Outlook Themes

• Economic conditions in agriculture have weakened in recent months alongside an ongoing decline in commodity prices.

• Financial pressure in agriculture has been limited, but could intensify in the year ahead.

• The resilience of the U.S. economy has provided broad support for agriculture, and other goods-based industries.
Compared with the past two years, crop prices and farm income have dropped sharply.

**Crop Prices**

Index (2019=100)

- 2022: 140
- 2023: 130
- 2024: 110

**Real Net Farm Income**

Billion dollars, 2024$

- 2022: 190
- 2023: 160
- 2024: 120

**Sources:** USDA and staff calculations
Moreover, farm income this year is expected to be only slightly higher than what was expected before the pandemic.

Sources: USDA and staff calculations
Interest rates have increased sharply over the past two years, potentially exacerbating financial challenges.

Average Interest Rates on Agricultural Loans

Sources: Federal Reserve Board of Governors and Survey of Terms of Lending to Farmers
And yet, delinquency rates on farm loans remain near all time lows, and farm real estate values have been firm.

**Farm Loan Delinquency Rates at Commercial Banks, Q2**

**Farm Real Estate Values**

*Note:* The right chart is the average of the Chicago, Kansas City and Minneapolis Federal Reserve Districts. Q2 results for both charts are preliminary.

*Sources:* Reports of Income and Conditions and Federal Reserve Surveys of Ag Credit Conditions
Farm income has dropped sharply, but the strength of the post-pandemic years was remarkable.

Sources: USDA and staff calculations
While some challenges in the livestock industry remain, profits in the cattle industry have been strong.

Ratio of Prices Received-to-Total Production Expenses

Index (2010 = 100)

Sources: USDA and staff calculations
Despite concerns about a post-recovery slowdown in recent years, the U.S. economy has been resilient.

Sources: BEA, Wolters Kluwer, and Haver Analytics
Inflation has moved closer to the Fed’s long-term target.

Sources: BEA, BLS and Haver Analytics
Home prices have remained elevated even with sharply higher mortgage rates.

U.S. Home Values and Mortgage Rates

Sources: Freddie Mac, Zillow and Haver Analytics
A strong U.S. dollar has supported the purchase of foreign products, but has weighed on U.S. ag exports.

Sources: Federal Reserve Board of Governors, USDA, and Haver Analytics
Overall production of U.S. ag products, however, has continued to rise alongside demand for food and fuel.

**Real U.S. Food Expenditures & Ethanol Consumption**

- **Food Expenditures (Left)**
- **Ethanol Consumption (Right)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Food Expenditures</th>
<th>Ethanol Consumption</th>
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<tbody>
<tr>
<td>2001-05</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>2006-10</td>
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<td>500</td>
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<tr>
<td>2011-15</td>
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<tr>
<td>2016-20</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>2023</td>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

**U.S. Crop and Meat Production**

- **Crop Production (Left)**
- **Red Meat & Poultry Production (Right)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Crop Production</th>
<th>Red Meat &amp; Poultry Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-05</td>
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<td>450</td>
</tr>
<tr>
<td>2006-10</td>
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<tr>
<td>2011-15</td>
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<tr>
<td>2016-20</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>2023</td>
<td>850</td>
<td>850</td>
</tr>
</tbody>
</table>

**Sources:** USDA and staff calculations
Although manufacturing activity has weakened over the past year, the declines have been from exceptional levels.

Sources: Institute of Supply Management (ISM) and Haver Analytics
For many regions with a strong ag presence, manufacturing is particularly concentrated in rural areas. 

In Iowa, 40.2% of all manufacturing employment is located in nonmetro areas that are concentrated in manufacturing.

**Manufacturing Employment in Nonmetro, Concentrated Areas**

Share of All Manufacturing Employment

- No manufacturing in nonmetro, concentrated areas
- Less than 5%
- 5-10%
- 10-15%
- 15-20%
- More than 20%

**Note:** Concentrated areas are counties where the share of manufacturing employment is at least twice the national share.

**Sources:** BLS, staff.
The U.S. ag economy entered the year in a strong position, but weaker profits may lead to some financial pressure.

**Corn Profit Margins**

- **Price Range**
  - Dec. 2024 Futures Price
  - Production Costs

**U.S. Farm Sector Working Capital**

Notes: Production costs are calculated from USDA’s Economic Research Service (Commodity Costs and Returns) and national yield averages for each year shown, but exclude the opportunity cost of unpaid labor from the calculation. 2024 costs are forecasts.

Source: USDA, Haver Analytics and CME
Recent Federal Reserve surveys show that farm financial stress has increased slightly with reduced incomes.

Source: Federal Reserve Bank of Kansas City Survey of Agricultural Credit Conditions
Summary

- Financial pressure appears to be growing in U.S. agriculture, particularly among row crop producers in the Midwest.

- A shift in consumption from goods to services has been accompanied by a shift back to spending on food “away from home”.

- The strength and resilience of the U.S. economy, particularly the labor market and consumer spending, will be a significant factor shaping food and ag markets in the months ahead.
AGRICULTURE AND THE ECONOMY

The Kansas City Fed is a leader on topics related to the agricultural economy within the Federal Reserve System. Our work provides insights on agricultural and rural economies for our seven-state region of the Tenth Federal Reserve District and nationally.

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