

# THE *Oklahoma* ECONOMIC DATABOOK

*A summary of regional economic indicators  
for the state of Oklahoma*



APRIL 24, 2017

FEDERAL RESERVE BANK *of* KANSAS CITY

## SUMMARY OF CURRENT OKLAHOMA ECONOMIC CONDITIONS

In Oklahoma, the unemployment rate was 4.3 percent in March, and total payroll employment declined 0.1 percent compared to the previous year. Employment growth was mixed across industries, with the strongest gains in the financial activities and construction sectors. Oklahoma nominal personal income grew 1.2 in the fourth quarter of 2016 compared to the previous year, with workplace earnings up 0.3 percent. Home prices increased 1.1 percent in the fourth quarter of 2016 compared to a year ago, while single-family and multifamily permits recorded a 3.9 and -33.8 percent change, respectively, year-to-date through February 2017. In January 2017, crude oil production was down 5.6 percent over last year, and rig counts were well above year-ago levels. Oklahoma exports were 4.9 percent lower in 2016 compared to 2015.

This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: employment; employment by industry; county and state unemployment; personal income; home prices; housing indicators; manufacturing activity; oil, gas and coal production; and exports. These indicators can be found on the following pages.



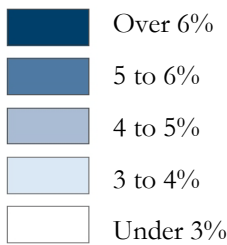
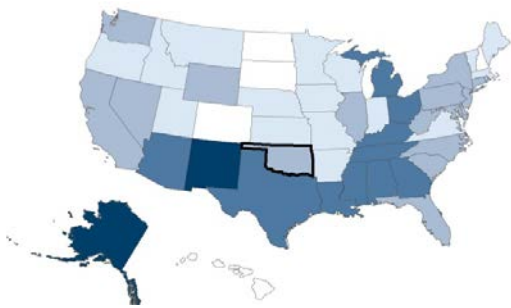
Chad Wilkerson is Vice President and Oklahoma City Branch Executive. In this role, Wilkerson is the Federal Reserve Bank of Kansas City's regional economist and lead officer in Oklahoma. He is responsible for briefing the Kansas City Fed's President on the economy in Oklahoma and the Tenth District.

**Unemployment Rates**

*Seasonally Adjusted*

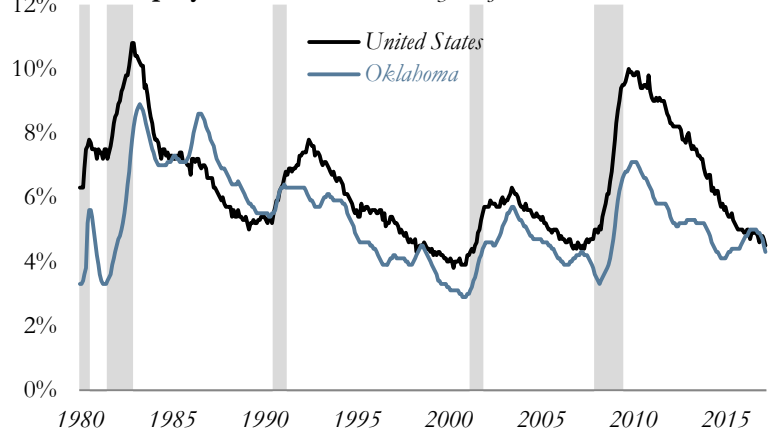
**March 2017 Unemployment Rates**

*Seasonally Adjusted*



| March 2017                   |               |          |
|------------------------------|---------------|----------|
|                              | United States | Oklahoma |
| Unemployment Rate            | 4.5%          | 4.3%     |
| Unemployment Rate, Last Year | 5.0%          | 4.8%     |

**Unemployment Rates, Seasonally Adjusted**



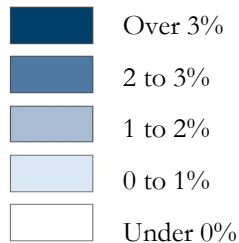
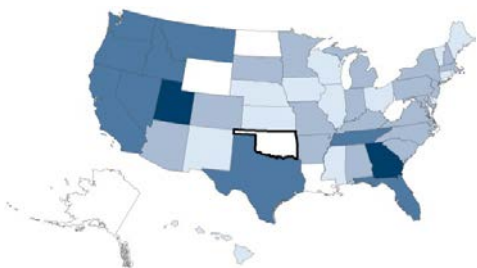
Note: Gray bars indicate recession.

**Payroll Employment**

*Seasonally Adjusted*

**March 2017 Payroll Employment**

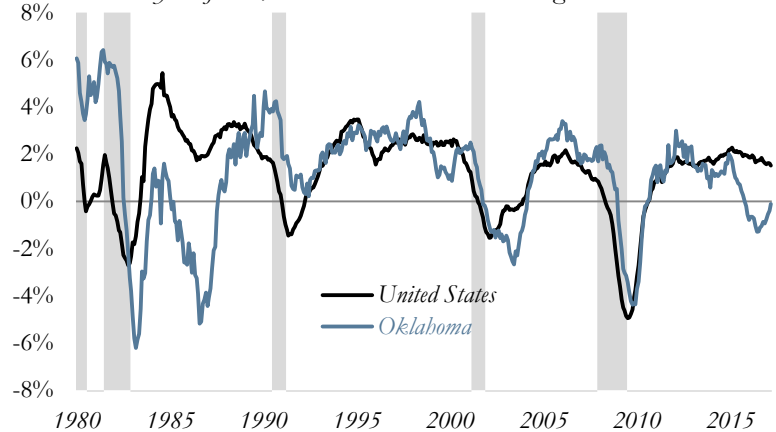
*Seasonally Adjusted, Year-over-Year Percent Change*



| March 2017            |               |          |
|-----------------------|---------------|----------|
|                       | United States | Oklahoma |
| Jobs (Thousands)      | 145,858.0     | 1,655.8  |
| Change from Last Year | 1.5%          | -0.1%    |

**Payroll Employment**

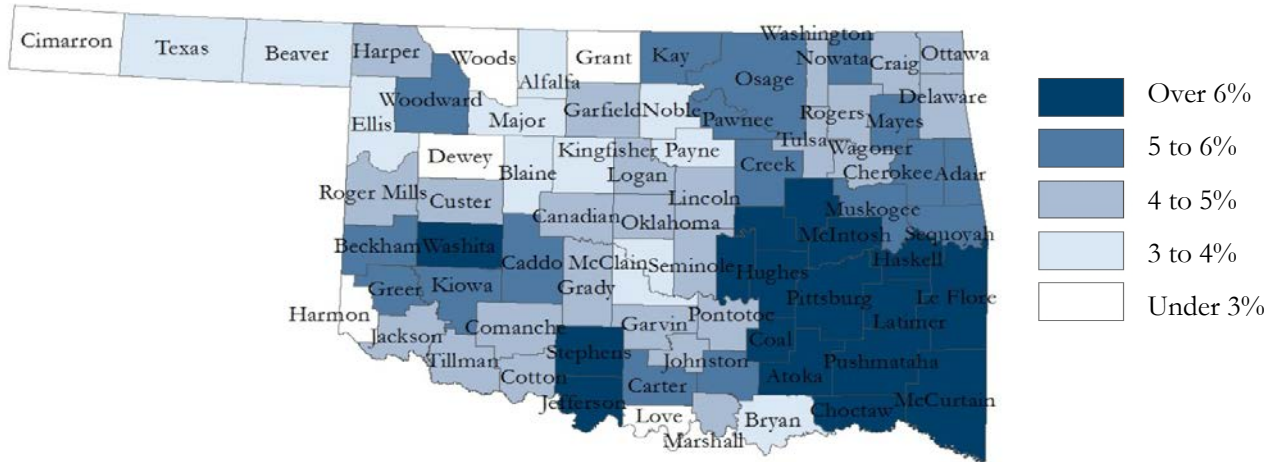
*Seasonally Adjusted, Year-over-Year Percent Change*



Note: Gray bars indicate recession.

Source: Bureau of Labor Statistics/Haver Analytics

**February 2017 Unemployment Rates & Civilian Labor Force**  
*Seasonally Adjusted*



|                      | <i>Percent Unemployed</i> | <i>Labor Force (Thousands)</i> |      | <i>Percent Unemployed</i> | <i>Labor Force (Thousands)</i> |      |      |
|----------------------|---------------------------|--------------------------------|------|---------------------------|--------------------------------|------|------|
| <b>United States</b> | <b>4.7%</b>               | <b>160,056.0</b>               | 19   | Cherokee                  | 5.9                            | 19.3 |      |
| <b>Oklahoma</b>      | <b>4.5</b>                | <b>1,831.8</b>                 | 20   | Nowata                    | 5.9                            | 4.6  |      |
| 1                    | Latimer                   | 8.3                            | 3.5  | 21                        | Beckham                        | 5.8  | 10.0 |
| 2                    | McIntosh                  | 8.3                            | 7.1  | 22                        | Sequoyah                       | 5.7  | 16.9 |
| 3                    | Stephens                  | 7.9                            | 18.1 | 23                        | Pawnee                         | 5.7  | 7.5  |
| 4                    | Haskell                   | 7.2                            | 4.5  | 24                        | Greer                          | 5.7  | 2.2  |
| 5                    | Okmulgee                  | 6.8                            | 16.3 | 25                        | Osage                          | 5.6  | 21.4 |
| 6                    | Choctaw                   | 6.7                            | 5.8  | 26                        | Kiowa                          | 5.6  | 4.1  |
| 7                    | Pushmataha                | 6.6                            | 4.8  | 27                        | Adair                          | 5.4  | 8.1  |
| 8                    | Jefferson                 | 6.6                            | 2.7  | 28                        | Creek                          | 5.4  | 31.5 |
| 9                    | Seminole                  | 6.6                            | 9.2  | 29                        | Muskogee                       | 5.4  | 29.6 |
| 10                   | McCurtain                 | 6.4                            | 15.0 | 30                        | Johnston                       | 5.3  | 4.6  |
| 11                   | Okfuskee                  | 6.3                            | 4.6  | 31                        | Caddo                          | 5.2  | 11.7 |
| 12                   | Hughes                    | 6.3                            | 5.3  | 32                        | Carter                         | 5.1  | 22.7 |
| 13                   | Le Flore                  | 6.2                            | 19.7 | 33                        | Mayes                          | 5.1  | 19.3 |
| 14                   | Washita                   | 6.2                            | 5.1  | 34                        | Woodward                       | 5.0  | 9.5  |
| 15                   | Pittsburg                 | 6.2                            | 17.3 | 35                        | Craig                          | 4.9  | 6.3  |
| 16                   | Coal                      | 6.0                            | 2.3  | 36                        | Marshall                       | 4.9  | 6.6  |
| 17                   | Atoka                     | 6.0                            | 5.0  | 37                        | Garvin                         | 4.9  | 12.6 |
| 18                   | Kay                       | 6.0                            | 18.8 | 38                        | Delaware                       | 4.9  | 18.0 |

Source: Bureau of Labor Statistics/Haver Analytics

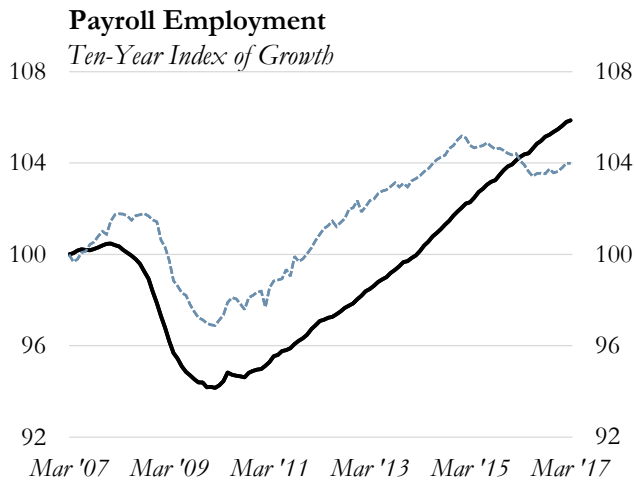
## February 2017 Unemployment Rates &amp; Civilian Labor Force

|    |              | <i>Percent<br/>Unemployed</i> | <i>Labor Force<br/>(Thousands)</i> |    |            | <i>Percent<br/>Unemployed</i> | <i>Labor Force<br/>(Thousands)</i> |
|----|--------------|-------------------------------|------------------------------------|----|------------|-------------------------------|------------------------------------|
| 39 | Rogers       | 4.8                           | 44.9                               | 58 | Pontotoc   | 4.0                           | 18.5                               |
| 40 | Wagoner      | 4.8                           | 36.5                               | 59 | Harper     | 4.0                           | 1.9                                |
| 41 | Lincoln      | 4.7                           | 16.0                               | 60 | McClain    | 4.0                           | 18.9                               |
| 42 | Washington   | 4.7                           | 23.7                               | 61 | Major      | 4.0                           | 4.0                                |
| 43 | Tillman      | 4.6                           | 3.2                                | 62 | Bryan      | 3.9                           | 19.8                               |
| 44 | Ottawa       | 4.6                           | 14.5                               | 63 | Cleveland  | 3.9                           | 140.0                              |
| 45 | Tulsa        | 4.6                           | 319.6                              | 64 | Payne      | 3.8                           | 38.8                               |
| 46 | Grady        | 4.5                           | 26.5                               | 65 | Noble      | 3.7                           | 5.8                                |
| 47 | Pottawatomie | 4.5                           | 33.0                               | 66 | Ellis      | 3.4                           | 2.3                                |
| 48 | Comanche     | 4.5                           | 50.3                               | 67 | Texas      | 3.4                           | 9.5                                |
| 49 | Oklahoma     | 4.3                           | 379.3                              | 68 | Kingfisher | 3.2                           | 8.4                                |
| 50 | Roger Mills  | 4.3                           | 1.8                                | 69 | Blaine     | 3.2                           | 4.2                                |
| 51 | Murray       | 4.3                           | 6.4                                | 70 | Alfalfa    | 3.1                           | 2.9                                |
| 52 | Jackson      | 4.3                           | 11.0                               | 71 | Beaver     | 3.1                           | 2.8                                |
| 53 | Custer       | 4.2                           | 14.8                               | 72 | Love       | 2.9                           | 6.7                                |
| 54 | Garfield     | 4.1                           | 30.4                               | 73 | Woods      | 2.9                           | 5.3                                |
| 55 | Cotton       | 4.1                           | 2.9                                | 74 | Grant      | 2.9                           | 3.0                                |
| 56 | Logan        | 4.1                           | 21.7                               | 75 | Dewey      | 2.8                           | 2.7                                |
| 57 | Canadian     | 4.0                           | 69.1                               | 76 | Harmon     | 2.8                           | 1.3                                |
|    |              |                               |                                    | 77 | Cimarron   | 2.5                           | 1.4                                |

Source: Bureau of Labor Statistics/Haver Analytics

**Payroll Employment**

*Seasonally Adjusted*

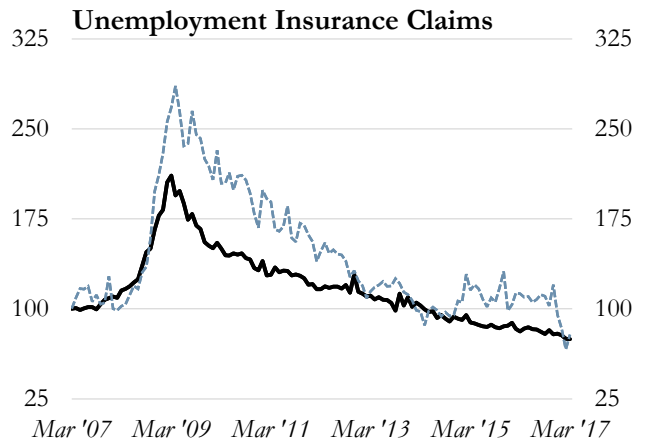
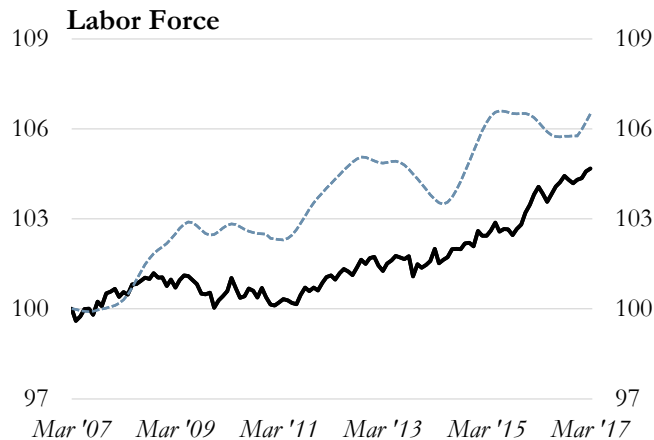
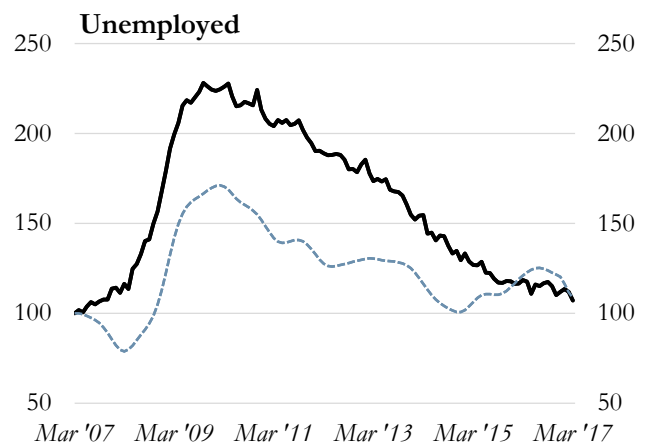
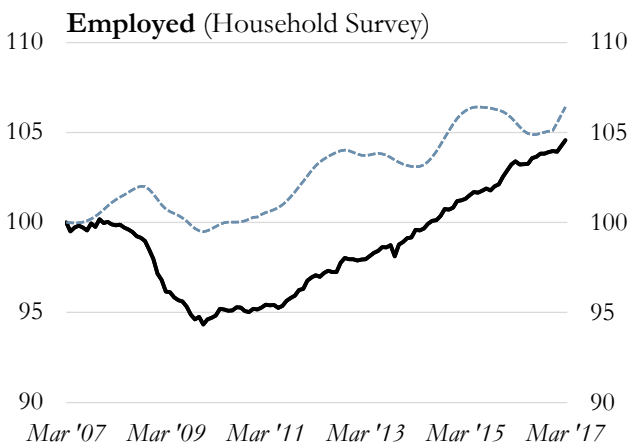


— United States  
- - - Oklahoma

| March 2017                           |               |          |
|--------------------------------------|---------------|----------|
|                                      | United States | Oklahoma |
| Jobs (Thousands)                     | 145,858.0     | 1,655.8  |
| Change from Last Year<br>(Thousands) | 2,185.0       | -1.9     |
| Share of U.S. Employment             |               | 1.1%     |

**Labor Force Dynamics**

*Ten-Year Index of Growth, Seasonally Adjusted*

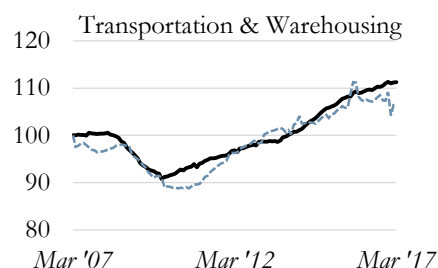
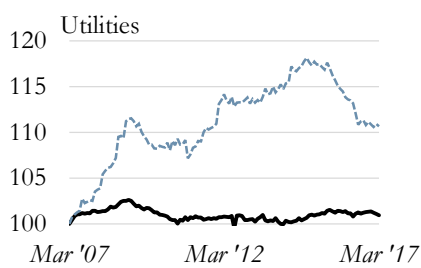
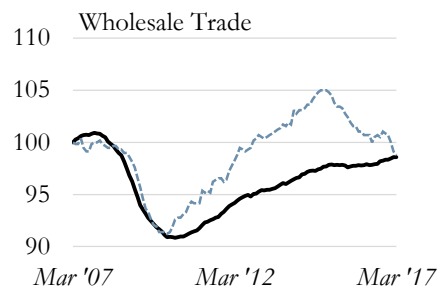
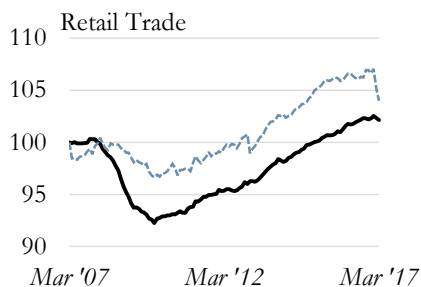
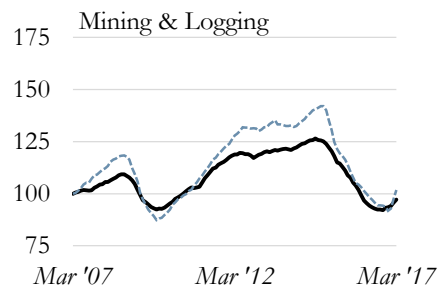
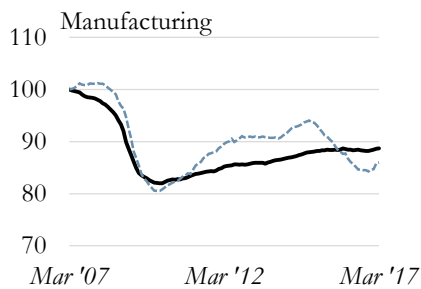
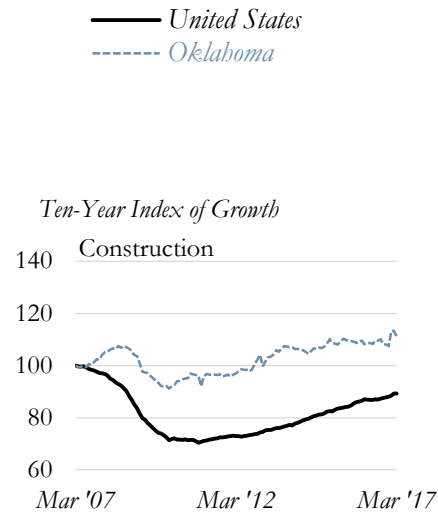
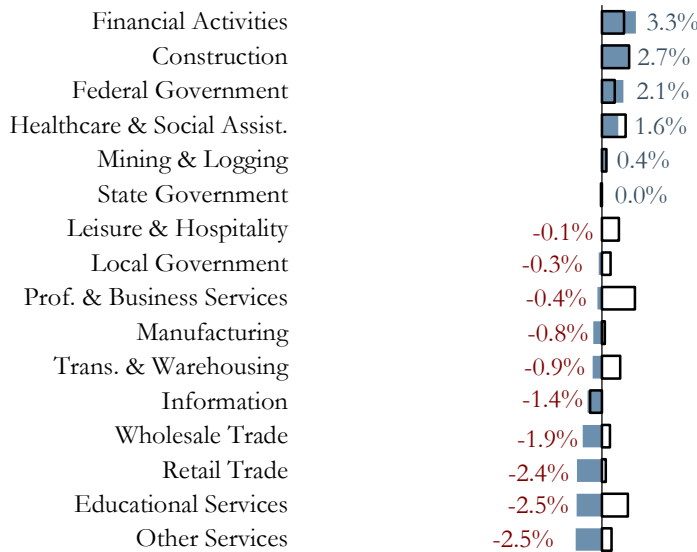


Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

### Payroll Employment by Industry

*Seasonally Adjusted*

**March 2017** *Percent Change Year-over-Year*

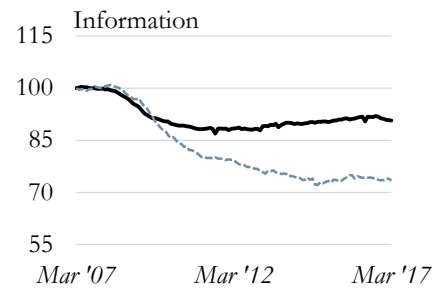


Source: Bureau of Labor Statistics/Haver Analytics

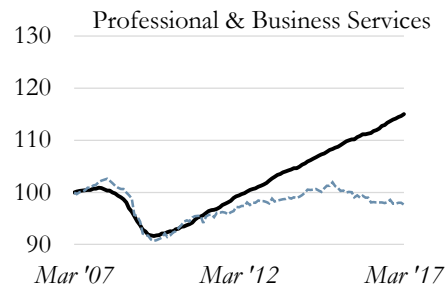
**Payroll Employment by Industry**

Ten-Year Index of Growth, Seasonally Adjusted

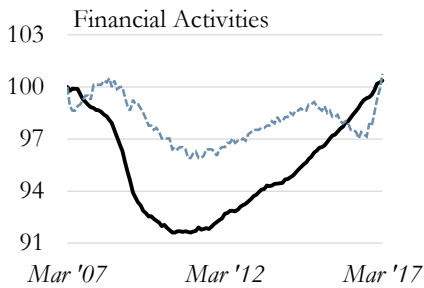
— United States  
 - - - Oklahoma



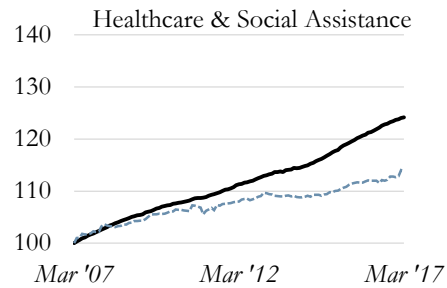
**Share of Jobs**  
 United States 1.9%  
 Oklahoma 1.3%



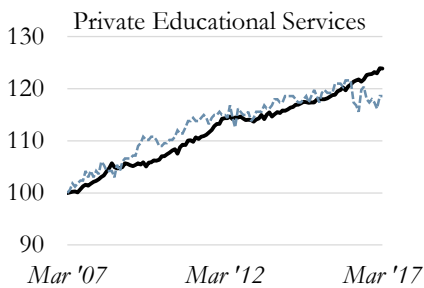
**Share of Jobs**  
 United States 14.1%  
 Oklahoma 10.8%



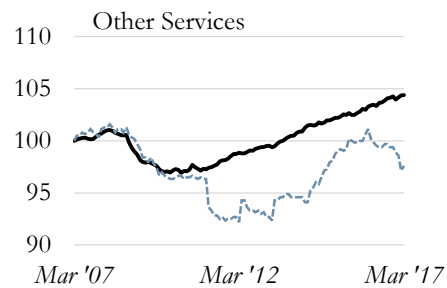
United States 5.8%  
 Oklahoma 4.9%



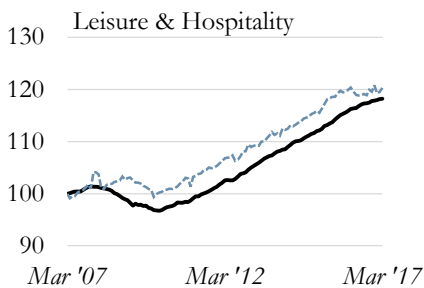
United States 13.3%  
 Oklahoma 13.1%



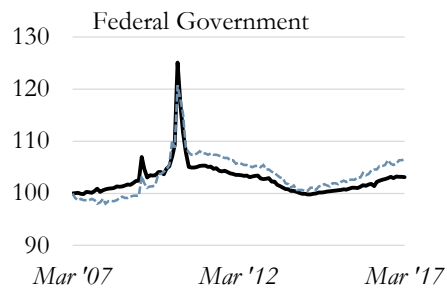
United States 2.5%  
 Oklahoma 1.2%



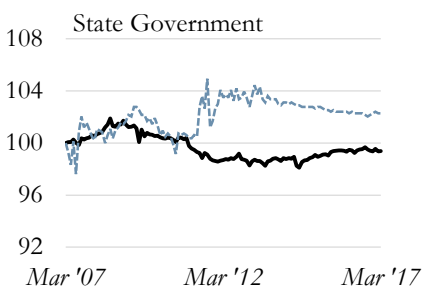
United States 3.9%  
 Oklahoma 3.7%



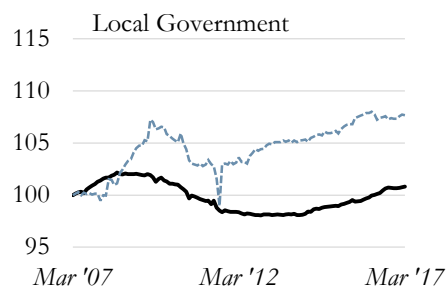
United States 10.8%  
 Oklahoma 10.0%



United States 1.9%  
 Oklahoma 2.9%



United States 3.5%  
 Oklahoma 5.2%

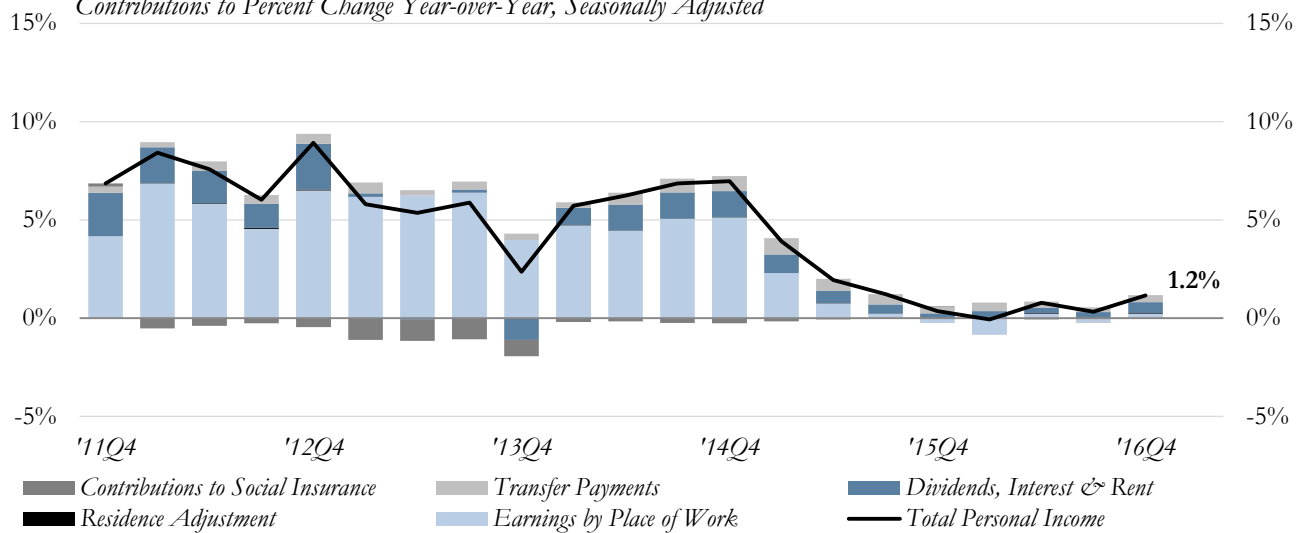


United States 9.9%  
 Oklahoma 13.3%

Source: Bureau of Labor Statistics/Haver Analytics

### Oklahoma Nominal Personal Income Growth

*Contributions to Percent Change Year-over-Year, Seasonally Adjusted*

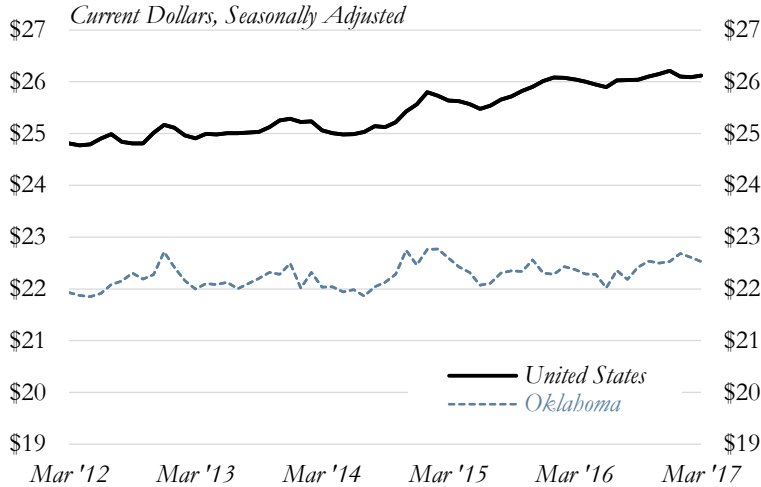


| 2016Q4                          | Percent Change Year-over-Year |             | Share of Personal Income |          |
|---------------------------------|-------------------------------|-------------|--------------------------|----------|
|                                 | United States                 | Oklahoma    | United States            | Oklahoma |
| <b>Total Personal Income</b>    | <b>3.7%</b>                   | <b>1.2%</b> |                          |          |
| Earnings by Place of Work       | 3.8%                          | 0.3%        | 72.0%                    | 71.2%    |
| Social Insurance Contributions* | -3.6%                         | -0.2%       | -7.8%                    | -6.9%    |
| Residence Adjustment            |                               | 6.5%        |                          | 0.5%     |
| Dividends, Interest & Rent      | 3.3%                          | 3.3%        | 18.5%                    | 17.5%    |
| Transfer Payments               | 3.7%                          | 2.0%        | 17.3%                    | 17.7%    |

\*Subtracted from personal income.

### Real Average Hourly Wage

*Current Dollars, Seasonally Adjusted*



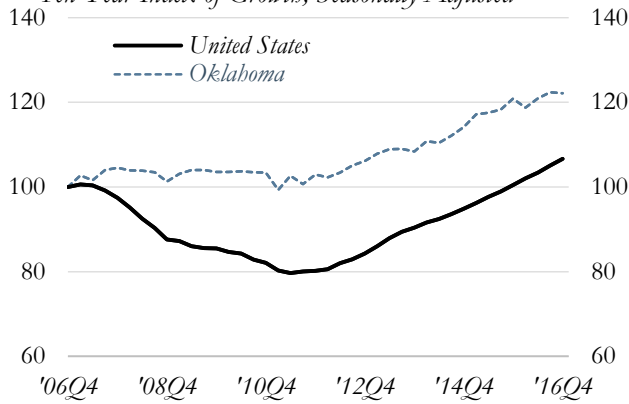
| March 2017              |               |          |
|-------------------------|---------------|----------|
| Average Hourly Wage     | United States | Oklahoma |
|                         | \$26.12       | \$22.53  |
| <i>Real Change from</i> |               |          |
| Last Month              | 0.1%          | -0.3%    |
| Last Year               | 0.3%          | 0.7%     |

Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

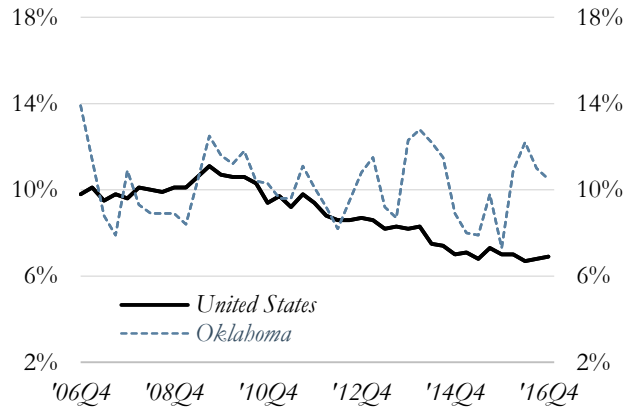


### FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted

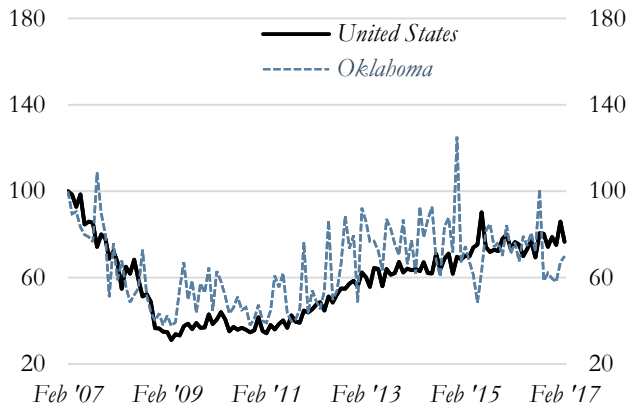


### Rental Vacancy Rates



### Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted

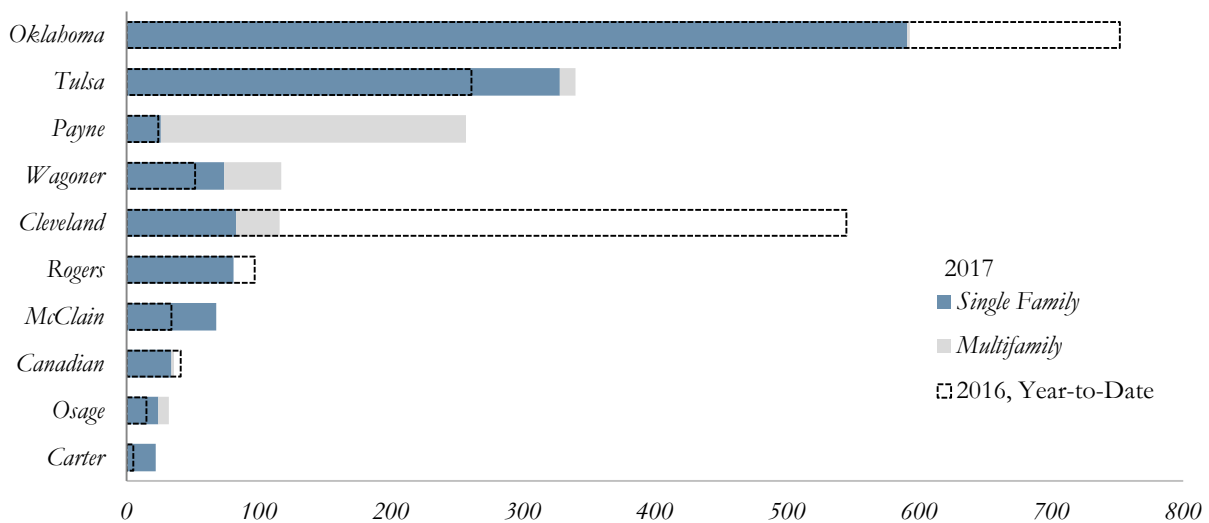


| Summary Statistics      |               |          |
|-------------------------|---------------|----------|
|                         | United States | Oklahoma |
| Prices (2016Q4)*        | 6.2%          | 1.1%     |
| Vacancy Rates (2016Q4)  | 6.9%          | 10.5%    |
| Permits (Year-to-Date)* |               |          |
| Single Family           | 13.0%         | 3.9%     |
| Multifamily             | -0.8%         | -33.8%   |

\*Percent change year-over-year.

### Top 10 Oklahoma Counties for Permit Activity

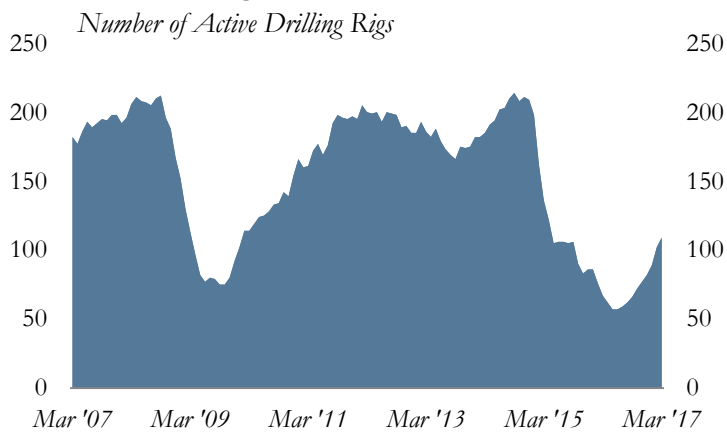
Year-to-Date through February



Source: Federal Housing Finance Agency (FHFA) & Census Bureau/Haver Analytics

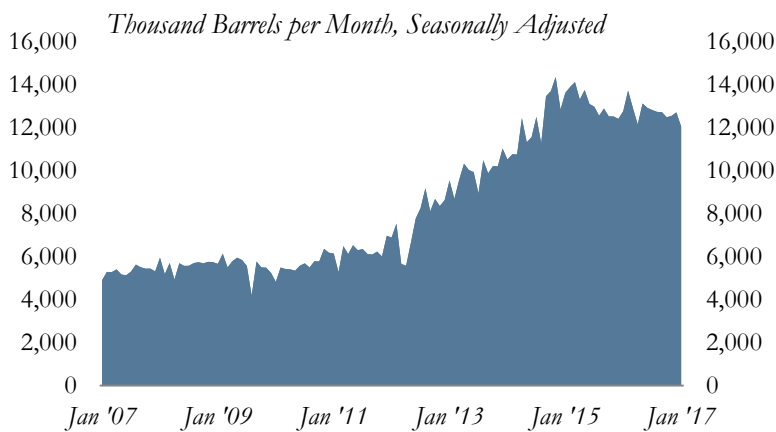
### Oklahoma Energy Activity

#### Oil & Gas Rig Counts



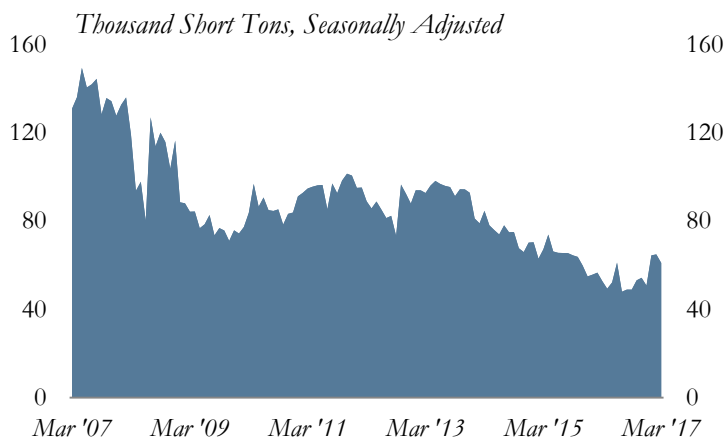
| March 2017             |               |          |
|------------------------|---------------|----------|
|                        | United States | Oklahoma |
| Rig Count              | 789           | 109      |
| <i>Change from</i>     |               |          |
| Last Month             | 45            | 7        |
| Last Year              | 312           | 42       |
| Share of U.S. Activity |               | 13.8%    |

#### Crude Oil Production



| January 2017           |               |          |
|------------------------|---------------|----------|
|                        | United States | Oklahoma |
| Production             | 268,365       | 12,062   |
| <i>Change from</i>     |               |          |
| Last Month             | 1.0%          | -5.2%    |
| Last Year              | -3.9%         | -5.6%    |
| Share of U.S. Activity |               | 4.5%     |

#### Coal Production

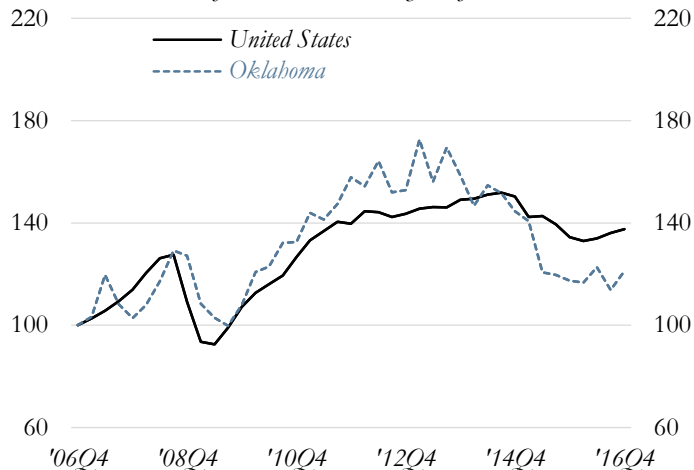


| March 2017             |               |          |
|------------------------|---------------|----------|
|                        | United States | Oklahoma |
| Production             | 66,102        | 61       |
| <i>Change from</i>     |               |          |
| Last Month             | -5.1%         | -6.0%    |
| Last Year              | 18.0%         | 15.6%    |
| Share of U.S. Activity |               | 0.1%     |

Source: Baker Hughes & Department of Energy, Energy Information Administration/Haver Analytics

**Global Exports**

*Ten-Year Index of Growth, Seasonally Adjusted*

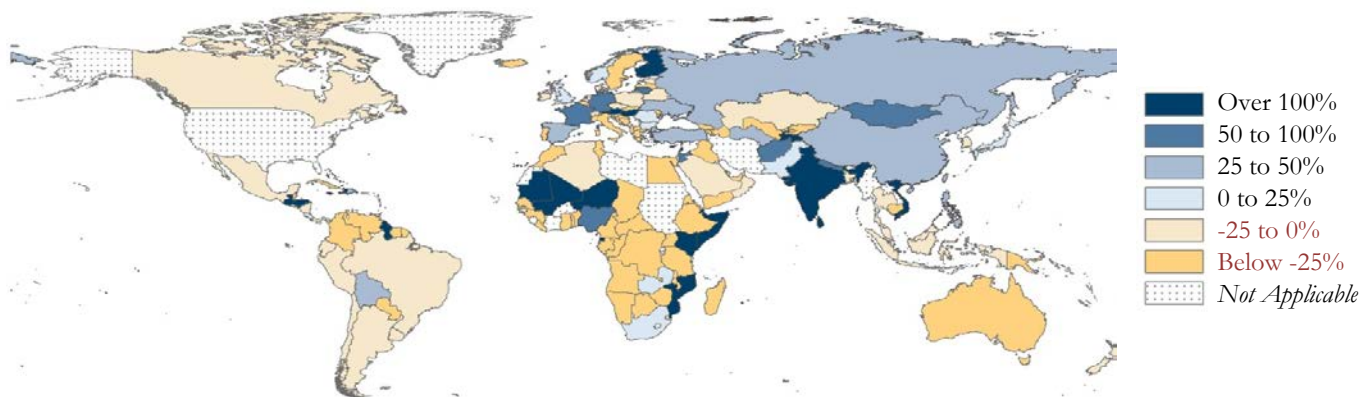


| 2016Q4                   |               |           |
|--------------------------|---------------|-----------|
|                          | United States | Oklahoma  |
| Exports (Millions)       | \$369,740.1   | \$1,277.4 |
| <i>Change from</i>       |               |           |
| Last Quarter             | 1.0%          | 6.5%      |
| Last Year (year-to-date) | -3.3%         | -4.9%     |
| Share of U.S. Activity   |               | 0.3%      |

| 2015           |               |          |
|----------------|---------------|----------|
| Exports as a   | United States | Oklahoma |
| Percent of GDP | 8.3%          | 2.8%     |

**Oklahoma Exports Year-to-Date through 2016Q4**

*Percent Change Year-over-Year*



| Top Markets      | Share |
|------------------|-------|
| 1 Canada         | 27.9% |
| 2 Mexico         | 10.7  |
| 3 Germany        | 7.4   |
| 4 China*         | 5.4   |
| 5 Japan          | 4.7   |
| 6 Singapore      | 4.7   |
| 7 India          | 3.4   |
| 8 Netherlands    | 3.1   |
| 9 United Kingdom | 2.6   |
| 10 Saudi Arabia  | 1.9   |

| Top Exports                        | Share |
|------------------------------------|-------|
| 1 Machinery (Except Electrical)    | 19.6% |
| 2 Transportation Equip.            | 14.1  |
| 3 Computers & Electronics          | 13.2  |
| 4 Fabricated Metal Products        | 12.8  |
| 5 Chemicals & Rare Earth Materials | 8.0   |
| 6 Food                             | 7.4   |
| 7 Electronic Equip. & Appliances   | 6.9   |
| 8 Plastics & Rubber Products       | 3.3   |
| 9 Agriculture & Livestock          | 3.0   |
| 10 Primary Metals                  | 2.2   |

\*China includes Hong Kong, Taiwan, and Macao.

Source: Census Bureau, WISERTrade & Bureau of Economic Analysis/Haver Analytics

*Pages 2 - 4:* County unemployment rates typically lag state data releases by one month. Gray bars show recessionary periods as designated by the National Bureau of Economic Research. The "official" and most commonly reported unemployment rate is calculated as the number of unemployed workers divided by the total civilian labor force. These data are reported from the Bureau of Labor Statistics Current Population Survey, or commonly called the "Household" survey.

*Page 5:* Nonfarm employment data from the Bureau of Labor Statistics Current Employment Survey are commonly called "Payroll" employment data. Estimates from this survey are revised throughout the year and a major revision or "benchmark" of the data occurs in March of each year. "Payroll" and "Household" surveys are released monthly, providing the most current estimates of employment published by the Bureau of Labor Statistics. Because methodologies differ between surveys, employment estimates also differ. For more information, visit:

[http://www.bls.gov/web/emp/sit/ces\\_cps\\_trends.pdf](http://www.bls.gov/web/emp/sit/ces_cps_trends.pdf)

Initial claims show monthly applications for initial claims for state unemployment insurance benefits.

*Pages 6 and 7:* Payroll employment by industry is shown for each of the major two-digit North American Industrial Classification System industries.

*Page 8:* Personal income provides a measure of all income received by residents of a given geographic area. Data shown are in nominal terms (not adjusted for inflation). Transfer payments include social benefits such as unemployment insurance, Social Security, and Medicaid. Contributions to social insurance are subtracted from personal income. These contributions include taxes paid by businesses and employees that support social insurance programs such as unemployment insurance, Social Security, and Medicaid. The residence adjustment adds income received outside of a recipient's state of residence and makes a corresponding subtraction from the area where this income was earned or received. Real average hourly wages are calculated as total earnings divided by total employment for a given geographic area. Data are adjusted for inflation using the consumer price index for all urban areas (CPI-U) and are indexed to the most current month of data.

*Page 9:* Home price indices estimate regional growth in home values based on repeat sales data for detached single family residential properties. Monthly single and multifamily housing permits data are not revised, and therefore, may not sum to published year-end totals.

*Page 10:* The active rig count is the number of rigs actively exploring for or developing oil or natural gas. Rig counts provide an indicator of new drilling activity and potential for expanded crude oil or natural gas production. Coal production is shown as production during a given month.

*Page 11:* Exports measure the total physical movement of a given product from the United States to a foreign country.

**Data Revisions**

Most data are revised periodically to correct for errors and incorporate additional information as it becomes available. Data shown in this report are subject to change.

**Seasonal Adjustments**

Most data are seasonally adjusted to remove variance caused by seasonal fluctuations in economic activity. Data in this report show the seasonal adjustments of data publishers where available. In other cases, Census X-12 adjustments were applied.

*Regional Economic Analysis*

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