Professional Development Webinars for Educators
Summer 2020
Gigi Wolf is a Senior Economic Education Specialist for the Federal Reserve Bank of Kansas City where she assists in curriculum development, facilitates professional development for regional educators, builds partnerships with like-minded organizations, manages content for the national Federal Reserve education website and coordinates programs for teachers, students and the public.

Federal Reserve Bank of Kansas City
Opportunity to Earn Graduate Credit

Emporia State University (ESU) is offering graduate credit opportunities with relevant and engaging extended learning.

Access a schedule of events and how to participate through Google Classroom: https://bit.ly/37n43Pi

For questions, contact:
Rob Catlett
rcatlett@emporia.edu

Bekah Selby
rselby@emporia.edu

Federal Reserve Bank of Kansas City
Megan Williams

Megan is Associate Economist and Manager in the Regional Affairs department at the Kansas City Fed’s Oklahoma City Branch office. In this role, she is responsible for current monetary policy research, district economic surveys, and a variety of economic research projects. She also serves as Secretary for the Oklahoma City Branch Board of Directors and the Board of Directors of the Oklahoma Council on Economic Education, where she is also a former Board Chair.
Ty Kreitman

Ty is an assistant economist in the Regional Affairs Department at the Omaha Branch of the Federal Reserve Bank of Kansas City. In this role, he primarily supports the Federal Reserve Bank of Kansas City and the Federal Reserve System efforts surrounding agricultural economics research, analysis and outreach. His responsibilities include co-authoring the *Tenth District Survey of Agricultural Credit Conditions* and the Federal Reserve System’s *Agricultural Finance Databook*.
U.S. and Energy Economic Outlook

COVID-19 Economic Impact Webinar
July 15, 2020

Megan Williams
Manager and Associate Economist

*The views expressed herein are those of the presenter only and do not necessarily reflect the views of the Federal Reserve Bank of Kansas City or the Federal Reserve System.
The share of populations with COVID-19 cases has increased in recent weeks

Cases by State, through July 9, 2020

Cases per capita
- 0.1 % to 0.4 %
- 0.5 % to 0.8 %
- 0.9 % to 1.0 %
- 1.1 % to 1.5 %
- 1.6 % to 3.0%

Source: The COVID Tracking Project
June FOMC: “The ongoing public health crisis will weigh heavily on economic activity… in the near term.”

Change in Real GDP

Note: Data and FOMC projections are for year-end. Sources: Bureau of Economic Analysis, FOMC
State employment changes varied greatly in May, but every state saw at least 4% decreases.
Unemployment rates varied regionally in May, but remained very high compared to pre-COVID levels.

Source: U.S. Bureau of Labor Statistics
U.S. hospitality job losses were less in June than in April and May, but energy cuts were deeper

Job Growth by Industry

Percent change, year-over-year

Sources: U.S. Bureau of Labor Statistics/Haver Analytics
Oil prices have rebounded somewhat, but remain below profitable drilling levels for most regional firms

Sources: EIA, FRBKC Energy Survey
Forecasts for world oil demand fell dramatically in April and May but stabilized in June and July.
Rig counts in energy states have decreased dramatically

Source: Baker Hughes/Haver Analytics
Currently, most active rigs are operating in the Permian Basin or off-shore in the Gulf of Mexico

July 10, 2020 Rig Count

Source: Baker Hughes/Haver Analytics
Drilling, employment, and access to credit are far below year-ago levels, and expectations remain low

Kansas City Fed Energy Indexes

Index, vs. a year ago

Drilling/Business Activity
Number of Employees
Access to Credit
Expectations

Source: FRBKC Energy Survey
In March, energy firms expect solvency issues to grow considerably if prices were to stay low very long.

FRBKC Q1 2020 Energy Special Question: If the WTI price of oil were to stay at $30/bbl or $40/bbl for an extended period of time, what share of firms in your industry would remain solvent (in the time periods referenced below)?

Sources: EIA, FRBKC Energy Survey
U.S. oil production has decreased since March following the oil price collapse with subdued forecasts.

Source: EIA
As of late June, most regional firms did not plan to increase production levels until oil prices recover more.

FRBKC Q2 2020 Energy Special Question: At what price do you expect the majority of producers in the U.S. to restart horizontal shut-in wells?

[Bar chart showing percentage of producers for different price ranges:]

- ≤$30: 10%
- $31-$35: 15%
- $36-$40: 20%
- $41-$45: 35%
- $46-$50: 25%
- $51: 10%

Sources: EIA, FRBKC Energy Survey
Most firms reported they could survive on current revenue levels for more than a year, but 32% could not.

FRBKC Q2 2020 Energy Special Question: If current revenues were to continue, how long could your firm survive?
Energy city office markets were already struggling some before COVID-19, and rose everywhere in Q2 2020.
COVID-19 and Food Supply Chains

Ty Kreitman, Federal Reserve Bank of Kansas City
July 15, 2020

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.
Presentation Themes

- The food supply chain is highly efficient, but not necessarily nimble in response to shocks.

- The emergence of COVID-19 led to drastic shifts in consumer purchases to retail outlets, reducing or eliminating channels for many products.

- Outbreaks of infection disrupted points in the supply chain that are labor-intensive.

- Effects were felt throughout the supply chain of many food products, from producers to consumers.

- The meat supply chain experienced particularly widespread and persistent disruptions.
The developments surrounding COVID-19 caused significant supply chain disruptions.

As stay-at-home orders were put in place, consumers shifted their food purchases to retail outlets.

Foot Traffic at Supermarkets vs. Restaurants

* 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 and USDA
Outbreaks of infection led to numerous closures at meat packing and food processing facilities.

Meat Packing Plants Affected by COVID-19

**Status as of 7/10/2020**

- 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.
The closures at meat plants led to sharp reductions in operating capacity and meat production.

**U.S. Beef and Pork Plant Capacity Utilization**

<table>
<thead>
<tr>
<th>Percent of capacity, 5-day moving average</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
</tr>
<tr>
<td>95</td>
</tr>
<tr>
<td>90</td>
</tr>
<tr>
<td>85</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>75</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>65</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>55</td>
</tr>
<tr>
<td>50</td>
</tr>
</tbody>
</table>

**Daily Cattle and Hog Slaughter**

<table>
<thead>
<tr>
<th>y/y percent change, 5-day moving average</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>-20</td>
</tr>
<tr>
<td>-40</td>
</tr>
<tr>
<td>-60</td>
</tr>
</tbody>
</table>

Note: Excludes weekend operations

**Sources:** USDA, National Pork Board, and KC Fed Calculations.
Alongside the drop in meat production, wholesale meat prices increased sharply and livestock prices declined.

---

**Beef and Cattle Prices**

- Boxed Beef Cutout Price (Choice/Select Avg.)*
- Live Cattle Price
- Average Advertised Retail Price**

**Pork and Hog Prices**

- Pork Carcass Cutout Price*
- Live Hog Price
- Average Advertised Retail Price**

*Beef: negotiated prices and volume of boxed beef cuts delivered within 0-21 days and on average industry cutting yields. Pork: negotiated prices and volume of pork cuts delivered within 14 days and on average industry cutting yields.

**Based on weekly national average of advertised prices, weighted based on carcass composition and interpolated to daily

Note: Wholesale represented by reports of “National Daily Boxed Beef Cutout And Boxed Beef Cuts - Negotiated Sales” and “National Daily Pork Report FOB Plant - Negotiated Sales”

Sources: USDA and staff calculations.
Retail meat prices increased notably in April and May alongside a dramatic shift in buying patterns.

Sources: U.S. Bureau of Labor Statistics and USDA.
Concluding Remarks

- The supply chain disruptions highlight a concern that is likely to be a longer-term focus.

- The food supply chain has become highly global and highly efficient, but not particularly nimble, and vulnerable to shocks.
  - Producers upstream from processing face lower prices and loss of key markets.
  - Spikes in wholesale and retail prices create consumer inflationary pressure.
  - Adapting to abrupt changes in consumption patterns requires adjustments to distribution channels (production, packaging, shipping, etc.).

- Agriculture had been in a prolonged downturn prior to the crisis. The effects of COVID-19 are likely to add more pressure to livestock producers and the sector broadly, but government aid will provide some support in 2020.
QUESTIONS?

ECON ED FROM THE FED
Kansas City Fed District Contacts:
- Kansas City: gigi.wolf@kc.frb.org
- Denver: erin.davis@kc.frb.org
- Omaha: nicole.connelly@kc.frb.org
- Oklahoma City: leslie.baker@kc.frb.org

KansasCityFed.org/Education / FederalReserveEducation.org