The More Things Change, the More They Stay the Same: The Safety Net, Living Arrangements, and Poverty in the Great Recession

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The Labor Market in the Aftermath of the Great Recession
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Our paper

- We examine the relationship between the Great Recession and poverty and explore the mediating effects of the private and social safety net
- To put these results in perspective we take a historical approach, relying on data (and cycles) back to 1980
- We test whether the patterns that we see in the Great Recession are what we would expect given the historical experience
- We provide suggestive evidence on the possible role of the safety net in the weak expansion out of the Great Recession

Overview of our approach

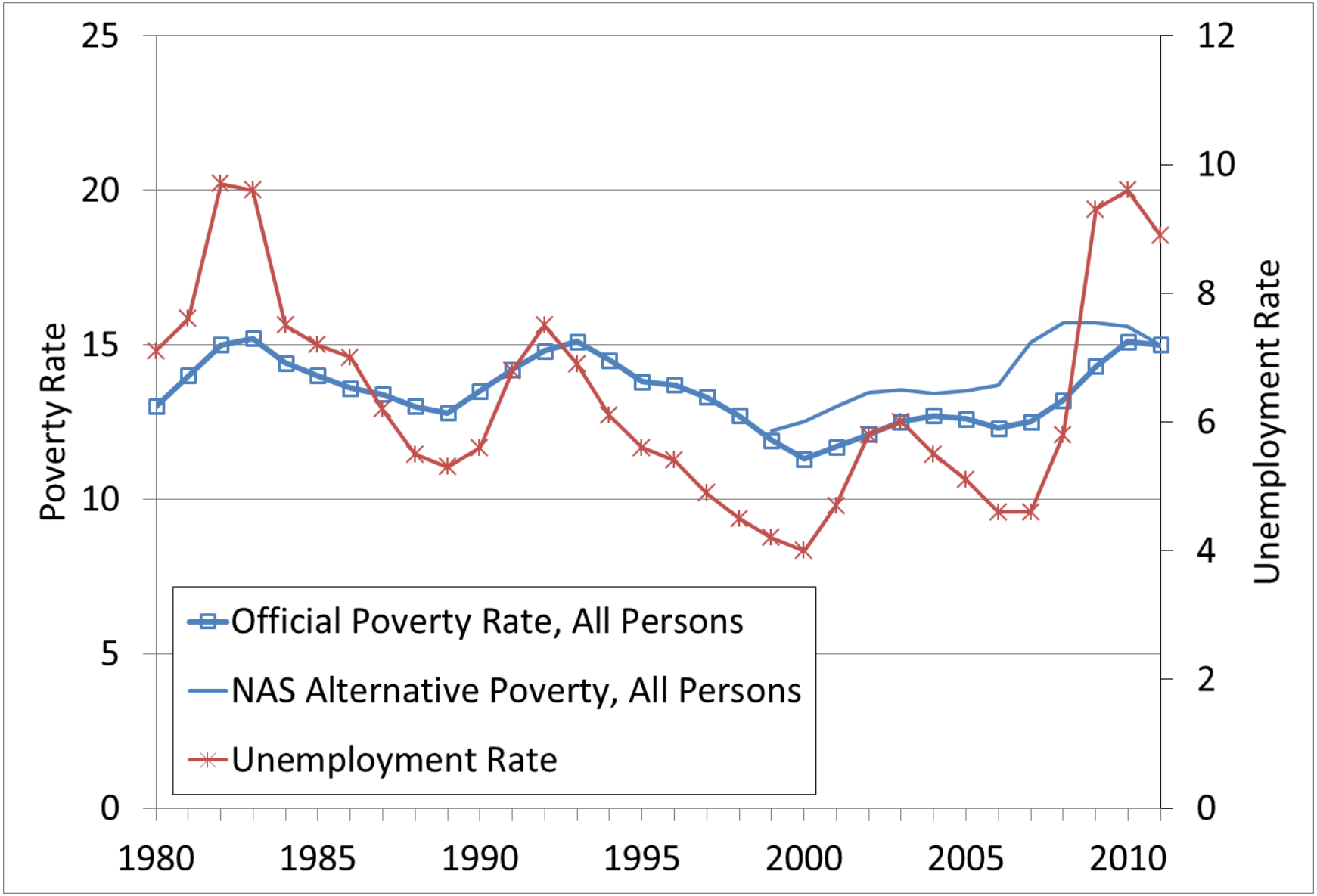
- Empirical strategy:
  - Exploit differences in timing and severity of cycles across states (basic state panel fixed effects model)
  - Unemployment rate is measure of cycle
  - Test whether responses in the GR are different from earlier cycles
- Outcomes we explore:
  - Poverty, official (cash) and alternative (CPS)
  - Social safety net: Safety net caseloads and $ using administrative data (AFDC/TANF, SNAP, UI, EITC, SSI, SSDI)
  - Private safety net: living arrangements, doubling up, young adults living at home

Preview of the findings

- NEED TO ADD

(1) The Facts: Cycles, Poverty, the Safety Net and the Great Recession

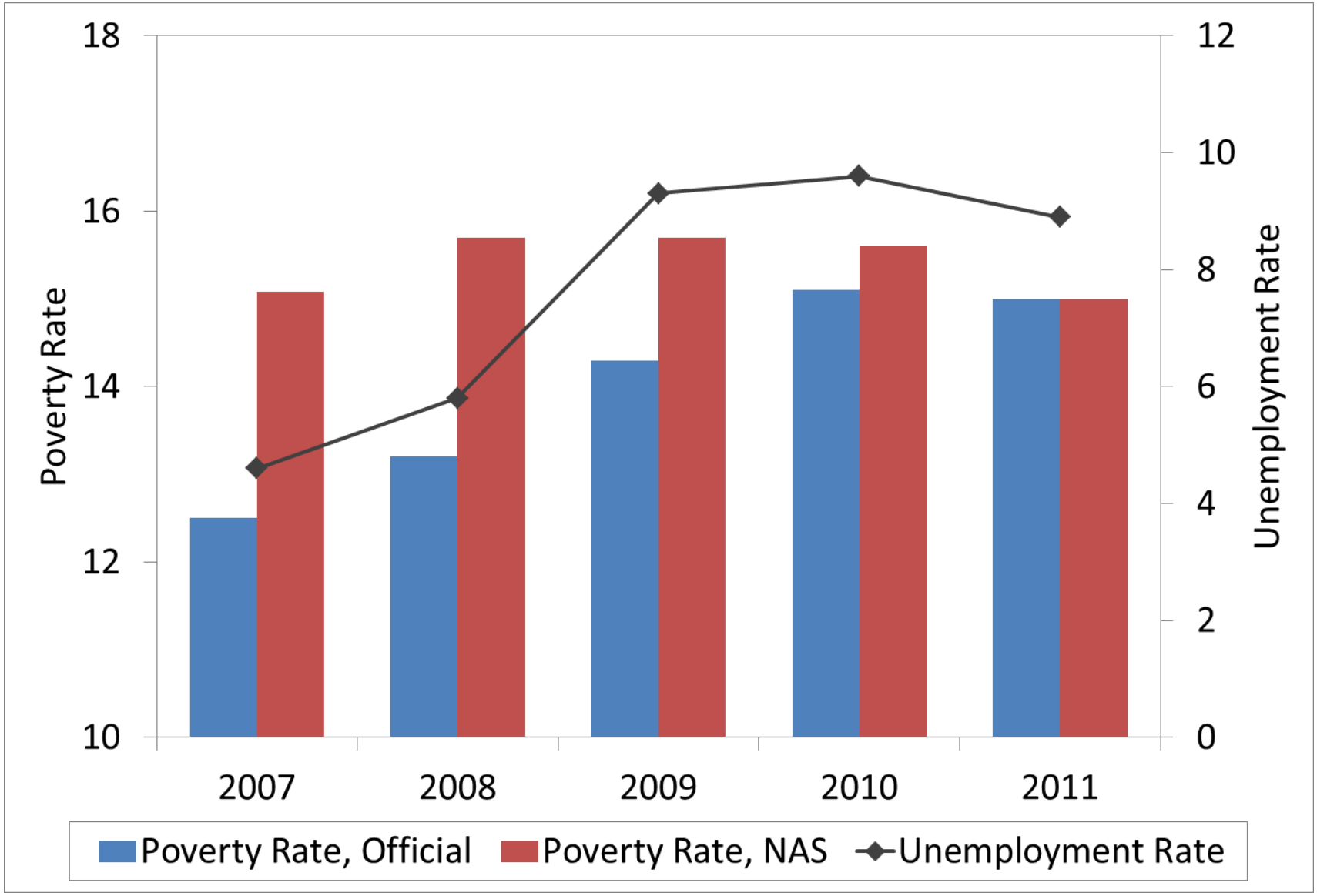
Unemployment Rate and Poverty Rate



Poverty measures

- Official poverty uses cash, pre-tax income
  - Does not incorporate the noncash safety net (e.g., Food Stamps) or taxes (e.g. the EITC)
- Development and release of the Census Supplemental Poverty Measure (in 2011) address this concern (other changes as well)
- In our work, we use an "alternative poverty" measure which is measurable in the CPS back to 1980 (using publically available data). Similar to NAS measure shown here.
  - Income includes taxes, plus value of Food Stamps, Medicaid, Medicare, school lunch, housing subsidy, energy assistance
- Meyer and Sullivan (2012) argue that alternative poverty is less tied to disadvantage than cash poverty. But we need a measure that includes the safety net and taxes.

Unemployment Rate and Poverty : The Great Recession



Take-away from facts on poverty, cycles

- Poverty is strongly counter cyclical
- The time series evidence suggests that poverty did not increase as much in the GR as expected. Alternative poverty rates did not increase by much.
- This suggests that the safety net is playing an important role.

The safety net for nonelderly families

1. Cash welfare AFDC/TANF [means tested]
2. Food Stamps [means tested]
3. The EITC [means tested, requires employment]
4. Unemployment Compensation [social insurance]
5. Disability benefits: DI, SSI

We identify these programs as the "safety net" – in that they may provide some protection in response to reductions in income/earnings.

Key changes in the safety net, prior to or during the Great Recession

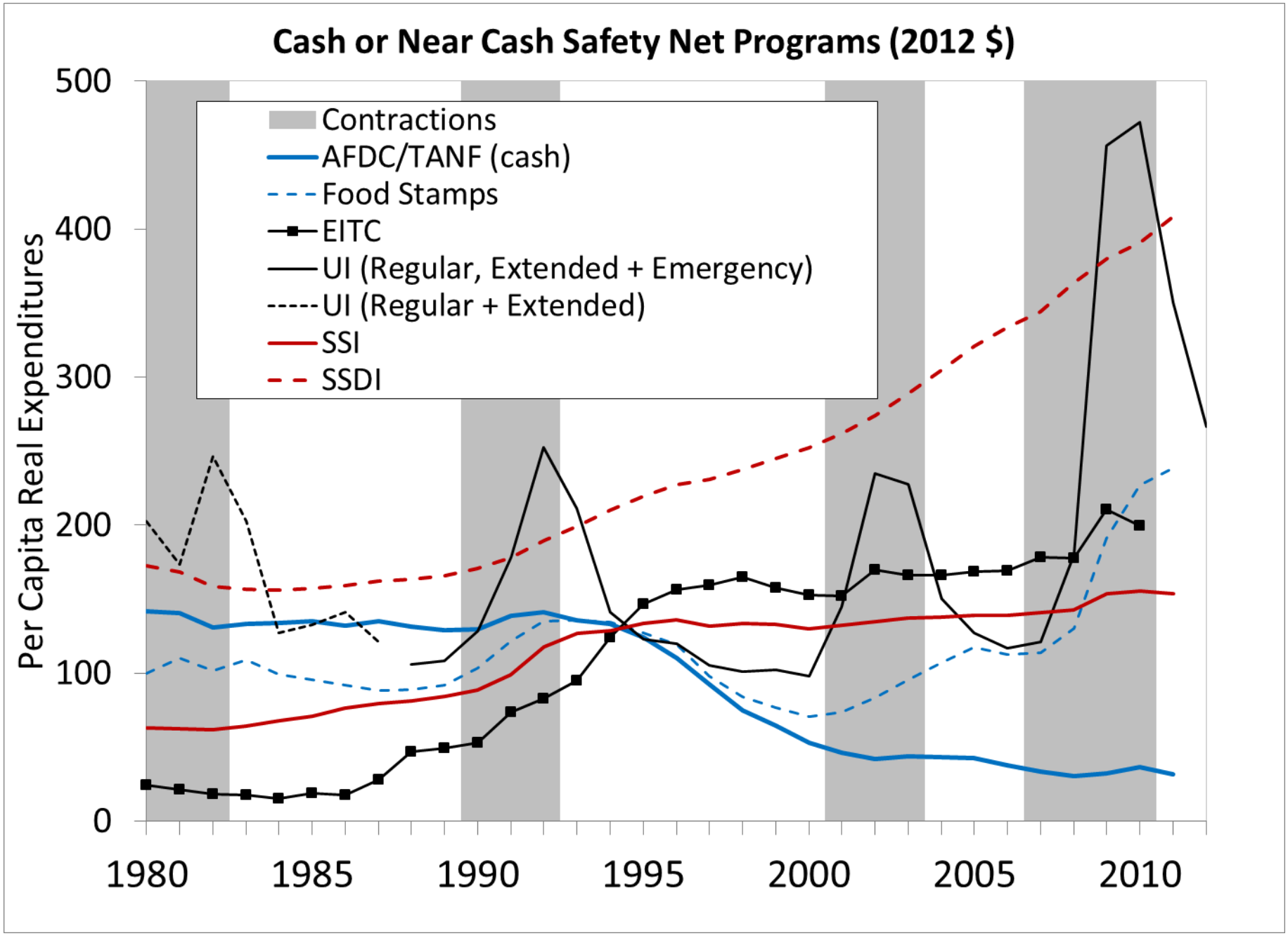
1. AFDC/TANF
   - Large moral hazard potential since implicit tax rates on program are high
   - Welfare reform 1996 → time limits, work requirements → caseloads at historic low
2. Food Stamps
   - Lower moral hazard due to lower implicit tax rates (30%)
   - Relaxing of asset requirements starting in 2002
   - ARRA increased benefits (not eligibility), $25/month

Key changes in the safety net, prior to or during the Great Recession (cont.)

3. EITC
   - Refundable tax credit for families with children; tied to earnings receipt and encourages work (employment)
   - ARRA added more generous schedule for families with 3+ children
4. Unemployment Compensation
   - Many states implemented EB programs
   - ARRA shifted full cost of EB to Federal government
   - Emergency program raised UI benefit durations to as long as 99 weeks

Key changes in the safety net, prior to or during the Great Recession (cont.)

5. Disability benefits (DI, SSI)
   - The GR occurred against a backdrop of steady increases in disability benefits.
   - This could change the relationship of cycles to poverty given the greater use of these programs
   - [Wherever possible, we limit our analysis of SSI to the nonaged caseload.]


Cash or Near Cash Safety Net Programs (2012 $)
Per Capita Real Expenditures
500
400
300
200
100
0
1980
1985
1990
1995
2000
2005
2010
Contractions
AFDC/TANF (cash)
Food Stamps
EITC
UI (Regular, Extended + Emergency)
UI (Regular + Extended)
SSI
SSDI

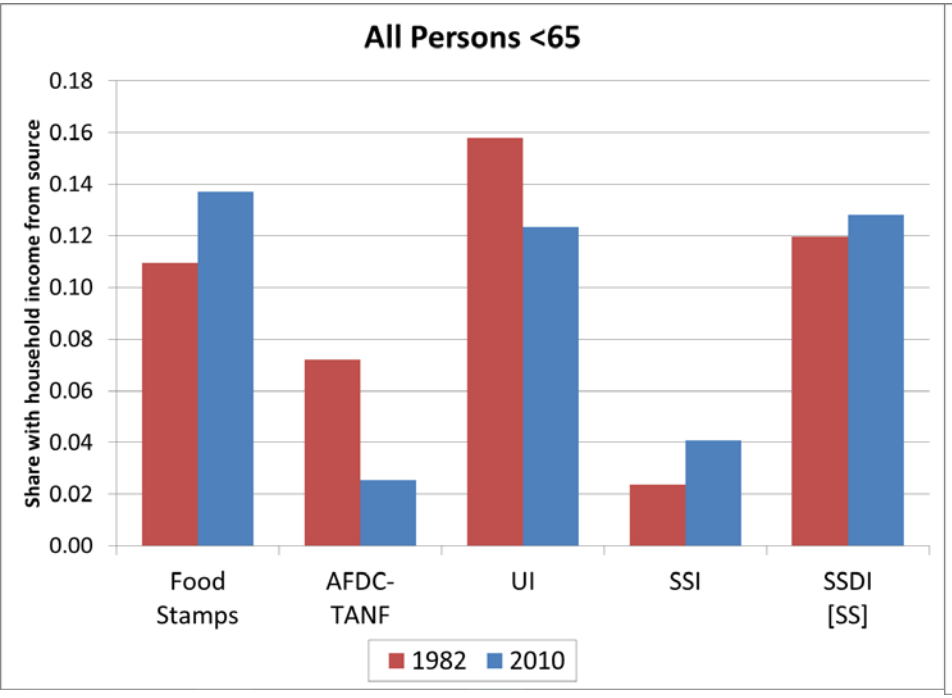
Cash and Near-Cash Safety Net, 2010

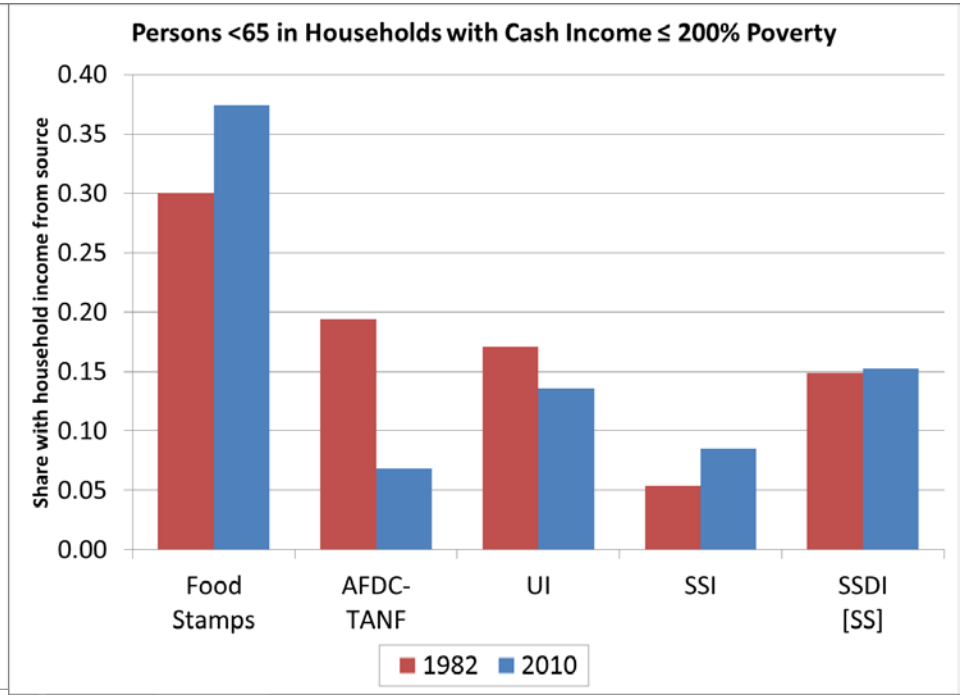
	Number of recipient units (thousands)	Total benefit payments (millions 2010$)	Average monthly benefit
TANF	1,911	$10,699	$402
Food Stamps	18,618	$64,702	$285
Federal EITC	26,170	$58,620	$187
SSI, Nonaged Caseload	6,728	$45,618	$518
SSDI	9,398	$114,854	$1,068
UI - Regular State Benefits	3,927	$59,461	$1,262
UI - Extended Benefits	604	$9,344	$1,289
UI - Emergency Benefits	4,508	$69,894	$1,292
UI - Total	9,039	138,699	$1,279

Take-away from facts on safety net

- Decline of welfare and rise of EITC → major transformation of safety net from *out-of-work* aid to *in-work* aid → less protection in GR
- Long UI benefit durations → more protection in GR
- Food stamp benefits expanded leading up to and during the GR → more protection in GR
- Backdrop of increases in disability benefits

Household participation in the safety net
CPS tabulations for nonelderly persons
Trough years 1982 vs. 2010





Caveat to CPS analysis: underreporting of government transfers is increasing over time (Meyer, Mok, and Sullivan 2009)

(2) Is the Great Recession period different?

Our approach

- Are the responses of the safety net and poverty as we would expect based on the historical evidence?
- We provide two comparisons:
  - Compare GR cycle [2007+] to early 1980s cycle [1980-1989]
  - Compare GR to prior recessions, compare expansion out of GR to prior expansions
- We define the cycles based on peak-to-peak using national unemployment
- Our analysis period = 1980–2011.

Our approach [cont.]

- We begin by establishing the findings for official (cash) and alternative poverty (CPS)
- We explore two mediating forces that may buffer families from effects of downturns:
  1. Social safety net: administrative data on caseloads and total $
  2. Private safety net: living arrangements, doubling up; interest in particular in young adults

Empirical model

- State panel fixed effects model
- Cycle measured by state-year unemployment rate
- Standard errors clustered on state, weighted using denominator
- Test 1: Is GR different from 1980s cycle?

$$y_{st} = \beta_{80} D_{80} UR_{st} + \beta_{GR} D_{GR} UR_{st} + \beta_O D_O UR_{st} + \alpha_s + \delta_t + \varepsilon_{st}$$

- Test 2: Is GR different from all other recessions? (same for expansions)

$$y_{st} = \beta_{CON} D_{CON} UR_{st} + \beta_{EXP} D_{EXP} UR_{st} + D_{GR}(\beta_{GR}^{CON} D_{CON} UR_{st} + \beta_{GR}^{EXP} D_{EXP} UR_{st}) + \alpha_s + \delta_t + \varepsilon_{st}$$

CPS sample

- CPS ASEC (March) 1981-2012 (calendar years 1980-2011)
- Limit to nonelderly persons
- Income and poverty assigned using household as economic unit
- Outcomes: income below 50%, 100%, 150%, 200% of official (cash) poverty and alternative poverty
- Collapse data to state-year cells
- Weight using sum of march weights in cell

	Official poverty *(cash pre-tax)*				Alternative poverty *(post-tax, all transfers)*			
	<50%	<100%	<150%	<200%	<50%	<100%	<150%	<200%
				A. Pooled Estimates				
UR	0.403***	0.735***	0.897***	1.036***	0.148***	0.556***	0.844***	1.046***
	(0.054)	(0.072)	(0.113)	(0.137)	(0.024)	(0.061)	(0.118)	(0.157)
% impact	*8.6%*	*6.1%*	*4.4%*	*3.5%*	*6.2%*	*6.5%*	*4.9%*	*3.8%*
Mean, 1980-2011	0.047	0.121	0.206	0.296	0.024	0.085	0.171	0.278

Results for full period:

- The estimates are similar to many prior estimates in the literature (ADD SOME CITES)
- Percent impacts decline as we move up the income distribution (but increase in percentage point impacts)
- Patterns and magnitudes for alternative poverty are strikingly similar. Exception is extreme poverty (<50% poverty) which shows much less cyclicality than cash poverty

	Official poverty *(cash pre-tax)*				Alternative poverty *(post-tax, all transfers)*			
	<50%	<100%	<150%	<200%	<50%	<100%	<150%	<200%
			B. By Period (1980s, GR, Rest of Period)					
UR x 1980s	0.384***	0.662***	0.756***	0.821***	0.102***	0.513***	0.697***	0.817***
	(0.062)	(0.075)	(0.121)	(0.154)	(0.033)	(0.062)	(0.146)	(0.160)
UR x Rest of period	0.506***	1.047***	1.317***	1.466***	0.208***	0.732***	1.132***	1.316***
	(0.074)	(0.150)	(0.227)	(0.240)	(0.057)	(0.136)	(0.189)	(0.274)
UR x GR	0.354***	0.624***	0.843***	1.148***	0.193***	0.496***	0.907***	1.302***
	(0.071)	(0.079)	(0.120)	(0.160)	(0.034)	(0.055)	(0.084)	(0.159)
% Impact, 1980s	*7.9%*	*5.2%*	*3.5%*	*2.6%*	*4.2%*	*5.5%*	*3.5%*	*2.6%*
% impact, GR	*7.2%*	*5.0%*	*4.0%*	*3.8%*	*7.1%*	*6.0%*	*5.8%*	*5.1%*

Test 1: Is GR different from early 1980s recession?

- Mostly no.
- Exception for *greater* cyclicality of alternative poverty at 150% and 200% poverty.

	Official poverty *(cash pre-tax)*				Alternative poverty *(post-tax, all transfers)*			
	<50%	<100%	<150%	<200%	<50%	<100%	<150%	<200%
				C. By Expansion/Contraction and GR				
UR x Contraction	0.259***	0.535***	0.601***	0.703***	0.072**	0.336***	0.465***	0.581***
	(0.057)	(0.094)	(0.157)	(0.201)	(0.033)	(0.067)	(0.172)	(0.201)
UR x Expansion	0.502***	0.902***	1.091***	1.176***	0.171***	0.715***	1.033***	1.185***
	(0.052)	(0.101)	(0.150)	(0.177)	(0.039)	(0.086)	(0.126)	(0.184)
UR x Contraction x GR	0.089	0.051	0.180	0.358	0.130**	0.171***	0.384**	0.614**
	(0.060)	(0.129)	(0.222)	(0.298)	(0.048)	(0.072)	(0.181)	(0.275)
UR x Expansion x GR	-0.197**	-0.349***	-0.329	-0.063	-0.045	-0.352***	-0.159	0.191
	(0.080)	(0.125)	(0.211)	(0.230)	(0.078)	(0.106)	(0.130)	(0.166)
N	1632	1632	1632	1632	1530	1530	1530	1530

Test 2: Is GR different from earlier recessions (contractions)

- If anything the GR is leading to more cyclicality of alternative poverty
- The expansion coming out of the GR is generating less improvement in poverty compared to historical expansions.
- Caveat on expansion – our CPS data only go through 2011.

The private safety net

- Families can help absorb shocks in many ways. We explore how living arrangements change in cycles and whether the patterns are changing over the GR
- Continue with CPS, nonelderly sample, 1980-2011

❖ Number of persons, number of families (in the household)
❖ Number of "extra" adults in household (over age 18, not household head or spouse)
❖ Living arrangements of young adults 18-30: live alone, with parents, with relatives, other

[Caveat on young adult measures NEED TO FIX]

	All nonelderly persons			Young adult sample, age 18-30				
	Num. persons	Num. families	Num. "extra" adults	Any young adult no FT work, no school	Living alone	Living with parents	Living with other relative	Other
				B. By Period (1980s, GR, Rest of Period)				
UR x 1980s	2.336***	0.329**	0.334	0.761***	-0.206*	0.129	0.180**	-0.032
	(0.689)	(0.129)	(0.301)	(0.075)	(0.120)	(0.160)	(0.072)	(0.138)
UR x Rest of period	1.876	0.469	0.682*	0.936***	-0.505**	0.004	0.387**	0.136
	(1.503)	(0.286)	(0.378)	(0.105)	(0.241)	(0.179)	(0.146)	(0.142)
UR x GR	2.012	0.538	1.634	0.565***	-0.392	0.591*	0.260*	-0.367**
	(1.782)	(0.570)	(1.168)	(0.168)	(0.293)	(0.307)	(0.136)	(0.148)
% Impact, 1980s	*0.6%*	*0.3%*	*0.6%*	*2.5%*	*-1.3%*	*0.4%*	*3.6%*	*-0.1%*
% impact, GR	*0.6%*	*0.6%*	*2.4%*	*2.3%*	*-1.9%*	*1.5%*	*2.4%*	*-1.2%*
Means by period								
1980s: 1980-1989	3.678	0.961	0.563	0.300	0.161	0.343	0.051	0.447
GR: 2007-2011	3.574	0.947	0.575	0.246	0.193	0.358	0.090	0.370

- Small adjustments in living arrangements.
- Larger movements for young adults
- Only one statistically significant difference between GR and early 1980s

The social safety net

- We explore the adjustment of the safety net in cycles
- We use administrative data on state-year caseloads per population

❖ AFDC/TANF, Food Stamps, UI, EITC

❖ These sources are monthly (except EITC which is annual)

❖ [Still waiting to complete our data on SSI, SSDI]

	Caseload / Population, Monthly				Cases/Pop, Annual
	AFDC/TANF	Food Stamps	UI [Reg., Ext.]	UI, 1988+ [Reg., Ext., Emerg.]	EITC
			A. Pooled Estimates		
UR	0.064***	0.132***	0.011***	0.016***	0.035
	(0.015)	(0.038)	(0.001)	(0.001)	(0.044)
% impact	*5.5%*	*3.6%*	*13.3%*	*16.3%*	*0.6%*
Mean of Y, pooled	0.012	0.037	0.001	0.001	0.059

- Over entire period (1980-2011), all programs except the EITC are countercyclical. This masks countercyclical effects for married and (insignificant) pro-cyclical effects for singles (Bitler, Hoynes & Kuka 2013)
- Largest effects for UI.

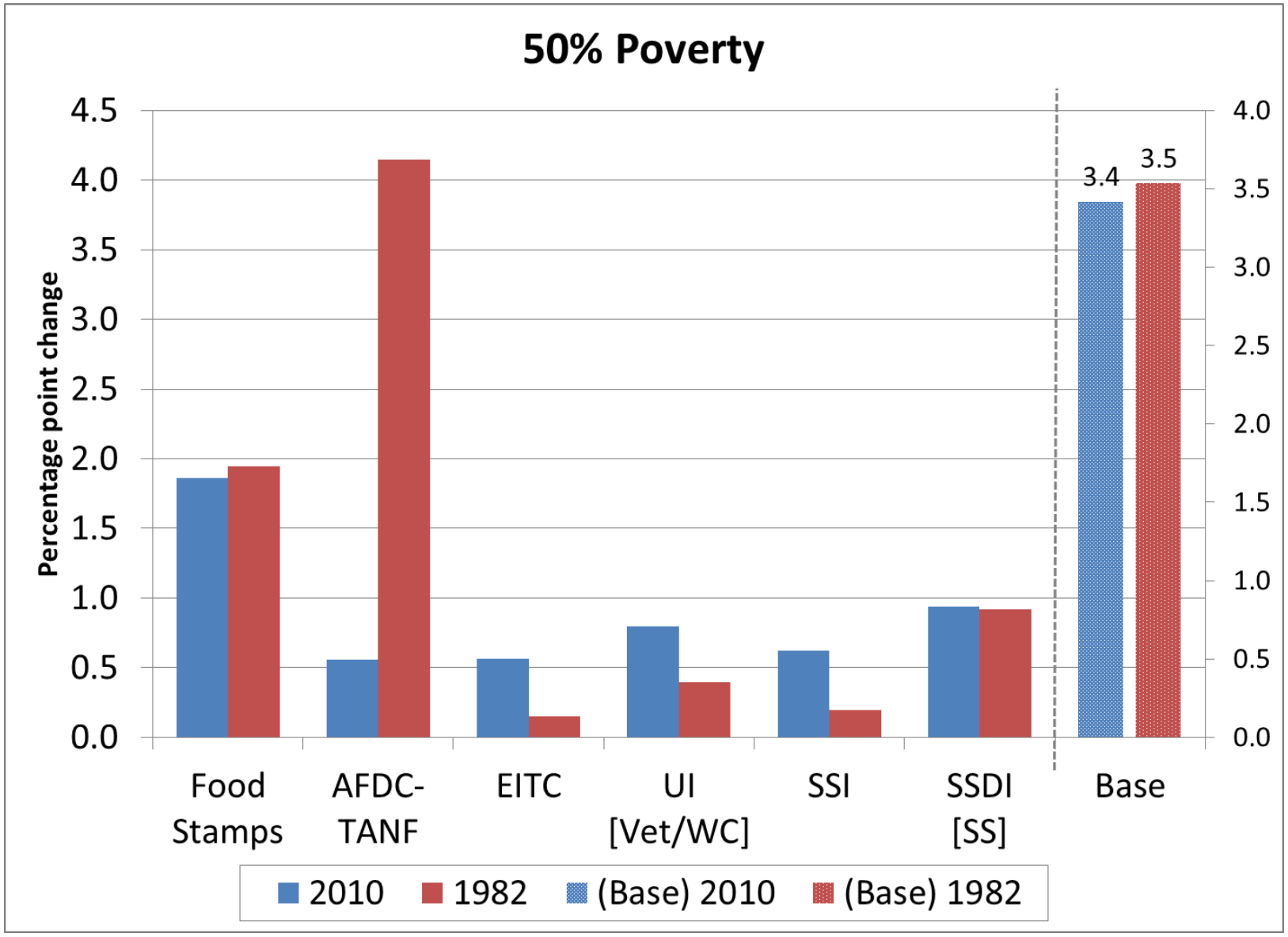
	Caseload / Population, Monthly				Annual
	AFDC/TANF	Food Stamps	UI [Reg., Ext.]	UI, 1988+ [Reg., Ext., Emerg.]	EITC
	C. By Expansion/Contraction and GR				
UR x Contraction	0.079**	0.069**	0.015***	0.015***	0.036
	(0.024)	(0.033)	(0.001)	(0.001)	(0.068)
UR x Expansion	0.082***	0.153***	0.010***	0.013***	0.028
	(0.017)	(0.031)	(0.001)	(0.001)	(0.053)
UR x Contraction x GR	-0.082**	0.066	-0.006***	0.003	0.019
	(0.036)	(0.140)	(0.001)	(0.003)	(0.122)
UR x Expansion x GR	-0.076**	-0.027	-0.004***	0.001	-
	(0.030)	(0.234)	(0.001)	(0.002)	
Mean of Y, 1980s	0.016	0.031	0.001	-	0.031
Mean of Y, GR	0.012	0.034	0.001	0.002	0.067
N	19,584	19,488	19,584	14,688	1581

- Post-welfare reform: TANF no protection across cycles
- SNAP shows more cyclicality in GR, not significant
- No evidence that UI is more responsive in GR (point estimates show more protection)

How is the cyclicality of poverty affected by the safety net?

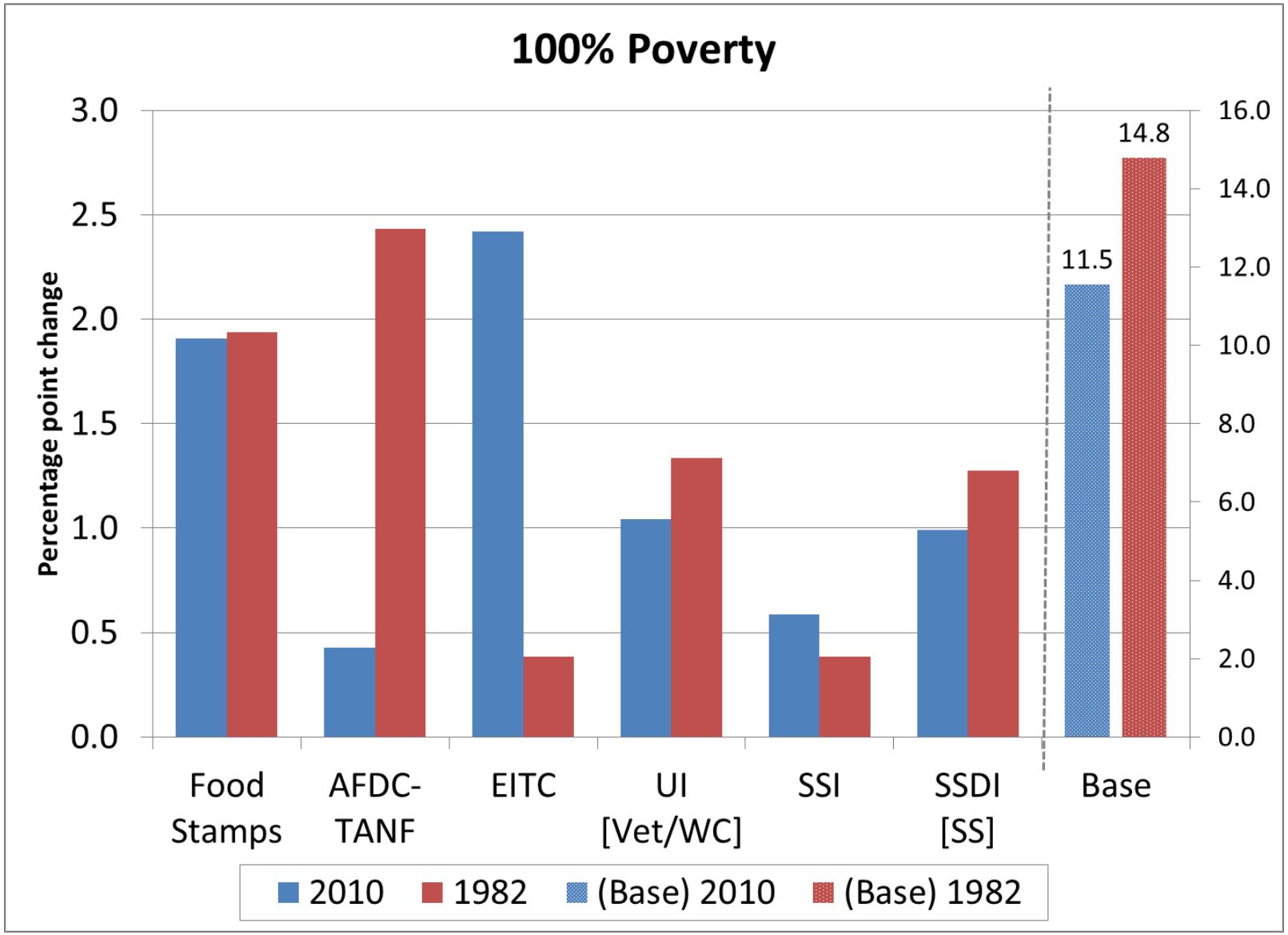
- We use the CPS for 1980-2011 and construct alternative poverty based on post-tax post-benefit income (Bitler and Hoynes 2010).
- Then (one at a time) we zero out the income amount from each safety net program and recalculate alternative poverty
- Compare the cyclicality of poverty with and without each safety net program
- This is a static exercise, nothing else changes. A more complete analysis would require establishing the full counterfactual for eliminating programs.
- This analysis is subject to concerns about increases in underreporting of safety net programs over time

- As a descriptive first step, we show these poverty rates with and without safety-net income zeroed-out for 1980 and 2010 (two trough years)
- We then plot the difference in the poverty rates: this gives an estimate of by how much poverty rates increase with the elimination of this safety net program
- [static]



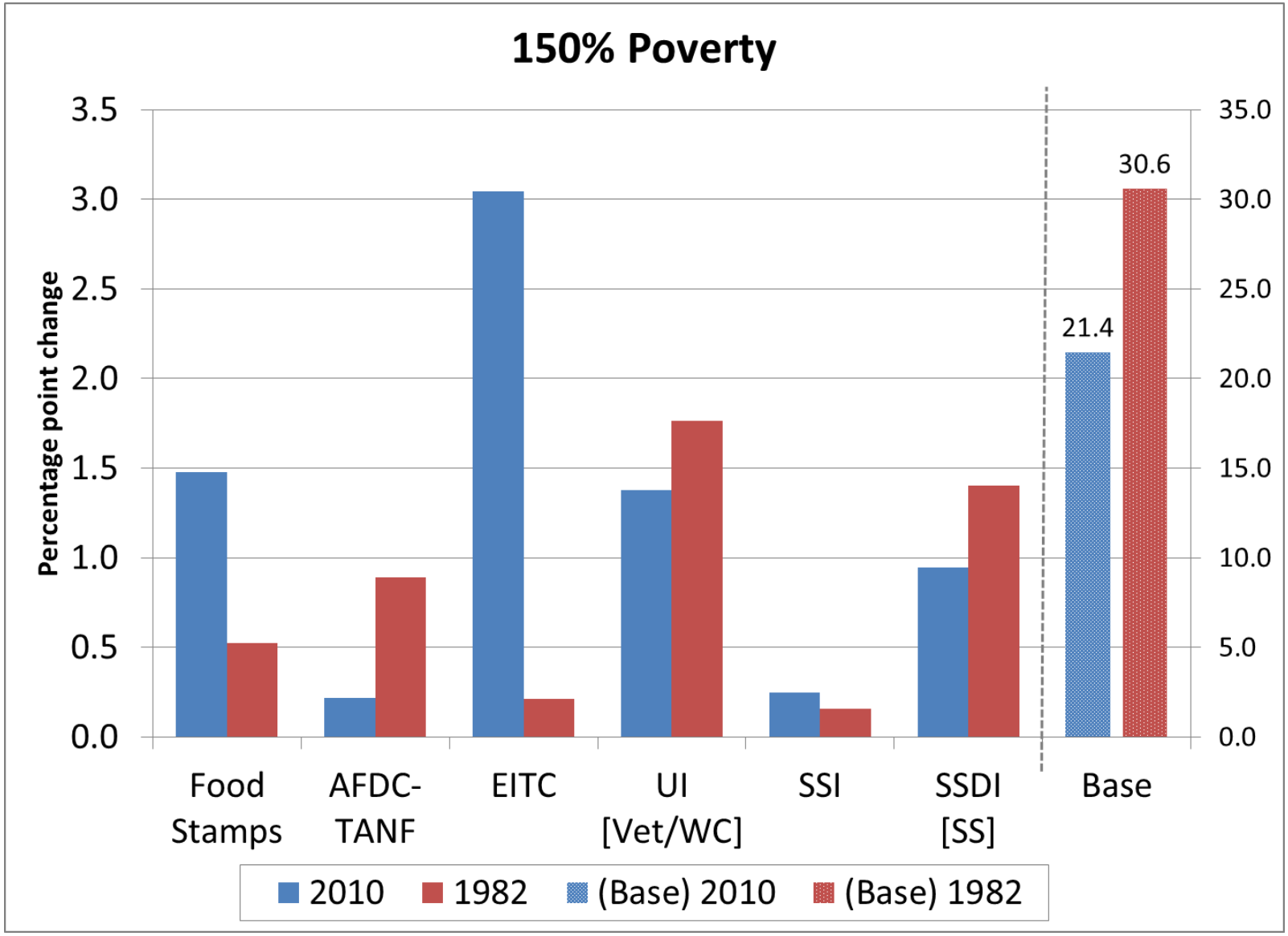
Huge reduction in protection from welfare

Increase in EITC, UI, SSI



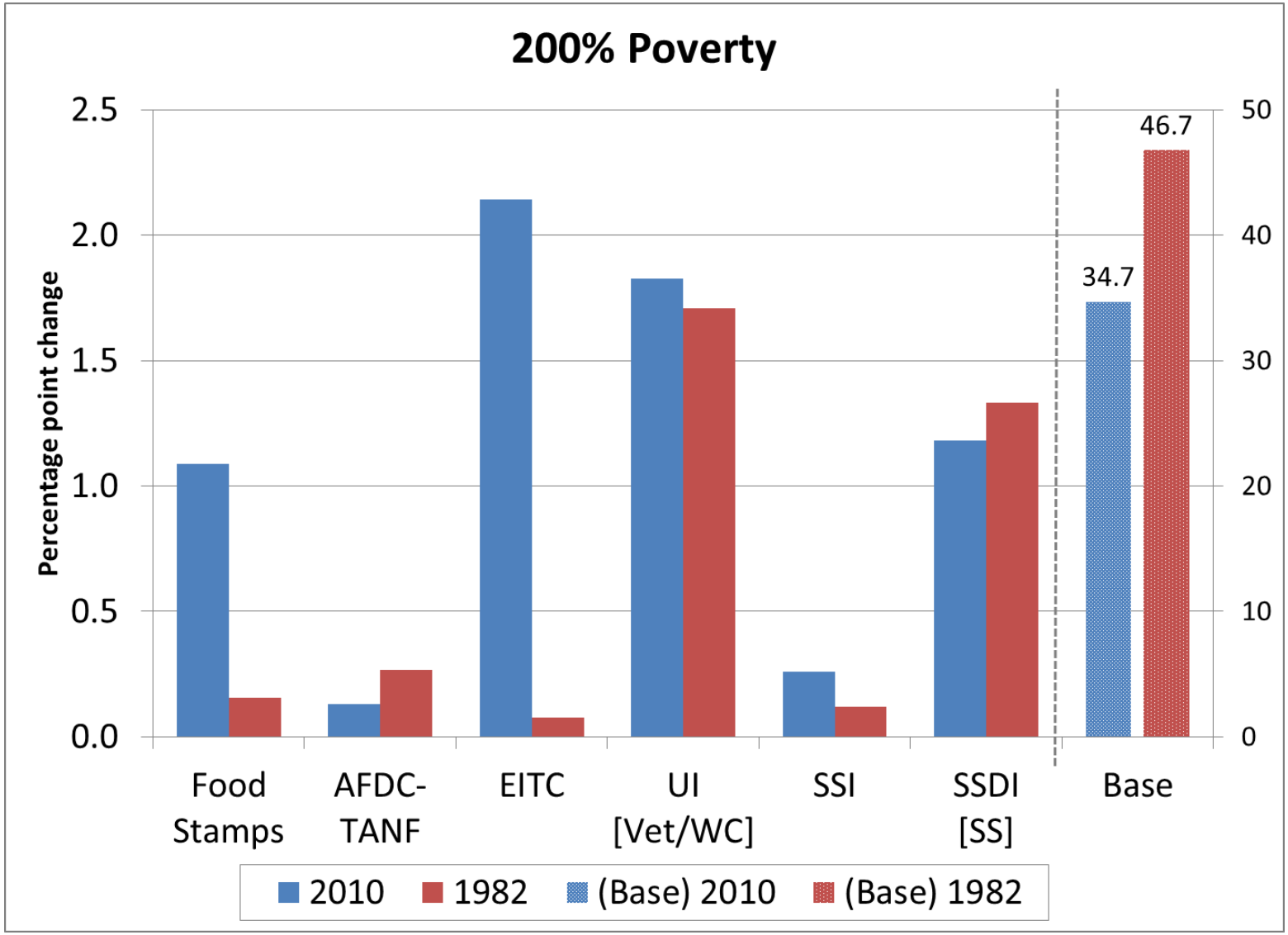
Huge reduction in protection from welfare

Huge increase in EITC



Increase in SNAP higher up the income distribution

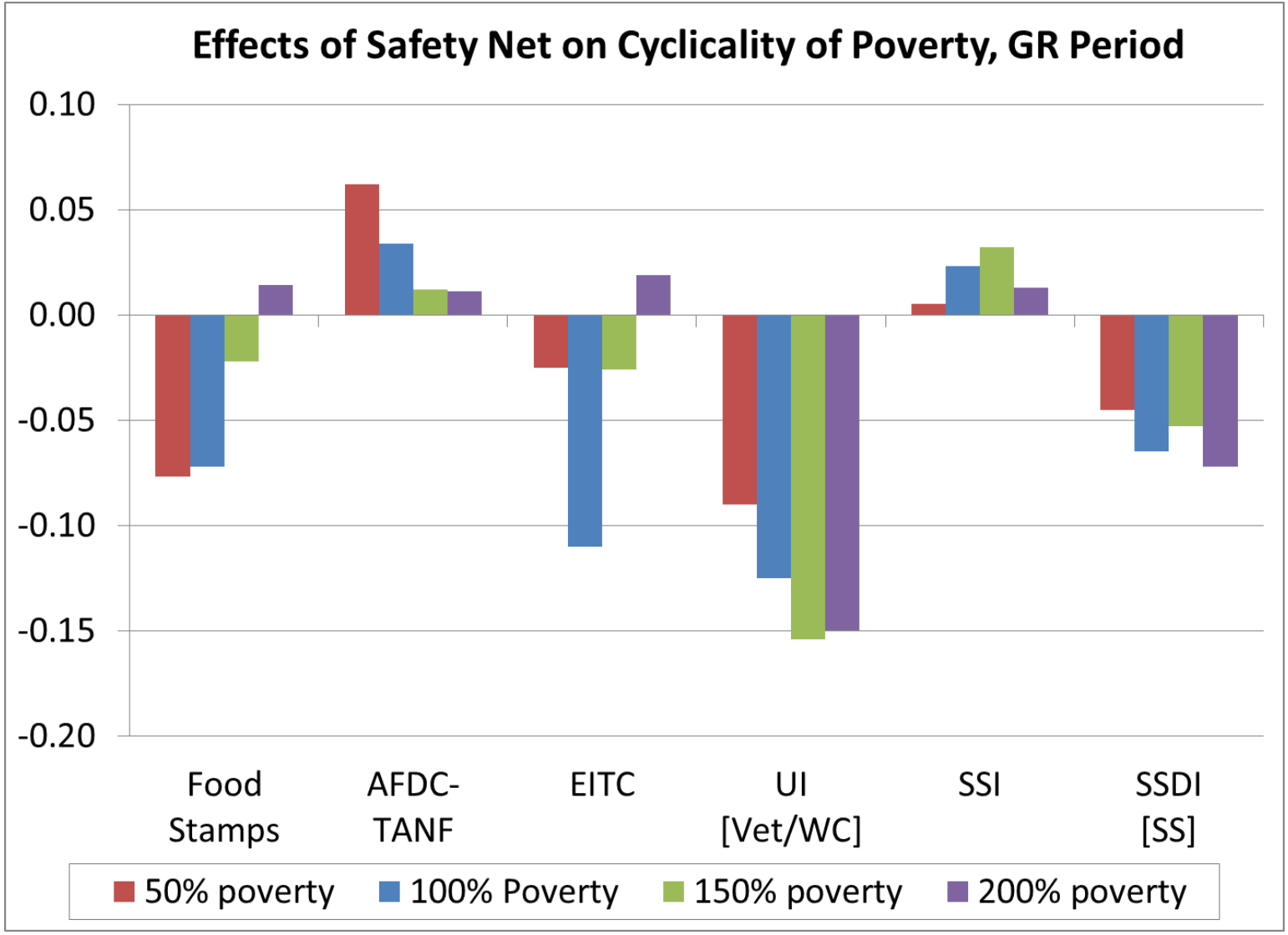
Huge increase in EITC



Increase in SNAP higher up the income distribution

Huge increase in EITC. Overall little evidence of MORE UI.

- We extend this with a regression framework. We estimate models for (base) alternative poverty and alternative “zeroing out income”
- We estimate the model allowing for different UR effects for 1980s, GR, and rest of period (Table 7)
- Here we ONLY look at the coefficients for the GR period, β_{GR}
- We then plot, for each safety net program, the difference in β_{GR} for (base) alternative poverty and poverty zeroing out the safety net.



- Negative = adding safety net program REDUCES cyclicality
- UI, SNAP and SSDI showing important effect.
- What this doesn't show is a comparison (1980s)

(3) Is the safety net (moral hazard) slowing down the expansion?

Labor supply predictions

- The optimal design of safety net programs requires balancing the goal of protection against distortion
- This is an issue for social insurance programs (UI, SSDI) and public assistance programs (TANF, SNAP)
- Mulligan (2012) argues that the expansion of the safety net (e.g. UI, SNAP and multiple program participation) has contributed to the weak expansion
- Rothstein (2011) and Farber and Valletta (2013) conclude that UI expansions have led to small increases in unemployment
- We know of no other work on other safety net programs and how they are affecting labor supply in the GR (perhaps Rothstein on DI in this conference)

Our approach

- We present tabulations from the CPS and Food Stamp administrative data on incidence of multiple program participation
- We relate CPS estimates of average state "moral hazard program spending" per household at the trough of the recession (2010) to measures of the state labor market expansion (2010 to 2012 change)
- Moral hazard programs = TANF, SNAP, UI, SSI

Comparison of household participation in 2010, 1982 CPS nonelderly sample

	Household participation in safety net			
	UI	Food Stamps	AFDC/ TANF	SSI
	A. Participation conditional on receiving UI			
1982	1.000	0.138	0.055	0.016
2010	1.000	0.199	0.031	0.043
	B. Participation conditional on receiving Food Stamps			
1982	0.199	1.000	0.541	0.097
2010	0.180	1.000	0.134	0.146

- SNAP participation higher among UI recipients in GR
- UI participation no higher among SNAP recipients
- Cash welfare (TANF) participation is much lower
- [More results in the paper for TANF, SSI]

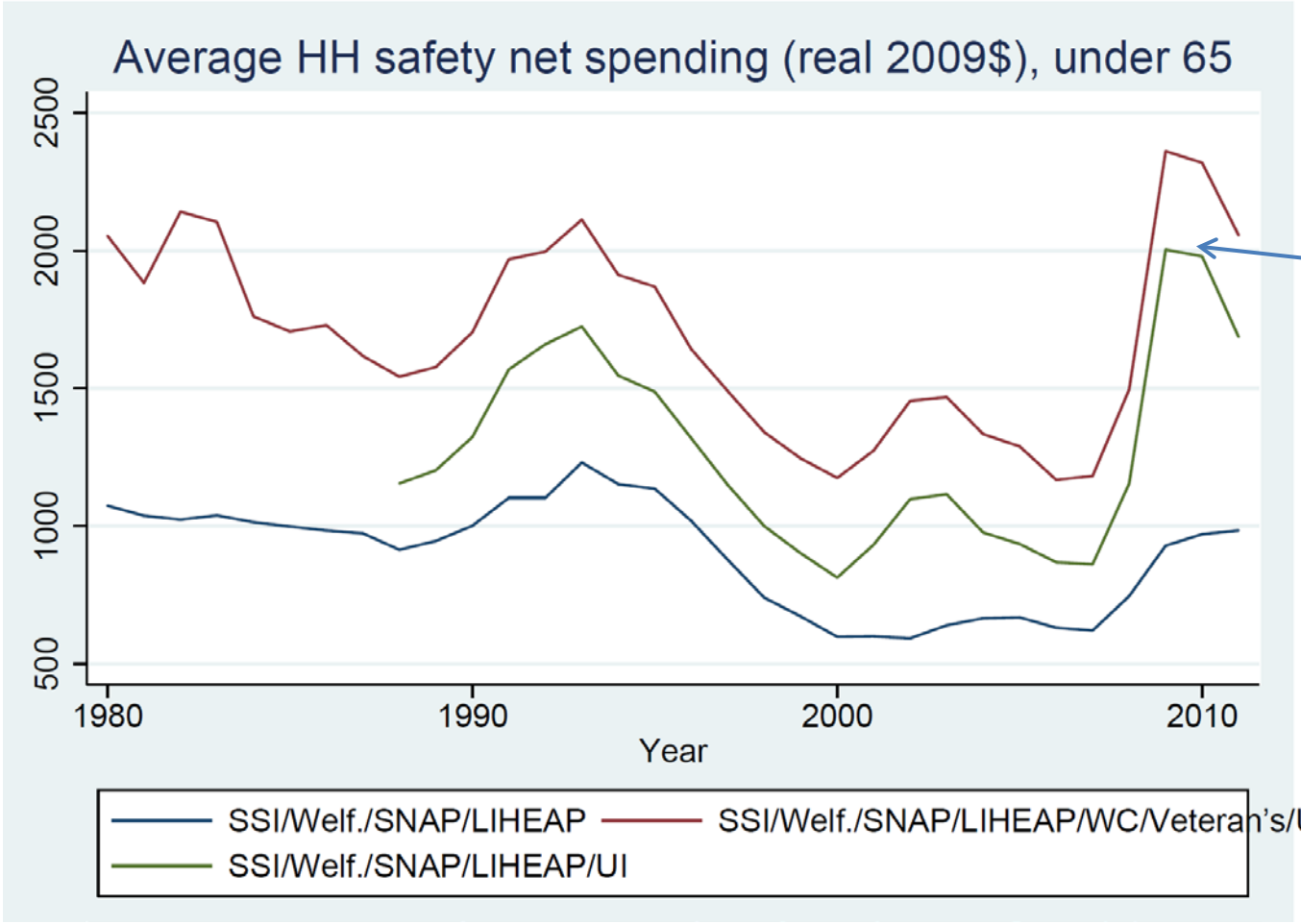
Administrative data on SNAP shows similar patterns as the CPS (All persons)

Can't get QC data back to 1982

	Household participation in safety net conditional on receving Food Stamps			
	UI	Food Stamps	AFDC/ TANF	SSI
	A. Food Stamp Quality Control Data (Recipiency Unit)			
2001	0.019	1.000	0.234	0.335
2010	0.059	1.000	0.076	0.202
	B. March CPS (Household)			
2001	0.093	1.000	0.240	0.286
2010	0.127	1.000	0.119	0.198

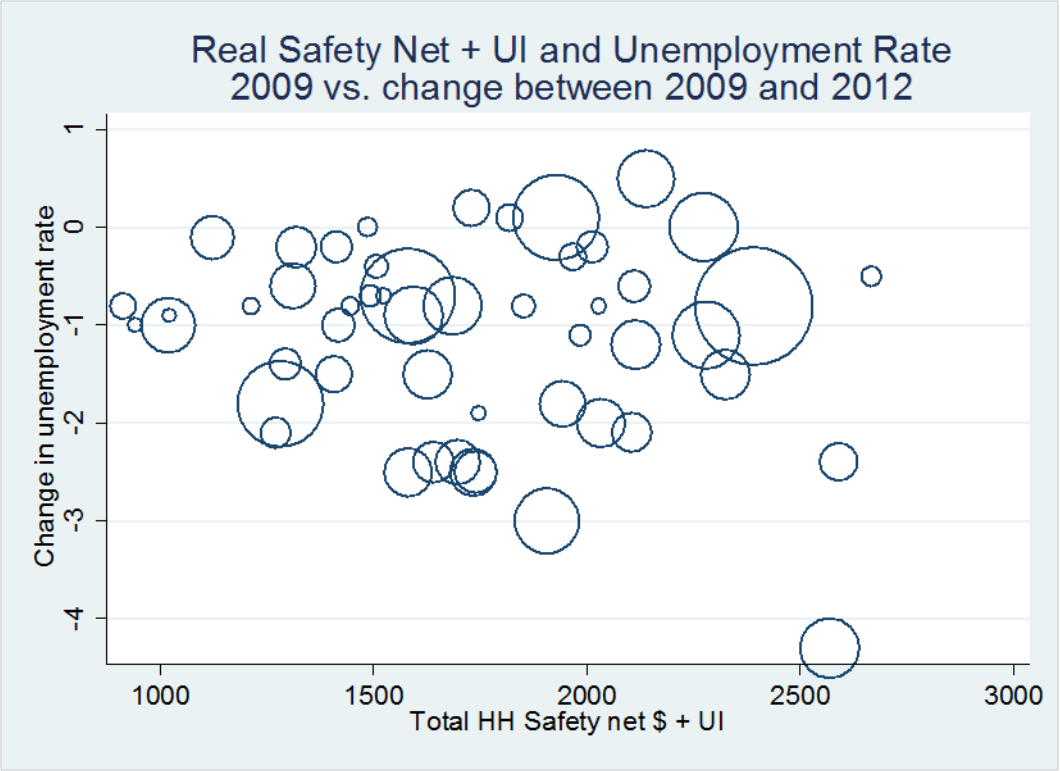
- UI participation rates are higher in CPS. Likely due to reporting period (annual for CPS, monthly for SNAP).

Average "moral hazard program spending" per household, CPS



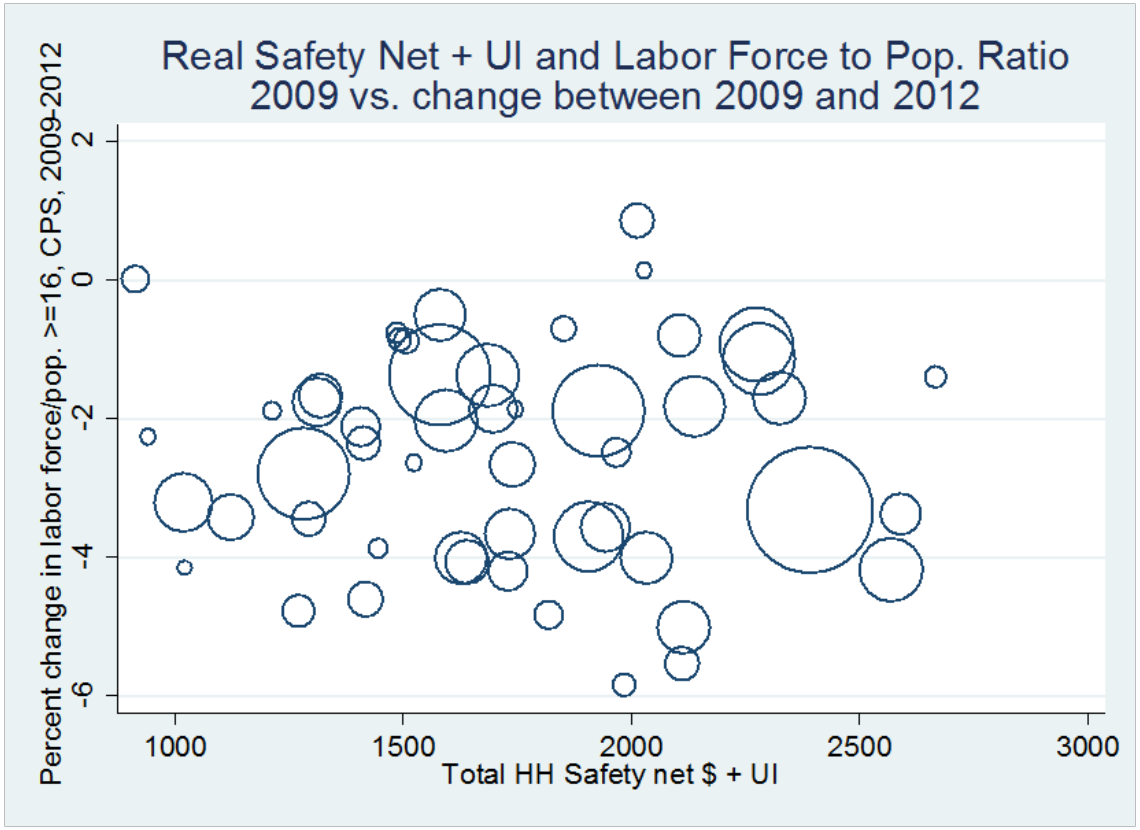
Use 2009 as peak of safety net spending

State “moral hazard” safety net spending per household in 2009 vs. change in unemp. rate 2009-2012



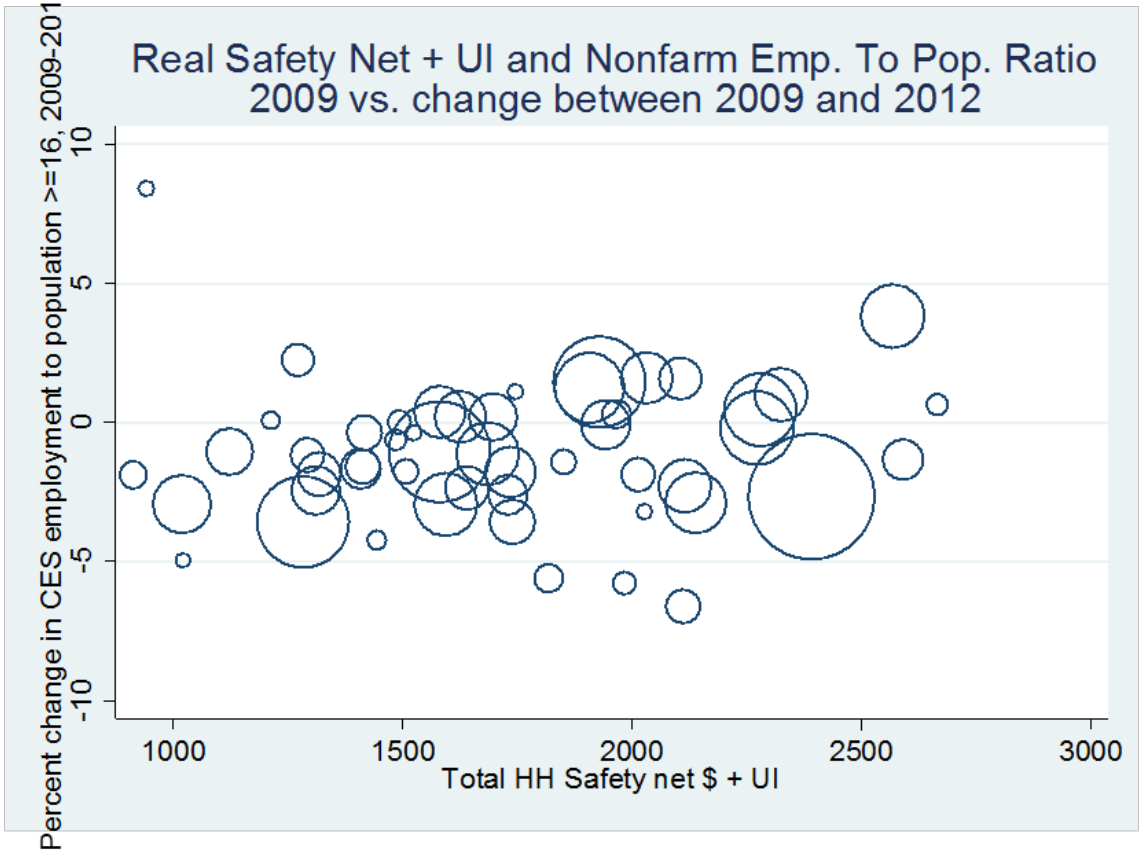
- Would expect a positive slope if safety net was contributing to slow recovery (higher $$ → less improvement in UR)
- Suggestive evidence

Safety net in 2009 vs. % change in labor force / population 2009-2012



- Would expect a negative slope if safety net was contributing to slow recovery

Safety net in 2009 vs. % change in employment / population 2009-2012



- Would expect a negative slope if safety net was contributing to slow recovery
- CES Employment

Next steps

- NEED TO ADD

Conclusion

- NEED TO ADD

ADDITIONAL RESULTS

Definition of cycles (App Table 1)

	Annual Data		Monthly Data	
	Contraction	Expansion	Contraction	Expansion
1980s Cycle	1979 – 1982	1983 – 1989	– 11/1982	12/1982 – 3/1989
	1979 – 1989		– 3/1989	
Rest of Period	1990 – 1992	1993 – 2000	4/1989 – 6/1992	7/1992 – 4/2000
	2001 – 2003	2004 – 2006	5/2000 – 6/2003	7/2003 – 10/2006
	1990-2006		4/1989 – 10/2006	
Great Recession	2007 – 2010	2011+	11/2006 – 10/2009	11/2009 +
	2007+		11/2006 +	