The Economy Turns – Again
What is the Federal Reserve?

The Federal Reserve is the Central Bank of the U.S. (formed in 1913)

Functions

- Conduct monetary policy
- Supervise and regulate banks
- Maintain stability of financial system
- Operate the nation’s payment system
Economic forecasts dropped sharply in August.

U.S. Real GDP Growth

Annual percent change

Forecast Ranges     2011:Q4  2012:Q4
Top 10 Avg.         3.3      3.4
Bottom 10 Avg.      1.8      2.3

Source: Blue Chip Economic Indicators, August 2011
Sluggish government and consumer spending.

Contribution to U.S. Real GDP Growth

Annual percent change

- **2010 Annual**
  - Private Investment: 2.0
  - Personal Consumption: 1.4
  - Net Exports: 0.3
  - Government: -0.4

- **2011:Q1**
  - Private Investment: 0.5
  - Personal Consumption: 1.5
  - Net Exports: -0.1
  - Government: -0.6

- **2011:Q2**
  - Private Investment: 0.8
  - Personal Consumption: 0.5
  - Net Exports: 0.3
  - Government: -0.2

Source: Bureau of Economic Analysis
Will the federal government be able to control U.S. debt accumulation?

Federal Government Debt as a Percent of GDP

Source: Congressional Budget Office
Can the private sector offset a smaller government sector?

What caused the private sector slump?

- Bad weather disrupts U.S. construction
- Supply chain disruptions in Japan
- High input costs - crude oil
- High food and gas prices for consumers
- Mideast turmoil (Arab Spring)
- European Debt Crisis: Greece
- U.S. debt concerns

**Structural Versus Cyclical Factors**

![U.S. Monthly Job Gains](image)

Source: Bureau of Labor Statistics
The Panic

Dow Jones Industrial Average

FOMC statement extending Exceptionally low rates to 2013
The U.S. consumer is deleveraging.

- Deleveraging means ...
  - Savings are up.
  - Housing is sluggish.
  - Spending is limited.
- Why?
  - Jobs prospects look bleak.
  - Income gains are modest.
  - Especially for the less-skilled
- Consumers are down, but not out.
  - Rising auto prices indicate consumers are buying.

Source: Bureau of Economic Analysis
Slower profits contributes to weaker investment activity and job gains.

- In 2010, profits rebounded sharply.
- Businesses responded by upgrading equipment and software.
- Firms began to expand labor hours –
  - First by extending hours
  - Then by hiring temp workers
- New building activity stabilized.
- In 2011, corporate profits softened.
  - Business investment slowed.
  - Hiring weakened.

Source: Bureau of Economic Analysis
Global economic growth is mixed.

- A summer slowdown in global economic growth.
- Commodity based economies continue to expand.
- Europe is dealing with their debt issues.
- Emerging markets are dealing with inflation.

### Foreign GDP Growth

<table>
<thead>
<tr>
<th>Country</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Brazil</td>
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<td>Australia</td>
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<td>Mexico</td>
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<tr>
<td>Canada</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Blue Chip Economic Indicators
With low interest rates through 2013, will the FOMC QE or not QE?

**Federal Reserve Balance Sheet: Assets**

- 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
The balance sheet increases long-term inflation risk.

Personal Consumption Expenditures Price Index

Percent change from previous year

Source: Bureau of Economic Analysis
Inflation is based on money and velocity.

**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 \( Q \) \( \downarrow \)
Who Wins?
Commodity-based Economies

1) Exchange Rates
2) Interest Rates
3) Supply Shocks
Exchange rate movements affect commodity prices.

Commodity Prices and the Dollar

Source: Commodity Research Bureau and Federal Reserve
Farm incomes rise in low interest rate environments.

Farm Incomes and Interest Rates

Constant 2005 dollars (billions)

Sources: USDA, Federal Reserve, BLS
A classic supply shock in commodity markets.

**World Crude Oil Production and Consumption**

- Production and Consumption in Million barrels per day from 2005 to 2011.
- Source: Energy Information Administration

**U.S. and World Corn Inventories**

- Stocks as percent of annual use from 1990 to 2010.
- Source: USDA

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**Graphs:**
- For crude oil, production and consumption are shown with a blue and red line respectively, increasing over time.
- For corn inventories, the graph shows the percentage of annual use, with U.S. and world data distinctly marked.
The Great Plains reaps the benefits of the commodity boom.
Asset values surge throughout the Corn Belt.

Non-irrigated Cropland Values
(Percent change 2010:Q1 to 2011:Q1)

Source: Agricultural Finance Databook, FRBKC
Conclusion

- Economic growth has slowed with government and consumer spending.
- Despite panic, sluggish growth is expected in 2012.
- Deleveraging will mute the economic recovery.
- The outlook for Nebraska and other commodity driven economies looks brighter than other regions.
- Commodities follow boom/bust cycles.

*How long will the boom last?*