cber.co Colorado
Economic Review Through September 2016

Colorado-based Business and Economic Research
Prepared
October 25, 2016

Overview of Economic Review

This chartbook provides a series of charts, tables, and discussions that review changes in the global, U.S. and Colorado economies. This review is divided into the sections listed below.

After 9 months, Colorado is on track to add 70,000 jobs in 2016, although that number may be revised downward in the BLS benchmark revisions next March.

Global and United States Economies

- Gross Domestic Product

United State Economy

- Labor
- Inflation, Financial Markets, and the Price of Oil
- Non-Manufacturing, Manufacturing, and Retail
- Housing and Construction
- Summary

The Colorado Economy

- Population
- Labor
- 2016 Colorado Employment by Performance Category
- Employment for Major Industries from Volatile Category
- Additional Information about Oil and Gas
- Housing and Construction
- DIA and Auto Registrations
- Summary

Global and United States Economies
Gross Domestic Product

A Simplistic Look at the Global and U.S. Economies From the IMF and the Fed

The following is a list of the titles of the IMF's recent quarterly economic outlooks. They have been far from rosy and have often included forecasts that called for modest growth that were later revised downward.

- Subdued demand: Symptoms and remedies
- Uncertainty in the aftermath of the U.K. referendum
- Too slow for too long
- Adjusting to lower commodity prices
- Slower growth in emerging markets and a gradual pickup in advanced economies
- Uneven growth
- Cross currents.

In the United States, economists from the Fed and other organizations have focused on the following topics:

- Secular stagnation
- "The new normal"
- Lower job and GDP growth than anticipated.

Their "on-again off-again" discussions about raising the interest rates have been regarded by some public and private leaders as a vote of "no confidence" in the U.S. economy.

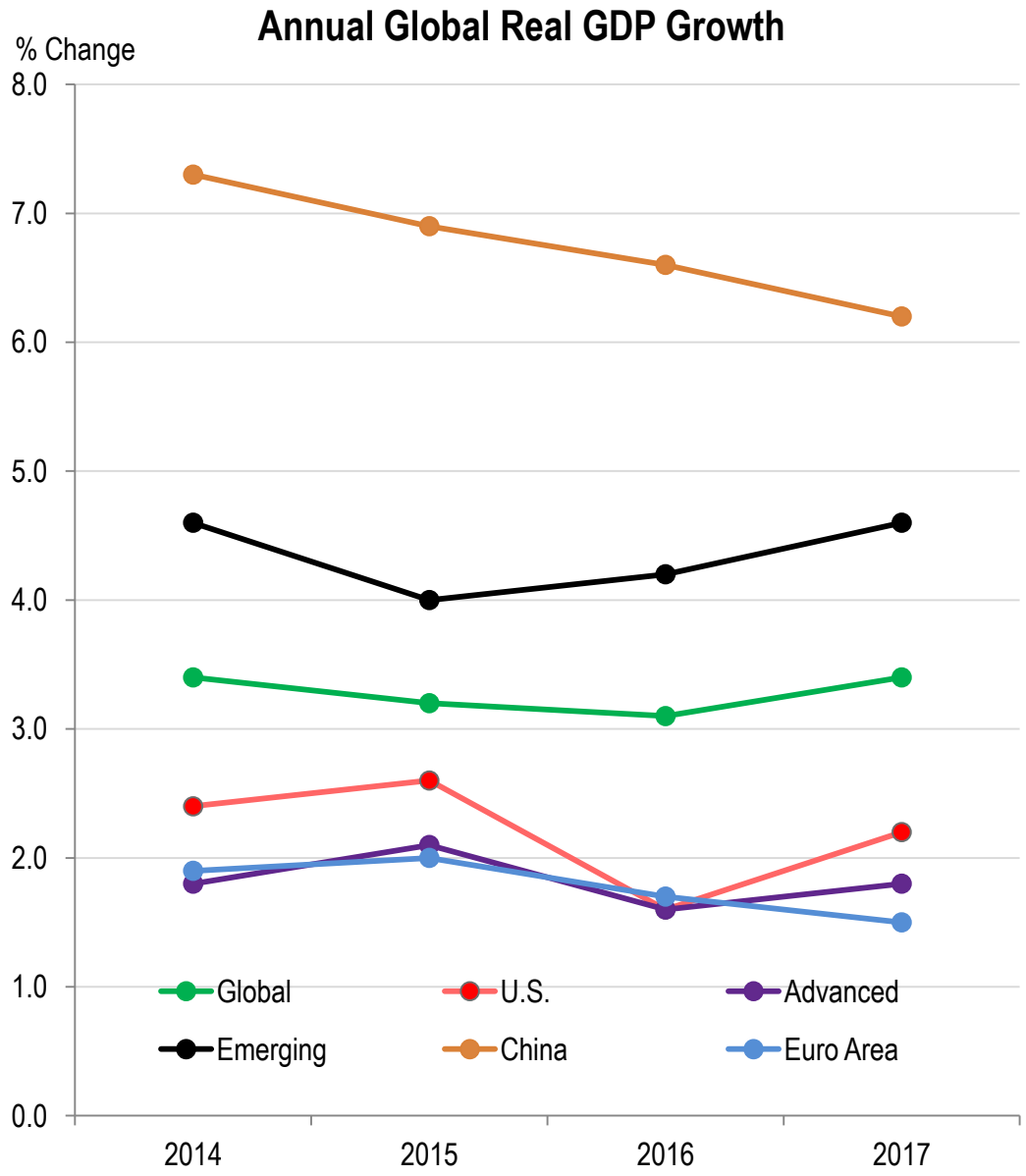
Despite these dismal prognostications the U.S. economy has experienced weak GDP growth and added jobs at a solid rate through the first 3 quarters of 2016.

Global Real GDP Growth

In October, the IMF released its updated global GDP forecast. The overall rate of GDP growth (green) remains unchanged from the mid-year forecast.

Looking ahead, the IMF foresees the following challenges:

- China's rebalancing process (this hasn't gone away).
- The struggles of commodity exporters.
- Uncertainty related to the decision by Great Britain to exit the European Union
- The Fed's second liftoff in interest rates.
- The slowdown in the growth of trade.
- Deflationary pressures.
- Backlash of globalization, particularly in the U.S.



Source: IMF, October 2016.

Quarterly Real GDP Growth United States

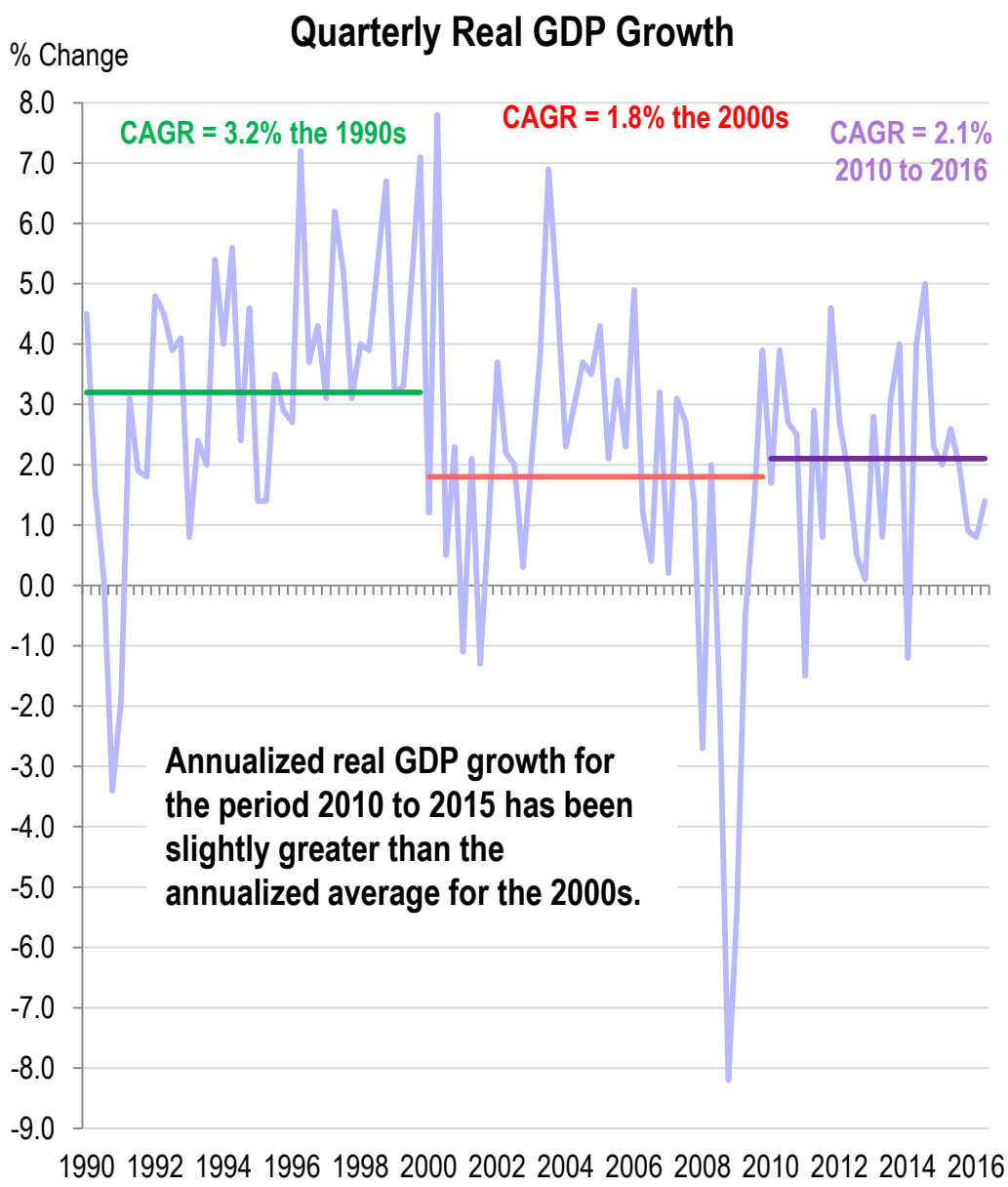
Annualized real GDP growth for the 1990s was 3.2% (green line). It was 1.8% for the 2000s (red line) and 2.1% from 2010 to 2015 (purple line).

Real GDP growth for Q1 2016 was 0.8% and it was 1.4% for Q2 2016.

A survey conducted by the Philadelphia Fed projects Q3 real GDP growth will be 2.6%, followed by 2.3% in Q4. Real GDP for 2016 will be 1.5%. Growth for the next 4 years will be in the range of 2.2% to 2.3%.

Real GDP growth for recent years was:

- 2010 2.5%
- 2011 1.6%
- 2012 2.2%
- 2013 1.7%
- 2014 2.4%
- 2015 2.6%



Source: Bureau of Economic Analysis, cber.co, Note GDP chained on 2009.

United States Economy
Labor

2016 U.S. Employment Growth

Job Growth has been Uneven

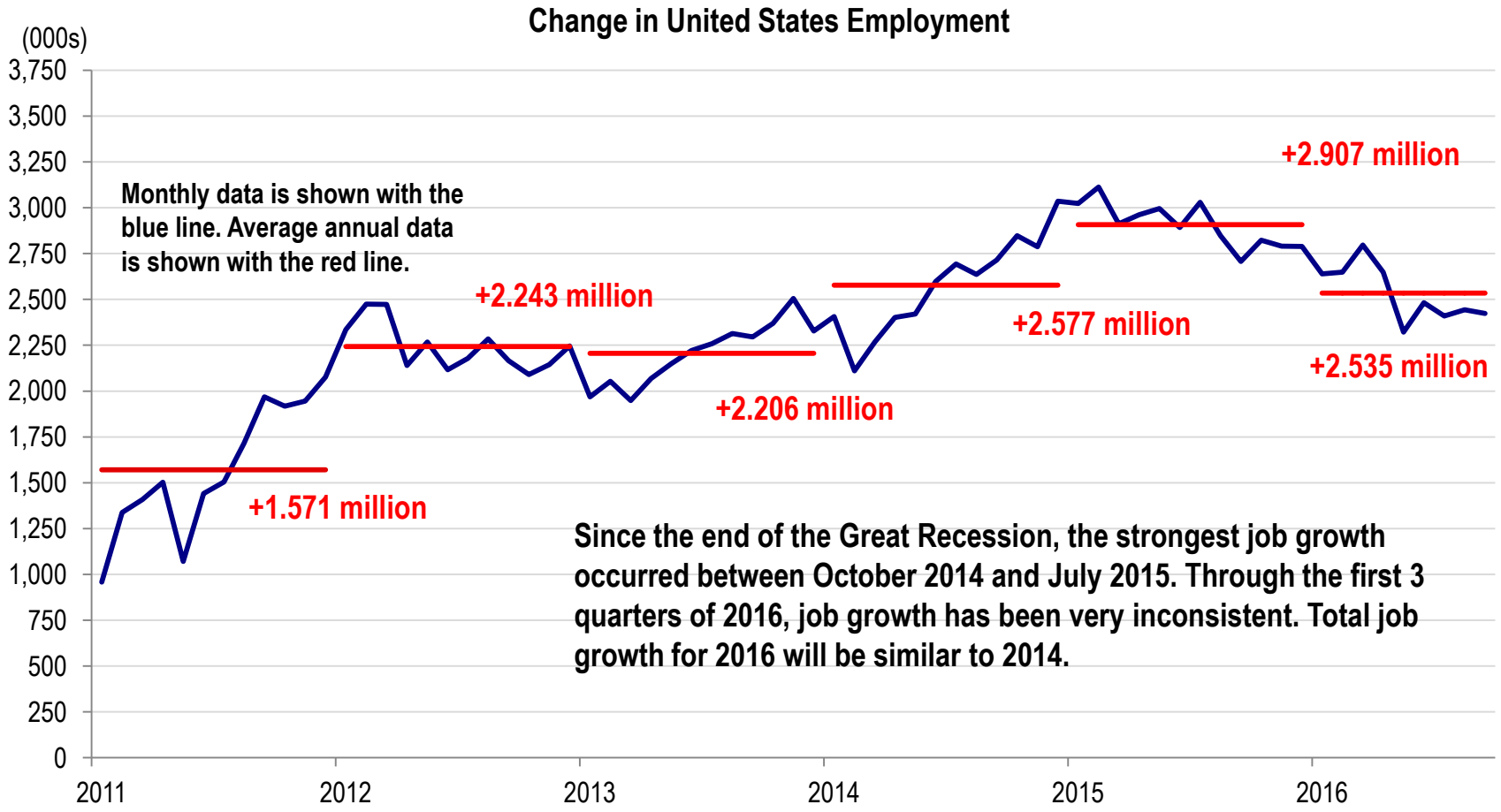
U.S. job growth for 2016 has been a little bit like the performance of the Broncos this season. A lot of good things have happened, but there have also been some moments that were at the other end of the spectrum.

At best, the seasonally adjusted job growth (month-over-previous-month) has been very uneven. There are no reasonable explanations for the sharp decline in May and for the large increases in June and July.

- January – Modest growth (168,000)
- February – Solid to strong growth (233,000)
- March – Modest growth (186,000)
- April – Weak to modest growth (144,000)
- May – Weak growth (24,000)
- June – Strong growth (271,000)
- July - Strong growth (252,000)
- August – Weak to modest growth (167,000)
- September – Weak to modest growth (156,000)

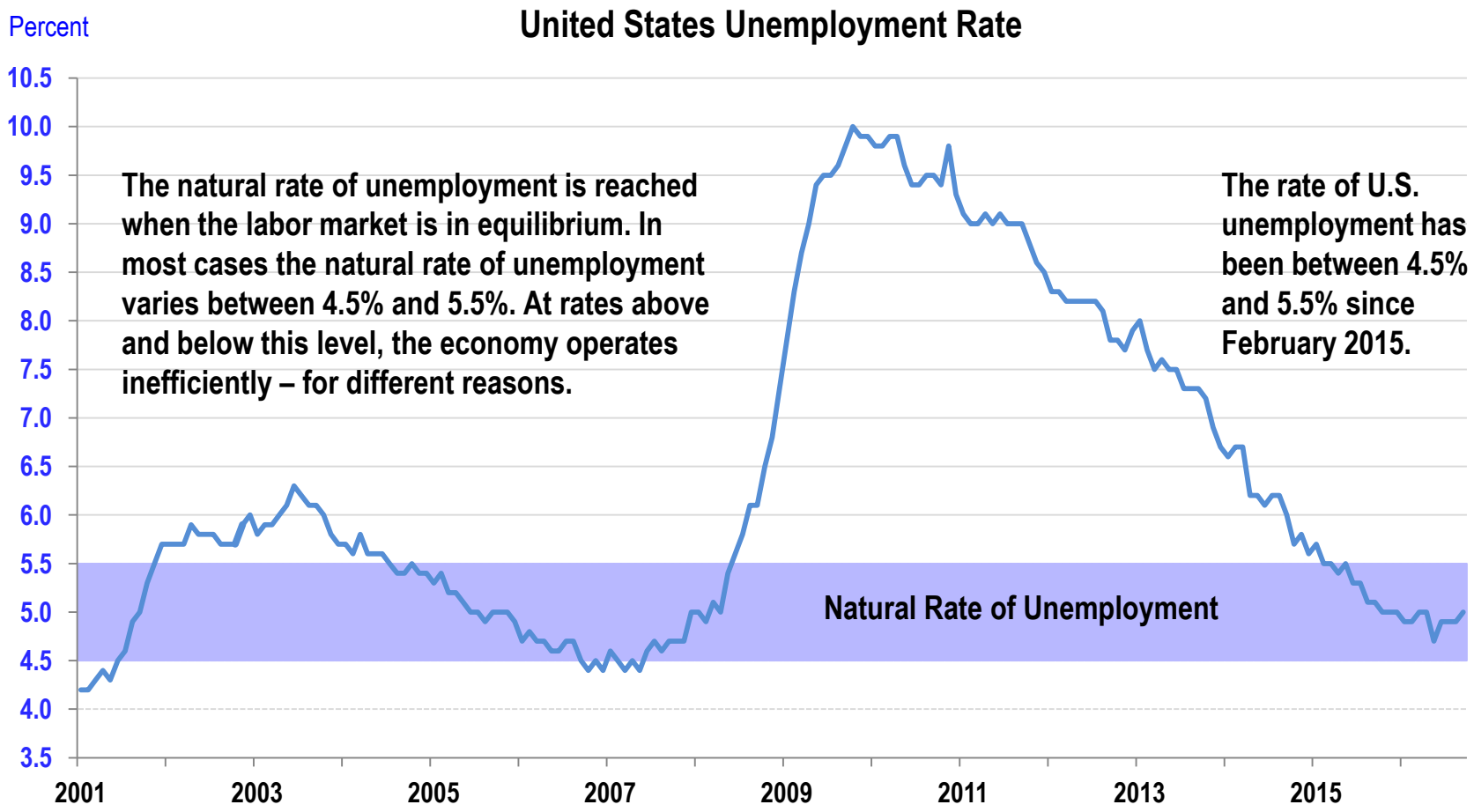
Even with the “ups and downs”, the U.S. is on track to add 2.5 million jobs this year. This would be similar to the number of jobs added in 2014.

Change in United States Employment Year-Over-Year



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

United States Unemployment Rate



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

The Effect of Low Unemployment Rates and Reduced Participation Rates on Employment Growth

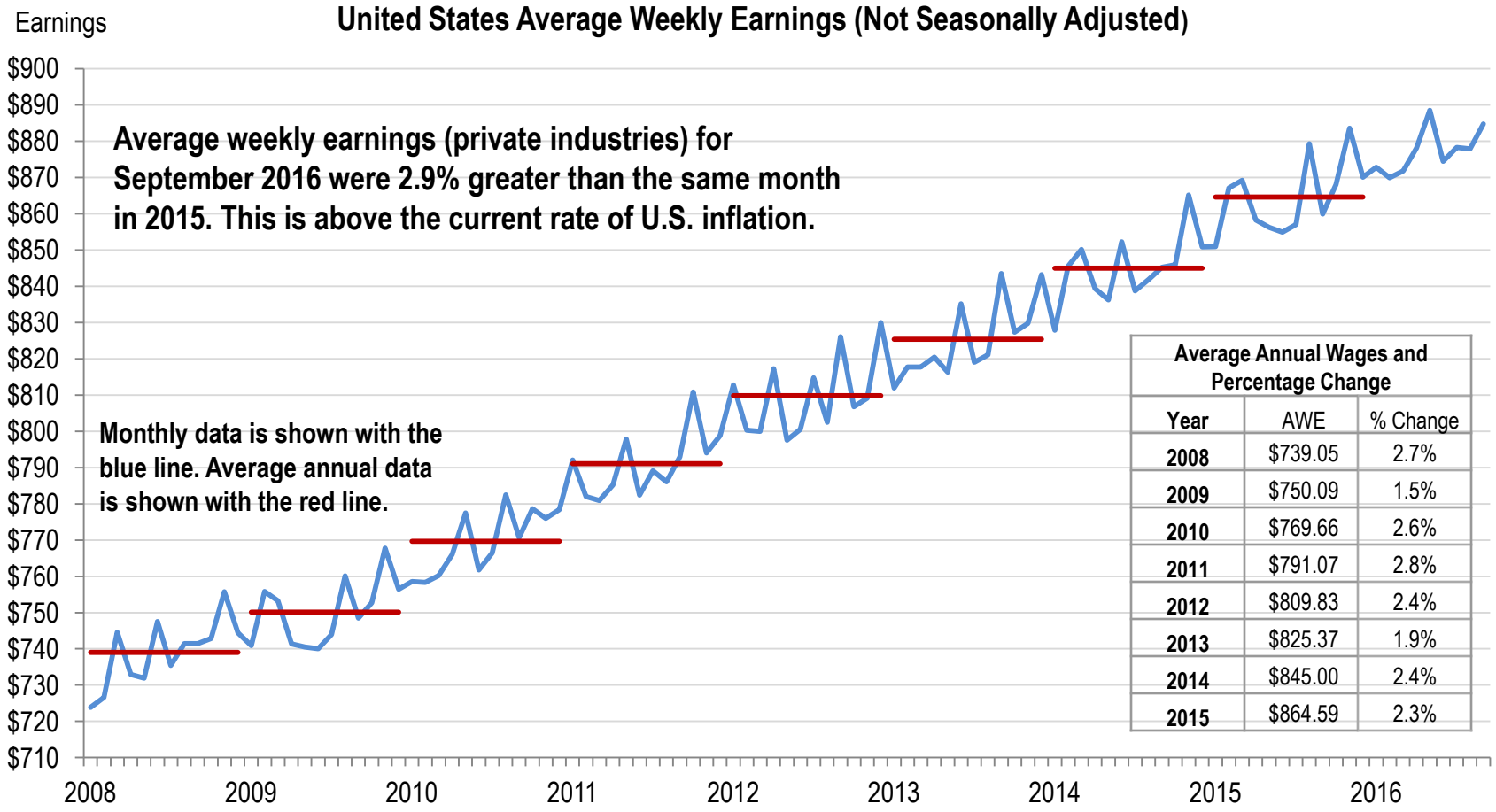
The current reduced participation rates and low levels of unemployment are areas of concern.

- When unemployment rates are low, there are fewer available people to work.
- When participation rates are low, there are fewer people willing to work. Part of the reason participation rates are low is because a large number of baby boomers are retiring. It is also reported that workers over 50 are having trouble finding jobs.

When the supply of people available and willing to work is limited, companies may not be able to find qualified workers to fill vacant positions. As a result company sales may be negatively impacted. To meet demand, companies may be forced to:

- Invest in processes or capital expenditures to meet demand for their goods and services.
- Raise wages or increase other benefits.
- Outsource or offshore work.
- Allow employees to work overtime.
- Leave money on the table by not meeting the demand for goods and services or by selling inferior products or services.

Unites States Average Weekly Earnings of All Employees (Private Sector)



Average Annual Wages and Percentage Change

Year	AWE	% Change
2008	$739.05	2.7%
2009	$750.09	1.5%
2010	$769.66	2.6%
2011	$791.07	2.8%
2012	$809.83	2.4%
2013	$825.37	1.9%
2014	$845.00	2.4%
2015	$864.59	2.3%

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

United States Economy

Inflation, Financial Markets, and the Price of Oil

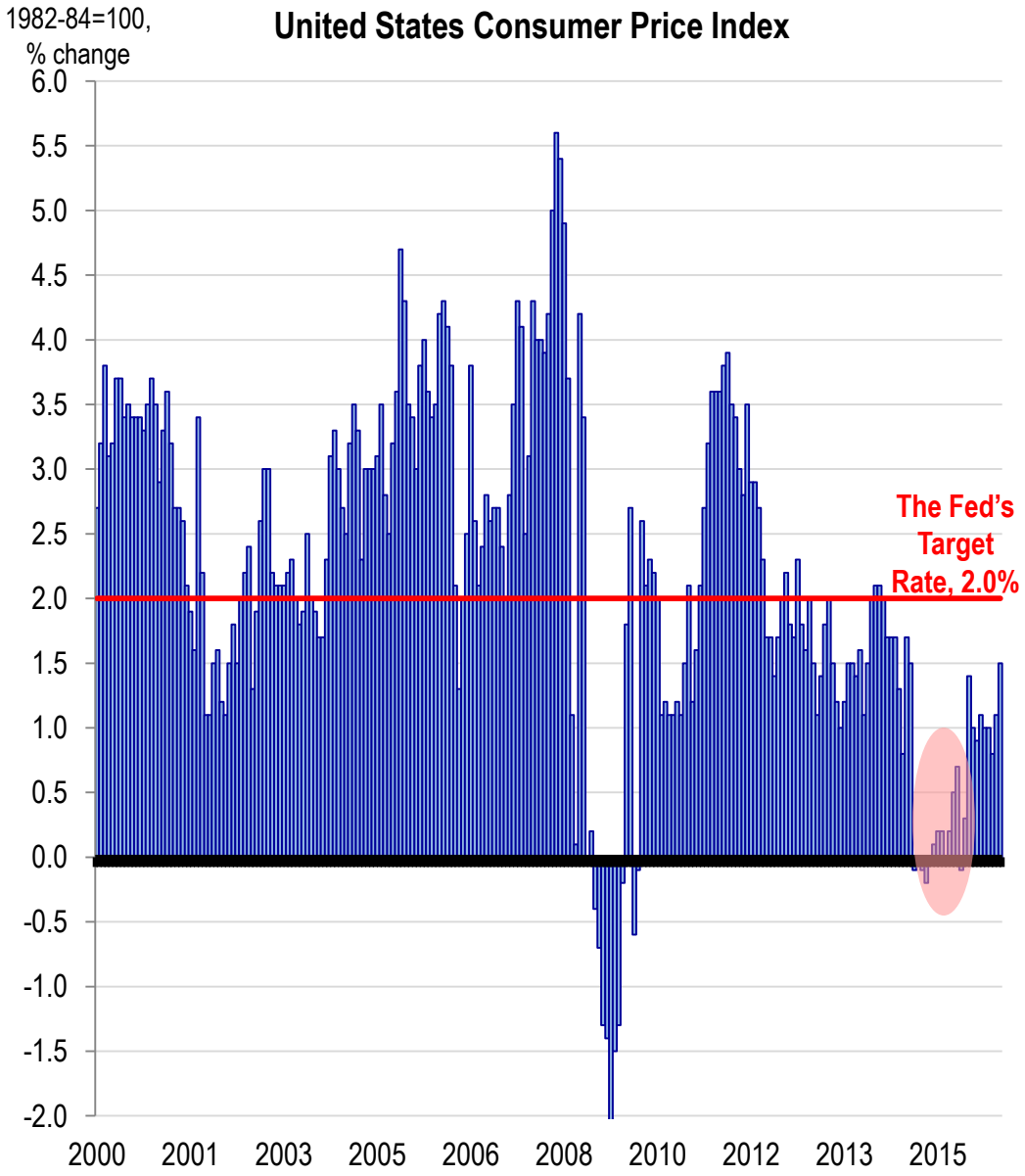
Consumer Price Index (CPI)

In 2015 (red oval), lower fuel costs played a major role in the decline in U.S. inflation, as measured by the CPI.

Inflation will continue to increase in 2016 and 2017 as the Fed raises interest rates (gradually), housing prices increase, gasoline prices rise, and wages increase.

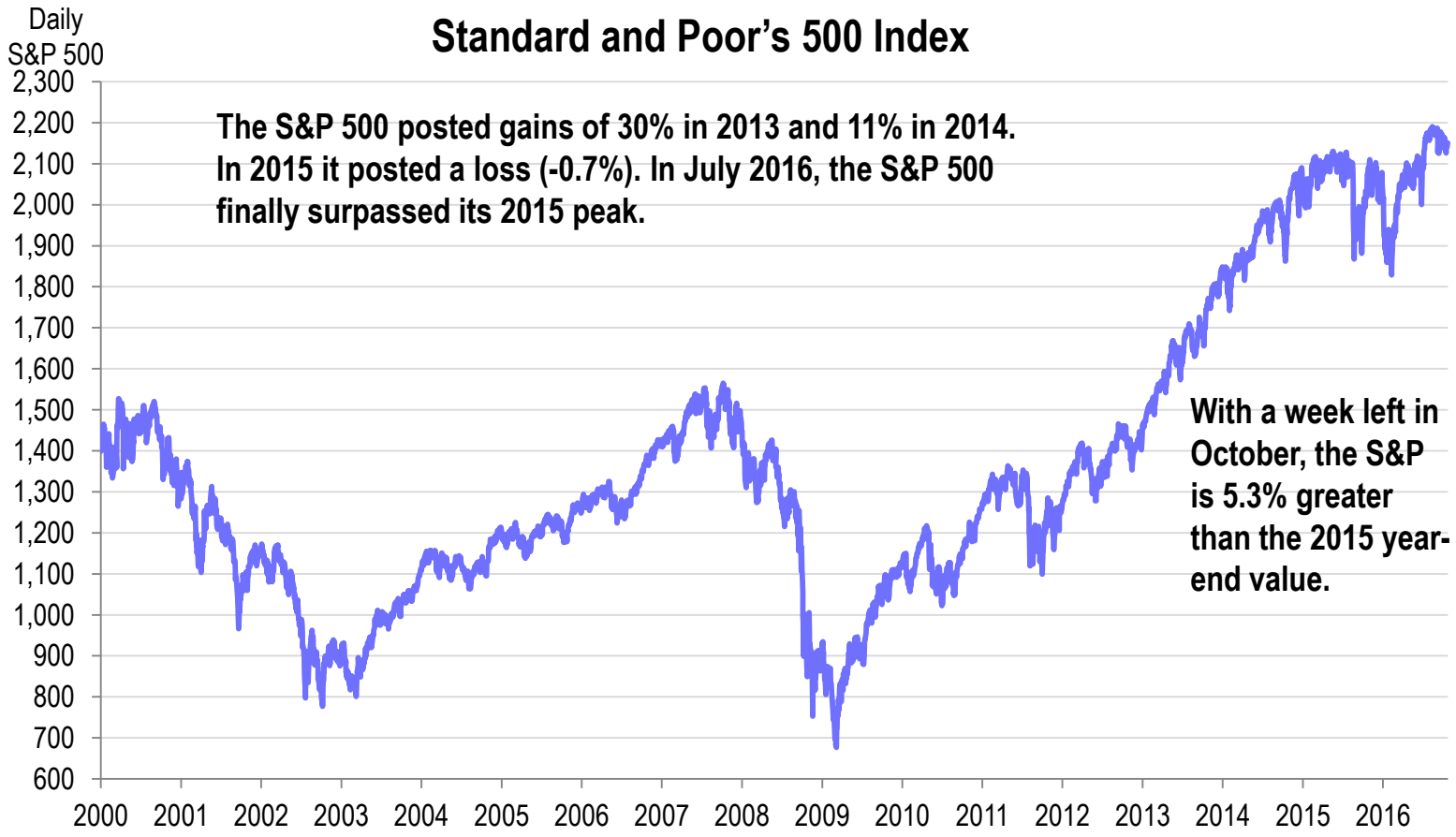
It is the Fed's intent to manage inflation so that it approaches their target rate of 2.0% (red line). As can be seen from the chart, that is easier said than done.

The CPI for the first half of 2016 is 1.1%. This compares to the annual rate of 0.1% for 2015.



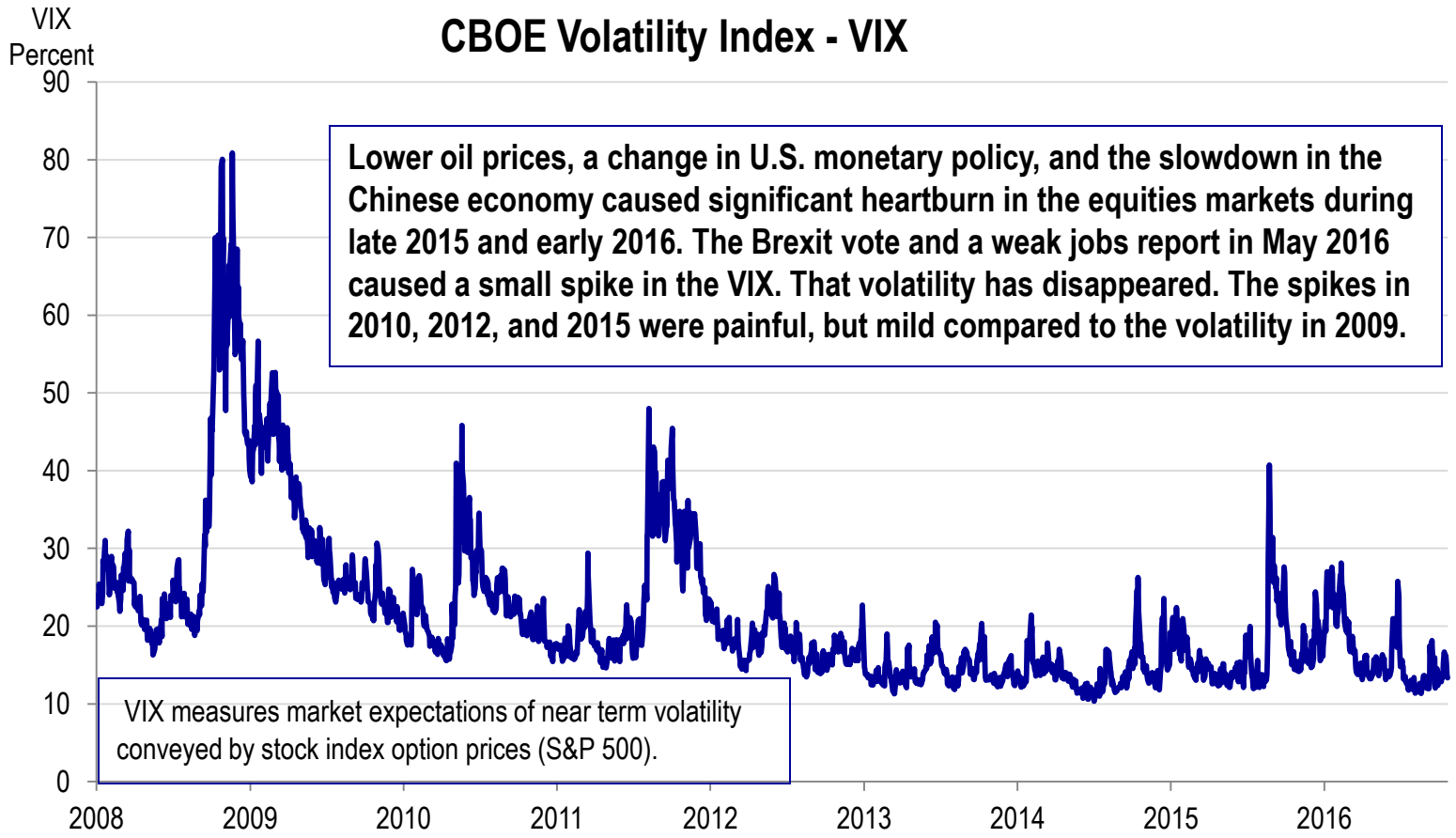
Source: Bureau of Labor Statistics, cber.co, nsa, y-o-y monthly.

Standard and Poor's 500 Index



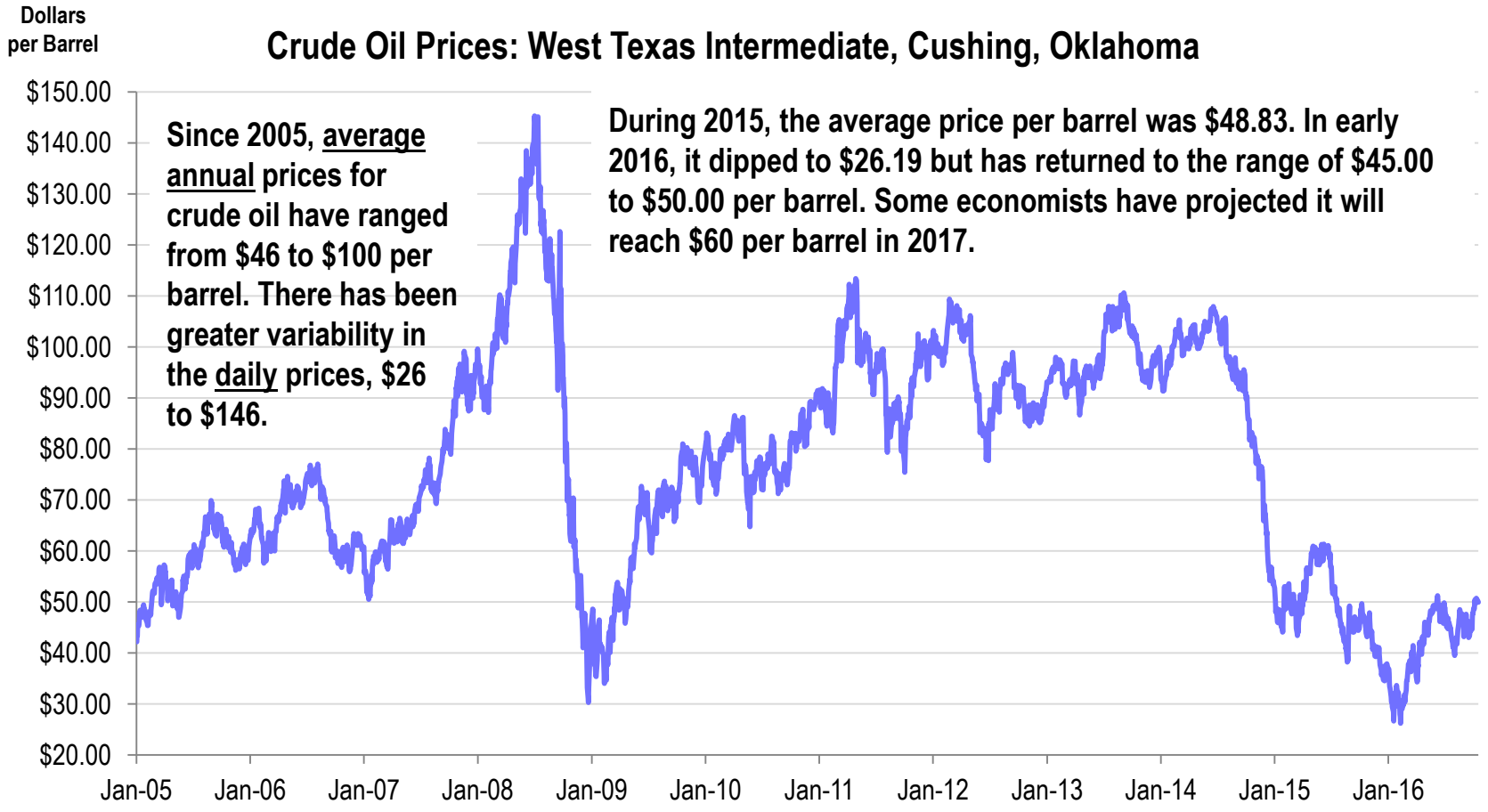
Source: FRED, S&P 500, cber.co.

CBOE Volatility Index
VIX (VIXCLS)



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

Crude Oil Prices
West Texas Intermediate

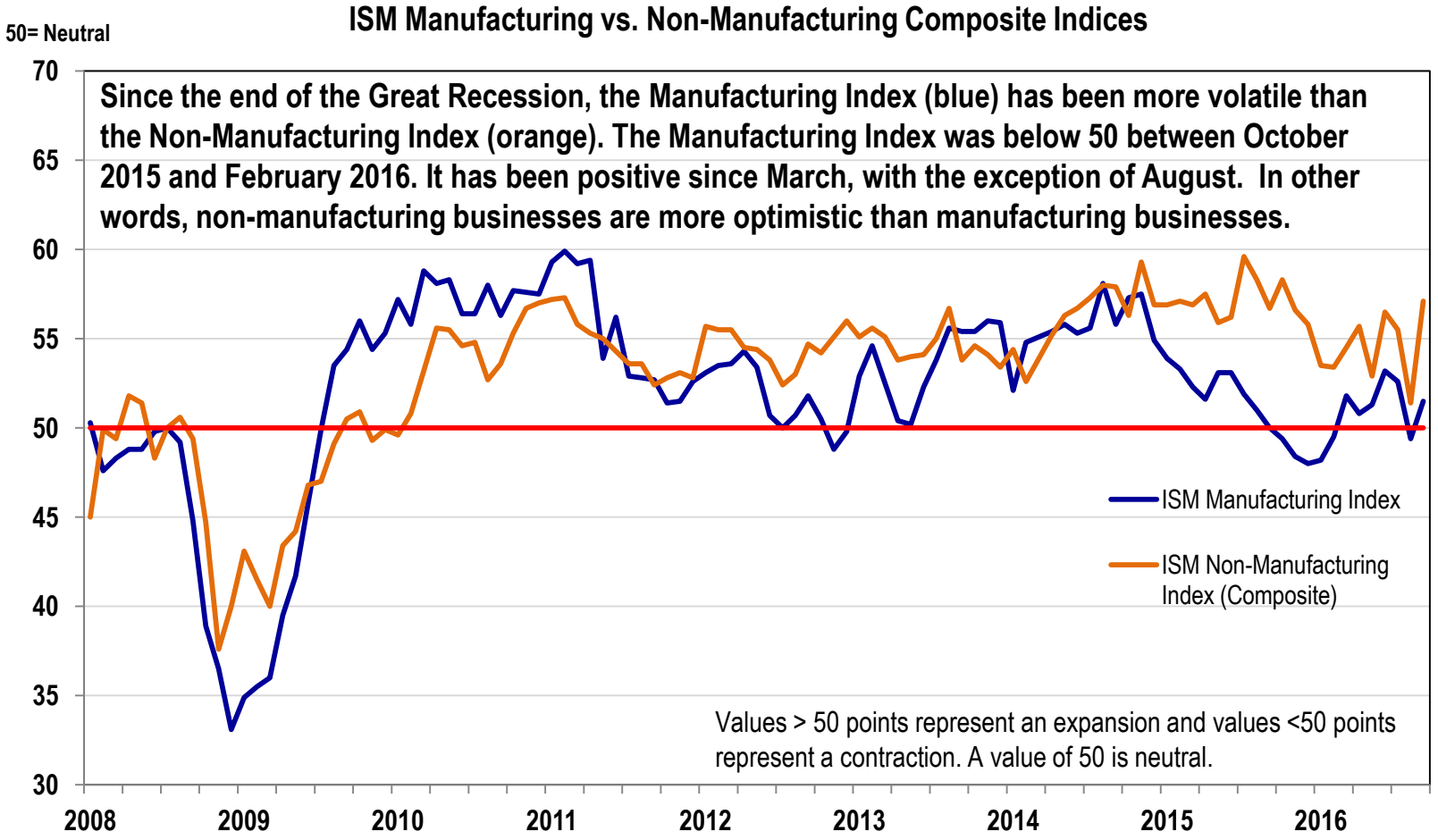


Source: FRED, EIA, cber.co.

United States Economy

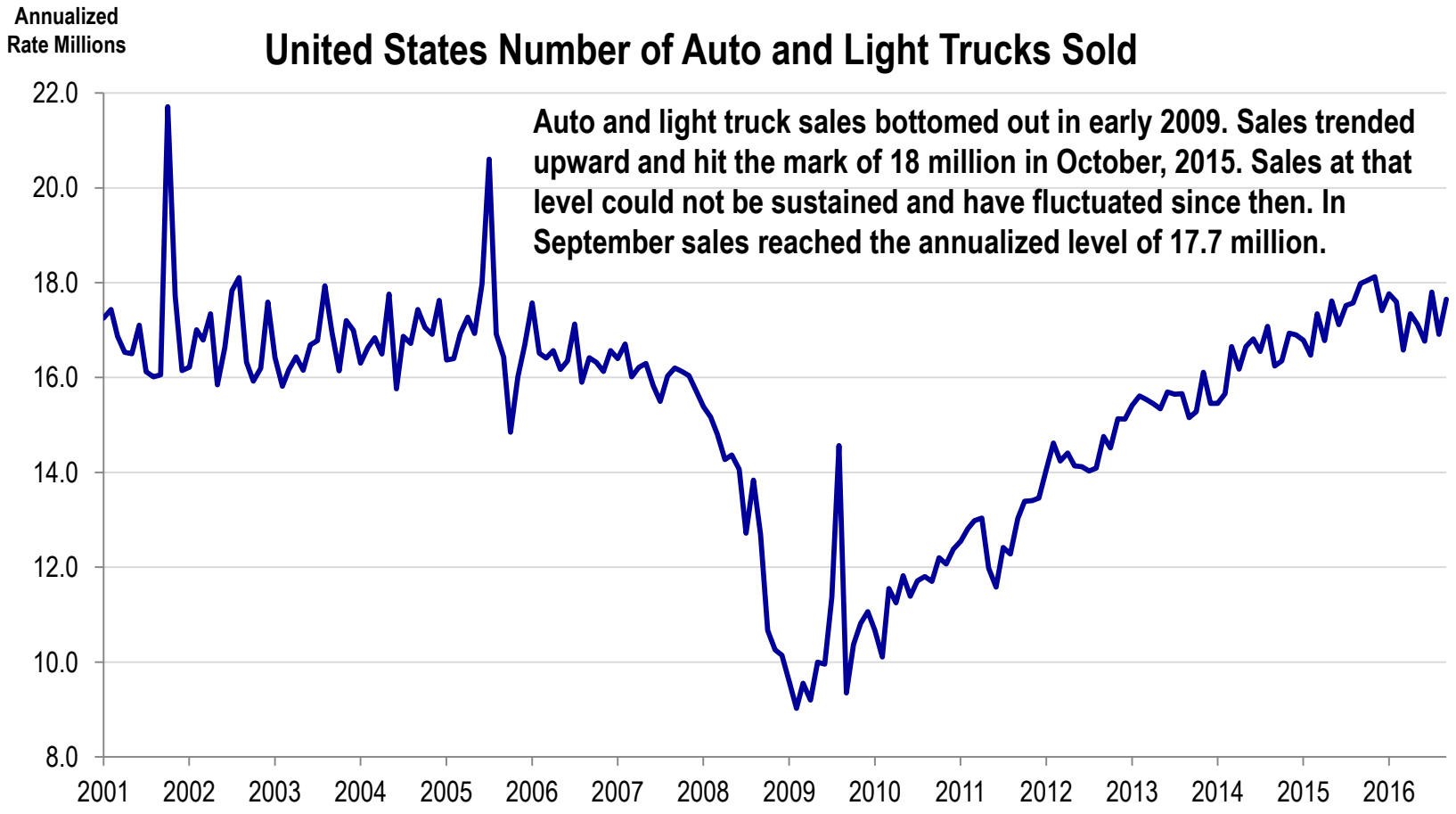
Non-Manufacturing, Manufacturing, and Retail

ISM PMI Composite Indices
Manufacturing vs. Non-manufacturing



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

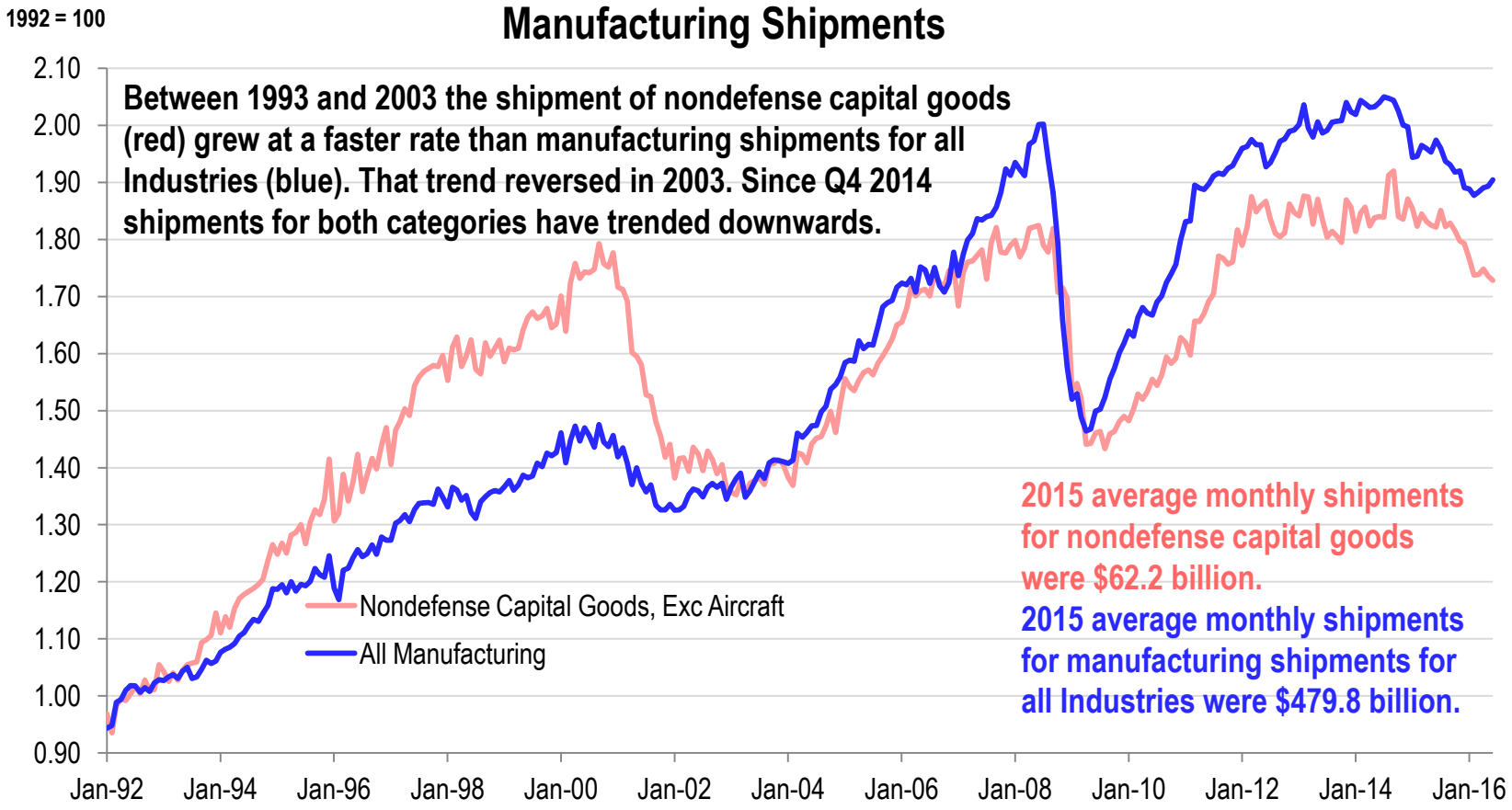
U.S. Weekly Auto and Light Truck Sales



Source: FRED, BEA, cber.co.
Note: Seasonally Adjusted Annualized Rate.

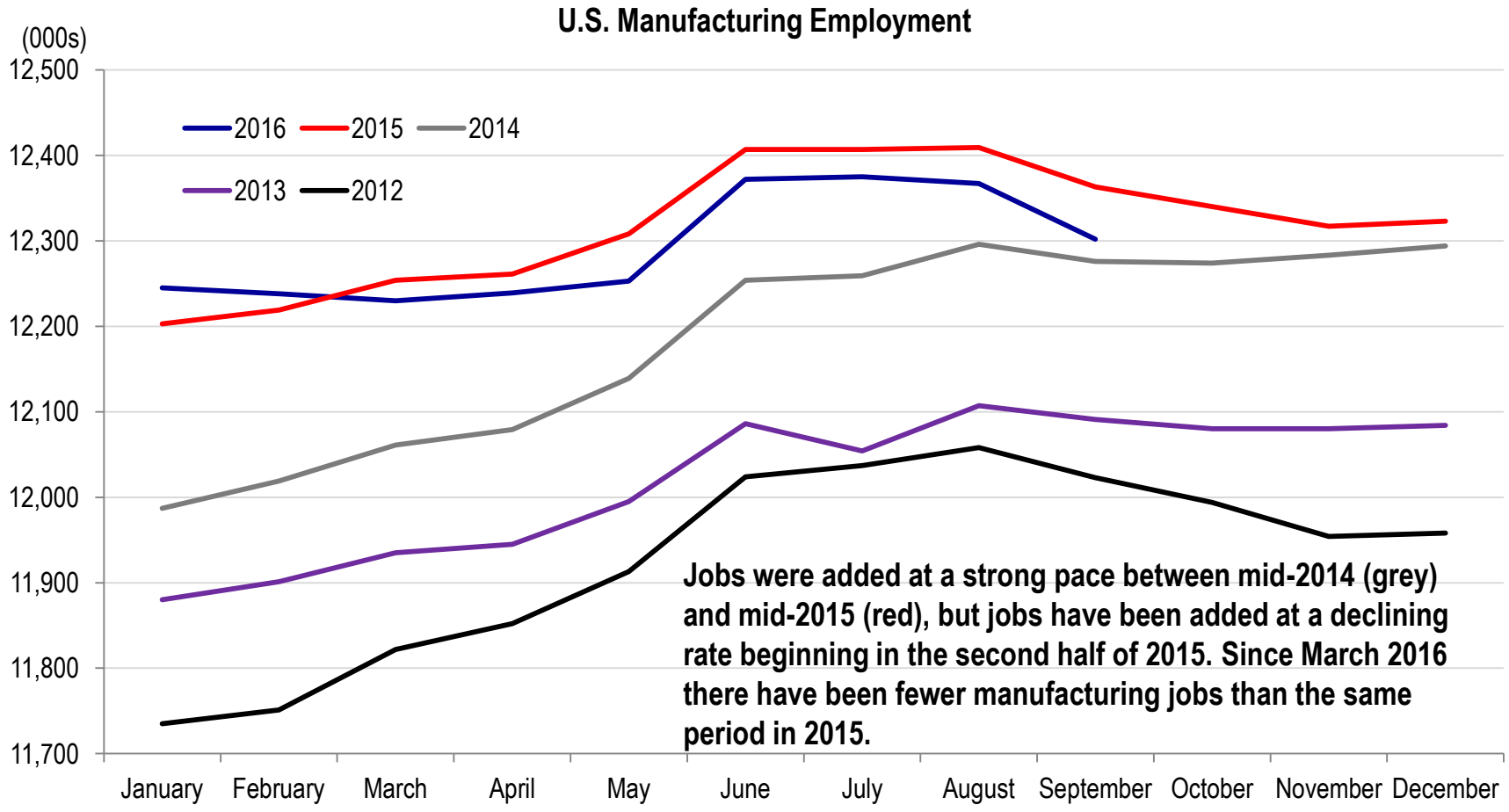
United States Manufacturing Shipments

All Industries vs. Nondefense Capital, Excluding Aircraft



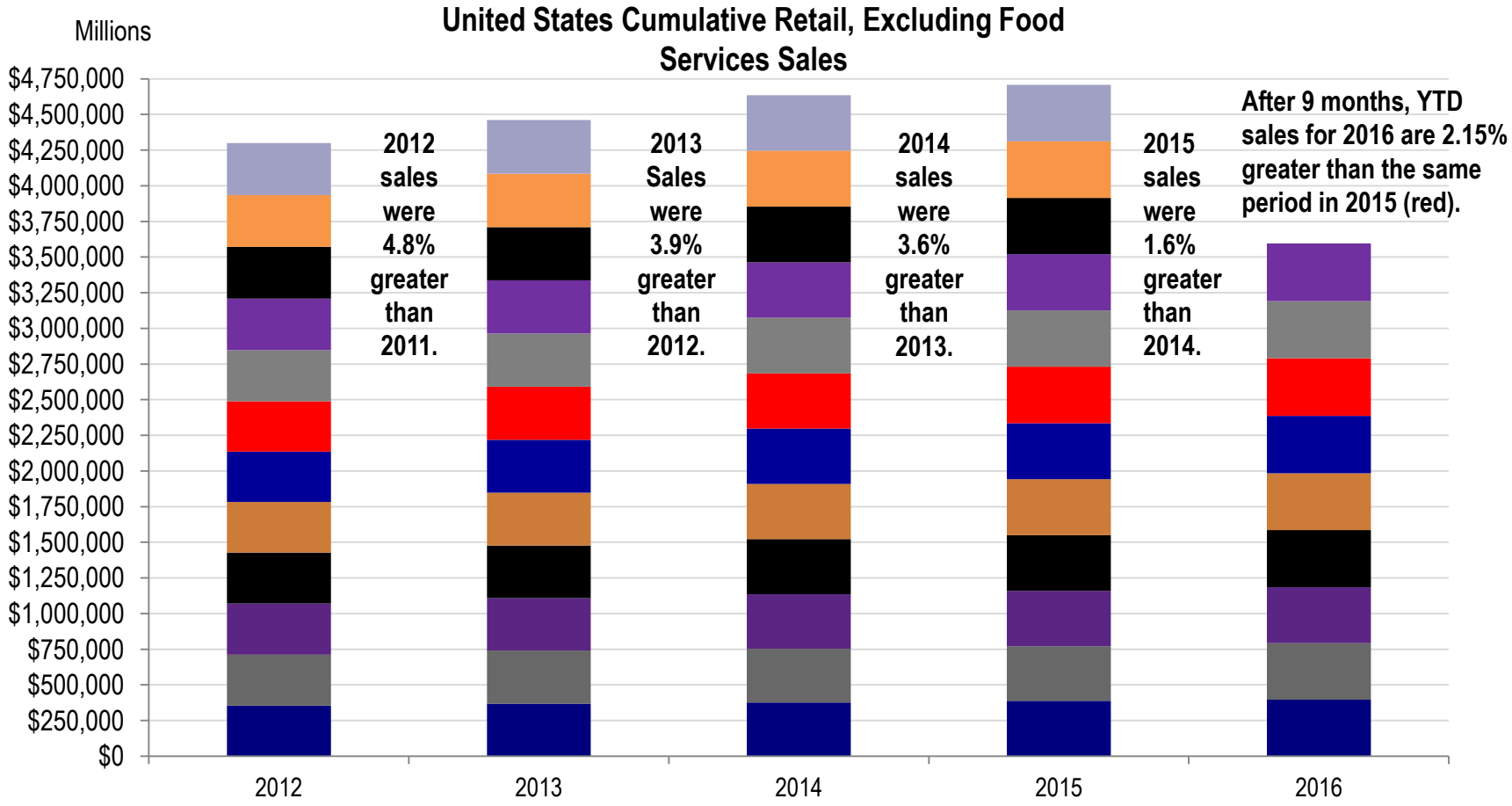
Source: FRED, SA. U.S. Bureau of the Census, cber.co. Note: Not adjusted for inflation.

United States Manufacturing Employment 2012 to Current



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

Cumulative Retail, Excluding Food Services Sales

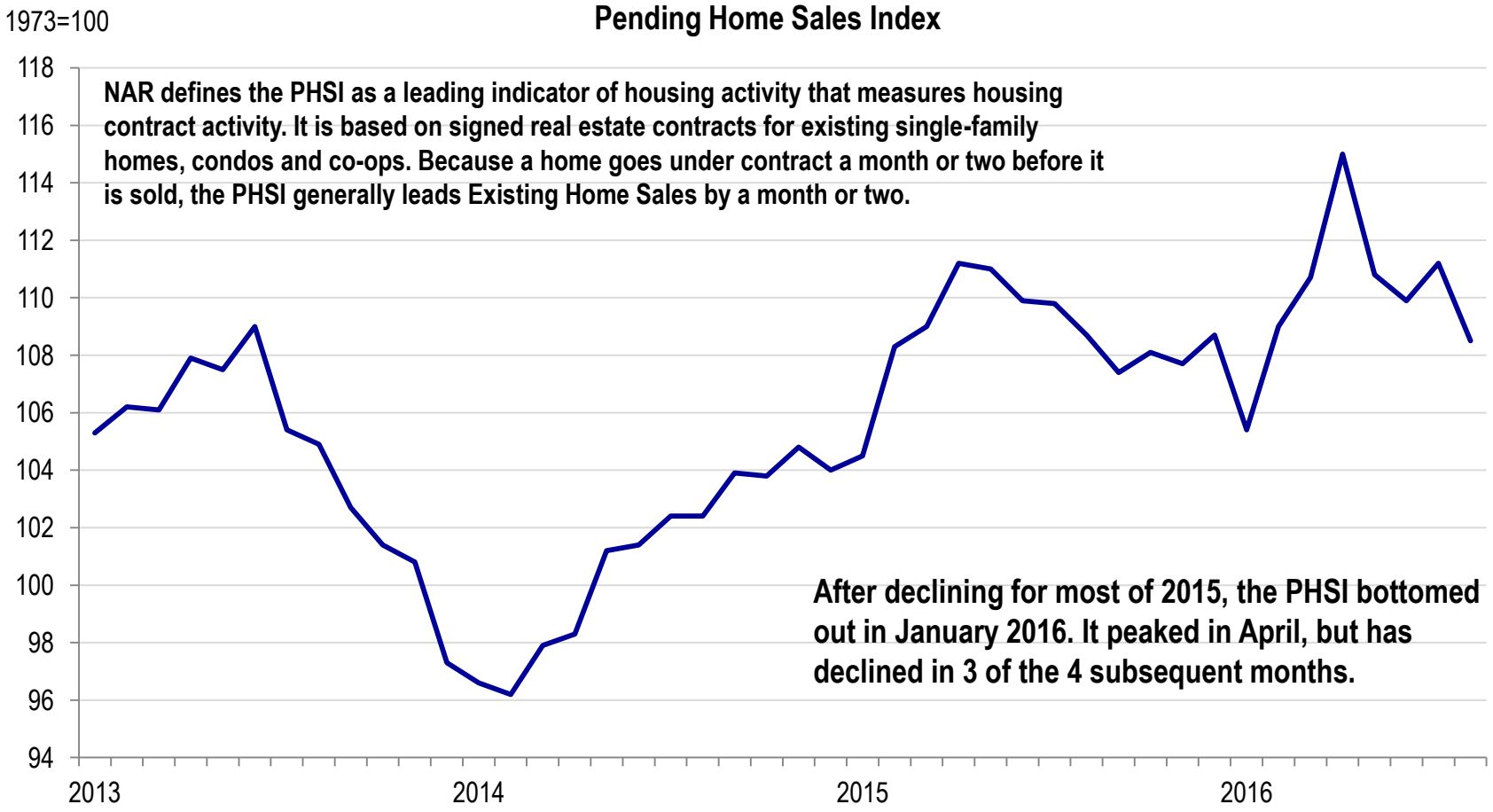


Source: U.S. Census Bureau, FRED, cber.co .

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

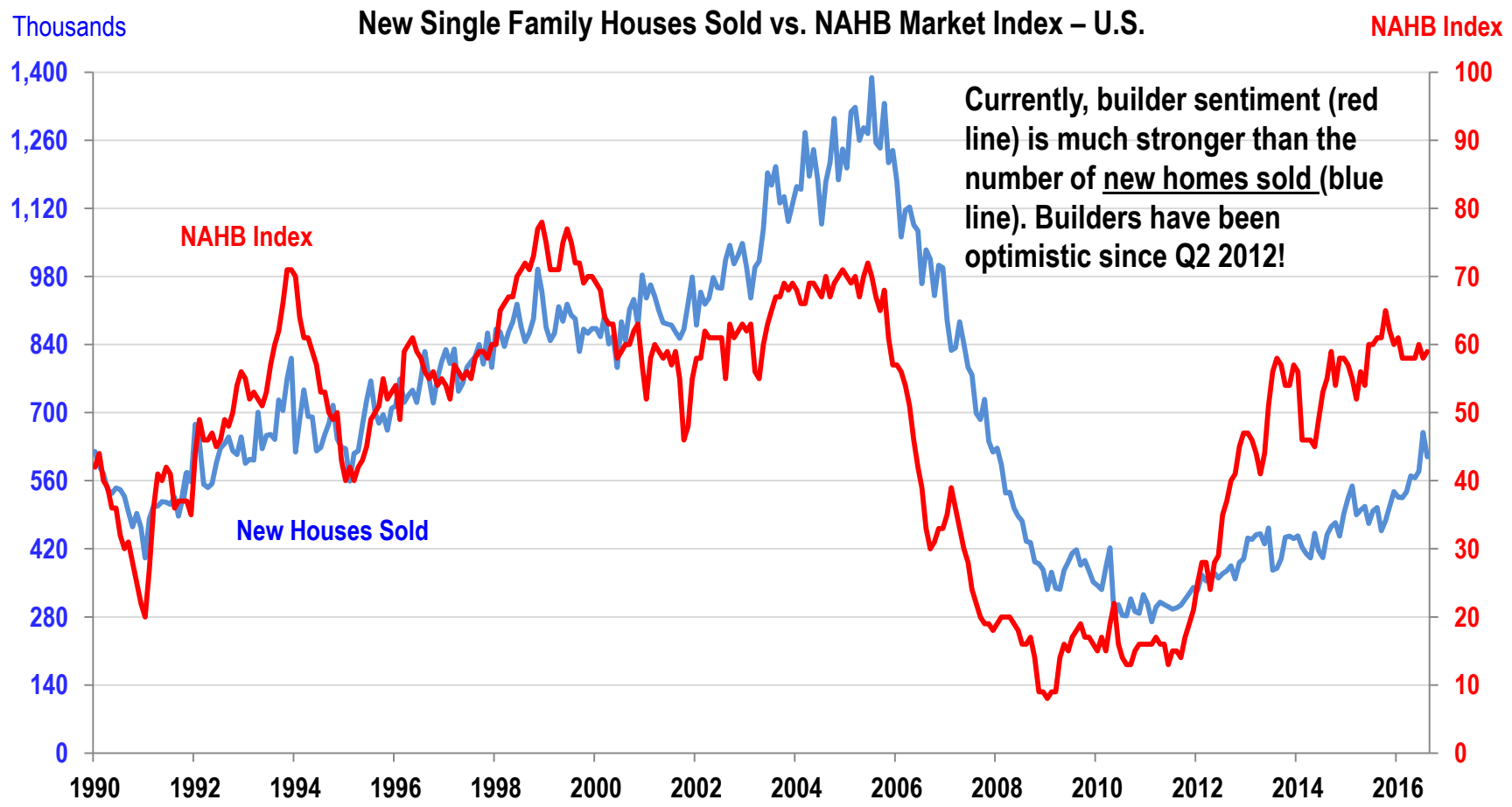
United States Economy
Housing and Construction

Pending Home Sales Index



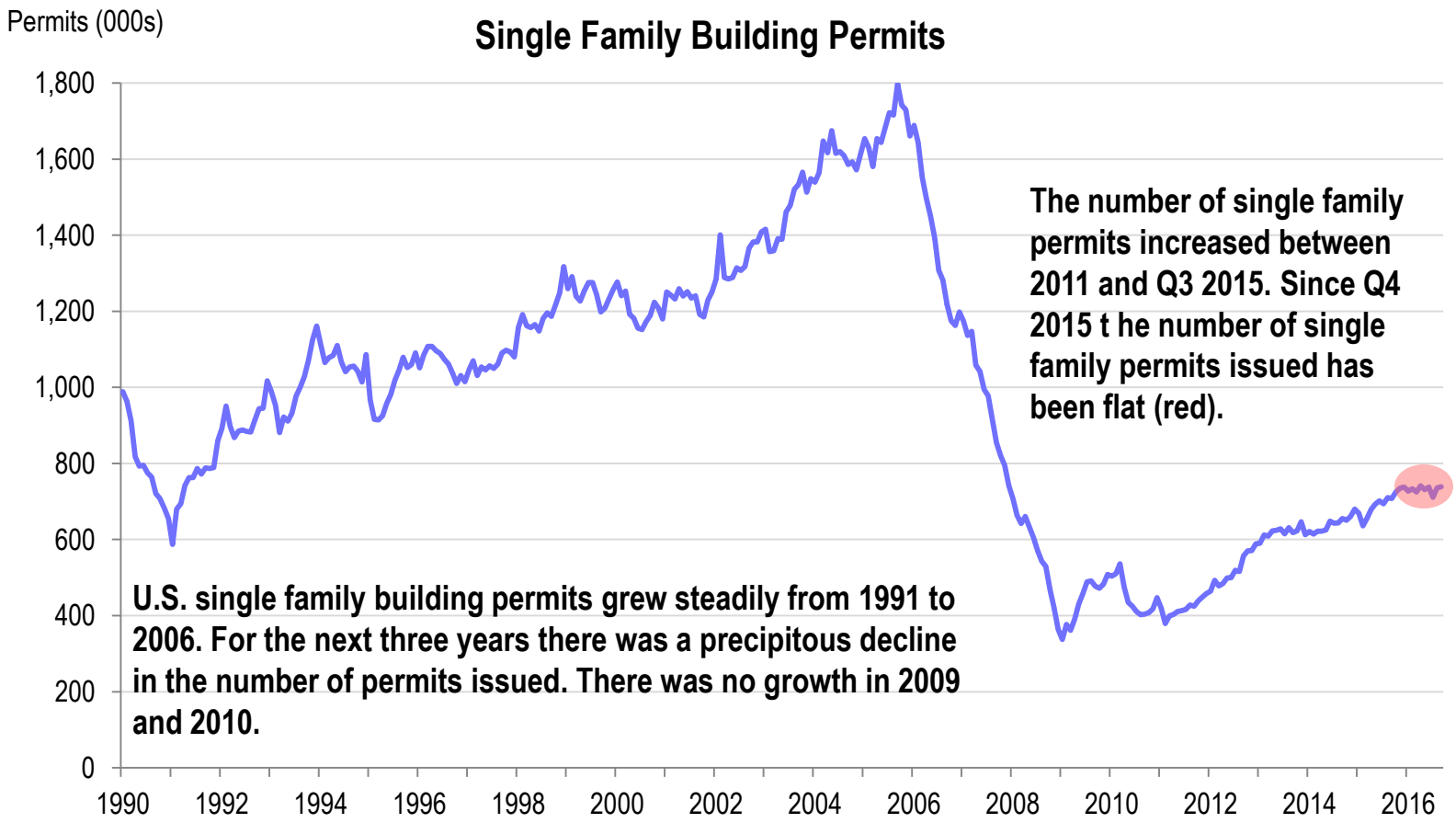
Source: National Association of Realtors, SA; cber.co.

New Single-Family Houses Sold vs. NAHB Market Index



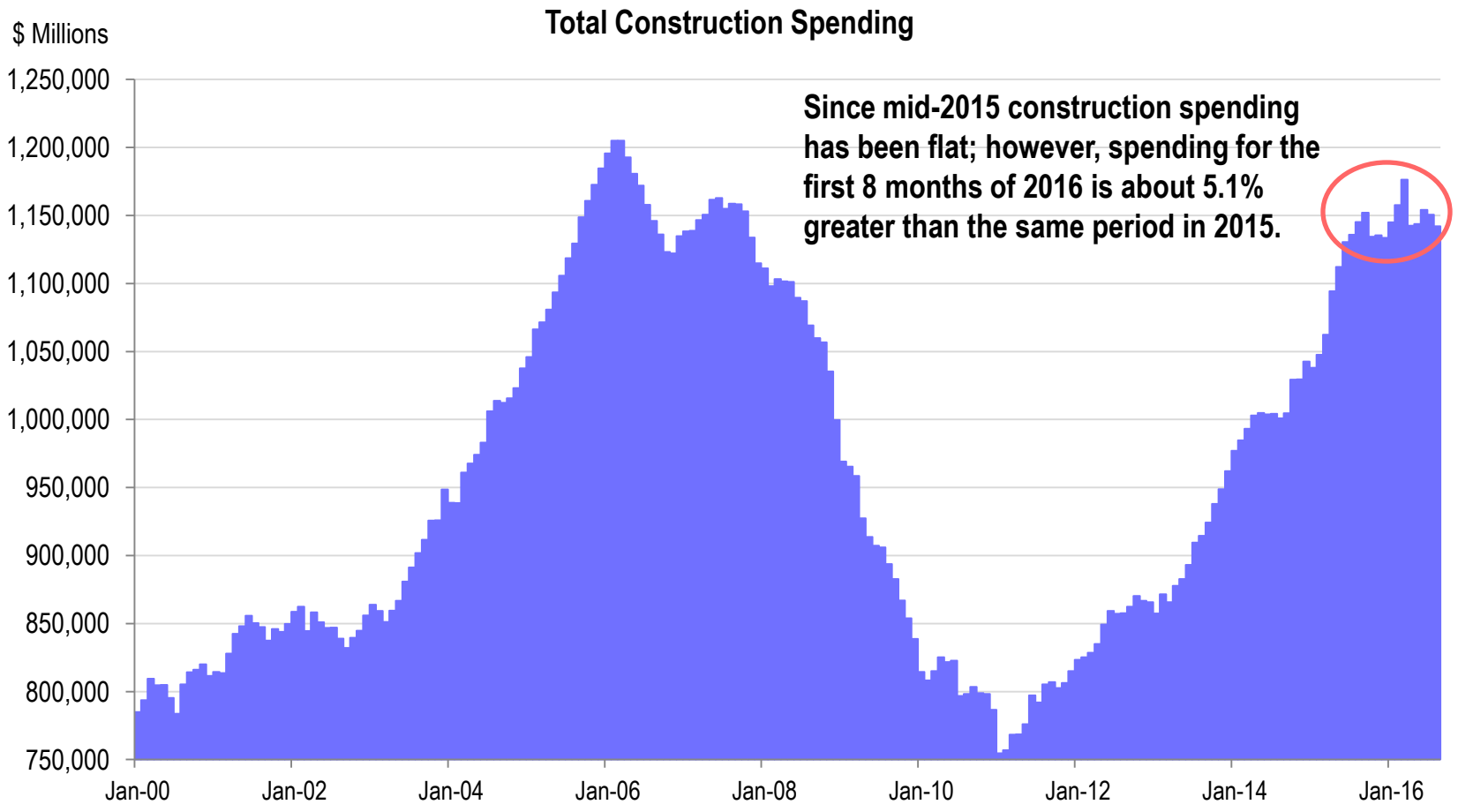
Source: FRED, Census Bureau SA, NAHB, cber.co.

New Single Family Building Permits – U.S.



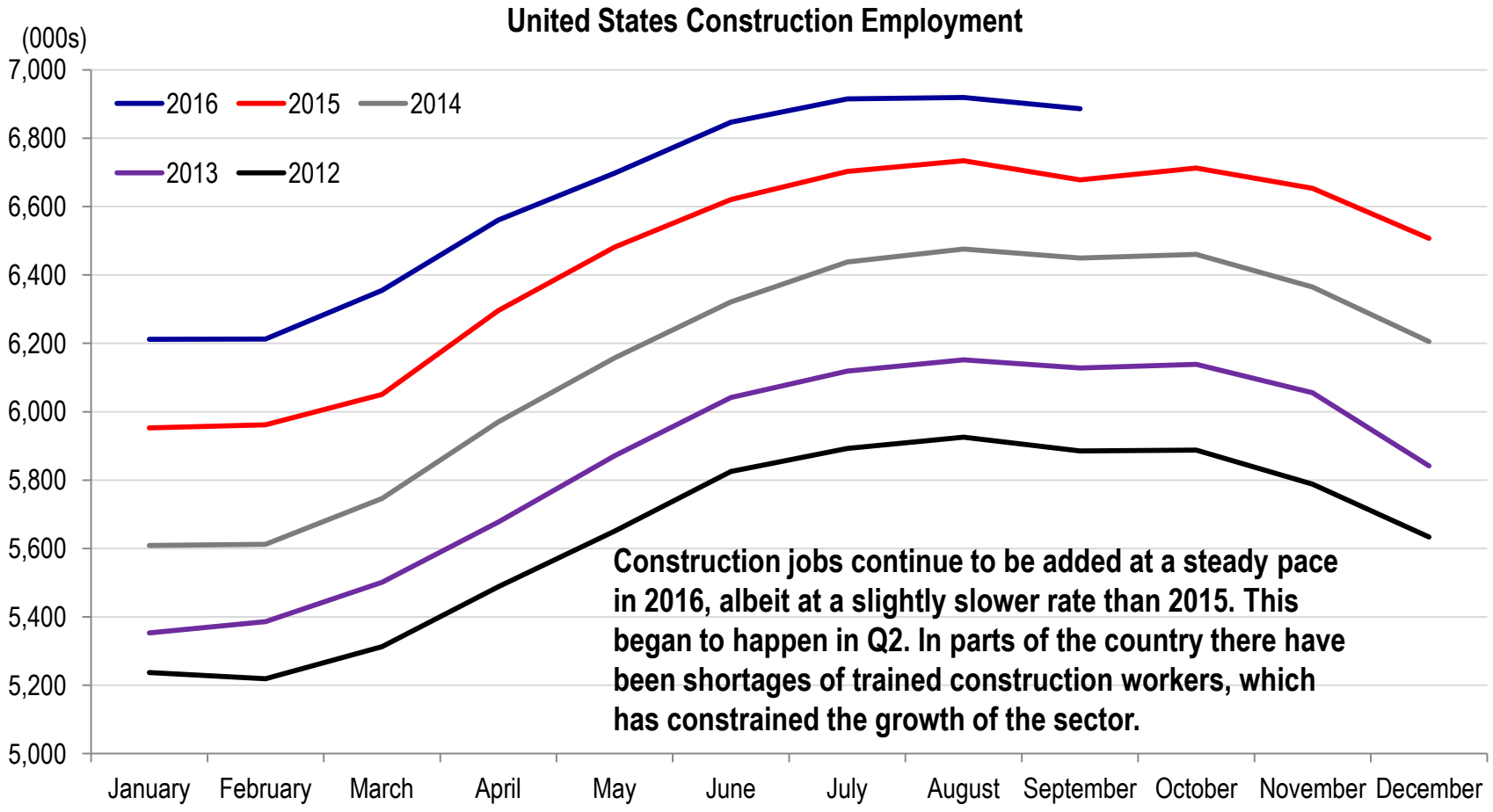
Source: FRED, U.S. Census Bureau, cber.co.

Total United States Construction Spending



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

United States Construction Employment 2012 to 2015



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

United States Economy Summary

Summary of the Global and United States Economies

The United States economy should post solid job and real GDP growth in the second half of 2016. For the year, about 2.5 million jobs will be added and real GDP growth will be in the range of 1.5% to2.0%.

Other Reasons to be Optimistic

Earnings - Wage increases have been across most industries and have exceeded the rate of inflation.

Housing - Overall, prices in the U.S. housing market are appreciating at a rate slightly greater than 5%.

CPI - Inflation is near 1.1%, well below the Fed's target rate of 2.0%. Inflation is expected to increase in 2017.

Consumer spending - Personal consumption is solid. Consumers are spending and saving.

Oil - The price for a barrel of oil is in the $45 to $50 range. Some speculators and economists think it will reach $60 in 2017.

Ag - Agriculture prices may be nearing the bottom or they have bottomed out, i.e. the future may be brighter for farmers and ranchers.

Areas of Concern

IMF economic update - The global rate of growth for real GDP will be lower than originally projected in 2016. It will be 3.1% in 2016 and 3.4% in 2017.

Philly Fed Q3 economic update

- The number of U.S. jobs will increase by 2.4 to 2.5 million in 2016 and by 1.9 million in 2017.
- Real GDP growth will be 1.5% in 2016, 2.3% in 2017, and 2.2% in 2018.
- Unemployment will be 4.8% in 2016, and 4.6% for the next two years. The U.S. is approaching full employment which means the number of qualified workers has been reduced significantly.

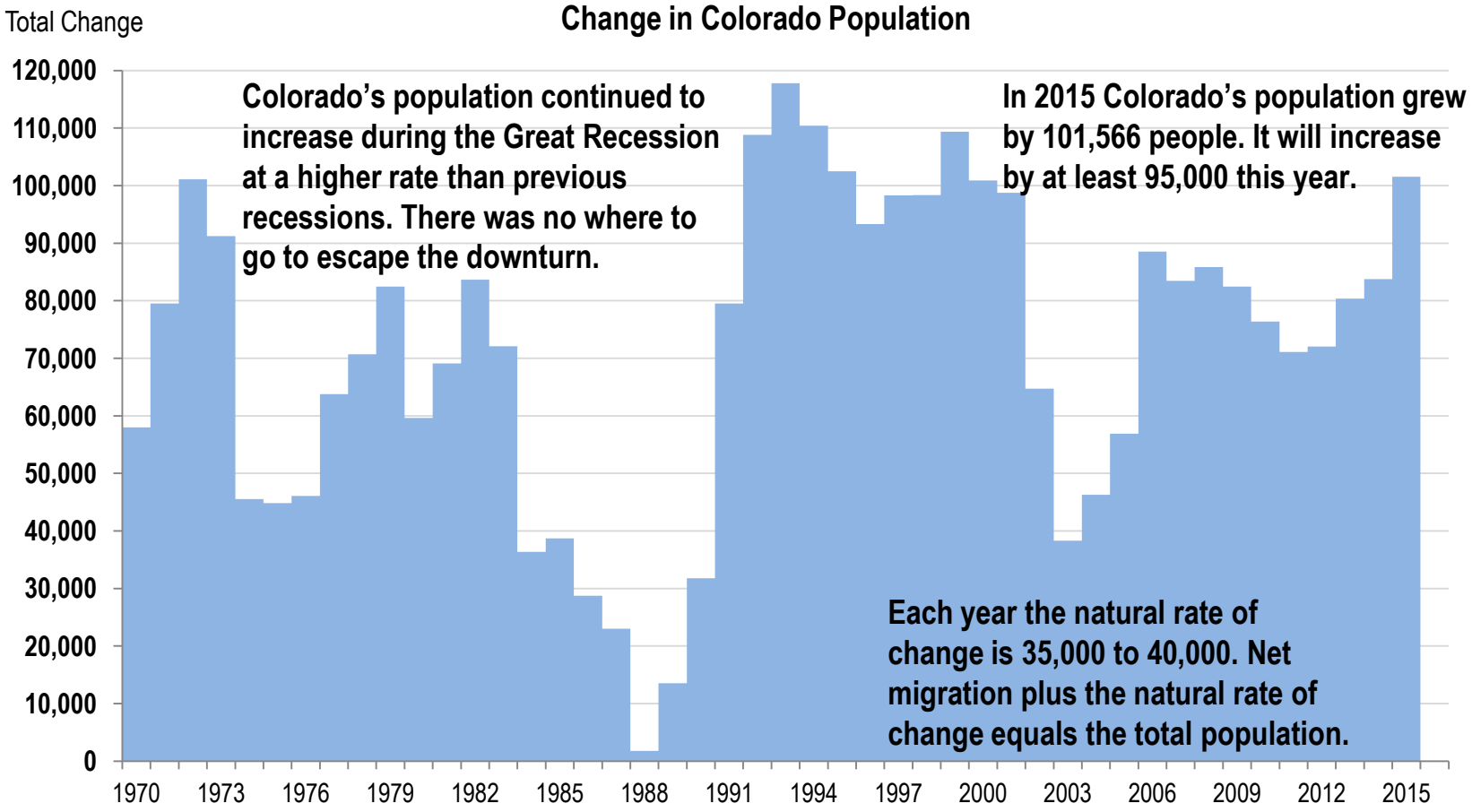
Prices at the pump – Expect prices at the pump to increase!

Manufacturing - Manufacturing shipments remain sluggish. Auto sales have flattened. The sector is struggling.

Construction – Construction activity is solid; however, it has slowed in some areas.

The Colorado Economy
Population

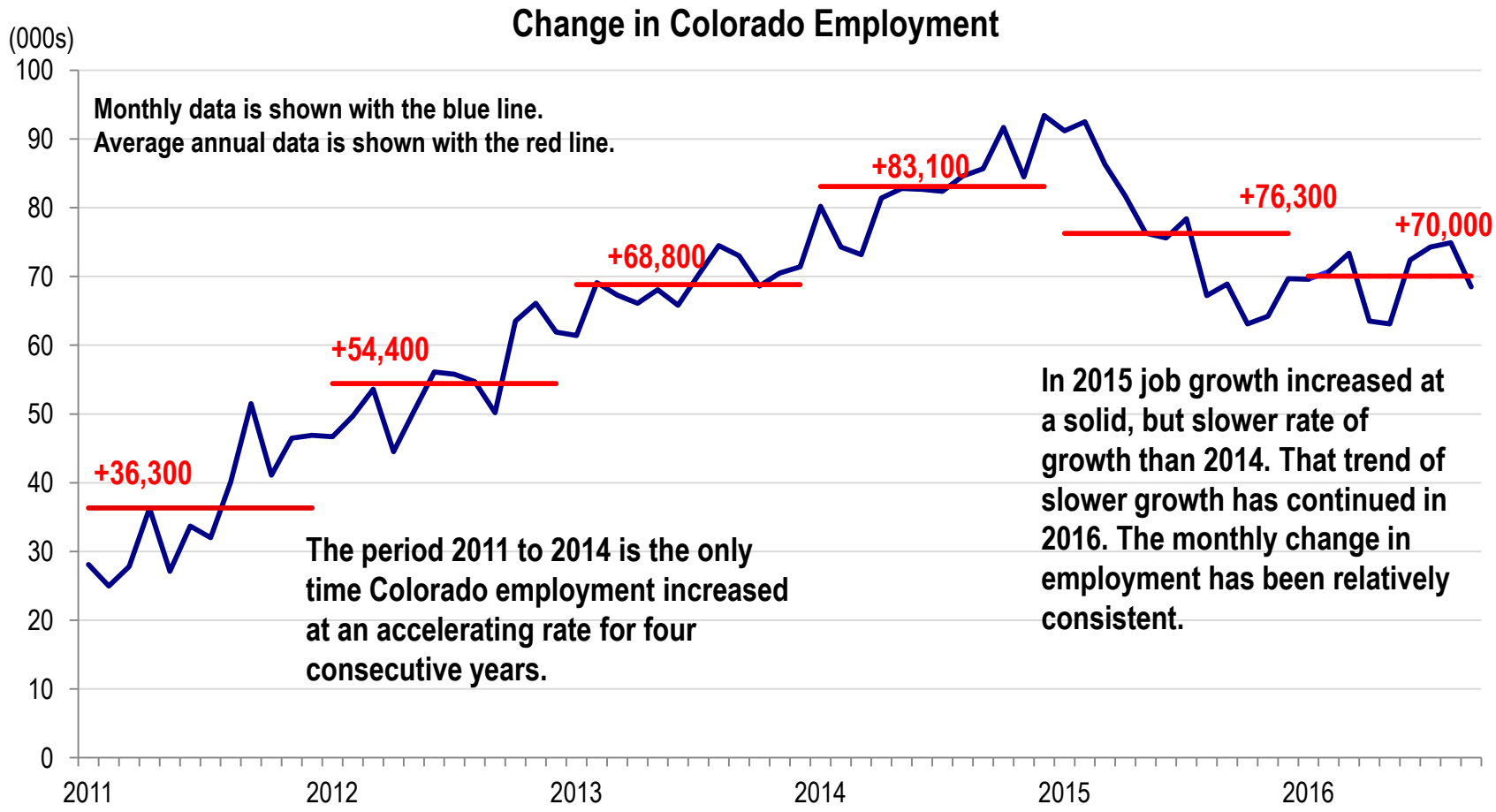
Annual Change in Population



Source: Census Bureau, cber.co.

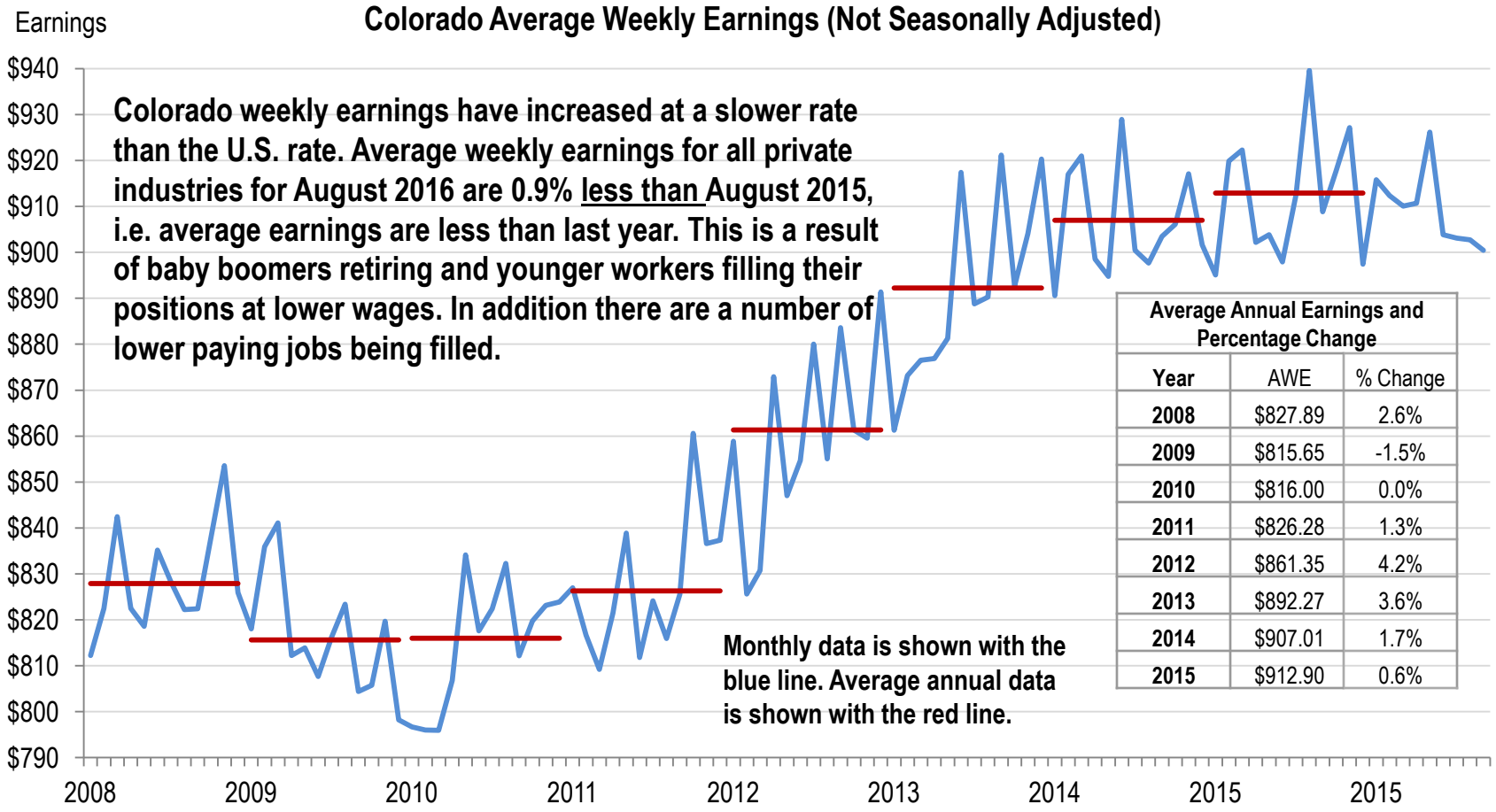
The Colorado Economy
Labor

Change in Colorado Employment Year-Over-Year



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

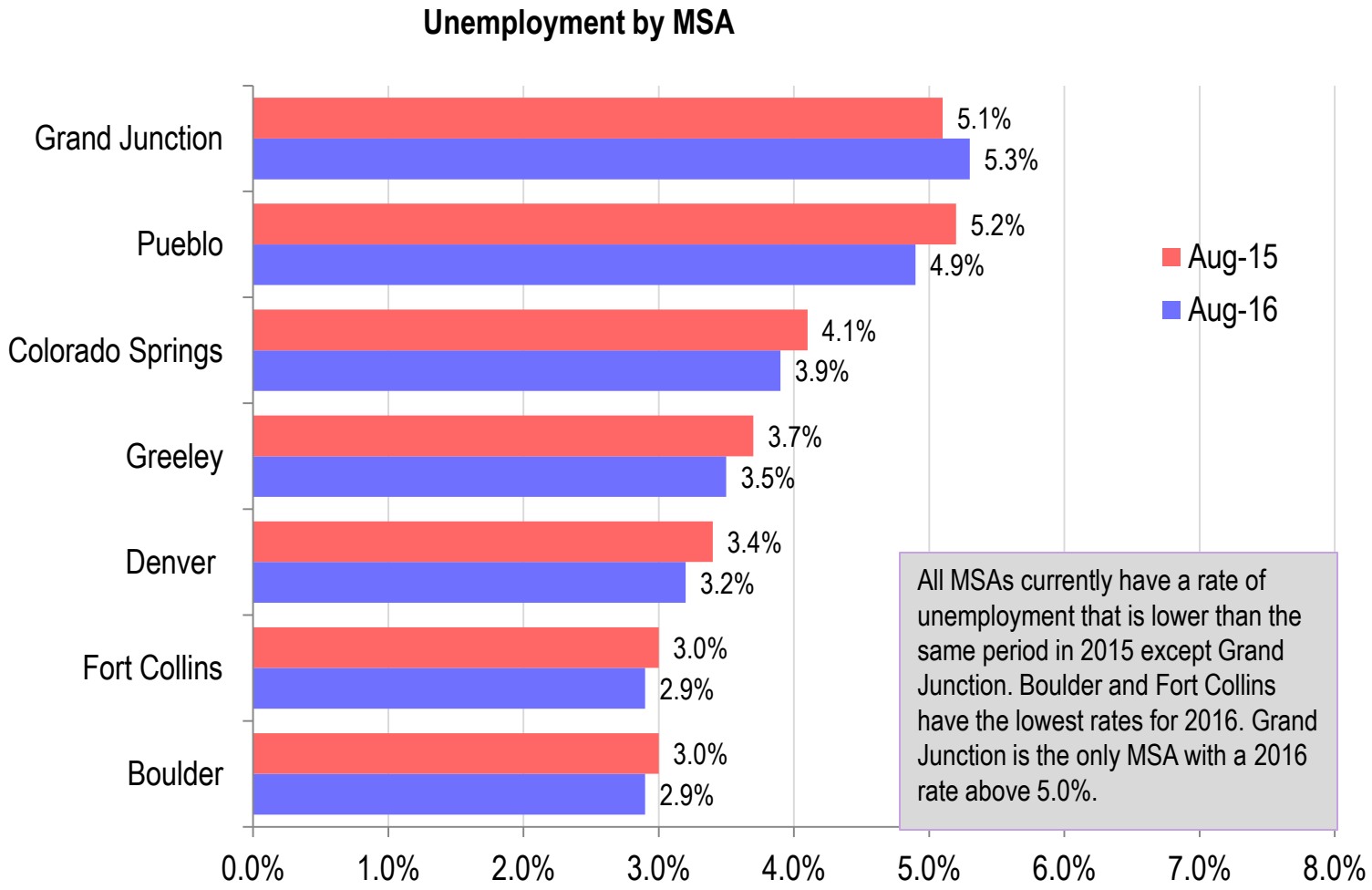
Colorado Average Weekly Earnings of All Employees (Private Sector)



Average Annual Earnings and Percentage Change		
Year	AWE	% Change
2008	$827.89	2.6%
2009	$815.65	-1.5%
2010	$816.00	0.0%
2011	$826.28	1.3%
2012	$861.35	4.2%
2013	$892.27	3.6%
2014	$907.01	1.7%
2015	$912.90	0.6%

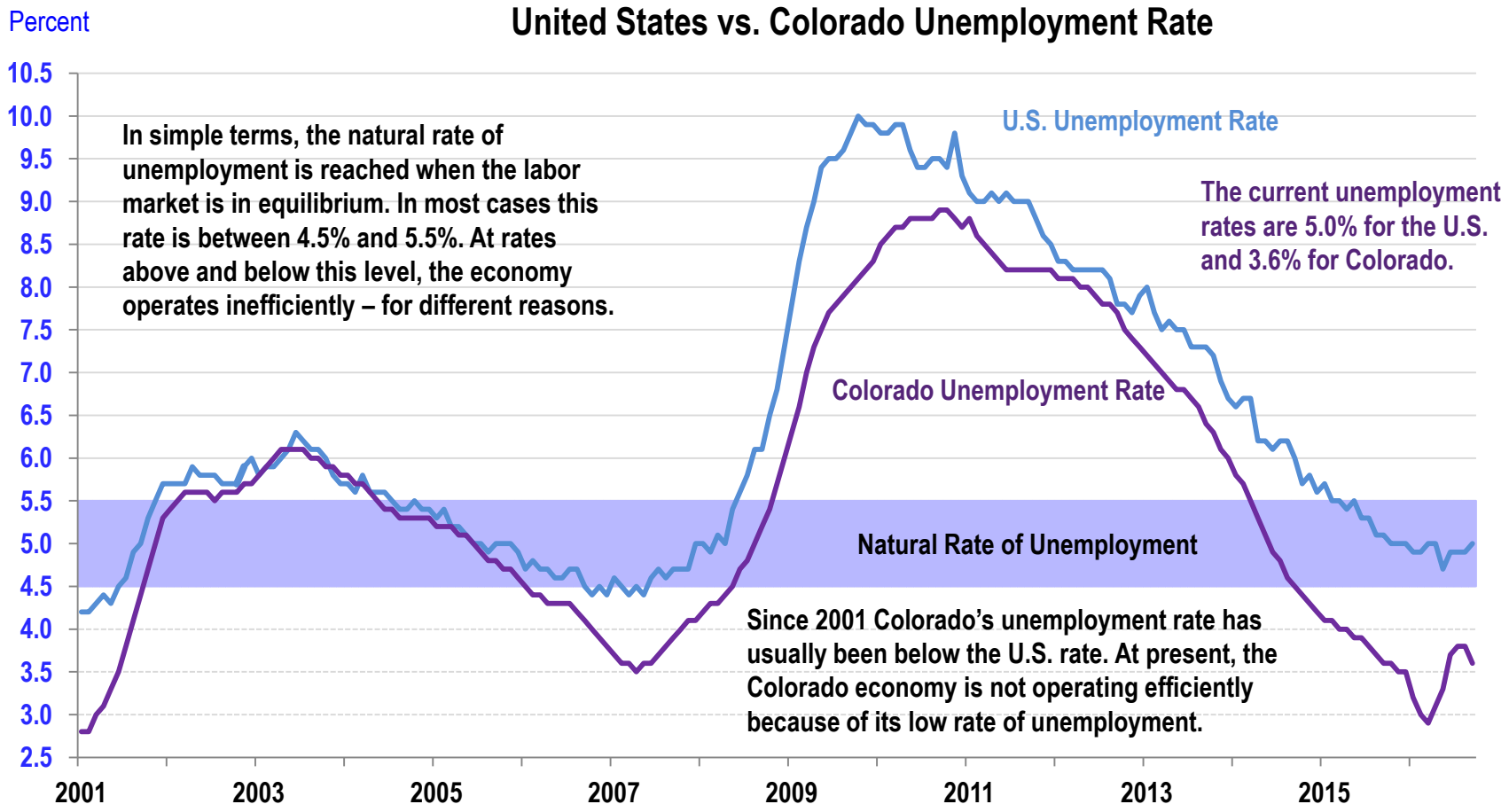
Source: Bureau of Labor Statistics, NSA, cber.co.

Unemployment by MSA 2015 vs. 2016



Source: Bureau of Labor Statistics, NSA, cber.co. Note: MSA unemployment lags by two months and is reported only on a non-seasonally adjusted basis.

United States vs. Colorado Unemployment Rate



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

September Unemployment Rate by State

Unemployment Rate < 4.0%		
Rank	State	Rate
1	New Hampshire	2.9%
1	South Dakota	2.9%
3	North Dakota	3.0%
4	Nebraska	3.2%
5	Hawaii	3.3%
5	Vermont	3.3%
7	Utah	3.4%
★ 8	Colorado	3.6%
8	Massachusetts	3.6%
10	Idaho	3.8%

3.9%<Rate < 5.0%		
Rank	State	Rate
11	Arkansas	4.0%
11	Minnesota	4.0%
11	Virginia	4.0%
14	Maine	4.1%
14	Wisconsin	4.1%
16	Iowa	4.2%
16	Maryland	4.2%
18	Delaware	4.3%
18	Montana	4.3%
20	Kansas	4.4%
21	Indiana	4.5%
22	Michigan	4.6%
22	Tennessee	4.6%
24	Florida	4.7%
24	North Carolina	4.7%
26	Ohio	4.8%
26	Texas	4.8%
28	South Carolina	4.9%

4.9%<Rate <6.0%		
Rank	State	Rate
29	Kentucky	5.0%
29	New York	5.0%
31	Georgia	5.1%
32	Missouri	5.2%
32	Oklahoma	5.2%
34	New Jersey	5.3%
34	Wyoming	5.3%
36	Alabama	5.4%
36	Connecticut	5.4%
38	Arizona	5.5%
38	California	5.5%
38	Illinois	5.5%
38	Oregon	5.5%
42	Rhode Island	5.6%
42	Washington	5.6%
44	Pennsylvania	5.7%
45	Nevada	5.8%
45	West Virginia	5.8%

5.9%<Rate <7.0%		
Rank	State	Rate
47	Mississippi	6.0%
48	District of Columbia	6.1%
49	Louisiana	6.4%
50	New Mexico	6.7%
51	Alaska	6.9%

Colorado is ranked 8th for the lowest rate of unemployment. Workers from states with higher rates are likely to migrate to Colorado to find employment.

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

How Low Can it Go?

Natural Rate of Unemployment

The natural rate of unemployment is the rate at which an economy operates efficiently. It is typically between 4.5% and 5.5%.

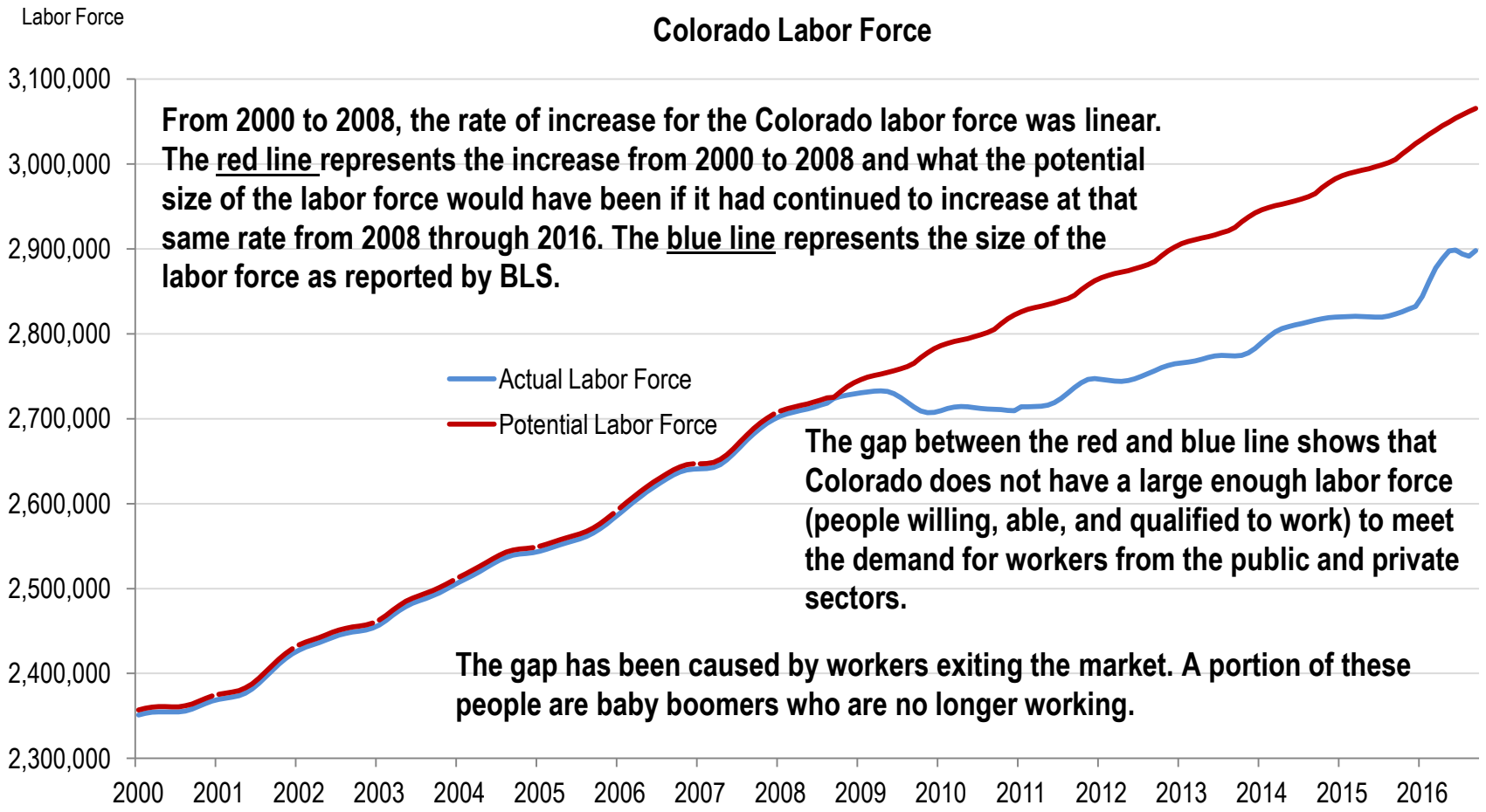
The economy operates inefficiently when:

- The rate of unemployment is too high, as it was during the Great Recession.
- The rate of unemployment is too low. The current rate of unemployment in Colorado is too low.

Reasons Low Unemployment May be Bad for the Economy

- Businesses may be forced to pay higher wages. The upside is that workers have more money to spend which theoretically stimulates the economy. On the other hand, businesses may hire fewer workers to keep costs in line or they may need to pass the added cost on to the consumer in the form of a price increase.
- Businesses may be forced to hire unqualified people and properly train them. The upside is that workers are better trained and more marketable. On the other hand, the added cost of training may have to be built into the price of the goods or services.
- During expansionary times, businesses increase their sales by adding workers and/or investing in capital projects or processes. If they cannot find workers they may invest in capital goods or processes that will reduce the need for labor in the long-run. For example, oil and gas companies have gained efficiencies by making capital expenditures that will reduce their long-term demand for employees.
- If companies cannot find qualified workers their services/goods may be of lower quality or they may simply lose business. For example, if a restaurant has wait times greater than an hour because they don't have enough kitchen help, then customers may go elsewhere or the food may be lousy. Both are bad alternatives.

Colorado Labor Force



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

Colorado Employment

2016 Colorado Employment by Performance Category
Average Employment First 9 Months

Colorado Employment
Performance Category Portfolio Analysis

Strong Growth, Solid Growth, and Volatile Categories

This portfolio approach has made it easy to see that some categories of industries consistently create jobs at a higher rate of growth, some show solid growth, and others are more volatile.

Ultimately, the volatile category tends to have a greater influence on the amount of change in total job growth than the sectors with steady growth.

The Process of Establishing the Categories

In 2012, 2013, and 2014 cber.co evaluated the performance of 23 sectors over the past two decades and refined the manner in which the sectors are grouped. The evaluation factors for grouping include the rate of growth, number of years with positive job growth, size of the sector, and volatility in job growth.

In the short period this process has been used, it has produced a high level of accuracy in the forecast.

More importantly, it has produced a better understanding of what is driving the Colorado economy.

Annual Employment Situation for the Strong Growth Category

Over the past two decades the following sectors have been the foundation for consistent growth in Colorado employment.

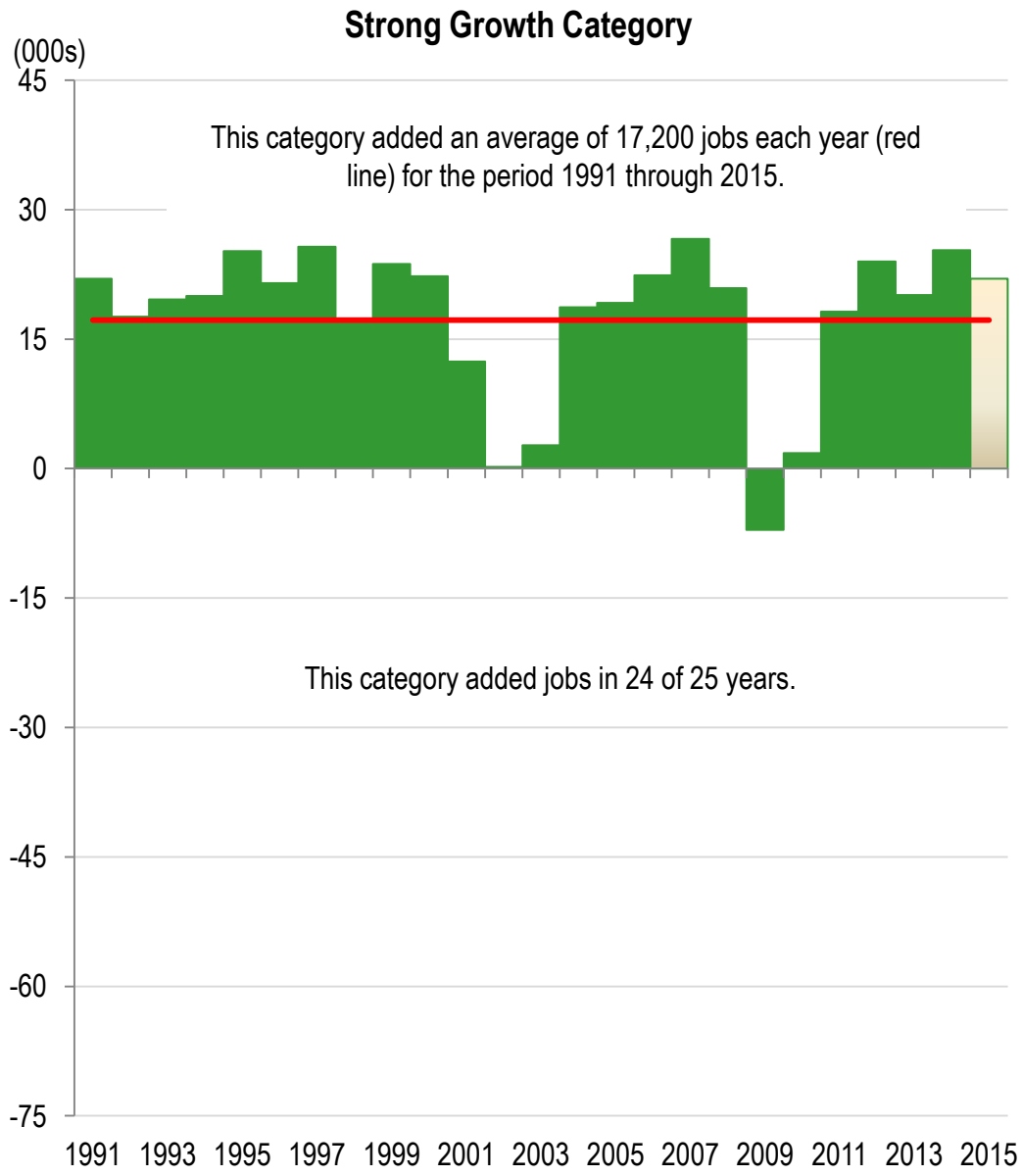
- Professional, Scientific, and Technical Services
- Management of Companies and Enterprises
- Administrative - Business to Business (Not Employment Services)
- Private Education
- Health Care
- Arts, Entertainment, and Recreation
- Other Services.

Total employment for this category was:

1994 445,200 workers, 25.4% of total employment

2004 615,900 workers, 28.3% of total employment

2014 788,300 workers, 32.0% of total employment



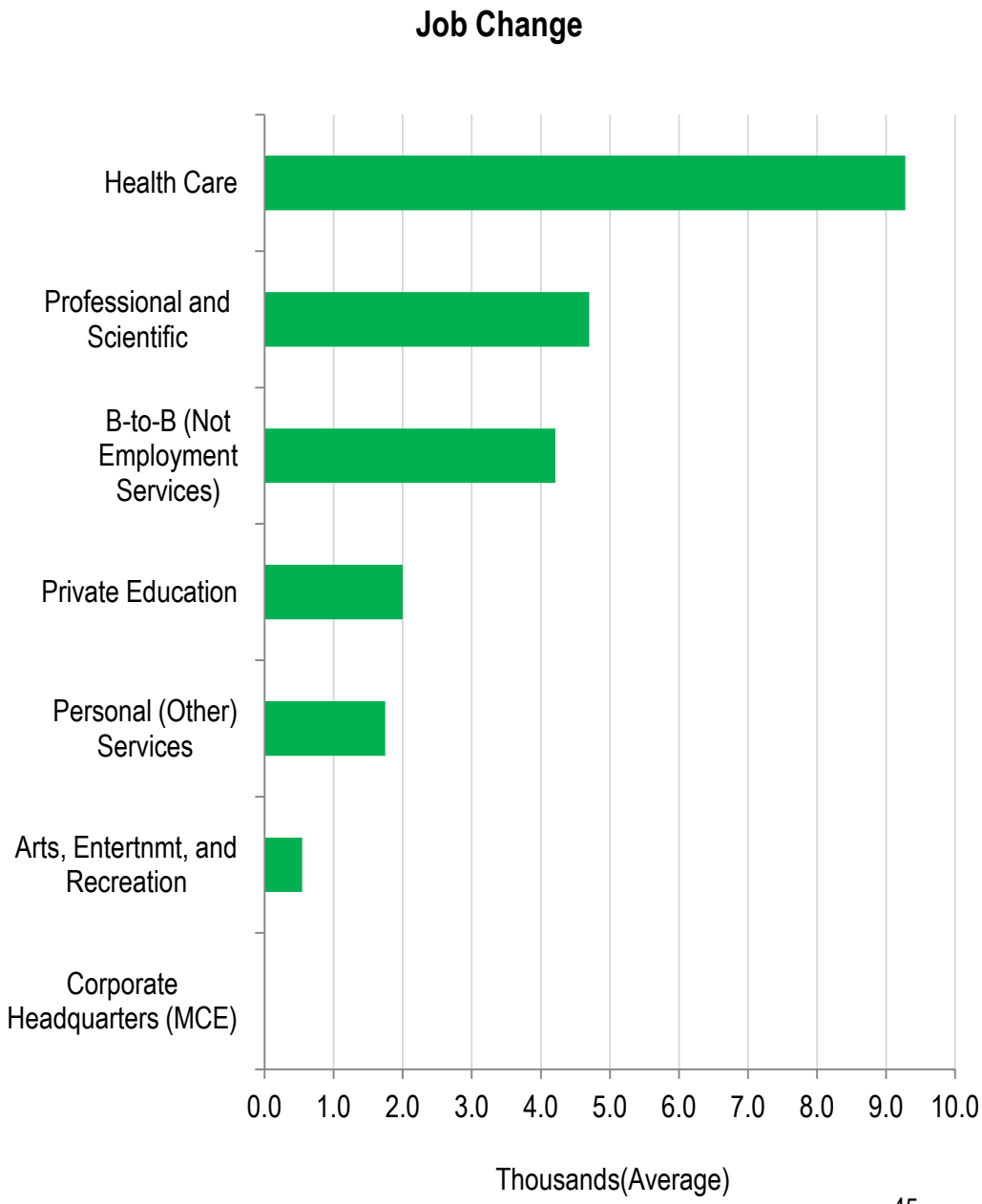
Source: Bureau of Labor Statistics, cber.co.

Solid Growth Sectors

- Average employment for the first 9 months of 2016 shows this category of sectors added 22,500 jobs compared to the same period last year.

- The Health Care Sector led job growth, followed by the PST sector. On the other hand, the Management of Corporations and Enterprises Sector showed no change from last year.

- In 2014, this category accounted for 32.4% of total job gains and 32.0% of total employees.



Source: Bureau of Labor Statistics, cber.co.

Annual Employment Situation for the Solid Growth Category

Over the past two decades the following sectors generally posted gains. The category posted stronger jobs gains during the 1990s than the 2000s.

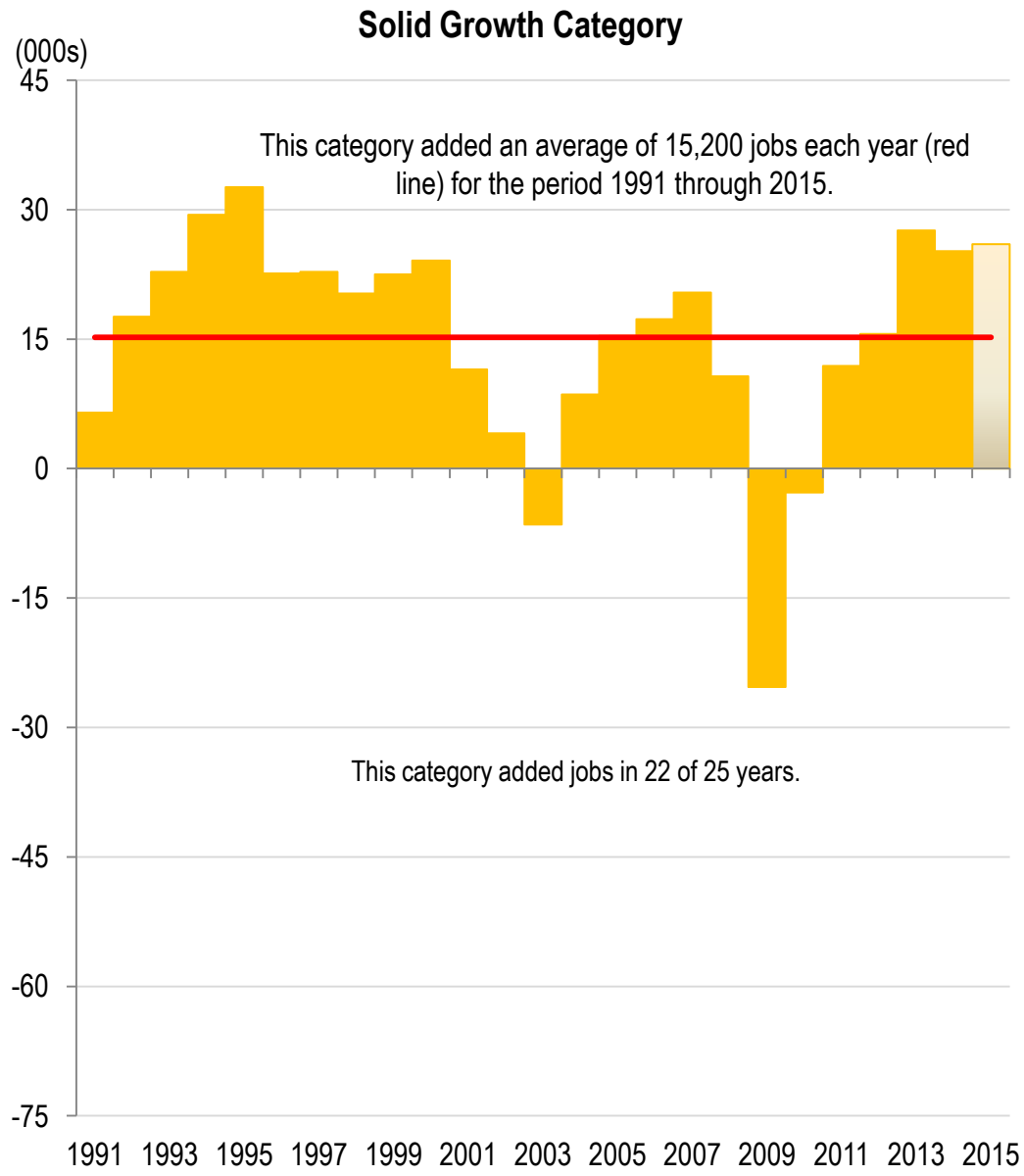
- Wholesale Trade
- Retail Trade
- State (Not Higher Education)
- Higher Education
- Local (Not K-12 Education)
- K-12 Education
- Accommodations and Food Services

Total employment for this category was:

1994 685,400 workers, 39.0% of total employment.

2004 848,000 workers, 38.9% of total employment.

2014 962,500 workers, 39.0% of total employment.



Source: Bureau of Labor Statistics, cber.co.

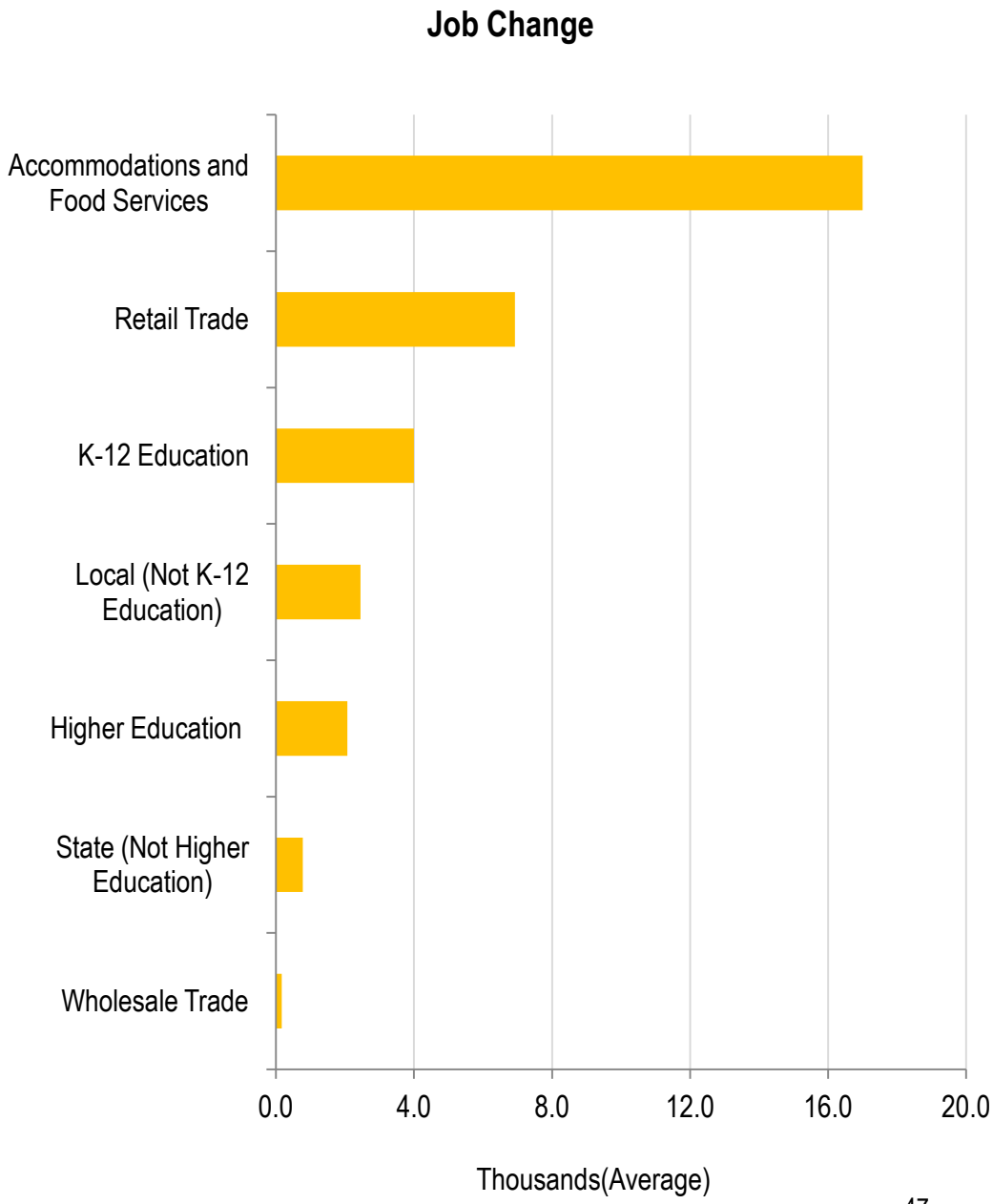
Limited Growth Sectors

- Average employment for the first 9 months of 2016 shows this category of sectors added 33,400 jobs compared to the same period last year.

- The Leisure and Hospitality Sector (AFS + AER) has had a strong year. Most likely the number of jobs added in the AFS sector is significantly overstated and will ultimately be reduced in benchmark revisions.

- Retail trade has also posted strong job gains as a result of population and job growth and another strong tourism season.

- In 2014, this category accounted for 29.8% of total job gains and 39.0% of total employees.



Source: Bureau of Labor Statistics, cber.co.

Annual Employment Situation for the Volatile Category

Over the past two decades the sectors listed below were the primary source of volatility in total employment.

The sectors are:

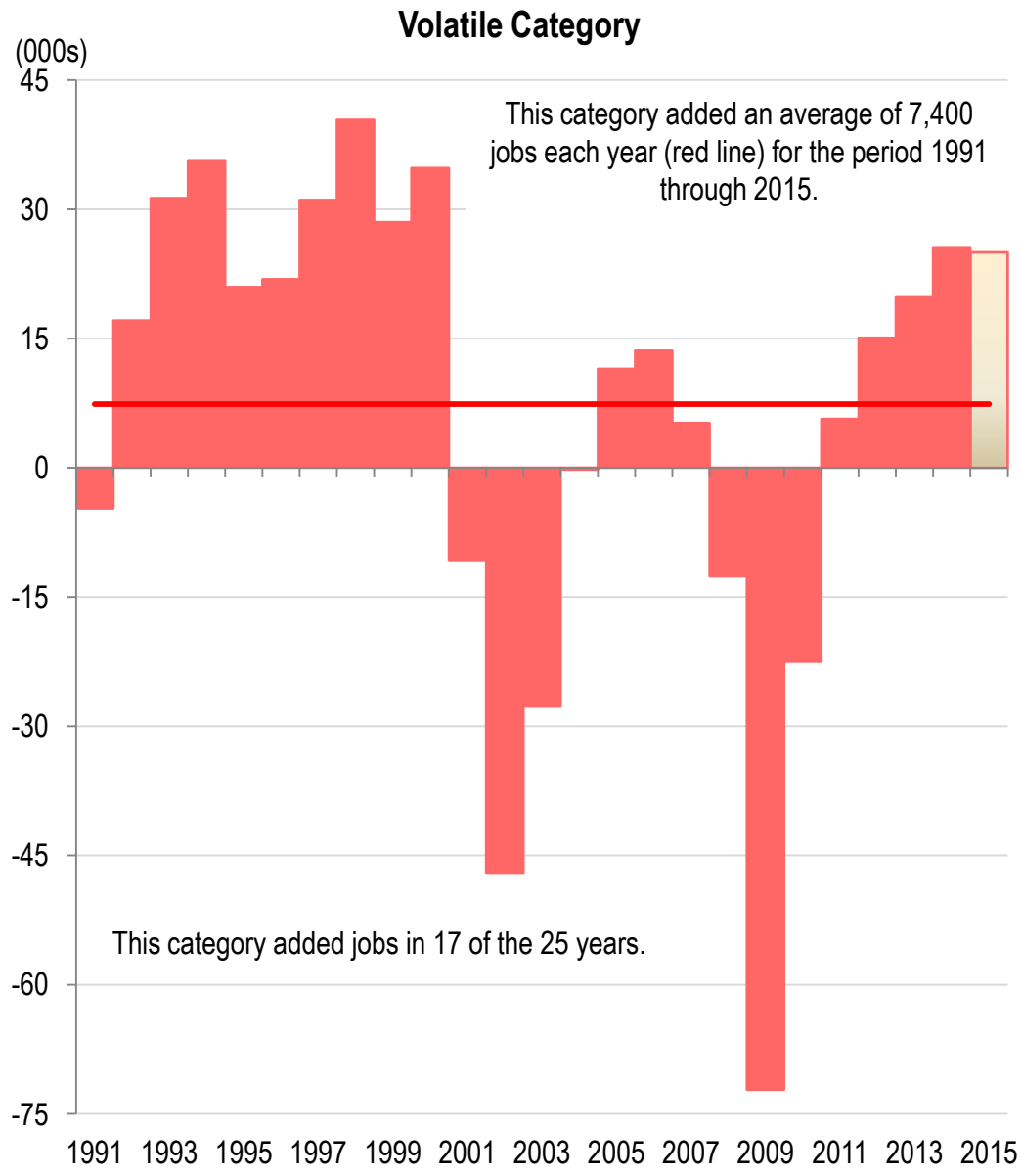
- Natural Resources and Mining
- Construction
- Manufacturing
- Transportation, Warehousing, and Utilities
- Employment Services
- Financial Activities
- Information
- Federal Government

Total employment for this category was:

1994 625,400 workers, 35.6% of total employment

2004 716,000 workers, 32.8% of total employment

2014 714,300 workers, 29.0% of total employment



Source: Bureau of Labor Statistics, cber.co.

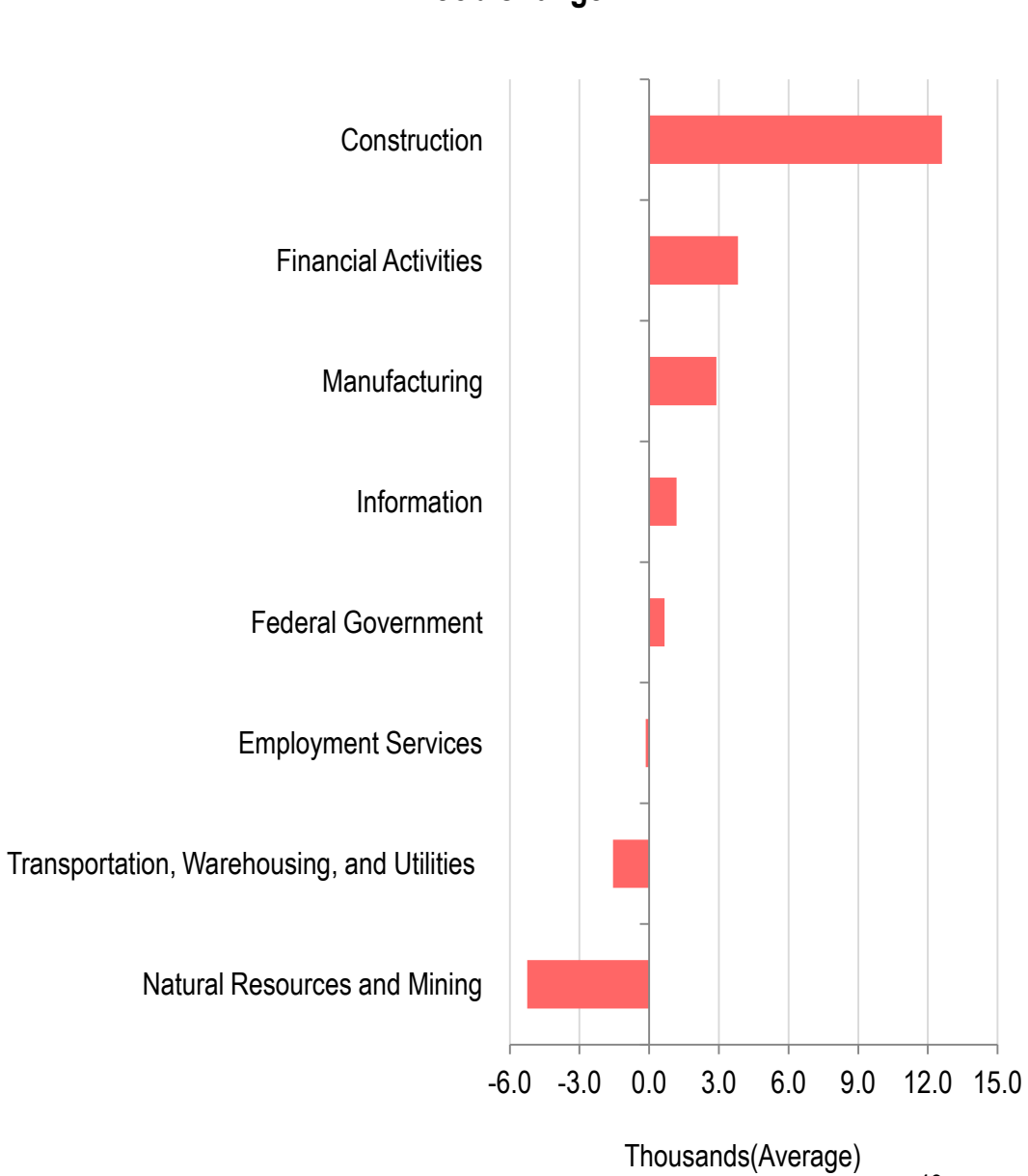
Volatile Sectors

- Average employment for the first 9 months of 2016 shows this category of sectors added 14,200 jobs in 2016 compared to the same period last year.

- For this period, the Construction, Financial Activities, and Manufacturing Sectors led job growth.

- It is likely the job data for the Employment Services and TWU sectors are understated. The job losses in the extractive industries are continuing, but at a declining rate.

- In 2014, this category accounted for 38.3% of total job gains and 29.0% of total employees.



Source: Bureau of Labor Statistics, cber.co.

Summary of Performance to cber.co 2016 Employment Forecast

This chart shows the year–to-date accuracy of the 2016 cber.co forecast

On this chart, the forecast ranges for the categories are:
- Strong Growth – green box.
- Solid Growth – yellow box.
- Volatile – red box.
- Total Employment – grey box.

The short blue lines indicate the level of change in the average employment for the first 9 months of 2016.

The overall forecast was within the projected forecast range (grey box).

Average employment for the first 9 months of 2016 is 70,000 greater than the same period in 2015.

Source: Bureau of Labor Statistics, cber.co.

The Colorado Economy

Employment for Major Industries from the Volatile Category

Impact of Industries in the Volatile Category

The Strong Growth and Solid Growth categories provide consistent job growth over time.

The Volatile category tends to have a greater influence on the amount of change in total job growth than the Strong Growth and Solid Growth categories because the industries in the Volatile category do not always have a standard business cycle that dictates when jobs are added or lost.

The following charts look at employment in four industries that are responsible for the "unpredictable changes" in the number of workers in the Volatile category. They illustrate that there are factors other than a standard business cycle that drive change in their employment.

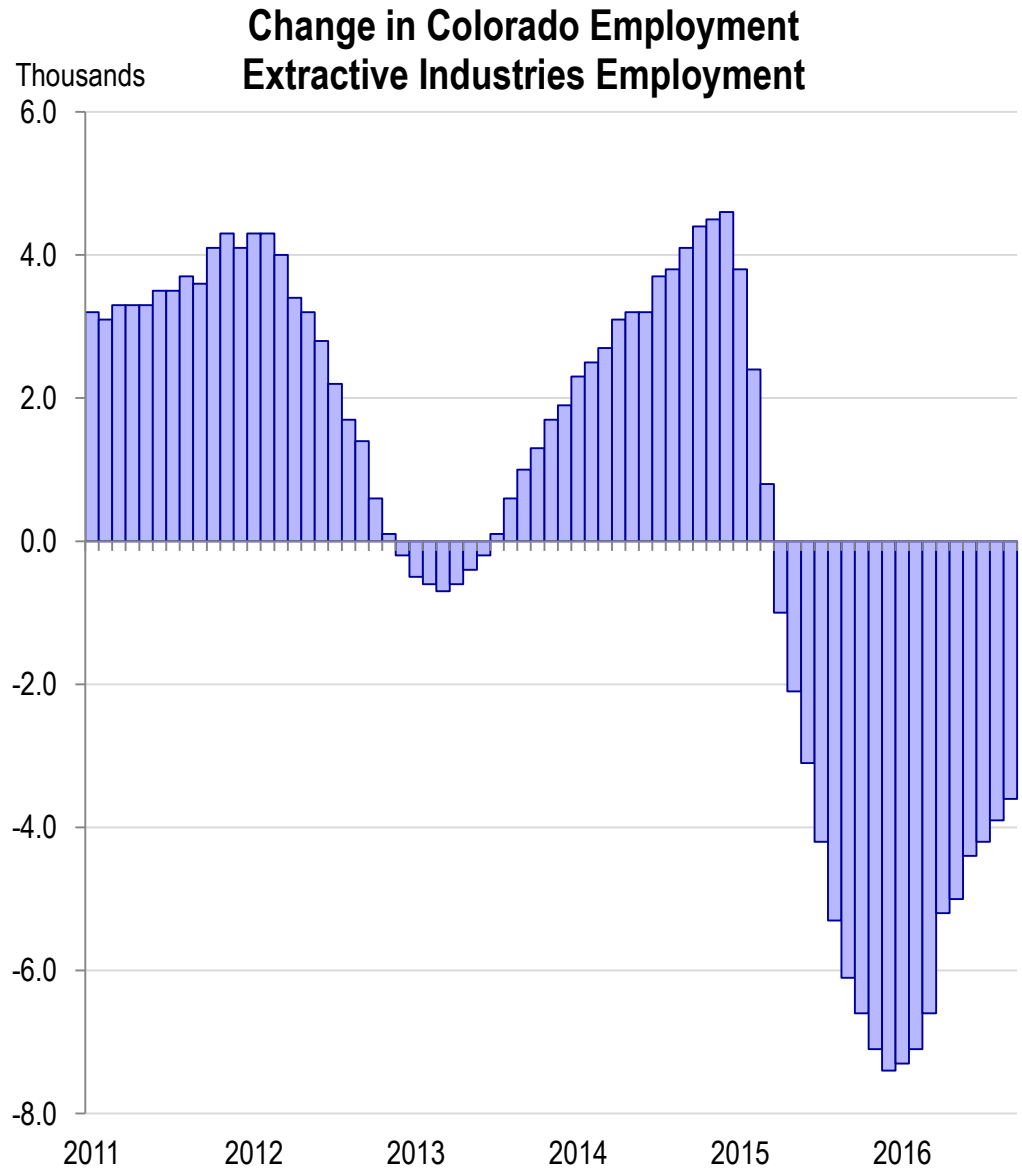
Y-O-Y Monthly Employment Change in Colorado Employment – Extractive Industries

The year-over-year monthly change in employment in the Colorado extractive industries slowed in 2012. Jobs were lost between December 2012 and June 2013. The sector added jobs beginning in the second half of 2013. That growth continued through 2014.

The industry added jobs at a slower rate in Q1 2015, but has lost jobs since then.

The greatest number of jobs lost was in December 2015. Throughout 2016 the number of y-o-y jobs lost has decreased each month.

Monthly employment appears to have bottomed out around 26,000 workers. This is down from a peak of 36,400 workers in December, 2014.



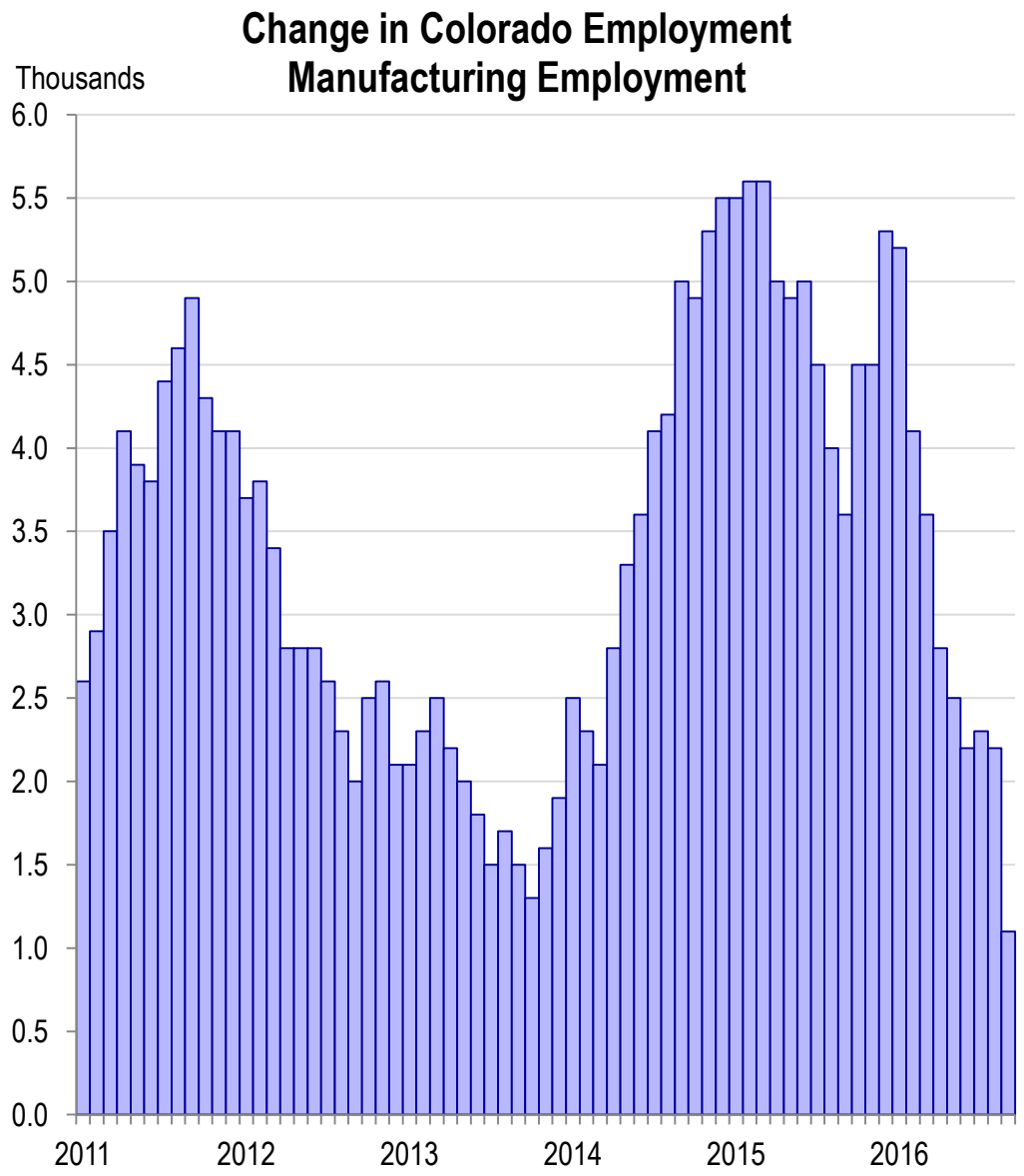
Source: Bureau of Labor Statistics NSA, cber.co.

Y-O-Y Monthly Employment Change in Colorado Employment - Manufacturing

Since Q4 2010 the year-over-year monthly change in Colorado manufacturing employment has been both positive and volatile.

Between 2011 and 2016 the monthly y-o-y change in employment has fluctuated between 1,100 and 5,600 jobs.

In September 2016, there were 1,100 more manufacturing jobs than the same period in 2015. Since December 2015, manufacturing jobs have been added at a declining rate; however, Colorado manufacturing is performing better than U.S. manufacturing.



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

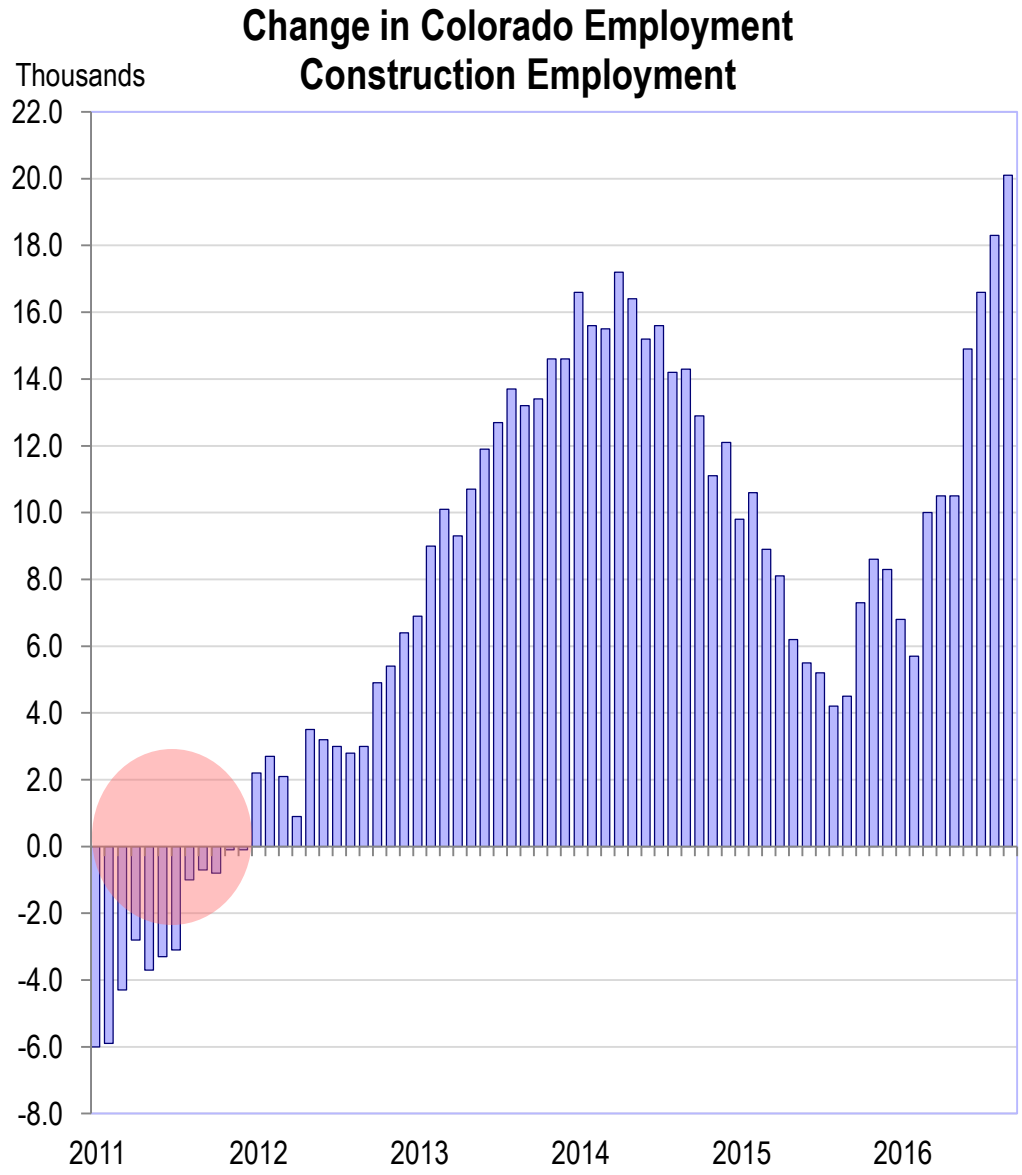
Y-O-Y Monthly Employment Change in Colorado Employment – Construction

The year-over-year monthly change in Colorado construction employment was negative throughout 2011 (red).

For this 5+ year period (2011 through 2016) the monthly y-o-y change has been volatile The largest change for the period 2011 through 2015,17,200 jobs, occurred in April 2014.

Between that peak and August 2015 construction employment increased at a decreasing rate. After bottoming out in August 2015, the level of job growth has rapidly trended upwards.

In September 2016, there were 20,100 more construction jobs than the same period in 2015, a new peak for the period 2011 to 2016. This number may be overstated given difficulties in finding trained workers.



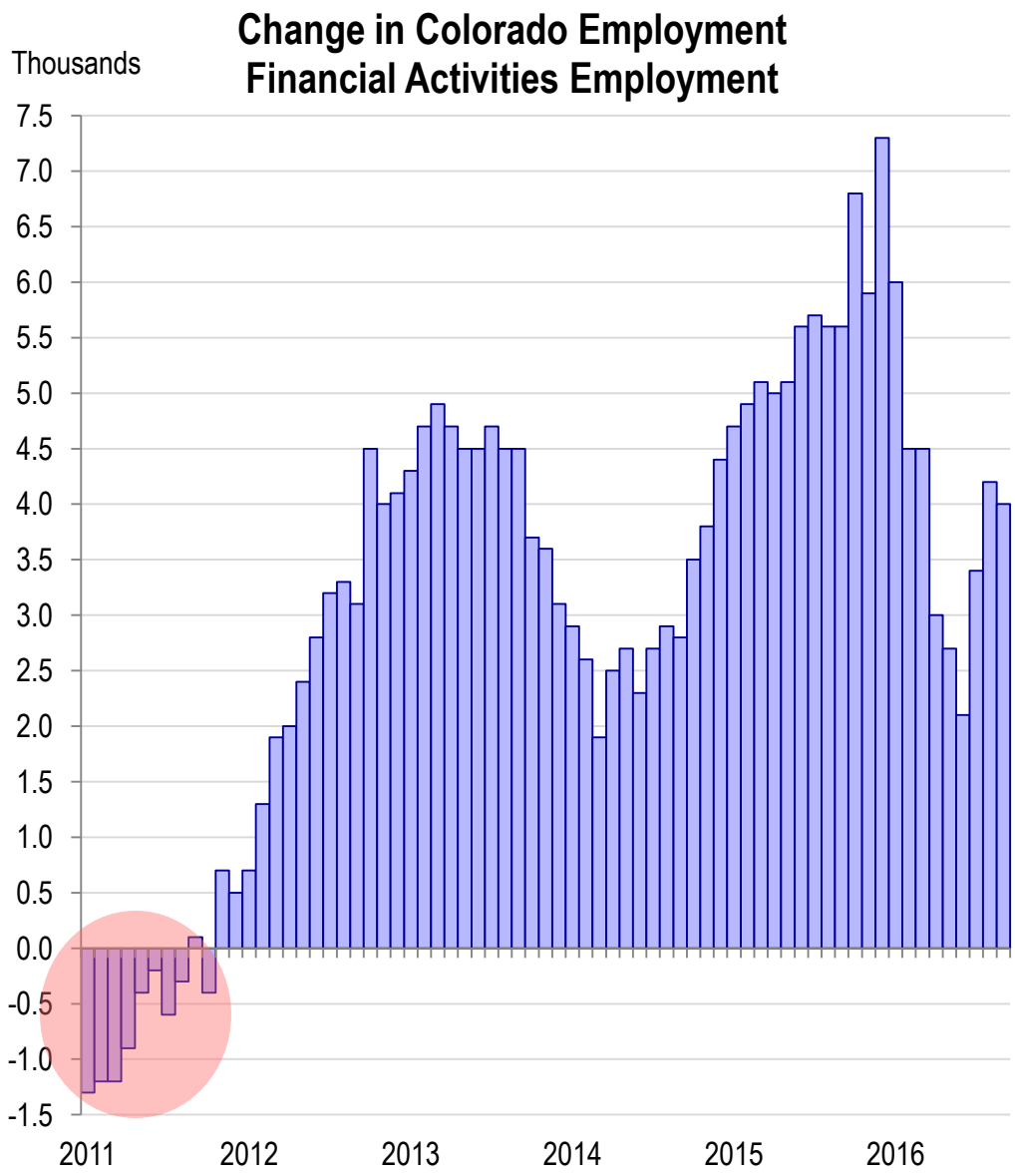
Source: Bureau of Labor Statistics NSA, cber.co.

Y-O-Y Monthly Employment Change in Colorado Employment – Financial Activities

After the Great Recession, the financial sector recorded:

- Job losses throughout most of 2011.
- Strong job growth in 2012.
- Steady job growth for the first 3 quarters of 2013.
- Job growth at a slower rate for Q4 2013 through Q3 2014.
- Job growth at an accelerating rate from Q4 2014 through Q4 2015.
- Job growth at a declining rate for the first half of 2016.

In September 2016, there were 4,000 more financial activities jobs than the same period in 2015.



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

The Colorado Economy
Additional Information about Oil and Gas

What is Happening in the Extractive Industries?
The Economic Impact of Job Losses

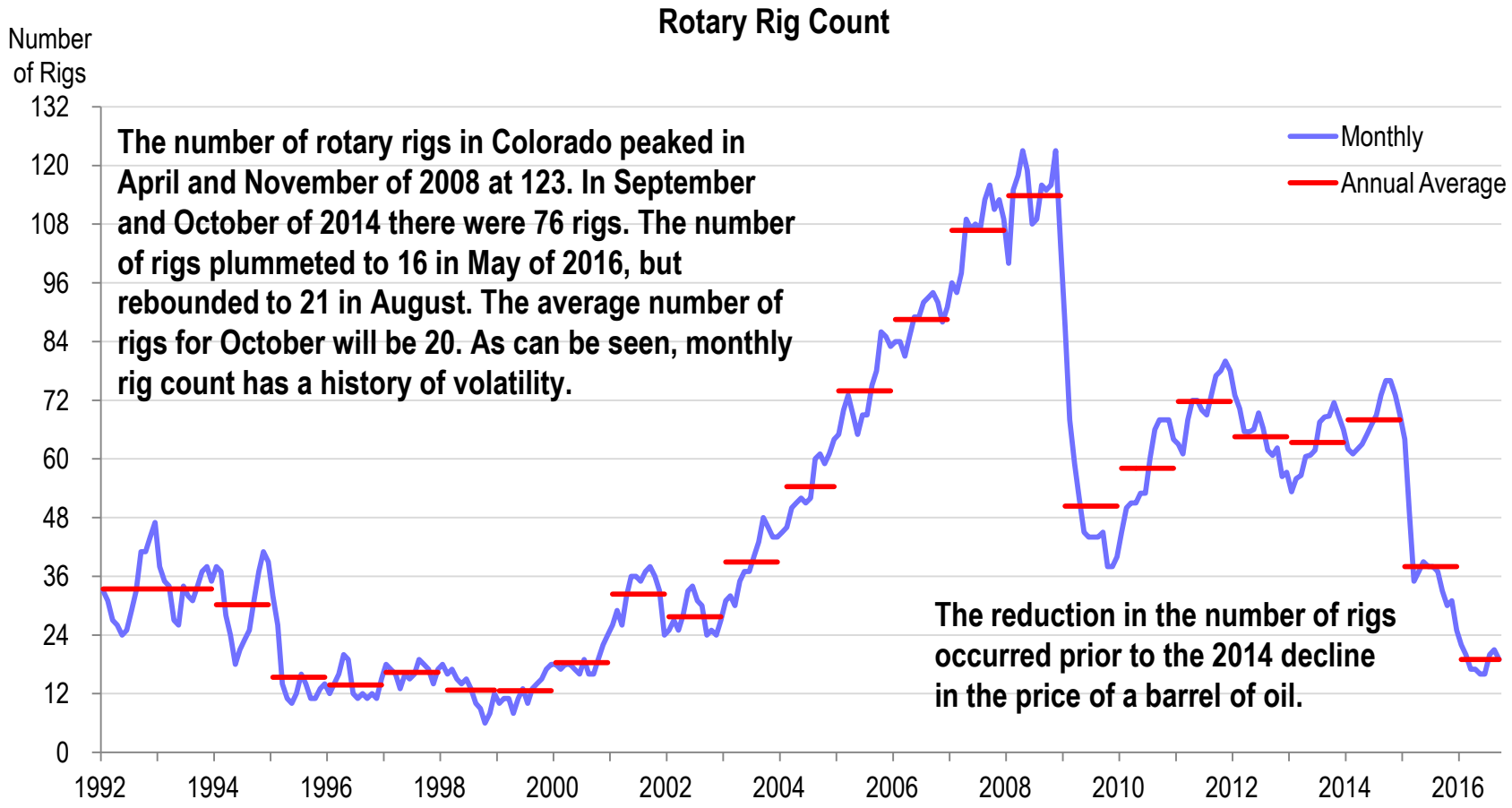
Changes in employment in the oil and gas industry may result in the loss of as many as 2,000 oil and gas workers and 4,500 support workers, as defined by BLS and IMPLAN. This decrease in employment would result in a loss of $3.2 billion in economic activity, a total loss of 15,464 jobs, a loss of $1.1 billion in labor income, and a loss of $1.7 billion in value added, or GDP growth. The shock was felt primarily in Weld, Mesa, and Denver counties. It had less of an impact on the state than previous "oil and gas busts" because the state economy has become larger and more diversified.

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	6,500	$568,165,610	$791,157,414	$ 1,789,935,071
Indirect Effect	3,971	$293,393,813	$473,300,594	$750,478,580
Induced Effect	4,993	$248,567,944	$425,164,615	$689,831,836
Total Effect	15,464	$ 1,110,127,367	$1,689,622,622	$ 3,230,245,487

Source: IMPLAN.

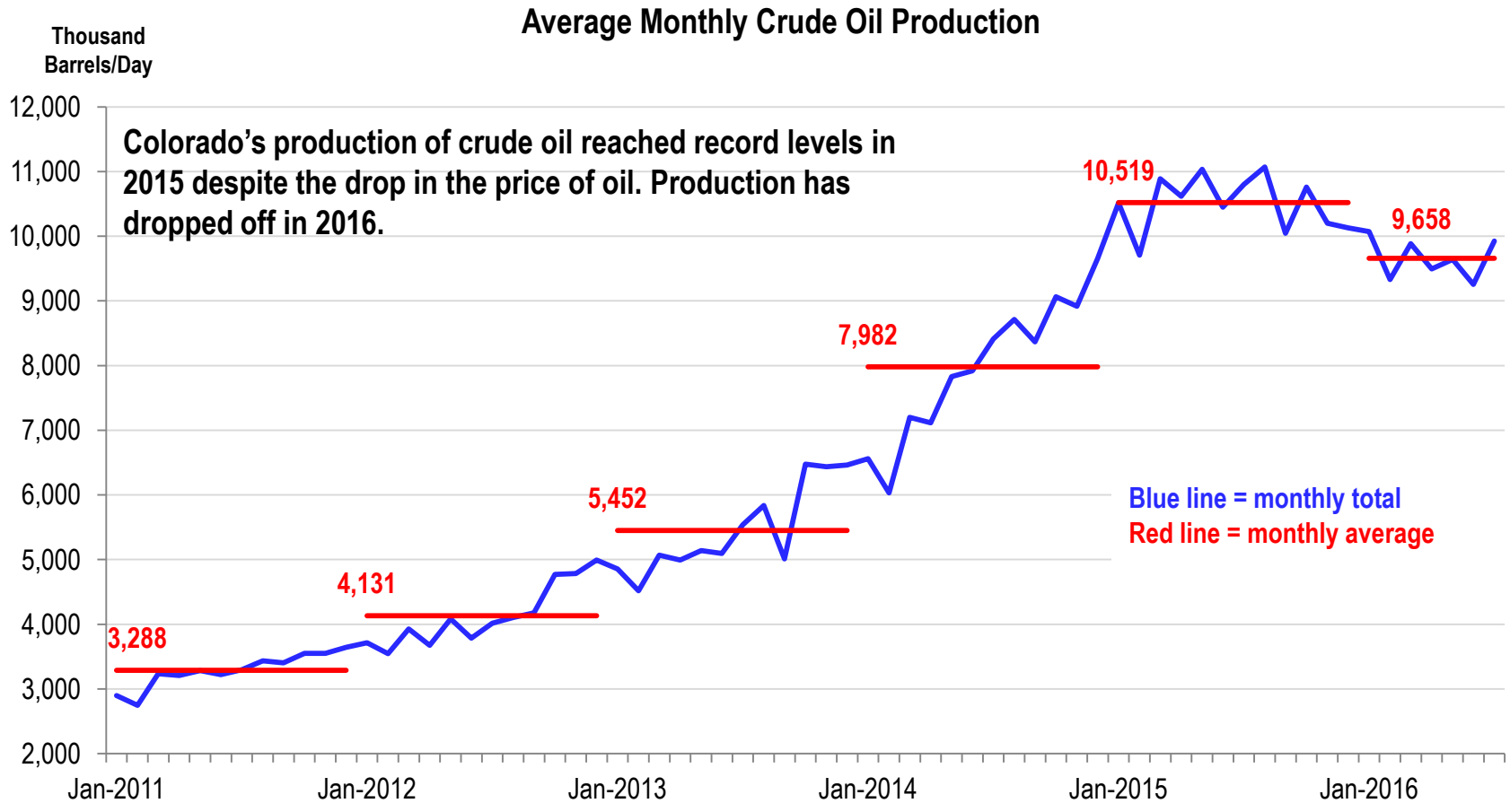
Source: IMPLAN, cber.co.

Colorado Monthly Average Rotary Rig Count 1987 to 2016



Source: Baker-Hughes, cber.co.

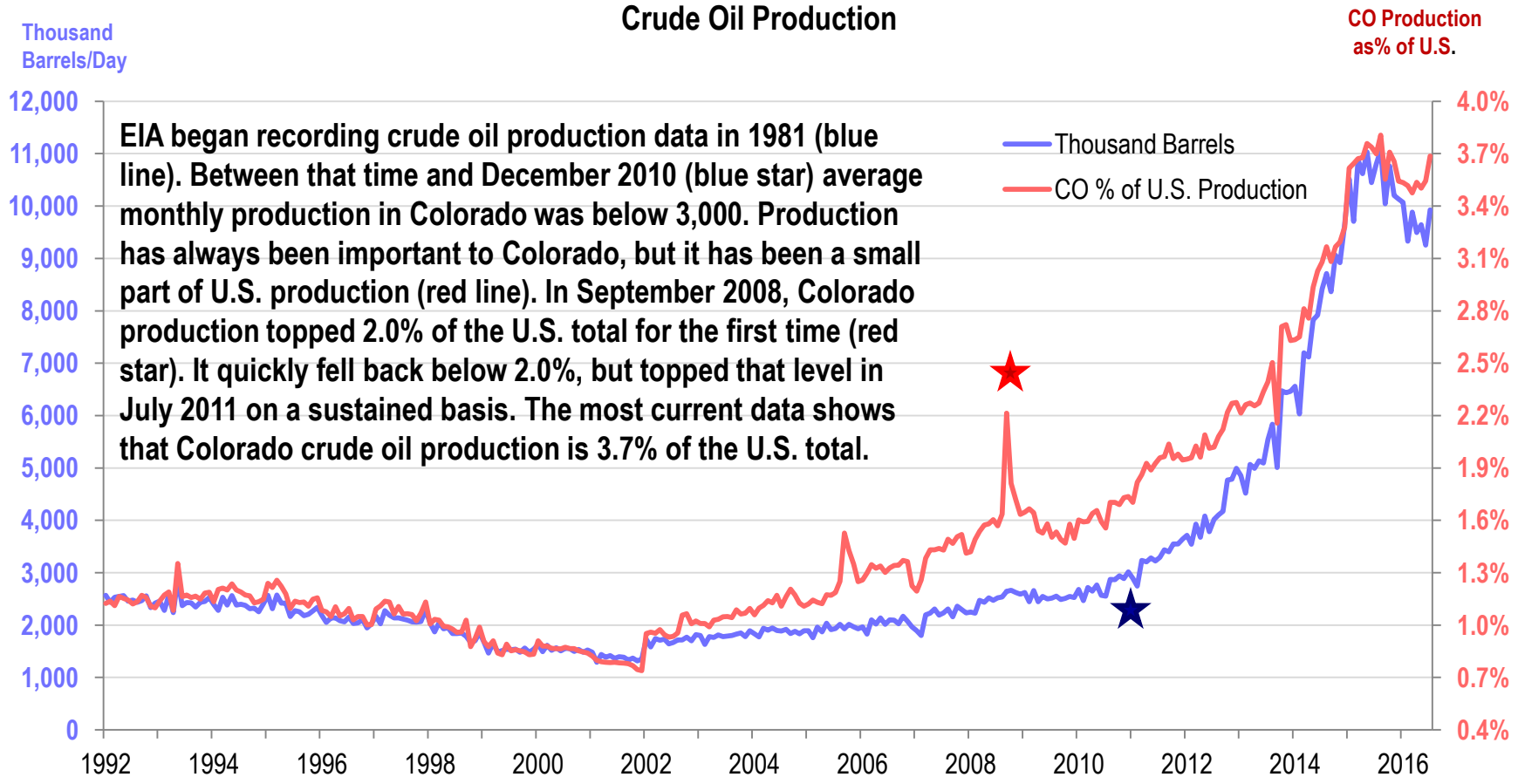
Average Monthly Colorado Crude Oil Production 2011 to 2015 (Thousand Barrels)



Source: EIA, cber.co.

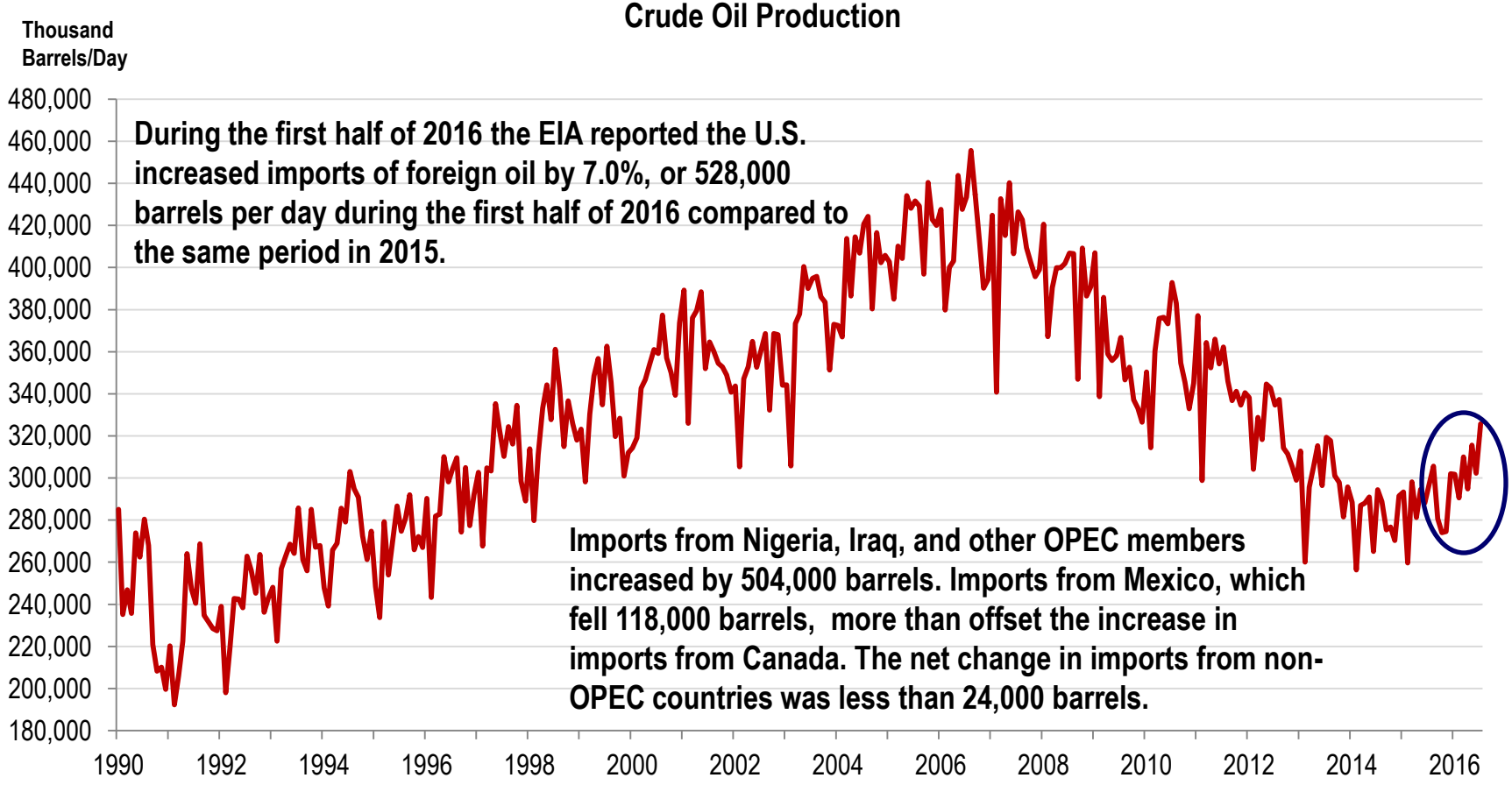
Monthly Colorado Crude Oil Production

Thousand Barrels/Day vs. % of U.S. Production



Source: EIA, cber.co.

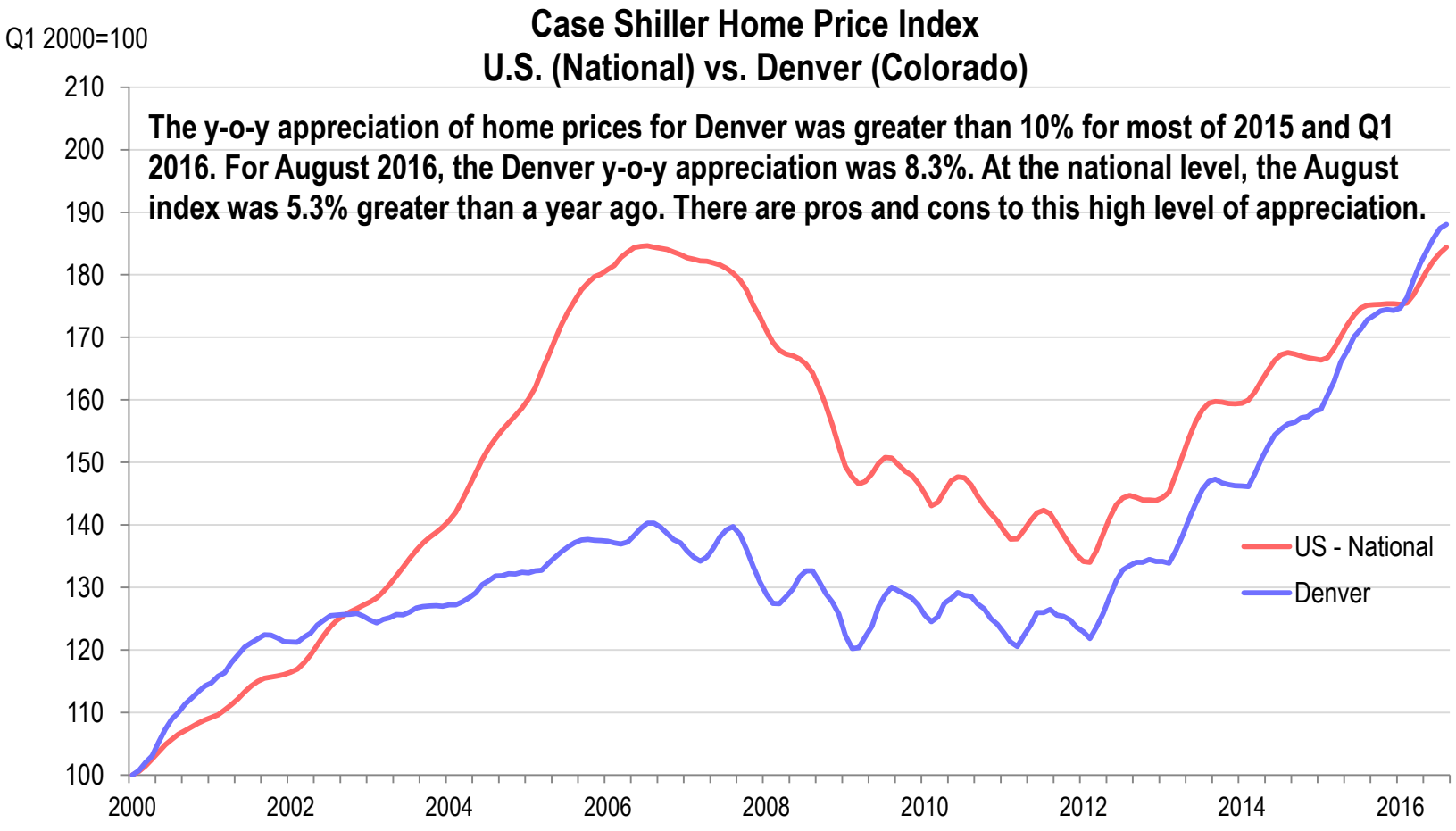
Imports of Foreign Oil
1990 to 2016 (Thousand Barrels)



Source: EIA, cber.co.

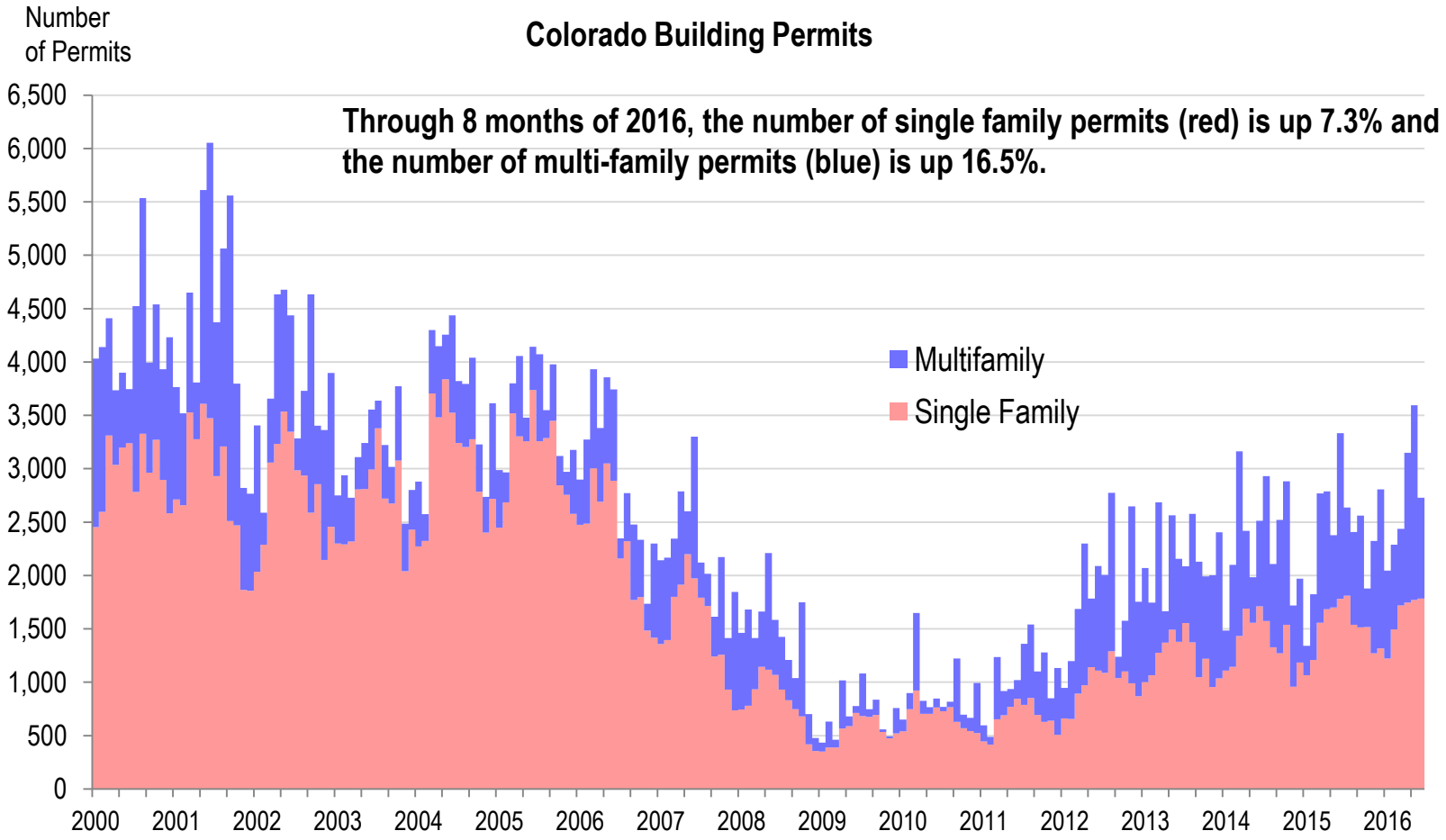
The Colorado Economy
Housing and Construction

Case Shiller Home Price Index National vs. Denver (Colorado)



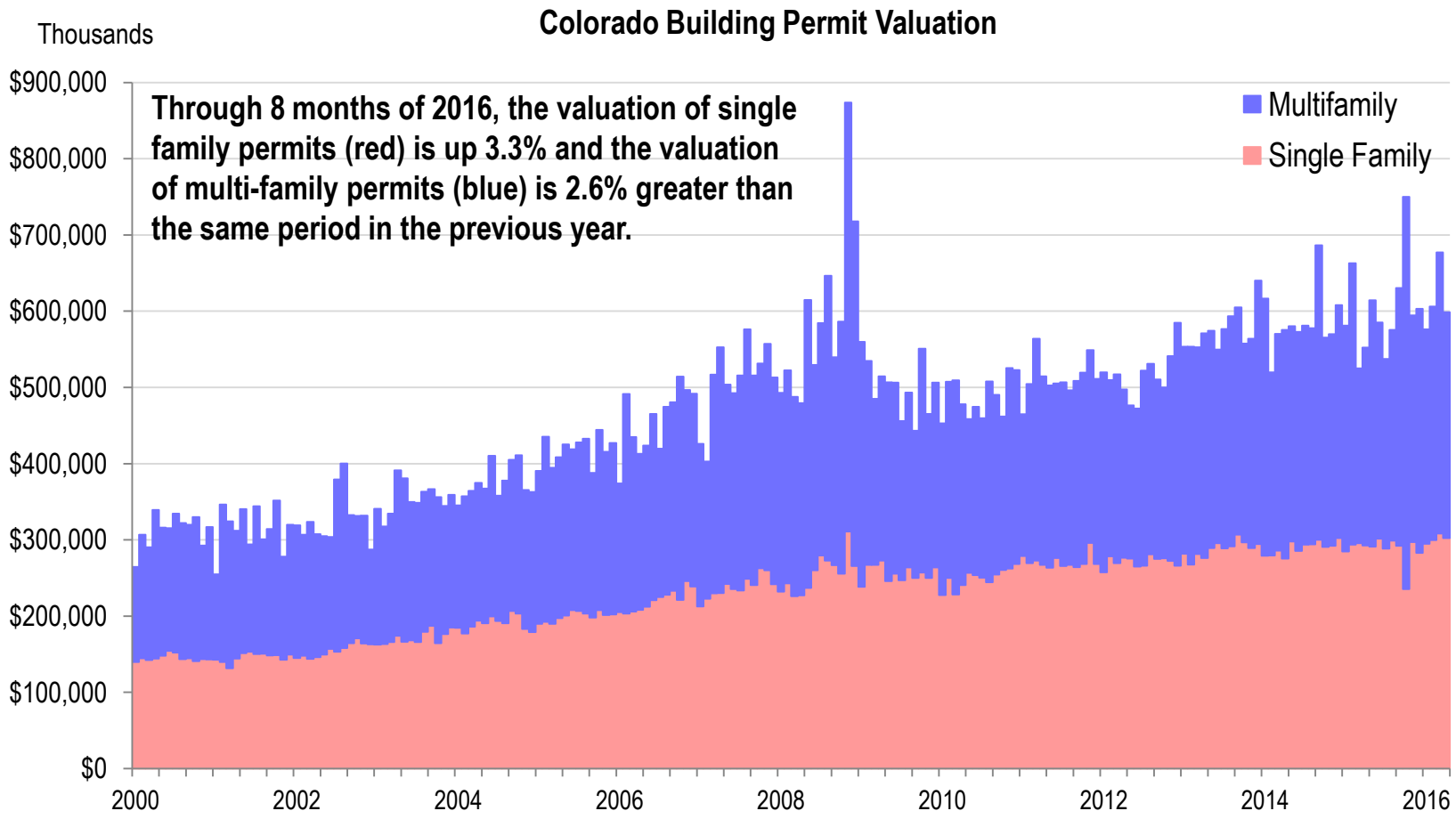
Source: S&P Core-Logic Case-Shiller, cber.co.

Colorado Residential Building Permits - Units



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

Colorado Residential Building Permits - Valuation



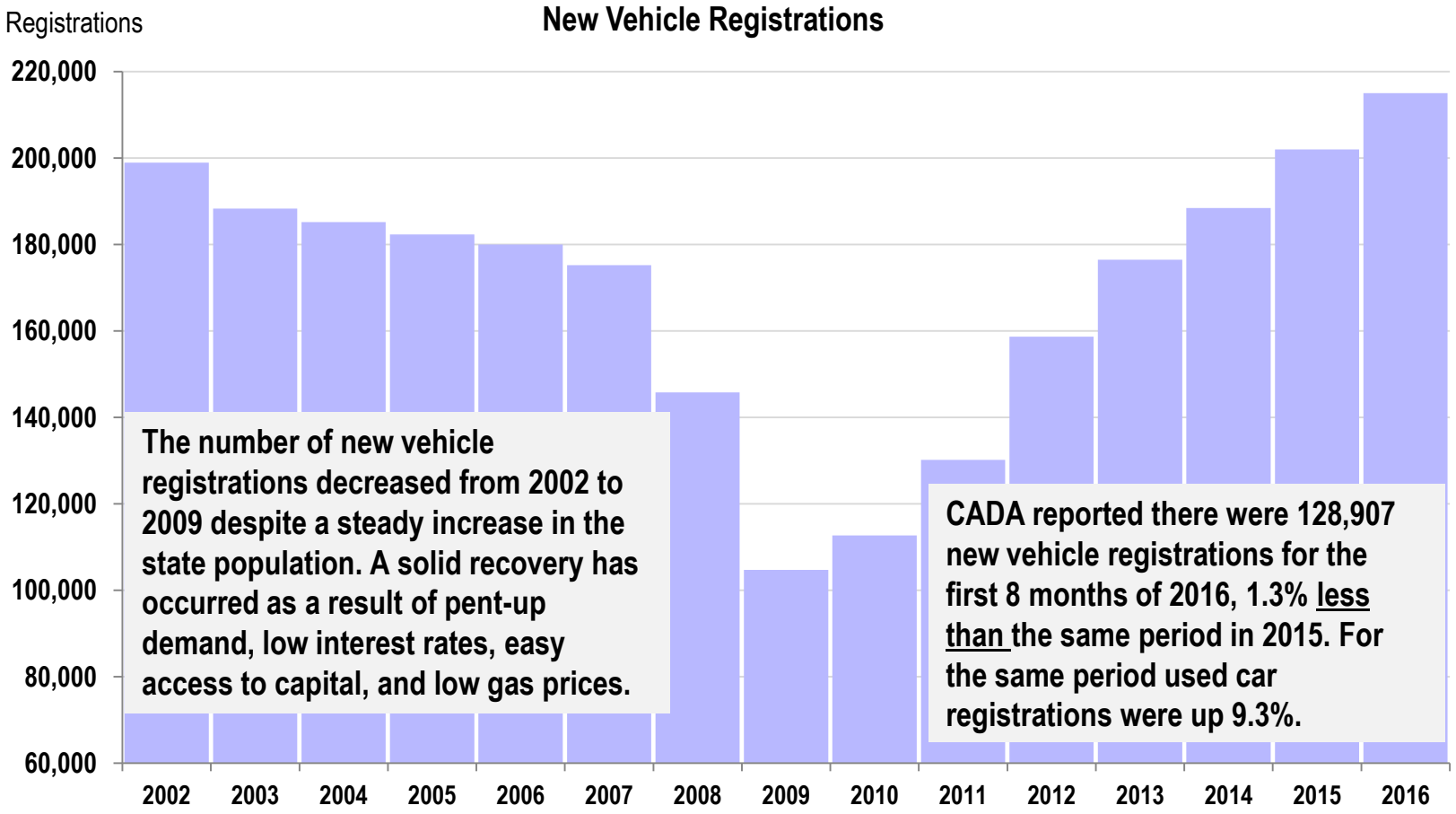
Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co. Note: Not adjusted for inflation.

The Colorado Economy
DIA and Vehicle Registrations

DIA Passengers

Source: flydenver.com, cber.co.

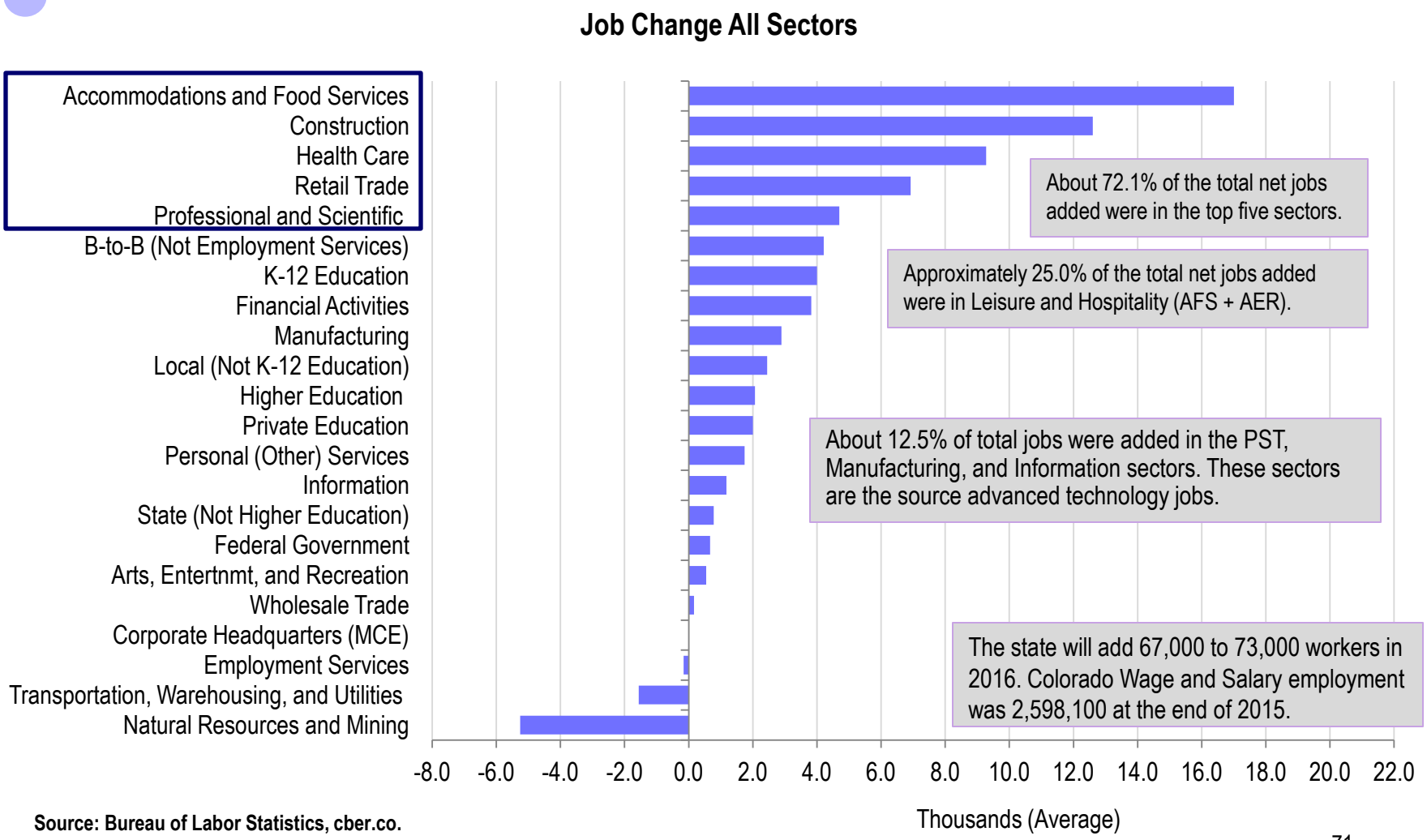
New Vehicle Registrations Colorado



Source: Colorado Auto Dealers Association, cber.co.

The Colorado Economy
Summary

Job Changes First 9 Months of 2016 vs. Same Period in 2015



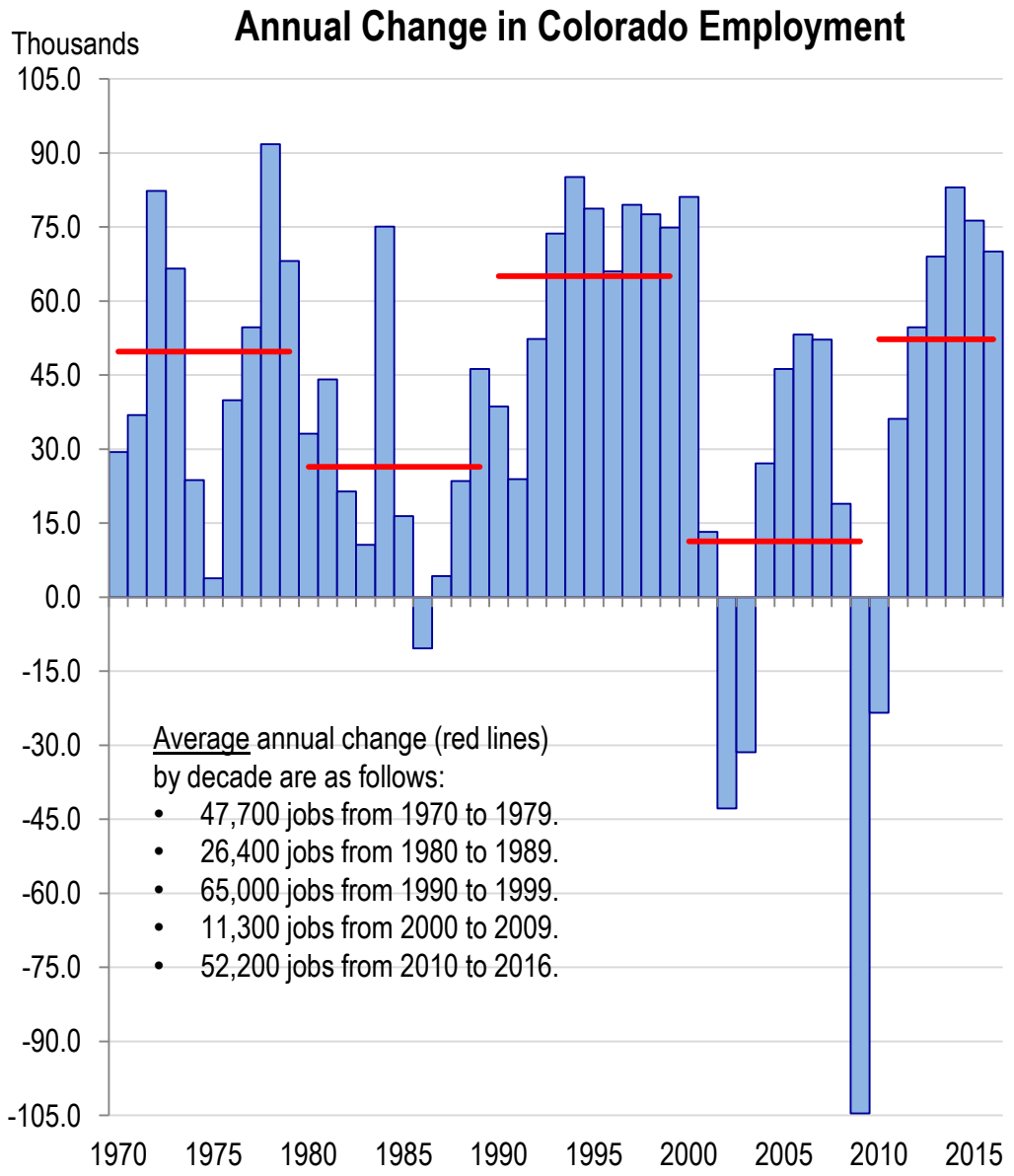
Source: Bureau of Labor Statistics, cber.co.

Annual Employment Change in Colorado Employment

The state will add 67,000 to 73,000 jobs in 2016. Colorado employment will increase by 2.7% to 2.9%.

After 9 months, the state is on track to add 70,000 jobs this year, prior to the BLS benchmark revisions.

The Colorado Department of Labor and Employment has indicated that the Q1 2016 jobs data may be overstated by as much as 10,000.



Source: Bureau of Labor Statistics, cber.co.

Summary of the Colorado Economy

Reasons to Feel Good About the Colorado Economy

The best things the Colorado economy has going for it are potential, momentum and diversified growth. Other factors include:

- Construction growth is on tap for 2016 and 2017, although the level of growth may be constrained by qualified workers.
- Tourism is coming off a record year in 2015 and is strong in 2016. Momentum should carry forward into 2017…if it snows soon.
- Colorado real GDP growth is broad-based. As a result, it continues to outpace U.S. real GDP growth.
- Strong growth is expected in the number of business establishments in 2016 and 2017 – although most of the growth is along the Front Range.
- Record passenger traffic at DIA is expected to continue.
- Colorado job growth is broad-based and includes most sectors.
- Job losses in the oil and gas industry appear to have bottomed out. There is an outside chance the sector might add jobs in 2017.
- Agriculture prices are expected to improve in the months ahead.

Red Flags that May Stymie Economic Growth

The following factors could cause the Colorado economy to grow at a pace that is slower than the current rate:

- Lack of qualified workers to fill key positions. The quality of service at some businesses has declined since the state's unemployment rate dropped below 4.5%.
- Construction is directly and indirectly responsible for the expansion of the local economy. An abrupt slowdown in construction could cause a concurrent slowdown in a number of industries. Currently the sector is being constrained by a lack of a sufficient number of qualified workers.
- Employment in the manufacturing sector is slowing.
- Lack of affordable housing. This is a problem that is relevant to most parts of the state. To date it has been an inconvenience, but has not been a deterrent to job growth.
- On the anecdotal side…lines in restaurants seem to be shorter.
- After a strong start to the year, new car registrations have slowed, although used car sales are strong.

cber.co Colorado Economic Review
Through September of 2016

This analysis is for informational purposes only. Any opinions or interpretations of data are those of the presenter. As such, they do not represent the viewpoints of any group or particular organization.

For further information contact Colorado-based Business and Economic Research (cber.co).

For additional information contact cber.co at cber@cber.co.

ABOUT THE AUTHOR

Gary Horvath has produce 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.

In addition, 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, which is part of OEDIT's early stage and proof of concept grant programs.