Agricultural Economic Update

Nate Kauffman, Federal Reserve Bank of Kansas City

March 24, 2021

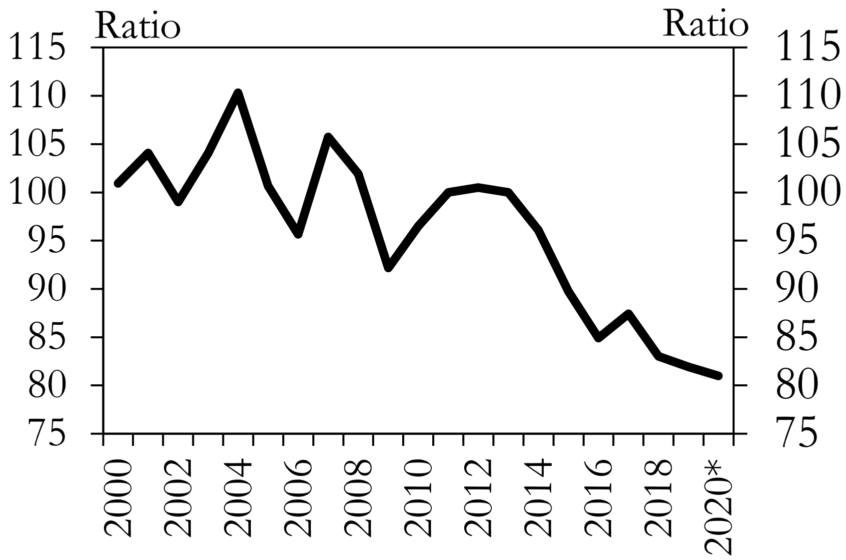
The views expressed here are those of the speaker and do not necessarily reflect the opinions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.

Outlook Themes

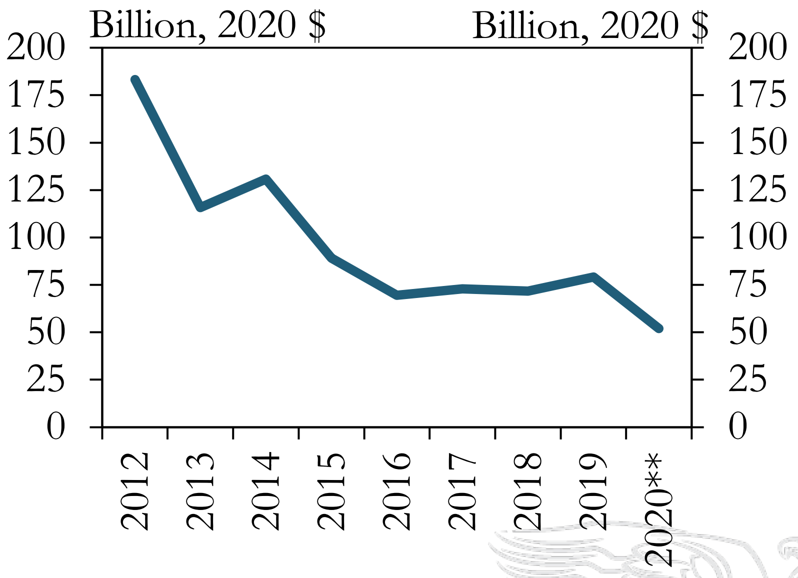
- The U.S. ag economy has entered the year with the strongest financial outlook in years.
- Some industries are positioned better than others, and there are still significant risks.
- Almost all measures of credit conditions have improved sharply in recent months.

A year ago, the U.S. ag economy appeared to be entering another year of decline.

Ag Prices Received-to-Prices Paid



U.S. Farm Sector Working Capital

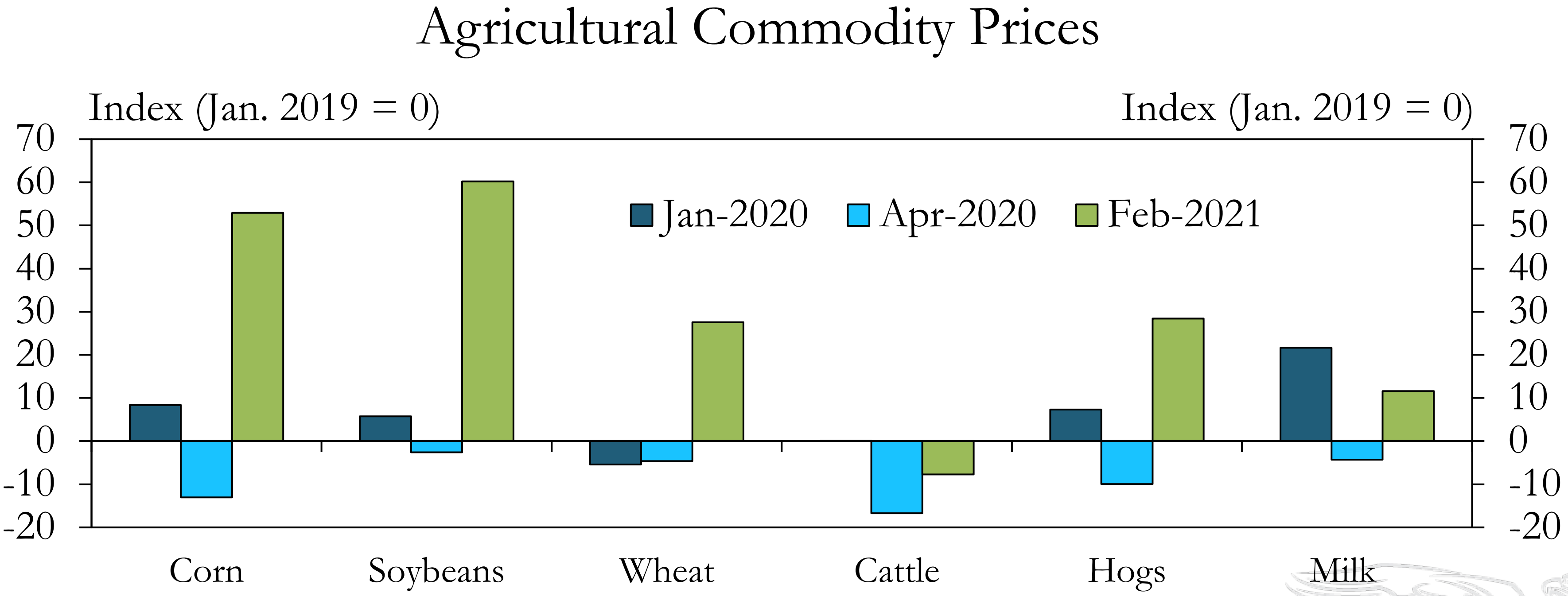


*Q1 2020.

**As of February 5, 2020

Sources: USDA and Haver Analytics.

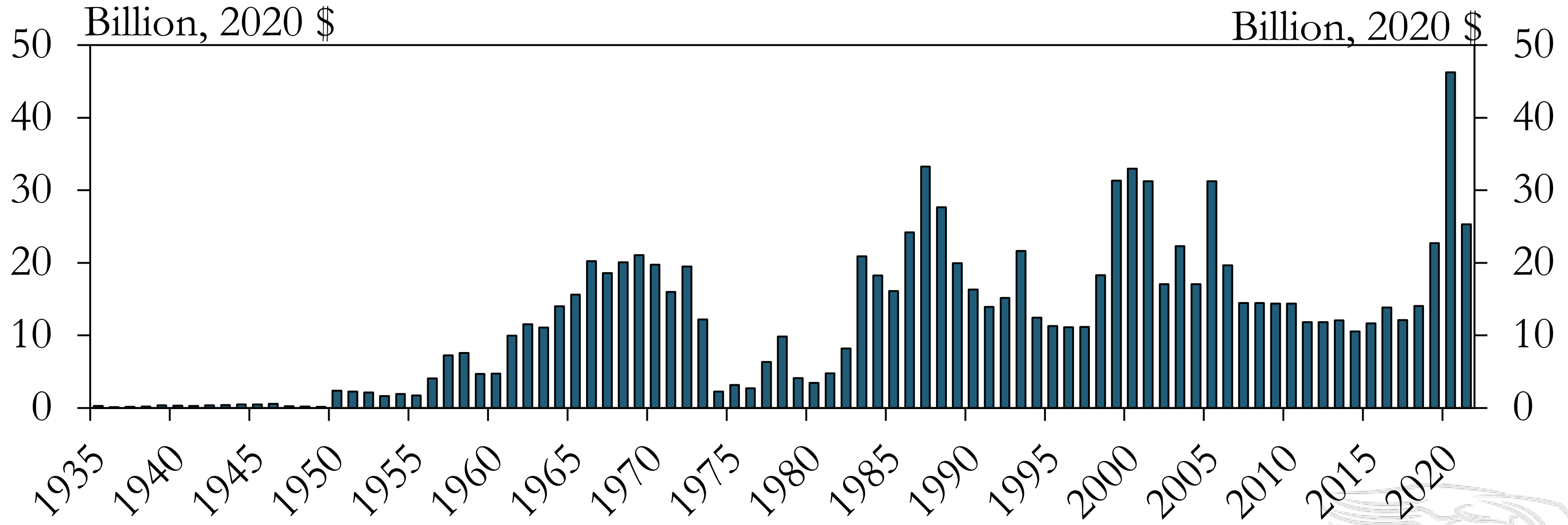
Ag commodity prices have rebounded sharply, however, following a plunge in the early months of the pandemic.



Sources: CME, WSJ and Haver Analytics.

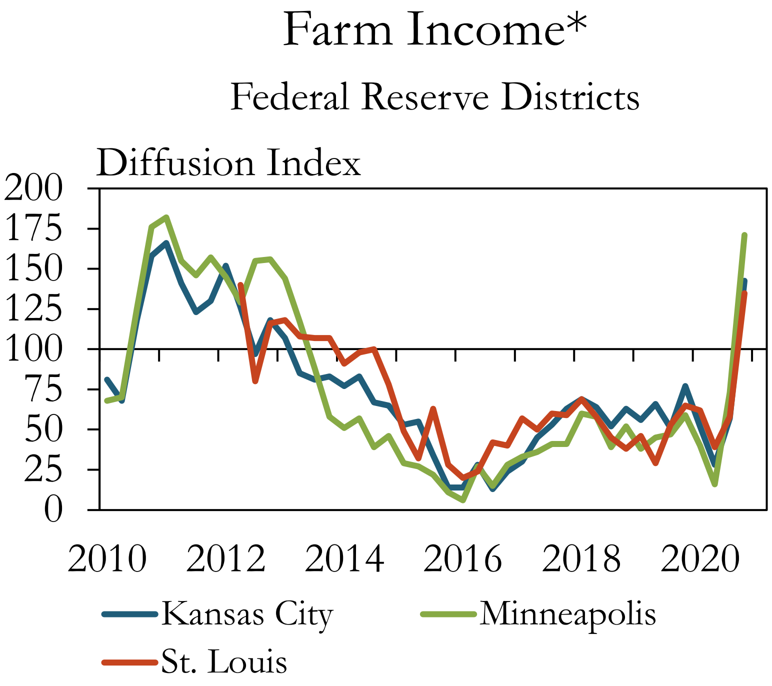
Government aid programs provided significant assistance to the U.S. farm sector in 2020.

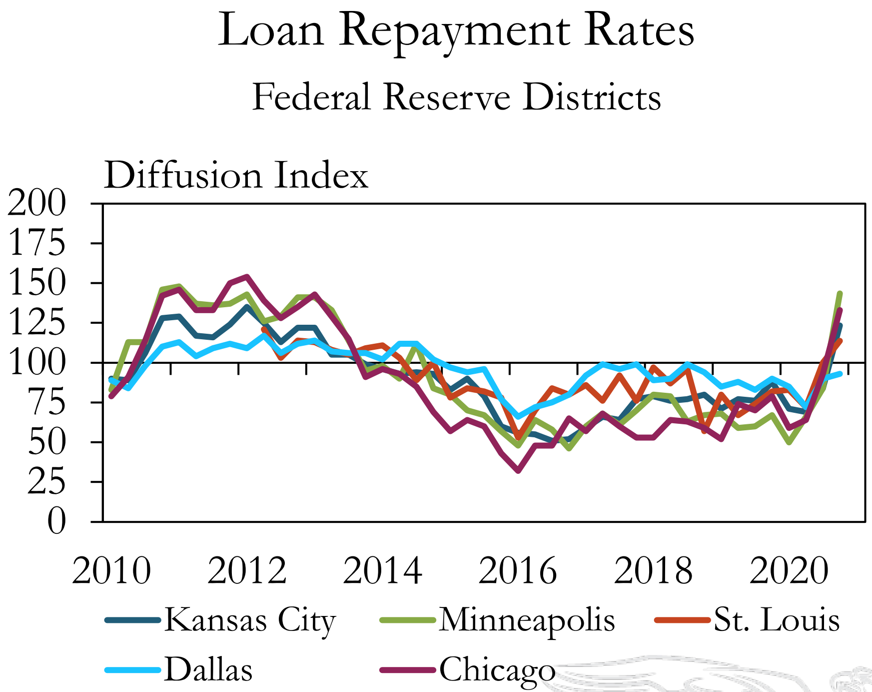
Direct Government Payments to U.S. Farm Sector



Source: USDA.

By the end of the year, farm income and credit conditions had improved dramatically.

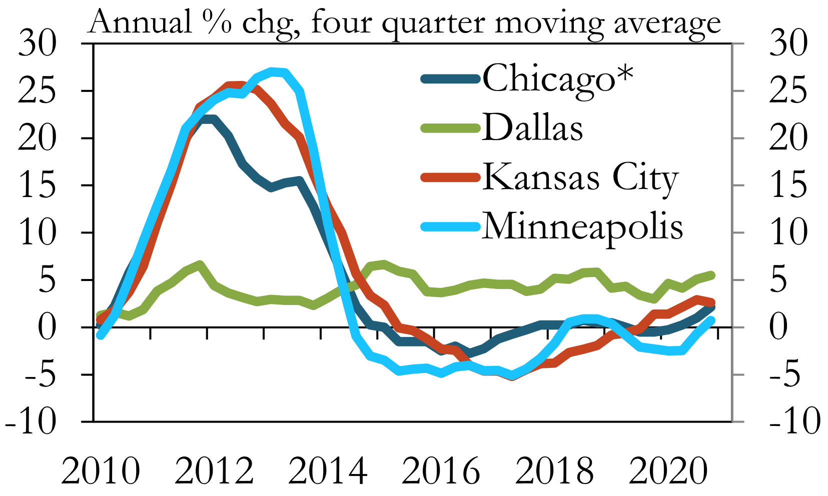




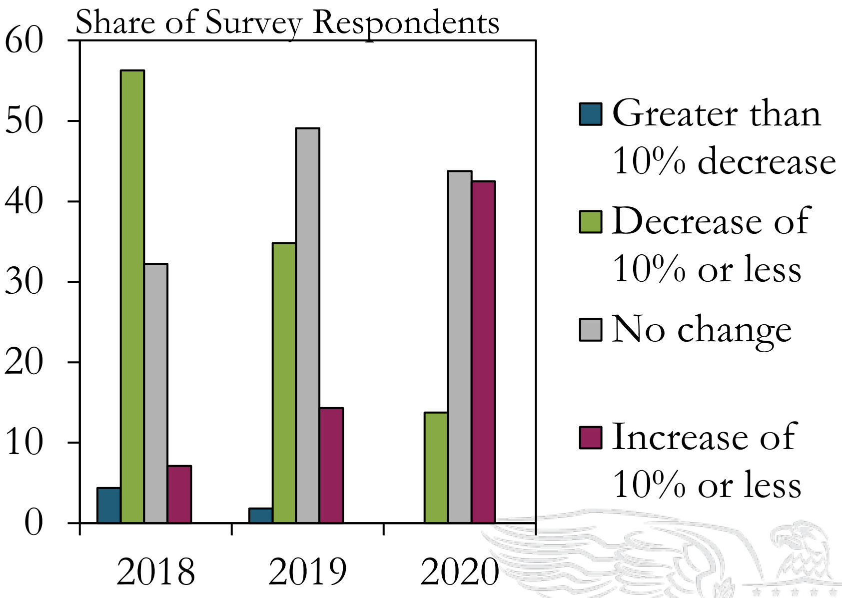
*Includes only Districts that collect information related to changes in farm income.
Note: Survey in St. Louis District began Q2 2012.
Sources: Federal Reserve District Surveys of Agricultural Credit Conditions

Farm real estate markets strengthened through 2020 and values may increase further in 2021.

Value of Non-irrigated Farmland - by Federal Reserve District

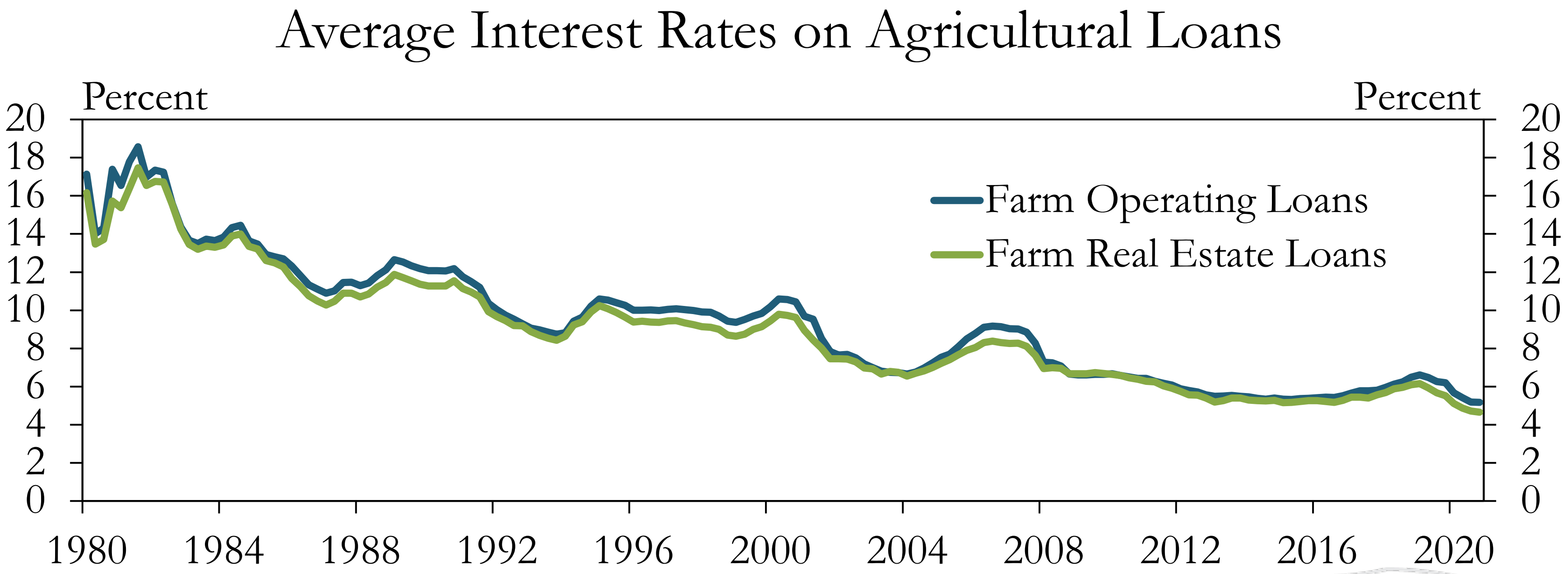


Expectations For Nonirrigated Farmland – KC District



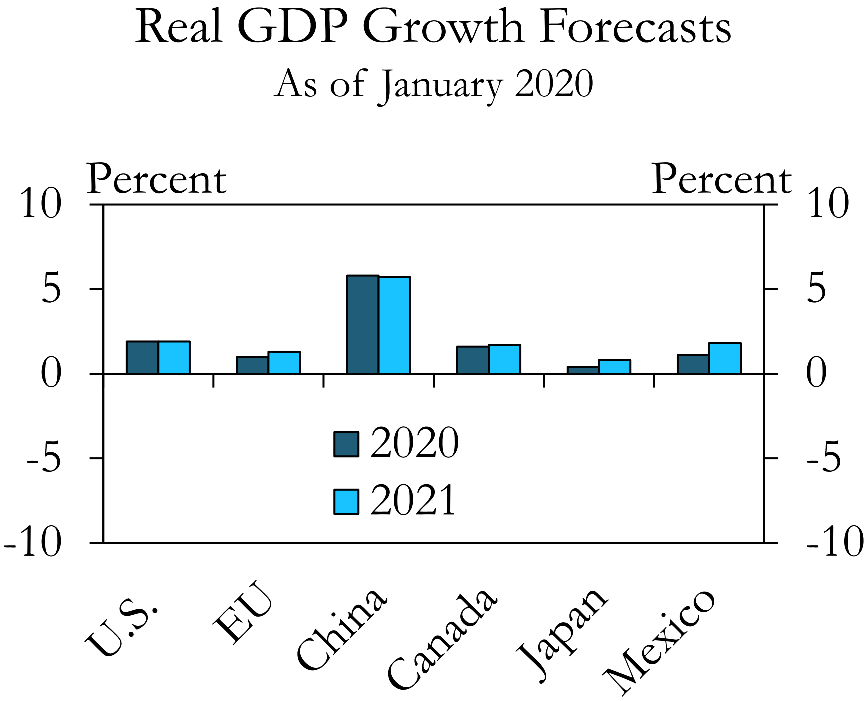
Sources: Federal Reserve District Surveys of Agricultural Credit Conditions

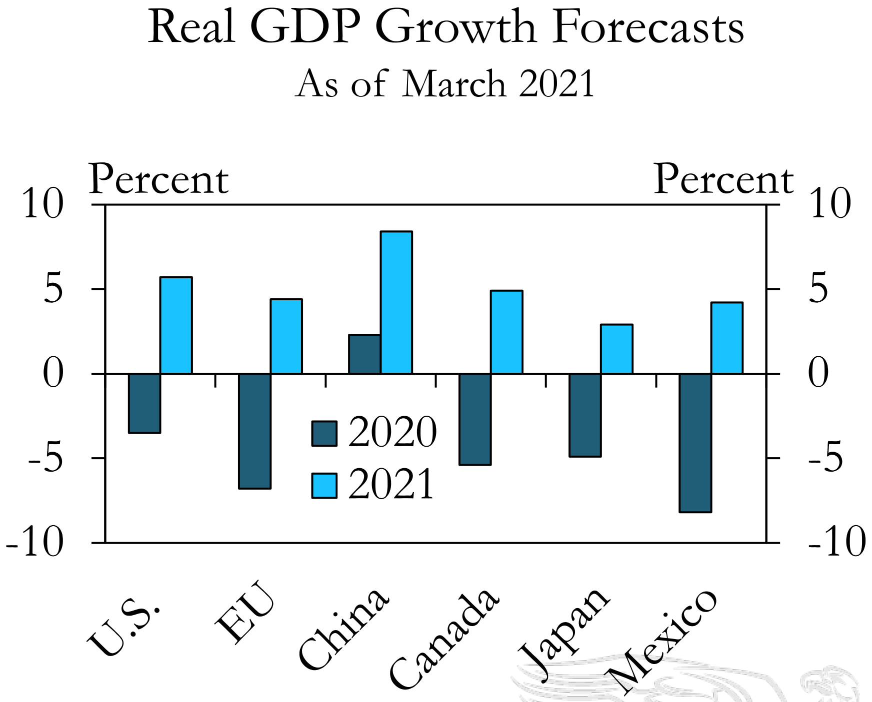
Historically low interest rates have provided additional support for farm finances.



Note: 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.

Looking ahead, macroeconomic growth prospects will shape broader ag market conditions.

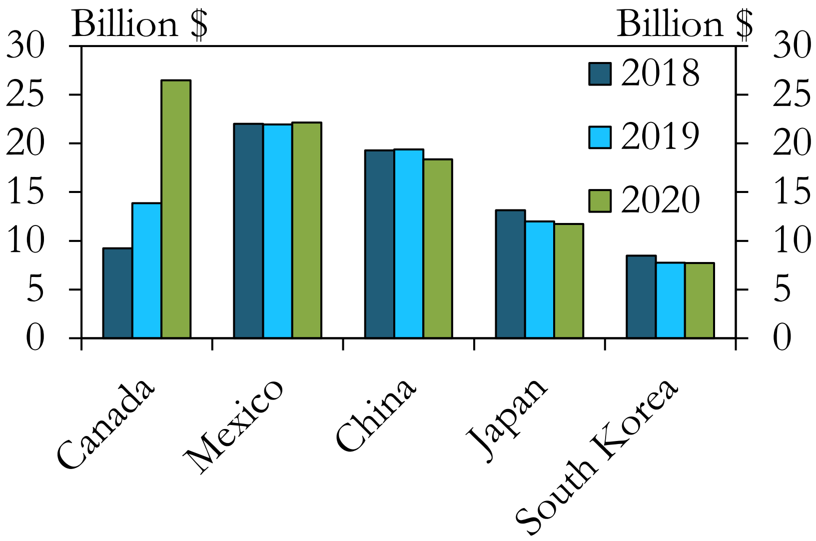




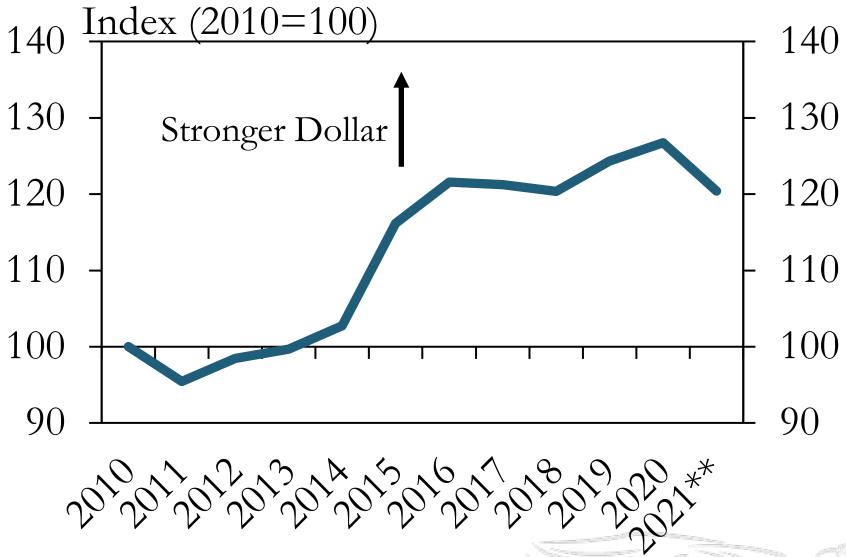
Source: Wolters Kluwer and Haver Analytics.

Exports to China will be an important determinant of the strength in ag markets.

U.S. Ag Exports by Partner



Value of U.S. Dollar*



*Nominal, broad, trade-weighted exchange value of the U.S. Dollar
**As of February 2021
Sources: Federal Reserve Board, WSJ, USDA, World Bank and Haver Analytics.

The U.S. ag economy appears to be in a relatively strong position, but there are still near-term risks.

- Macroeconomic effects associated with the pandemic
- Household finances and off-farm income
- Government payments in 2021 and beyond?
- Policy uncertainty
- Financial decisions amid uncertainty: marketing, risk management, and investment
- Livestock sector

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FEDERAL RESERVE BANK OF KANSAS CITY

COVID-19 Disruptions in the Meat Supply Chain

Evening with the Fed

March 24, 2021

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Cortney Cowley

Outline

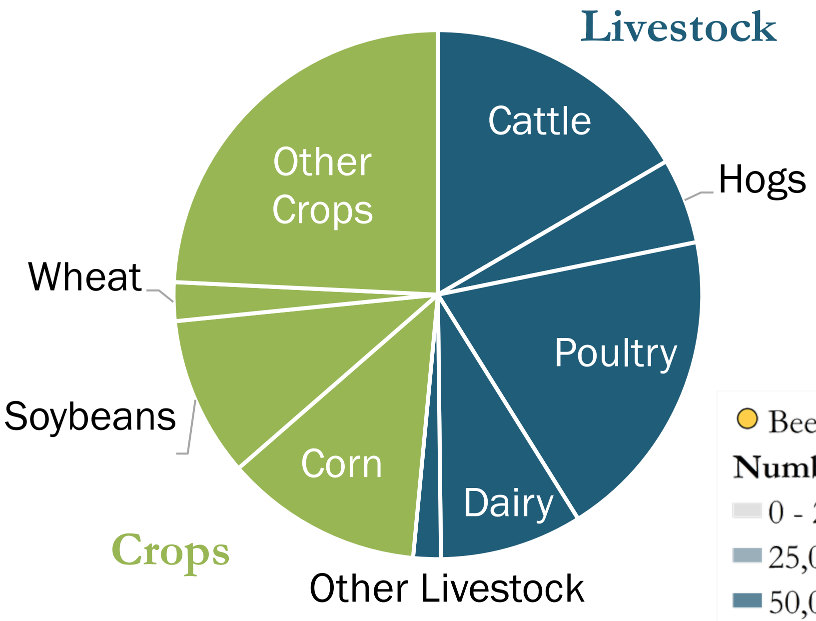
- The pandemic exposed substantial vulnerabilities in supply chains, particularly in the food sector.

- Last year, outbreaks of COVID-19 at meatpacking plants led to significant disruptions and created issues of oversupply and low prices for livestock producers.

- These disruptions temporarily reduced meat production, and alongside rapid shifts in consumer demand, led to higher prices for consumers, making it more difficult for some households to purchase meat.

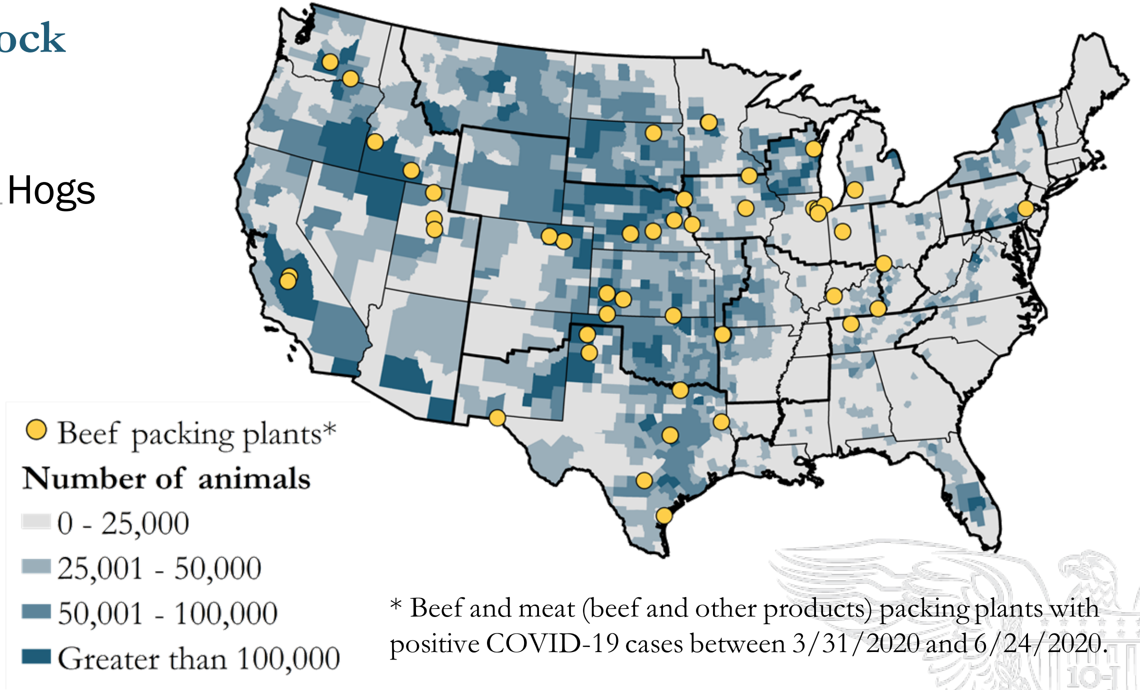
The livestock sector accounts for a large portion of the U.S. farm economy.

U.S. Farm Revenues



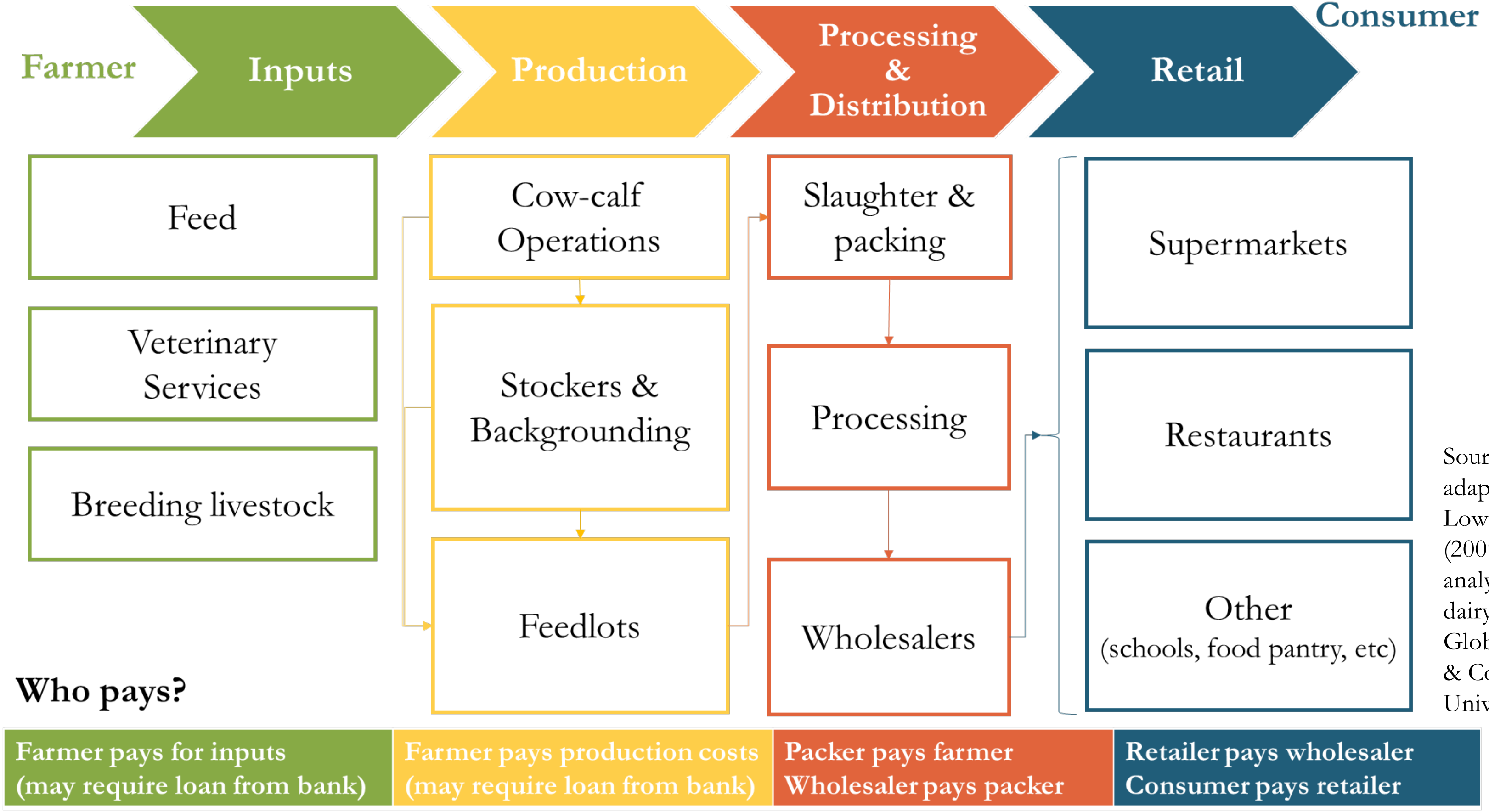
Source: USDA.

U.S. Cattle Inventories, by County



* Beef and meat (beef and other products) packing plants with positive COVID-19 cases between 3/31/2020 and 6/24/2020.

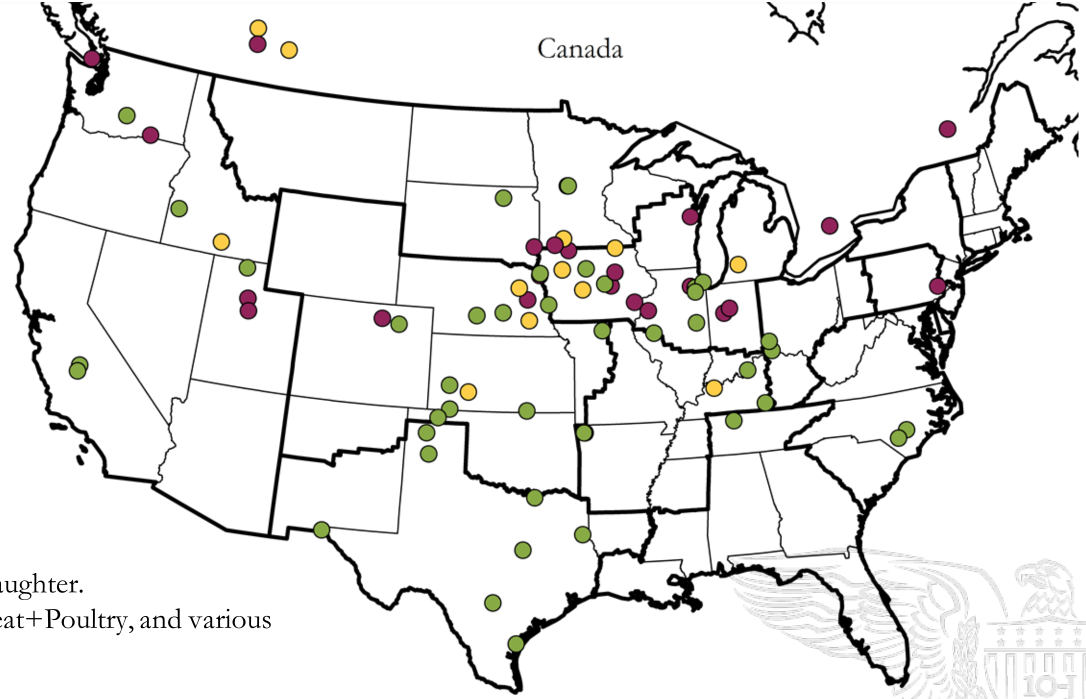
Flow Chart of the Beef Supply Chain



Source: The chart was adapted from a figure in Lowe, M., and Gereff, G. (2009). A value chain analysis of the US beef and dairy industries. Center on Globalization, Governance & Competitiveness, Duke University.

The spread of COVID-19 among employees at meat packing plants led to many closures and slowdowns.

Meat Packing Plants Affected by COVID-19



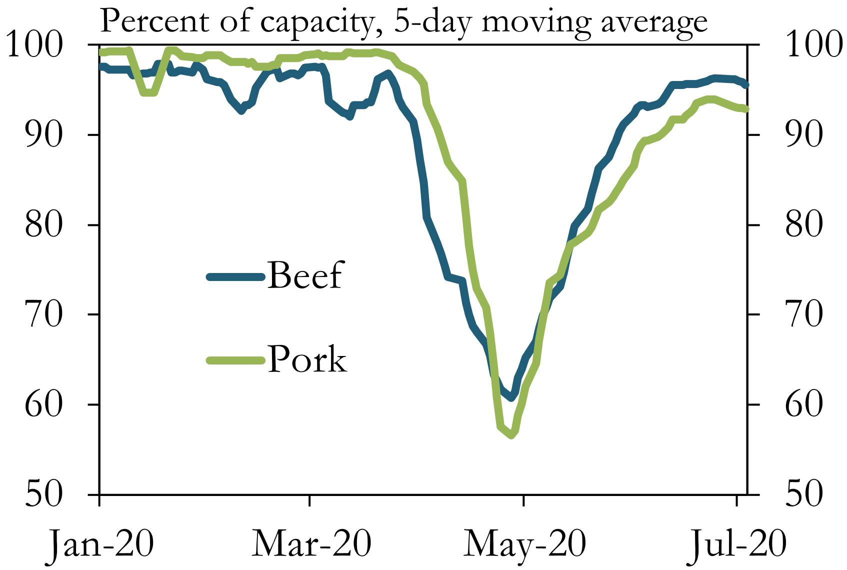
Status as of 7/13/2020

- Positive COVID-19 cases, but never closed
- Closed for less than one week - subsequently reopened
- Closed for more than one week - subsequently reopened

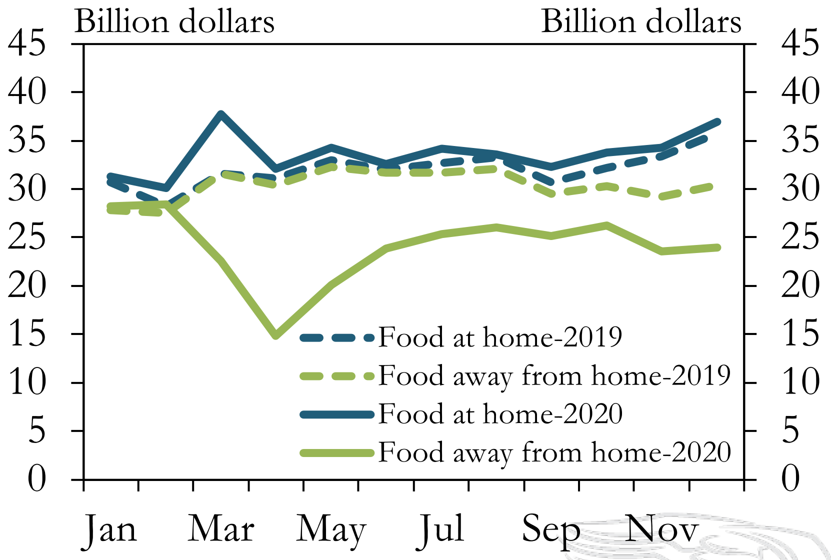
Note: Includes beef and pork plants that purchase animals for slaughter.
Sources: Food & Environment Reporting Network, Drovers, Meat+Poultry, and various local news outlets.

Disruptions led to sharp reductions in meat production, as consumers shifted food purchases away from restaurants.

U.S. Beef and Pork Plant Capacity Utilization



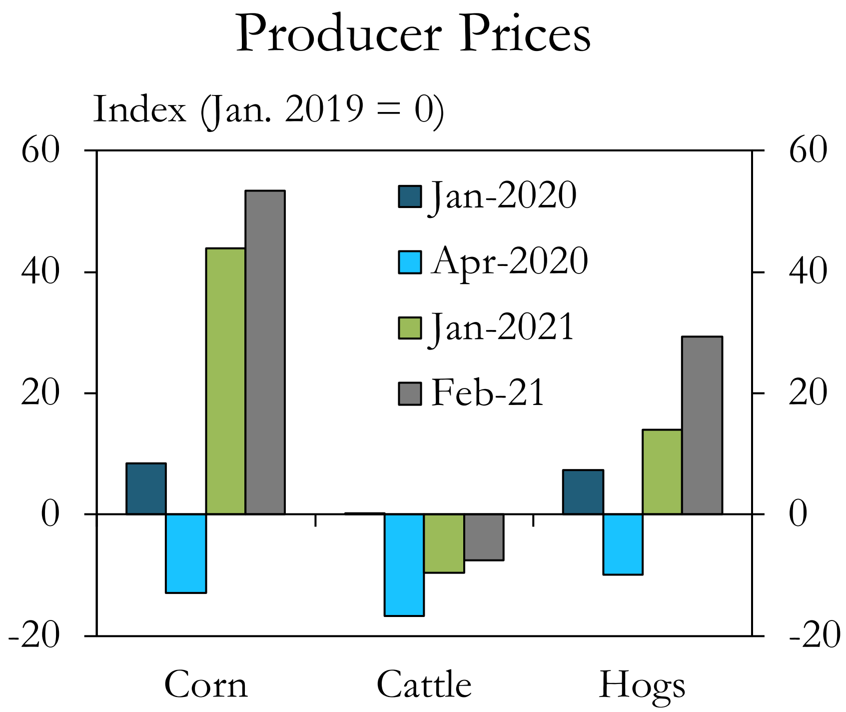
U.S. Monthly Food Expenditures*

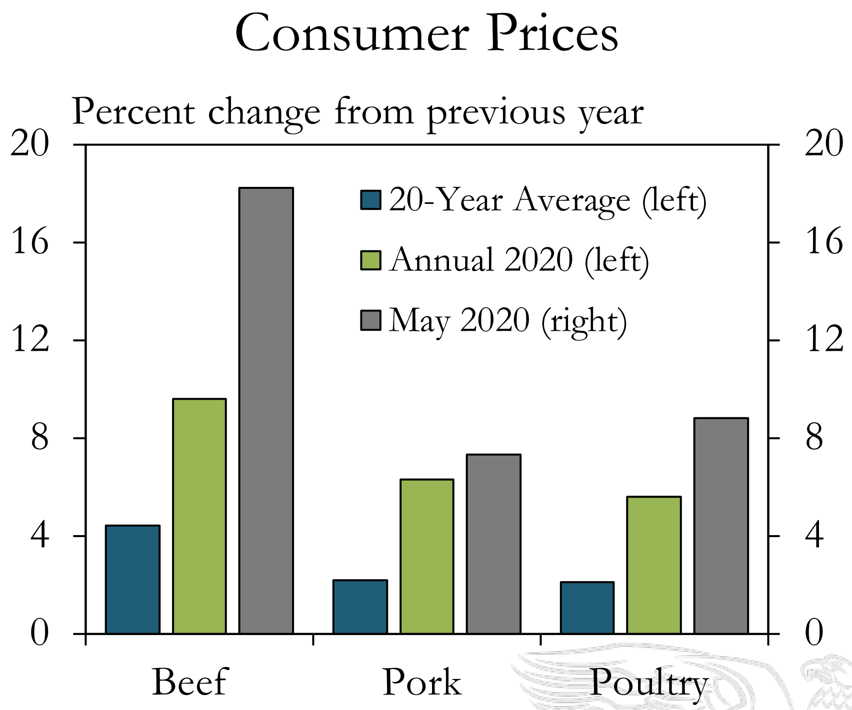


* Food at home is food bought at a grocery store to be consumed at home. Food away from home is food bought and consumed outside the home, such as at a restaurant.

Sources: USDA, National Pork Board, and KC Fed calculations

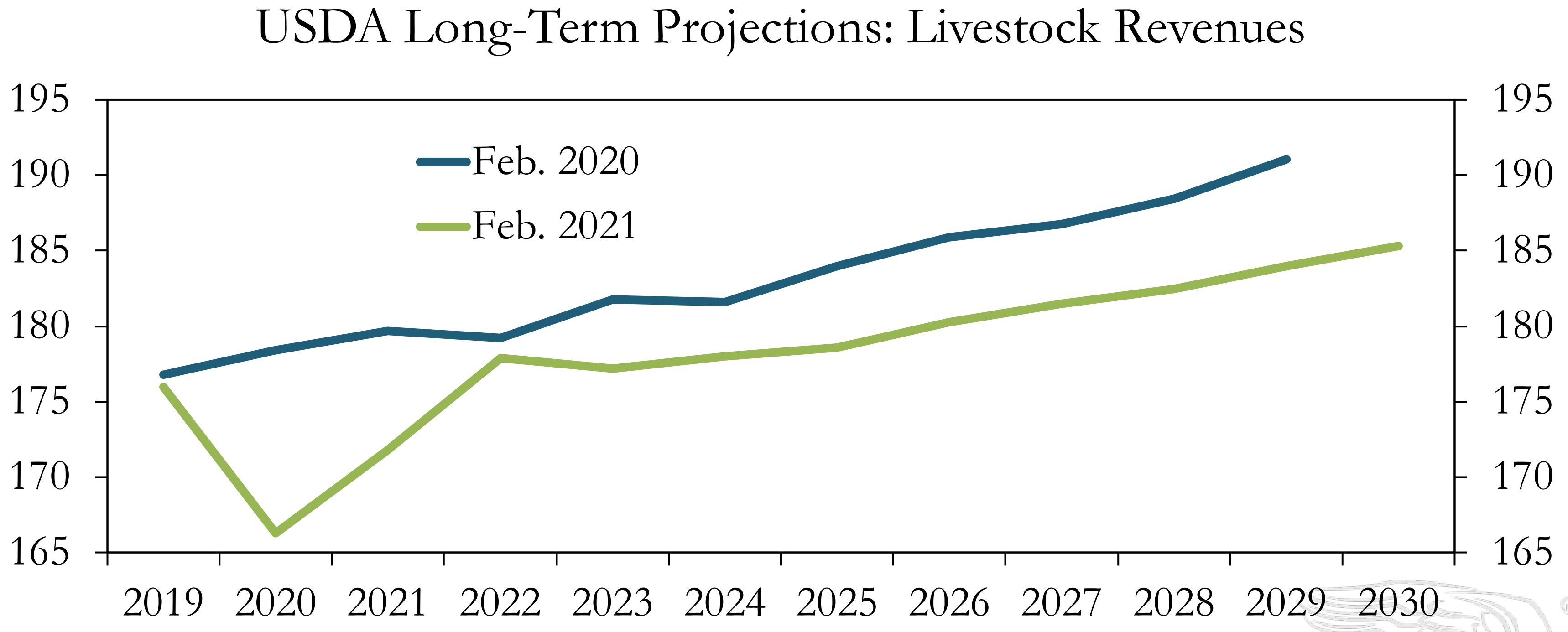
Cattle prices have yet to recover to pre-COVID levels, but meat prices rose significantly in 2020.





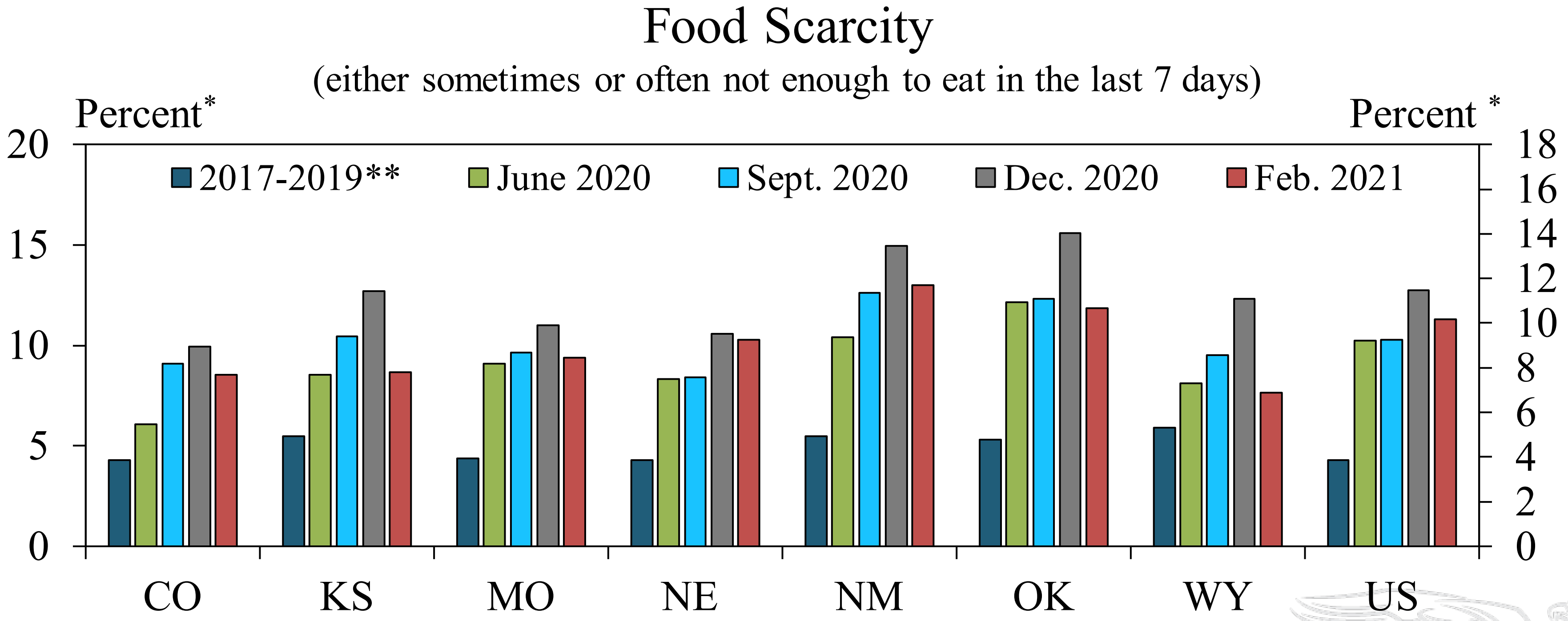
Sources: USDA, CME, WSJ and Haver Analytics.

Revenues on livestock farms declined sharply in 2020 following the outbreak of the pandemic.



Source: USDA.

Higher retail prices for meat could put more pressure on finances and food supplies for some families



*Census Pulse Survey - % of adults in households where there was either sometimes or often not enough to eat in the last 7 days.
**USDA -Very low food security – % of households with reports of multiple indications of disrupted eating patterns and reduced food intake.
Sources: U.S. Census Bureau, Household Pulse Survey and USDA.

Key Takeaways

- Outbreaks of COVID-19 in the U.S. meat industry caused a temporary slowdown in meat production and widespread uncertainty about markets for food and livestock in the United States.

- Kinks in the supply chain resulted in higher meat prices for consumers, even as producers faced lower livestock prices.

- As the example of the meat industry has shown, one result of the pandemic has been greater focus on supply chains and their importance to producers, consumers, and the broader economy.

Questions?

For more information on this topic, visit
https://kansascityfed.org/agriculture/ag-outlooks/

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Research and Updates

Ag Bulletin

The Ag Bulletin provides a high-level summary of economic conditions for the U.S. agricultural sector.

February 5, 2021

COVID-19 Disruptions in the U.S. Meat Supply Chain

The emergence of COVID-19 in the U.S. has created substantial challenges for all segments of the meat supply chain.

July 31, 2020

COVID-19 Updates & Key Demand Drivers for Agriculture

A review of U.S. ag policy, exports, ethanol production and meat production.

Jun 22, 2020