Major Trends Driving Major Changes in Rural America

The views expressed are those of the author and do not necessarily reflect the opinions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.
Today’s Roadmap

- The economic recovery is the major trend.
- Five trends for rural America
- Can Rural America compete in the recovery?
The U.S. economy is projected to rebound in 2010.
Unemployment rates have spiked.
Unemployment rates have spiked.

Unemployment Rate
2008 Monthly Average

Source: Bureau of Labor Statistics
Unemployment rates have spiked.

Unemployment Rate
2009 Monthly Average

Source: Bureau of Labor Statistics
Is the “Great Recession” the “Great Depression” for our generation?
Where are tomorrow’s consumers?

GDP Growth

Annual percent change, constant dollars

Source: International Monetary Fund, January 2010
Can stronger global economies and a weaker dollar spur further improvements in the trade balance?
In the future, the Federal Reserve will need to shrink its balance sheet

Federal Reserve Balance Sheet: Assets

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

DECEMBER 2007 (833 BILLION DOLLARS)
- $776.0
- $70.7

DECEMBER 2009 (2201 BILLION DOLLARS)
- $1,092.5
- $448.4
- $317.0
- $216.8
- $126.2

Source: Federal Reserve Bank of Cleveland
In the short run, deficit spending stimulates the economy. What about the long-term consequences?

U.S. Gross Federal Debt

Source: Congressional Budget Office
Inflation expectations remain low.

U.S. Inflation Expectations

- Expectations over next 10 years
- Expectations over next 4 quarters

Source: Survey of Professional Forecasters
Today’s Roadmap

- The economic recovery is the major trend.
- Five trends for rural America
1) Money may NOT be Cheap

- Due to the zero bound, the Fed Funds rate can only go up.
- Interest rate risk for banks and businesses.
- Do not forget about credit standards and collateral requirements.
2) The Consumer is King

- The “Great Recession” was caused by a collapse in demand.
- When will domestic demand rebound?
- Who are tomorrow’s consumers?
Rural America is in the Food Business.

U.S. Retail Sales at Grocery Stores and Restaurants

Percent change from year ago

Source: Census Bureau
Gasoline demand has also plummeted.

Total Gasoline Retail Deliveries

Million gallons per day (three month moving average)

Source: Energy Information Administration
As incomes rise, how people purchase and prepare food changes.

### Households Owning a Refrigerator

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<td>India</td>
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Source: USDA, Euromonitor

### Households Owning a Microwave Oven

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Source: USDA, Euromonitor
3) U.S. Ag: High Hopes, Uncertain Profits

- If we can get $4 corn with weak demand, what happens when demand rebounds?
Crop inventories remain low.

World Crop Inventories

Ending stocks to use ratio (percent)

Source: USDA
Traditionally, farm booms are driven by demand.

Real U.S. Net Farm Income

Billion dollars

Source: USDA
A decade of high crop profits?

Net Returns to Crop Production
(Gross Market Returns Less Variable or Cash Costs)

Dollars per acre (three year moving average)

Source: USDA
Variable costs exclude costs for labor and management, depreciation, land, taxes, insurance, and farm overhead.
Volatility in commodity prices remains high.

U.S. Annual Farm Prices

Dollars per bushel

Source: USDA
3) U.S. Ag: High Hopes, Uncertain Profits

- If we can get $4 corn with weak demand, what happens when demand rebounds?
- $4 corn presents a challenge to U.S. livestock.
4) Changing Government Policies

- Financial markets and regulation
- Environmental policy
- Energy policy
- Health care policy
- Agricultural policy
- Rural development
- ???
What happened to biodiesel production in Jan. 2010? Do you want to base your profits on government policy?

U.S. Biodiesel Production

Million gallons

Source: Dept. of Energy
5) Another Wave of Consolidation.

- Potential consolidation in banking, agriculture, and rural communities.

- Shaped by the following ...
  - Business and bank failures open opportunities for survivors.
  - Higher fixed costs of production.
  - Regulatory costs also boost fixed costs.
  - With tighter standards, equity/collateral needs rise.

- Economies of scale and scope will tend to dominate in rural America.
The strongest economic regions are formerly rural communities.

“If you can’t beat them, annex them.”

Kansas Metropolitan Counties
Don’t be surprised if Rural America Can Compete.

- The strongest economic regions are formerly rural communities.
- Rural places have had stronger growth in past “jobless recoveries”

Calculations based on BEA wage and salary employment and per capita income data.
The Competitiveness of Rural Places

- Technology: Rural America adopts technology
  - 1850: 85 hours of labor needed to produce 100 bushels of corn.
  - 2000’s: less than 2 hours of labor needed to produce 100 bushels of corn.
The Competitiveness of Rural Places

- Technology: Rural America adopts technology
- Infrastructure: a focus on broadband and communication, but what about traditional infrastructure (roads, rail, and water)?
High Speed Internet Coverage
June 2000

Source: FCC
High Speed Internet Coverage 2008

Source: FCC

Number of Providers *
- 7 or more
- 4 to 6
- 1 to 3
- Zero Delivery Areas

* Provider serves at least one subscriber in the ZIP Code. All reported technologies are included. See footnote 2 following Tables 1-6 for details.

Sources: FCC Form 477 and Tele Atlas Dynamap/ZIP Code Boundary and Inventory Files v16.1, April 2008.
Railroad Capacity
2007

Source: Dept. of Transportation
Projected Railroad Capacity 2035 without improvements

Source: Dept. of Transportation
What has Brazil been doing over the past decade?

Soybean Production Costs in U.S., Brazil and Argentina, 1998
(Dollars per bushel)

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<tr>
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<th>U.S. Heartland</th>
<th>Mato Grasso, Brazil</th>
<th>Argentina</th>
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<tr>
<td>Variable costs</td>
<td>$1.71</td>
<td>$3.17</td>
<td>$1.90</td>
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<tr>
<td>Fixed costs</td>
<td>$3.40</td>
<td>$0.72</td>
<td>$2.02</td>
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<tr>
<td>Total production costs</td>
<td>$5.11</td>
<td>$3.89</td>
<td>$3.92</td>
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<tr>
<td>Internal transportation and marketing</td>
<td>$0.43</td>
<td>$1.34</td>
<td>$0.81</td>
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<tr>
<td>Freight Cost</td>
<td>$0.38</td>
<td>$0.57</td>
<td>$0.49</td>
</tr>
<tr>
<td>Total costs</td>
<td>$5.92</td>
<td>$5.80</td>
<td>$5.22</td>
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Source: USDA
The Competitiveness of Rural Places

- Technology: Rural America adopts technology
- Infrastructure: a focus on broadband and communication, but what about traditional infrastructure (roads, rail, and water)？
- Capital: Despite current situation, U.S. capital markets are the envy of the world.
  - Who is the “safe haven” financial market?
  - Debt capital flows to rural America.
  - A better flow of equity capital to rural communities is needed.
The Competitiveness of Rural Places

- Technology: Rural America adopts technology
- Infrastructure: a focus on broadband and communication, but what about traditional infrastructure (roads, rail, and water)?
- Capital: Despite current situation, U.S. capital markets are the envy of the world.
- Labor: a quantity of high-quality workers are needed.
  - Do jobs follow people, or do people follow jobs?
  - What entices people to return to rural America?
People do come home to rural America.

Rural Population by Birth Cohort
(Tenth Federal Reserve District)

- Late boomers born from 1960 to 1964
- Gen X born from 1965 to 1969
- Gen X born from 1970 to 1974

The Competitiveness of Rural Places

- Technology: Rural America adopts technology
- Infrastructure: a focus on broadband and communication, but what about traditional infrastructure (roads, rail, and water)?
- Capital: Despite current situation, U.S. capital markets envy of the world.
- Labor: a quantity of high-quality workers are needed.
- Entrepreneurship: Necessity is the Mother of Invention.
How Does Knowing the Customer Affect What You Produce?

Japanese Watermelon
Cost:
Square Watermelon: $82
Regular Watermelon $15 to $25

Source: BBC, 2001

Sold on a limited basis due to cost … the Consumer is King
Conclusions

- Recovery opens new horizons for rural America.
- High hopes for prosperity are not certain in an environment of consolidation where money is not cheap, government action is high, and a fickle consumer is king.
- Rural areas can compete by tapping the pioneering spirit of our forefathers, where entrepreneurial investments in technology, infrastructure, capital, and labor are key.
Mark Your Calendars!

For Registration Information, Please E-mail
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