What Drives Farmland Markets?

- Farmland values are the capitalized value of future revenue streams.

- The two drivers of farmland values
  - Incomes
  - Interest Rates
Farm incomes are high in times of low real interest rates.

**U.S. Real Farm Incomes and Interest Rates**

- **10-year Treasury Yield (Left Scale)**
- **1-year Treasury Yield (Left Scale)**
- **Net Returns to Farm Operators (Right Scale)**

Source: Federal Reserve, USDA, and BLS
U.S. Economic Conditions
Will recent economic strength be sustained?

U.S. Real GDP Growth

Source: Bureau of Economic Analysis and Blue Chip Forecast (Jan. 2013)
Despite headline weakness, fundamentals are solid.

Source: Bureau of Economic Analysis
Housing markets appear to have bottomed.

Housing is on the mend, but a long ways to go.

- **Existing Home Sales**: Up 12.5% from 2009, Down 5.7% from 2000
- **Housing Starts**: Up 42.2% from 2009, Down 48.8% from 2000
- **FHFA Home Price Index**: Up 4.3% from 2011, Down 16% from 2007

Source: Census Bureau and National Association of Realtors
Consumer spending continues to expand.

- Stronger sales on larger ticket items
  - Motor vehicles
  - Furniture

- Steady growth in personal retail sales
  - Grocery stores
  - Health and personal care stores
  - Clothing stores

- Entertainments sales strengthen in 2012:Q4
  - Food Service and Drinking Places
  - Sporting Goods, Hobby, Book and Music

- Department store sales fall

<table>
<thead>
<tr>
<th>Source: Census Bureau</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. Retail Sales</strong></td>
</tr>
<tr>
<td><strong>Annual percent change</strong></td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>Retail Excluding Motor Vehicles and Parts</td>
</tr>
<tr>
<td>Motor Vehicle and Parts</td>
</tr>
</tbody>
</table>
Sovereign debt is a global economic headwind

General Government Gross Debt

Percent of gross domestic product

Source: International Monetary Fund
After rebounding in 2010, U.S. trade growth has slowed.

- Stronger value of the dollar
- Weaker global economies

U.S. Exports and Imports

Annual percent change

Source: Census Bureau
Caution signs for U.S. manufacturing

- Public and private sector manufacturing surveys indicate slowing activity.
- After contracting this fall, manufacturing employment rebounded in December.
- The slowdown occurred at durable goods factories.

Source: Census Bureau
Note: Nondefense goods excluding aircraft and parts.
Investment slows with uncertainty.

- Potential changes in tax law sparked an increase in business investment at the end of 2011.
- Businesses report that increased economic, fiscal policy, and regulatory uncertainty are weighing on investments.

Source: Bureau of Economic Analysis
Although jobs openings increase, hiring advances more slowly.

Why are businesses not hiring people?

Source: BLS
Inflation remains contained.

U.S. Inflation Rates

Percent change from previous year

Source: Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics
The Goal: Foster Maximum Employment and Stable Prices

Economic Projections of Federal Open Market Committee Members, Central Tendency, December 2012

<table>
<thead>
<tr>
<th></th>
<th>Longer Run</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td>Real GDP Growth</td>
<td>2.3 to 2.5</td>
<td>1.7 to 1.8</td>
<td>2.3 to 3.0</td>
<td>3.0 to 3.5</td>
<td>3.0 to 3.7</td>
</tr>
<tr>
<td>Sept. 2012 proj.</td>
<td>1.7 to 2.0</td>
<td>2.5 to 3.0</td>
<td>3.0 to 3.8</td>
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<td></td>
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<tr>
<td>Unemployment Rate</td>
<td>5.2 to 6.0</td>
<td>7.8 to 7.9</td>
<td>7.4 to 7.7</td>
<td>6.8 to 7.3</td>
<td>6.0 to 6.6</td>
</tr>
<tr>
<td>Sept. 2012 proj.</td>
<td>8.0 to 8.2</td>
<td>7.6 to 7.9</td>
<td>6.7 to 7.3</td>
<td>6.0 to 6.8</td>
<td></td>
</tr>
<tr>
<td>PCE Inflation</td>
<td>2.0</td>
<td>1.6 to 1.7</td>
<td>1.3 to 2.0</td>
<td>1.5 to 2.0</td>
<td>1.7 to 2.0</td>
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<td></td>
</tr>
</tbody>
</table>

Source: Federal Reserve Board of Governors
The Monetary Base is not Money Supply

Quantity Theory of Money

\[ \text{Price} = \frac{\text{Money} \times \text{Velocity}}{\text{Quantity}} \]

Definition of Inflation:

Too much money \( M \uparrow \)

chasing \( V \uparrow \)

too few goods \( Q \downarrow \)

Growth in Monetary Aggregates

Index (Jan 2000=100)

Source: Federal Reserve Board of Governors
Lending is needed to create money.
Will a large monetary base fuel inflation? What is the exit strategy?

Federal Reserve Balance Sheet: Assets

Billion Dollars

- Fed Agency Debt MBS Purchases
- Liquidity to Key Credit Markets
- Lending to Financial Institutions
- Long Term Treasury Purchases
- Traditional Security Holdings

Source: Federal Reserve Bank of Cleveland
Views of appropriate policy differ widely across the FOMC

Source: Federal Reserve Bank Board of Governors
Conclusions

- The U.S. economy is expanding.
- Consumers are spending on larger ticket items – homes and autos.
- Sovereign debt issues are limiting global growth.
- Business investment and hiring is sluggish.
- Less consensus on interest rates in 2015.

*How will U.S. agriculture manage its interest rate risk?*
For More Information on Agriculture and Rural America

www.kansascityfed.org/omaha