What in the World is Going on with Our Markets?!?

KEY AUSTERITY VOTE PASSES

8:13PM As protests rage, Greek lawmakers approve cuts needed for securing additional bailout funds. More

Paul Burgener
Agriculture Lender
Platte Valley Bank
Scottsbluff, Nebraska

Source: CNN.com
New Employer.....Lots of Learning

Change from UNL to PVC

- Big learning curve
- Bank processes – many sets of eyes
- Farm/Ranch eye openers
  - Holding commodities
  - Total number of dollars
  - Impact of volatility
Welcome to a New Market

- Still selling at the same elevator
  - Growing the same crops
  - Harvest at the same time
- Big changes over the past several years
  - New players
  - Smaller world
  - More communication
- We need to understand the changes
Volatility Defined

CORN NEAREST FUTURES daily OHLC plot

As of 11/25/04

@ Barchart.com

CORN NEAREST FUTURES daily OHLC plot

As of 11/25/08

@ Barchart.com
Dow Jones Industrial Avg: Past 12 Months
WTI Crude Oil Futures: 2007 - 2012
Comparative Advantage

- Produce and export goods
  - Produced more efficiently (lower opportunity cost)
  - Import those that have higher cost
- Results from endowment of resources
  - Capital, land, labor, technology, etc.
  - Some countries have advantages in each
- Free trade is beneficial to all
  - If each country produces according to its comparative advantage
  - Can get biased by tariffs, subsidies, etc.
- Theory based on the work of David Ricardo
Comparative Advantage

Illustrated

- Each country has a comparative advantage
- Both better off
  - Free trade happens
  - Better use of scarce resources
- Theory is great
  - Practice is tougher
# Corn Balance Sheet

<table>
<thead>
<tr>
<th>Jan. 15, 2010</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planted Acres</td>
<td>86.5</td>
<td>88.2</td>
<td>91.9</td>
</tr>
<tr>
<td>Harvested Acres</td>
<td>79.6</td>
<td>81.4</td>
<td>84.0</td>
</tr>
<tr>
<td>Yield</td>
<td>164.7</td>
<td>152.8</td>
<td>147.2</td>
</tr>
<tr>
<td>Production</td>
<td>13,110</td>
<td>12,447</td>
<td>12,358</td>
</tr>
<tr>
<td>Stocks</td>
<td>1,673</td>
<td>1,708</td>
<td>1,128</td>
</tr>
<tr>
<td>Imports</td>
<td>8</td>
<td>28</td>
<td>20</td>
</tr>
<tr>
<td>TOTAL SUPPLY</td>
<td>14,791</td>
<td>14,183</td>
<td>13,506</td>
</tr>
<tr>
<td>Food, Seed &amp; Industrial</td>
<td>5,930</td>
<td>6,406</td>
<td>6,383</td>
</tr>
<tr>
<td>Ethanol for fuel</td>
<td>4,560</td>
<td>5,021</td>
<td>5,000</td>
</tr>
<tr>
<td>Growth in ethanol use</td>
<td>23%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>Feed &amp; Residual</td>
<td>5,167</td>
<td>4,792</td>
<td>4,600</td>
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<tr>
<td>ALL DOM. USE</td>
<td>11,097</td>
<td>11,220</td>
<td>11,005</td>
</tr>
<tr>
<td>EXPORTS</td>
<td>1,987</td>
<td>1,835</td>
<td>1,700</td>
</tr>
<tr>
<td>TOTAL USAGE</td>
<td>13,084</td>
<td>13,055</td>
<td>12,705</td>
</tr>
<tr>
<td>ENDING STOCKS</td>
<td>1,707</td>
<td>1,128</td>
<td>801</td>
</tr>
<tr>
<td>STOCK/USE (%)</td>
<td>13%</td>
<td>8.6%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Avg Farm Price ($/Bu)</td>
<td>$3.55</td>
<td>$5.18</td>
<td>$5.80 – 6.60</td>
</tr>
</tbody>
</table>

- **91.9 million acres in 2011**
- **Yield off to 146.7 bu**
  - Down 18 bu in 2 years
- **Exports down 135 million bu**
  - South American drought
  - China
- **U.S. Stocks down**
  - Ratio at 6.9%
- **World production up 4.8%**
  - 39.96 MMT or
  - 1.57 Billion bushels
U.S. Corn Exports

Source: USDA WASDE Report 2.9.12

KSU Dept. of Ag Econ
www.AgManager.info
Corn Prices: 2007 - 2012
# Soybean Balance Sheet

<table>
<thead>
<tr>
<th>January 2010</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planted Acres</td>
<td>77.5</td>
<td>77.4</td>
<td>75.0</td>
</tr>
<tr>
<td>Harvested Acres</td>
<td>76.4</td>
<td>76.6</td>
<td>73.6</td>
</tr>
<tr>
<td>Yield</td>
<td>44.0</td>
<td>43.5</td>
<td>41.5</td>
</tr>
<tr>
<td>Production</td>
<td>3,359</td>
<td>3,329</td>
<td>3,056</td>
</tr>
<tr>
<td>Stocks</td>
<td>138</td>
<td>151</td>
<td>215</td>
</tr>
<tr>
<td>Imports</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL SUPPLY</td>
<td>3,512</td>
<td>3,495</td>
<td>3,285</td>
</tr>
<tr>
<td>Crush</td>
<td>1,752</td>
<td>1,648</td>
<td>1,615</td>
</tr>
<tr>
<td>Seed</td>
<td>90</td>
<td>87</td>
<td>88</td>
</tr>
<tr>
<td>Feed &amp; Residual</td>
<td>21</td>
<td>45</td>
<td>32</td>
</tr>
<tr>
<td>ALL DOM. USE</td>
<td>1,863</td>
<td>1,780</td>
<td>1,735</td>
</tr>
<tr>
<td>EXPORTS</td>
<td>1,498</td>
<td>1,500</td>
<td>1,275</td>
</tr>
<tr>
<td>TOTAL USAGE</td>
<td>3,361</td>
<td>3,280</td>
<td>3,010</td>
</tr>
<tr>
<td>ENDING STOCKS</td>
<td>151</td>
<td>215</td>
<td>275</td>
</tr>
<tr>
<td>STOCK/USE (%)</td>
<td>4.5%</td>
<td>6.5%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Avg Farm Price ($/Bu)</td>
<td>$9.60</td>
<td>$11.30</td>
<td>$11.10-12.30</td>
</tr>
</tbody>
</table>

- Ending stocks increasing
  - Nearly double 2009
- Exports down
  - 225 Million bushels
  - Watch weather
  - South America
- World down 1.9%
  - 4.96 MMT or
  - 182 Million bushels
U.S. Soybean Exports

Source: USDA WASDE Report 2.9.12

KSU Dept. of Ag Econ
www.AgManager.info
Soybean Prices: 2007-2012
## Wheat Balance Sheet

<table>
<thead>
<tr>
<th>Feb. 15, 2009</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planted Acres</td>
<td>59.2</td>
<td>53.6</td>
<td>54.4</td>
</tr>
<tr>
<td>Harvested Acres</td>
<td>49.9</td>
<td>47.6</td>
<td>45.7</td>
</tr>
<tr>
<td>Yield</td>
<td>44.5</td>
<td>46.3</td>
<td>43.7</td>
</tr>
<tr>
<td>Production</td>
<td>2,218</td>
<td>2,207</td>
<td>1,999</td>
</tr>
<tr>
<td>Stocks</td>
<td>657</td>
<td>976</td>
<td>862</td>
</tr>
<tr>
<td>Imports</td>
<td>119</td>
<td>97</td>
<td>120</td>
</tr>
<tr>
<td>TOTAL SUPPLY</td>
<td>2,994</td>
<td>3,279</td>
<td>2,981</td>
</tr>
<tr>
<td>Seed</td>
<td>69</td>
<td>71</td>
<td>82</td>
</tr>
<tr>
<td>Food</td>
<td>917</td>
<td>925</td>
<td>935</td>
</tr>
<tr>
<td>Feed &amp; Residual</td>
<td>150</td>
<td>132</td>
<td>145</td>
</tr>
<tr>
<td>TOTAL DOM. USE</td>
<td>1,136</td>
<td>1,128</td>
<td>1,162</td>
</tr>
<tr>
<td>TOTAL EXPORTS</td>
<td>882</td>
<td>1,289</td>
<td>975</td>
</tr>
<tr>
<td>TOTAL USAGE</td>
<td>2,018</td>
<td>2,417</td>
<td>2,137</td>
</tr>
<tr>
<td>ENDING STOCKS</td>
<td>976</td>
<td>862</td>
<td>844</td>
</tr>
<tr>
<td>STOCKS/USE (%)</td>
<td>48%</td>
<td>36%</td>
<td>40%</td>
</tr>
<tr>
<td>Avg. Farm Price ($/bu)</td>
<td>$4.87</td>
<td>$5.70</td>
<td>$7.15-7.45</td>
</tr>
</tbody>
</table>

- Increase ending stocks
  - Back to 40% S/U
- Increased exports in 10-11
  - Back down in 11-12
  - Black Sea countries
  - Winter kill
  - Large Aussie crop
- World crop up 5.7%
  - 37.39 MMT or
  - 1.37 Billion bushels
U.S. Wheat Exports

Source: USDA WASDE Report 2.9.12 & K-State Ag. Econ. Dept.

KSU Dept. of Ag Econ
www.AgManager.info
Wheat Exports by Country

Market share of major wheat exporters

Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution (PS&D) database.
Winter Wheat Prices: 2007 - 2012

The line chart depicts the weekly nearest line chart for KE - KCBT Red Wheat, showing fluctuations in prices from 2007 to 2012.
SLAUGHTER STEER PRICES
Southern Plains, Weekly

$ Per Cwt.
130
125
120
115
110
105
100
95
90
85
80

JAN
APR
JUL
OCT

Avg. 2006-10
2011
2012

Livestock Marketing Information Center
Data Source: USDA-AMS
C-P-52
02/13/12
Per Capita U.S. Meat Consumption

![Graph showing per capita meat consumption from 1955 to 2009. The graph compares the consumption of beef, pork, chicken, turkey, fish, veal, and lamb.]
Dollar Index Defined

- Geometrically-averaged calculation of six currencies weighted against the dollar
- Currencies included
  - Euro 57.60%
  - Japanese Yen 13.60%
  - British Pound 11.90%
  - Canadian Dollar 9.10%
  - Swedish Krona 4.20%
  - Swiss Franc 4.60%
- Freely floated currencies
Why do we Care?

- U.S. dollar is the pricing currency for commodities around the world
  - Oil is the key
  - Grains priced for trade
- Government controlled currencies
  - Non-floating
  - Can distort trade
U.S. Dollar Index: Daily, Past 12 Months
U.S. Dollar Index: Monthly, Past 15 Years
Dollar Index to Commodities Correlation

One, three, and five year correlation coefficients of key commodities to U.S. dollar index

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Global grain trade review

Many factors are driving a new era of grain price volatility.
WorldGrain.com, Nov. 28, 2011
by Chris Lyddon

Volatility has become the dominant market theme with an ever-increasing spread in the price volatility of different commodities across different countries, though price declines might be expected to slow as demand strengthens.

Iran Sanctions Shifting Trade Patterns

Iranian rice buyers defaulted on the $144 million bill for 200,000 tons of Indian rice. Ukraine’s corn exports to Iran fell by 40% after the Iranians had trouble paying.

Iowa to Host U.S.-China Ag Summit

The visit of Chinese Vice President Xi Jinping next week is becoming a high-profile news story, particularly in Iowa where Xi had visited the state in 1999.

USDA says 2011 beef, pork exports hit record

JournalStar.com
What Does This Say?

➢ China buys soybeans

✓ Agreement signed in Iowa by trade mission reps
✓ How many beans does China usually buy?
  ✓ 2011 – 24 Million Metric Tons
  ✓ This purchase – 8.6 Million Metric Tons
The Power of Bad News

Top markets for U.S. beef *
(accounting for over 90 percent of total beef exports)

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>Mexico</th>
<th>South Korea</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume</td>
<td>Value</td>
<td>Volume</td>
<td>Value</td>
</tr>
<tr>
<td></td>
<td>(Million lbs. carcass weight)</td>
<td>($million)</td>
<td>(Million lbs. carcass weight)</td>
<td>($million)</td>
</tr>
<tr>
<td>2002</td>
<td>771</td>
<td>854</td>
<td>629</td>
<td>615</td>
</tr>
<tr>
<td>2003</td>
<td>918</td>
<td>1,182</td>
<td>586</td>
<td>623</td>
</tr>
<tr>
<td>2004</td>
<td>12</td>
<td>31</td>
<td>333</td>
<td>393</td>
</tr>
<tr>
<td>2005</td>
<td>17</td>
<td>50</td>
<td>464</td>
<td>584</td>
</tr>
<tr>
<td>2006</td>
<td>52</td>
<td>105</td>
<td>660</td>
<td>786</td>
</tr>
<tr>
<td>2007</td>
<td>159</td>
<td>294</td>
<td>586</td>
<td>737</td>
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<tr>
<td>2008</td>
<td>231</td>
<td>439</td>
<td>759</td>
<td>895</td>
</tr>
<tr>
<td>2009</td>
<td>274</td>
<td>495</td>
<td>628</td>
<td>770</td>
</tr>
<tr>
<td>2010</td>
<td>351</td>
<td>662</td>
<td>500</td>
<td>670</td>
</tr>
</tbody>
</table>

*Note: Total beef exports to South Korea and Japan include several processed meat categories, each of which is assumed to contain a specific portion of beef.

Source: USDA, ERS
Where are we Watching?

- Corn market
  - 1 MMT = 39 million bushels
  - Drought in Brazil and Argentina
    - USDA estimates Argentine crop at 22 MMT
    - Buenos Aires Grain Exchange 21.3 MMT
    - Argentine Ag Ministry 20.5 MMT
    - Big crops get bigger and small crops get smaller
  - Chinese corn consumption is accelerating
    - Feed uses
    - Making huge increases in production
Where are we Watching?

Soybean market

- Drought in Brazil and Argentina
  - USDA estimates Argentine crop at 48 MMT
  - Buenos Aires Grain Exchange 46.2 MMT
  - Argentine Ag Ministry 43.5 MMT
- Big crops get bigger and small crops get smaller
- Chinese corn consumption is accelerating
  - Food and feed
Where are we Watching?

- Wheat market
  - Freezing weather in the Black Sea and FSU
    - Concerns about winter kill – Export tariffs
  - Australian crop is always an issue – big exporter
    - Good crop this year
  - Middle East is big purchase area
    - Egypt making purchases in U.S. and Australia
    - Suggests closer (cheaper) supplies may be short
Where are we Watching?

➢ Beef market
  ✓ Watching numbers and distribution in the U.S.
    ✓ Drought in Southwest
    ✓ Cow herd is getting smaller
    ✓ High demand for feeder cattle
  ✓ Exports to Japan and South Korea
    ✓ Free trade agreement with South Korea is key
    ✓ Getting over the BSE issue
  ✓ Huge increase in red meat demand in China
    ✓ Impacts both beef and feedgrains
General Economy

- PIIGS are still the key to many issues
  - Euro is 57.60% of dollar index
  - Greece is the immediate concern
  - Others following
- Oil is still king
  - Concerns about Iran
  - Instability in the entire region
    - New governments
  - Exponential increases in demand from China and India