U.S. and Oklahoma Economic Update

Risk Management Association
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Vice President and Oklahoma City Branch Executive

*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 “Fed” consists of three main entities:
- Board of Governors: 7 members appointed by U.S. President
- Federal Reserve Banks: 12 total; semi-independent by design
- Federal Open Market Committee: 19 members; 12 voting

Primary responsibility areas:
- Monetary policy
- Bank regulation
- Financial services
The Oklahoma City Branch of the Federal Reserve Bank of Kansas City

• Functions and purposes ~ 50 staff
  • Research on U.S. and Oklahoma economies; energy sector and business survey focus
  • Examinations of Oklahoma financial institutions (~45 banks, ~175 holding cos.)
  • Community development programming for low and moderate income groups, workforce focus
  • Economic education and public outreach programming

• 2019 OKC Fed Branch Board of Directors
  • Clint Abernathy (chair), Owner, Abernathy Farms, Inc., Altus
  • Susan Chapman Plumb, Chair & CEO, Bank of Cherokee County, Tahlequah
  • Walt Duncan, President, Duncan Oil Properties, Oklahoma City
  • Tina Patel, Co-Owner & CFO, Promise Hotels, Tulsa
  • Chris Turner, President & CFO, First State Bank, Oklahoma City
  • Katrina Washington, Owner/Broker, Stratos Realty, Oklahoma City
  • Dana Weber, Chair & CEO, Webco Industries, Sand Springs
The Federal Reserve’s Role in Monetary Policy

• Dual Mandate from U.S. Congress:
  1) Maximum employment
  2) Price stability

• Federal Open Market Committee (FOMC):

Board of Governors
- Jerome H. Powell, Chairman
- Richard H. Clarida, Vice Chairman
- Randal K. Quarles, Vice Chairman of Supervision
- Lael Brainard
- Michelle W. Bowman
- Open
- Open

Reserve Bank Presidents
- John C. Williams, New York, Vice Chairman
- James Bullard, St. Louis
- Charles L. Evans, Chicago
- Esther L. George, Kansas City
- Eric Rosengren, Boston
- Patrick T. Harker, Philadelphia
- Robert S. Kaplan, Dallas
- Neel Kashkari, Minneapolis
- Loretta J. Mester, Cleveland
- Thomas I. Barkin, Richmond
- Raphael W. Bostic, Atlanta
- Mary C. Daly, San Francisco

*Permanent voters in bold; 2019 rotating voters in red; 2020 rotating voters in blue
U.S. Economic Outlook and Monetary Policy
Oct. FOMC: “Economic activity has been rising at a moderate rate...household spending has been...strong”

Contributions to Percent Change in Real GDP

Percent change from the previous period, SAAR

Source: U.S. Bureau of Economic Analysis
Oct. FOMC: “The labor market remains strong... business fixed investment and exports remain weak.”

U.S. Payroll Employment and Business Indexes

Change from previous month, thousands

Payroll Employment (left axis)
ISM Manufacturing Index (right axis)
ISM Non-Manufacturing Index (right axis)

Sources: Institute for Supply Management, Bureau of Labor Statistics
Oct. FOMC: “The unemployment rate has remained low.”

U.S. Unemployment Rate

Current (Oct. 2019): 3.6%

Sept FOMC Forecast

Sources: U.S. Bureau of Labor Statistics, FOMC
Oct. FOMC: “Overall inflation and inflation for items other than food and energy are running below 2%.”

PCE Inflation Index

Current Overall PCE (Sept. 2019): 1.3%
Current Core PCE (Sept. 2019): 1.7%

Sources: U.S. Bureau of Labor Statistics, FOMC
Oct. FOMC: “In light of… global developments… muted inflation… the [FOMC] decided to lower the… rate.”

Federal Funds Rate
Year-End Target

Current Target: 1.50-1.75%

Sept FOMC Forecast

Sources: U.S. Bureau of Labor Statistics, FOMC
“In light of...increases in...reserve liabilities, the [FOMC] directs the Desk...to maintain...ample reserve balances.”

Source: Federal Reserve Board
Oklahoma Economic Outlook
The pace of Oklahoma job growth has slowed in 2019
Indeed, new claims for unemployment insurance this year have returned to nearly 2015-16 levels.

Sources: U.S. Department of Labor, NBER recession shading.
State sales tax growth picked back up slightly in the metros in Q3, but October state receipts were down.

Oklahoma and Metro Sales Tax Revenues

Note: Q4 2019 state tax data is shown through October 2019.

Source: OK Tax Commission
The slower state job growth has been driven mainly by job losses in energy and related sectors.
Oklahoma’s rig count has dropped this year, and regional energy firms expect further slowing ahead.

![Energy Sector Indicators](image)

Note: Q4 2019 rig count data shown through October 2019.

Source: Federal Reserve Bank of Kansas City Energy Survey
Oklahoma’s percentage drop in rigs is easily the largest among the top 8 oil- and gas-producing states.
Volatile and marginally profitable oil prices, plus low natural gas prices, have contributed to slower activity.

[Graph showing Oil & Natural Gas Profitability and Prices]

Sources: EIA, Federal Reserve Bank of Kansas City Energy Survey
Even with much fewer rigs and less workers, oil and gas production in the state remains very high.

Oklahoma Oil & Gas Rig Count, Employment, and Production

Index May-90=100

Note: Employment is for total mining and logging, which in Oklahoma is almost completely oil and gas related. Production is shown as a 3-month moving average.

Sources: Baker Hughes, U.S. Energy Information Administration
Oil and gas’s share of Oklahoma’s economy remains high, especially in terms of GDP and income.
Despite slower job growth and rising UI claims this year, unemployment remains low across the state.
Looking at longer-term trends, more people have been leaving Oklahoma than moving into the state.

U.S. vs. Oklahoma population growth, 1970-2018

Oklahoma population changes by component, 2003-2018*

Note: Annual BEA population data used through 2017, Census population data used for the most recent year.

Sources: Bureau of Economic Analysis, Census Bureau/Haver Analytics, Population and Housing Unit Estimates – Census Bureau and authors’ calculations.
Large metro migration improved slightly in 2018, while outflows from western Oklahoma have been sizeable.

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**Oklahoma Net Domestic Migration by Area, 2011-2018**

**Net Domestic Migration by County, 2015-2018**

Sources: Bureau of Economic Analysis, Census Bureau/Haver Analytics, Population and Housing Unit Estimates – Census Bureau and authors’ calculations.
Highly educated Oklahomans of all age groups have been leaving the state, especially since 2013.

Note: Metro area timeseries data was harmonized in IPUMS using the 2013 OMB delineations.

Sources: U.S. Census Bureau ACS 1-year sample Public Use Microdata, IPUMS-USA, authors' calculations.
Oklahomans with a bachelor’s degree or more are mostly moving to Texas, especially Dallas-Fort Worth.

States Gaining the Most Oklahomans with a Bachelor's or More on Net

Net Migration of Oklahomans with a Bachelor's or More to Texas

Note: Metro area timeseries data was harmonized in IPUMS using the 2013 OMB delineations.

Sources: U.S. Census Bureau ACS 1-year sample Public Use Microdata, IPUMS-USA, authors' calculations.
Consequence: Educational attainment is growing less
Silver lining?: People keep coming, just more have left

Educational Attainment as the Share of Population Over 25 with a Bachelor's or More

Oklahoma Domestic Migration Flows of Those with a Bachelor's or More

Sources: U.S. Census Bureau ACS 5-year estimates, ACS 1-year sample Public Use Microdata, IPUMS-USA, authors' calculations.
Plus, while Oklahoma job growth has lagged the nation, some industries in the state have grown considerably

Oklahoma Industries Adding the Most Jobs, 2013-2018

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industries Adding the Most Jobs</th>
<th>OK Empl. Change</th>
<th>OK Empl. % Change</th>
<th>U.S. Empl. % Change</th>
<th>OK Empl. Share 2018</th>
<th>Location Quotient 2013</th>
<th>Location Quotient 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Restaurants</td>
<td>14,359</td>
<td>12%</td>
<td>14%</td>
<td>8.1%</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>2</td>
<td>Warehousing and storage</td>
<td>8,148</td>
<td>153%</td>
<td>61%</td>
<td>0.8%</td>
<td>0.7</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>Aerospace product and parts manufacturing</td>
<td>6,314</td>
<td>94%</td>
<td>1%</td>
<td>0.8%</td>
<td>1.2</td>
<td>2.4</td>
</tr>
<tr>
<td>4</td>
<td>Gambling industries*</td>
<td>3,729</td>
<td>21%</td>
<td>-13%</td>
<td>1.3%</td>
<td>11.1</td>
<td>16.4</td>
</tr>
<tr>
<td>5</td>
<td>Executive, legislative and general government*</td>
<td>3,439</td>
<td>12%</td>
<td>3%</td>
<td>2.0%</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>6</td>
<td>Outpatient care centers</td>
<td>3,074</td>
<td>48%</td>
<td>37%</td>
<td>0.6%</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td>7</td>
<td>Building equipment contractors</td>
<td>3,019</td>
<td>14%</td>
<td>24%</td>
<td>1.6%</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>8</td>
<td>Management of companies and enterprises</td>
<td>2,647</td>
<td>16%</td>
<td>13%</td>
<td>1.2%</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>9</td>
<td>Other amusement and recreation industries</td>
<td>2,324</td>
<td>25%</td>
<td>18%</td>
<td>0.7%</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>10</td>
<td>Utility system construction</td>
<td>2,321</td>
<td>23%</td>
<td>24%</td>
<td>0.8%</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>11</td>
<td>Computer systems design and related services</td>
<td>2,018</td>
<td>27%</td>
<td>25%</td>
<td>0.6%</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>12</td>
<td>Accounting and bookkeeping services</td>
<td>2,011</td>
<td>15%</td>
<td>8%</td>
<td>1.0%</td>
<td>1.2</td>
<td>1.4</td>
</tr>
<tr>
<td>13</td>
<td>Offices of other health practitioners</td>
<td>2,008</td>
<td>26%</td>
<td>23%</td>
<td>0.6%</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>14</td>
<td>Other ambulatory health care services</td>
<td>1,908</td>
<td>50%</td>
<td>14%</td>
<td>0.4%</td>
<td>1.2</td>
<td>1.7</td>
</tr>
<tr>
<td>15</td>
<td>Gasoline stations</td>
<td>1,764</td>
<td>11%</td>
<td>8%</td>
<td>1.1%</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>16</td>
<td>Insurance agencies and brokerages</td>
<td>1,521</td>
<td>15%</td>
<td>24%</td>
<td>0.7%</td>
<td>0.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Note: Only includes industries with data disclosed for both 2013 and 2018. A sizeable portion of the growth in aerospace product and parts manufacturing (NAICS 3364) jobs in Oklahoma in recent years appears to be due to the reclassification of several thousand jobs in air transportation (NAICS 481) to that sector.

Sources: Bureau of Labor Statistics QCEW data and authors' calculations
Summary

• The national economy continues to grow, with low unemployment, but business investment has slowed.

• Oklahoma’s economy has slowed in 2019, as lower oil and gas prices hurt, but unemployment remains very low.

• A longer-term trend worth watching is the state’s switch in net domestic migration flows in recent years, as more highly educated Oklahomans have been moving out.

• At the same time, some industries in the state have continued to thrive, many of which pay good wages.
Questions?

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