.479 (0.010)	0.497 (0.010)	0.018 (0.014)	
<i>Control group 1:</i>				
Less than high school, without children [3958]	0.784 (0.010)	0.761 (0.009)	-0.023 (0.013)	0.041 (0.019)
<i>Control group 2:</i>				
Beyond high school, with children [5712]	0.911 (0.005)	0.920 (0.005)	0.009 (0.007)	0.009 (0.015)
<b>C. Treatment group:</b>				
High school, with children [9702]	0.764 (0.006)	0.787 (0.006)	0.023 (0.008)	
<i>Control group 1:</i>				
High school, without children [16,527]	0.945 (0.002)	0.943 (0.003)	-0.002 (0.004)	0.025 (0.009)
<i>Control group 2:</i>				
Beyond high school, with children [5712]	0.911 (0.005)	0.920 (0.005)	0.009 (0.007)	0.014 (0.011)

Data are from the March CPS, 1985–1987 and 1989–1991. Pre-TRA86 years are 1984–1986. Post-TRA86 years are 1988–1990. Labor force participation equals one if annual hours are positive, zero otherwise. Standard errors are in parentheses. Sample sizes are in square brackets. Means are weighted with CPS March supplement weights.

## All Unmarried Females



## Unmarried Males With Less Than High School Education

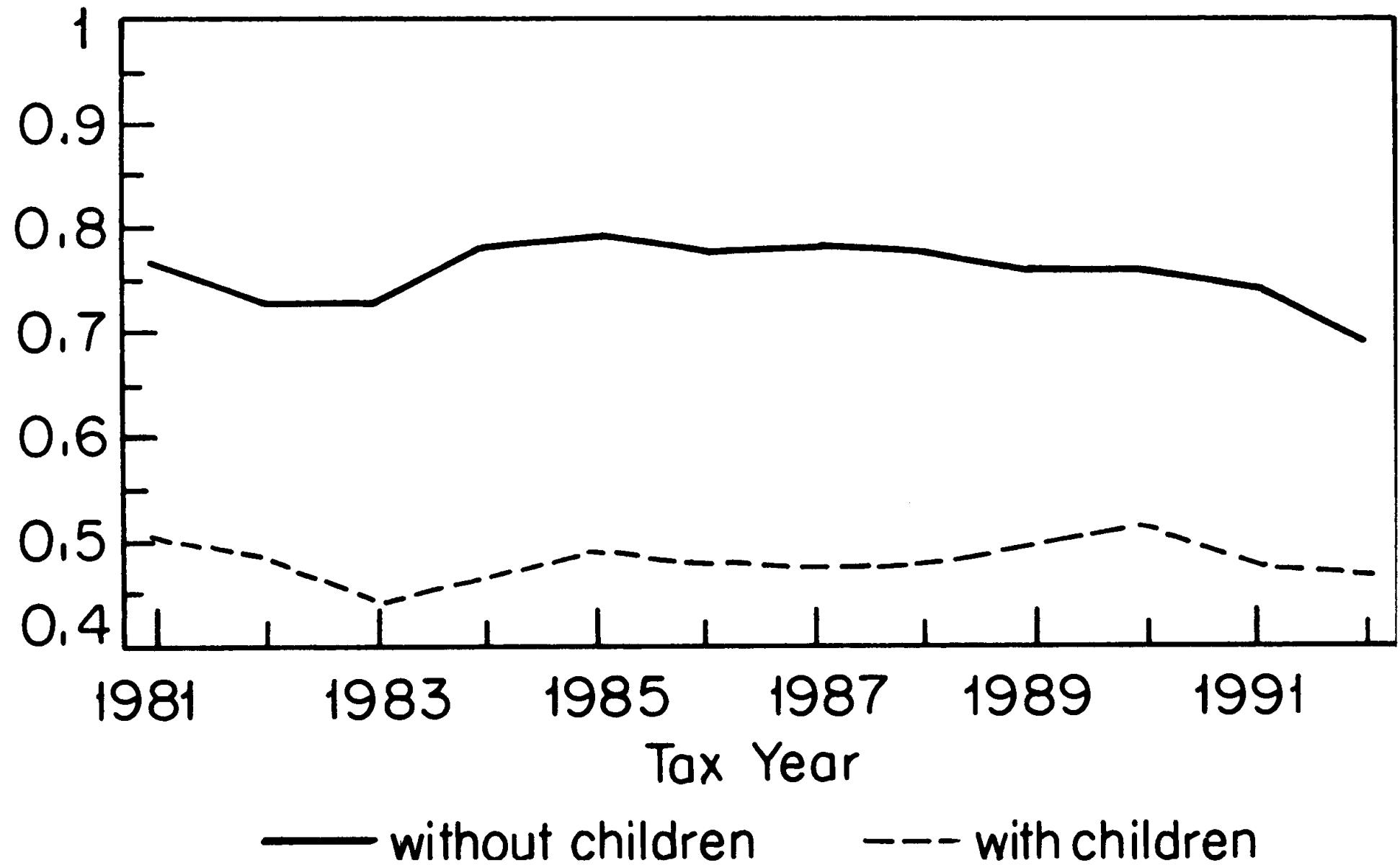
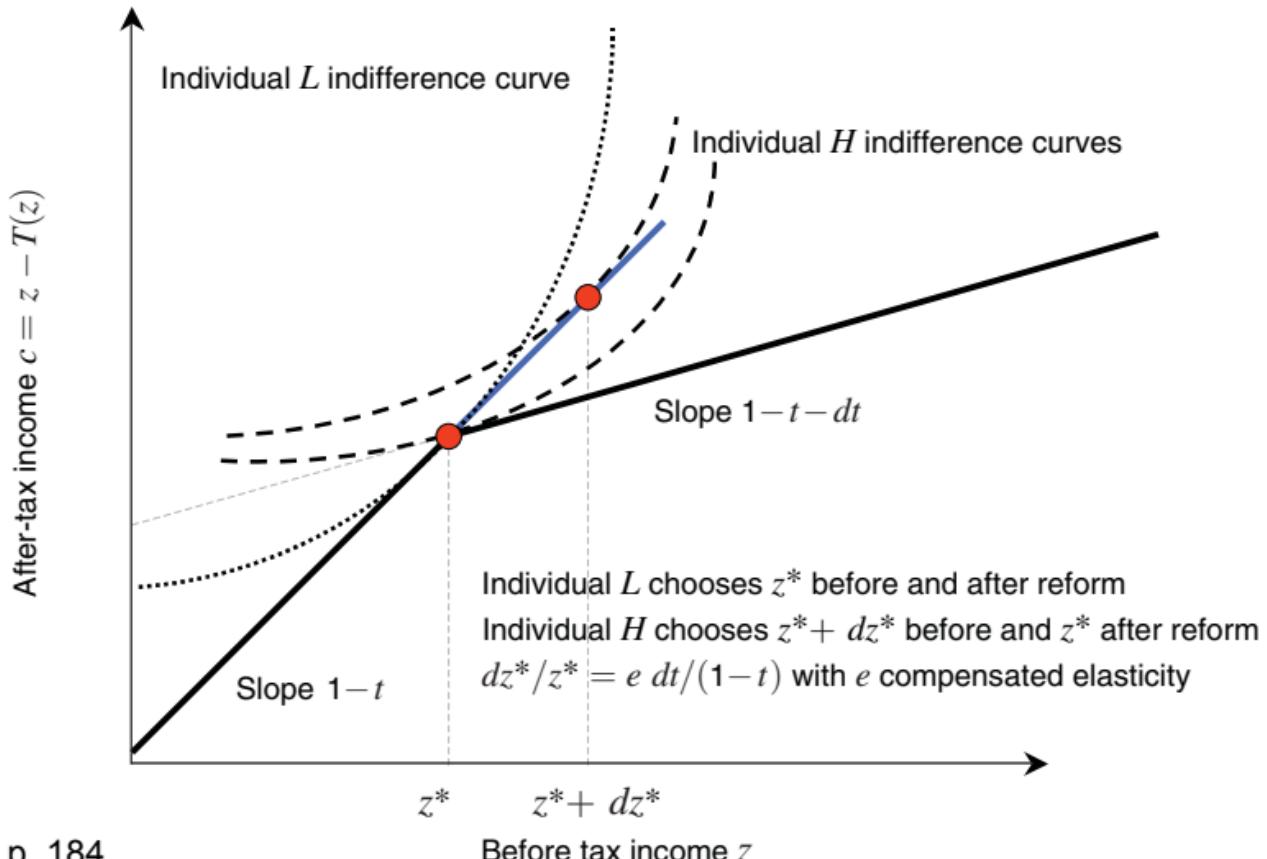


FIGURE II

Labor Force Participation Rates 1981 to 1992, Unmarried Females Ages 16–44

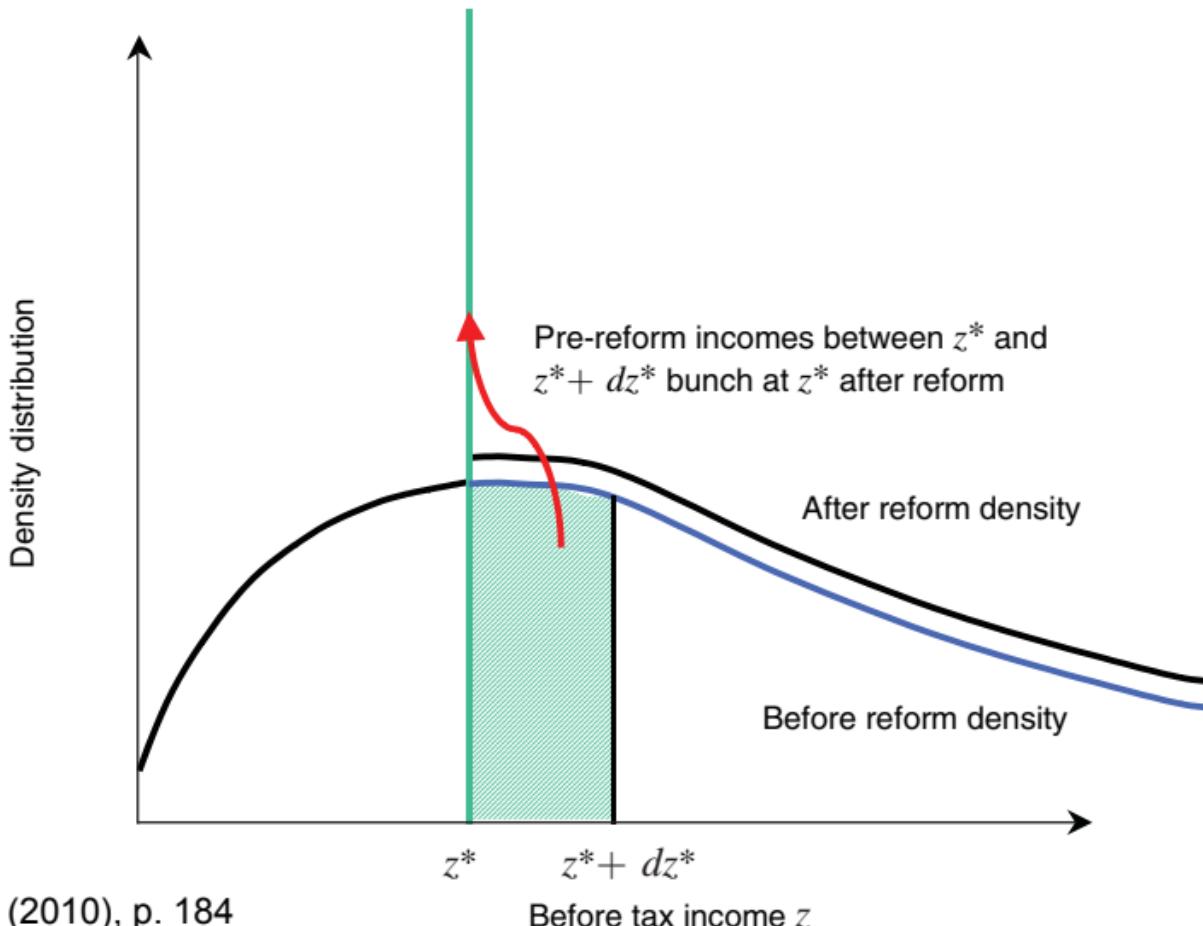
Source: Eissa and Liebman (1996), p. 624

### Panel A. Indifference curves and bunching



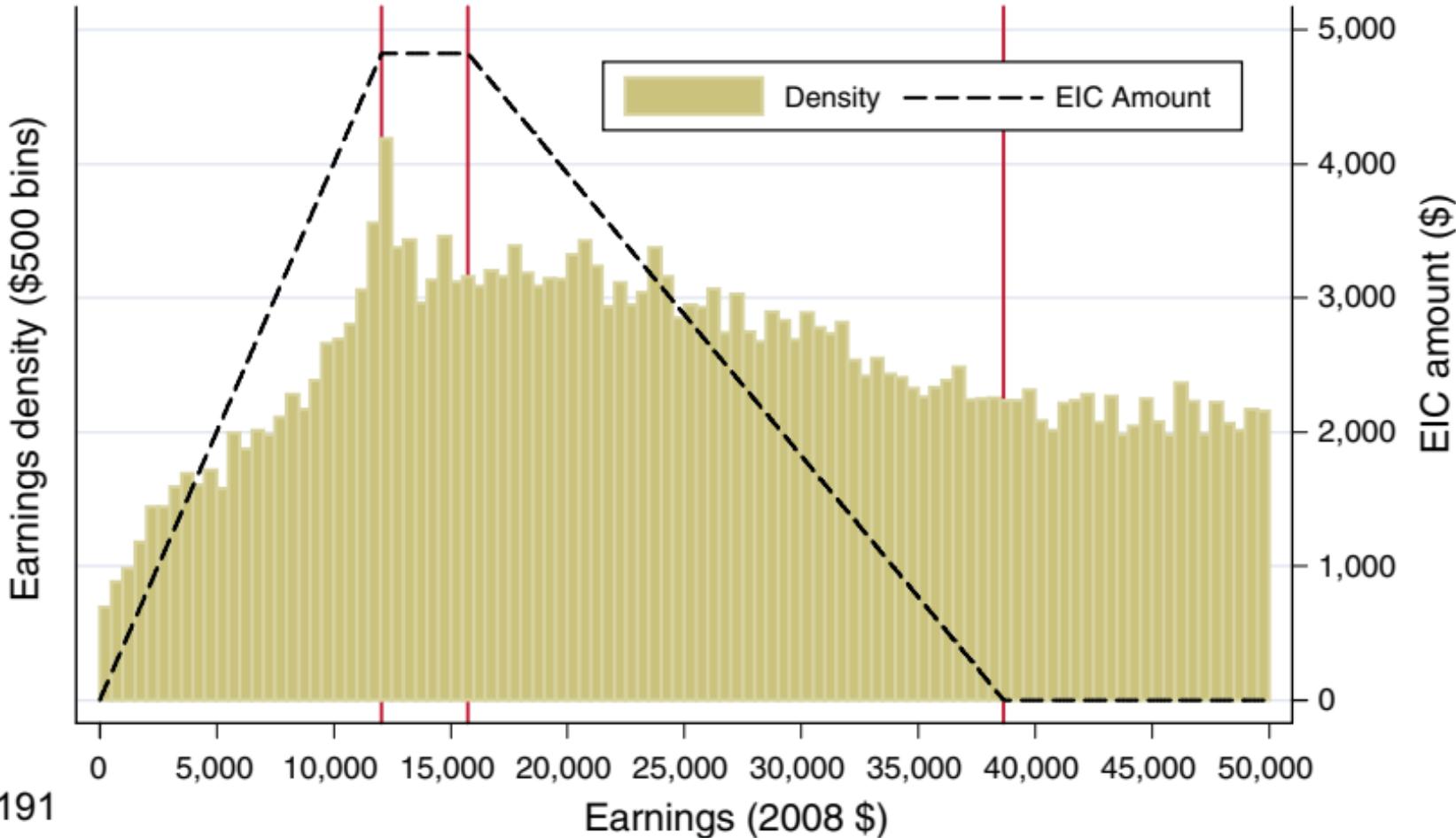
Source: Saez (2010), p. 184

## Panel B. Density distributions and bunching

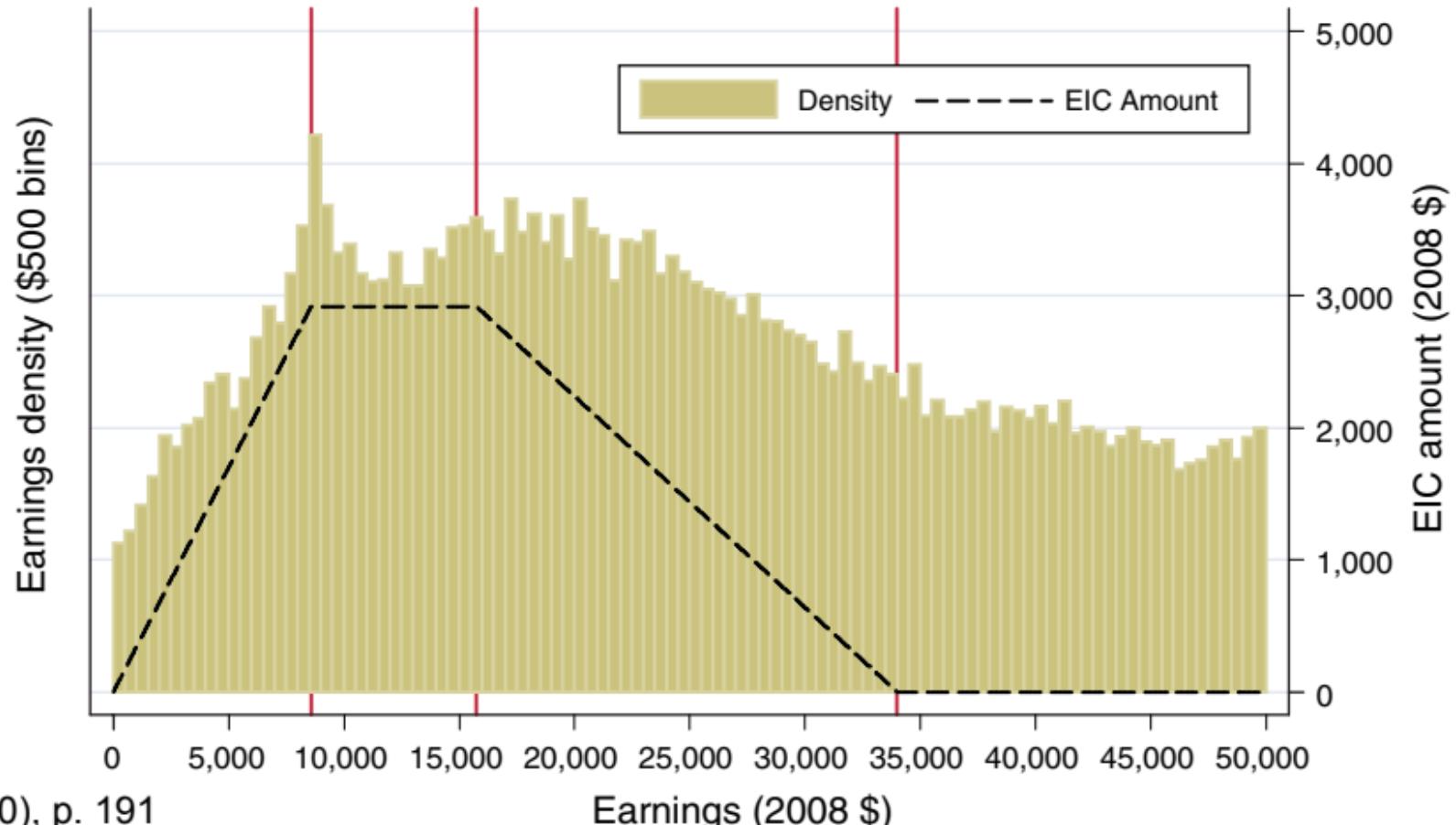


Source: Saez (2010), p. 184

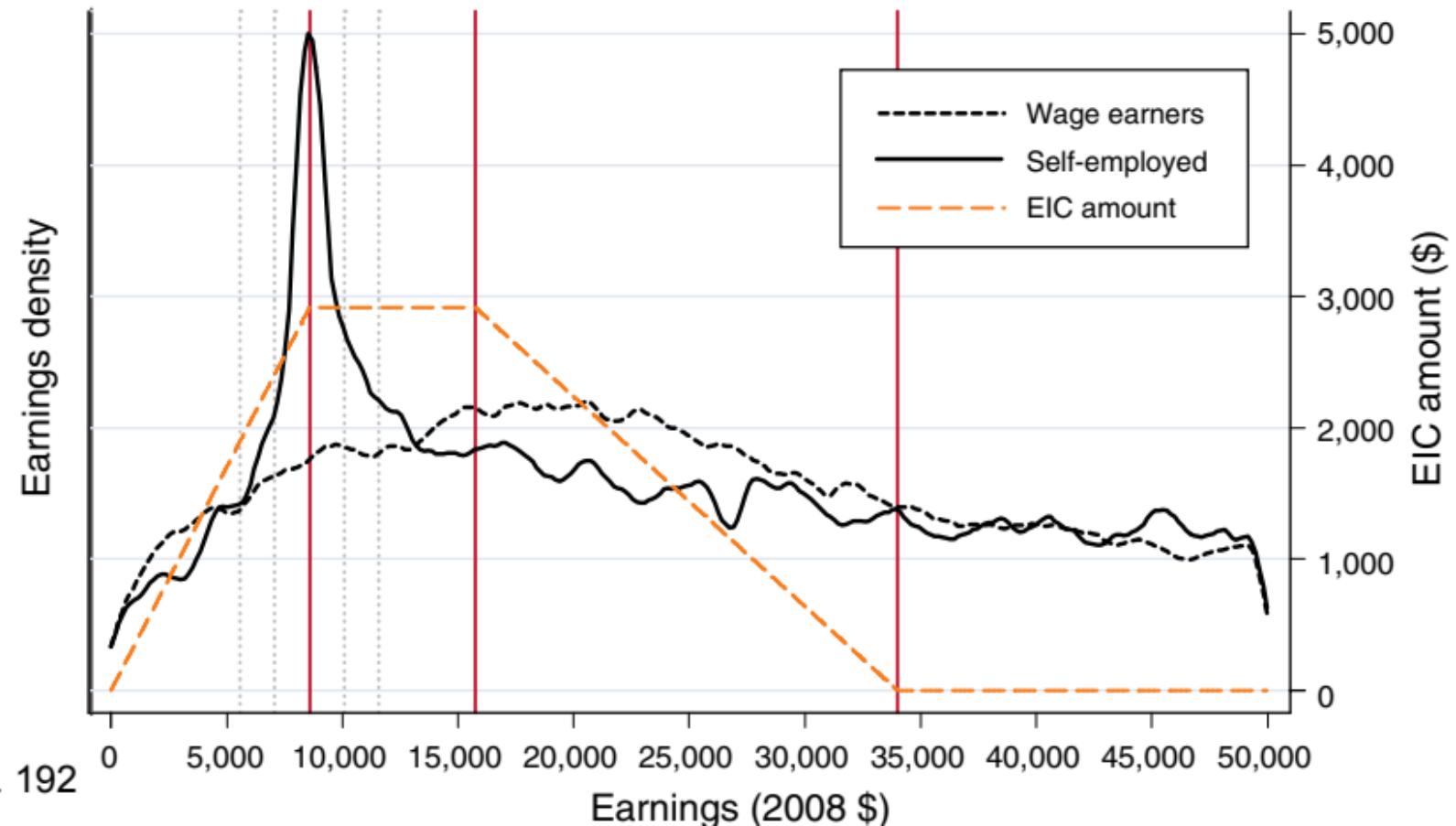
B. Two children or more



Panel A. One child



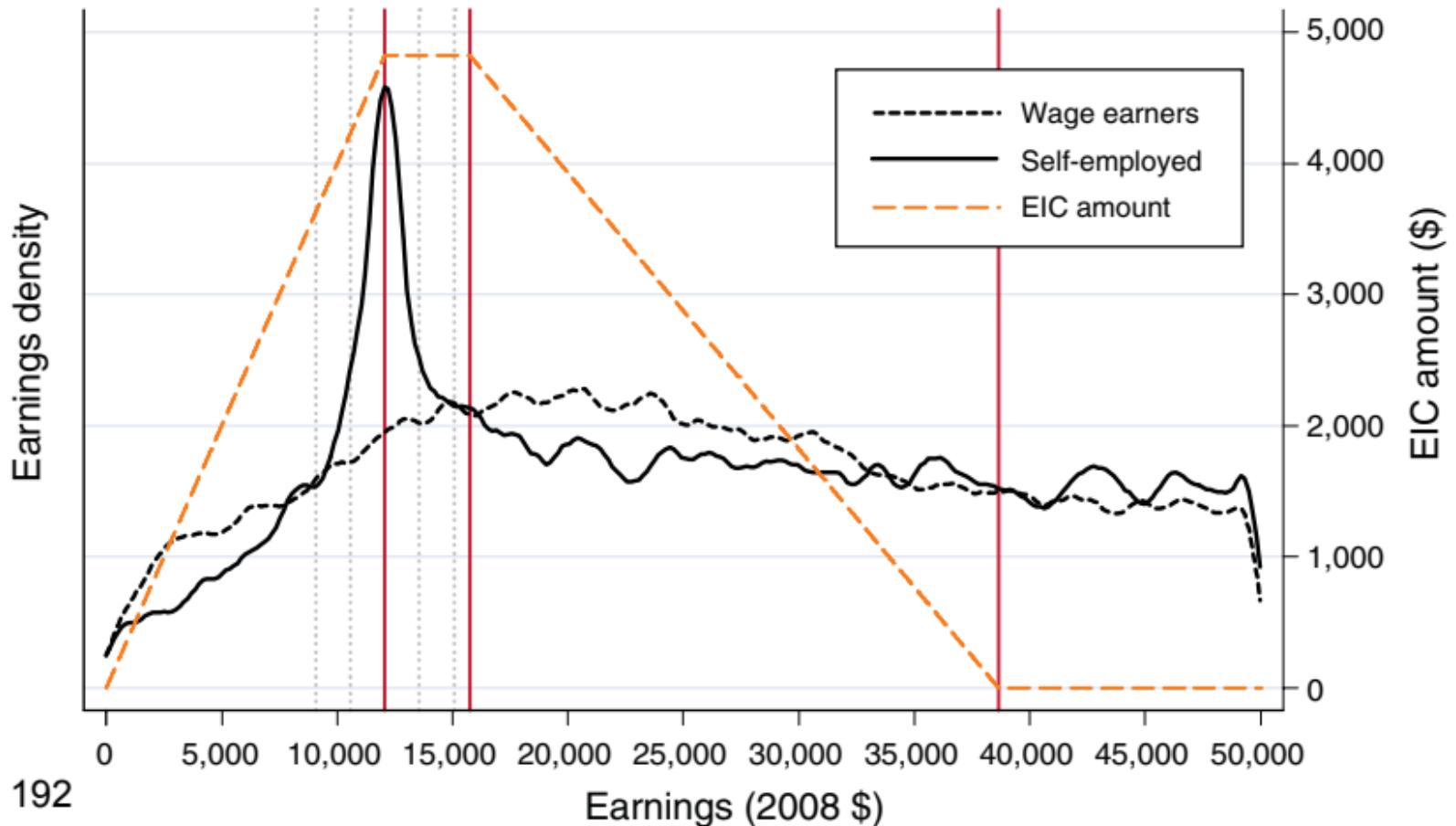
Panel A. One child



Source: Saez (2010), p. 192

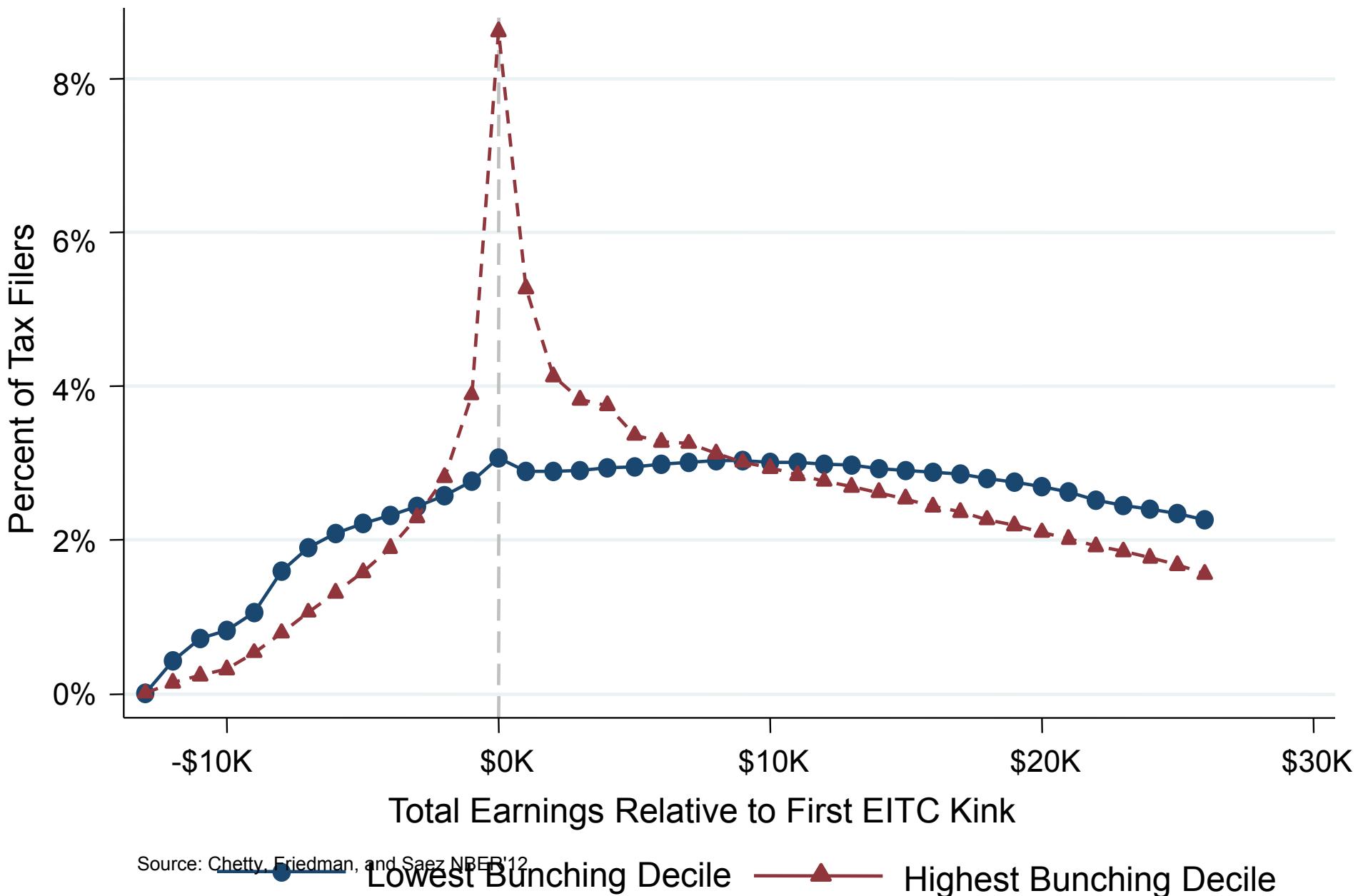
Earnings (2008 \$)

### Panel B. Two or more children

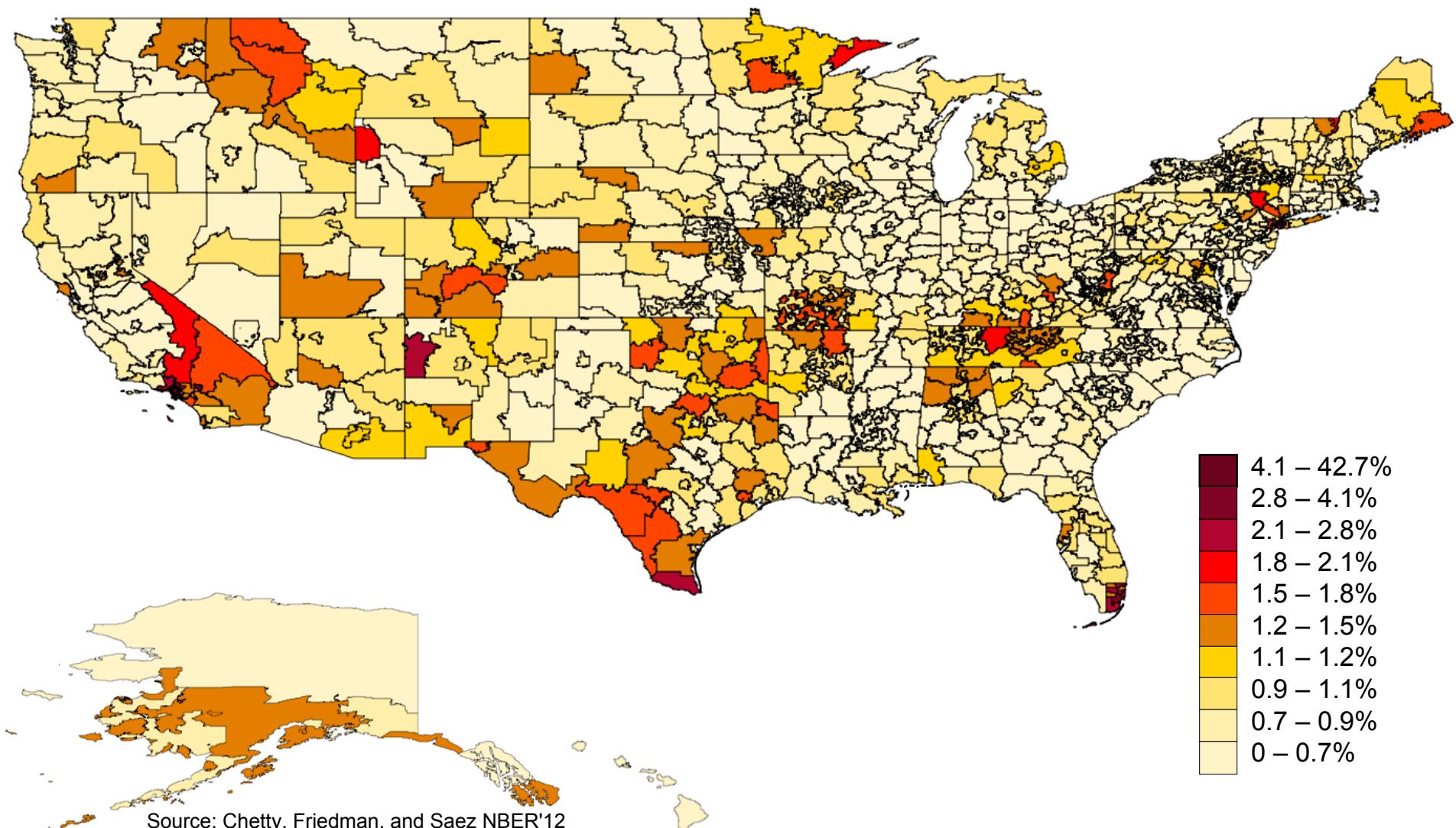


Source: Saez (2010), p. 192

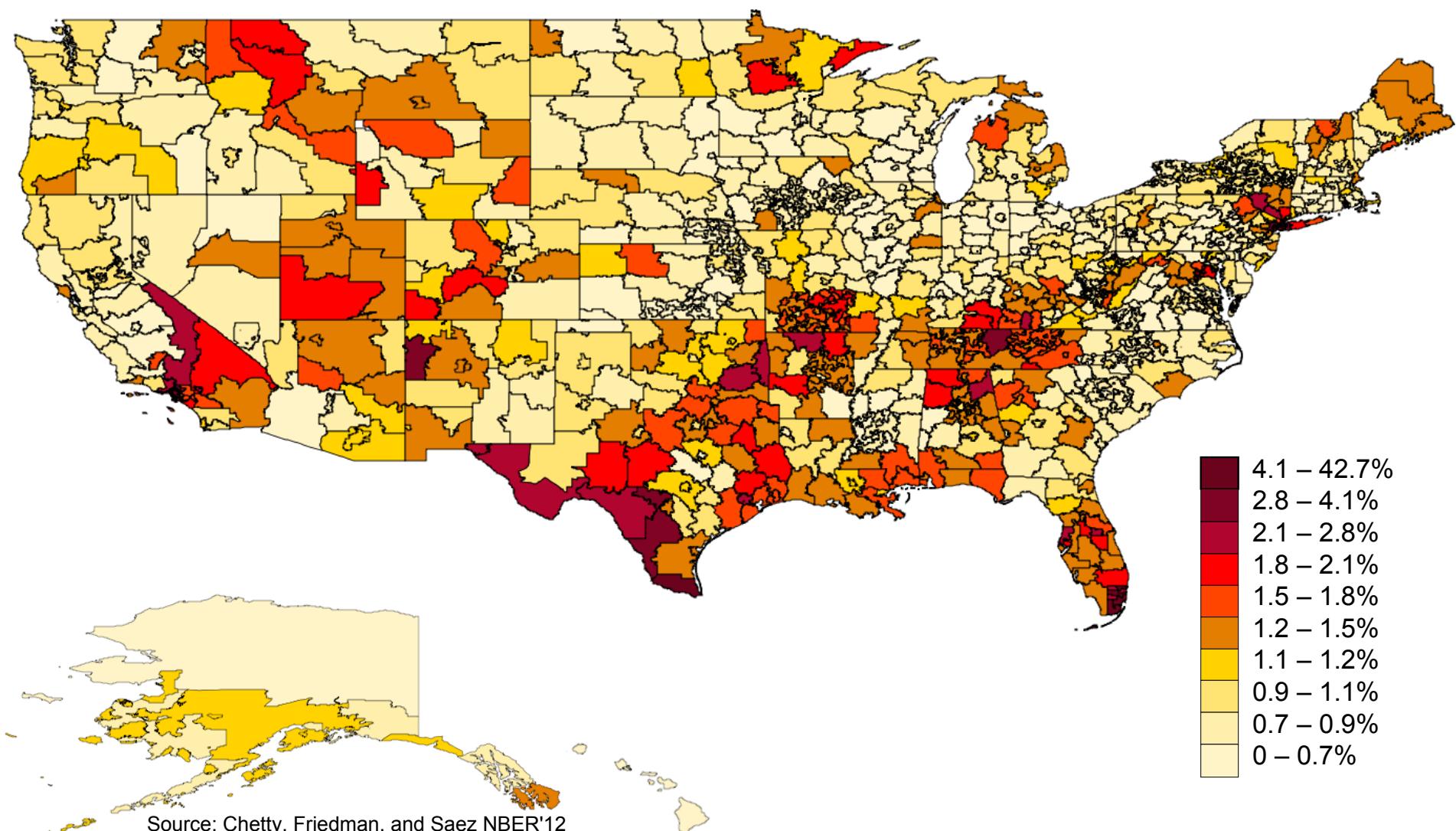
# Earnings Distributions in Lowest and Highest Bunching Deciles



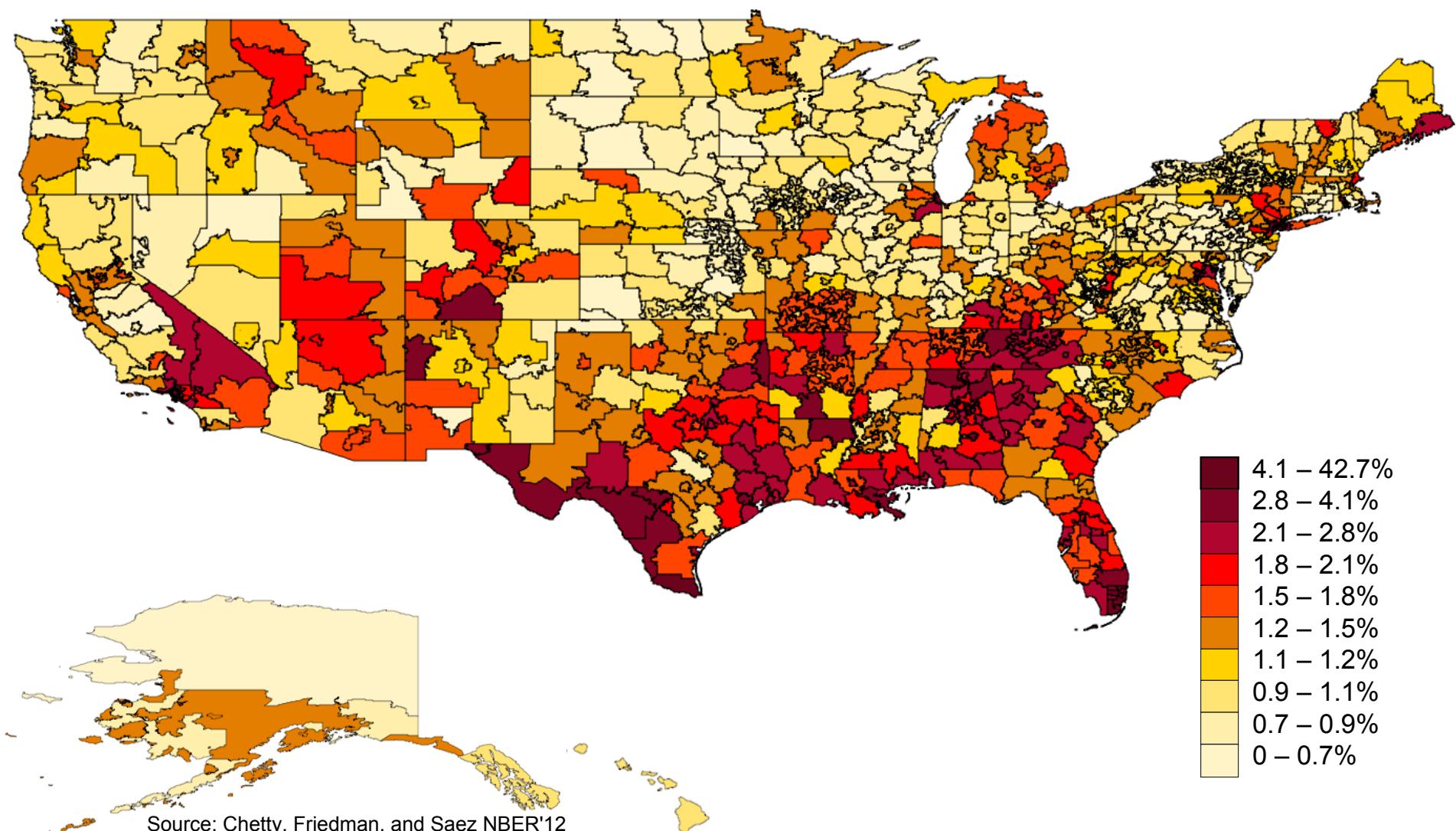
# Fraction of Tax Filers Who Report SE Income that Maximizes EITC Refund in 1996



# Fraction of Tax Filers Who Report SE Income that Maximizes EITC Refund in 1999

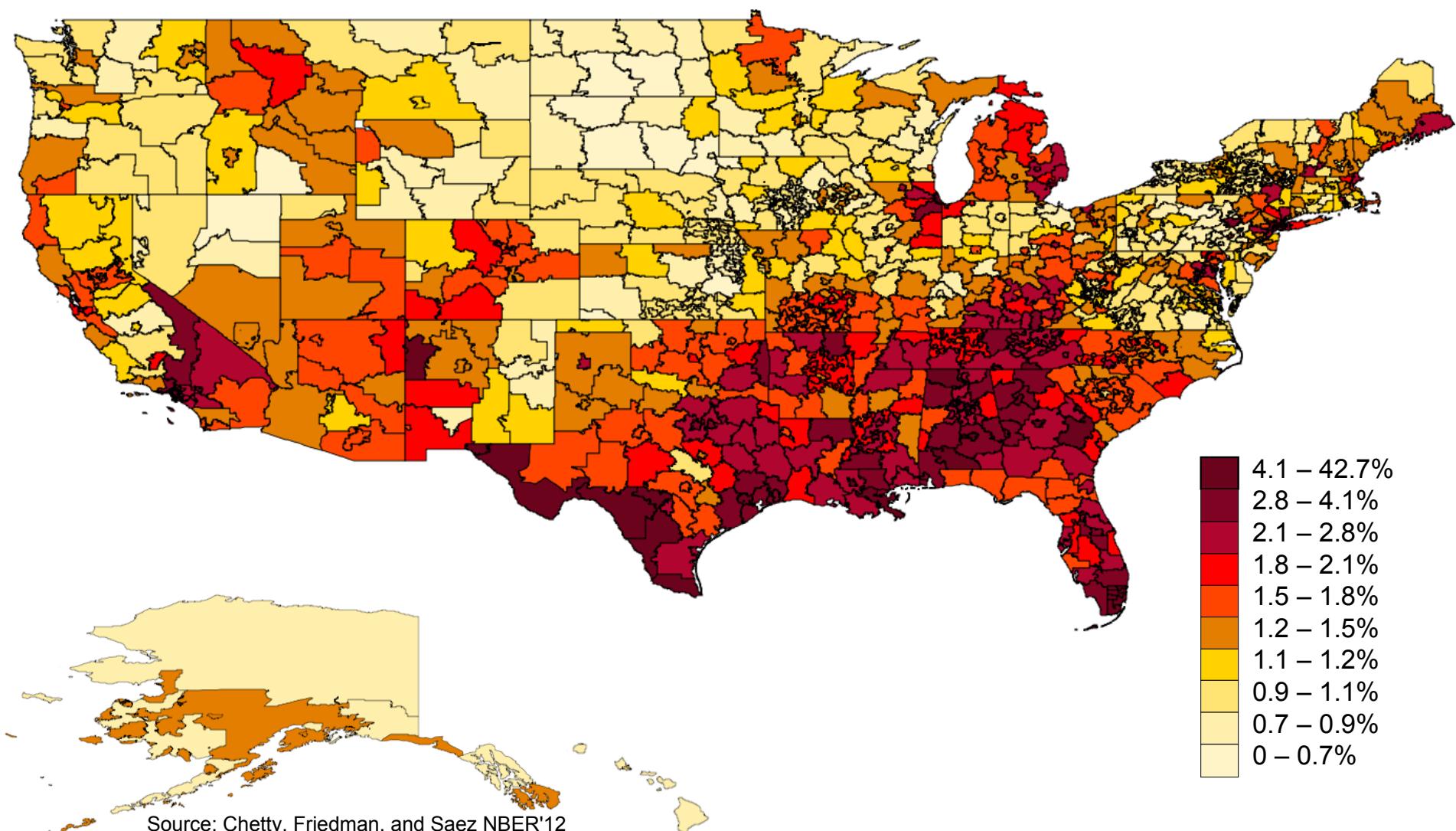


# Fraction of Tax Filers Who Report SE Income that Maximizes EITC Refund in 2002



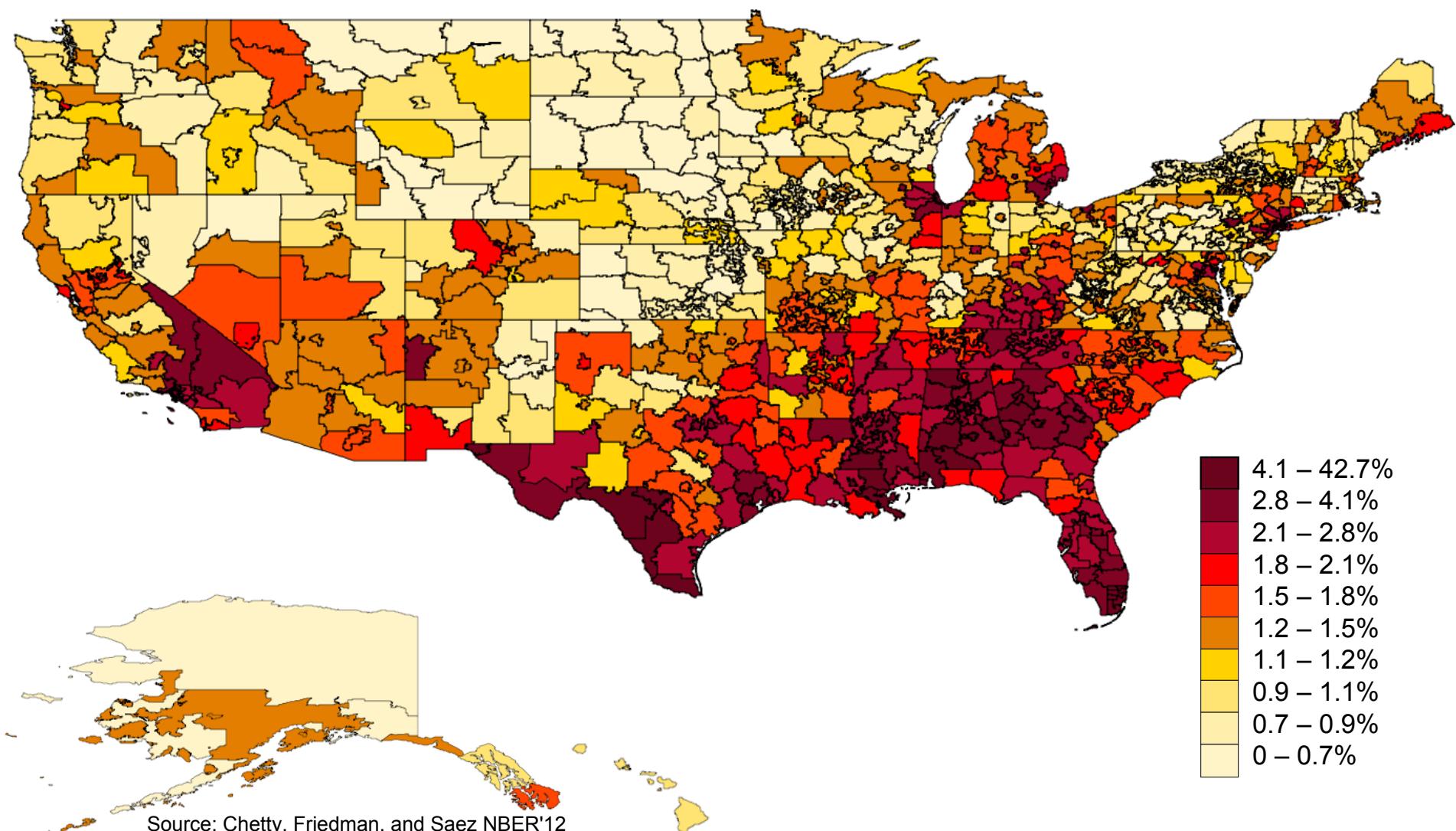
Source: Chetty, Friedman, and Saez NBER'12

# Fraction of Tax Filers Who Report SE Income that Maximizes EITC Refund in 2005

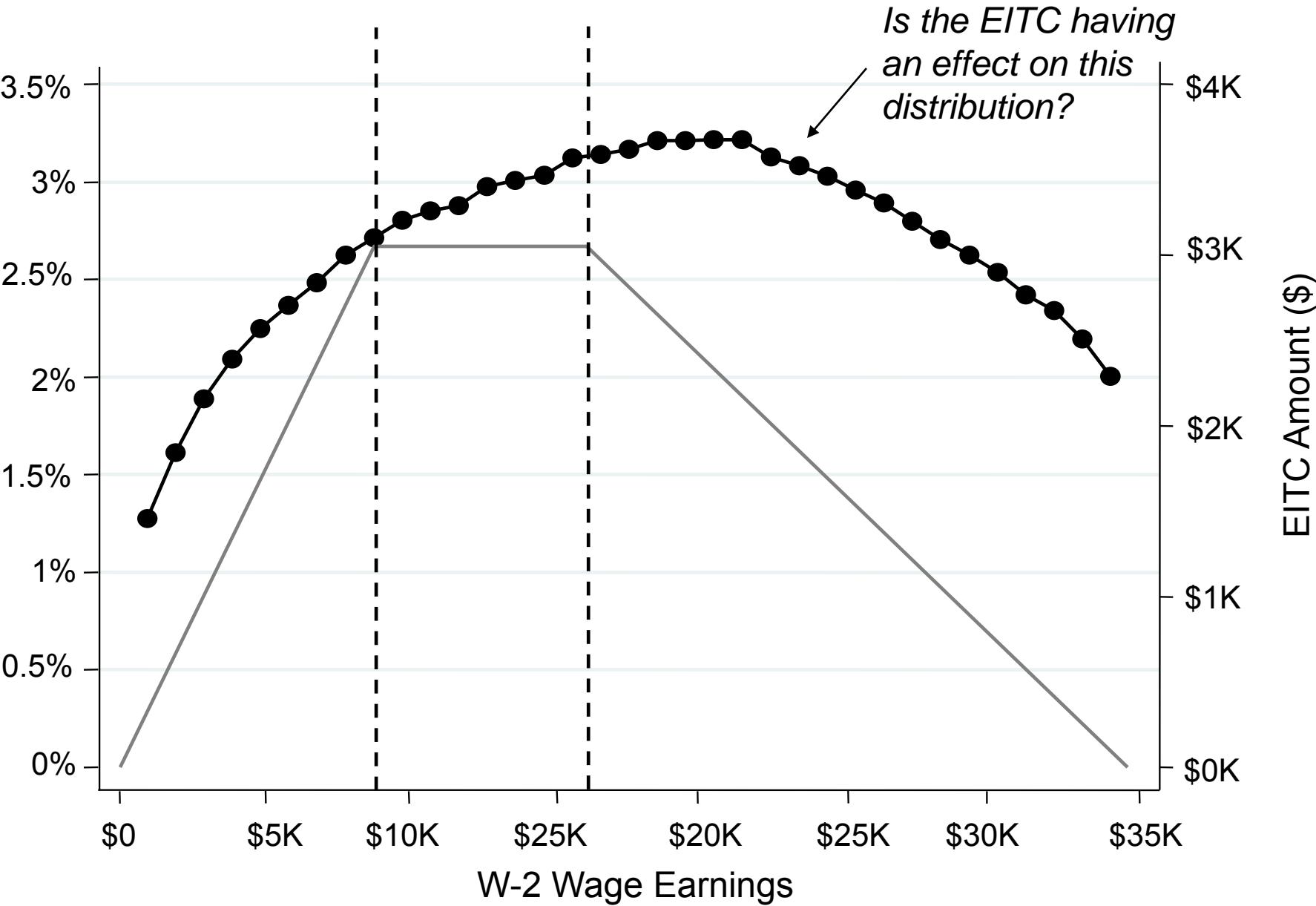


Source: Chetty, Friedman, and Saez NBER'12

# Fraction of Tax Filers Who Report SE Income that Maximizes EITC Refund in 2008

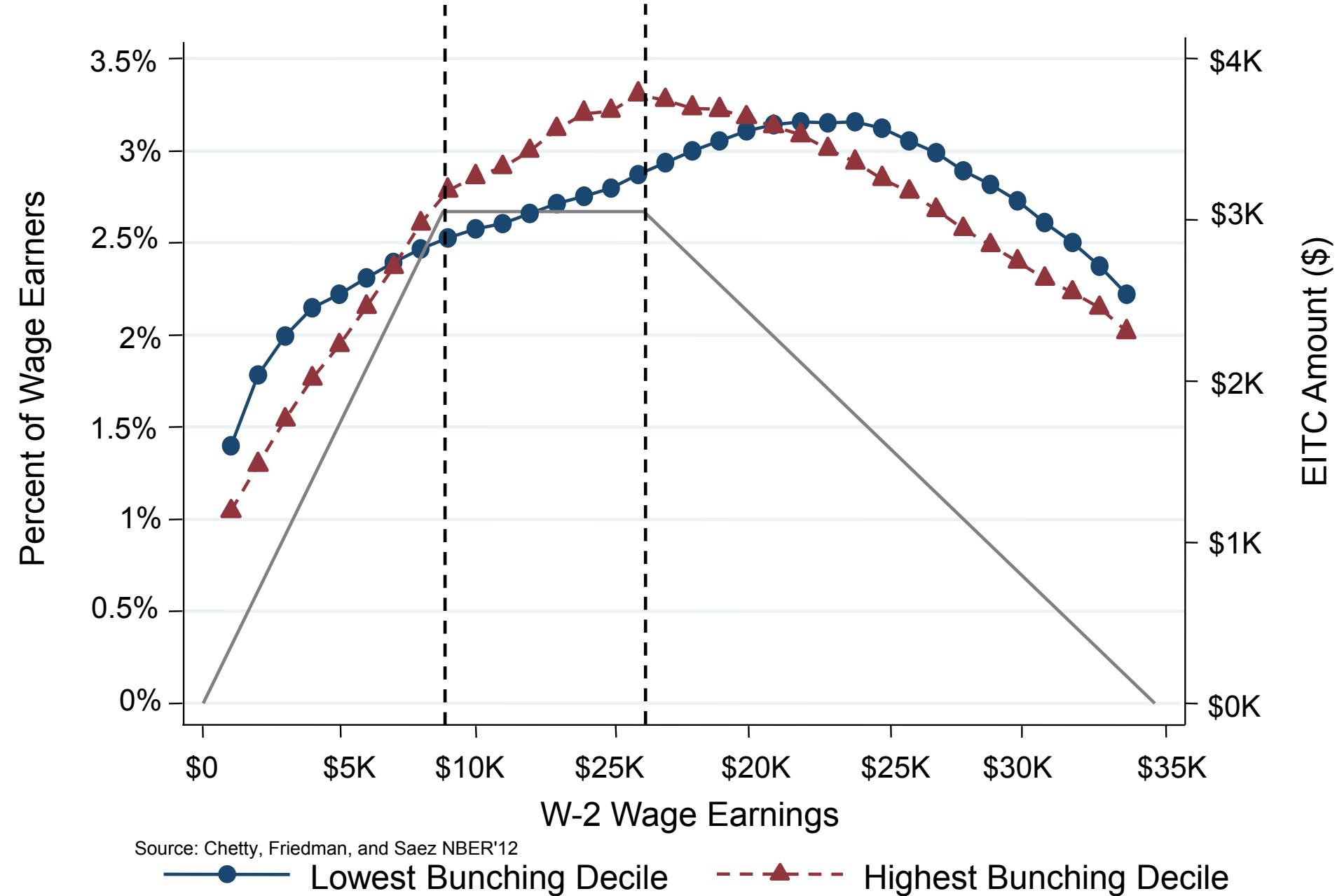


# Income Distribution For Single Wage Earners with One Child

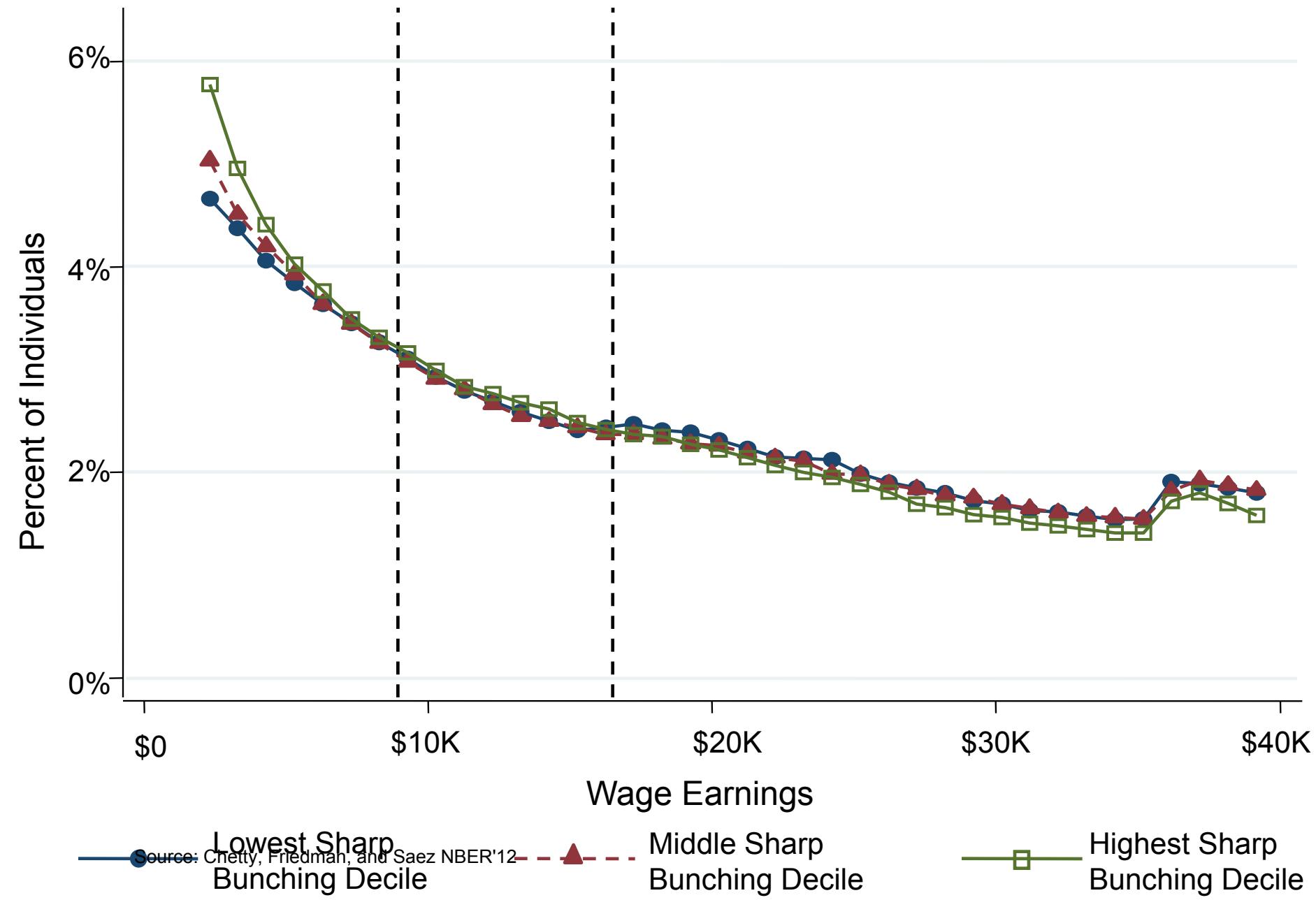


Source: Chetty, Friedman, and Saez NBER'12

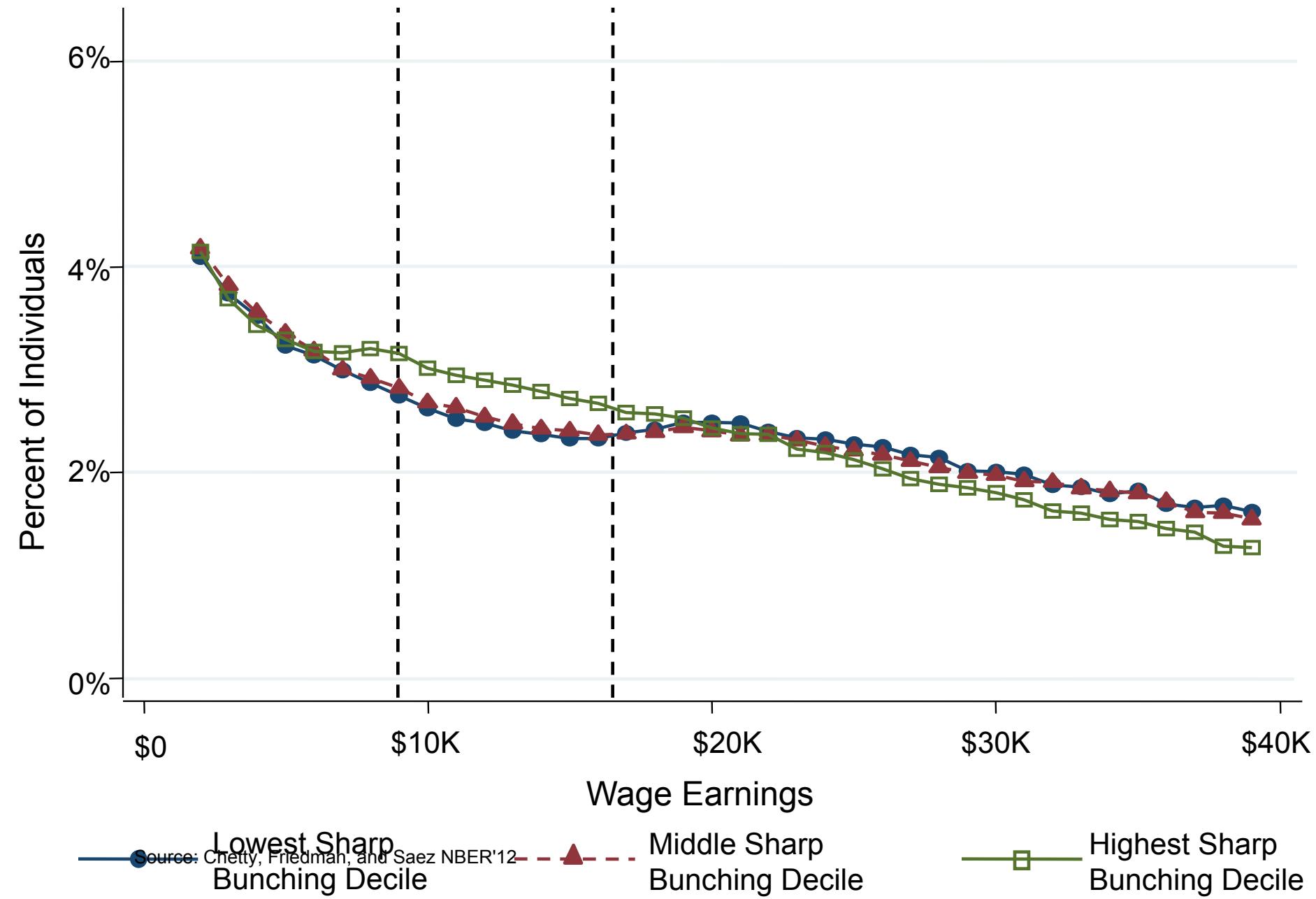
# Income Distribution For Single Wage Earners with One Child High vs. Low Bunching Areas



# Earnings Distribution in the Year Before First Child Birth for Wage Earners



# Earnings Distribution in the Year of First Child Birth for Wage Earners



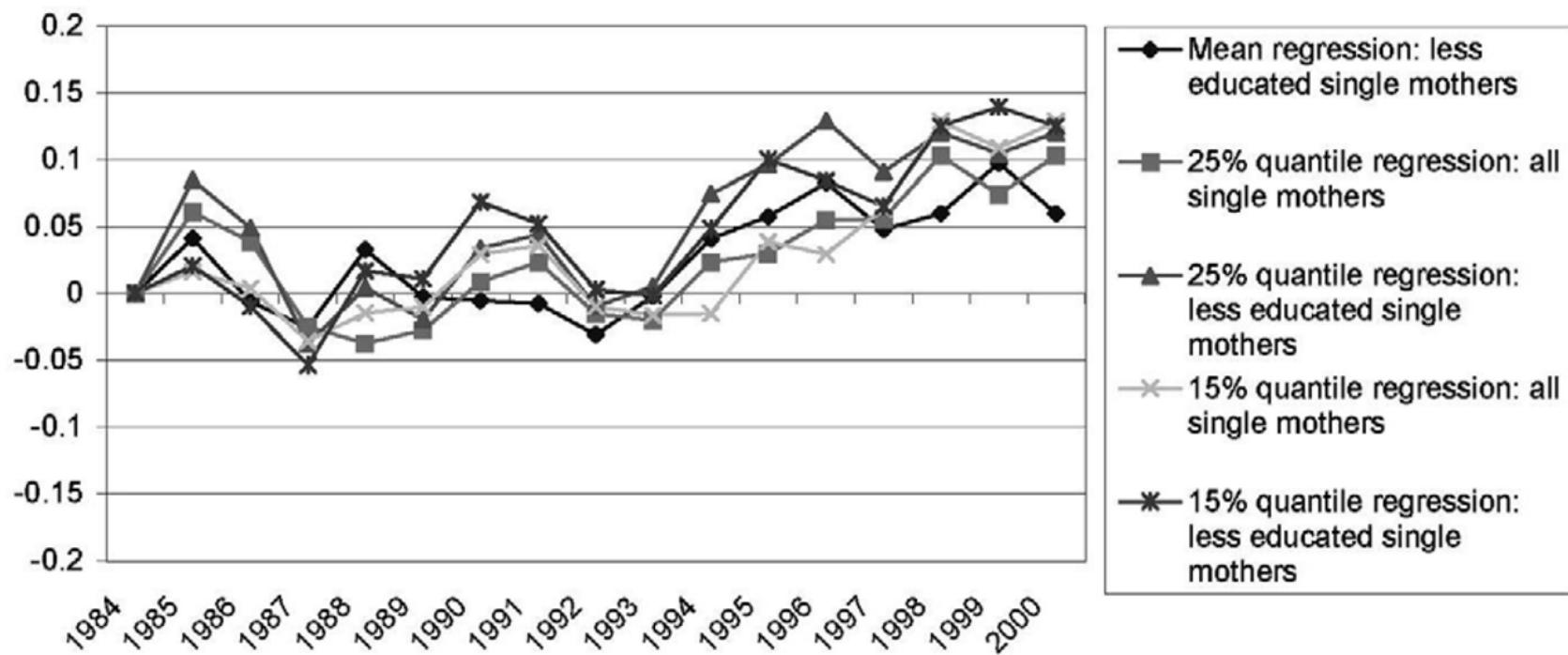


Fig. 2. Total consumption: single mothers, 1984–2000.

Source: Meyer and Sullivan (2004), p. 1407

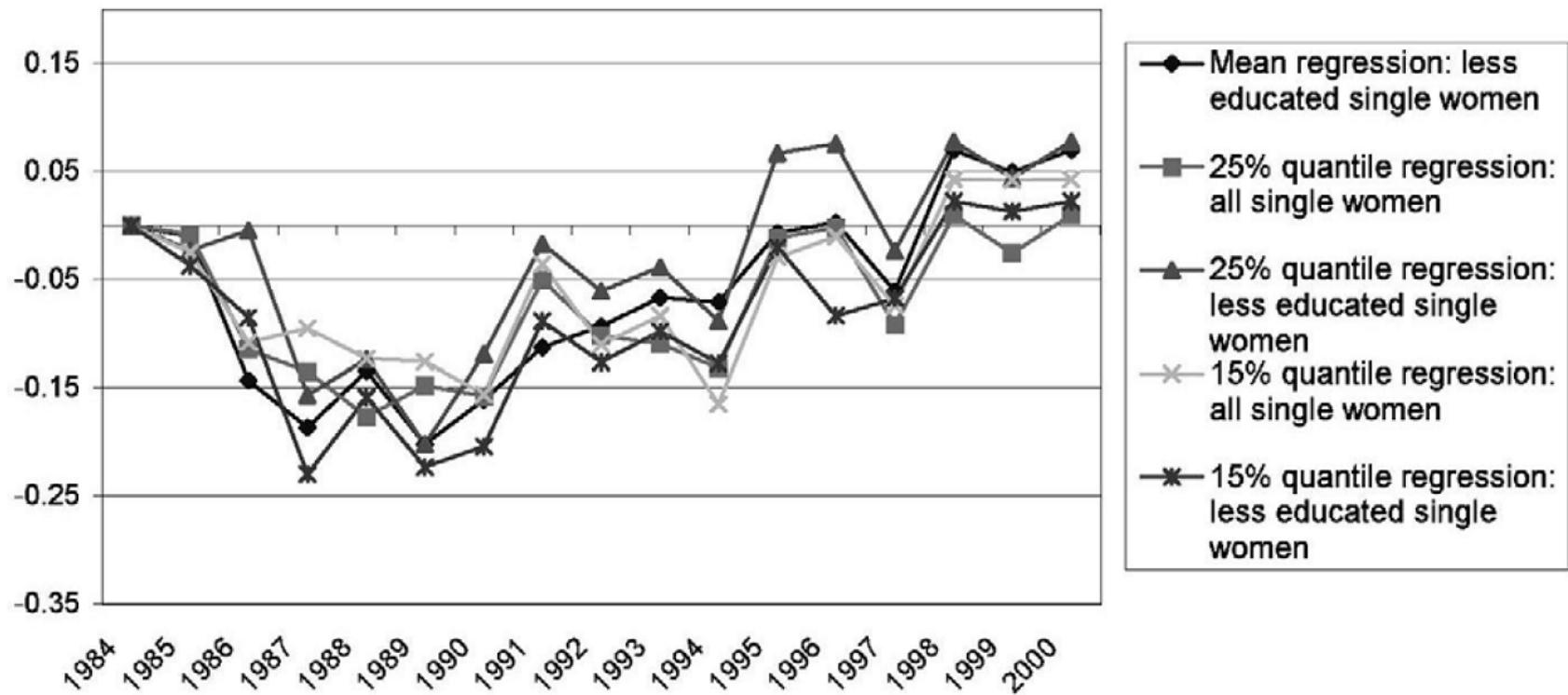
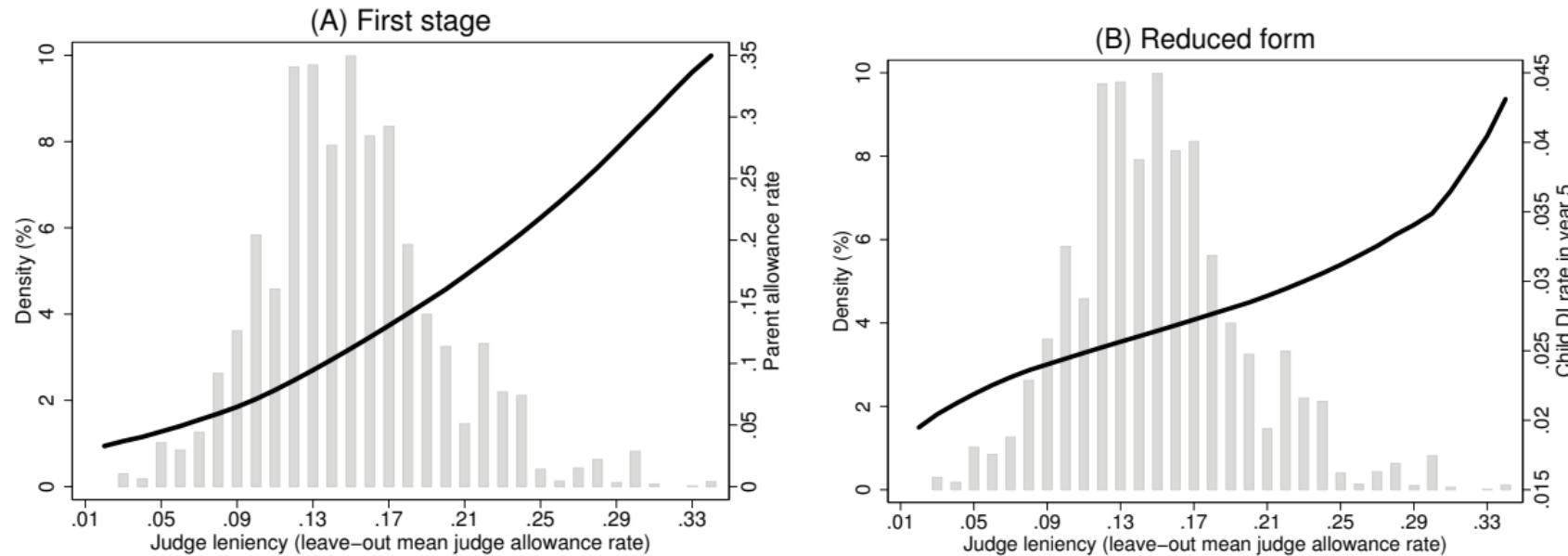


Fig. 3. Relative total consumption: single mothers vs. single women without children, 1984–2000.

Source: Meyer and Sullivan (2004), p. 1414

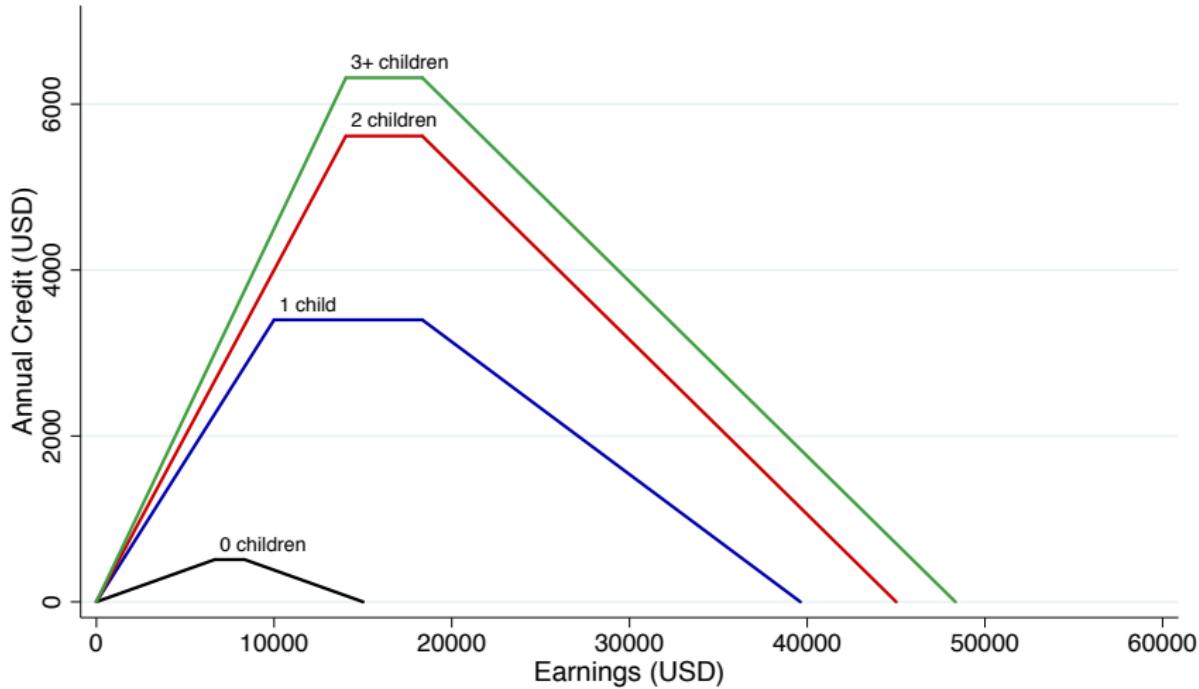
Figure 3: Effect of Judge Leniency on Parents (First Stage) and Children (Reduced Form).



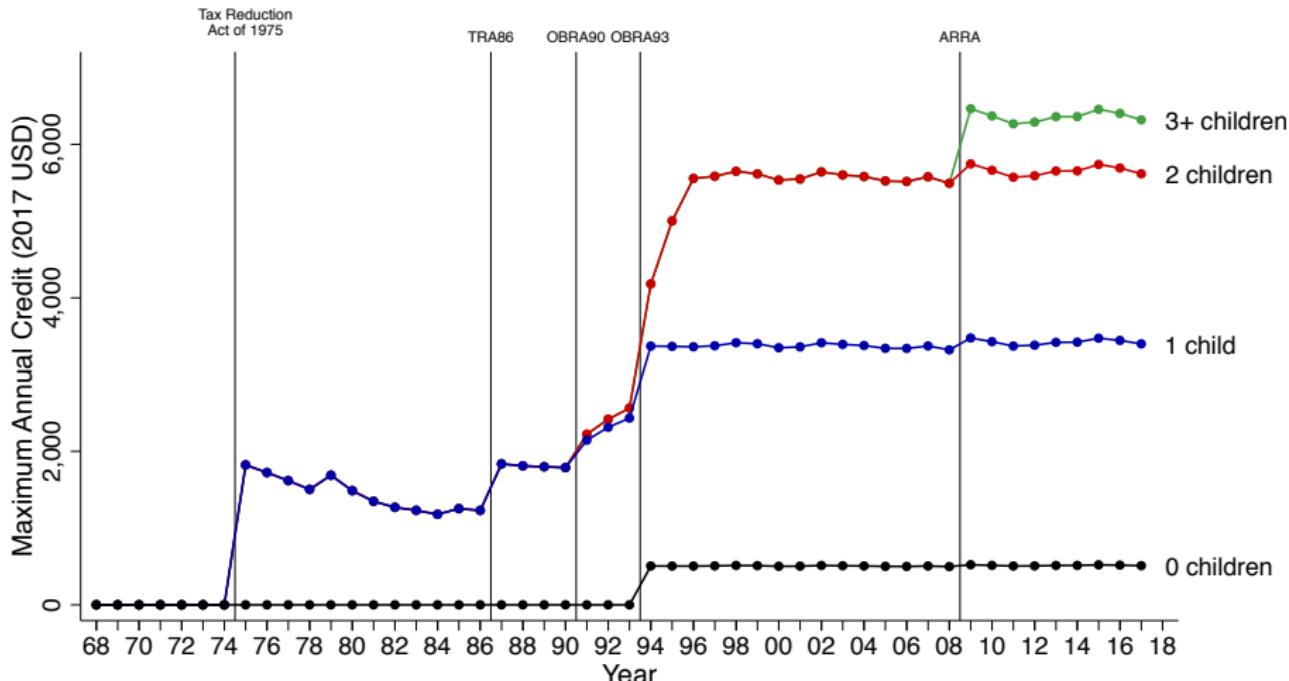
*Notes:* Baseline sample, consisting of parents who appeal an initially denied DI claim during the period 1989-2005 (see Section 3 for further details). There are 14,893 individual observations and 79 different judges. Panel (A): Solid line is a local linear regression of parental DI allowance on judge leniency. Panel (B): Solid line is a local linear regression of child DI receipt on their parent's judge leniency measure. All regressions include fully interacted year and department dummies. The histogram of judge leniency is shown in the background of both figures (top and bottom 0.5% excluded from the graph).

Source: Dahl, Kostol, Mogstad (2013)

# EITC Schedule in 2017



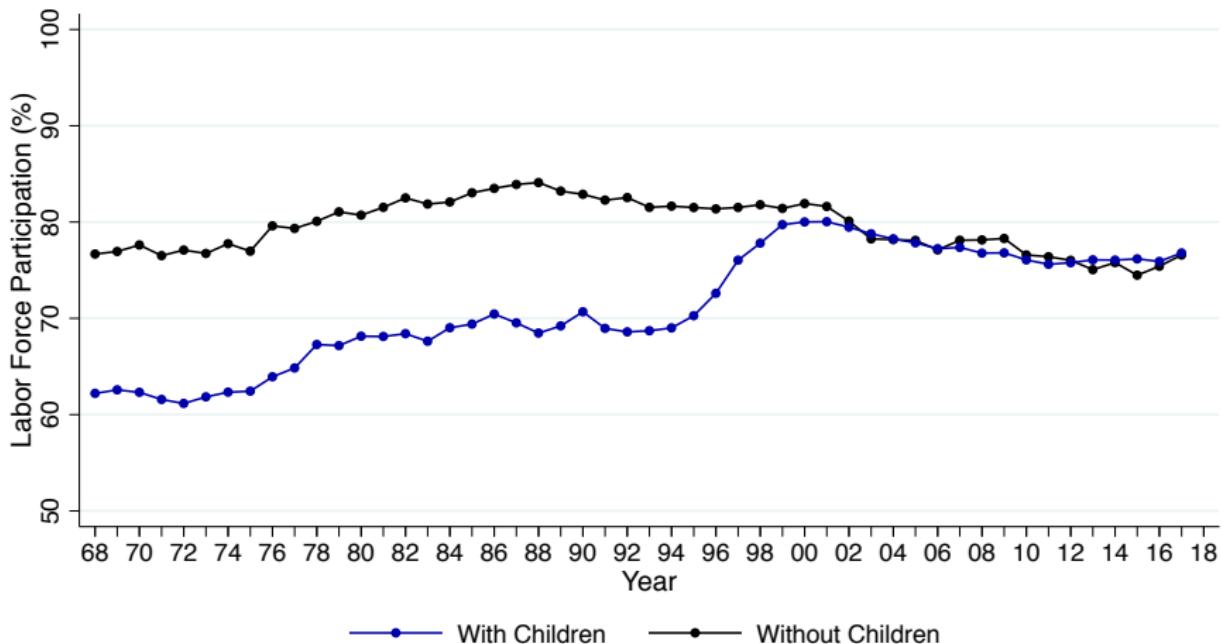
# EITC Maximum Credit Over Time



Source: Kleven (2018)

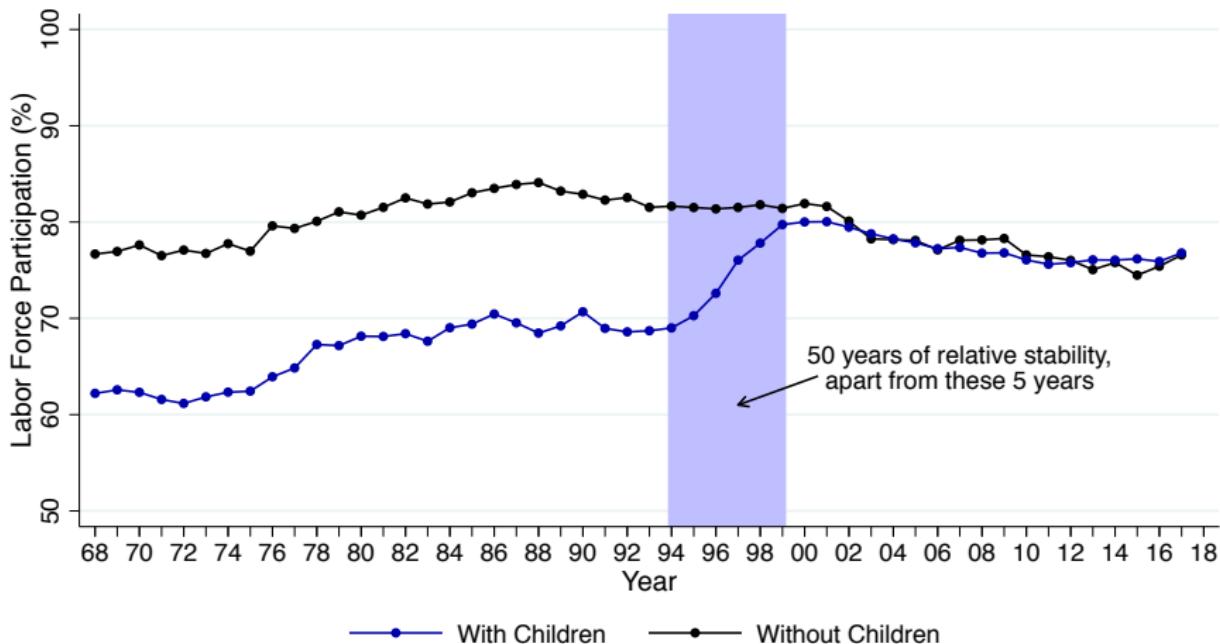
# Labor Force Participation of Single Women

## With and Without Children



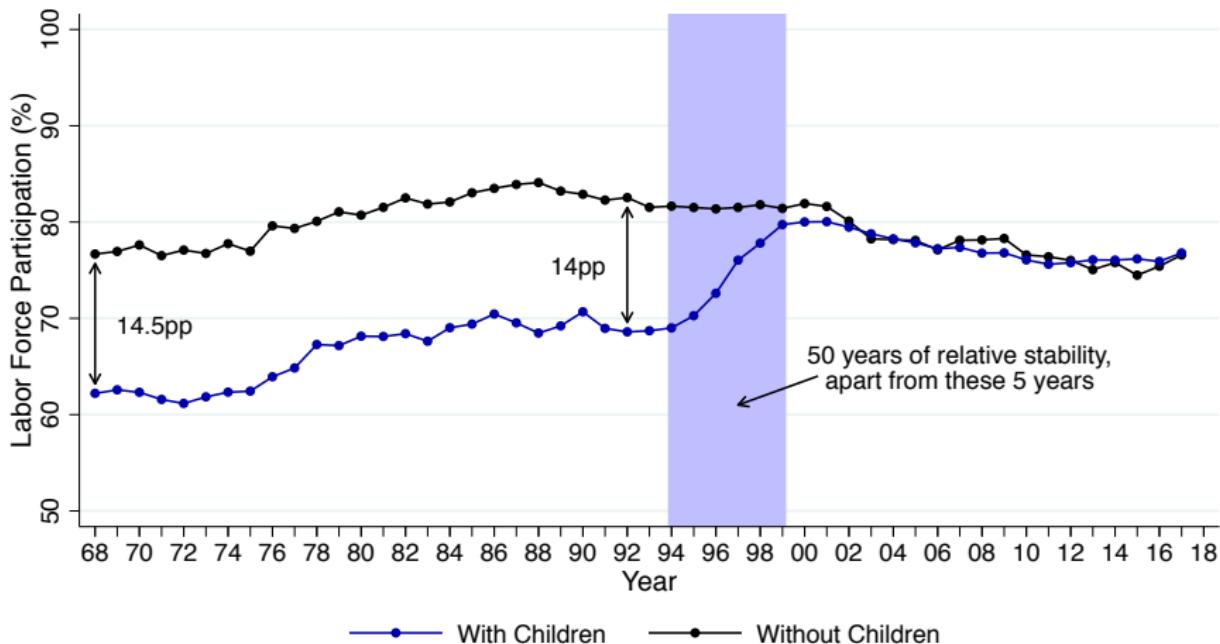
# Labor Force Participation of Single Women

## With and Without Children



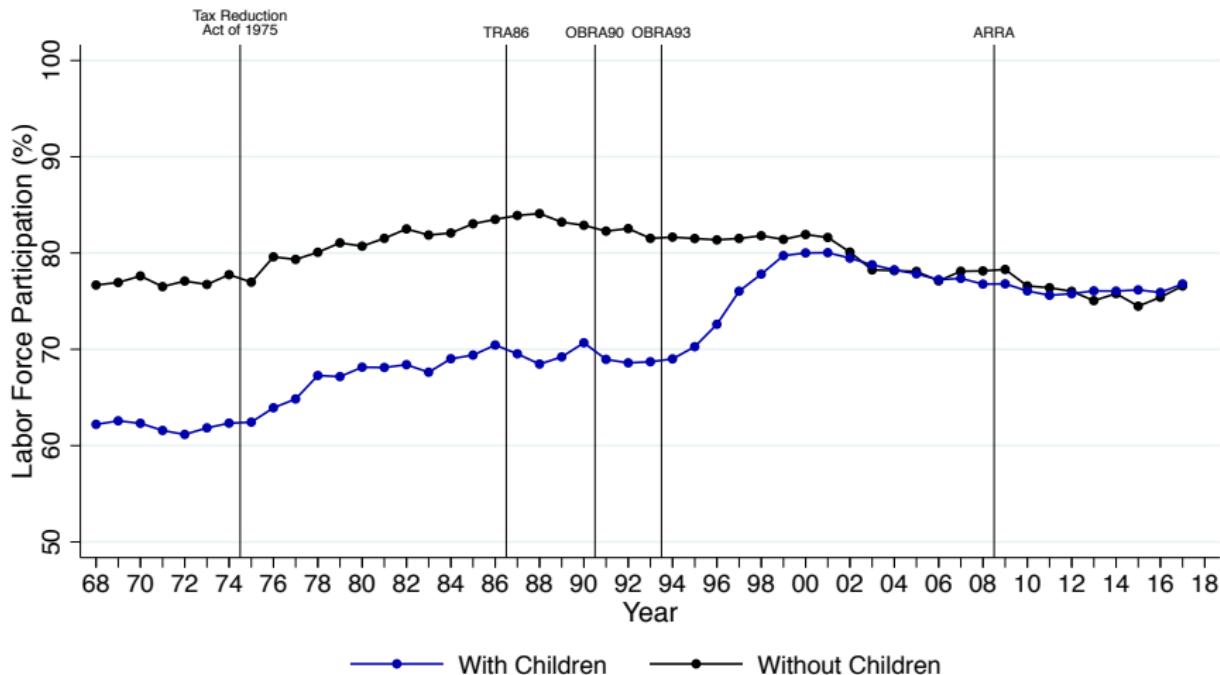
# Labor Force Participation of Single Women

## With and Without Children



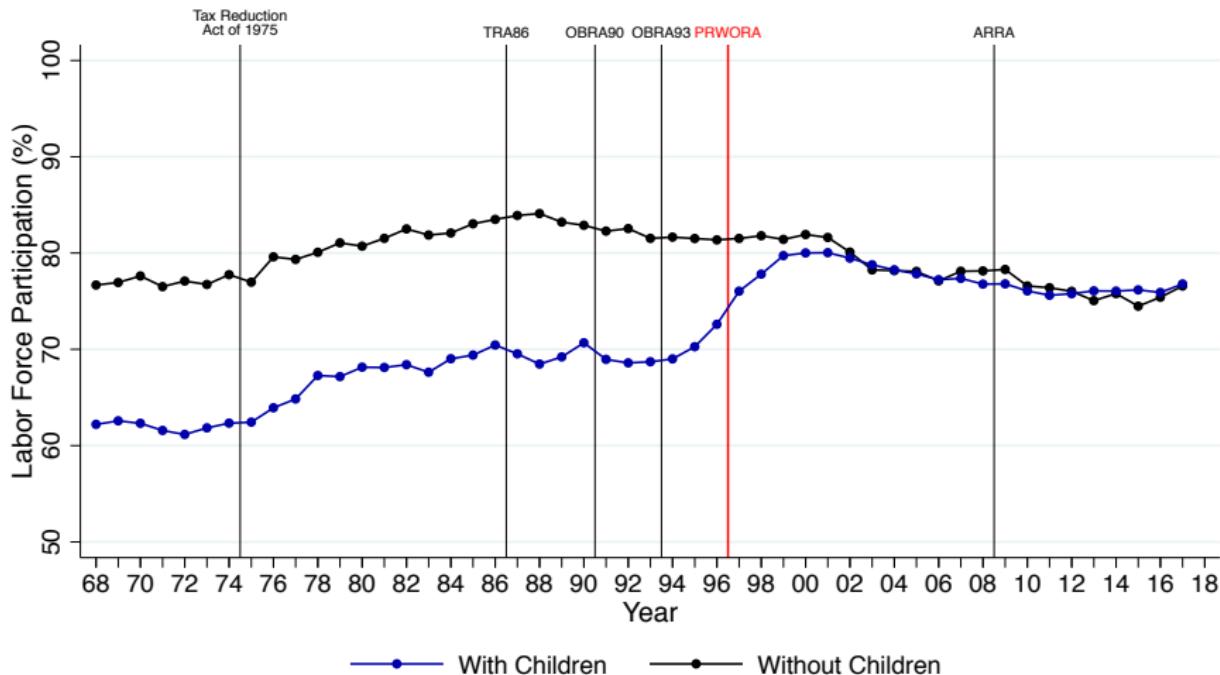
# Labor Force Participation of Single Women

## With and Without Children



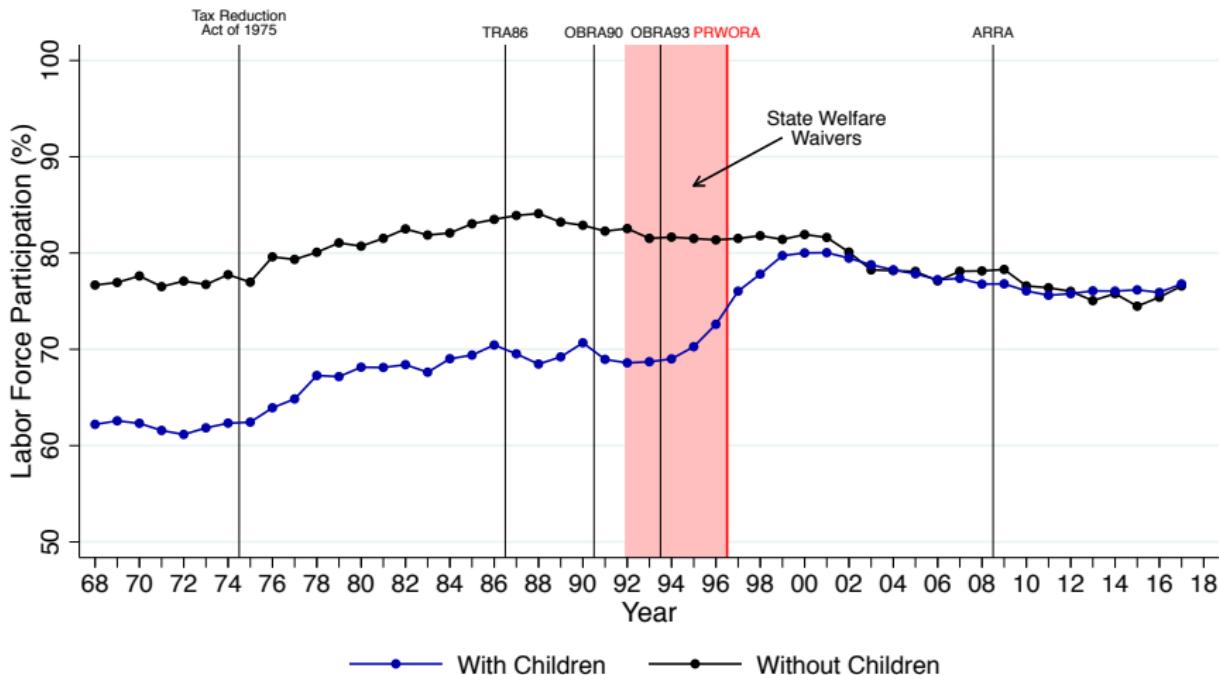
# Labor Force Participation of Single Women

## With and Without Children

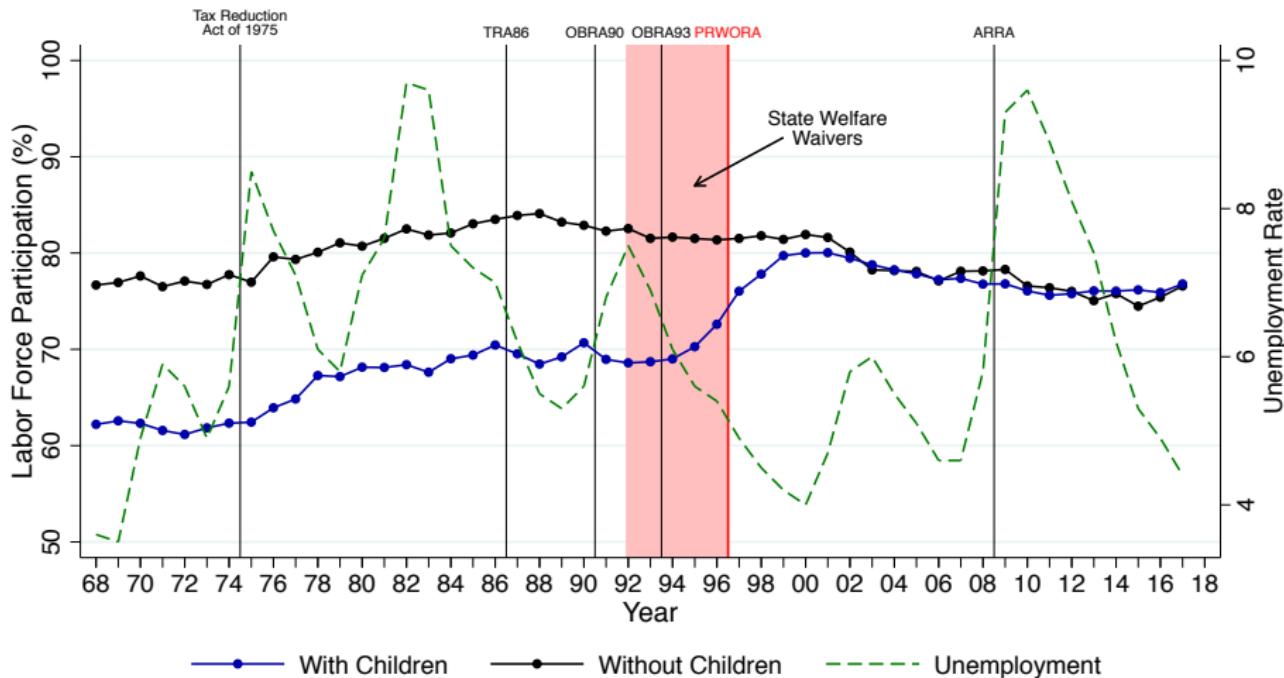


# Labor Force Participation of Single Women

## With and Without Children

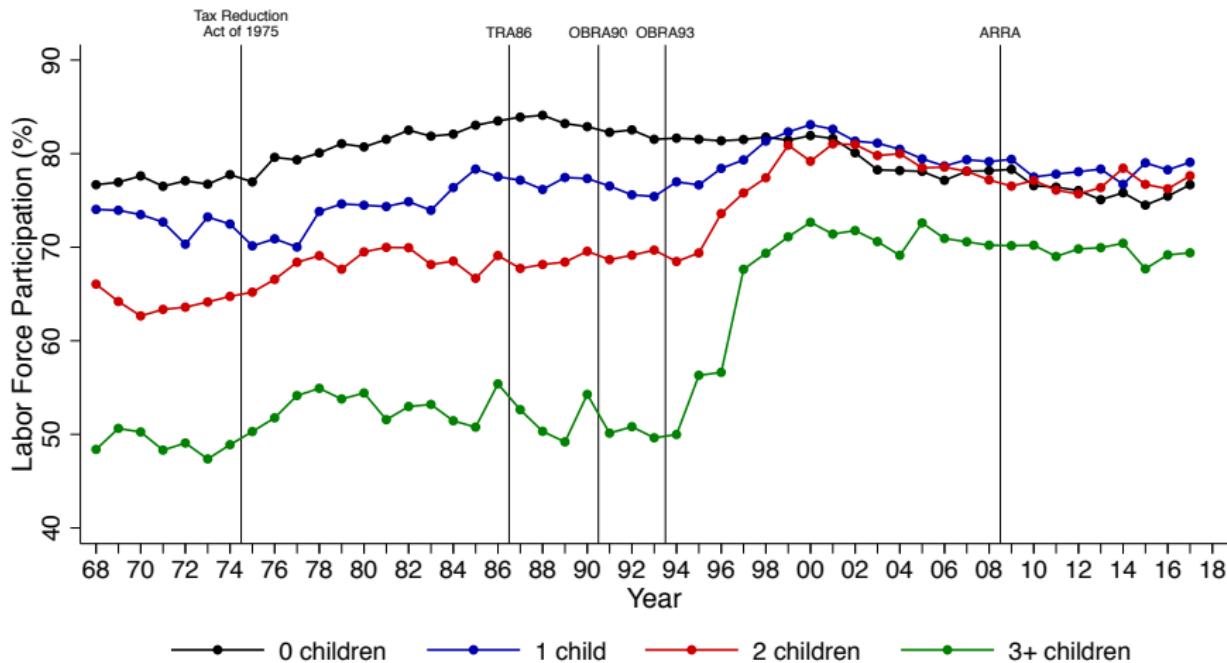


# Labor Force Participation of Single Women With and Without Children



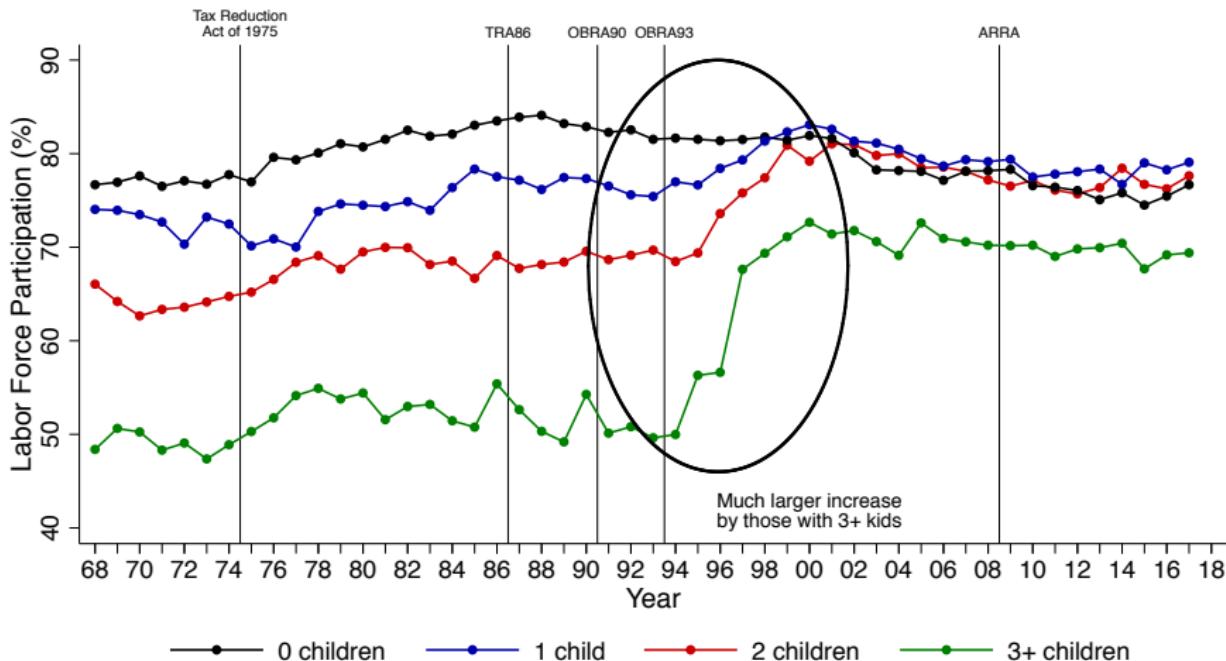
# Labor Force Participation of Single Women

## By Number of Children



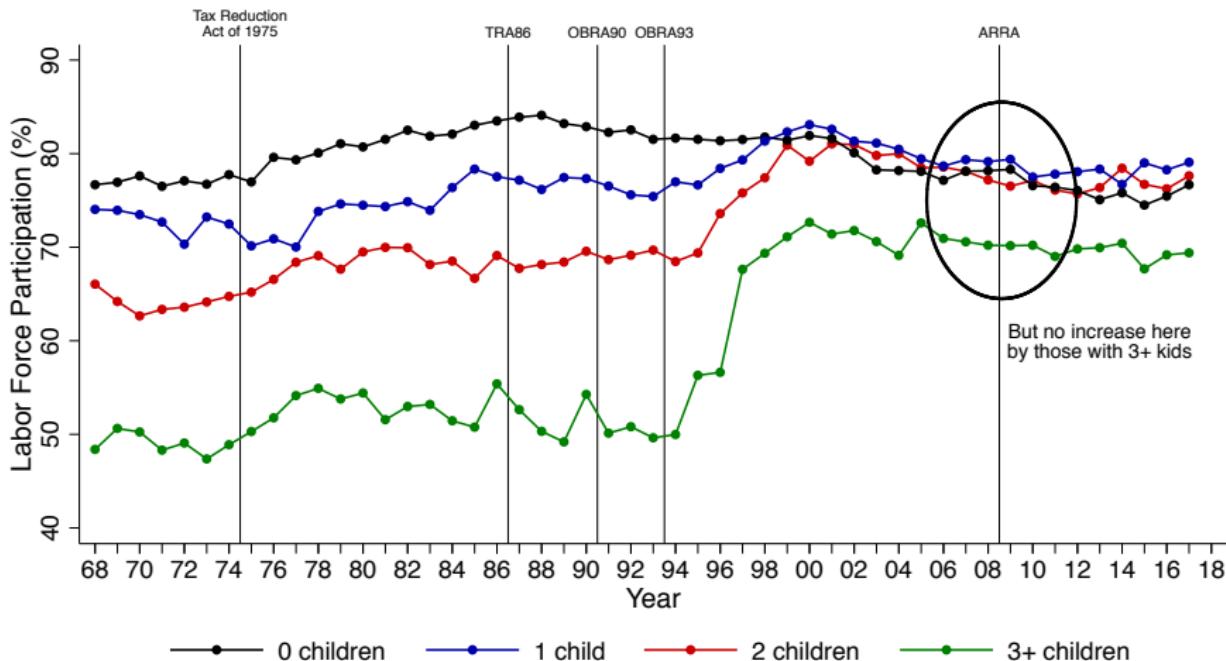
# Labor Force Participation of Single Women

## By Number of Children



# Labor Force Participation of Single Women

## By Number of Children



Source: Kleven et al. AEA-PP 2019

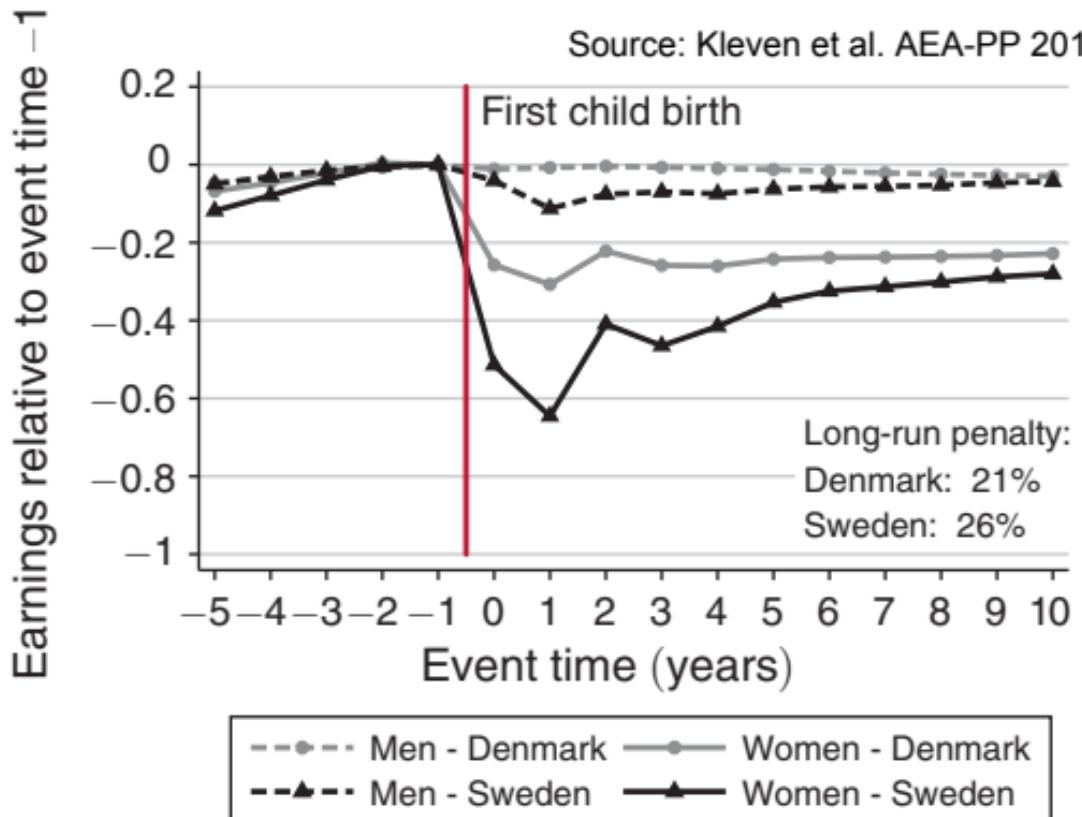


FIGURE 1. CHILD PENALTIES IN EARNINGS IN SCANDINAVIAN COUNTRIES

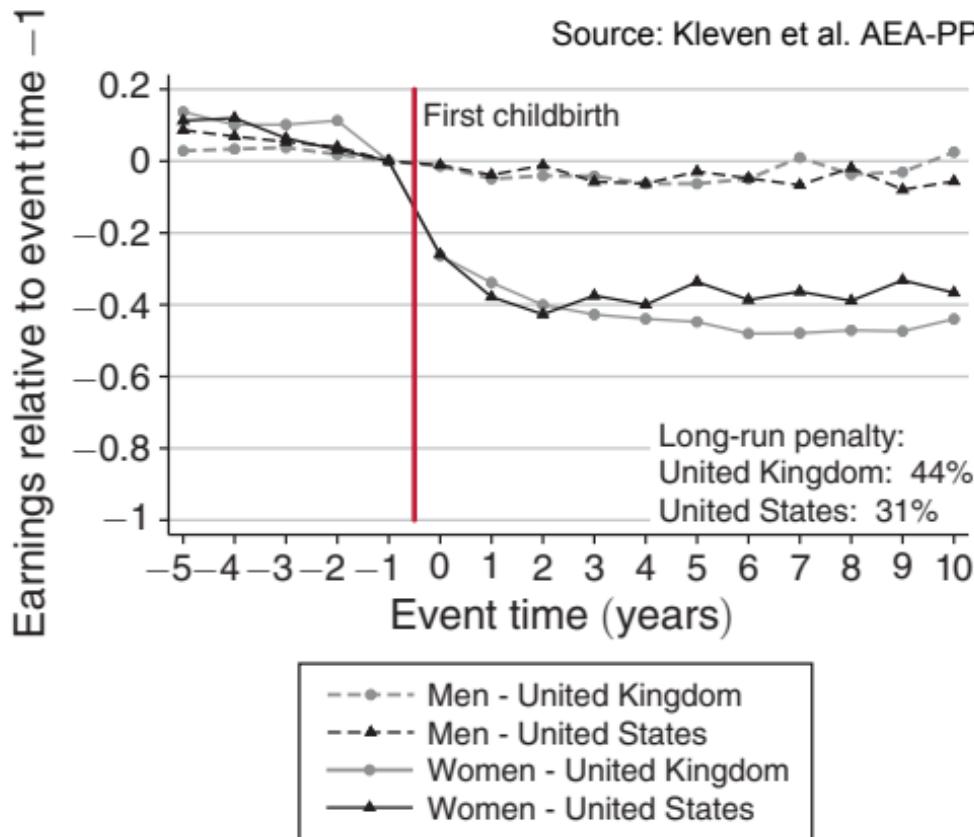


FIGURE 2. CHILD PENALTIES IN EARNINGS IN ENGLISH-SPEAKING COUNTRIES

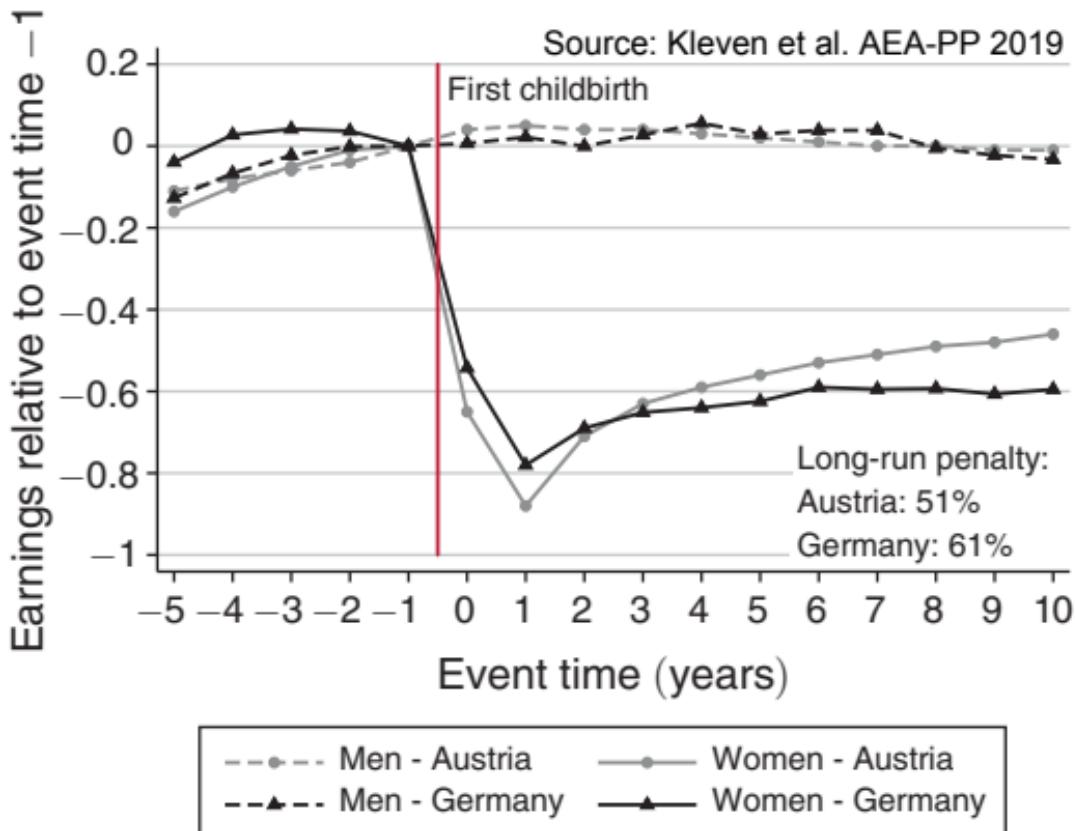
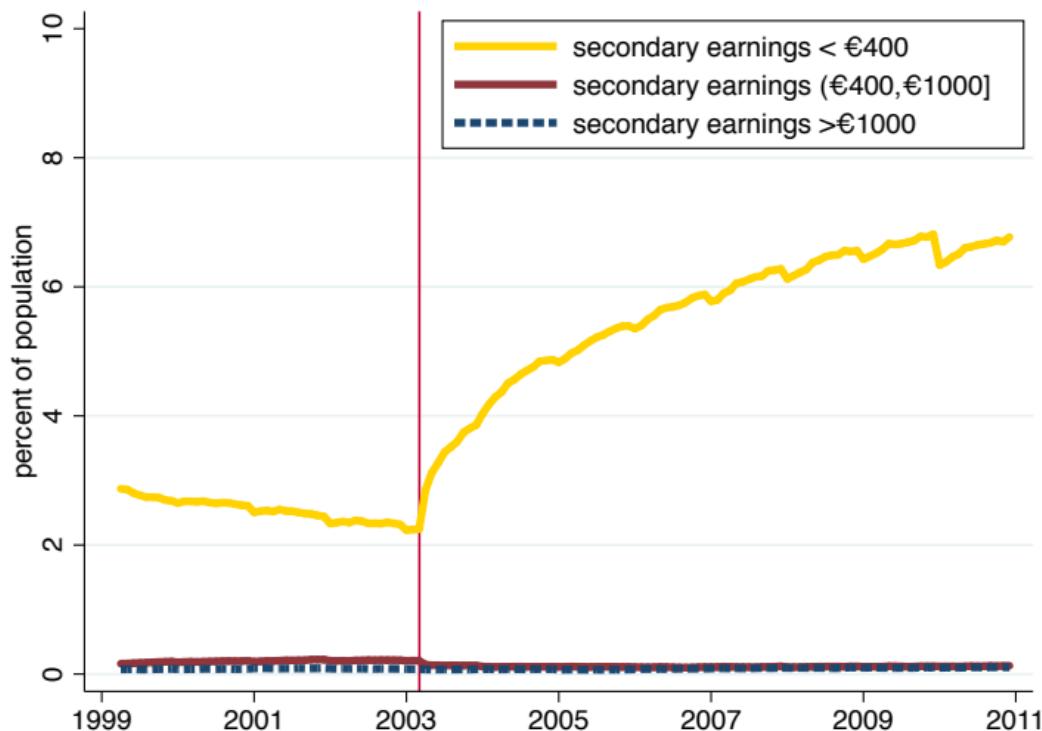


FIGURE 3. CHILD PENALTIES IN EARNINGS IN GERMAN-SPEAKING COUNTRIES

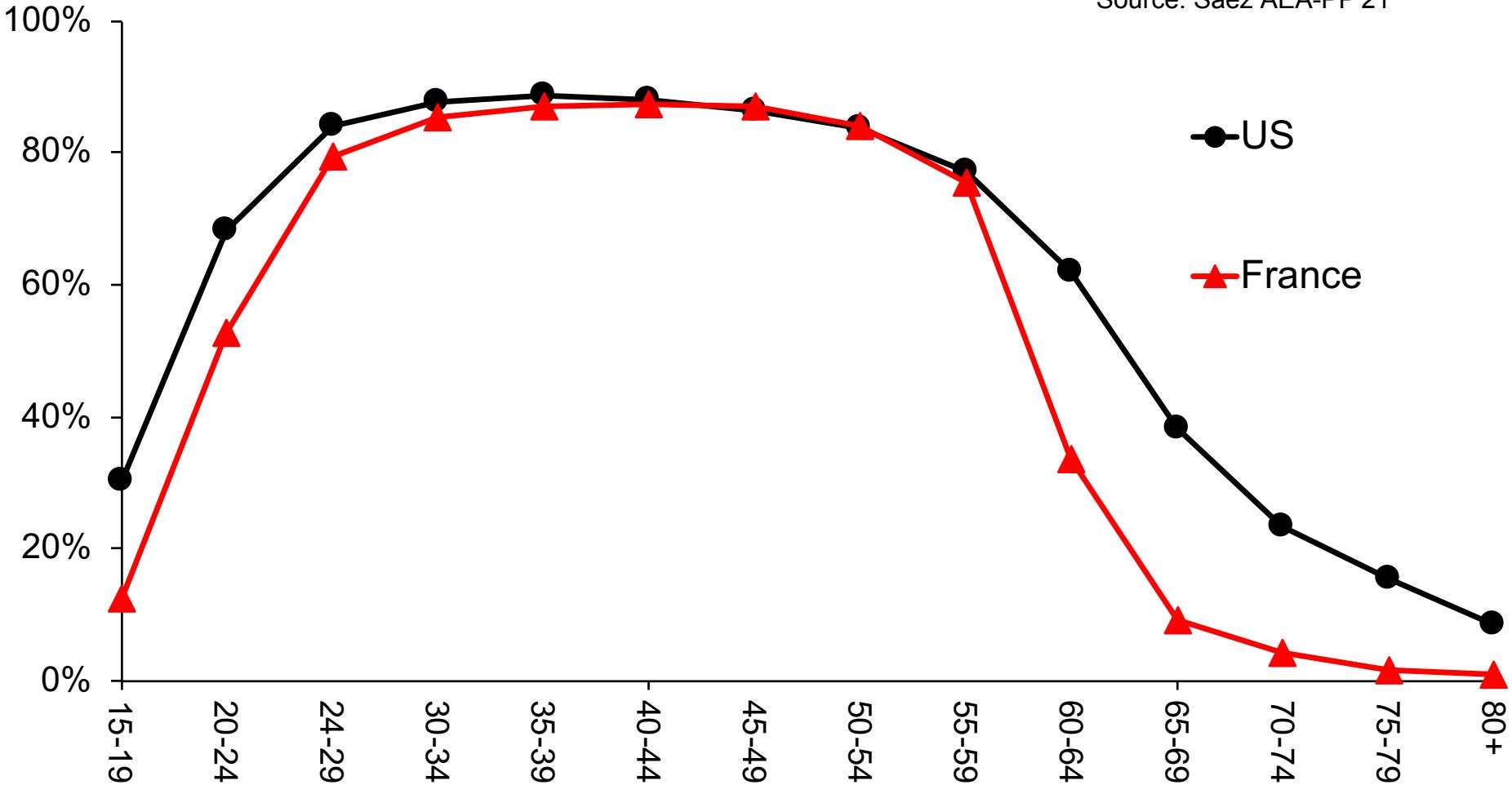
Figure 4: Secondary Job Holding Rates by Secondary Earnings Level  
Source: Tazhitdinova (2019)

(a) same axis



# Employment Rates of Men by Age, 2019

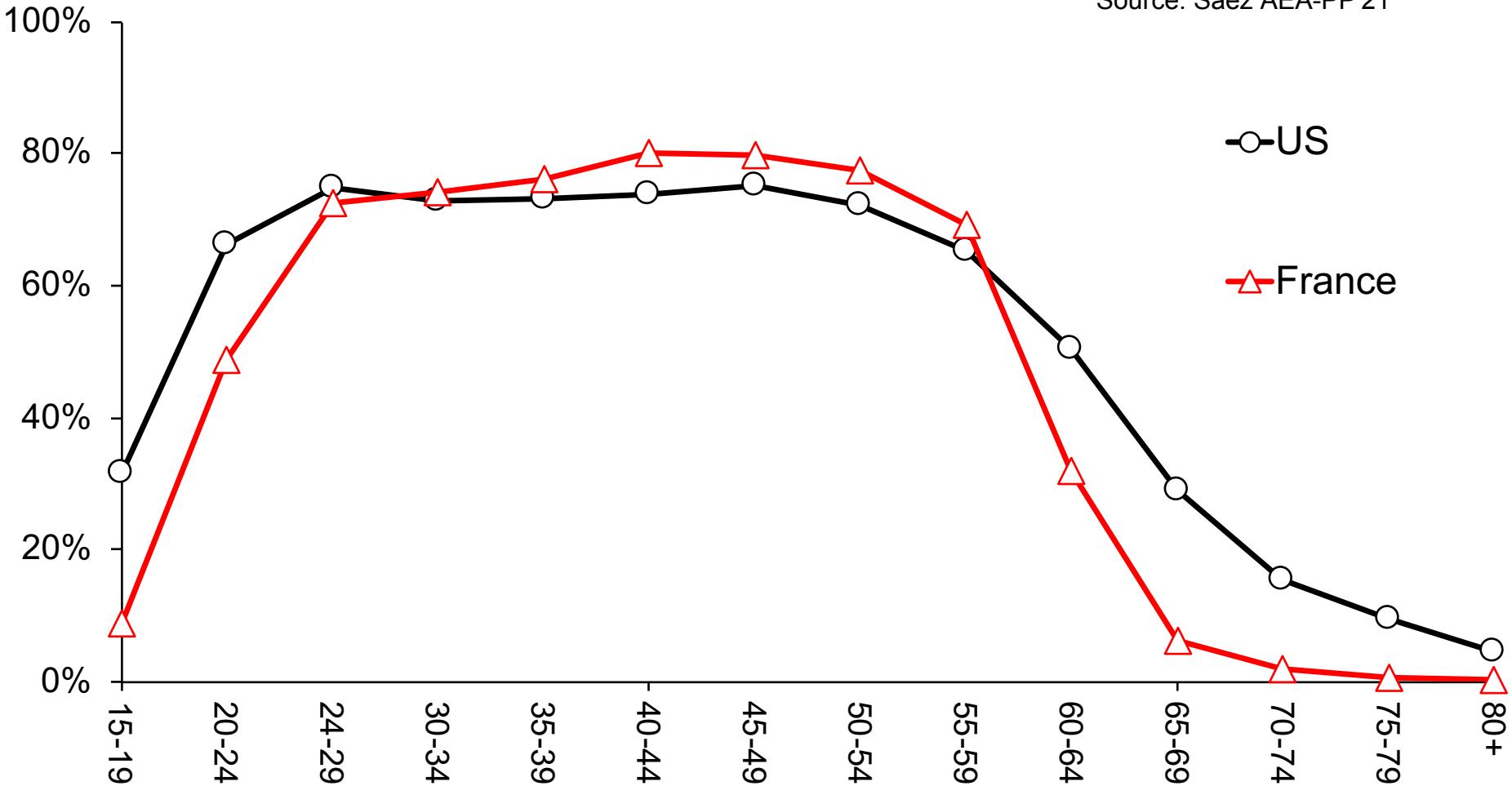
Source: Saez AEA-PP'21



Source: OECD database online. Employment to population ratios.

# Employment Rates of Women by Age, 2019

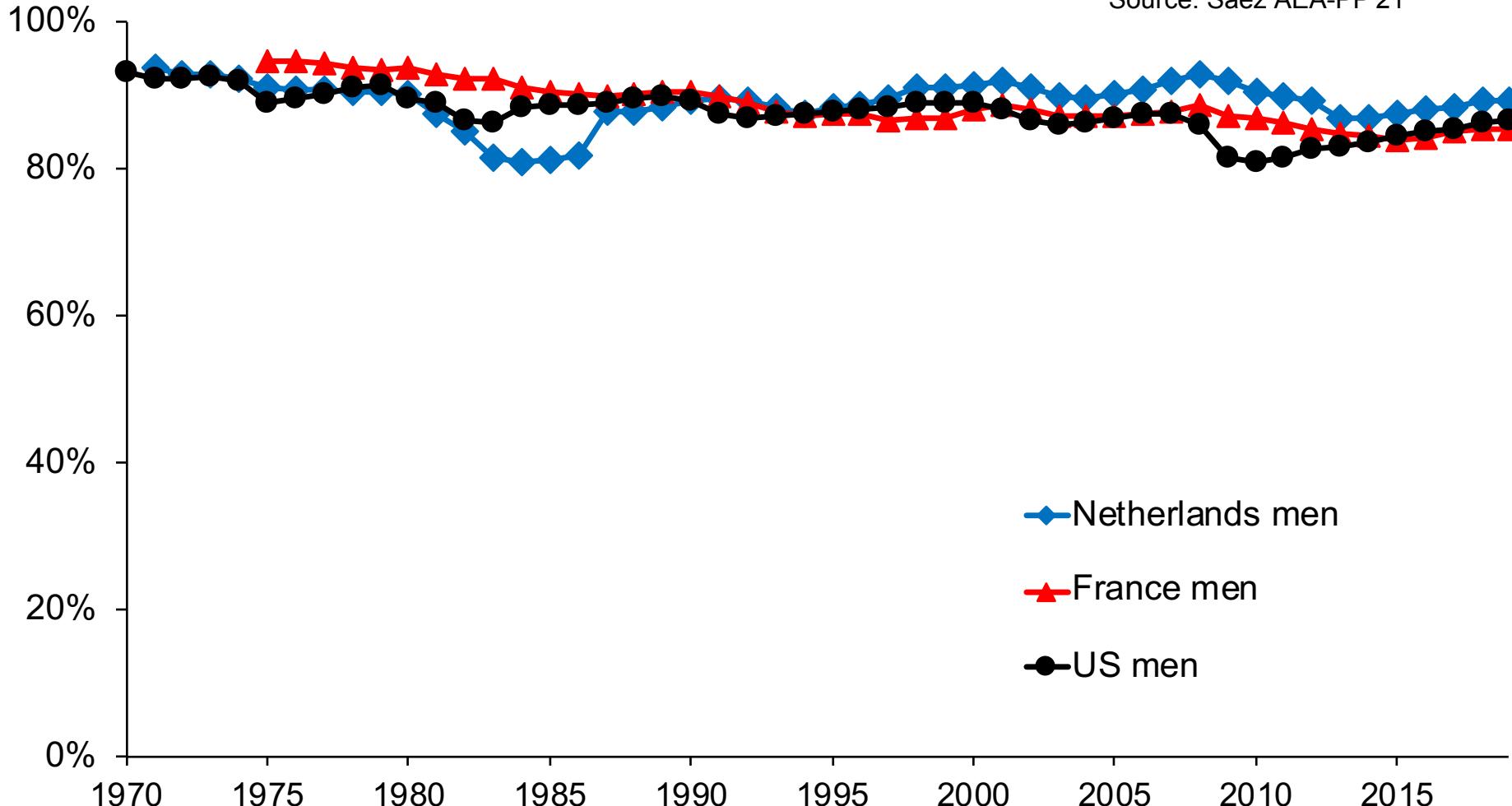
Source: Saez AEA-PP'21



Source: OECD database online. Employment to population ratios.

# Employment Rates of Men and Women, aged 25-54

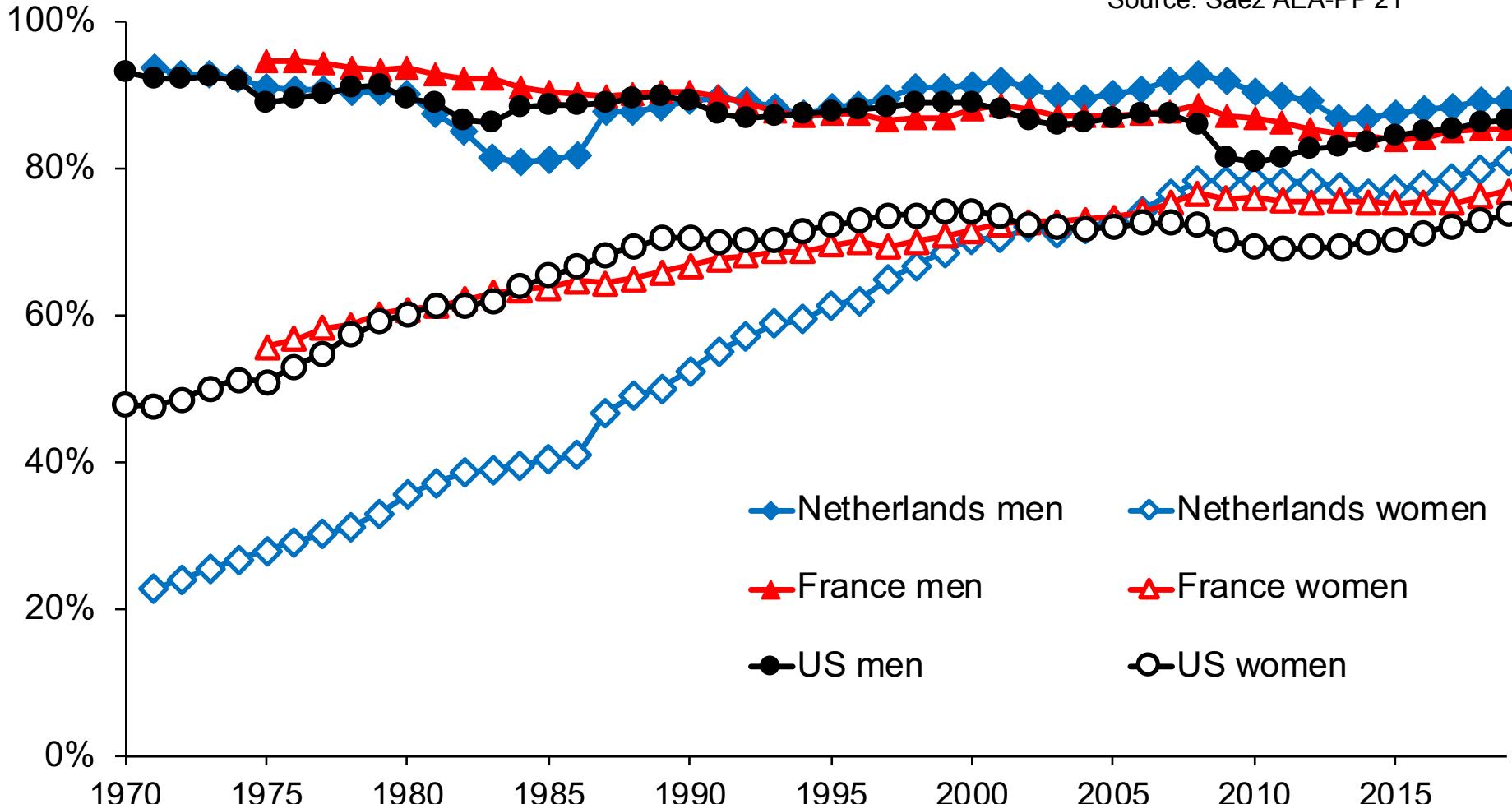
Source: Saez AEA-PP'21



Source: OECD database online.

# Employment Rates of Men and Women, aged 25-54

Source: Saez AEA-PP'21



Source: OECD database online.

# US female labor force participation, age 16-64

Source: Saez AEA-PP'21



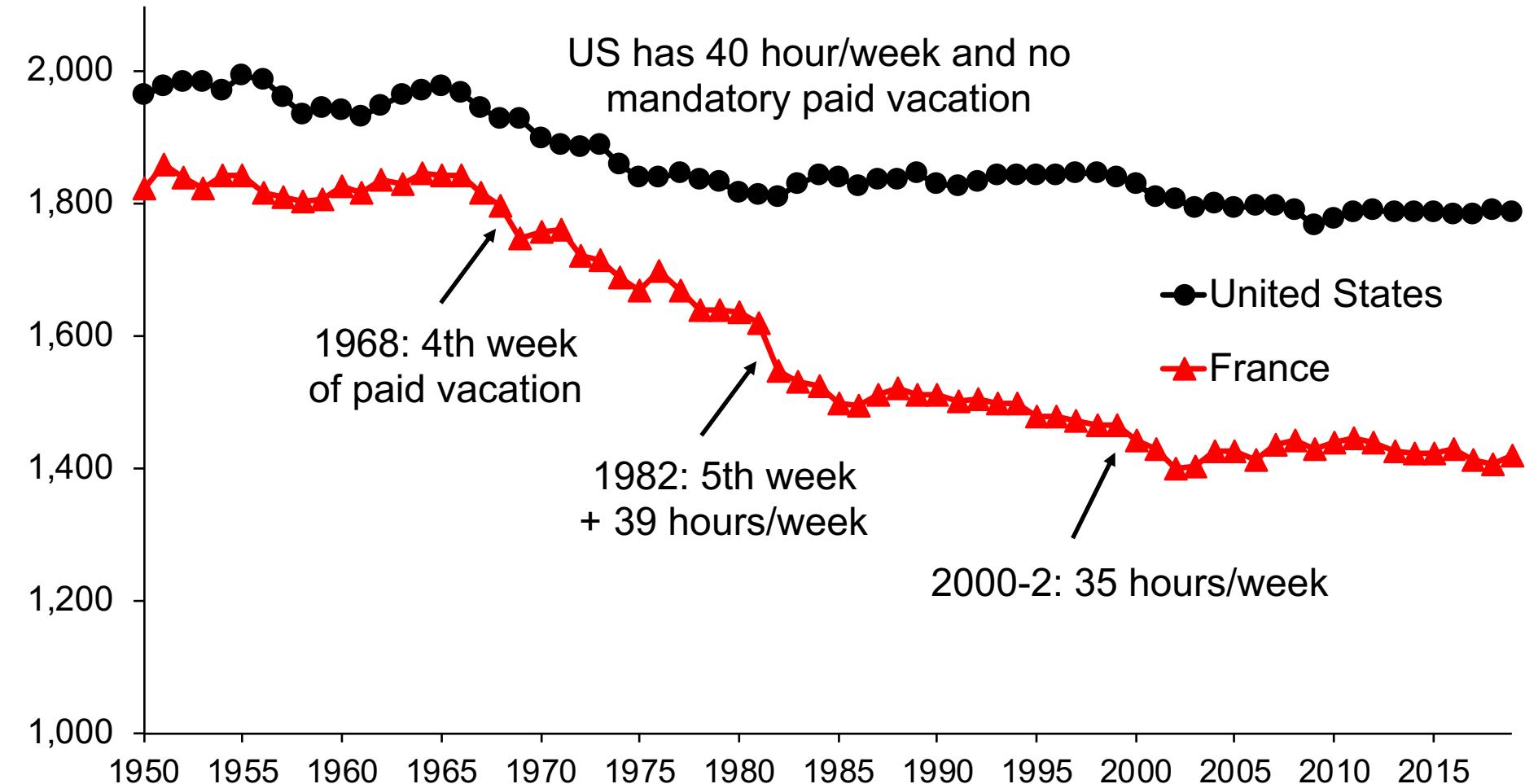
25% increase in  
1943-1945 during  
WW2 planned  
economy



Source: Historical Statistics of the United States (Current Population Reports).

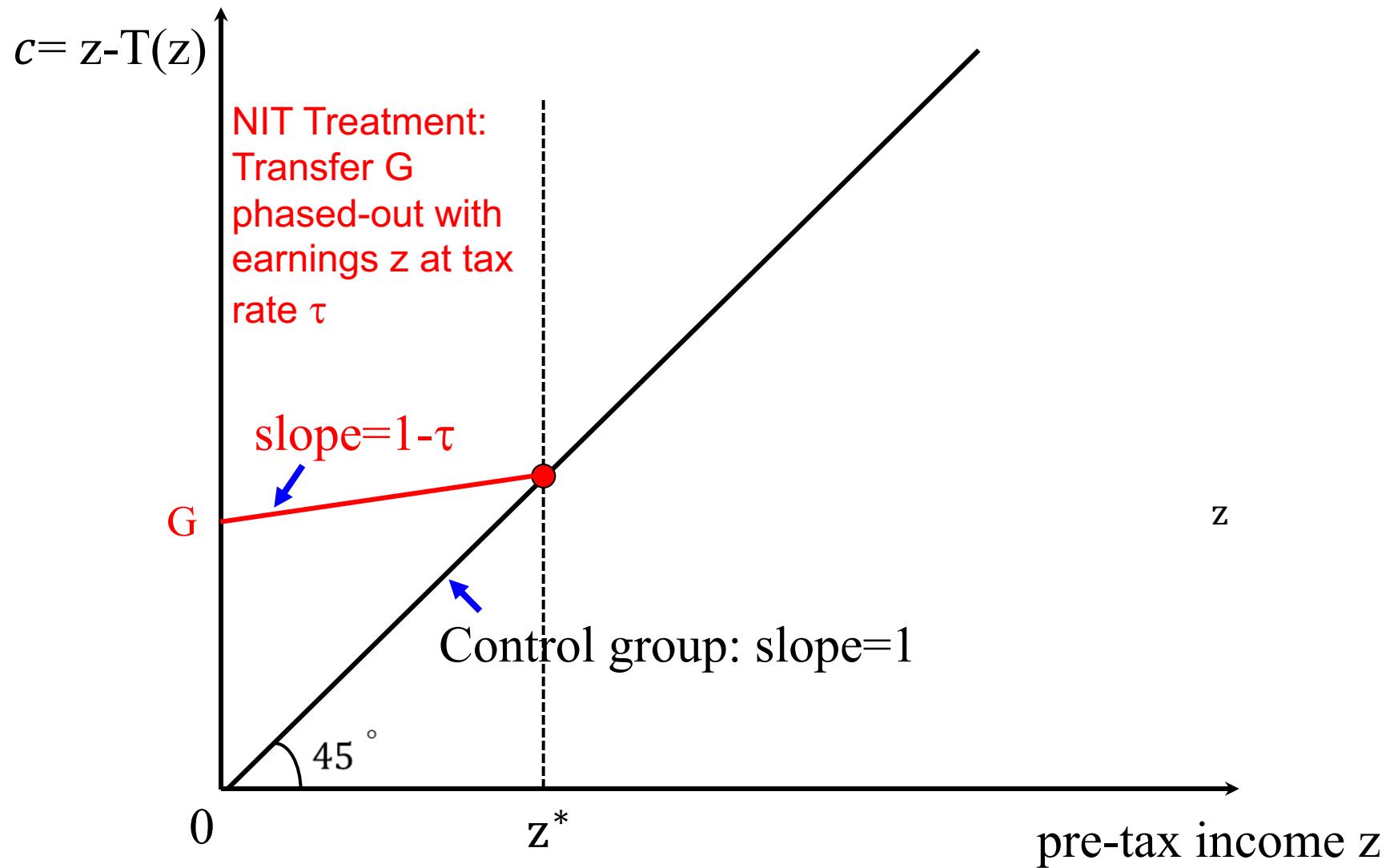
# Average Annual Hours of Work of Employees

Source: Saez AEA-PP'21

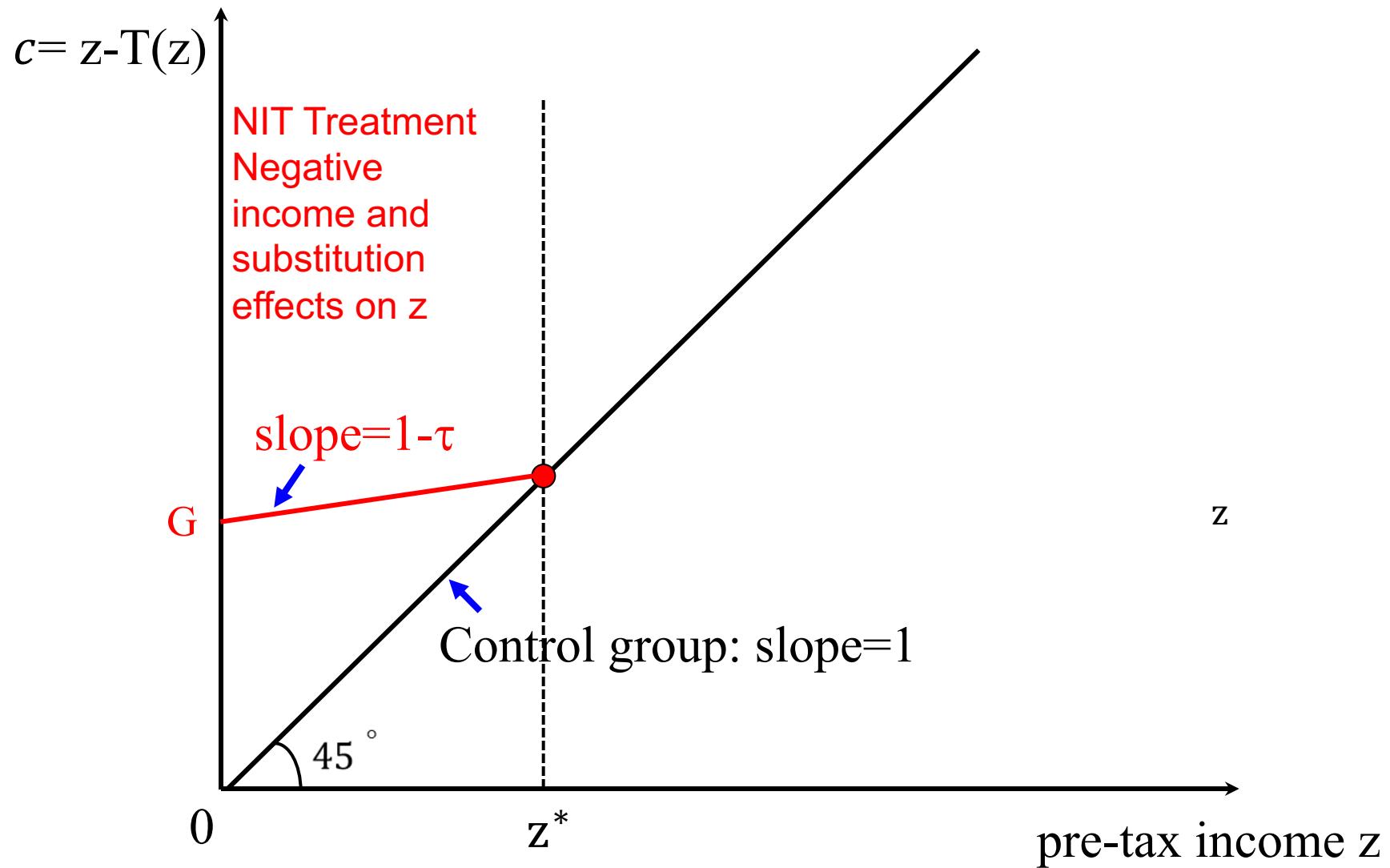


Source: OECD database online. Includes all ages, genders, and part-time, full-time, overtime.

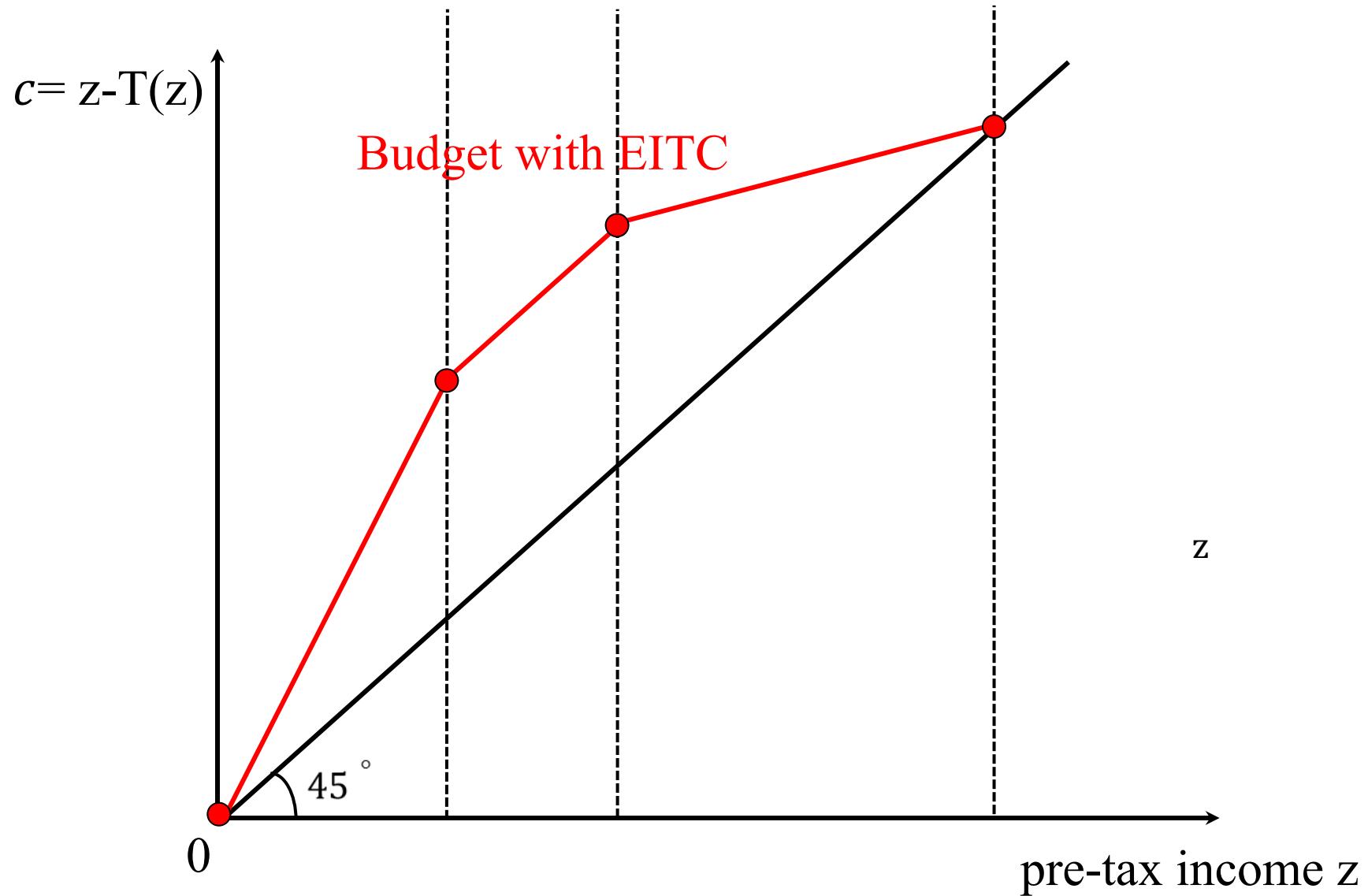
# Negative Income Tax Experiment



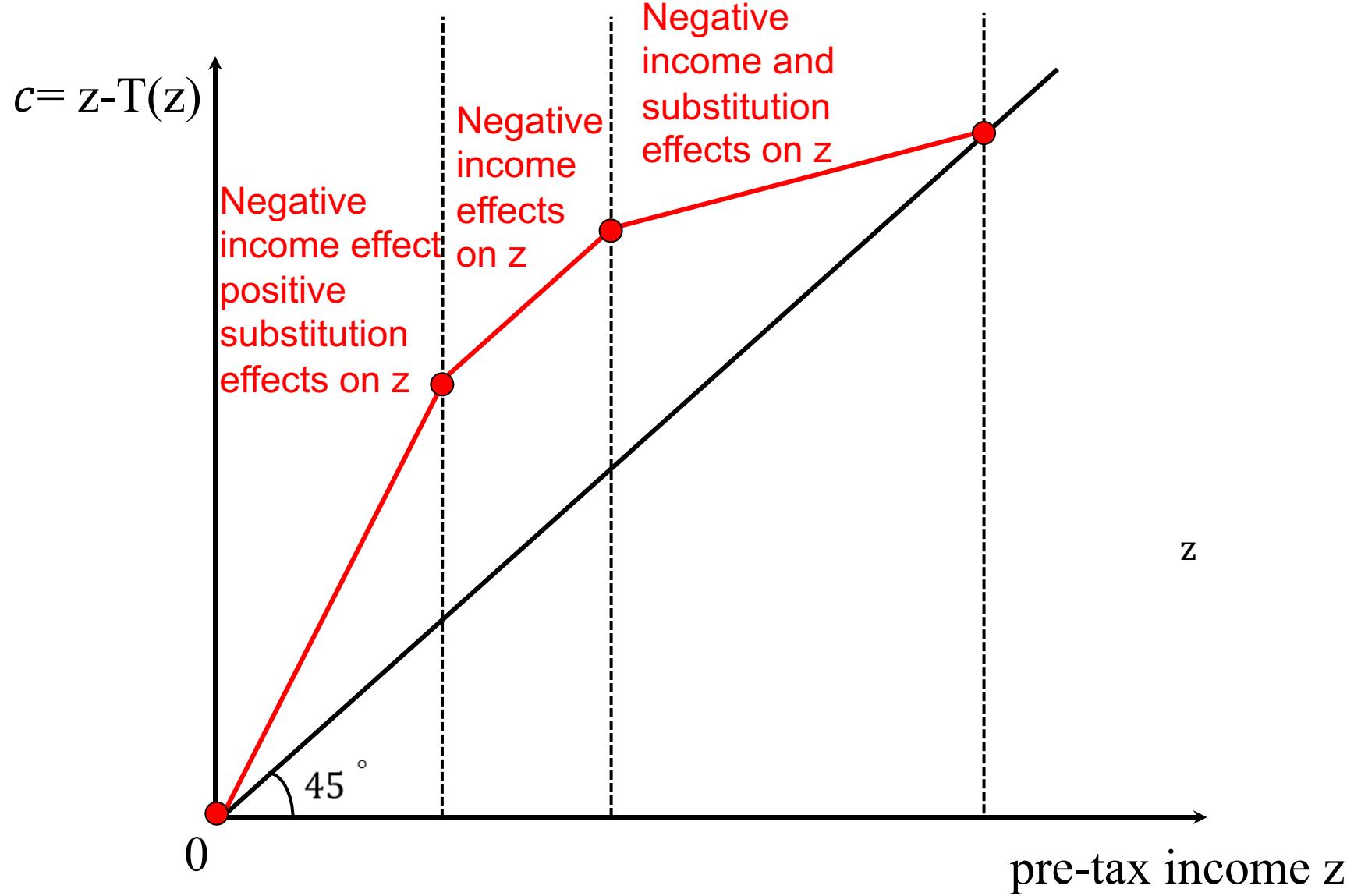
# Negative Income Tax Experiment



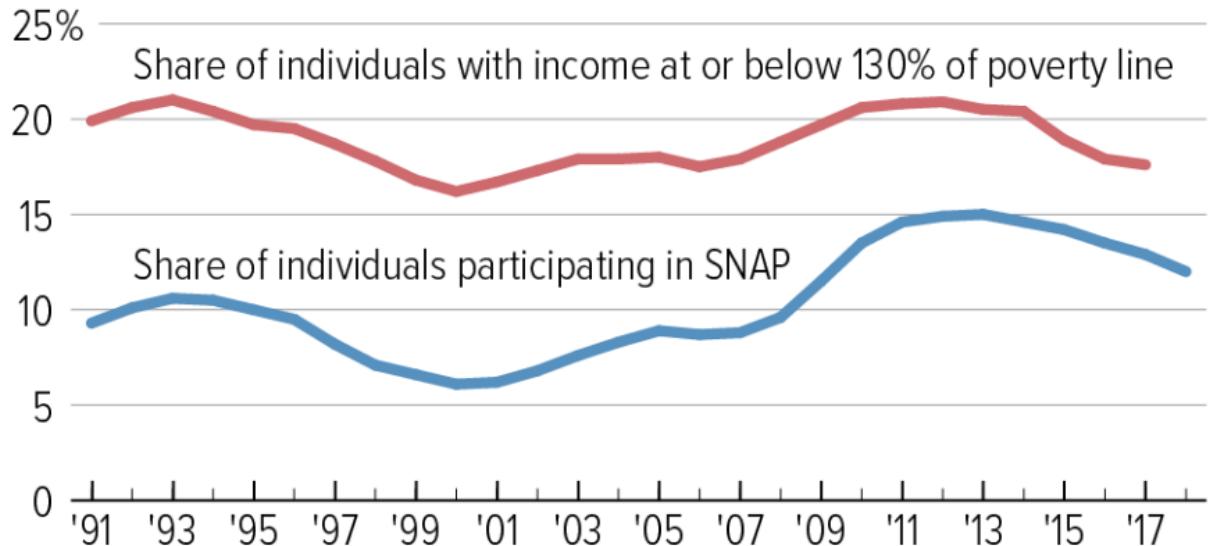
# EITC and intensive labor supply



# EITC and intensive labor supply



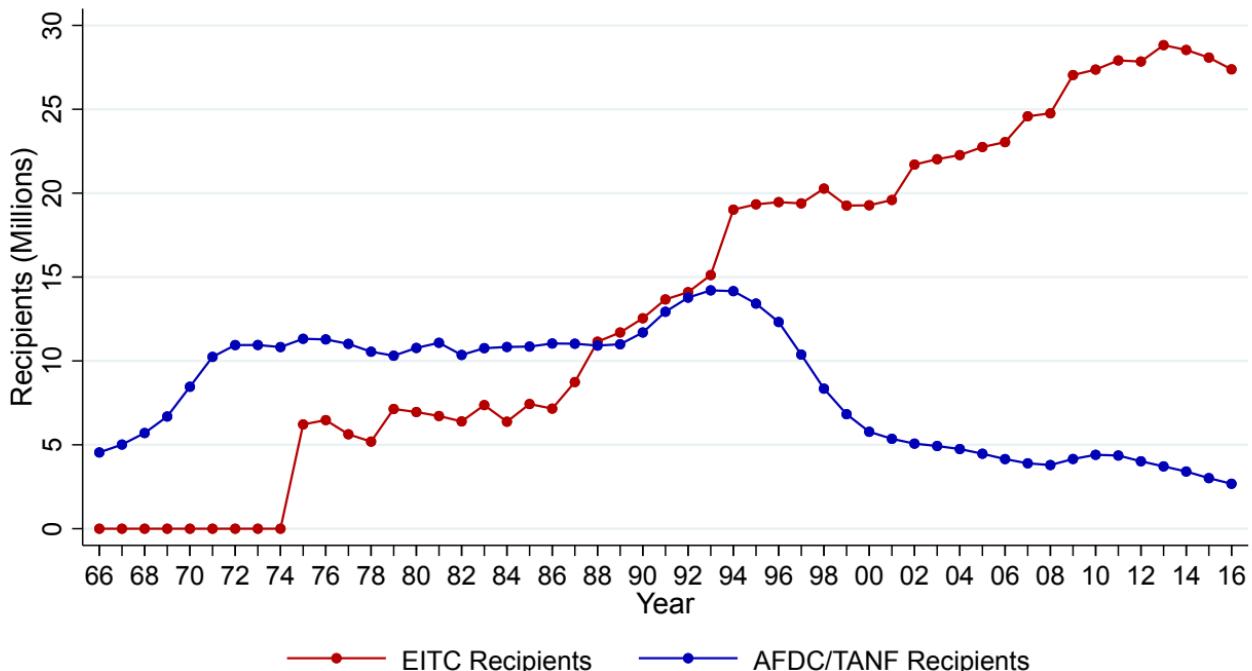
## **SNAP Tracks Changes in Share of Population That Is Poor or Near-Poor**



Note: Poverty estimates are annual estimates. SNAP shares of resident population are calendar year averages.

Sources: U.S. Census Bureau, U.S. Department of Agriculture

**FIGURE 1: LONG-RUN EVOLUTION OF EITC AND CASH WELFARE**



Source: Internal Revenue Service (EITC) and Department of Health and Human Services (AFDC/TANF).

Notes: The red series show the annual number of federal EITC recipients between 1966-2016. The blue series show the average monthly number of Aid to Families with Dependent Children (AFDC) recipients between 1966-1996, and the average monthly number of Temporary Assistance for Needy Families (TANF) recipients between 1997-2016.