The Effects of Avian Influenza News on Consumer Purchasing Behavior: A Case Study of Italian Consumers’ Retail Purchases

By
Fred Kuchler
Food Economics Division, ERS, USDA
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Introduction

• Background statistics on bird flu
• Reported impacts on poultry demand
• Puzzle—Are consumers’ responses out of proportion to health risks?
Research questions

• Estimate the magnitude and duration of decreases in poultry demand from news media reports of bird flu
• Extrapolate from countries where bird flu was found to the U.S.
Number of weekly non-Italy-specific newspaper reports about bird flu

- Reported in Turkey, Romania, and Croatia
- Reported in Bulgaria, Greece, and Italy
- Turkey reports human cases
- Reported in Russia and Kazakhstan

Graph showing the number of weekly reports from 2005M01 to 2006M07.
Number of weekly Italy-specific newspaper reports about bird flu

Reported in Russia and Kazakhstan

Reported in Turkey, Romania, and Croatia

Reported in Bulgaria, Greece, and Italy

Turkey reports human cases
Weekly reduction in poultry purchases associated with a marginal increase in non-Italy-specific newspaper reports.
Weekly reduction in poultry purchases associated with a marginal increase in Italy-specific newspaper reports

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>-0.7</td>
</tr>
<tr>
<td>4</td>
<td>-0.6</td>
</tr>
<tr>
<td>6</td>
<td>-0.5</td>
</tr>
<tr>
<td>8</td>
<td>-0.4</td>
</tr>
<tr>
<td>10</td>
<td>-0.3</td>
</tr>
<tr>
<td>12</td>
<td>-0.2</td>
</tr>
<tr>
<td>14</td>
<td>-0.1</td>
</tr>
<tr>
<td>16</td>
<td>0.0</td>
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<tr>
<td>18</td>
<td>0.0</td>
</tr>
<tr>
<td>20</td>
<td>0.0</td>
</tr>
<tr>
<td>22</td>
<td>0.0</td>
</tr>
<tr>
<td>24</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Fresh poultry
Frozen poultry
Actual and simulated frozen and processed poultry purchases in Italy

Kilograms per week (thousands)

- No Italy-specific or non-Italy-specific news
- No Italy-specific news
- Actual purchases
Actual and simulated fresh poultry purchases in Italy

Actual purchases
Proportion of baseline fresh poultry purchases remaining with AI news impacts

Purchases with news impacts as a proportion of purchases without news impacts

Italy-specific news
Italy-specific and non-Italy-specific news
Proportion of baseline frozen and processed poultry purchases remaining with AI news impacts

Purchases with news impacts as a proportion of purchases without news impacts

- Blue line: Italy-specific news
- Red line: Italy-specific and non-Italy-specific news
<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th>U.S.</th>
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</thead>
<tbody>
<tr>
<td>Poultry consumption</td>
<td>23.5 lbs.</td>
<td>60.4 lbs.</td>
</tr>
<tr>
<td>Food share of all spending</td>
<td>16.6 %</td>
<td>9.7 %</td>
</tr>
<tr>
<td>Income elasticity for meat</td>
<td>0.340</td>
<td>0.110</td>
</tr>
<tr>
<td>Price elasticity for meat</td>
<td>-0.275</td>
<td>-0.089</td>
</tr>
</tbody>
</table>
What does news do?

- May lead consumers to think food is riskier than before
  - Consumers are likely to purchase less when risks rise
- If consumers already know food is not risk-free, news may not be news
  - News might be irrelevant to food demand
Complete details are available in a new ERS report