THE
Missouri
ECONOMIC DATABOOK

*A summary of regional economic indicators
for the state of Missouri*
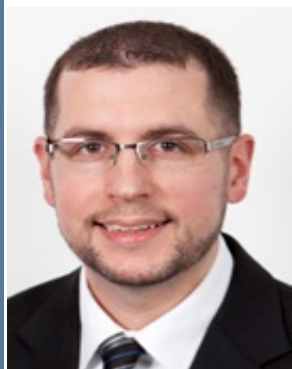
MARCH 26, 2018   FEDERAL RESERVE BANK *of* KANSAS CITY

SUMMARY OF CURRENT MISSOURI ECONOMIC CONDITIONS

In Missouri, the unemployment rate was 3.7 percent in February, and total payroll employment grew 1.0 percent compared to the previous year. Employment growth was mixed across industries, with the strongest gains in the professional and business services and mining and logging sectors. Missouri nominal personal income grew 3.0 percent in the fourth quarter of 2017 compared to the previous year, with workplace earnings up 3.3 percent. Home prices increased 5.9 percent in the fourth quarter of 2017 compared to a year ago, while single-family and multifamily permits recorded a -4.6 and -59.6 percent change, respectively, year-to-date through February 2018. Missouri exports were 1.9 percent higher in 2017 compared to 2016.

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; and exports. These indicators can be found on the following pages.

Jason Brown is an Assistant Vice President, Economist, and Regional Executive at the Federal Reserve Bank of Kansas City. In this role, Brown is the Federal Reserve Bank of Kansas City's regional economist in Kansas and Missouri. He is responsible for briefing the Kansas City Fed's President on the economy in these states and the Tenth District.
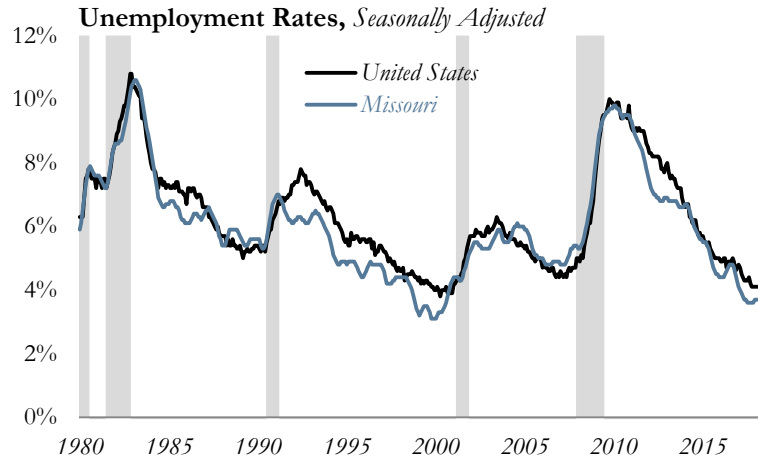
Unemployment Rates
Seasonally Adjusted

February 2018 Unemployment Rates
Seasonally Adjusted
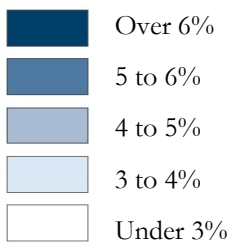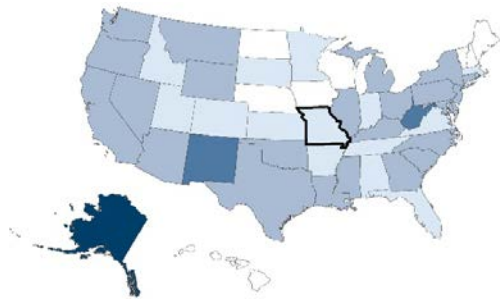
February 2018		
	United States	*Missouri*
Unemployment Rate	4.1%	3.7%
Unemployment Rate, *Last Year*	4.7%	4.0%

Over 6%

5 to 6%

4 to 5%

3 to 4%

Under 3%

Unemployment Rates, *Seasonally Adjusted*
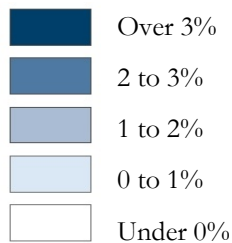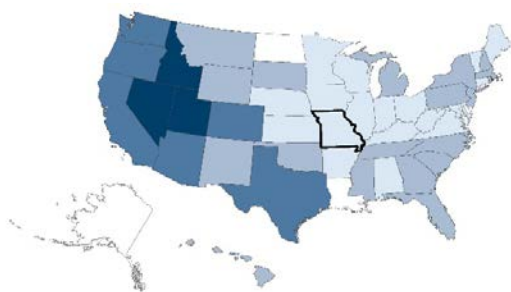
— United States
— Missouri

Note: Gray bars indicate recession.
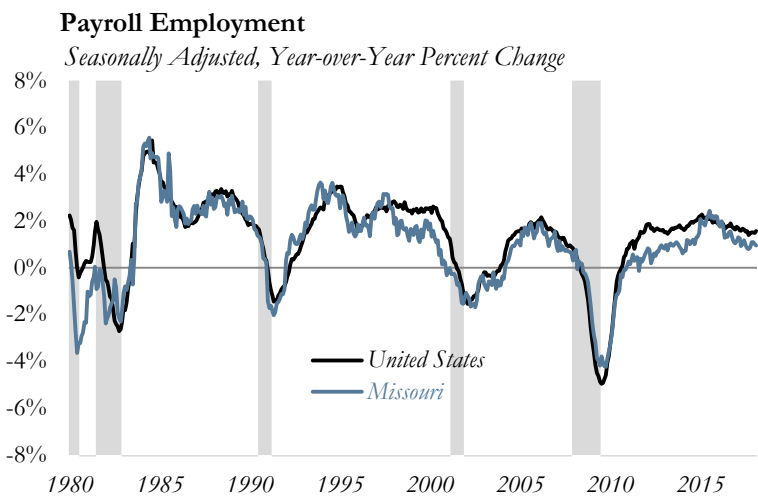
Payroll Employment
Seasonally Adjusted

February 2018 Payroll Employment
*Seasonally Adjusted, Year-over-Year Percent Change*

February 2018		
	United States	*Missouri*
Jobs (*Thousands*)	148,177.0	2,891.3
Change from Last Year	1.6%	1.0%

Over 3%

2 to 3%

1 to 2%

0 to 1%

Under 0%

Payroll Employment
Seasonally Adjusted, Year-over-Year Percent Change

— United States
— Missouri

Note: Gray bars indicate recession.

January 2018 Unemployment Rates *&* Civilian Labor Force
Seasonally Adjusted

			Over 6%
			5 to 6%
			4 to 5%
			3 to 4%
			Under 3%
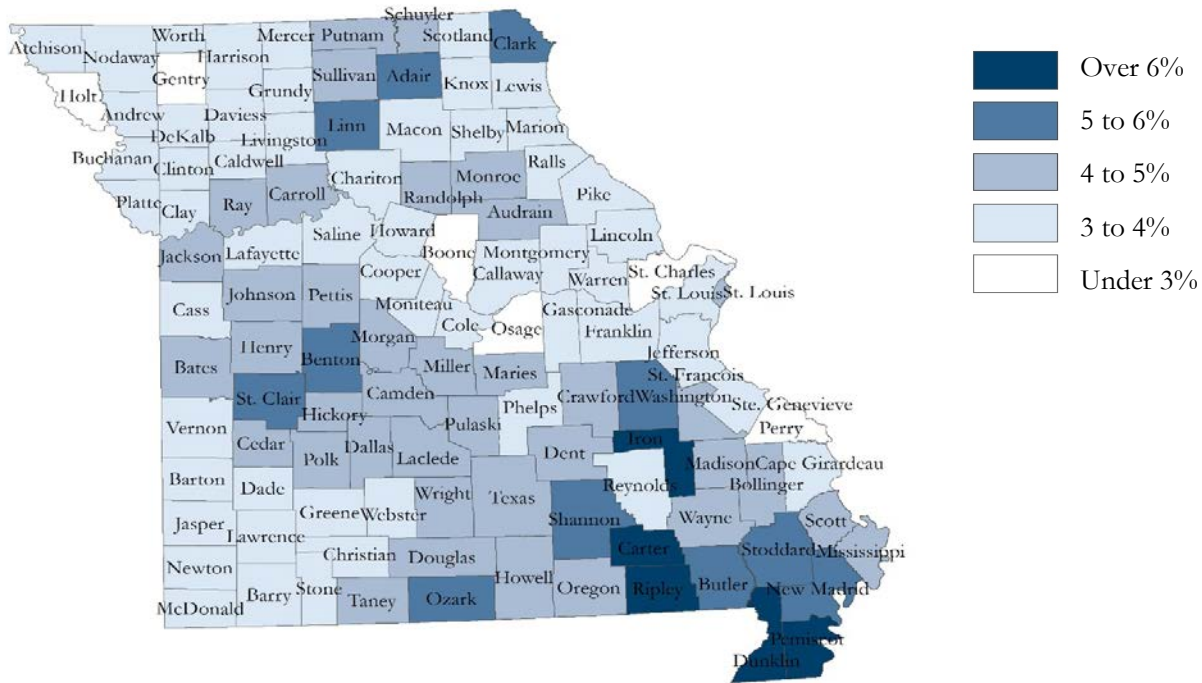
		Percent Unemployed	Labor Force (Thousands)			Percent Unemployed	Labor Force (Thousands)
	United States	**4.1%**	**161,115**	19	Maries	4.8	5.3
	Missouri	**3.7**	**3,043**	20	Texas	4.8	9.1
1	Pemiscot	7.6	6.3	21	Bollinger	4.8	5.4
2	Iron	6.9	3.4	22	Crawford	4.7	10.5
3	Dunklin	6.3	12.0	23	Randolph	4.7	9.9
4	Ripley	6.2	5.1	24	Hickory	4.7	3.7
5	Carter	6.0	2.4	25	Douglas	4.7	4.9
6	New Madrid	5.8	7.7	26	St. Francois	4.6	26.0
7	Shannon	5.8	3.1	27	Johnson	4.6	23.2
8	Linn	5.7	5.1	28	Wright	4.6	7.4
9	Butler	5.6	17.8	29	Pulaski	4.6	14.1
10	Benton	5.3	7.0	30	Dallas	4.5	6.9
11	Washington	5.3	10.0	31	St. Louis (City)	4.5	153.8
12	Clark	5.2	3.1	32	Morgan	4.5	7.7
13	Ozark	5.1	3.5	33	Mississippi	4.5	5.8
14	St. Clair	5.1	3.7	34	Bates	4.4	8.1
15	Adair	5.0	10.0	35	Polk	4.4	14.2
16	Stoddard	5.0	12.8	36	Pettis	4.4	20.2
17	Wayne	5.0	5.4	37	Howell	4.4	15.1
18	Schuyler	4.9	1.8	38	Camden	4.3	18.2

*Source: Bureau of Labor Statistics/Haver Analytics*

January 2018 Unemployment Rates & Civilian Labor Force

		Percent Unemployed	Labor Force (Thousands)			Percent Unemployed	Labor Force (Thousands)
39	Ray	4.3	11.1	78	Barton	3.6	5.0
40	Taney	4.3	26.3	79	Moniteau	3.6	7.2
41	Jackson	4.3	360.1	80	Harrison	3.6	3.8
42	Monroe	4.3	3.9	81	Daviess	3.6	4.0
43	Laclede	4.3	16.0	82	Franklin	3.6	51.5
44	Henry	4.3	9.5	83	Pike	3.6	7.7
45	Dent	4.2	5.9	84	Ste. Genevieve	3.6	3.9
46	Cedar	4.2	5.6	85	Caldwell	3.6	4.4
47	Carroll	4.2	4.6	86	Callaway	3.6	21.1
48	Oregon	4.2	3.9	87	Cass	3.6	54.0
49	Marion	4.1	3.8	88	St. Louis	3.5	521.1
50	Scott	4.1	19.5	89	Cape Girardeau	3.5	39.6
51	Miller	4.1	11.7	90	Madison	3.5	7.3
52	Sullivan	4.1	2.7	91	Lewis	3.5	5.0
53	Putnam	4.1	2.4	92	Shelby	3.5	3.0
54	Audrain	4.0	10.8	93	Jasper	3.4	56.0
55	Phelps	3.9	19.1	94	Grundy	3.4	4.7
56	Mercer	3.9	1.9	95	Montgomery	3.4	5.4
57	Stone	3.9	13.4	96	Ralls	3.4	5.5
58	Vernon	3.9	9.4	97	Buchanan	3.4	45.6
59	Macon	3.9	10.6	98	Platte	3.3	56.1
60	Clinton	3.8	11.0	99	Knox	3.3	1.9
61	Lawrence	3.8	17.5	100	Chariton	3.2	3.7
62	Nodaway	3.8	10.2	101	Greene	3.2	148.2
63	DeKalb	3.8	5.0	102	Warren	3.2	17.0
64	Reynolds	3.8	3.2	103	Cole	3.1	38.1
65	Lincoln	3.8	26.5	104	Scotland	3.1	2.4
66	Saline	3.8	10.3	105	Christian	3.1	43.0
67	Lafayette	3.8	17.1	106	Andrew	3.1	9.8
68	Jefferson	3.7	115.2	107	Atchison	3.1	2.8
69	Newton	3.7	27.5	108	Worth	3.0	1.1
70	Cooper	3.7	7.2	109	Livingston	3.0	7.1
71	Barry	3.7	15.0	110	St. Charles	3.0	216.0
72	Webster	3.7	16.7	111	Holt	3.0	2.6
73	McDonald	3.7	14.2	112	Osage	3.0	7.0
74	Dade	3.7	3.5	113	Perry	3.0	9.9
75	Clay	3.7	132.9	114	Boone	2.9	96.7
76	Gasconade	3.7	7.6	115	Gentry	2.8	3.5
77	Howard	3.6	4.9				

Payroll Employment

Payroll Employment
Ten-Year Index of Growth

Seasonally Adjusted
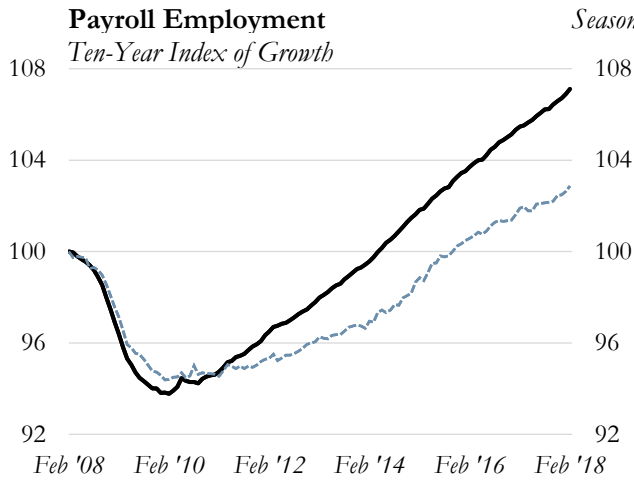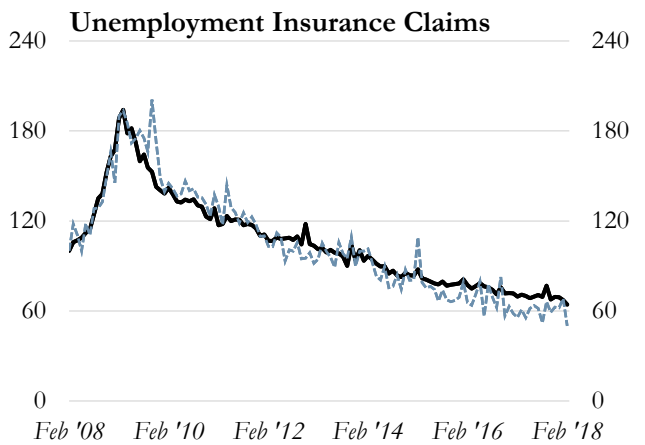
United States
Missouri

February 2018		
	United States	*Missouri*
Jobs (*Thousands*)	148,177.0	2,891.3
Change from Last Year (*Thousands*)	2,281.0	27.3
Share of U.S. Employment		2.0%

Labor Force Dynamics
Ten-Year Index of Growth, Seasonally Adjusted

Employed (Household Survey)

Unemployed

Labor Force
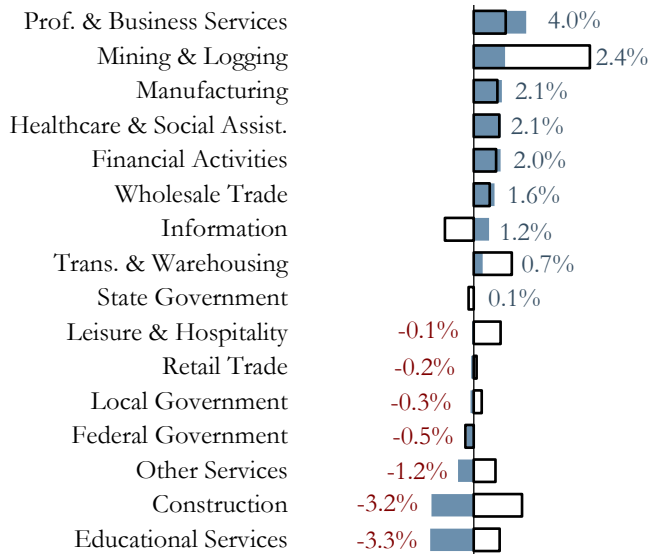
Unemployment Insurance Claims
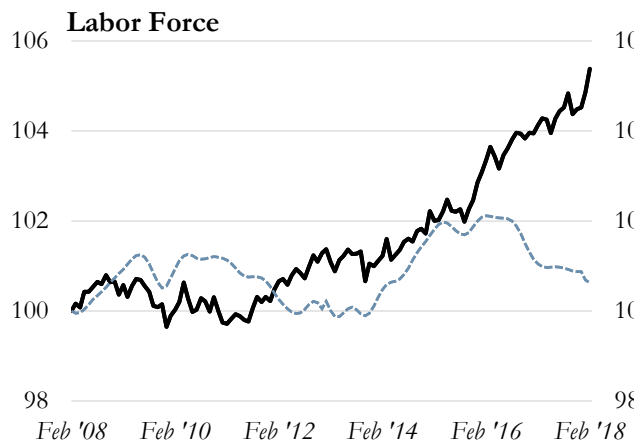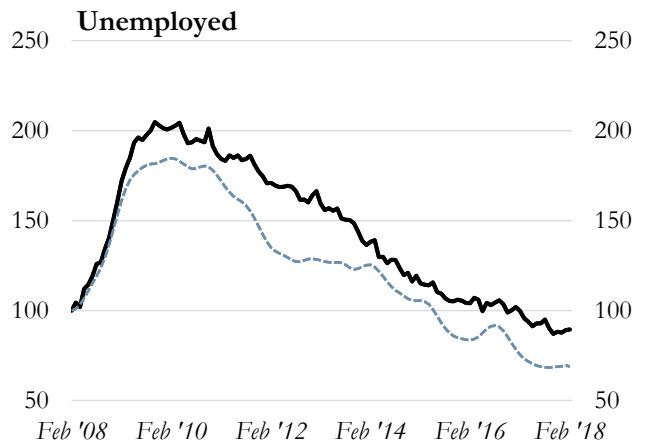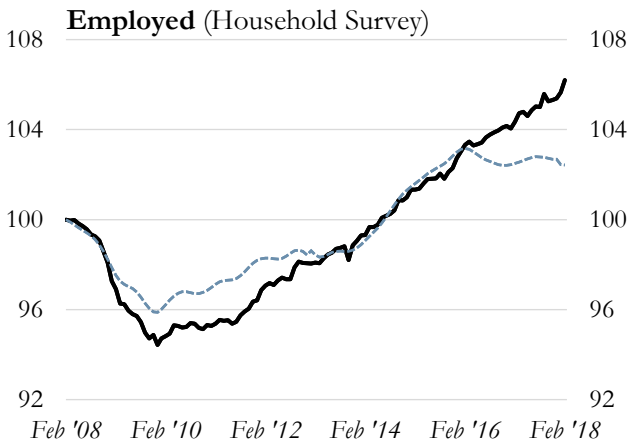
Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

Payroll Employment by Industry

Seasonally Adjusted

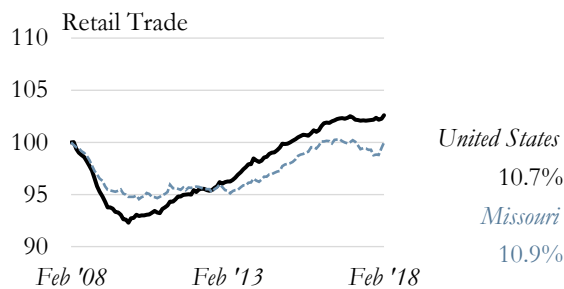**February 2018** *Percent Change Year-over-Year*

Industry	Percent Change
Prof. & Business Services	4.0%
Mining & Logging	2.4%
Manufacturing	2.1%
Healthcare & Social Assist.	2.1%
Financial Activities	2.0%
Wholesale Trade	1.6%
Information	1.2%
Trans. & Warehousing	0.7%
State Government	0.1%
Leisure & Hospitality	-0.1%
Retail Trade	-0.2%
Local Government	-0.3%
Federal Government	-0.5%
Other Services	-1.2%
Construction	-3.2%
Educational Services	-3.3%

United States

Missouri

Ten-Year Index of Growth

Construction

Feb '08 — Feb '13 — Feb '18

Share of Jobs
United States
4.8%
Missouri
4.2%

Manufacturing

Feb '08 — Feb '13 — Feb '18

Share of Jobs
United States
8.5%
Missouri
9.4%

Mining & Logging

Feb '08 — Feb '13 — Feb '18

United States
0.5%
Missouri
0.1%

Retail Trade

Feb '08 — Feb '13 — Feb '18

United States
10.7%
Missouri
10.9%

Wholesale Trade

Feb '08 — Feb '13 — Feb '18

United States
4.0%
Missouri
4.3%

Utilities

Feb '08 — Feb '13 — Feb '18

United States
0.4%
Missouri
0.4%

Transportation & Warehousing

Feb '08 — Feb '13 — Feb '18
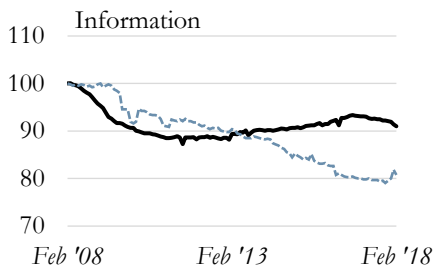
United States
3.6%
Missouri
3.5%

Source: Bureau of Labor Statistics/Haver Analytics

Payroll Employment by Industry
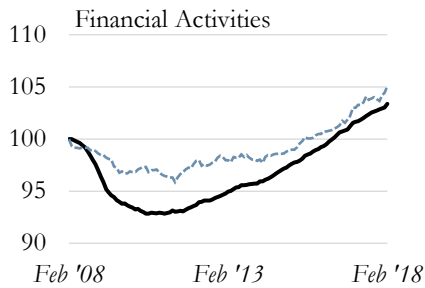
Ten-Year Index of Growth, Seasonally Adjusted
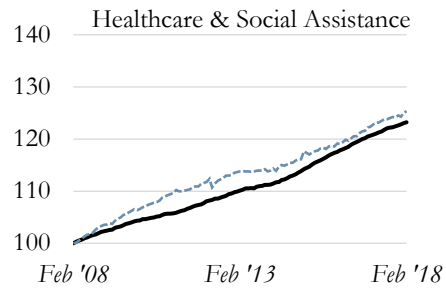
—— *United States*
----- *Missouri*

Information

Share of Jobs
United States
1.9%
Missouri
1.8%

Professional & Business Services
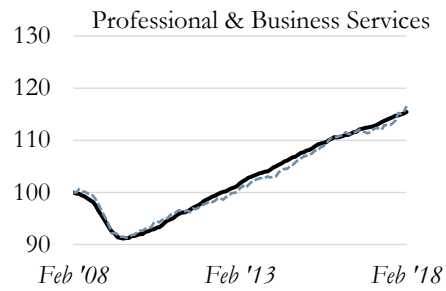
Share of Jobs
United States
14.0%
Missouri
13.7%

Financial Activities

United States
5.8%
Missouri
6.1%

Healthcare & Social Assistance

United States
13.3%
Missouri
14.4%
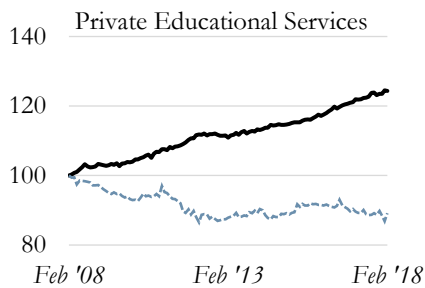
Private Educational Services

United States
2.5%
Missouri
1.9%
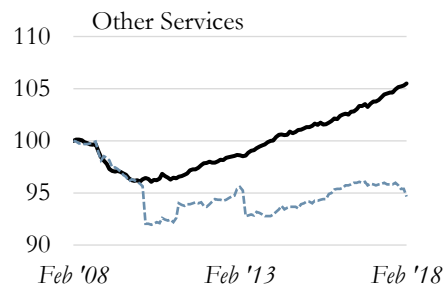
Other Services

United States
3.9%
Missouri
4.0%

Leisure & Hospitality
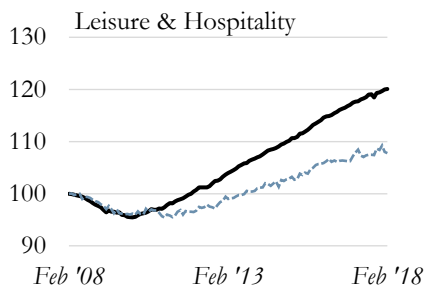
United States
11.0%
Missouri
10.5%

Federal Government
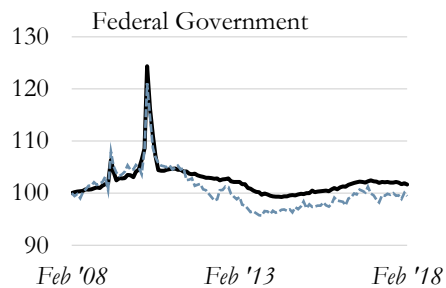
United States
1.9%
Missouri
1.9%

State Government
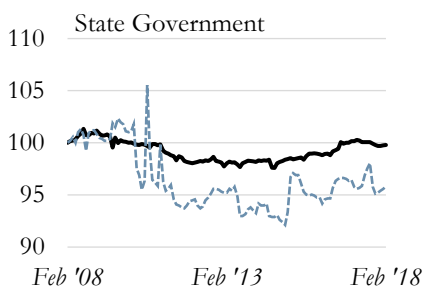
United States
3.5%
Missouri
3.5%

Local Government
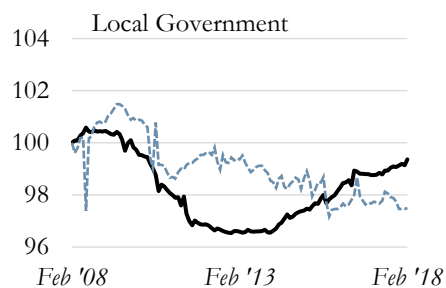
United States
9.7%
Missouri
9.6%

Source: Bureau of Labor Statistics/Haver Analytics

Missouri Nominal Personal Income Growth
Contributions to Percent Change Year-over-Year, Seasonally Adjusted

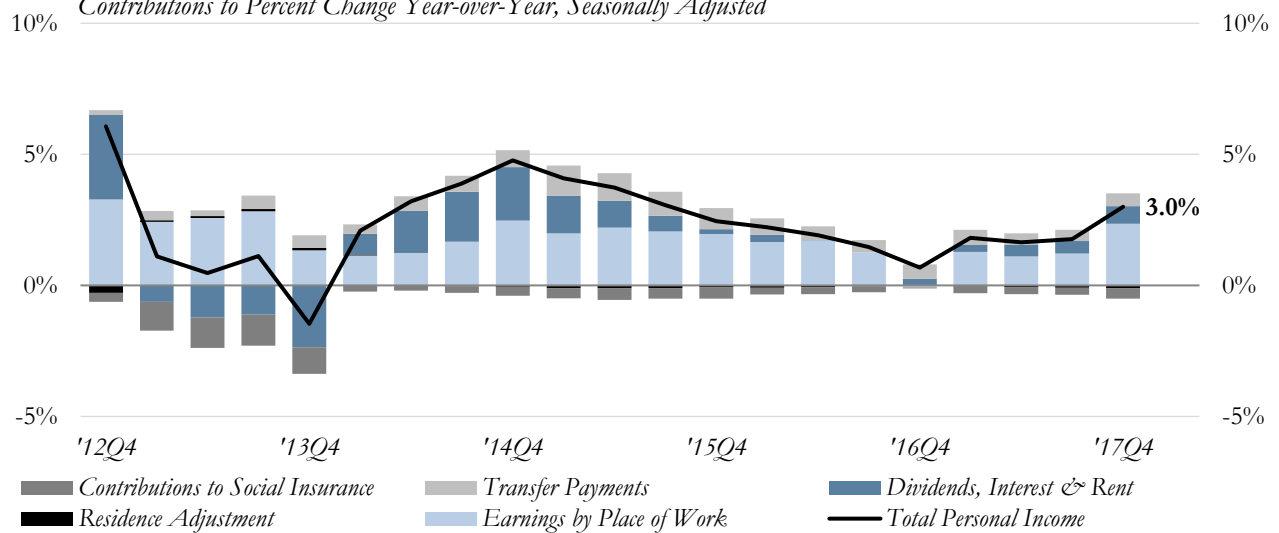| | Contributions to Social Insurance | | Transfer Payments | | Dividends, Interest & Rent |
| | Residence Adjustment | | Earnings by Place of Work | | Total Personal Income |

2017Q4	Percent Change Year-over-Year		Share of Personal Income	
	United States	Missouri	United States	Missouri
Total Personal Income	**3.9%**	**3.0%**		
Earnings by Place of Work	4.3%	3.3%	71.2%	71.8%
Social Insurance Contributions*	-5.8%	-4.9%	-7.9%	-8.4%
Residence Adjustment		5.4%		-2.1%
Dividends, Interest & Rent	4.1%	3.7%	19.4%	18.3%
Transfer Payments	3.0%	2.4%	17.3%	20.3%

*Subtracted from personal income.

Real Average Hourly Wage
Current Dollars, Seasonally Adjusted
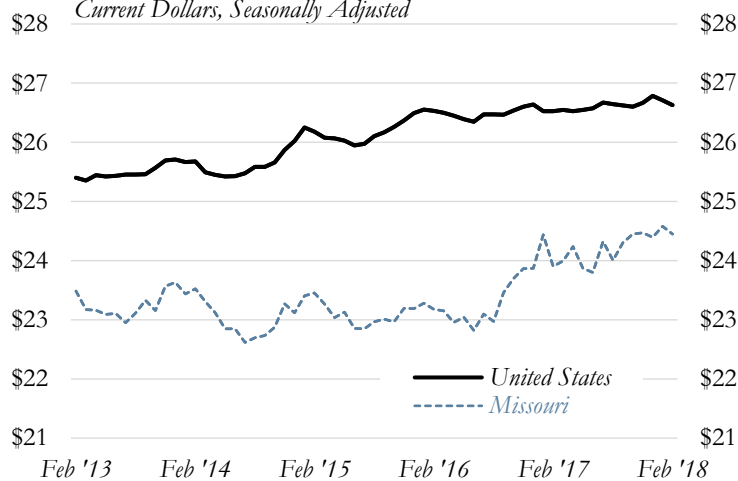
February 2018		
Average	United States	Missouri
Hourly Wage	$26.63	$24.45
Real Change from		
Last Month	-0.3%	-0.5%
Last Year	0.4%	2.3%

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

FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted
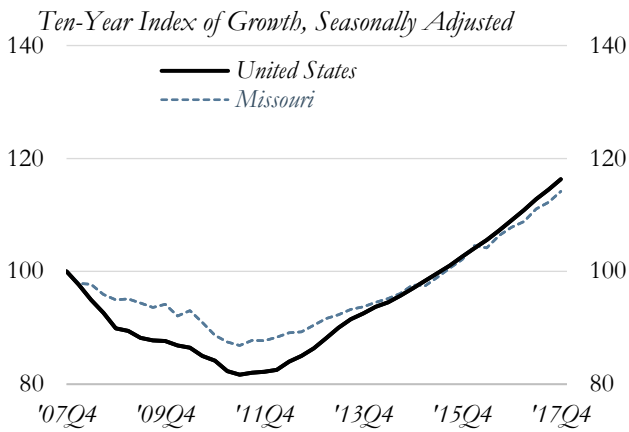
Rental Vacancy Rates

Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted
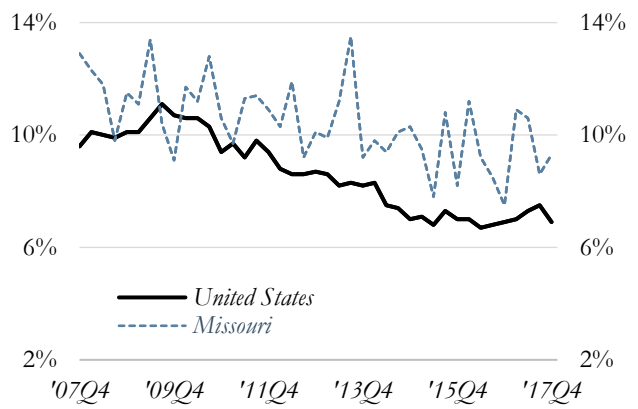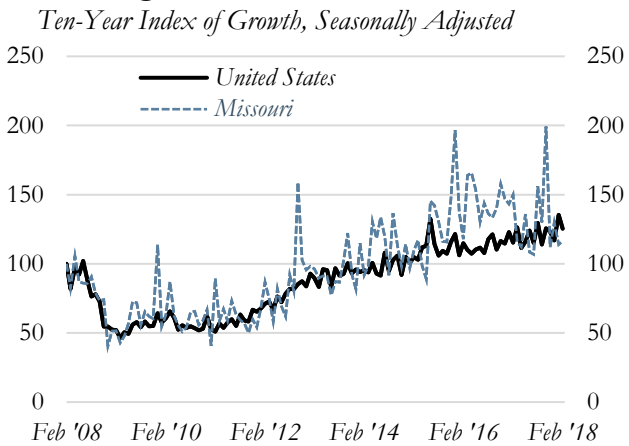
Summary Statistics		
	United States	*Missouri*
Prices (2017Q4)*	6.7%	5.9%
Vacancy Rates (2017Q4)	6.9%	9.3%
Permits (*Year-to-Date*)*		
Single Family	11.2%	-4.6%
Multifamily	5.9%	-59.6%

*Percent change year-over-year.

Top 10 Missouri Counties for Permit Activity

Year-to-Date through February
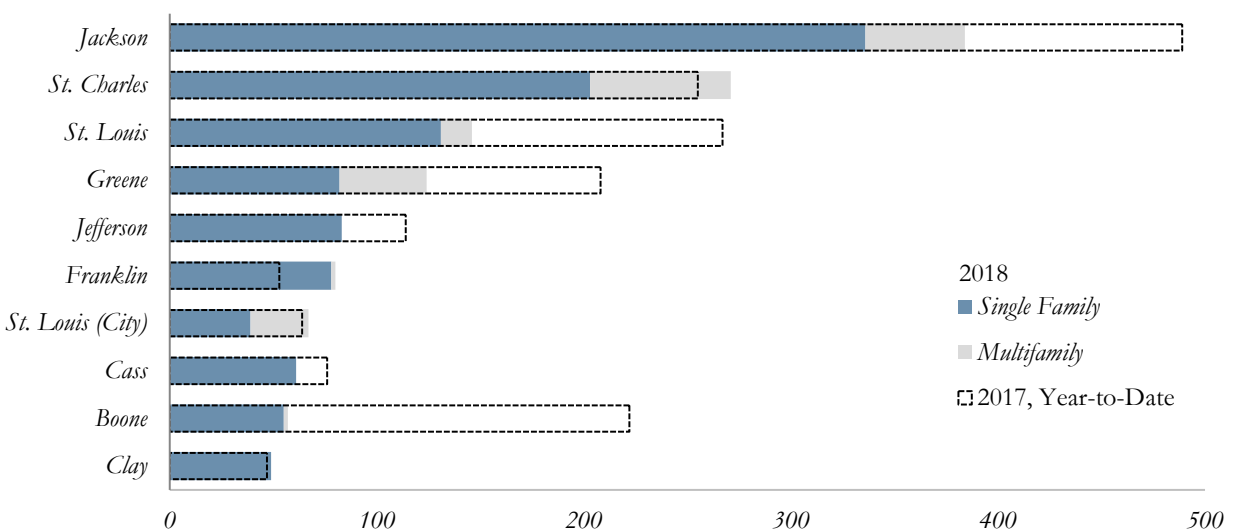
Global Exports

Ten-Year Index of Growth, Seasonally Adjusted

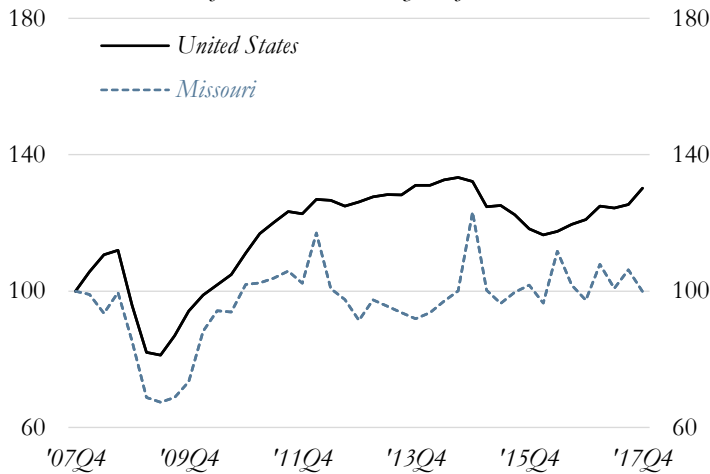| 2017Q4		
	United States	*Missouri*
Exports *(Millions)*	$398,780.4	$3,416.2
Change from		
Last Quarter	3.8%	-6.0%
Last Year *(year-to-date)*	6.4%	1.9%
Share of U.S. Activity		0.9%

2016		
Exports as a Percent of GDP	United States 7.8%	*Missouri* 4.7%

Missouri Exports Year-to-Date through 2017Q4

Percent Change Year-over-Year

Over 100%
50 to 100%
25 to 50%
0 to 25%
-25 to 0%
Below -25%
Not Applicable
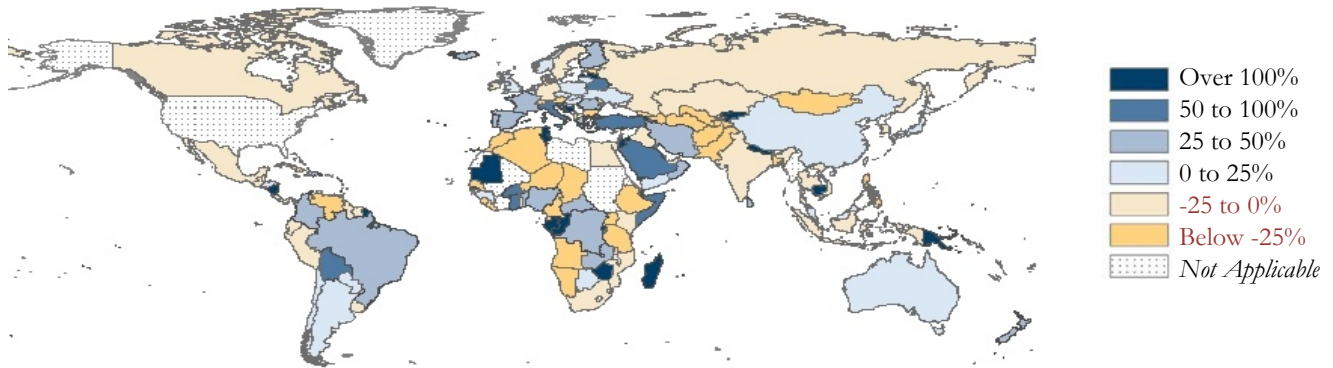
Top Markets		Share
1	Canada	36.4%
2	Mexico	18.1
3	China*	7.6
4	Belgium	4.1
5	Japan	3.9
6	Germany	3.2
7	United Kingdom	2.4
8	Australia	2.1
9	France	2.0
10	South Korea	1.9

Top Exports		Share
1	Transportation Equip.	27.4%
2	Chemicals & Rare Earth Metals	18.3
3	Machinery (Except Electrical)	9.4
4	Food	9.1
5	Electronic Equip. & Appliances	4.9
6	Computers & Electronics	4.3
7	Fabricated Metal Products	3.9
8	Agriculture & Livestock	3.8
9	Primary Metals	2.9
10	Plastics & Rubber Products	2.5

*China includes Hong Kong, Taiwan, and Macao.

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/empsit/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 : 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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