Outlook and Policy Considerations for AZ Field Crops

by
Russell Tronstad

University of Arizona, Dept. of Agricultural and Resource Economics

Arizona Crop Acres, 1990-2012

Source: Arizona Agricultural Statistics, various years
**Arizona Cash Receipts, 1990-2010**

- **Billion 2010 Dollars**
- **Annual % Change**
  - Total: 0.2%
  - Govt. Payments: -0.1%
  - Other Citrus & Melons: -0.1%
  - Dairy Products: 2.7%
  - Cattle & Calves: -1.3%
  - Other Crops: 3.0%
  - Citrus: -7.2%
  - Other Livestock: -0.8%
  - Other Veg. & Melons: 2.7%
  - Lettuce: 6.7%
  - Wheat: -0.6%
  - Hay: -0.6%
  - Cotton: -6.4%

Source: Arizona Agricultural Statistics, various years

Note: Revenues are deflated by the Consumer Price Index for all goods, 1982-84=100

**US Grain Production, 1988-2012**

- **Billion Bushels**
- **Annual % Change**
  - Total: 2.4%
  - Soybeans: 2.2%
  - Sorghum: -3.4%
  - Barley: -1.1%
  - Wheat: 1.0%
  - Corn: 3.2%

Source: NASS/USDA, various years
Selected US Crop Values, 90-11

Annual % Change

- Total 2.5%
- Soybeans 3.1%
- Corn 3.2%
- Wheat 1.0%
- Cotton -0.9%
- Sorghum -2.3%
- Hay -0.3%
- Barley -3.0%

Source: NASS/USDA, various years

US Corn Supply & Price, 88-13

Bil. Bushels

$ Per Bushel

Supply
Price


Source: NASS/USDA, various years
**US Corn Utilization, 1988-2013**

- **Utilization of US Corn Production**

  - Billion bushels of corn
  - Livestock feed and residual
  - Exports
  - Food, seed, and other
  - Ethanol
World Corn Ending Stocks, 88-12

World Stocks-to-Use Ratios

Crop Year
Wheat Coarse Grains
### 2012-13 WORLD COTTON SUPPLY & OFFTAKE

<table>
<thead>
<tr>
<th></th>
<th>Beginning Stocks</th>
<th>Production</th>
<th>Imports</th>
<th>Supply</th>
<th>Mill Use</th>
<th>Exports</th>
<th>Ending Stocks</th>
<th>Stocks-to-Use Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>69.9</td>
<td>114.0</td>
<td>36.6</td>
<td>183.9</td>
<td>107.6</td>
<td>36.6</td>
<td>76.5</td>
<td>71.1%</td>
</tr>
<tr>
<td>U.S.</td>
<td>3.4</td>
<td>17.1</td>
<td>0.0</td>
<td>20.5</td>
<td>3.4</td>
<td>11.8</td>
<td>5.3</td>
<td>34.9%</td>
</tr>
<tr>
<td>China</td>
<td>30.6</td>
<td>31.0</td>
<td>12.0</td>
<td>73.6</td>
<td>38.0</td>
<td>0.1</td>
<td>35.5</td>
<td>93.3%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3.1</td>
<td>9.7</td>
<td>2.4</td>
<td>15.2</td>
<td>11.3</td>
<td>0.5</td>
<td>3.4</td>
<td>28.8%</td>
</tr>
<tr>
<td>India</td>
<td>7.7</td>
<td>24.5</td>
<td>1.0</td>
<td>33.2</td>
<td>21.5</td>
<td>3.5</td>
<td>8.2</td>
<td>32.7%</td>
</tr>
<tr>
<td>Central Asia</td>
<td>3.0</td>
<td>6.7</td>
<td>0.0</td>
<td>9.8</td>
<td>2.3</td>
<td>4.4</td>
<td>3.0</td>
<td>45.4%</td>
</tr>
<tr>
<td>Australia</td>
<td>3.3</td>
<td>4.3</td>
<td>0.0</td>
<td>7.6</td>
<td>0.0</td>
<td>4.2</td>
<td>3.5</td>
<td>81.8%</td>
</tr>
<tr>
<td>Brazil</td>
<td>8.0</td>
<td>6.1</td>
<td>0.1</td>
<td>14.1</td>
<td>4.3</td>
<td>4.0</td>
<td>6.0</td>
<td>73.2%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.5</td>
<td>0.0</td>
<td>2.2</td>
<td>2.7</td>
<td>2.1</td>
<td>0.0</td>
<td>0.5</td>
<td>23.1%</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.8</td>
<td>1.0</td>
<td>1.3</td>
<td>3.0</td>
<td>1.8</td>
<td>0.4</td>
<td>0.9</td>
<td>39.9%</td>
</tr>
<tr>
<td>Turkey</td>
<td>1.7</td>
<td>2.8</td>
<td>3.0</td>
<td>7.5</td>
<td>5.6</td>
<td>0.2</td>
<td>1.8</td>
<td>30.2%</td>
</tr>
</tbody>
</table>

Source: USDA-WAOB September WASDE Report.

### Global Cotton Stocks & Price

![Graph showing global cotton stocks and average annual A-index between 2003/04 and 2012/13](image)

Sources: Cotlook and USDA.

Note: A-index for 2012/13 is projected.
Policy Considerations

- Ethanol Tax Credit / Blend Wall
- FARRM (Federal Ag. Reform and Risk Mgmt. Act of 2012)
- Repeal Direct & Counter Cyclical Payments
- Farm Risk Mgmt. Election
- SNAP (Supplemental Nutrition Assistance Program)

FARRM $ Changes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Road and Bridge Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-205</td>
<td>-155</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
<td>-205</td>
</tr>
<tr>
<td>Repeal Direct Payments</td>
<td>0</td>
<td>-935</td>
<td>-935</td>
<td>-935</td>
<td>-935</td>
<td>-935</td>
<td>-935</td>
<td>-935</td>
<td>-935</td>
<td>-935</td>
<td>-6,222</td>
<td>-4,177</td>
</tr>
<tr>
<td>Repeal Counter-cyclical</td>
<td>0</td>
<td>0</td>
<td>-101</td>
<td>-127</td>
<td>-121</td>
<td>-123</td>
<td>-130</td>
<td>-137</td>
<td>-134</td>
<td>-135</td>
<td>-349</td>
<td>-1,008</td>
</tr>
<tr>
<td>Repeal Average Crop</td>
<td>0</td>
<td>0</td>
<td>-863</td>
<td>-637</td>
<td>-470</td>
<td>-479</td>
<td>-452</td>
<td>-547</td>
<td>-632</td>
<td>-533</td>
<td>-1,970</td>
<td>-4,615</td>
</tr>
<tr>
<td>Revenue Election Payments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm Risk Management</td>
<td>0</td>
<td>0</td>
<td>3,253</td>
<td>3,086</td>
<td>3,217</td>
<td>3,180</td>
<td>2,893</td>
<td>2,998</td>
<td>2,949</td>
<td>2,968</td>
<td>9,556</td>
<td>24,544</td>
</tr>
<tr>
<td>Election</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy Program</td>
<td>-60</td>
<td>-56</td>
<td>-46</td>
<td>-29</td>
<td>3</td>
<td>28</td>
<td>7</td>
<td>32</td>
<td>61</td>
<td>22</td>
<td>-188</td>
<td>-38</td>
</tr>
<tr>
<td>Supplemental Agriculture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disaster Assistance</td>
<td>226</td>
<td>211</td>
<td>192</td>
<td>192</td>
<td>199</td>
<td>197</td>
<td>196</td>
<td>198</td>
<td>203</td>
<td>208</td>
<td>1,020</td>
<td>2,022</td>
</tr>
<tr>
<td>Other Commodity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisions</td>
<td>65</td>
<td>38</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>111</td>
<td>131</td>
</tr>
</tbody>
</table>

CHANGES IN OUTLAYS FROM DIRECT SPENDING
Risk Mgmt. Election -- 2 options

• **One time election: crop & farm**

• **Price Loss Coverage** *(multi-yr price declines)*
  + complement crop insurance
  + modern ylds. & cost of prod. index

• **Revenue Loss Coverage**
  + county wide losses
  + yield plugs & cost of prod. for price