The Role of Media Outreach and Program Modernization in the Growth of the SNAP Caseload

Stacy Dickert-Conlin, Katie Fitzpatrick, and Laura Tiehen

Stacy Dickert-Conlin
Department of Economics
Michigan State University
110 Marshall-Adams Hall
East Lansing, MI 48824-1038
dickertc@msu.edu
Phone: 517-337-3109
Fax: 517-432-1068

Katie Fitzpatrick
Economic Research Service
U.S. Department of Agriculture
1800 M St., NW Rm. N2183
Washington, DC 20036
kfitzpatrick@ers.usda.gov
Phone: 202-694-5339
Fax: 202-694-5642

Laura Tiehen
Economic Research Service
U.S. Department of Agriculture
1800 M St., NW Rm. S2076
Washington, DC 20036
ltiehen@ers.usda.gov
Phone: 202-694-5417
Fax: 202-694-5642

This study examines the effect of a multi-year advertising campaign and modernization policies on the caseload of the Supplemental Nutrition Assistance Program (SNAP, formerly the Food Stamp Program).

**Background and Motivation**
- SNAP is one of the primary transfer programs for low-income families in the United States.
  - Over 40 million Americans received SNAP in 2010.
  - Many eligible households do not receive SNAP benefits.
    - USDA estimates that 67 percent of eligible individuals participated in the program in 2008.
    - Participation rates among eligible individuals vary dramatically over time and across states.
  - The U.S. Department of Agriculture has created new initiatives aimed at increasing awareness of SNAP eligibility and modernizing program operations.
  - Important to understand the effect of these new initiatives
    - Is an advertising campaign an effective tool to increase SNAP participation?
    - Are the modernization efforts having the intended effect?

**SNAP Advertising Campaign**
- USDA-funded campaign started in 2004 to increase awareness of SNAP
  - Emphasize the potential eligibility of working households
  - Focus on the ability to purchase healthy food
  - Some ads targeted to the elderly, some aired in Spanish
  - Introduce the new program name

SNAP Radio Advertising Campaigns, 2004 and 2007
• **SNAP Modernization Efforts**
  o Online applications
    ▪ Downloaded and sent to SNAP office
    ▪ Fully completed online, with digital signature
  o Call Centers allow clients to interview for SNAP eligibility and recertification over the phone rather than in person.

• **Previous Literature**
  o Estimated effects of outreach on SNAP take-up are mixed.
  o Our work is most closely related to:
    ▪ Aizer (2003, 2007): Medicaid outreach ads are associated with a 4 percent increase in enrollment in the following month
    ▪ Heflin and Meuser (2009): modernization efforts are associated with reductions in the Florida SNAP caseload.

• **Methodology**
  o We estimate the following equation explaining the county-level monthly SNAP caseload from January 2000 to January 2010:

\[
SNAP_{ct} = \alpha + \sum_{l=1}^{6} \beta_l Ad_{Radio_{c(t-l)}} + \sum_{l=1}^{6} \hat{\gamma}_l Ad_{STV_{c(t-l)}} + MOD_{ct} \eta + FSP_{ct} \theta + \sum_{l=1}^{12} \phi_l Econ_{c(t-l)} + \phi Demo_c \cdot t + \sigma_c + \delta_m + \mu_s \cdot t + \epsilon_{ct}
\]

  where \( SNAP_{ct} \) is the natural log of the per capita SNAP caseload in county \( c \) (\( c = 1 \) to 2855) at time \( t \) (\( t = 1 \) to 121),
  \( Ad_{Radio_{c(t-l)}} \) (\( Ad_{STV_{c(t-l)}} \)) indicates that county \( c \) received a radio (Spanish-language TV) advertisement in time \( t \),
  \( MOD_{ct} \) is a matrix of policies related to the modernization of the SNAP application process (online applications, acceptance of e-signatures, and use of call centers),
  \( FSP_{ct} \) is a matrix of controls for other SNAP policies,
  \( Econ_{ct} \) controls for the unemployment rate in county \( c \) at time \( t \),
  \( Demo_c \) are year 2000 county demographic characteristics, interacted with the time trend \( t \); \( \sigma_c \) are county fixed effects; \( \delta_m \) (\( m = 2 \) to 12) are month-of-year dummy variables; and \( \mu_s \cdot t \) represents state-specific linear time trends (an alternative specification includes state-year fixed effects rather than linear time trends).
**Regression Results: Primary Specification**

<table>
<thead>
<tr>
<th>Coefficient estimates</th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio advertisements</td>
<td>0.026**</td>
<td>0.001**</td>
</tr>
<tr>
<td>Spanish TV advertisements</td>
<td>-0.075**</td>
<td>-0.087**</td>
</tr>
<tr>
<td>Online applications</td>
<td>-0.030**</td>
<td>-0.031**</td>
</tr>
<tr>
<td>Electronic signature</td>
<td>0.002</td>
<td>0.031**</td>
</tr>
<tr>
<td>Call Centers</td>
<td>-0.001</td>
<td>0.003**</td>
</tr>
<tr>
<td>Unemployment</td>
<td>0.051</td>
<td>0.034</td>
</tr>
<tr>
<td>Controls for time-varying state characteristics</td>
<td>State-linear time trends</td>
<td>State-year fixed effects</td>
</tr>
</tbody>
</table>

**Significant at 1%, *Significant at 5%**

**Endogeneity Issues**
- The choice of counties in which to place advertisements could bias estimates
- Our attempts to control for possible endogeneity
  - Control for pre-treatment county characteristics
  - Include leads of advertising variables
  - Use more closely matched comparison group of border counties
- Findings suggest an upward bias in the estimated effect of radio advertising and an downward bias in the estimated effect of television advertising.

**Summary of Findings**
- Small, positive effects of radio ads
- Large, negative effects of Spanish-language TV ads, which may be a result of the endogeneity of ad placement.
- Online applications are negatively associated with the SNAP caseload, consistent with earlier research on the SNAP caseload in Florida
- Little to no effect of call centers
Selected References:


