

THE *Missouri* ECONOMIC DATABOOK

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



NOVEMBER 21, 2016

FEDERAL RESERVE BANK of KANSAS CITY

SUMMARY OF CURRENT MISSOURI ECONOMIC CONDITIONS

In Missouri, the unemployment rate was 5.1 percent in October, and total payroll employment grew 1.8 percent compared to the previous year.. Employment growth was mixed across industries, with the strongest gains in the professional and business services and financial activities sectors. Missouri nominal personal income grew 3.3 percent in the second quarter of 2016 compared to the previous year, with workplace earnings up 4.0 percent. Home prices increased 5.3 percent in the second quarter of 2016 compared to a year ago, while single-family and multifamily permits recorded a -1.0 and 29.1 percent change, respectively, so far this year. Missouri exports were 4.3 percent higher in the third quarter of 2016 compared to the same period in 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; and exports. These indicators can be found on the following pages.



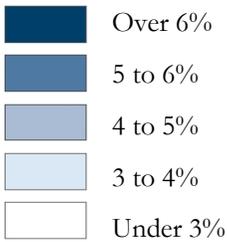
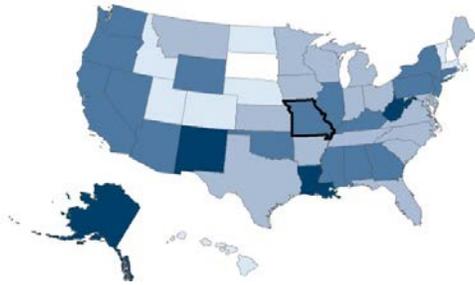
Jason Brown is a Senior Economist and Regional Executive at the Federal Reserve Bank of Kansas City. In this role, Brown is the Federal Reserve Bank of Kansas City's regional economist in Kansas and Missouri. He is responsible for briefing the Kansas City Fed's President on the economy in these states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

Unemployment Rates

Seasonally Adjusted

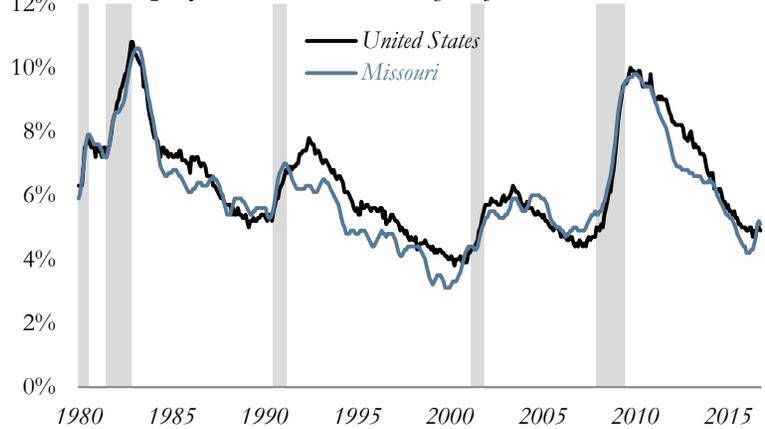
October 2016 Unemployment Rates

Seasonally Adjusted



October 2016		
	<i>United States</i>	<i>Missouri</i>
Unemployment Rate	4.9%	5.1%
Unemployment Rate, Last Year	5.0%	4.5%

Unemployment Rates, Seasonally Adjusted



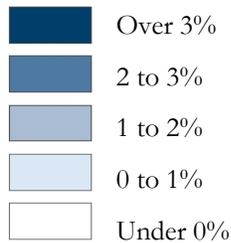
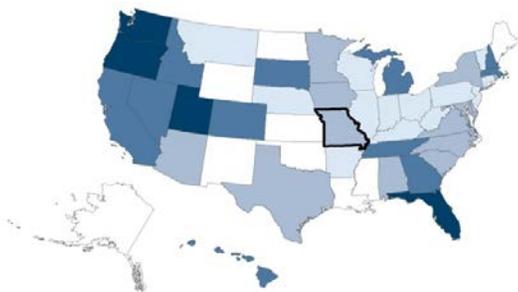
Note: Gray bars indicate recession.

Payroll Employment

Seasonally Adjusted

October 2016 Payroll Employment

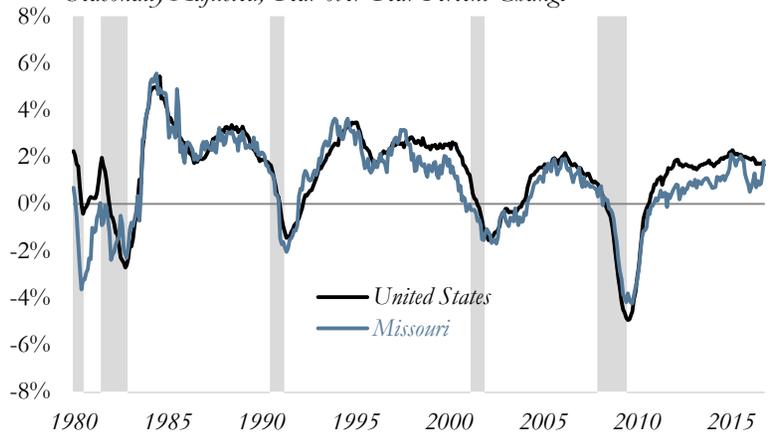
Seasonally Adjusted, Year-over-Year Percent Change



October 2016		
	<i>United States</i>	<i>Missouri</i>
Jobs (Thousands)	144,952.0	2,838.5
Change from Last Year	1.7%	1.8%

Payroll Employment

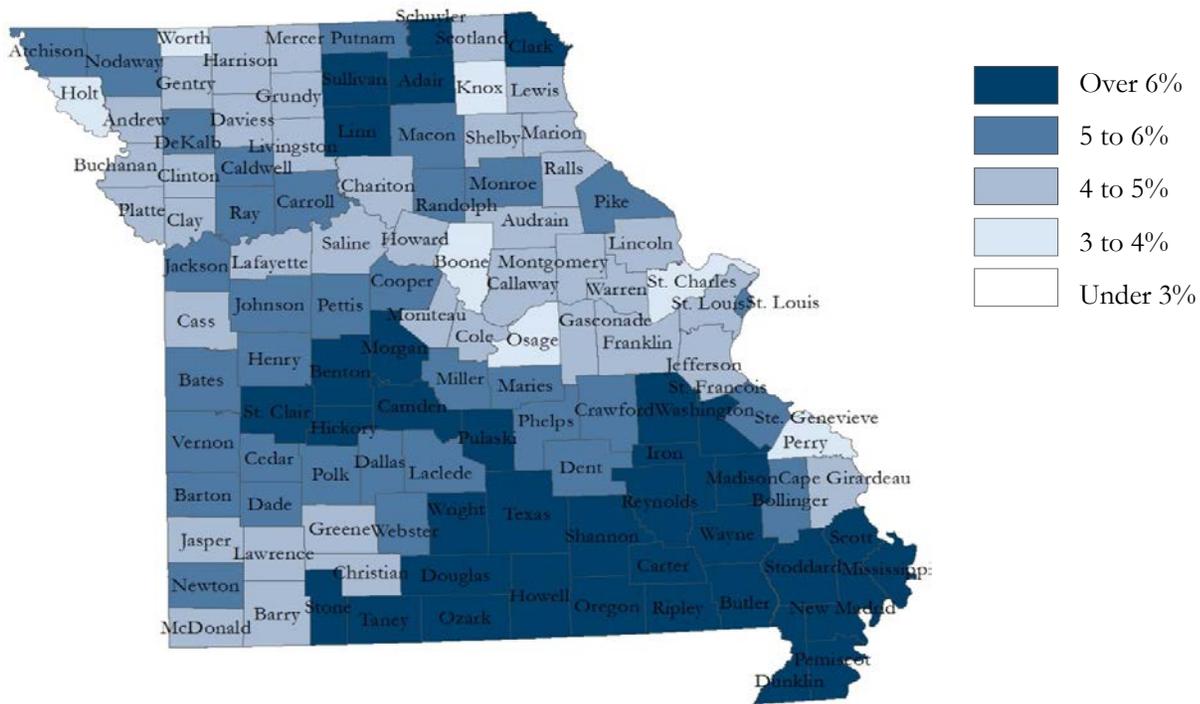
Seasonally Adjusted, Year-over-Year Percent Change



Note: Gray bars indicate recession.

Source: Bureau of Labor Statistics/Haver Analytics

September 2016 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>	
United States	5.0%	159,907	19	Texas	9.7	
Missouri	5.2	3,130	20	Washington	10.7	
1	New Madrid	9.4	8.9	21	Morgan	8.3
2	Pemiscot	9.2	7.2	22	Wright	7.9
3	Dunklin	8.6	13.4	23	Benton	7.4
4	Taney	8.3	27.3	24	Oregon	4.3
5	Shannon	8.1	554.7	25	St. Clair	2.0
6	Stone	8.0	14.1	26	Howell	16.5
7	Carter	8.0	2.6	27	Camden	19.0
8	Ozark	8.0	3.8	28	Pulaski	14.9
9	Clark	7.8	3.5	29	Scott	26.9
10	Ripley	7.8	5.5	30	Adair	10.8
11	Linn	7.6	5.4	31	St. Francois	2.5
12	Iron	7.5	3.9	32	Hickory	3.8
13	Reynolds	7.3	2.8	33	Butler	19.5
14	Schuyler	7.2	4.1	34	Maries	5.6
15	Douglas	7.2	5.3	35	Wayne	5.8
16	Stoddard	7.0	13.8	36	Dallas	7.3
17	Mississippi	7.0	6.5	37	Dent	6.4
18	Sullivan	7.0	2.9	38	Crawford	11.2

Source: Bureau of Labor Statistics/Haver Analytics

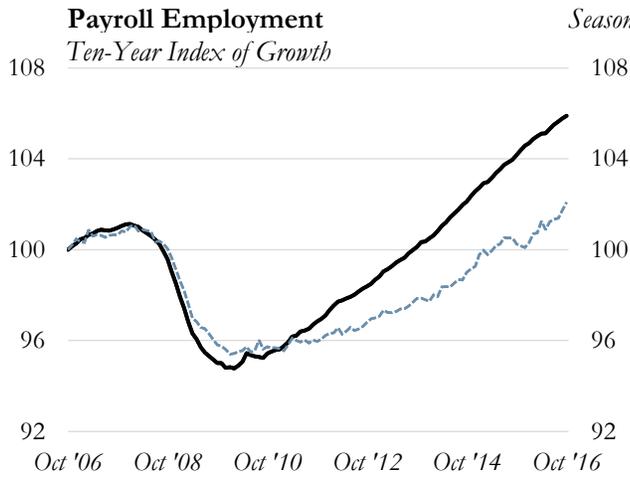
September 2016 Unemployment Rates & Civilian Labor Force

		<i>Percent Unemployed</i>	<i>Labor Force (Thousands)</i>			<i>Percent Unemployed</i>	<i>Labor Force (Thousands)</i>
39	Miller	5.9	12.2	78	Lincoln	4.9	27.8
40	Bollinger	5.9	5.8	79	Moniteau	4.9	7.6
41	Bates	5.9	8.5	80	Harrison	4.8	4.1
42	Barton	5.8	5.5	81	Macon	4.8	11.2
43	St. Louis (City)	5.8	3.4	82	Lewis	4.8	5.3
44	Laclede	5.7	16.3	83	Montgomery	4.8	5.9
45	Randolph	5.7	10.8	84	Lawrence	4.8	18.3
46	Johnson	5.7	24.1	85	Jefferson	4.8	121.5
47	Marion	5.6	4.0	86	St. Louis	4.7	20.5
48	Madison	5.6	7.7	87	Jasper	4.7	58.4
49	Jackson	5.5	370.1	88	Clinton	4.7	11.2
50	Carroll	5.5	5.0	89	Warren	4.6	17.9
51	Phelps	5.5	20.1	90	Lafayette	4.6	17.8
52	Cedar	5.4	6.0	91	Cass	4.6	55.0
53	Henry	5.4	10.4	92	Callaway	4.6	22.2
54	Nodaway	5.4	11.4	93	McDonald	4.6	14.9
55	Atchison	5.4	3.0	94	Shelby	4.6	166.6
56	Pettis	5.4	21.3	95	Buchanan	4.5	46.9
57	Webster	5.4	17.2	96	Gasconade	4.5	7.9
58	Cooper	5.3	7.7	97	Audrain	4.5	11.5
59	Caldwell	5.3	4.6	98	Scotland	4.5	9.3
60	Polk	5.3	14.8	99	Andrew	4.4	10.1
61	Ray	5.3	11.6	100	Christian	4.3	44.2
62	DeKalb	5.2	5.2	101	Gentry	4.3	3.8
63	Pike	5.1	8.3	102	Daviess	4.3	4.3
64	Dade	5.1	3.8	103	Clay	4.2	134.8
65	Putnam	5.1	2.6	104	Livingston	4.2	7.5
66	Vernon	5.1	10.0	105	Greene	4.1	154.4
67	Newton	5.1	29.0	106	Ralls	4.1	5.8
68	Monroe	5.0	4.3	107	Cole	4.1	40.2
69	Ste. Genevieve	5.0	3.2	108	Platte	4.1	56.5
70	Mercer	5.0	2.0	109	St. Charles	3.9	11.2
71	Saline	5.0	223.7	110	Knox	3.9	2.0
72	Cape Girardeau	5.0	41.2	111	Perry	3.9	10.3
73	Barry	5.0	15.5	112	Osage	3.7	7.4
74	Chariton	5.0	4.0	113	Boone	3.7	102.7
75	Howard	5.0	5.2	114	Holt	3.6	2.8
76	Grundy	4.9	5.1	115	Worth	3.3	1.3
77	Franklin	4.9	54.5				

Source: Bureau of Labor Statistics/Haver Analytics

Payroll Employment

Seasonally Adjusted

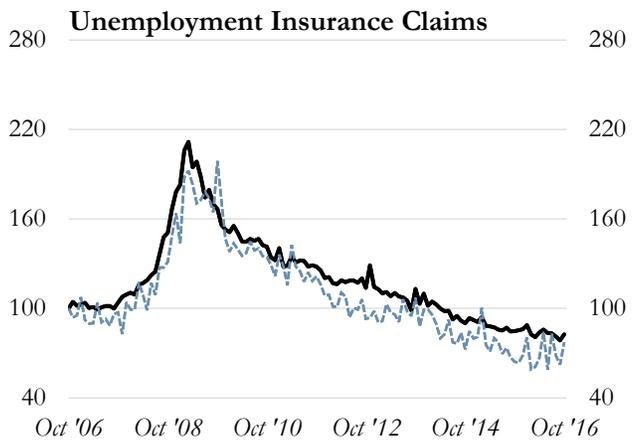
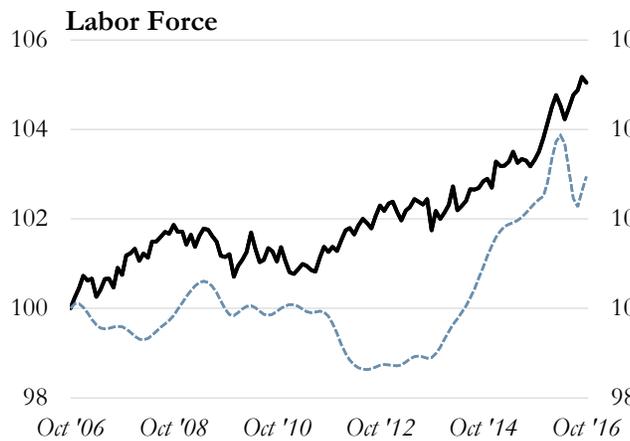
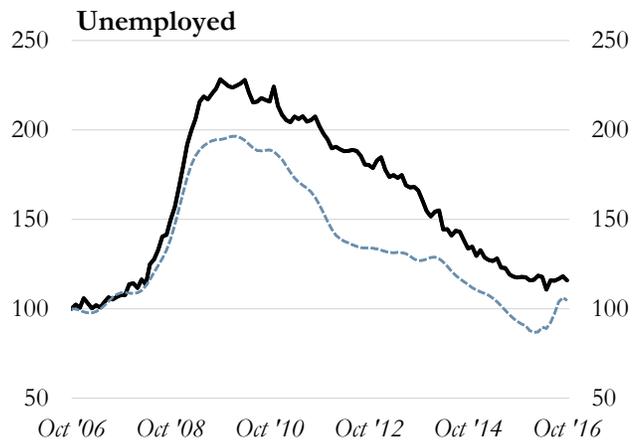
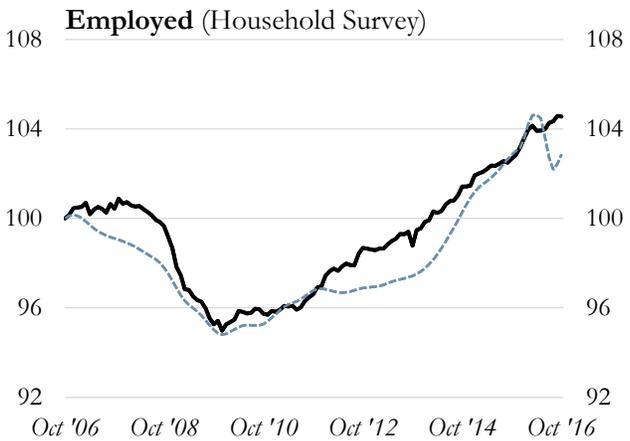


— United States
- - - Missouri

October 2016		
	United States	Missouri
Jobs (Thousands)	144,952.0	2,838.5
Change from Last Year (Thousands)	2,357.0	50.9
Share of U.S. Employment		2.0%

Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted

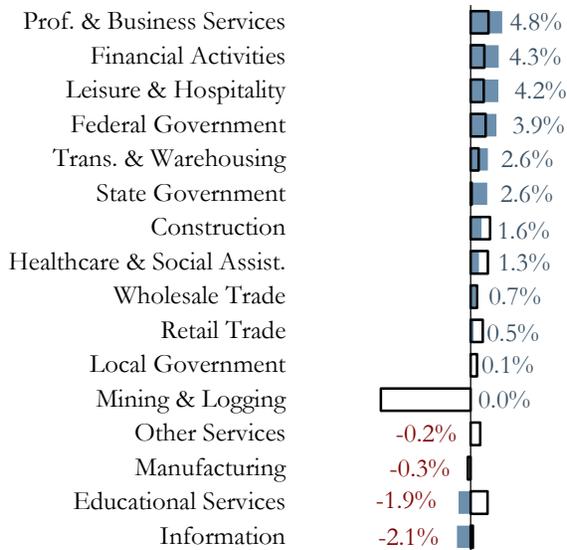


Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

Payroll Employment by Industry

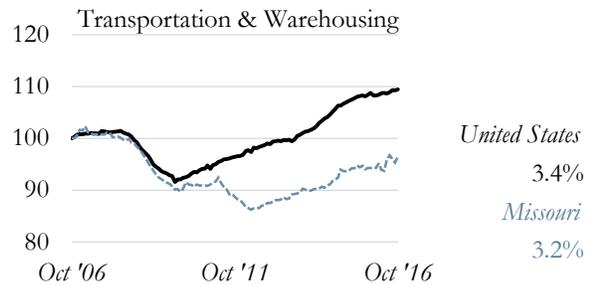
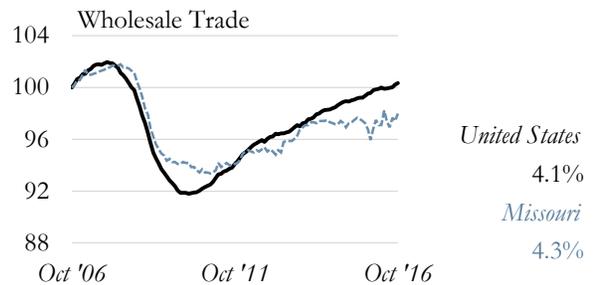
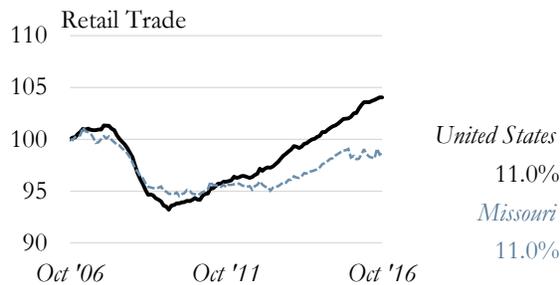
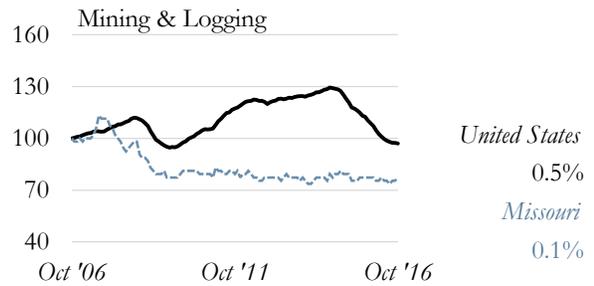
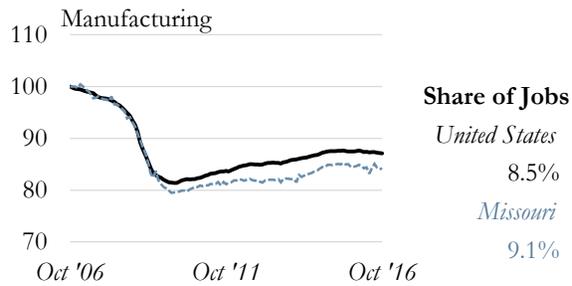
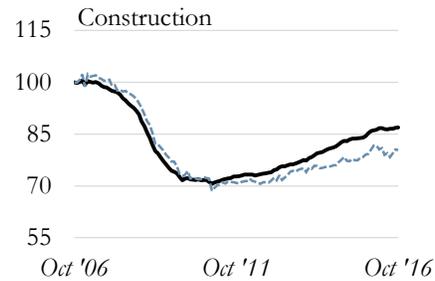
Seasonally Adjusted

October 2016 *Percent Change Year-over-Year*



— United States
- - - - Missouri

Ten-Year Index of Growth

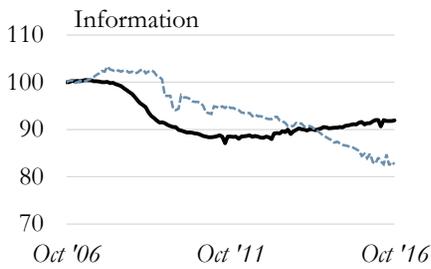


Source: Bureau of Labor Statistics/Haver Analytics

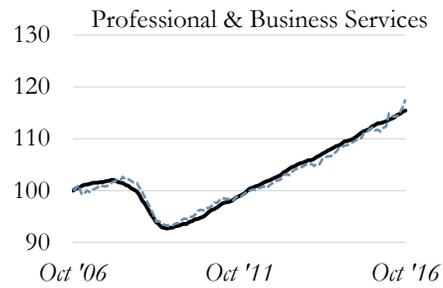
Payroll Employment by Industry

Ten-Year Index of Growth, Seasonally Adjusted

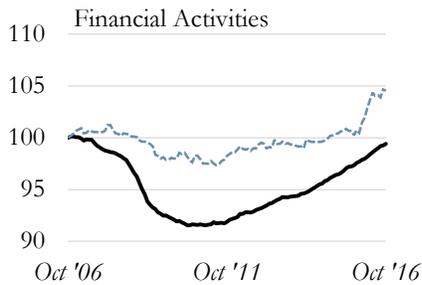
— United States
 - - - - Missouri



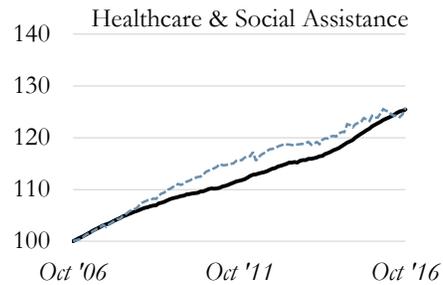
Share of Jobs
 United States 1.9%
 Missouri 1.8%



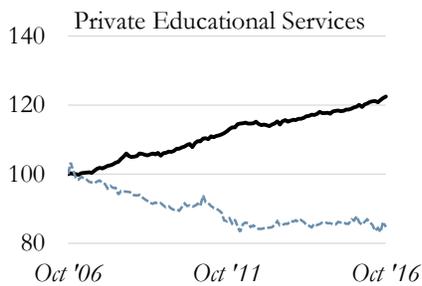
Share of Jobs
 United States 14.1%
 Missouri 13.8%



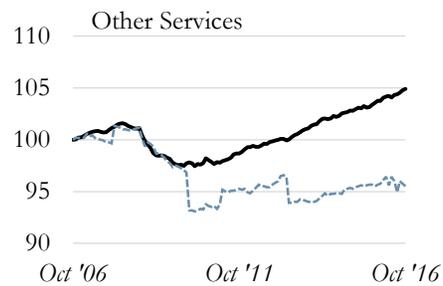
United States 5.8%
 Missouri 6.1%



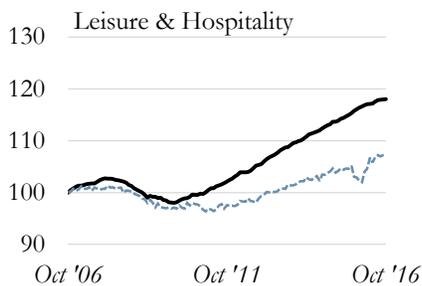
United States 13.3%
 Missouri 14.2%



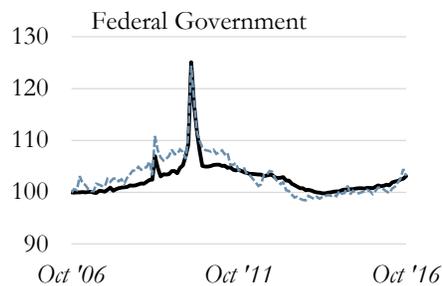
United States 2.5%
 Missouri 1.9%



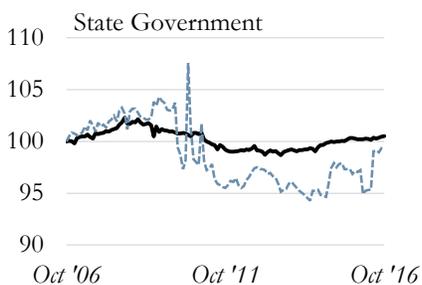
United States 3.9%
 Missouri 4.0%



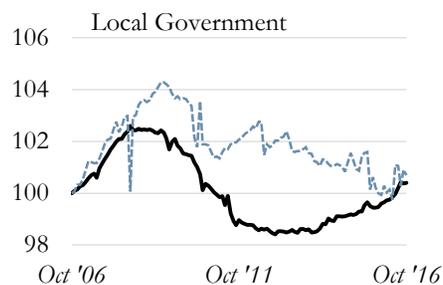
United States 10.7%
 Missouri 10.6%



United States 1.9%
 Missouri 2.0%



United States 3.5%
 Missouri 3.7%

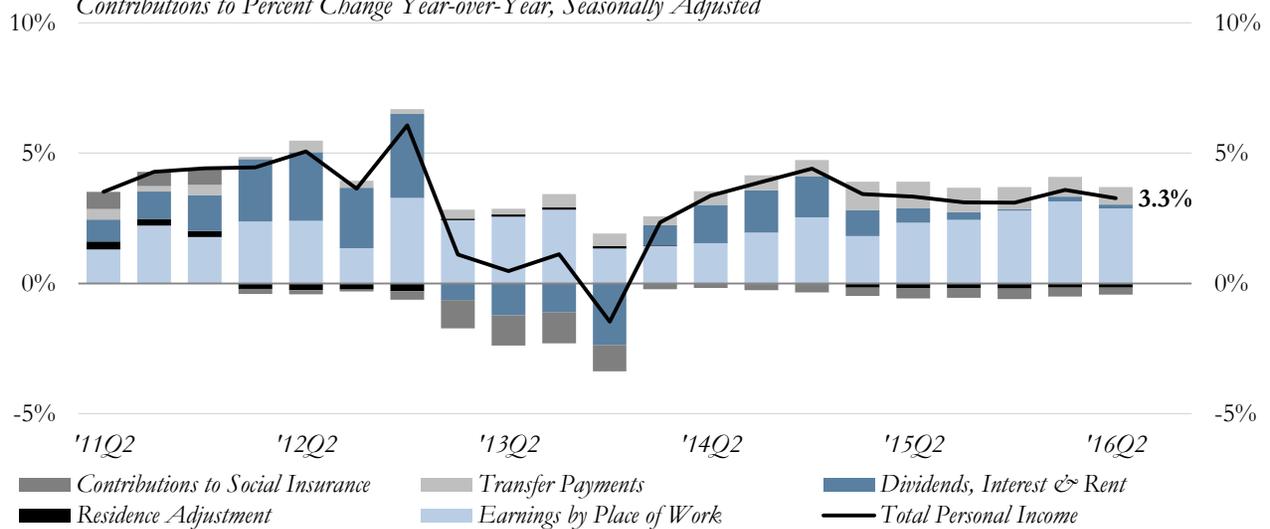


United States 9.9%
 Missouri 9.8%

Source: Bureau of Labor Statistics/Haver Analytics

Missouri Nominal Personal Income Growth

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

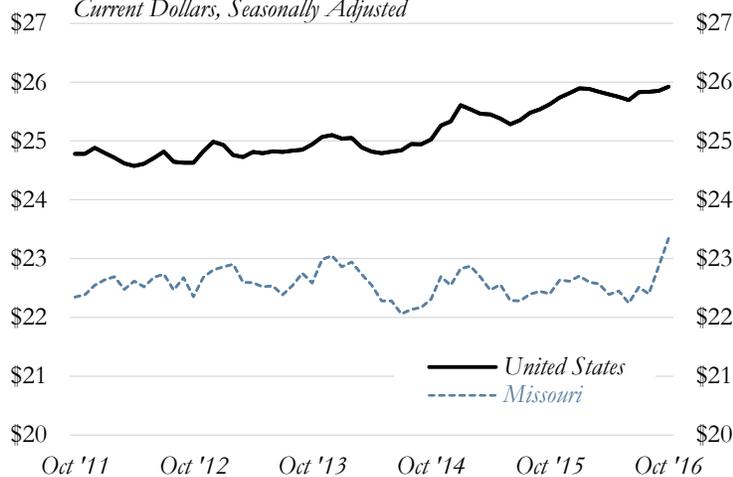


2016Q2	Percent Change Year-over-Year		Share of Personal Income	
	United States	Missouri	United States	Missouri
Total Personal Income	3.2%	3.3%		
Earnings by Place of Work	3.7%	4.0%	71.8%	72.8%
Social Insurance Contributions*	-3.5%	-3.4%	-7.8%	-8.1%
Residence Adjustment		7.7%		-2.2%
Dividends, Interest & Rent	1.2%	0.8%	18.6%	17.4%
Transfer Payments	3.3%	3.3%	17.4%	20.1%

*Subtracted from personal income.

Real Average Hourly Wage

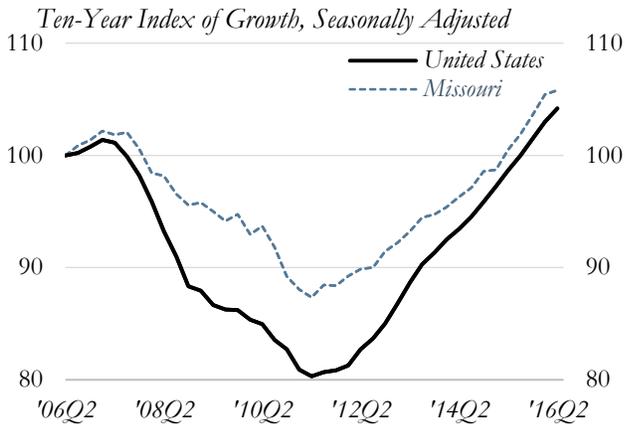
Current Dollars, Seasonally Adjusted



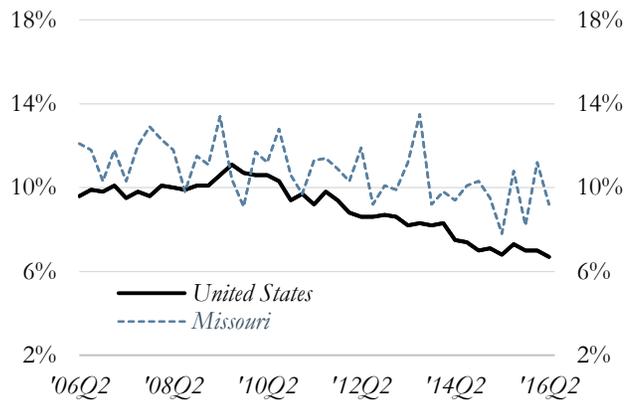
October 2016		
Average Hourly Wage	United States	Missouri
	\$25.92	\$23.34
<i>Real Change from</i>		
Last Month	0.3%	2.1%
Last Year	1.2%	4.2%

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

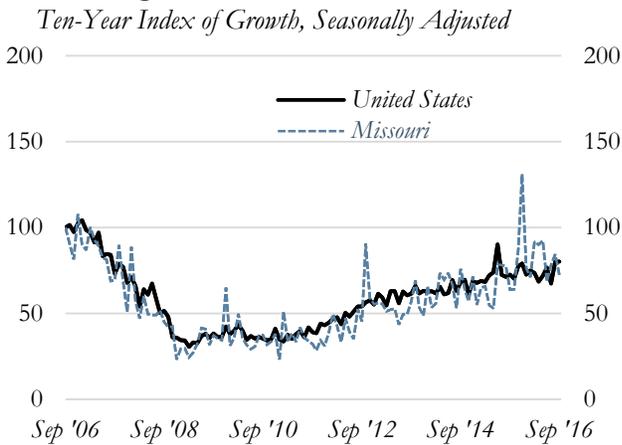
FHFA Purchase-Only Home Price Index



Rental Vacancy Rates



Housing Permits

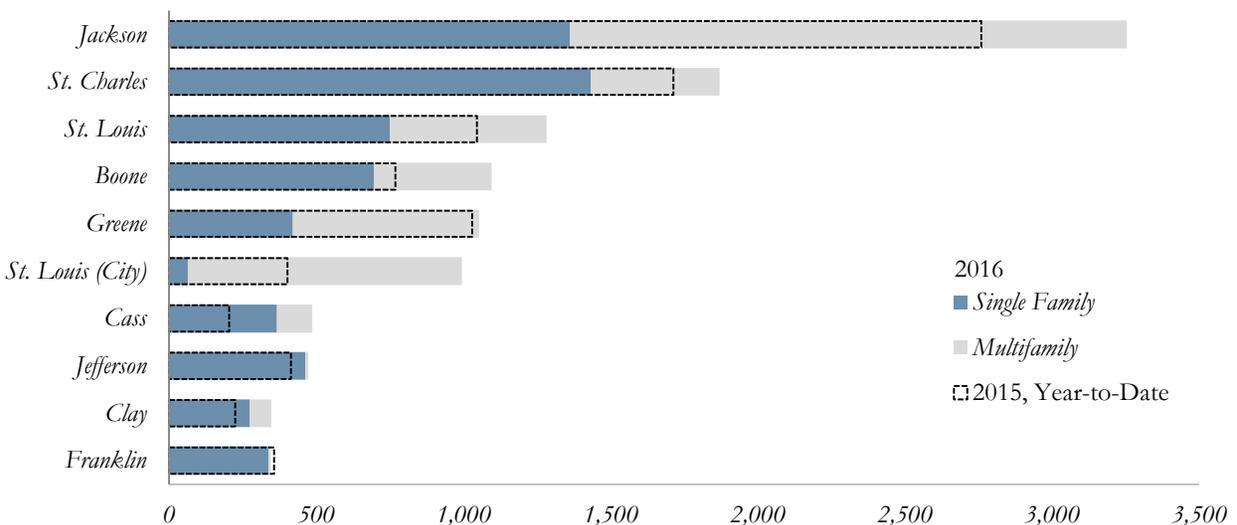


Summary Statistics		
	<i>United States</i>	<i>Missouri</i>
Prices (2016Q2)*	5.6%	5.3%
Vacancy Rates (2016Q2)	6.7%	9.2%
Permits (Year-to-Date)*		
<i>Single Family</i>	8.3%	-1.0%
<i>Multifamily</i>	-9.0%	29.1%

*Percent change year-over-year.

Top 10 Missouri Counties for Permit Activity

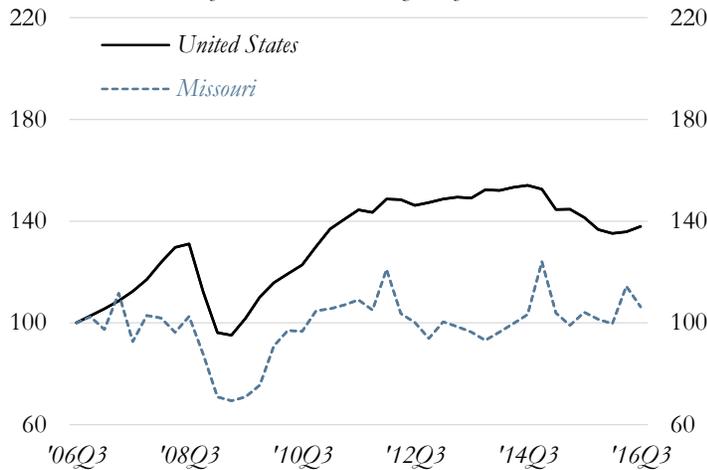
Year-to-Date through September



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

Global Exports

Ten-Year Index of Growth, Seasonally Adjusted

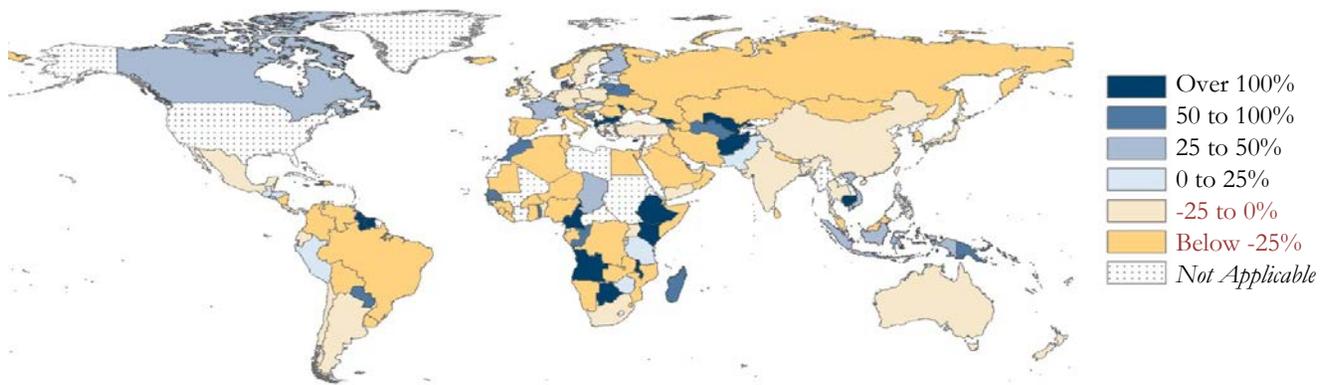


2016Q3		
	United States	Missouri
Exports (Millions)	\$360,760.3	\$3,533.6
<i>Change from</i>		
Last Quarter	1.5%	-7.0%
Last Year (year-to-date)	-5.1%	4.3%
Share of U.S. Activity		1.0%

2015		
Exports as a	United States	Missouri
Percent of GDP	8.3%	4.6%

Missouri Exports Year-to-Date through 2016Q3

Percent Change Year-over-Year



Top Markets	Share
1 Canada	41.0%
2 Mexico	17.8
3 China*	6.7
4 Japan	3.5
5 Belgium	3.1
6 Germany	2.8
7 South Korea	2.3
8 United Kingdom	2.2
9 Australia	1.5
10 France	1.5

Top Exports	Share
1 Transportation Equip.	33.2%
2 Chemicals & Rare Earth Metals	16.1
3 Food	9.4
4 Machinery (Except Electrical)	9.2
5 Electronic Equip. & Appliances	4.8
6 Computers & Electronics	4.6
7 Fabricated Metal Products	3.8
8 Agriculture & Livestock	3.2
9 Plastics & Rubber Products	2.3
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/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

Sign up to receive *The Missouri Economic Databook* and other publications each month via email using the link below:

<http://www.kansascityfed.org/ealert/>

Additional Resources Available

- Agricultural Surveys
- Manufacturing Survey
- Energy Survey
- Regional Economic Analysis
- Speeches
- Banker Resources
- Economic Indicators
- Economic Research
- Educational Tools

Visit: www.KansasCityFed.org