cber.co Colorado Economic Forecast 2018 Abbreviated Version

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The Global and U.S. Economy

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Summary of Key Data United States and Global Economies

United States

Real GDP – In 2018, annual real GDP growth will be stronger than 2017. It will be in the 2.3% to 2.7% range.

Real Personal Consumption – Annual personal consumption will be in the 2.3% to 2.7% range for 2018.

U.S. Employment – The U.S. will add between 158,000 to 175,000 jobs per month, or 1.9 to 2.1 million jobs in 2018.

Unemployment Rate – Average 2017 unemployment was 4.4%; look for 3.9% to 4.3% in 2018.

Consumer Price Index – The CPI is estimated to be 2.1% in 2017 and 2.3% in 2018.

Corporate Profits – The most recent corporate profits, for July 2017, were up 9.8% compared to July 2016.

Price of a Barrel of Oil (WTI) – Oil closed the year at \$60 per barrel. It will be in the \$55 to \$65 range for 2018.

Case Shiller Housing Prices – YOY U.S. home prices for October were +6.2%. Appreciation is trending upwards.

Standard and Poor's 500 – The S&P 500 posted a gain of 19.4% in 2017. For the near-term, the bull will continue to run in 2018.

Global GDP

Global and Category Real GDP Growth Global 3.0% Mature 2.1% Emerging 3.8% The global, mature, and emerging economies will post real GDP growth for 2018 similar to 2017.

Mature Economies (2.1%)

U.S. 2.6% Japan 1.0% Eurozone 1.9%

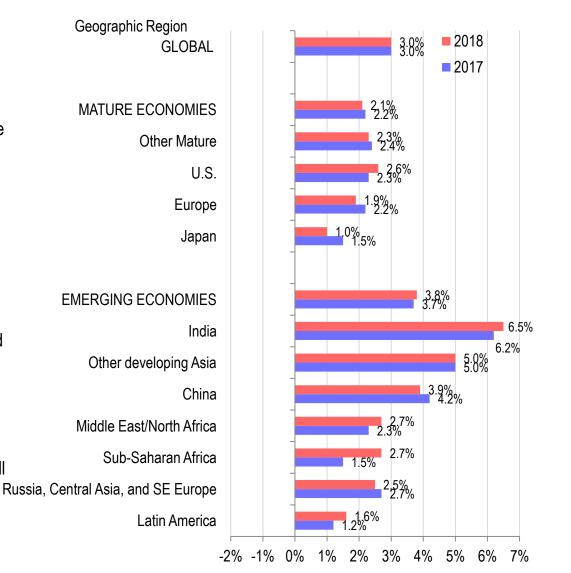
Emerging Economies (3.8%)

Sub-Saharan Africa 2.7% Russia, Central Asia and Southern Europe 2.5% Latin America 1.6% India 6.5% China 3.9% Middle East and North Africa 2.7%

Source: The Conference Board.

Global Real GDP Growth

Real GDP Growth 2017 vs. 2018



The global real GDP forecast is based on the Conference Board global forecast. TCB is more conservative than the popular IMF forecast.

Real GDP growth for 2018 vs. 2017 will be:

- 3.0% global growth, similar to 2017.
- 2.1% mature economies, down from 2.2%.
- 3.8% emerging economies, up from 3.7%.

Mature – The U.S. will lead growth in the mature economies at 2.6%. Japan will experience weak growth and Germany will lead the Eurozone.

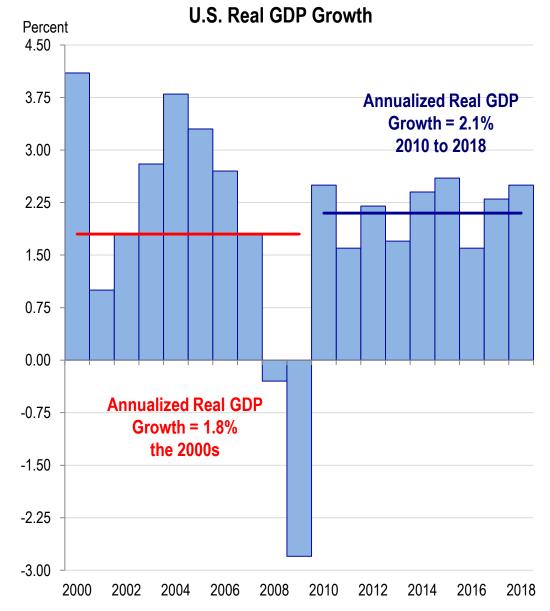
Emerging - In 2018, the Chinese economy is expected to grow at 3.9%. India will lead the region with a 6.5% rate of growth. The Latin America economy turned positive in 2017; it will post stronger gains in 2018.

Source: The Conference Board (December, 2017), cber.co.

U.S. Real GDP Growth C+I+G+X

- Real GDP will grow at a rate between 2.3% to 2.7% in 2018.
- As is usually the case, personal consumption will drive real GDP growth. It will increase by 2.3% to 2.7%.
- With the passage of the tax reform, business investment will increase by 4.3% to 4.7%
- Government spending will increase by 0.6% to 0.8%.
- The trade deficit will increase by 3.0% to -\$630 billion.

GDP = Consumption + Private Investment + Government Spending + Net Exports



Source: Bureau of Economic Analysis, cber.co, chained in 2009 dollars.

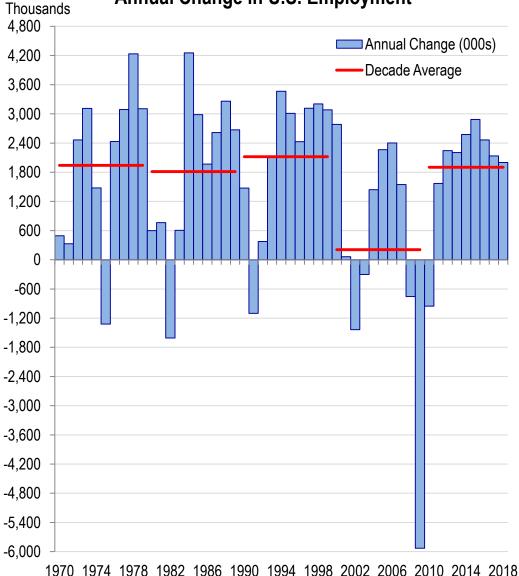
Annual Change in U.S. Employment

The U.S. added slightly more than 2.1 million jobs in 2017. Between 1.9 million and 2.1 million jobs will be added in 2018.

The average absolute change in employment for the 2010s is similar to the 1970s and 1980s and much greater than the 2000s.

The <u>average</u> annual change (red lines) by decade follows:

- 1.9 from 1970 to 1979.
- 1.8 from 1980 to 1989.
- 2.1 million from 1990 to 1999.
- 0.2 million from 2000 to 2009.
- 1.9 million from 2010 to 2018 (9 years).



Annual Change in U.S. Employment

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

The United States Economy Summary

Watch for the Following in 2018

- **Global and U.S. Real GDP** Global and U.S. real GDP growth will be similar to 2017.
- **Global Geopolitical Tensions** Syria, North Korea Which country is next?
- **Brexit** The Brexit talks have entered a more serious phase of negotiations.
- **Consumption and Investment** Consumers will continue to spend; business investment will increase.
- **Inflation** The Fed will keep inflation in check, slightly above the target rate.
- Unemployment The national unemployment rate will continue to decline; companies in more regions are challenged to find workers.
- **Jobs** The U.S. will add jobs at a slightly slower pace than 2017. This slower rate of growth is not a sign of a recession in the nearterm.
- **Rate Increases** The increase in interest rates by the Fed may reduce demand for housing and durable goods in late 2018.
- **Manufacturing** U.S. manufacturers will continue to benefit from a weaker dollar.

- **Retail Trade** The retail industry will continue to evolve, ecommerce will increase, consumers will continue to spend, and vehicle sales will be slower in 2018.
- **Corporate Profits** Corporate profits will continue to be strong in 2018.
- **Construction and Housing** Demand will continue to be strong for residential and commercial construction. Housing prices will continue to appreciate at an increasing rate.
- **Equities** The bull market will continue its run into 2018. Will it be running at the end of the year?
- **Price of Oil** The price for a barrel of oil will be in the range of \$55 to \$65.
- **Political and Social Divide** The performance of the economy is strong enough that is has taken a backseat to other issues.
- **Productivity** Labor productivity continues to be a concern.
- **Debt** Personal and government debt may become an issue if the economy slows too much. Is the savings rate too low?
- **Mother Nature** Natural disasters (hurricanes, fires, floods, etc.) will continue to disrupt state and regional economies.

The Colorado Economy

Summary of Key Data United States and Colorado

Colorado

Population - Colorado's population will increase by 90,600 in 2018 to a total of 5,720,280. Net migration will be 61,000.

Colorado GDP – The Colorado real GDP will expand by 2.8% in 2017 and in the range of 2.7% to 3.3% in 2018.

Wage and Salary Employment – Colorado will add 57,200 jobs in 2017. The range of growth in 2018 is 51,400 to 57,400 jobs.

Unemployment Rate – The unemployment rate will be in the range of 3.2% to 3.4% in 2018. Rates will be lowest in Boulder and Ft. Collins.

Consumer Price Index – The Denver-Boulder-Greeley CPI is expected to be 3.4% in 2017 with an increase to 3.3% in 2018.

Retail Trade Sales (Including Food Services) – In 2018, annual retail trade sales will increase by 4.7% to \$108.7 billion.

Construction – About 22,000 single-family permits will be issued in 2018 – if the industry can find enough qualified workers.

Case Shiller Housing Prices – The YOY rate of appreciation for October 2017 was +7.2%. The rate of YOY appreciation will decline in 2018.

There will be solid, but slower economic growth in Colorado in 2018. The rate of job and real GDP growth will outpace the U.S.

United States

Real GDP – In 2018, annual real GDP growth will be stronger than 2017. It will be in the 2.3% to 2.7% range.

Real Personal Consumption – Annual personal consumption will be in the 2.3% to 2.7% range for 2018.

U.S. Employment – The U.S. will add between 158,000 to 175,000 jobs per month, or 1.9 to 2.1 million jobs in 2018.

Unemployment Rate – Average 2017 unemployment was 4.4%; look for 3.9% to 4.3% in 2018.

Consumer Price Index – The CPI is estimated to be 2.1% in 2017 and 2.3% in 2018.

Corporate Profits – The YOY corporate profits for July 2017, the most recent data, were up 9.8%.

Price of a Barrel of Oil (WTI) – Oil closed the year at \$60 per barrel. It will be in the \$55 to \$65 range for 2018.

Case Shiller Housing Prices – The U.S.YOY rate of appreciation for October 2017 was +6.2%. Appreciation is trending upwards.

Standard and Poor's 500 – The S&P 500 posted a gain of 19.4% in 2017. For the near-term, the bull will continue to run in 2018.

The U.S. will post modest job and GDP growth in 2018.

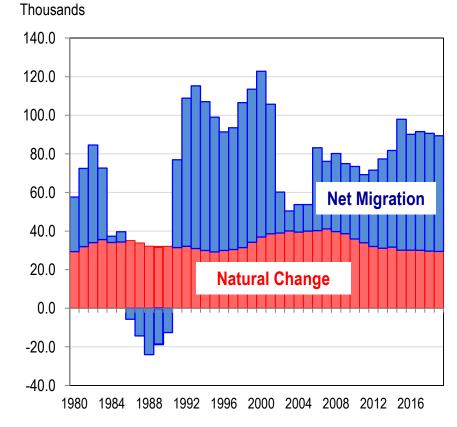
Colorado Population Components of Change

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 $3\frac{1}{2}$ decades the natural rate of change (red bars) varied from a low of 29,145 in 1995 to a peak of 41,124 in 2007. In 2018 it is projected to drop to 29,400. Fertility rates in Colorado have declined.

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 and the change in population were negative. More people moved out of state than moved into the state to escape a regional recession. During the past two recessions, net migration declined, but did not turn negative. It was difficult for people to move anywhere to escape the downturn.

The Colorado population will increase by about 90,000 for the years 2015 to 2018. In 2018 the state's population will increase by 1.6% to 5,720,280.



Change in Colorado Population 1980 - 2019

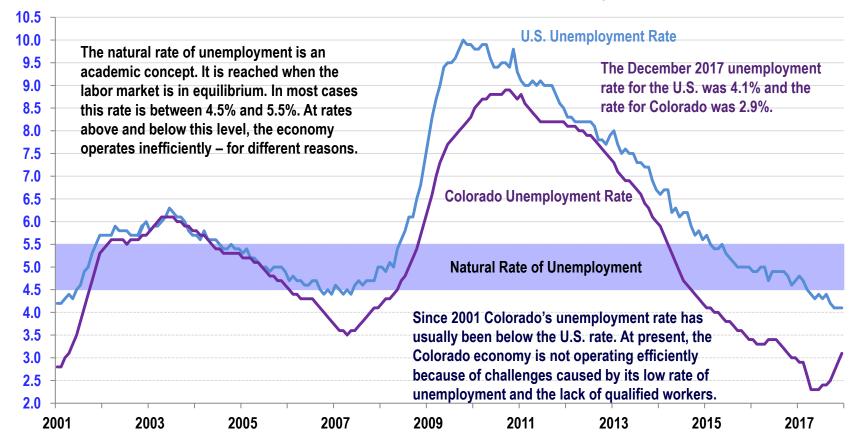
Sources: State Demography Office and cber.co.

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Unemployment Rate United States vs. Colorado

Percent

United States vs. Colorado Unemployment Rate



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

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Annual Employment Change in Colorado Employment

The state will add 51,400 to 57,400 jobs in 2017. Colorado employment will increase by 1.9% to 2.1%.

The 2018 forecast assumes that Colorado added 56,500 jobs in 2016 and 57,200 jobs in 2017. The job growth for 2015 to 2017 is steady and slightly above the average for the decade.

For the first 9 years of this decade, Colorado has added an average of 51,300 jobs.

Thousands 105.0 Annual Change 90.0 Average for Decade 75.0 60.0 45.0 30.0 15.0 0.0 -15.0 Average annual change (red lines) -30.0 by decade are as follows: 47,700 jobs from 1970 to 1979. -45.0 26,400 jobs from 1980 to 1989. 65,000 jobs from 1990 to 1999. -60.0 11,300 jobs from 2000 to 2009. 51,300 jobs from 2010 to 2018. -75.0 -90.0 -105.0 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015

Annual Change in Colorado Employment

Source: Bureau of Labor Statistics, cber.co.

The Colorado Economy in 2018

Watch for the Following in 2018

- Colorado will benefit from stable global and U.S. real GDP growth.
- Net migration will be comparable to the last two years.
- The Colorado inflation rate will increase; it will be about a point greater than the U.S. rate.
- The Colorado economy is not operating efficiently because the unemployment rate is too low.
- Colorado job growth will be slightly less than 2017.
- The Colorado real GDP growth rate will be greater than the U.S. rate and will be driven by health care, real estate, and the extractive industries.
- The state's economic growth would be slowed if the Fed Funds rate is increased 3 times in 2018.
- Manufacturing growth will be driven by a handful of larger companies.
- Retail trade is evolving. Retail sales will remain strong.

- The 2018 legislative session will be dicey as legislators struggle to address social issues, congestion, transportation issues, the state pension fund, and how much funding should be allocated to education.
- The state's information sector is quietly evolving; there will be minimal job growth, but high value added.
- The growth of the state will be constrained by the lack of workers to complete construction projects .
- There are three economies in Colorado Front Range, micropolitan areas such as Durango, and rural Colorado. It is an understatement to say that many rural counties are significantly challenged.
- Amazing things are happening at DIA and the area surrounding it Welcome Gaylord!
- The lack of snow in December and early January has left its mark on the state's ski areas. It would be worse if they had not invested in snowmaking.

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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, Broomfield Economic Development Corporation, and Colorado Photonics Industry Association. Horvath has also been the lead for the photonics/electronics cluster in OEDIT's early stage and proof of concept grant programs.