Kansas in Crisis

Inching Towards Economic Recovery

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Overview

• Update on the Coronavirus in Kansas and the United States
  • Have we bent the curve?
  • Testing Updates

• What’s happened to the economy so far?
  • We share what little data that we have
  • Supplement data with other information.

• Testing, testing, testing. . .
The US and Kansas have a Pandemic (data through April 12, 2020 4:00 PM)

In both Kansas cases grew by 38% in the past week and deaths were 64% higher.
In the US cases grew by 36% and deaths were 63% higher in the past week. Both rates were slower than the previously.
COVID-19 Cases by Country

Several countries have turned the corner, with numbers of new cases now in decline.

Financial Times shows that US has started to bend the curve.

Source: https://www.ft.com/coronavirus-latest
Growth in COVID-19 Cases has varied by County

- In the five largest counties, growth rates have varied significantly.
  - Douglas and Shawnee counties have flattened the curve.
  - Johnson and Wyandotte, counties—not so much
  - Sedgwick may be turning the corner.
Counties with Meatpacking have seen Cases Increase

- In counties with meatpacking plants cases have spiked.
  - Ford county appears to have increasing problems.
  - Seward, Lyon and Finney counties.
  - Healthcare capacity may be limited there.
Testing has been uneven across the country

Using data from the COVID Tracking project, we calculated the number of tests per 1,000 people in each state:

- Kansas has performed only 6.2 tests per 1,000 people.
- This is the lowest level among all states.

Source: Institute for Policy & Social Research, The University of Kansas; data from The COVID Tracking Project (https://covidtracking.com/).
Testing Results are also Uneven

- Calculated the share of positive tests.
  - 10% of Kansas are positive.
- 30% of tests return a false negative.
  - This also contributes to the undercount.

Source: Institute for Policy & Social Research, The University of Kansas; data from The COVID Tracking Project (https://covidtracking.com/).
COVID-19 and the Kansas Economy

It's not good.
The Stock Market: January 1 – April 3, 2020

• The Dow Jones Industrial Average peaked at 29,348 on February 12th.
  • It bottomed out on March 23rd, and recovered to on April 20th. 23,650
  • Down about 20% since the peak

• Nasdaq has followed a similar pattern.

Source: FRED https://fred.stlouisfed.org/series/DJIA
Unemployment Claims Continue to Soar

- **US Initial Unemployment Claims are still at historic highs**
  - Over 22 million unemployed in a month.

- **Based on the US Labor Force in February 2020 the US the unemployment rate is anywhere between 10 – 13%**
  - It’s estimated that 12 million workers have lost employer-backed health insurance.

Source: https://www.dol.gov/ui/data.pdf
Unemployment Claims in Kansas and Missouri

- Missouri Initial Unemployment Claims are 3 times higher than Kansas
- Based on February Labor Force projections the Unemployment Rate in Kansas and Missouri is approximately 11%

Source: Calculations using KS and MO Department of Labor Data
Kansas Initial Unemployment Claims by Industry as a Share of Total Employment

<table>
<thead>
<tr>
<th>Industry</th>
<th>Unemployment within Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>0.44%</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>9.34%***</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20.77%***</td>
</tr>
<tr>
<td>Retail trade</td>
<td>11.09%***</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>23.74%</td>
</tr>
<tr>
<td>Administrative &amp; waste management</td>
<td>9.59%</td>
</tr>
<tr>
<td>Professional, scientific &amp; technical serv.</td>
<td>5.44%</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>7.12%</td>
</tr>
<tr>
<td>Construction</td>
<td>9.97%</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>1.79%</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>4.50%</td>
</tr>
<tr>
<td>Other services</td>
<td>21.72%</td>
</tr>
<tr>
<td>Management of companies</td>
<td>0.59%</td>
</tr>
<tr>
<td>Educational services</td>
<td>18.33%</td>
</tr>
<tr>
<td>Information</td>
<td>9.08%</td>
</tr>
<tr>
<td>Real estate and rental and leasing</td>
<td>13.11%</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>35.64%</td>
</tr>
<tr>
<td>Mining and oil and gas extraction</td>
<td>12.79%</td>
</tr>
<tr>
<td>Utilities</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

- I calculated the share of initial unemployment claims for all of March and April over total employment by industry in February, 2020.
  - Industries are ranked by share of total employment.
  - Government, Health care, manufacturing and retail trade are 53% of total employment in the state.
Cumulative Unemployment Claims in Kansas

Top 5 Industries with Cumulative Jobs Lost:

- Manufacturing 34,782
- Accommodation & Food Service 27,283
- Health Care & Social Assistance 17,357
- Retail Trade 16,082
- Other Services 11,317

Source: My calculations using Kansas Department of Labor Data
Cumulative Unemployment Claims by County

Top 5 Counties by Cumulative Initial Claims:
- Sedgwick 45,172
- Johnson 27,736
- Shawnee 10,105
- Wyandotte 7,728
- Douglas 7,597

Source: IPSR calculations using Kansas Department of Labor Data
Estimated Unemployment Rate by County

- Estimated Using First Quarter Employment Data
- Top 5 Counties by unemployment rate:
  - Wilson 19.2%
  - Sedgwick 17.6%
  - Sumner 15.3%
  - Butler 13.6%
  - Montgomery 12.8%

Source: IPSR calculations using Kansas Department of Labor Data
Estimated Unemployment in Kansas City Metro

- Unemployment Claims & Rates are lower on the Kansas-side.
  - Wyandotte 9.7%
  - Johnson 8.1%
  - Clay 13.7%
  - Jackson 11.3%

Source: IPSR calculations using Kansas & Missouri Department of Labor Data
What’s Happening to Economic Growth (GDP)

- GDP = C + I + G + (X-M)
  - C = Consumption (68%)
  - I = Investment (17%)
  - G = Government (18%)
  - X – M = Net Exports (-2.9%)

- Consumption patterns have changed dramatically
  - Retail sales fell by a historic -8.7% last month

- Government Expenditures will increase

- WTO projects trade to fall by 13% – 32%
Sectors that contribute most to Kansas growth with above average unemployment:

- Manufacturing: 21% UE & 16% of GSP
- Health Services: 9% UE & 7.5% of GSP
- Retail: 11% UE & 6.4% GSP

Source: Author's calculations.
Oil & Gas Production in 10th District Has Dropped

- Federal Reserve Bank of Kansas City shows that oil and gas production in the district has dropped significantly.
  - "Long term $30 per barrel (oil price) will lead to massive consolidation and insolvency. I'm estimating that some will be able to hang on for another year, but two years probably reduces E&Ps significantly."

The Oil Markets have Gone Berserk

Too Much Oil: How a Barrel Came to Be Worth Less Than Nothing

One oil price went negative on Monday, signaling that there is no place to store all the crude the world is producing but not using.

- Oil prices turned negative on Monday, April 20th
- Producers need to pay buyers to take oil because there is no place to store it.
- Refineries are unwilling to make gasoline because people aren’t driving.

Manufacturing in the 10th District Has Dropped

Federal Reserve Bank of Kansas City (March 26th) shows manufacturing activity has fallen to the lowest levels since 2009.

- “This is the most uncertain about the future that I have ever been during my 29 years with this company.”

Services in the 10th District Have Dropped

- Federal Reserve Bank of Kansas City (March 27th) shows services have fallen by the most ever recorded:
  - "We will need real information and guidance on how long this will last. One month is one thing - until August... well that is a death sentence for us."

https://www.kansascityfed.org/research/indicatorsdata/services/articles/2020/tenth-district-services-activity-decreased-significantly
Meatpacking has been identified as a weak link in food supply chain

- Covid-19 outbreaks in meatpacking plants put the meat supply chain at risk.
- Reduced demand for dairy products at schools means that farmers are dumping milk.

Friedson et al (2020) estimated that California’s shelter in place policy prevented 144,793 – 232,828 COVID-19 cases and saved 1,836 – 4,969 lives.

- Source: https://www.nber.org/papers/w26992

Harris (2020) finds that subway ridership in New York City contributed to its high infection rate.

- Source: https://www.nber.org/papers/w27021

Manski and Molinari (2020) bounded infection rates and found that infections were likely much higher than reported, but fatality rates were lower.

- Source: https://www.nber.org/papers/w27032
Small Businesses are Vulnerable
Kansas has a Large Number of Small Businesses

- Estimated Using County Business Patterns Data 2016/17
- Top 5 Counties with small businesses:
  - Johnson 68,896
  - Sedgwick 44,805
  - Shawnee 13,937
  - Douglas 11,154
  - Wyandotte 11,071

Source: IPSR calculations using Kansas Department of Labor Data
Small Businesses in Vulnerable Industries

- Estimated Using County Business Patterns Data 2016/17
- In some counties, over 40% of businesses in the county are in vulnerable industries.

Source: IPSR calculations using Kansas Department of Labor Data
Kansas has a Large Share of Self-Employed

- Estimated Using County Business Patterns Data 2016/17
  - Nonemployer establishments measure self-employed
  - Self-employed are the most vulnerable to this economic downturn:
    - Unemployment system not designed to help
    - Access to credit may be more difficult.

Source: IPSR calculations using Kansas Department of Labor Data
Coronavirus Aid, Relief and Economic Security (CARES) Act

• Paycheck Protection Program lends money to small businesses via banks.
  • Loan forgiveness if the small business keeps workers on the payroll
  • Many problems reported with getting access to money
  • Not enough money to meet the need
  • Congress at loggerheads trying to add funds
Paycheck Protection Program Benefited Kansas

- Total of $4.3 Billion in loans in Kansas
  - 26,245 Loans made
  - Average loan size $163,408

- The need is great:
  - 55,682 Small Businesses
  - 201,268 Nonemployer Establishments.

- Only 10.2% of Kansas firms were funded.
  - In the US a total of 5.2% of firms were funded.

Source: IPSR calculations using 2017 Statistics of US Businesses
Paycheck Protection Program Benefited Kansas

- As a share of total payroll/receipts, the PPP program in Kansas covered 61% of total PPP expected payments.
- In the US the PPP program covered 40% of expected payments.
  - Kansas has relatively more banks per population and more banks engaged in small business lending.

Source: IPSR calculations using 2017 Statistics of US Businesses
Paycheck Protection Program Funding is Spent

• There was overwhelming demand for the program.
• Banks that had strong relationships with the Small Business Administration were more successful in providing funds.
• Pre-existing relationships with the banks were important.

This morning, the Small Business Administration announced that it has exhausted the funds provided under the CARES Act and is seeking additional funding from Congress.

Even with thousands of employees working around the clock, we were not able to satisfy the overwhelming demand from our customers. We remain optimistic that Congress will authorize additional funding. However, we will not be accepting new applications for the Paycheck Protection Program at this time.

Our goal is to reopen the application if and when Congress approves additional funds. You will be notified via email of any updates.

For the most up-to-date information, visit usbank.com/ppp.

Thank you for choosing U.S. Bank.

Source: Email to non-employer establishment
Despite Billions Being Provided to Kansans—Need is Great

• Newer, smaller businesses were likely shut out of the process.
• The self-employed were also more disadvantaged.

Source: Facebook Post
The U-Shaped Recovery
Past Recoveries from Recessions

• This event study shows the index of GDP 10 quarters before and after the end of a recession.
  • V-shaped recessions prior to 1990s
  • U-shaped or jobless recovery recessions since 1990

• The U-Shaped Recovery is increasingly likely.
• Even if we threw open the doors of the economy tomorrow, it’s not clear that people would want to venture out given all of the uncertainty.
It All Comes Down to Testing

• We need reliable and widespread testing
  • For COVID-19
  • For COVID-19 Antibodies

• It’s not clear when widespread testing will become available.

• Without testing we’re in economic purgatory.
  • Given the new outbreaks in Western Kansas, we may have more problems on the horizon.
Alternative Approaches to Testing

- Facebook & Carnegie Mellon University are surveying people.
- We have downloaded their data and will be working with it to determine whether these kinds of surveys can be used to get a better estimate of cases.

As of April 12 Population with Symptoms:
- 1.62% Shawnee County
- 1.14% Sedgwick County
- 1.97% Finney County
- 0.85% Lyon County
- 1.24% Riley County
- 0.65% Johnson County
- 0.07% Douglas County

Source: https://covid-survey.dataforgood.fb.com/

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Economic Impacts of COVID-19

• In future lectures we will continue to monitor the economic fallout from the COVID-19 epidemic.
• We will also monitor the policy responses.
• I hope that you all stay healthy!
Thank You!