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Economic Trends for Colorado Through June 2019

Colorado-based Business and Economic Research
Prepared
July 25, 2019

2019 Economic Trends for Colorado

Through June

Over the past nine months there have been numerous articles in the media projecting a recession in the near-term. The most current data shows the economy is performing better than these projections. Specifically, growth in Q3 and Q4 may be stronger than the first half of the year. Colorado is on track to add 50,700 jobs in 2019. The current unemployment rate is painfully low at 3.0%. This chartbook include analysis about the data mentioned below.

United States

- U.S. Real GDP, Employment, Job Openings, and Inflation
- Industrial Production, Capacity Utilization, Manufacturing and Nonmanufacturing Indices, Manufacturing Shipments, Trade Weighted Dollar, Exports of Goods and Services, Retail Sales, and Auto and Light Truck Sales
- Single Family Permits, Construction Spending, 30-Year Fixed Rate Mortgages, NAHB HMI and Housing Starts, and Housing Prices
- Corporate Profits, S&P Performance, and Volatility
- Federal Reserve Leading Indicator, NFIB Index, Michigan Consumer Sentiment
- Summary

Colorado

- Real GDP
- Population Components of Change
- Changing Demographics – Under 18, 65+, Peak County Population
- Employment, Percent Change in Employment, and Unemployment Rate
- DIA Passengers, Retail Sales, and Venture Capital
- Building Permits, Valuation, and Housing Prices
- Oil Production and Prices
- Summary

The 2019 forecast can be found at <https://cber.co/economic-forecasts/cber-co-economic-forecast/>. Monthly economic updates are available at <https://cber.co/economic-updates/>

U.S. Economy





The U.S. Economy

Real Gross Domestic Product, Employment, Job
Openings, and Inflation

Quarterly Real GDP Growth

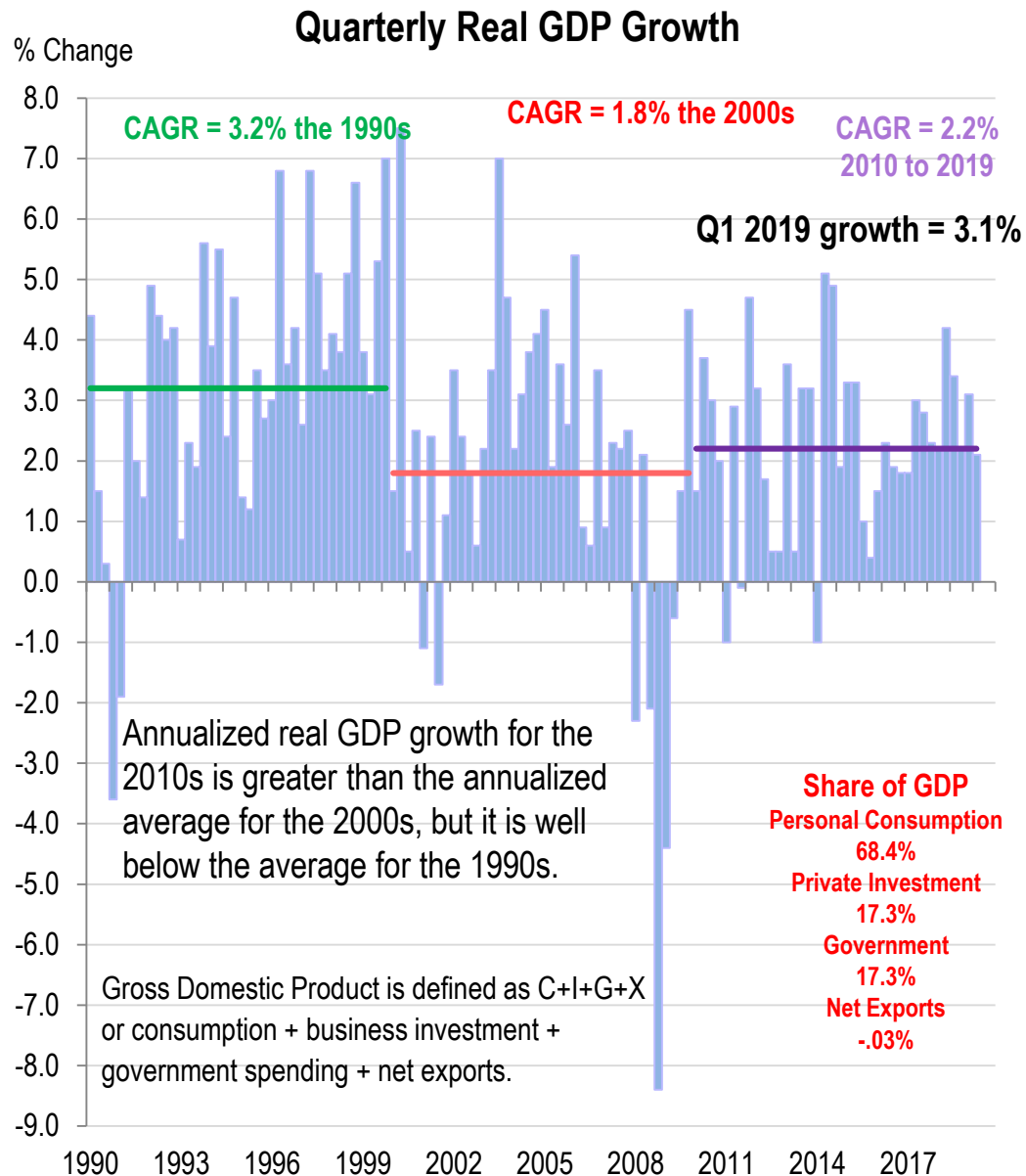
Historical United States

Between 2010 and 2019, quarterly real GDP growth ranged from -1.0% to 5.1%.

The advance estimate for Q2 2019 real GDP growth came in stronger than expected by most economists at 2.1%.

The growth was driven by personal consumption (as usual) and government spending at all levels. Growth was partly offset by private inventory investment, exports, and nonresidential fixed investment and residential fixed investment.

Q2 2019 is the 21th consecutive quarter of positive growth since Q1 2014.

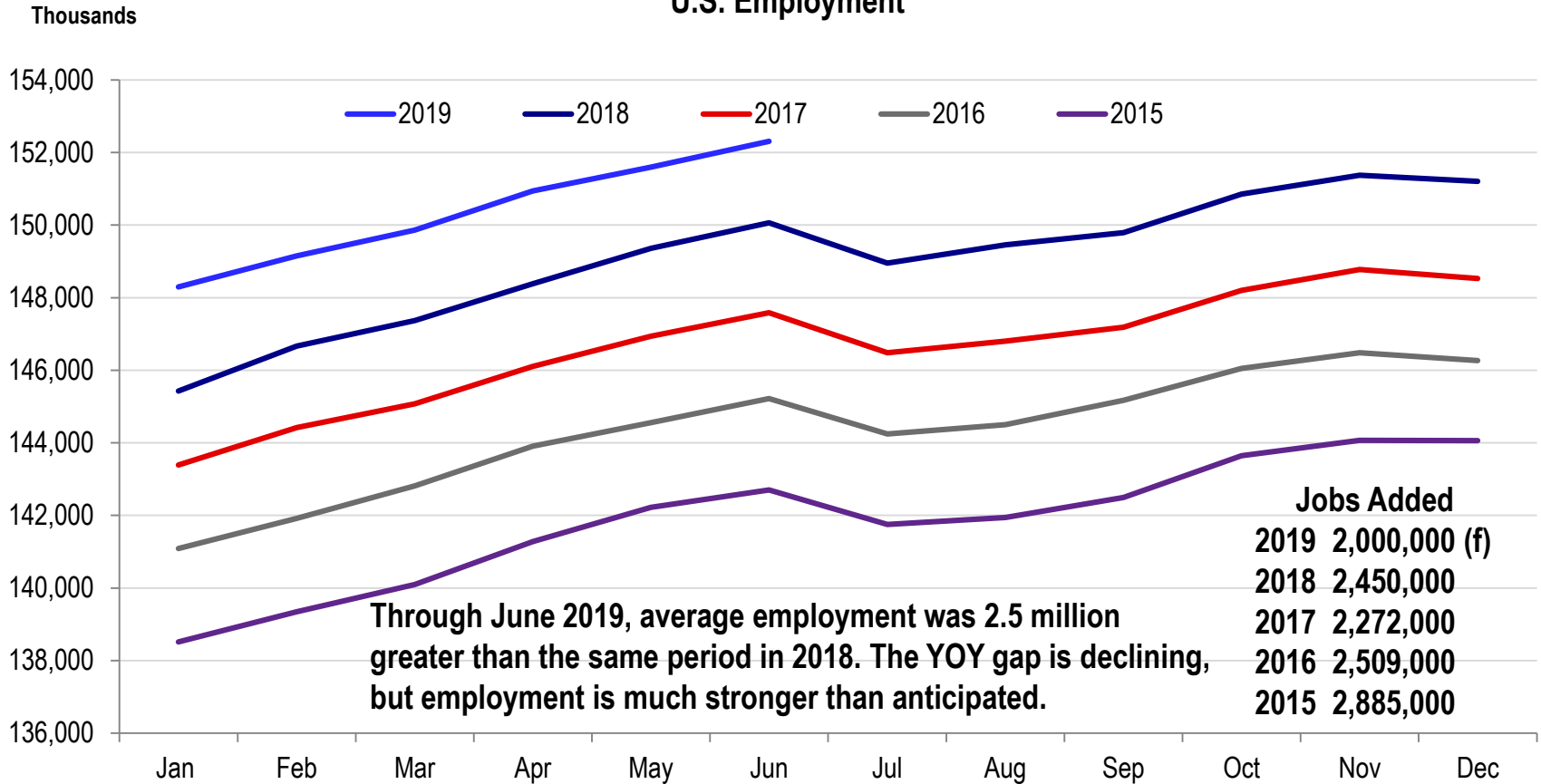


Source: Bureau of Economic Analysis, Table 1.1.1, Share of GDP based on 2017, cber.co.

U.S. Employment

2015 to 2019

U.S. Employment



Source: BLS, NSA, cber.co. Note: CES Employment is also referred to as nonfarm wage and salary employment.

● Job Openings vs. Number of Unemployed

● United States



Job Openings vs. Number of Unemployed



Source: Bureau of Labor Statistics, SA, cber.co.

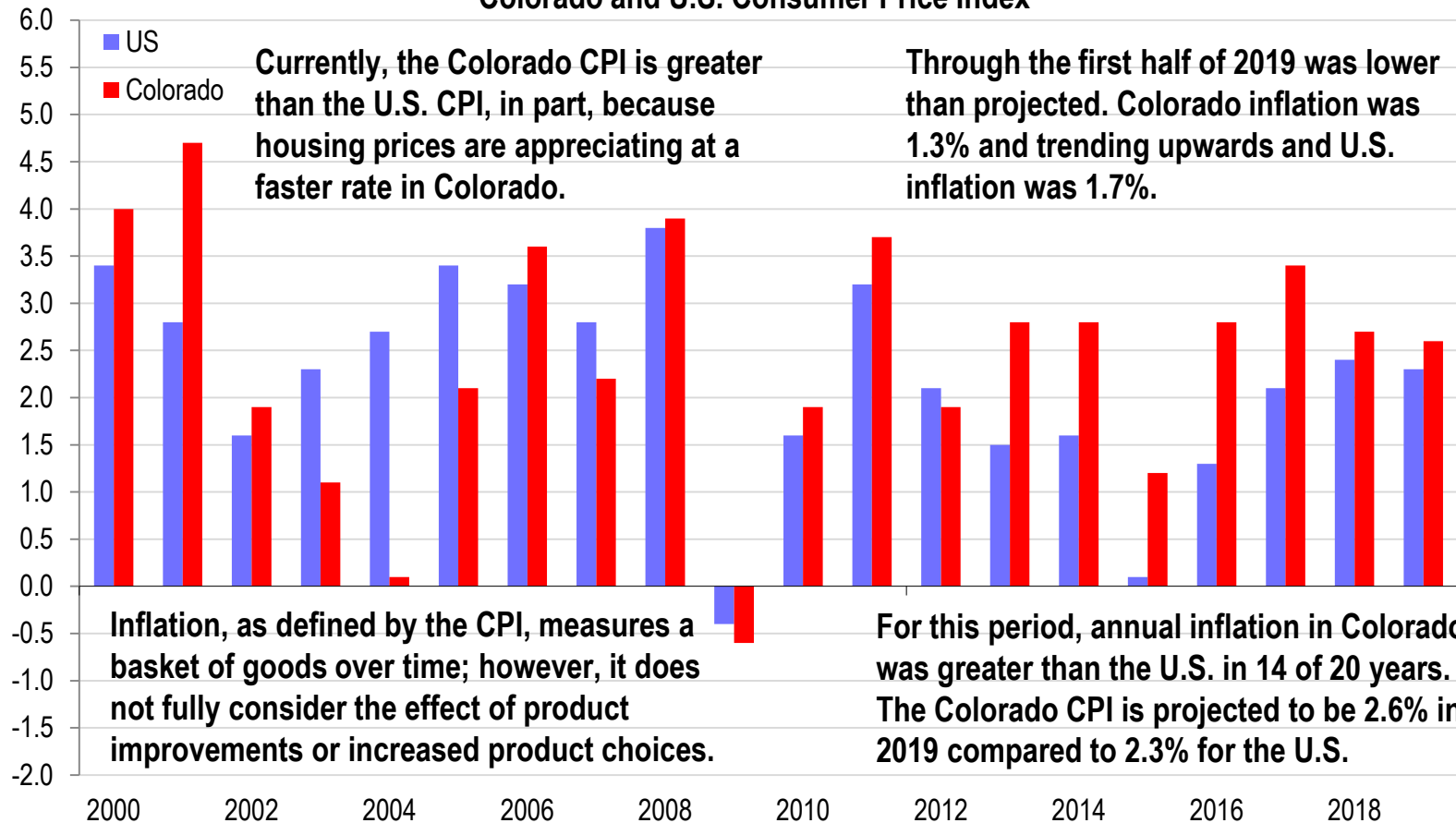
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Consumer Price Index (CPI)

Colorado vs. U.S.

1982-84=100,
% change

Colorado and U.S. Consumer Price Index



Source: Bureau of Labor Statistics, SA, cber.co.



The U.S. Economy

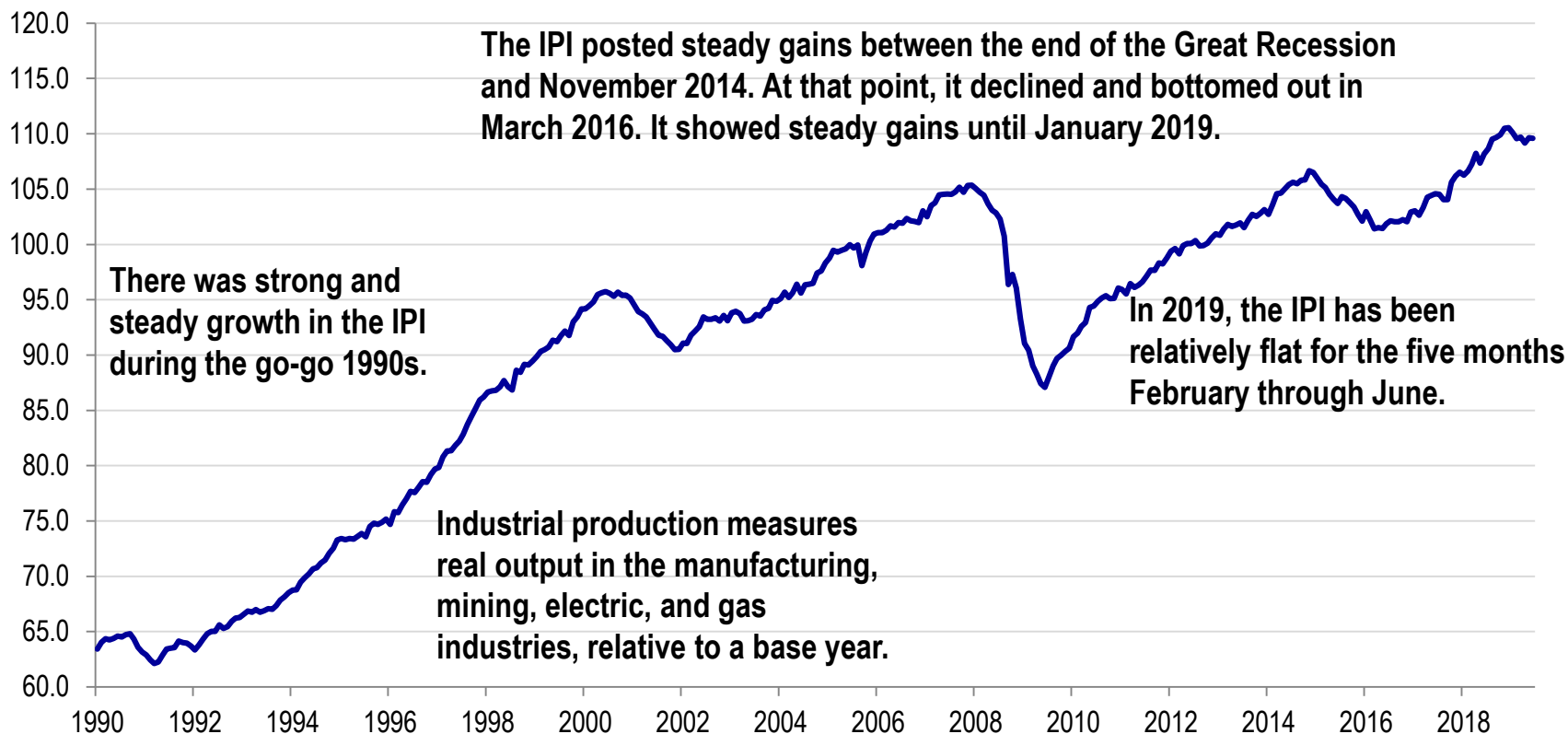
Industrial Production, Capacity Utilization, Manufacturing and Nonmanufacturing Indices, Manufacturing Shipments, Trade Weighted Dollar, Exports of Goods and Services, Retail Sales, and Auto Sales

Industrial Production Index

All Industries

Industrial Production, All Industries

Index, 2012 = 100



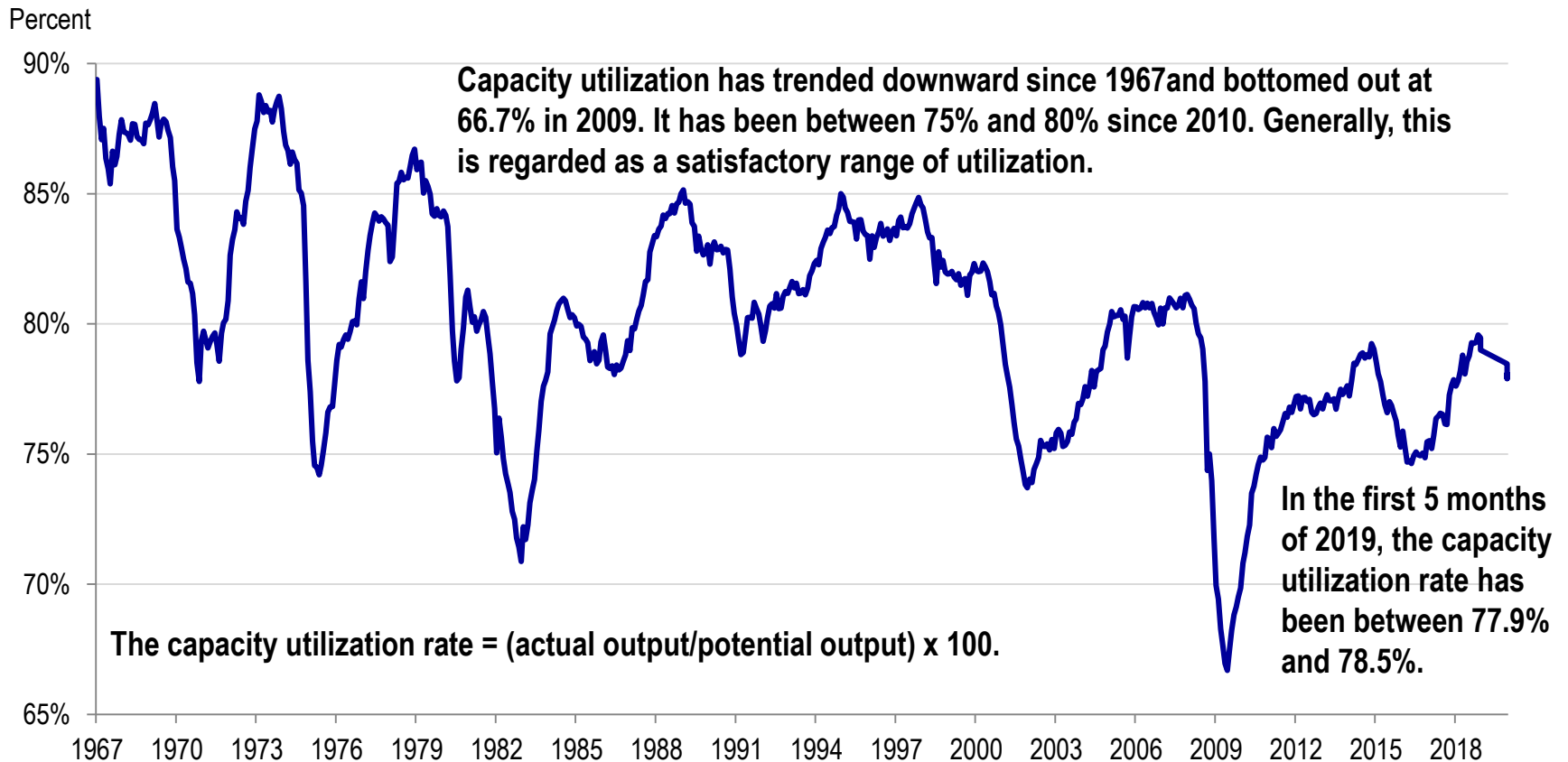
Source: FRED, Federal Reserve, cber.co.

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Capacity Utilization

Total Industry

Capacity Utilization

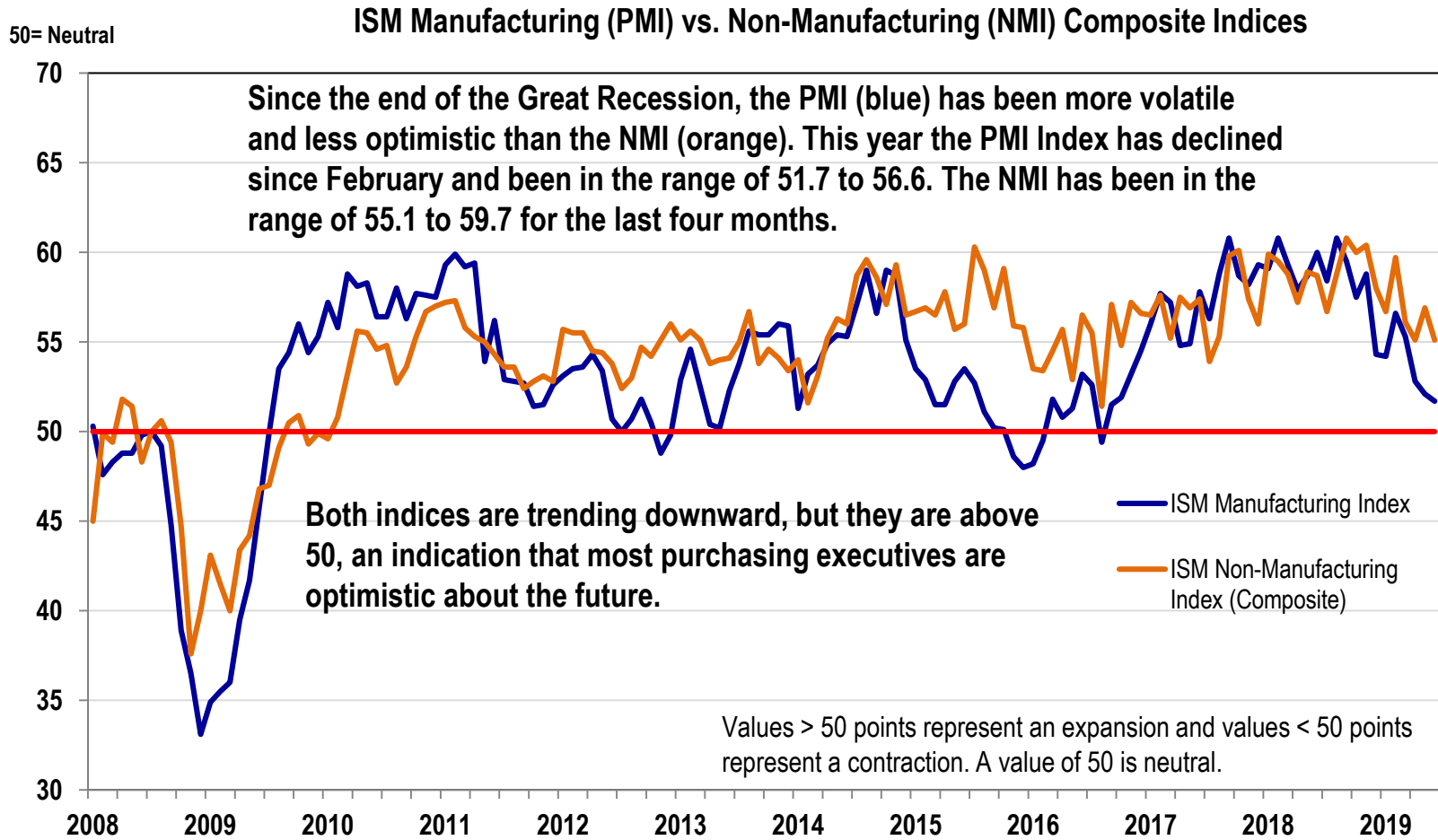


Source: FRED, Federal Reserve, cber.co.

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ISM PMI Composite Indices

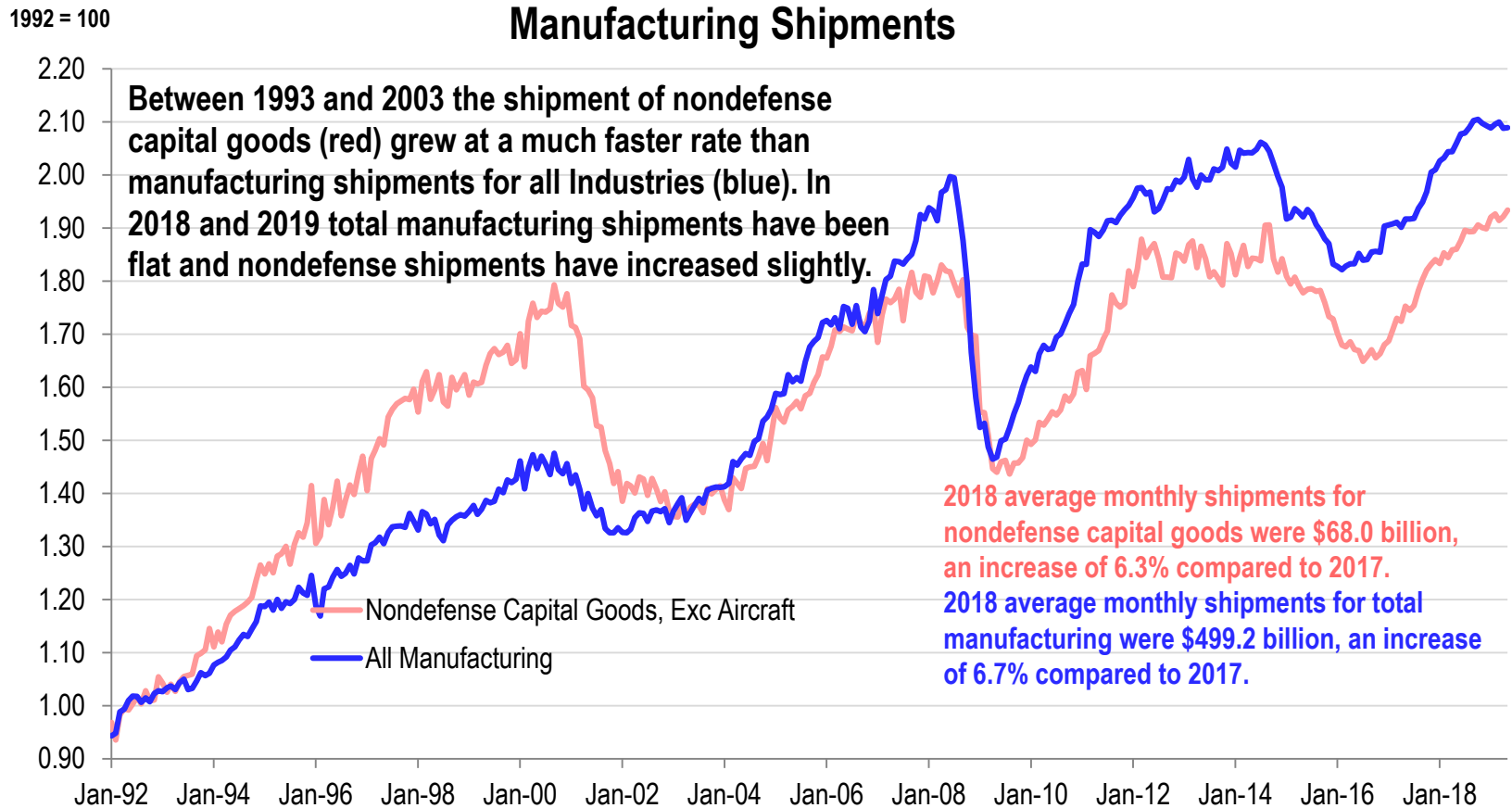
Manufacturing vs. Non-manufacturing



Sources: Institute for Supply Management (ISM), FRED, cber.co.

United States Manufacturing Shipments

All Industries vs. Nondefense Capital, Excluding Aircraft

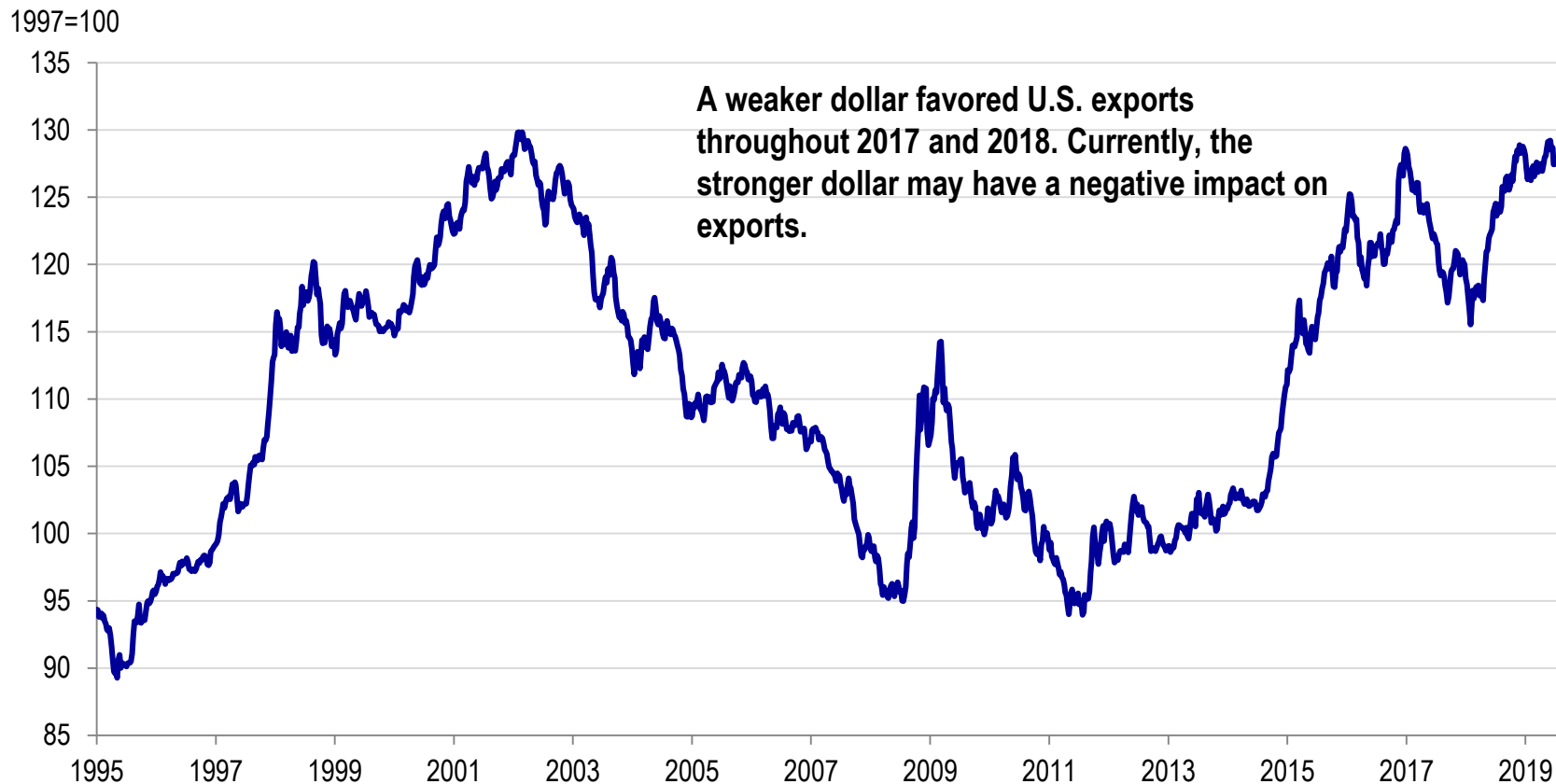


Source: FRED, SA. U.S. Bureau of the Census, cber.co. Note: Not adjusted for inflation.

Trade Weighted U.S. Dollar Index: Broad



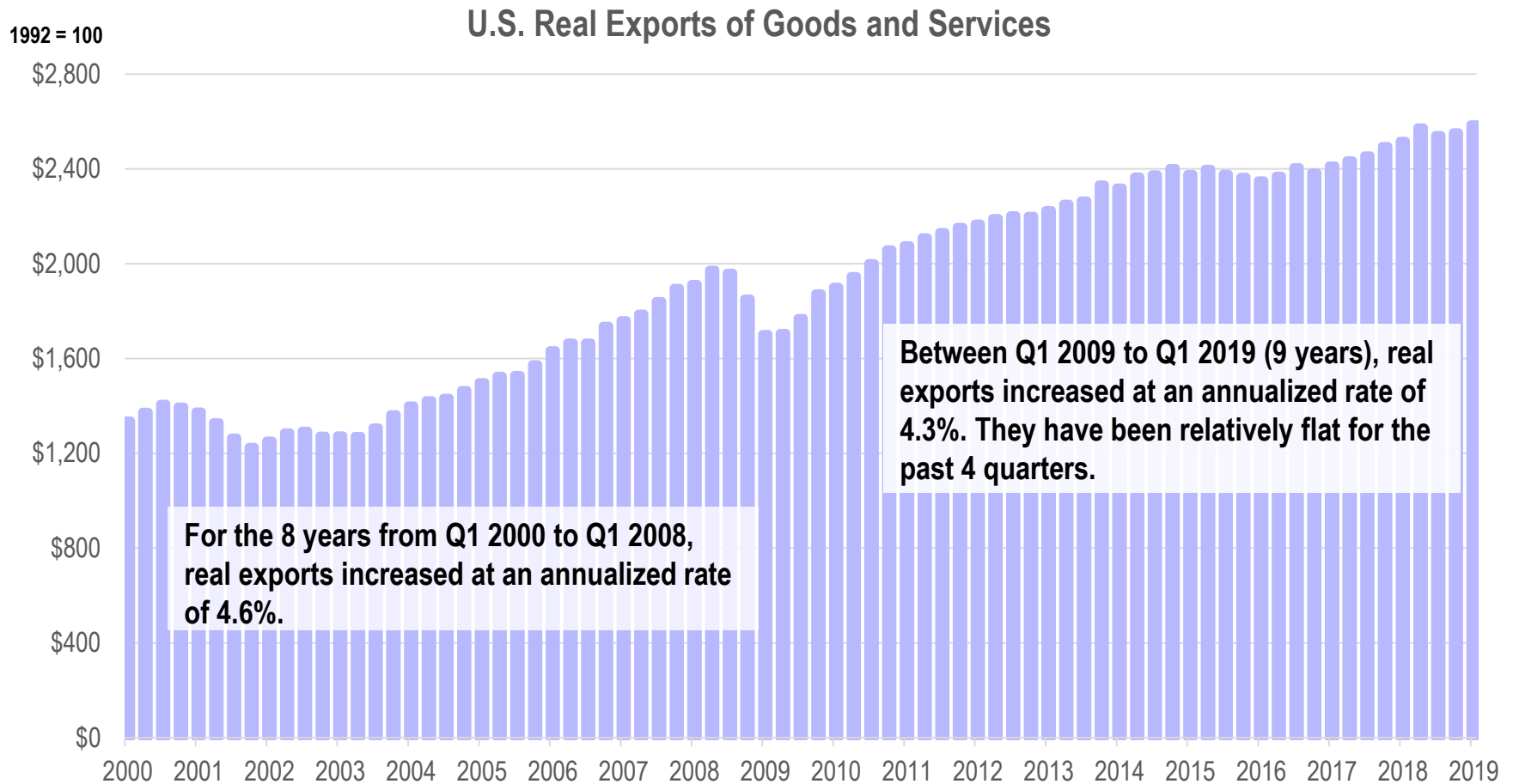
Trade Weighted U.S. Dollar Index: Broad



Source: FRED, The Federal Reserve, cber.co.

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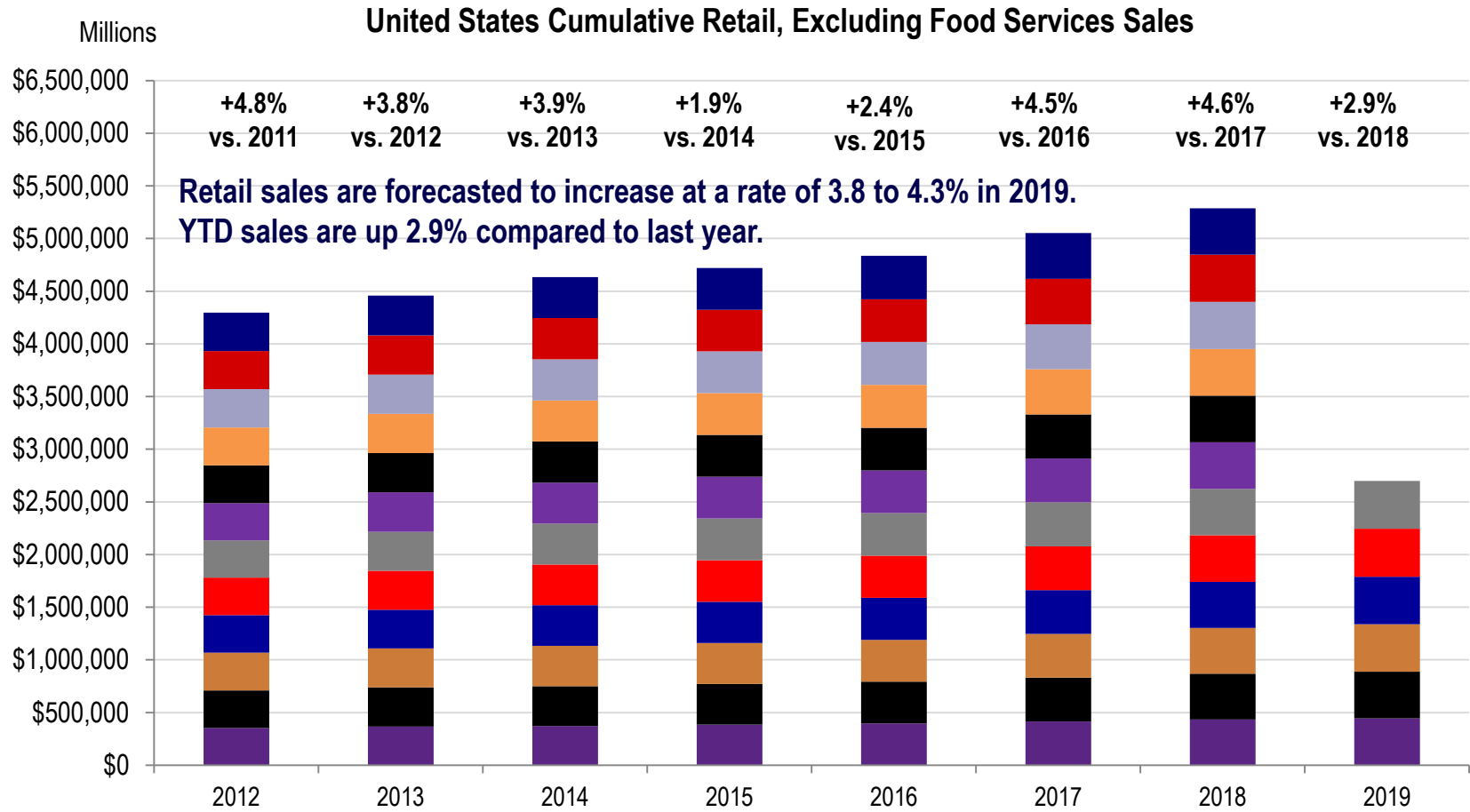
Real Exports of U.S. Goods and Services



Source: FRED, BEA, SAAR, cber.co

Cumulative Retail, Excluding Food Services Sales

Monthly

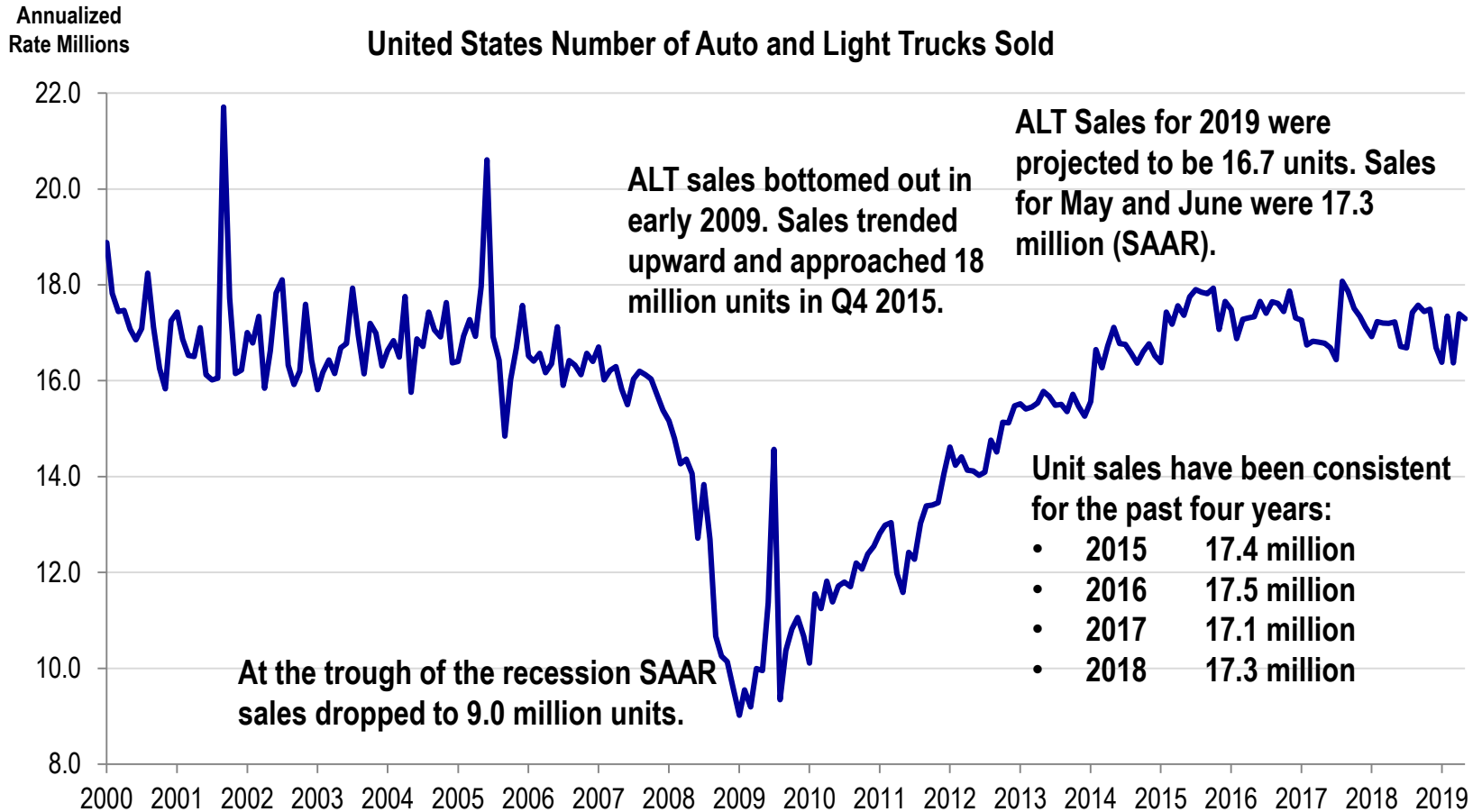


Source: U.S. Census Bureau, FRED, cber.co.

Note: Data is in descending order with December at the top and January at the bottom, not adjusted for inflation.

U.S. Auto and Light Truck (ALT) Sales

Monthly (Annualized Rate Millions)



Source: FRED, BEA, cber.co.

Note: Seasonally Adjusted Annualized Rate.

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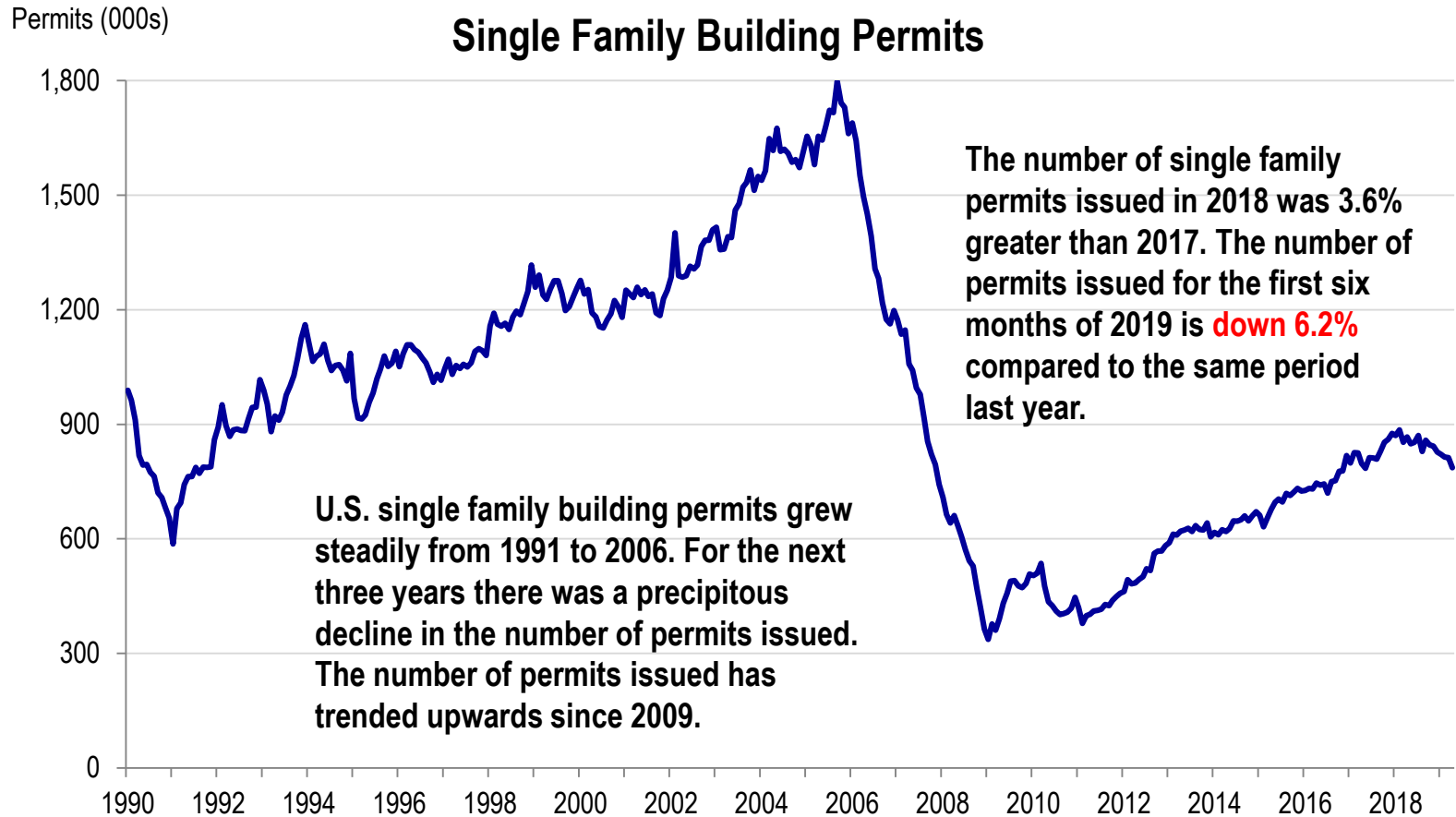


The U.S. Economy

Single Family Permits, Construction Spending, 30-Year Fixed Rate Mortgages, NAHB HMI and Housing Starts, and Housing Prices

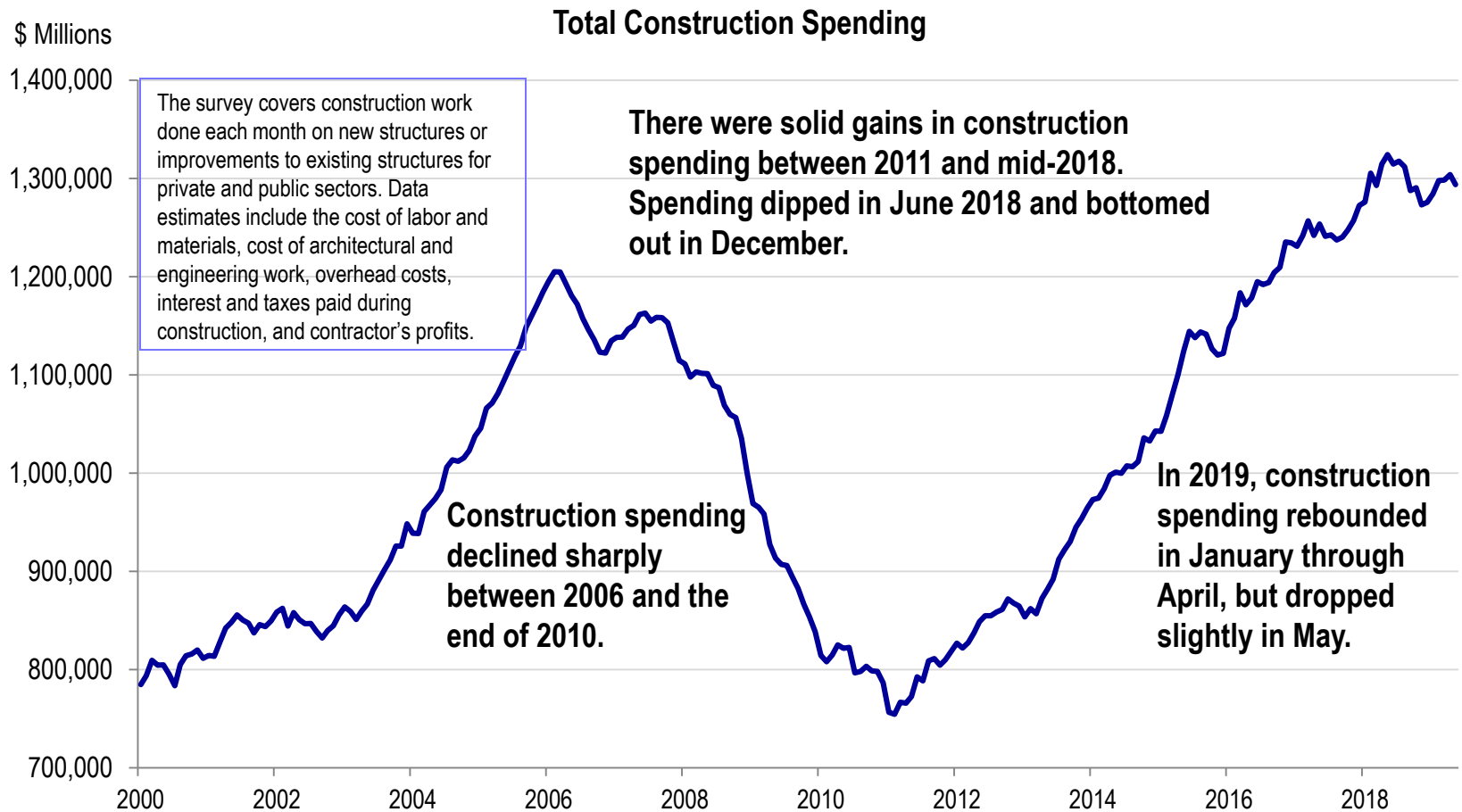
New Single Family Building Permits

United States



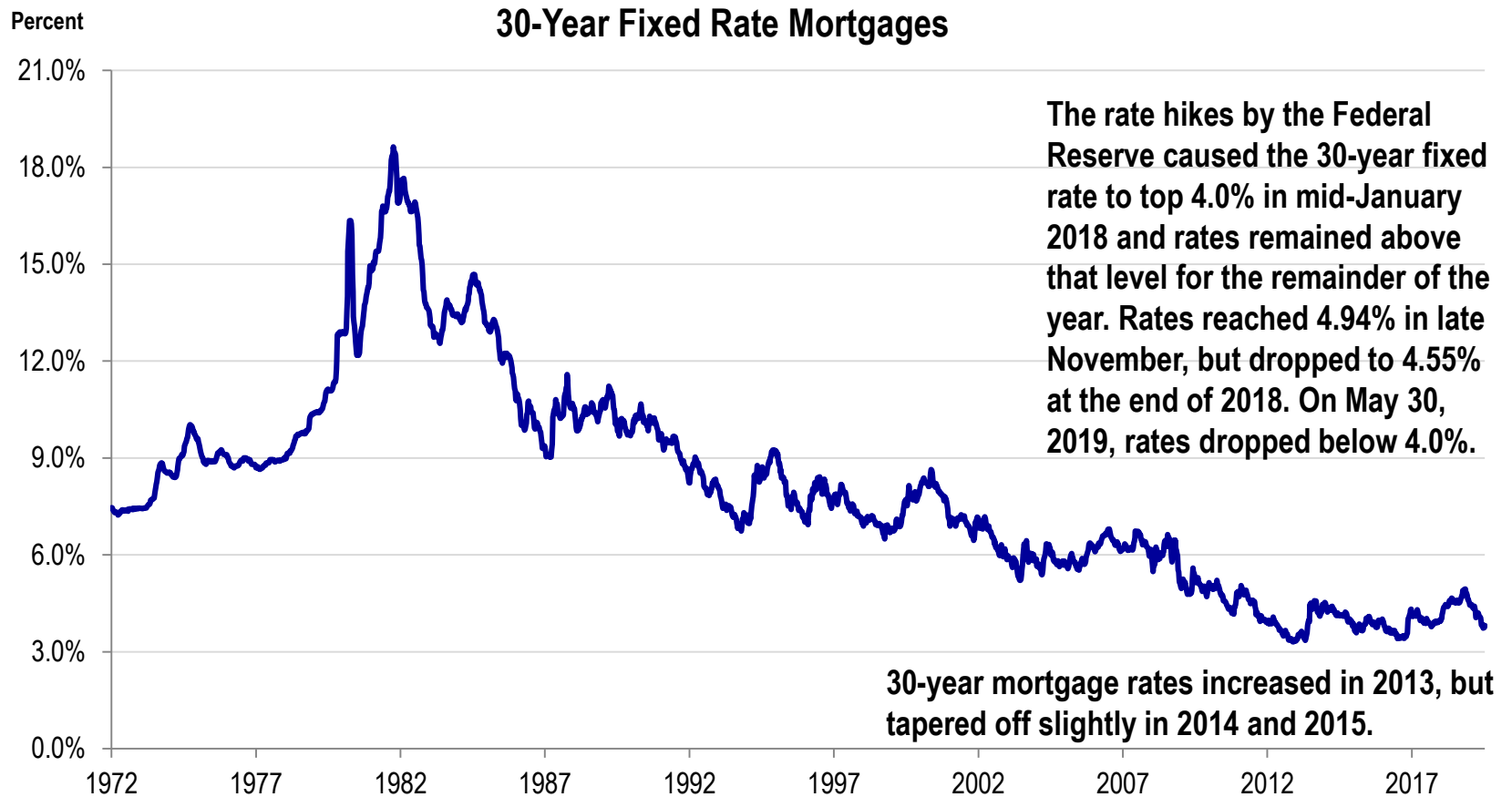
Source: FRED, U.S. Census Bureau, cber.co.

Total U.S. Construction Spending



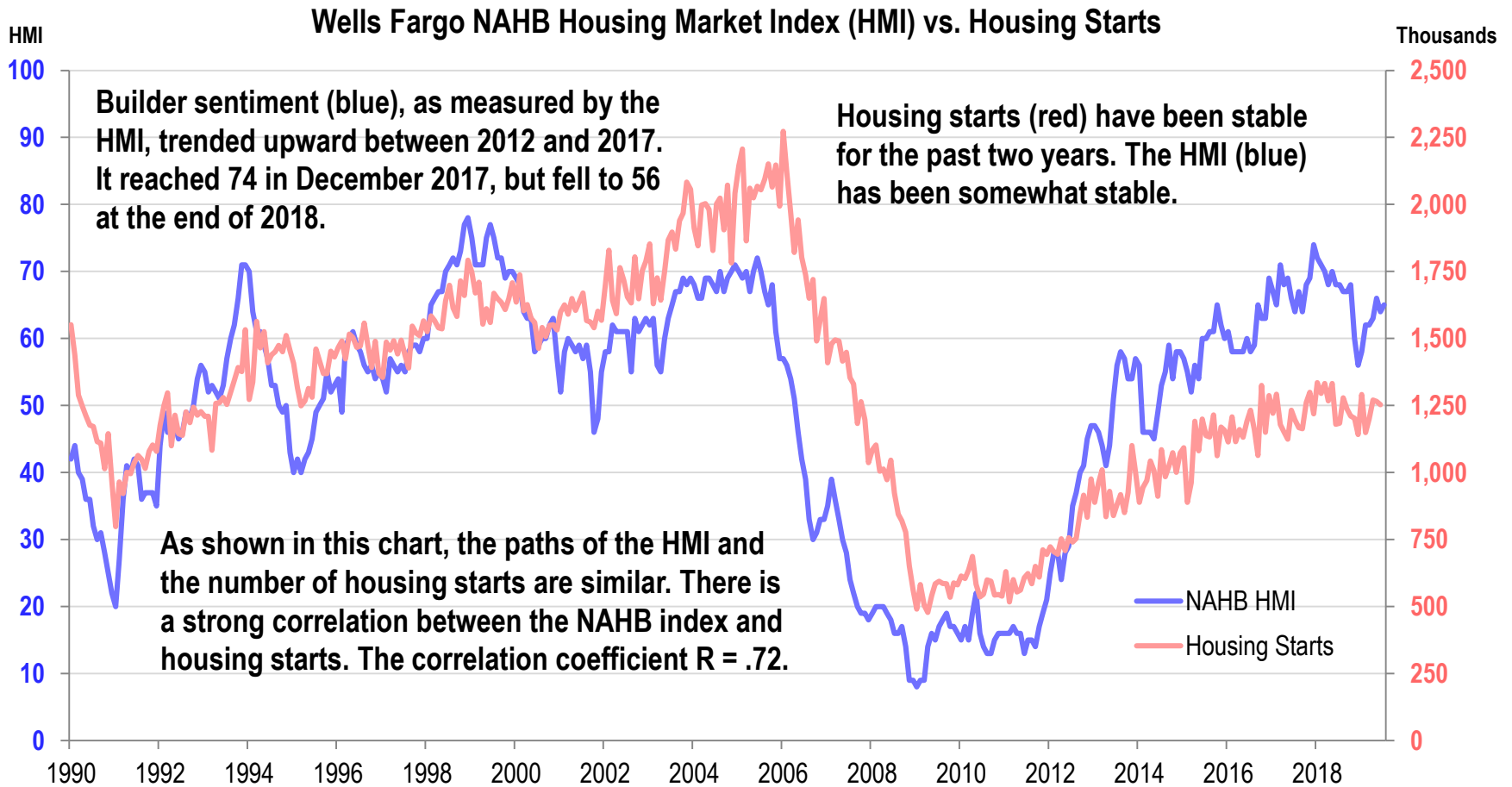
Source: FRED, Census Bureau, not adjusted for inflation, SAAR, cber.co.

30-Year Fixed Rate Mortgages



Source: FRED, Freddie MAC, cber.co.

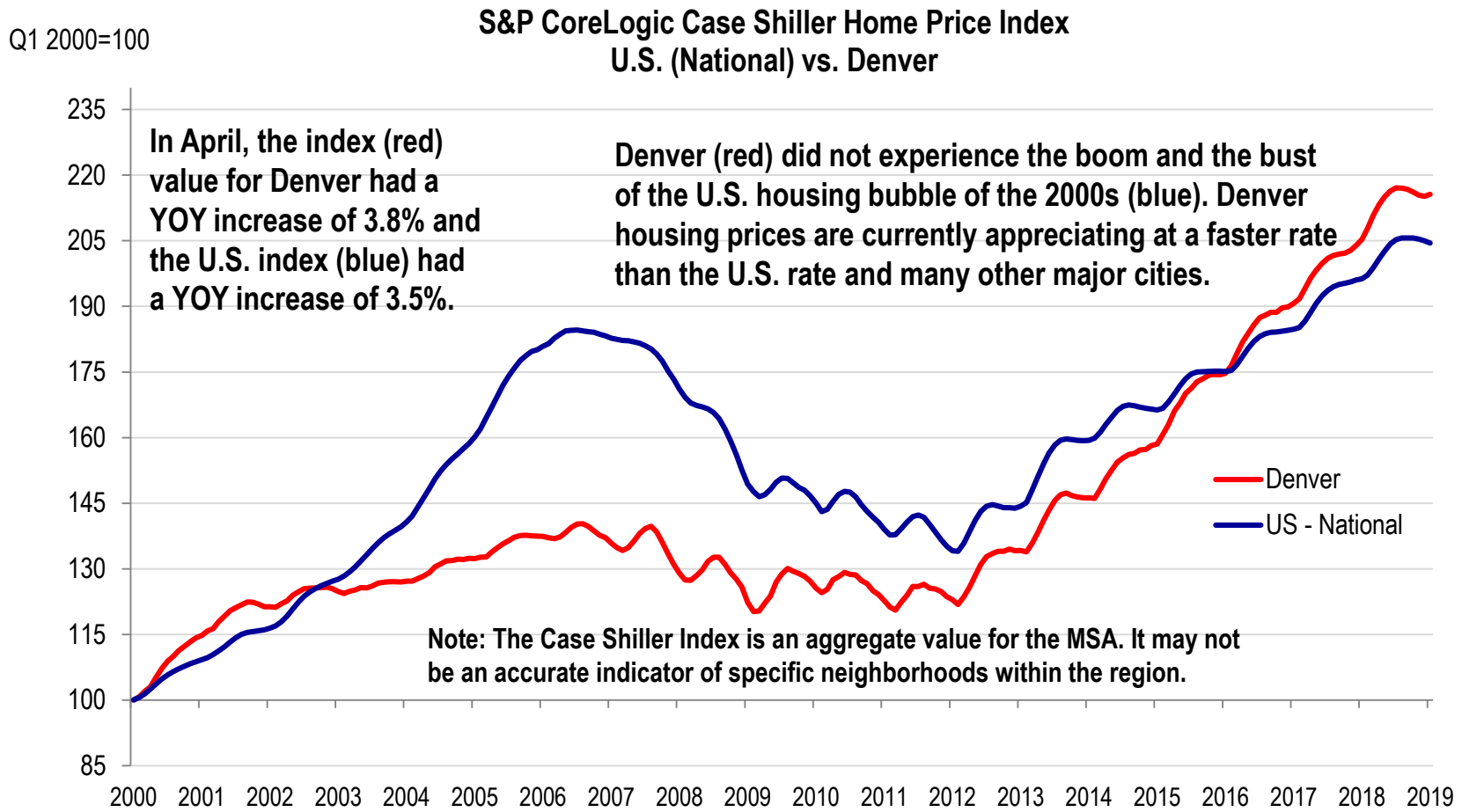
Wells Fargo NAHB HMI vs. Housing Starts



Source: NAHB, cber.co.

Case Shiller Home Price Index

National vs. Denver Index Value



Source: S&P Core-Logic Case-Shiller, cber.co.



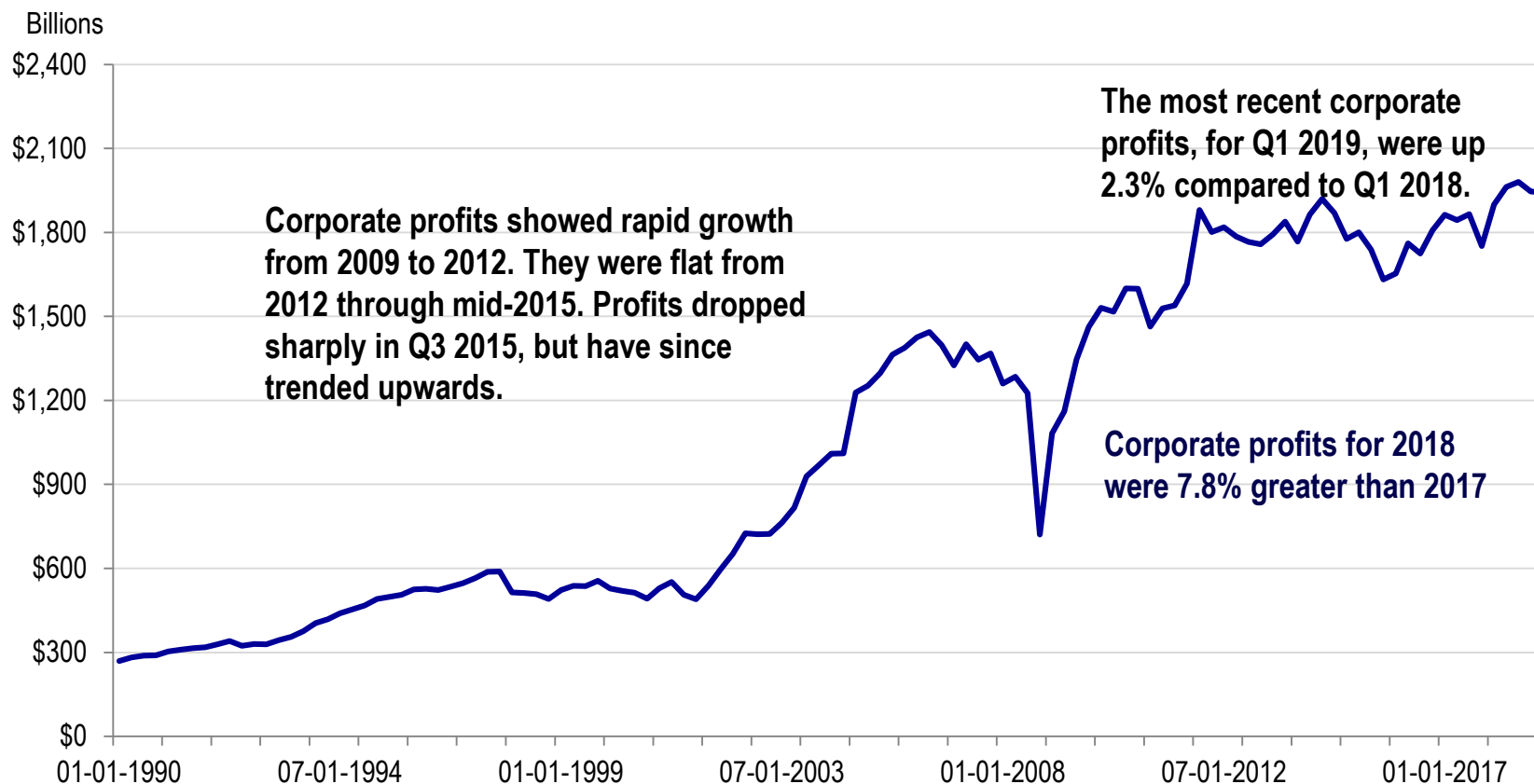
United States Economy

Corporate Profits, S&P Performance, and Volatility

Corporate Profits

After Tax (without IVA and CCAdj)

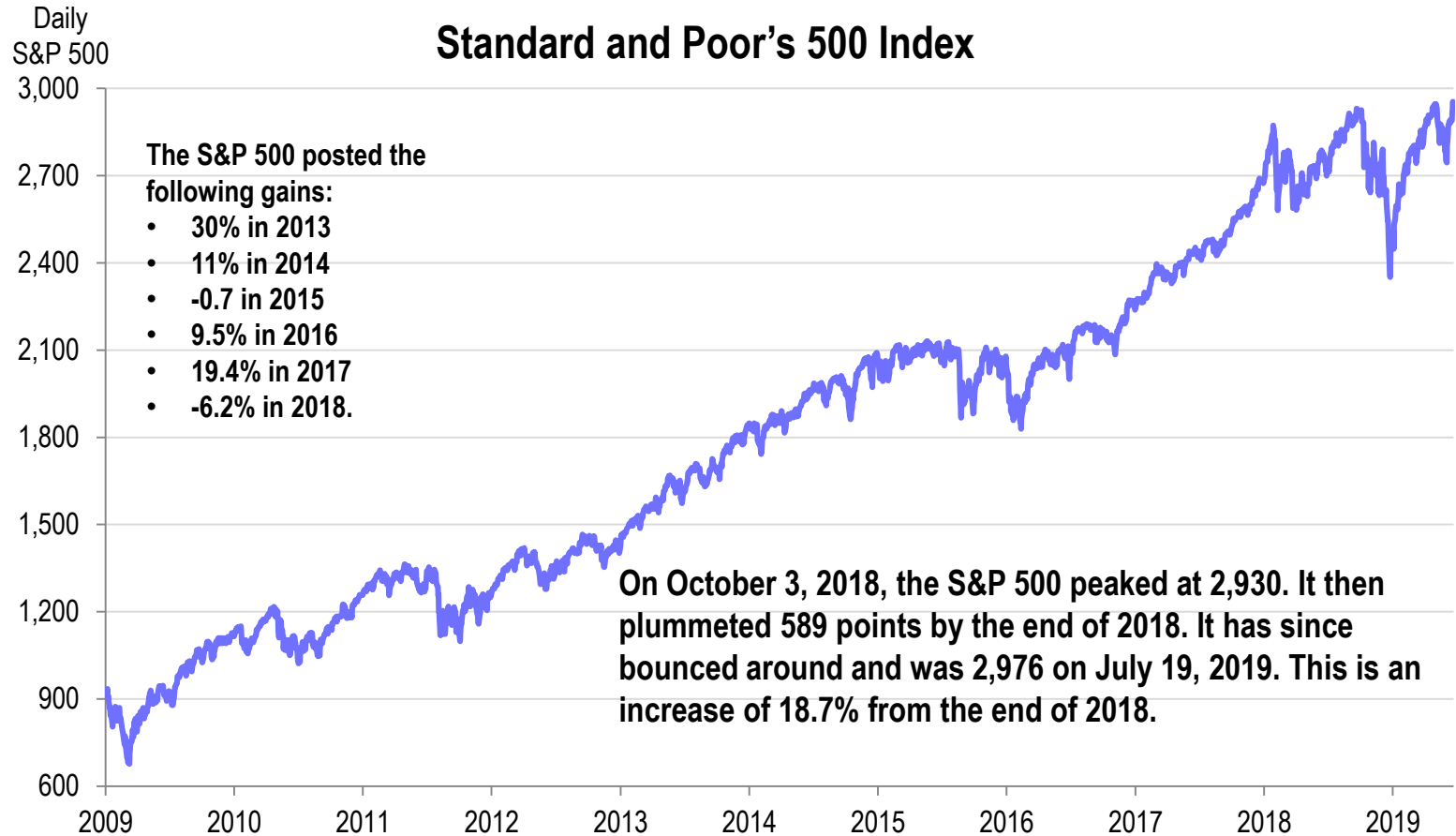
Corporate Profits After Tax



Source: FRED, BEA, cber.co.

Colorado-based Business and Economic Research <http://cber.co>

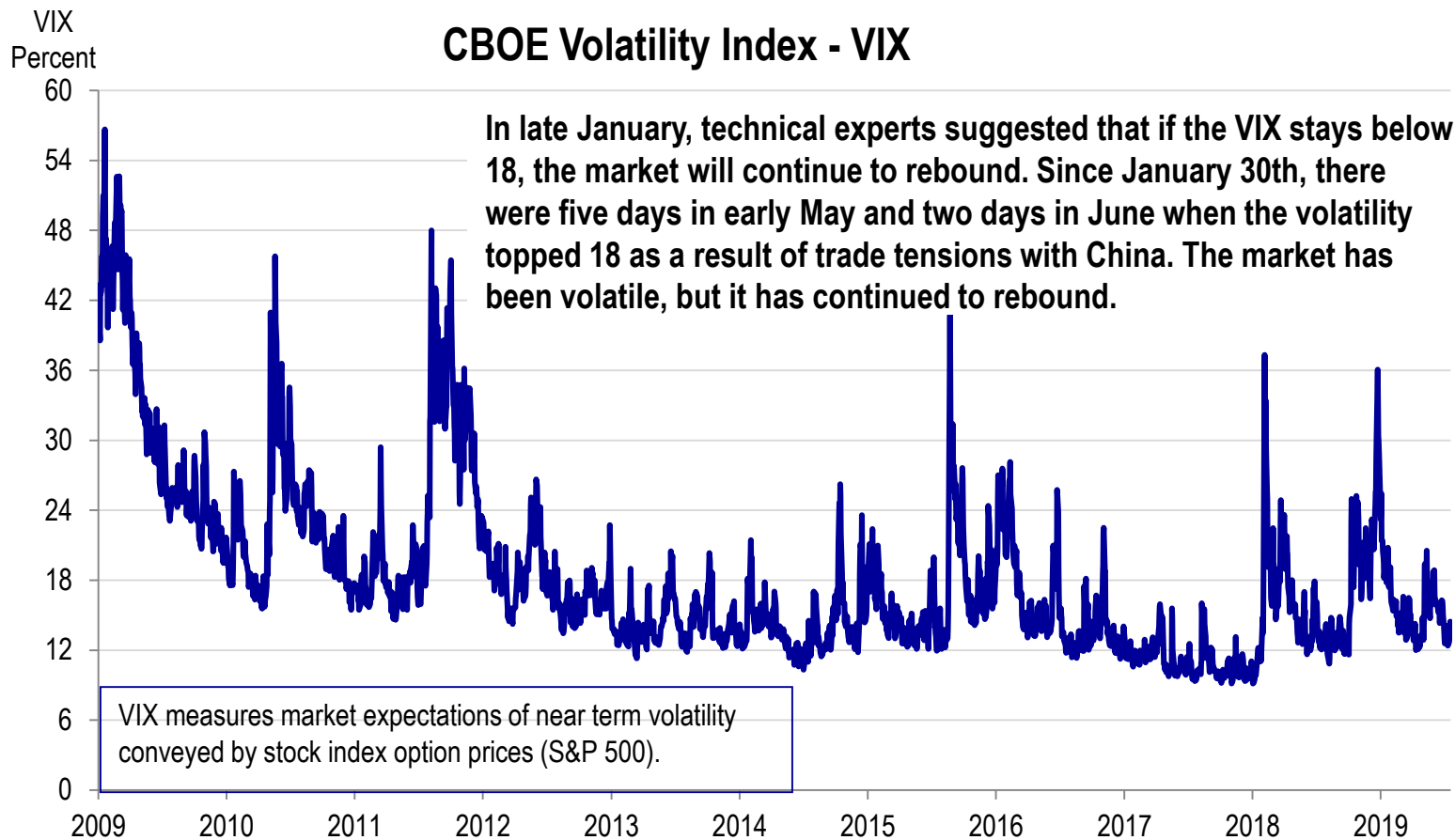
● Standard and Poor's 500 Index



Source: FRED, S&P 500, cber.co.

CBOE Volatility Index

VIX (VIXCLS)



Source: FRED, Chicago Board Options Exchange, cber.co.



The U.S. Economy

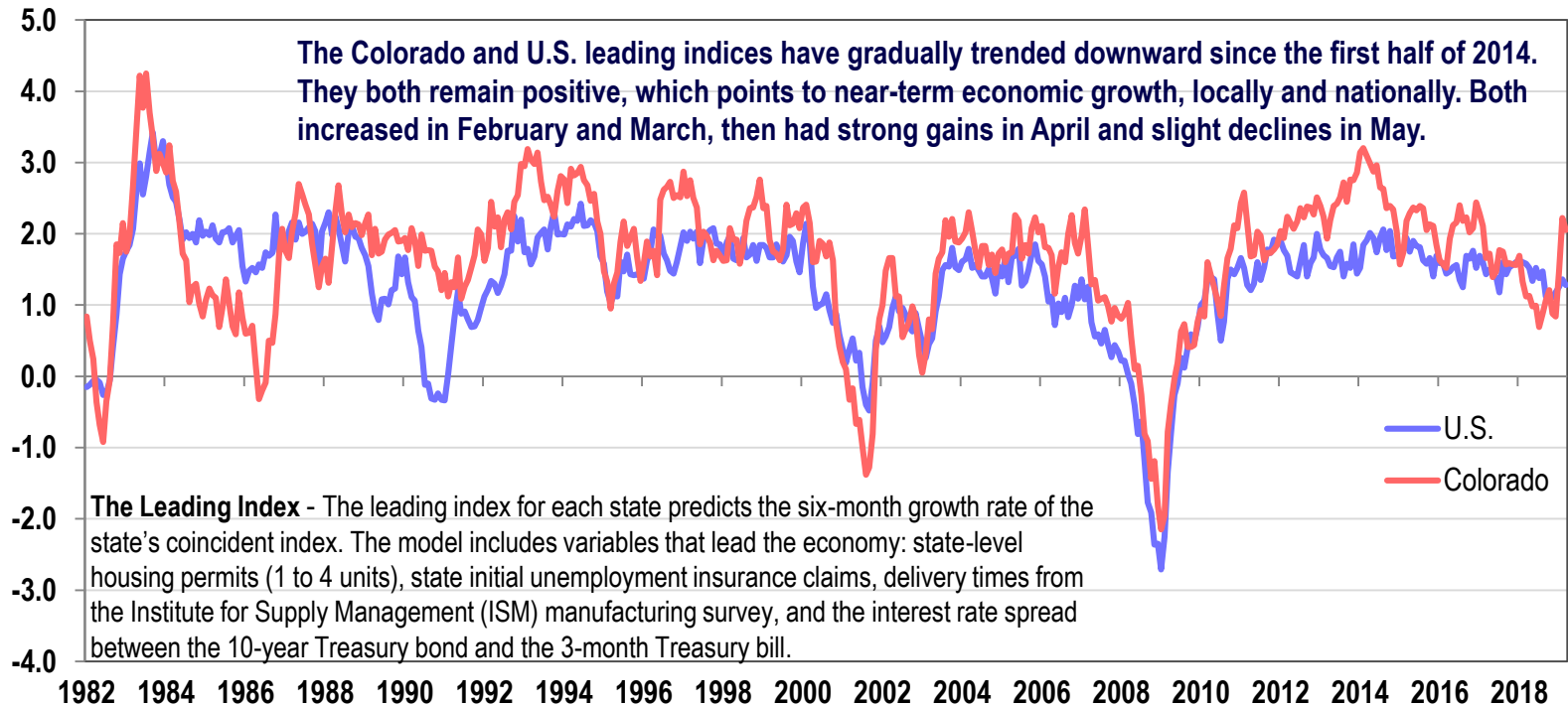
Federal Reserve Leading Indicator, NFIB Index, Michigan Consumer Sentiment

Philadelphia Fed Leading Index

Colorado vs. U.S.

Philadelphia Federal Reserve Leading Index – Colorado and U.S.

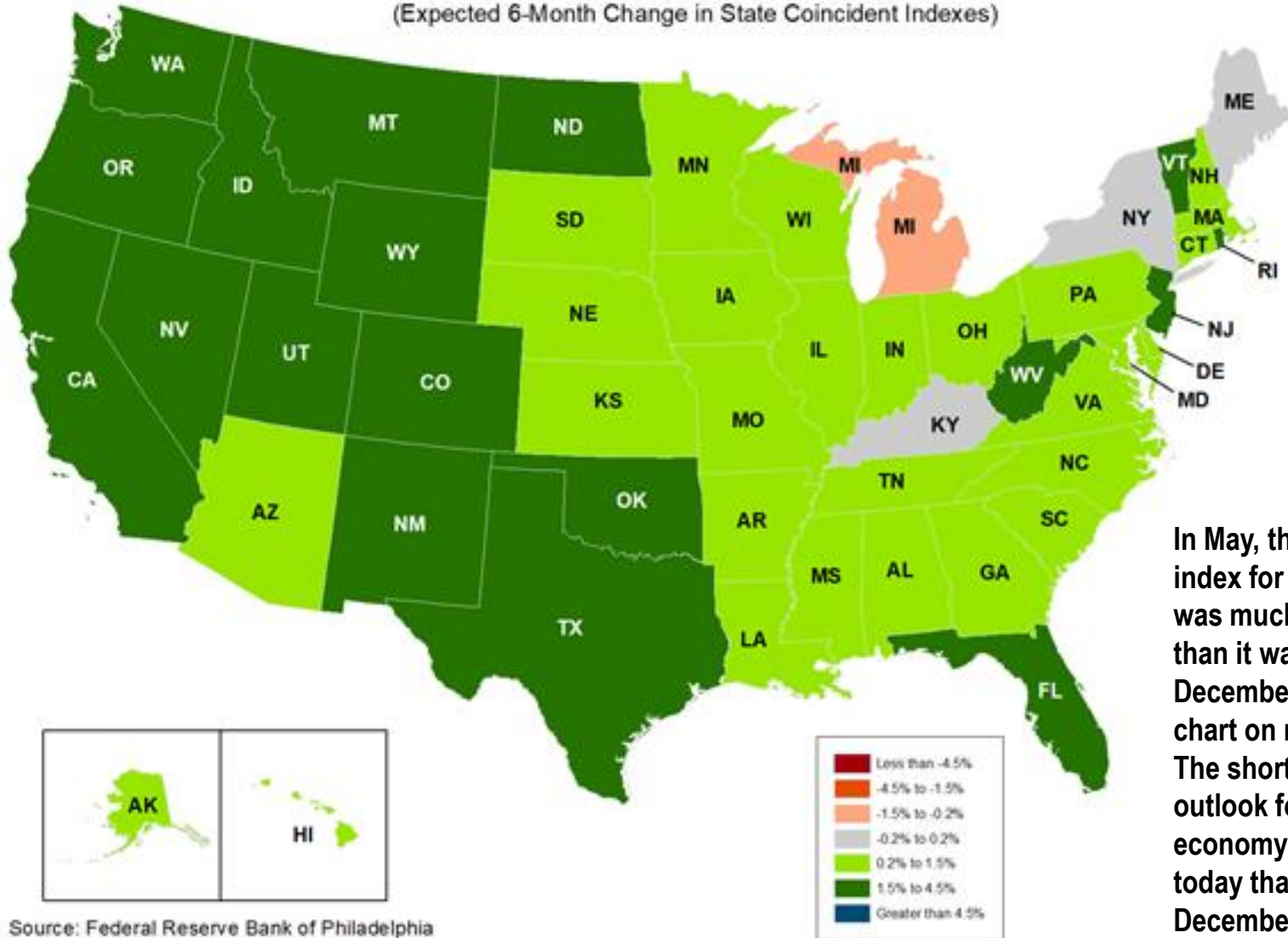
Index Value



Source: Philadelphia Federal Reserve, cber.co. Note: The leading index predicts the six-month growth rate of the U.S. and state's coincident index.

May 2019 State Leading Indexes

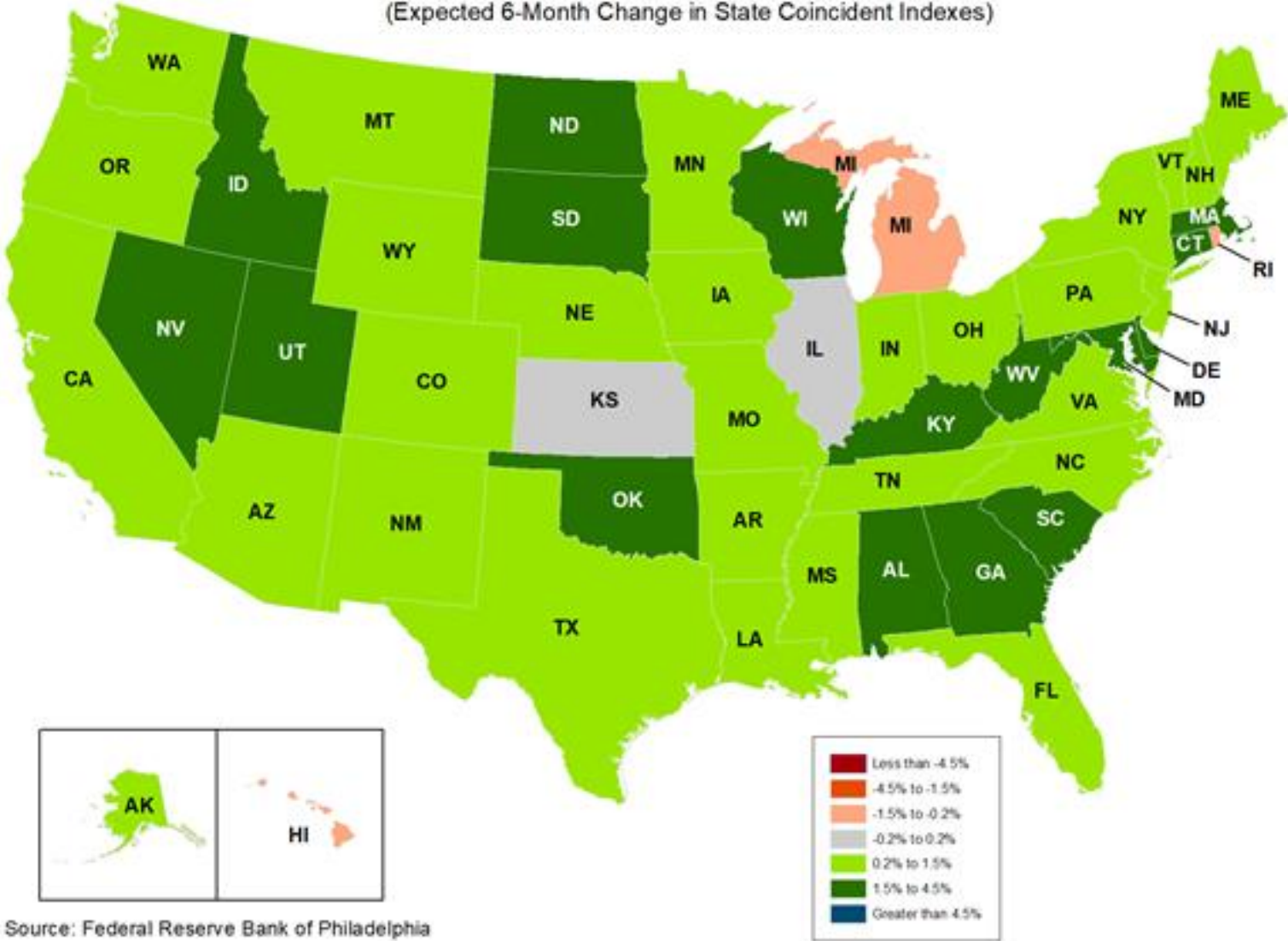
(Expected 6-Month Change in State Coincident Indexes)



In May, the leading index for most states was much greater than it was in December 2018 (see chart on next page). The short-term outlook for the economy is stronger today than it was in December.

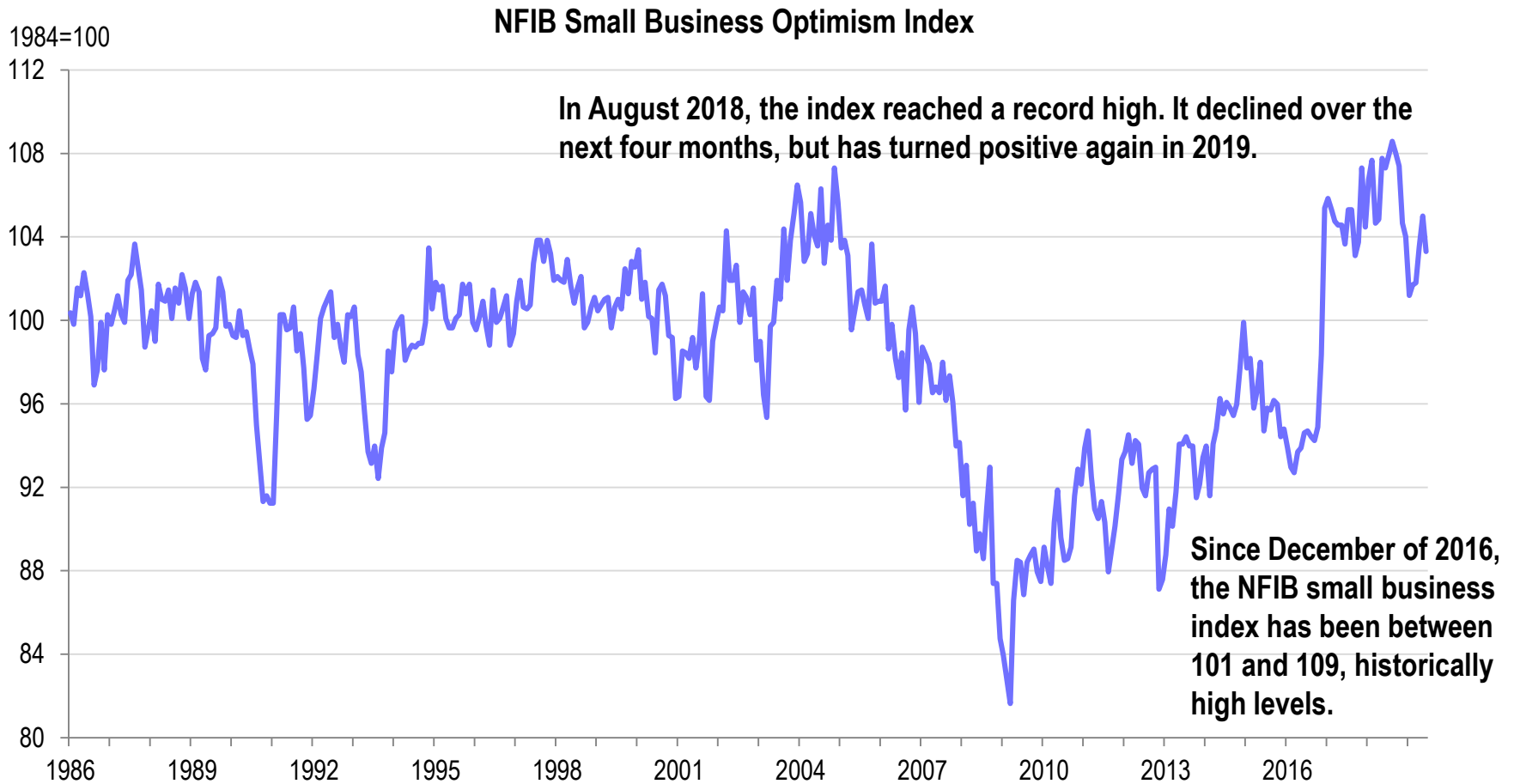
December 2018 State Leading Indexes

(Expected 6-Month Change in State Coincident Indexes)



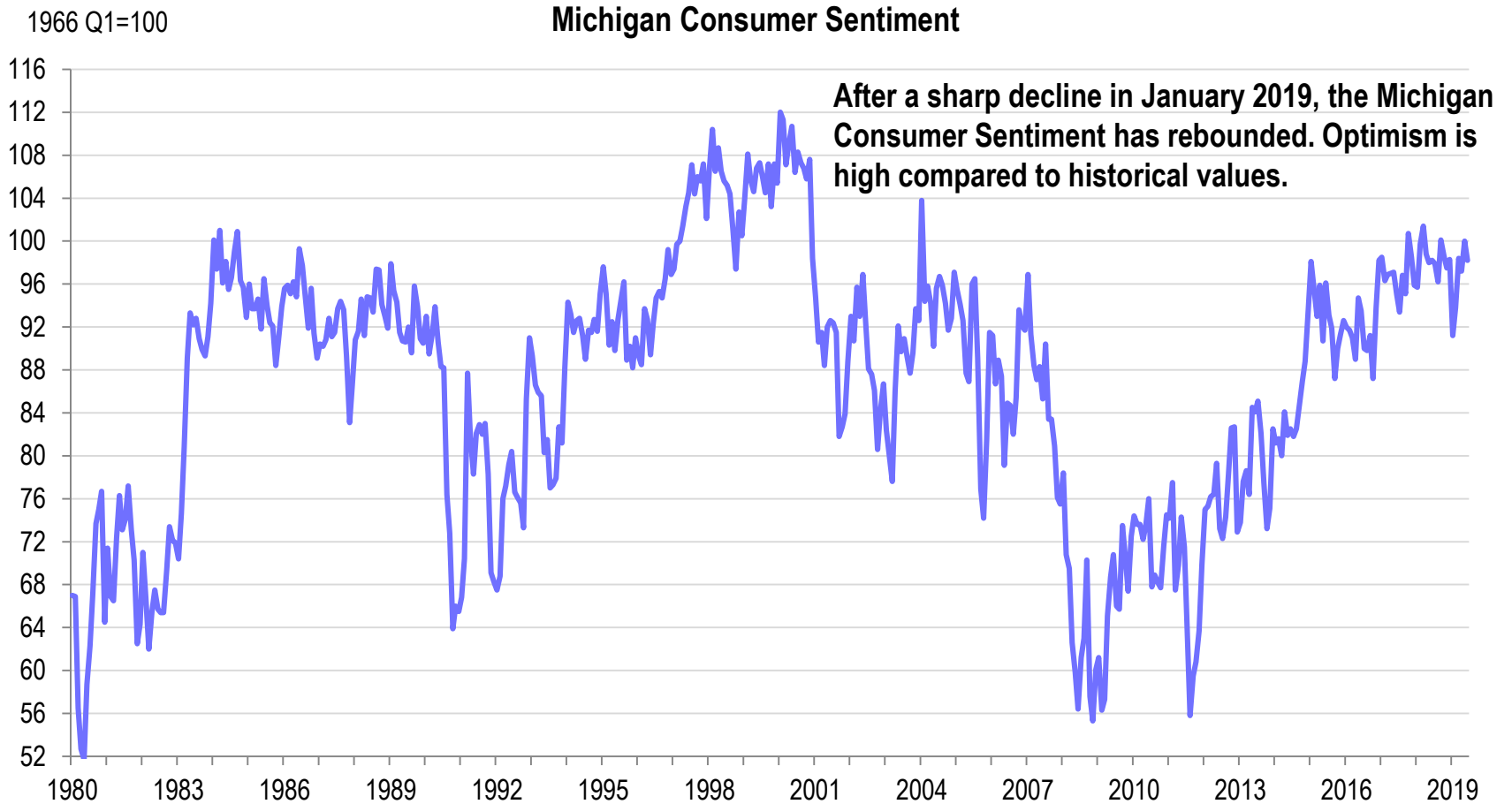
Source: Federal Reserve Bank of Philadelphia

NFIB Small Business Optimism Index



Source: NFIB, cber.co. Index 1984=100

University of Michigan Consumer Sentiment



Source: University of Michigan, cber.co.

Colorado-based Business and Economic Research <http://cber.co>



The U.S. Economy

Summary



Summary

U.S. Economy

The economy is performing stronger than expected. The most recent employment and GDP reports show the U.S. economy is stable, with solid employment and real GDP growth. In addition, the FOMC has indicated it will take steps to ensure that it remains solid in the near-term.

The month-over-month unemployment rate was stable in 44 states plus DC and lower in 6 states.

The month-over-month rate of growth in nonfarm employment was relatively unchanged in 46 states plus DC and it increased in 4 states.

As a result of the solid labor market, most other metrics and forward-looking indicators point to solid growth for the remainder of 2019.

The FOMC is ambivalent. It expects to see “sustained expansion of economic activity”; however, it will consider a rate decrease because there is uncertainty about the impact of trade tensions and the slowing global economy.

A grayscale photograph of a dense forest. In the center, a waterfall cascades down a rocky ledge. The trees are tall and thin, filling the background and foreground. The overall scene is serene and natural.

The Colorado Economy



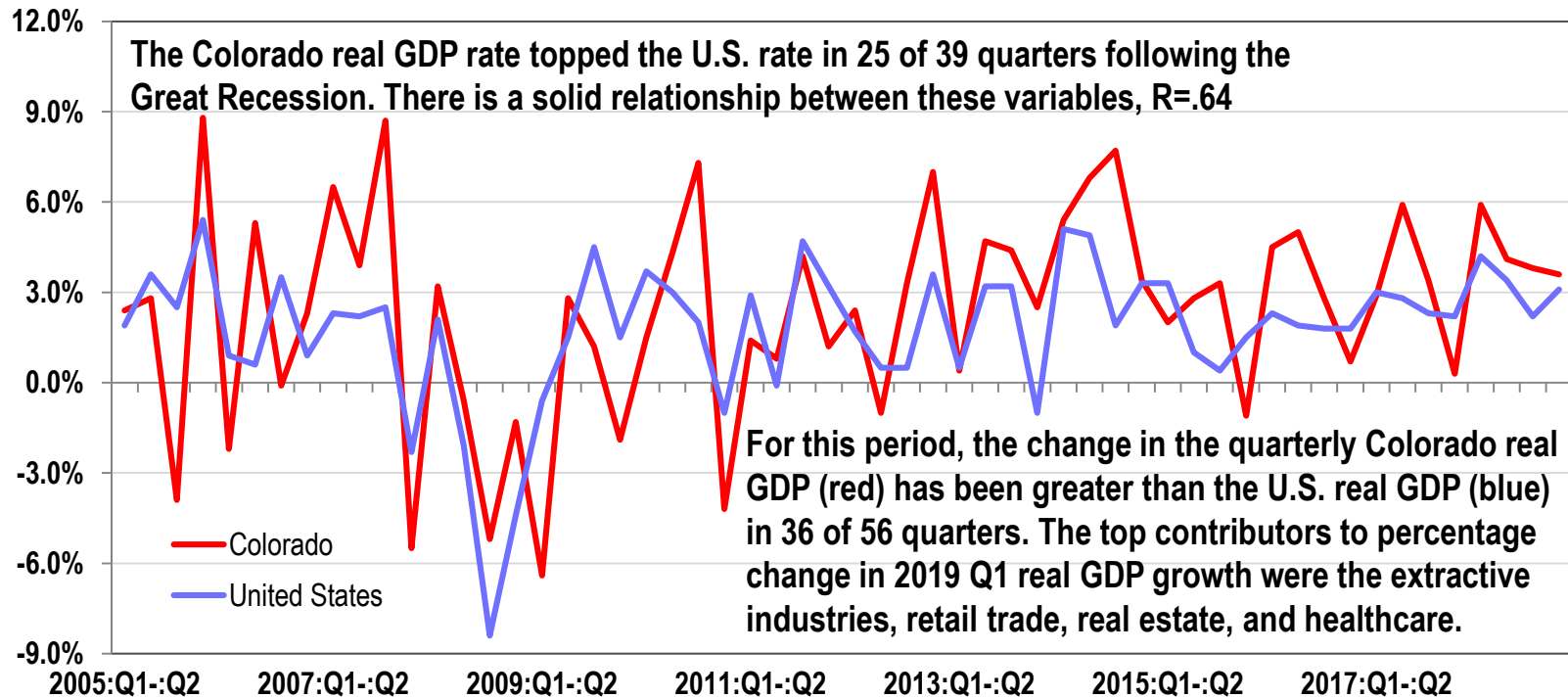
The Colorado Economy

Gross Domestic Product

Real Gross Domestic Product

Colorado vs. U.S. (Quarterly Rate)

Change in the Quarterly Rate of Change for Real Gross Domestic Product

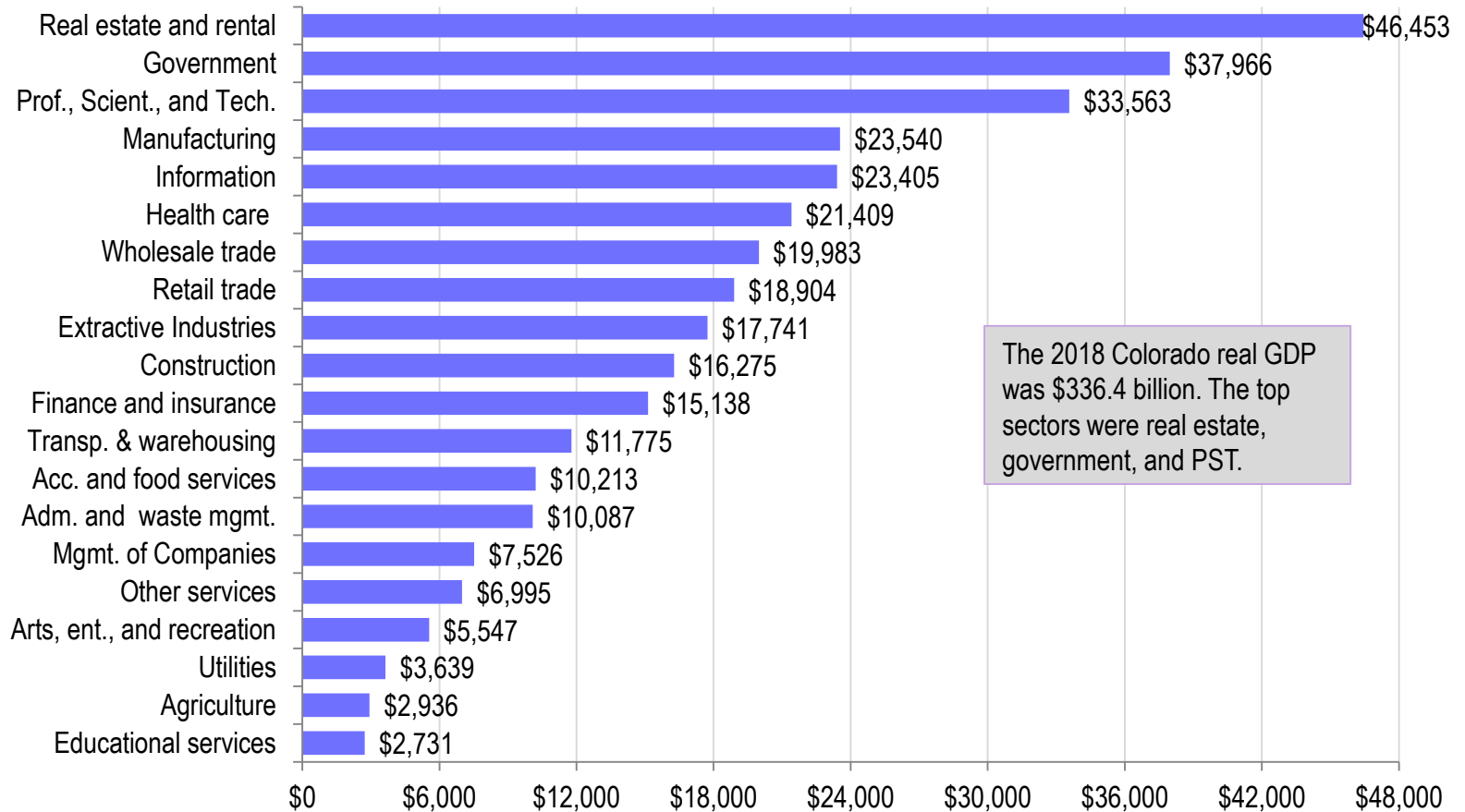


Source: Bureau of Economic Analysis. Note: U.S. real GDP is summary of states GDP; quarterly rate is annualized.

GDP by Sector

Colorado

Colorado Real GDP – 2018 (Millions of Dollars)



The 2018 Colorado real GDP was \$336.4 billion. The top sectors were real estate, government, and PST.

Source: Bureau of Economic Analysis. Chained on 2012.



The Colorado Economy

Population Components of Change

Colorado Population

Components of Change

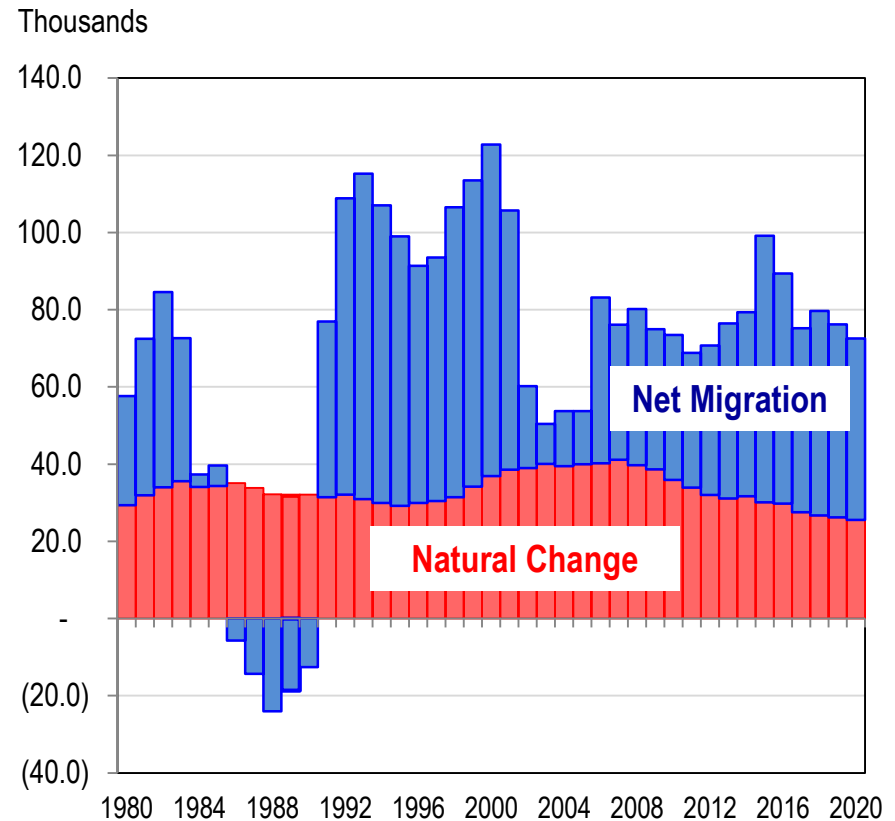
Population increases and decreases are a result of the natural rate of change (births minus deaths) and the change in net migration (people moving into the state minus people moving out of the state).

Over the past 3½ decades the natural rate of change (red bars) varied from a low of 26,700 in 2018 to a peak of 41,124 in 2007. The natural rate for 2019 is projected to be 26,200, a new low, as a result of a decline in fertility rates.

Changes resulting from net migration (blue bars) are closely tied to the strength of the economy and the change in state employment. For example, there were five years, from 1986 to 1990, when net migration was negative. More people moved out of state than moved into the state to escape the regional recession. During the past two recessions (2001 and 2007), net migration declined, but did not turn negative. It was difficult for people to move anywhere to escape the bad economy.

The Colorado population will increase by about 75,000 for each of the years from 2016 to 2020. In 2019 the state's population will increase by 1.3%, or 76,200, to 5,765,527.

Change in Colorado Population 1980 - 2020





The Colorado Economy

Changing Demographics – Under 18, 65+, Peak County Population

Changing Demographics

Change in Under 18, 65+, and Peak County Population

The charts on the next three slides are produced by the State Demographers Office. They are included in the chartbook to illustrate population change in three critical areas.

Change in population for under 18 year-olds

- 7 counties had changes in the range of -10% to -26%.
- 33 counties had changes in the range of 0% to -10%.
- 8 counties had changes in the range of 0% to 5%.
- 10 counties had changes in the range of 5% to 10%.
- 6 counties had changes in the range of 10% to 19%.

Change in population for over 65 year-olds

- There was a decrease in only 1 county.
- 6 counties had changes in the range of 0% to 10%.
- 14 counties had changes in the range of 10% to 25%.
- 17 counties had changes in the range of 25% to 50%.
- 26 counties had changes of 50% or greater.

Year of peak population (The most current year is 2017)

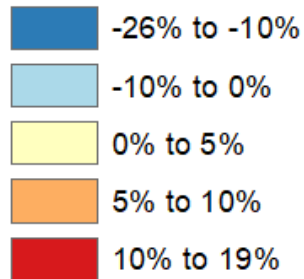
- 31 counties had their peak population in 2017.
- 5 counties had their peak population in 2010.
- 28 counties had their peak population 1960 or before.

Key Points

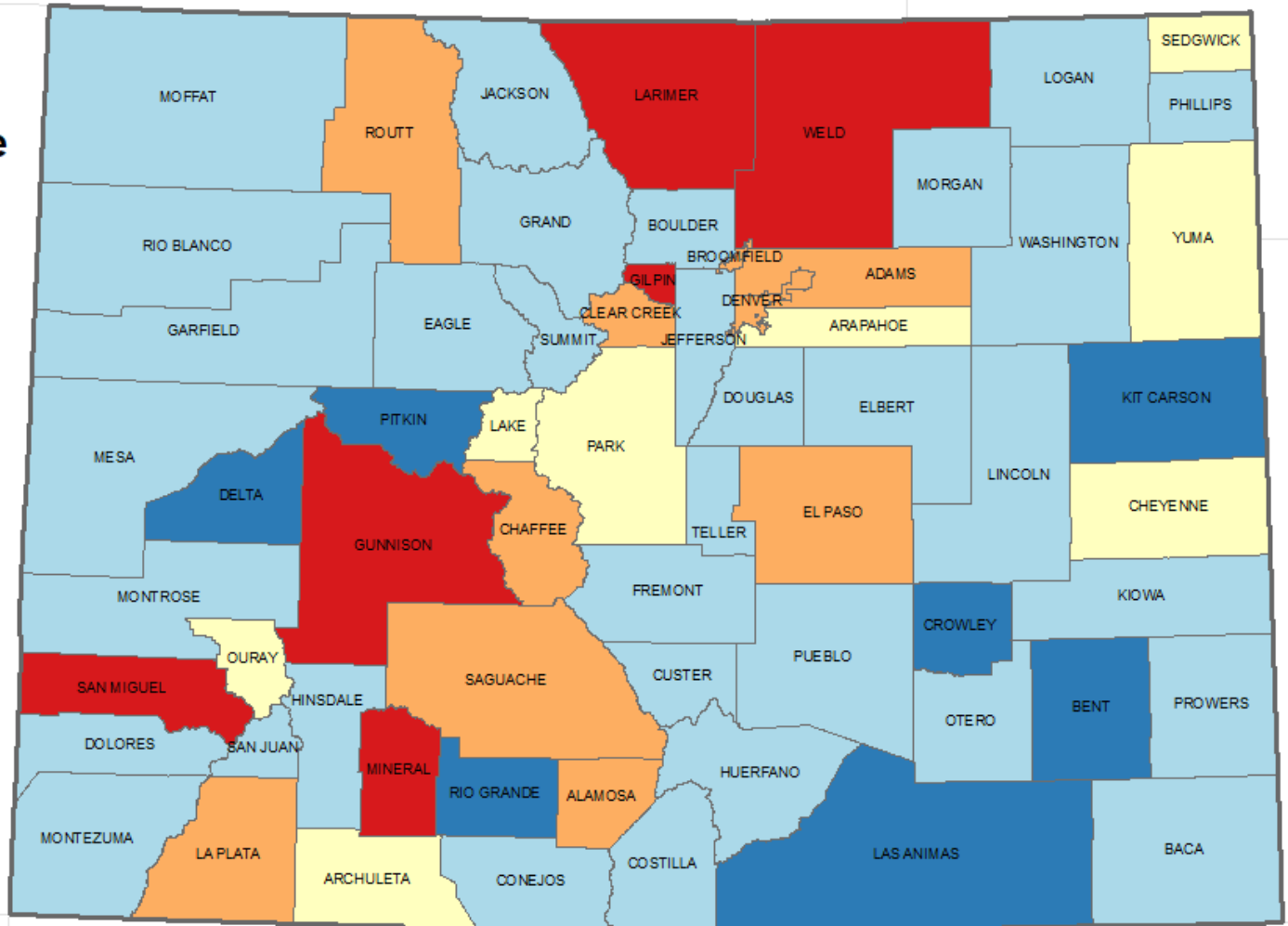
- The state's population is not growing evenly across all counties. In fact, there was not growth in about half the counties between 2010 and 2018. The Colorado Divide continues to grow bigger. How do you establish economic development policies to address this issue?
- The under 18 population declined in 40 of the state's 64 counties. How will this impact the state's school systems?
- The 65+ age category is a small group, but it is growing at different rates across the state. How do public and private leaders address this change?

Colorado: Percent Population Change Under 18 2010 - 2018

Percent Change

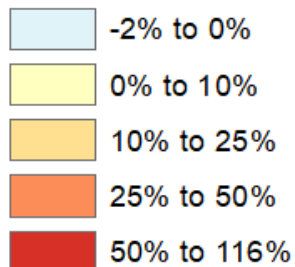


7 counties -10% to -26%
33 counties 0% to -10%
8 counties 0% to 5%
10 counties 5% to 10%
6 counties 10% to 19%

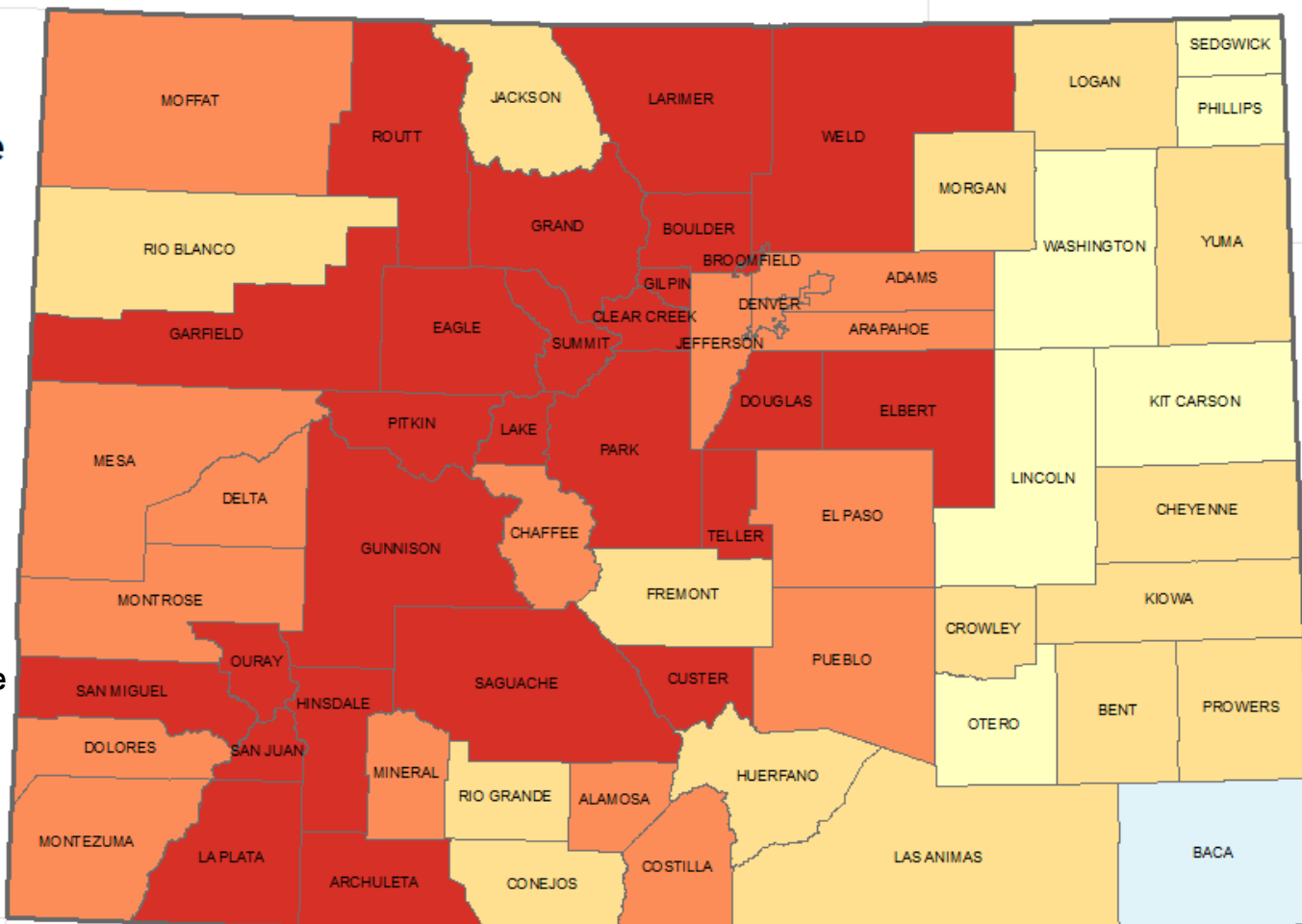


Colorado: Percent Population Change Over 65 2010 - 2018

Percent Change

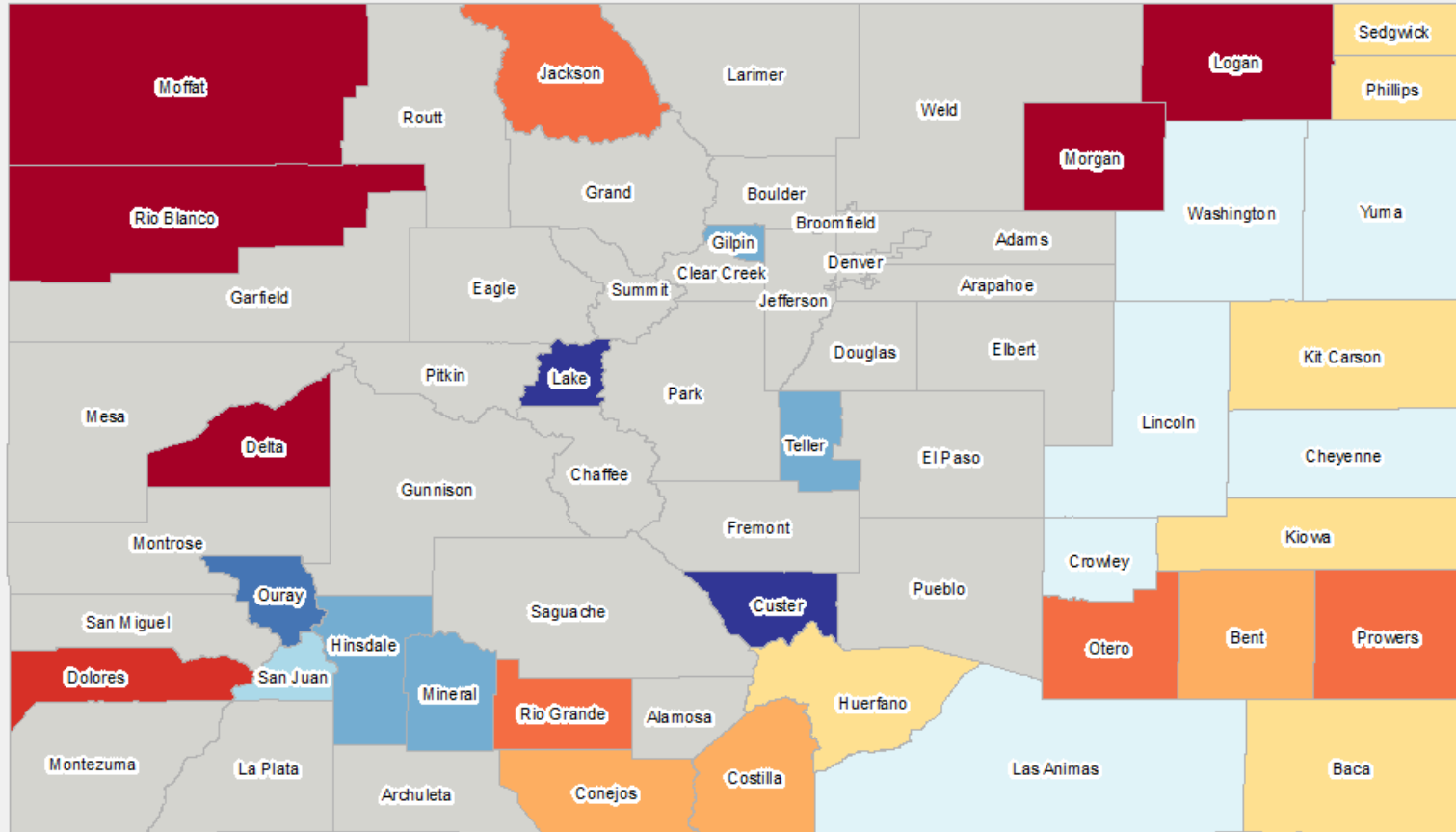


1 county < 0%
6 counties 0% to 10%
14 counties 10% to 25%
17 counties 25% to 50%
26 counties 50% or more

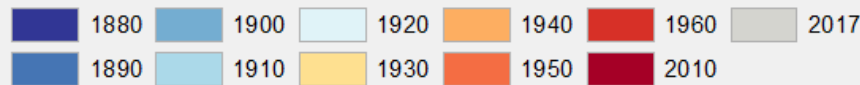


Colorado State Demography Office, 07/16/2019

Colorado County Population Peaks



Peak Census Population Year



31 counties peak population in 2017
 5 counties peak population in 2010
 28 counties peak population 1960 or before.

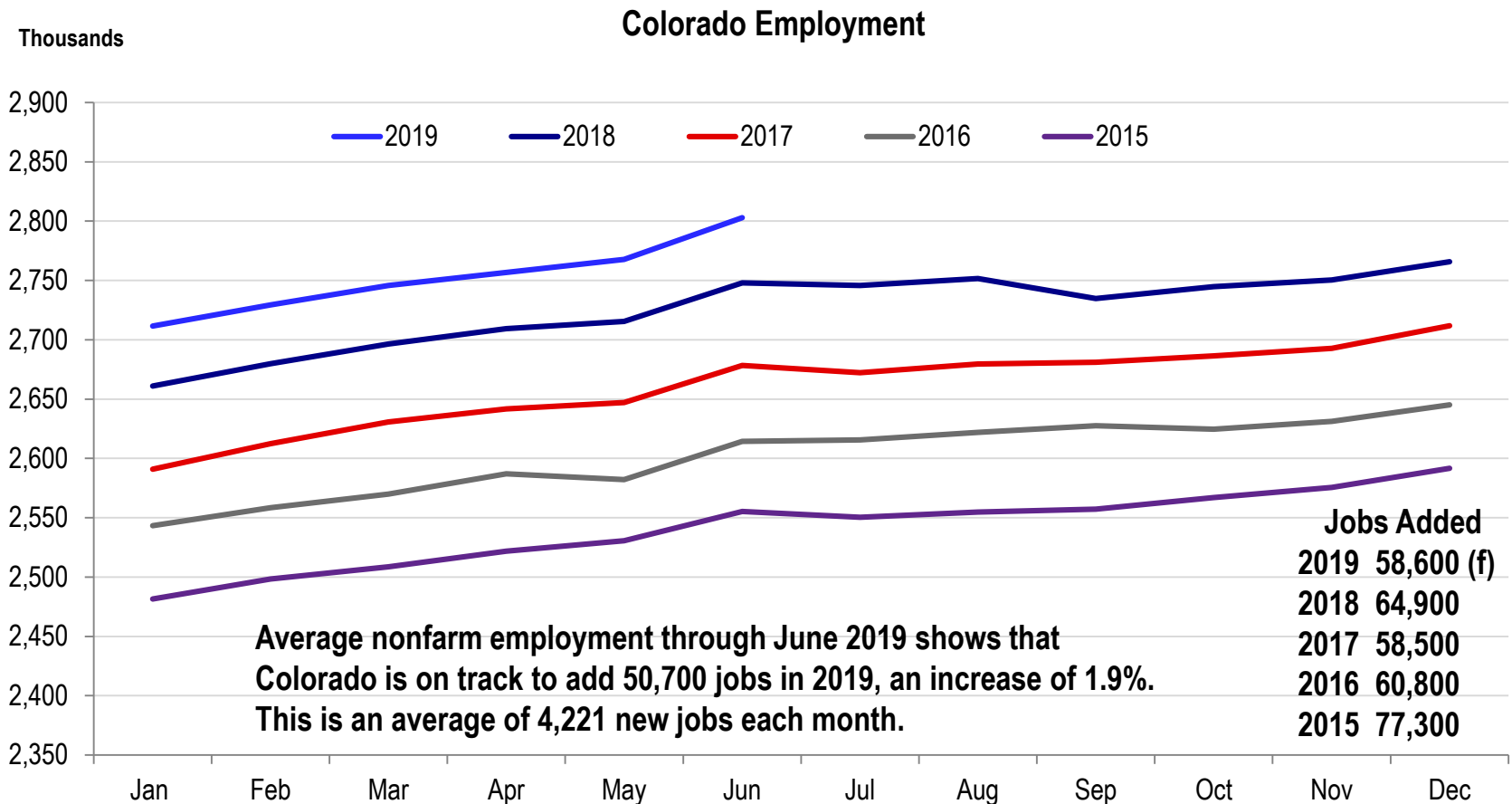


The Colorado Economy

Employment, Percent Change in Employment, and
Unemployment Rate

Colorado Employment

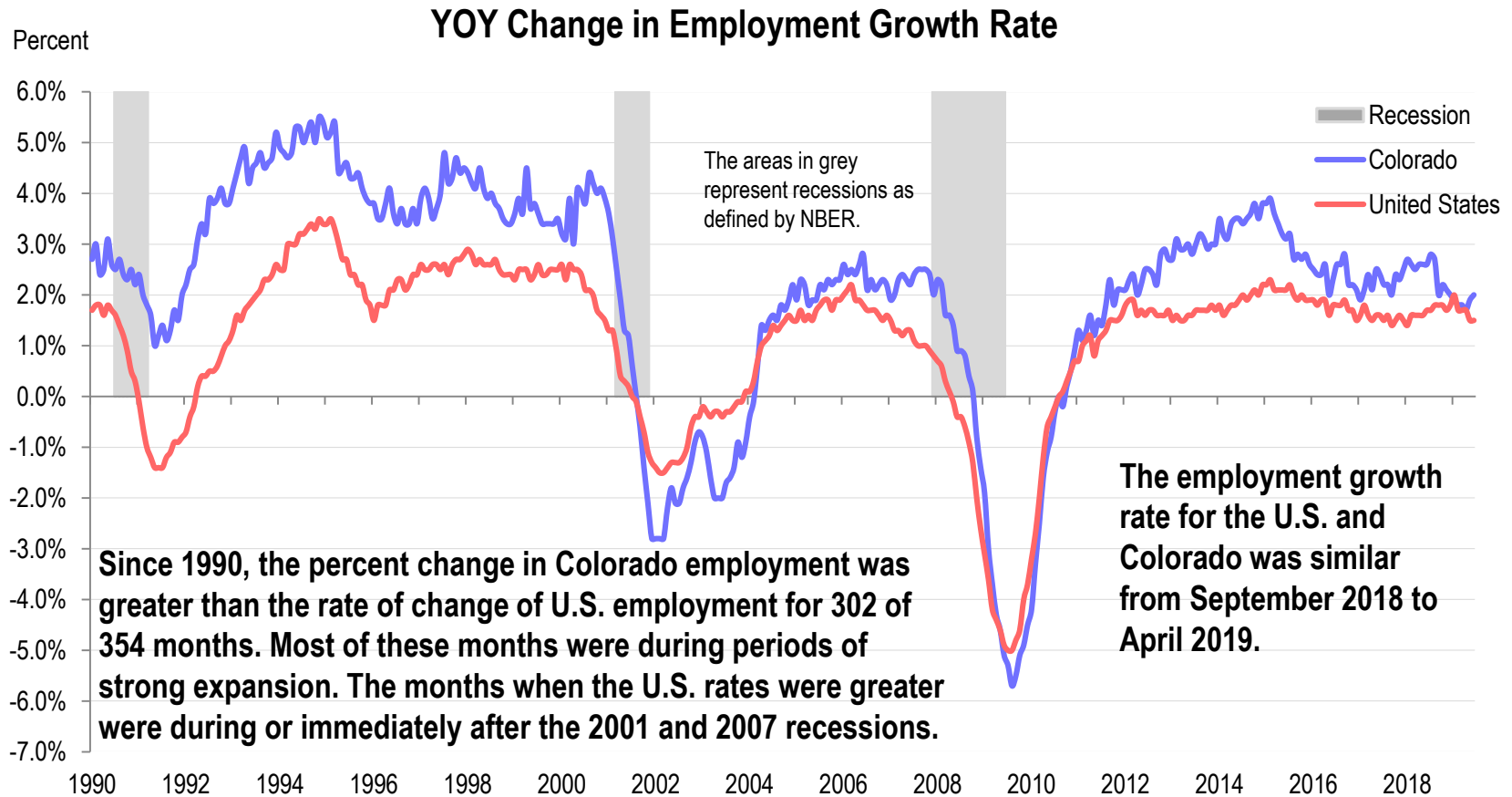
2015 to 2019



Source: BLS, cber.co. Note: CES Employment is also referred to as nonfarm wage and salary employment.

YOY Percent Change in Employment

Colorado vs. U.S.



Source: Bureau of Labor Statistics, NSA, NBER, cber.co.

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Unemployment Rate vs. Colorado

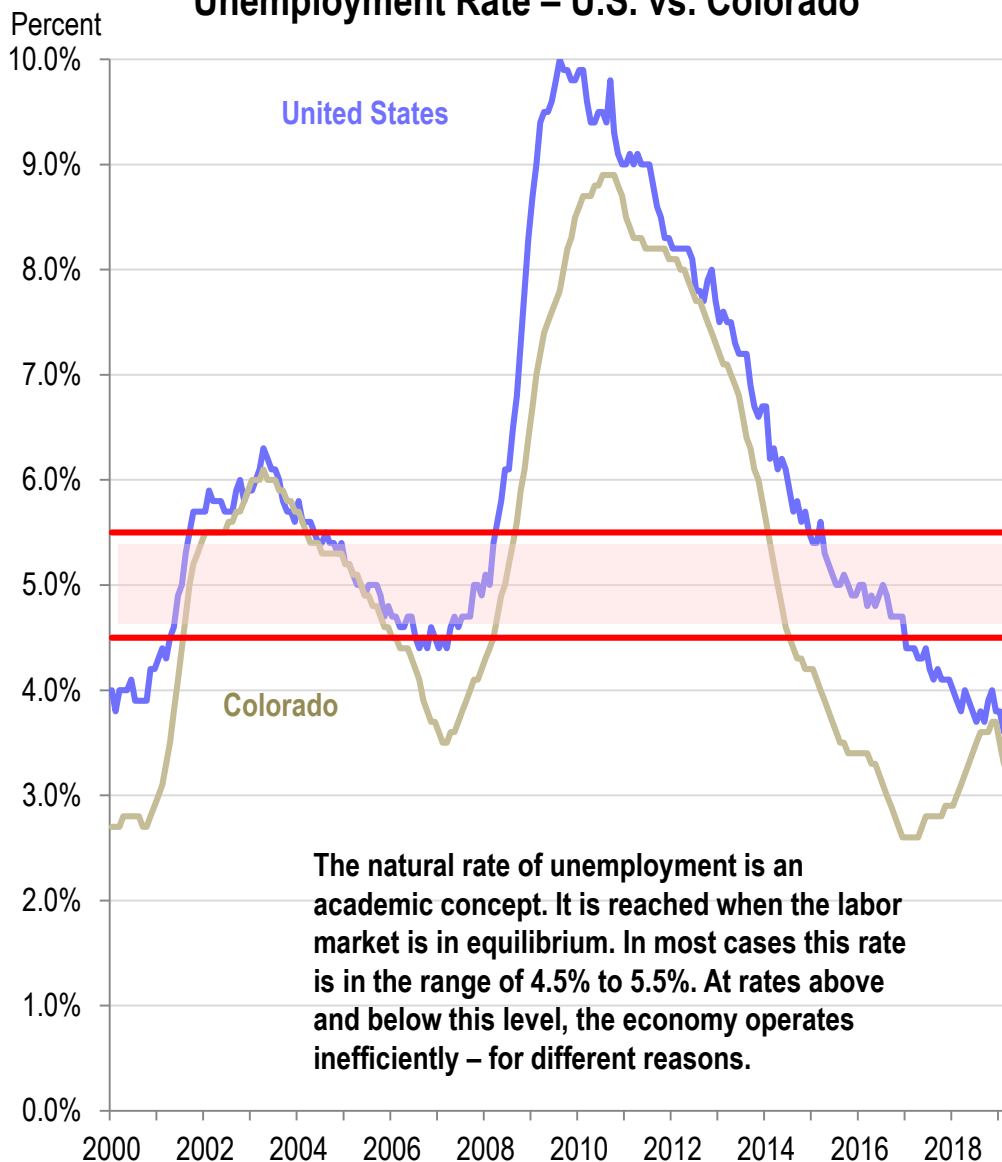
The U.S. and Colorado unemployment rates have declined since 2010 when the U.S. rate was 9.9% and the Colorado rate was 8.8%.

The U.S. rate fell below 4.5% in March 2017 and has been there for 28 months. By comparison, there was a 31 month period from November 1998 to May 2001 (not shown) when the U.S. rate was below 4.5%.

The Colorado rate dropped below 4.5% in October 2014 and has been there for 57 months. By comparison, there was an 89 month period from May 1994 to September 2001 (not shown) when Colorado's rate of unemployment was less than 4.5%.

In June 2019, the unemployment rate for Colorado was 3.0% compared to 3.7% for the U.S.

Unemployment Rate – U.S. vs. Colorado



Source: Bureau of Labor Statistics, SA; cber.co.



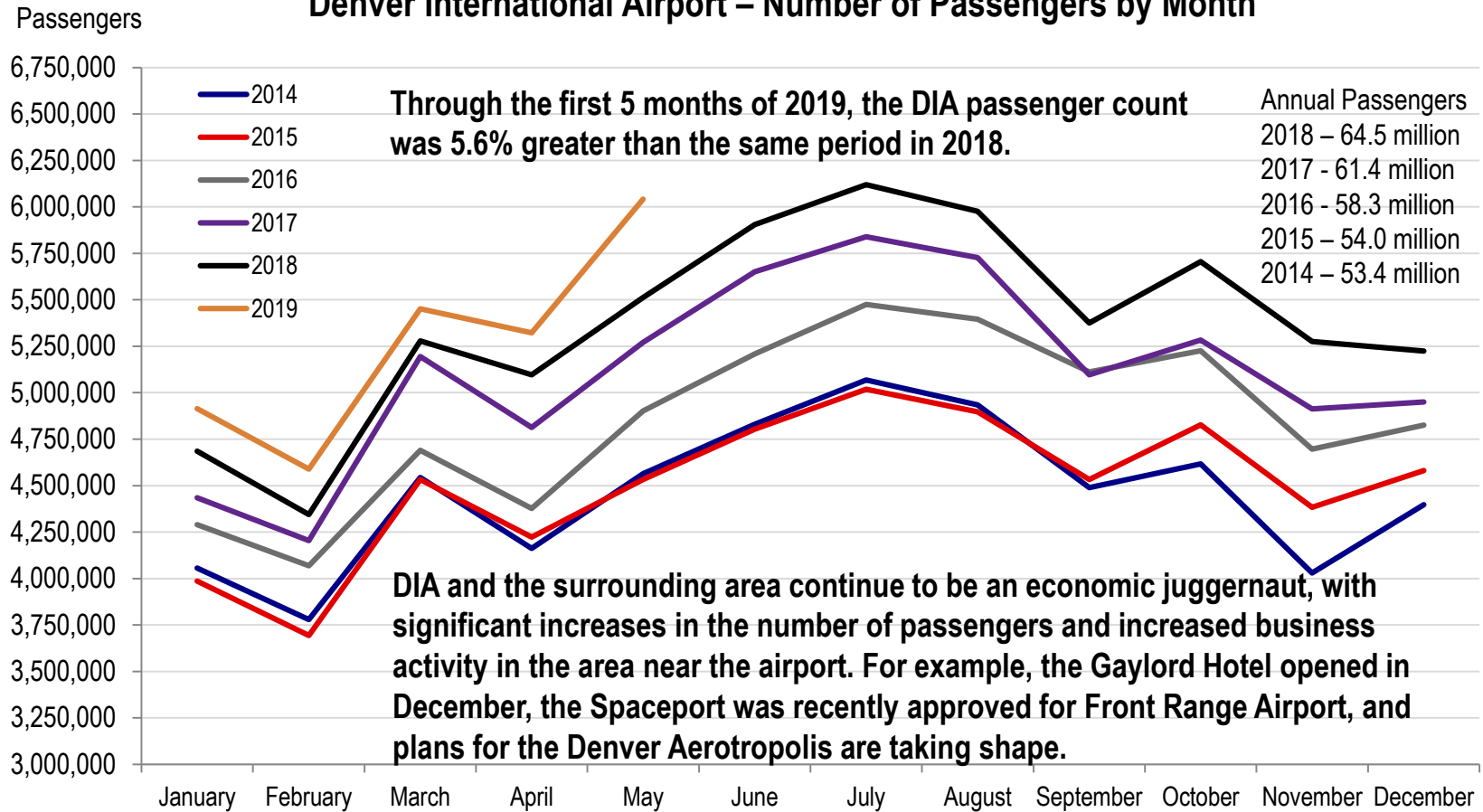
The Colorado Economy

DIA Passengers, Retail Sales, and Venture Capital

Denver International Airport

Passenger Count

Denver International Airport – Number of Passengers by Month



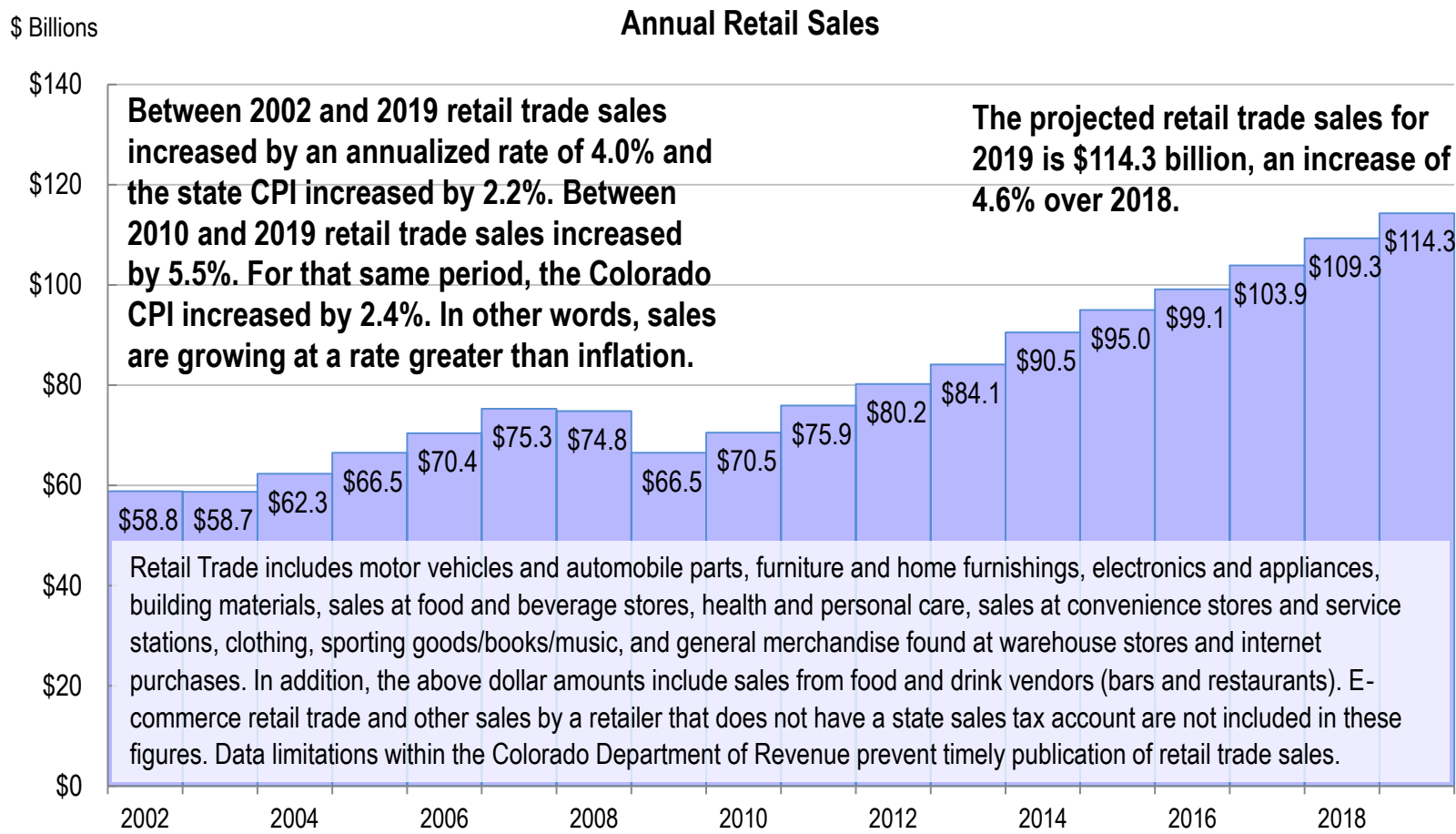
Source: FlyDenver.com, cber.co.

Great Hall Project

- The DIA Great Hall project is reportedly 3+ years behind schedule and millions of dollars overbudget. On a positive note, the number of passengers is up 5.6% through May.



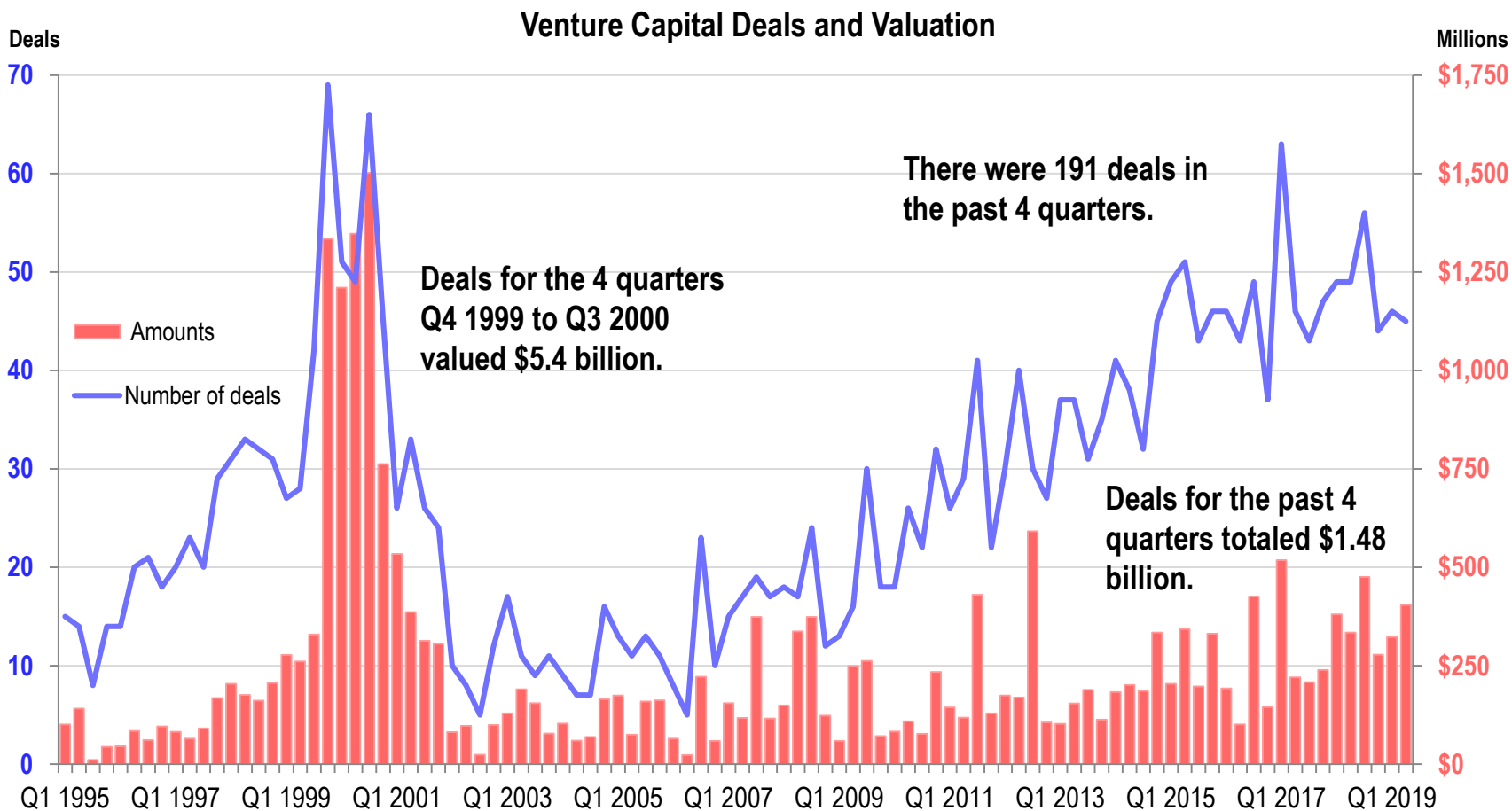
Annual Retail Sales - Colorado



Source: OSPB, cber.co.

PWC Venture Capital Deals and Value

Colorado



Source: PWC, cber.co.

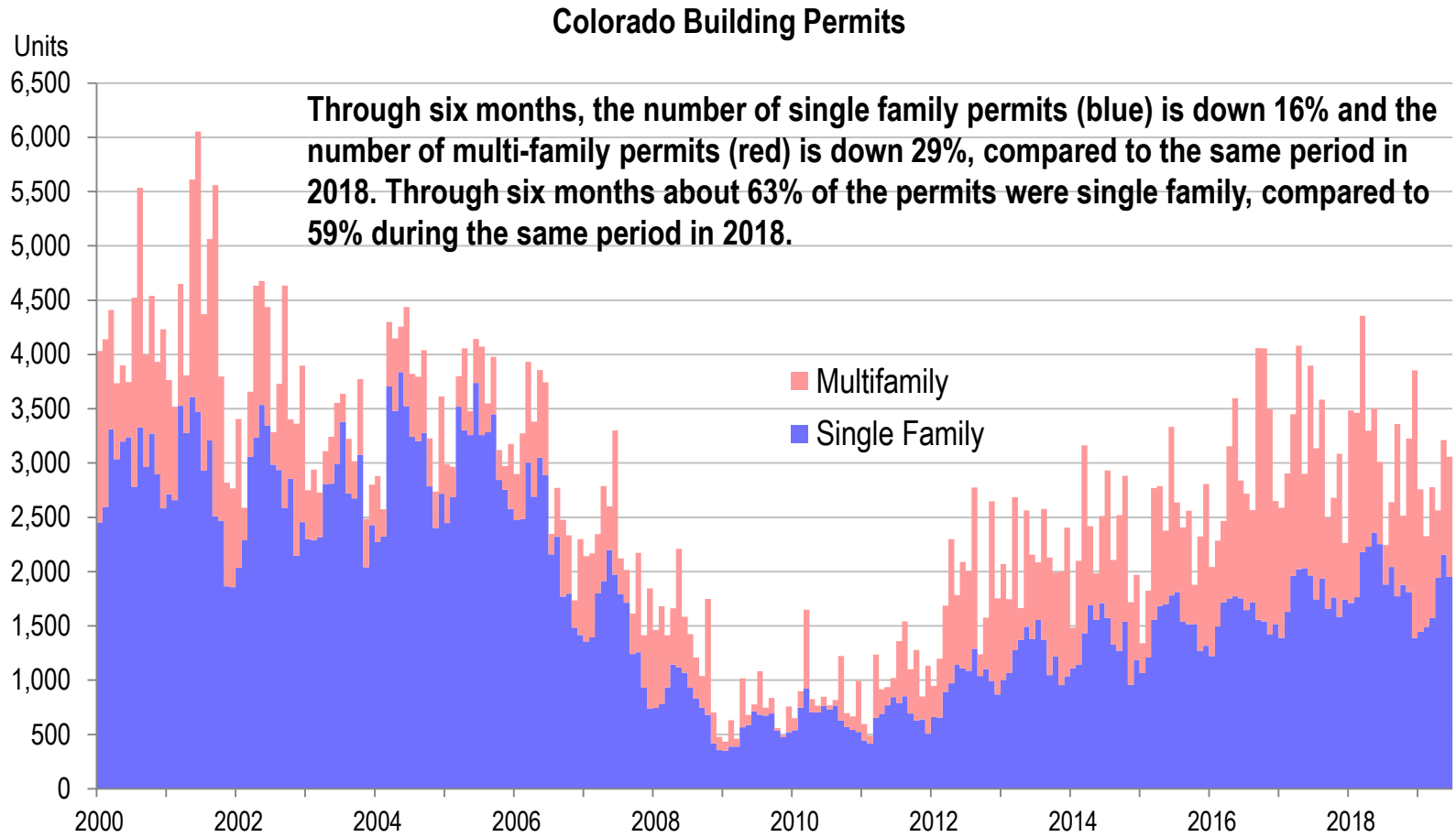


The Colorado Economy

Building Permits, Valuation, and Housing Prices

Colorado Residential Building Permits

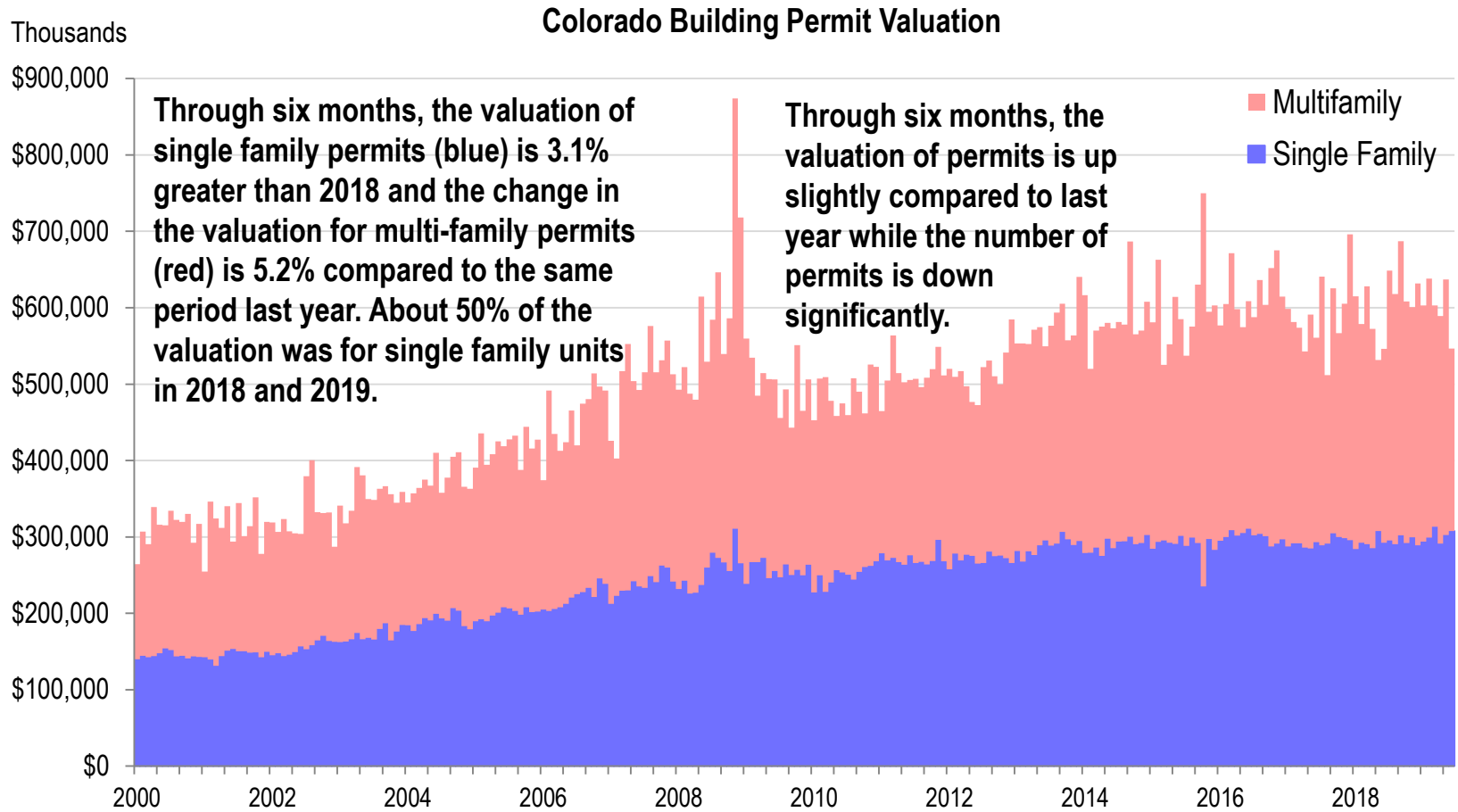
Units



Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co.

Colorado Residential Building Permits

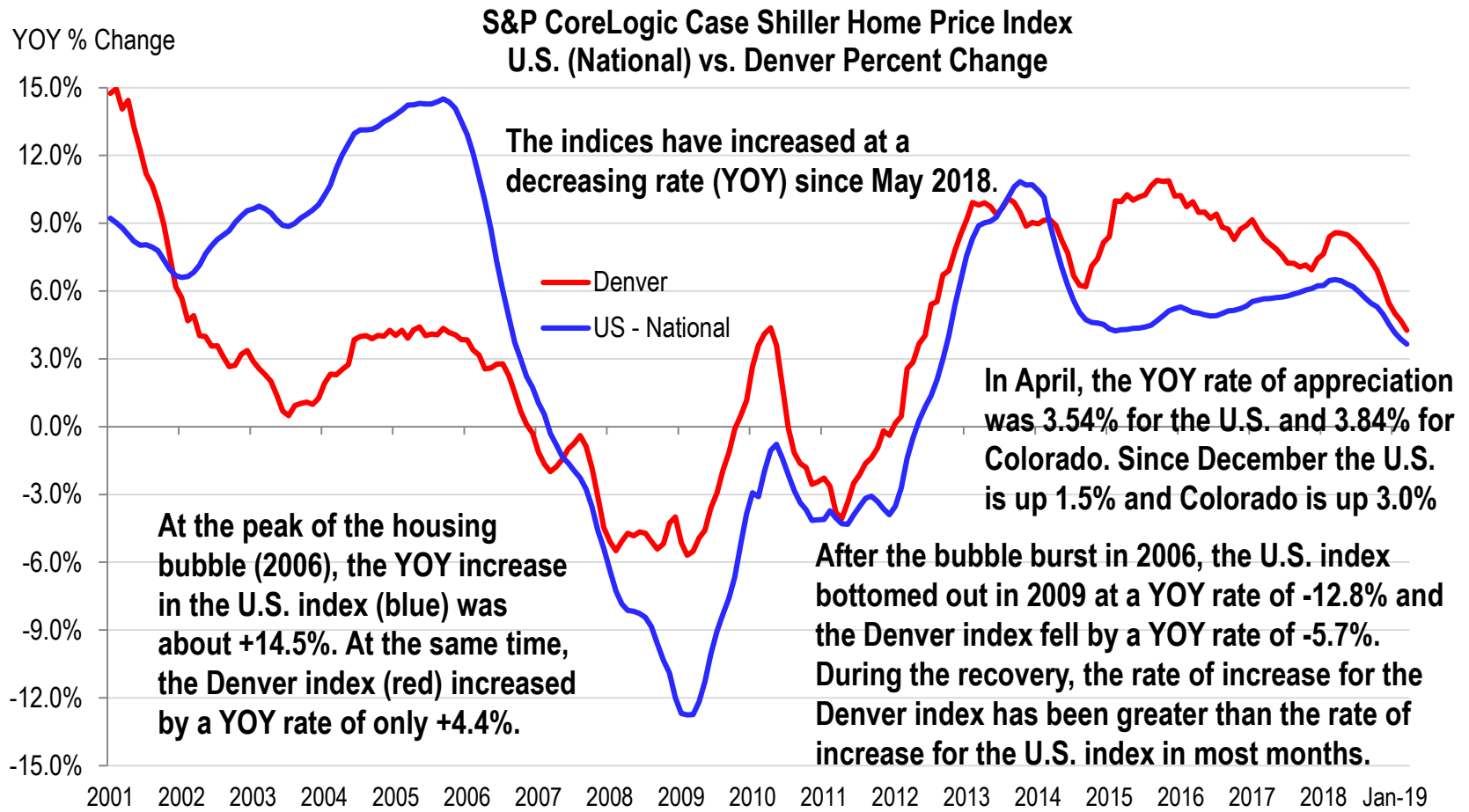
Valuation



Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co. Note: Not adjusted for inflation.

Case Shiller Home Price Index

National vs. Denver Rate of Change



Source: S&P Core-Logic Case-Shiller, cber.co.

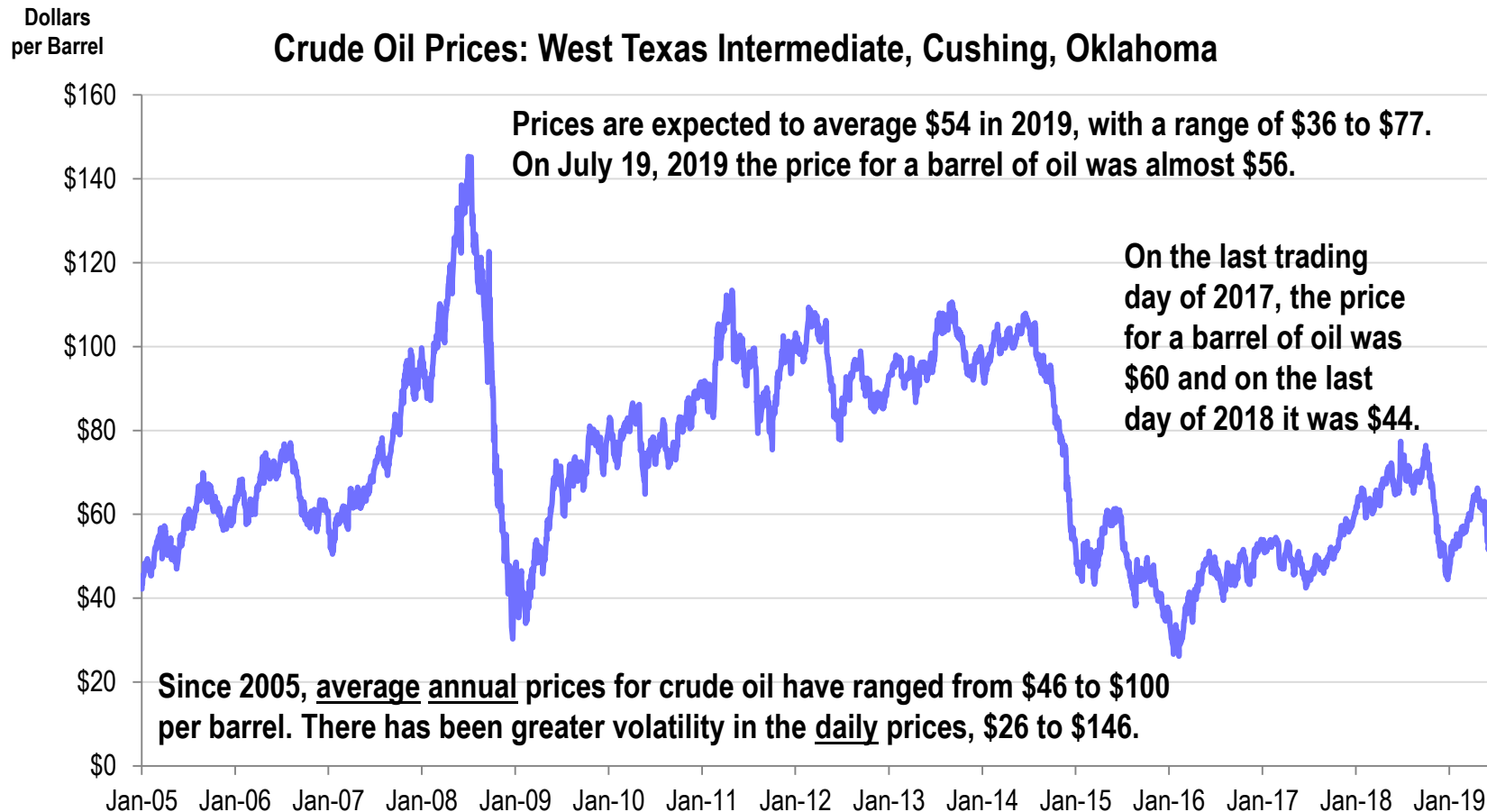


The Colorado Economy

Oil Production and Prices

Crude Oil Prices

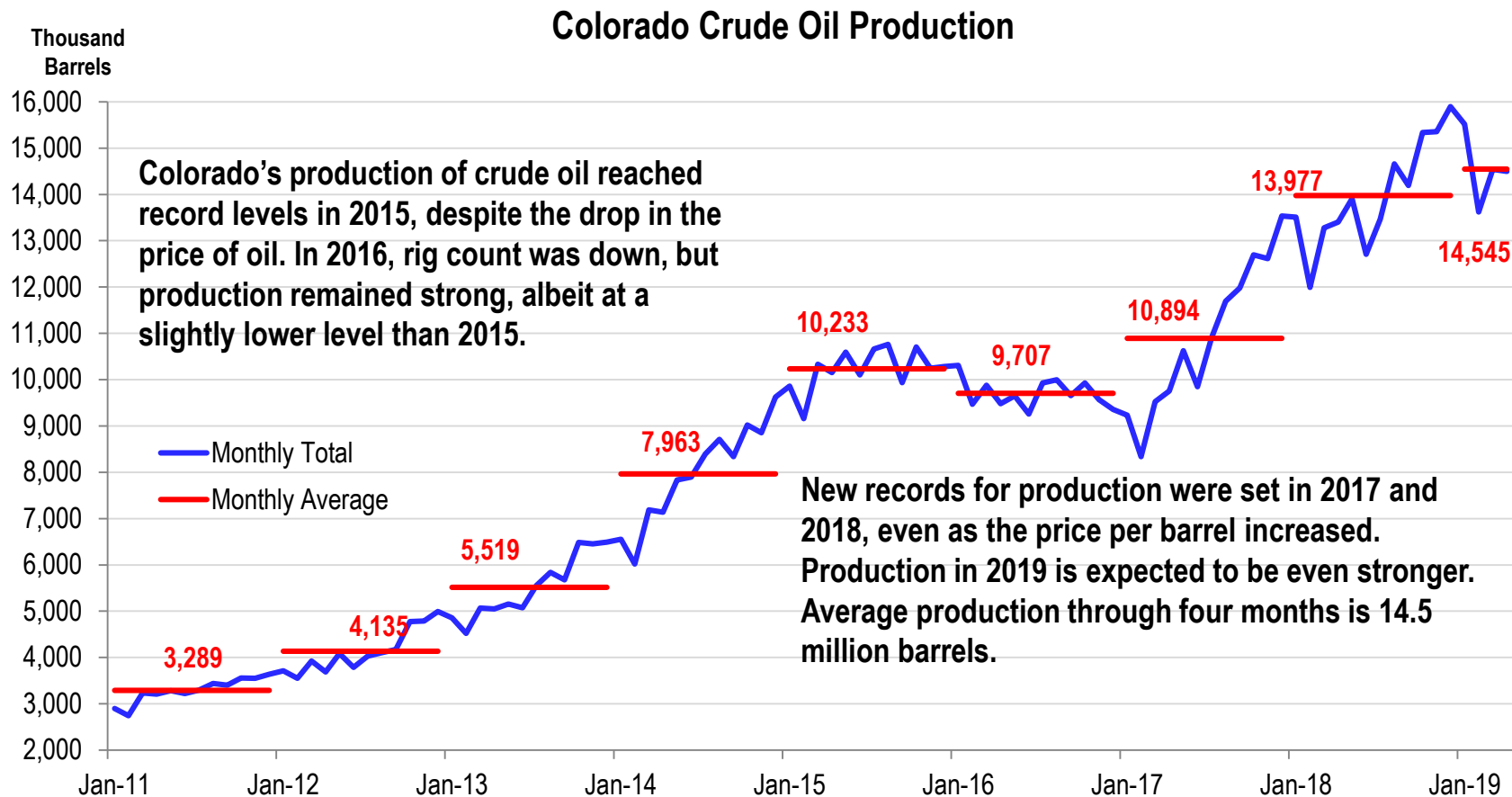
West Texas Intermediate



Source: FRED, EIA, cber.co.

Colorado Field Production of Crude Oil

2011 to 2019 (Thousand Barrels)



Source: EIA, cber.co.

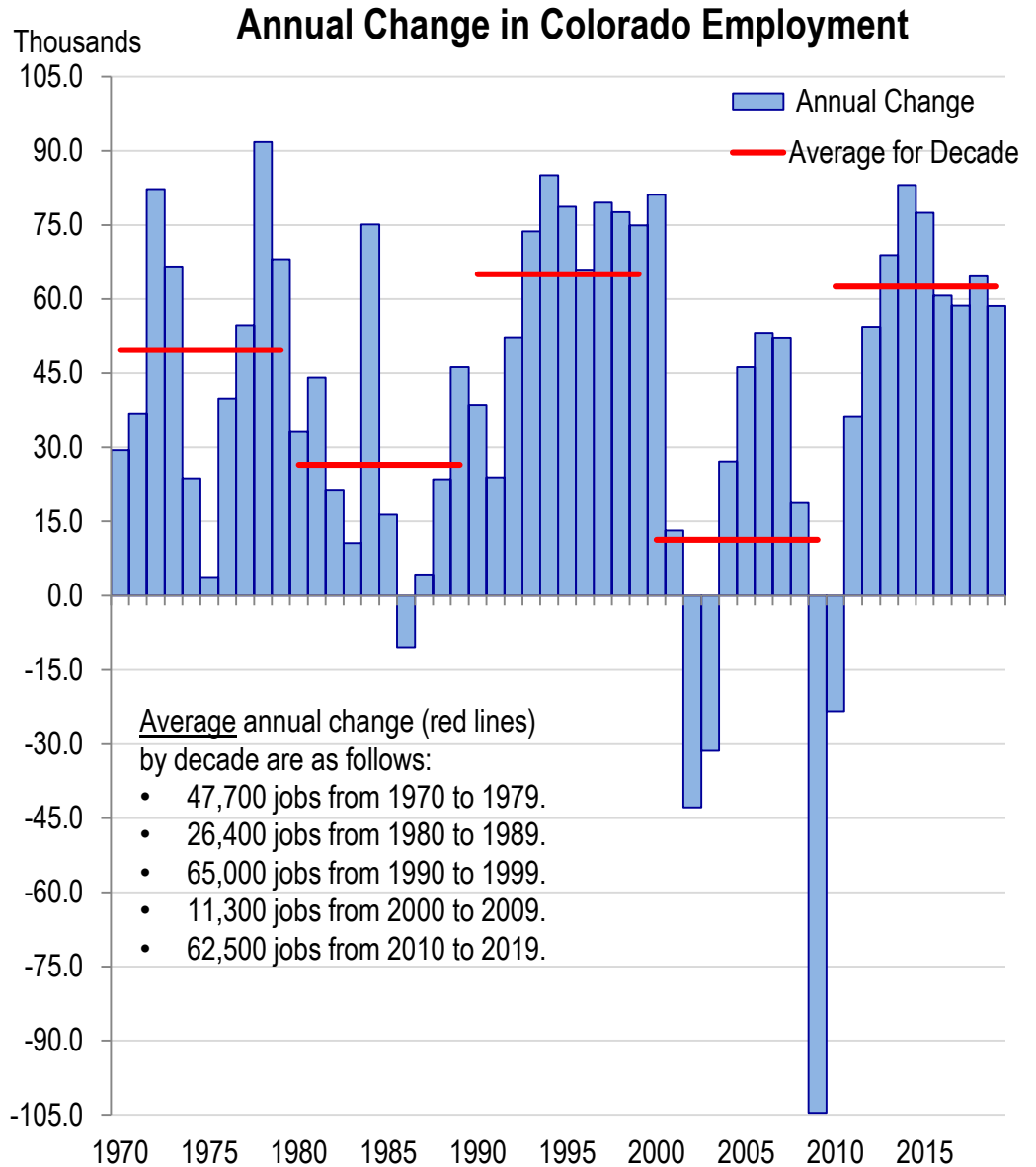
Colorado-based Business and Economic Research <http://cber.co>

Annual Employment Change in Colorado

Through the first six months of 2019, average employment is up 50,700 jobs, or 1.9% greater than the same period in 2018.

Job growth for 2019 was projected to be 58,600 workers (see chart), an increase of 2.2%. This projected rate of job growth for Colorado will again be greater than the rate for the U.S.

The rate of growth for Colorado has been slower than expected; however, it has been steady. YOY job growth has been in the range of 47,400 to 55,000.



Source: Bureau of Labor Statistics, cber.co.



The Colorado Economy

Summary



Summary

Colorado Economy

Recent reports show there is solid employment and real GDP growth in Colorado. Both employment and real GDP are growing at a faster rate in Colorado than the U.S.

The state unemployment rate has been below 4.5% for almost 5 years. Colorado's low unemployment rate continues to be a drag on the state economy, as employers continue to struggle to find qualified workers.

For the first six months there have been no surprises as YOY employment has increased at a steady rate. Nonseasonally adjusted job increases have been in the range of 47,400 to 55,000.

The state is on track to add 50,700 jobs in 2019.

The Fed expects to see “sustained expansion of economic activity”, but there is a caveat. They will consider a rate decrease because they are uncertain about possible headwinds. The state should be in position for solid growth in the second half of 2019, given the consistent and diversified performance of the economy through June.



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Economic Trends for Colorado Through June 2019

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ABOUT THE AUTHOR

Gary Horvath has produced annual employment forecasts of the state economy for over 25 years. They have been supplemented by monthly economic updates and indices that track economic performance over the short term. In addition, he has directed three statewide analyses that included reviews of all 64 county economies.

Horvath was the principal investigator for a state and federally funded project to prepare a nanotechnology roadmap for Colorado. As well, he was a co-founder of the Colorado Photonics Industry Association, a trade group for Colorado’s Photonics cluster. Horvath has been an active board member of the group since its inception.

Horvath has also served on the Board of Directors for the Economic Development Council of Colorado, Northwest Denver Business Partnership, Adams County Economic Development, and Broomfield Economic Development Corporation. Horvath has also been the lead for the photonics/electronics cluster in OEDIT’s early stage and proof of concept grant program.