

Economic Outlook

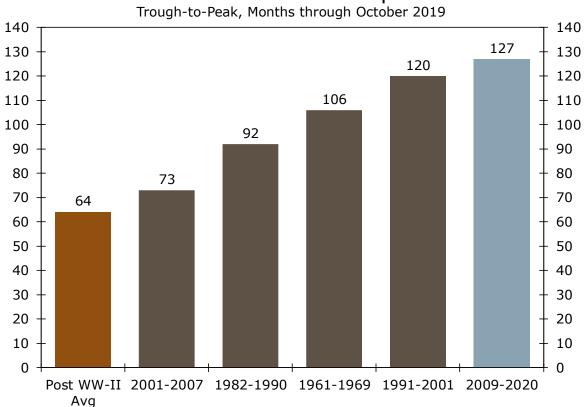
Charlie Dougherty, Vice President & Economist January 15, 2020

Together we'll go far



The economic expansion is now 10 years old and the longest on record.

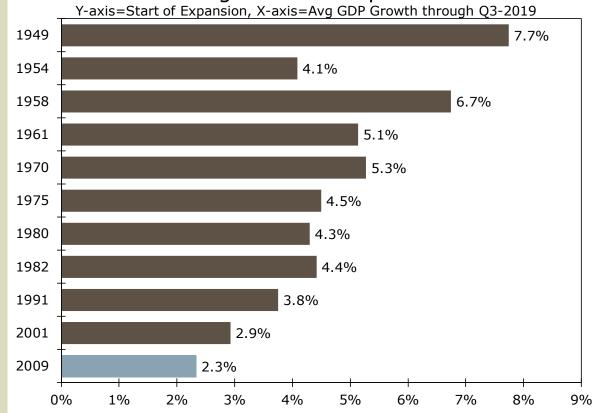
Duration of Economic Expansion



Source: NBER and Wells Fargo Securities

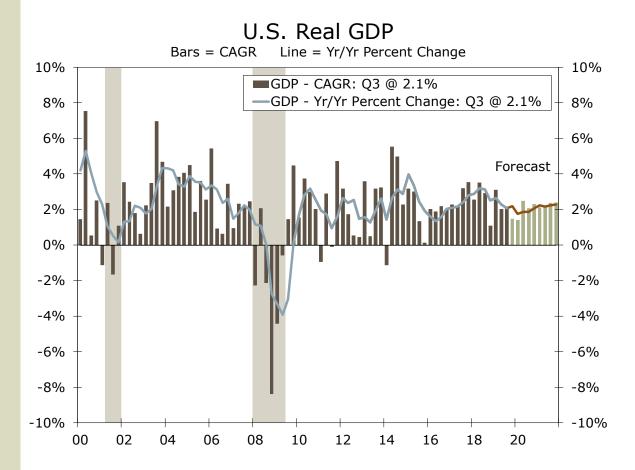
Over the past decade, the economy has grown at roughly half the pace of previous expansions.

Strength of U.S. Expansion



Source: NBER and Wells Fargo Securities

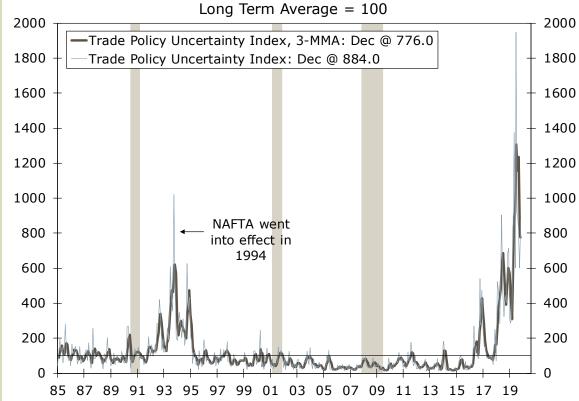
Real GDP growth will remain solid, yet likely moderate somewhat over the next few years.



Source: U.S. Department of Commerce and Wells Fargo Securities

Progress on both the USMCA
the Phase I trade deal with
China will help clear up some of
the trade uncertainty which is
having a slowing impact on the
economy. Businesses have had
to reassess supply chains, build
contingency plans and delay
capital investments.

U.S. Trade Policy Uncertainty Index



Source: OECD and Wells Fargo Securities

Political Uncertainty

Given the wide range of potential outcomes, the upcoming election will only add more uncertainty to the economy. That noted, fears of a dramatic move in either direction are likely overblown, and much will depend on outcomes in the Senate and House of Representatives.

	The 2020 Democratic Primary State of	f Play						
National Polling Average on Real Clear Politics as of January 7, 2020								
1	Joe Biden	29.3%						
2	Bernie Sanders	19.9%						
3	Elizabeth Warren	14.4%	-					
4	Pete Buttigieg	7.7%	-					
5	Michael Bloomberg	5.6%						

Source: Real Clear Politics and Wells Fargo Securities

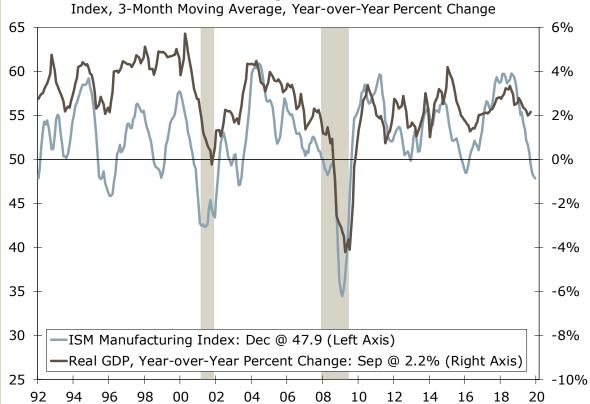
Global economic growth has been generally strong, but is slowing dramatically outside of the U.S., particularly in China and Germany.

Global Growth Performance Real GDP Growth Year-over-Year Percent Chage 8% 8% United States -G2-G7 economies 7% 7% G8-G20 economies 6% 6% 5% 5% 4% 4% 3% 3% 2% 2% 1% 1% 0% 0% -1% -1% 2012 2015 2016 2017 2010 2011 2013 2014 2018 2019

Source: OECD and Wells Fargo Securities

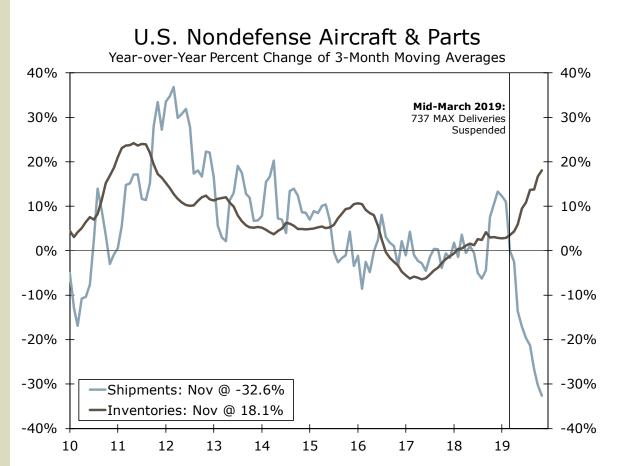
Languishing global growth, a strong dollar, and the ongoing trade war are clearly having an impact on the factory sector.

ISM Manufacturing Index & Real GDP



Source: Institute of Supply Management, BEA and Wells Fargo Securities

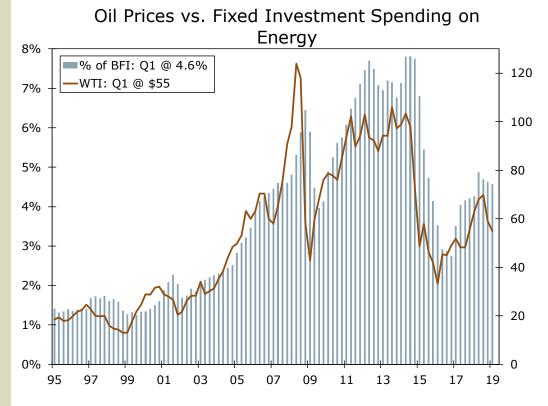
The suspension of production for the 737 MAX will continue to reverberate across the manufacturing sector.



Source: Department of Commerce and Wells Fargo Securities

Another reason for manufacturing weakness stems from the energy sector pulling back on capital spending.

Following a sharp decline in oil prices last year, oil producers have become more financially disciplined.



Source: U.S. Department of Commerce, Bloomberg L.P. and Wells Fargo Securities

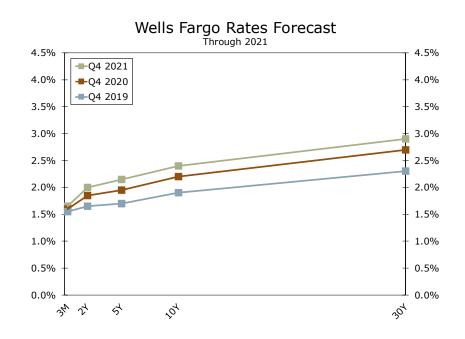
Interest Rates Moving Lower

In an effort to give the U.S. economy a booster shot amid global economic malaise, the Fed has now lowered short-term interest rates by 75 basis points. The moves lower have helped steepen the yield curve, parts of which had been inverted causing widespread fear that a downturn is around the corner.

Monetary Policy

Federal Funds Target Rate Upper Bound 7.0% 7.0% —Federal Funds: Q4 @ 1.75% 6.0% 6.0% 5.0% 5.0% 4.0% 4.0% 3.0% 3.0% Forecast 2.0% 2.0% 1.0% 1.0% 0.0% 0.0% 02 04 06 80 10 12 14 16 18 20

Interest Rates



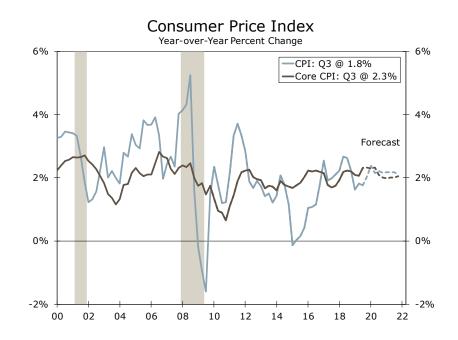
Source: Federal Reserve Board ac and Wells Fargo Securities

Inflationary pressures have subsided recently. Core measures, however, continue to firm around the Fed's target of 2.0%. Overall, inflation expectations remain low at present, which will help keep prices from dramatically heating up.

Anchored Inflation Expectations

Median 5-10 Year Inflation Expectations Expected Year-over-Year Inflation Rate 3.6% 3.6% 3.4% 3.4% 3.2% 3.2% 3.0% 3.0% 2.8% 2.8% 2.6% 2.6% 2.4% 2.4% 2.2% 2.2% Median Inflation Expect. For 5-10 Yrs: Dec @ 2.2% 3-Month Moving Average: Dec @ 2.3% 2.0% 2.0% 15 01 11 13 17 19

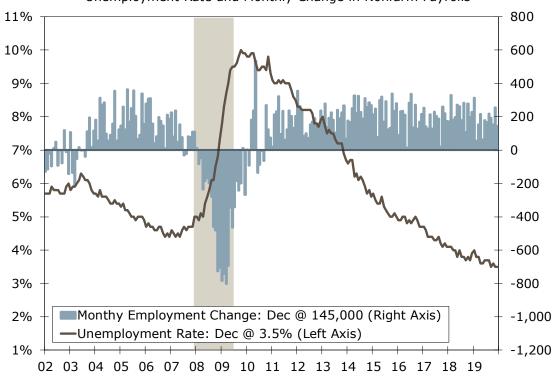
Tame Inflation



Source: University of Michigan and Wells Fargo Securities

Hiring remains strong but is downshifting as employers struggle to find workers amid near record-low unemployment.

Unemployment and Monthly Job Gains Unemployment Rate and Monthly Change in Nonfarm Payrolls



Source: U.S. Department of Labor and Wells Fargo Securities

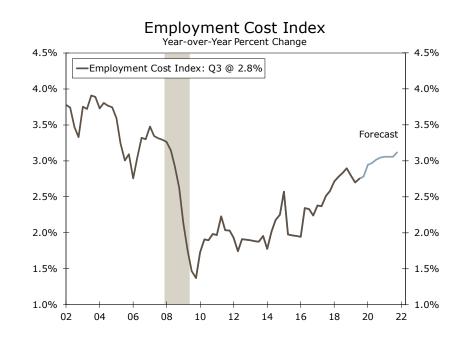
Wages Are Finally Picking Up As Labor Market Tightens

Wage growth has picked up modestly but remains a missing piece to the recovery thus far due to slow productivity growth. On the flip side, employment costs also continue to go up.

Wages Are Rising...

Atlanta Fed Wage Growth Tracker YoY % Change of Median Wage Growth, 3-MMA 6% 6% —Atlanta Fed Wage Growth Tracker: Nov @ 3.7% 5% 3% 2% 2% 97 99 01 03 05 07 09 11 13 15 17 19

..So Are Employment Costs



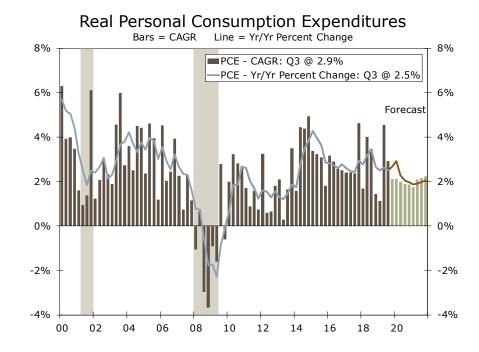
Source: U.S. Department of Labor, Federal Reserve Bank of Atlanta and Wells Fargo Securities

Although business spending is downshifting, consumer spending remains strong enough to keep overall GDP growing at a solid rate.

Business Investment Slows on Uncertainty...

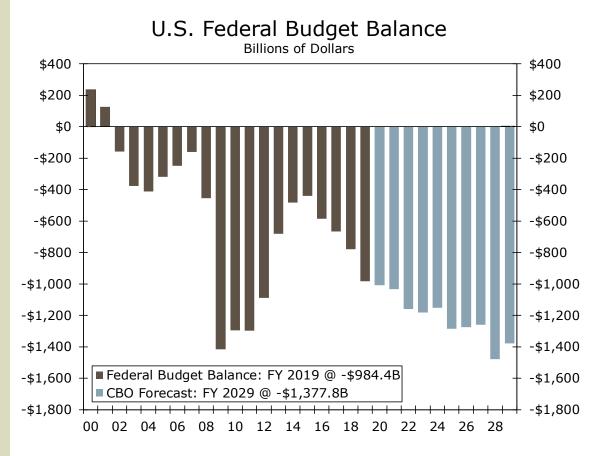
Real Business Fixed Investment Bars = CAGR Line = Yr/Yr Percent Change 30% ■Non-Res Fixed Invest - CAGR: Q3 @ -2.7% Non-Res Fixed Invest - Yr/Yr Percent Change: Q3 @ 1.3% 20% 20% 10% Forecast + 10% 0% -10% -10% -20% -20% -30% -30% 10 12

...But Solid Consumer Spending



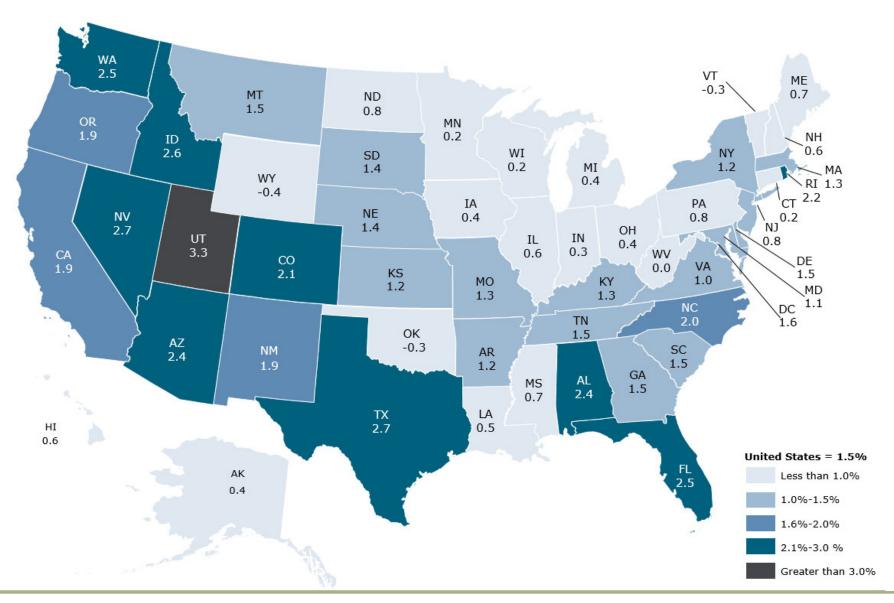
Source: Federal Reserve Board, Department of Commerce and Wells Fargo Securities

The recent budget deal, which removed caps on federal spending, will be a short term positive for economic growth. However, over the long term, a growing deficit could potentially push up interest rates, crowd out private investment and slow overall economic growth.



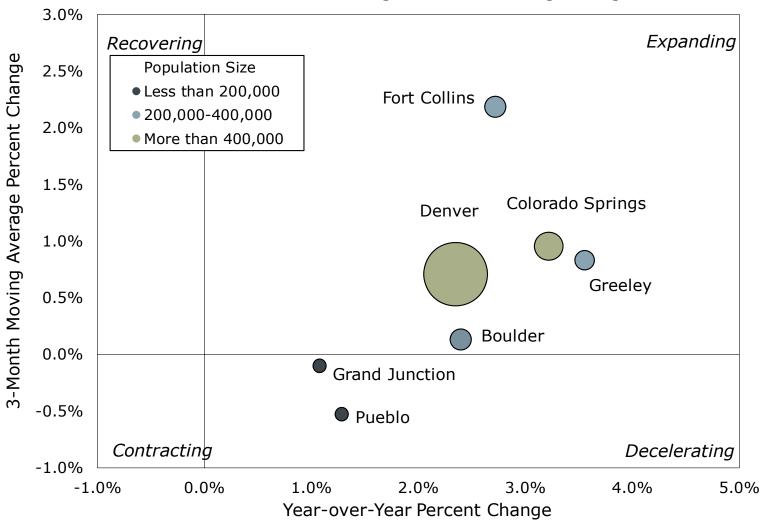
Source: Congressional Budget Office and Wells Fargo Securities

Employment Growth, Year-to-Year %, November 2019



Colorado Employment Growth: November 2019

Year-over-Year Percent Change, 3-Month Moving Average



Source: U.S. Department of Labor and Wells Fargo Securities

Hiring continues to be robust, with employment growth outpacing the rest of the country.

Nonfarm Employment Growth: Colorado vs. U.S. Year-over-Year Percent Change of 3-MMA 6% 6% 4% 4% 2% 2% 0% 0% -2% -2% -4% -4% -6% -6% -United States: Dec @ 1.4% -Colorado: Nov @ 2.1% -8% -8% 00 02 80 10 12 14 16 18 20

04 06

Source: Bureau of Labor Statistics and Wells Fargo Securities

96

98

The jobless rate in Colorado is also much lower than the national rate. Further evidence that the labor market is strengthening is in a steadily rising participation.

Unemployment Low

Colorado vs. U.S. Unemployment Rate

Seasonally Adjusted

12%

10%

8%

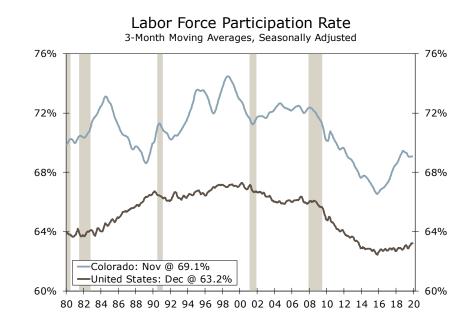
6%

4%

2%

90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20

Labor Force Participation Improving



Source: Department of Labor and Wells Fargo Securities

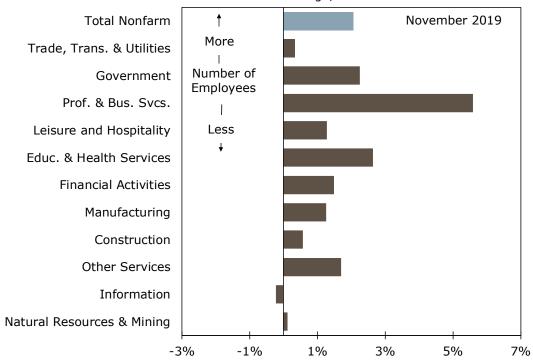
-Colorado: Nov @ 2.6%

United States: Dec @ 3.5%

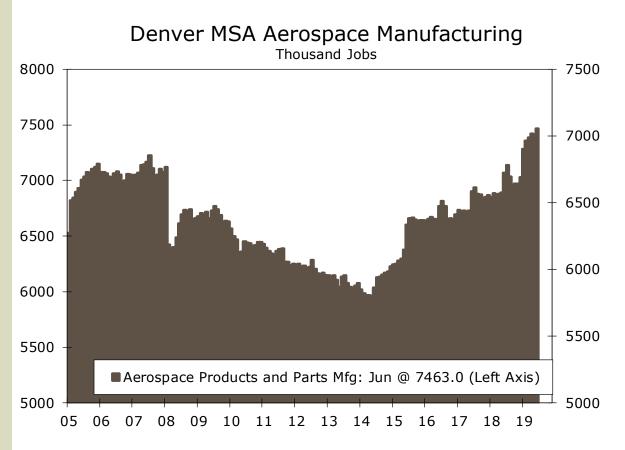
Nearly every major industry is adding jobs, with hiring in the tech sector the clear standout.

Colorado Employment Growth By Industry

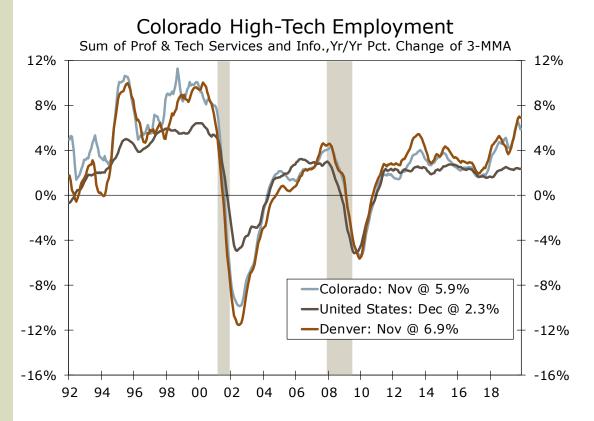
Year-over-Year Percent Change, 3-MMA



The aerospace products and parts manufacturing industry has seen hiring pickup recently, likely a result of increased federal spending from the 2018's budget deal.



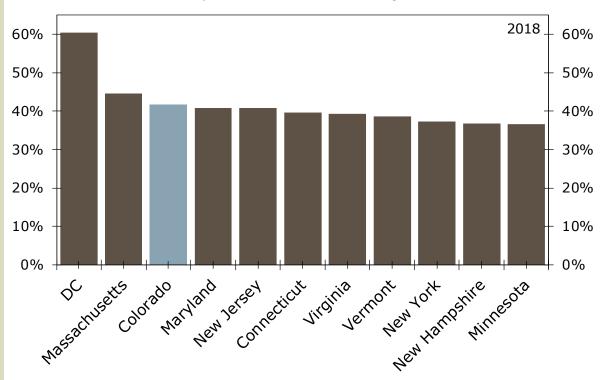
Tech hiring is not showing any signs of slowing down. Denver, Bolder and Colorado Springs continue to see an influx of major tech companies to the area.



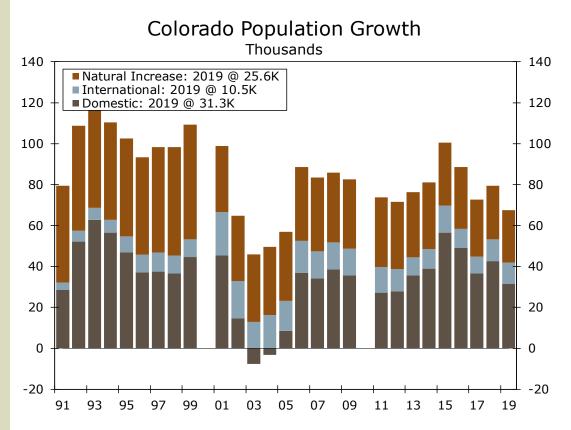
Behind much of the recent economic momentum is the state's deep pool of highly educated labor, a trait which is common among other high growth areas.

Educational Attainment

Share of Population with Bachelor's Degree, Percent

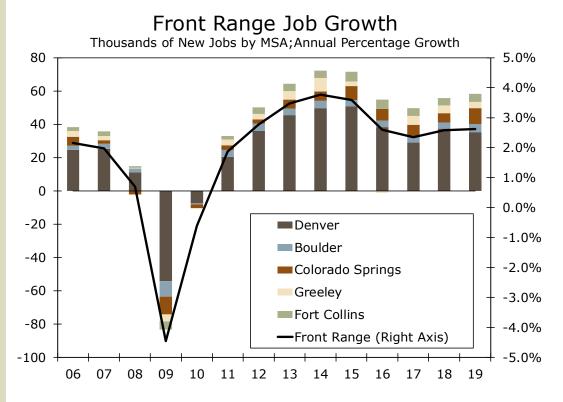


Population growth has moderated recently, as the state added over 67,000 new residents in 2019. Much of the gain continues to be owed to an influx of movers from out of state.



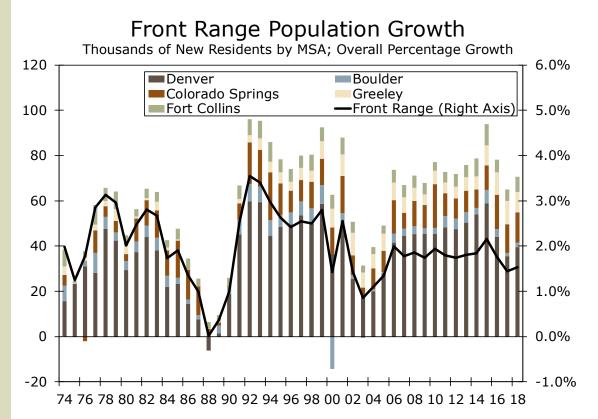
Source: Census Bureau and Wells Fargo Securities

The Front Range area appears to be regaining momentum. The region added over 58,000 new jobs during 2019, which is the strongest gain since 2015



Source: BLS and Wells Fargo Securities

Similar to the rest of the country, population growth is slowing. That noted, there continues to be an incredible amount of people moving to the area, which will help reinforce the region's economy.



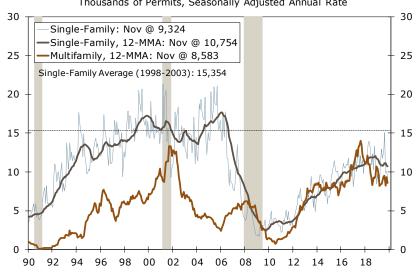
Local residential construction activity remains elevated but is cooling off a bit. Higher construction costs, mostly for land and labor, are making it challenging for builders to maintain the high levels of construction seen in recent years.

Front Range Building Permits

Building Permits Thousands at SAAR ■ Denver ■ Boulder ■ Colorado Springs ■ Greeley ■ Fort Collins

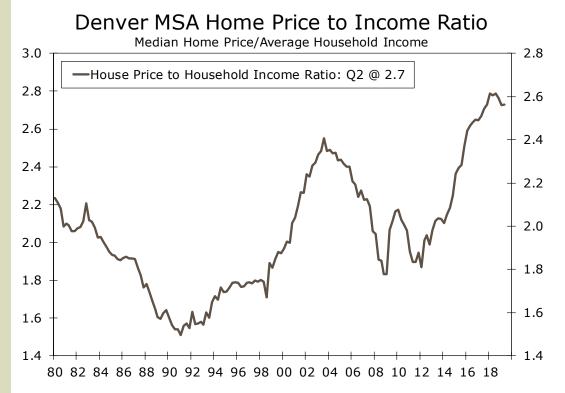
Multifamily Has Surged



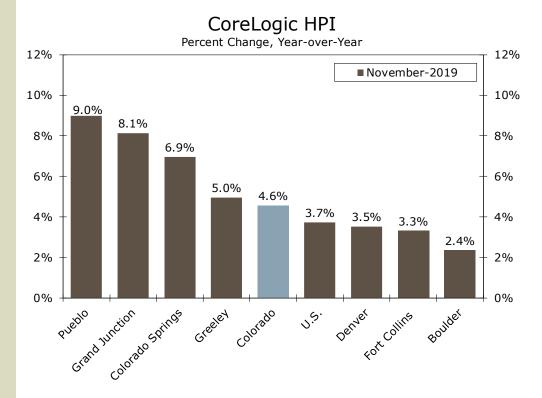


Source: Department of Commerce and Wells Fargo Securities

Home prices rising at a faster rate than incomes has led to a rapid deterioration in housing affordability in Denver and Boulder, which is pushing more development to lower cost areas in Colorado Springs and Fort Collins.

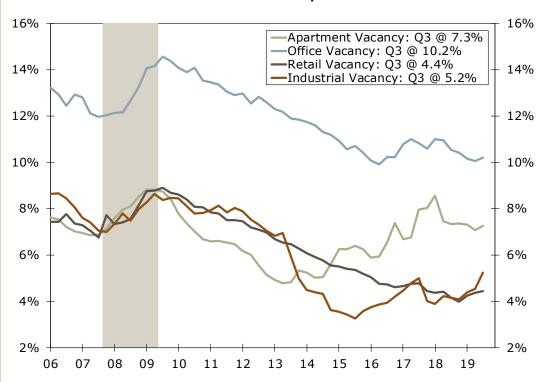


Home prices have cooled off a bit relative to the brisk pace seen in recent years, which should help improve housing affordability and help attract more residents and businesses to the area.



Vacancy rates generally remain low across property types, although the wave of new apartment buildings have led to vacancies trending higher.

Denver Vacancy Rates



Source: CoStar, Inc. and Wells Fargo Securities

Appendix

U.S. Economic Forecast

Wells Fargo U.S. Economic Forecast																				
	Actual						Forecast								Actual		st			
		20	18			20	19			20	20			20	21		2018	2019	2020	2021
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	_			
Real Gross Domestic Product ¹	2.6	3.5	2.9	1.1	3.1	2.0	2.1	1.5	1.4	2.5	2.1	2.3	2.1	2.2	2.4	2.4	2.9	2.3	1.9	2.2
Personal Consumption	1.7	4.0	3.5	1.4	1.1	4.6	2.9	2.1	2.1	2.0	1.9	1.9	1.8	2.1	2.2	2.2	3.0	2.6	2.3	2.0
Business Fixed Investment	8.8	7.9	2.1	4.8	4.4	-1.0	-2.7	2.5	2.2	2.6	3.7	3.8	4.0	3.9	3.9	3.8	6.4	2.3	1.8	3.8
Equipment	6.6	3.4	2.9	7.4	-0.1	0.8	-3.8	1.1	1.4	1.5	2.6	2.9	3.4	3.4	3.2	3.0	6.8	1.6	0.9	3.0
Intellectual Property Products	9.7	11.9	4.1	11.7	10.8	3.6	5.1	6.2	5.1	4.4	5.7	6.0	5.9	5.5	5.6	5.7	7.4	7.8	5.2	5.7
Structures	12.1	11.0	-2.1	-9.0	4.0	-11.1	-12.0	-6.5	-1.5	1.5	2.5	2.0	1.8	1.9	2.0	2.1	4.1	-4.5	-3.2	2.0
Residential Investment	-5.3	-3.7	-4.0	-4.7	-1.0	-3.0	5.1	4.5	4.3	4.5	4.5	4.3	4.0	4.0	3.8	3.5	-1.5	-1.6	4.0	4.1
Government Purchases	1.9	2.6	2.1	-0.4	2.9	4.8	1.6	0.5	1.1	1.1	1.0	0.8	0.8	0.8	0.7	0.7	1.7	2.2	1.2	0.9
Net Exports ²	0.0	0.7	-2.1	-0.4	0.7	-0.7	-0.1	0.1	0.0	0.0	-0.2	-0.1	-0.2	-0.1	0.0	0.0	-0.4	-0.3	-0.1	-0.1
Inventories ²	0.1	-1.2	2.1	0.1	0.5	-0.9	0.2	-0.5	-0.7	0.4	0.1	0.2	0.2	0.0	0.0	0.0	0.1	0.2	-0.2	0.1
Nominal GDP ¹	5.0	7.1	4.8	2.9	3.9	4.7	3.8	3.2	3.6	4.4	4.0	4.2	4.2	4.1	4.1	4.1	5.4	4.1	3.8	4.2
Corporate Profits Before Taxes ³	2.9	2.4	4.2	4.2	-2.2	1.3	-0.8	2.6	3.0	0.8	3.2	2.2	1.4	3.2	2.5	1.0	3.4	0.2	2.3	2.0

Forecast as of: December 18, 2019

Source: IHS Global Insight and Wells Fargo Securities

¹ Compound Annual Growth Rate Quarter-over-Quarter ² Percentage Point Contribution to GDP ³ Year-over-Year Percentage Change

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December-18 December-17	Forecast Update: When the Facts Change, We Change Our Minds	Bryson
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