Trends in food, markets and farms: findings from USDA’s Economic Research Service

Lunch~N~Learn
National Coalition for Food and Agricultural Research
March 23, 2015
Mary Bohman, Ph.D.
Administrator
Inform and enhance public and private decision making on economic and policy issues related to agriculture, food, the environment, and rural development.
Research & statistics that track the status of the food, ag & rural economy

• Key role in WASDE, USDA Baseline
• Farm income
• Agricultural productivity
• Status of rural economy
• Food security of U.S. households
• Food access measures
ERS provides research to inform policy decisions

- Analysis of 2014 Farm Act
- Child nutrition and WIC reauthorization
- Livestock Mandatory Price Reporting Act (to expire on September 30, 2015)
ERS website provides research and data ... and social media expands our reach

Twitter: https://twitter.com/USDA_ERS

www.ers.usda.gov
Need something else …

- Contact ERS directly with specific questions
- Start with Steve Crutchfield, ERS Assistant Administrator (202-694-5406, scrutch@ers.usda.gov)
- Subject specialists listed on website
Trends in food, markets and farms: findings from USDA’s Economic Research Service
Trends in the American diet

Food industry responds to consumer demand for health, convenience, and other traits
America’s away-from-home spending continues to increase...

Food-at-home and away-from-home expenditures in the United States, 1960-2013

...contributing to a larger Food Services share and smaller Farm Share of the Food Dollar

2012 Food dollar (nominal): Industry Group

Note: “Other” includes two industry groups: Advertising plus Legal & Accounting. Source: USDA, Economic Research Service, Food Dollar Series.
Calorie by food group, 1970 and 2010

Calories from grains, added fats and oils, and sweeteners have increased...

Note: Food Availability data serve as proxies for food consumption. Added fats and oils and added sugars are added to foods during processing or preparation. They do not include naturally-occurring fats and sugars in food (e.g., fats in meat or sugars in fruits).

...so that eating trends are not consistent with recommendations

U.S. consumption in relation to MyPlate food group recommendations, 2012

Percent

1 Based on a 2,000-calorie diet.
Consumers try to improve diet quality...have shifted to healthier milk options, while consuming more cheese and less fluid milk.


...but time and other constraints can make healthy food choices challenging at times


**Other activities include grooming, housework, caring activities, sports/exercise, and shopping.
Regulations prompted industry to reformulate toward low-transfat products

Average trans fat content of new food products

<table>
<thead>
<tr>
<th>Category</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakery products</td>
<td>0.50</td>
<td>0.15</td>
</tr>
<tr>
<td>Prepared meals</td>
<td>0.35</td>
<td>0.15</td>
</tr>
<tr>
<td>Desserts</td>
<td>0.20</td>
<td>0.10</td>
</tr>
<tr>
<td>Processed fish, meat, and egg products</td>
<td>0.10</td>
<td>0.05</td>
</tr>
<tr>
<td>Snacks</td>
<td>0.10</td>
<td>0.05</td>
</tr>
</tbody>
</table>

US agriculture operates in dynamic global markets

Growing importance of global markets for U.S. agriculture
USDA Baseline forecasts growth in global trade of soybean, coarse grains and wheat
Higher incomes have increased demand for food in developing countries

- Sales to developing countries now account for two-thirds of U.S. agricultural exports

![U.S. agricultural exports by global region](chart)

The top 3 U.S. ag markets—China, Canada, and Mexico—account for about 45 percent of U.S. exports.
Chinese imports are growing
U.S. exports to China are growing.
US farms: increasing farm size and evolving market opportunities
Most U.S. farms are small, but large farms account for most production

Note: Small family farms have gross cash farm income (GCFI) < $350,000. Midsize family farms have GCFI of $350,000-$999,999. Large-scale family farms have GCFI of $1,000,000 or more.
Commodity orientation differs by size and type of farm


---

1Sheep, lambs, wool, goats, goats’ milk, mohair, horses, ponies, mules, donkeys, bees, honey, aquaculture, mink, rabbits, other fur bearing animals, bison, deer, elk, llamas, etc.

2High value crops are vegetables, fruits and tree nuts, and nursery and greenhouse.

---
Farms size continues to increase

Midpoint (weighted median) acreage provides a good measure with a skewed distribution.

*Note: "Midpoint acreage" is the farm size where half of all cropland acres are on farms with more cropland than the midpoint, and half are on farms with less. "Mean" cropland is the total number of cropland acres divided by the total number of farms with cropland. Source: USDA, National Agricultural Statistics Service, Census of Agriculture (for mean cropland), and ERS calculations from farm-level Census of Agriculture data (for midpoint acreages).*
Not just field crops ...

• 37 fruit, vegetable, nut, & berry crops
  – Covering over 90% of acreage
  – Midpoints increased for 36 of 37 over 1987-2012
  – Mean increase was 146%, median was 116%
  – 29 with increases in 2007-12; mean was 18%

• From 1987 to 2012, the mid-point dairy herd increased from 80 to 900 cows
U.S. farm consolidation is ...

• Long-term, ongoing and widespread

• Drivers
  – Technology: better faster equipment, pest management practices
  – Organizational innovations: specialization of production into stages (hogs), via contracts, via hiring custom services
What else has not happened?

• But, not really very “corporate”—still dominated by family businesses

• Few corporatized farming businesses
  – Crop farms are getting larger, but none have more than 50,000 hectares of cropland
  – Livestock is more mixed
    • Integrators control vertical chains in hogs, poultry
      – But contract with growers
    • Some cattle feeders own multiple large feedlots
    • Some individuals own multiple large dairy farms
A diverse U.S. agricultural sector: Local food systems and small farms

• Local and regional food systems are gaining interest among consumers

• Direct-to-consumer sales increased by 32 percent between 2002 and 2007, but have been flat since. Intermediated sales may have grown.

• Small farms handle 33 percent of local sales (compared to 25 percent of all farm sales).
Direct to consumer sales take place across U.S., but most occur in Northeast and West Coast.

Figure 2
Total direct-to-consumer sales, by county, 2012

Direct to Consumer (DTC) farms: More likely to survive, less likely to grow

Survival rate 2007-12

<table>
<thead>
<tr>
<th></th>
<th>No direct sales in 2007</th>
<th>Direct sales in 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>All operations</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Beginning farmer in 2007</td>
<td>40%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Change in sales 2007-12

<table>
<thead>
<tr>
<th></th>
<th>No direct sales in 2007</th>
<th>Direct sales in 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>All operations</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Beginning farmer in 2007</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

All differences between groups are statistically significant (0.1%)

Source: Calculations by USDA ERS, based on USDA NASS Census of Agriculture data
Summary: Trends in food, markets & farms

• Food and farming continue to change in response to
  – Consumers balancing time and desire to eat better
  – Food industry providing convenience and meeting consumer demand for taste and health
  – Global market opportunities expand with income growth in developing countries
  – New technology and innovations in organization
  – Evolving market opportunities including local foods
For more information

ERS website: www.ers.usda.gov

Twitter: https://twitter.com/USDA_ERS