The ‘Normal’ Normal?

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_With Joe Glauber IFPRI_

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Research Professor
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Falling real prices

*Index = 100 in 2005*
2013 meat consumption per capita and GDP per capita

Kg meat consumption per capita vs. thousand 2010 USD per capita
Global and regional population growth

-1.0%
-0.5%
0.0%
0.5%
1.0%
1.5%
2.0%
2.5%
3.0%

billion people

0 1 2 3 4 5 6 7 8

growth rate
0 0.5% 1.0% 1.5% 2.0% 2.5% 3.0%

billion people

U.S. motor-gasoline transportation consumption forecasts (billion gallons)

- 2007 Forecast
- 2010 Forecast
- 2017 Forecast

U.S. field production of crude oil (million barrels per day)

- 1990
- 1992
- 1994
- 1996
- 1998
- 2000
- 2002
- 2004
- 2006
- 2008
- 2010
- 2012
- 2014
- 2016

China soybean import demand

Data: USDA
China’s use of 14 grains and oilseeds

Data for 9 grains (corn, wheat, rice, sorghum, barley, oats, rye, millet and mixed grains) and 5 oilseeds (soybeans, rapeseed, sunflower seed, peanuts and cottonseed).

Growth from 1980-2018: 440 million tons (164%)

Source: May 2019 data from USDA’s PSD Online.
Annual Pig Crop Growth rate vs Soybean Meal Equivalent Use

China growth rates

U.S. growth rates

Linear (China SME use growth Rate)
Linear (China Pig Crop Growth Rate)
Linear (U.S. SME Use Growth Rate)
Linear (U.S. Pig Crop Growth Rate)
Growth in meat and dairy consumption, kg per capita

United States

China, Mainland

India

Nigeria
U.S. share of global exports

- **US Corn Export Share**
- **US Soybean Export Share**
- **US Wheat Export Share**
- **US Cotton Export Share**
<table>
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</thead>
<tbody>
<tr>
<td><strong>Area planted</strong></td>
<td>89.1</td>
<td>89.9</td>
<td>91.9</td>
<td>90.4</td>
<td>90.9</td>
<td>91.1</td>
</tr>
<tr>
<td><strong>Area harvested</strong></td>
<td>81.7</td>
<td>81.8</td>
<td>84.2</td>
<td>83.0</td>
<td>83.4</td>
<td>83.5</td>
</tr>
<tr>
<td><strong>Yield</strong></td>
<td></td>
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<tr>
<td></td>
<td>176.4</td>
<td>168.4</td>
<td>176.4</td>
<td>178.3</td>
<td>180.0</td>
<td>181.9</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>14,420</td>
<td>13,779</td>
<td>14,858</td>
<td>14,793</td>
<td>15,016</td>
<td>15,190</td>
</tr>
<tr>
<td><strong>Imports</strong></td>
<td>28</td>
<td>50</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td><strong>Beginning stocks</strong></td>
<td>2,140</td>
<td>2,114</td>
<td>1,936</td>
<td>2,233</td>
<td>2,278</td>
<td>2,329</td>
</tr>
<tr>
<td><strong>Total supply</strong></td>
<td>16,588</td>
<td>15,944</td>
<td>16,834</td>
<td>17,066</td>
<td>17,334</td>
<td>17,558</td>
</tr>
<tr>
<td><strong>Feed and residual use</strong></td>
<td>5,618</td>
<td>5,287</td>
<td>5,453</td>
<td>5,465</td>
<td>5,500</td>
<td>5,535</td>
</tr>
<tr>
<td><strong>Other domestic use</strong></td>
<td>6,791</td>
<td>6,822</td>
<td>6,888</td>
<td>6,972</td>
<td>7,047</td>
<td>7,075</td>
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<tr>
<td><strong>Exports</strong></td>
<td>2,065</td>
<td>1,898</td>
<td>2,260</td>
<td>2,351</td>
<td>2,459</td>
<td>2,572</td>
</tr>
<tr>
<td><strong>Total use</strong></td>
<td>14,474</td>
<td>14,008</td>
<td>14,601</td>
<td>14,788</td>
<td>15,006</td>
<td>15,183</td>
</tr>
<tr>
<td><strong>Ending stocks</strong></td>
<td>2,114</td>
<td>1,936</td>
<td>2,233</td>
<td>2,278</td>
<td>2,329</td>
<td>2,376</td>
</tr>
<tr>
<td><strong>Price, U.S. farm</strong></td>
<td>3.61</td>
<td>3.82</td>
<td>3.56</td>
<td>3.60</td>
<td>3.65</td>
<td>3.69</td>
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**U.S. soybean supply and use**

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<tbody>
<tr>
<td><strong>Area planted</strong></td>
<td>89.2</td>
<td>76.5</td>
<td>85.5</td>
<td>85.0</td>
<td>85.2</td>
<td>85.1</td>
</tr>
<tr>
<td><strong>Area harvested</strong></td>
<td>87.6</td>
<td>75.6</td>
<td>84.6</td>
<td>84.2</td>
<td>84.3</td>
<td>84.2</td>
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<tr>
<td><strong>Yield</strong></td>
<td></td>
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<tr>
<td></td>
<td>50.6</td>
<td>46.9</td>
<td>49.7</td>
<td>50.2</td>
<td>50.7</td>
<td>51.2</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>4,428</td>
<td>3,550</td>
<td>4,210</td>
<td>4,229</td>
<td>4,274</td>
<td>4,311</td>
</tr>
<tr>
<td><strong>Imports</strong></td>
<td>14</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Beginning stocks</strong></td>
<td>438</td>
<td>913</td>
<td>460</td>
<td>478</td>
<td>472</td>
<td>473</td>
</tr>
<tr>
<td><strong>Total supply</strong></td>
<td>4,880</td>
<td>4,483</td>
<td>4,691</td>
<td>4,728</td>
<td>4,766</td>
<td>4,804</td>
</tr>
<tr>
<td><strong>Crush</strong></td>
<td>2,092</td>
<td>2,115</td>
<td>2,171</td>
<td>2,185</td>
<td>2,200</td>
<td>2,213</td>
</tr>
<tr>
<td><strong>Other domestic use</strong></td>
<td>128</td>
<td>130</td>
<td>131</td>
<td>131</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td><strong>Exports</strong></td>
<td>1,748</td>
<td>1,778</td>
<td>1,911</td>
<td>1,940</td>
<td>1,962</td>
<td>1,979</td>
</tr>
<tr>
<td><strong>Total use</strong></td>
<td>3,967</td>
<td>4,023</td>
<td>4,212</td>
<td>4,256</td>
<td>4,293</td>
<td>4,324</td>
</tr>
<tr>
<td><strong>Ending stocks</strong></td>
<td>913</td>
<td>460</td>
<td>478</td>
<td>472</td>
<td>473</td>
<td>480</td>
</tr>
<tr>
<td><strong>Price, U.S. farm</strong></td>
<td>8.48</td>
<td>9.00</td>
<td>8.43</td>
<td>8.58</td>
<td>8.47</td>
<td>8.49</td>
</tr>
<tr>
<td><strong>Soybean/corn price ratio</strong></td>
<td>2.35</td>
<td>2.35</td>
<td>2.37</td>
<td>2.38</td>
<td>2.32</td>
<td>2.30</td>
</tr>
</tbody>
</table>
It’s not the 1980s, but...

• During the 1980s farm financial crisis, the farm debt/asset ratio peaked at 22%
• It declined to half that level in 2012, but has been increasing since then
• Besides lower levels of debts relative to assets, interest rates are far lower now than in the 1980s
• But it is concerning that the debt/asset ratio continues to increase

Sources: USDA ERS (history) and FAPRI-MU, Sept 2019
Thanks!

- FAPRI-MU website: www.fapri.missouri.edu
- Follow us on Twitter: @FAPRI_MU
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