Macro and Micro Economic Issues in Agriculture

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Objectives

- Look at some of macroeconomy issues of late
- Examine some current trends in agricultural markets
The Macro Economy--Stocks

Four Bad Bear Markets


nominal price excluding dividends

- Dow Crash of 1929: 9/3/1929 - 7/8/1932 (34.2 months)
- Tech Crash: 3/24/2000 - 10/9/2002 (30.5 months)
- Financial Crisis: 10/9/2007 - ? (17 months if the low holds)

- Currently -31.7%
  Up 58.0% from low

Crash of 1929
1973 Oil Crisis
2000 Tech Crash
2007 Financial Crisis

-47.5%
-48.2%
-49.1%
-56.8%
-89.2%
The Macro Economy—Capacity Utilization

Source: Federal Reserve [http://www.calculatedriskblog.com/]
The Macro Economy—Inflation

This chart shows the official Consumer Price Index for Urban Consumers (CPI-U) published by the Bureau of Labor Statistics (BLS), which began tracking inflation in 1913. The earlier metrics are from Warren and Pearson’s price index. The spliced series is available at Robert Shiller’s Yale website. See my data sources for a link.
The Macro Economy—Money Supply

St. Louis Adjusted Monetary Base (BASE)
Source: Federal Reserve Bank of St. Louis

Shaded areas indicate US recessions.
2009 research.stlouisfed.org
Oil/Exchange Rates

**%CL [10] - LIGHT CRUDE OIL**
- Last: 71.98
- Change: ▼ 0.49
- High: 72.26
- Low: 71.27
- Date: 9/18/2009

**%DX [30] - US DOLLAR INDEX**
- Last: 76.70
- Change: ▲ 0.27
- High: 76.93
- Low: 76.48
- Date: 9/18/2009

Charts sponsored by: Lightspeed
A View of the Markets

|-------------------|-------------|--------------|-------------|------------|------------|

Charts sponsored by Lightspeed®
## Relative Prices

<table>
<thead>
<tr>
<th>Corn Price</th>
<th>Cotton Price</th>
<th>Ratio</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.00</td>
<td>0.70</td>
<td>8.57</td>
<td>Sep</td>
</tr>
<tr>
<td>3.28</td>
<td>0.65</td>
<td>5.04</td>
<td>Dec</td>
</tr>
</tbody>
</table>

Although the absolute prices still favor corn, the relative price differences have moderated some.
Ethanol

RFS Mandates and Ethanol Production

- Billion Gallons
- 2004 to 2012

Legend:
- RFS02
- RFS05
- RFS07
- Ethanol
- Ethanol + MTBE
For better or worse, energy and ag are linked through policy.
Cap-and-Trade

Cap Carbon Output

Trade between firms from more to less efficient

Purchase offsets from outside industry to compensate for carbon output

Cap Carbon Output

Carbon Emissions

Carbon Offsets
Cap-and-Trade Necessary Assumptions

- CO2/GHG emissions are a problem and should therefore be regulated
- Caps are binding for some, not for others, offering opportunities for trade (otherwise, we just have a regulated reduction)
- Technology exists to lower CO2/GHG emissions such that adopting firms can remain under caps and trade to compensate for investment costs
- The cap-and-trade market can be effectively administered on a national scale
- Everyone else follows our lead and reduces carbon emissions as well
Conclusions

• Macro economy shows some signs of improvement, but still a very tenuous time
• RFS has created a structural shift in corn (and, by consequence, other markets), but we have about maxed out the impact of RFS without further expansion of mandate
• Cap-and-trade/energy legislation likely to have significant negative impacts on agriculture with limited ability to profit from offset markets