

Economic Outlook for U.S. Agriculture

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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.



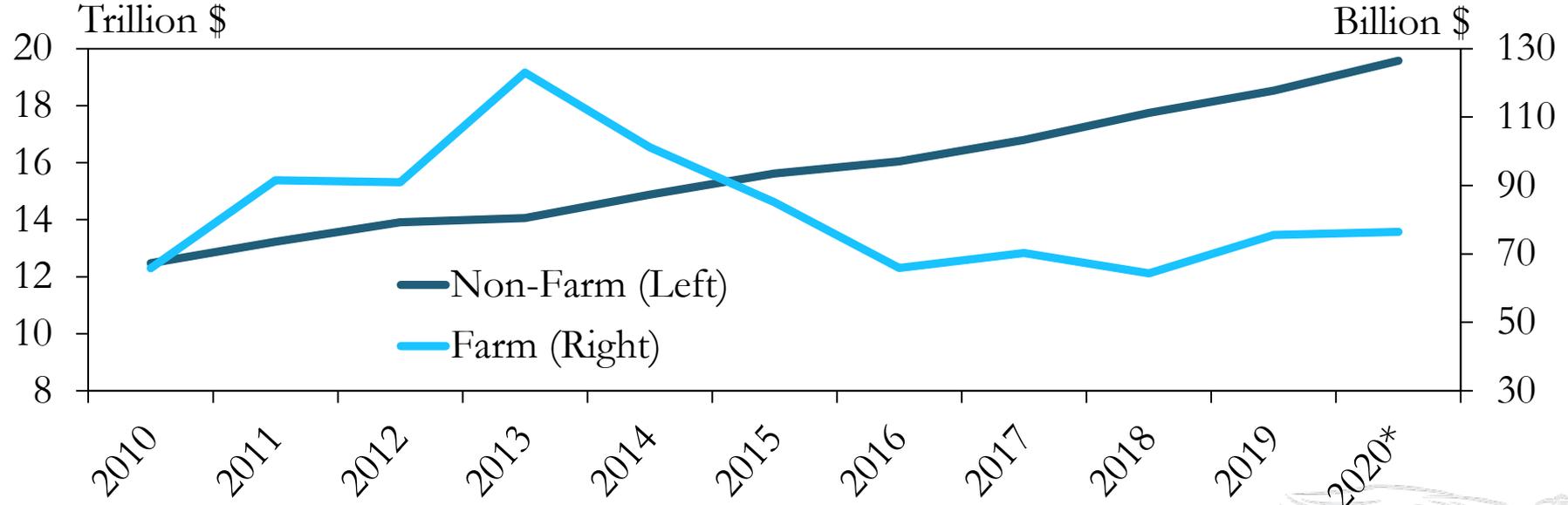
Outlook Themes

- In contrast to the broader economy, U.S. agriculture had been in a prolonged downturn even before the pandemic.
- Economic conditions in agriculture have improved since April, but due in large part to government payments.
- Agricultural credit conditions have remained weak, but farm real estate markets have provided support.



The U.S. agricultural economy had been in a prolonged downturn prior to COVID-19.

U.S. Personal Income



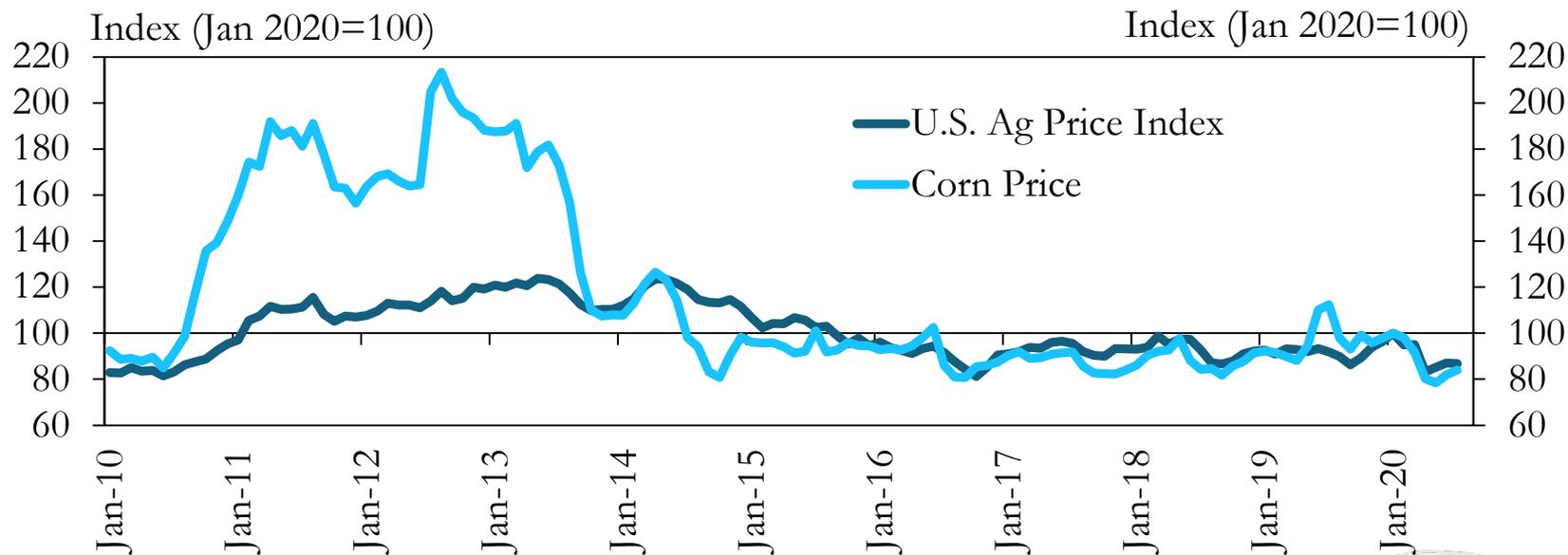
*Annual average through Q2 2020

Sources: U.S. Bureau of Economic Analysis and Haver Analytics.



Despite some variation across markets, agricultural prices had been flat for multiple consecutive years.

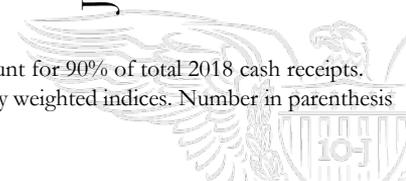
U.S. Agriculture - Price Index*



*2019 and 2020 weighted based on share of total 2018 agricultural cash receipts attributed to each individual commodity. Individual commodities allocated account for 90% of total 2018 cash receipts.

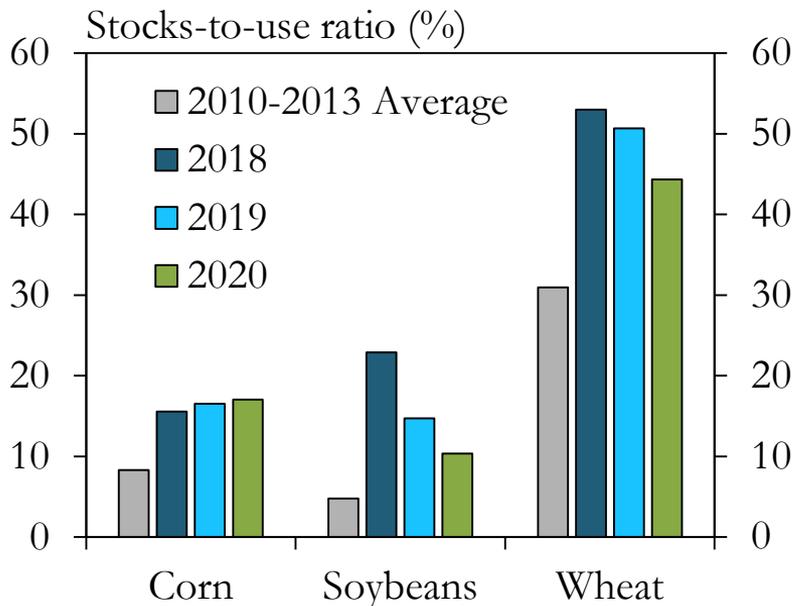
**Based on changes in weighted indices of individual commodities and corresponding contribution to the change from Jan. 2020 in the sum of those individually weighted indices. Number in parenthesis denotes share of total cash receipts.

Sources: USDA, WSJ and staff calculations.

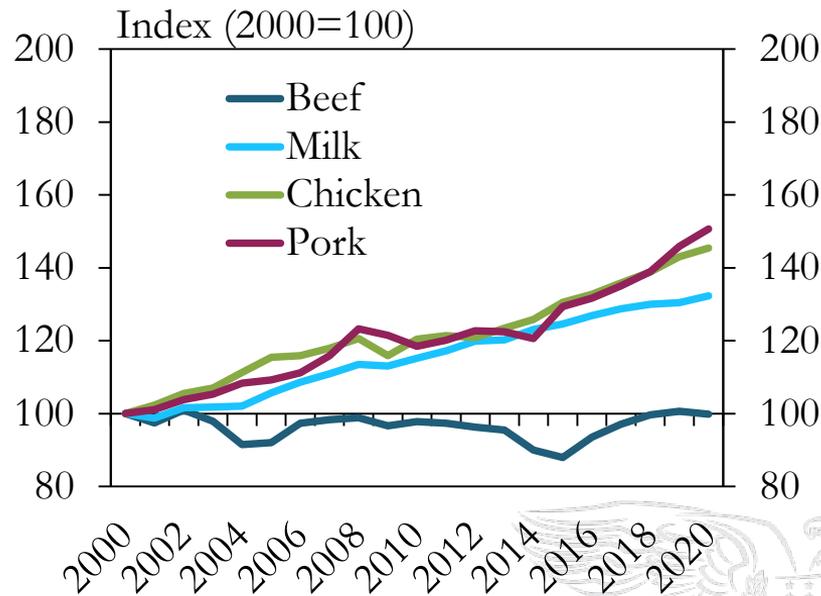


Record-setting levels of production and a build-up of inventories limited the potential for higher prices.

U.S. Crop Inventories



U.S. Production of Livestock & Dairy Products

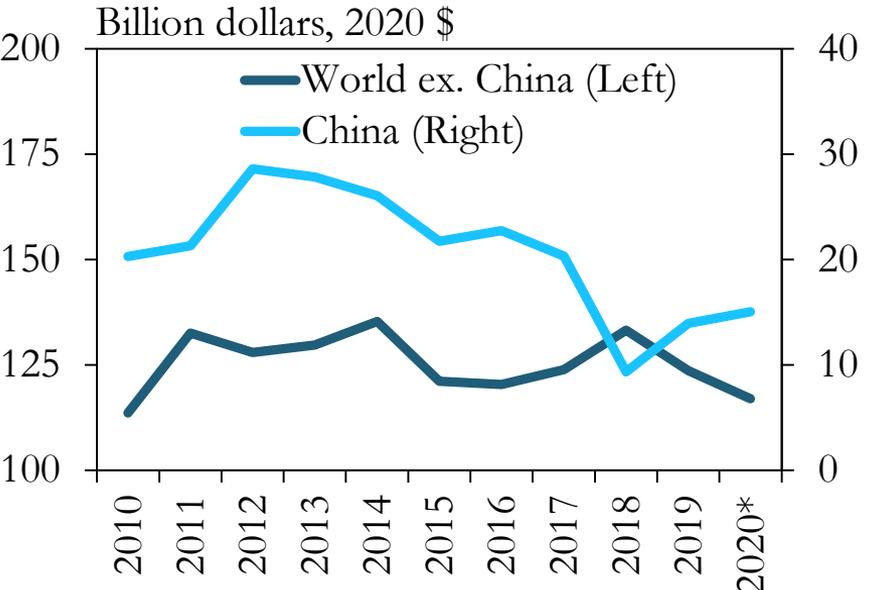


Source: USDA and staff calculations.

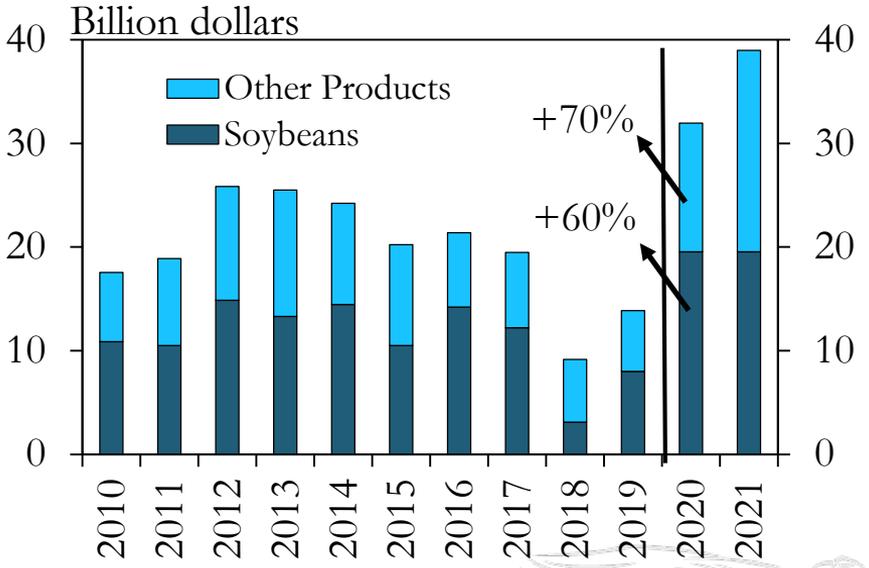


Trade disruptions have weighed heavily, despite some optimism in early 2020 on a trade deal with China.

U.S. Agricultural Exports



U.S. Farm Exports to China: "Phase 1" Trade Deal



*Exports from January 2020 to July 2020 annualized based on percent change from same period in 2019.

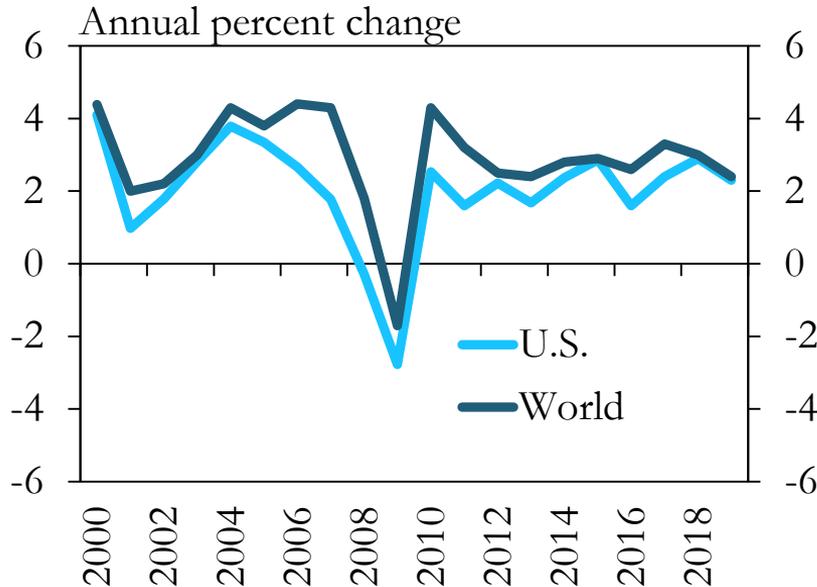
Note: Projections assume increases from 2017 baseline of \$12.5 billion in 2020 and \$19.5 billion in 2021. % Changes indicated percent increase in exports from 2017. A 60% increase in soybean exports to China would total 90% of all U.S. soybean exports.

Source: USDA, Bloomberg and staff calculations.

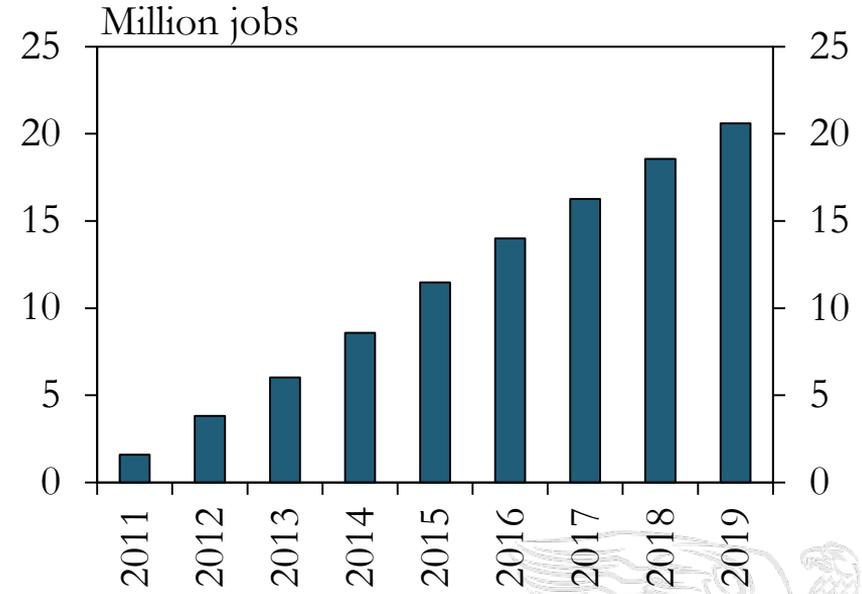


Despite trade risks, the U.S. began 2020 in the midst of its longest economic expansion on record.

Real Gross Domestic Product



U.S. Jobs Added Since 2010

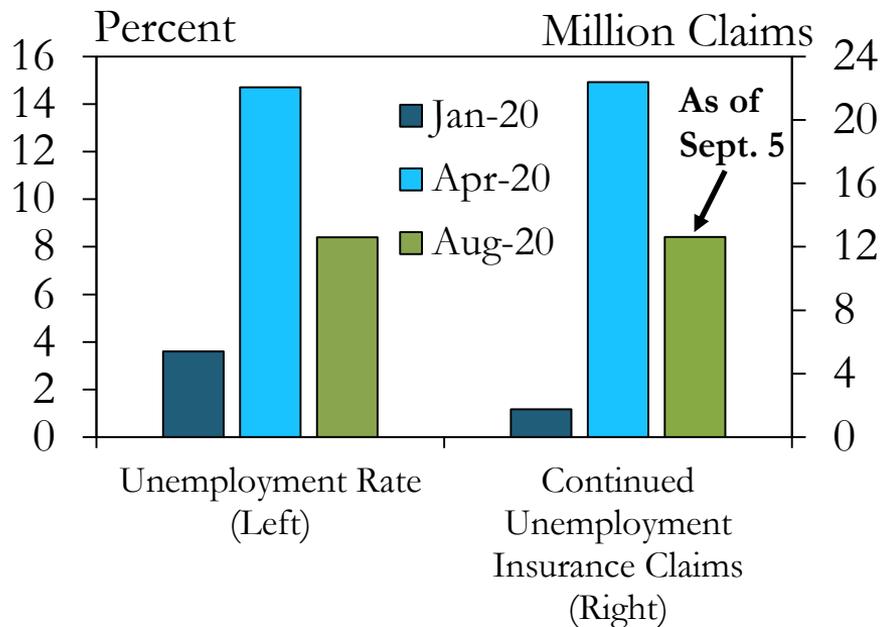


Sources: World Bank and Bureau of Labor Statistics.

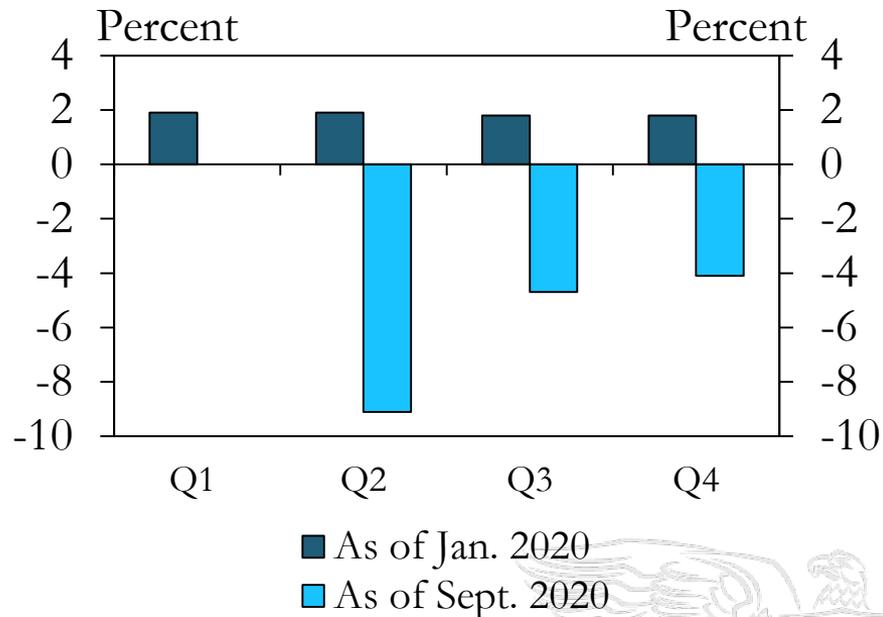


In March, the global economy began to shut down. Unemployment spiked and economic output sank.

U.S. Unemployment



U.S. Real GDP Growth Forecasts

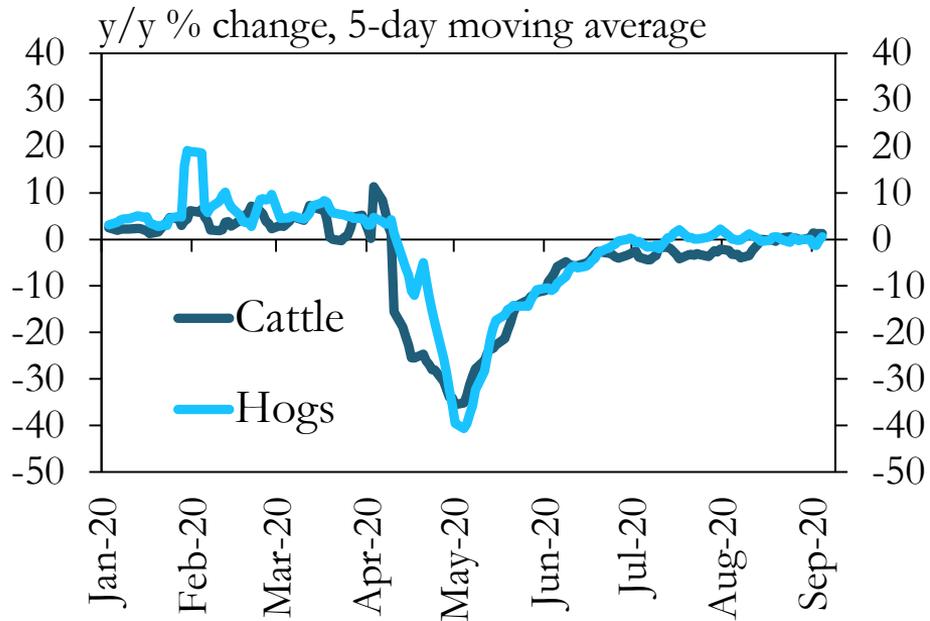


Source: Bureau of Labor Statistics, Department of Labor, Wolters Kluwer and Haver Analytics.

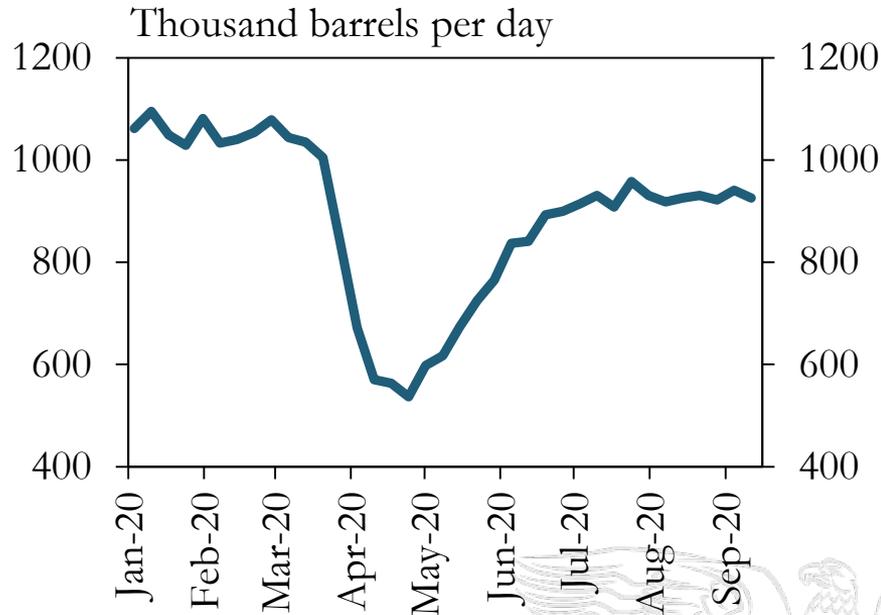


In April, the outlook for agriculture was very weak alongside key market disruptions.

Cattle and Hog Slaughter



U.S. Ethanol Production

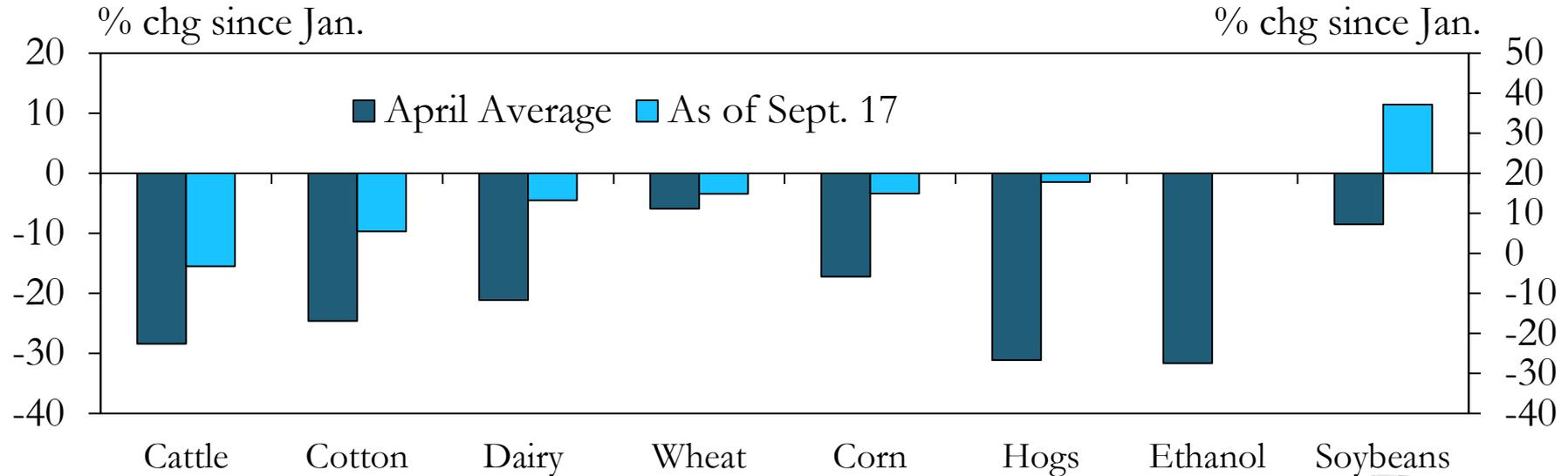


Sources: USDA, EIA and staff calculations.



The prices of some ag commodities have improved slightly since April, but most remain low.

Agricultural Commodity Prices

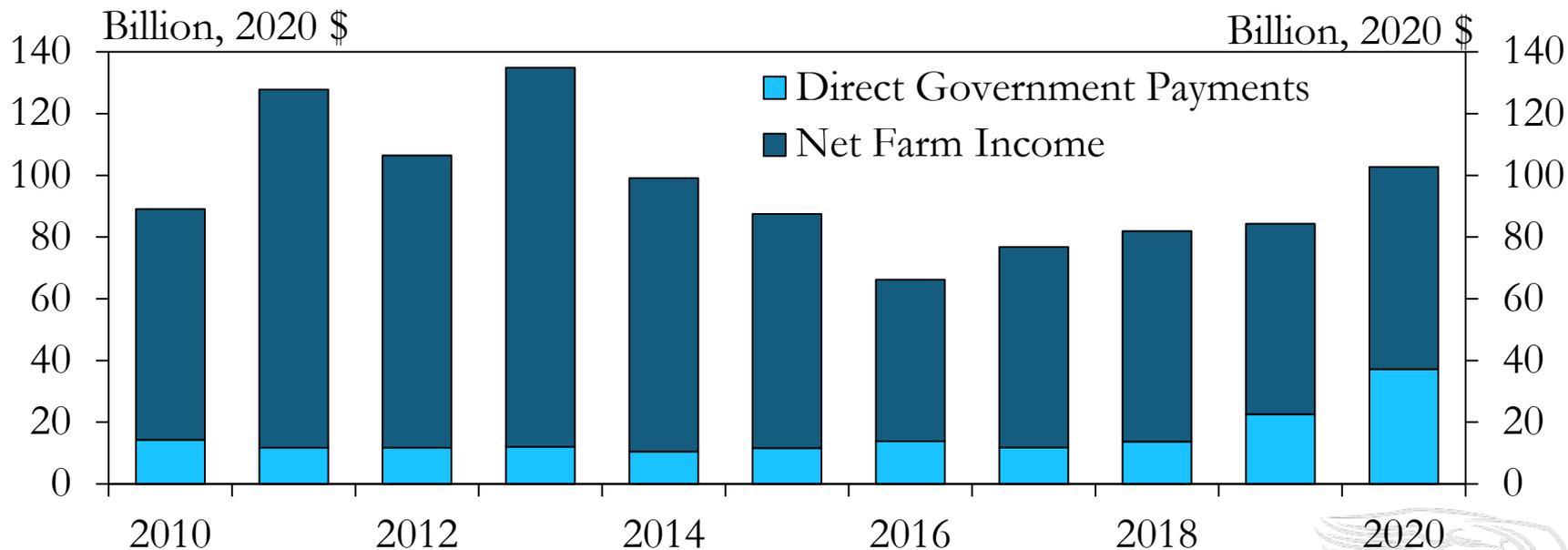


Sources: CME, WSJ and Haver Analytics.



Farm income is expected to be notably higher than a year ago, largely because of government payments.

U.S. Net Farm Income

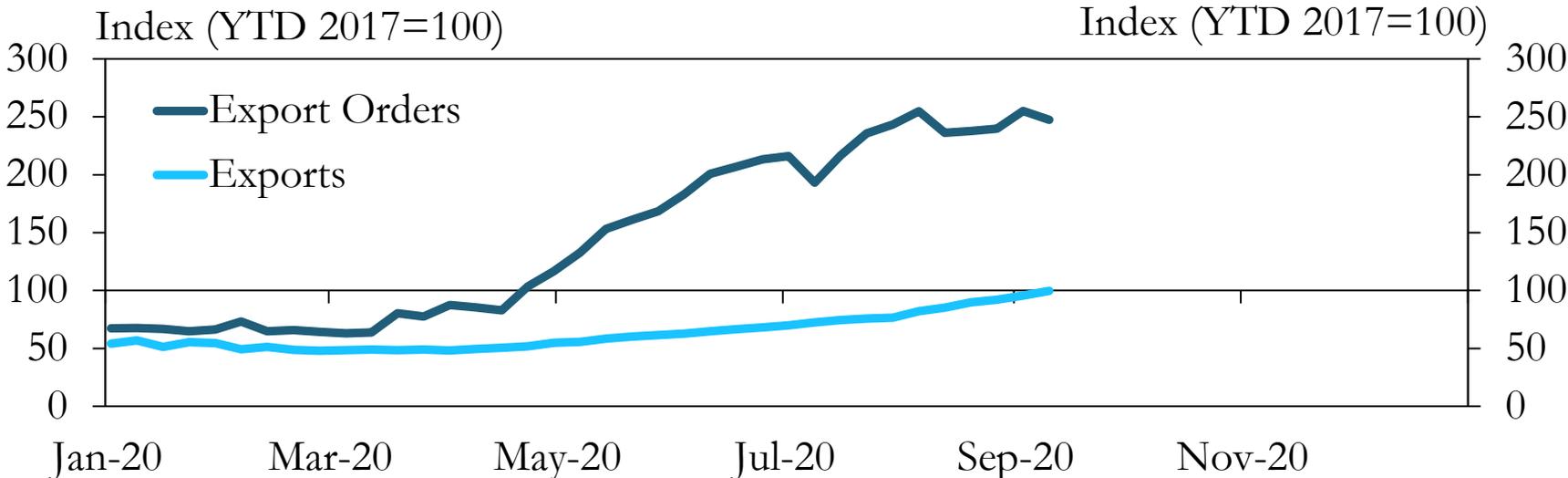


Source: USDA.

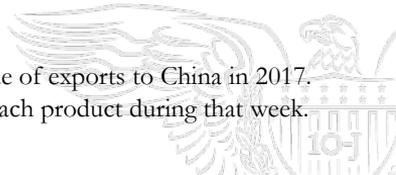


Trade prospects picked up this summer and will depend crucially on future shipments to China.

Sales and Exports of Agricultural Products to China

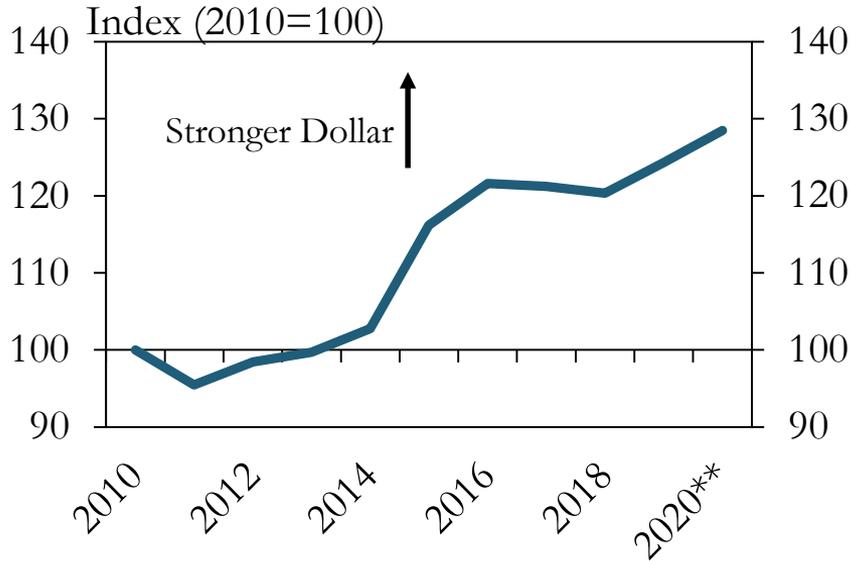


* Includes exports and sales of soybeans, cotton, sorghum, pork, wheat and corn. Listed commodities accounted for approx. 70% of total value of exports to China in 2017.
Note: Total quantity of weekly exports and sales of each commodity for current and next marketing year multiplied by average spot price for each product during that week.
Sources: USDA and staff calculations.

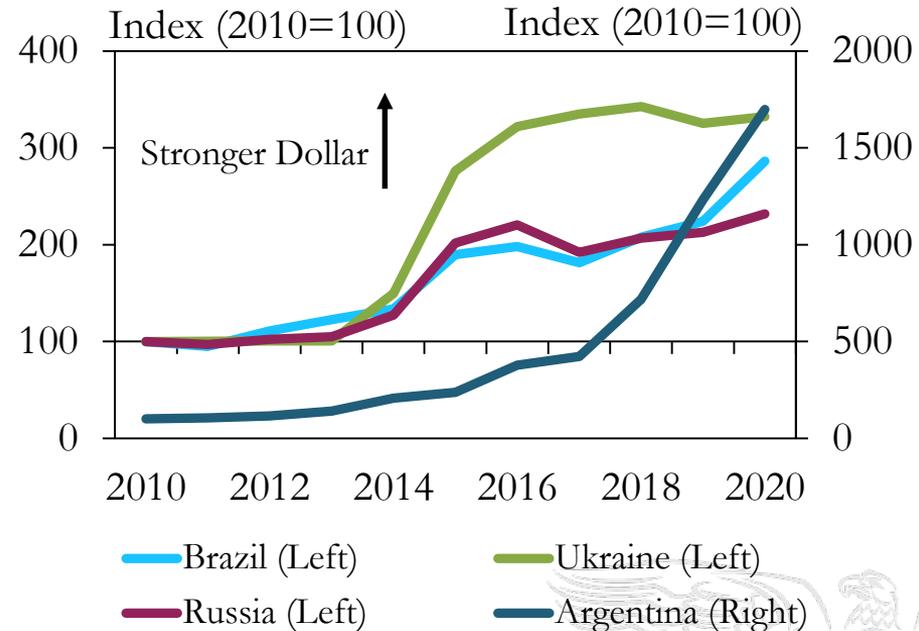


And exchange rates will also play a role in how trade prospects evolve.

Value of U.S. Dollar*



U.S. Dollar Exchange Rates



*Nominal, broad, trade-weighted exchange value of the U.S. Dollar

**Monthly average through August 2020

Sources: Federal Reserve Board, WSJ, World Bank and Haver Analytics.



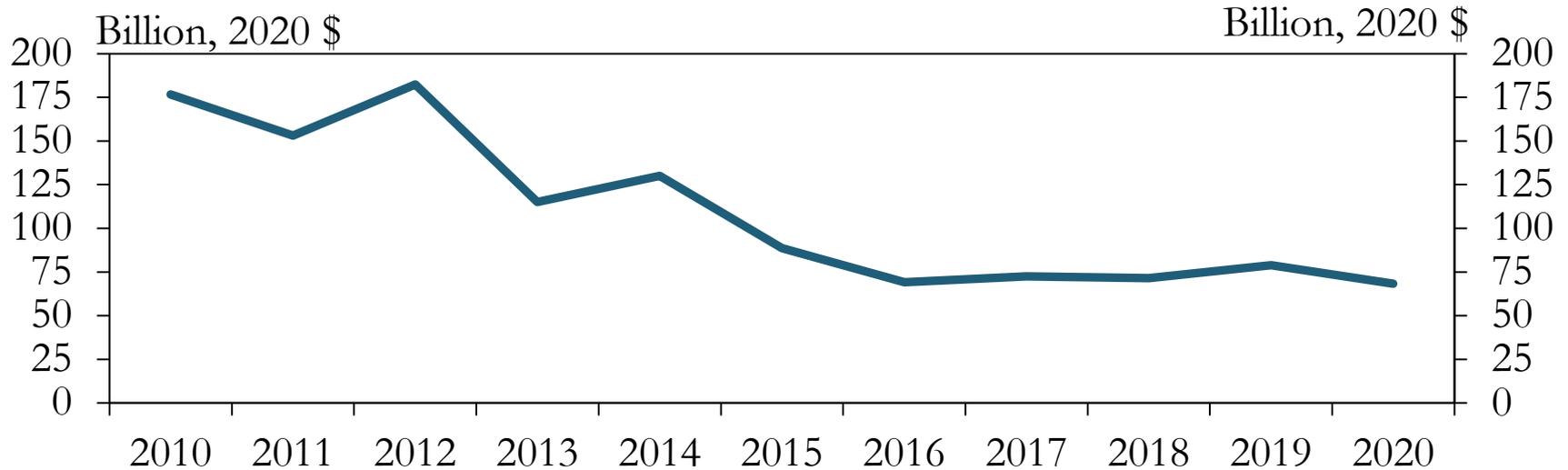
Agricultural Credit Conditions

Summary and Outlook



Prior to the pandemic, there were intensifying concerns about liquidity.

U.S. Farm Sector Working Capital



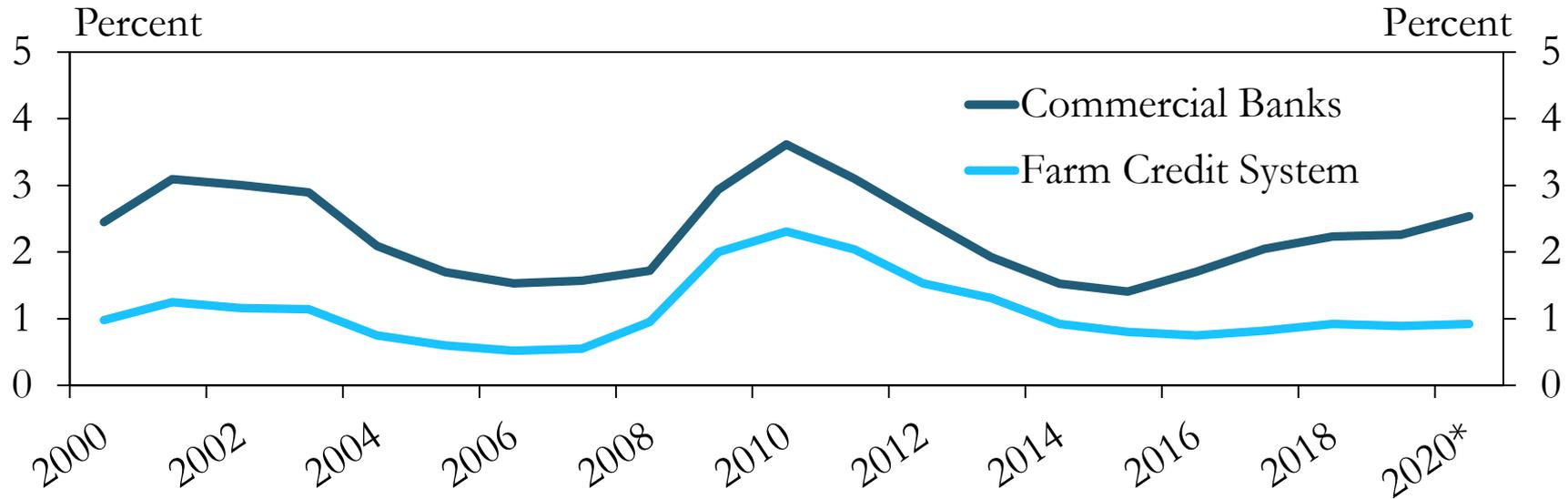
Note: 2020 forecast.

Source: USDA.



Delinquency rates on farm loans have trended higher, but the increases have been modest.

Farm Loan Delinquency Rates



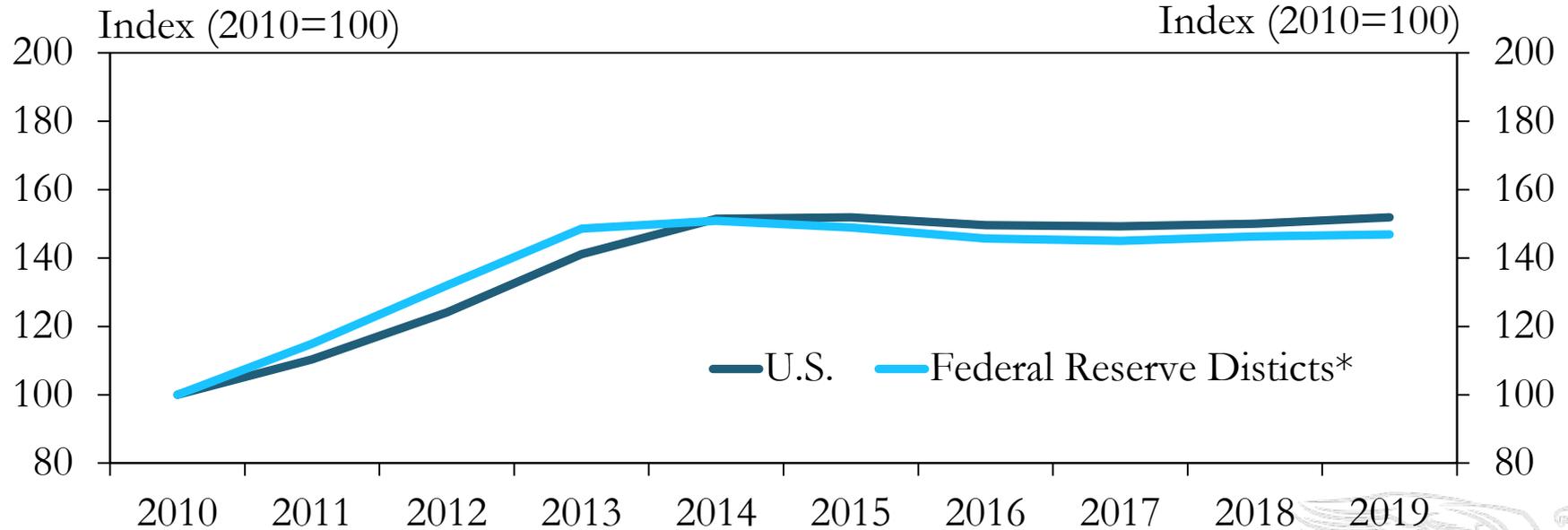
*As of Q2 2020

Sources: Board of Governors and Farm Credit Administration.



The strength of farmland markets has supported ag credit conditions and farm balance sheets.

Farm Real Estate Values



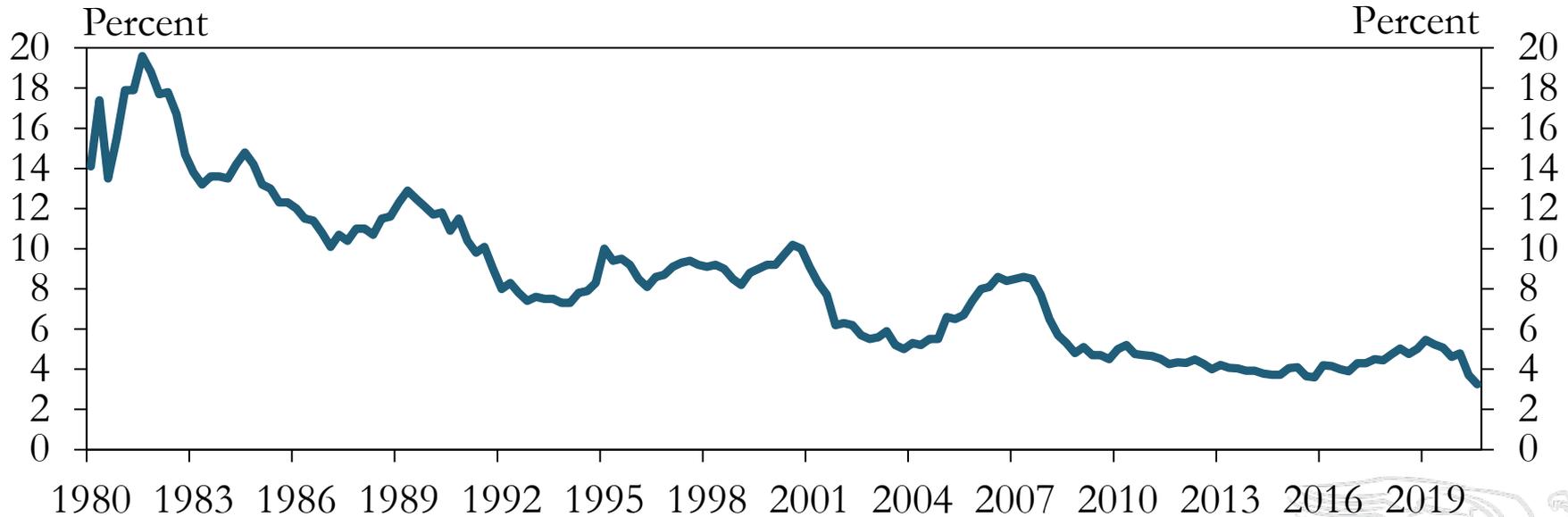
*Average of indices for each participating District – Chicago, Kansas City, Minneapolis, St. Louis, and Dallas.

Sources: USDA, Federal Reserve Surveys of Agricultural Credit Conditions and staff calculations.



Historically low interest rates have also eased some pressure on farm finances.

Interest Rates on Non-Real Estate Farm Loans

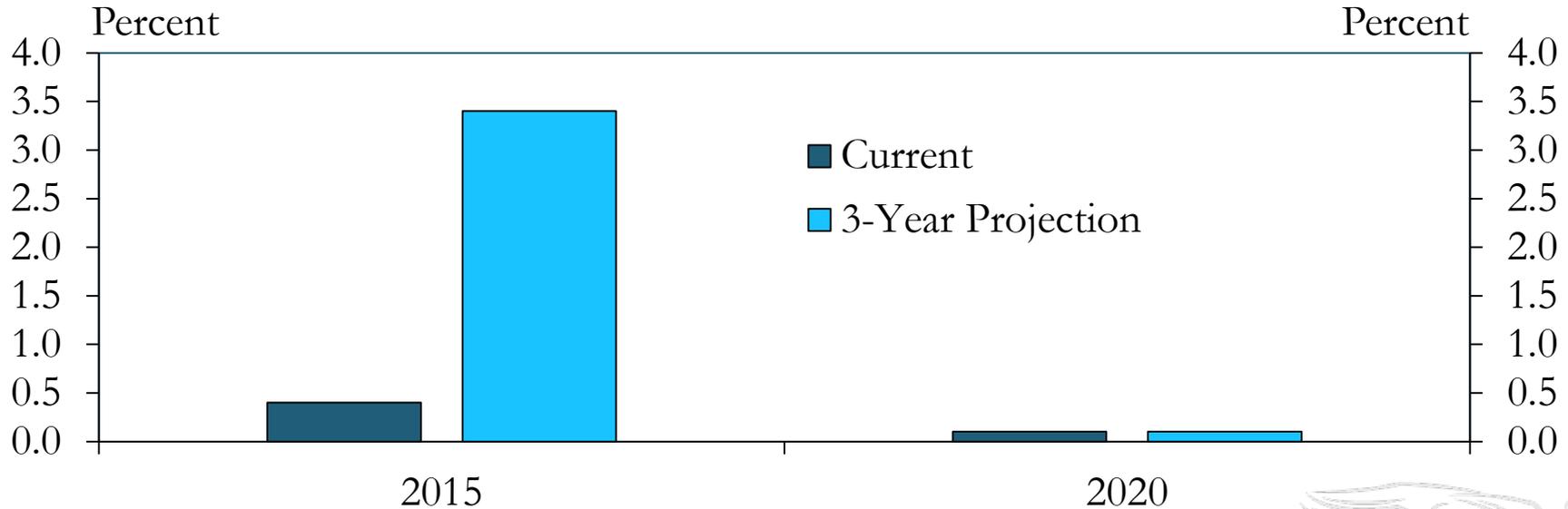


Sources: Agricultural Finance Databook and Federal Reserve Bank of Kansas City.



Over the past several years, expectations of long-term interest rates have gradually declined.

Median Federal Funds Rate, September



Source: Board of Governors.



Recently, the Federal Reserve has announced a willingness to allow higher inflation “for some time.”

U.S. Inflation Expectations

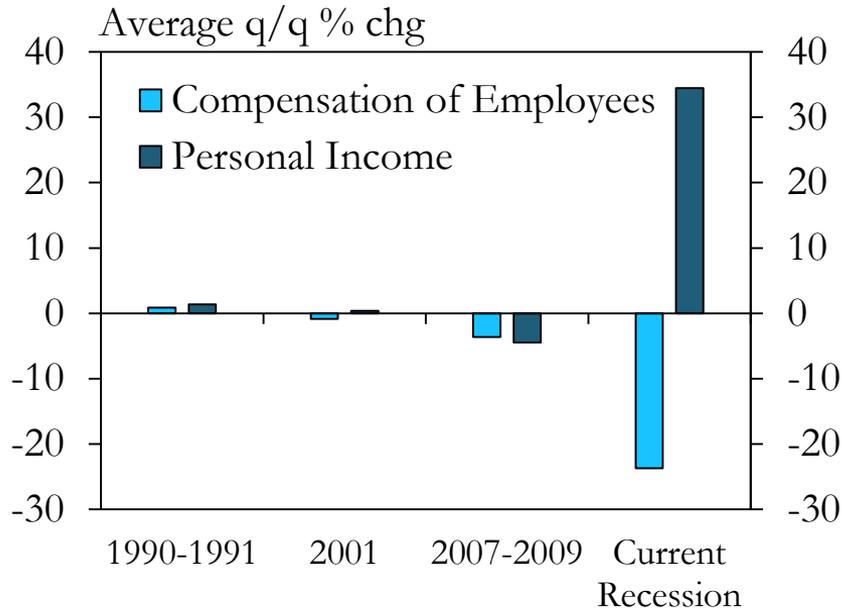


Sources: Federal Reserve Bank of St. Louis



Fiscal and monetary policy actions have provided notable support to the broader economy.

U.S. Income and Compensation During Recent Recessions



Sources: BEA and Board of Governors.

Fiscal Policy Support

- Coronavirus Aid, Relief and Economy Security Act (CARES)
- Paycheck Protection Program (PPP)
- Economic Injury Disaster Loans (EIDL)

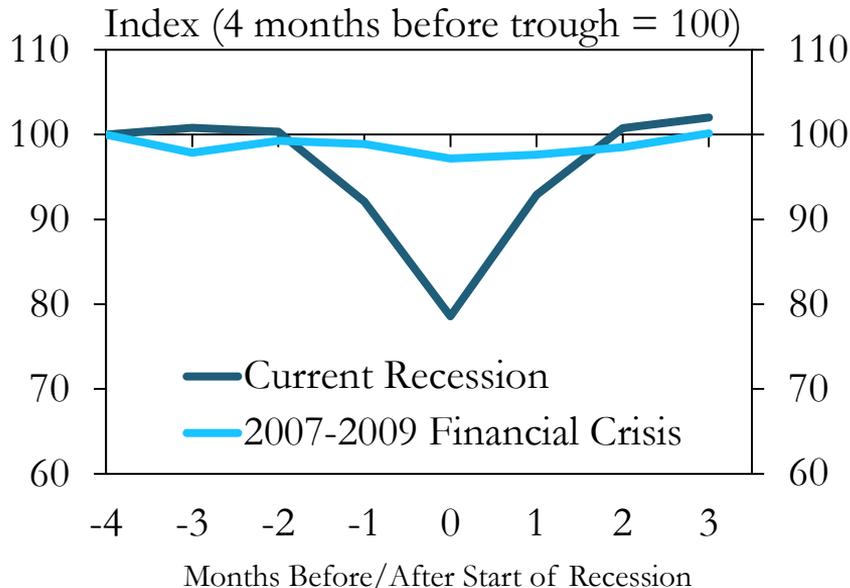
Monetary Policy Support

- Federal funds target range cut to 0-0.25%
- Overnight Repo Actions
- Commercial Paper and Primary Dealer Credit Facilities
- Money Market Facility
- Main Street Lending Program
- Bolstering of PPP Liquidity Facility
- Municipal Liquidity Facility

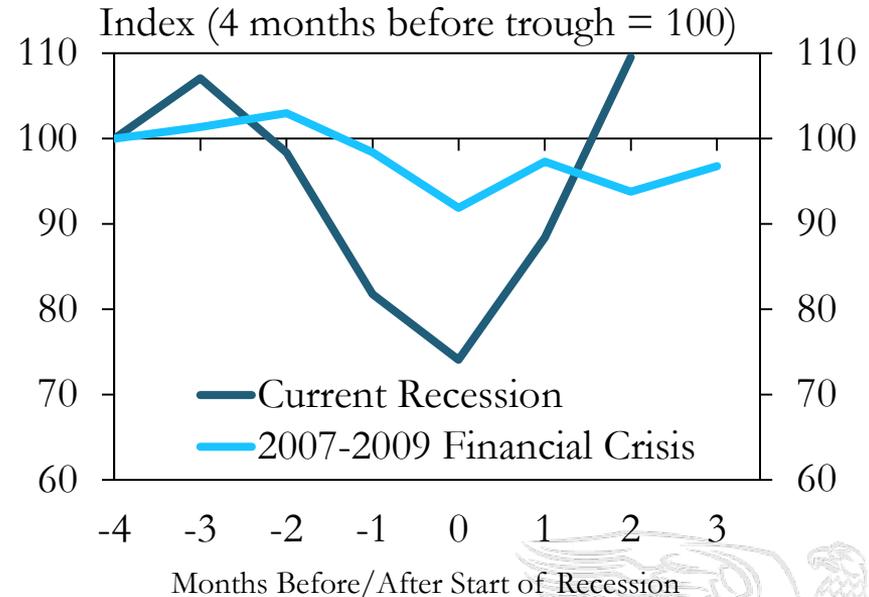


Alongside substantial government support, some indicators have rebounded significantly.

Retail Sales and Food Services



Existing Single-Family Home Sales

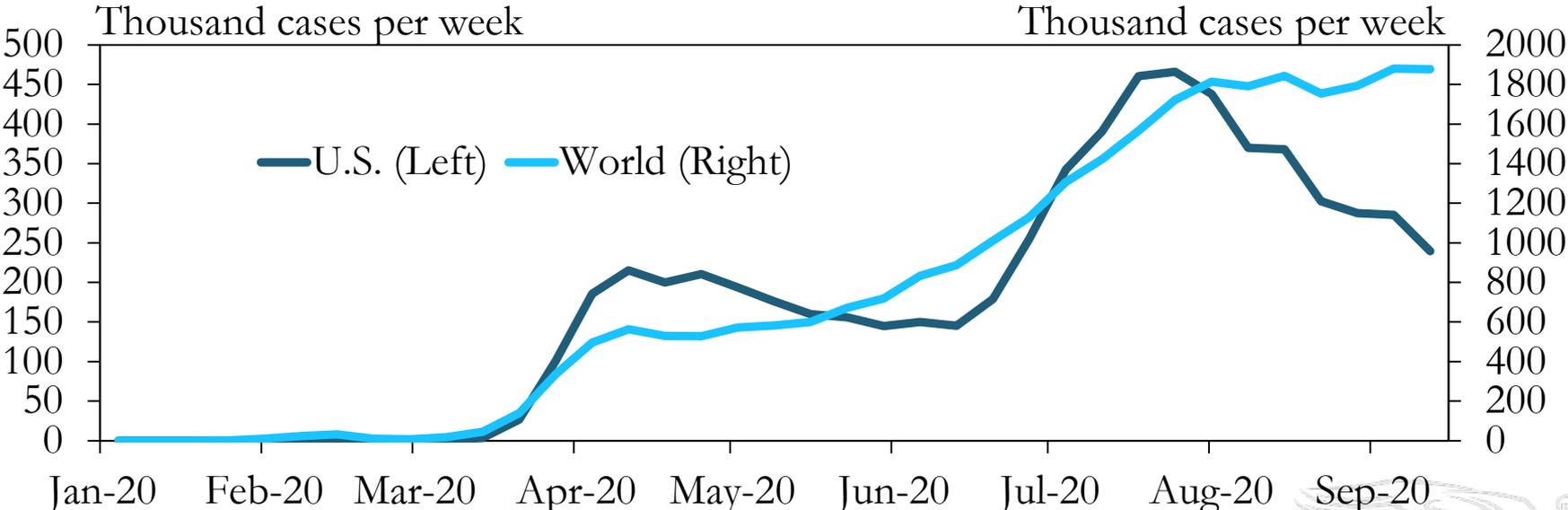


Sources: Census Bureau, National Association of Realtors, Haver Analytics and staff calculations.



Going forward, the outlook for the U.S. and global economy is still directly tied to the pandemic.

New Confirmed Cases of COVID-19



Sources: The COVID Tracking Project and Johns Hopkins University.



Concluding Thoughts

- The potential for severe difficulties in agriculture associated with the pandemic has lessened, for now.
- Concerns appear likely to reemerge, however, in early 2021 as government support fades, and the outlook depends on underlying market conditions.



