

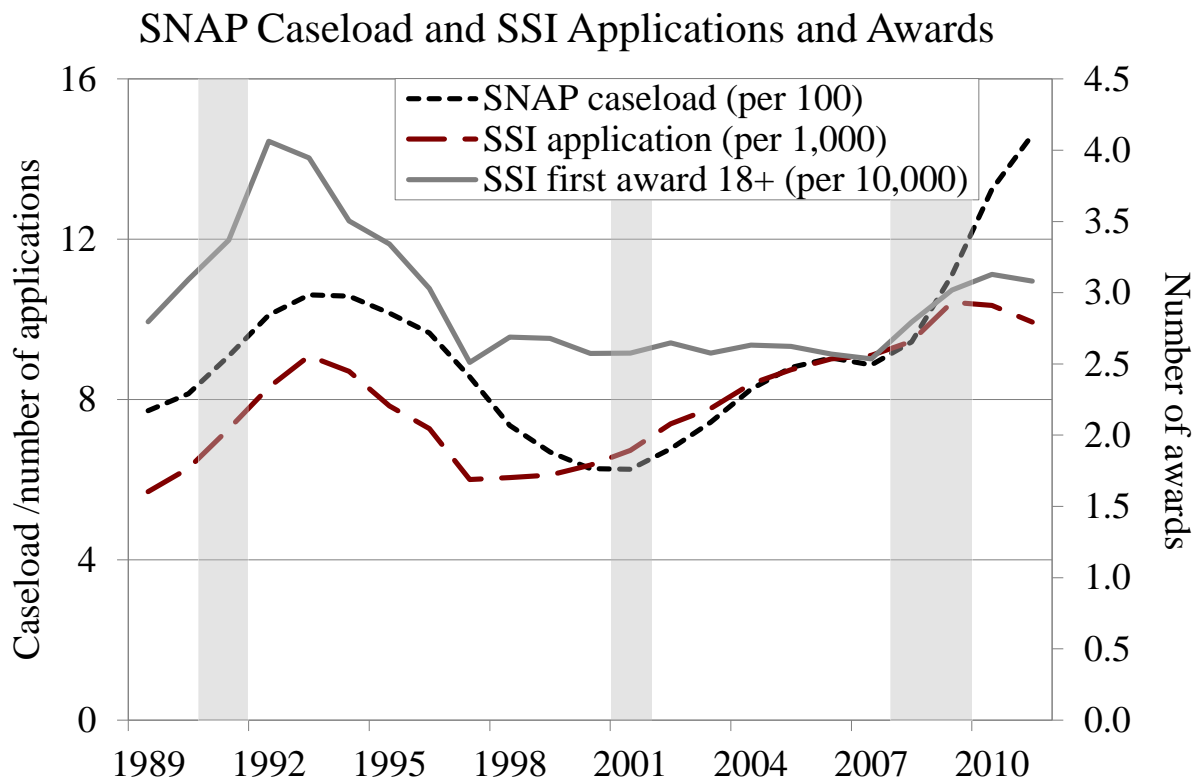
Why Do SSI and SNAP Enrollments Rise in Good Economic Times and in Bad?

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Motivation

- SSI and SNAP caseloads skyrocketed during Great Recession.
- But caseloads have also risen when the economy was not in recession.



Sources: U.S. Social Security Administration. *Annual Statistical Supplement*, 1989-2011; and U.S. Department of Agriculture. *Characteristics of Supplemental Nutrition Assistance Program Households*, 1989-2011.

Motivation (cont'd)

- The literature finds that the unemployment rate and other macroeconomic conditions account for a large share of the change in caseload levels.

Unemployment rate	SSI caseload	SNAP caseload
1 percentage-point	2.0%	2.3%

- If these historical relationships had held, then during the mid-2000s economic expansion:

	<i>should have fallen by:</i>	<i>but increased by:</i>
SSI	2.8%	5.0%
SNAP	3.2	24.0

Sources: David C. Stapleton, Kevin A. Coleman, and Kimberly A. Dietrich. 1995. "Demographic and Economic Determinants of the Recent Application and Award Growth for SSA's Disability Programs." Presented at "The Social Security Administration's Disability Programs: Explanations of Recent Growth and Implications for Disability Policy." U.S. Social Security Administration and U.S. Department of Health and Human Services; James P. Ziliak, Craig Gunderson, and David N. Figlio. 2003. "Food Stamp Caseloads Over the Business Cycle." *Southern Economic Journal* 69(4): 903-919; and authors' calculations.

Research question

- This paper investigates the continuing growth in SSI and SNAP since 2000 at both the state- and individual-levels.
 - State-level:
 - Stock vs. flow
 - How the effect of each contributing factor has changed over time
 - Individual-level:
 - Decomposition: changes in the share of eligibles and take-up and exit rates among the eligibles
 - Elderly vs. non-elderly

Background

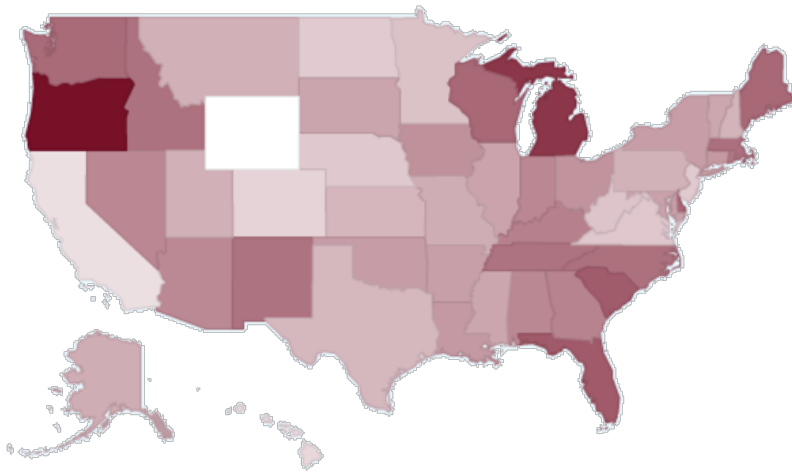
- SNAP
 - Largest nutrition program for low-income Americans
 - Income and asset tests
 - Age-specific eligibility rule

- SSI
 - Largest federal means-tested cash assistance program
 - Income and asset requirements
 - Disability requirement
 - State supplements

Data and sample

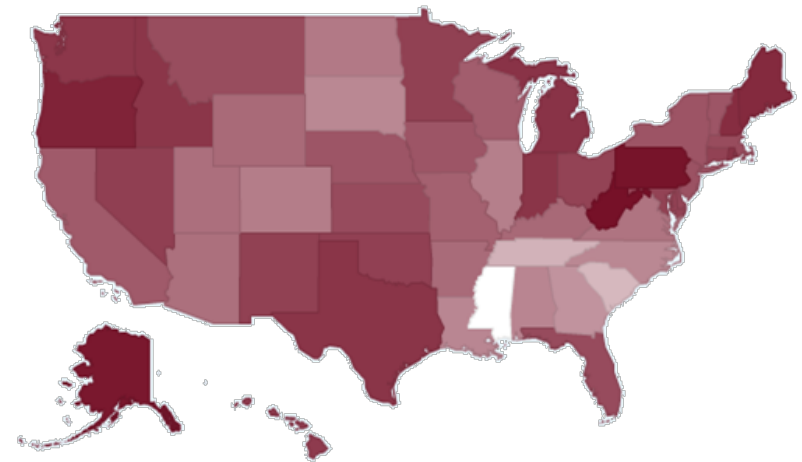
- State-level
 - Official estimates of state SSI caseloads, applications, and first-time award levels by the SSA.
 - SNAP caseloads reported by the USDA.

Change in SNAP Caseload, 1996-2011



0.06 17

Change in SSI Caseload, 1996-2011



-1.54 0.81

Source: Authors' calculations.

Data and sample (cont'd)

- Individual-level
 - 1996, 2001, 2004, and 2008 *Survey of Income and Program Participation* (SIPP) panels
 - 300,000 individuals (and close to 10 million person-months) age 18 and over

Empirical strategy

- State-level

$$C_{st} = \beta E_{st} + \alpha P_{st} + \gamma D_{st} + S_s + \delta_t + \varepsilon_{st}$$

- E is a vector of economic variables
- P is a vector of policy variables
- D is a vector of demographic/health characteristics

- Individual-level

$$P_{it} = \alpha Policy_{it} + X_{it}\beta + \delta_t + \varepsilon_{it}$$

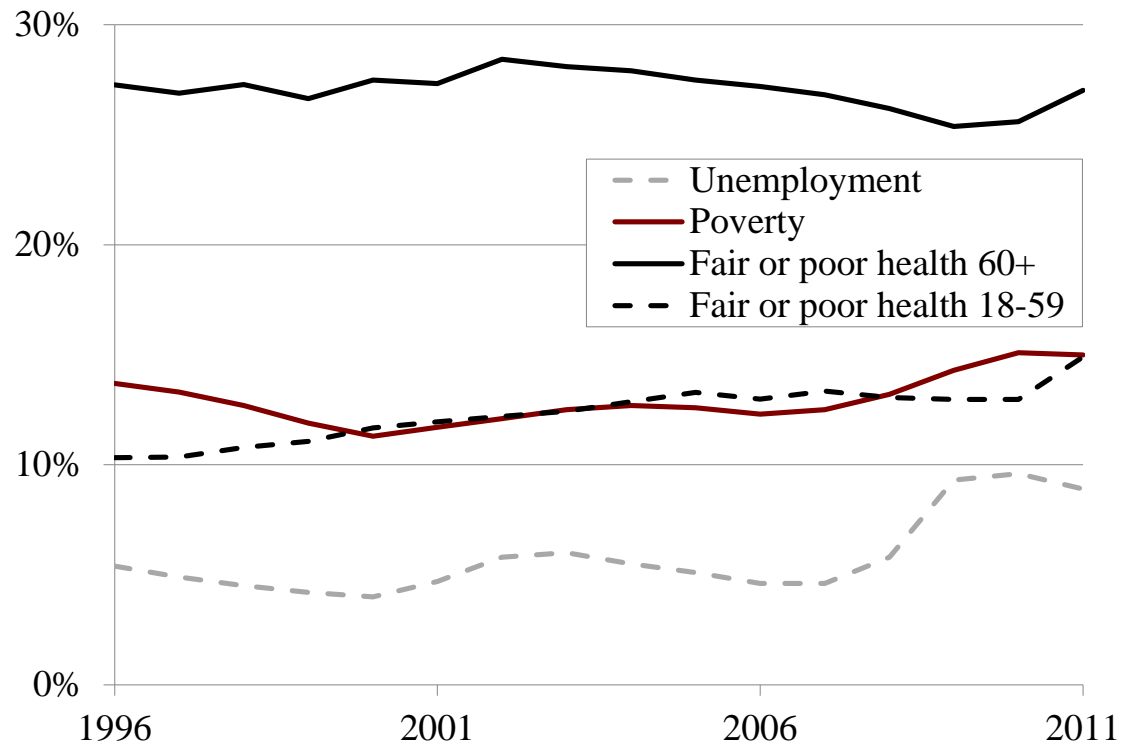
- Interact dummies for time period (2000-2003, 2004-2007, and 2008-2011, with 1996-1999 as the omitted condition) with the main variables of interest
- Estimate for elderly and non-elderly separately

Results: state-level, SNAP

- Unemployment rate (+)
- Poverty rate (+)
- Increased share of the state's population in poor or fair health (+)
- Higher out-of-pocket medical expenditure (+)
- Expanded categorical eligibility (+)
- Increased length of certification period (+)
- Generosity of TANF and UI (—)

Results: state-level, SNAP (cont'd)

Unemployment, Poverty, and Self-Reported General Health; 1996-2011



Sources: Authors' calculations based on 2011 data from Centers for Disease Control and Prevention, U.S. Bureau of Labor Statistics, and U.S. Census Bureau.

Results: state-level, SNAP (cont'd)

State-Level Regressions: SNAP Caseload 18+

	(1)	(2)	(3)	(4)
Unemployment	0.376***			0.459***
2000-03* Unemployment	-0.338***			-0.321***
2004-07 * Unemployment	-0.102			-0.234*
2008-11 * Unemployment	0.348***			0.204
Poverty		0.091*		0.101**
2000-03 * Poverty		-0.087**		-0.042
2004-07 * Poverty		0.099*		0.029
2008-11 * Poverty		0.229***		0.109
% reporting poor health			0.123***	0.141***
2000-03 * % reporting poor health			-0.027	0.037
2004-07 * % reporting poor health			0.157**	0.151**
2004-07 * % reporting poor health			0.226***	0.125

Note: *** p<0.01, ** p<0.05, * p<0.1.

Source: Authors' calculations.

Results: state-level, SNAP (cont'd)

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Source: Authors' calculations.

Results: state-level, SNAP (cont'd)

State-Level Regressions: SNAP Caseload 18-59 and 60+

	18-59	60+
Unemployment	0.684***	-0.036
2000-03 * Unemployment	-0.481***	-0.062
2004-07 * Unemployment	-0.315*	0.029
2008-11 * Unemployment	0.296*	0.181**
Poverty	0.082	0.099***
2000-03 * Poverty	-0.025	-0.084*
2004-07 * Poverty	0.121*	-0.048
2008-11 * Poverty	0.150	-0.008
% reporting poor health	0.106	0.099***
2000-03 * % reporting poor health	0.120	-0.067*
2004-07 * % reporting poor health	0.272***	-0.093*
2004-07 * % reporting poor health	0.369**	-0.132***

Note: *** p<0.01, ** p<0.05, * p<0.1.

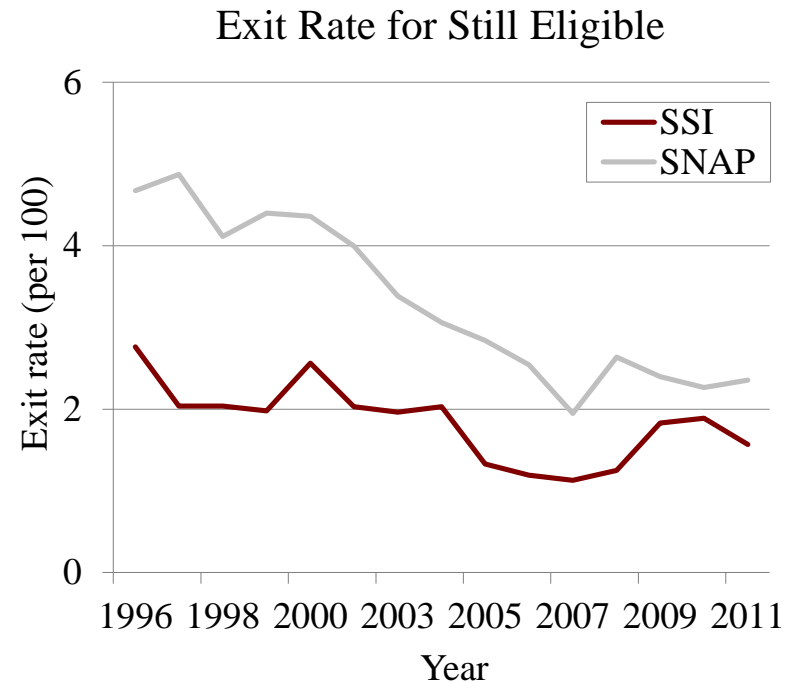
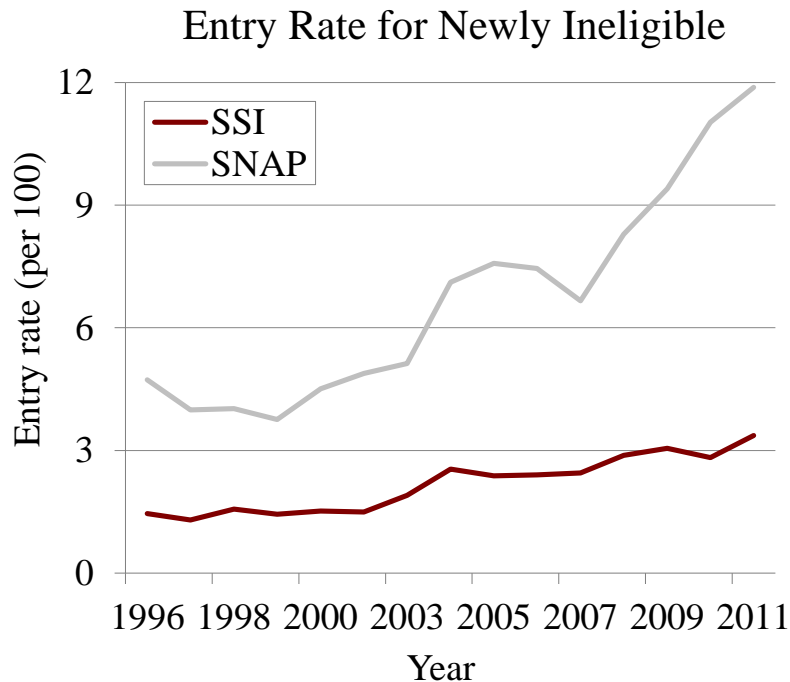
Source: Authors' calculations.

Results: state-level, SSI

- Interaction model: SSI caseloads have grown slightly more cyclical
- Elderly vs. non-elderly
 - The positive correlation between non-elderly SSI caseloads and poor health grew stronger.
 - The correlation between elderly SSI caseloads and poor health became weaker and even turned negative.
- Stock vs. flow
 - Unemployment rate is positively correlated with application levels and first-time awards.
 - For SSI applications
 - Increasing responsiveness to poor health
 - A weakening correlation with the unemployment rate

Results: individual-level

- Increases in the entry rate among newly eligible
- Decreases in the exit rate among those who remain eligible and those who lose eligibility



Source: Authors' calculations.

Results: individual-level, SNAP

Probit Regression Results for SNAP Participation

	Exit for still eligible	Exit for ineligible	Entry for newly eligible
Employment	0.028***	0.039***	-0.010***
2000-03 * Employment	-0.026***	-0.030***	0.002
2004-07 * Employment	-0.040***	-0.033***	-0.003
2008-11 * Employment	-0.053***	-0.052***	-0.008***
Poor health	-0.002	-0.012***	0.023***
2000-03 * Poor health	-0.017**	0.004	0.004
2004-07 * Poor health	-0.012*	-0.010	0.002
2008-11 * Poor health	-0.020***	-0.015*	0.004
Income	0.004***	0.021***	-0.001**
2000-03 * Income	0.003*	0.005**	0.000
2004-07 * Income	0.003	0.004**	-0.000
2008-11 * Income	0.004***	0.002	0.000

Note: *** p<0.01, ** p<0.05, * p<0.1.

Source: Authors' calculations.

Results: individual-level, SNAP

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Note: *** p<0.01, ** p<0.05, * p<0.1.

Source: Authors' calculations.

Results: individual-level, SSI

Probit Regression Results for SSI Participation

	Exit for still eligible	Exit for ineligible	Entry for newly eligible
Employment	0.016	-0.001	-0.026***
2000-03 * Employment	-0.002	-0.055**	-0.002
2004-07 * Employment	0.007	-0.031	-0.002
2008-11 * Employment	0.017	-0.025	-0.004
Poor health	-0.018*	0.014	0.021***
2000-03 * Poor health	0.015	-0.021	0.003
2004-07 * Poor health	0.004	0.027	0.004*
2008-11 * Poor health	0.008	0.022	0.000
Income	0.031***	0.167***	-0.001*
2000-03 * Income	0.008**	0.012	-0.000
2004-07 * Income	0.009**	0.005	0.002***
2008-11 * Income	0.007*	0.001	0.001

Note: *** p<0.01, ** p<0.05, * p<0.1.

Source: Authors' calculations.

Conclusion

- Cyclicalness of SNAP and SSI have changed over time.
- Each program is responding to different factors.
 - For SNAP, the role of:
 - unemployment rate declines;
 - poverty increases, particularly among non-elderly;
 - self-reported health increases, but different by age groups;
 - fewer beneficiaries in fair or poor health leave SNAP; and
 - fewer employed people leave.
 - For SSI, the role of:
 - self-reported health changes, also different by age groups;
 - people in fair or poor health are more likely to apply to SSI and eventually enter the SSI rolls.

Policy implications

- Will a new economic expansion allow program budgets to recover?
 - A tightening labor market is not sufficient for caseloads to fall.
 - A falling poverty rate and improved health for a low-income population that is only tenuously attached to the labor force are needed.