

A Reset in the U.S. Ag Economy

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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.



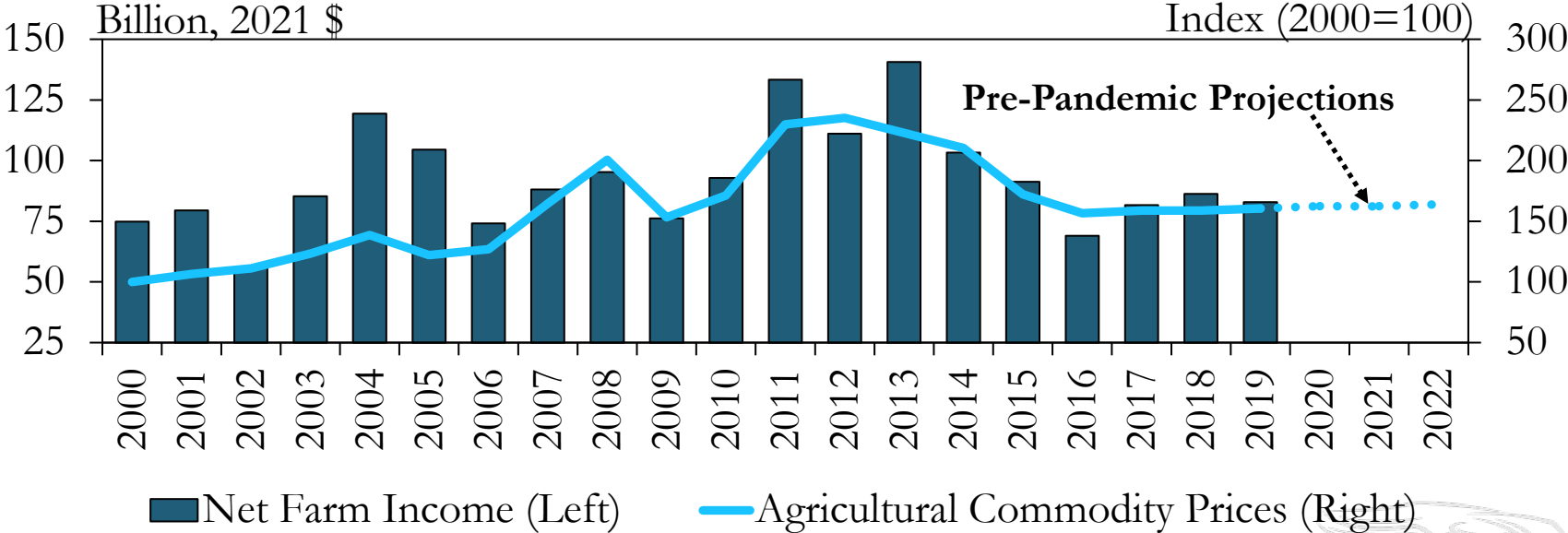
Outlook Themes

- Economic conditions in agriculture enter 2022 in a strong position alongside broad macroeconomic support.
- Farm finances have strengthened remarkably, though risks remain...
 - Inflation
 - Labor
 - Supply Chains



Prior to the pandemic, the U.S. ag economy had been mired in a prolonged downturn.

U.S. Farm Income and Agricultural Commodity Prices



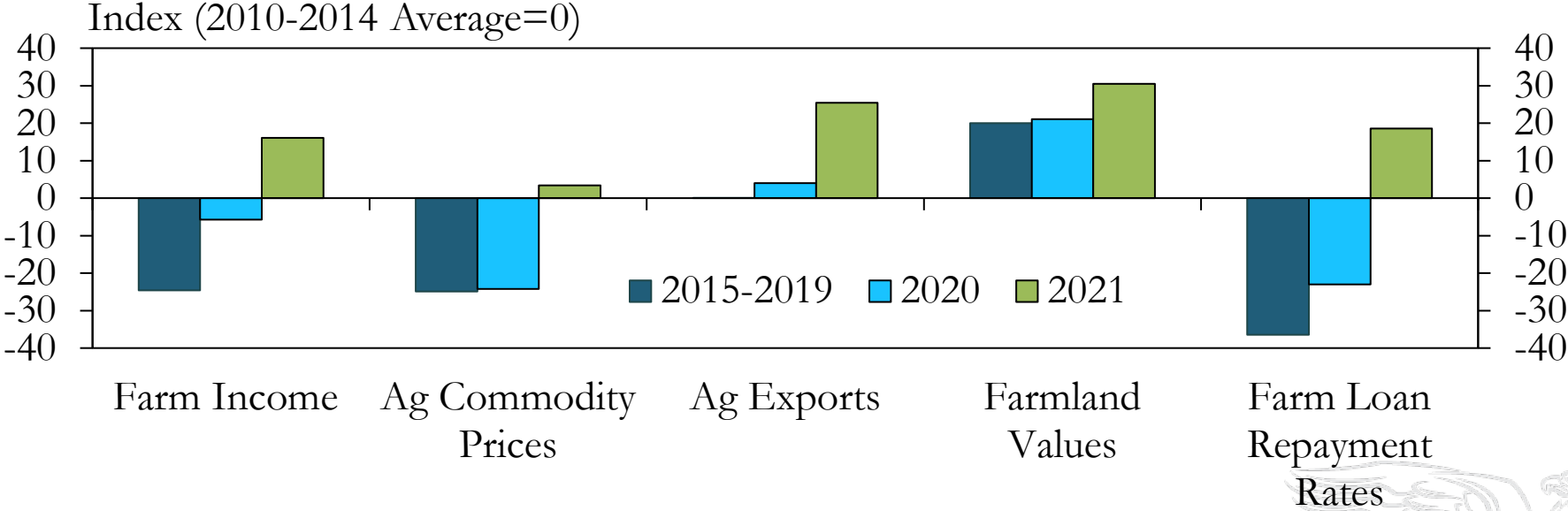
Note: Agricultural Commodity Prices are the average of corn, soybeans, wheat, cattle, hogs and milk prices. Projections are based on data from University of Missouri - FAPRI as of August 28, 2019.

Sources: USDA, CME, *Wall Street Journal*, University of Missouri - FAPRI and Haver Analytics



But developments of the past two years have led to a reset in the U.S. ag economy.

Indicators of the U.S. Ag Economy

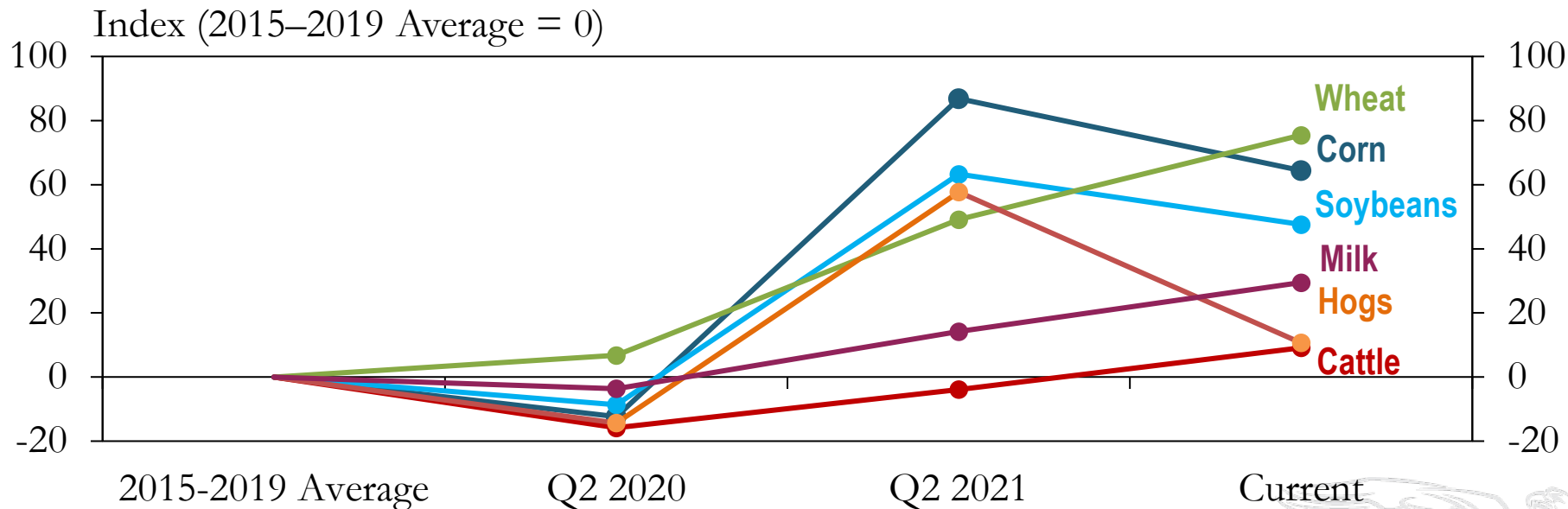


Source: USDA, Wall Street Journal and Federal Reserve Surveys of Agricultural Credit Conditions.



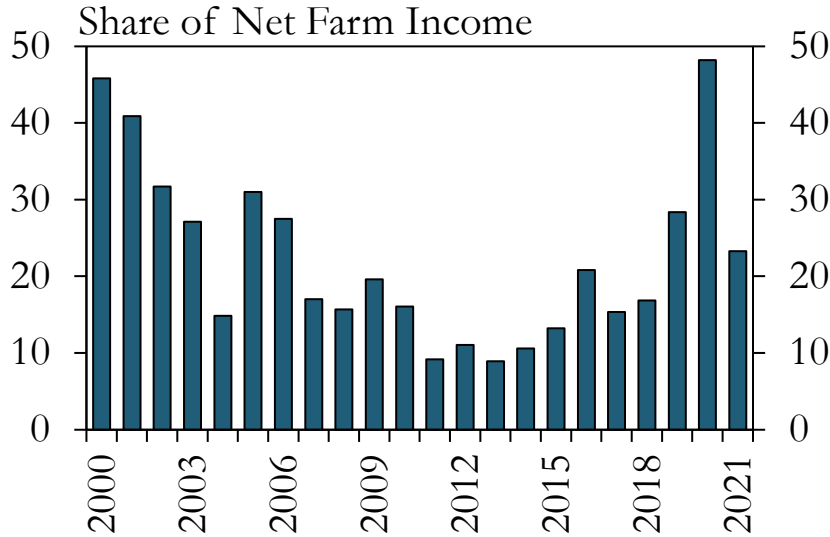
Following the early crisis of the pandemic, ag prices rebounded sharply and have remained elevated.

Ag Commodity Prices

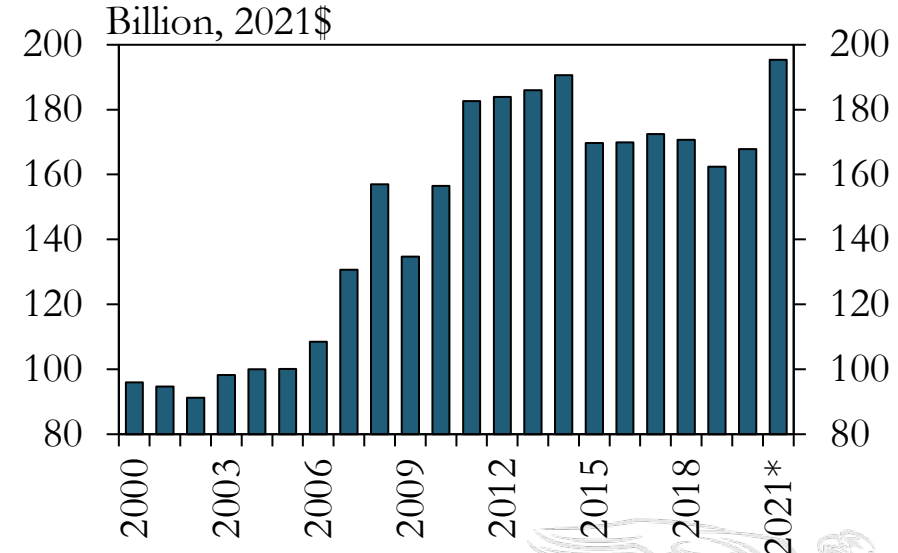


Government payments have provided income support, but increased foreign demand has also bolstered prices.

Government Payments



U.S. Agricultural Exports



*Annualized based on year-to-date percent change from Jan-Nov 2020 to Jan-Nov 2021.

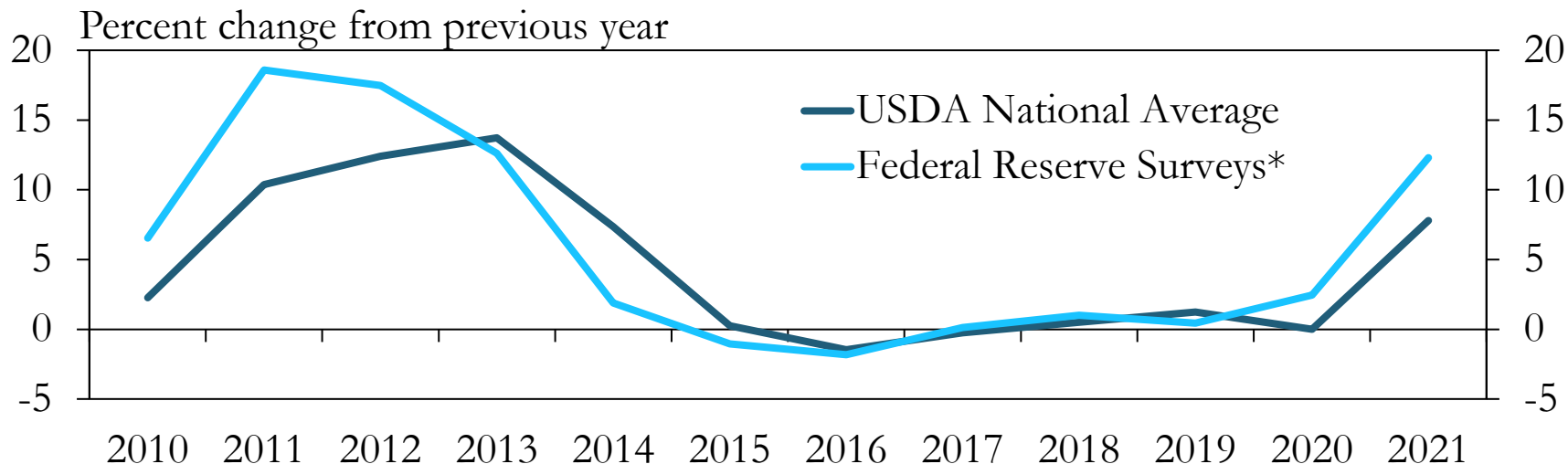
Note: 2021 Government Payments as a Share of Net Farm Income is the USDA forecast as of December 1, 2021.

Source: USDA



Farmland values have surged, following a period of decline or minimal change.

U.S. Farm Real Estate Values



*The average quarterly percent change for participating Federal Reserve Districts (Dallas, Chicago, Kansas City, Minneapolis and St. Louis).

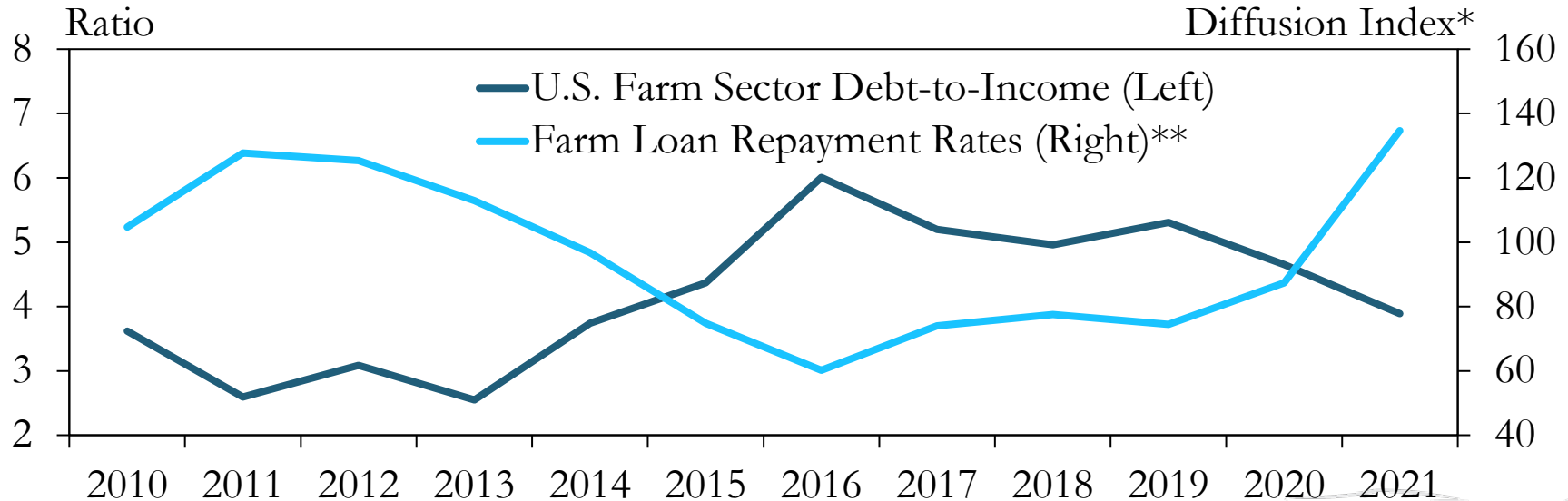
Note: FRS District Survey Average for 2021 is average through Q3 2021.

Source: USDA, Federal Reserve District Surveys of Agricultural Credit Conditions.



The financial position of farm borrowers has improved dramatically.

U.S. Farm Finances



*Percent of survey respondents that responded "lower" minus the percent that responded "higher" plus 100.

**The average quarterly index for participating Federal Reserve Districts (Dallas, Chicago, Kansas City, Minneapolis and St. Louis).

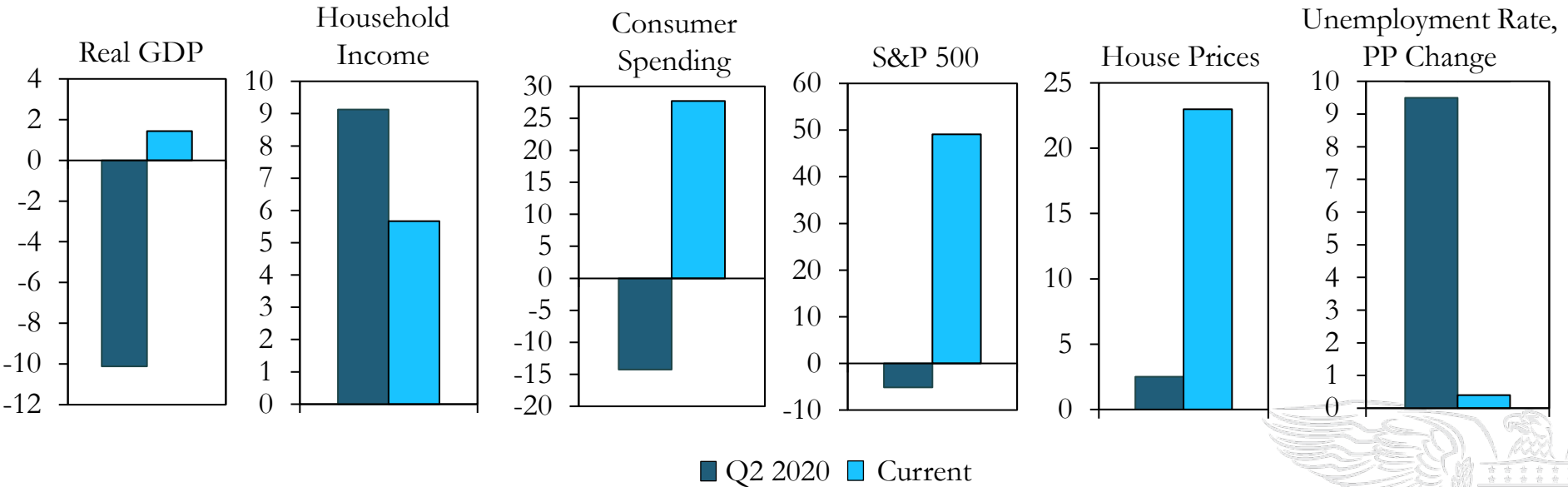
Source: USDA and Federal Reserve District Surveys of Agricultural Credit Conditions.



Strength in the broader U.S. economy has provided support for many households.

U.S. Economic Indicators

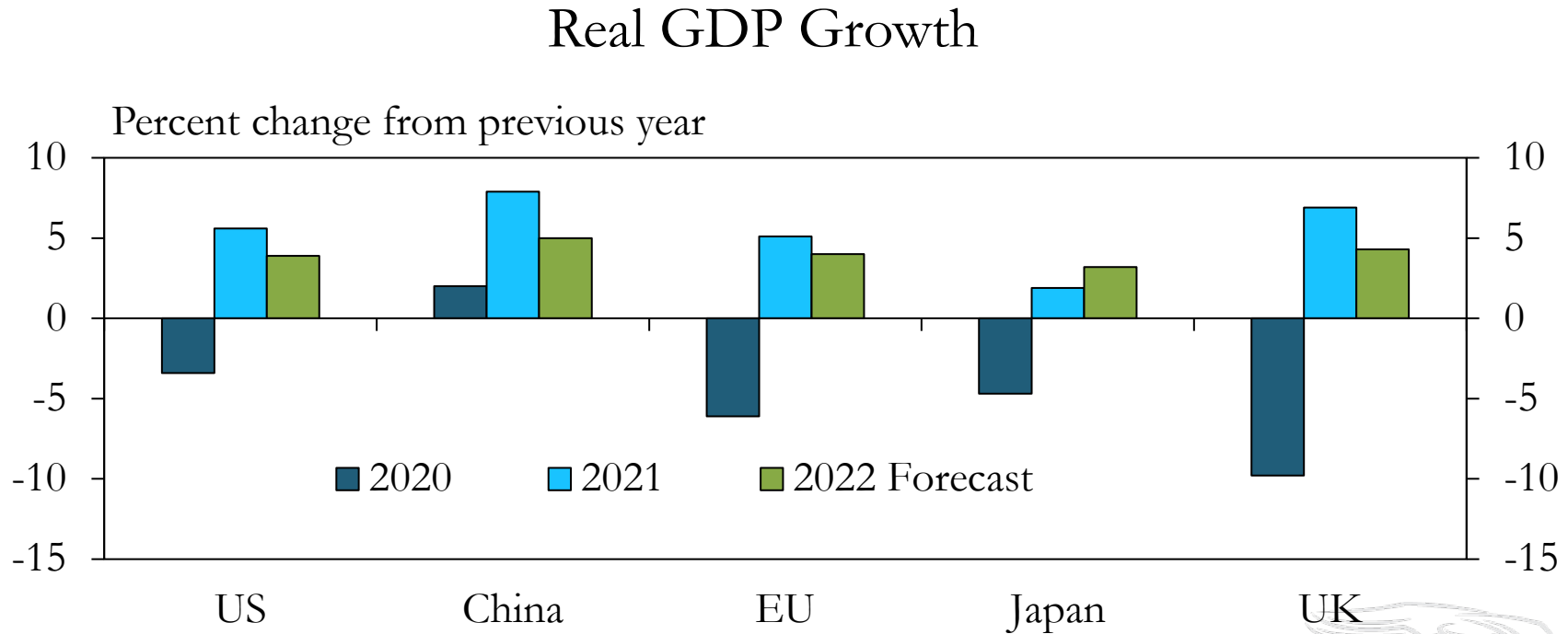
Percent Change from Pre-Pandemic Levels



Sources: BEA, BLS, S&P, Zillow, Affinity (Track the Recovery) and Haver Analytics.



However, significant economic risks still loom.



Sources: BEA, Wolters Kluwer, Statistical Office of the European Communities, Cabinet Office of Japan, Office of National Statistics, China National Bureau of Statistics, and Haver Analytics.

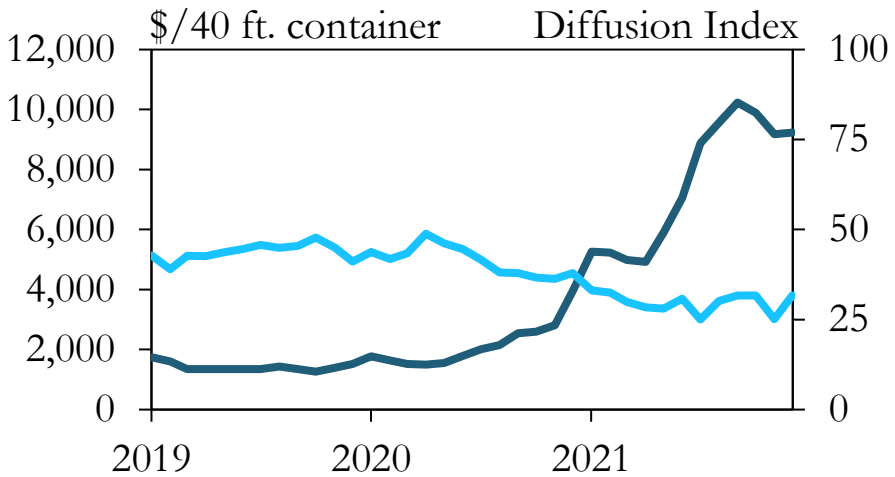


Labor shortages and supply chain disruptions have been ongoing challenges for businesses across the country.

U.S. Workforce Availability



Shipping Container Costs and Inventories



— World Container Index (Left)
— U.S. Manufacturing Customer Inventories (Right)

Note: Workforce availability is calculated by dividing the number of unemployed by the number job openings.
Sources: BLS, ISM, Haver Analytics, Drewry (Bloomberg) and staff calculations.

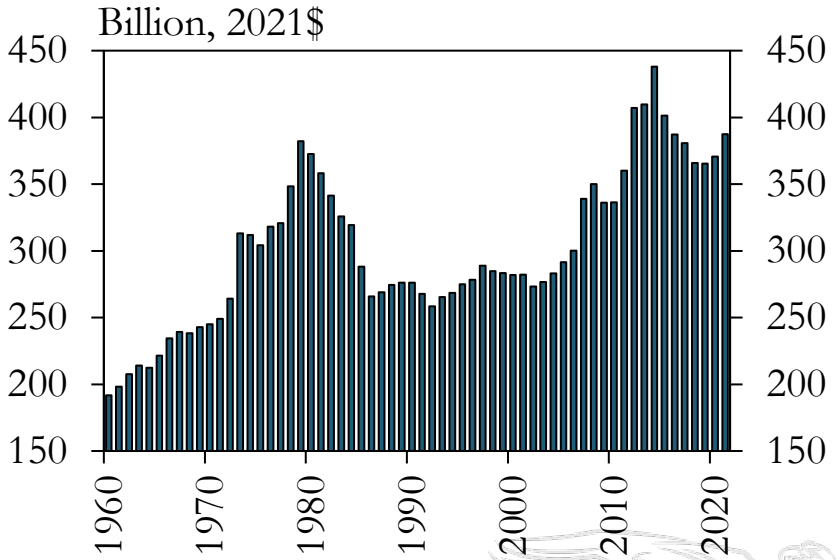


Inflation is at its highest rate in 40 years, with significant cost pressures in agriculture.

U.S. Consumer Price Index



U.S. Farm Production Expenses

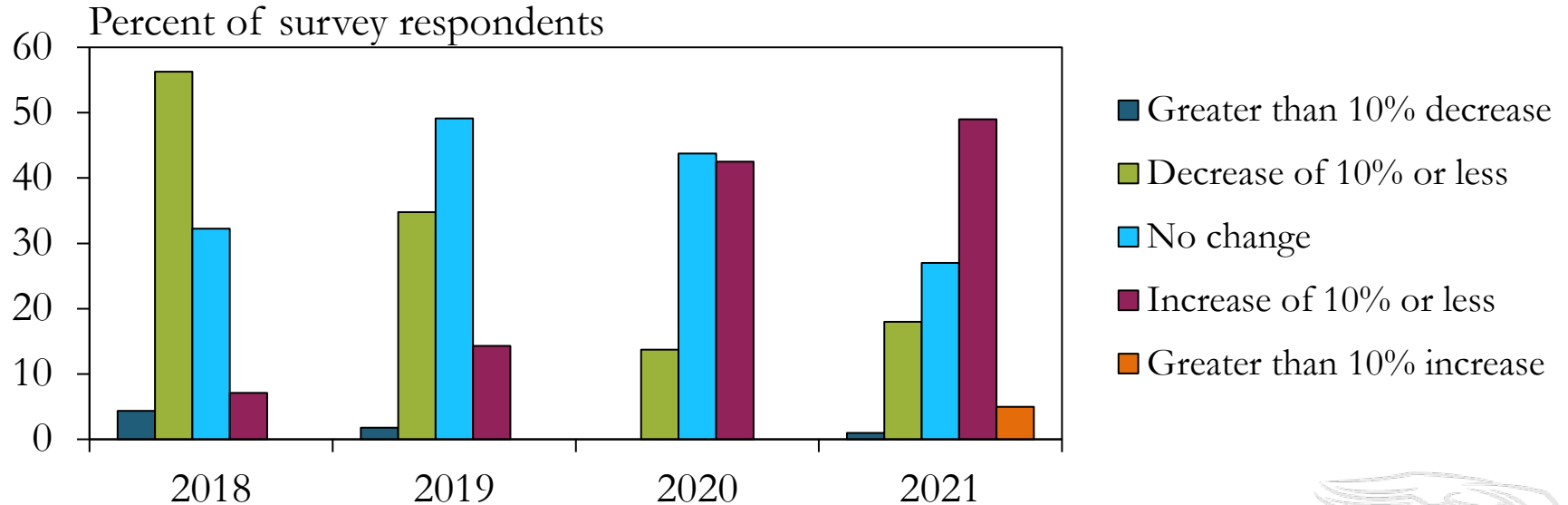


Sources: Bureau of Labor Statistics and USDA.



Recent data suggest land values may increase even further, but valuations appear stretched.

Cropland Value Expectations for Coming Year
Kansas City Fed Region



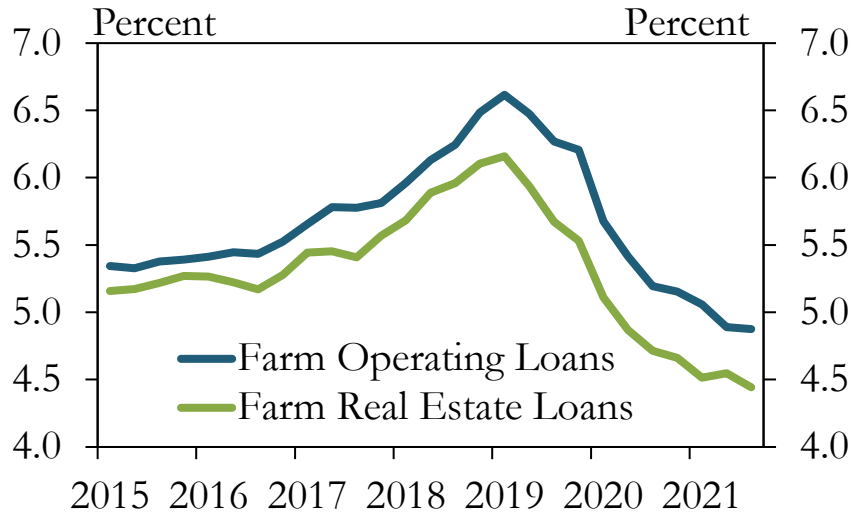
Note: Bankers responded to the following question: Looking ahead, what change do you expect in non-irrigated cropland values one year from now?

Sources: Federal Reserve District Surveys of Agricultural Credit Conditions.

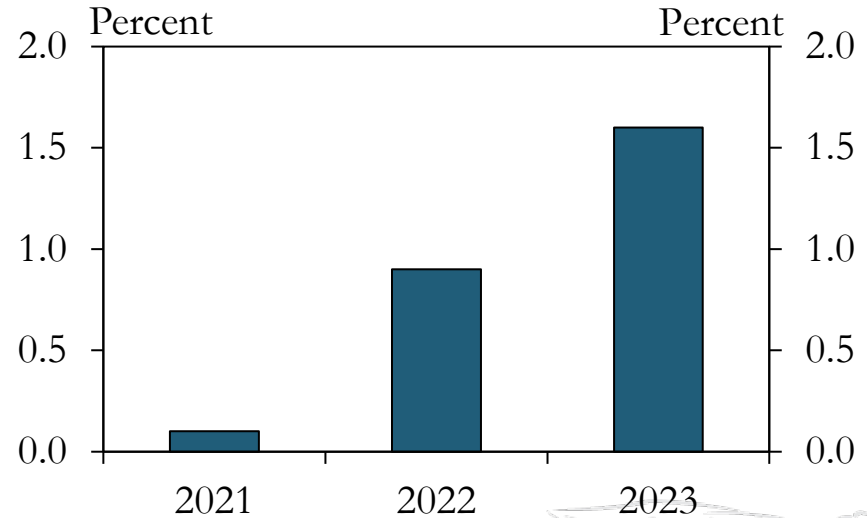


Interest rates on farm loans have been at historic lows, but may increase in the year ahead.

Average Interest Rates on Agricultural Loans*

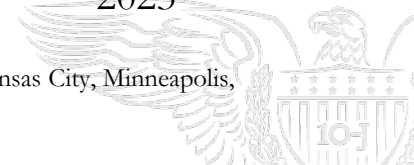


Median FOMC Federal Funds Rate Projections



*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

- Agriculture appears likely to remain in a strong economic and financial position through 2022.
- Many of the potential risks are tied to macroeconomics:
 - Global growth (China export demand)
 - Inflation and supply chains (input cost pressures)
 - Labor (costs and productivity)
 - Interest rates (land values)



