The objective of this work is to explore the impact of local agricultural production on food retail stores. Even though vibrant food retail establishments can be an important way for communities to attract tourist expenditures from non-local residents and retain expenditures from local residents, previous research that has estimated the economic impacts of local agricultural production has focused on upstream effects, such as how local food markets provide jobs for farm laborers and/or revenue for input suppliers (e.g., Jablonski and Schmit 2015). The impact of local agricultural production on the food retail sector has not been rigorously investigated in the literature.

The table below presents the levels and changes in sales for Food and Beverage Stores (retail food stores like grocery stores) and Food Services and Drinking Places (like restaurants and bars) in the West South Central Census region (which includes Arkansas, Louisiana, Oklahoma and Texas) between 2007 and 2012. Both sectors had increased sales, consistent with rising incomes in the region due in part to increased oil and gas production; direct to consumer agricultural sales in the region declined over the same period, consistent with a severe drought which occurred in the region and reduced all agricultural production in the region. Using statistical techniques, we can utilize these facts to determine if direct to consumer sales could stimulate local food markets.

### Comparison of Retail and Direct to Consumer Agricultural Sales, 2007-2012 in the West South Central Census Region

<table>
<thead>
<tr>
<th></th>
<th>2007 (2014 $000)</th>
<th>2012 (2014 $000)</th>
<th>Absolute Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Beverage Stores</td>
<td>$58,670,138</td>
<td>$66,765,019</td>
<td>$8,094,881</td>
<td>14%</td>
</tr>
<tr>
<td>Food Services and Drinking Places</td>
<td>$54,141,129</td>
<td>$63,143,562</td>
<td>$9,002,433</td>
<td>17%</td>
</tr>
<tr>
<td>Direct to Consumer Agricultural Sales</td>
<td>$77,145</td>
<td>$50,965</td>
<td>-$26,180</td>
<td>-34%</td>
</tr>
</tbody>
</table>

*The views expressed in this fact sheet are not necessarily those of the U.S. Department of Agriculture.*

For more information:
Dave Shideler · Oklahoma State University · 405-744-6170 · dave.shideler@okstate.edu
While the results shown in the figure on the left suggest that direct to consumer sales cause sales to increase at Food Services and Drinking Places, the results are modest; one needs to note the relative magnitudes of sales in direct to consumer channels versus retail food outlets – a $1,000 increase in direct to consumer sales (a 0.002% increase) leads to a $48,600 increase in Food Service and Drinking Places sales (a 0.00007% increase).

**Implications**

» Direct-to-consumer agricultural production does not appear to affect the food and beverage store (e.g., grocery stores) subsector but does increase sales of the food service and drinking places (e.g., restaurants) subsector.

» Expenditures at grocery stores are more for staple foods and are less influenced by whether such products are local.

» In contrast, expenditures at restaurants may be more influenced by quality attributes of the food product.

» Grocery store supply chains may be more consolidated and challenging for direct-to-consumer farmers to access, whereas selling products directly to a restaurant may be more straightforward.

» The linkage that we establish between direct-to-consumer agricultural production and food retail establishments suggests that policymakers and economic development officials can view supporting the food service and drinking places subsector and direct-to-consumer markets as reinforcing for planning purposes in metropolitan counties, but as substitutes in non-metropolitan counties.

» Additionally, this linkage between locally-focused agricultural producers and restaurants may present an important market channel for growth among small and medium sized farms in this region.

**Data Sources:**
