Outlook Themes

- The U.S. agricultural sector is in the midst of an extended period of lower prices and income.

- Large inventories, weather constraints and uncertainty surrounding demand for agricultural products have weighed on the outlook for farm prices and revenues in 2019.

- Current conditions and the prolonged nature of the downturn have contributed to weaker agricultural credit conditions, both in the U.S. and in Nebraska.
The Kansas City Fed has a high concentration of agriculture and monitors conditions closely.

Average Farm Income as a Share of Total Personal Income
Average Across Counties by Fed District, 2015-2017

Proportion of “Farm Dependent” Counties and Agricultural Banks

Source: BEA and staff.

*Agricultural banks are defined as banks with farm production and farm real estate loans equaling approximately 18 percent or more of total loans.
Compared to surrounding states, Nebraska is more concentrated in agriculture by several measures.

Sources: U.S. Department of Agriculture, Federal Reserve Bank of Kansas City and the Federal Reserve Board.
Nebraska is particularly concentrated in food and ag exports and cattle, bean, and corn production.

Nebraska Exports
Total Dollar Value

- Agricultural products: 44%
- Food products: 9%
- Oil and gas: 6%
- Chemicals: 9%
- Machinery: 13%
- Electrical equipment: 4%
- Transportation: 15%

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Nebraska</th>
<th>Colorado</th>
<th>Missouri</th>
<th>Kansas</th>
<th>New Mexico</th>
<th>Oklahoma</th>
<th>Wyoming</th>
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<tbody>
<tr>
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<tr>
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</tbody>
</table>

*Numbers in parenthesis indicate Nebraska's share of U.S. production of each commodity.*

Sources: WISERTrade, USDA ERS, USDA NASS.
Agricultural commodity prices have remained low in 2019, and profit opportunities limited.

Monthly Agricultural Commodity Prices

Sources: The Wall Street Journal and staff calculations.
Input costs remain relatively high compared to crop revenues.

* Forecast for 2019.

** Production expenses include manufactured inputs (e.g. fertilizer, pesticides, fuel), seed purchases, and rent.

Source: USDA
U.S. farm income is expected to be better than anticipated earlier in the year due, in part, to govt. payments.

Source: USDA.
In addition to the prolonged period of lower farm income, weather has been a challenge this year.

* Average response of all borrowers in each state.
Source: Federal Reserve Bank of Kansas City.
Planting progress was slower in Nebraska due to flooding this year, but not as slow as in other areas.

Source USDA
Uncertainty surrounds key sources of demand for agricultural products, and inventories remain elevated.

Key Sources of Crop Demand

U.S. Crop Inventories

* Exports as of July of each year, ethanol production as of September. Sources: USDA and EIA.
But trade relief payments could comprise a relatively large share of farm income in Nebraska in 2019.

Estimations for 2019 Trade Relief Payments

Percent of Farm Income
- 0 - 10
- 11 - 30
- Greater than 30

Sources: USDA and author calculations.
Alongside lower farm income, demand for credit remains high and loan repayment rates weak.

Nebraska Credit Conditions

Source: Federal Reserve Bank of Kansas City.
Relatively stable farmland values have supported agricultural credit conditions.

Source: Federal Reserve Bank of Kansas City Ag Credit Survey.
Although demand for farmland remains strong, an uptick in supply could also weigh on the outlook.

*MS = Mountain States, which include Colorado, New Mexico and Wyoming. Source: Federal Reserve Bank of Kansas City.
Concluding Thoughts

• The U.S. agricultural sector is in the midst of an extended period of lower prices and income, but a crisis does not appear to be imminent.

• Reduced demand and large inventories could continue to weigh on farm financial conditions, and severe weather added additional strain to the farm sector in 2019.

• Farmers in Nebraska could “weather the storms” of 2019 better than some other areas of the U.S., but financial stress and downside risks remain in the longer-term outlook.