

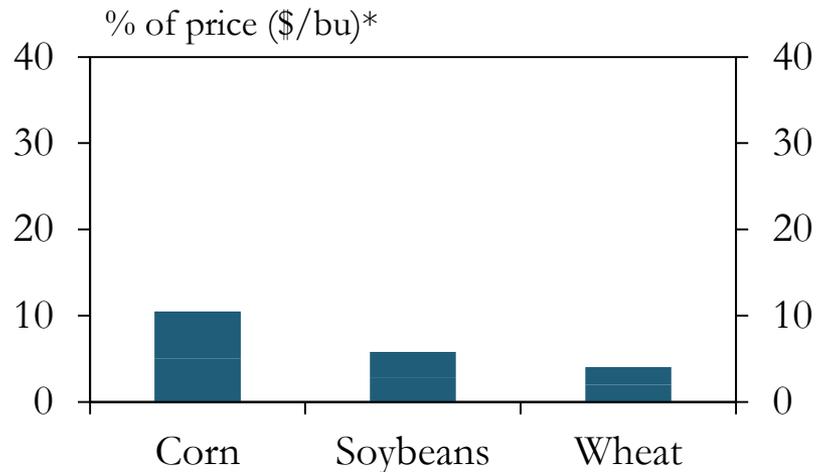
COVID-19 Updates & Key Demand Drivers for Agriculture

June 22, 2020

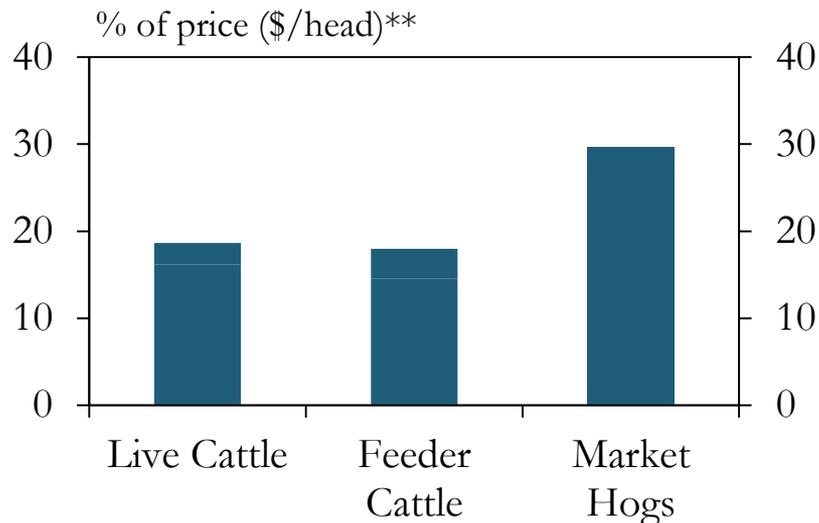


The USDA Coronavirus Food and Aid Program (CFAP) will allocate support more heavily towards the livestock sector.

Crop CFAP Payments



Livestock CFAP Payments



* Estimated using marketing year average price forecast from WASDE for the 2019/2020 MY.

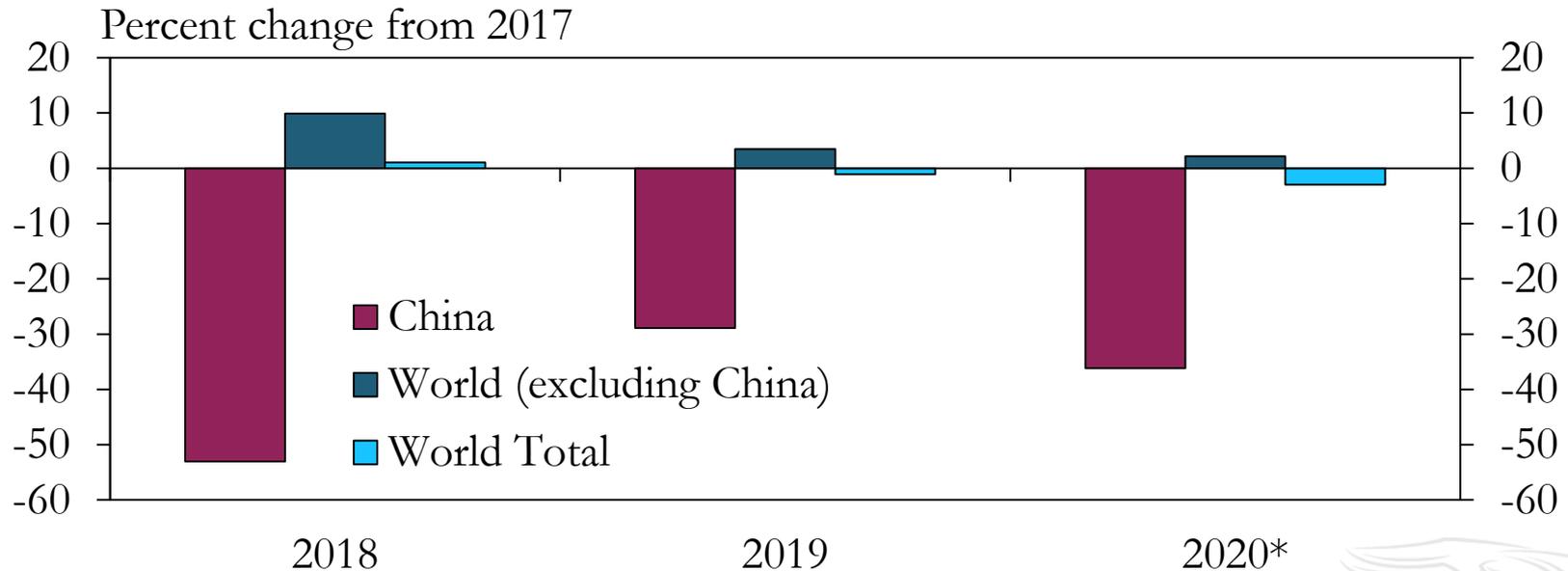
** Estimated using monthly average prices from Jan through May 2020. For live cattle, \$/head estimates assume market weight of 1200 lbs. For reference, feeder cattle weigh 600-800 pounds, and market hogs weigh more than 120 pounds.

Note: Crop CFAP payments will be made based on 50 percent of a producer's 2019 total production or 2019 inventory, whichever is smaller. Cattle and hog CFAP payments will be based on livestock sold between January and mid-April 2020 and the highest number of livestock on the farm between mid-April and mid-May.

Sources: USDA, Iowa State University, and KC Fed calculations.

Increases in U.S. agricultural exports have remained limited, particularly with respect to China.

U.S. Agricultural Exports



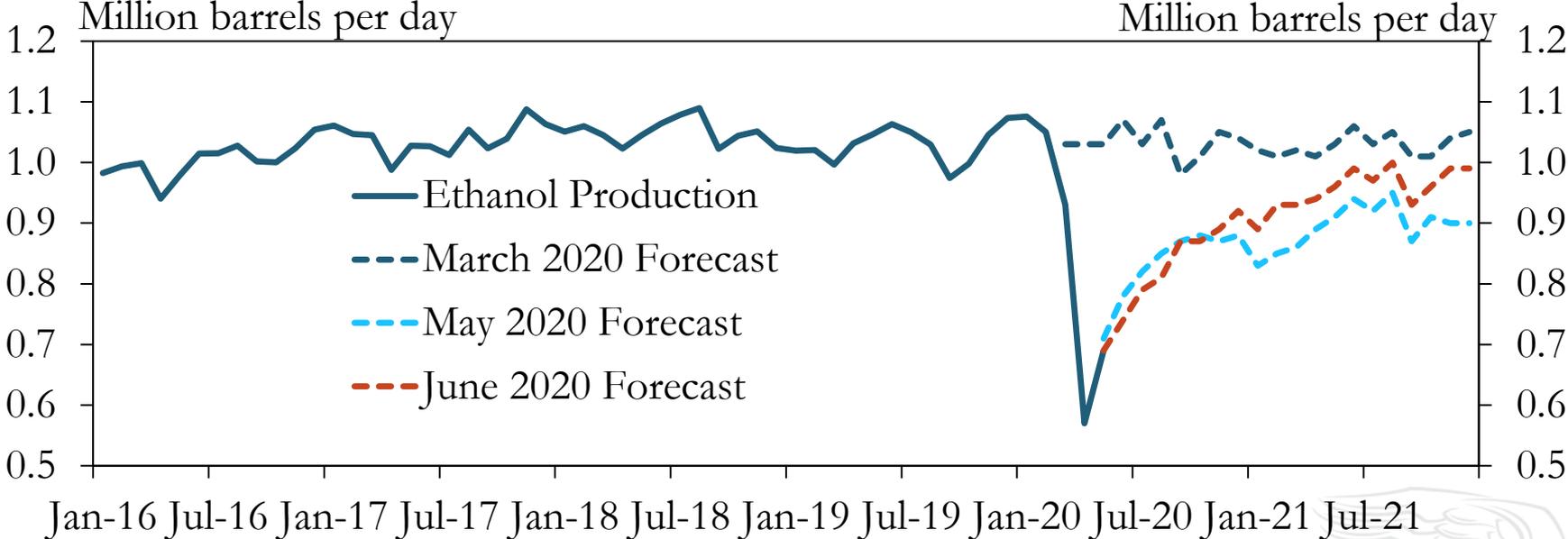
*January to April YTD total compared to same period in 2017

Sources: USDA and KC Fed Calculations.



Ethanol production declined sharply in March, April, and May and appears likely to remain subdued in the coming months.

Short-Term Outlook: U.S. Ethanol Production



Source: EIA.

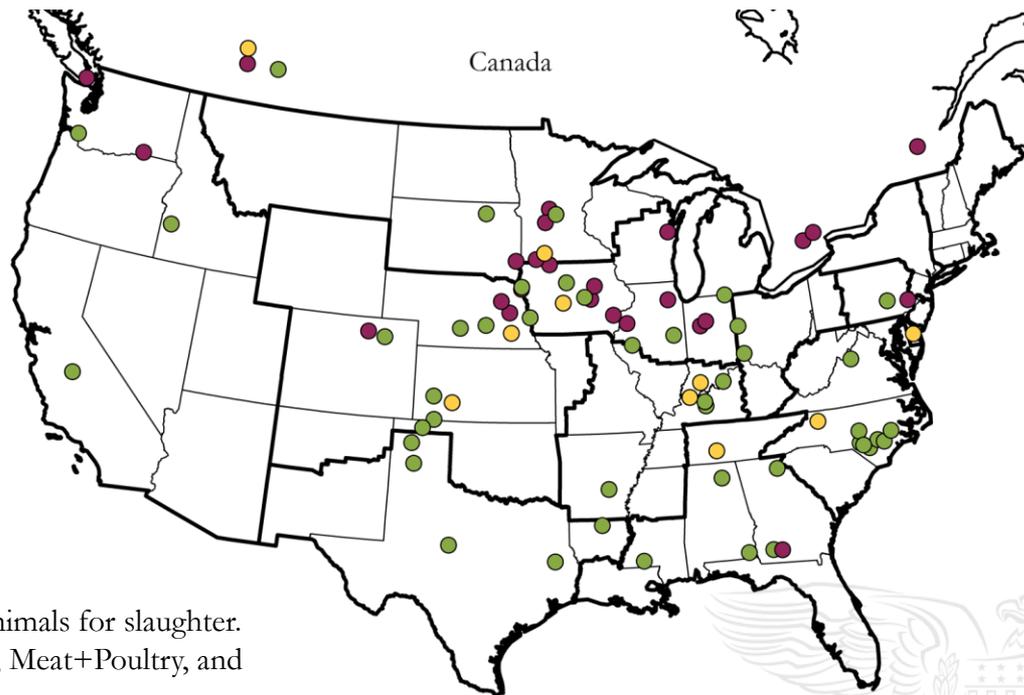


All meat packing plants have reopened, but the effects of COVID-19 in the supply chain could persist.

Meat Packing Plants Affected by COVID-19

Status as of 6/22/2020

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



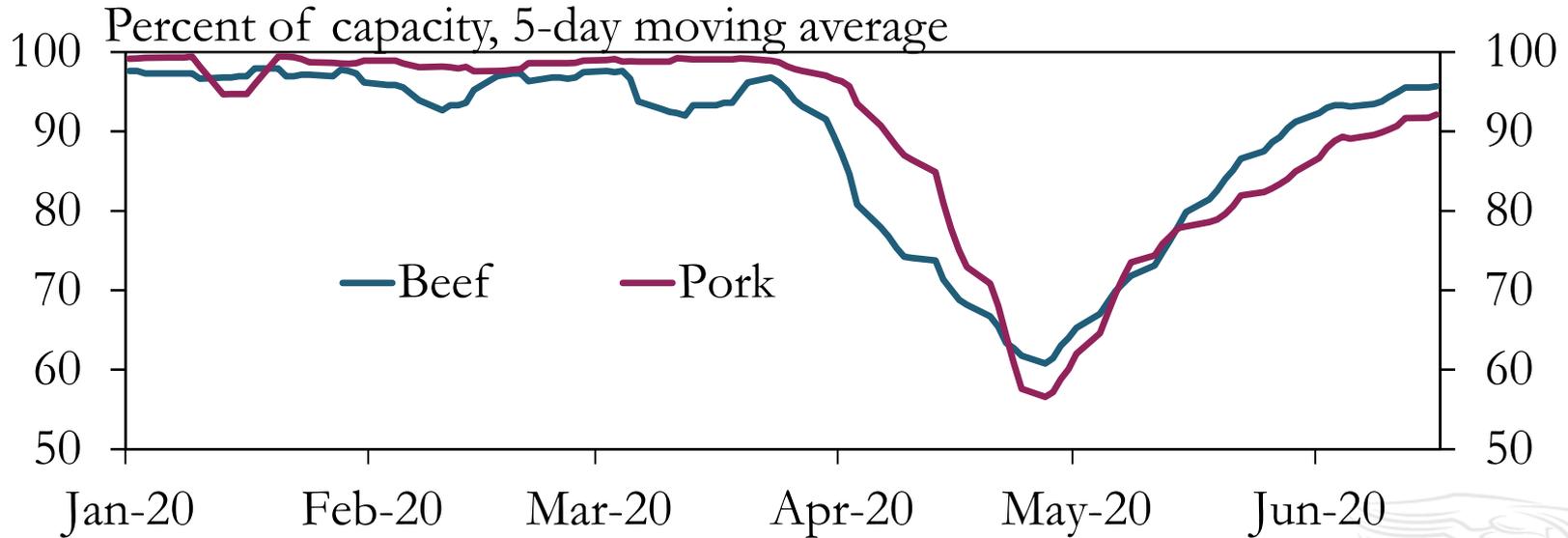
Note: Includes beef, pork, and poultry plants that purchase animals for slaughter.

Sources: Food & Environment Reporting Network, Drovers, Meat+Poultry, and various local news outlets.



Capacity utilization at meat plants increased, but remained slightly limited by modified operations.

U.S. Beef and Pork Plant Capacity Utilization

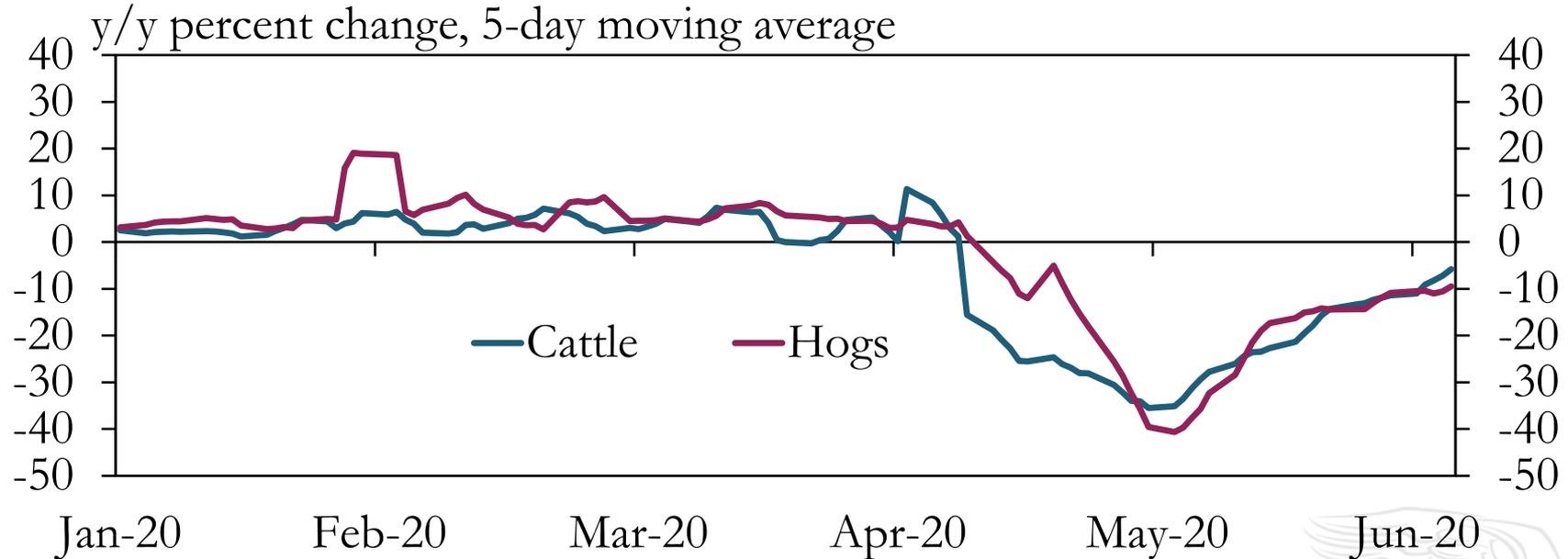


Sources: USDA, National Pork Board, and KC Fed Calculations.



Alongside reduced operations at packing plants, meat production continued to lag 2019 levels.

Daily Cattle and Hog Slaughter



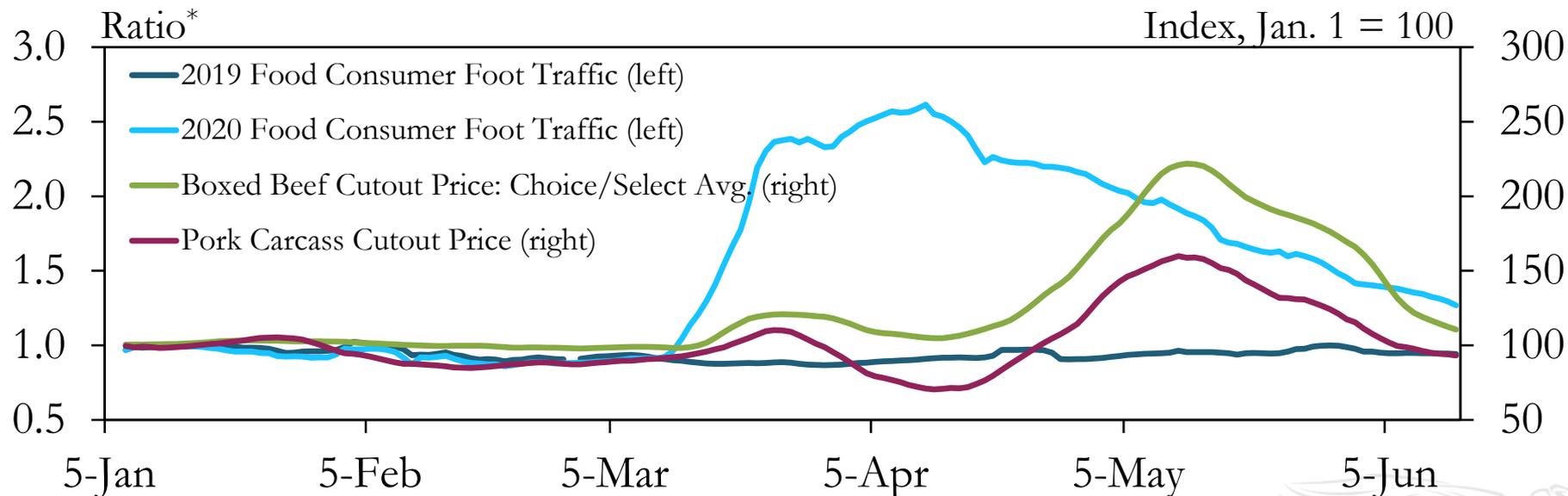
Note: Excludes weekend operations.

Source: USDA.



In addition to the packing plant disruptions, consumers have shifted their food purchases to retail outlets.

Foot Traffic at Supermarkets vs. Restaurants and Wholesale Meat Prices



* Ratio of foot traffic at supermarkets to foot traffic at restaurants. A ratio equal to one indicates that foot traffic at supermarkets is equal to foot traffic at restaurants.

Sources: SafeGraph, USDA and KC Fed Calculations

