Rising Farmland Values: Causes and Cautions

Federal Reserve Bank of Chicago
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Unemployment soared higher during the Great Recession

(Civilian unemployment rate, percent SA)
The path of this recovery is forecast below past deep recession recovery cycles.

Business cycle recovery path

index - business cycle trough = 100

Quarters before trough quarters after trough

Blue Chip forecast recovery path

1974-75
1981-82
2008-09
Housing market tanked and bouncing along bottom

Housing starts
(Thousands of units, 3-month moving average, SAAR)

Home mortgage rate
(Percent, effective rate for all loans closed)
In December 2008, the Federal Open Market Committee lowered its Fed Funds rate target to a range from 0 to 0.25%.
Quantitative easing was necessary

Assets of the Federal Reserve

Billions of dollars

- Term Asset-Backed Securities
- Loan Facility
- Maiden Lane II & III
- AIG Support
- Central Bank Swaps
- Commercial Paper Facility
- Maiden Lane
- Term Auction Credit
- Securities Held Outright

2007 2008 2009 2010 2011
Food price increases again rising faster than core inflation (less food and energy)

(Consumer price index, percent change from year ago)
Why is the Chicago Fed interested in Agriculture?

• Important portion of District economy
  – Wide geographic impact
  – “Backbone” of economy

• Leading farm states

• Food manufacturing
  – Jobs
  – Income

• Impact on commercial banks

• Response to stakeholders
7th District Agriculture Products (as % of U.S. total, 2010)
Corn for Grain 2005
Production by County

Bushels
- Not Estimated
- < 1,000,000
- 1,000,000 - 4,999,999
- 5,000,000 - 9,999,999
- 10,000,000 - 14,999,999
- 15,000,000 - 19,999,999
- 20,000,000 +

U.S. Department of Agriculture, National Agricultural Statistics Service
Real Crop Prices

($/bushel, adjusted by CPI-U for January 2008)
Real net farm income higher in 2011

*billion 2005$

*forecast
Why the interest in farmland values?

• Accounts for huge portion of sector asset value

• An indicator of agriculture’s health

• Affects collateral values & portfolio quality

• Impact on lending institutions

• A factor in the 1980’s farm crisis
Banks in 7th District Land Value and Credit Conditions Survey
Annual change in farmland values in 
Seventh Federal Reserve District
Year over year changes by quarter in farmland values in the Seventh Federal Reserve District
Farmland Value Indexes for Seventh District States (1981=100)
Indexes of Seventh District farmland values
(1981=100)
Indexes of Seventh District farmland values and USDA farm real estate (1981=100, adjusted by PCE)
Indexes of Seventh District and USDA Farmland Values for Indiana (1981=100)
Indexes of Seventh District and USDA Farmland Values for Iowa (1981=100)
Indexes of Seventh District and USDA Farmland Values for Wisconsin (1981=100)
What factors affect farmland values?

- Expected net returns
- Interest rates
- Government programs
- Capital investment in structures
- Non-farm demand

- Inflation, lending policies, other investments, speculation, technology, trade, site characteristics, environmental issues
Index of Seventh District Cash Rents
Nominal vs. Inflation Adjusted (1981=100)
Financial indicators for the farm sector

- Net farm income is higher for 2011
- Farm program spending going lower
- Farm balance sheets in stronger shape
- Interest rates are relatively low
- Credit conditions improved in recent years
  - Fewer loan renewals and extensions
  - Only 2% of 7th District agricultural loans with “major” or “severe” repayment problems
Index of agricultural loan demand for the Seventh Federal Reserve District (excluding real estate)
Index of agricultural loan repayment rates for the Seventh Federal Reserve District
Index of funds availability for the Seventh Federal Reserve District
Interest rates charged on new farm loans in the Seventh Federal Reserve District

percent

Farm operating

Farm real estate