Ag Finance Recovery

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The views expressed here are those of the speaker and do not necessarily reflect the opinions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.
Outlook Themes

• Gains in economic activity, both globally and in the U.S., have supported a notable recovery in U.S. agriculture.

• Ag finance conditions have improved dramatically relative to pre-pandemic conditions.

• Still, many risks remain, including significant cost pressures.
After contracting sharply a year ago, economic activity has rebounded.

Sources: BEA, BLS and Haver Analytics.
Globally, economic growth is poised to be relatively strong in 2021 and 2022.

Many jobs have returned, but several industries remain well below their pre-pandemic level of employment.

Sources: BLS, Haver Analytics.
The emergence of the Delta variant limited optimism and economic activity in the third quarter.

**Consumer Sentiment Index**

Index (1966 = 100)

**Contributions to GDP Growth**

Percentage point contribution

Sources: University of Michigan, BEA, Haver Analytics.
Trade to and from the U.S. has strengthened notably despite changes in the value of the dollar.

U.S. Exports

- Total (Left)
- Food & Ag Products (Right)

U.S. Imports & Value of Dollar

- Total Imports (Left)
- Value of U.S. Dollar (Right)*

* Real Broad Trade-Weighted U.S. Dollar Index

Sources: Wiser Trade, Haver Analytics, Federal Reserve Board of Governors.
Business investment has continued to expand despite concerns about supply chain disruptions and freight costs.

**ISM Manufacturing Indices**

- **Headline**
- **New Orders**
- **Backlog of Orders**
- **Customer Inventories**

**World Container Index**

Sources: ISM, Haver Analytics, Drewry (Bloomberg).
Business contacts have also pointed to challenges associated with labor shortages.

U.S. Worker Availability

Note: Worker availability is calculated by dividing the number of unemployed by the number job openings.
Sources: BLS, Haver Analytics, staff calculations.
Pandemic related disruptions, labor shortages, and re-openings have affected inflationary pressures.

Consumer Prices

Sources: BLS, Haver Analytics.
The pandemic has had broad and severe economic effects, but agriculture has been a surprising bright spot.

U.S. GDP and Farm Income

After dropping in the initial months of the pandemic, some ag markets have rebounded sharply.

Sources: CME, Wall Street Journal, and Haver Analytics
Higher prices have boosted the expectation for farm incomes in 2021.

Note: Estimate and forecast for 2021 are as of September 2021.
Source: USDA
The more optimistic market environment has also boosted long-term income forecasts.

Source: University of Missouri - Food and Agricultural Policy Research Institute (FAPRI)
Ag exports, particularly to China, have been a significant driver of higher prices.
Cost pressures have also increased, however, and could weigh on profits in the years ahead.

![Projected U.S. Ag Production Costs](chart)

Source: University of Missouri - Food and Agricultural Policy Research Institute (FAPRI)
Despite higher costs, financial stress among ag borrowers has eased over the past year.

**Farm Loan Delinquency Rates**

<table>
<thead>
<tr>
<th>Year</th>
<th>Commercial Banks</th>
<th>Farm Credit System</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>3.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>2015</td>
<td>2.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>2020</td>
<td>2.0%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

**Farm Loan Repayment Rates**

**Federal Reserve Districts**

<table>
<thead>
<tr>
<th>Year</th>
<th>Kansas City</th>
<th>Minneapolis</th>
<th>St. Louis</th>
<th>Chicago</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>200</td>
<td>190</td>
<td>180</td>
<td>170</td>
</tr>
<tr>
<td>2020</td>
<td>220</td>
<td>210</td>
<td>200</td>
<td>190</td>
</tr>
</tbody>
</table>

*As of Q2 2021

**Note:** Survey for St. Louis District began

**Sources:** Federal Reserve District Surveys of Agricultural Credit Conditions, Farm Credit Administration and Reports of Condition and Income.
Demand for operating loans has also softened while real estate lending has remained more steady.

Source: Reports of Condition and Income and FCA.
Higher farm incomes have renewed strength in farmland markets.

U.S. Farmland Values
Change from 2015 to 2020

U.S. Farmland Values
Change from 2020 to 2021

Sources: USDA and staff calculations
Interest rates on farm loans have remained low alongside accommodative monetary policy.

Average Interest Rates on Agricultural Loans*

Federal Reserve Balance Sheet and Federal Funds Rate

*Average fixed interest rates on intermediate operating loans and farm real estate loans reported by agricultural bankers in Chicago, Dallas, Kansas City, Minneapolis, Richmond and St. Louis Federal Reserve Districts.

Sources: Federal Survey District Surveys of Agricultural Credit Conditions and Federal Reserve Board of Governors.
Concluding Thoughts

- The near-term outlook for U.S. agriculture remains strong, but longer-term risks could lead to pressure.
  - Global demand strength (China)
  - Rising production outside of the U.S. (South America)
  - Input cost pressures (fertilizer)
  - Supply chain disruption/normalization
  - Government payments
  - Environmental policy and the future of biofuels
  - Regional production conditions (climate change, water)