NPI Brown Bag Seminar Series
Safety Net Investments in Children: The Evidence on SNAP

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Safety Net Investments in Children: The Evidence on SNAP/CalFresh

UC Center Sacramento
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What is SNAP / CalFresh?
Supplemental Nutritional Assistance Program
A Snapshot

• Previously known as Food Stamps
• In FY2017, SNAP served 42.2 million people in 23 million households at a cost of $68 billion dollars
  – In CA, CalFresh served 4.1 million people at a cost of $6.7 billion dollars
• Average monthly benefit $258 per household, About $4.20 per person per day
• Central element of the U.S. social safety net and main government policy aimed at reducing food insecurity; available nationwide since 1975
• Survived welfare reform in the 1990s intact but many current proposals for reforming the program: adding work requirements, block granting, and the current farm bill
Program details

- **Eligibility:** gross monthly income below 130% FPL, net income below 100% FPL.
- **Benefits:** phased out as income increases; at a 30% rate
- "Voucher" (debit card) allow purchase of most food items at the grocery store
- Benefits and eligibility criteria set federally, federally funded (other than administration)
Who receives SNAP? Nationally

Vast Majority of SNAP Recipients Live in Households With a Child, Senior, or Person with a Disability
Percent of individuals in households, fiscal year 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly (Age 60+)</td>
<td>12%</td>
</tr>
<tr>
<td>Disabled non-elderly</td>
<td>19%</td>
</tr>
<tr>
<td>Young children</td>
<td>36%</td>
</tr>
<tr>
<td>Children</td>
<td>68%</td>
</tr>
<tr>
<td>Children, elderly, or disabled</td>
<td>87%</td>
</tr>
</tbody>
</table>


4 Out of 5 SNAP Participants Are Not Expected to Work or Are Working

- Not expected to work (children, elderly, disabled): 14%
- Currently employed: 67%
- Not currently employed: 19%
- Children under 18: 44%
- Non-working non-elderly parent caring for a child under age 6 in a household with a worker, or non-disabled adult caring for a disabled person: 4%
- Elderly (age 60 or over): 10%
- Non-elderly adults who are disabled: 9%

Note: This chart takes out individuals with earnings first, and then looks at those “not expected to work” among individuals without earnings.
Source: CBPP analysis of 2015 SNAP household characteristics data.
### California

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP participants in families with children</td>
<td>more than 74%</td>
</tr>
<tr>
<td>Members who are elderly or have disabilities</td>
<td>more than 6%</td>
</tr>
<tr>
<td>Working families</td>
<td>almost 50%</td>
</tr>
</tbody>
</table>

### Nationally

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP participants in families with children</td>
<td>more than 68%</td>
</tr>
<tr>
<td>Members who are elderly or have disabilities</td>
<td>more than 30%</td>
</tr>
<tr>
<td>Working families</td>
<td>more than 44%</td>
</tr>
</tbody>
</table>

Source: CBPP analysis of data from USDA Food and Nutrition Service, FY 2015

#### Most SNAP Participants in California Are Poor

<table>
<thead>
<tr>
<th>Income Category</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income between 51-100% of poverty</td>
<td>23%</td>
</tr>
<tr>
<td>Income at or below 50% of poverty</td>
<td>64%</td>
</tr>
<tr>
<td>Income above 100% of poverty</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: CBPP analysis of FY 2015 USDA SNAP Household Characteristics data
Given where we are at, this is a good time to assess *Why SNAP Matters*

1. SNAP is a central part of the U.S. safety net
2. Research on the short and long run effects of SNAP on health
3. Current policy issues and concerns
1. SNAP and the social safety net
4 Observations about SNAP

- SNAP is one of the largest anti-poverty programs in the U.S.
- It is the closest thing to a “universal safety net”
- It plays an “automatic stabilizer role”; and was important in protecting families in the Great Recession
- SNAP’s importance is rising in part due to stagnant and declining wages for less skilled workers
After the EITC, SNAP lifts more children out of poverty than any other program.

Children Kept out of Poverty (2015, In Millions)

<table>
<thead>
<tr>
<th>Program</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>EITC (and CTC)</td>
<td>4.8</td>
</tr>
<tr>
<td>SNAP (Food Stamps)</td>
<td>2.0</td>
</tr>
<tr>
<td>Social Sec &amp; DI</td>
<td>1.6</td>
</tr>
<tr>
<td>Housing Subsidy</td>
<td>0.9</td>
</tr>
<tr>
<td>School Lunch</td>
<td>0.7</td>
</tr>
<tr>
<td>SSI</td>
<td>0.6</td>
</tr>
<tr>
<td>UI</td>
<td>0.2</td>
</tr>
<tr>
<td>TANF &amp; GA</td>
<td>0.3</td>
</tr>
<tr>
<td>WIC</td>
<td>0.2</td>
</tr>
<tr>
<td>LIHEAP</td>
<td>0.1</td>
</tr>
<tr>
<td>Workers Comp.</td>
<td>0.1</td>
</tr>
</tbody>
</table>

These (official) estimates are likely an undercount of the full effect of SNAP

Recent research shows substantial underreporting of SNAP as well as other transfers in household surveys (Meyer, Mok and Sullivan 2015, Meyer and Mittag 2015)

### CalFresh moves more than 800,000 Californians out of poverty

<table>
<thead>
<tr>
<th>County/group</th>
<th>Children</th>
<th>Adults</th>
<th>County</th>
<th>Children</th>
<th>Adults</th>
<th>County</th>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>391,400</td>
<td>466,000</td>
<td>Los Angeles</td>
<td>111,700</td>
<td>133,200</td>
<td>San Joaquin</td>
<td>8,500</td>
<td>11,900</td>
</tr>
<tr>
<td>Alameda</td>
<td>11,000</td>
<td>15,900</td>
<td>Madera*</td>
<td>2,000</td>
<td>3,300</td>
<td>San Luis Obispo*</td>
<td>1,300</td>
<td>1,800</td>
</tr>
<tr>
<td>Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne*</td>
<td>900</td>
<td>1,300</td>
<td>Marin*</td>
<td>100</td>
<td>800</td>
<td>San Mateo</td>
<td>2,000</td>
<td>2,300</td>
</tr>
<tr>
<td>Butte*</td>
<td>1,800</td>
<td>2,700</td>
<td>Merced</td>
<td>5,700</td>
<td>6,100</td>
<td>Santa Barbara</td>
<td>4,500</td>
<td>4,800</td>
</tr>
<tr>
<td>Colusa, Glenn, Tehama, Trinity*</td>
<td>1,900</td>
<td>2,100</td>
<td>Monterey, San Benito</td>
<td>5,800</td>
<td>6,400</td>
<td>Santa Clara</td>
<td>8,400</td>
<td>9,900</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>7,200</td>
<td>8,000</td>
<td>Napa*</td>
<td>1,100</td>
<td>900</td>
<td>Santa Cruz*</td>
<td>1,900</td>
<td>1,600</td>
</tr>
<tr>
<td>Del Norte, Lassen, Modoc, Plumas, Siskiyou*</td>
<td>1,200</td>
<td>1,900</td>
<td>Nevada, Sierra*</td>
<td>600</td>
<td>700</td>
<td>Shasta*</td>
<td>1,800</td>
<td>2,100</td>
</tr>
<tr>
<td>El Dorado*</td>
<td>800</td>
<td>1,000</td>
<td>Orange</td>
<td>21,800</td>
<td>24,300</td>
<td>Solano</td>
<td>4,300</td>
<td>5,200</td>
</tr>
<tr>
<td>Fresno</td>
<td>20,300</td>
<td>23,200</td>
<td>Placer</td>
<td>1,700</td>
<td>1,900</td>
<td>Sonoma</td>
<td>3,100</td>
<td>3,900</td>
</tr>
<tr>
<td>Humboldt*</td>
<td>1,900</td>
<td>2,400</td>
<td>Riverside</td>
<td>27,600</td>
<td>31,100</td>
<td>Stanislaus</td>
<td>8,800</td>
<td>11,700</td>
</tr>
<tr>
<td>Imperial*</td>
<td>3,600</td>
<td>4,700</td>
<td>Sacramento</td>
<td>19,100</td>
<td>22,800</td>
<td>Sutter, Yuba*</td>
<td>1,600</td>
<td>2,400</td>
</tr>
<tr>
<td>Kern</td>
<td>15,600</td>
<td>15,400</td>
<td>San Bernardino</td>
<td>34,700</td>
<td>40,500</td>
<td>Tulare</td>
<td>9,800</td>
<td>10,200</td>
</tr>
<tr>
<td>Kings*</td>
<td>2,200</td>
<td>2,100</td>
<td>San Diego</td>
<td>22,600</td>
<td>27,000</td>
<td>Ventura</td>
<td>6,600</td>
<td>8,400</td>
</tr>
<tr>
<td>Lake, Mendocino*</td>
<td>1,800</td>
<td>3,300</td>
<td>San Francisco</td>
<td>3,100</td>
<td>4,700</td>
<td>Yolo*</td>
<td>1,100</td>
<td>1,800</td>
</tr>
</tbody>
</table>


Source: PPIC “The CalFresh Food Assistance Program: Just the Facts”
SNAP poverty reduction widespread across groups

FIGURE 3
Reductions in Poverty from SNAP by Age, Race or Ethnicity, and Work or Disability Status, 2015

Percent reduction in poverty

<table>
<thead>
<tr>
<th>Age or Status</th>
<th>Number of people removed from poverty (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>8,384</td>
</tr>
<tr>
<td>Under age 18</td>
<td>3,829</td>
</tr>
<tr>
<td>Ages 18 to 64</td>
<td>4,057</td>
</tr>
<tr>
<td>Age 65 or older</td>
<td>498</td>
</tr>
<tr>
<td>Non-Hispanic white</td>
<td>3,271</td>
</tr>
<tr>
<td>Non-Hispanic black</td>
<td>1,964</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2,522</td>
</tr>
<tr>
<td>Non-Hispanic other race</td>
<td>628</td>
</tr>
<tr>
<td>Families where all adults are age 65 or older or disabled</td>
<td>1,232</td>
</tr>
<tr>
<td>Families with at least one nondisabled adult age 18–64 and no working adults</td>
<td>962</td>
</tr>
<tr>
<td>Families with at least one nondisabled adult age 18–64 and at least one working adult</td>
<td>6,190</td>
</tr>
</tbody>
</table>

SNAP is the closest thing the U.S. has to a “universal safety net”

- Closest thing to universal safety net in the U.S.
  - Eligibility is virtually universal (and depends on income and asset eligibility)
  - Exceptions: restrictions for able bodied recipients without dependents; undocumented immigrants
SNAP played a big role in protecting families in the Great Recession

• More generally, SNAP is a entitlement, not block granted

• Responds quickly to changes in conditions and need; serves an automatic stabilizer role
CalFresh benefits grew dramatically when need was high and as participation rates rose.

Source: USDA, Food and Nutrition Service, SNAP data; USDA, Food and Nutrition Service, SNAP participation rate reports, various years.

Source: PPIC “The CalFresh Food Assistance Program: Just the Facts”
Safety Net Response to the Great Recession
2007-2009 change in state unemployment rate vs change in safety net

(a) SNAP

Food Stamps and Unemployment Rate
Change between 2007 and 2009

(b) TANF

Cash Welfare (TANF) and Unemployment Rate
Change between 2007 and 2009

Given wage stagnation/declines for less skilled workers, there is increasing need for the social safety net to supplement earnings to maintain family income levels. SNAP (and the EITC) is central here.

Fig. 6. Change in real wage levels of full-time workers by education, 1963–2012. (A) Male workers, (B) female workers. Data and sample construction are as in Fig. 3.

David Autor, Science.
2. Research on the short and long run effects of SNAP on health
I. Direct (or short run) effects of SNAP

- Consistent evidence that SNAP leads to more food consumption and reduces food insecurity
- Despite documented benefits of SNAP, there is evidence that the benefits of the program fall over the monthly food stamp cycle
- The phasing out of SNAP benefits leads to small (but detectible) reductions in labor supply
Results: SNAP and Food Insecurity

• Research shows consistent evidence that SNAP reduces food insecurity

• Comparisons of the same family pre- and post-SNAP takeup (Mabli et al 2013, Mabli and Ohls 2015)

• Variation in state implementation policies that generates differences in take-up across states over time (Mykerezi & Mills 2010; Ratcliffe et al. 2011 Shaefer & Gutierrez 2013; Yen et al. 2008)

• Expansions in benefits from federal stimulus (Nord and Prell 2011)
Results: The SNAP Benefit “Cycle”

- Despite documented benefits of SNAP, there is growing evidence that the benefits of the program fall over the monthly food stamp cycle
- Calorie intake declines by 10-25% over the month (Shapiro 2005)
- Admissions for hypoglycemia increase over the month (Seligman et al 2014)
- School disciplinary actions grow over the month (Gennetian et al 2015, Gassman-Pines & Bellows 2016)
- Unclear results for test scores (Gassman-Pines & Bellows 2015)
Figure 9: Hospital Admissions for Hypoglycemia Rise at the End of the Month Among Low-income Patients

Hospitalizations per million admissions

- Low-Income
- High-Income

Source: Seligman et al. (2014)
II. Effects of the SNAP in the longer run

• Recent research has turned attention to evaluating how SNAP affects health and human capital outcomes in the long run
• Does providing SNAP to children when they are young lead to improved health and economic well-being in adulthood?
• Does age of exposure matter?
• This relates to a larger literature that examines whether the social safety net for children can be thought of as an investment in the future by society
Why might SNAP affect adult outcomes?

- FSP leads to increases in income and nutrition. Early life nutrition and resources may translate to later life economic and health outcomes.

- **HEALTH OUTCOMES:** “Fetal origins” hypothesis, from developmental biology and Barker (1990) argues that there is a connection between pre/post natal development and early “critical” periods (nutrition in particular) and chronic conditions in adulthood.

- **ECONOMIC OUTCOMES:** Heckman and others argue that investment in early childhood leads to higher returns to human capital than investments later in life.

- Reductions in stress may be an alternative pathway. Recent work shows that the SES/cortisol correlations may be causal and manipulated by policy.

- Implication: more food stamps in childhood → better outcomes in adulthood.
Leveraging the Historical Rollout of SNAP
Joint Research with Doug Almond and Diane Schanzenbach

- Use initial rollout of the Food Stamps, which took place across the approx. 3,200 U.S. counties over 1961-1975
- We leverage variation over the rollout and estimate a quasi-experimental research design; event study model and difference-in-difference
- Comparison across counties and over time while controlling for county, year, and a host of other potentially confounding effects (Hoynes and Schanzenbach 2009 document the validity of this approach)
- Note: examining long run outcomes means having to look back in time for policy variation!
Geographic Rollout by County

Effects of Childhood Exposure to Food Stamps on Adult Health and Economic Well-Being
Hoynes, Schanzenbach and Almond (AER, 2016)

• Because food stamps was introduced 50 years ago, the individuals who were children when the program was introduced are now adults → we can use the food stamps rollout to estimate the effect of childhood exposure to food stamps on completed education, earnings, and detailed health outcomes.

• We use event study and difference-in-difference models, comparing trends using county and year of birth

• Our design allows us to explore when treatment matters
Data and Outcomes

• Panel Study of Income Dynamics, longitudinal data links across multiple generations
• Two indices: economic self-sufficiency, metabolic health
• Use county and year-month of birth and family of origin characteristics (e.g. parent’s education)
• Sample includes those born between 1956-1981; outcomes measured at ages 24-53
• Caveat: these folks are still pretty young; we may be capturing a delay in onset
Key result: Food Stamps in childhood reduce adult metabolic syndrome

**Outcome = Metabolic Syndrome (Index)**

Key result: Food Stamps in childhood and adult metabolic syndrome

Improving nutrition through age 5 generates long run health improvements

More on long run impacts of food stamps  
**Joint with Martha Bailey, Maya Rossin-Slater and Reed Walker**

- We now have **20% Census 2000 (43 million obs.)** linked to the Social Security Administration *NUMIDENT* file, which records detailed place of birth (from birth certificates)

- Estimating effects of childhood exposure to food stamps on adult human capital and labor market outcomes
  - Human capital, economic self sufficiency, living conditions, disability, mortality, incarceration
Food stamps in early childhood leads to improvement in human capital

*Event Study – Full Sample*

Human capital index: completed schooling, professional degree, professional occupation
All in standard deviation units
And leads to reduction in mortality

*Event Study – Full Sample*

All in standard deviation units
And food stamps *throughout childhood* leads to reduction in incarceration (*nonwhite males*)

*Event Study – Nonwhite Males*

![Graph showing reduction in incarceration for nonwhite males](image)

All in SD units
3. Current policy issues and concerns
The Farm Bill

- Significant work requirements: require SNAP participants ages 18-59 who are not disabled or raising a child under 6 to prove — every month — that they’re working or participating in a work program at least 20 hours a week
- Face sanctions for noncompliance -- the first failure would mean a loss of benefits for 12 months; each subsequent failure would lock individuals out of the program for 36 months.
- Ramp up training programs (though not much specificity about what this means)
<table>
<thead>
<tr>
<th>Description</th>
<th>CBO 10-Year Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP benefit cuts</td>
<td>-$23.1 billion</td>
</tr>
<tr>
<td>SNAP benefit improvements</td>
<td>$5.8 billion</td>
</tr>
<tr>
<td>New administrative costs and work programs</td>
<td>$15.0 billion</td>
</tr>
<tr>
<td>SNAP benefit delivery, and other program changes</td>
<td>-$0.6 billion</td>
</tr>
<tr>
<td>Non-SNAP grants</td>
<td>$2.8 billion</td>
</tr>
<tr>
<td><strong>Total Nutrition Title</strong></td>
<td><strong>$0 billion</strong></td>
</tr>
</tbody>
</table>

See Appendix Table for more detail. Details do not add to total because of rounding.

* Title IV total including $463m in direct spending and $465m in increased revenue.

Sources: Congressional Budget Office (CBO), *H.R. 2, Agriculture and Nutrition Act of 2018, as introduced April 12, 2018* [https://www.cbo.gov/publication/53760](https://www.cbo.gov/publication/53760) and preliminary supporting documents.

Source: Center for Budget and Policy Priorities “Chairman Conaway’s Farm Bill Would Increase Food Insecurity and Hardship.”
TABLE 5

Illustrative Example of People Potentially Subject to the Work Requirement and Employment and Training Grant Had the Work Requirement Applied in 2016

<table>
<thead>
<tr>
<th>State/Territory</th>
<th>Number of non-disabled adults without children under 6 in a typical month of FY2016</th>
<th>Number of non-disabled adults without children under 6 not working 20 hours per week in a typical month of FY2016</th>
<th>Estimated SNAP Employment and Training Granta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>186,000</td>
<td>147,000</td>
<td>$19,960,000</td>
</tr>
<tr>
<td>Alaska</td>
<td>22,000</td>
<td>19,000</td>
<td>$2,524,000</td>
</tr>
<tr>
<td>Arizona</td>
<td>218,000</td>
<td>181,000</td>
<td>$24,561,000</td>
</tr>
<tr>
<td>Arkansas</td>
<td>88,000</td>
<td>71,000</td>
<td>$9,591,000</td>
</tr>
<tr>
<td>California</td>
<td>1,193,000</td>
<td>1,015,000</td>
<td>$137,656,000</td>
</tr>
</tbody>
</table>

Source: Center for Budget and Policy Priorities “Chairman Conaway’s Farm Bill Would Increase Food Insecurity and Hardship.”
• We’ve seen this before – welfare reform and TANF
• Complying with these work requirements will cut off many recipients
• Low-paying jobs with unreliable hours
• those with barriers to employment would be left without neither earnings nor food assistance
• The insurance/protective element of SNAP would be gone
• Risk that these requirements mainly would fail large numbers of people, who would be deemed “out of compliance” and lose their basic food assistance.
TANF’s Role as a Safety Net Continues to Decline

Number of families receiving AFDC/TANF benefits for every 100 families with children in poverty

1979: 82
1996: 68
2016: 23

AFDC families
TANF families

'80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02 '04 '06 '08 '10 '12 '14 '16

Note: TANF = Temporary Assistance for Needy Families, AFDC = Aid to Families with Dependent Children
Conclusions

- Food stamps is a central element of the safety net
- The work summarized here shows that there are economically important improvements in health, both contemporaneous and in the longer term
- It implies that benefits of safety net are broader than previously thought. Positive external benefits to taxpayers.
- The proposed changes to SNAP would dramatically reduce these benefits of the program,
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