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Federal Reserve Bank of Chicago
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Can Ethanol and Livestock Coexist?

• Corn Growers need a robust, healthy livestock industry

• Ethanol producers need a robust healthy livestock industry

• $7 corn didn’t help anybody
Corn Yields

Data Source: USDA, NASS

--- Linear (35-year)   Linear (1999-09)
Corn Usage

Source: ProExporter Network
Corn Usage 2009-10*

- Feed: 41%
- Exports: 16%
- DDG Displacement: 8%
- Ethanol: 25%
- FSI: 10%

Source: ProExporter Network
U.S. Corn Exports

Source: USDA, FAS
Ethanol Usage
Ethanol Production

Source: ProExporter Network
2007 EISA (Energy Act or RFS2)

RENWABLE FUELS STANDARD

BILLION GALLONS


- Conventional Biofuels
- Cellulosic
- Other Advanced Biofuels
- Biobased diesel

“Advanced” Biofuels: 21 BGY
“Conventional” Biofuels: 15 BGY
The Fed: Don’t Blame Corn

- Non-farm costs have added more costs to retail food dollar
- 59% in 1959 to 80% today, due primarily to rising labor and energy costs
Monthly Corn Price Received
Central Illinois

Data Source: USDA, AMS; WASDE

May 96 - $4.86
Old crop S:U 3.7%
New crop S:U 8.5%

Jun 08 - $6.55
Old crop S:U 11.0%
New crop S:U 5.4%
Corn, Oil Prices Down
<table>
<thead>
<tr>
<th></th>
<th>2007-08* (mil bu)</th>
<th>% Supply</th>
<th>2015-16** (mil bu)</th>
<th>% Supply</th>
<th>2020-21*** (mil bu)</th>
<th>% Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>13,074</td>
<td></td>
<td>15,170</td>
<td></td>
<td>17,000^1</td>
<td></td>
</tr>
<tr>
<td>Carry-in</td>
<td>1,304</td>
<td></td>
<td>1,731</td>
<td></td>
<td>1,800</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>14,398</td>
<td></td>
<td>16,911</td>
<td></td>
<td>18,800</td>
<td></td>
</tr>
<tr>
<td>Feed &amp; Residual</td>
<td>5,974</td>
<td>43%</td>
<td>5,425</td>
<td>32%</td>
<td>6,100^2</td>
<td>32%</td>
</tr>
<tr>
<td>DDG Fed – Corn equivalents</td>
<td>792</td>
<td></td>
<td>1,454</td>
<td></td>
<td>1,400</td>
<td></td>
</tr>
<tr>
<td>Food, Seed &amp; Industrial (FSI)</td>
<td>4,364</td>
<td>30%</td>
<td>6,922</td>
<td>41%</td>
<td>7,900</td>
<td>42%</td>
</tr>
<tr>
<td>Food</td>
<td>1,095</td>
<td>8%</td>
<td>1,006</td>
<td>6%</td>
<td>1,025</td>
<td>5%</td>
</tr>
<tr>
<td>New Uses, Industrial, Starch</td>
<td>270</td>
<td>2%</td>
<td>435</td>
<td>3%</td>
<td>725^6</td>
<td>4%</td>
</tr>
<tr>
<td>Ethanol (-DDG credit)</td>
<td>3,010</td>
<td>Adjusted Consumption 15%</td>
<td>5,481</td>
<td>Adjusted Consumption 24%</td>
<td>6,150^3</td>
<td>Adjusted Consumption 25%</td>
</tr>
<tr>
<td></td>
<td>(2,218)</td>
<td></td>
<td>(4,027)</td>
<td></td>
<td>(4,750)^4</td>
<td></td>
</tr>
<tr>
<td>Exports (Grain Only)</td>
<td>2,436</td>
<td>17%</td>
<td>2,500</td>
<td>15%</td>
<td>2,760^5</td>
<td>15%</td>
</tr>
<tr>
<td>Total Use</td>
<td>12,773</td>
<td></td>
<td>14,847</td>
<td></td>
<td>16,760</td>
<td></td>
</tr>
<tr>
<td>Carry Out</td>
<td>1,624</td>
<td>(Stocks: Use) 13%</td>
<td>2,064</td>
<td>(Stocks: Use) 14%</td>
<td>2,140</td>
<td>(Stocks: Use) 13%</td>
</tr>
</tbody>
</table>