Feed Grain Suppliers’ Impact On World Meat Trade

Edward W. Allen
ERS-USDA
ewallen@ers.usda.gov
202-694-5288

Washington, DC
August 30, 2007
Grains Outlook

• U.S. ethanol demand for corn boosts domestic demand. EU bio-fuels policy in flux.
• Quality problems and high corn prices boost wheat feeding in 2008/09, a dramatic shift.
• China’s soybean imports support soybean prices.
• Competition for land in the United States, Brazil, and Argentina a key to price developments.
2008 Wheat Feeding Boom

• Production in Europe rebounds.
• High yield and rain degrade milling quality.
• Wheat is harvested early and leads the grain price decline.
• Livestock producers who know how to feed wheat have an advantage.
World Production and Consumption of Wheat

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (Mil)</th>
<th>Consumption (Mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>500000</td>
<td>550000</td>
</tr>
<tr>
<td>1997</td>
<td>600000</td>
<td>650000</td>
</tr>
<tr>
<td>1999</td>
<td>700000</td>
<td>700000</td>
</tr>
<tr>
<td>2001</td>
<td>800000</td>
<td>800000</td>
</tr>
<tr>
<td>2003</td>
<td>900000</td>
<td>900000</td>
</tr>
<tr>
<td>2005/06</td>
<td>1000000</td>
<td>1000000</td>
</tr>
<tr>
<td>2007/08</td>
<td>1100000</td>
<td>1100000</td>
</tr>
</tbody>
</table>

Year
EU and World Wheat Feed Use
U.S. Farm Prices

- Corn
- Wheat
- Soybeans

U.S. Corn Used for Ethanol

Million bushels

Petroleum Price and the U.S. Corn Farm Price

- U.S. Corn Farm Price
- Texas Price for Crude Petroleum

Fuente: Stallings & NASS
U.S. Corn Area Huge in 2007, Then Down

Million acres

Planted area

Harvested area

U.S. Soybean Area Drops in 2007, Rebounds in 2008

Planted area

Harvested area
2008/09 U.S. Corn Outlook

- U.S. corn yields in 2008 below, but near trend; area decline cuts the crop 8%.
- Beginning stocks up 21%, but smaller crop trims supplies 5%.
- Domestic use up 2% as strong ethanol demand offsets the feed decline.
- Exports to drop 18% as world trade declines.
- U.S. ending stocks to drop 35%, the lowest in 5 years.
Most U.S. Corn Use is Domestic

- Feed and residual
- Human & industrial
- Exports

Y-axis: Millones of tons
X-axis: Years (1990 to 2005/06)
Global Corn Exports

Million tons


United States Argentina China Brazil Other1

1/ Republic of South Africa, EU, former Soviet Union, and others.
World Corn Imports

- Japan, South Korea, Taiwan
- Others, mostly developing
- Former Soviet Union-12
<table>
<thead>
<tr>
<th>Year</th>
<th>Production (million tons)</th>
<th>Area (million hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>10</td>
<td>2.2</td>
</tr>
<tr>
<td>1996</td>
<td>15</td>
<td>2.4</td>
</tr>
<tr>
<td>1997</td>
<td>20</td>
<td>2.6</td>
</tr>
<tr>
<td>1998</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>1999</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>2000</td>
<td>3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>2001</td>
<td>3.6</td>
<td>3.4</td>
</tr>
<tr>
<td>2002</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>2003</td>
<td>2.2</td>
<td>3.8</td>
</tr>
<tr>
<td>2004</td>
<td>2.4</td>
<td>4.0</td>
</tr>
<tr>
<td>2005</td>
<td>2.6</td>
<td>4.2</td>
</tr>
<tr>
<td>2006</td>
<td>2.8</td>
<td>4.4</td>
</tr>
<tr>
<td>2007</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>2008</td>
<td>3.2</td>
<td>4.8</td>
</tr>
<tr>
<td>2009</td>
<td>3.4</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Argentina: Corn Production
U.S. Soybean Production Takes a Backseat

Million tons

120,000
110,000
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0

1995 1997 1999 2001 2003 2005 2007

U.S.

Argentina and Brazil
Brazil’s Strong Currency Hurts Export Competitiveness

Brazil’s Real Exchange Rate

Source: ERS Exchange Rate Data Set
Brazil’s Tradition Is Corn, Soybeans Have a Comparative Advantage

![Graph showing harvested area of corn and soybeans from 1990 to 2006. The x-axis represents years (1990, 1994, 1998, 2002, 2006) and the y-axis represents harvested area in million hectares. Corn is represented by red squares and soybeans by blue diamonds. The graph indicates an increase in the harvested area for both crops, with soybeans showing a significant increase in the late 1990s and early 2000s.]
China’s Bean Imports Are Key

Million tons

1997/98 1999/00 2001/02 2003/04 2005/06 2007/08
China: Soymeal Use and Corn Feed Use

Million tons


Corn

Soymeal
Conclusions: Key Issues for Meat Trade

- The world has enough grains in 2008/09 to meet demand for food, feed, and energy at prices declining from recent historic highs.

- Questions:
  - 1) Will Brazil export corn or meat on the margin?
  - 2) Will China’s soybean imports stagnate? Meat imports?
  - 3) What is the future of bio-diesel, ethanol, and crude oil prices?