Emerging Trends in the U.S. and Colorado Economies

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The views expressed are those of the presenter and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.
U.S. economic growth is expected to continue at a moderate pace in 2020.

**REAL U.S. GROSS DOMESTIC PRODUCT**

*Percent Change from Previous Quarter at Seasonally Adjusted Annualized Rates*

![Chart showing real U.S. GDP growth rates from 2009Q3 to 2022Q3.* Projections as of December FOMC meeting.](chart.png)
Growth in the U.S. economy continues to be driven by consumer spending.

**Contributions to Real U.S. Gross Domestic Product**

*Percent Change at Seasonally Adjusted Annualized Rates*

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Exports</th>
<th>Govt. Consumption &amp; Investment</th>
<th>Gross Private Domestic Investment</th>
<th>Personal Consumption Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>'14Q3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'15Q3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>'16Q3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>'17Q3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'18Q3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'19Q3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Bureau of Economic Analysis / Haver Analytics
Consumer spending continues to increase, and early reports suggest that holiday retail sales were solid.

**Real Consumption Spending**

*Seasonally Adjusted, Year-over-Year Percent Change*

Source: Bureau of Economic Analysis / Haver Analytics
Businesses and consumers remain fairly optimistic about the economy.

**BUSINESS AND CONSUMER SENTIMENT**

*Seasonally Adjusted*

- **NFIB Small Business Optimism Index**, Q1:1986 = 100
- **Univ. of Michigan Consumer Sentiment**, Q1:1966 = 100

Sources: University of Michigan and National Federation of Independent Business / Haver Analytics
The unemployment rate has declined steadily over the past ten years and has fallen below most estimates of its longer-run level.

Sources: Bureau of Labor Statistics, National Bureau of Economic Research and Federal Open Market Committee (FOMC) / Haver Analytics

*Projections as of December FOMC meeting; median unemployment rate
Inflation is expected to move toward the FOMC’s two percent target over the next few years.

PERSONAL CONSUMPTION EXPENDITURE PRICE INDEX (PCEPI)

Percent Change Year-over-Year

Headline Inflation

Core Inflation

Sources: Bureau of Economic Analysis and Federal Open Market Committee / Haver Analytics
*Projections as of December FOMC meeting; median projections
“Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee decided to maintain the target range for the federal funds rate at 1-1/2 to 1-3/4 percent.”

- December 2019 FOMC Statement
The U.S. and Colorado economies continue to add jobs at a moderate pace.

**PAYROLL EMPLOYMENT GROWTH**

*Index 100 = December 2007, Seasonally Adjusted*

<table>
<thead>
<tr>
<th></th>
<th>Dec. ‘07 to Present</th>
<th>Past Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. (Dec. ‘19)</td>
<td>10.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Colorado (Nov. ‘19)</td>
<td>19.0%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Denver (Nov. ‘19)</td>
<td>23.0%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Sources: Bureau of Labor Statistics / Haver Analytics and author’s calculations.
The majority of industries in Colorado have added jobs over the past year.

**Change in Payroll Employment, November 2019**

*Seasonally Adjusted*

<table>
<thead>
<tr>
<th>Industry</th>
<th>Colorado (%)</th>
<th>United States (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Educational Services</td>
<td>5.3%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>3.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>3.4%</td>
<td>3.1%</td>
</tr>
<tr>
<td>State Government</td>
<td>3.1%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>1.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Local Government</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other Services</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Construction</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-0.2%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Transportation &amp; Utilities</td>
<td>-1.4%</td>
<td></td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Resources &amp; Mining</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics / Haver Analytics
Unemployment rates are low across Colorado.

**UNEMPLOYMENT RATES**  
*November 2019, Seasonally Adjusted*

<table>
<thead>
<tr>
<th>Unemployment Rate</th>
<th>U-3</th>
<th>U-5*</th>
<th>U-6*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States (Dec. ‘19)</td>
<td>3.5%</td>
<td>4.2%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Colorado (Nov. ‘19)</td>
<td>2.6%</td>
<td>3.5%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Denver (Nov. ‘19)</td>
<td>2.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*U-5 and U-6 values are 12-month moving averages as of Q3 2019 for Colorado and are for Dec. 2019 for the United States.*
Wage growth has picked up in Colorado over the past couple of years.

**Real Wage Growth**

*Year-over-Year Percent Change, Four-Quarter-Moving-Average*

-6%  -3%  0%  3%  6%  9%


Colorado

United States

Denver County

Note: Grey bars indicate recession.

Source: Bureau of Labor Statistics
Population growth has slowed in Colorado since the 1990s, but people continue to migrate into the state.

**CONTRIBUTIONS TO POPULATION CHANGE IN COLORADO**

*Annual*

- **Net Migration** (Left)
- **Births – Deaths** (Left)
- **Year-over-Year Percent**
- **Population Change** (Right)

**Source:** Census Bureau / Haver Analytics
Residential construction activity has increased significantly since 2009, but permitting declined in 2019.

Residential Permits
Seasonally Adjusted, Year-to-Date through November

Source: Census Bureau / Haver Analytics
Low inventories have led to strong home price appreciation in Colorado, although the pace of price gains has started to moderate.
25 percent of renters and 9 percent of homeowners are severely burdened by housing costs in Colorado.

COLORADO HOUSING COST-BURDEN RATES BY HOUSEHOLD INCOME

Percent of Ownership Category

Note: Moderate burdens are defined as households with housing costs of between 30 – 50% of household income. Costs above 50% of household income are considered severely burdening.

Source: IPUMS-USA and author’s calculations
Commercial real estate construction is expected to remain solid in 2020.

**DENVER COMMERCIAL REAL ESTATE COMPLETIONS**

*Annual*

**Apartment**

*Units*

**Office**

*Mil. sq. ft.*

*2019 data includes forecasted values for Q4  **2020 – 2022 values are forecasted.*

Source: CBRE Economic Advisors
Vacancy rates remain low across the Denver metro area.

**DENVER COMMERCIAL VACANCY RATES**

*Percent, Seasonally Adjusted*

Source: CBRE Economic Advisors
The services sector is expanding moderately.

**Non-Manufacturing and Services Activity**

*Diffusion Index, Seasonally Adjusted, Month-over-Month*

Sources: Kansas City Federal Reserve Bank and ISM / Haver Analytics
Manufacturing activity has been contracting in recent months.

**MANUFACTURING ACTIVITY**

*Diffusion Index, Seasonally Adjusted, Month-over-Month*

Sources: Kansas City Federal Reserve Bank and ISM / Haver Analytics
Global economic growth slowed in 2019 but is expected to improve this year.

**Global Economic Outlook**

*Real Gross Domestic Product, Annual Percent Change*

- **Advanced Economies**
- **United States**
- **Germany**
- **Eurozone**
- **U.K.**
- **Emerging and Developing Economies**
- **China**
- **India**

Sources: International Monetary Fund / Haver Analytics
Colorado exports decreased slightly in 2019.

**COLORADO EXPORTS BY TRADING PARTNER**

*Billions*

**November 2019 Year-to-Date**

<table>
<thead>
<tr>
<th></th>
<th>Year-over-Year Percent Change</th>
<th>Share*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Trade</td>
<td>-3.4%</td>
<td></td>
</tr>
<tr>
<td>All Other</td>
<td>1.5</td>
<td>31.5%</td>
</tr>
<tr>
<td>Japan</td>
<td>-12.9</td>
<td>5.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>-17.5</td>
<td>15.1</td>
</tr>
<tr>
<td>Canada</td>
<td>-0.3</td>
<td>17.3</td>
</tr>
<tr>
<td>China</td>
<td>-7.7</td>
<td>12.5</td>
</tr>
<tr>
<td>Eurozone</td>
<td>2.9</td>
<td>18.1</td>
</tr>
</tbody>
</table>

*Shares are for 2018*
Energy activity has increased substantially over the past few years.

**Crude Oil Production**

*Millions of Barrels, Monthly, Seasonally Adjusted*

- **United States (left)**
- **Colorado (right)**

Sources: Baker Hughes and Energy Information Administration / Haver Analytics
Looking ahead, contacts expect energy activity to weaken in the months ahead.

**Energy Survey Activity Indicators**

*Quarterly Diffusion Index*

Source: Kansas City Federal Reserve Bank Energy Survey
For additional information on the regional economy: