

THE *Missouri* ECONOMIC DATABOOK

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



NOVEMBER 9, 2020

FEDERAL RESERVE BANK of KANSAS CITY

SUMMARY OF CURRENT MISSOURI ECONOMIC CONDITIONS

More than half of the jobs lost at the start of the pandemic in Missouri have been regained through the third quarter, though total payroll employment is still 121,000 (4.2 percent) below year-ago levels. The unemployment rate ended the third quarter at 4.9 percent, a 5 percentage point decline from record-high levels in April. However, a decline in the number of individuals in the labor force may account for some of the improvement. Professional and business services, leisure and hospitality and healthcare and social assistance are experiencing the largest declines in employment relative to January levels. Conversely, employment in government and construction have seen gains relative to last year. The significant level of job loss in the state led to a decline in earnings at work for households, which was more than offset by transfer payments that supported personal income in the second quarter of this year.

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.



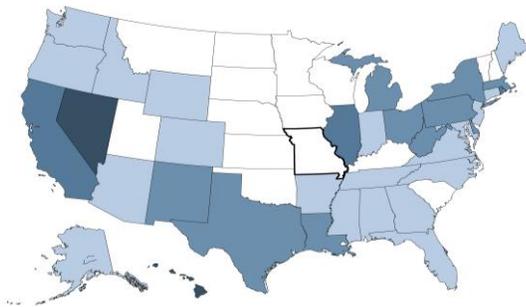
Jason Brown is a Research and Policy Officer and Economist at the Federal Reserve Bank of Kansas City. In this role, Brown is the Federal Reserve Bank of Kansas City's regional economist in Kansas and Missouri. He is responsible for briefing the Kansas City Fed's President on the economy in these states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

Unemployment Rates

Seasonally Adjusted

September 2020 Unemployment Rates

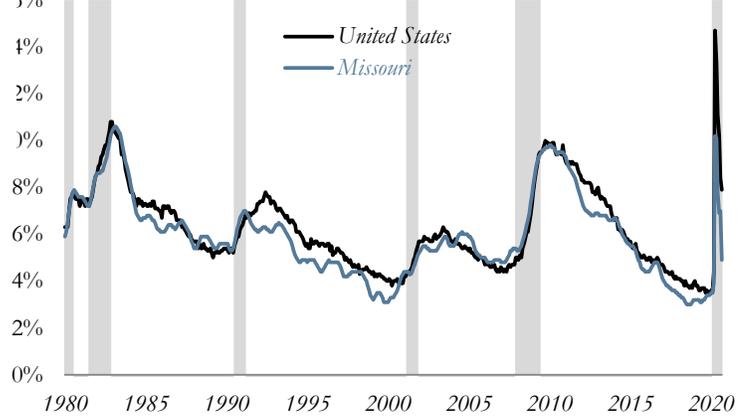
Seasonally Adjusted



- Over 12%
- 10 to 12%
- 8 to 10%
- 6 to 8%
- Under 6%

| September 2020 | | |
|-------------------------------------|----------------------|-----------------|
| | <i>United States</i> | <i>Missouri</i> |
| Unemployment Rate | 7.9% | 4.9% |
| Unemployment Rate, <i>Last Year</i> | 3.5% | 3.3% |

Unemployment Rates, Seasonally Adjusted



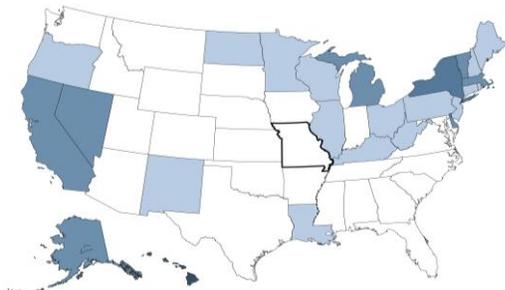
Note: Gray bars indicate recession.

Payroll Employment

Seasonally Adjusted

September 2020 Payroll Employment

Seasonally Adjusted, Year-over-Year Percent Change

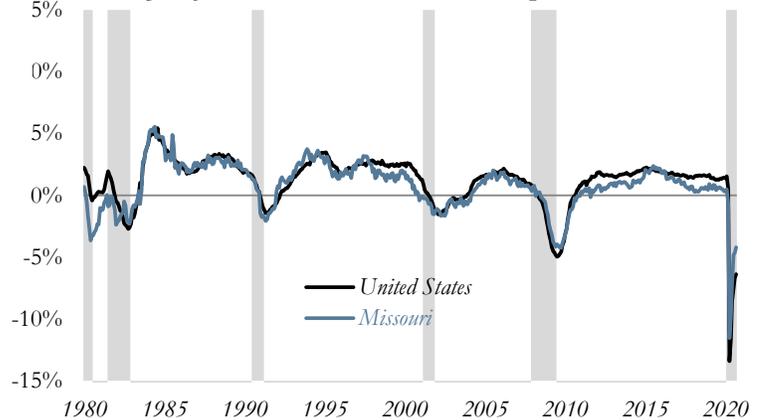


- Under -12%
- 12 to -10%
- 10 to -8%
- 8 to -6%
- 6 to 0%

| September 2020 | | |
|------------------------------|----------------------|-----------------|
| | <i>United States</i> | <i>Missouri</i> |
| Jobs (<i>Thousands</i>) | 141,720.0 | 2,784.5 |
| <i>Change from Last Year</i> | -6.4% | -4.2% |

Payroll Employment

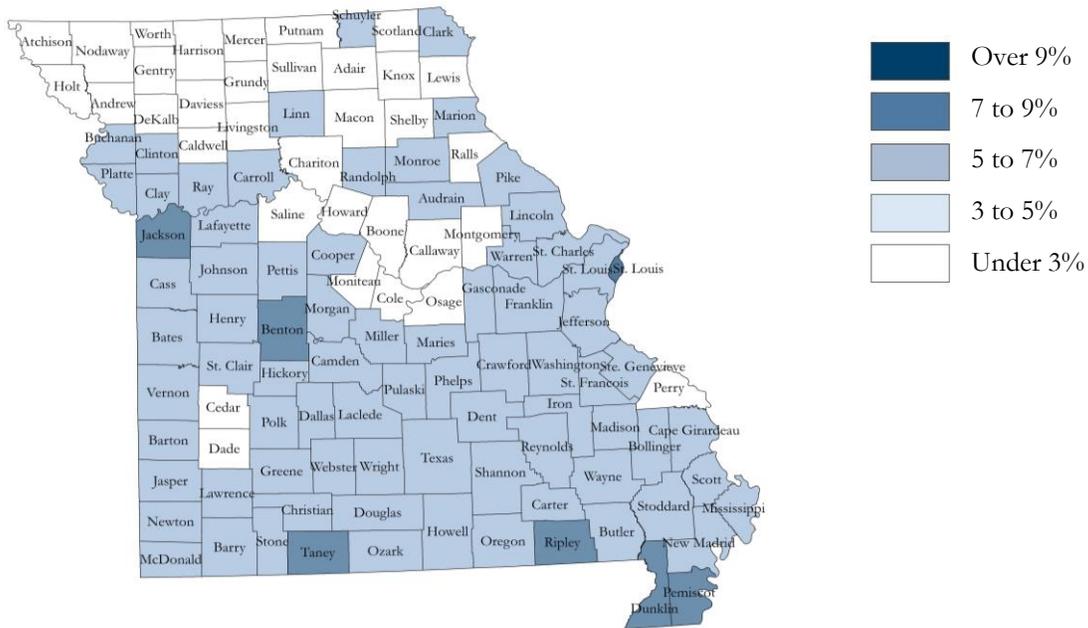
Seasonally Adjusted, Year-over-Year Percent Change



Note: Gray bars indicate recession.

Source: Bureau of Labor Statistics/Haver Analytics

September 2020 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 | 7.9% | 160,143 | 19 | Wayne | 5.2 | |
| Missouri | 4.9 | 3,011 | 20 | Crawford | 5.2 | |
| 1 | Taney | 9.1 | 26.9 | 21 | Carter | 5.2 |
| 2 | St. Louis (City) | 7.8 | 149.9 | 22 | New Madrid | 5.1 |
| 3 | Pemiscot | 7.5 | 6.5 | 23 | Ray | 5.0 |
| 4 | Stone | 7.2 | 13.6 | 24 | Bollinger | 5.0 |
| 5 | Ripley | 6.9 | 5.0 | 25 | Howell | 5.0 |
| 6 | Benton | 6.6 | 7.2 | 26 | Morgan | 5.0 |
| 7 | Dunklin | 6.5 | 11.5 | 27 | Jefferson | 4.9 |
| 8 | Jackson | 6.2 | 357.3 | 28 | Linn | 4.9 |
| 9 | Washington | 6.1 | 10.1 | 29 | Reynolds | 4.9 |
| 10 | St. Francois | 5.8 | 26.7 | 30 | St. Clair | 4.9 |
| 11 | Iron | 5.7 | 3.5 | 31 | Randolph | 4.9 |
| 12 | Shannon | 5.7 | 3.2 | 32 | Oregon | 4.8 |
| 13 | Ozark | 5.6 | 3.4 | 33 | Franklin | 4.8 |
| 14 | St. Louis | 5.5 | 515.0 | 34 | Lincoln | 4.8 |
| 15 | Pettis | 5.4 | 21.2 | 35 | Stoddard | 4.7 |
| 16 | Maries | 5.3 | 5.6 | 36 | Laclede | 4.7 |
| 17 | Camden | 5.3 | 18.0 | 37 | Bates | 4.7 |
| 18 | Butler | 5.3 | 18.0 | 38 | Clinton | 4.7 |

Source: Bureau of Labor Statistics/Haver Analytics

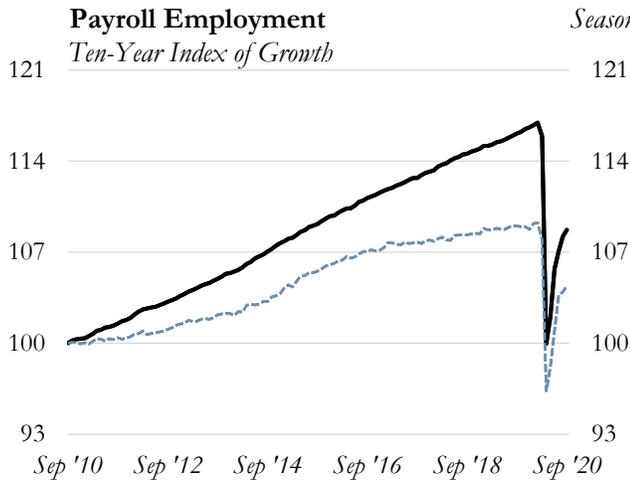
September 2020 Unemployment Rates & Civilian Labor Force

| | | <i>Percent Unemployed</i> | <i>Labor Force (Thousands)</i> | | | <i>Percent Unemployed</i> | <i>Labor Force (Thousands)</i> |
|----|----------------|-------------------------------|------------------------------------|-----|------------|-------------------------------|------------------------------------|
| 39 | Miller | 4.7 | 12.1 | 78 | Barton | 3.8 | 5.2 |
| 40 | Barry | 4.7 | 15.7 | 79 | Worth | 3.8 | 1.2 |
| 41 | Clay | 4.7 | 133.4 | 80 | Hickory | 3.8 | 3.8 |
| 42 | Monroe | 4.6 | 3.7 | 81 | Vernon | 3.8 | 9.5 |
| 43 | Texas | 4.6 | 8.8 | 82 | Madison | 3.7 | 7.5 |
| 44 | Warren | 4.5 | 17.3 | 83 | Christian | 3.7 | 44.0 |
| 45 | Henry | 4.5 | 9.7 | 84 | Montgomery | 3.7 | 5.7 |
| 46 | Cass | 4.5 | 53.5 | 85 | Polk | 3.6 | 14.3 |
| 47 | Macon | 4.5 | 10.7 | 86 | Putnam | 3.6 | 2.3 |
| 48 | Lafayette | 4.4 | 16.5 | 87 | DeKalb | 3.6 | 4.8 |
| 49 | Newton | 4.4 | 27.0 | 88 | Perry | 3.5 | 9.9 |
| 50 | Mississippi | 4.4 | 5.8 | 89 | Andrew | 3.5 | 9.6 |
| 51 | Jasper | 4.4 | 56.6 | 90 | Saline | 3.5 | 10.8 |
| 52 | Scott | 4.4 | 19.6 | 91 | Callaway | 3.4 | 21.2 |
| 53 | Johnson | 4.4 | 23.3 | 92 | Cole | 3.4 | 38.8 |
| 54 | Lawrence | 4.4 | 18.0 | 93 | Harrison | 3.4 | 4.0 |
| 55 | Dallas | 4.3 | 6.9 | 94 | Daviess | 3.4 | 4.2 |
| 56 | Clark | 4.3 | 3.2 | 95 | Lewis | 3.4 | 5.0 |
| 57 | Platte | 4.3 | 57.4 | 96 | Cedar | 3.4 | 5.8 |
| 58 | Pike | 4.1 | 7.5 | 97 | Moniteau | 3.4 | 7.3 |
| 59 | Buchanan | 4.1 | 43.8 | 98 | Howard | 3.4 | 4.8 |
| 60 | Gasconade | 4.1 | 7.6 | 99 | Boone | 3.4 | 95.6 |
| 61 | Pulaski | 4.1 | 14.6 | 100 | Sullivan | 3.4 | 2.7 |
| 62 | Schuyler | 4.1 | 1.9 | 101 | Grundy | 3.4 | 4.4 |
| 63 | Cape Girardeau | 4.0 | 37.6 | 102 | Shelby | 3.3 | 3.2 |
| 64 | Caldwell | 4.0 | 4.3 | 103 | Ralls | 3.3 | 5.6 |
| 65 | Phelps | 4.0 | 19.6 | 104 | Chariton | 3.2 | 3.7 |
| 66 | Greene | 4.0 | 148.4 | 105 | Dade | 3.2 | 3.5 |
| 67 | Webster | 4.0 | 16.9 | 106 | Knox | 3.2 | 1.8 |
| 68 | Wright | 4.0 | 7.4 | 107 | Nodaway | 3.2 | 11.1 |
| 69 | St. Charles | 4.0 | 217.5 | 108 | Livingston | 2.9 | 7.5 |
| 70 | Dent | 4.0 | 6.3 | 109 | Holt | 2.8 | 2.6 |
| 71 | Ste. Genevieve | 3.9 | 5.6 | 110 | Atchison | 2.8 | 2.8 |
| 72 | Marion | 3.9 | 3.9 | 111 | Osage | 2.6 | 7.1 |
| 73 | Cooper | 3.9 | 7.3 | 112 | Gentry | 2.6 | 3.6 |
| 74 | Audrain | 3.9 | 10.5 | 113 | Scotland | 2.6 | 2.4 |
| 75 | Carroll | 3.9 | 4.7 | 114 | Mercer | 2.5 | 1.9 |
| 76 | McDonald | 3.8 | 14.5 | 115 | Douglas | 1.9 | 5.0 |
| 77 | Adair | 3.8 | 10.1 | | | | |

Source: Bureau of Labor Statistics/Haver Analytics

Payroll Employment

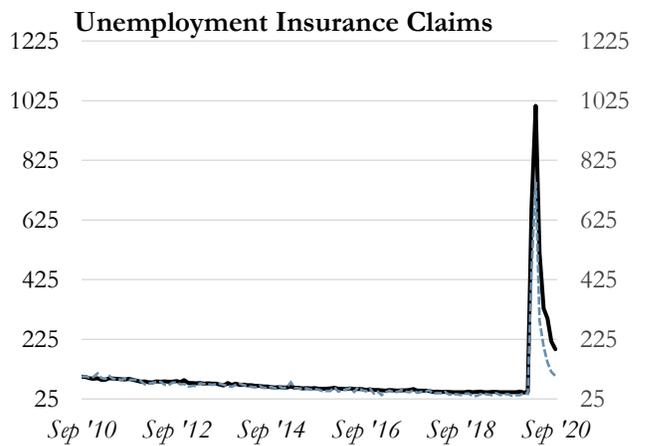
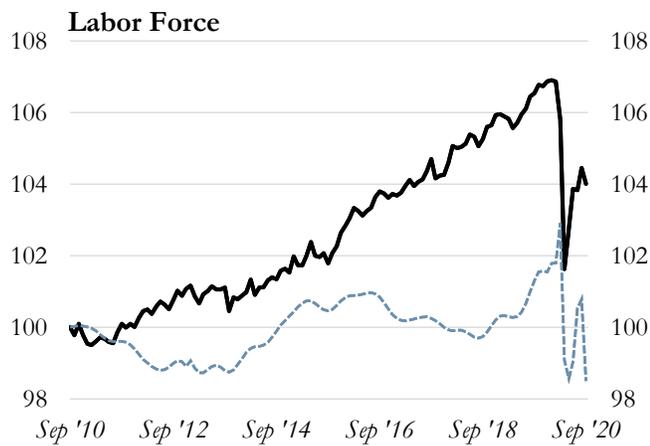
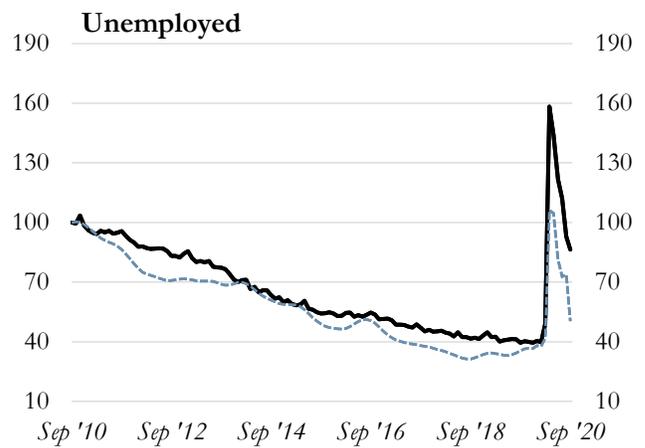
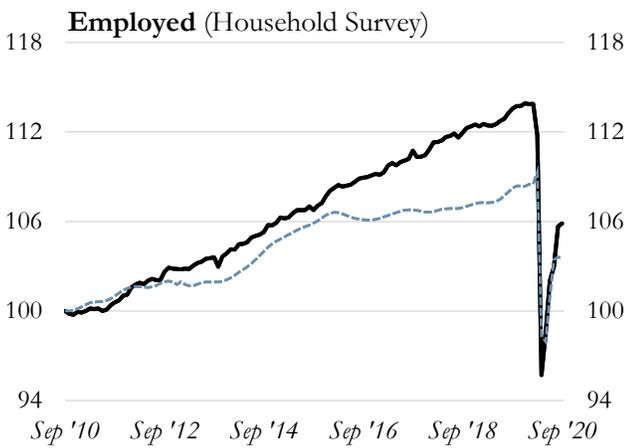
Seasonally Adjusted



| September 2020 | | |
|-----------------------------------|---------------|----------|
| | United States | Missouri |
| Jobs (Thousands) | 141,720.0 | 2,784.5 |
| Change from Last Year (Thousands) | (9,648.0) | -121.9 |
| Share of U.S. Employment | | 2.0% |

Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted

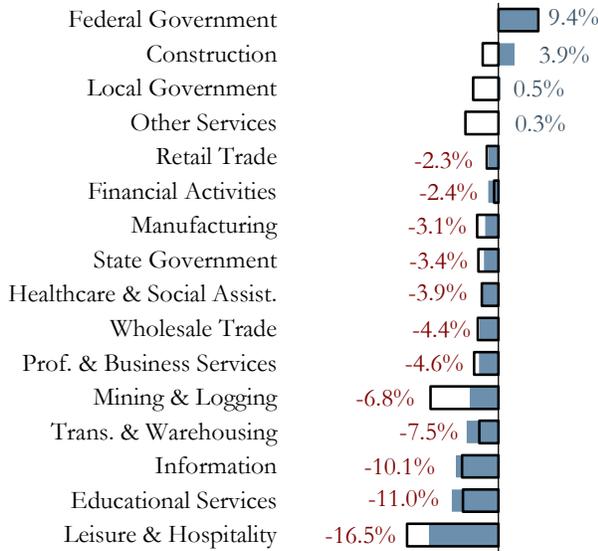


Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

Payroll Employment by Industry

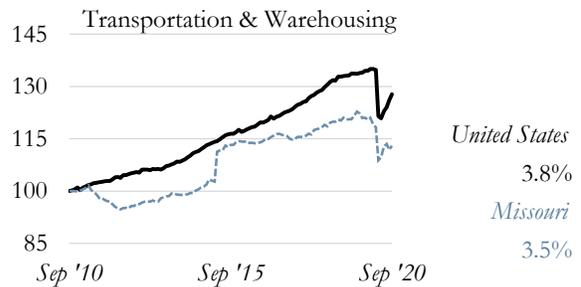
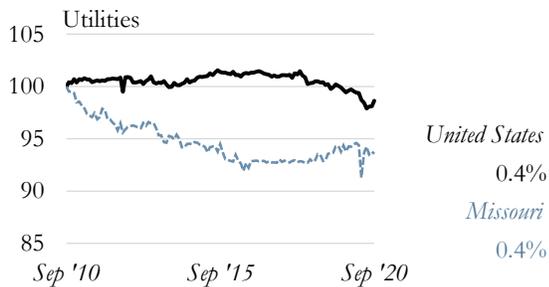
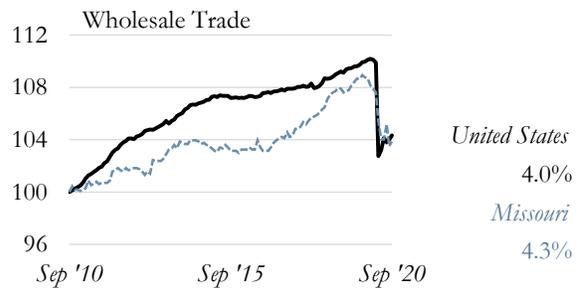
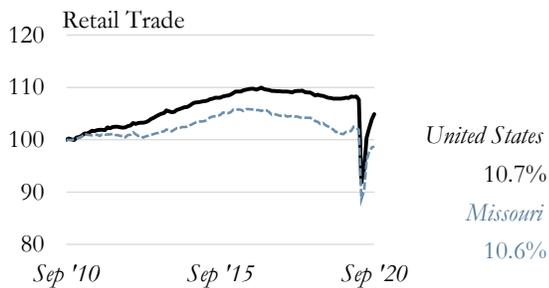
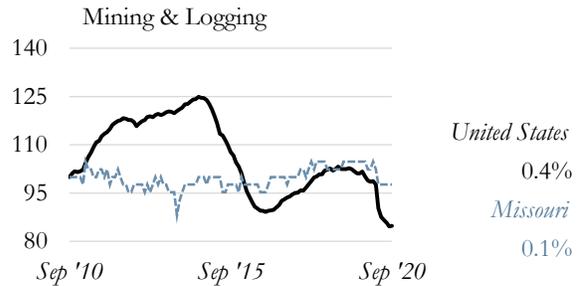
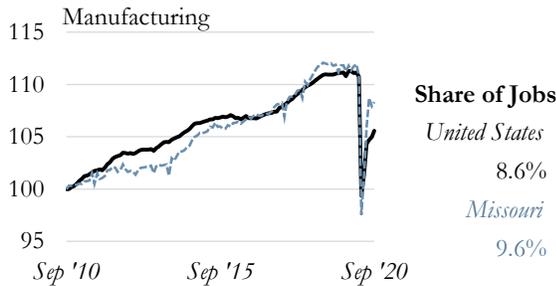
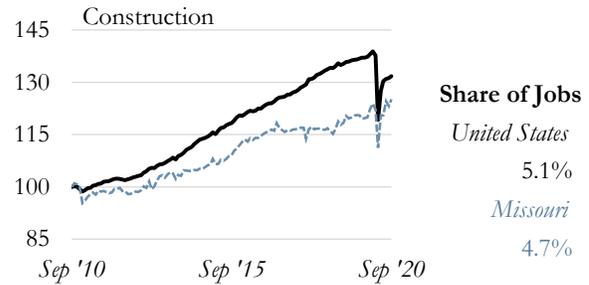
Seasonally Adjusted

September 2020 *Percent Change Year-over-Year*



— United States
 - - - Missouri

Ten-Year Index of Growth

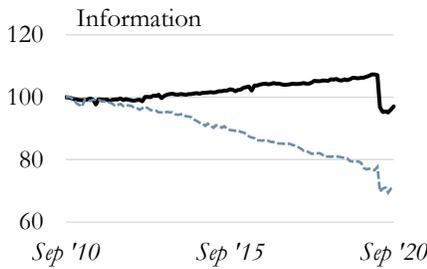


Source: Bureau of Labor Statistics/Haver Analytics

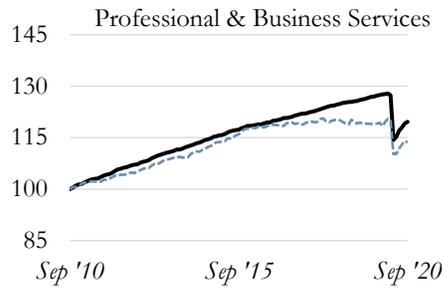
Payroll Employment by Industry

Ten-Year Index of Growth, Seasonally Adjusted

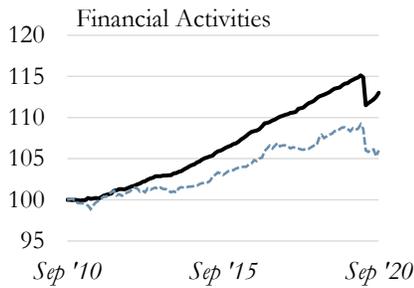
— United States
- - - Missouri



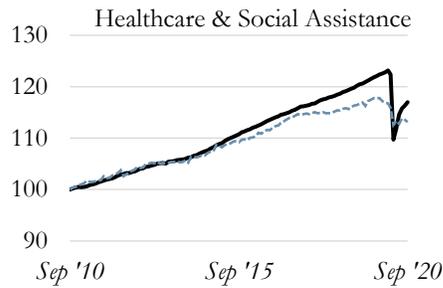
Share of Jobs
United States
1.8%
Missouri
1.5%



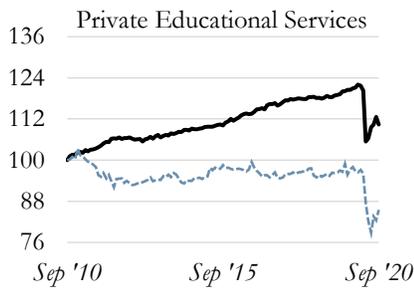
Share of Jobs
United States
14.2%
Missouri
13.1%



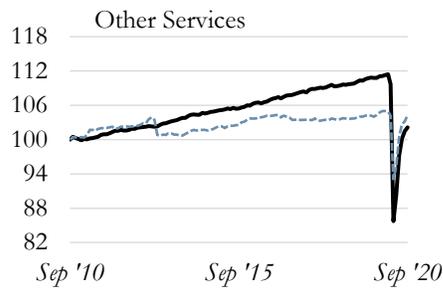
United States
6.1%
Missouri
6.1%



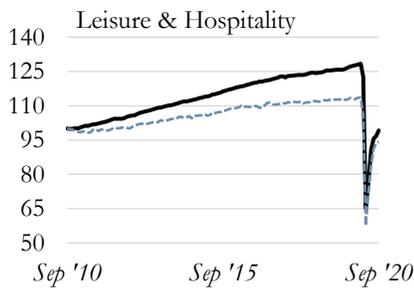
United States
13.9%
Missouri
14.9%



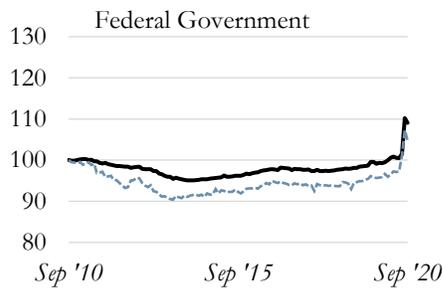
United States
2.5%
Missouri
1.7%



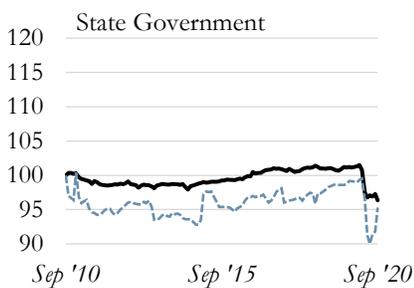
United States
3.8%
Missouri
4.2%



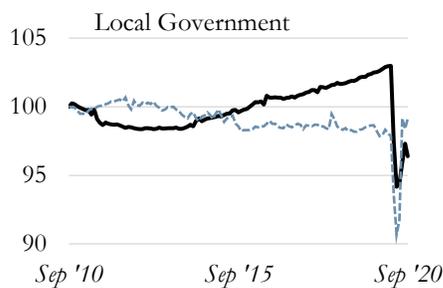
United States
9.2%
Missouri
9.2%



United States
2.2%
Missouri
2.2%



United States
3.5%
Missouri
3.6%

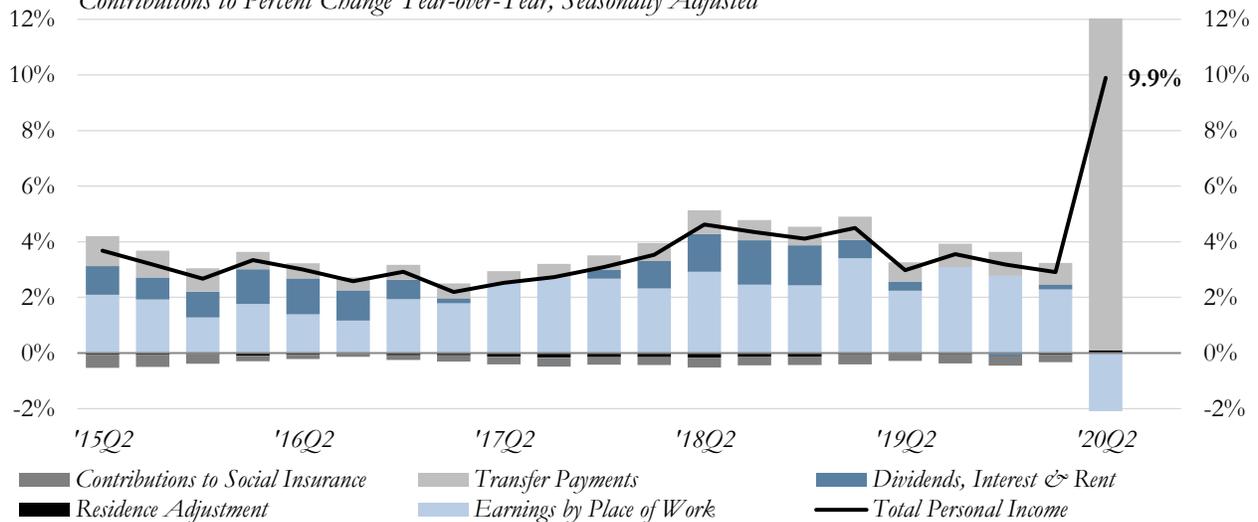


United States
9.7%
Missouri
10.0%

Source: Bureau of Labor Statistics/Haver Analytics

Missouri Nominal Personal Income Growth

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

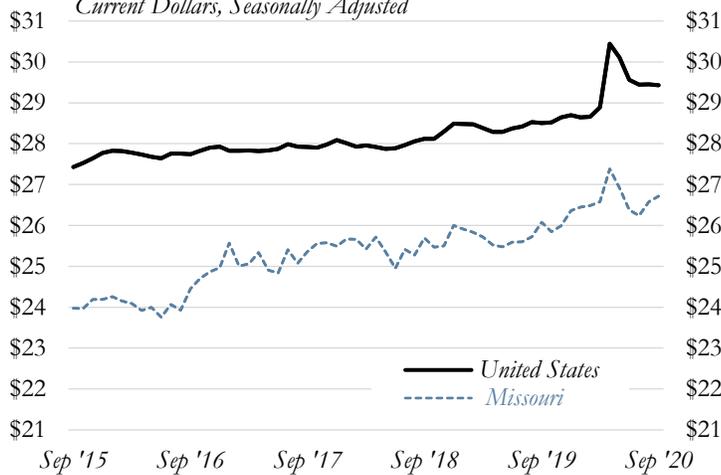


| 2020Q2 | Percent Change Year-over-Year | | Share of Personal Income | |
|---------------------------------|-------------------------------|-------------|--------------------------|----------|
| | United States | Missouri | United States | Missouri |
| Total Personal Income | 10.4% | 9.9% | | |
| Earnings by Place of Work | -4.8% | -3.6% | 60.8% | 62.4% |
| Social Insurance Contributions* | 2.5% | 1.8% | -6.8% | -7.2% |
| Residence Adjustment | | -5.3% | | -1.7% |
| Dividends, Interest & Rent | -1.3% | -1.4% | 18.2% | 17.2% |
| Transfer Payments | 82.1% | 63.1% | 27.8% | 29.3% |

*Subtracted from personal income.

Real Average Hourly Wage

Current Dollars, Seasonally Adjusted

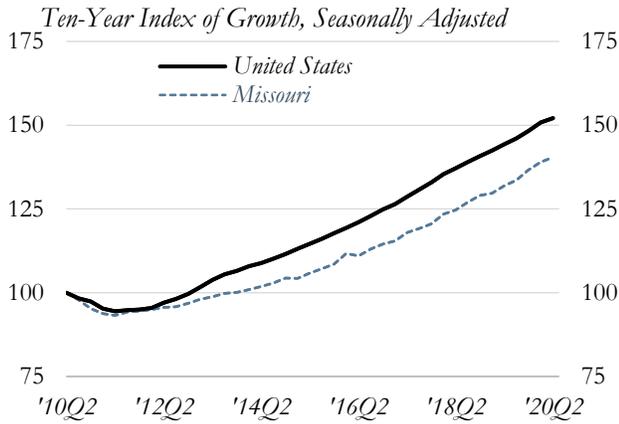


September 2020

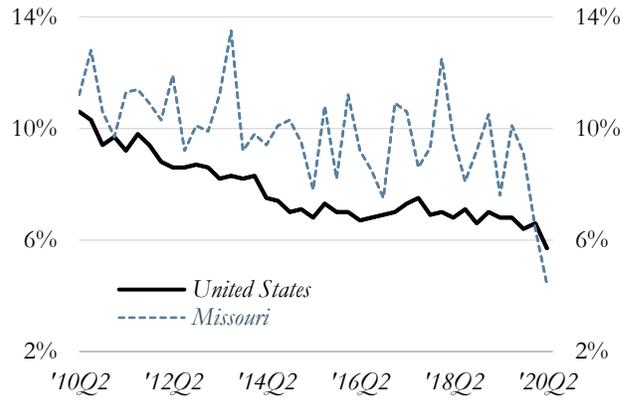
| Average | United States | Missouri |
|-------------------------|---------------|----------|
| Hourly Wage | \$29.43 | \$26.71 |
| <i>Real Change from</i> | | |
| Last Month | -0.1% | 0.5% |
| Last Year | 3.2% | 2.4% |

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

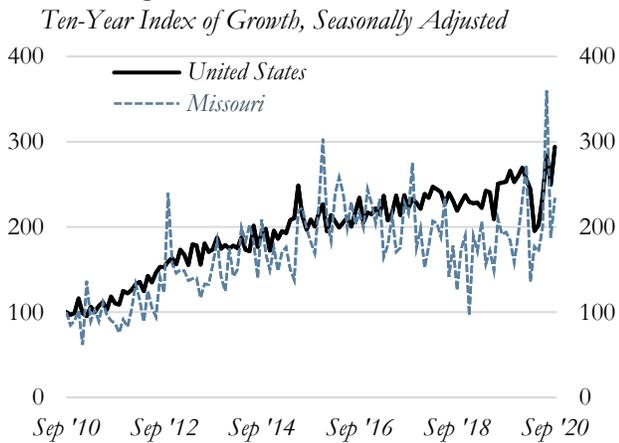
FHFA Purchase-Only Home Price Index



Rental Vacancy Rates



Housing Permits

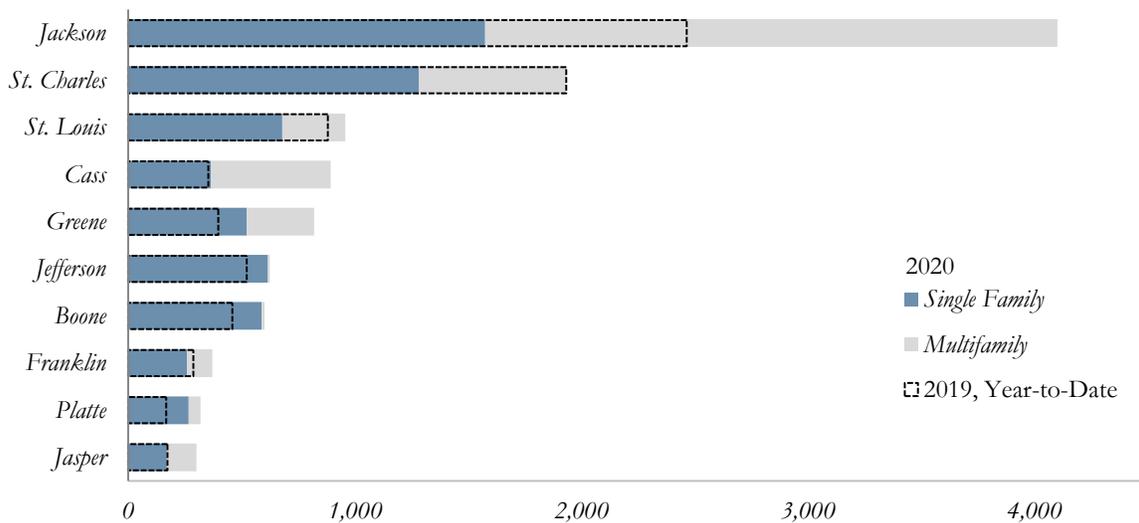


| Summary Statistics | | |
|-------------------------|---------------|----------|
| | United States | Missouri |
| Prices (2020Q2)* | 5.4% | 6.4% |
| Vacancy Rates (2020Q2) | 5.7% | 4.4% |
| Permits (Year-to-Date)* | | |
| <i>Single Family</i> | 10.2% | 21.3% |
| <i>Multifamily</i> | -6.5% | 31.4% |

*Percent change year-over-year.

Top 10 Missouri Counties for Permit Activity

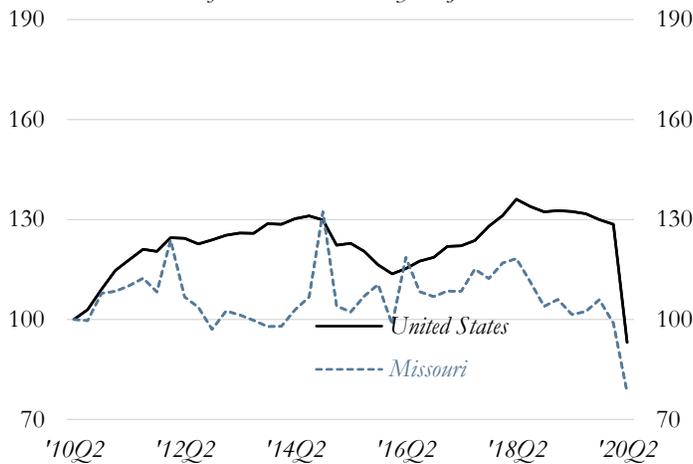
Year-to-Date through September



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

Global Exports

Ten-Year Index of Growth, Seasonally Adjusted

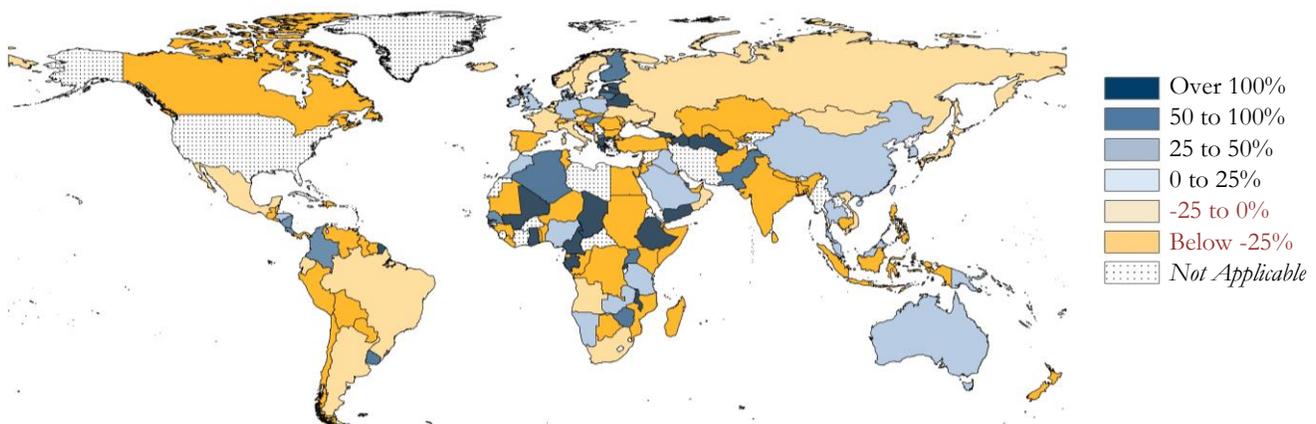


| 2020Q2 | | |
|--------------------------|---------------|-----------|
| | United States | Missouri |
| Exports (Millions) | \$290,478.1 | \$2,520.7 |
| <i>Change from</i> | | |
| Last Quarter | -27.6% | -21.0% |
| Last Year (year-to-date) | -16.4% | -14.7% |
| Share of U.S. Activity | | 0.9% |

| 2019 | | |
|----------------|---------------|----------|
| Exports as a | United States | Missouri |
| Percent of GDP | 7.7% | 4.1% |

Missouri Exports Year-to-Date through 2020Q2

Percent Change Year-over-Year



| Top Markets | Share |
|------------------|-------|
| 1 Canada | 33.9% |
| 2 Mexico | 15.4 |
| 3 China* | 6.5 |
| 4 Germany | 4.6 |
| 5 South Korea | 4.3 |
| 6 Japan | 3.7 |
| 7 France | 2.7 |
| 8 United Kingdom | 2.7 |
| 9 Netherlands | 2.3 |
| 10 Brazil | 2.3 |

| Top Exports | Share |
|----------------------------------|-------|
| 1 Chemicals & Rare Earth Metals | 23.0% |
| 2 Transportation Equip. | 20.7 |
| 3 Food | 11.4 |
| 4 Machinery (Except Electrical) | 8.9 |
| 5 Electronic Equip. & Appliances | 5.1 |
| 6 Computers & Electronics | 5.0 |
| 7 Fabricated Metal Products | 4.7 |
| 8 Agriculture & Livestock | 3.5 |
| 9 Plastics & Rubber Products | 2.7 |
| 10 Minerals & Ores | 2.1 |

*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_eps_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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