U.S. and Western Oklahoma Economic Update

Oklahoma Economic Forum
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Vice President, Economist, and Oklahoma City Branch Executive
Federal Reserve Bank of Kansas City
www.kansascityfed.org/oklahomacity
Structure and Functions of 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

- As with most central banks, the Fed’s primary responsibilities fall within four general areas:
  - Lender of last resort – provide liquidity in times of crisis
  - Monetary policy – promote full employment and low inflation
  - Bank regulation – ensure safety and soundness of banks
  - Financial services – bank for banks, bank for federal govt.
The Oklahoma City Branch of the Federal Reserve Bank of Kansas City

- Functions – approximately 40 staff
  - Research on U.S. and Oklahoma economies
  - Economic, community, and financial education outreach
  - Examinations of Oklahoma financial institutions

- 2016 Branch Board of Directors
  - Pete Delaney (chair), Chairman & CEO (retired), OGE Energy Corp., OKC
  - Clint Abernathy, Owner, Abernathy Farms, Inc., Altus
  - Michael Coffman, CEO, Panhandle Oil & Gas, Inc., Oklahoma City
  - Chuck Hall, Chairman & CEO, Exchange Bank & Trust, Perry
  - Jane Haskin, President & CEO, First Bethany Bank & Trust, Bethany
  - Tina Patel, Co-Owner & CFO, Promise Hotels, Tulsa
  - Doug Stussi, EVP & CFO, Love’s Travel Stops & Country Stores, OKC
The U.S. Economy and Monetary Policy
U.S. economic activity slowed somewhat in early 2016 but has improved recently.
U.S. unemployment is at long-term levels after falling considerably in recent years.
U.S. inflation is low but expected to return to close to target in 2016

PCE Inflation Index

Percent change, year-over-year

Current (Q2 2016): 1.9%
Current Core (Q2 2016): 1.7%

Jun. FOMC Forecast Ranges in Yellow

Sources: U.S. Bureau of Labor Statistics, FOMC
FOMC participants expect moderate increases in rates heading forward

Federal Funds Rate
Year-end target

Current (Aug. 2016): 0.50%

Jun. FOMC Forecast Ranges in Yellow

Sources: Federal Reserve Board, FOMC
Recent employment trends have diverged across the country, with energy areas hit hard.

Total Nonfarm Employment Growth
June 2016

Source: U.S. Bureau of Labor Statistics
Trends in the Western Oklahoma Economy
Unemployment in most of Western Oklahoma remains relatively low

May 2016 Unemployment Rates

Source: U.S. Bureau of Labor Statistics
But employment in much of the area fell sharply in 2015, after a solid 2014.

*Includes the following counties: Far West OK – Beckham, Roger Mills, Custer, Washita; NW OK – Harper, Woods, Ellis, Woodward, Dewey; Panhandle – Cimmaron, Texas, Beaver; SW OK – Greer, Harmon, Jackson, Kiowa, Tillman

Source: U.S. Bureau of Labor Statistics
The regional jobs decline was driven by energy, but spread to other industries.

Western Oklahoma* Employment Growth by Industry

Percent change, year-over-year

-25 -20 -15 -10 -5 0 5 10

Total  Mining  Mfg  All Other  Trade/Tran  Const  S&L Govt

Q4-14  Q4-15

*Includes the following counties: Beckham, Roger Mills, Custer, Washita, Harper, Woods, Ellis, Woodward, Dewey, Cimmaron, Texas, Beaver, Greer, Harmon, Jackson, Kiowa, Tillman

Source: U.S. Bureau of Labor Statistics
Agriculture and energy, of course, dominate the economy of western Oklahoma.

### Western Oklahoma Personal Income Share by Industry

#### 2014

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percent of Total Income</th>
<th>W OK Location Quotient</th>
<th>OK Location Quotient</th>
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</thead>
<tbody>
<tr>
<td><strong>Western OK</strong></td>
<td><strong>U.S.</strong></td>
<td><strong>W OK</strong></td>
<td><strong>OK</strong></td>
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<td>16.0</td>
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<td>20.9</td>
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<td>5.4</td>
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<td>Trade, Transportation &amp; Utilities</td>
<td>17.9</td>
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<td>Construction</td>
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<td>State &amp; Local Government</td>
<td>13.6</td>
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<td>Information</td>
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<tr>
<td>Prof. and Business Services</td>
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<td>Education &amp; Health</td>
<td>2.9</td>
<td>13.1</td>
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*Includes the following counties: Beckham, Roger Mills, Custer, Washita, Harper, Woods, Ellis, Woodward, Dewey, Cimmaron, Texas, Beaver, Greer, Harmon, Jackson, Kiowa, Tillman


Note - Location quotient is the division of local share by national share.
Within the region, though, ag and energy’s relative importance differs somewhat

Western Oklahoma Personal Income Location Quotients 2014

<table>
<thead>
<tr>
<th>Industry</th>
<th>Far West OK*</th>
<th>Northwest OK*</th>
<th>Panhandle*</th>
<th>Southwest OK*</th>
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<td>Professional and Business Services</td>
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Oil prices have eased again after rising in Q2, while natural gas prices have improved a bit.

Source: EIA, Reuters
World oil supply and demand are expected to remain out of balance a while longer

Global Oil Supply and Demand
July 2016 Forecast

Source: EIA
According to firms, energy prices need to be higher for much increased activity to occur.

KC Fed Energy Survey Special Questions
Q3 2014 to Q2 2016

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<tr>
<th></th>
<th>Q3-14</th>
<th>Q1-15</th>
<th>Q3-15</th>
<th>Q1-16</th>
<th>Q2-15</th>
<th>Q2-16</th>
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<th>Q4-15</th>
<th>Q2-16</th>
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<td>Price Needed to Increase Drilling Significantly</td>
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Natural Gas Price Needed to Increase Drilling, Q2 2016: $3.51 average

Source: FRBKC Energy Survey
In agriculture, Oklahoma farm income and spending have dropped dramatically.
Cattle and wheat prices have plummeted over the past couple of years.

Cattle and Wheat Prices

Source: CME, Haver
But farmland values have largely held up in Oklahoma, unlike the rest of the region.
One recent sign of cautious optimism in the state comes from manufacturing

Manufacturing Survey Composite Indexes

Diffusion Index, 3 month-moving-avg.

Source: ISM, FRBKC Manufacturing Survey
And again, although unemployment has risen in the region, it’s still relatively low.

*Includes the following counties: Beckham, Roger Mills, Custer, Washita, Harper, Woods, Ellis, Woodward, Dewey, Cimmaron, Texas, Beaver, Greer, Harmon, Jackson, Kiowa, Tillman
Summary

• The U.S. economy continues to grow, and the Fed has begun to raise interest rates

• The economy in western Oklahoma has been hurt by low energy prices

• Western Oklahoma’s important agriculture industry is also having difficulties

• However, some firms are optimistic and unemployment remains relatively low
Questions?

For regular updates and analysis of the Oklahoma economy, subscribe to our quarterly Oklahoma Economist publication at:

www.kansascityfed.org/publications/research/oke/