

MACROECONOMIC

'GOOD VIBRATIONS'

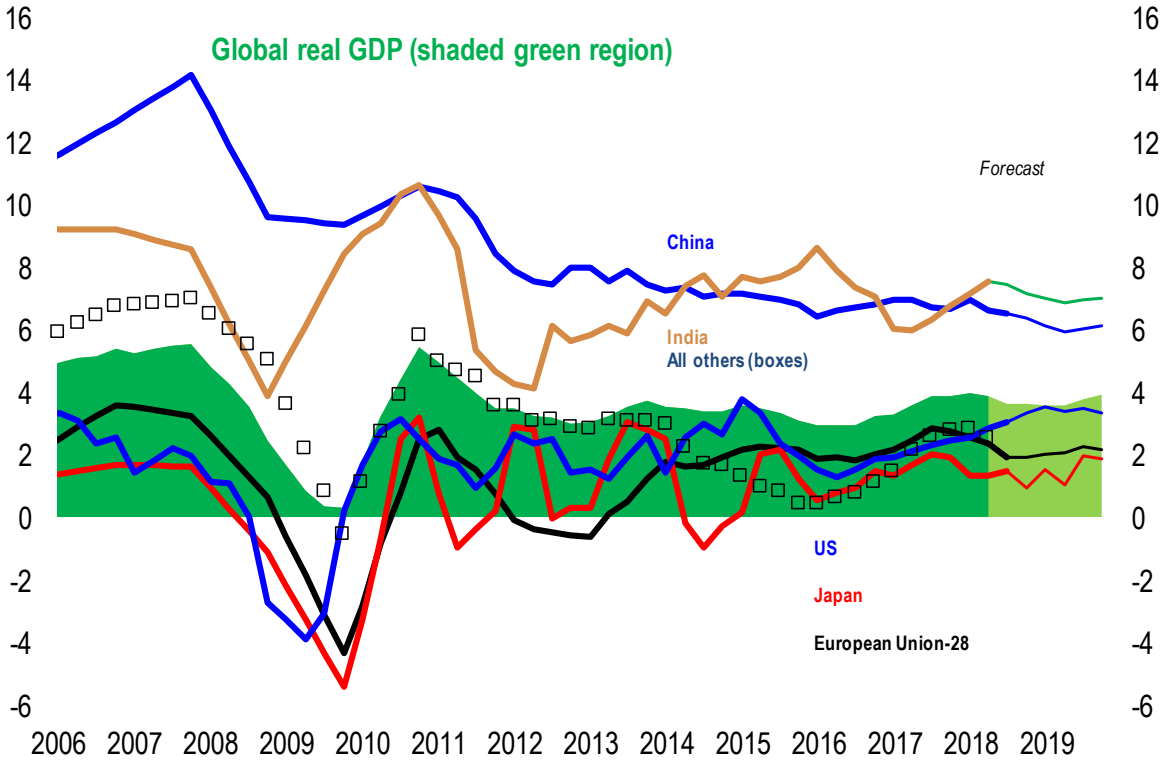
January 22, 2019

The 2019 Outlook In Brief

(An Unprecedented 'State of Mind' as Economic Cycles Go)

Uneven but Still-Growing ...

Real GDP in selected regions (percent change from four quarters earlier)

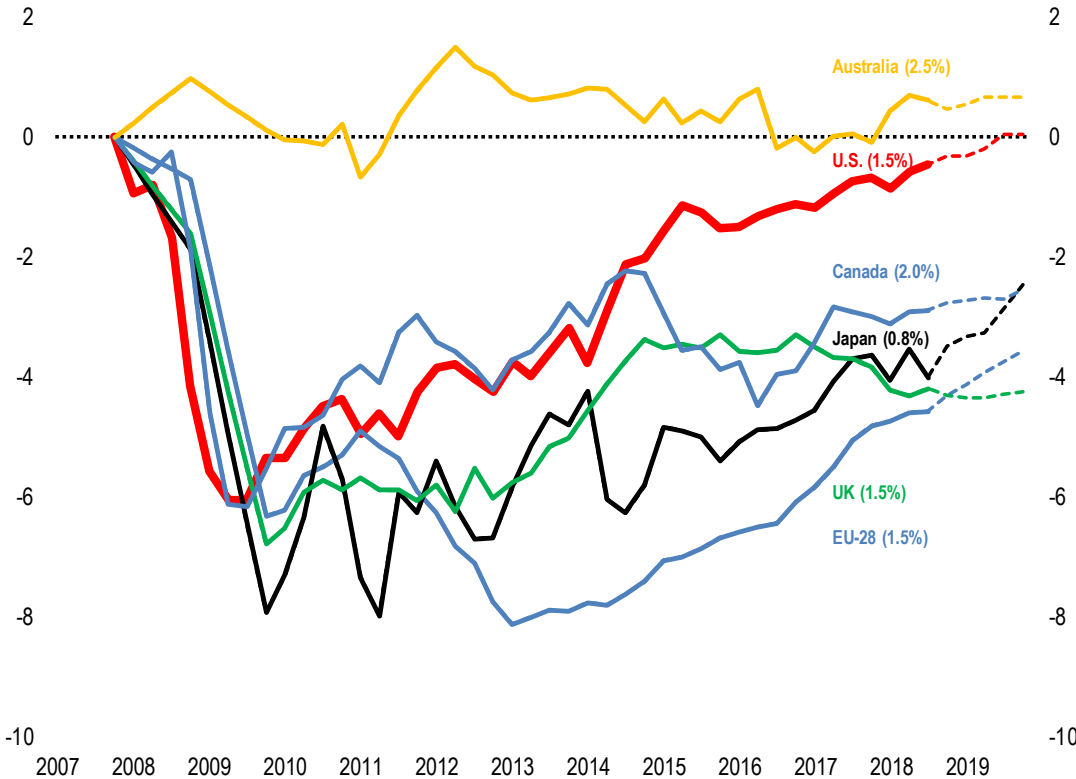


Note: Global real GDP is constant 2016 dollars (PPP basis).

Sources: Haver Analytics; OECD; World Bank; IMF; CIA; U.S. Department of Commerce; J.P. Morgan. Updated through 2018 Q3.

... In Different Stages ...

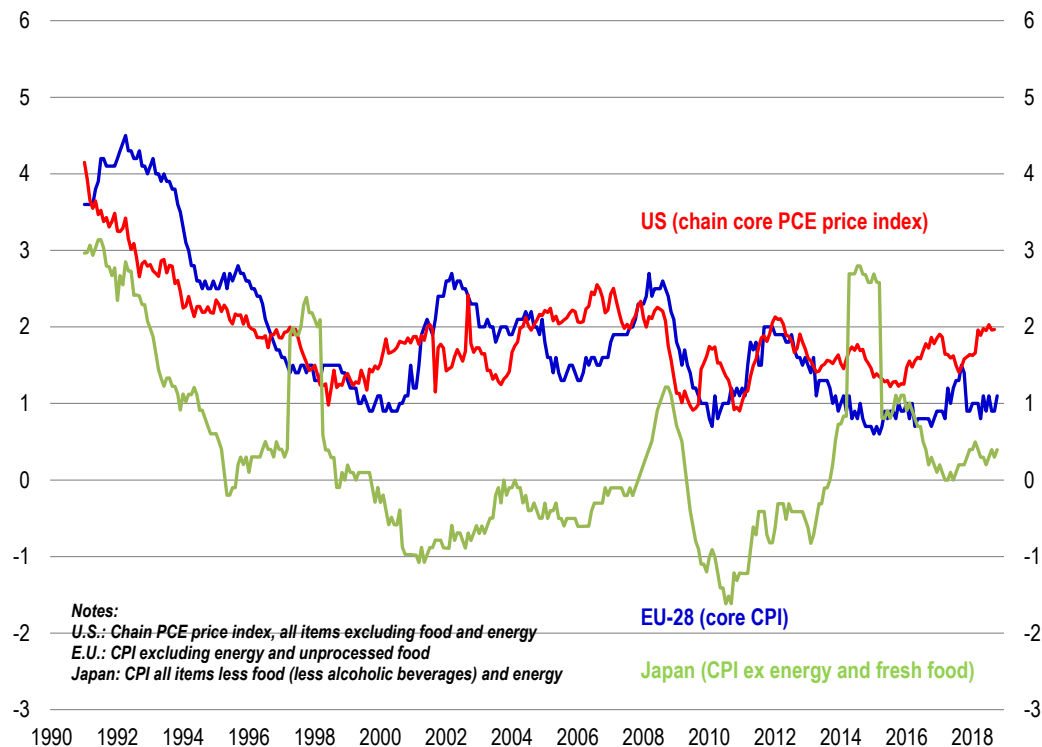
Real GDP gap¹ (percent of potential real GDP)



¹ Actual real GDP less potential real GDP as a percent of potential real GDP.
Sources: OECD; World Bank; IMF; CIA; U.S. Department of Commerce; J.P. Morgan. Updated through 2018 Q3.

... and that's Why Inflation Trends Differ

Core inflation in selected advanced economies (percent change from 12 months earlier)

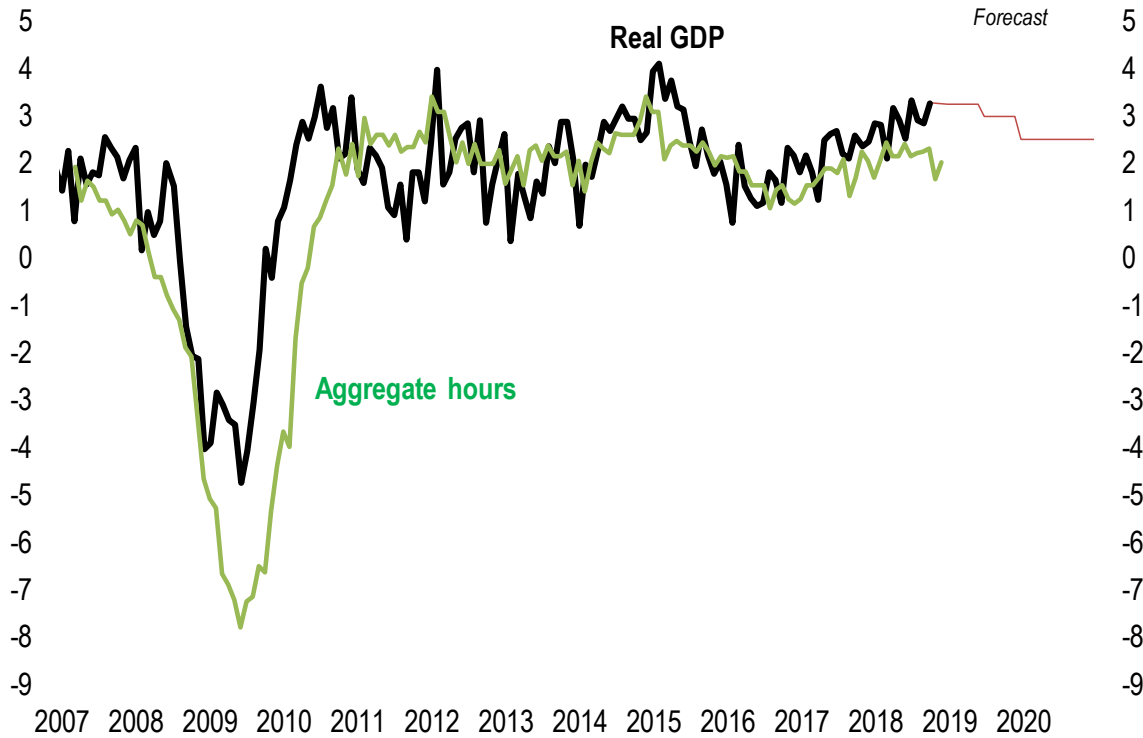


Note: Japan introduced a consumption tax in 1989, setting it at 3 percent. It raised this to 5 percent in April 1997 and then to 8 percent in April 2014.

Source: U.S. Department of Commerce. Updated through October 2018.

The U.S. Is Still Riding a Fiscal Swell ...

Real GDP and aggregate hours worked (percent change from 12 months earlier)



The Fed's View¹ (Range of Forecasts):

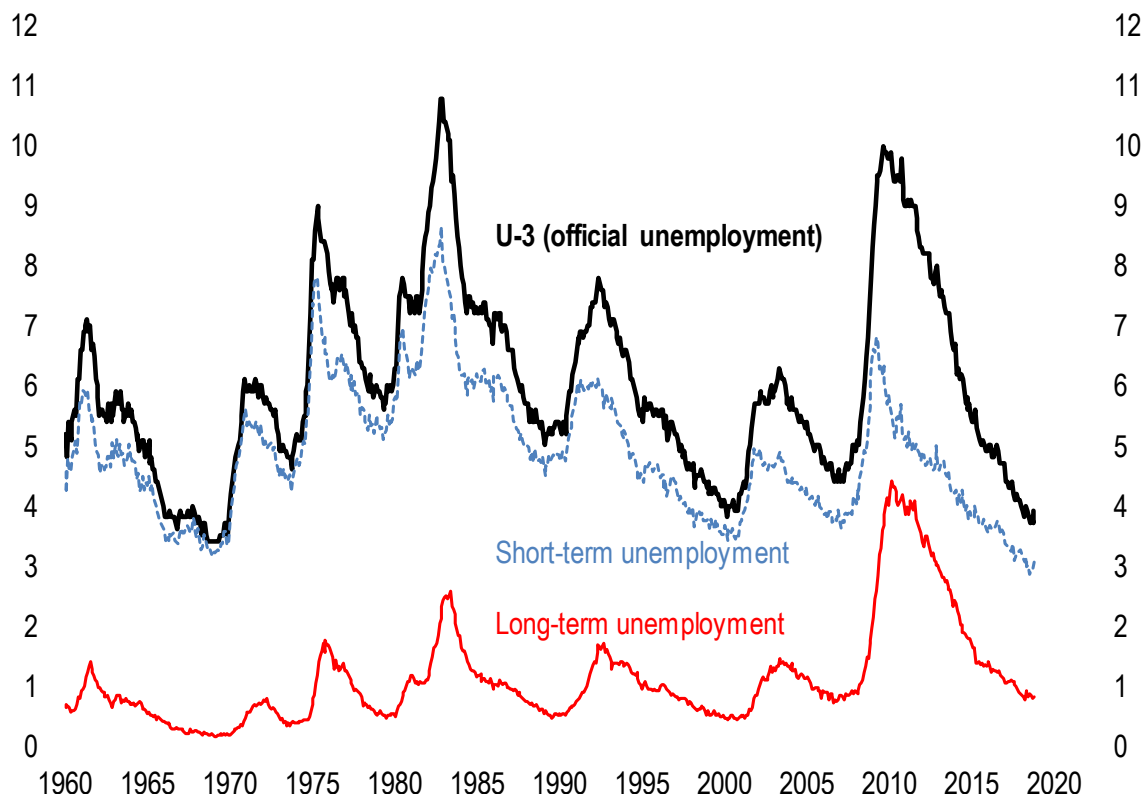
2018	3.0-3.1
2019	2.0-2.7

¹December 18-19, 2018

Sources: Haver Analytics; Macroeconomic Advisers. Updated through October 2018 (GDP) and December 2018 (hours).

... but “Slower” Would Be Nothing to Fear

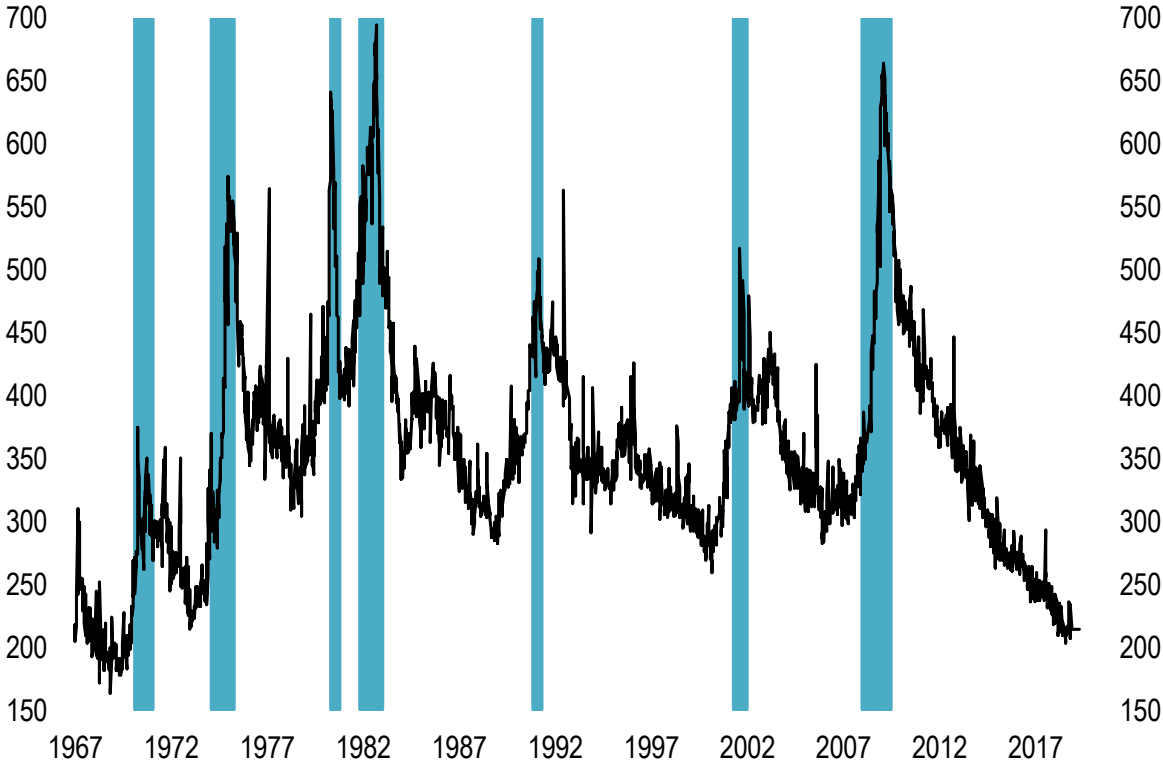
Unemployment (percent of the labor force)



Sources: Haver Analytics; U.S. Department of Labor. Updated through December 2018.

The Sum of All Cheers & Fears ...

Initial applications for unemployment benefits (thousands, weekly)

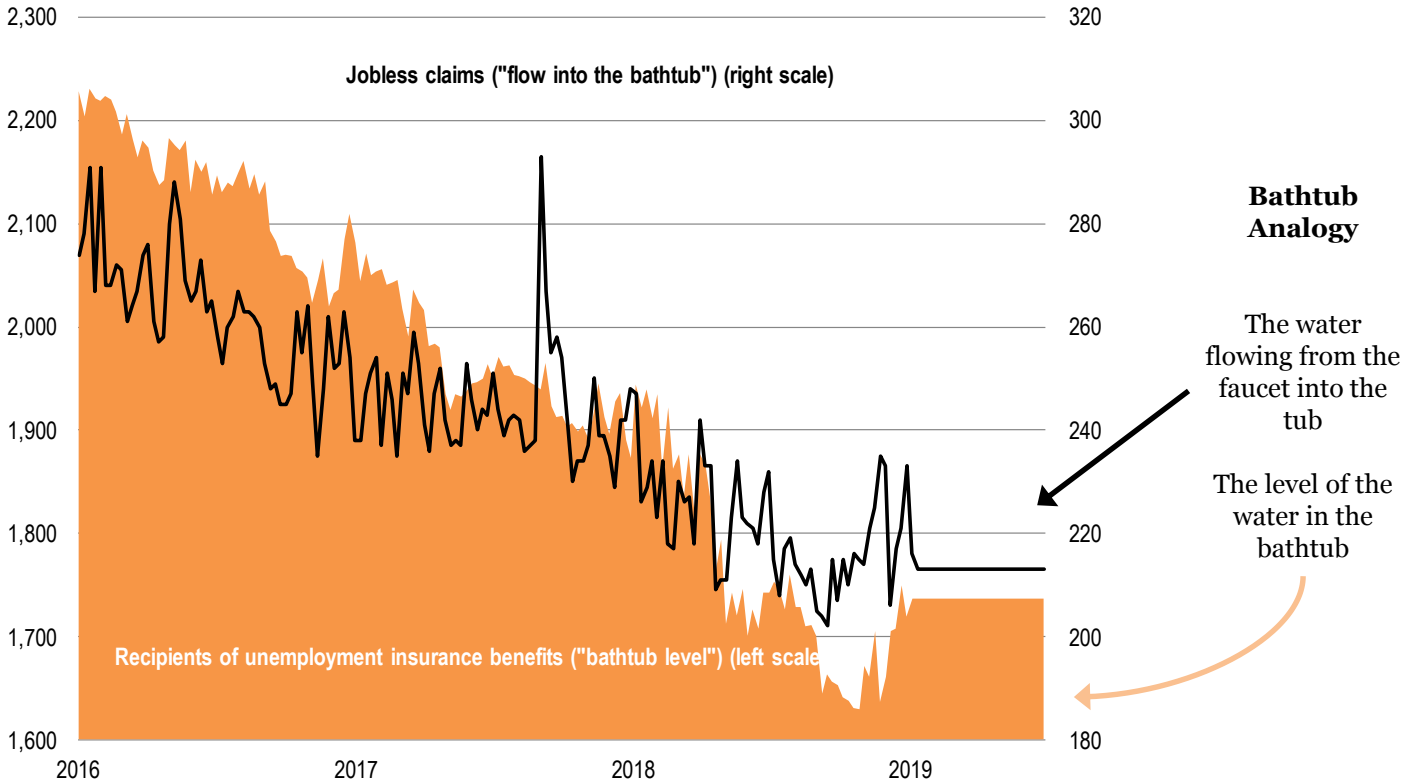


Sources: Haver Analytics; U.S. Department of Labor. Updated through January 12, 2019.

... Is Entirely in the 'Cheers Column'

Claimants (number)

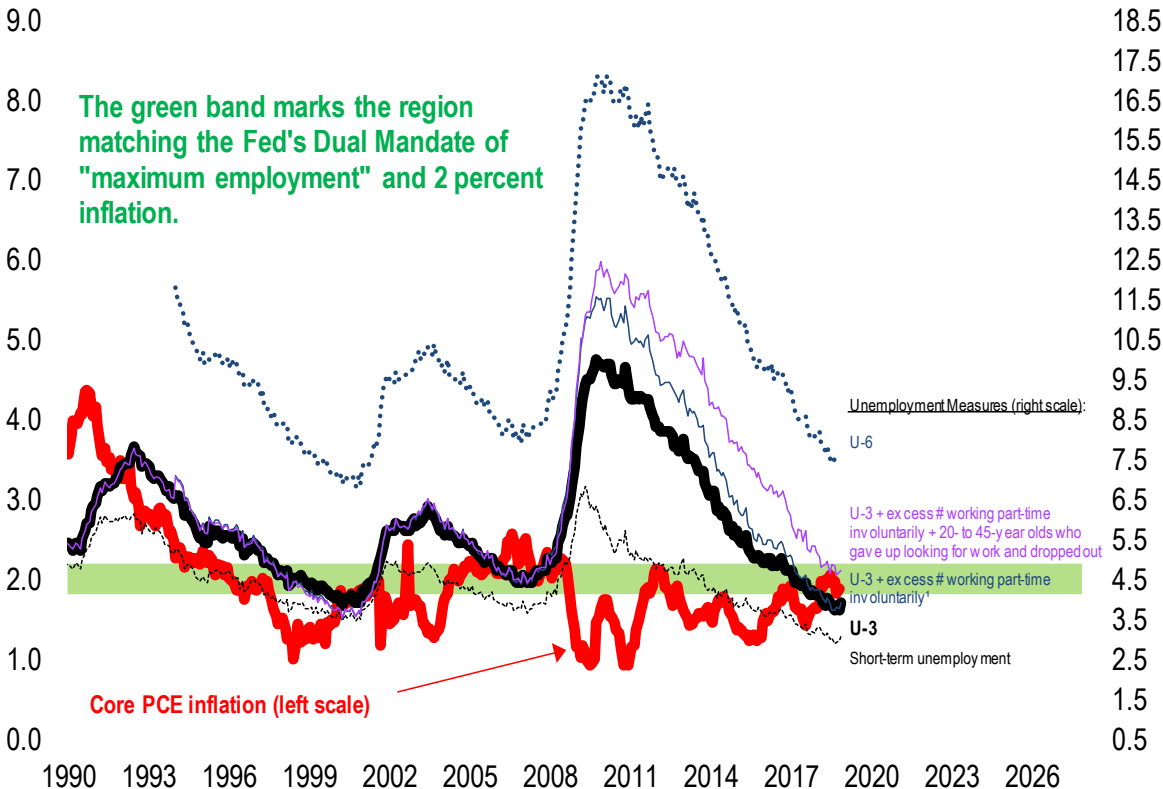
Initial applications for unemployment benefits (thousands, weekly)



Sources: Haver Analytics; U.S. Department of Labor. Updated through January 12, 2019 (claimants) and January 12, 2019 (claims).

Dual Mandates Met ...

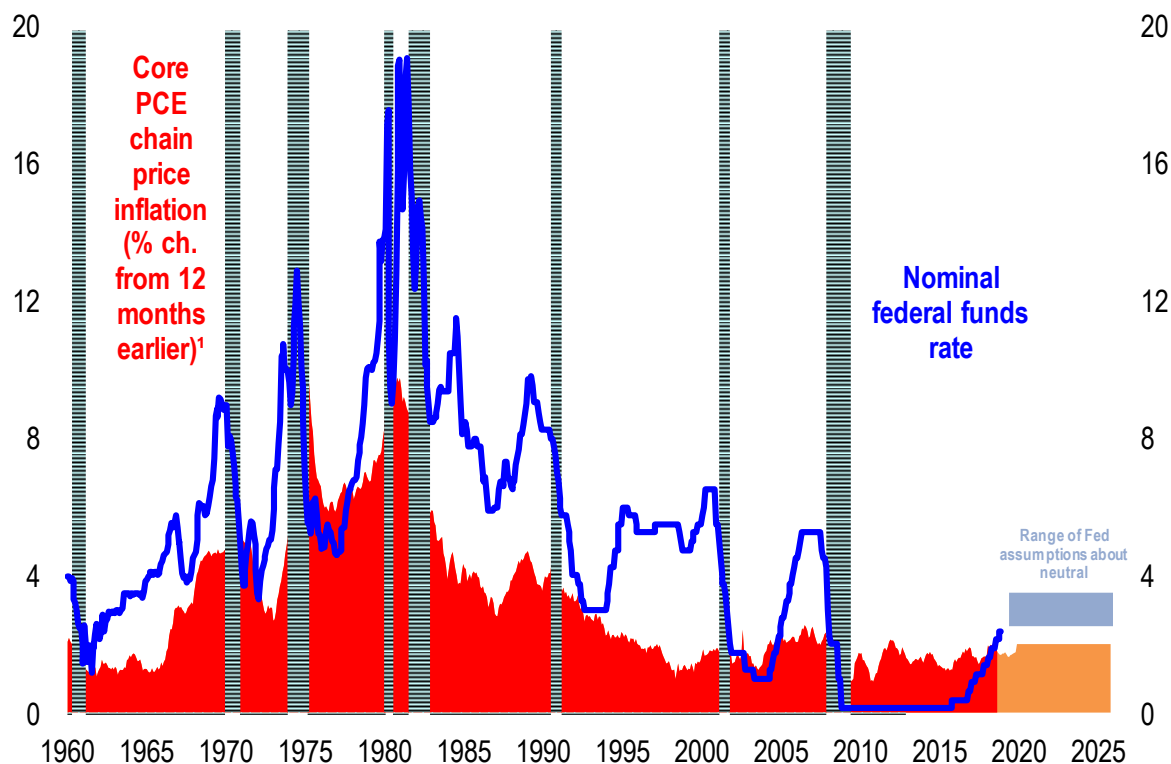
Core PCE inflation (% ch from 12 months earlier) Unemployment (% of the labor force)



Sources: Haver Analytics; U.S. Department of Commerce; U.S. Department of Labor. Updated through November 2018 (inflation) and December 2018 (unemployment).

... Allow the Fed to “Normalize” Short Rates ...

Nominal federal funds rate and core inflation (percent)

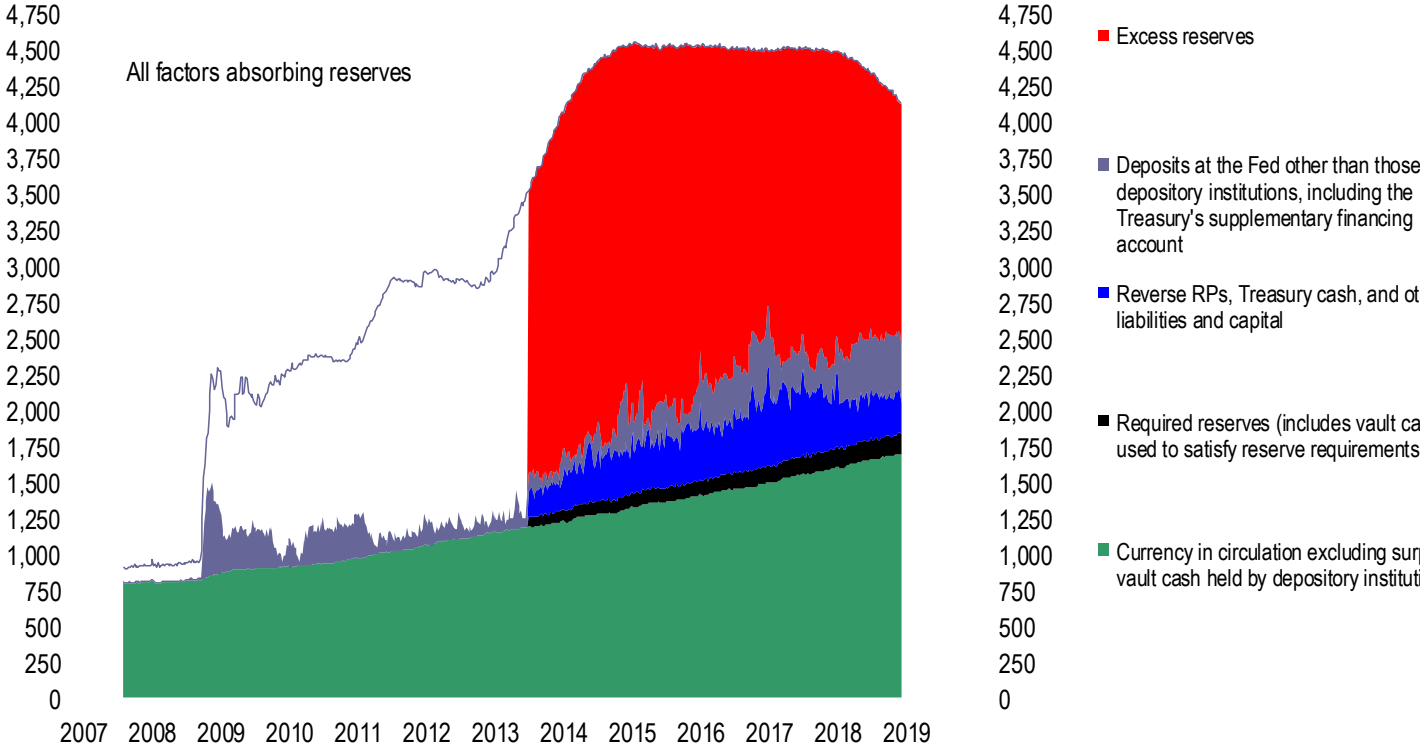


¹ The inflation metrics that the Federal Reserve Board uses to communicate its policies.

Sources: Haver Analytics; U.S. Department of Commerce; Federal Reserve Board. Updated through October 2018 (inflation) and December 17, 2018 (federal funds rate).

... and Shrink Its Balance Sheet ...

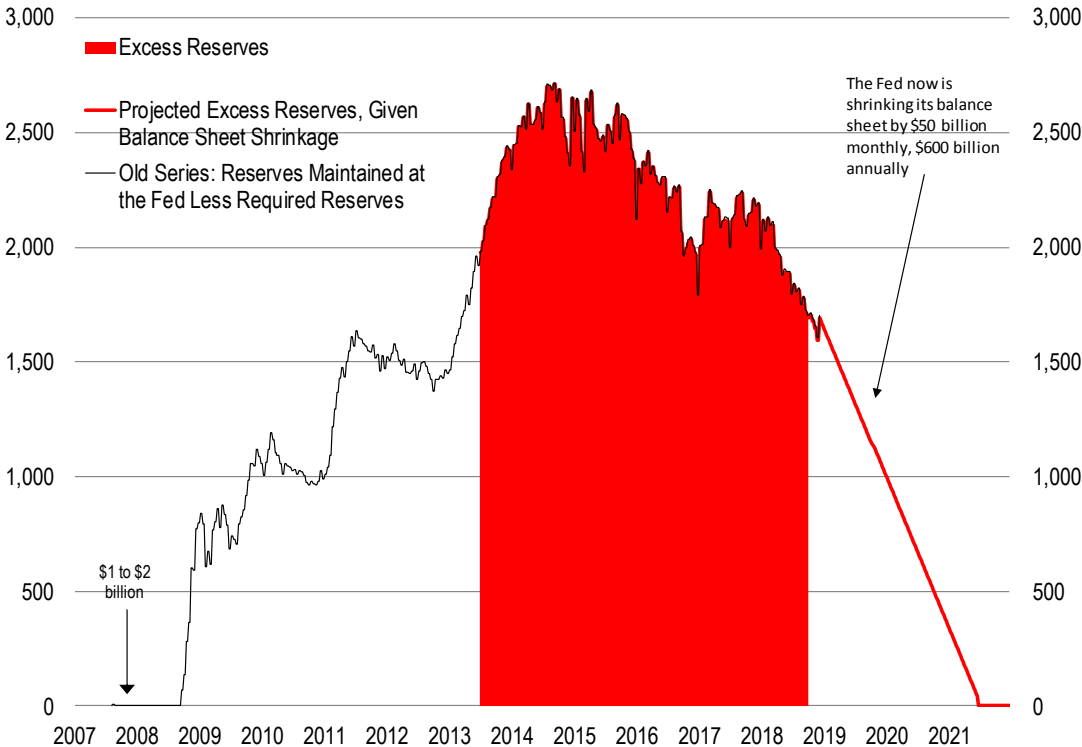
Federal Reserve liabilities (billions of dollars)



Sources: Haver Analytics; Federal Reserve Board. Updated through December 12, 2018.

... to Where Is Unclear

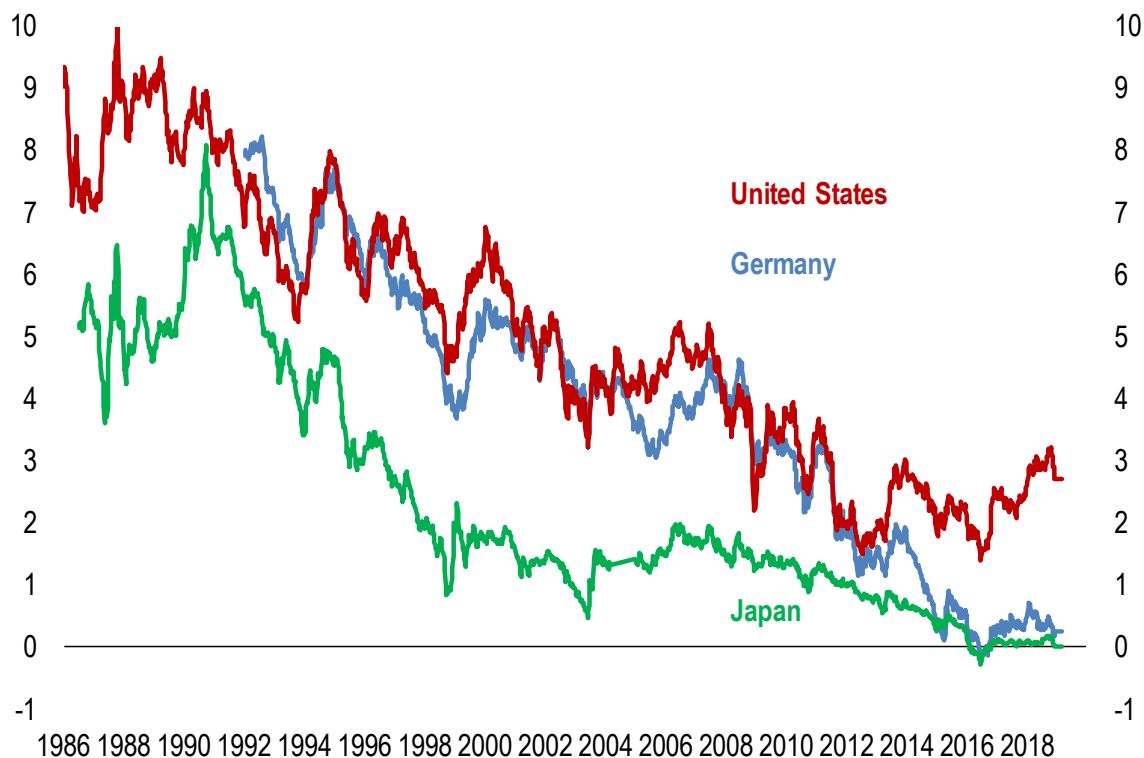
Excess reserves (billions of dollars)



Sources: Haver Analytics; Federal Reserve Board. Updated through December 12, 2018.

Bonds Live in a Global Community

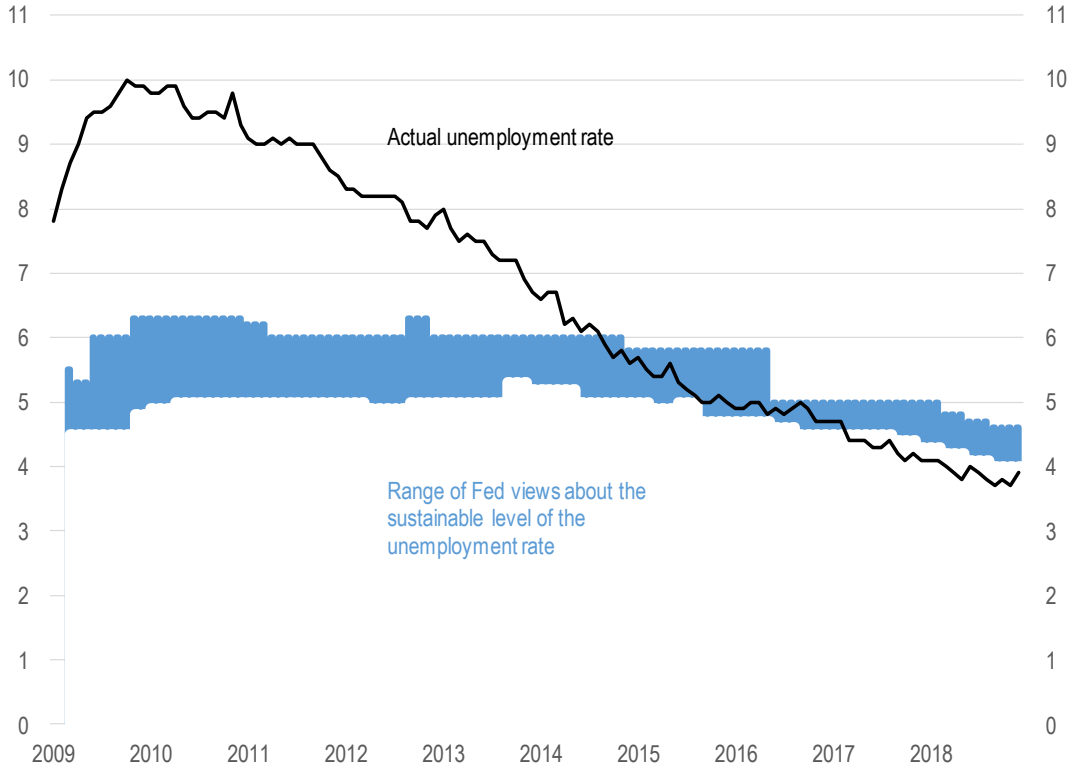
Selected 10-year sovereign yields (percent)



Sources: Haver Analytics; Federal Reserve Board; Bank of Japan; European Central Bank. Updated through January 4, 2019.

“Maximum Employment” Evolves ...

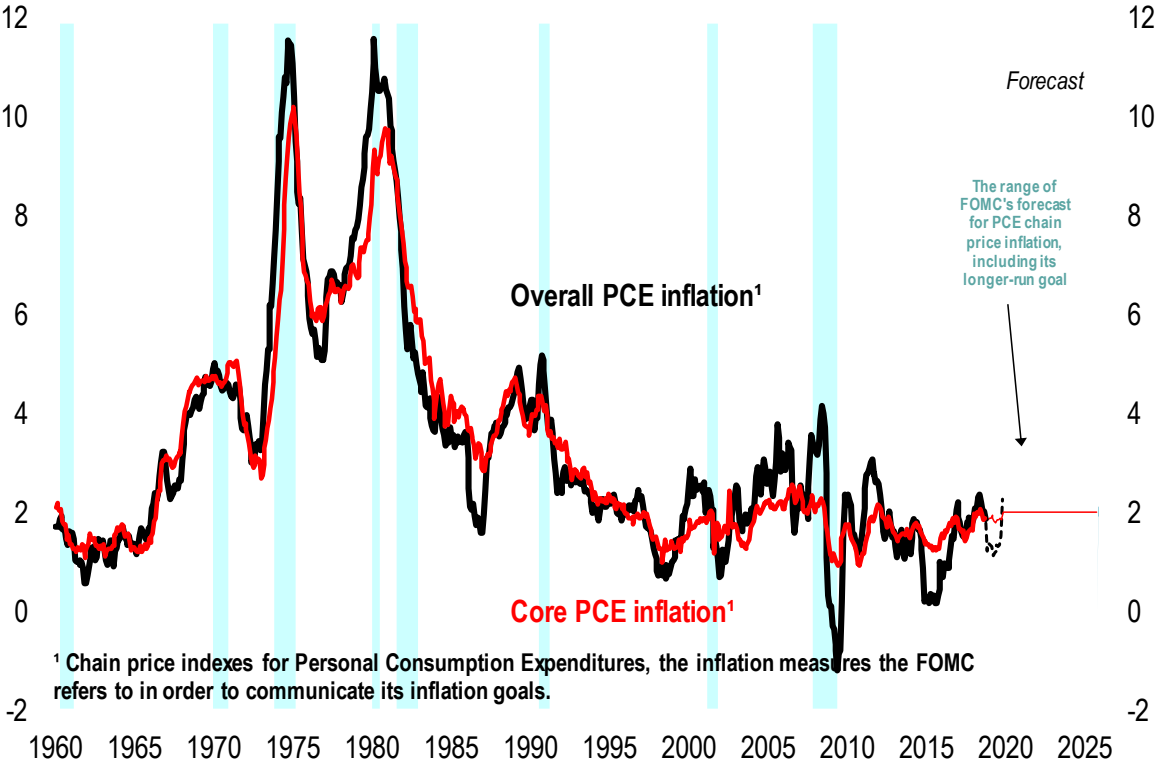
Unemployment rate (% of the labor force)



Sources: Haver Analytics; U.S. Department of Labor; Federal Reserve Board. Updated through December 2018 (unemployment) and December 19, 2018 (FOMC unemployment assumptions).

... the Inflation Target is Firm

Consumer inflation (percent change from 12 months earlier)



Sources: Haver Analytics; U.S. Department of Commerce. Updated through November 2018.

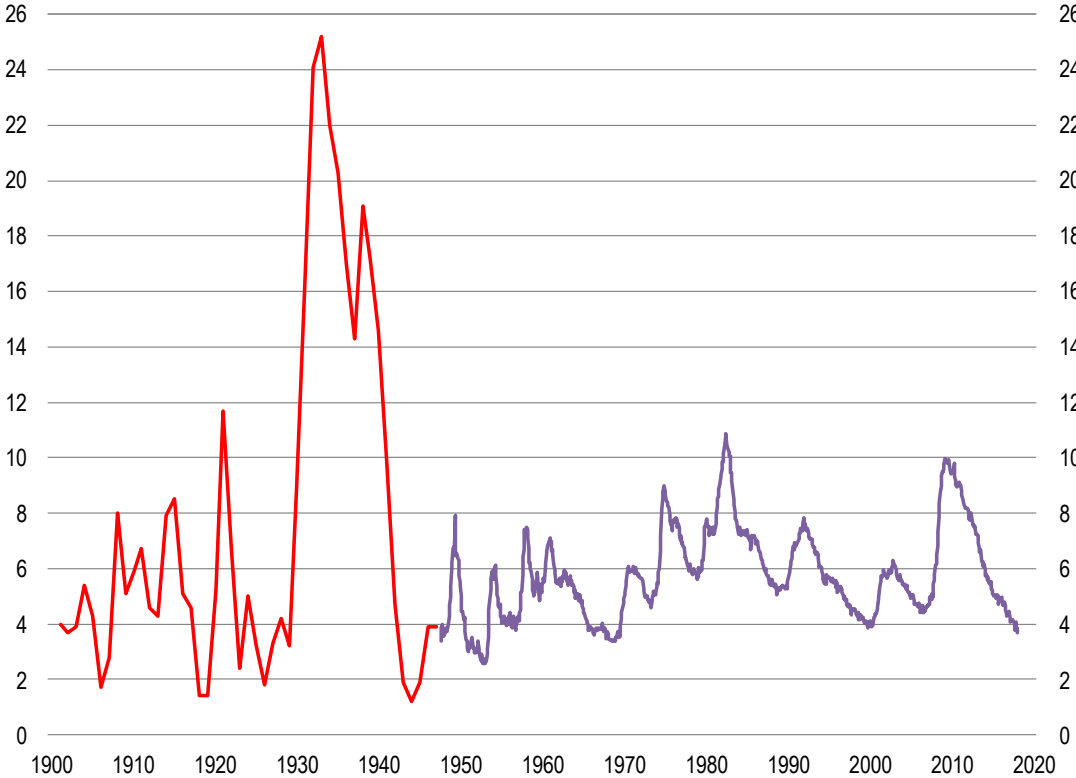
Three Big Questions



If the Economy Is So Wonderful,
Why Are They Talking About
Recession?

If So Great ...

Unemployment (percent of the labor force)



Sources: Haver Analytics; U.S. Department of Labor. Updated through December 2018.

Sudden Doubt ...

Selected broad stock market indexes



Sources: Haver Analytics; Dow Jones. Updated through January 4, 2019.

... Although Less Notable in Percentage Terms

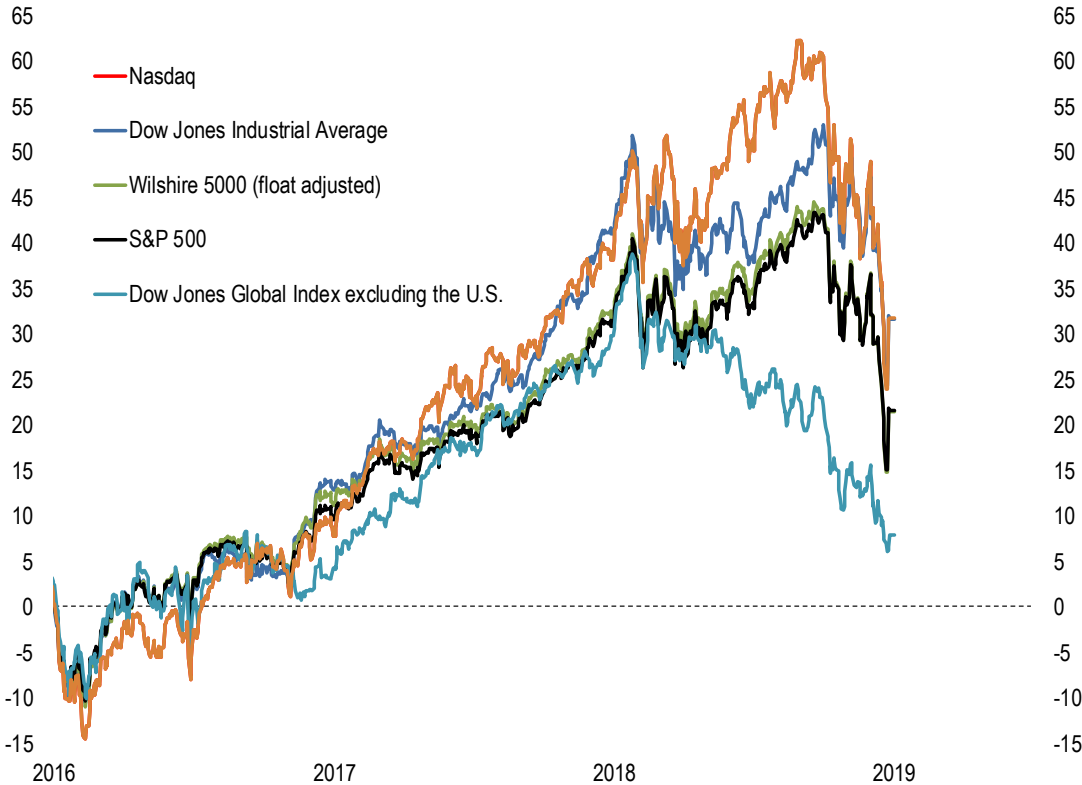
S&P 500, \log_{10} scale



Sources: Haver Analytics; Dow Jones. Updated through January 4, 2019.

All Sectors Feel It

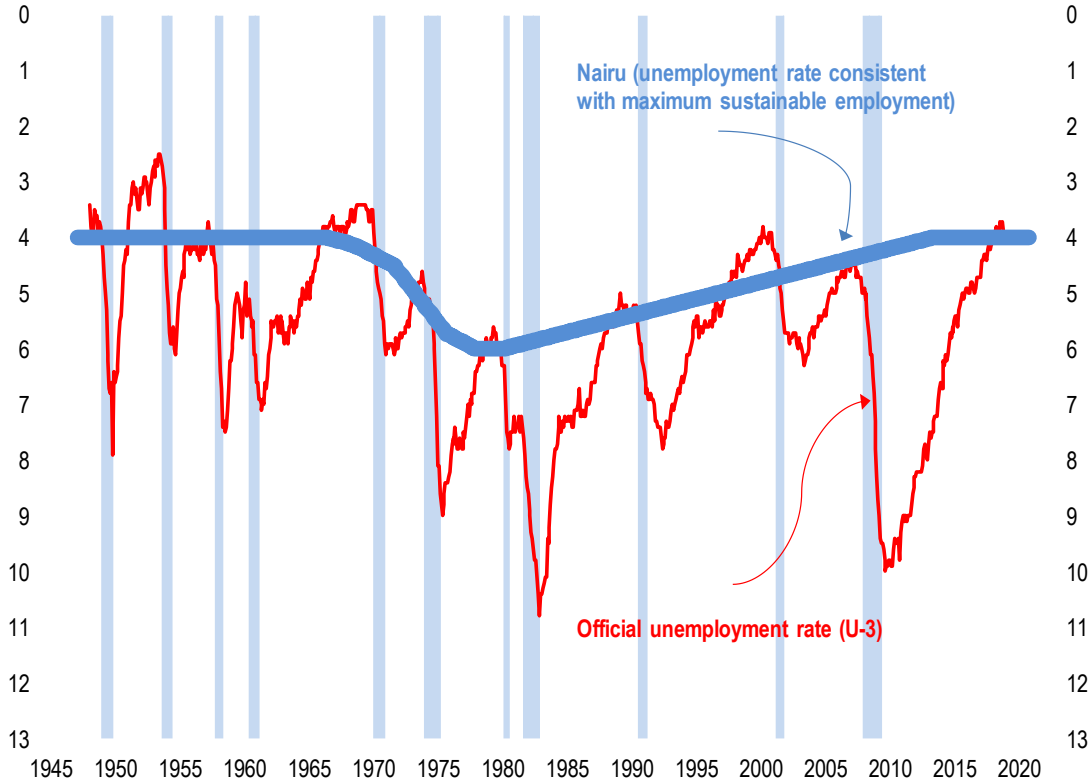
Selected equity indexes (ratio to December 15, 2015)



Sources: Haver Analytics; Dow Jones; Nasdaq. Updated through January 4, 2019.

No, Recession Is Not Inevitable ...

Unemployment (percent of the labor force)



Sources: Haver Analytics; U.S. Department of Labor; Congressional Budget Office. Updated through December 2018.

... Although Recession Predictions Are

WSJ Opinion | Commentary

Another Recession Is Looming

And unlike in the past, the Federal Reserve has little room to encourage growth by reducing rates.

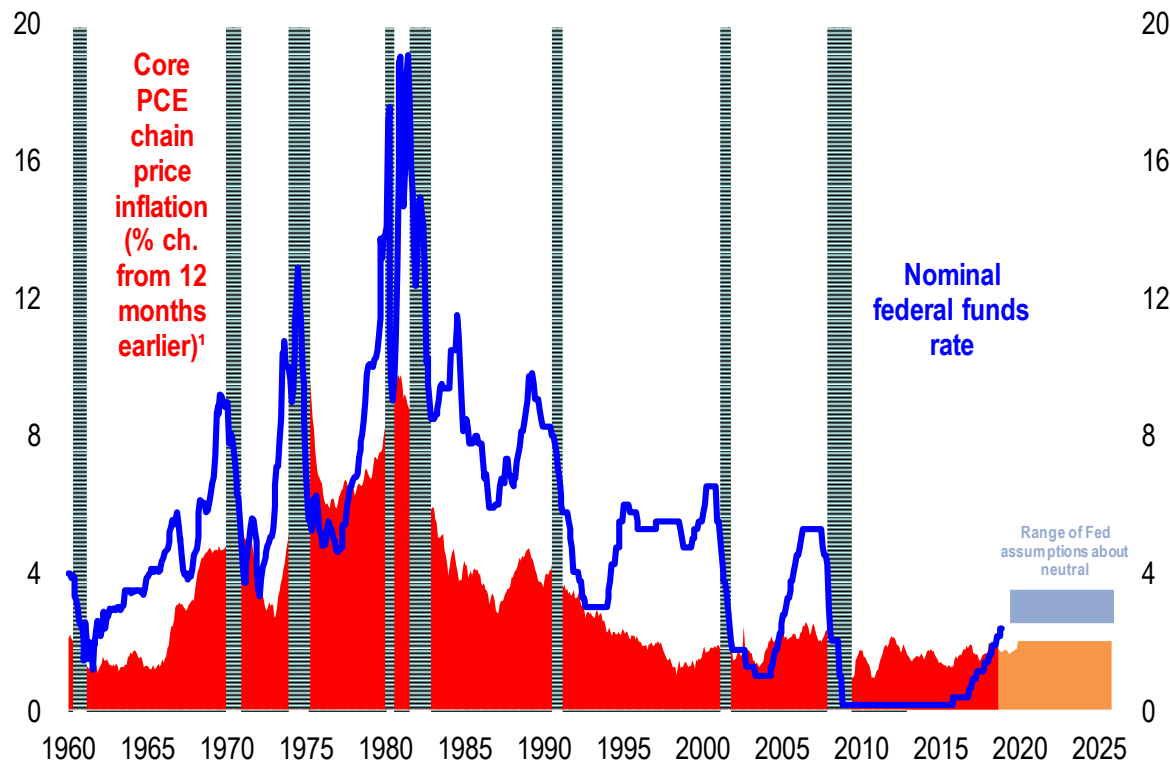
By Martin Feldstein
Sept. 27, 2018 6:46 p.m. ET

Ten years after the Great Recession's onset, another long, deep downturn may soon roil the U.S. economy. The high level of asset prices today mirrors the earlier trend in house prices that preceded the 2008 crash; both mispricings reflect long periods of very low real interest rates caused by Federal Reserve policy. Now that interest rates are rising, equity prices will fall, dragging down household wealth, consumer spending and economic activity.

During the five-year period before the last downturn, the Fed had decreased the federal-funds rate to as low as 1%. That drove down

No, the Fed Isn't Trying to Restrict Growth

Nominal federal funds rate and core inflation (percent)

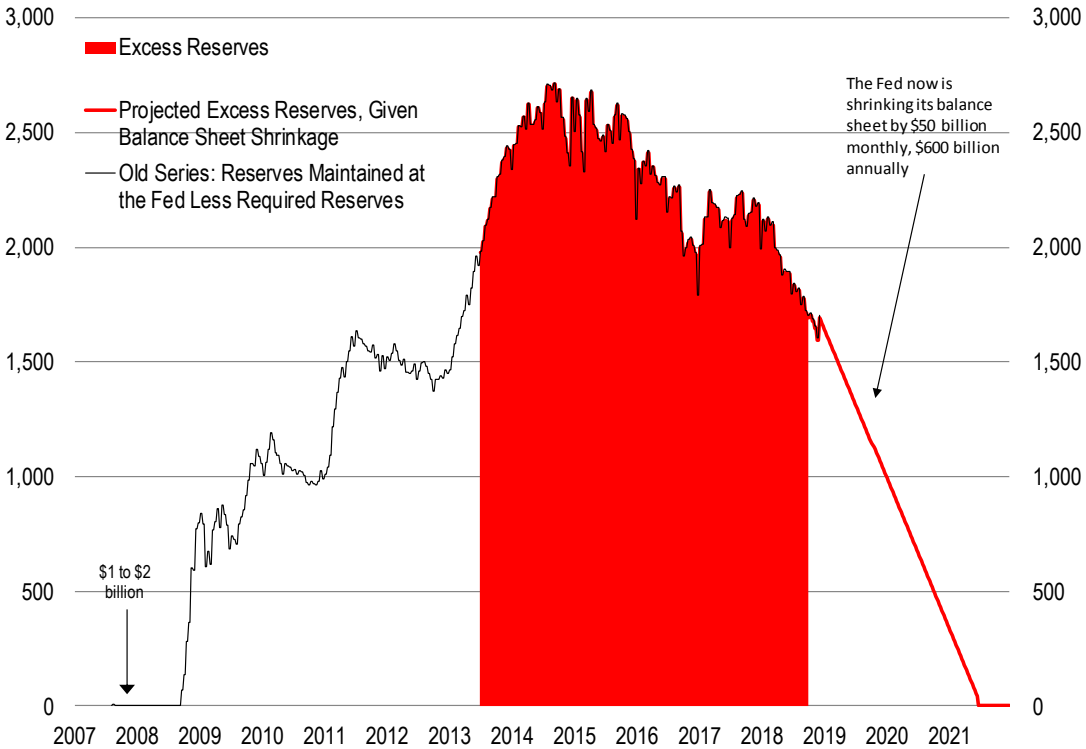


¹ The inflation metrics that the Federal Reserve Board uses to communicate its policies.

Sources: Haver Analytics; U.S. Department of Commerce; Federal Reserve Board. Updated through October 2018 (inflation) and December 17, 2018 (federal funds rate).

No, QT Isn't Hurting the Economy ...

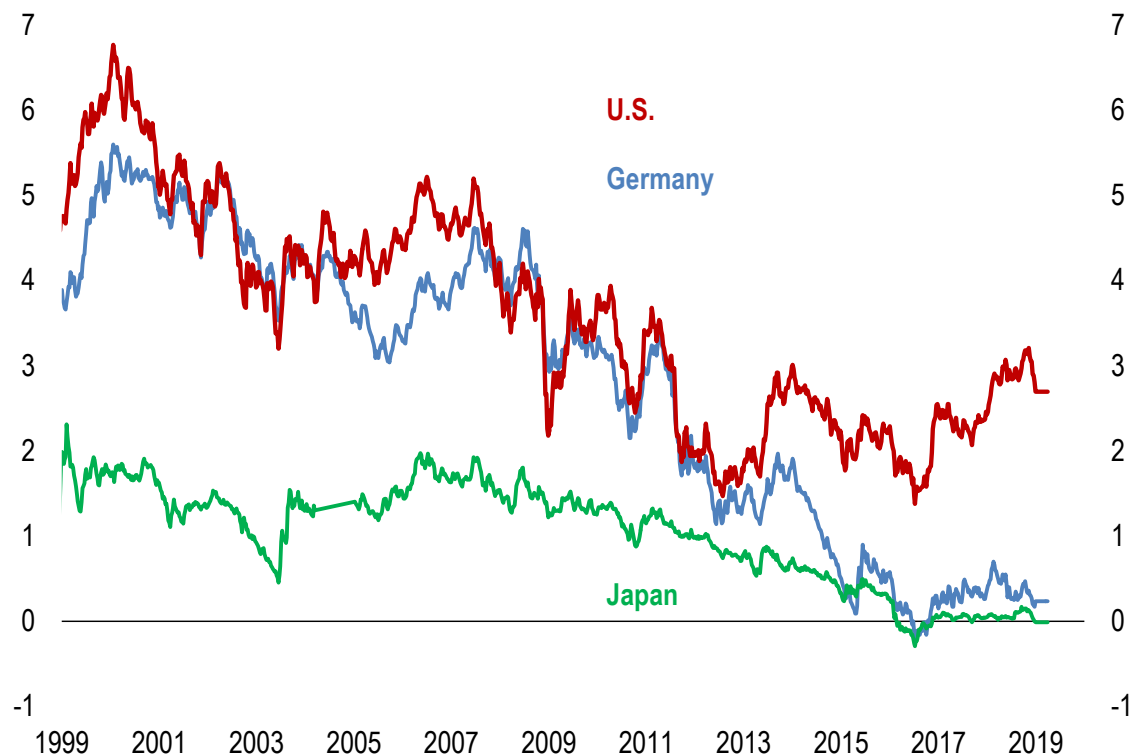
Excess reserves (billions of dollars)



Sources: Haver Analytics; Federal Reserve Board. Updated through December 12, 2018.

... Not if Bond Yields Don't Know About It:

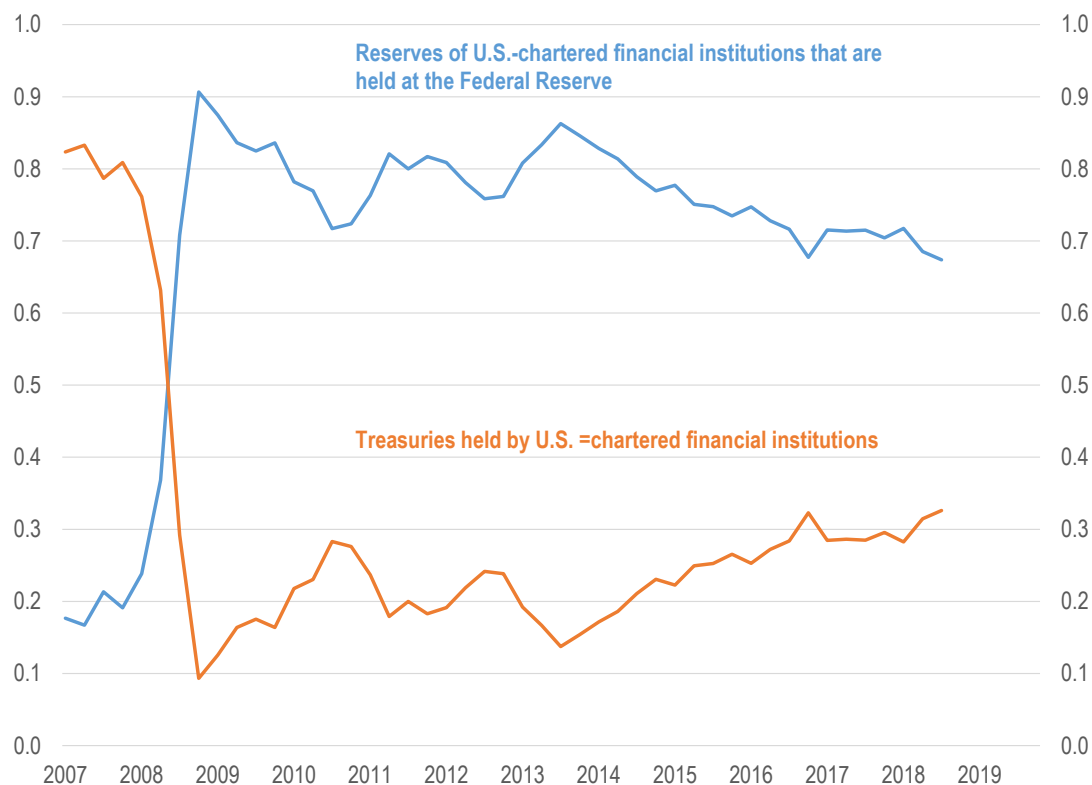
Selected 10-year sovereign yields (percent)



Sources: Haver Analytics; Federal Reserve Board; Bank of Japan; European Central Bank. Updated through December 31, 2018.

(1) The LCR Creates Buyers for Fed Sales ...

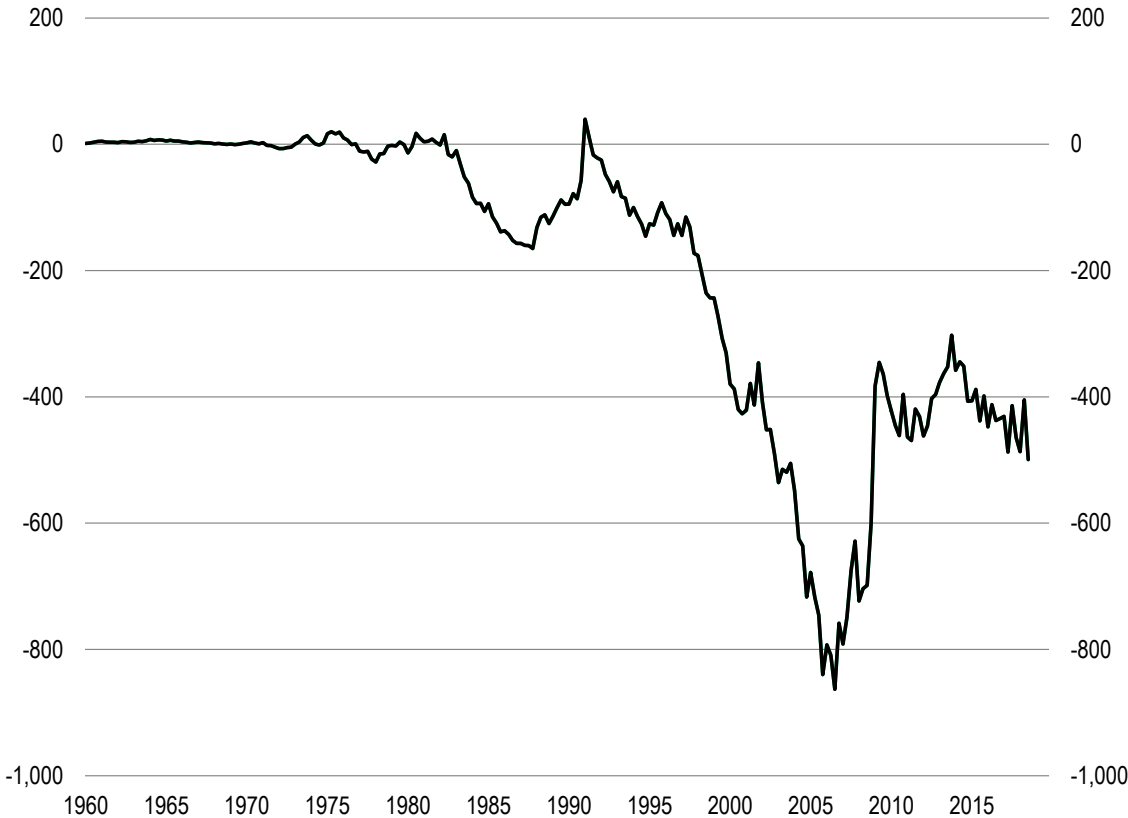
Assets held by banks that meet the LCR (% of reserves at the Fed + Treasuries)



Sources: Haver Analytics; Federal Reserve Board. Updated through 2018 Q4.

... and (2) Global Saving Remains Elevated

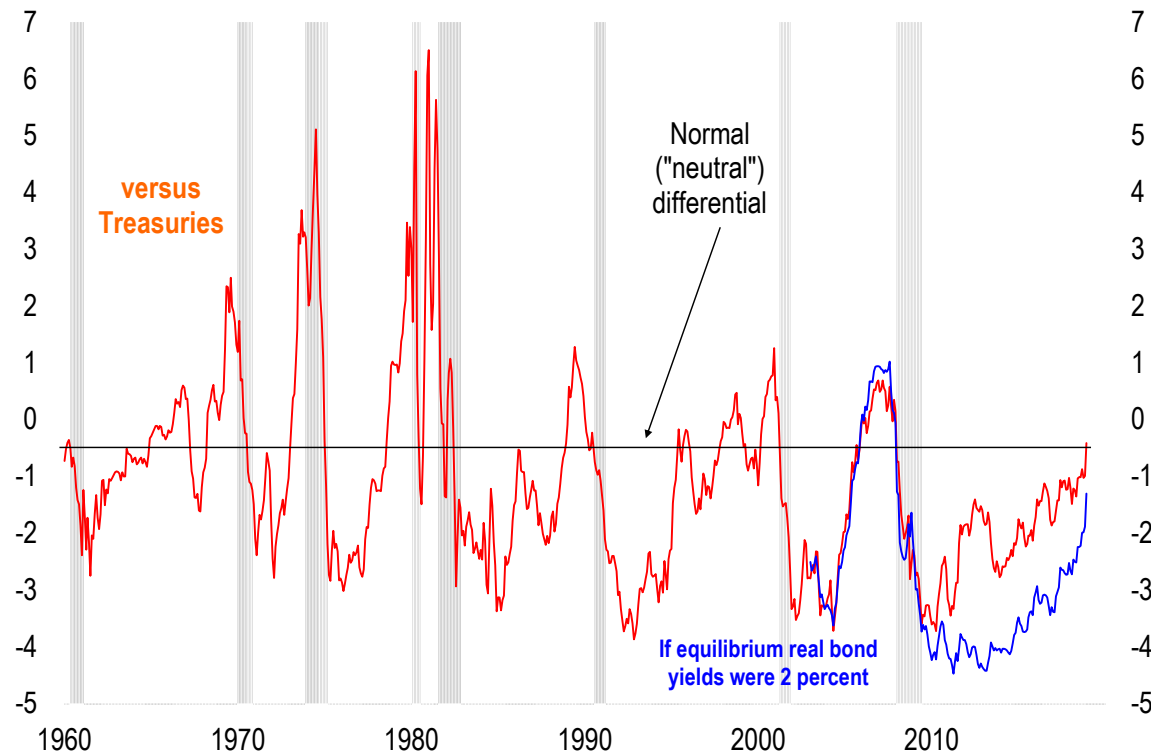
The U.S. current account balance (*billions of dollars annually*)



Sources: Haver Analytics; U.S. Department of Commerce. Updated through 2018 Q3.

No, the Yield Curve Doesn't See Recession ...

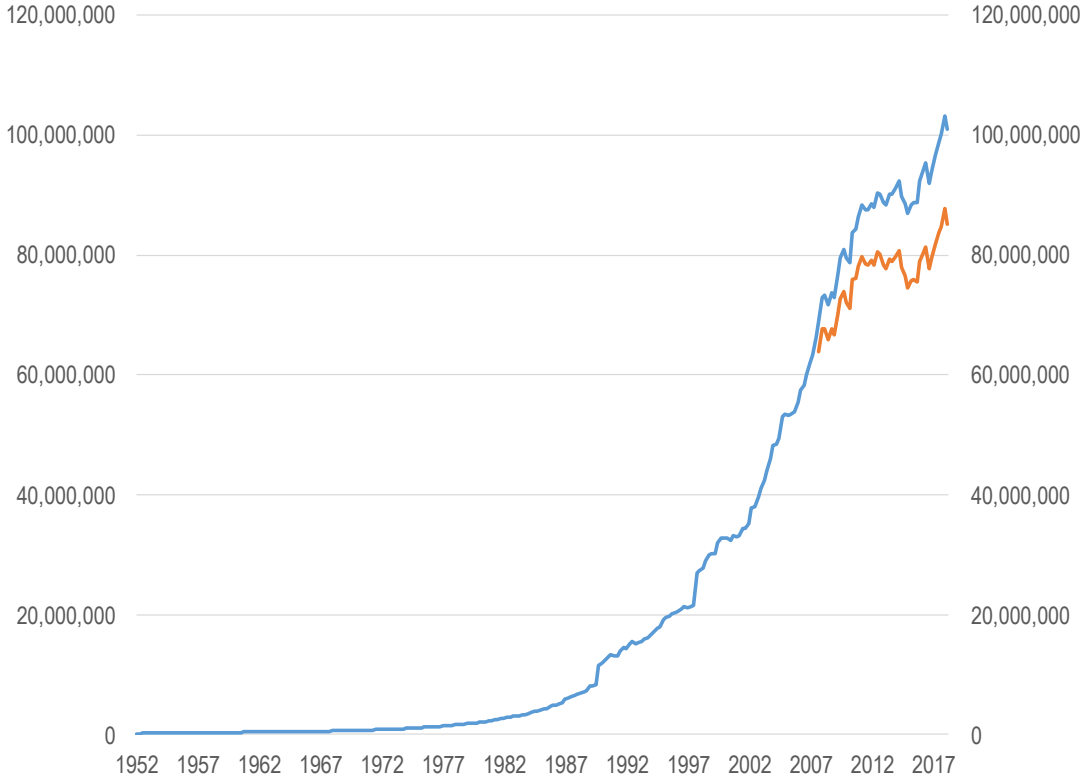
Selected 10-year sovereign yields (percent)



Sources: Haver Analytics; NBER-designated recession bars; Federal Reserve Board; U.S. Dep. Of Commerce. Updated through December 20, 2018.

... Because that QE Fogs the View

Global fixed income market and central bank holdings (millions of dollars)



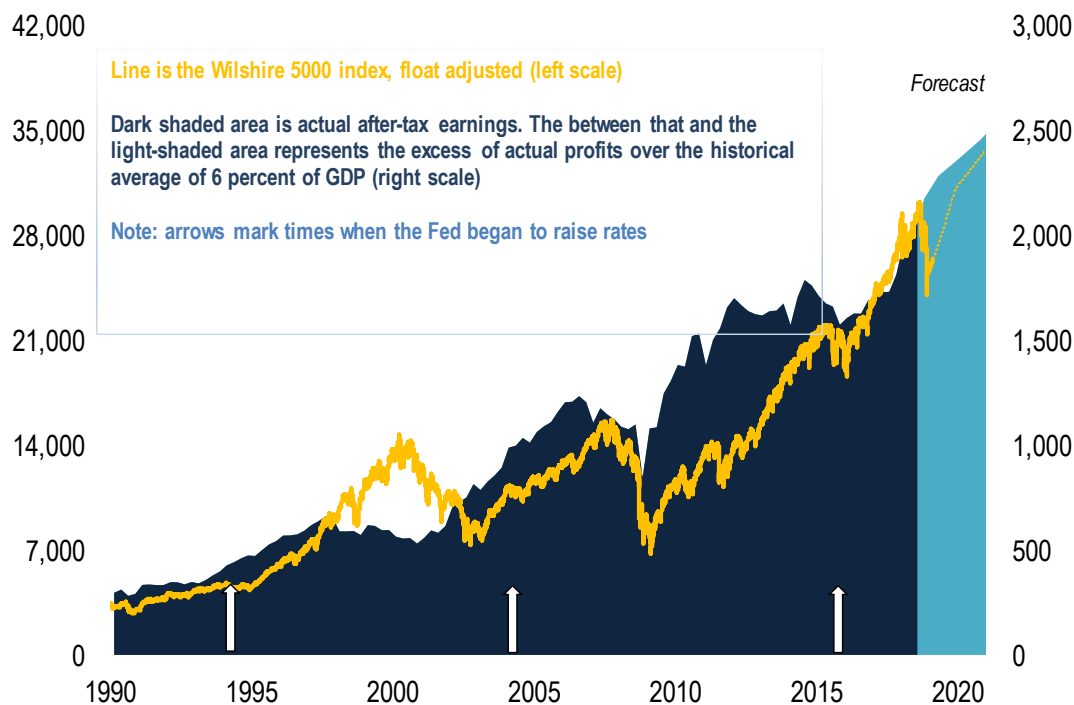
Sources: Haver Analytics; Bank for International Settlements. Updated through 2018 Q2.

No, Stocks Are About Earnings, Not the Fed

Stocks and after-tax earnings

(Wilshire 5000, flt. adj., December 31, 1970 = 830.27)

(after-tax GDP earnings)

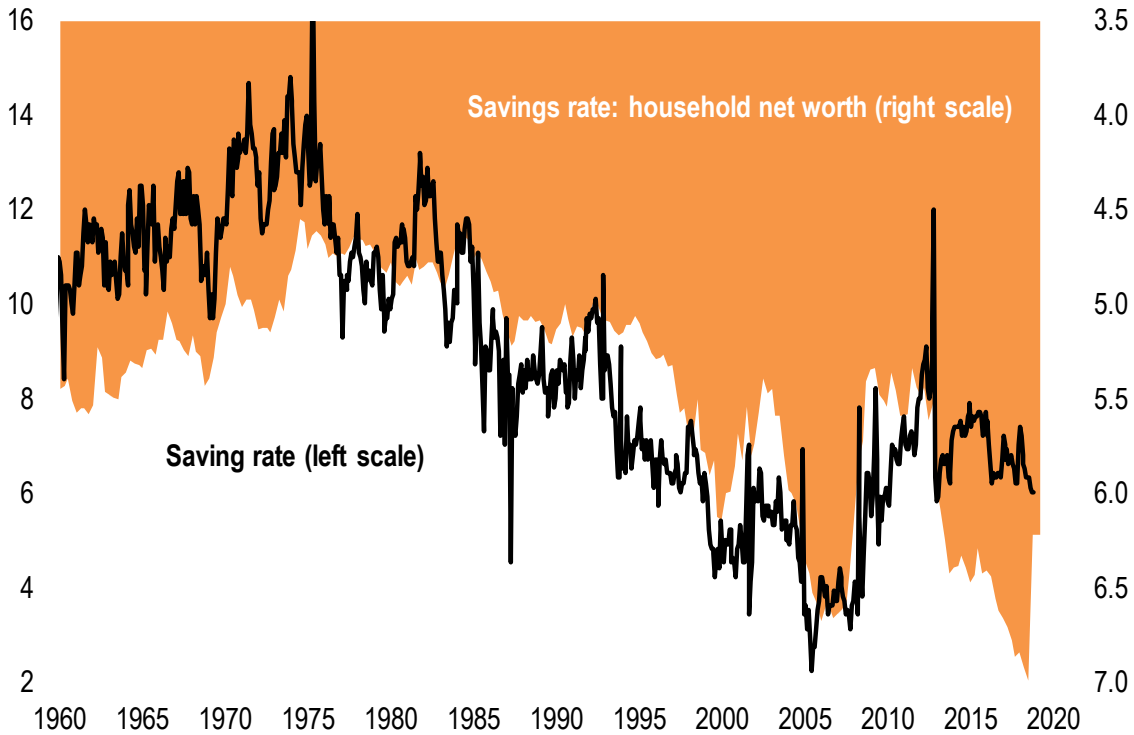


Sources: Haver Analytics; Wilshire; U.S. Department of Commerce. Updated through 2018 Q4 (profits) and January 4, 2019 (stocks).

Spending Responds to Wealth Effects ...

Household saving (% of income)

Household savings (ratio of net worth to income)

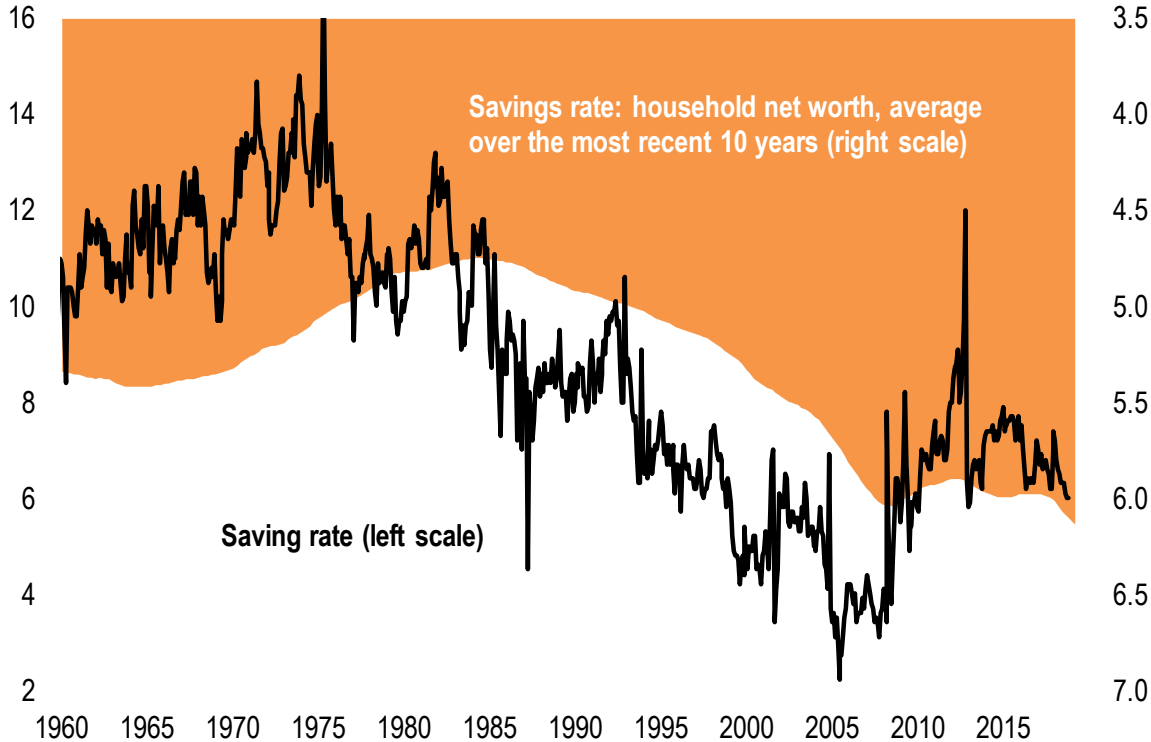


Sources: Haver Analytics; U.S. Dep. of Com.; Federal Reserve Board. Updated through 2018 Q3 (net worth) and November 2018 (saving).

... More When They're Viewed as Permanent

Household saving (% of income)

Household savings (ratio of net worth to income)



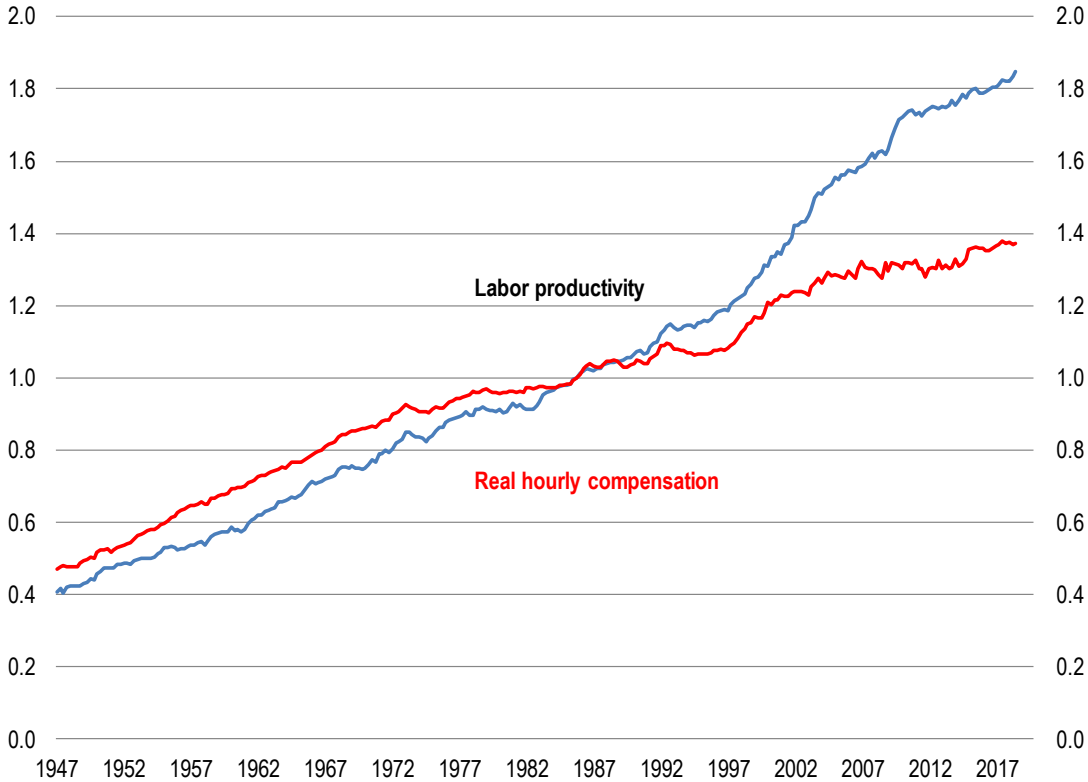
Sources: Haver Analytics; U.S. Dep. of Com.; Federal Reserve Board. Updated through 2018 Q3 (net worth) and November 2018 (saving).



If the Job Market Is So Great, Why
Doesn't It Feel that Way?

Textbooks and the Digital Revolution ...

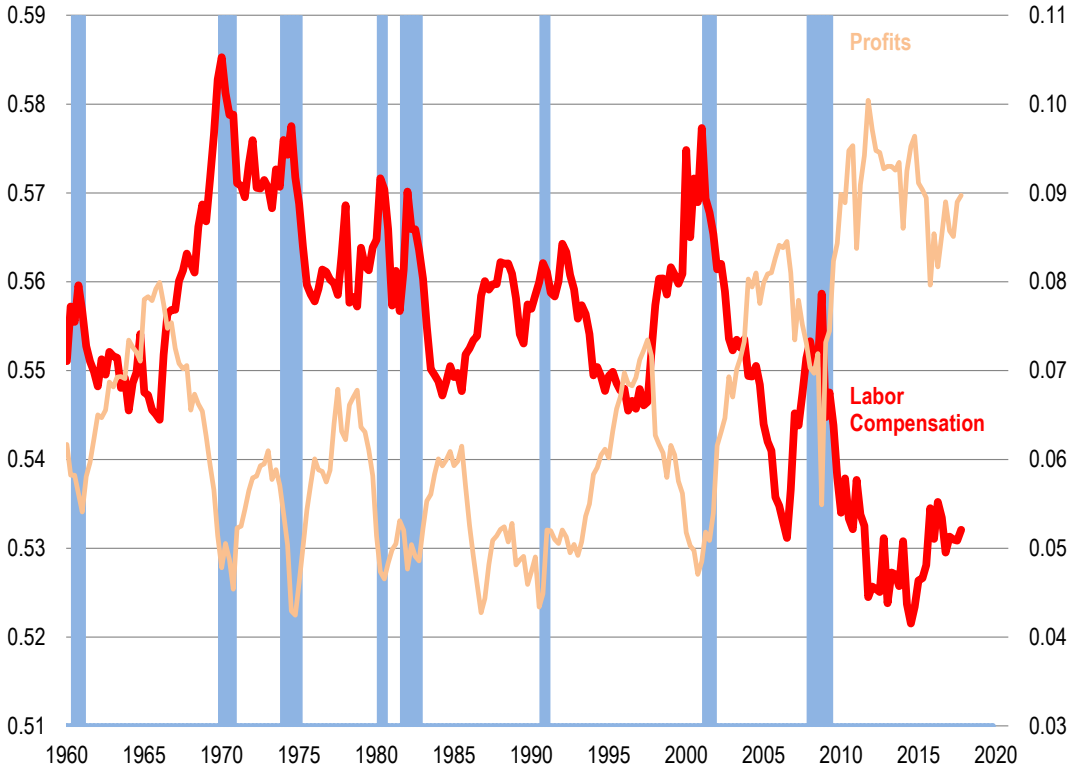
Labor productivity and real labor compensation (ratio to respective 1985 Q4 level)



Sources: Haver Analytics; U.S. Department of Commerce. Updated through 2018 Q3.

... Is Driving This ...

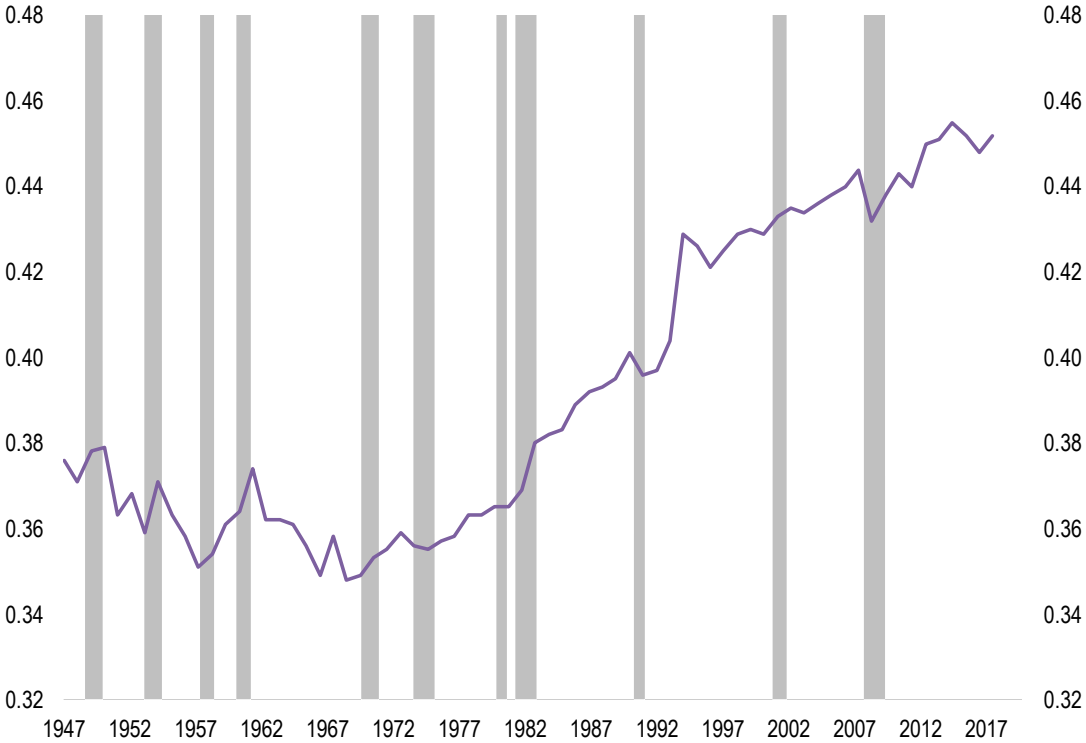
Income share (percentage of Gross Domestic Income)



Sources: Haver Analytics; NBER-designated recessions; U.S. Department of Commerce. Updated through 2017 Q4.

... and Most Likely This

Gini coefficient (0=maximum equality, 1=minimal distribution)



Sources: Haver Analytics; NBER-designated recessions; Census Bureau. Updated through 2016.

Consumers Make the Call

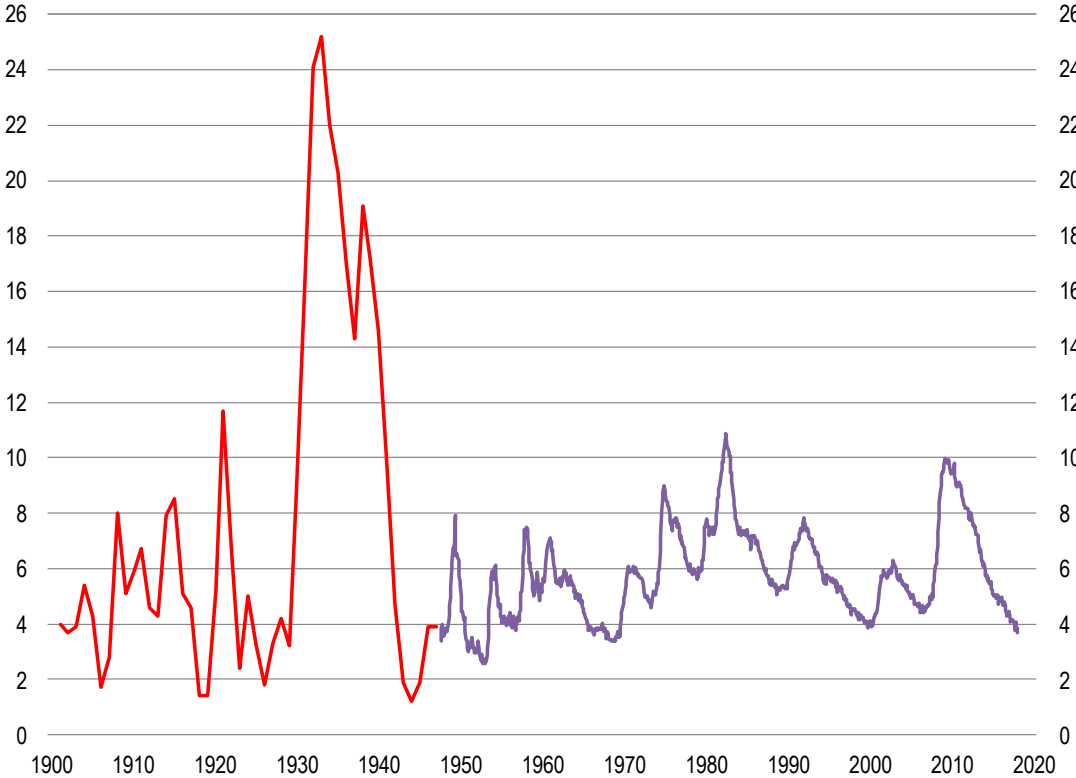
- New developments—the Digital Revolution (Amazon, Google, ride-sharing services, commercialization of private assets, AI, autonomous transportation technology, Big Data) and China’s Industrial Revolution—may be socially and politically disruptive but they are sustained in market economies by the endorsement of consumers.
- Well-meaning proposals such as, for example, a living wage or a hike in the minimum wage aren’t nearly as effective as education and job skills training in meeting the challenges driven by technological change.



If Trade Opens Up So Many
Opportunities, Why Are We
Threatening China with Tariffs?

If Trade Is a Benefit, Not a Burden ...

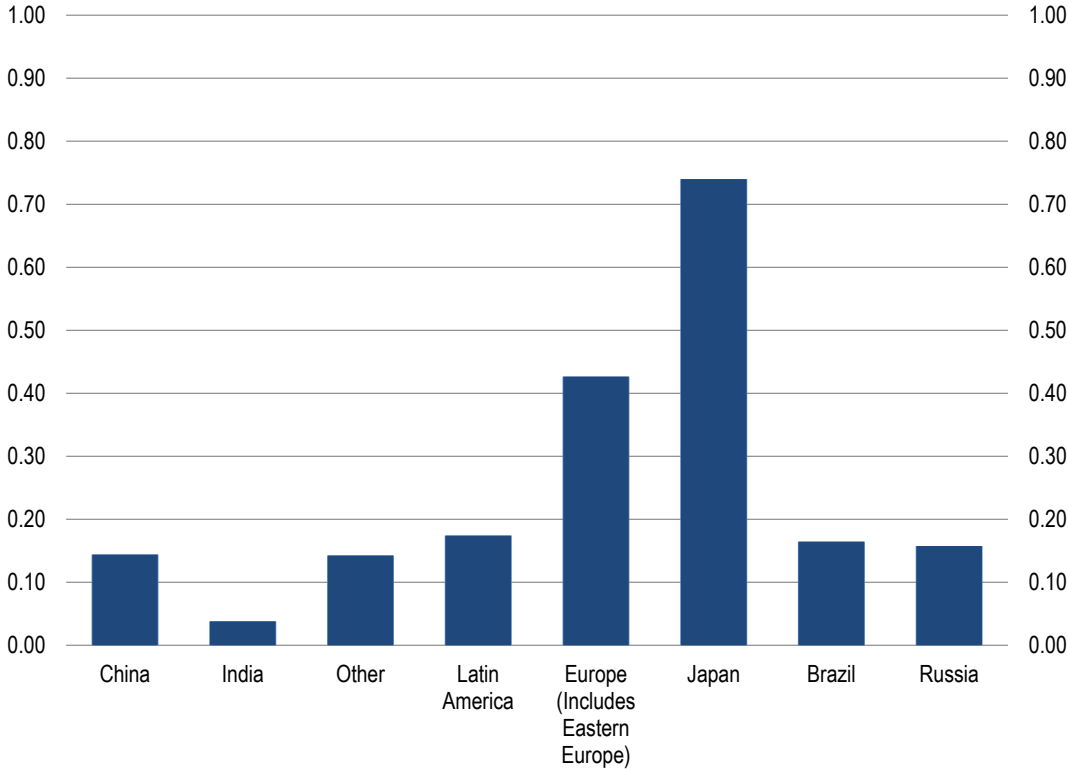
Unemployment (percent of the labor force)



Sources: Haver Analytics; U.S. Department of Labor. Updated through December 2018.

... Full of Opportunity

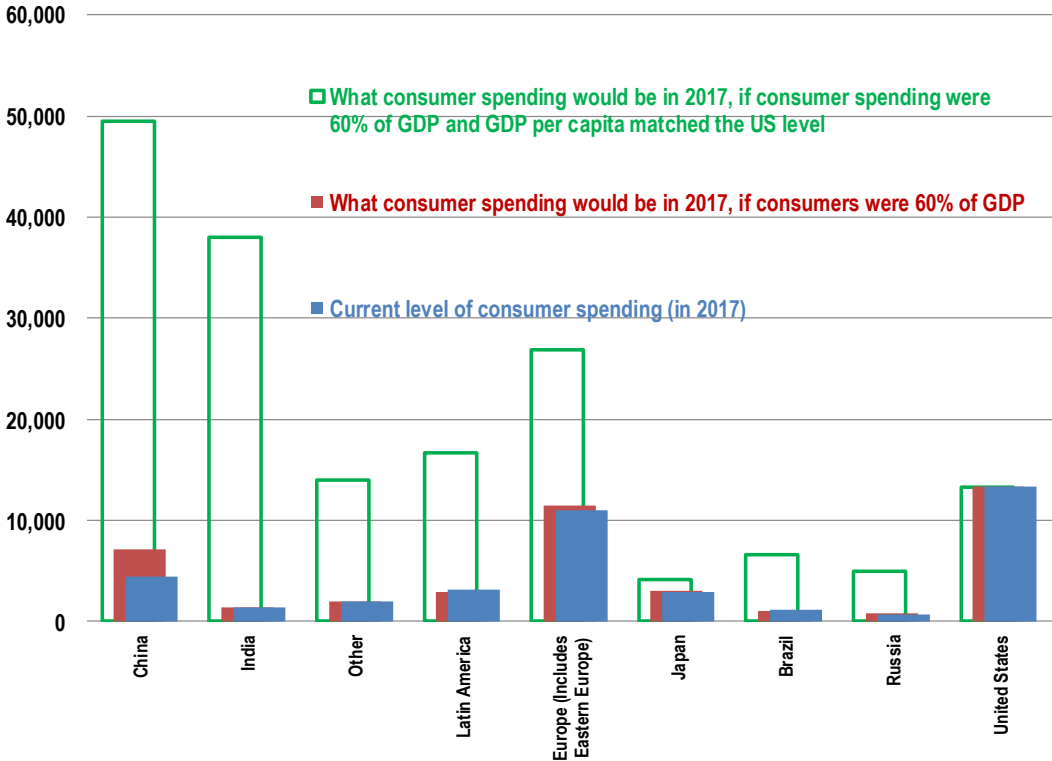
Relative real GDP per capita (ratio to U.S. real GDP per capita, 2016 dollars)



Sources: Haver Analytics; World Bank; JPMorgan Chase & Co. Updated through 2018 Q3.

Bottom Line: Helping Others Helps Ourselves

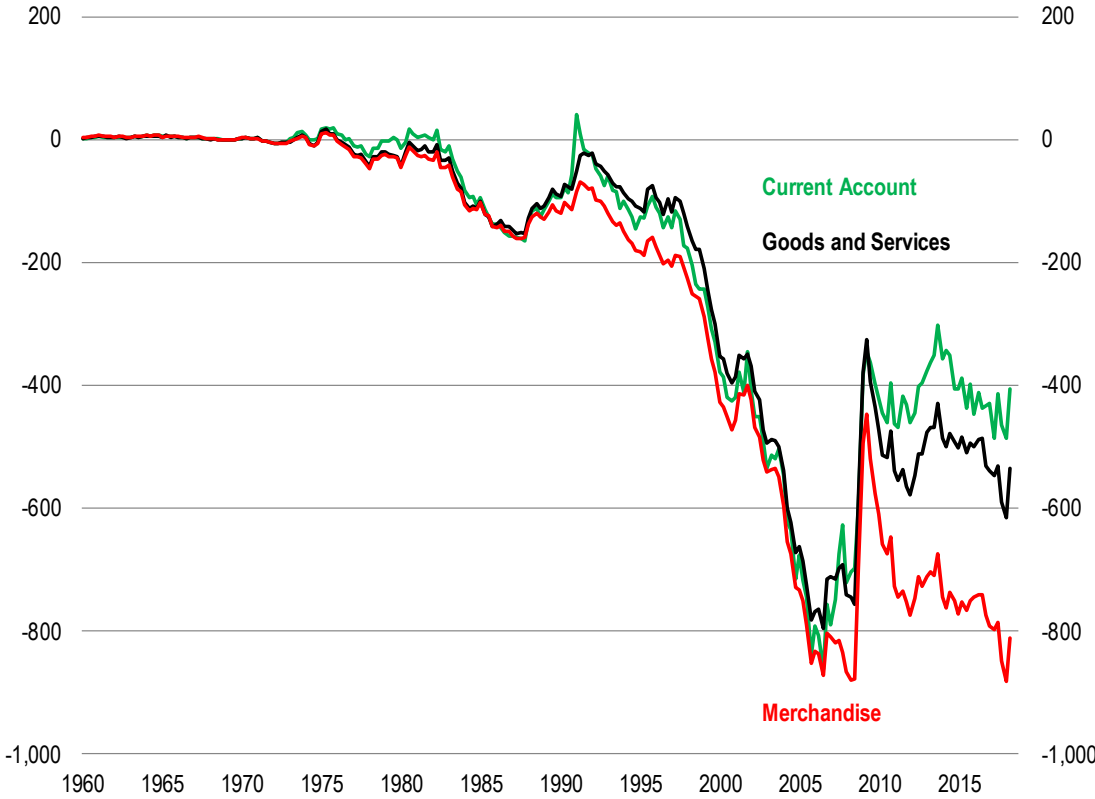
Consumer opportunities (chained 2009 dollars)



Sources: Haver Analytics; World Bank; JPMorgan Chase & Co. Updated through 2018 Q3.

The Goods Trade Deficit Is a Red Herring ...

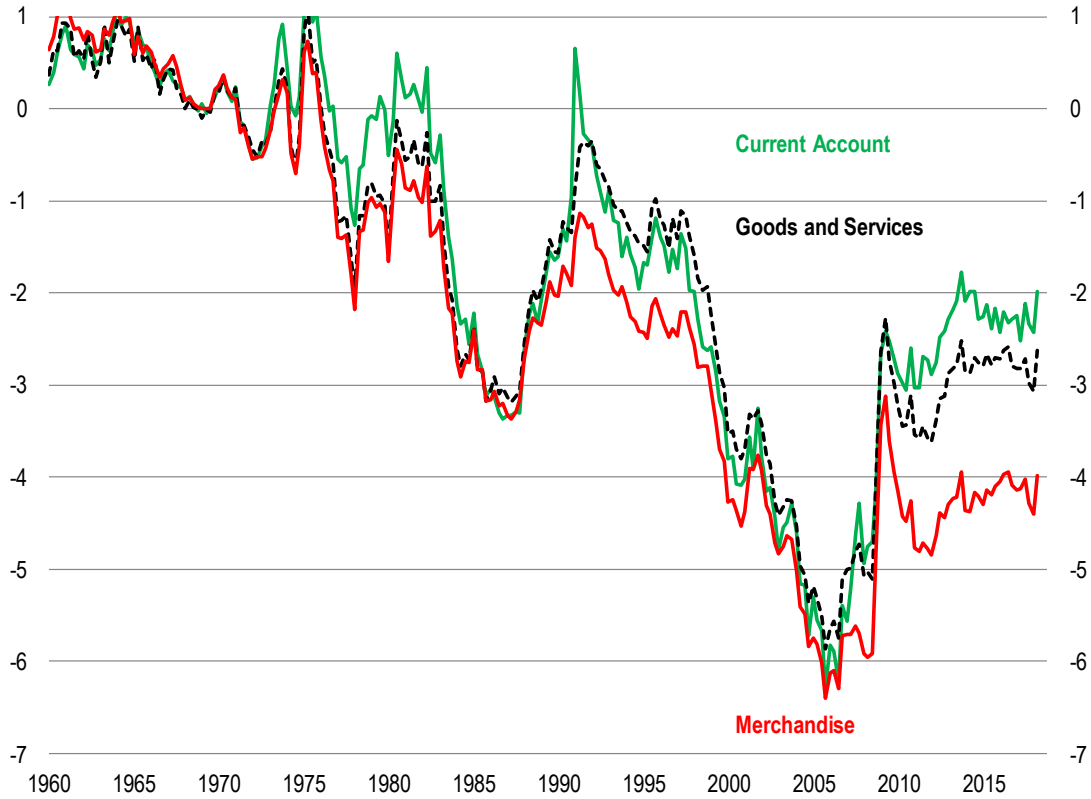
Components of the U.S. current account balance (billions of dollars annually)



Sources: Haver Analytics; U.S. Department of Commerce. Updated through 2018 Q2.

... and Imbalances Are Small Versus GDP

Components of the U.S. current account balance (percent of GDP)



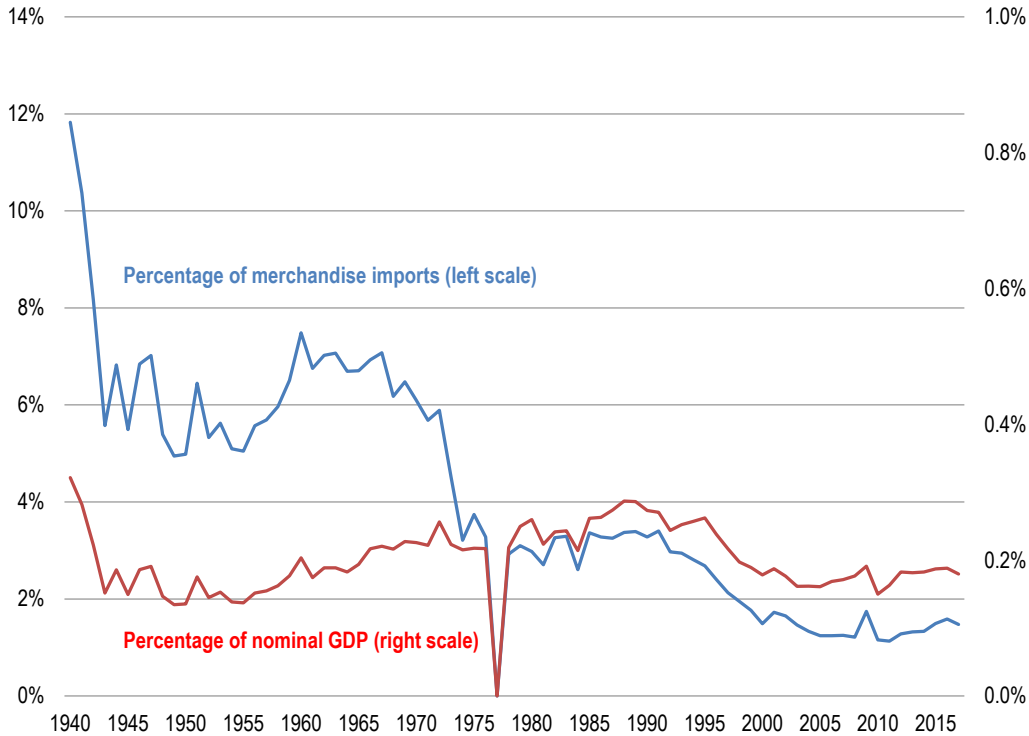
Sources: Haver Analytics; U.S. Department of Commerce. Updated through 2018 Q2.

We Know Trade Wars, You're No Trade War

- This is no Smoot-Hawley Tariff Act of 1930
- Protection of intellectual property
- Forced technology transfers
- Open access to markets
- China 2025
- Belt and Road project
- Memo: the focus on the goods trade deficit is a red herring

Tariffs Falling Out of Fashion

Customs duties
(percent of merchandise imports) (percent of GDP)



Sources: Haver Analytics; U.S. Treasury. Updated through 2017.

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jglassman@jpmorgan.com

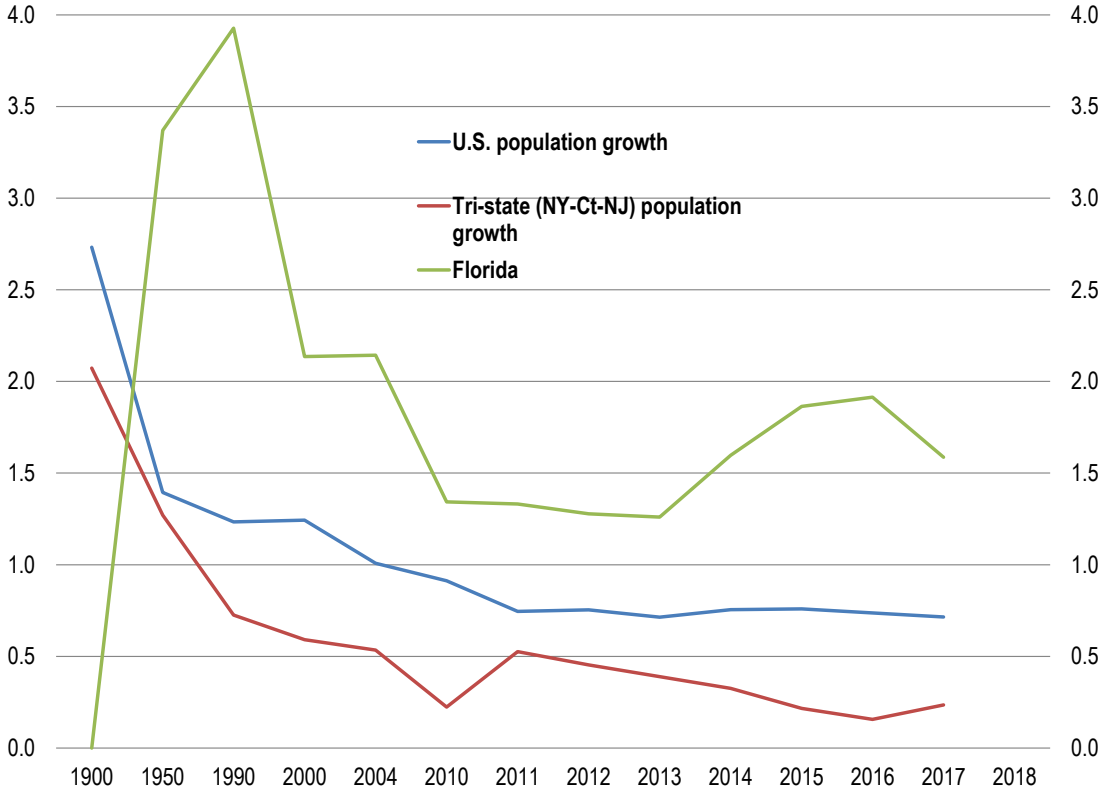
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Appendix 1. Florida

People in Motion

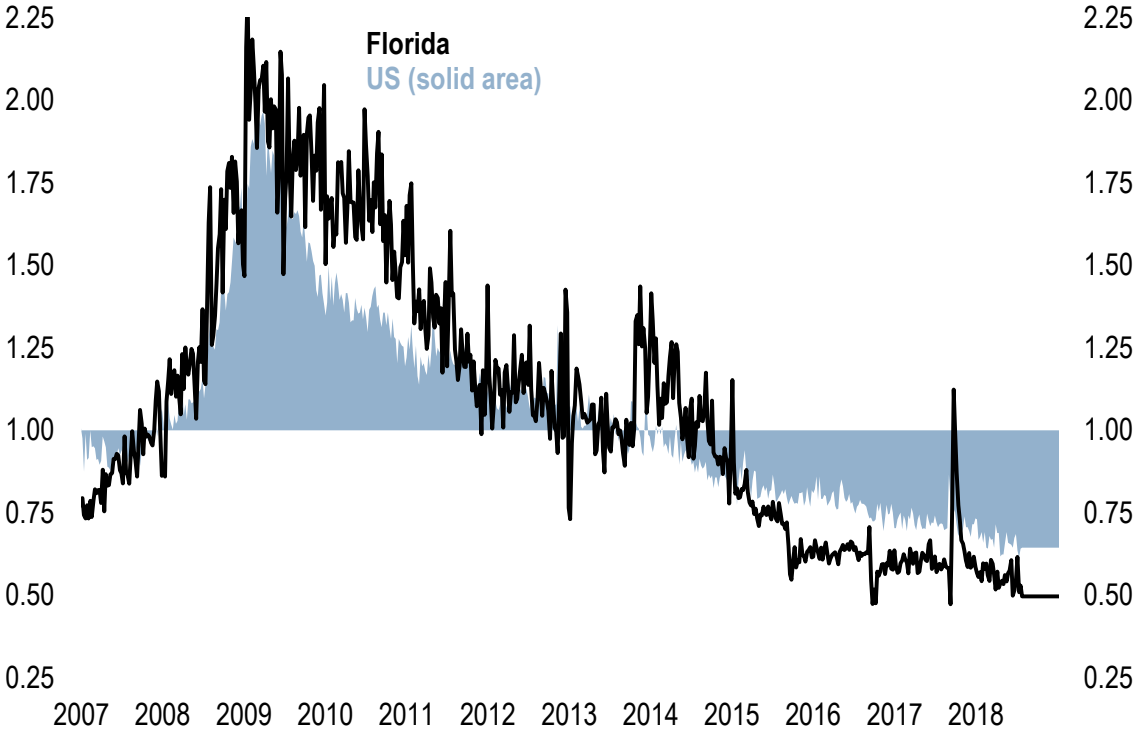
Population growth in selected regions (percent change from a year earlier)



Sources: Haver Analytics; U.S. Department of Labor. Updated through 2017.

Smooth Sailing ...

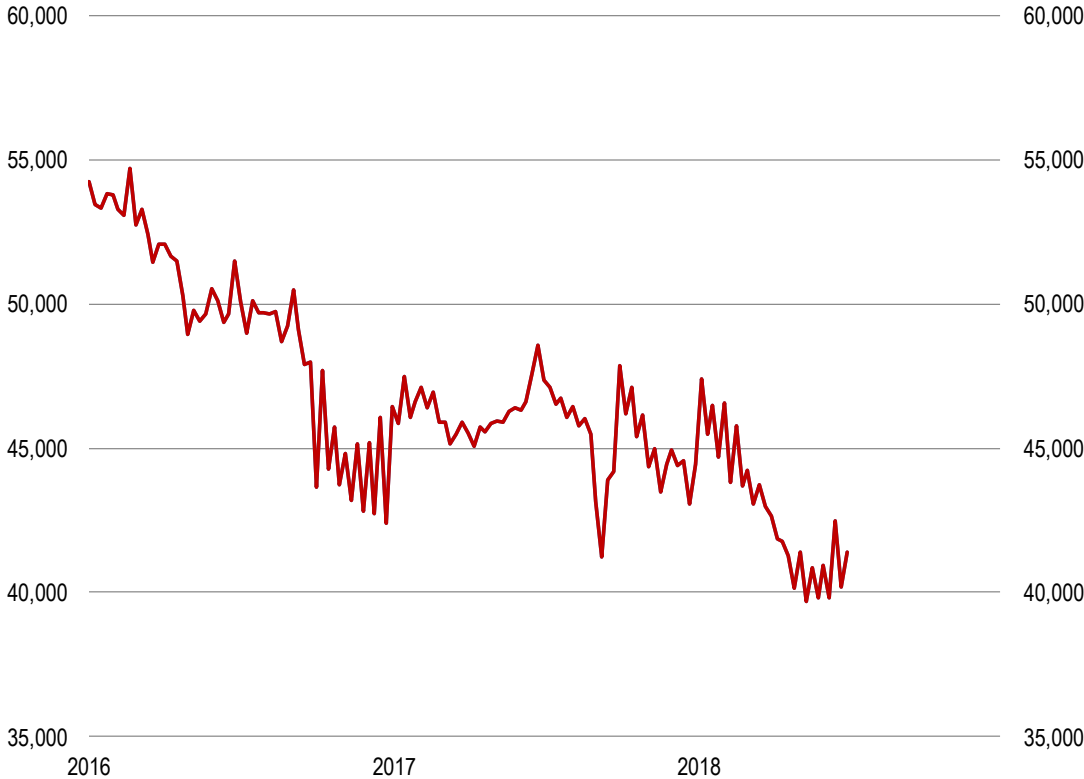
Jobless claims in Florida (ratio to 2007 Q4 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through July 28, 2018.

... and Second Wind This Year

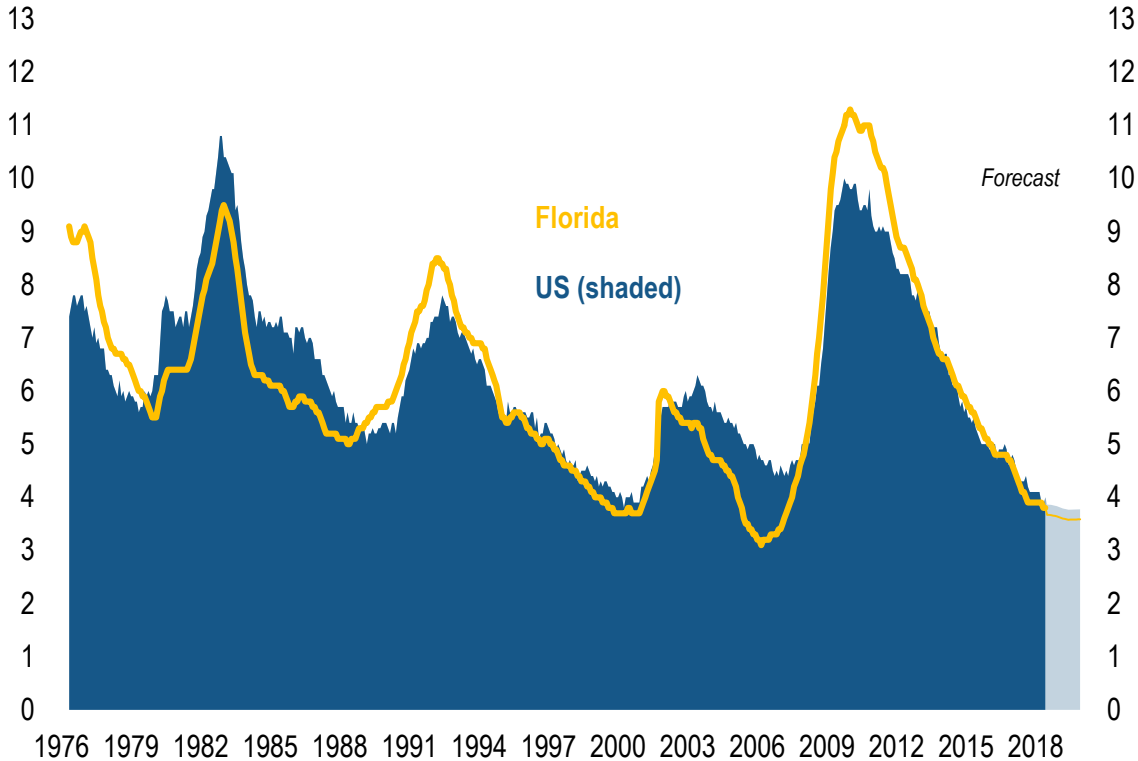
Claimants (number)



Sources: Haver Analytics; U.S. Department of Labor. Updated through July 21, 2018.

Back Home

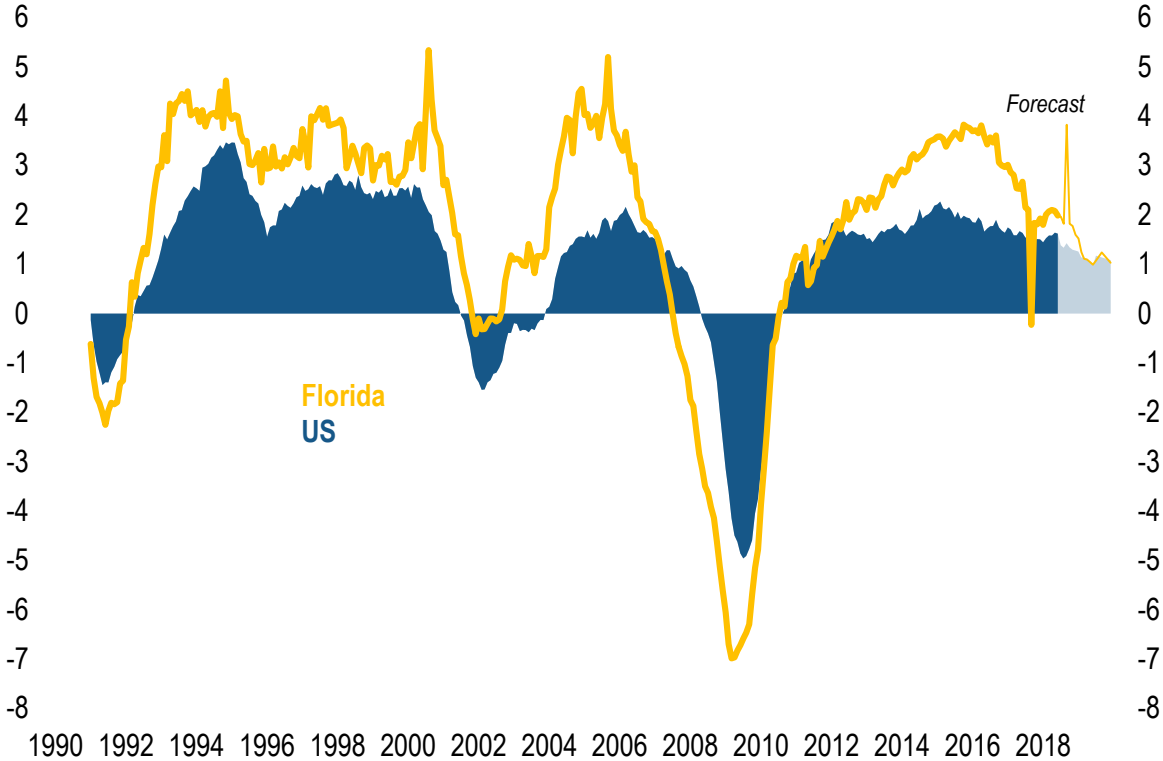
Unemployment in Florida and the U.S. (percent of the labor force)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

Robust Job Growth Still

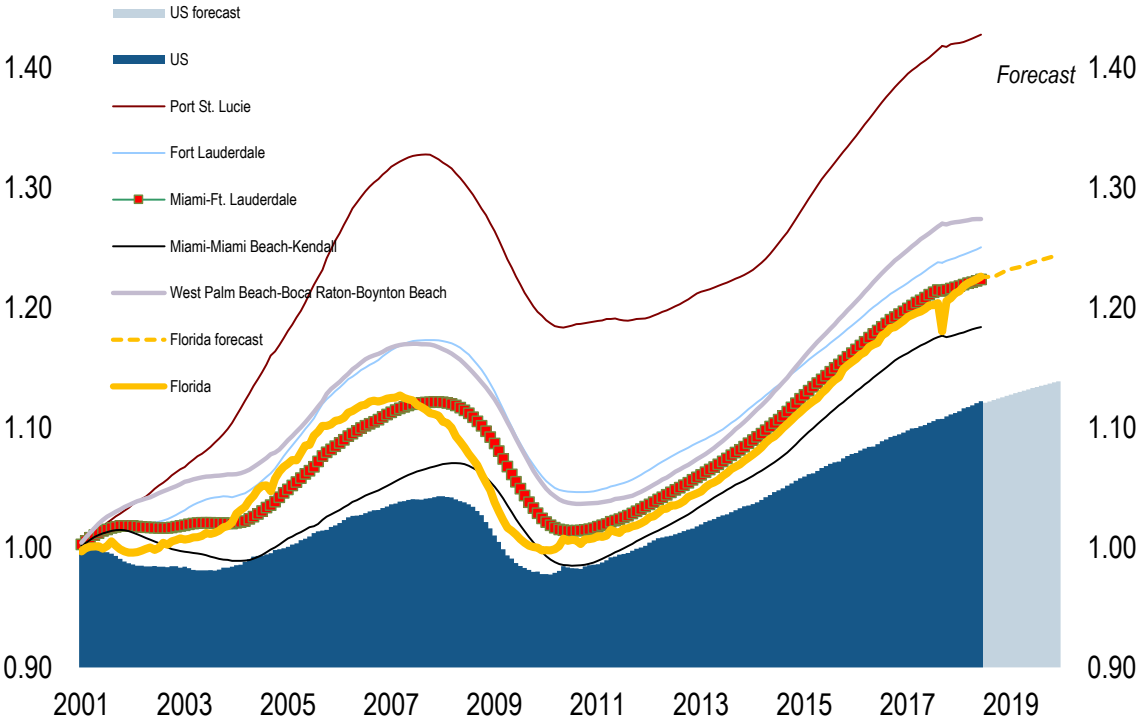
Nonfarm employment in Florida vs the U.S. (percent change from 12 months earlier)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

South Florida

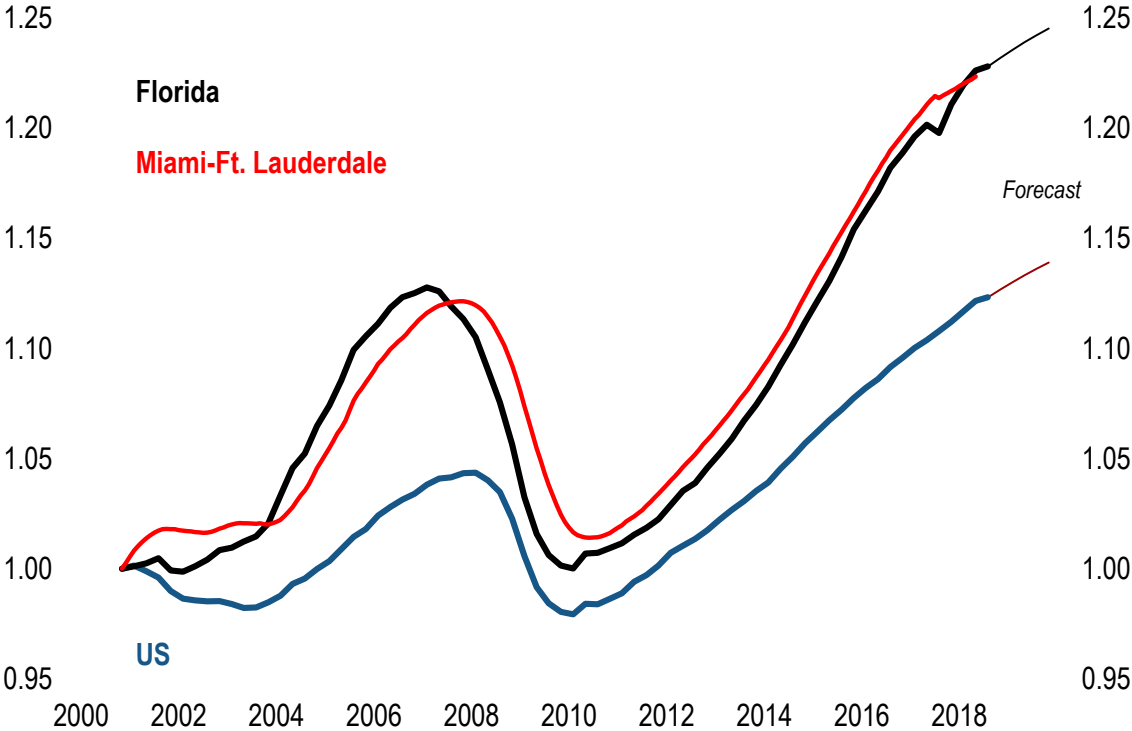
Nonfarm employment in Florida and the U.S. (ratio to 2000 Q4 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

Miami

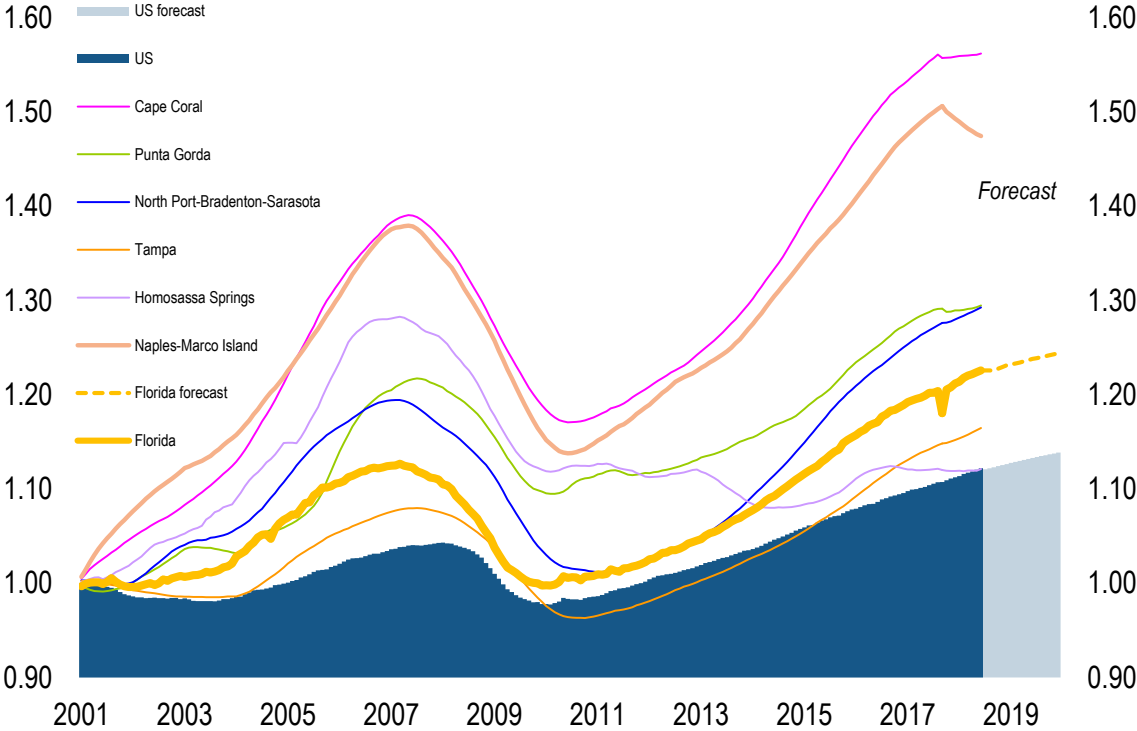
Nonfarm employment in Florida and the U.S. (ratio to 2000 Q4 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

Southwest Florida

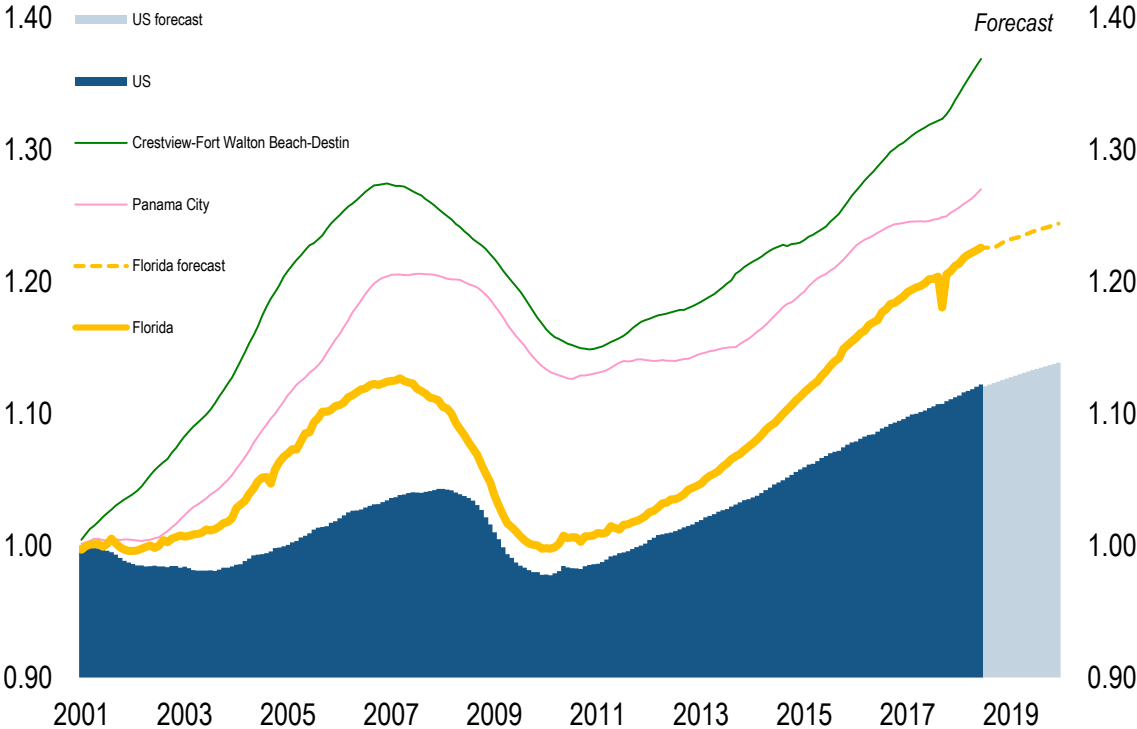
Nonfarm employment in selected Florida cities and the U.S. (ratio to 2000 Q4 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

Panhandle

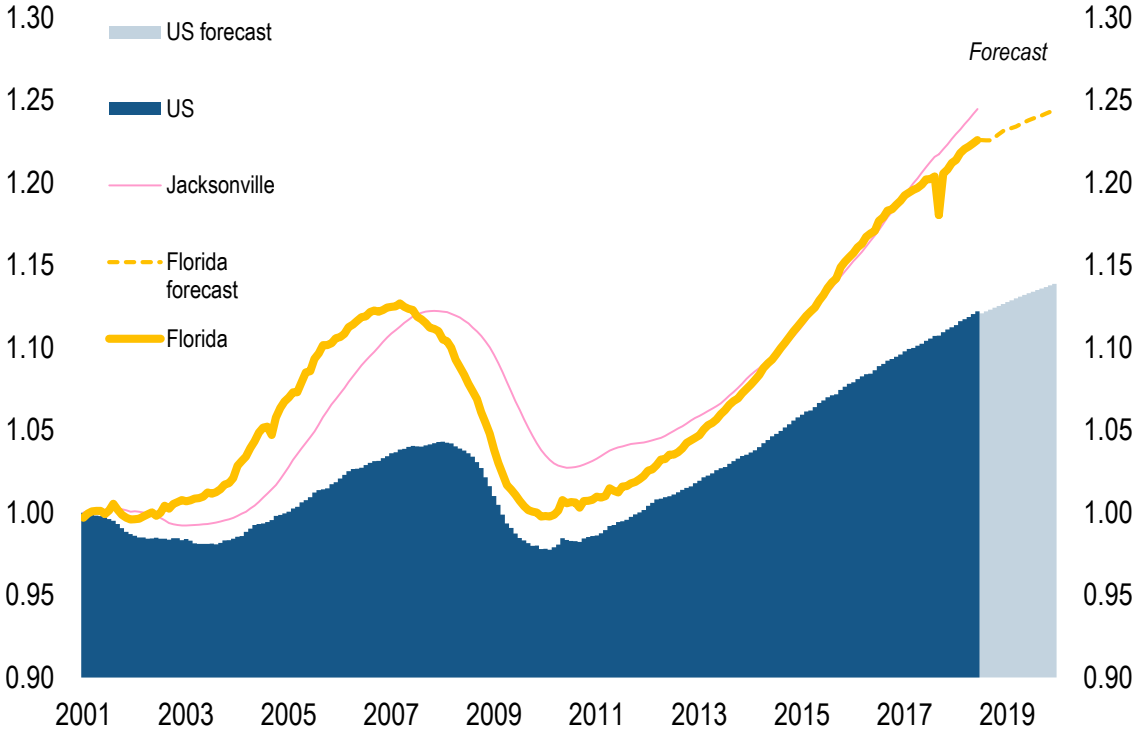
Nonfarm employment in selected Florida cities and the U.S. (ratio to 2000 Q4 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

Jacksonville

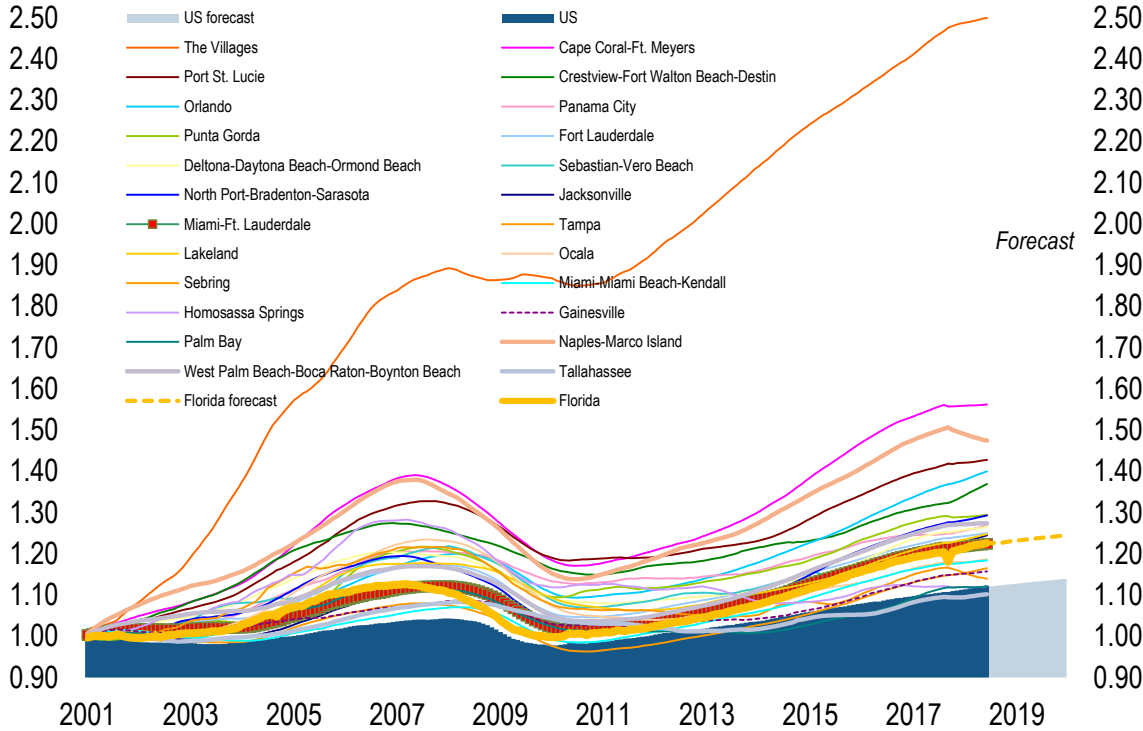
Nonfarm employment in selected Florida cities and the U.S. (ratio to 2000 Q4 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

Across the State

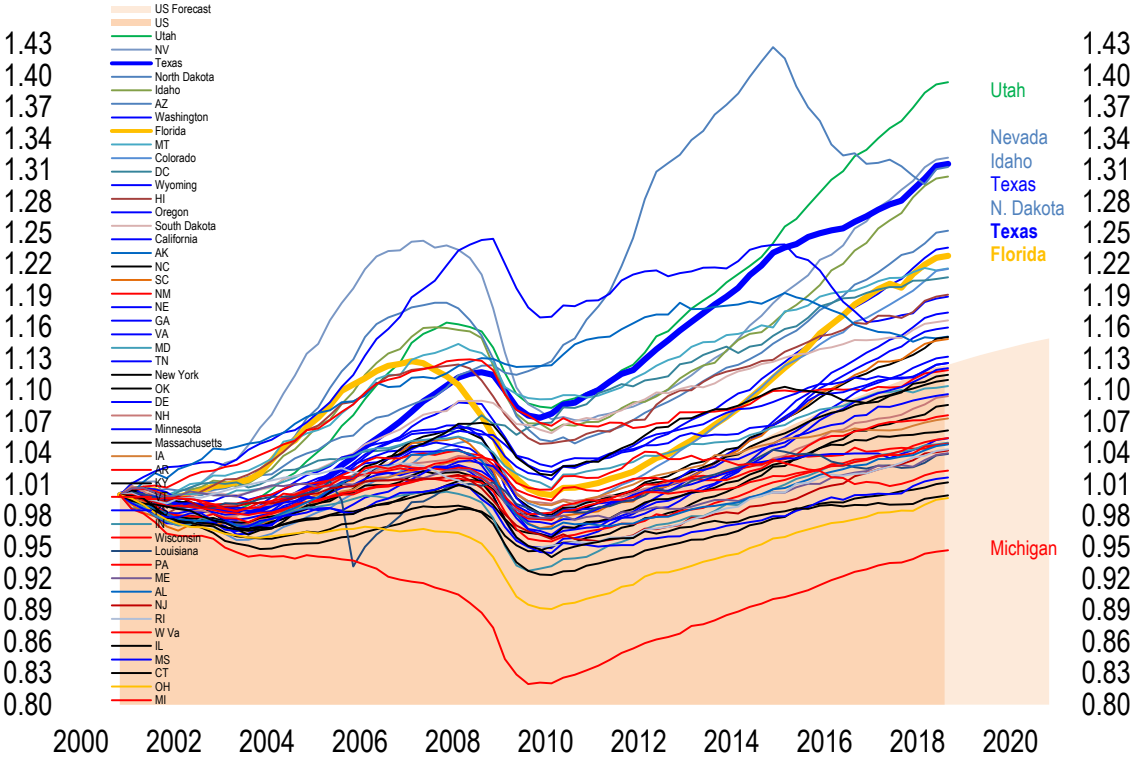
Nonfarm employment in selected Florida cities and the U.S. (ratio to 2000 Q4 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

Florida Is Pulling Up ...

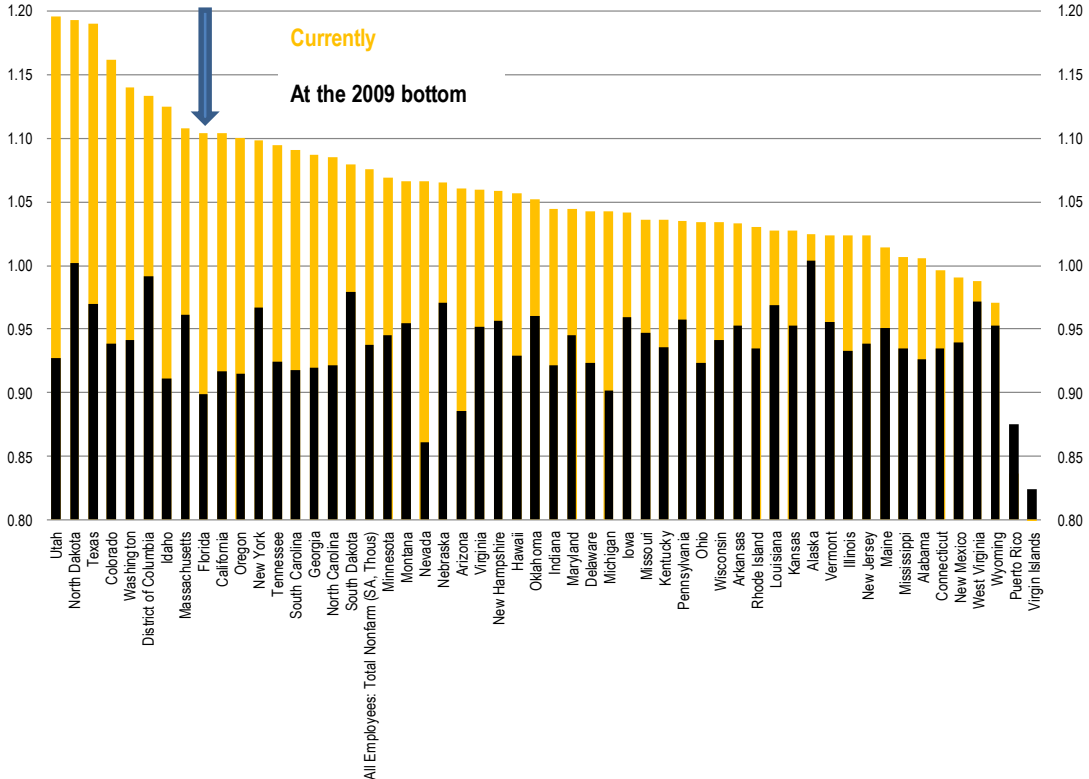
Nonfarm payroll employment across the nation (ratio to 2007 Q4)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

... From the Deep Hole It Fell Into

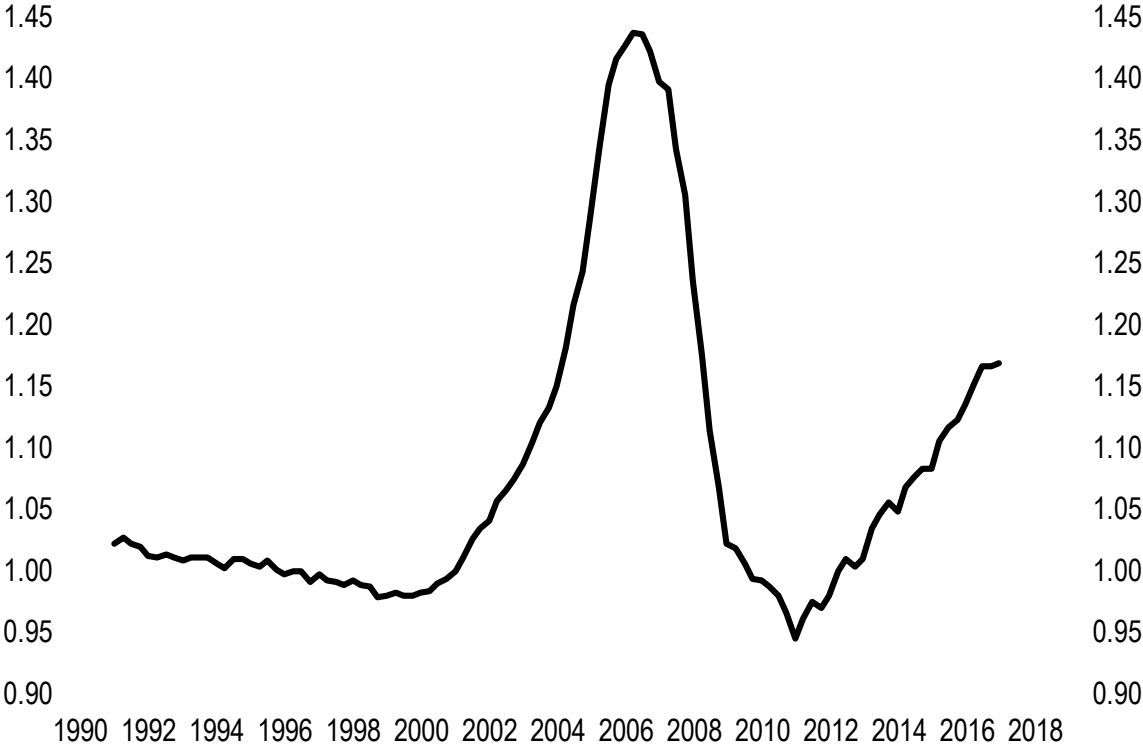
Nonfarm employment at the cycle bottom and now (ratio to December 2007 level)



Sources: Haver Analytics; U.S. Department of Labor. Updated through June 2018 (state) and June 2018 (U.S.).

House Prices ...

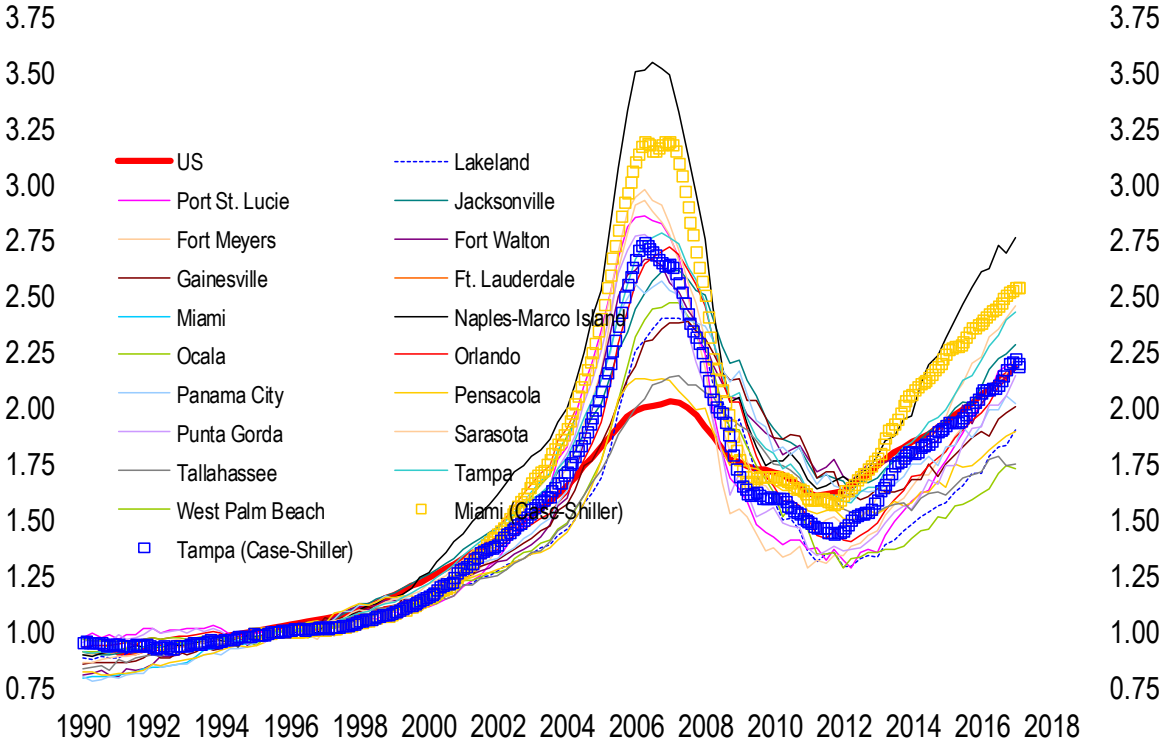
Ratio of the state's house prices to the national average (1995 Q2 = 1.0)



Sources: Haver Analytics; FHFA. Updated through 2017 Q1.

... Broadly Similar Across the State

House prices in selected communities (ratio to the 1995 Q2 level)



Sources: Haver Analytics; FHFA; Standard & Poor's. Updated through 2017 Q1 (FHFA) and March 2017 (S&P measure).

Most Still Are in “Underwater” Territory

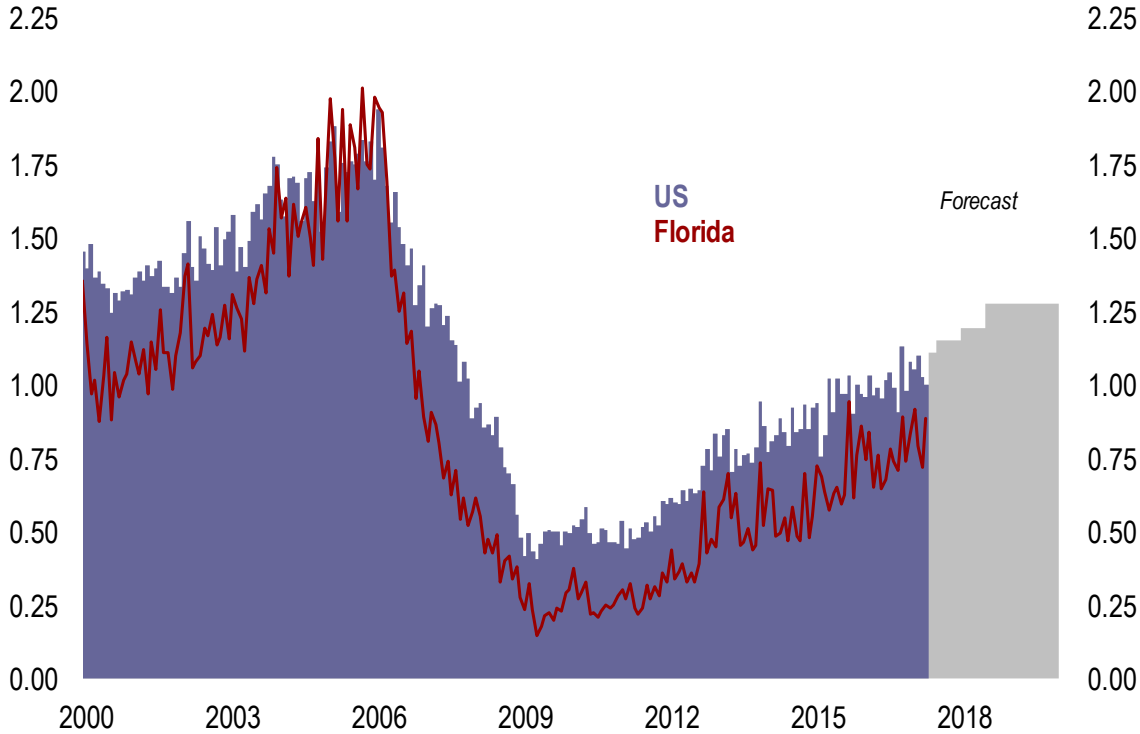
House prices in selected communities (ratio to the 2003 average)

	<u>2007 Peak</u>	<u>2011 Bottom</u>	<u>Now (2017 Q1)</u>
US	1.30	1.03	1.36
Florida	1.66	0.88	1.42
Naples-Marco Island	1.92	0.89	1.49
Crestview-Fort Walton Beach	1.83	1.14	1.49
Tampa-St. Petersburg-Clearwater	1.69	0.96	1.47
Bradenton-Sarasota-Venice	1.76	0.86	1.45
Orlando-Kissimmee	1.79	0.92	1.44
Cape Coral-Fort Meyers	1.84	0.80	1.39
Jacksonville	1.60	0.99	1.39
Pensacola-Ferry Pass-Brent	1.56	1.09	1.38
Lakeland-Winter Haven	1.74	0.93	1.37
Gainesville	1.63	1.08	1.37
Port St. Lucie-Fort Pierce	1.75	0.79	1.36
Panama City-Lynn Haven	1.72	1.06	1.35
Punta Gorda	1.71	0.82	1.33
Tallahassee	1.54	1.08	1.26
Ocala	1.76	0.91	1.23

Sources: Haver Analytics; FHFA; Standard & Poor's. Updated through 2017 Q1 (FHFA) and March 2017 (S&P measure).

Homebuilding Recovering

Housing starts (ratio to the July 1990 level)



Sources: Haver Analytics; Census Department. Updated through April 2017.

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