U.S. Agricultural Outlook and Farm Finances

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Nate Kauffman
Omaha Branch Executive and Economist
Federal Reserve Bank of Kansas City
Of the 12 Fed Districts, the KC District is the most concentrated in agriculture by some measures.

Farm Sector Concentration

| Source: BEA and staff calculations |

Share of Counties with Moderate Farm Concentration or Higher

| Source: BEA, USDA, and staff calculations |

Kansas City
Minneapolis
Chicago
San Francisco
St. Louis
Dallas
Atlanta
Richmond
New York
Boston
Cleveland
Philadelphia
Outlook Themes

• The outlooks for agriculture and the broader economy have traded places the past few years.

• The Fed has begun to raise interest rates in recognition of sustained economic growth.

• A stronger U.S. economy, and strength in farmland markets, have provided support through the downturn in ag.
  • The downturn in ag has been gradual, but persistent. And risks still remain.
From 2007 to 2013, the ag economy outperformed the rest of the U.S. economy.

Indicators for Ag Economy and Broader U.S. Economy
Change from 2007 to 2013

Source: USDA, University of Michigan, Federal Reserve Board, and Haver Analytics.
Since 2013, the outlooks have reversed.

Indicators for Ag Economy and Broader U.S. Economy
Change from 2013 – 2017

Source: USDA, University of Michigan, Federal Reserve Board, and Haver Analytics.
Short-term interest rates have gradually inched higher, even as long-term rates remain low.

U.S. Interest Rates

Source: Federal Reserve Board and Haver Analytics.
In agriculture, however, the primary driver of the transition is supply and demand.

U.S. Corn Price and Stocks-to-Use Ratios

Source: USDA and staff calculations.
The low price environment continues to stress liquidity, even as solvency measures remain stronger.

U.S. Farm Sector Solvency and Liquidity Metrics

Source: USDA.
Lenders have recognized the reduced liquidity as an increase in portfolio risk.

Source: Federal Reserve Bank of Kansas City.
Interest rates on ag loans have risen alongside higher risk profiles and increases in benchmark rates.

Variable Interest Rates

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Operating Loans  Machinery Loans  Farm Real Estate Loans

Fixed Interest Rates

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Operating Loans  Machinery Loans  Farm Real Estate Loans

Source: Federal Reserve Bank of Kansas City.
Liquidity is also a growing concern for commercial banks with an agricultural concentration.

* Through third quarter of 2017.

Note: Highly concentrated agricultural banks have an agricultural loan to risk based capital ratio of at least 300%.

Source: Agricultural Finance Databook.
The strength of farmland values has sustained the ag economy. Will it last?

**KC Fed District Farmland Values**

- Nonirrigated
- Irrigated
- Ranchland

**Equities and Farmland P/E Ratios**

Sources: Standard & Poor's, Haver Analytics and Federal Reserve Bank of Kansas City
A stronger global economy has been a significant driver to various regions and sectors.

**Real GDP Growth**

- **Percent change from previous year**

  - **Blue line**: Advanced Economies (Left Scale)
  - **Green line**: Emerging & Developing Economies (Right Scale)

Source: IMF and Haver Analytics.
Concluding Thoughts

- The U.S. farm economy remains in a prolonged downturn and agricultural commodity prices are likely to remain low in the near-term.

- Although the downturn has persisted for 4 years, liquidity is still a growing concern.

- Some producers remain well positioned, but financial stress has continued to build for many others.

- As long as farmland values remain strong, the sector will likely avoid systemic problems similar to the 1980s, but further consolidation is a possible outcome.

- A strong global economy will offer support, but significant areas of concern remain.
Questions?

Nate Kauffman
Economist and Omaha Branch Executive
Federal Reserve Bank of Kansas City – Omaha Branch
Email: Nathan.Kauffman@kc.frb.org
Website: http://www.kansascityfed.org/omaha/