

U.S. and Oklahoma Economic Update

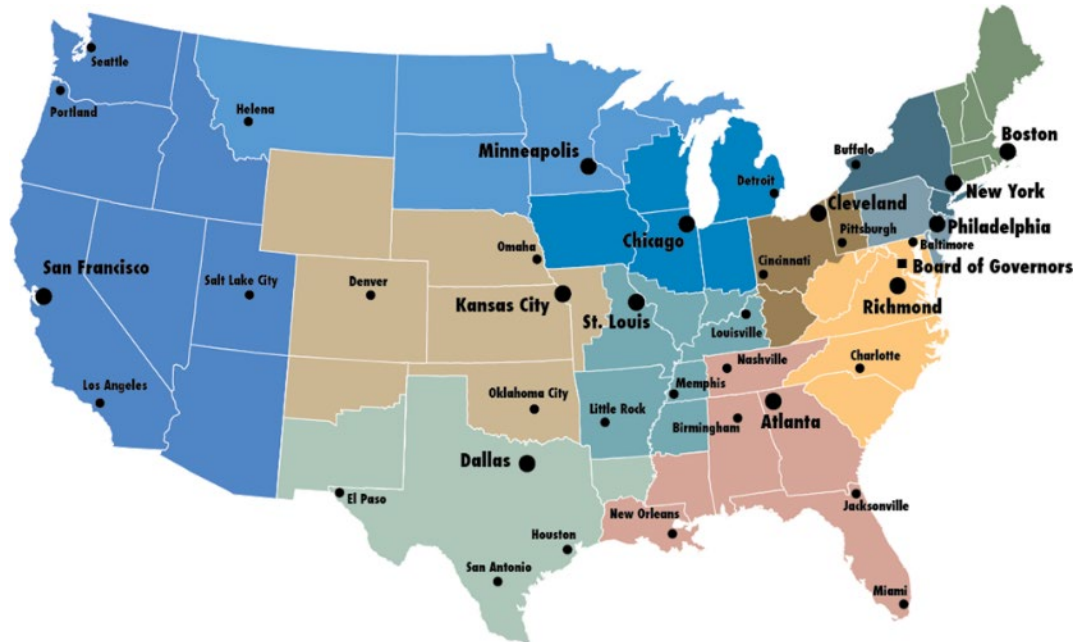
Council of Petroleum Accountants Societies
September 19, 2019

Chad Wilkerson
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.



Structure & Functions of the Federal Reserve



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 ~ 45 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

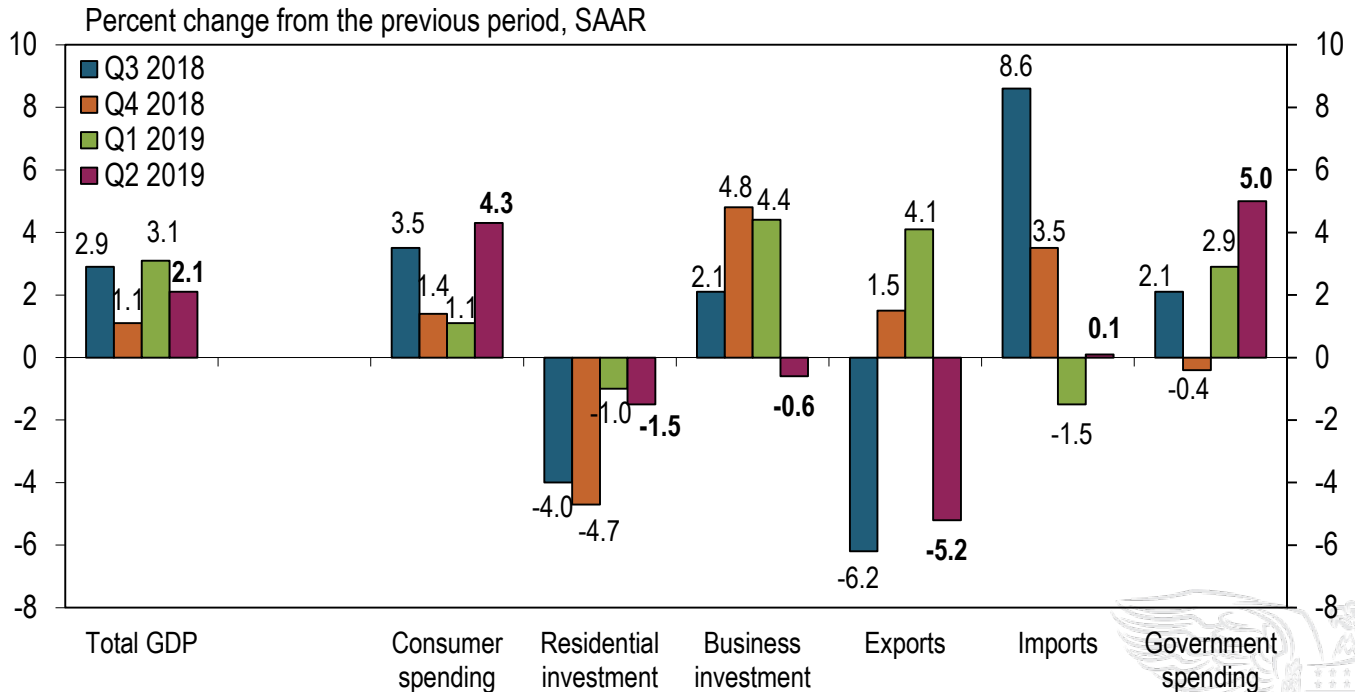


U.S. Economic Outlook and Monetary Policy



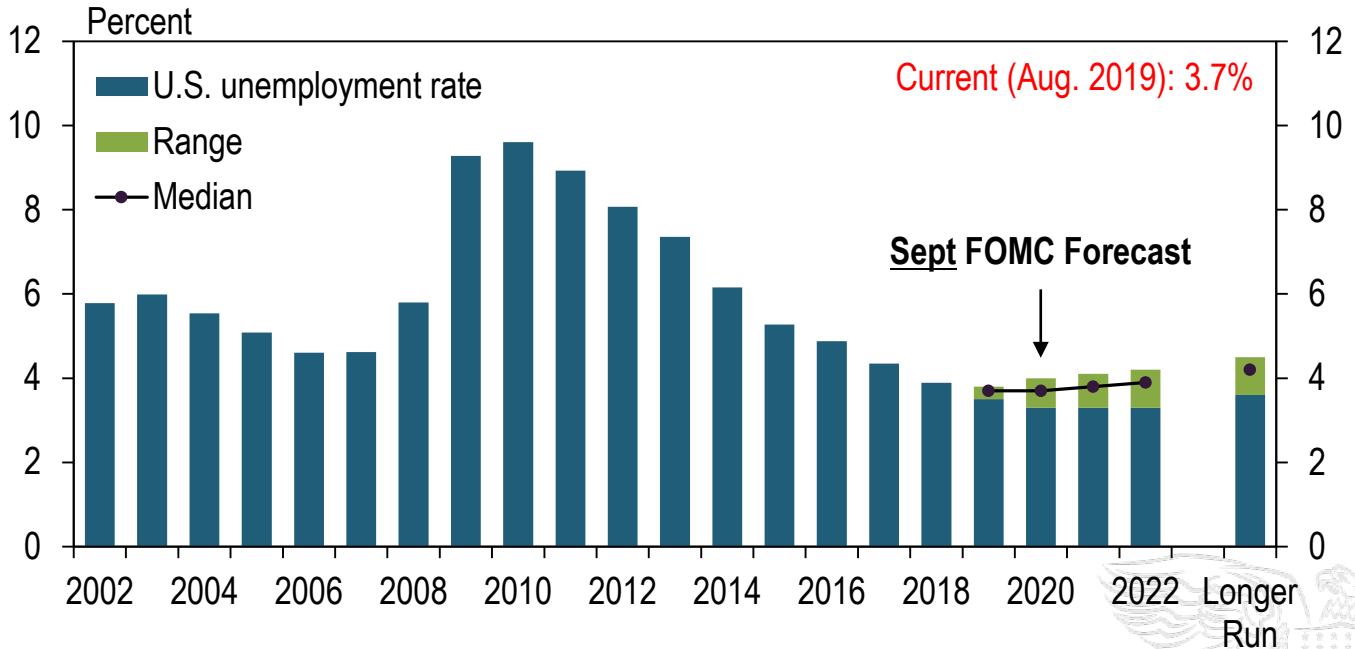
Sept. FOMC: “household spending has been...strong... business fixed investment and exports have weakened..”

Contributions to Percent Change in Real GDP



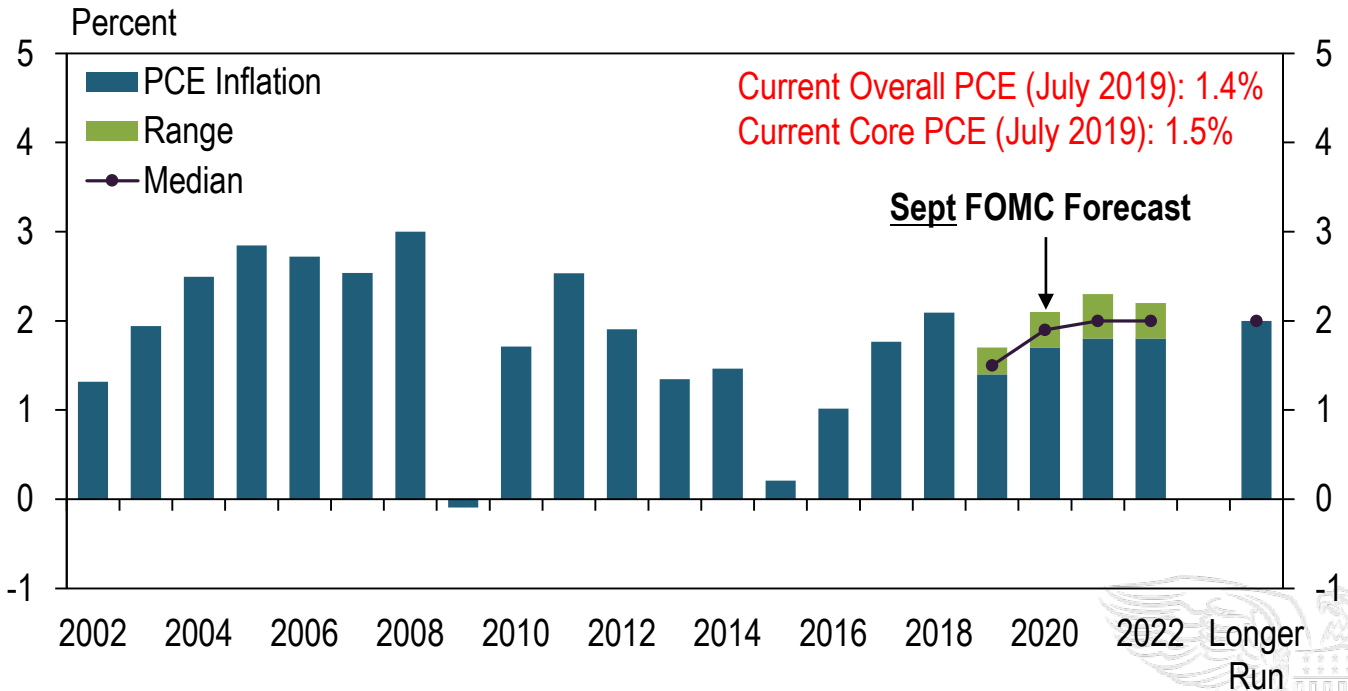
Sept. FOMC: “The labor market remains strong and...the unemployment rate has remained low.”

U.S. Unemployment Rate



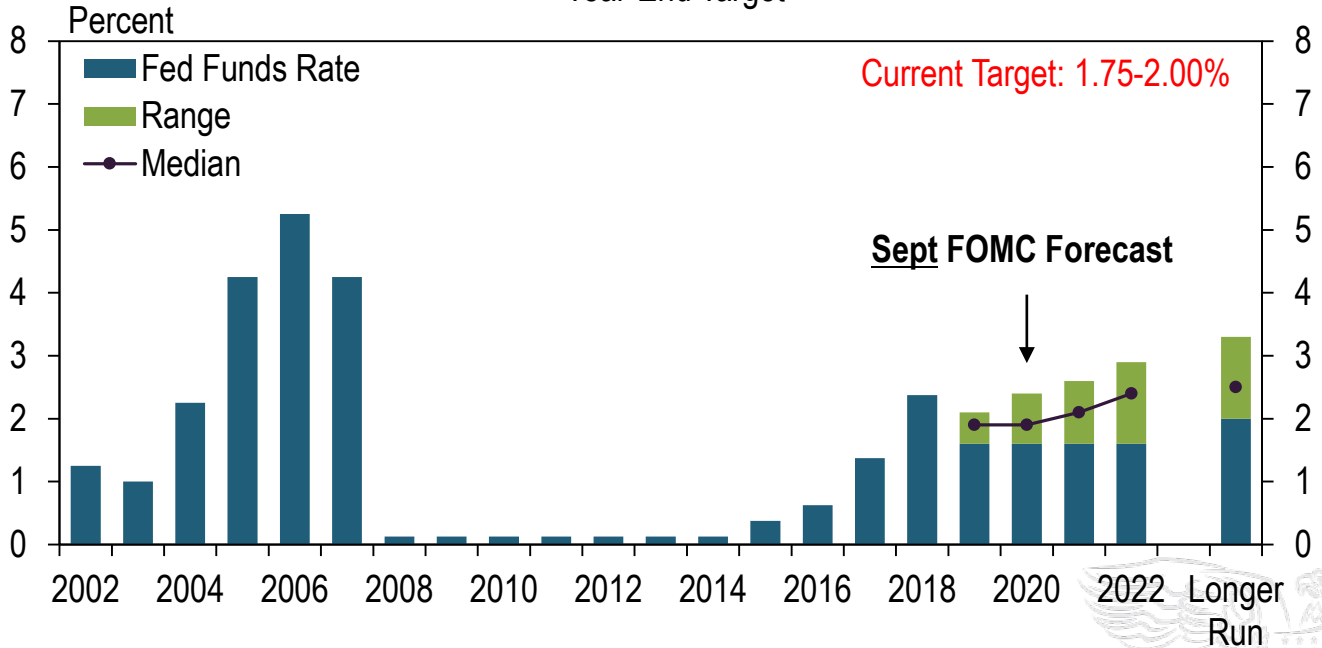
Sept. FOMC: “Overall inflation and inflation for items other than food and energy are running below 2%”

PCE Inflation Index



Sept. FOMC: “In light of...global developments...muted inflation ...the [FOMC] decided to lower the...rate.”

Federal Funds Rate
Year-End Target



From September 18, 2019 FOMC Statement

“In light of the implications of global developments for the economic outlook as well as muted inflation pressures, the Committee decided to lower the target range for the federal funds rate to 1-3/4 to 2 percent.

This action supports the Committee's view that sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective are the most likely outcomes, but uncertainties about this outlook remain...

“Voting against the action were James Bullard, who preferred at this meeting to lower the target range for the federal funds rate to 1-1/2 to 1-3/4 percent; and Esther L. George and Eric S. Rosengren, who preferred to maintain the target range at 2 percent to 2-1/4 percent.”

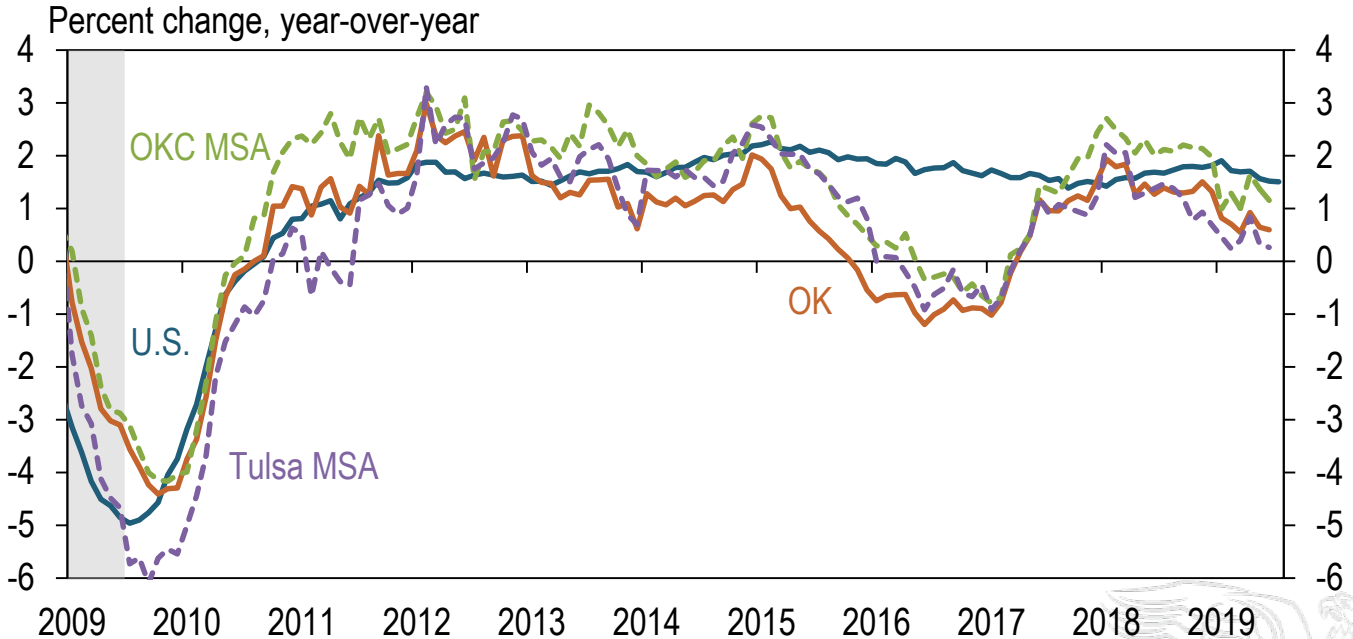


Oklahoma Economic Outlook

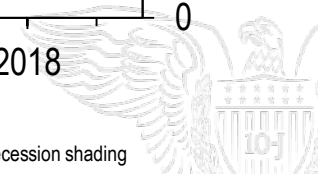
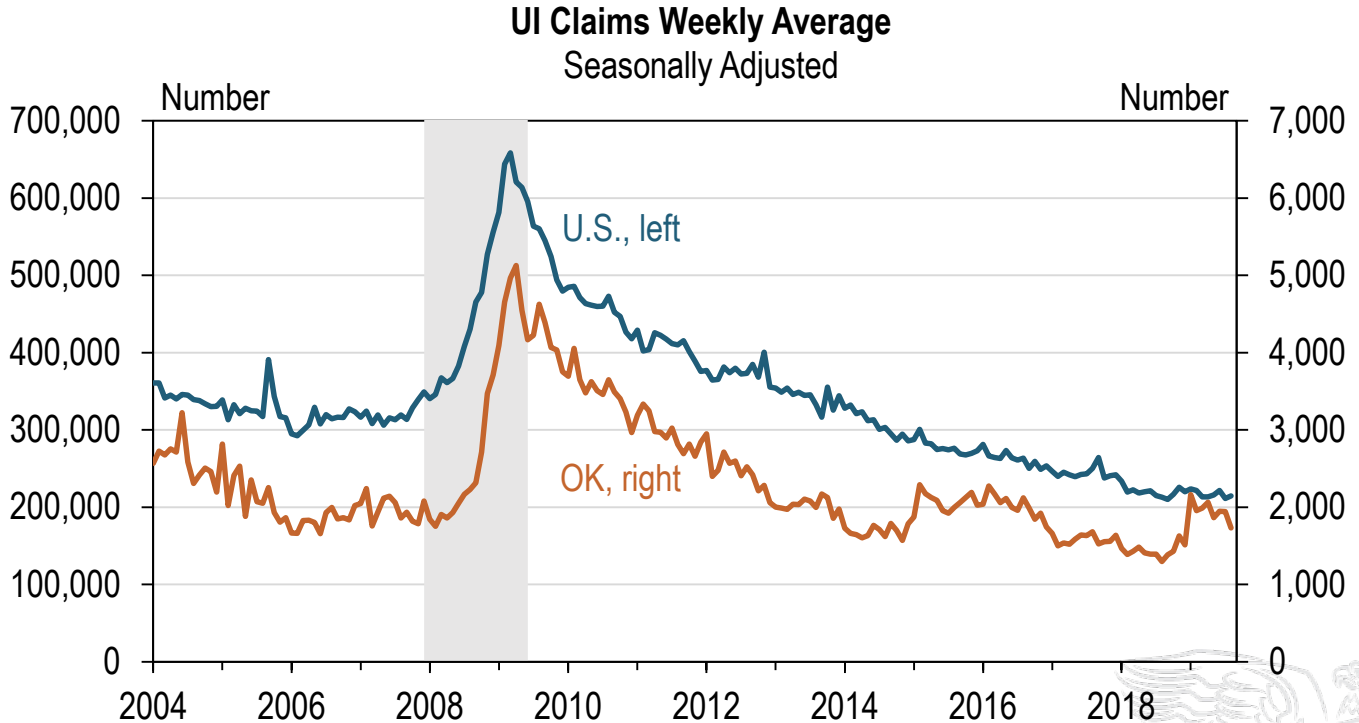


The pace of Oklahoma job growth has slowed in 2019 and has now mostly lagged the nation since 2015

Nonfarm Payroll Employment Growth

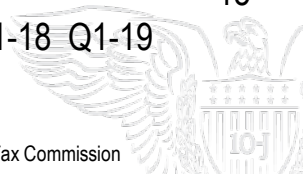
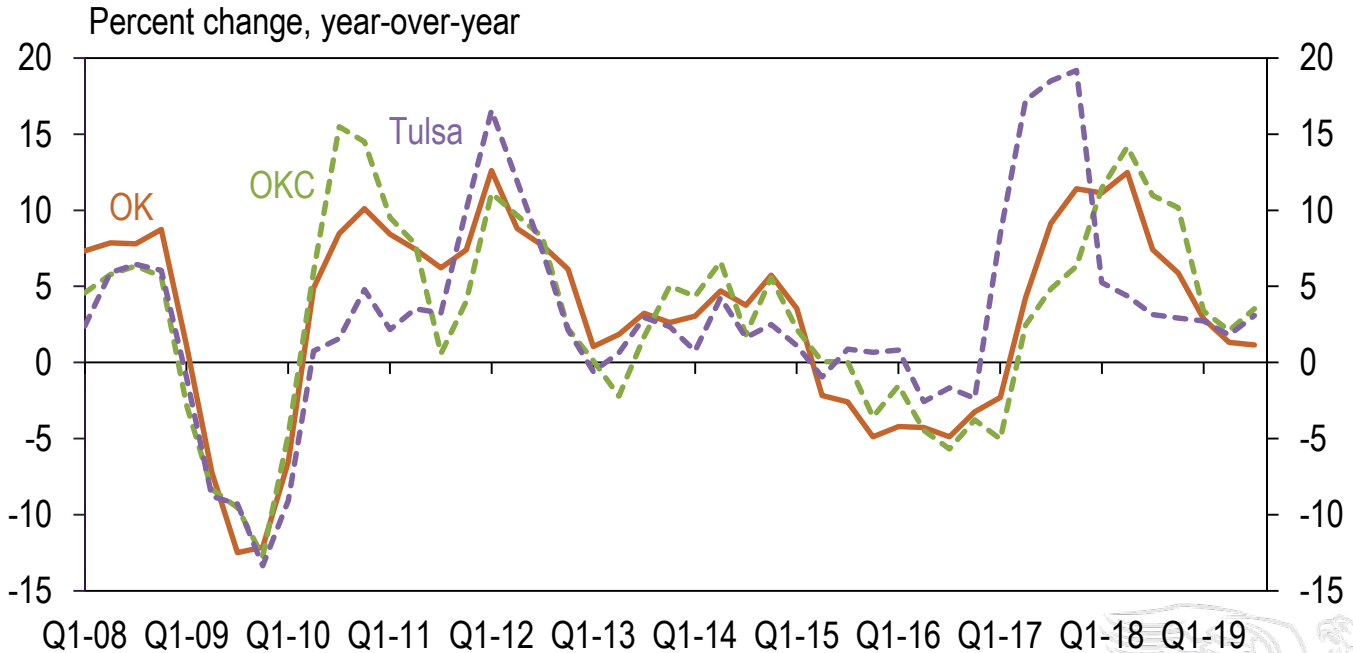


New claims for unemployment insurance in Oklahoma recently returned to 2015-2016 levels, before dipping



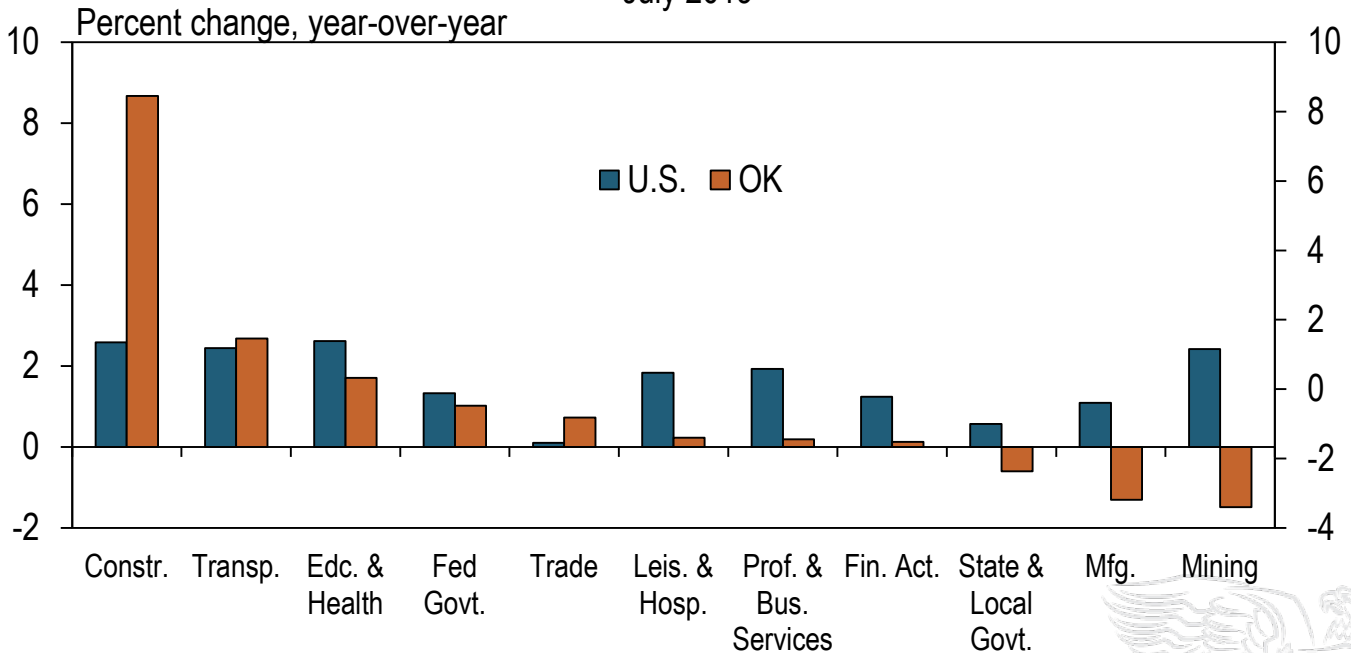
State sales tax growth also eased in early 2019 but picked back up in the metros so far in Q3

Oklahoma and Metro Sales Tax Revenues



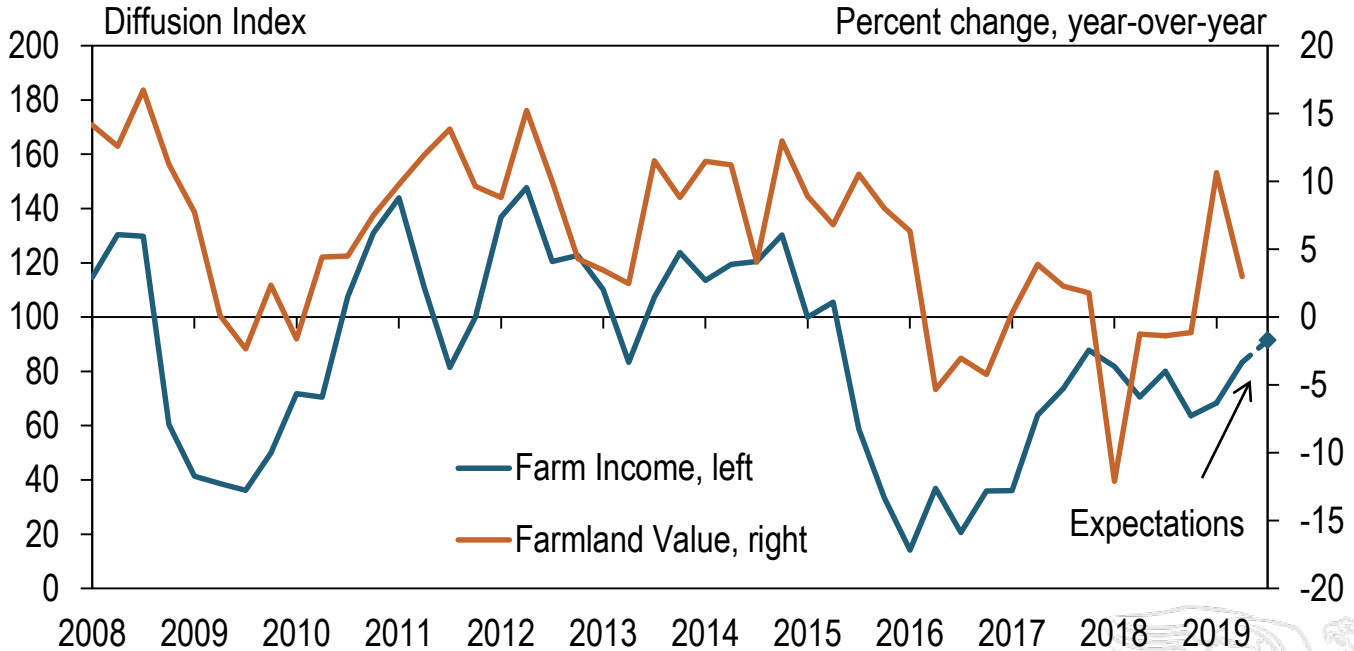
The slower state job growth recently has been driven mainly by job losses in energy and manufacturing

Job Growth by Industry
July 2019



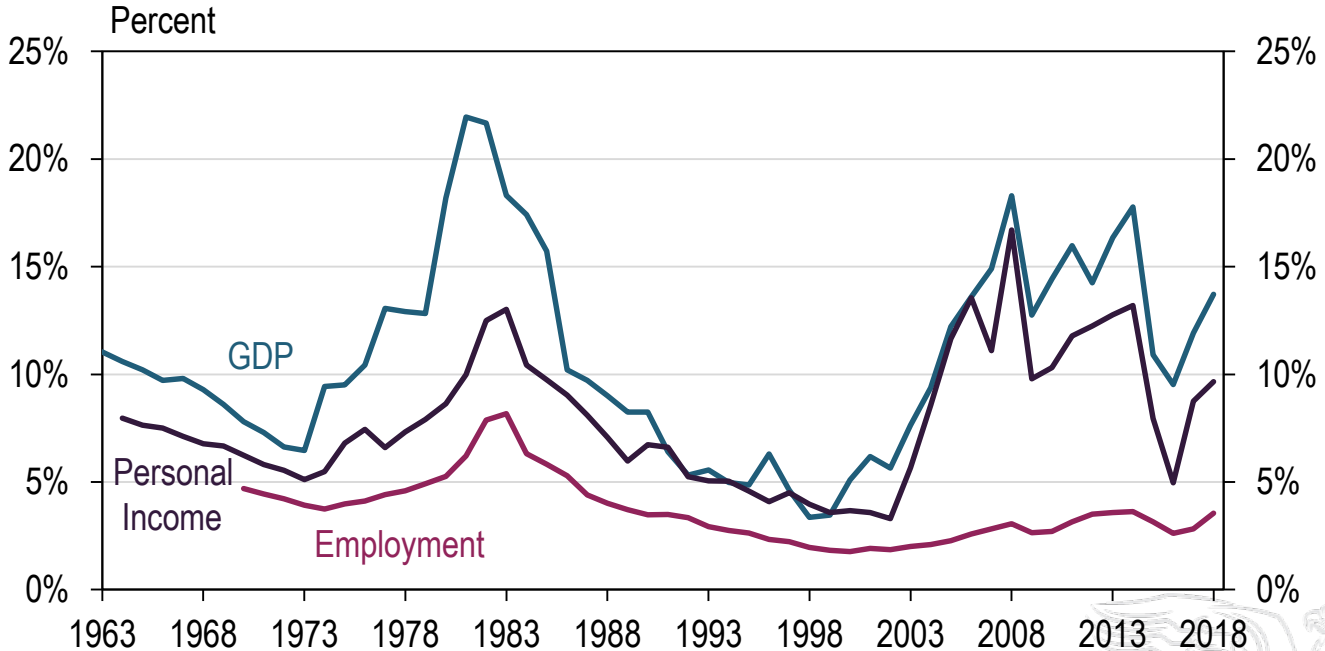
In agriculture, incomes have continued to decline, but by less than in recent years, and land values have held

Oklahoma Farm Income and Farmland Values



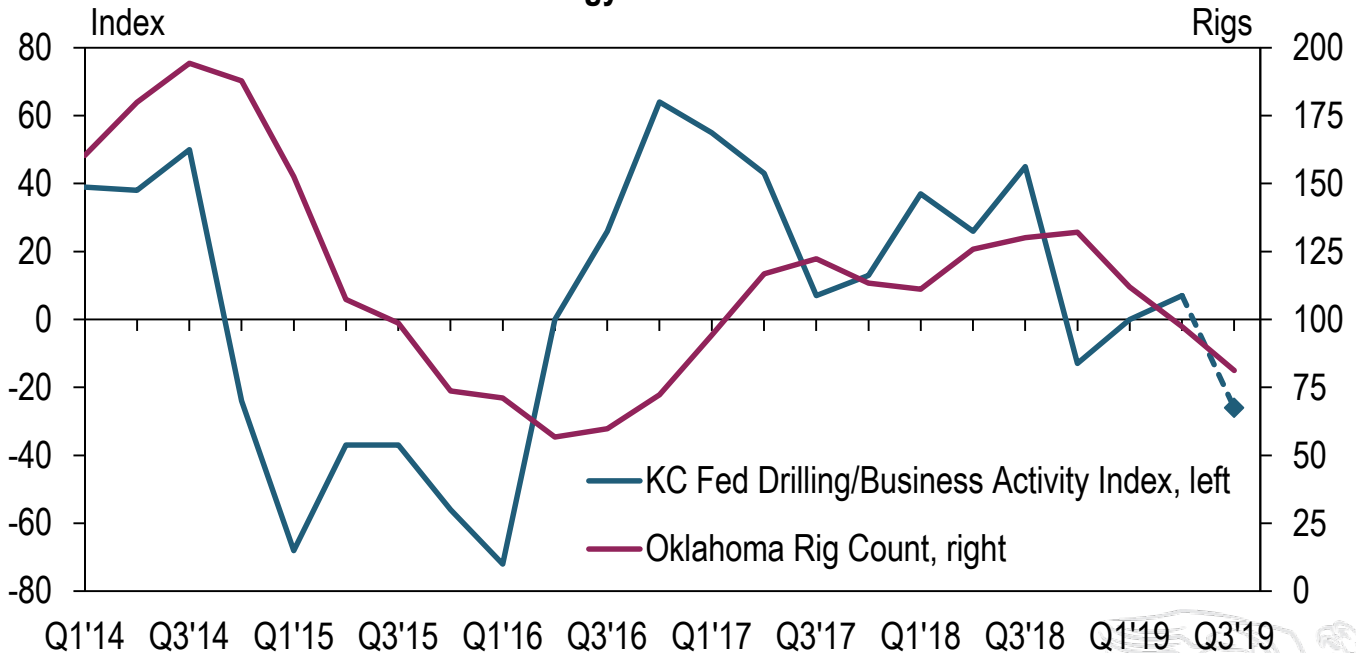
Oil and gas's share of Oklahoma's economy remains high in terms of GDP and income, less so in jobs

Mining Sector Share of Oklahoma Economic Activity



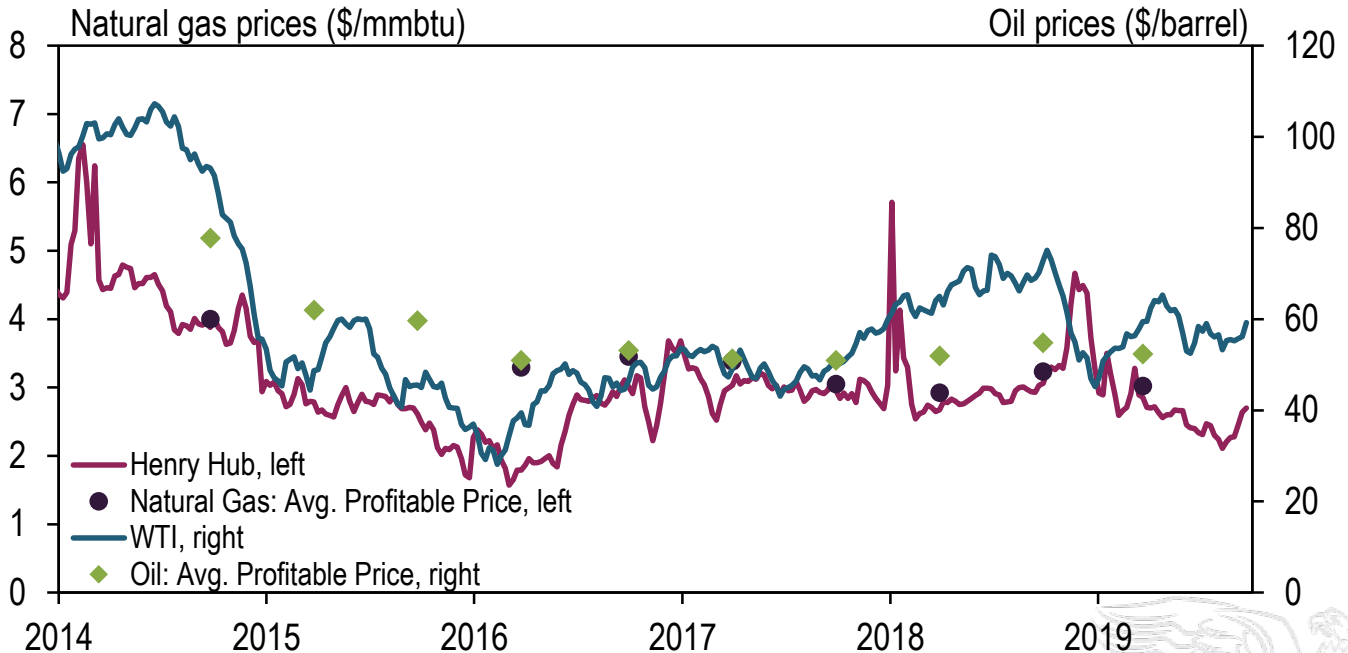
Oklahoma's rig count has dropped this year, and regional energy firms expect further slowing ahead

Energy Sector Indicators



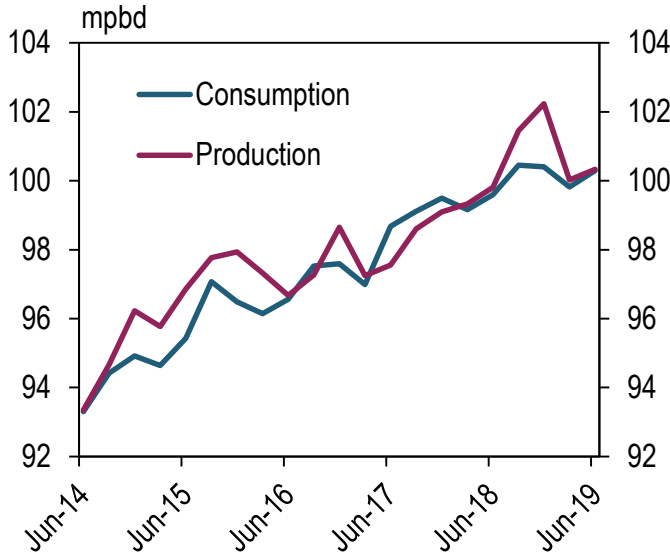
Volatile and marginally profitable oil prices, plus low natural gas prices, have contributed to slower activity

Oil & Natural Gas Profitability and Prices

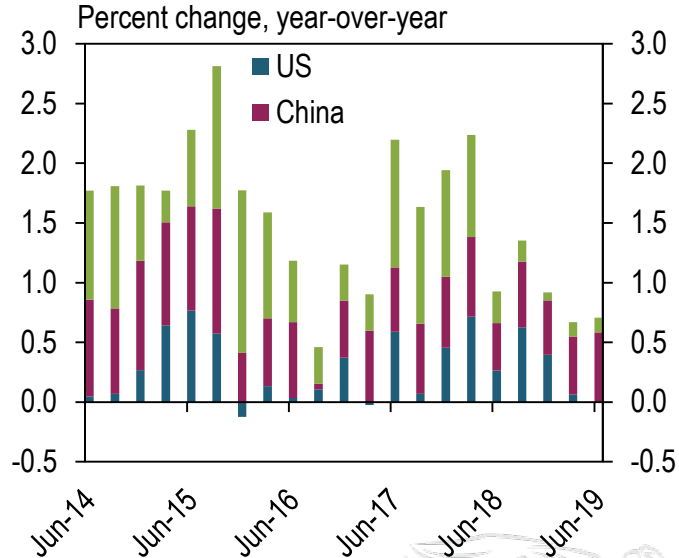


Global supply and demand for oil appears aligned, but is being held together in part from Chinese demand

Global Petroleum Consumption and Production

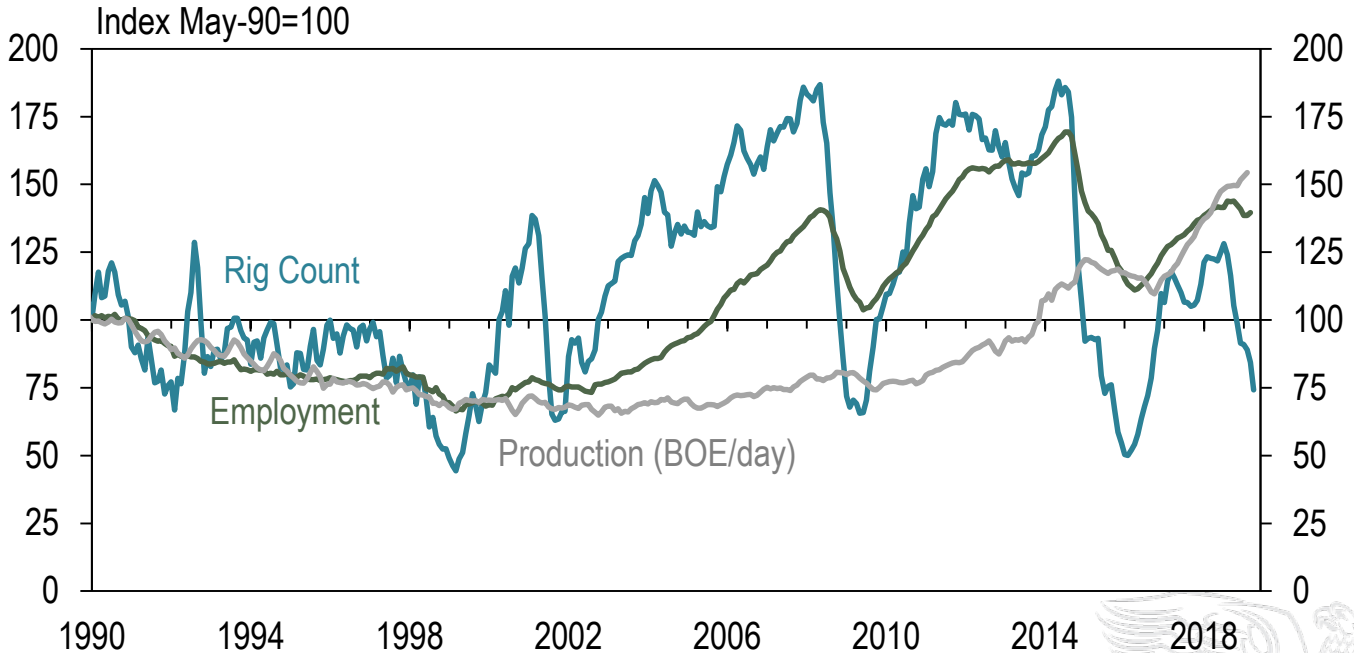


Contributions to Change in Global Petroleum Consumption



Even with fewer Oklahoma rigs and workers this year, oil and gas production in the state continues to rise

Oklahoma Oil & Gas Rig Count, Employment, and Production



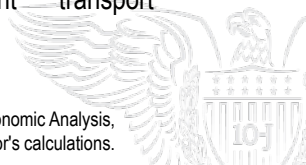
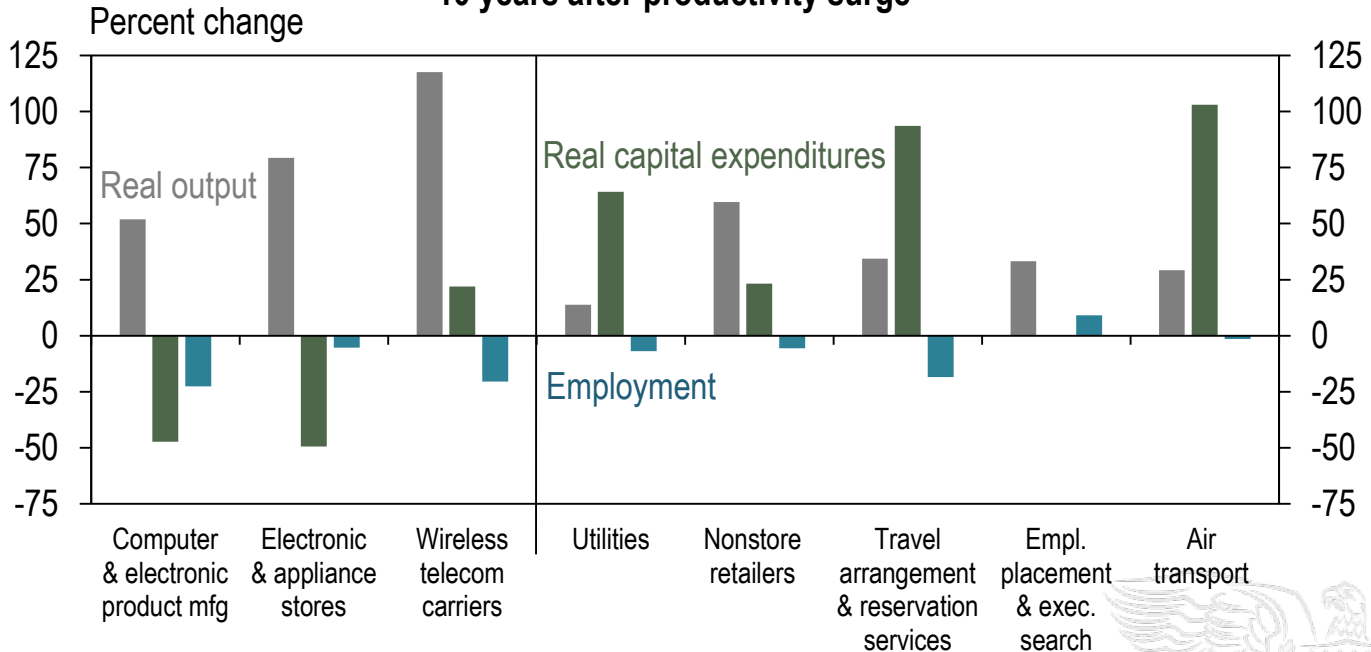
Note: Employment is for total mining and logging, which in Oklahoma is almost completely oil and gas related. Production is shown as a 3-month moving average.

Sources: Baker Hughes, U.S. Energy Information Administration



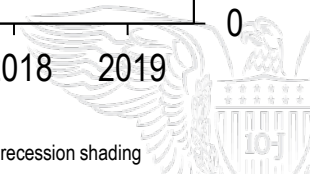
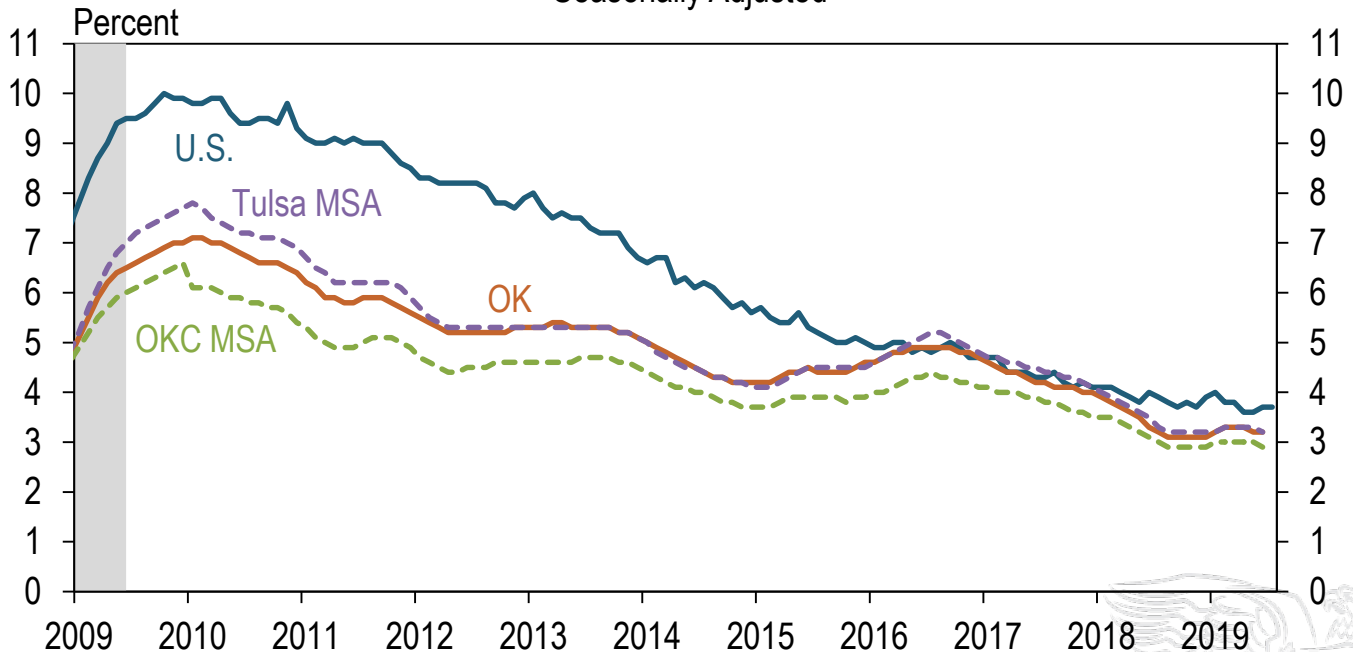
Past industries with rapid productivity gains generally shed jobs the following decade, even as output rose

Change in output, investment, and employment
10 years after productivity surge



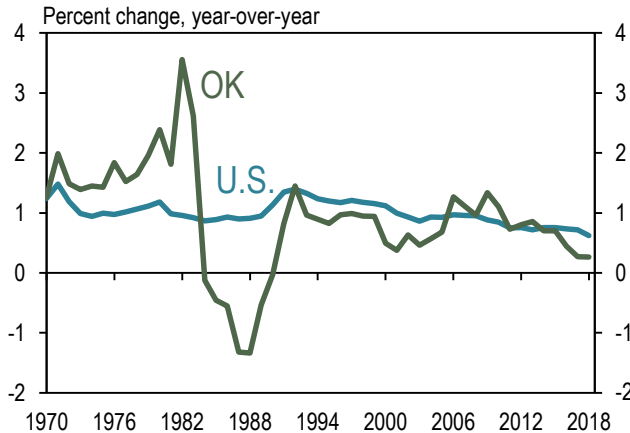
Despite slower state and metro economic growth recently, unemployment remains exceptionally low

Unemployment Rates
Seasonally Adjusted

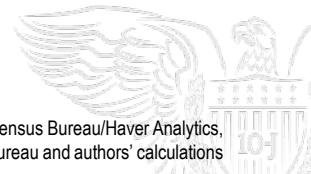
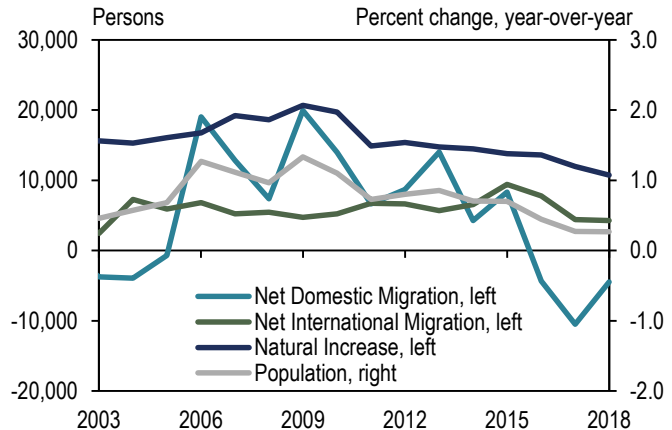


Looking at longer-term trends, more people have been leaving Oklahoma than moving into the state

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

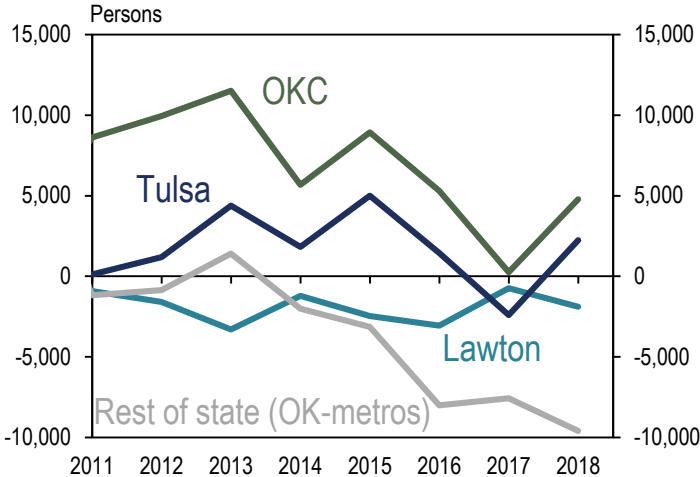


Oklahoma population changes by component, 2003-2018*

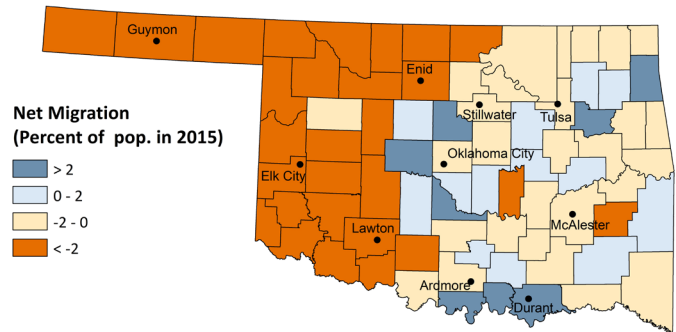


Large metro migration improved slightly in 2018, while outflows from western Oklahoma have been sizable

Oklahoma Net Domestic Migration by Area, 2011-2018

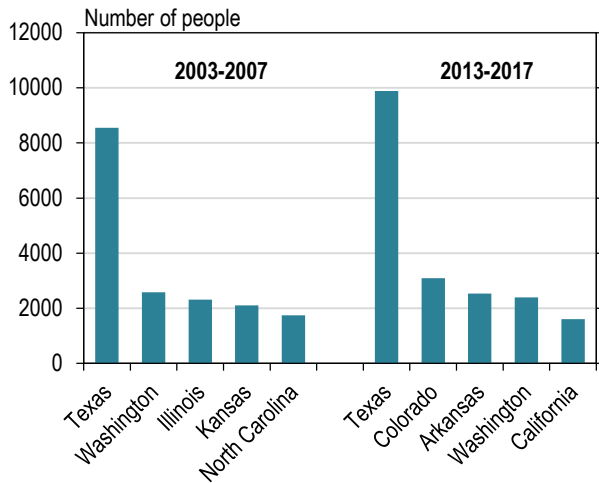


Net Domestic Migration by County, 2015-2018

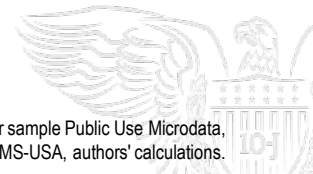
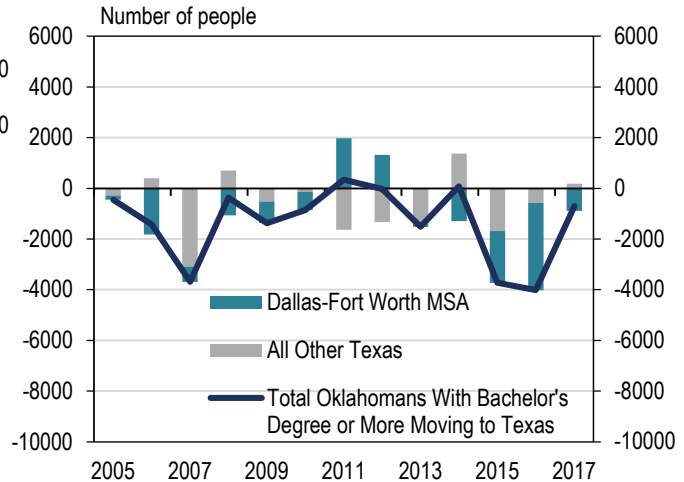


Oklahomans with a bachelor's degree or more are mostly moving to Texas, especially Dallas-Fort Worth

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



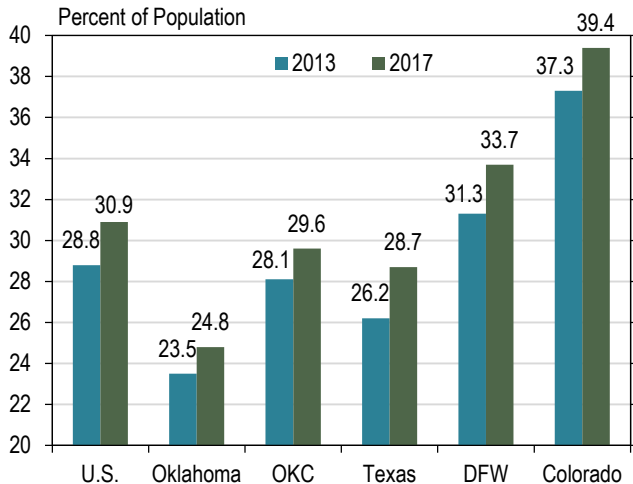
Net Migration of Oklahomans with a Bachelor's or More to Texas



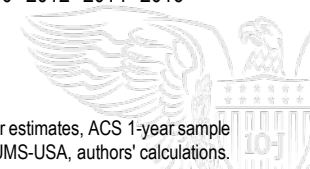
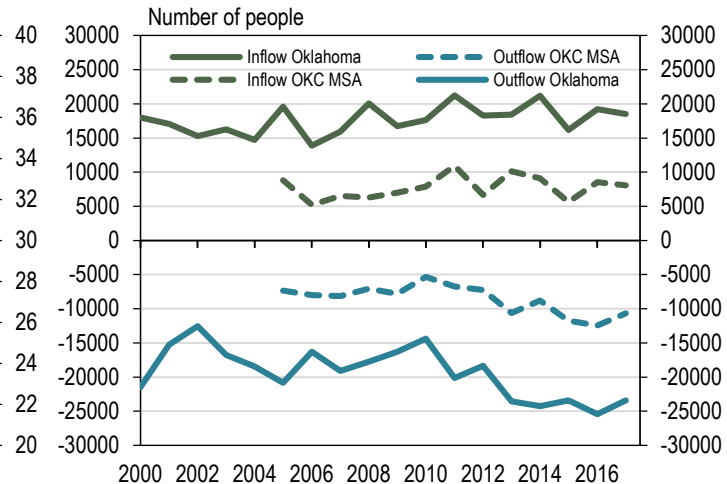
Consequence: Educational attainment is growing less

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



In addition, despite outmigration and slower overall growth, some industries in the state have thrived

Oklahoma Industries Adding the Most Jobs, 2013-2018

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

* Local Government Sector

Note: Only includes industries with data disclosed for both 2013 and 2018.

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



While none of the rapidly growing industries pay as much as energy, several are well above average

Average Annual Oklahoma Wage by Industry

Rank	Industries Losing the Most Jobs	Avg. Wage 2018	Rank	Industries Adding the Most Jobs	Avg. Wage 2018
1	Oil and gas extraction	\$147,766	1	Restaurants	\$15,786
2	Home health care services	\$32,481	2	Warehousing and storage	\$34,694
3	Business support services	\$39,355	3	Aerospace product and parts manufacturing	\$88,464
4	Misc. nondurable goods merchant wholesalers	\$42,324	4	Gambling industries*	\$36,163
5	Elementary and secondary schools*	\$34,945	5	Executive, legislative and general government*	\$40,084
6	Other general purpose machinery manufacturing	\$70,912	6	Outpatient care centers	\$51,703
7	Administration of human resource programs**	\$42,911	7	Building equipment contractors	\$52,590
8	Ag., construction, and mining machinery mfg.	\$63,401	8	Management of companies and enterprises	\$83,511
9	General medical and surgical hospitals*	\$53,762	9	Other amusement and recreation industries	\$16,771
10	Electronic markets and agents and brokers	\$53,306	10	Utility system construction	\$62,951
11	Newspaper, book, and directory publishers	\$48,003	11	Computer systems design and related services	\$75,516
12	Insurance carriers	\$72,697	12	Accounting and bookkeeping services	\$61,444
13	Wired and wireless telecommunications carriers	\$69,340	13	Offices of other health practitioners	\$40,019
14	Automotive equipment rental and leasing	\$40,087	14	Other ambulatory health care services	\$35,579
15	Colleges and universities	\$45,504	15	Gasoline stations	\$24,566
16	Clothing stores	\$16,164	16	Insurance agencies and brokerages	\$57,848

* Local Government Sector

** State Government Sector

Note: Only includes industries with data disclosed for both 2013 and 2018.

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 job growth 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, though, some industries in the state continue to thrive, many of which pay good wages



Questions?

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