Agriculture in the Economic Recovery
Today’s Roadmap

- U.S. economic outlook
  - Sluggish growth with strong headwind or
  - Sluggish growth strengthening in 2011
- Inflation
  - Short-term deflation or
  - Long-term inflation
- Implications for agriculture
  - How long will the boom last?
Output:
- “The pace of recovery in output and employment has slowed in recent months.”

Inflation:
- “Measures of underlying inflation are currently at levels somewhat below those the Committee judges most consistent, over the long, run, with its mandate to promote maximum employment and price stability.”

Policy:
- “Economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period of time.”
- “Maintain its existing policy of reinvesting principal payments from its securities holdings.”

Dissent:
- Thomas Hoenig, Federal Reserve Bank of Kansas City
It’s official, the recession is over!!!

Sluggish, but stronger growth is the consensus forecast.

Different comparisons affect the interpretation of GDP growth.

- In the near term, sluggish is key as strong headwinds cut economic forecasts in near term.

- In the long term, growth is key as forecasts point to positive and stronger growth near 3 percent.

Real U.S. GDP Growth

Annualized percent change

Historical
Sept. 2010 Forecast
May 2010 Forecast

Calculations based on Bureau of Economic Analysis data
Job openings and hiring will need to rebound before unemployment falls.

Layoffs, Hiring, and Job Openings

Source: Bureau of Labor Statistics
The housing market slows after the end of the tax credits.

U.S. Housing Markets

Source: U.S. Census Bureau
Corporate profits and business investment are beginning to rebound.

Corporate Profits and Nonresidential Fixed Investment

Percent change from year ago

Corporate Profits (Left Scale)
- Equipment and Software Investment (Right Scale)
- Structures Investment (Right Scale)

Source: Bureau of Economic Analysis
Can we expect additional support from export activity?

Economic growth is stronger in emerging countries. However, growth is expected to slow.

### Annual GDP Growth

<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>7.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Russia</td>
<td>4.8%</td>
<td>4.4%</td>
</tr>
<tr>
<td>India</td>
<td>8.4%</td>
<td>8.1%</td>
</tr>
<tr>
<td>China</td>
<td>10.0%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>5.6%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Korea</td>
<td>6.1%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>7.1%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Canada</td>
<td>3.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Mexico</td>
<td>4.5%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Eurozone</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

Source: Blue Chip Forecast

### U.S. Real Net Exports and Value of the Dollar

- **Real Net Exports**: (left axis)
- **Broad Dollar Index**: (right axis)

Source: Bureau of Economic Analysis, Federal Reserve Board of Governors, and Blue Chip forecast
How will surging federal debt levels affect economic conditions long-term?

U.S. Debt as a Percent of GDP

Source: Congressional Budget Office
How much de-leveraging will take place?

U.S. Debt as a Percent of GDP

Source: Calculations based on Federal Reserve and BEA data
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Inflation is based on money and velocity.

Quantity Theory of Money

Price = \frac{Money \times Velocity}{Quantity}

Definition of Inflation:

Too much money \( M \) up
chasing \( V \) up
too few goods \( Q \) down
The Fed will now take principal payments from securities to purchase long term treasuries.
Banks are holding money in excess reserve, which limits velocity.

Excess Reserves of Depository Institutions

Source: Federal Reserve Board of Governors
Different inflation measures point to different levels of inflation.

- Inflation is running 1% above year ago levels according to both core (less food and energy) and headline inflation.

- However, consumer prices are 2% above year ago levels if you remove the costs of shelter.

- The storyline: lower home values are pulling down the inflation indexes.

Source: Bureau of Labor Statistics
The Issue: long periods of low interest rates lead to financial imbalances.

Two Perspectives:

- “… My preference at this time is to use prudential regulation and supervision to strengthen the financial system and lean against developing financial imbalances.”
  Donald Kohn, Vice Chairman, Federal Reserve Board of Governors, May 13, 2010.

- “It was after a period of too-low interest rates, too much credit, too much leverage that the collapse of the housing bubble, the rapid deleveraging and the ensuing financial crisis occurred.” ...

“Monetary policy is a powerful tool. Certainly lowering interest rates is the appropriate monetary policy response to the onset of an economic recession and rising unemployment. But it is also a blunt instrument that has a wide set of unintended consequences that can and have worsened economic outcomes including misallocation of precious resources, inflation and long-term unemployment.”

Thomas Hoenig, President and CEO, Federal Reserve Bank of Kansas City, June 3, 2010
Is a farmland bubble brewing?

Farmland Values to Rent Ratio

- Iowa Farmland Value to Rent
- East NE Irrigated Cropland Value to Rent
- S&P PE Ratio (Average since 1945)

Calculations based on Iowa State University and University of Nebraska data
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U.S. food expenditures have rebounded.

**U.S. Retail Sales at Grocery Stores and Restaurants**

Percent change from year ago

- Grocery Stores
- Food Service and Drinking Places

Source: Census Bureau
U.S. agricultural exports have rebounded.

Real U.S. Agricultural Exports
(January to May data)

Billion dollars (constant 2009=100 dollars)

Source: USDA
A demand shock has turning into a supply shock.

World Corn Inventories and U.S. Corn Price

Source: USDA
What happens to prices if crude oil demand outpaces supply?

World Crude Oil and Liquid Fuels Balance

Million barrels per day

Source: Energy Information Administration
Farm incomes and agricultural equipment sales go hand in hand.

U.S. Real Net Farm Income and Agricultural Equipment Sales

Percent change from previous year

Source: Association of Equipment Manufacturers and USDA
* Tractor Sales data are year-to-date through July and Net Farm Income forecast for 2010 dated August 31, 2010.
Conclusions

- Economists are two-handed, and the result is wide differences of opinion.
  - Near-term vs. long term focus
  - Growth vs. inflation
  - Deflation vs. inflation
  - Financial imbalances: to prick or not to prick
  - Supply shocks, demand shocks, or speculators
- A new golden era for agriculture? How long will it last this time?
Federal Reserve Bank of Kansas City
Omaha Branch

The Main Street Economist:
a bi-monthly publication discussing agriculture and rural America

Agricultural Credit Survey:
a quarterly survey of agricultural credit conditions in the Tenth Federal Reserve District

Coming this fall - Agricultural Finance Databook:
a quarterly summary of national agricultural finance conditions

For Additional Information on
Agricultural and Rural Issues

www.kansascityfed.org/omaha