

THE *Tenth District* ECONOMIC DATABOOK

*A summary of regional and national economic indicators
for the Tenth District states*



NOVEMBER 19, 2018

FEDERAL RESERVE BANK of KANSAS CITY

SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

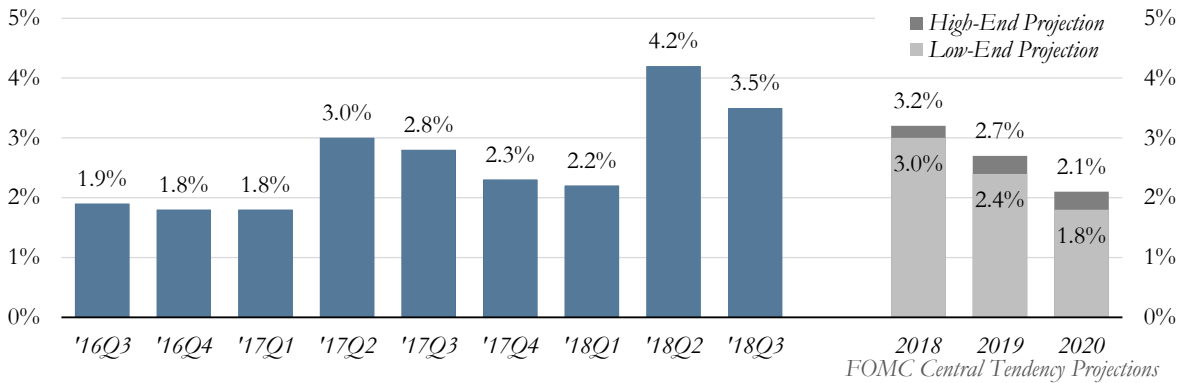
The unemployment rate was 3.3 percent across the Tenth District states in October, and total payroll employment grew 1.9 percent compared to the previous year. Employment growth was broad-based across industries, with the strongest percentage gains in the mining and logging and construction sectors. Tenth District nominal personal income grew 4.1 percent in the second quarter of 2018 compared to the previous year. In the energy sector, rig counts were well above year-ago levels. The Federal Reserve Bank of Kansas City's Manufacturing Survey indicated an increase in manufacturing activity in October 2018, with a composite index of 53.8. Nonirrigated farmland values, as measured by the Federal Reserve Bank of Kansas City's Survey of Agricultural Credit Conditions, decreased 1.6 percent in the third quarter of 2018 compared to the same period in 2017.

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



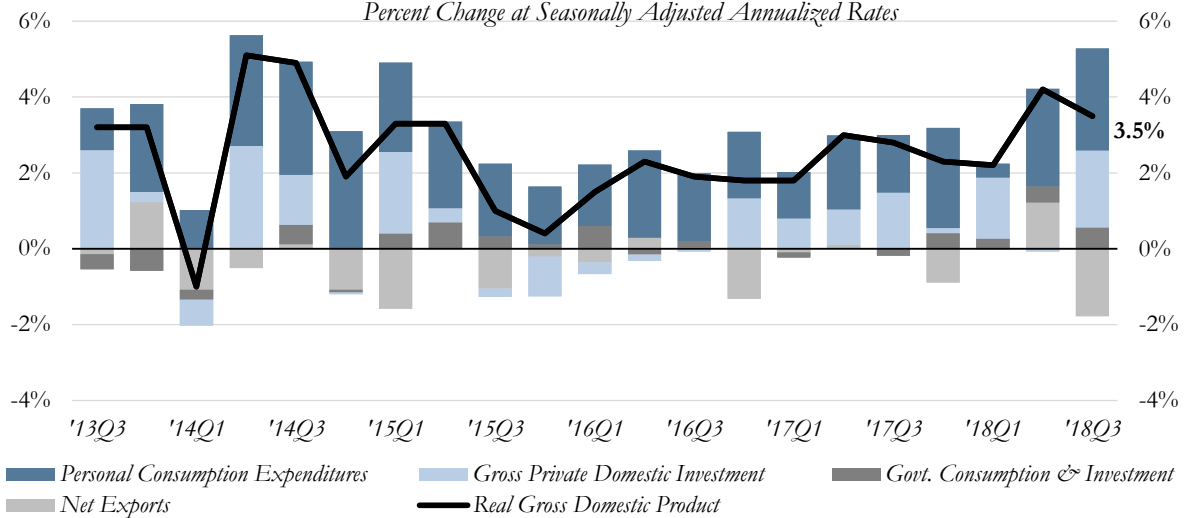
The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming. There are three branches across the Tenth Federal Reserve District located in Denver, Oklahoma City, and Omaha.

U.S. Real Gross Domestic Product
Percent Change at Seasonally Adjusted Annualized Rates



Contributions to Real U.S. GDP

Percent Change at Seasonally Adjusted Annualized Rates



Tenth District Real Gross Domestic Product

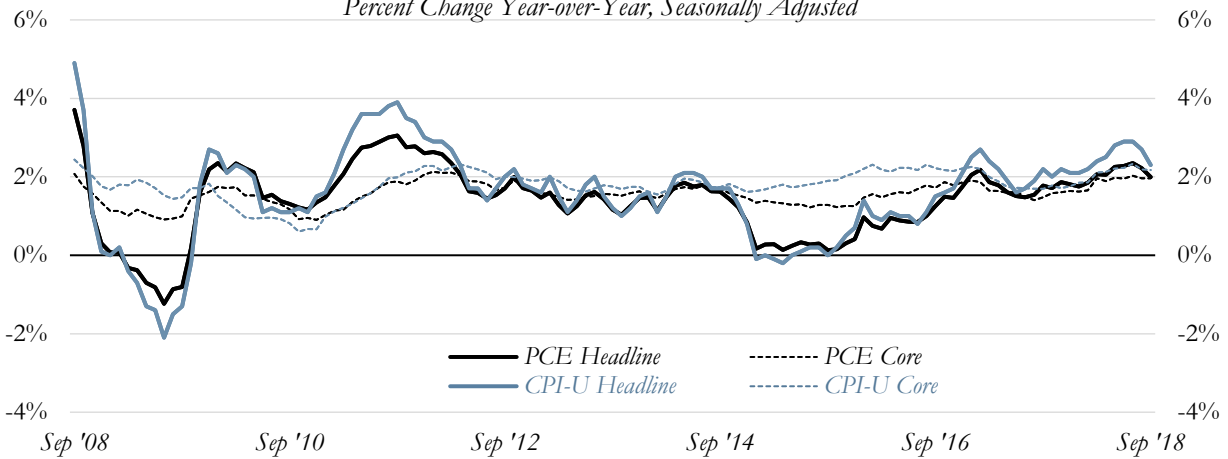
Percent Change Year-over-Year



Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics

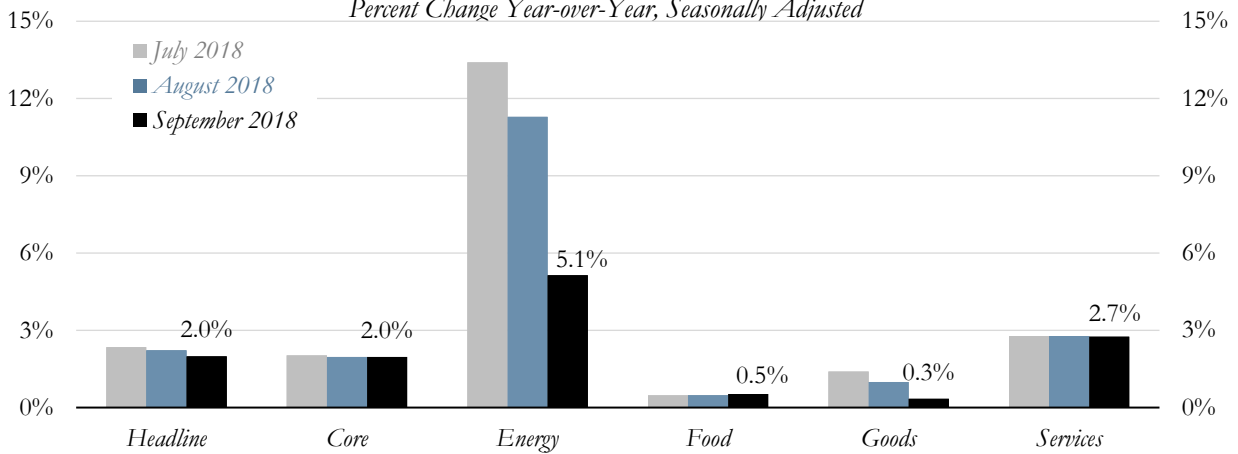
PCE & CPI-U Inflation

Percent Change Year-over-Year, Seasonally Adjusted



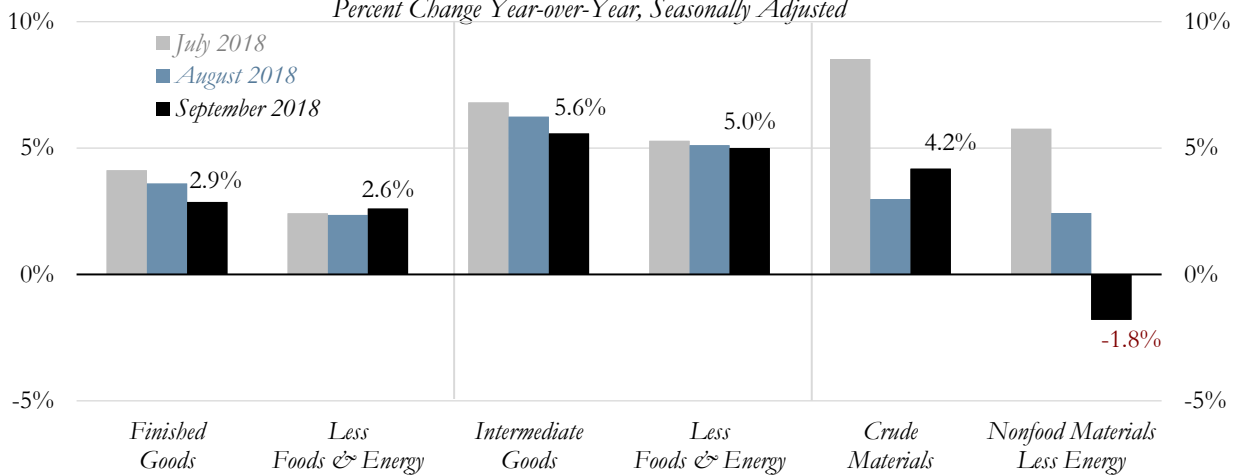
PCE by Component

Percent Change Year-over-Year, Seasonally Adjusted



Producer Prices

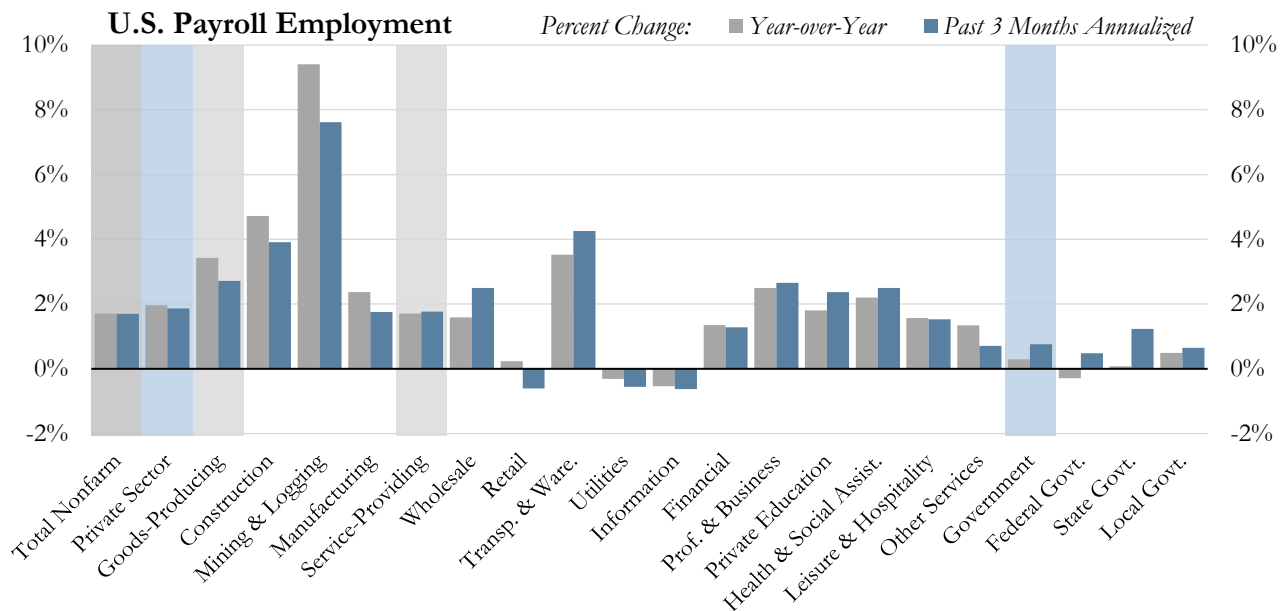
Percent Change Year-over-Year, Seasonally Adjusted



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

October 2018 U.S. Payroll Employment

	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
Total Nonfarm	149,750	2,516	100.0%
Private Sector	127,353	2,450	85.0%
<i>Goods-Producing</i>			
Goods-Producing	20,859	691	13.9%
Construction	7,318	330	4.9%
Mining & Logging	756	65	0.5%
Manufacturing	12,785	296	8.5%
<i>Service-Providing</i>	106,476	1,786	71.1%
Wholesale Trade	6,017	94	4.0%
Retail Trade	15,896	37	10.6%
Transportation & Warehousing	5,399	184	3.6%
Utilities	553	-2	0.4%
Information	2,769	-15	1.8%
Financial Activities	8,609	115	5.8%
Professional & Business Services	21,146	516	14.1%
Educational Services	3,753	67	2.5%
Healthcare & Social Assistance	20,058	432	13.4%
Leisure & Hospitality	16,410	254	10.9%
Other Services	5,884	78	3.9%
Government	22,397	66	15.0%
Federal Government	2,799	-8	1.9%
State Government	5,139	4	3.4%
Local Government	14,459	70	9.7%

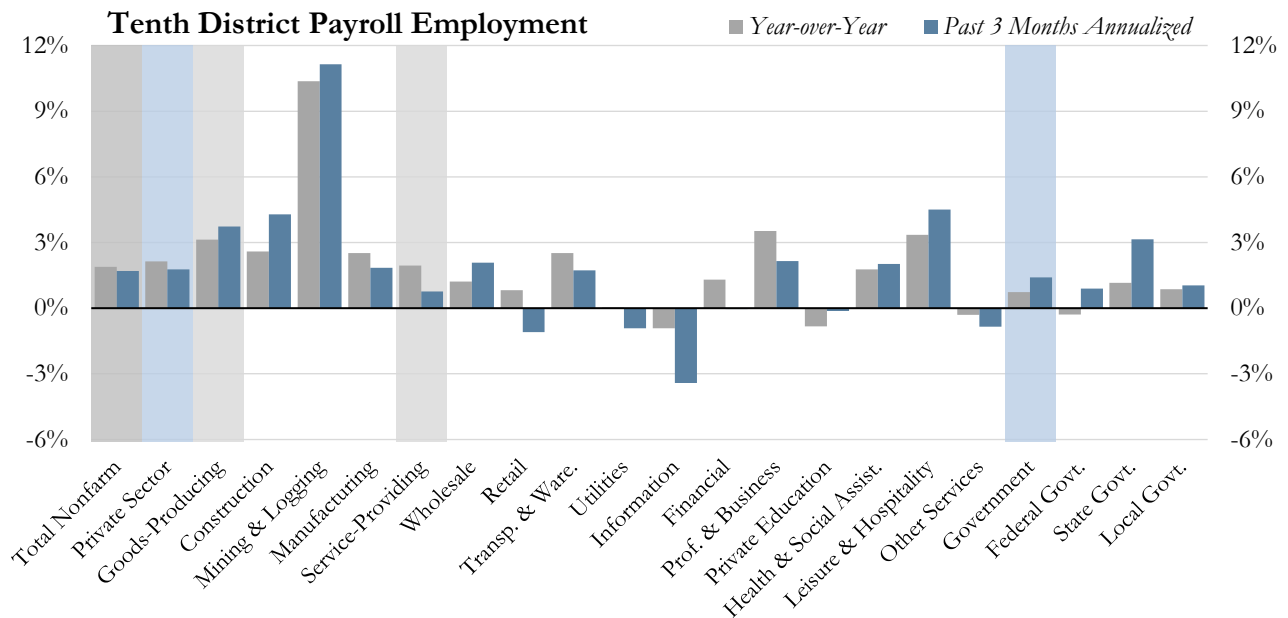


Source: Bureau of Labor Statistics/Haver Analytics

October 2018 Tenth District Payroll Employment

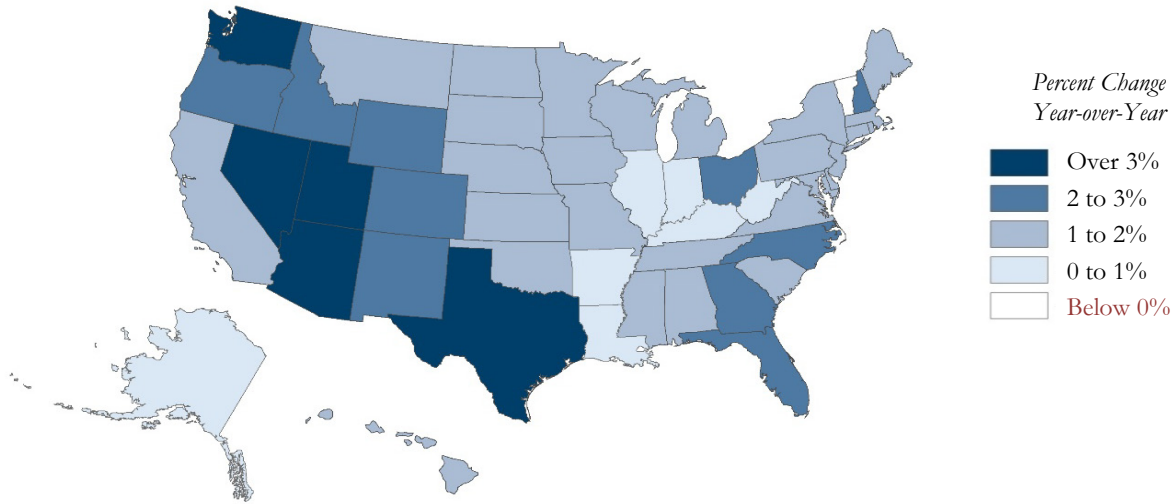
Seasonally Adjusted

	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
Total Nonfarm	10,965	204	100.0%
Private Sector	9,044	190	82.4%
<i>Goods-Producing</i>	1,556	47	14.2%
Construction	555	14	5.1%
Mining & Logging	142	13	1.3%
Manufacturing	856	21	7.8%
<i>Service-Providing</i>	7,485	143	68.2%
Wholesale Trade	423	5	3.9%
Retail Trade	1,145	9	10.4%
Transportation & Warehousing	388	10	3.5%
Utilities	39	0	0.4%
Information	194	-2	1.8%
Financial Activities	627	8	5.7%
Professional & Business Services	1,460	50	13.3%
Private Educational Services	152	-1	1.4%
Healthcare & Social Assistance	1,428	25	13.0%
Leisure & Hospitality	1,211	39	11.0%
Other Services	423	-1	3.9%
Government	1,921	14	17.6%
Federal Government	236	-1	2.2%
State Government	478	6	4.4%
Local Government	1,208	10	11.0%



Source: Bureau of Labor Statistics/Haver Analytics

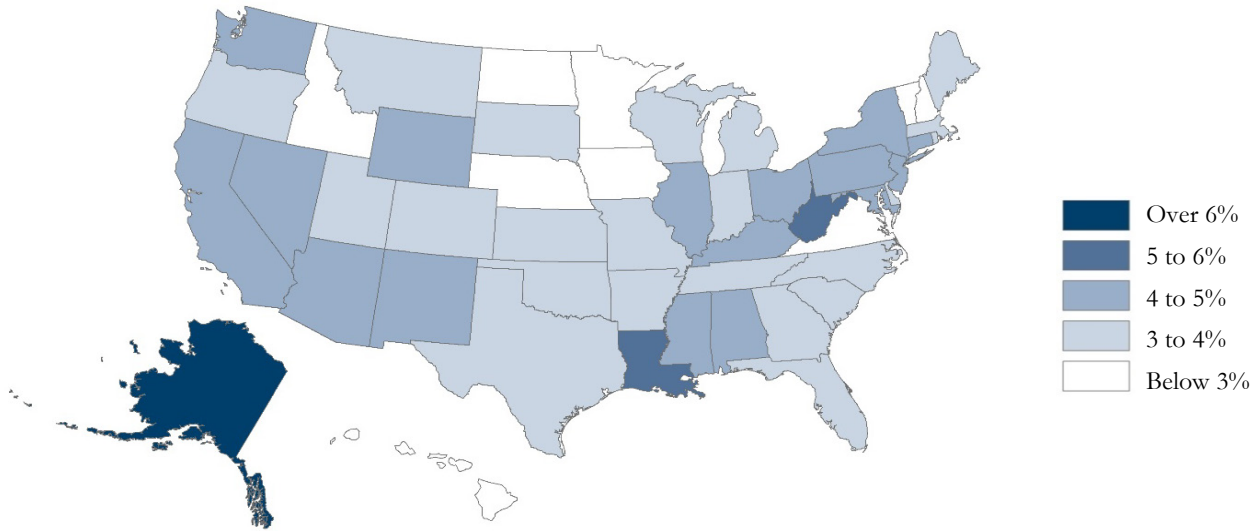
October 2018 Total Nonfarm Employment
Seasonally Adjusted



		<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>
	United States	1.7%	25	Nebraska	1.6%
	Tenth District	1.9	26	Missouri	1.6
1	Nevada	3.4	27	Pennsylvania	1.5
2	Utah	3.3	28	Montana	1.5
3	Washington	3.3	29	Maryland	1.4
4	Texas	3.1	30	Michigan	1.4
5	Arizona	3.1	31	Kansas	1.4
6	Florida	2.7	32	Iowa	1.4
7	Colorado	2.7	33	Oklahoma	1.4
8	New Mexico	2.7	34	Connecticut	1.3
9	Oregon	2.5	35	New York	1.3
10	North Carolina	2.3	36	Maine	1.3
11	New Hampshire	2.3	37	Rhode Island	1.3
12	Wyoming	2.1	38	Minnesota	1.2
13	Idaho	2.1	39	Mississippi	1.2
14	Georgia	2.1	40	North Dakota	1.2
15	Ohio	2.1	41	Wisconsin	1.1
16	Tennessee	2.0	42	Delaware	1.1
17	California	1.8	43	Louisiana	1.0
18	Virginia	1.8	44	Illinois	1.0
19	South Carolina	1.8	45	West Virginia	0.9
20	Massachusetts	1.8	46	Indiana	0.8
21	South Dakota	1.7	47	Arkansas	0.7
22	Hawaii	1.7	48	Kentucky	0.5
23	Alabama	1.7	49	Alaska	0.1
24	New Jersey	1.7	50	Vermont	-0.9

Source: Bureau of Labor Statistics/Haver Analytics

October 2018 Unemployment Rates
Seasonally Adjusted



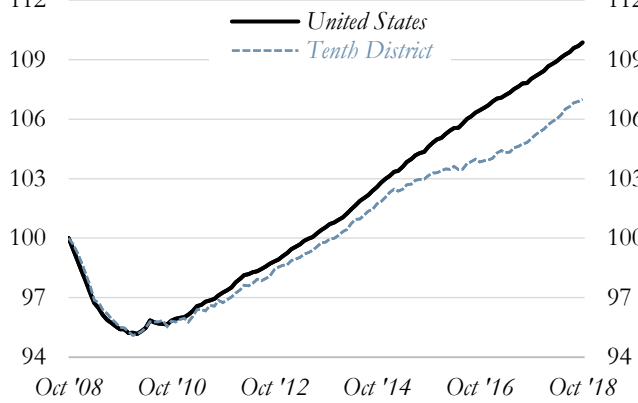
<i>Percent Unemployed</i>			<i>Percent Unemployed</i>		
United States 3.7%			24	Montana	3.7
Tenth District 3.3			24	Tennessee	3.7
1	Alaska	6.4	27	North Carolina	3.6
2	West Virginia	5.2	27	Georgia	3.6
3	Louisiana	5.0	29	Massachusetts	3.5
4	Mississippi	4.7	29	Arkansas	3.5
4	Arizona	4.7	29	Indiana	3.5
6	New Mexico	4.6	32	Oklahoma	3.4
6	Ohio	4.6	32	Florida	3.4
8	Kentucky	4.5	32	Maine	3.4
9	Nevada	4.4	35	South Carolina	3.3
10	Washington	4.3	35	Kansas	3.3
11	Connecticut	4.2	37	Utah	3.2
11	Illinois	4.2	37	Colorado	3.2
13	Maryland	4.1	39	Missouri	3.1
13	New Jersey	4.1	40	South Dakota	3.0
13	California	4.1	40	Wisconsin	3.0
13	Pennsylvania	4.1	42	Virginia	2.9
13	Alabama	4.1	43	Vermont	2.8
13	Wyoming	4.1	43	Minnesota	2.8
19	New York	4.0	43	Nebraska	2.8
20	Michigan	3.9	43	North Dakota	2.8
20	Delaware	3.9	47	Idaho	2.7
22	Rhode Island	3.8	48	New Hampshire	2.6
22	Oregon	3.8	49	Iowa	2.4
24	Texas	3.7	50	Hawaii	2.3

Source: Bureau of Labor Statistics/Haver Analytics

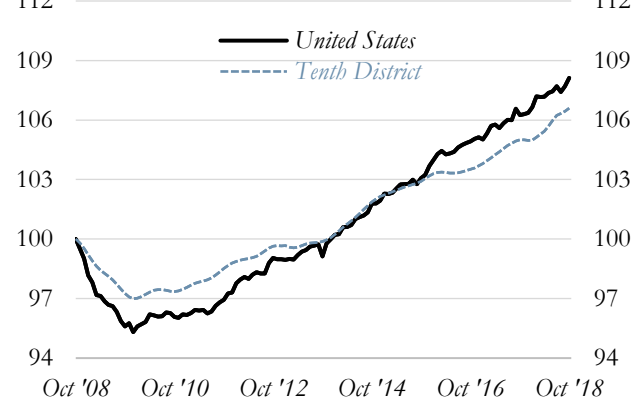
Total Nonfarm Employment

Ten-Year Index of Growth, Seasonally Adjusted

Payroll Survey



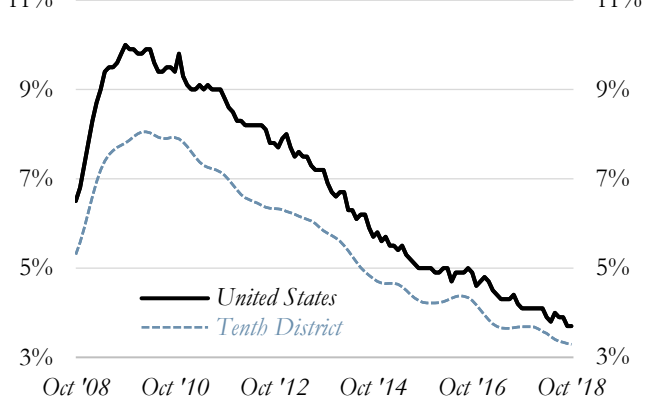
Household Survey



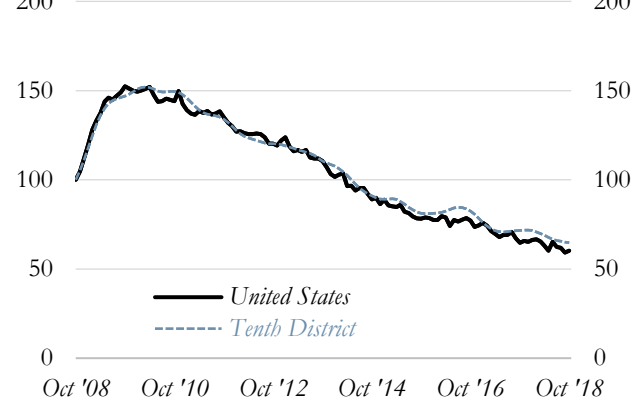
Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted

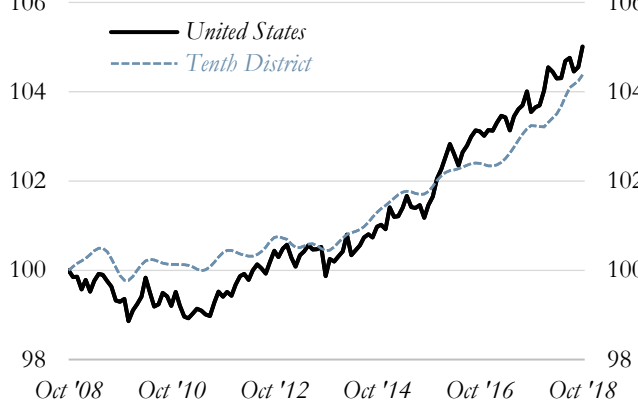
Unemployment Rate



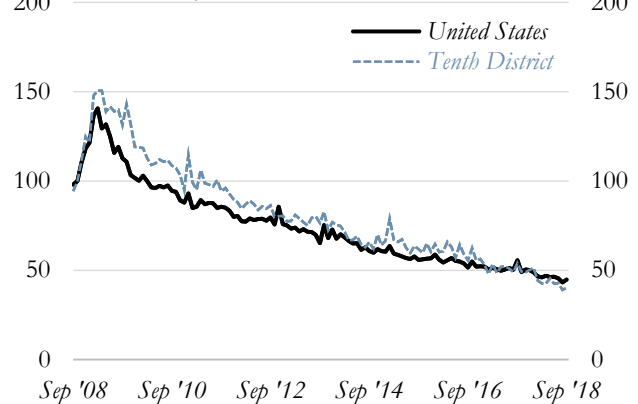
Unemployed



Labor Force



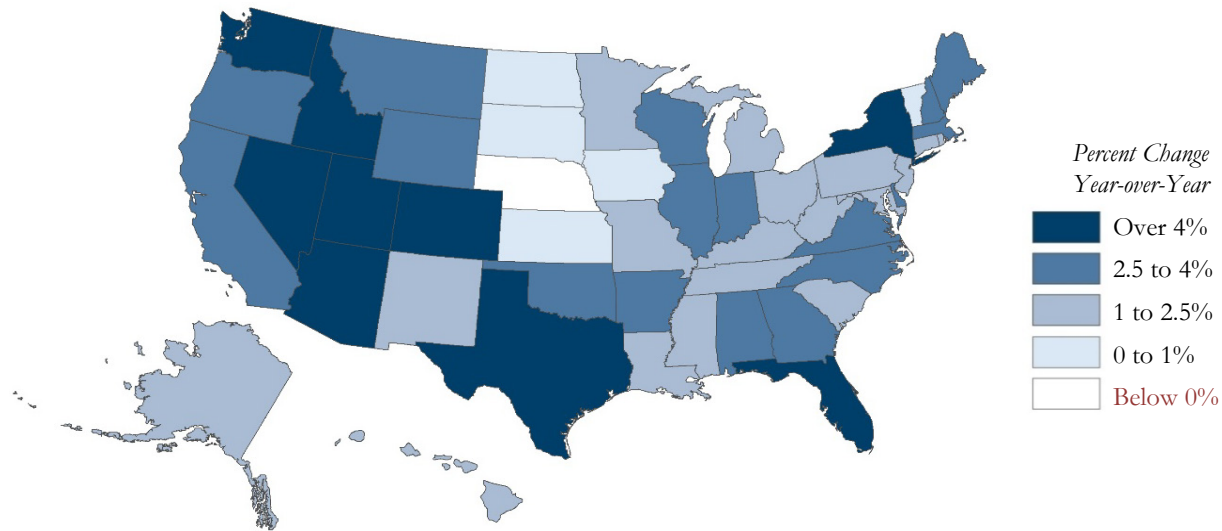
Unemployment Insurance Claims



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

2018Q2 Real Personal Income

Seasonally Adjusted

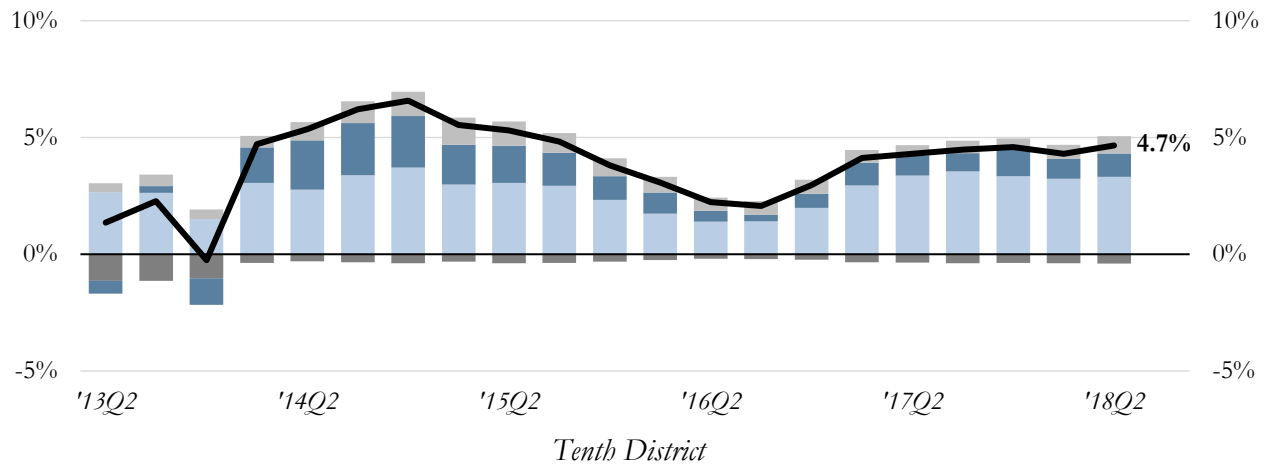


	<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		
United States	2.4%	\$53,342	25	Wyoming	2.1%	\$60,044	
Tenth District	1.9	45,809	26	Indiana	2.0	46,610	
1	Utah	4.4	45,124	27	Tennessee	1.9	46,773
2	Washington	3.9	60,017	28	Mississippi	1.9	37,903
3	Nevada	3.5	47,596	29	Louisiana	1.8	45,245
4	Colorado	3.4	56,563	30	West Virginia	1.8	39,920
5	Texas	3.4	49,081	31	Michigan	1.8	47,696
6	Arizona	3.3	43,594	32	Rhode Island	1.8	54,438
7	Florida	3.3	49,236	33	Pennsylvania	1.7	54,952
8	New York	3.2	67,264	34	South Carolina	1.7	42,583
9	Idaho	3.0	42,935	35	Ohio	1.7	48,091
10	Montana	2.8	47,040	36	Kentucky	1.6	41,786
11	Illinois	2.6	56,600	37	New Jersey	1.6	66,490
12	New Hampshire	2.6	61,706	38	Maryland	1.4	62,535
13	Delaware	2.5	51,001	39	Missouri	1.4	46,316
14	Oregon	2.5	49,580	40	New Mexico	1.4	40,949
15	California	2.4	61,856	41	Minnesota	1.3	55,604
16	Maine	2.4	48,049	42	Connecticut	1.3	74,030
17	North Carolina	2.3	45,522	43	Alaska	1.1	58,854
18	Georgia	2.3	45,378	44	Hawaii	1.0	54,217
19	Massachusetts	2.3	69,935	45	Vermont	1.0	53,653
20	Wisconsin	2.2	50,651	46	North Dakota	0.9	54,206
21	Virginia	2.2	56,830	47	Kansas	0.7	49,738
22	Arkansas	2.1	42,490	48	South Dakota	0.5	49,627
23	Alabama	2.1	42,248	49	Iowa	0.3	48,050
24	Oklahoma	2.1	46,053	50	Nebraska	-0.2	51,486

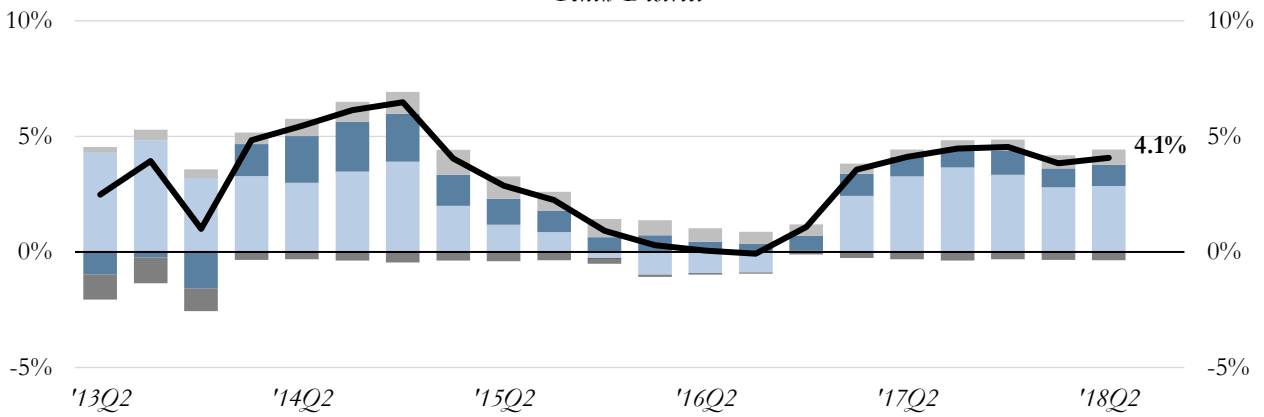
Source: Bureau of Economic Analysis/Haver Analytics

Nominal Personal Income

Contributions to Percent Change, Seasonally Adjusted
United States



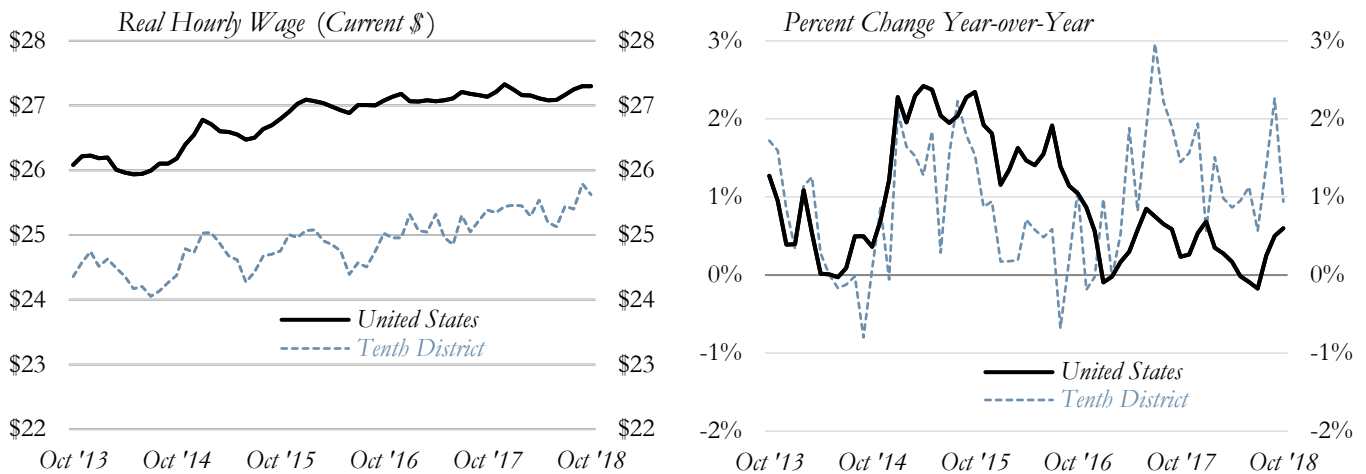
Tenth District



- Contributions to Social Insurance
- Transfer Payments
- Residence Adjustment
- Earnings by Place of Work
- Dividends, Interest & Rent
- Total Personal Income

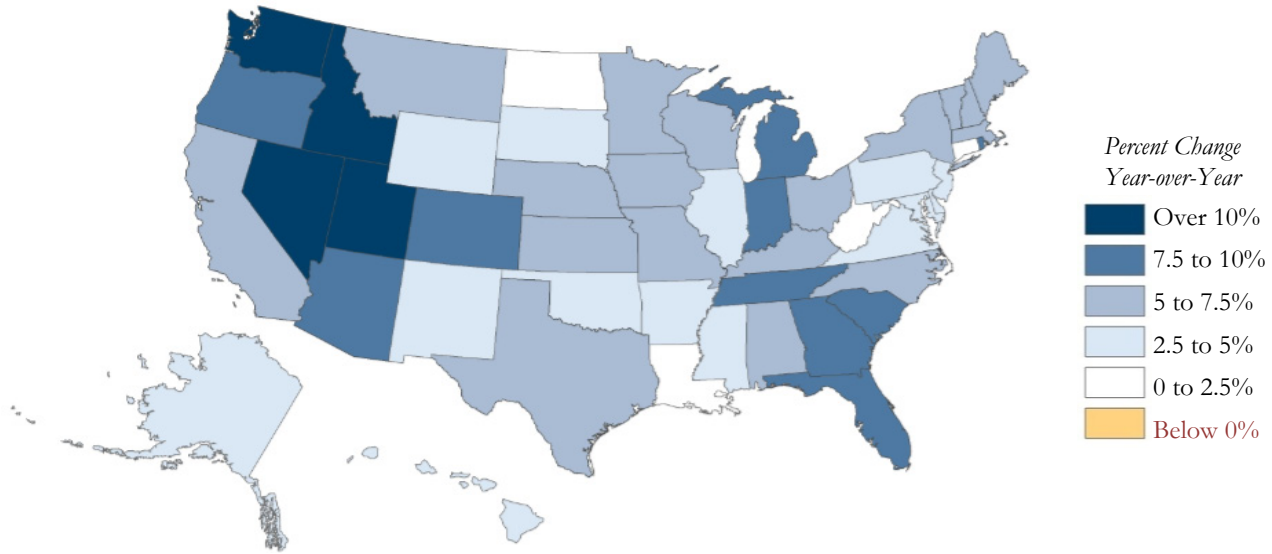
Real Average Hourly Wage

Seasonally Adjusted



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

2018Q2 FHFA Purchase-Only Home Price Index
Seasonally Adjusted



Percent Change Year-over-Year

- Over 10%
- 7.5 to 10%
- 5 to 7.5%
- 2.5 to 5%
- 0 to 2.5%
- Below 0%

Percent Change Year-over-Year

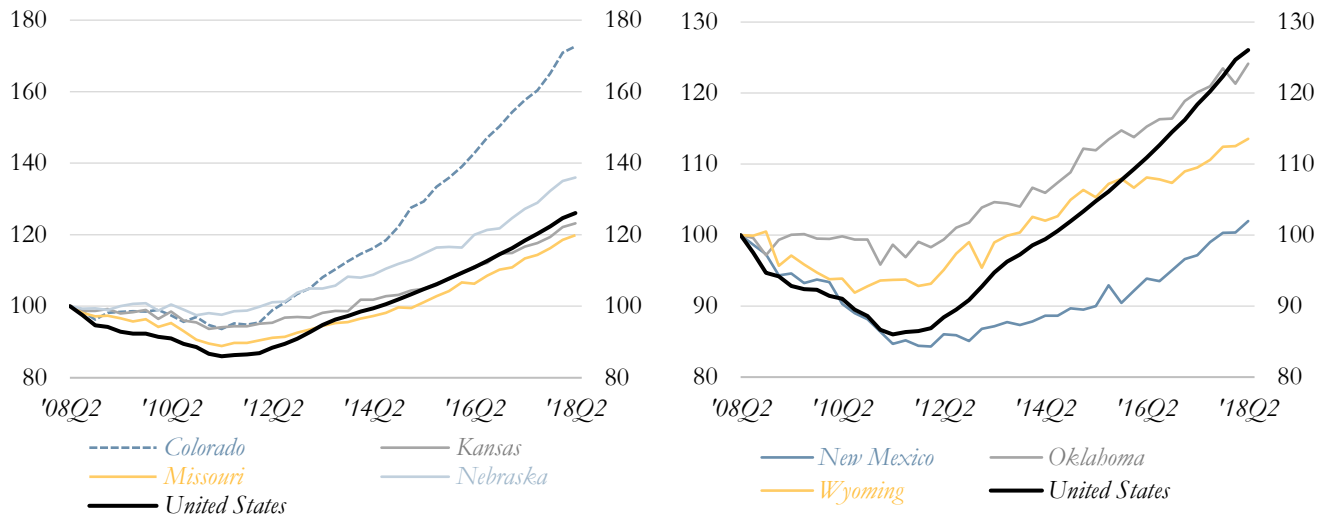
Percent Change Year-over-Year

United States			6.5%		
1	Nevada	17.0	25	Iowa	6.0%
2	Idaho	13.0	26	Texas	5.9
3	Utah	11.3	27	Massachusetts	5.9
4	Washington	11.0	28	Ohio	5.8
5	Colorado	9.6	29	Missouri	5.7
6	Florida	8.5	30	Vermont	5.6
7	South Carolina	8.3	31	Kansas	5.5
8	Indiana	8.3	32	Kentucky	5.2
9	Rhode Island	8.1	33	New Mexico	4.9
10	Georgia	8.0	34	Pennsylvania	4.9
11	Oregon	7.9	35	Hawaii	4.7
12	Arizona	7.8	36	South Dakota	4.5
13	Michigan	7.7	37	Delaware	4.3
14	Tennessee	7.5	38	Virginia	4.3
15	California	7.1	39	Illinois	4.1
16	Wisconsin	7.1	40	New Jersey	4.1
17	Nebraska	6.9	41	Maryland	3.8
18	New Hampshire	6.7	42	Wyoming	3.7
19	Maine	6.6	43	Arkansas	3.7
20	New York	6.5	44	Oklahoma	3.4
21	Minnesota	6.3	45	Mississippi	3.2
22	North Carolina	6.2	46	Alaska	2.6
23	Alabama	6.1	47	Connecticut	2.4
24	Montana	6.0	48	West Virginia	2.3
			49	Louisiana	2.3
			50	North Dakota	2.1

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

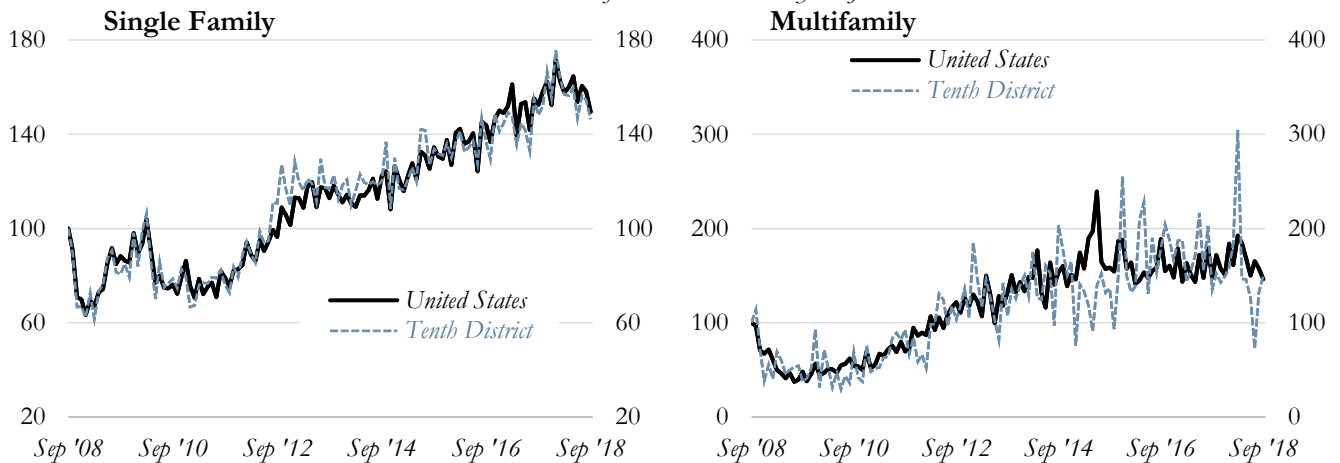
FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted

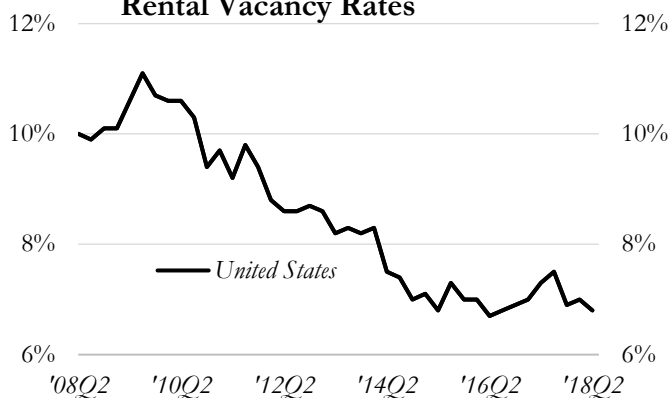


Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted



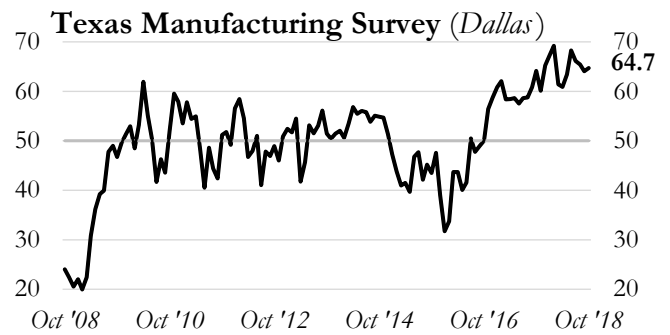
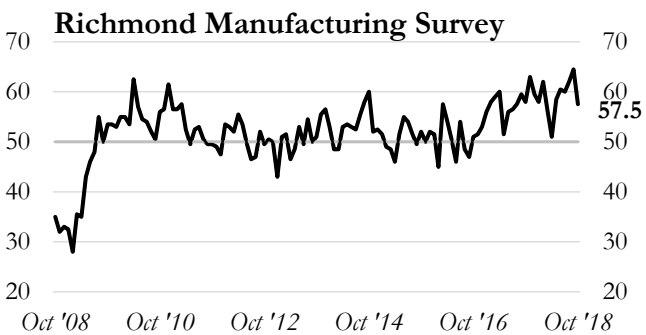
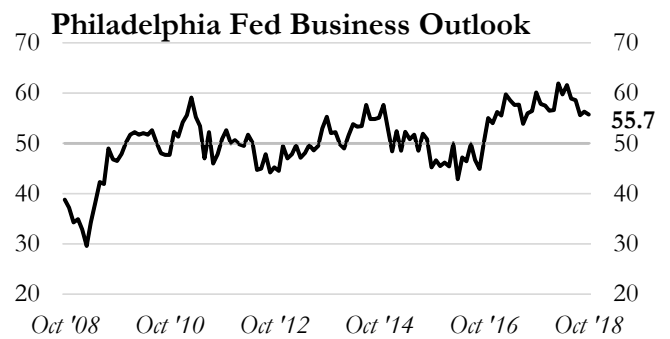
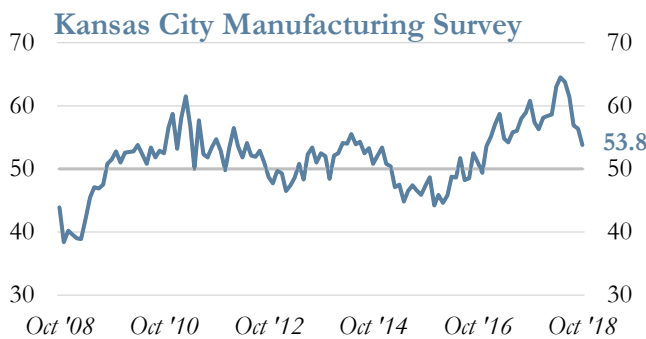
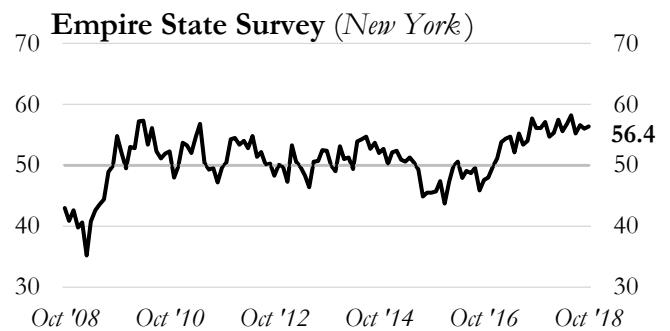
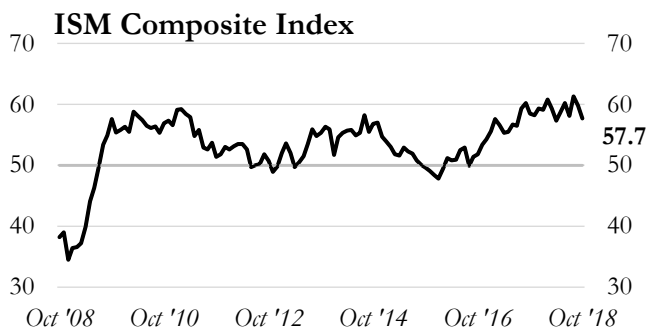
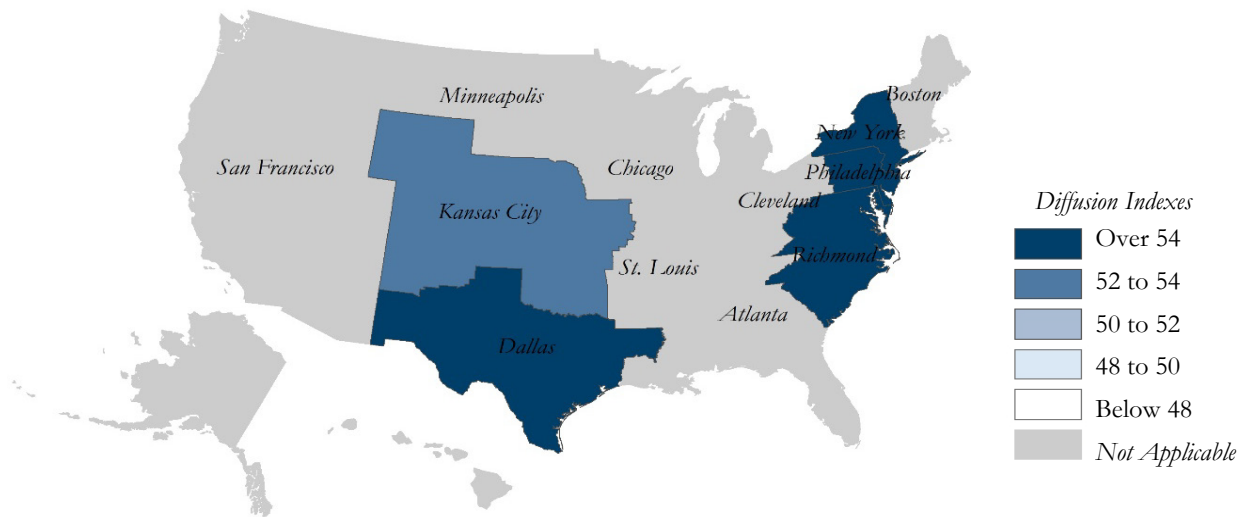
Rental Vacancy Rates



Note: Rental Vacancy Rates are not available for the Tenth District.

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

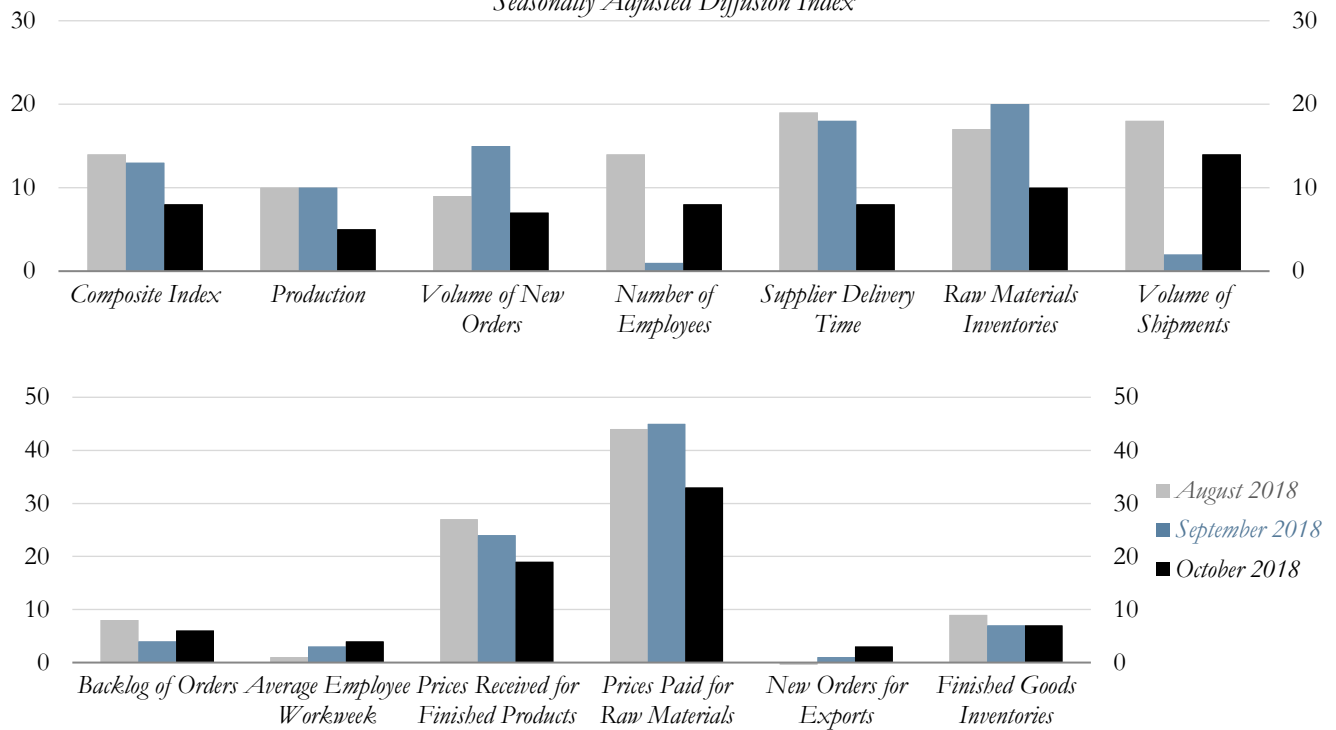
Manufacturing Surveys
Seasonally Adjusted



Note: Indices are defined to be between 0 and 100; above 50 indicates growth and below 50 indicates contraction.
Source: Institute for Supply Management (ISM) & Federal Reserve District Banks/Haver Analytics

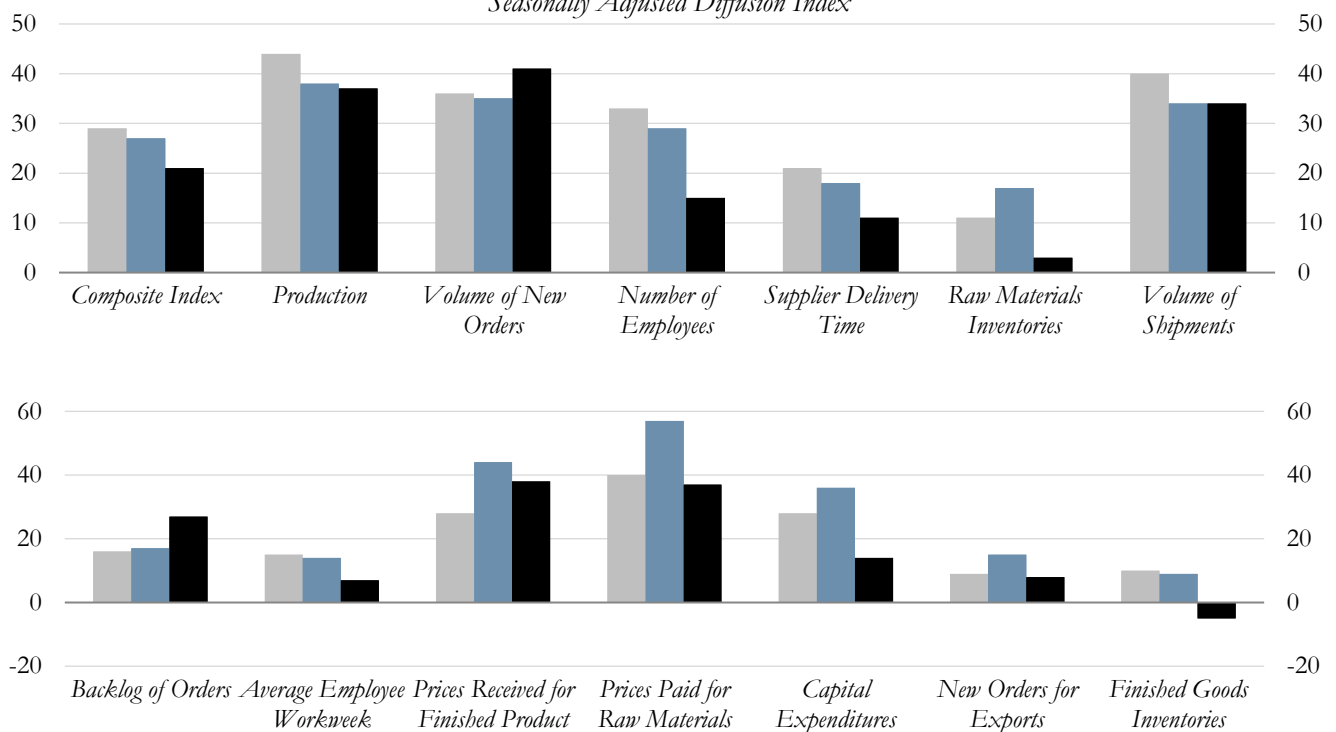
Current Activity vs. a Month Ago

Seasonally Adjusted Diffusion Index



Expectations Six-Months Ahead

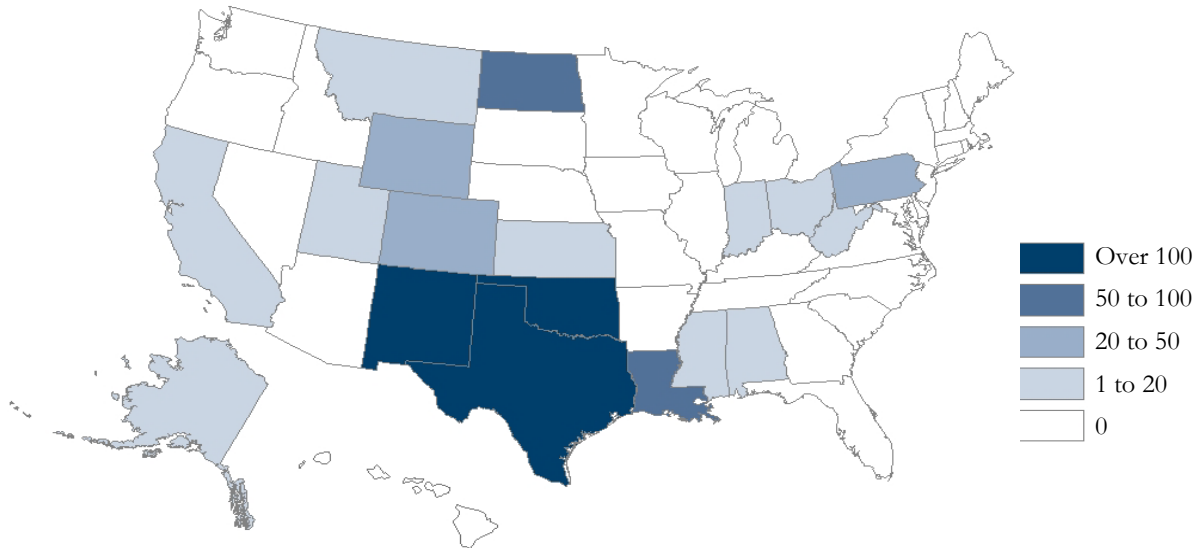
Seasonally Adjusted Diffusion Index



Note: Indices above zero indicate expansion.

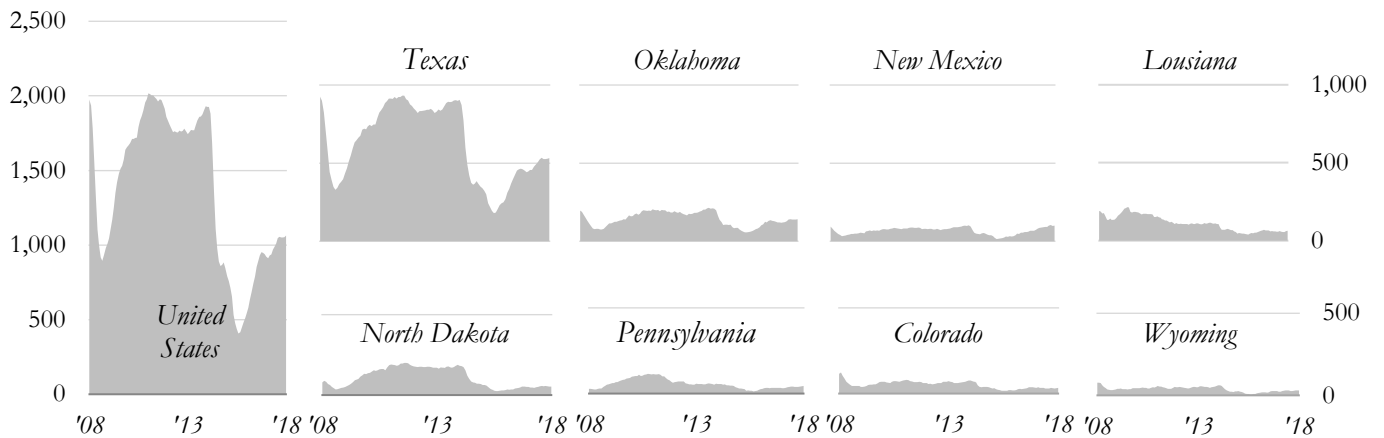
Source: Federal Reserve Bank of Kansas City/Haver Analytics

October 2018 Active Oil & Gas Drilling Rig Counts



	<i>Average Rig Counts During the Month</i>	<i>Percent Change Year-over-Year</i>	<i>Current Share of Activity</i>
United States	1,063	16.7%	
Tenth District	307	22.8	28.9%
<i>Top Producing States</i>			
Texas	533	20.6	50.1
Oklahoma	142	13.6	13.4
New Mexico	101	48.5	9.5
Louisiana	63	-3.1	5.9
North Dakota	53	6.0	5.0
Pennsylvania	45	40.6	4.2
Colorado	33	-2.9	3.1
Wyoming	30	36.4	2.8
Ohio	17	-41.4	1.6
California	14	-6.7	1.3

Ten-Year History of Most Active States
Average Active Monthly Drilling Rig Counts

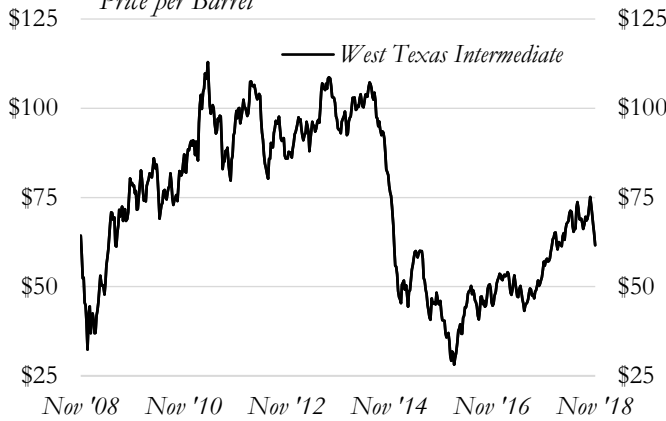


Source: Baker Hughes/Haver Analytics

Spot Prices

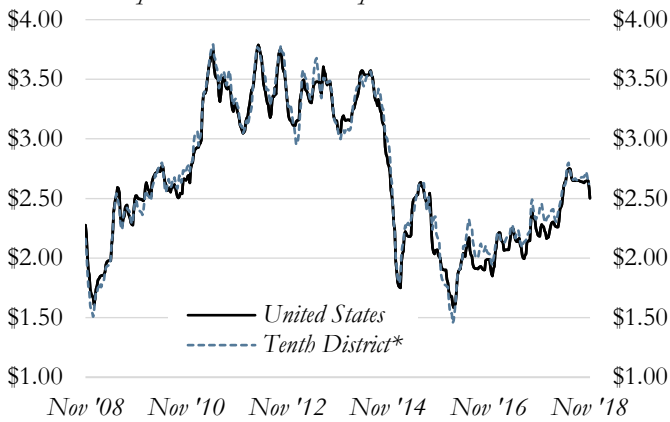
Crude Oil

Price per Barrel



Gasoline

Price per Gallon at the Pump



Natural Gas

Price per Thousand Cubic Feet

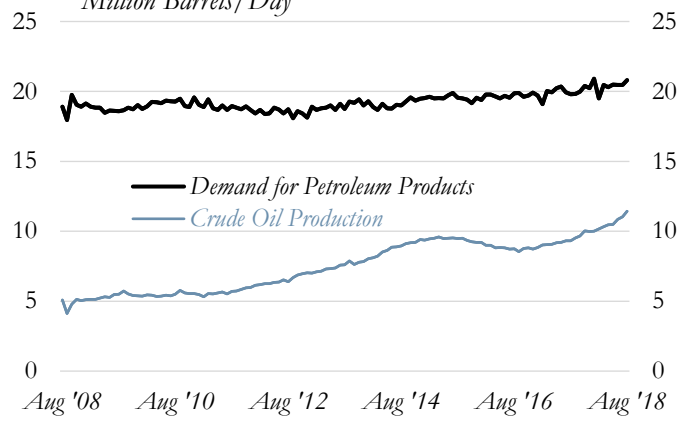


U.S. Supply/Demand Dynamics

Seasonally Adjusted

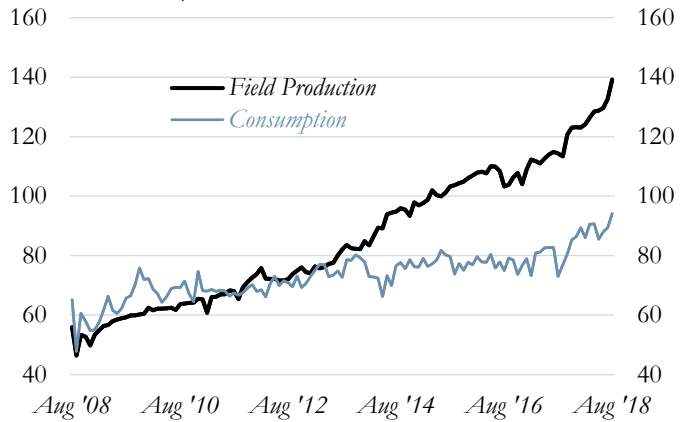
Crude Oil

Million Barrels/Day



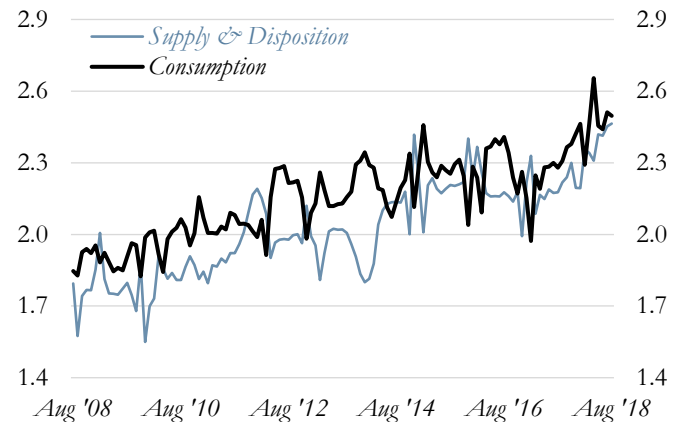
Natural Gas Liquids

Million Barrels/Month



Natural Gas

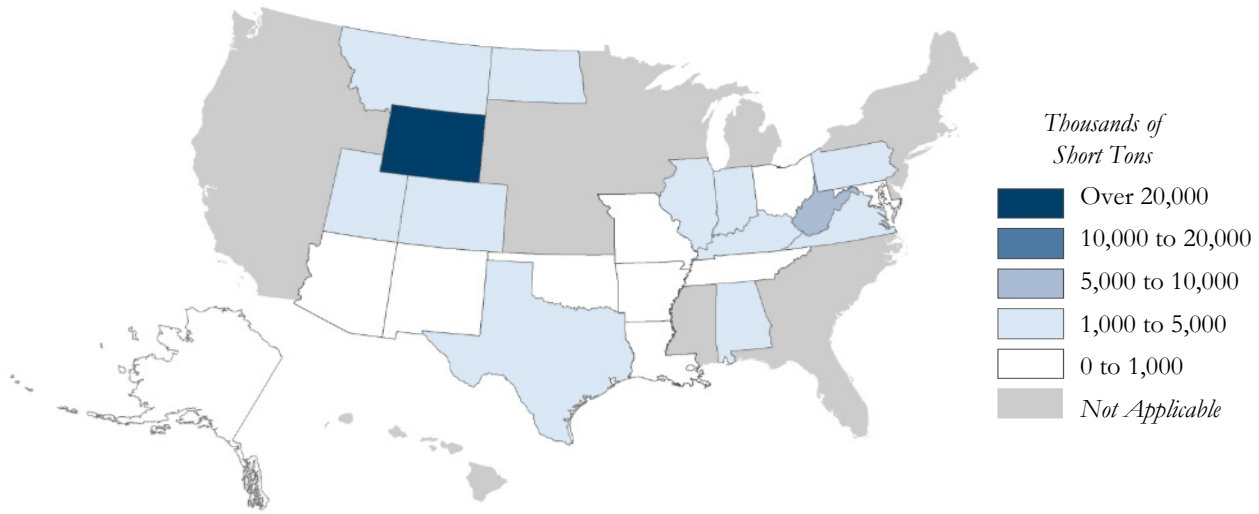
Trillion Cubic Feet/Month



*Average price per gallon for major Tenth District metro areas.

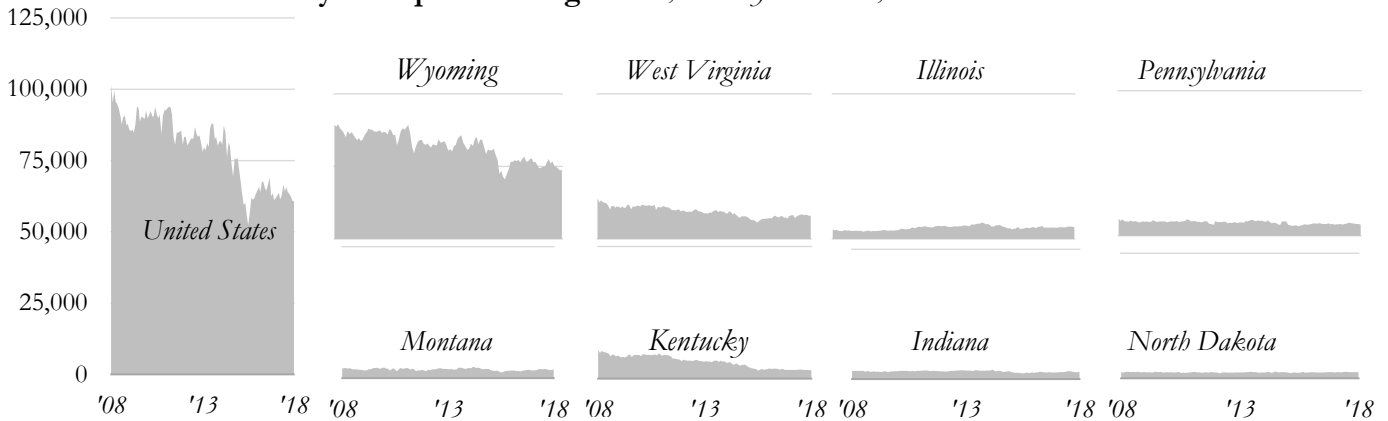
Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

October 2018 Coal Production
Seasonally Adjusted



	<i>Monthly Production (Thousand Short Tons)</i>	<i>Percent Change Year-over-Year</i>	<i>Current Share of Production</i>
United States	60,704.5	-1.7%	
Tenth District*	25,743.4	-3.2	42.4%
<i>Top Producing States</i>			
Wyoming	23,948.9	-1.8	39.5
West Virginia	8,079.9	1.9	13.3
Illinois	4,035.0	3.2	6.6
Pennsylvania	3,889.2	-1.4	6.4
Montana	3,207.7	9.4	5.3
Kentucky	3,126.7	-4.8	5.2
Indiana	2,811.2	9.6	4.6
North Dakota	2,466.8	3.0	4.1
Texas	2,296.2	-23.4	3.8
Alabama	1,265.6	15.0	2.1

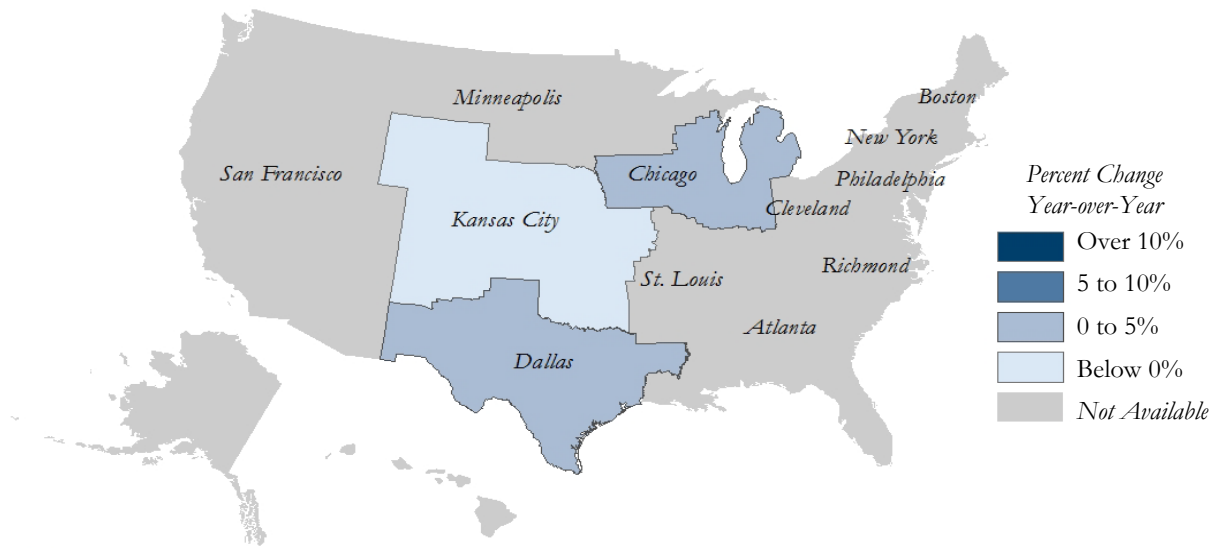
Ten-Year History of Top Producing States, Monthly Production, Thousand Short Tons



*Includes all Tenth District states but Nebraska.

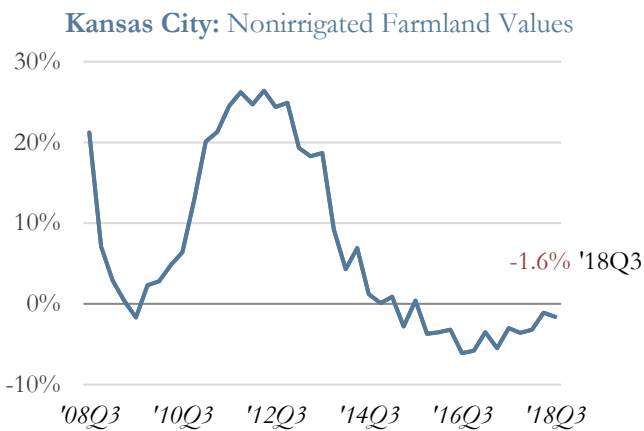
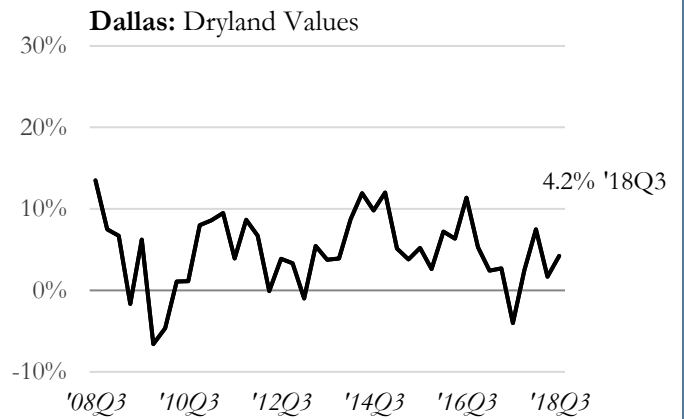
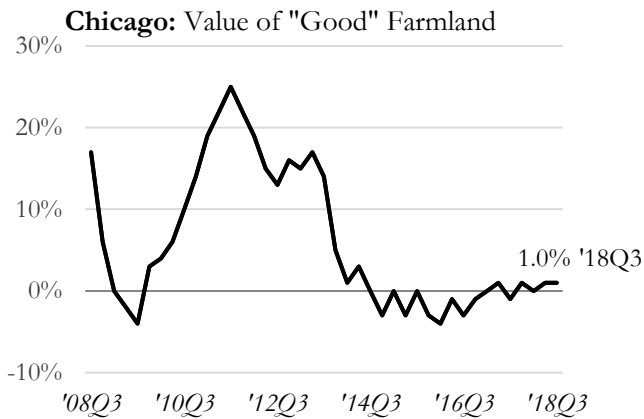
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

Farm Land Values*



Farmland Values by Federal Reserve District

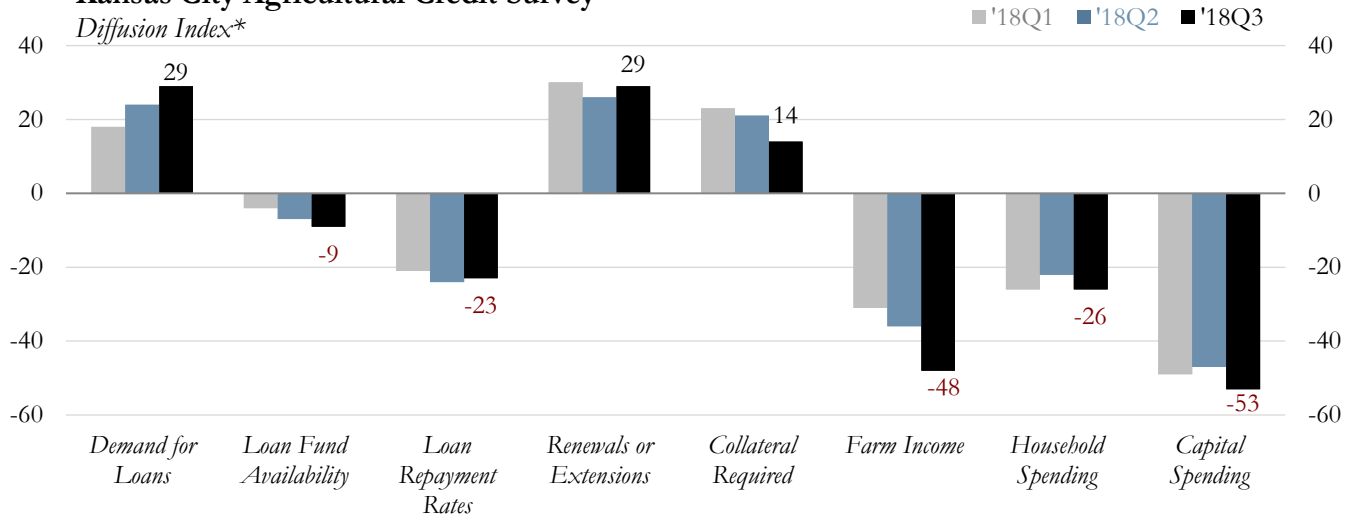
Percent Change Year-over-Year



*Values shown for the most recent survey available for each district.
 Source: Federal Reserve District Banks/Haver Analytics

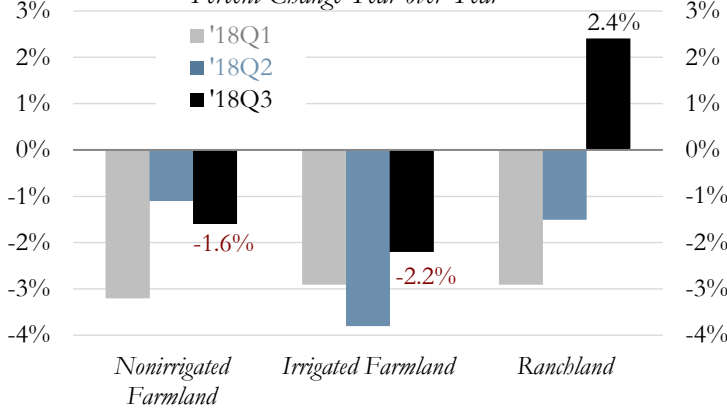
Kansas City Agricultural Credit Survey

*Diffusion Index**

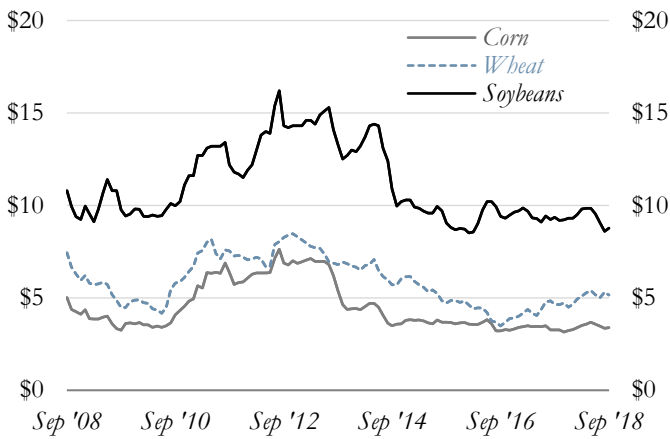


Tenth District Farmland Values

Percent Change Year-over-Year

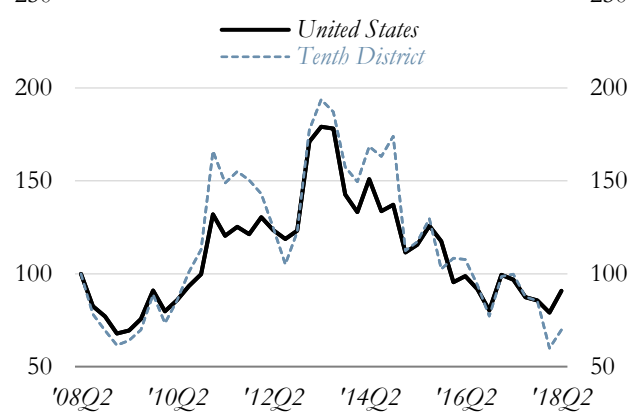


Spot Prices



Farm Income

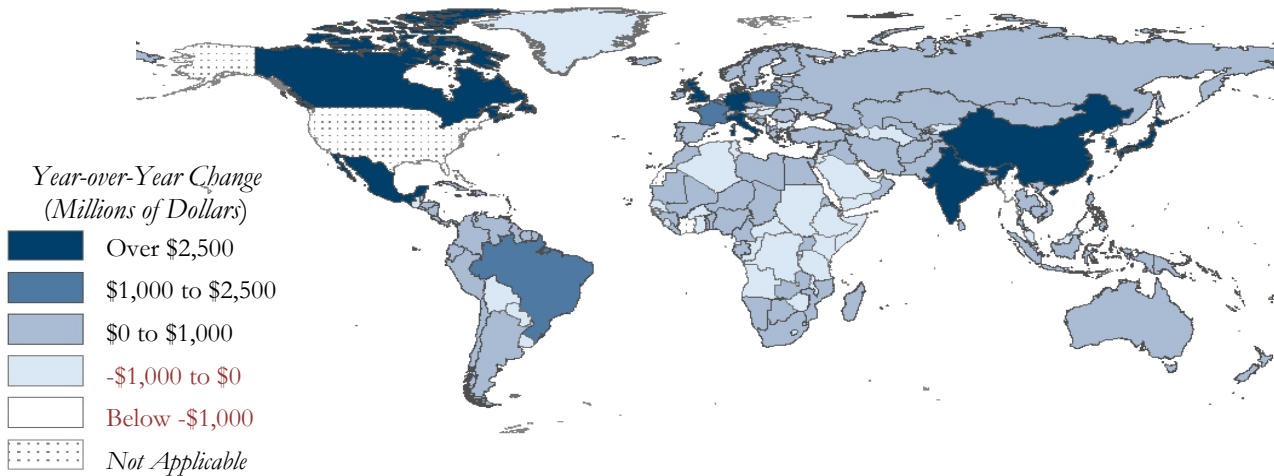
Ten-Year Index of Growth



*Calculated as the percentage of total respondents reporting increases less those reporting declines.

Source: Wall Street Journal, Bureau of Economic Analysis & Federal Reserve Bank of Kansas City/Haver Analytics

2018Q3 U.S. Exports
Year-to-Date



		<i>Exports Year-to-Date (Billions of Dollars)</i>	<i>Percent Change Year-to-Date</i>	<i>Share of Exports Year-to-Date</i>
	United States	\$1,242.2	9.1%	
<i>Top Export Markets</i>	Canada	225.4	7.3	18.1%
	Mexico	197.9	10.2	15.9%
	China*	144.2	2.8	11.6%
	Japan	54.8	9.9	4.4%
	United Kingdom	49.3	18.4	4.0%
	Germany	43.5	10.3	3.5%
	South Korea	41.0	13.8	3.3%
	Netherlands Antilles	36.2	15.0	2.9%
	Brazil	29.3	9.0	2.4%
	France	26.9	8.1	2.2%

Ten-Year History of U.S. Top Export Countries
Billions in Quarterly Exports



Source: Census Bureau/Haver Analytics

*Includes China, Hong Kong, Taiwan & Macao.

Page 2: Gross domestic product (GDP) is the most commonly used measure of aggregate U.S. economic activity. Real GDP is indexed for inflation to 2009 dollars using the personal consumption expenditure price index (PCEPI). Advance, second, and third GDP estimates are released during the first, second, and third month of the following quarter. Each release reflects more complete information. Federal Open Market Committee (FOMC) projections for GDP are released quarterly. Contributions to GDP show how each component of GDP contributes to GDP growth. Tenth District GDP is the year-over-year percent change for the sum of the Gross State Products from CO, KS, MO, NE, NM, OK and WY.

Page 3: Inflation is calculated as the year-over-year change in price indices. Headline inflation includes all price components, while core inflation excludes the more volatile components of food and energy. Producer prices reflect price changes in production components, while PCEPI and CPI-U (consumer price index for all urban consumers) estimates show changes in commodities sold to consumers.

Pages 4, 5 and 6: 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.

Page 7: 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, commonly called the "Household" survey.

Page 8: "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/empsit/ces_cps_trends.pdf Initial claims show monthly applications for initial claims for state unemployment insurance benefits.

Pages 9 and 10: Personal income provides a measure of all income received by residents of a given geographic area. Data shown on page 9 are in real terms (adjusted for inflation) and data on page 10 are shown 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 recipients 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 CPI-U and are indexed to the most current month of data.

Pages 11 and 12: Home price indices estimate regional growth in home values based on repeat sales data for detached single family residential properties.

Page 12: Monthly single and multifamily housing permits data are not revised and therefore may not sum to published year-end totals.

Page 13: The ISM composite index, also commonly called the Purchasing Managers Index (PMI), represents a weighted average of diffusion indices for new orders, production, supplier deliveries, inventories, and employment. Federal Reserve district surveys differ slightly in methodologies for composite indices.

Page 14: Kansas City Manufacturing Survey diffusion indices are calculated as the percentage of total respondents reporting increases in activity less those reporting declines.

Page 15: 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.

Page 16: A spot price is the current market delivery price of a given commodity.

Page 17: Coal production is shown as production during a given month.

Pages 18 and 19: Farmland values surveyed differ across Federal Reserve districts.

Page 20: 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.

Additional Resources Available

- Agricultural Surveys
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