

THE ECONOMY IN 2019: TERRIFIC, TURBULENT OR TEPID?

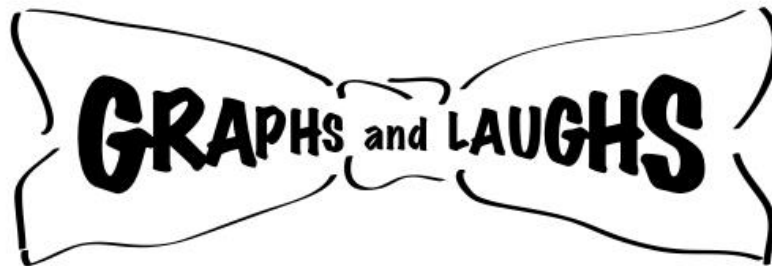
Presented by:

Elliot F. Eisenberg, Ph.D.

President: GraphsandLaughs, LLC

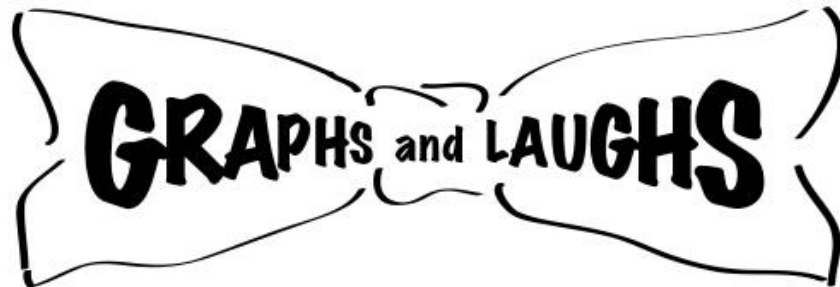
January 15, 2019

Reno, NV



**The Economy
is OK!**

$$\text{GDP} = C + I + G + (X - M)$$



Conference Board Consumer Confidence is High

But off their best levels

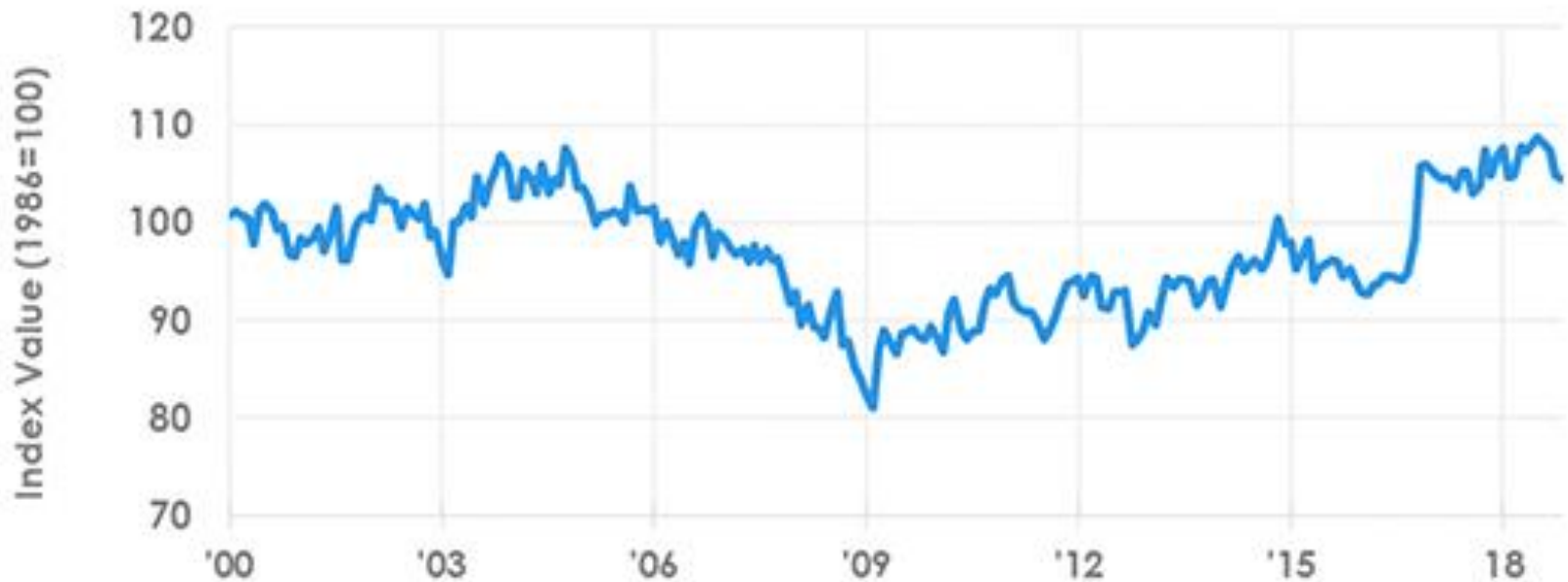


Small Business Confidence Remains Strong

Spectacular rise since election. But, declines of late

Small Business Optimism Index Remains High at 104.4

Based on 10 survey indicators, seasonally adjusted, Jan. '00 – Dec. '18

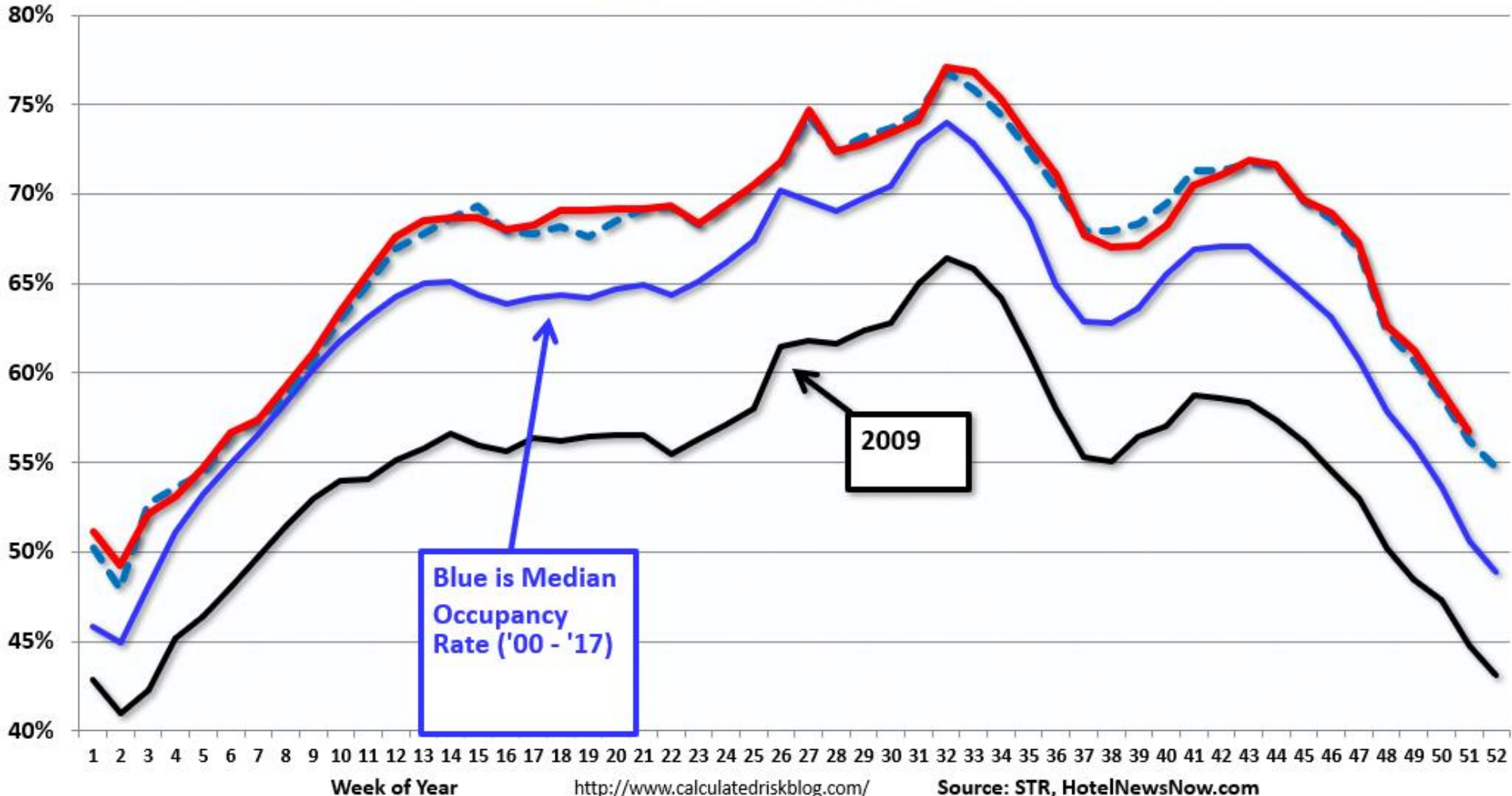


Hotel Occupancy Rates are Excellent!

Occupancy is superb as are ADR and RevPAR

Hotel Occupancy Rate by Week of Year (4 week moving average)

— 2009 — Median (2000-2017) - - 2017 — 2018



<http://www.calculatedriskblog.com/>

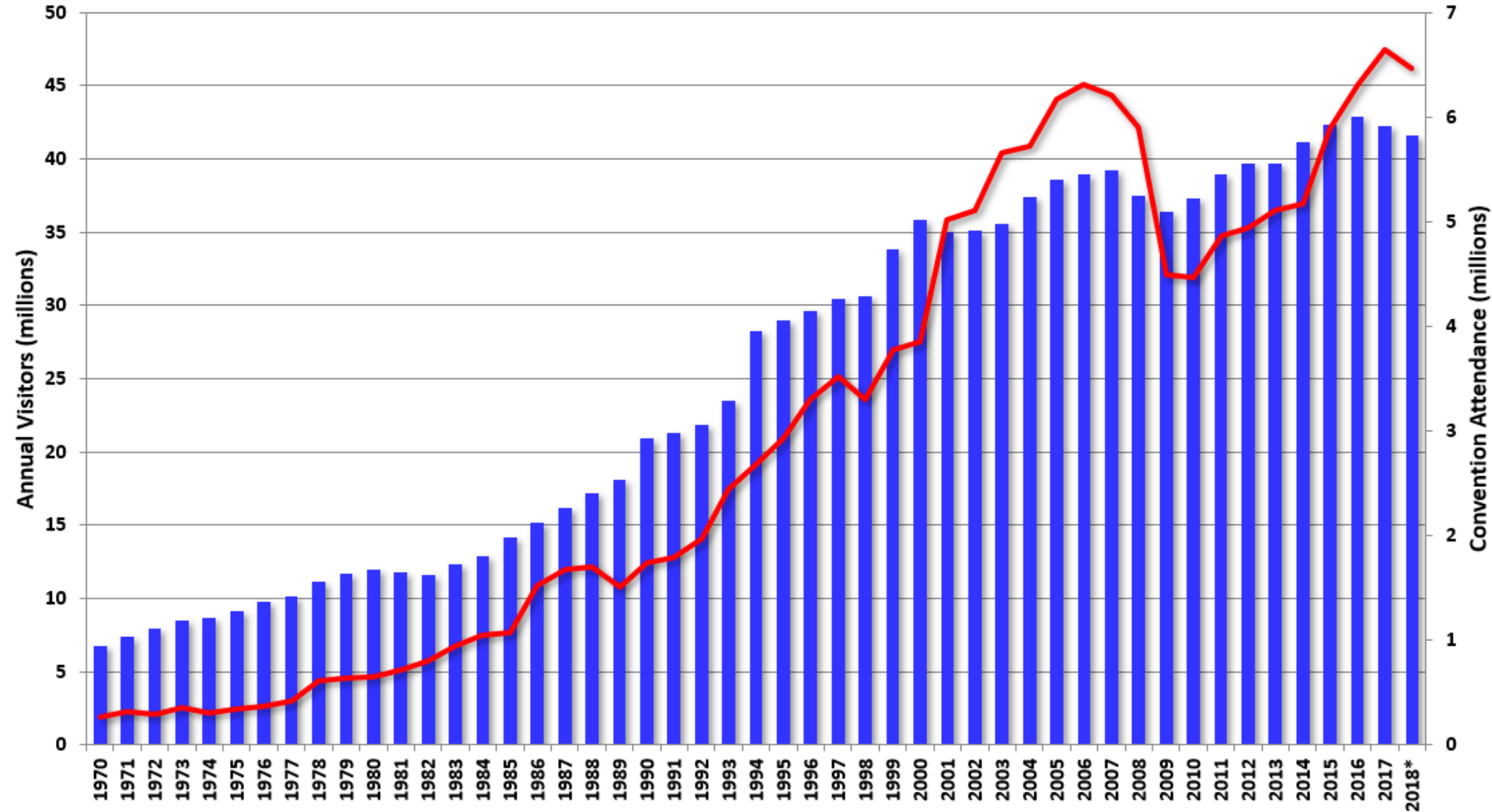
Source: STR, HotelNewsNow.com

Las Vegas Attendance Is good

The gamblers are generally back along with the conventioners

Las Vegas Visitors

■ Visitors — Convention Attendance

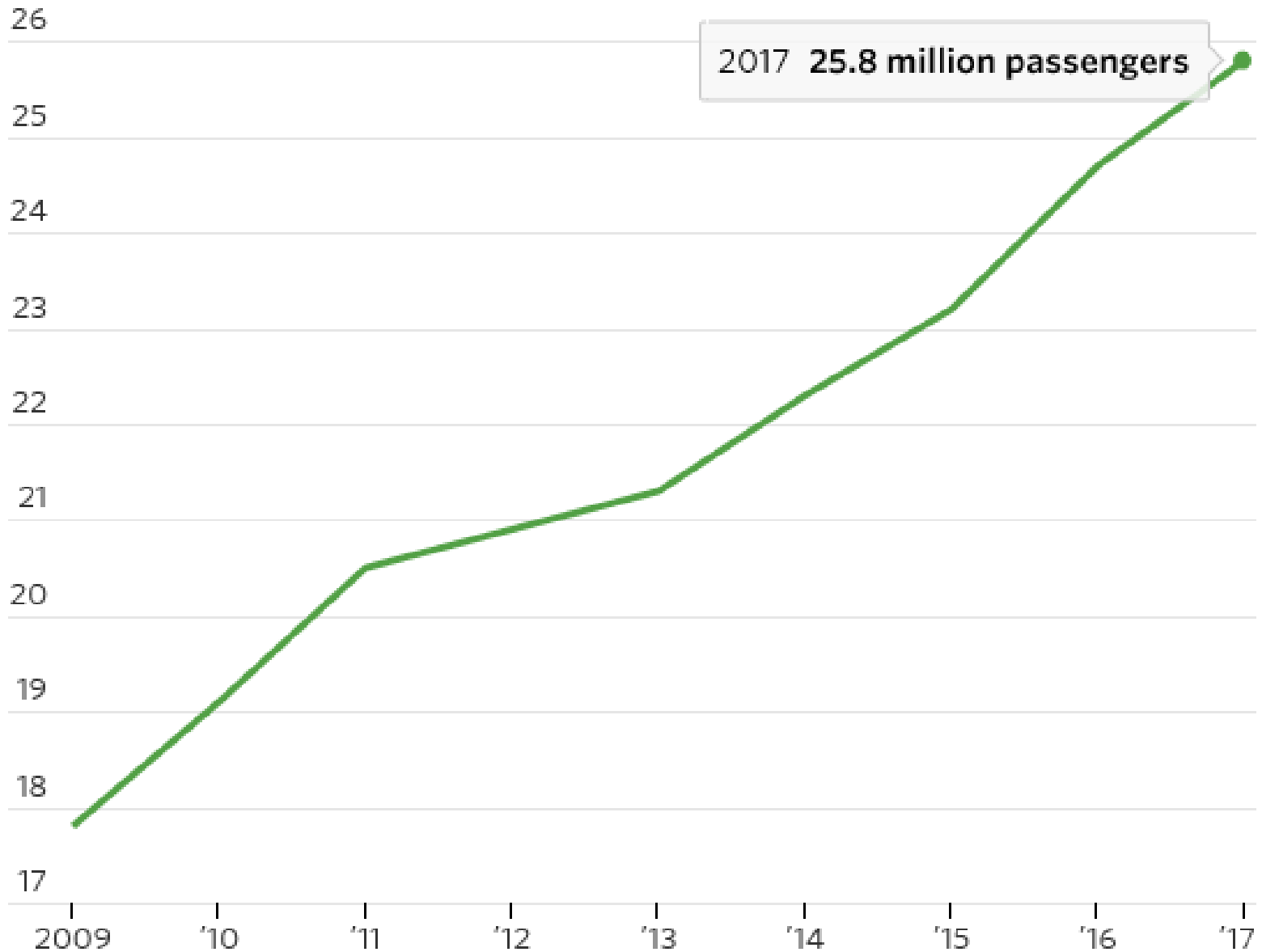


*2018 Estimated

<http://www.calculatedriskblog.com/>

Cruise-Passenger Growth is Rising Globally

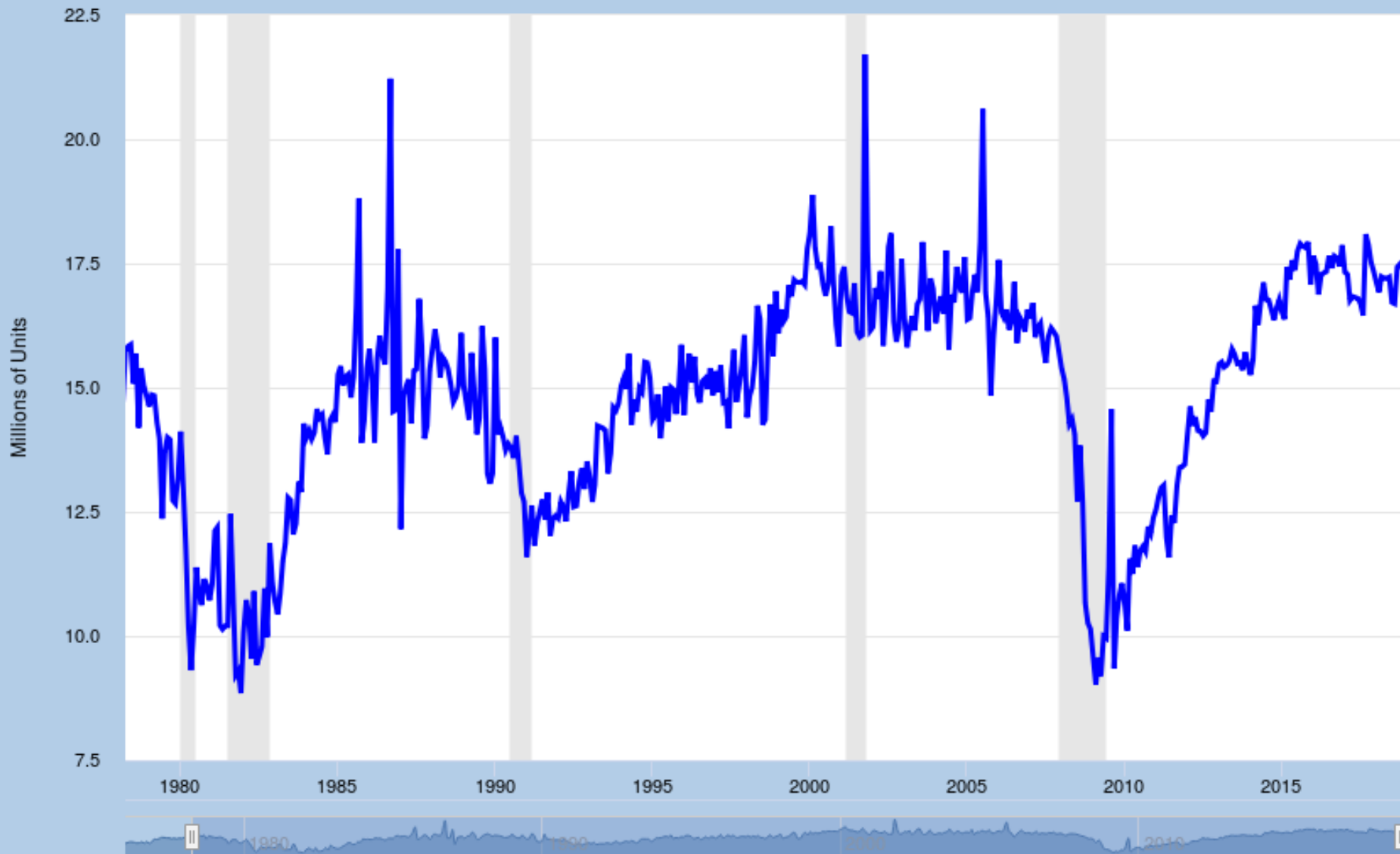
27 million passengers



US Light Vehicle Sales Slow

But, no records will be set

FRED  — Light Weight Vehicle Sales: Autos and Light Trucks



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Economic Analysis

myf.red/g/mozp

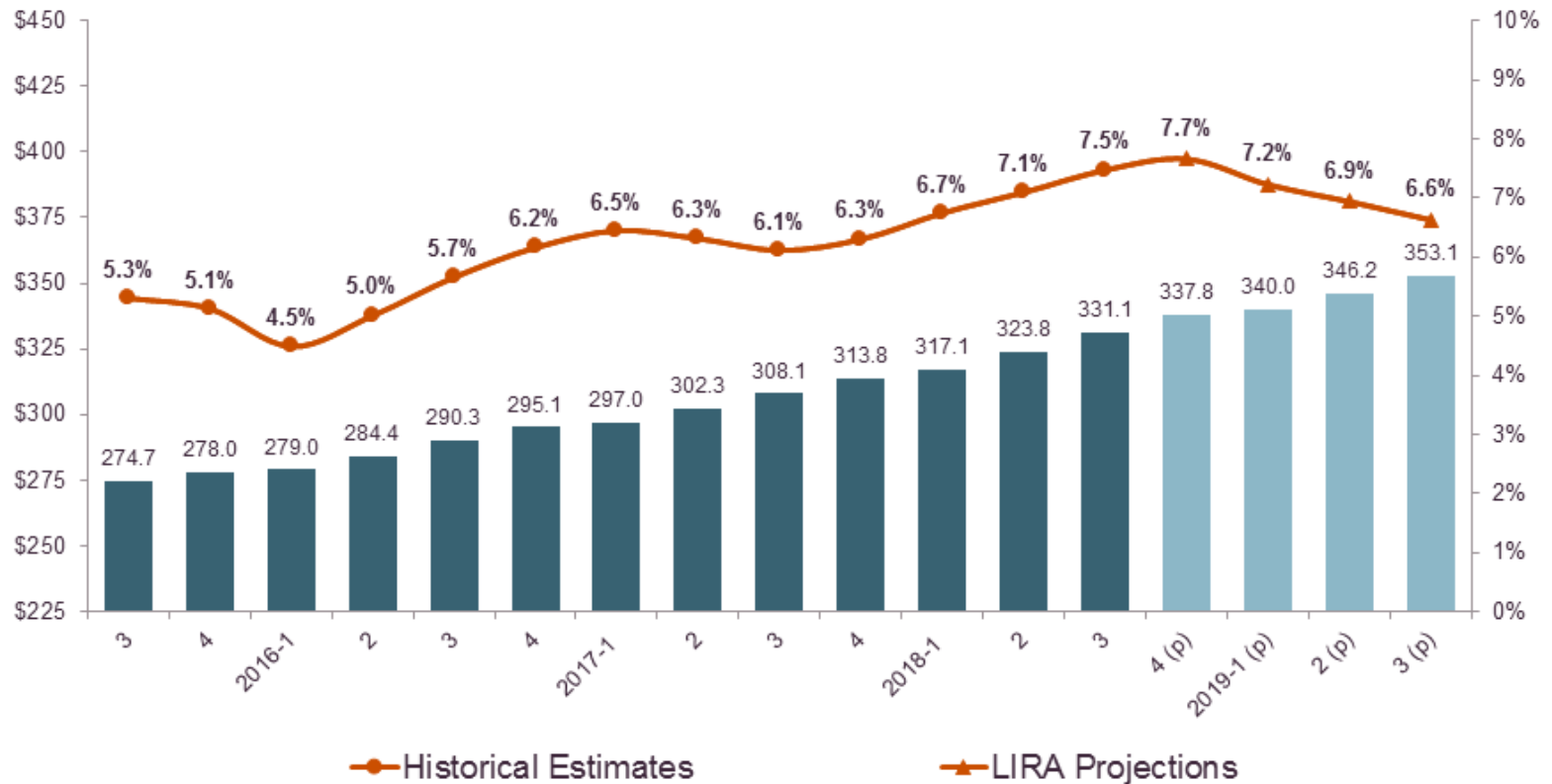
Housing Improvements & Repairs Keep Rising

Homes are aging, rates are low, home equity is good, and a lack of inventory

Leading Indicator of Remodeling Activity – Third Quarter 2018

Homeowner Improvements & Repairs
Four-Quarter Moving Totals
Billions

Four-Quarter Moving
Rate of Change

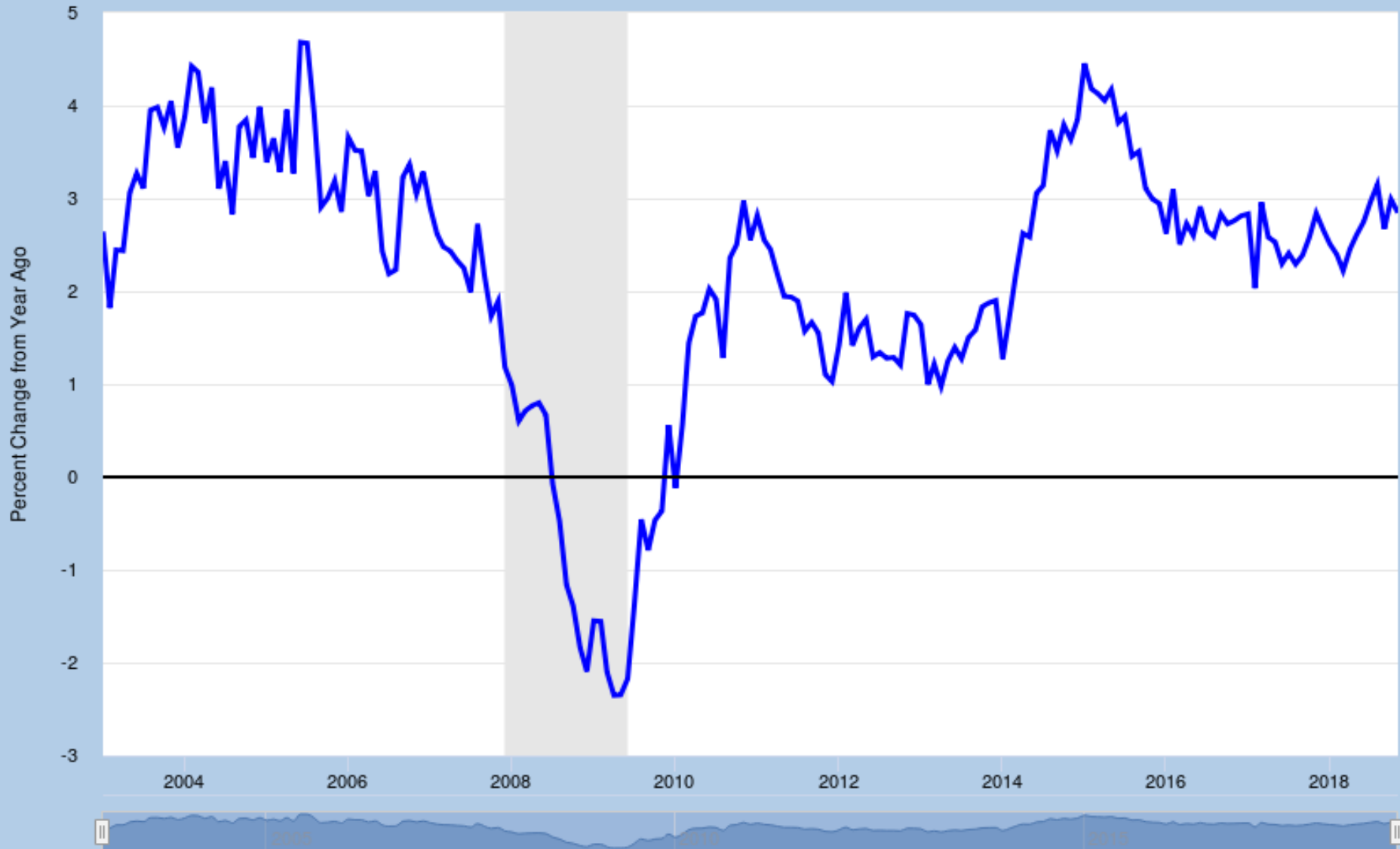


Note: Historical estimates since 2015 are produced using the LIRA model until American Housing Survey data become available.
Source: Joint Center for Housing Studies.

Annual Y-o-Y Percent Change in PCE

A very solid growth rate of 2.85%

FRED  — Real Personal Consumption Expenditures



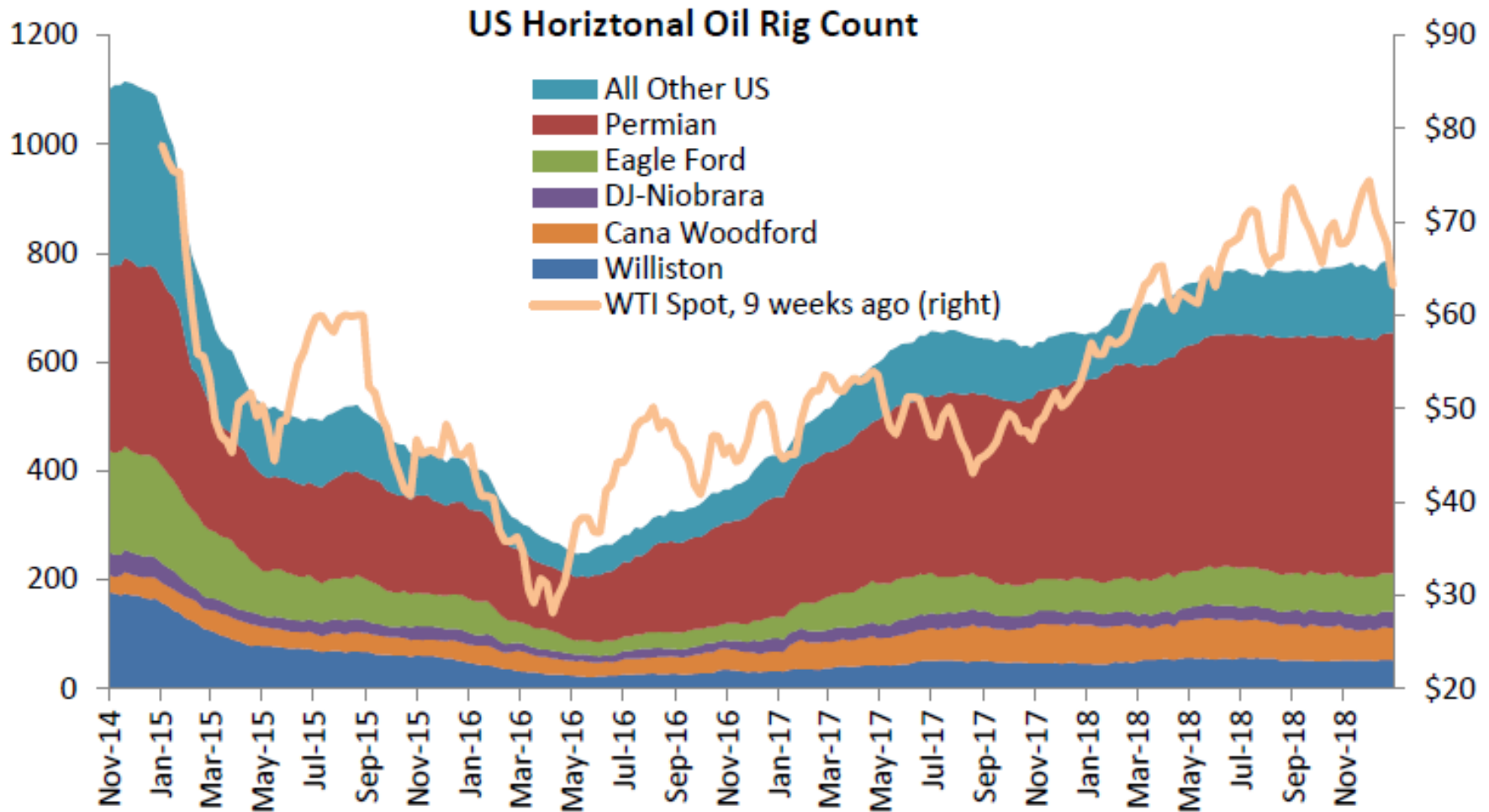
Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Economic Analysis

myf.red/g/muzM

Drilling Activity is High But Flat

Falling prices hurt but a lack of pipelines are a more lasting problem



- Horizontal oil rigs: +0 to 786

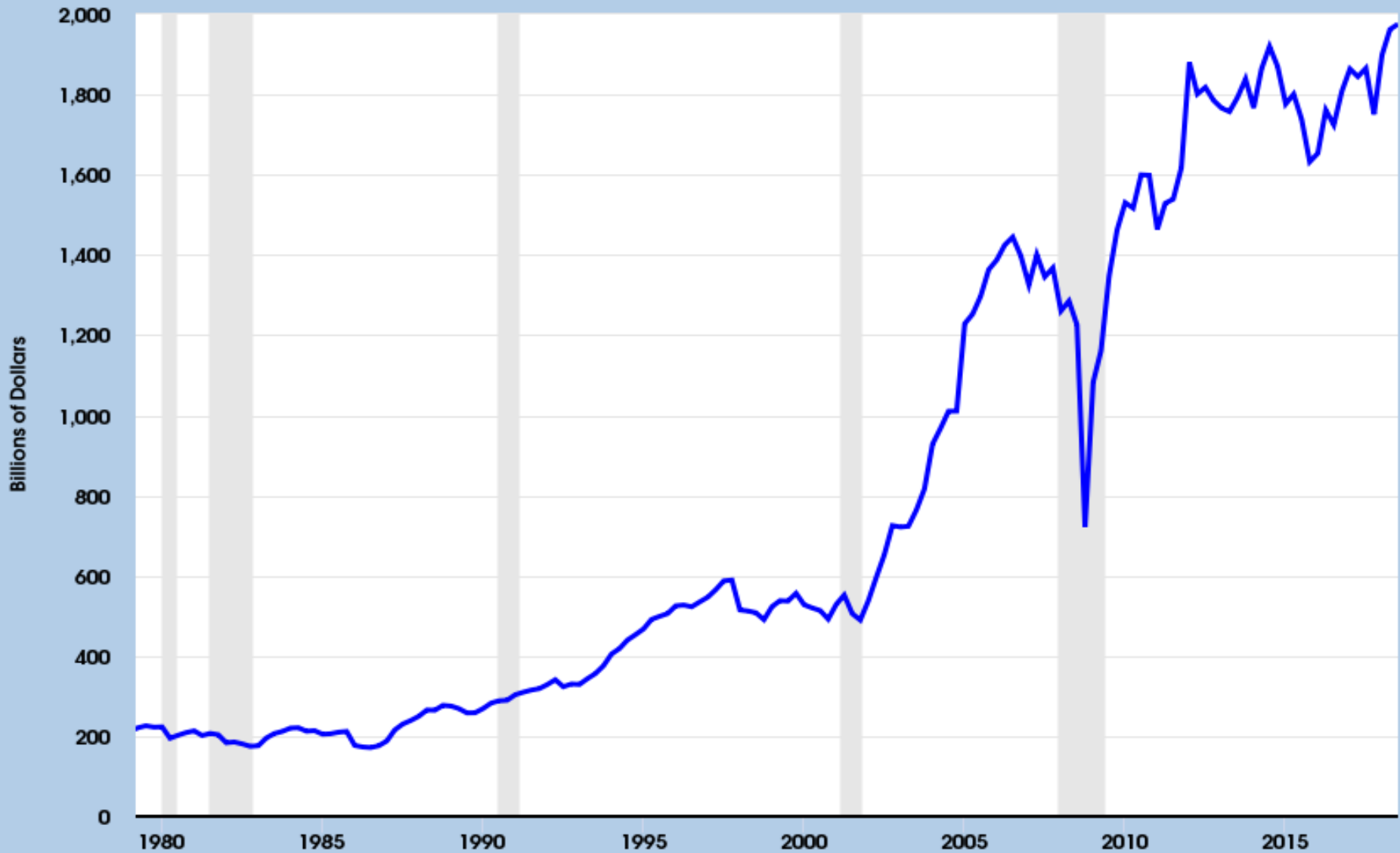
Corporate Profits are at a Record High

Corporate profit growth in 2019 will be much weaker

FRED



— Corporate Profits After Tax (without IVA and CCAdj)



Shaded areas indicate U.S. recessions

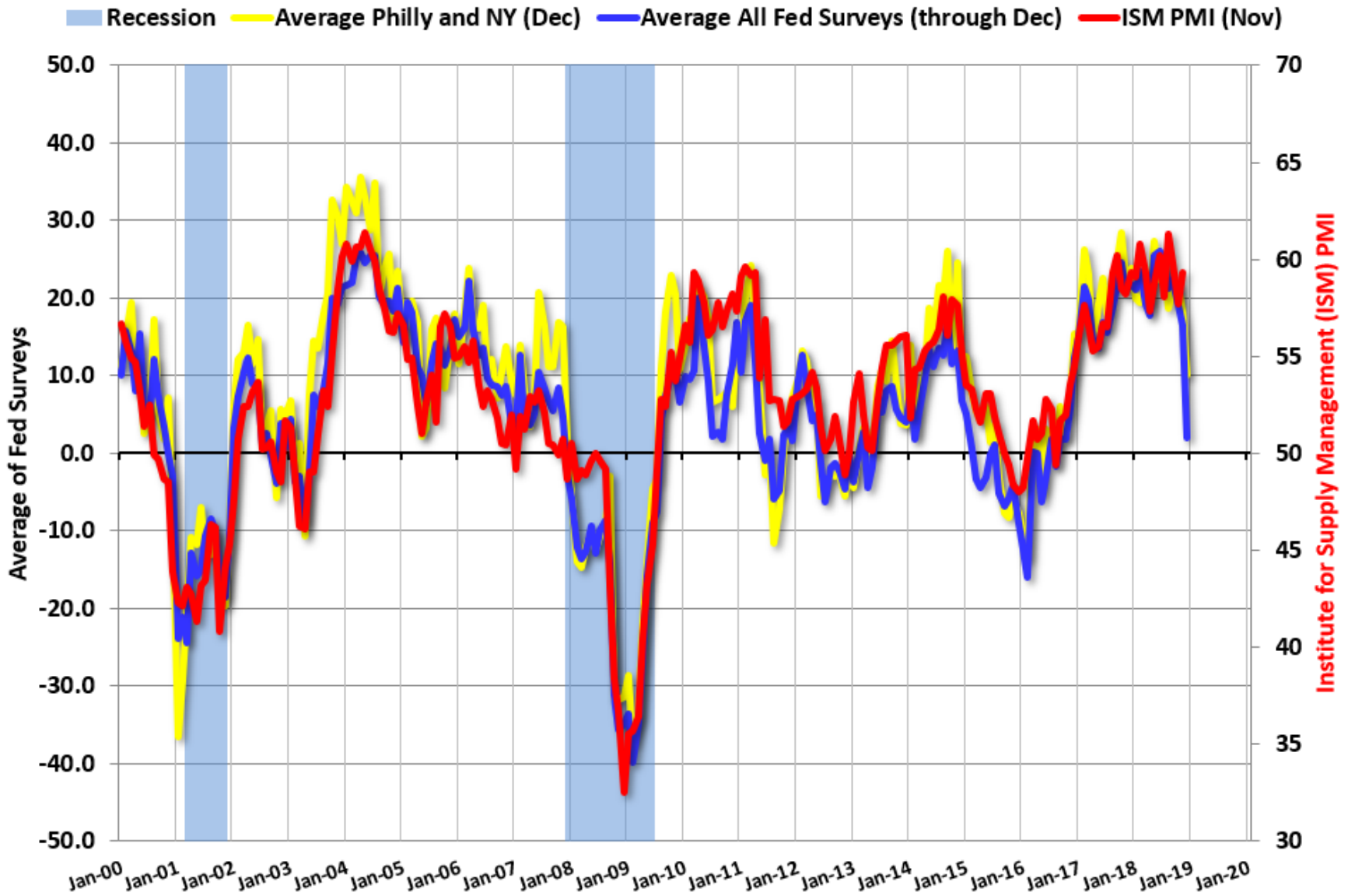
Source: U.S. Bureau of Economic Analysis

myf.red/g/merE

ISM Manufacturing Numbers Decline!

Manufacturing is less important than in decades past. Has it peaked?

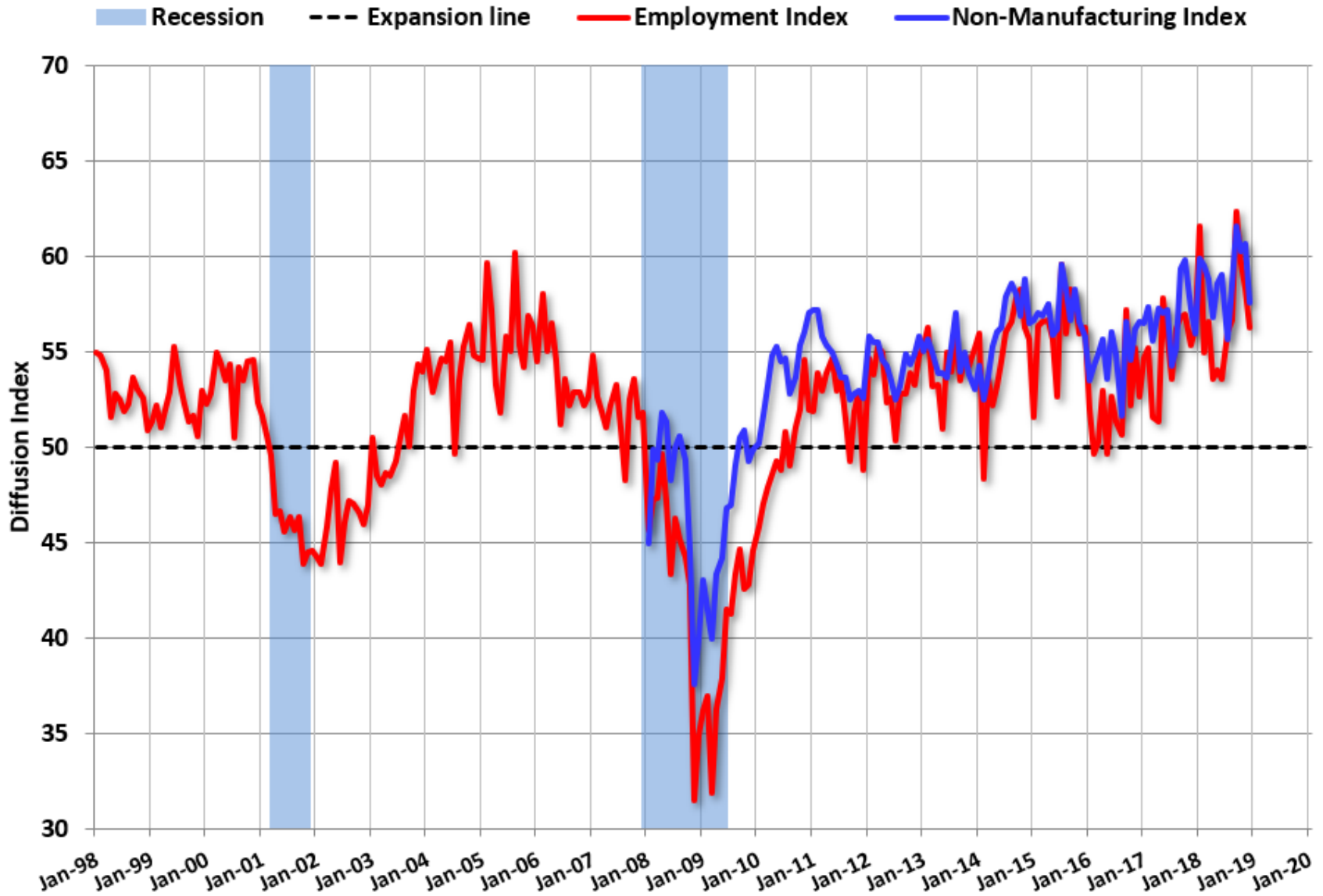
ISM Purchasing Managers' Index (PMI) and Fed Manufacturing Surveys



ISM Non-Manufacturing Numbers are Good

Service sector is hold up

ISM Non-Manufacturing and Employment Diffusion Indexes

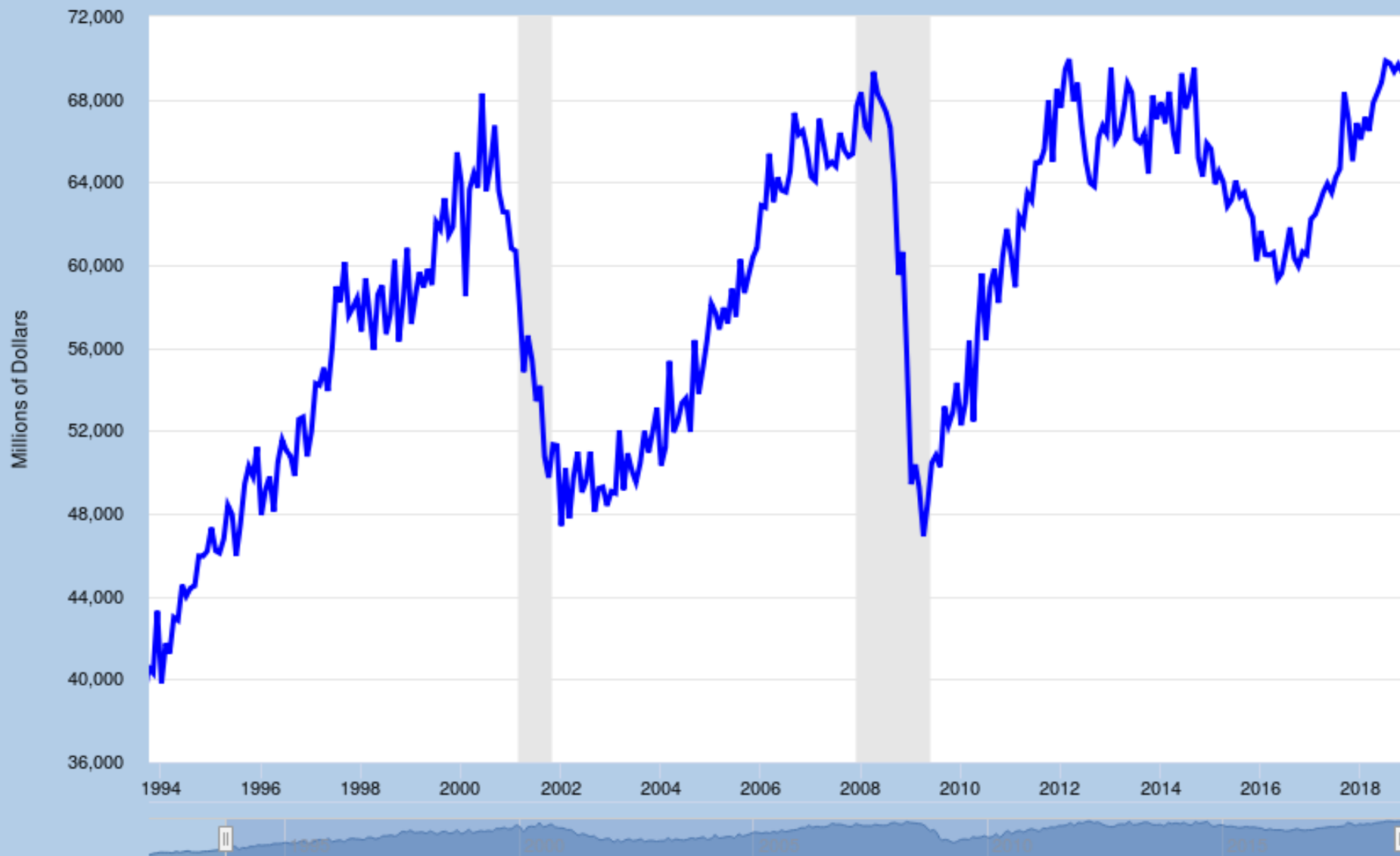


Look at Capital Goods Orders. They are OK

Slowing global growth, trade concerns and falling oil prices are why



— Manufacturers' New Orders: Nondefense Capital Goods Excluding Aircraft



Shaded areas indicate U.S. recessions

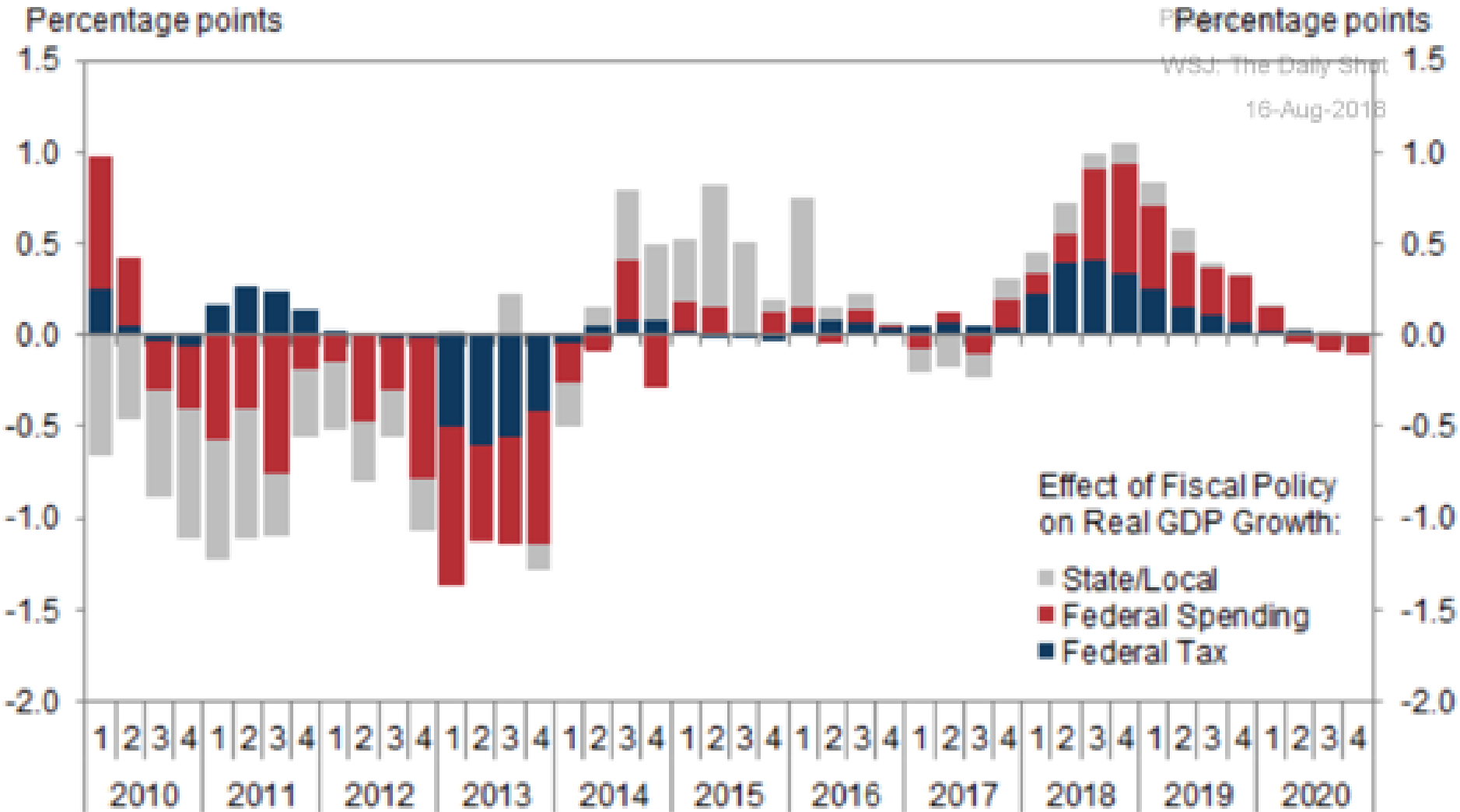
Source: U.S. Bureau of the Census

myf.red/g/mudT

Tax Cuts Are Supercharging the Economy

But, only in the short run

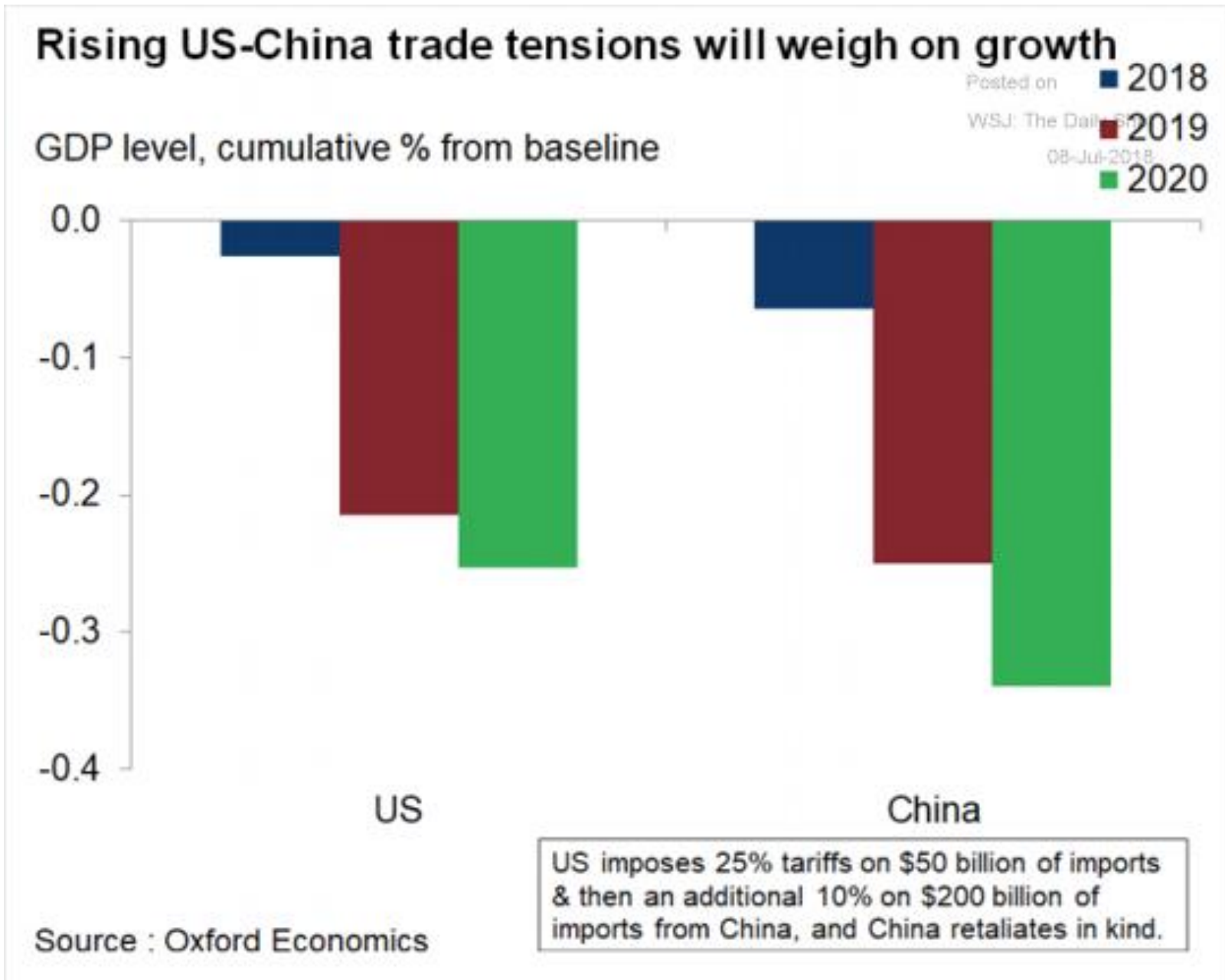
Exhibit 3: Fiscal Boost to Growth Likely to Fade Gradually in 2019



Source: US Department of Commerce, Treasury, Goldman Sachs Global Investment Research

\$250 Billion Trade War Hurts GDP

The impact will rise over time, and is now quite small



The G20 Nations Growth Will Slow

Slowing US is a key reason

Global macroeconomic outlook for G-20 countries, 2019-20
(November 2018 update)

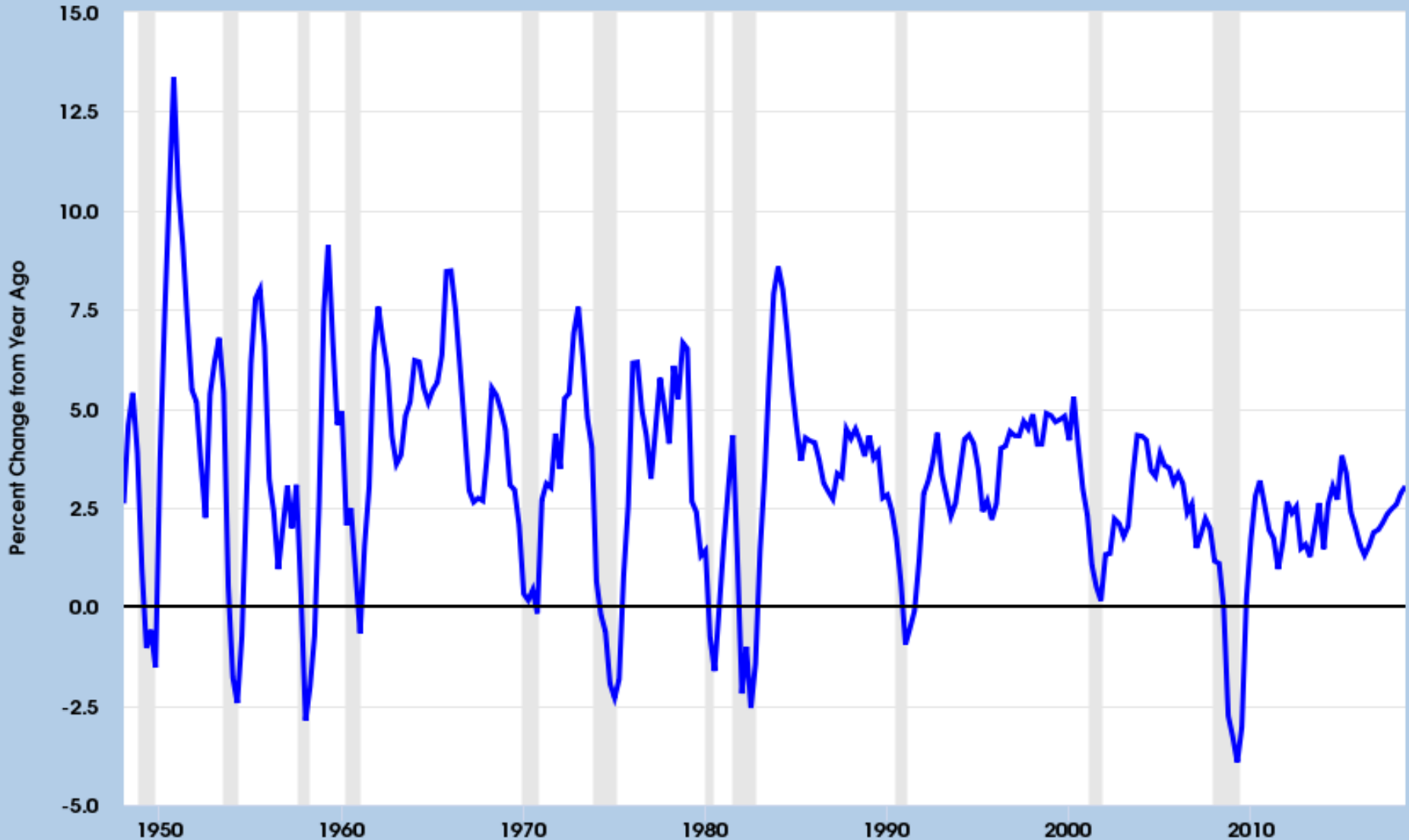
Economies	Real GDP Growth %										
	17	18E	18E	18E	18E	18E	18E	18E	18E	18E	18E
G-20 Advanced	2.2	2.3									
US	2.3	2.9									
Euro area 1	2.5	2.0									
Japan	1.7	1.1									
Germany	2.5	1.8									
UK	1.7	1.3									
France	2.2	1.7									
Italy	1.5	1.0									
Canada	3.0	2.1									
Australia	2.3	3.0									
South Korea	3.1	2.5									
G-20 Emerging	5.3	5.0									
China	6.9	6.6									
India	6.7	7.4									
Brazil	1.0	1.8									
Russia	1.5	1.8									
Mexico	2.0	2.3									
Indonesia	5.1	5.1									
Turkey	7.4	1.5									
Saudi Arabia	-0.7	2.5									
Argentina	2.9	-2.5									
South Africa	1.3	0.5									
G-20 All	3.3	3.3									

■ An improvement (upward adjustment) from August 2018 Global Macroeconomic Outlook.
■ A deterioration (downward adjustment) from August 2018 Global Macroeconomic Outlook.

GDP Growth Will Slow

Impact of the recent tax cuts and spending increases will fade through 2019

FRED  — Real Gross Domestic Product



Shaded areas indicate U.S. recessions

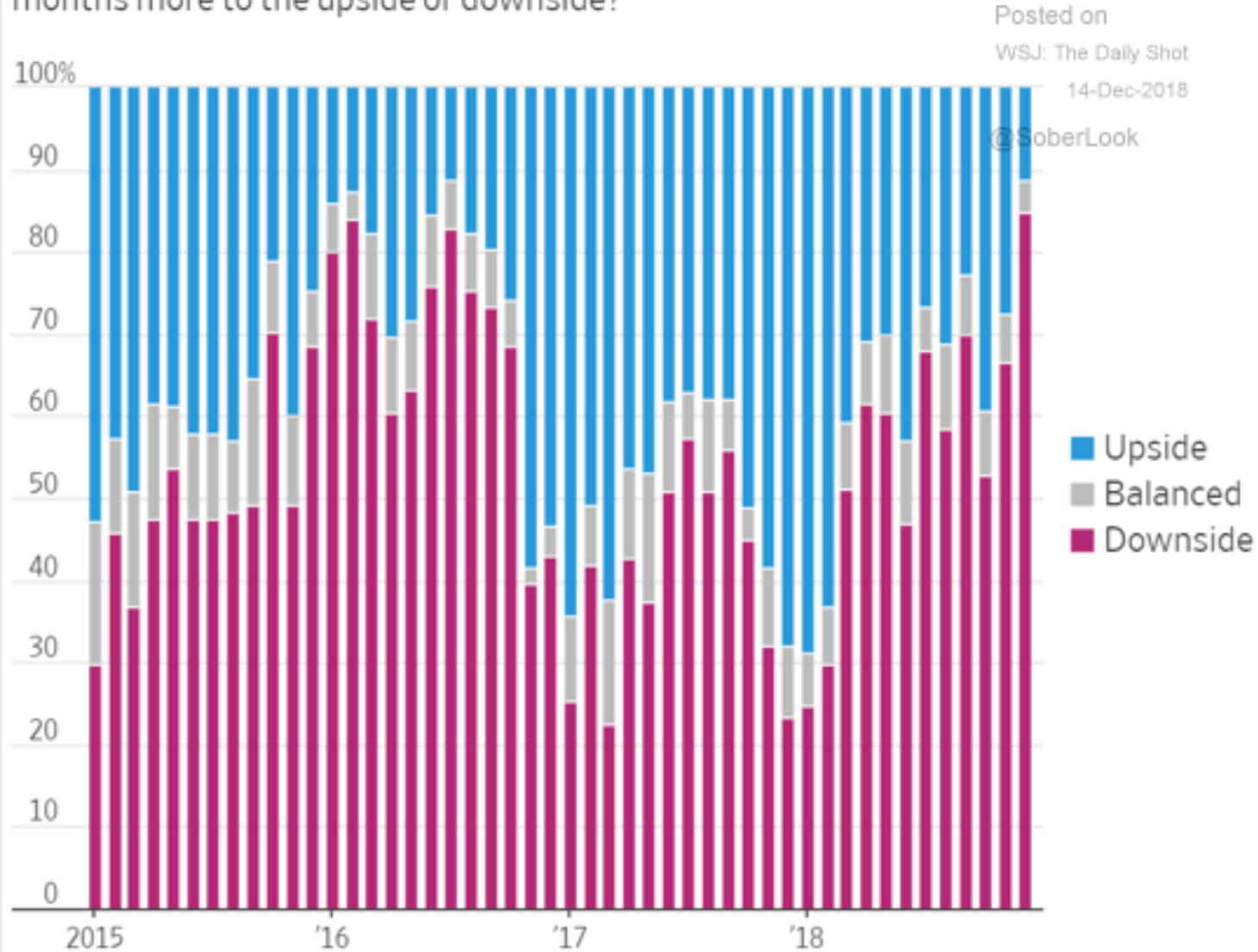
Source: U.S. Bureau of Economic Analysis

myf.red/g/ILb3

Future GDP Growth is Imperiled

Ill timed tax cuts, spending increases and trade wars are why

Is the risk to your U.S. gross domestic product growth forecast for the next 12 months more to the upside or downside?

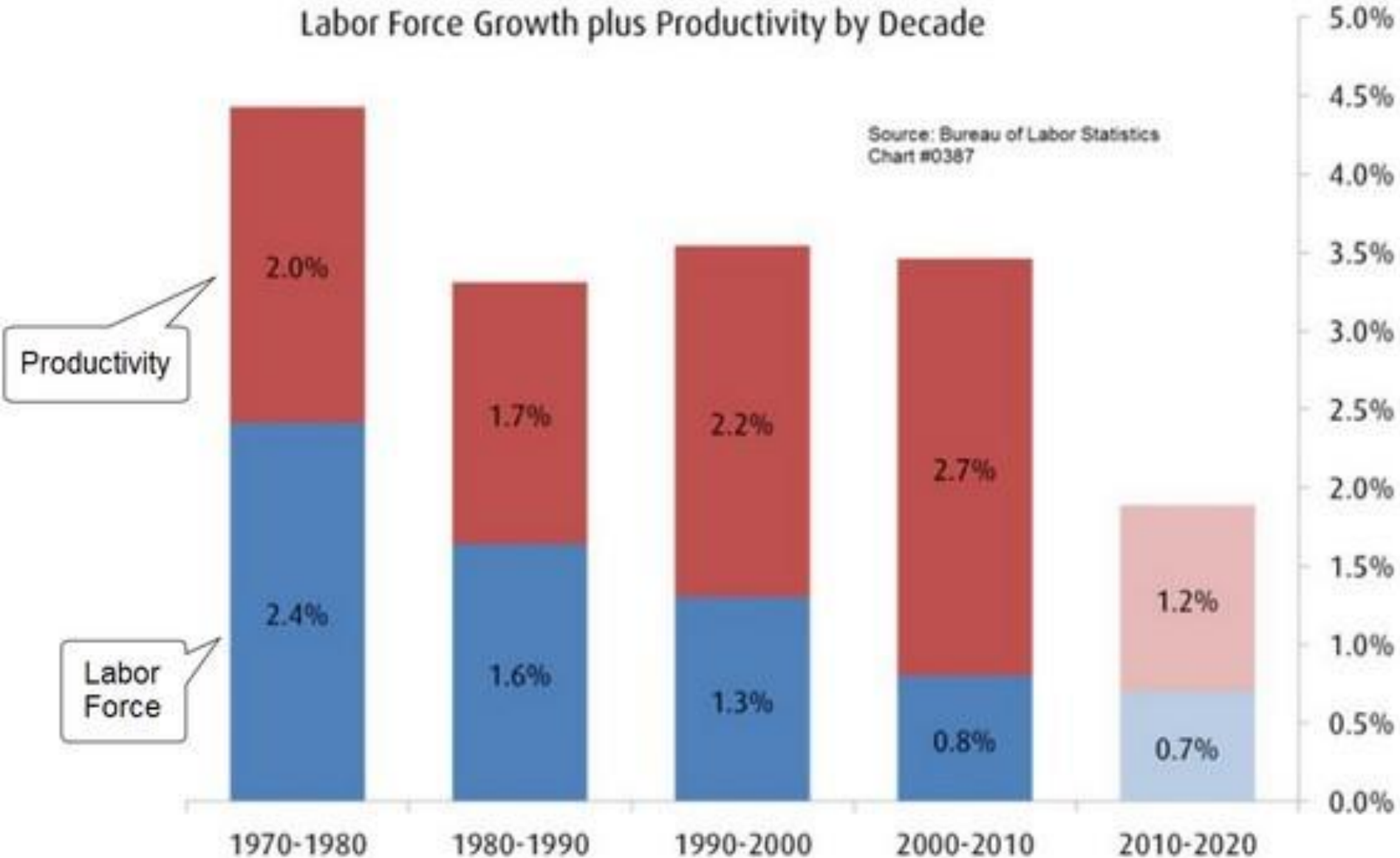


Source: WSJ Survey of Economists

GDP Can't Grow Fast!

Very weak population growth and labor productivity growth

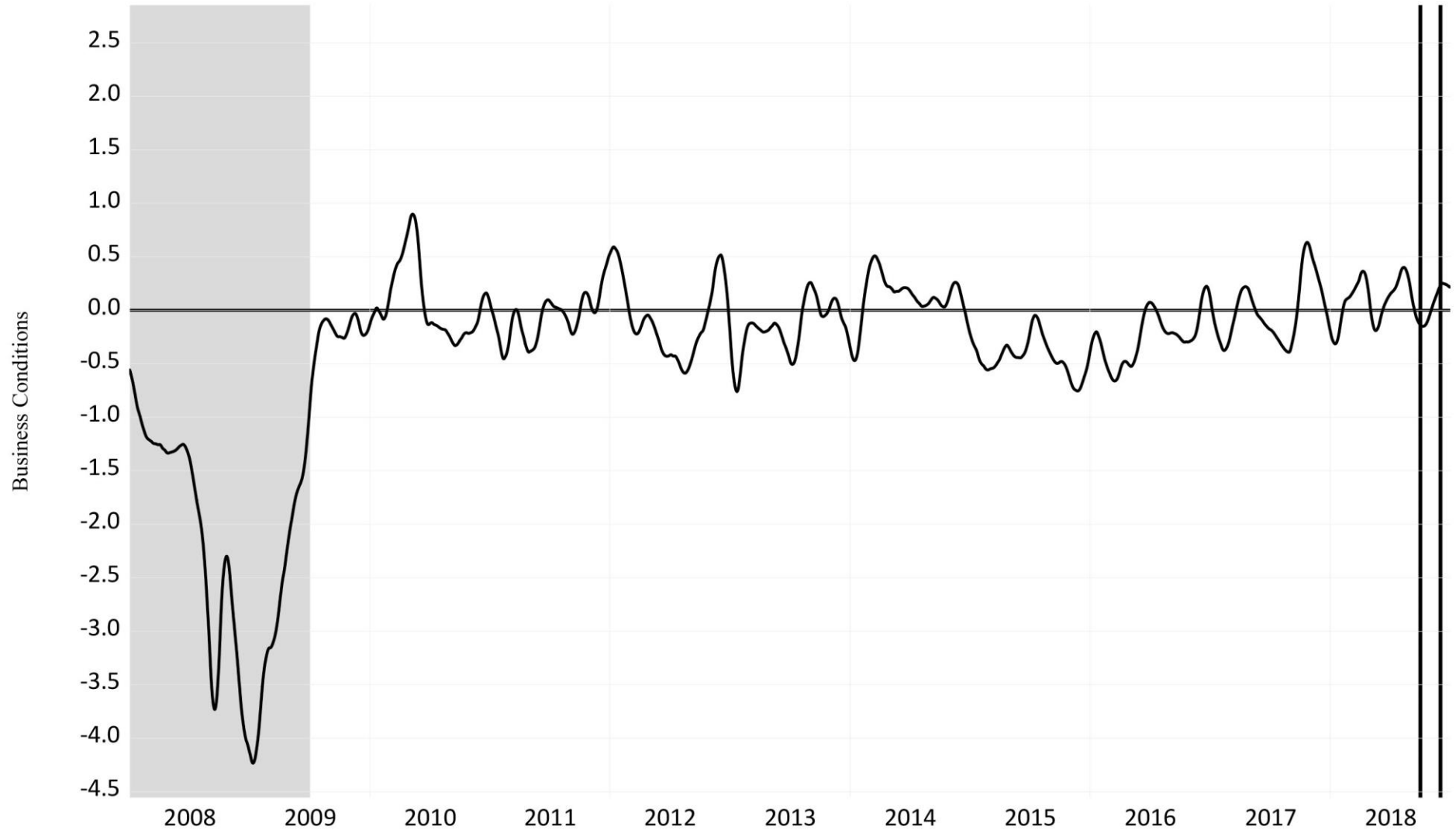
Labor Force Growth plus Productivity by Decade



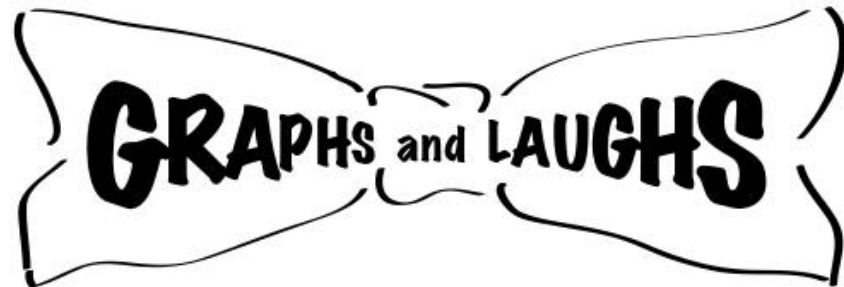
Best of All, No Recession Now!

Designed to track real macroeconomic activity in real time

Aruoba-Diebold-Scotti Business Conditions Index (12/31/2007- 12/31/2018)



Labor Markets: They're Tight, Very Tight



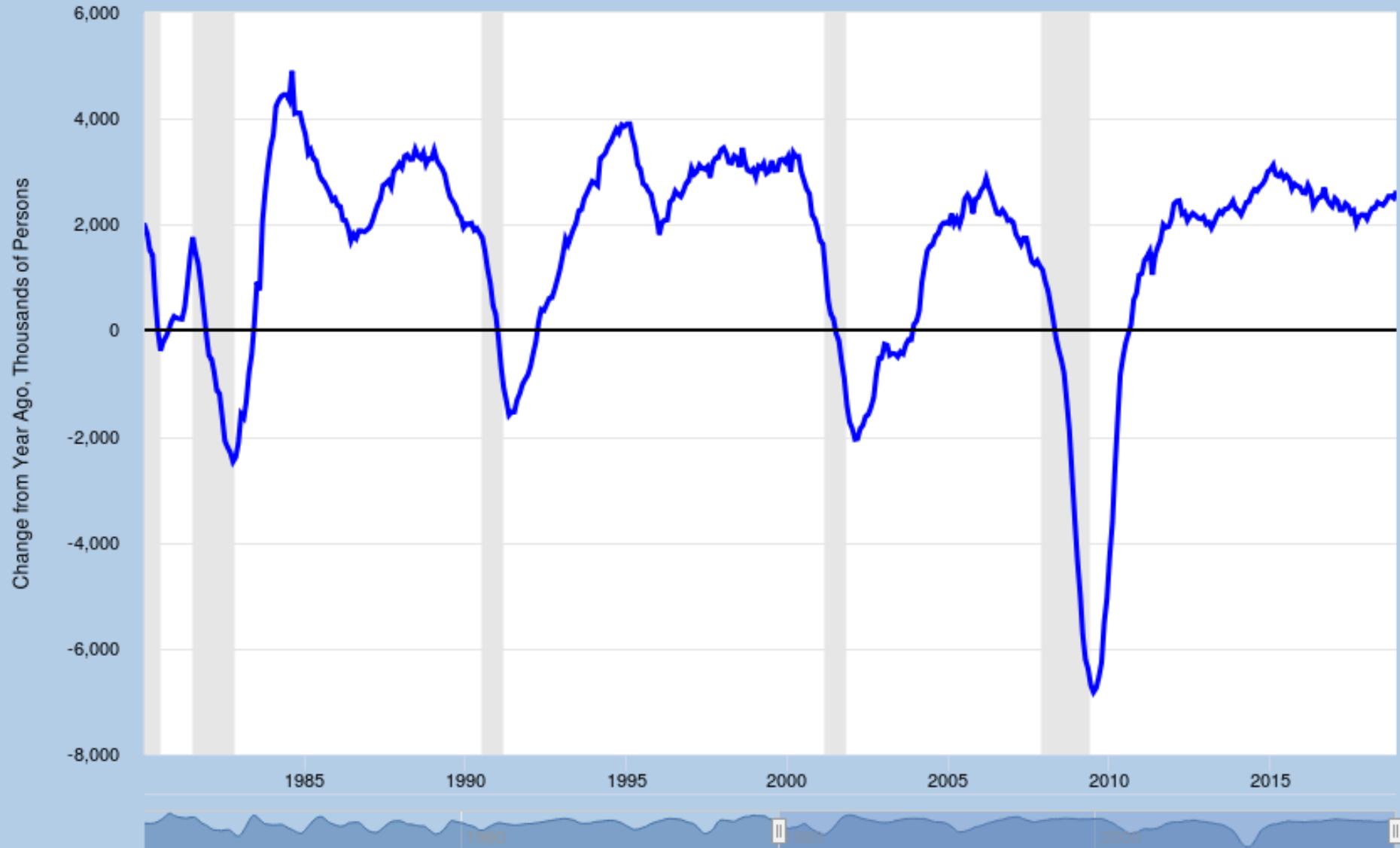
Historical Job Growth

Y-o-Y Total employment growth is spectacular. But, we will run out of workers

FRED



— All Employees: Total Nonfarm Payrolls



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

myf.red/g/mzgE

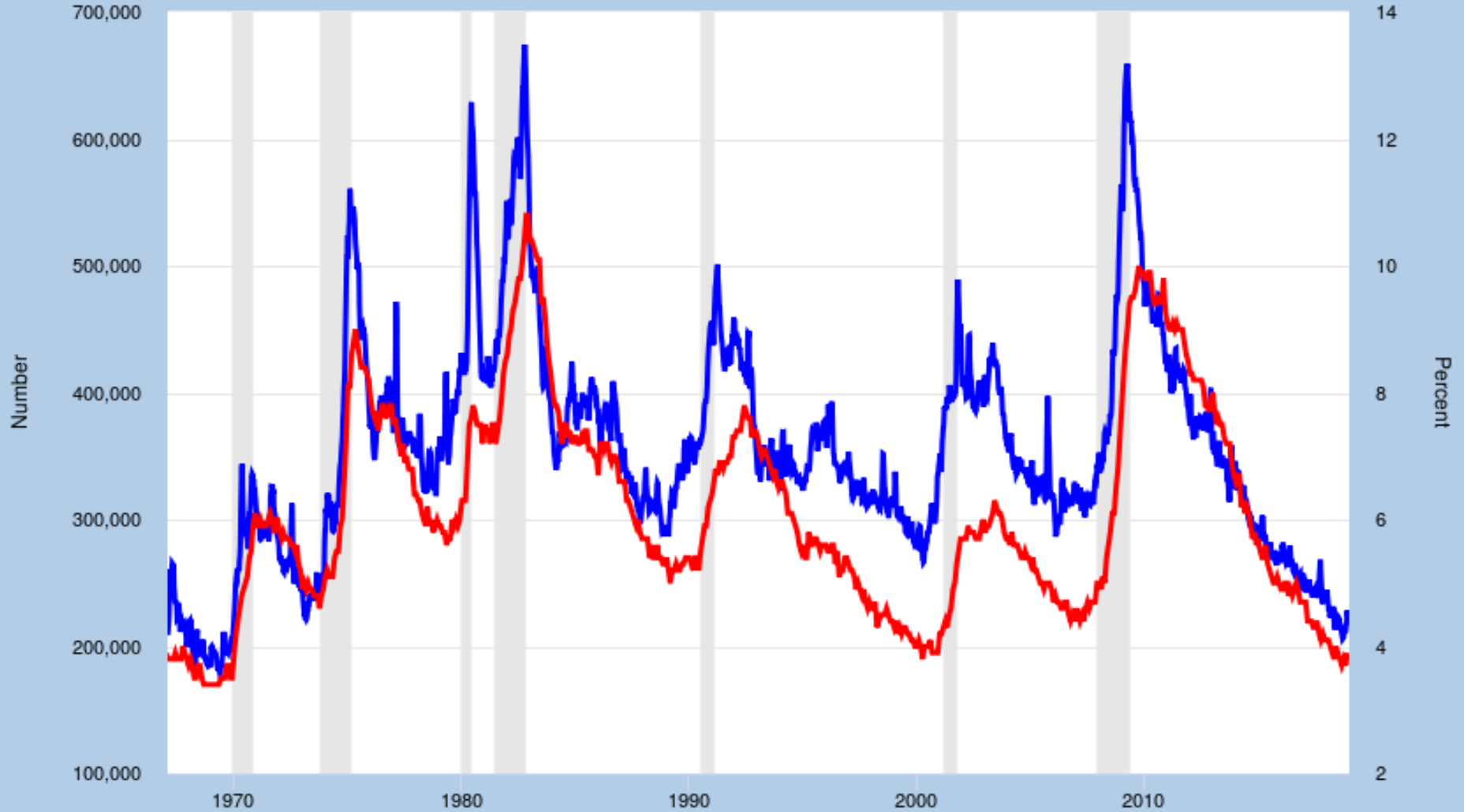
STEADY Labor Market Improvement: Involuntary Separation

Long Term Trends: 1967-2017 Initial claims below 300K for **200** straight weeks!

FRED



— 4-Week Moving Average of Initial Claims (left)
— Civilian Unemployment Rate (right)



Shaded areas indicate U.S. recessions

Sources: BLS, U.S. Employment and Training Administration

myf.red/g/mzhf

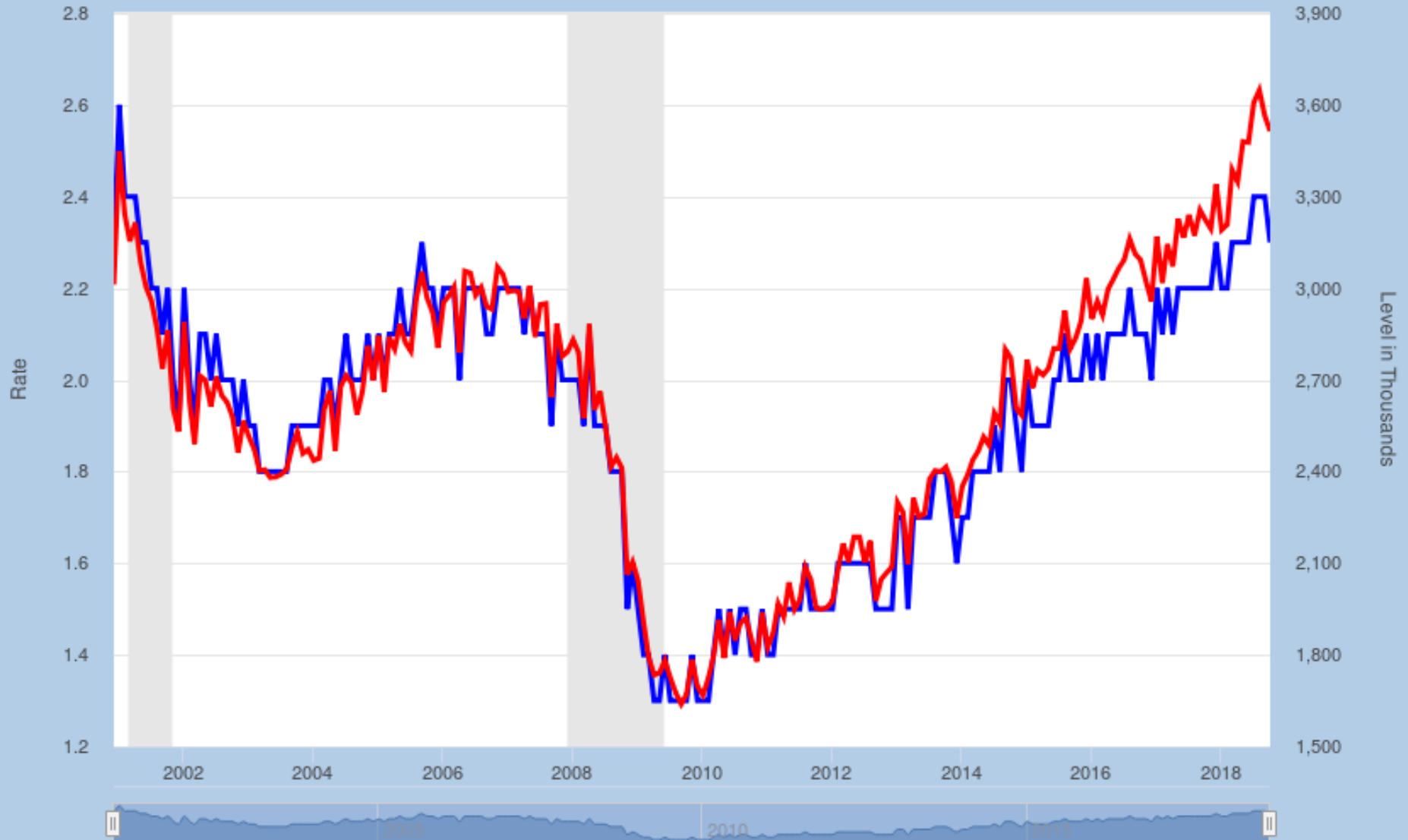
Quits, No matter How Measured Are Superb

Are above their pre-recession level. At 2.3% (in blue) or 3.5 million (in red)

FRED



— Quits: Total Nonfarm (left)
— Quits: Total Nonfarm (right)



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

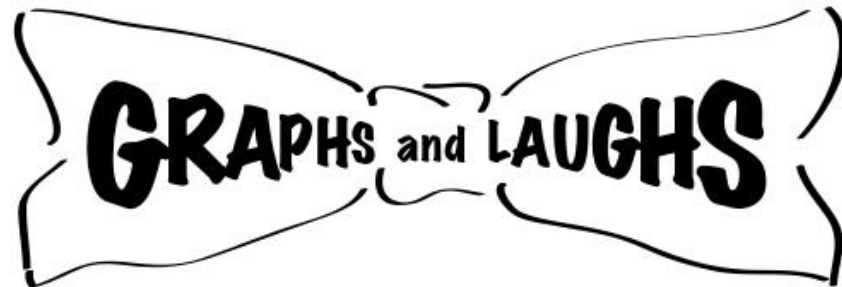
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Job Openings are Hard to Fill

Increasingly hard to fill




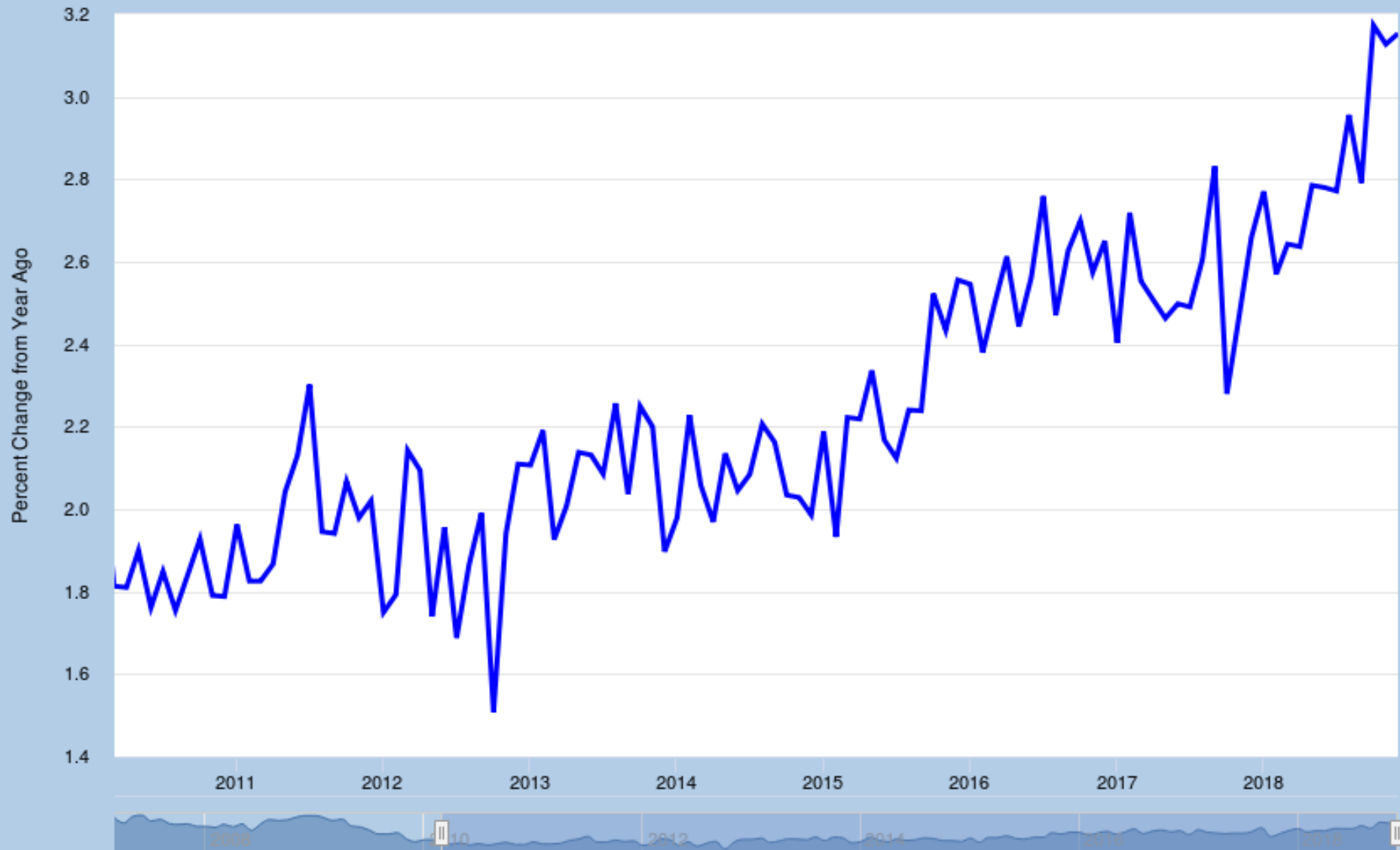
Wage Growth is Slowly Rising



Y-o-Y Percent Change in Hourly Earnings

Despite a very low unemployment rate, wages growth is relatively weak

FRED  — Average Hourly Earnings of All Employees: Total Private



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

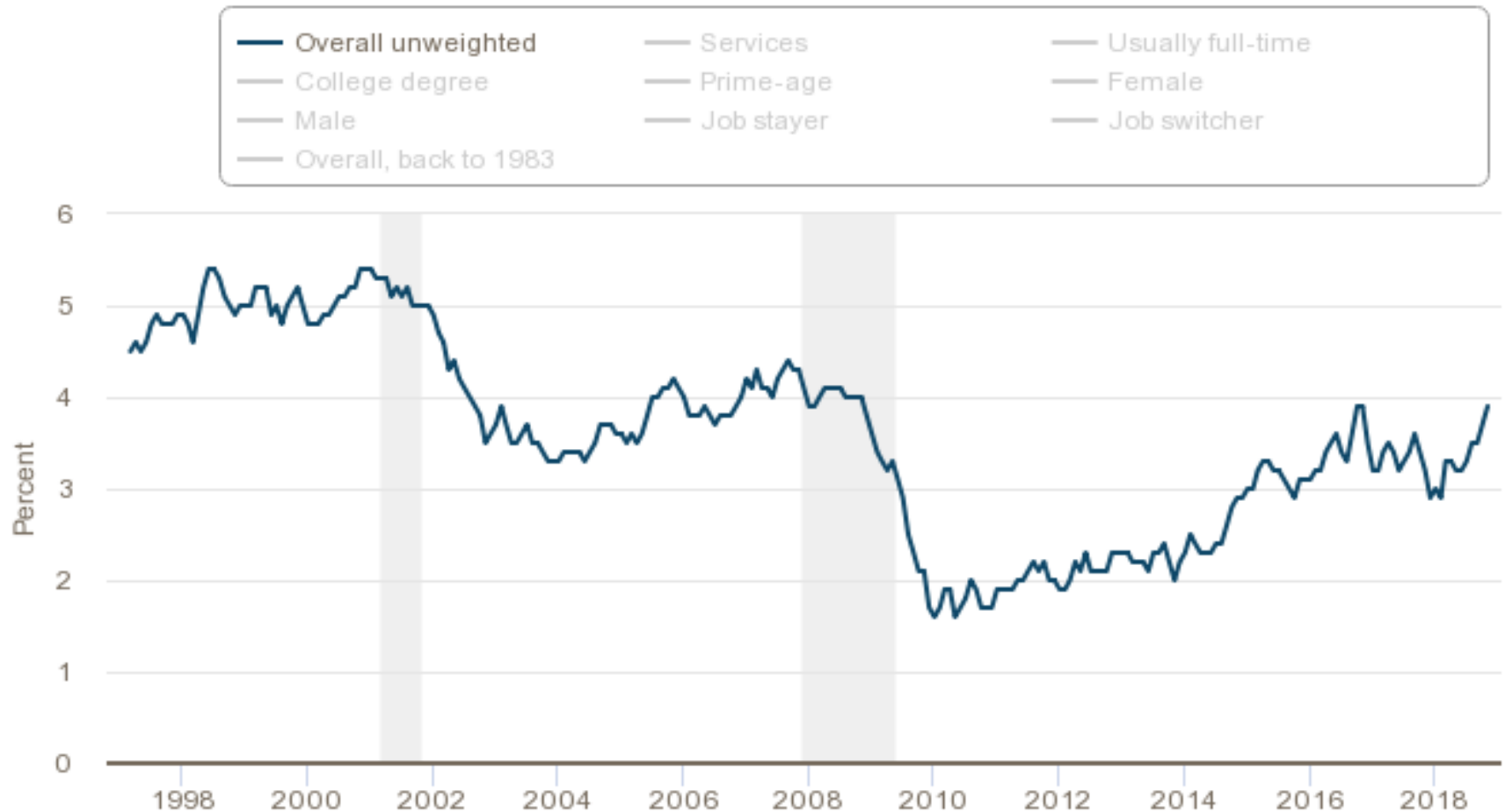
myf.red/g/mzjq

Changes in Median Wage Growth Looks OK!

Looks only at those continuously full-time employed

Wage Growth Tracker

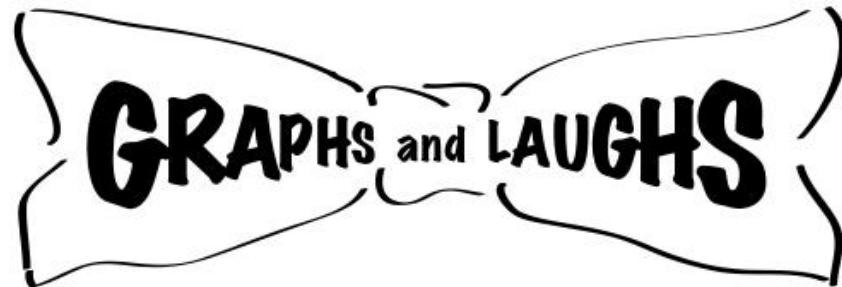
three-month moving average of median wage growth



Sources: Current Population Survey, Bureau of Labor Statistics and author's calculations

Inflation?

It's Sorta MIA!



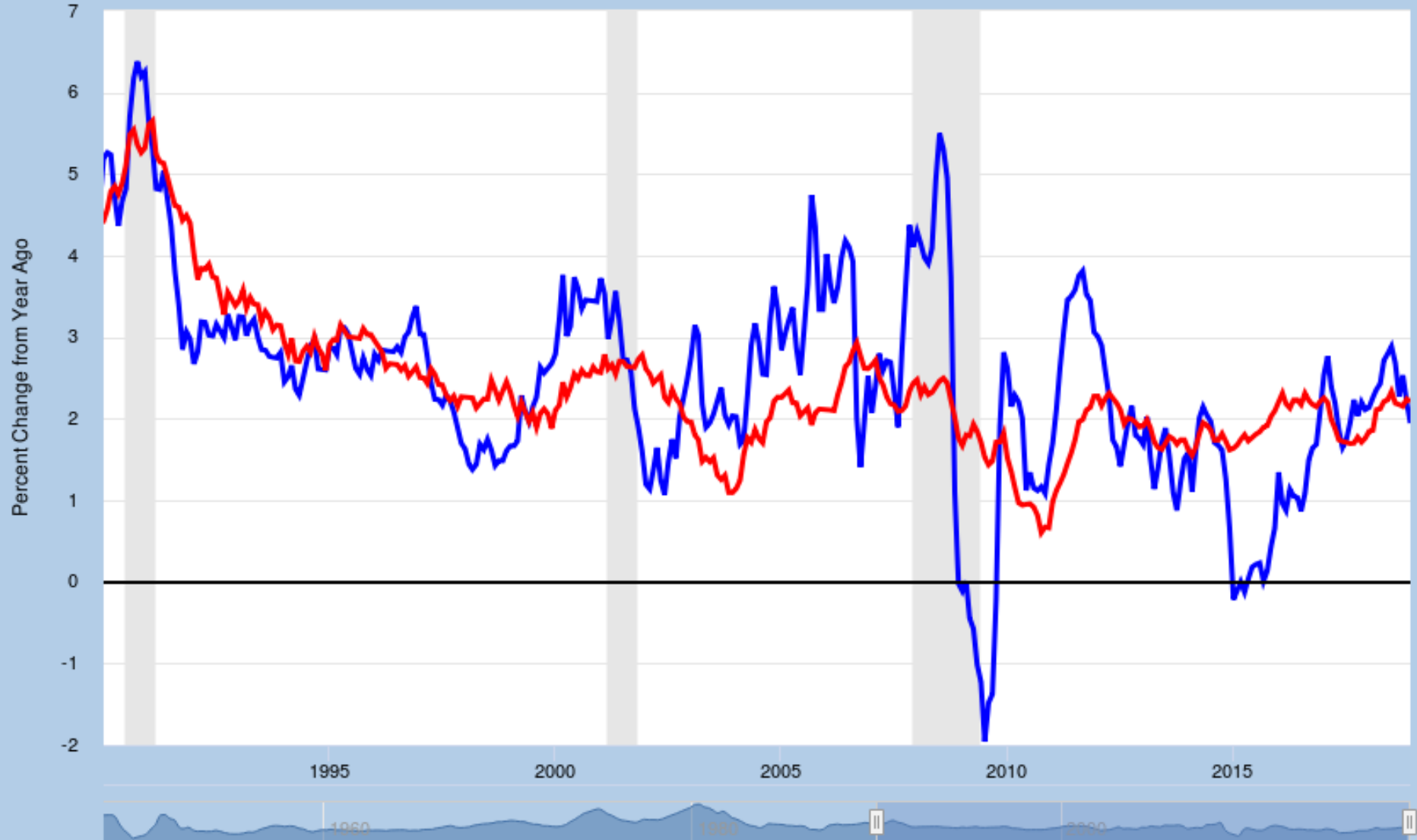
CPI: Inflationary Pressures are Rising

Modest pressures are slowly building

FRED 

— Consumer Price Index for All Urban Consumers: All Items

— Consumer Price Index for All Urban Consumers: All Items Less Food and Energy



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

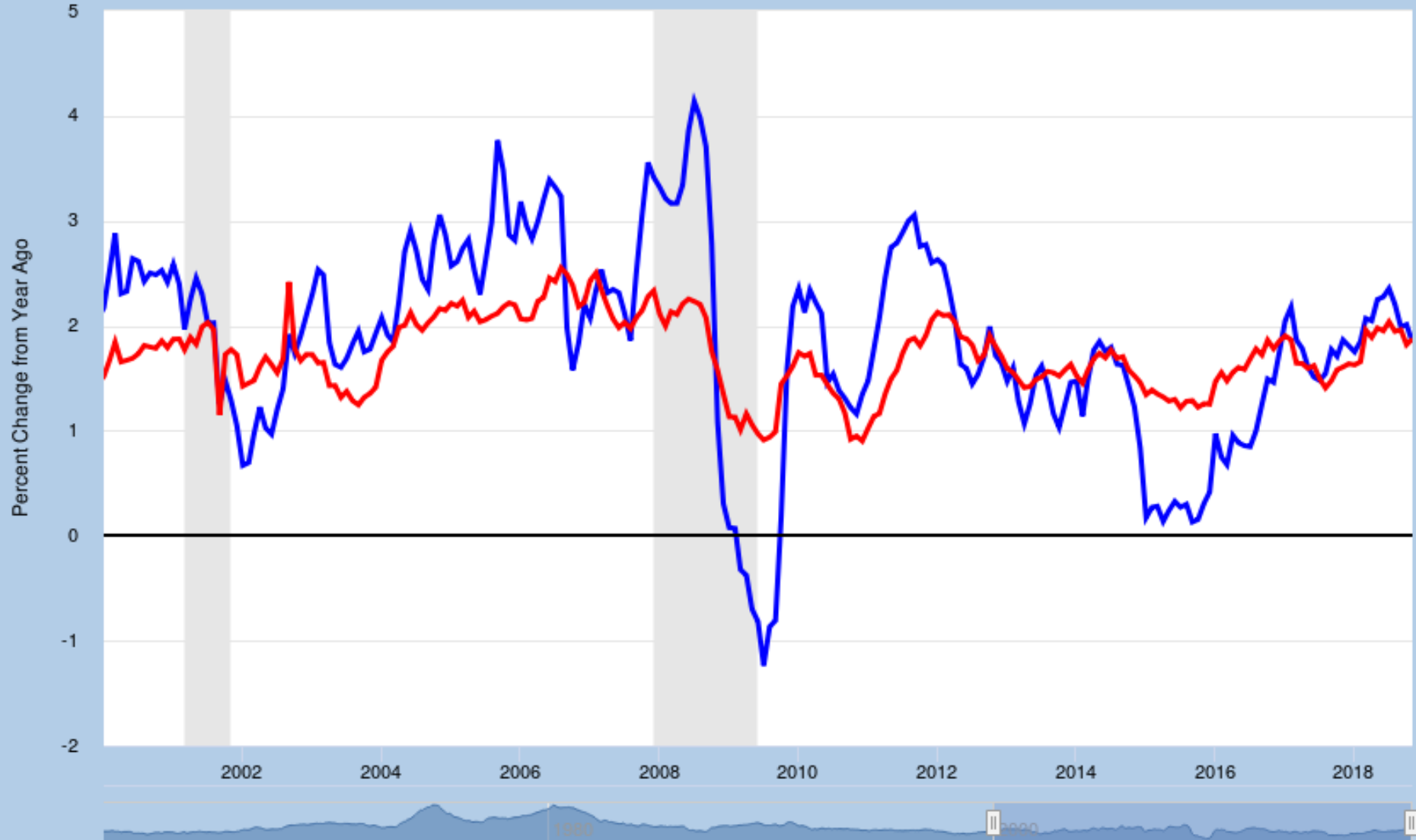
myf.red/g/mDBu

Core PCE Price Index

Inflation is fortunately being held back by a number of factors

FRED

- Personal Consumption Expenditures: Chain-type Price Index
- Personal Consumption Expenditures Excluding Food and Energy (Chain-Type Price Index)



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Economic Analysis

myf.red/g/muzo

Federal Reserve Behavior

Rates Will Rise.

But, How Fast?

Taller Fed Chair, Higher Rates?

BOTH THE HEIGHT OF THE FED CHAIR AND RATES HAVE FALLEN OVER TIME, COULD A TALLER FED CHAIR MEAN RATES RISE?

- 10-Year Yield (Left Scale)
- Paul Volcker
- Alan Greenspan
- Ben Bernanke
- Janet Yellen
- Jay Powell?

Posted on
WSJ: The Daily Shot

28-Oct-2017



Source: LPL Research, Bloomberg 10/22/17

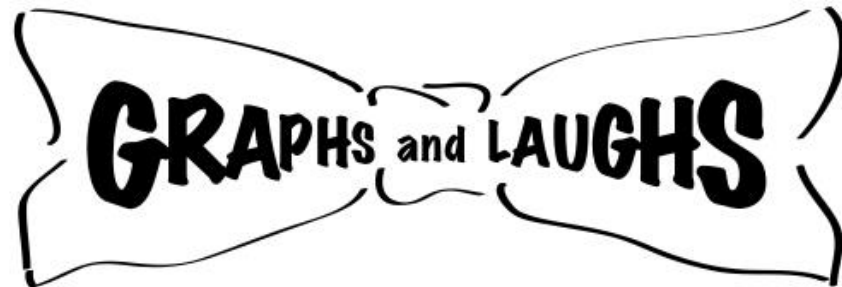
We don't actually believe that interest rates are determined by the height of the Fed chair, but it has been an interesting coincidence.

Federal Reserve Behavior

Most optimistic scenario

- Fed funds is currently 2.375%
- 12/31/19: 2.875% 10-yr Treasury @ 3.35%
- 12/31/20: 3.125% 10-yr Treasury @ 3.45%
- 12/31/21: 2.875% 10-yr Treasury @ 3.35%
- Balance sheet keeps shrinking.

**New Housing?
Not enough is being
built!**



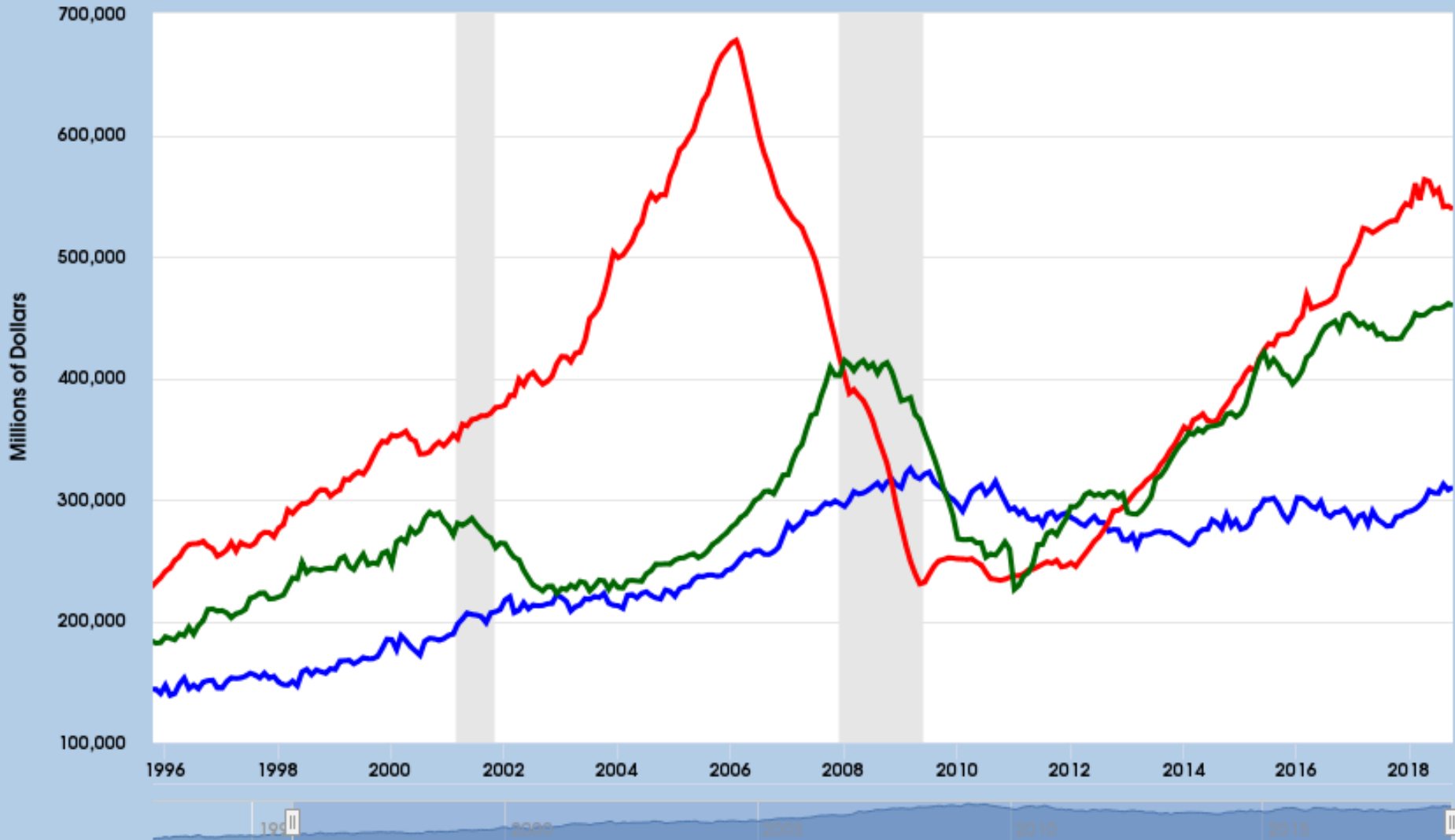
Residential Fixed Investment Stalls

Non-residential is up 11%, public is down 5% and residential is down 21% from peak

FRED



- Total Public Construction Spending
- Total Private Construction Spending: Residential
- Total Private Construction Spending: Nonresidential



Shaded areas indicate U.S. recessions

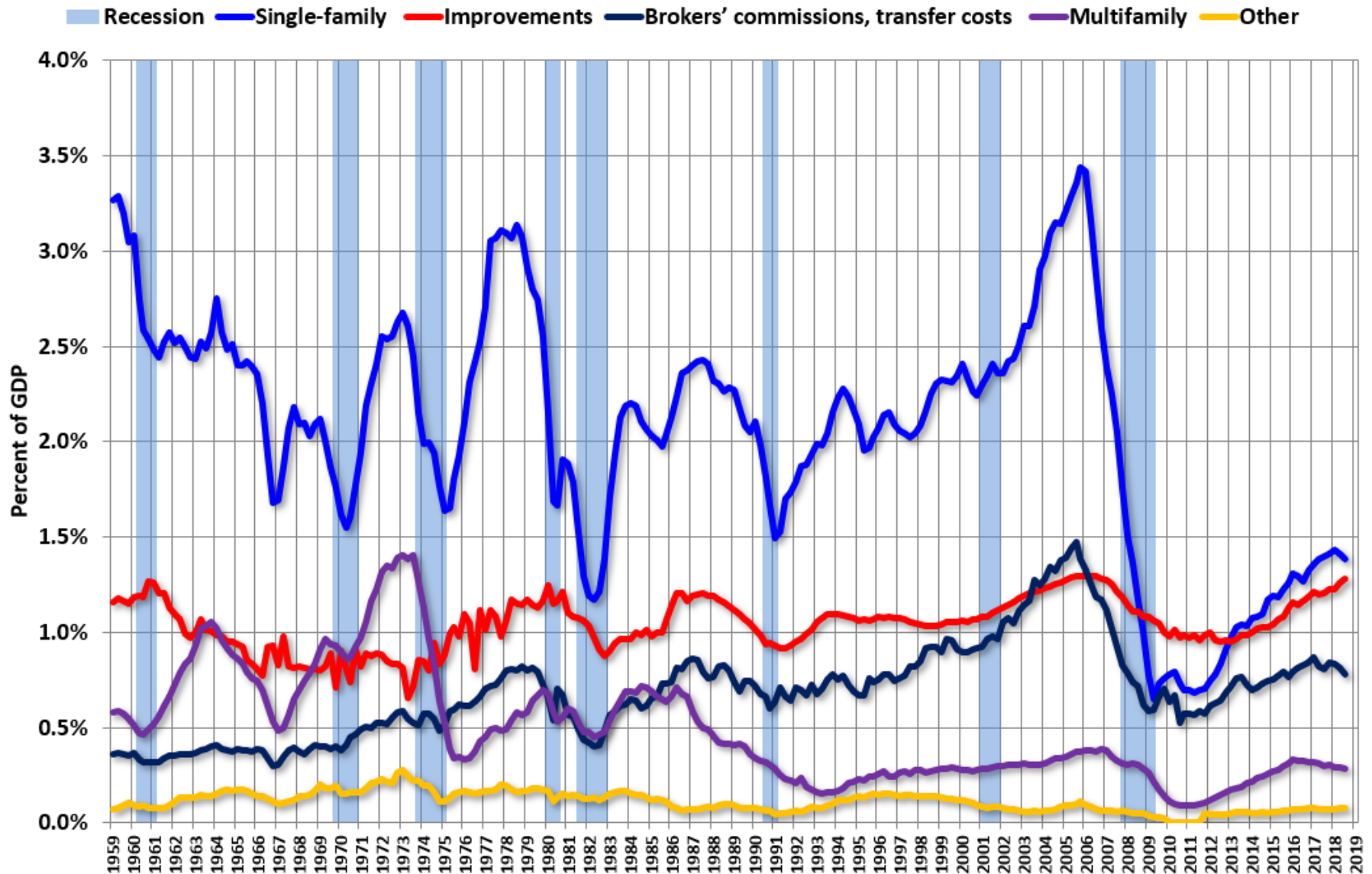
Source: U.S. Bureau of the Census

myf.red/g/mimc

Housing Recovery Is Stalling

Single family is what is lagging. Other components have largely recovered.

Components of Residential Investment as Percent of GDP

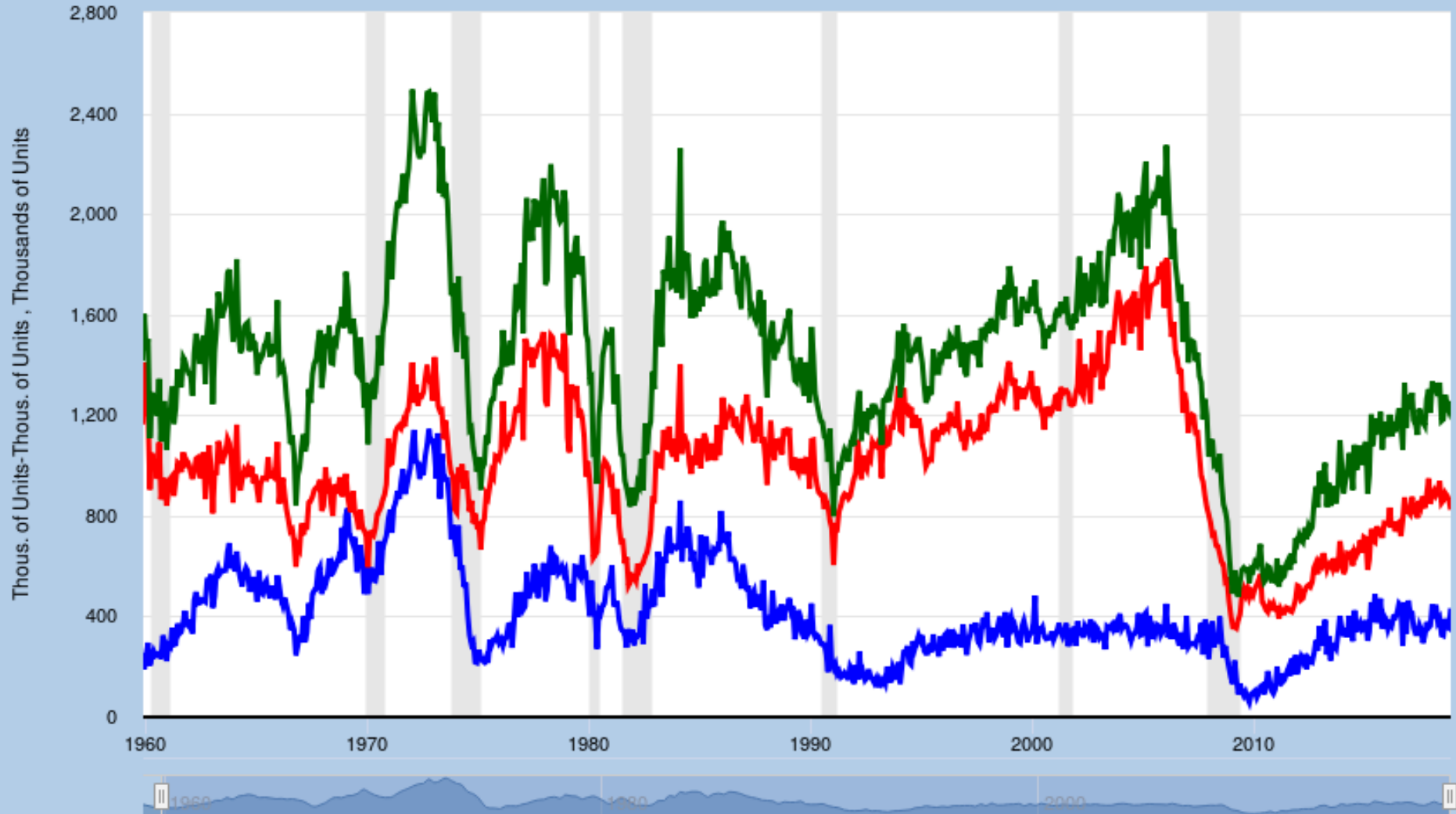


Single-Family and Multifamily Starts – A Slow Recovery

Lack of lots, rising rates, high prices, SF remains near recessionary lows



- Housing Starts: Total: New Privately Owned Housing Units Started-Privately Owned Housing Starts: 1-Unit Structures**
- Privately Owned Housing Starts: 1-Unit Structures**
- Housing Starts: Total: New Privately Owned Housing Units Started**



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of the Census

myf.red/g/msnS

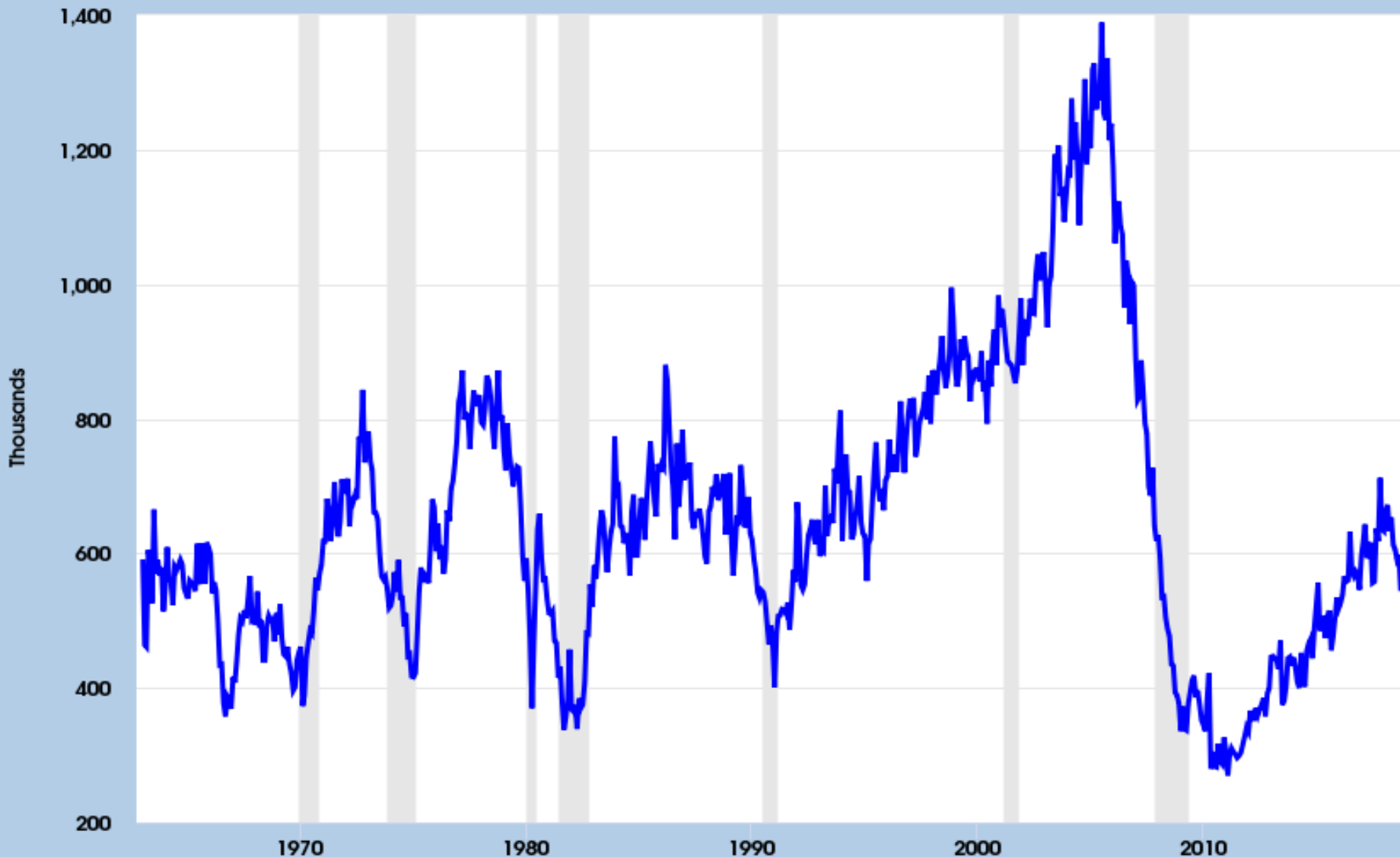
New Home Sales Were Rising Till Recently

Now they are barely up year-over-year

FRED



— New One Family Houses Sold: United States



Shaded areas indicate U.S. recessions

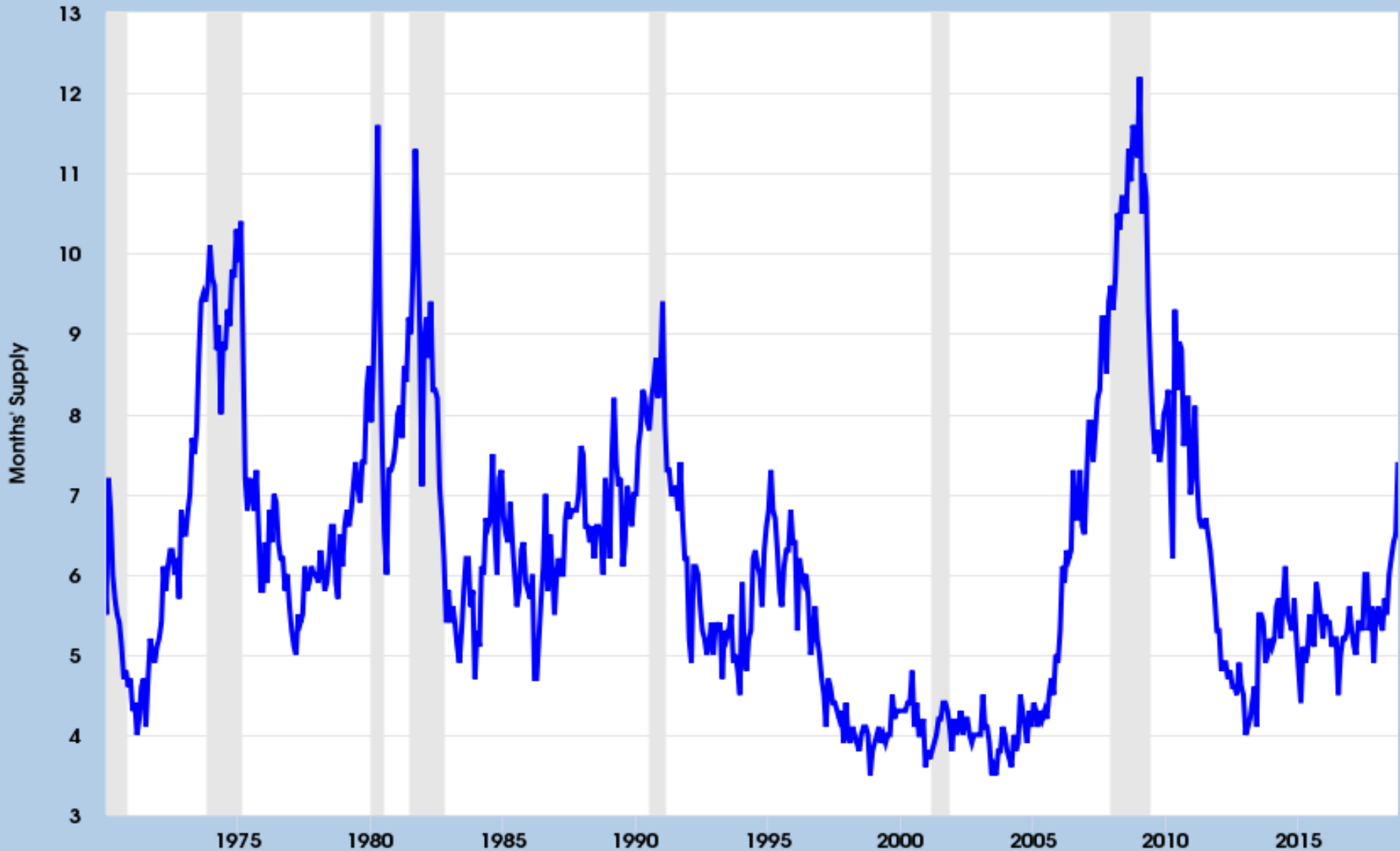
Source: U.S. Bureau of the Census

myf.red/g/mesj

Yikes! New Home Inventory is Skyrocketing

Six months supply is healthy. It's now above seven months

FRED  Monthly Supply of Houses in the United States



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of the Census

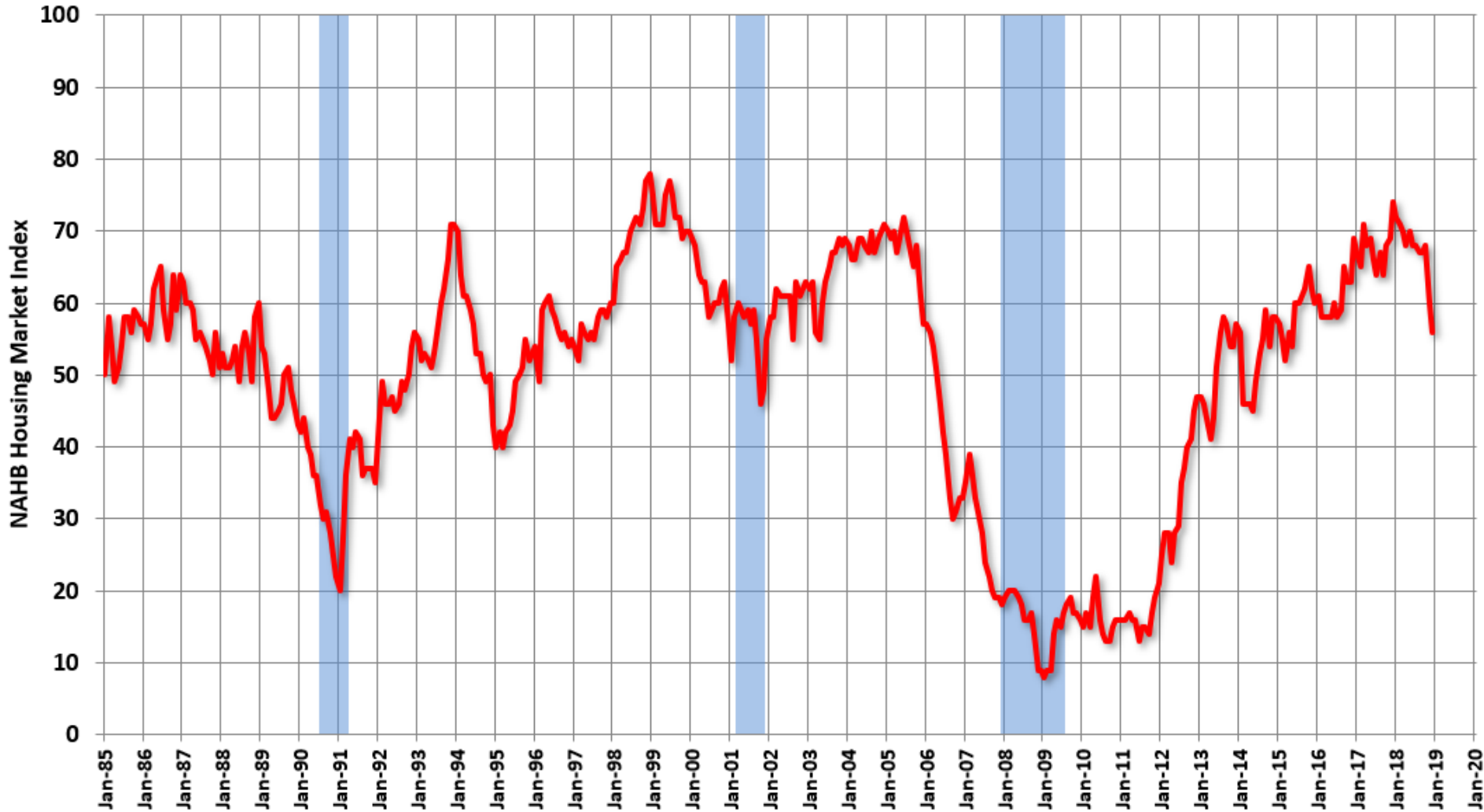
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Builders Are Getting Nervous

Builder happiness is rapidly declining

NAHB Housing Market Index

Recession HMI



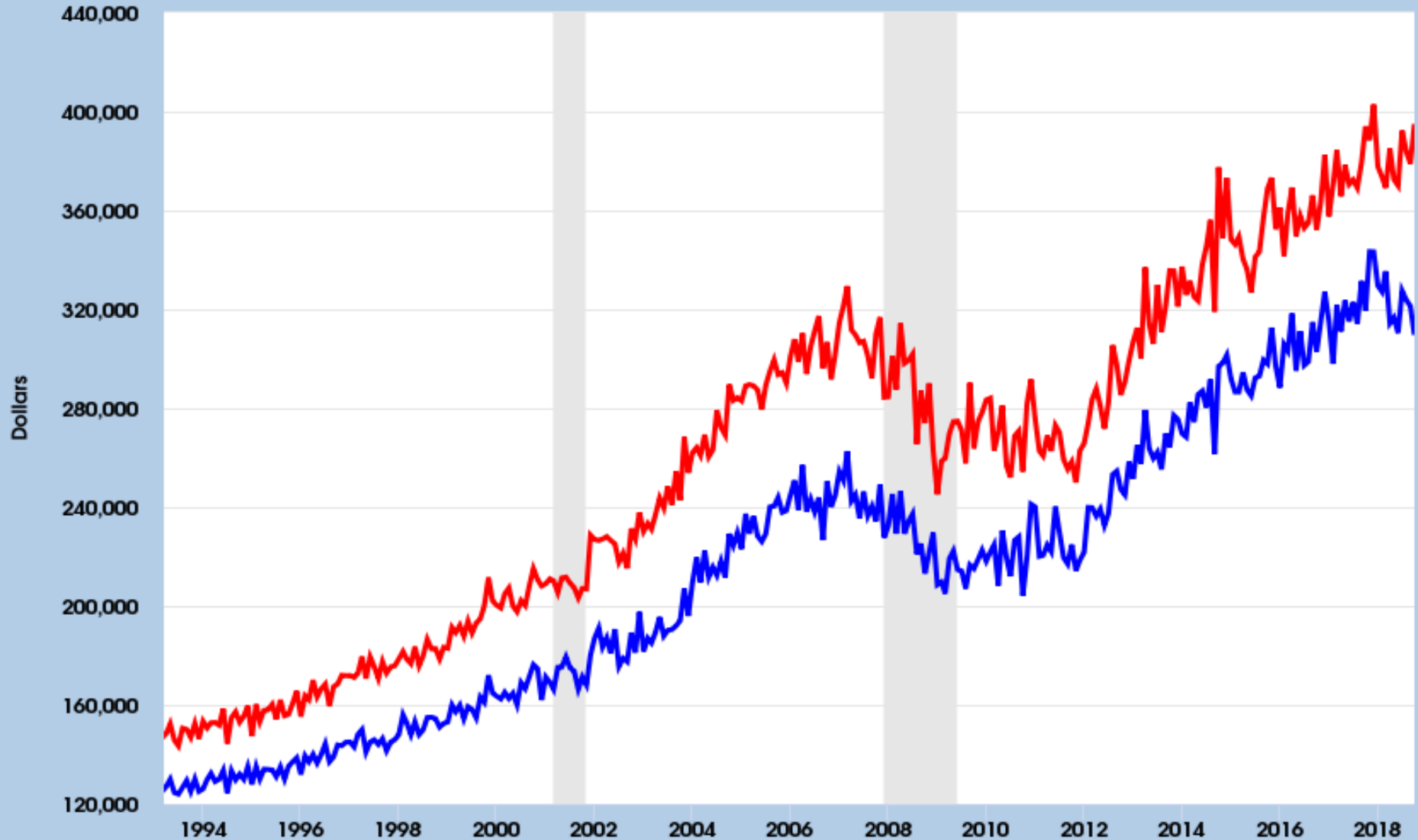
New Home Prices Are Too High, But Slowing Growth

Way above the nominal pre-recession high

FRED



- Median Sales Price for New Houses Sold in the United States
- Average Sales Price for New Houses Sold in the United States



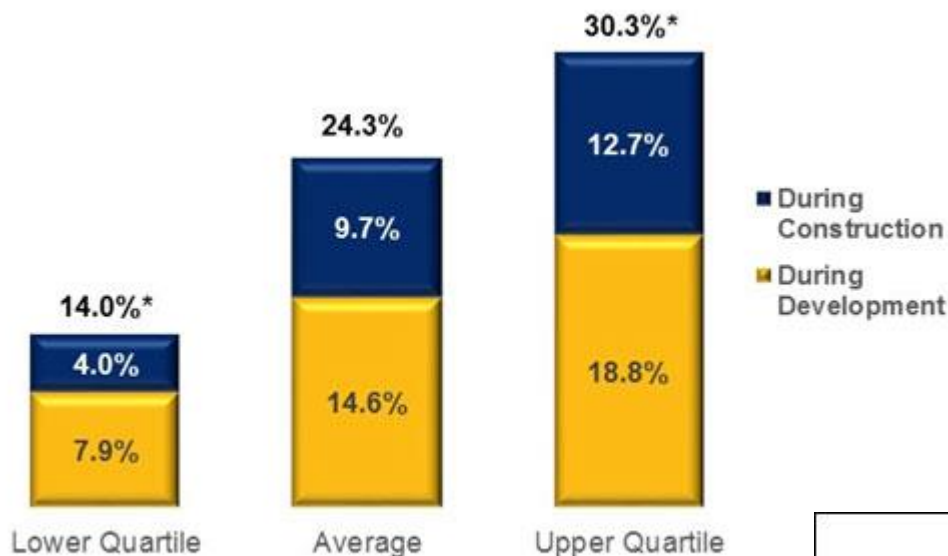
Shaded areas indicate U.S. recessions

Source: U.S. Bureau of the Census

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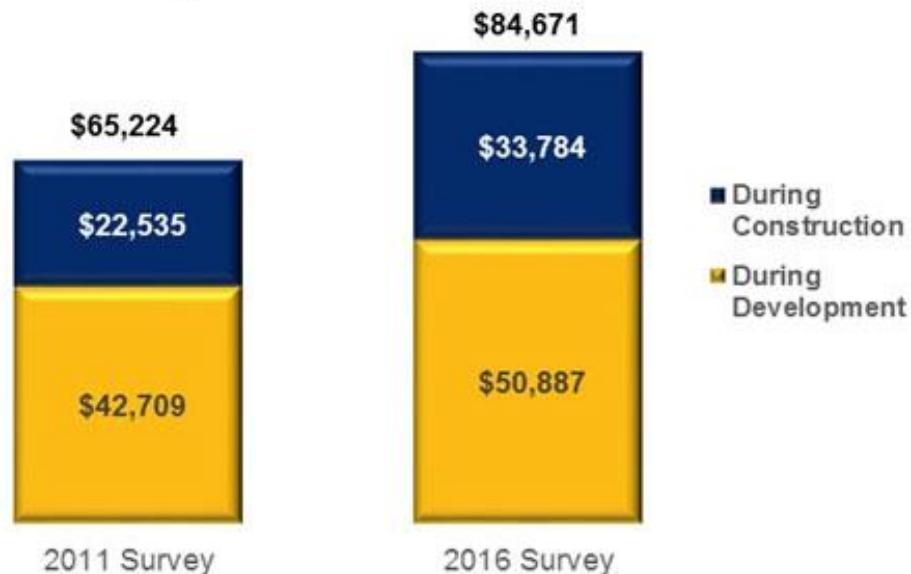
New Home Prices Are Too High Due to Regulation

Figure 1. Regulatory Costs as a Share of Home Price



* For quartiles, construction and development costs do not sum to the total.
 Source: NAHB/Wells Fargo HMI survey, assumptions described in the Appendix.

Figure 2. Average Cost of Regulation in the Price of a New Home



Based on average new home price one month before the NAHB/Wells Fargo HMI surveys
 Source for average new home prices: New Residential Sales, U.S. Census Bureau.

Construction Workers are in Serious Short Supply

Average wage growth/year for construction workers is 5.7%, much higher than the average

Construction Contractor Hourly Wages by Trade

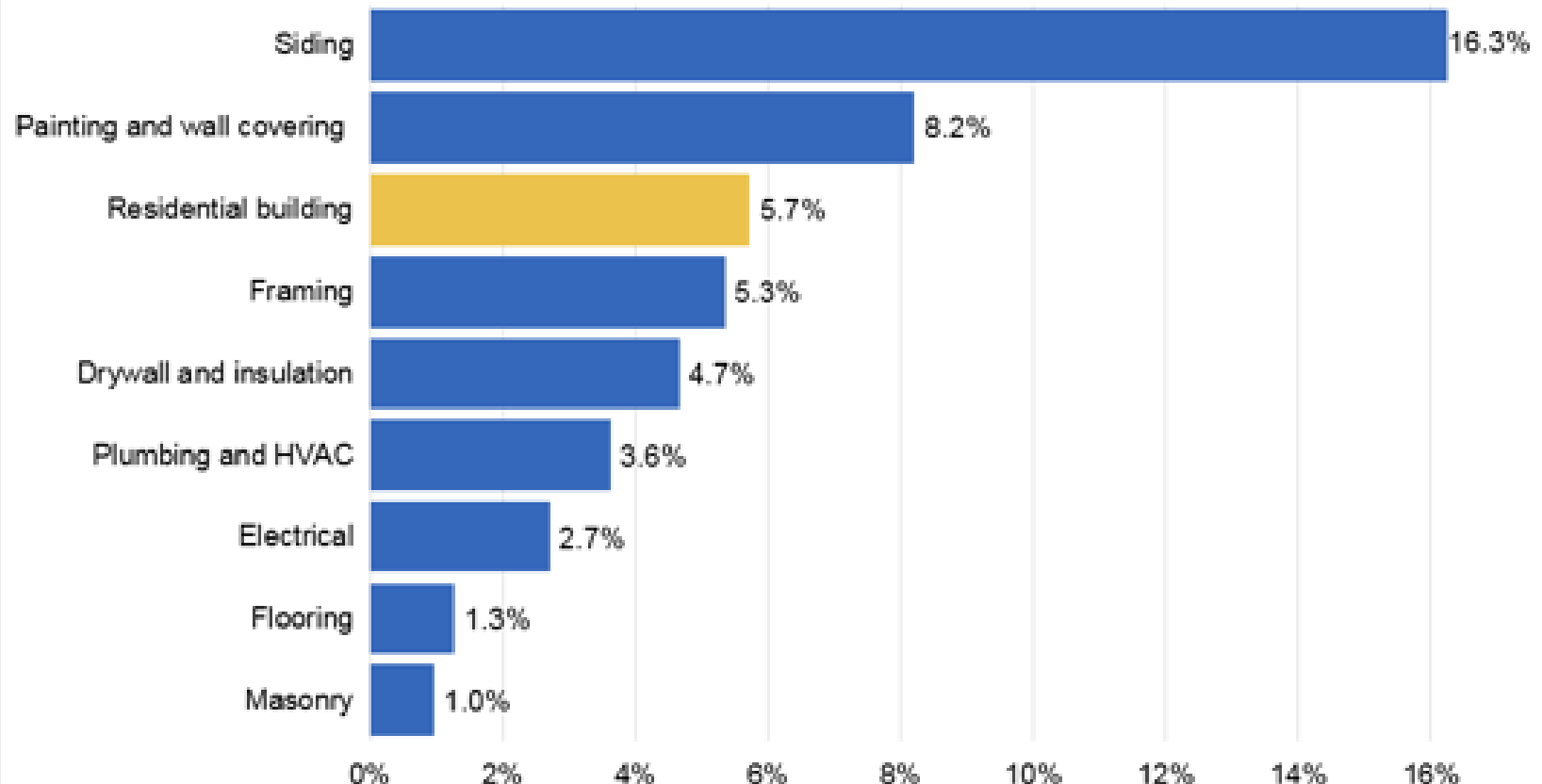
Hourly wages for construction contractors increased 6% YOY, with notable dispersion between trades. Siding wages gained 16%, while wages for masonry only gained 1%.

Posted on
WSJ: The Daily Shot
07-Jan-2019

@SoberLook

Construction Contractor Hourly Wages

YOY % change*



Source: BLS (Data: Sep-18, updated quarterly)

*We take a 3-month average to remove unnecessary volatility.

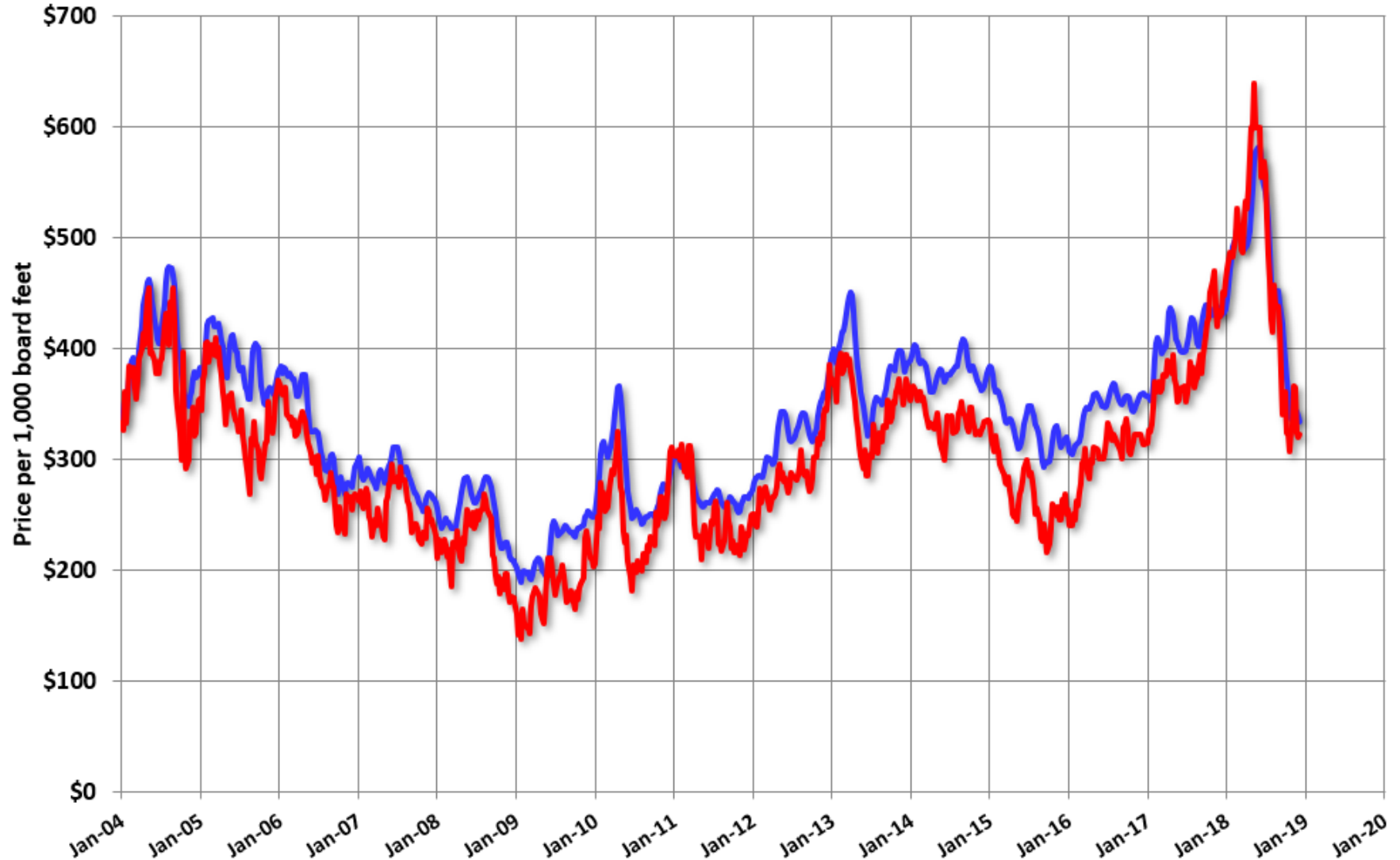
Pub: Dec-18

Input Costs Were Way Up due to Policy and China

Prices are down 22% to 25% Y-o-Y. Tariffs, wildfires, who cares!

Framing Lumber Prices per 1,000 board feet

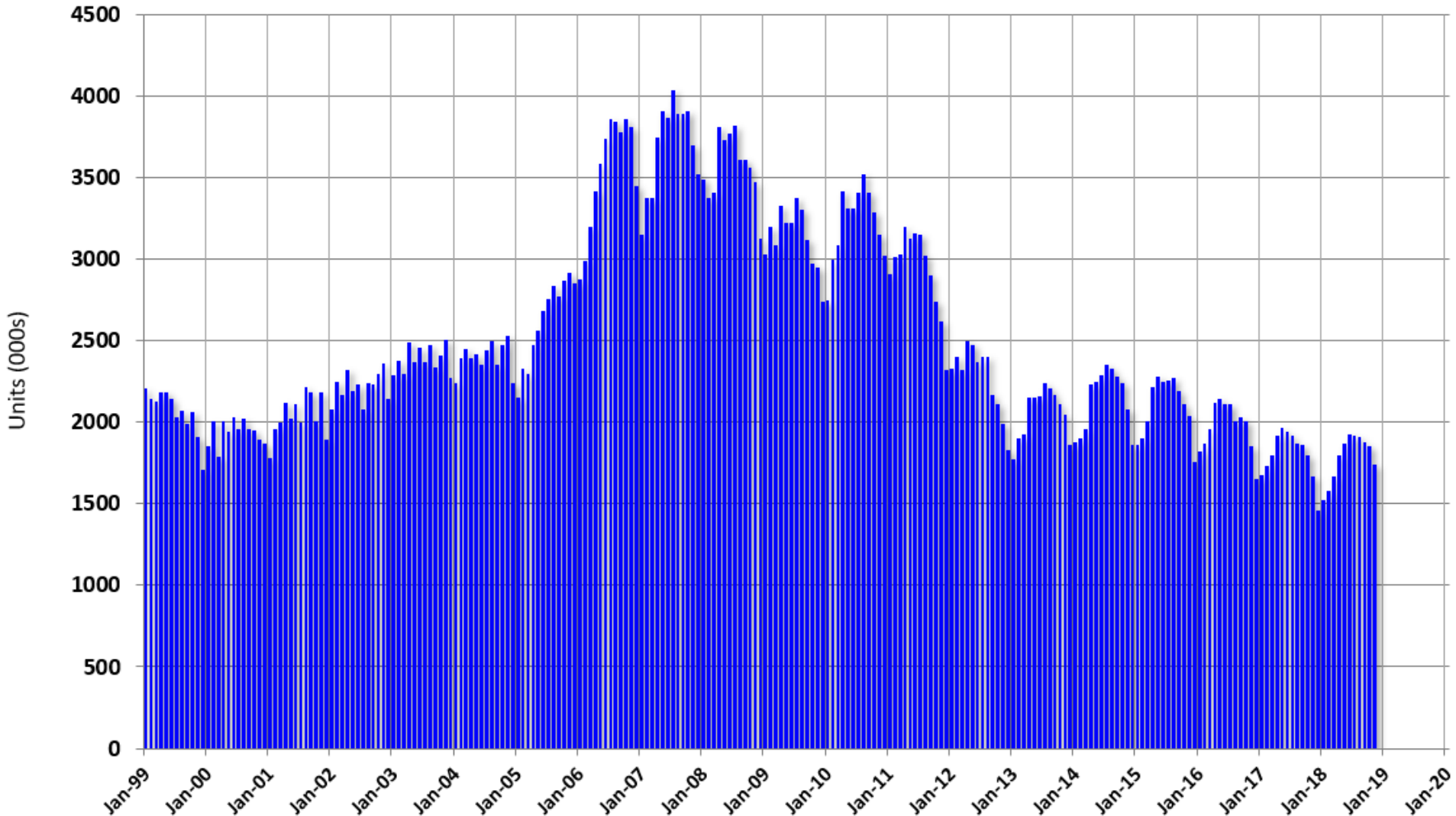
— Random Lengths Composite Price — CME Futures Price



Has Existing Inventory Bottomed?

Inventory's up 4.2% Y-o-Y ! 4th consecutive month of growth and biggest rise since late 2014
Rental conversions especially at lower price points, aging in place & mortgage lock-in hurt

Existing Home Inventory

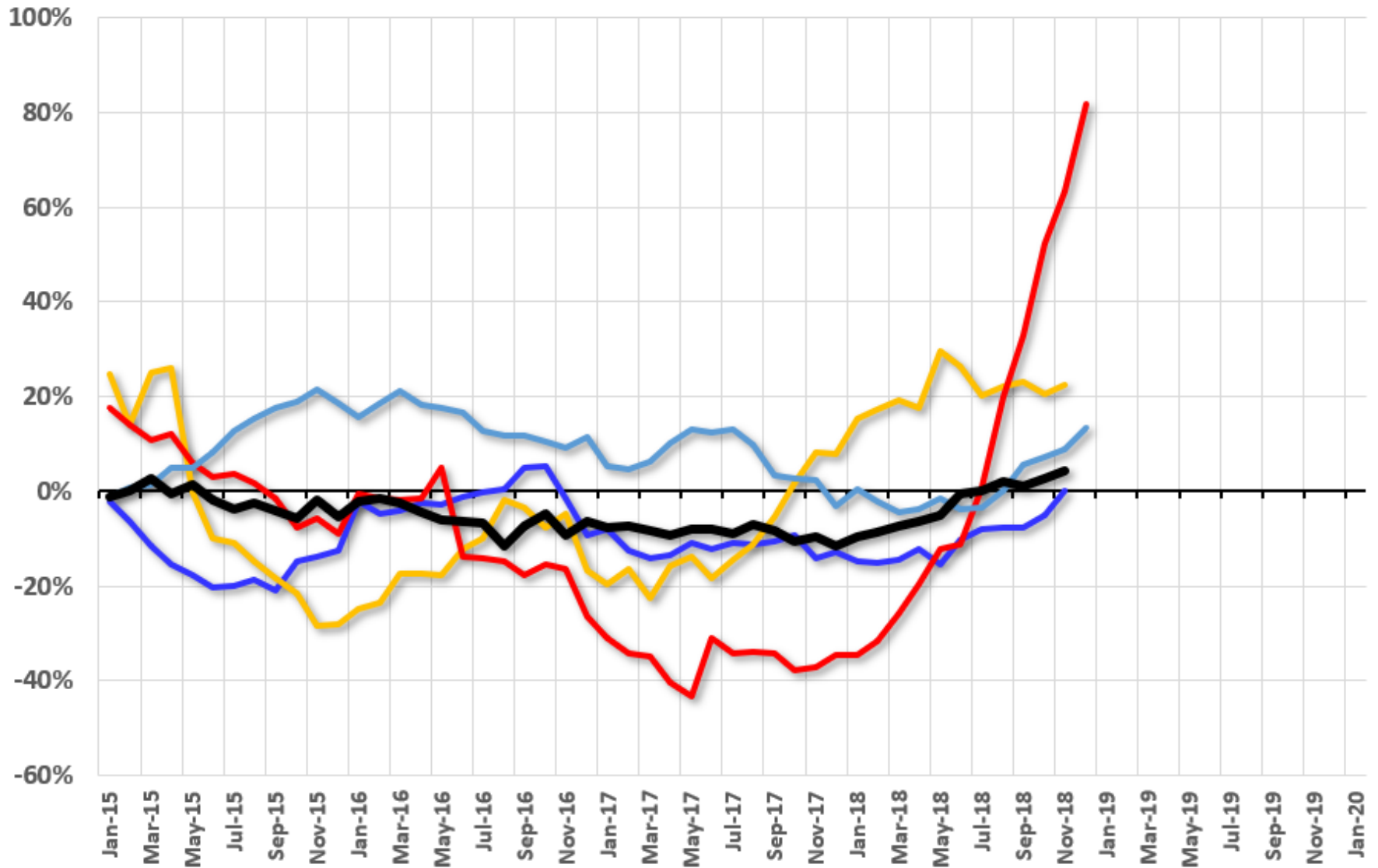


Has Inventory Bottomed?

It looks like it hit bottom in mid-2018

Year-over-year Inventory, National and Four Local Markets

Phoenix Sacramento Las Vegas Houston NAR (National)

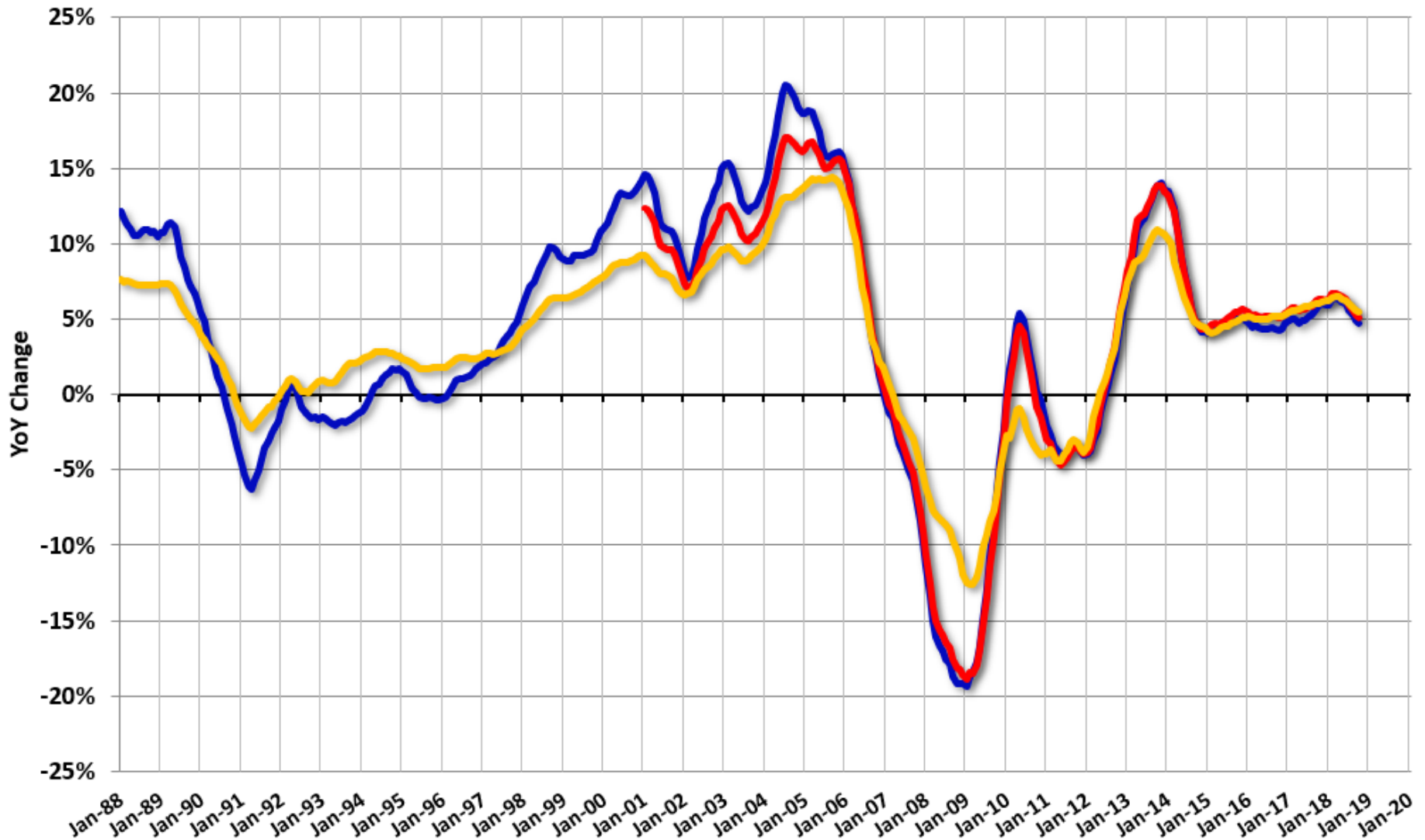


Price Growth Appears to be Topping

Prices rise faster than wages! Y-o-Y prices up 4.7%, 5.1% or 5.5% depending on the measure

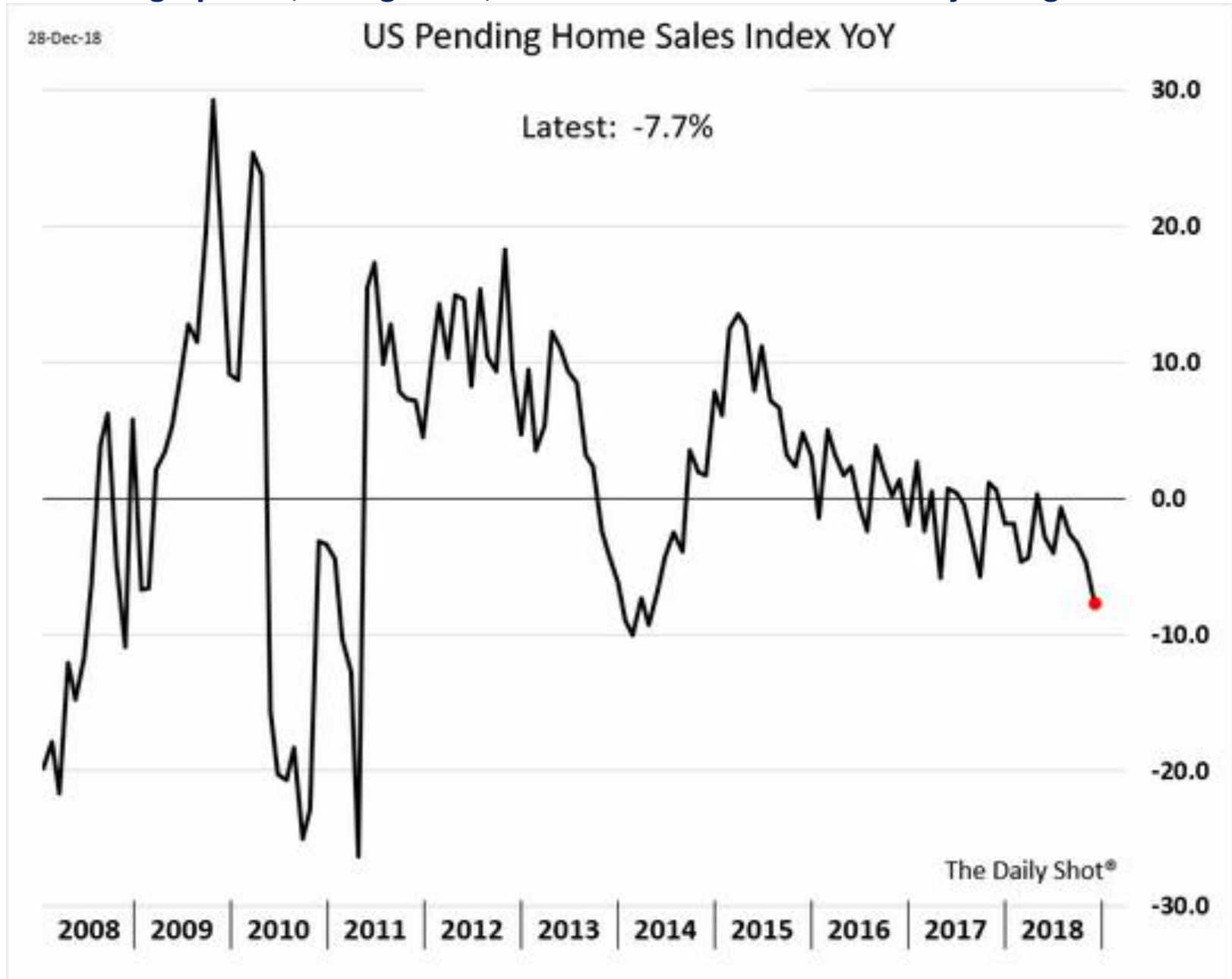
Case-Shiller National and Composite Indices SA, Year-over-year Change

— Composite 10 — Composite 20 — National Index



Pending Home Sales Decline

High prices, rising rates, and low inventories are finally being felt

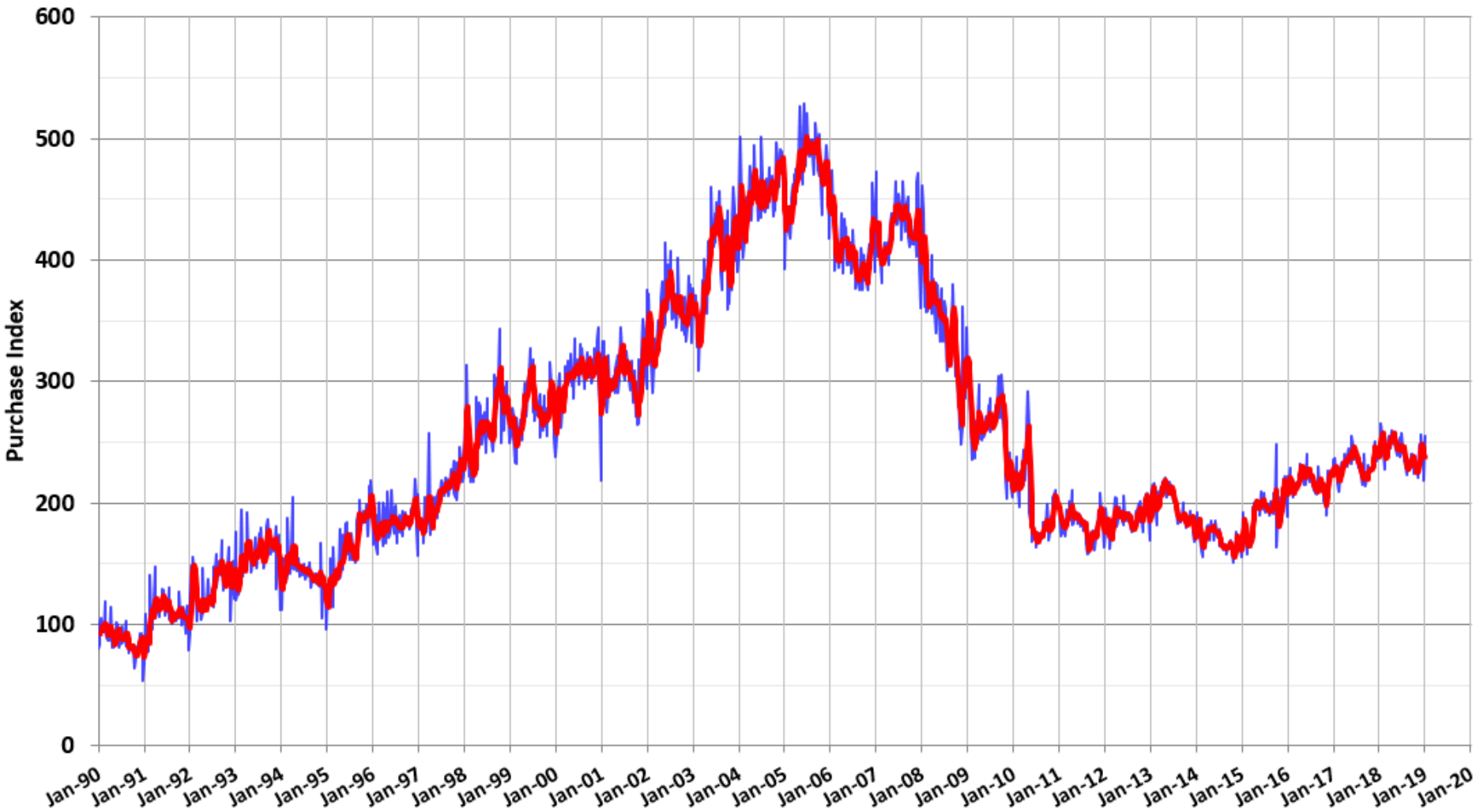


MBA Mortgage Purchase Apps Flatten

1st time applications are up 4% Y-o-Y, at level of the late 1990s!
2019 purchase volume looks to be \$1.2 trillion, unchanged from 2018

MBA Purchase Applications Index

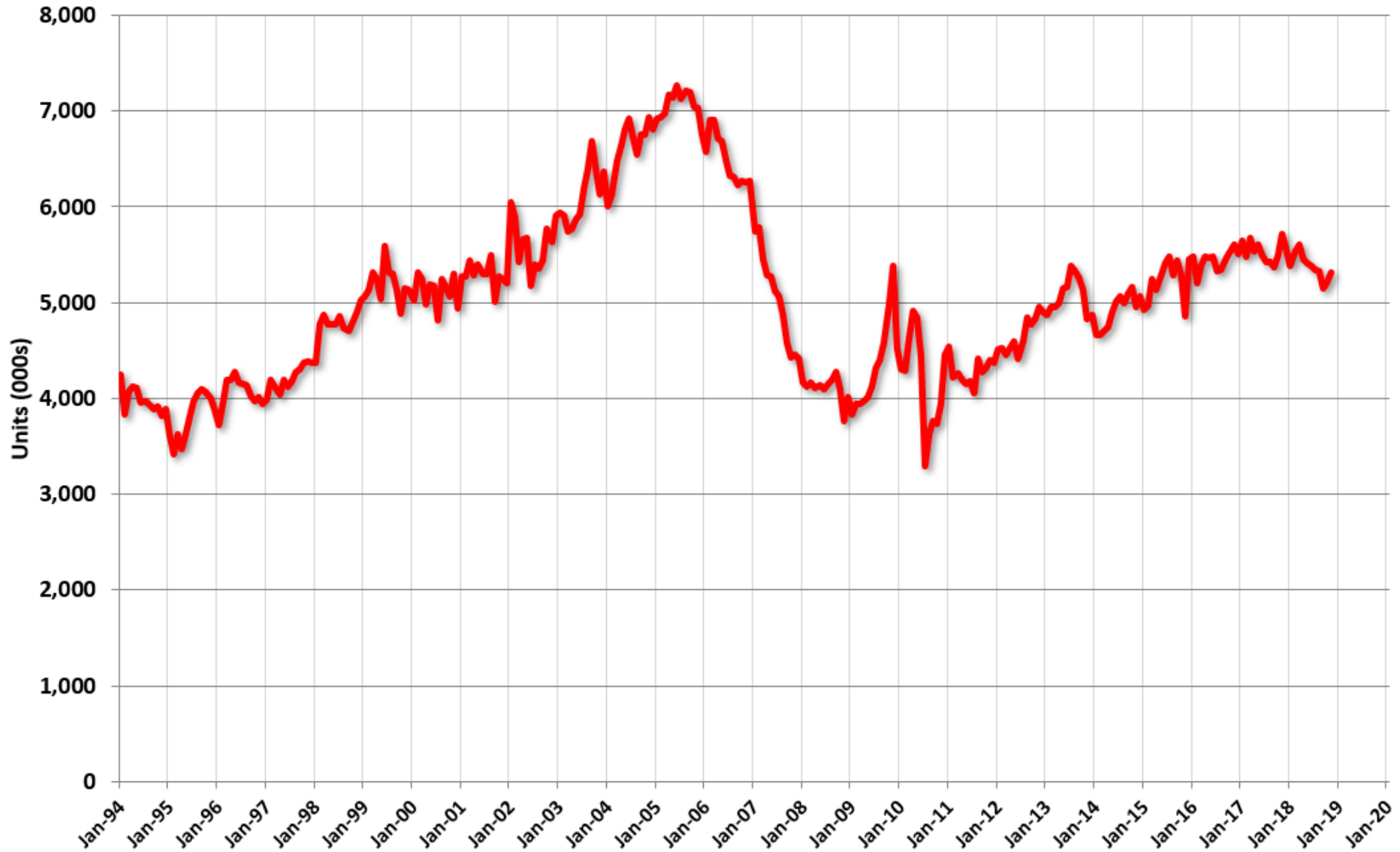
— Purchase Index — 4 Week Moving Average



Existing Home Sales Have Plateaued

Regrettably this is occurring while the economy rocks!

Existing Home Sales (SAAR)

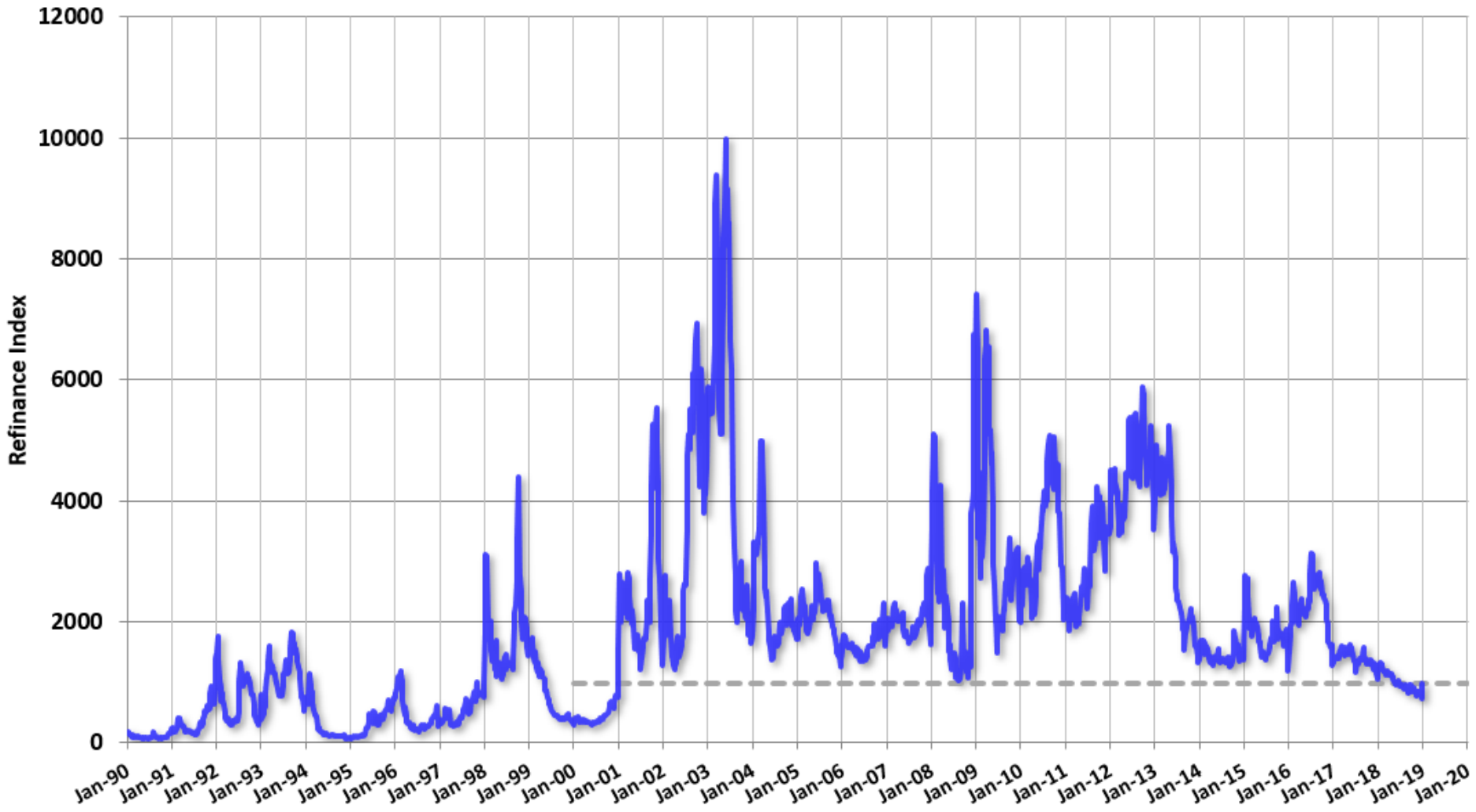


Refinance Activity Keeps Declining!

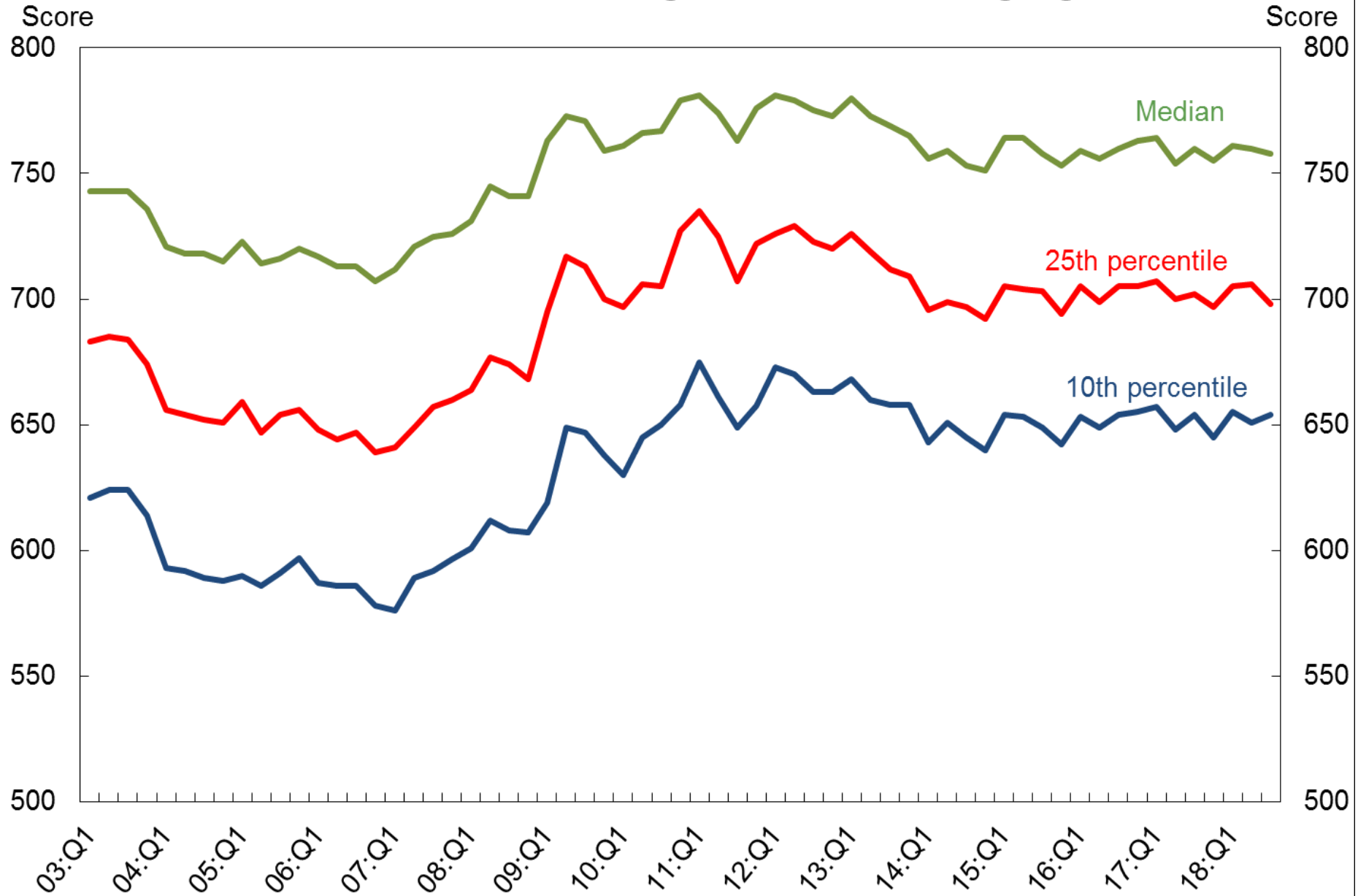
2019 refi activity falls to \$400 billion from \$460 in 2018 and \$600 in 2017. Ouch

MBA Refinance Applications Index

--- Current — Refinance Index



Credit Score at Origination: Mortgages*



Source: New York Fed Consumer Credit Panel/Equifax

* Credit Score is Equifax Riskscore 3.0; mortgages include first-liens only.

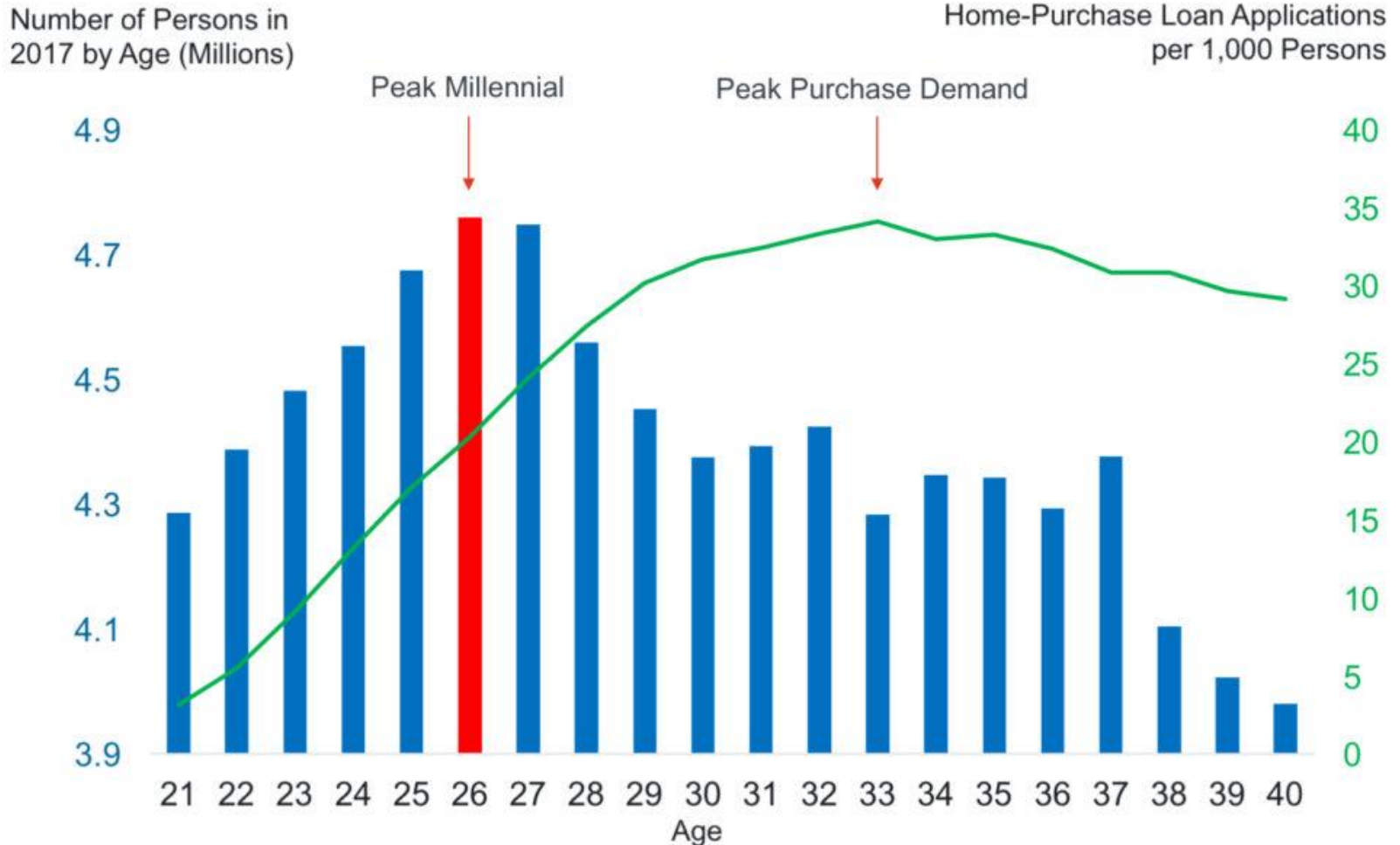
Millennials Will Keep This Issue Front and Center

Beginning to approach the Peak. Chase Millennials, move-up buyers and Boomers

Exhibit 4:



Millennials Will Propel First-time Buyer Demand

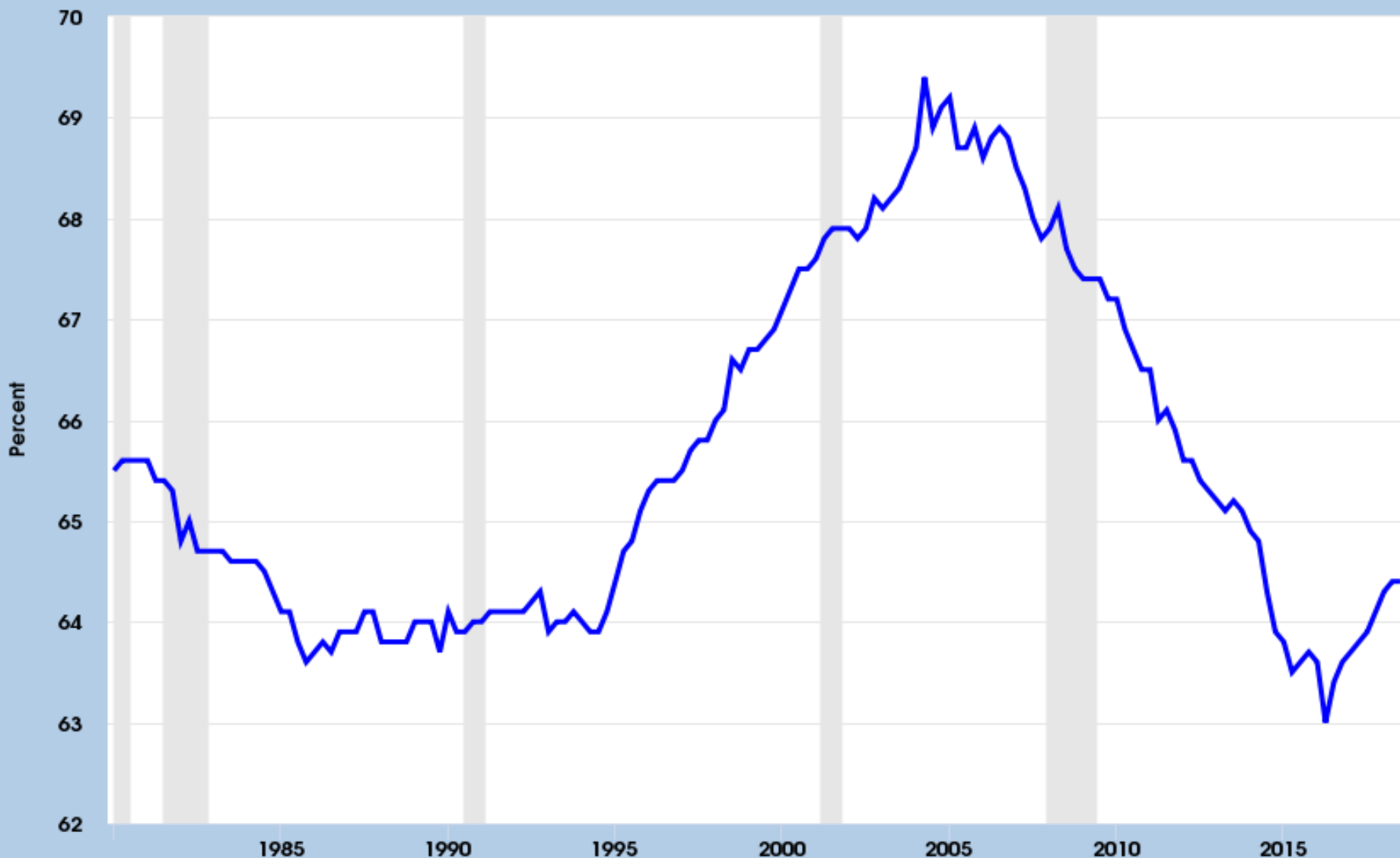


Source: CoreLogic and Census Bureau (population as of July 1)

The U.S. Home Ownership Rate is Rising

Demographic changes are pushing it up, but slowly

FRED  — Homeownership Rate for the United States



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of the Census

myf.red/g/IONA

ANY QUESTIONS?

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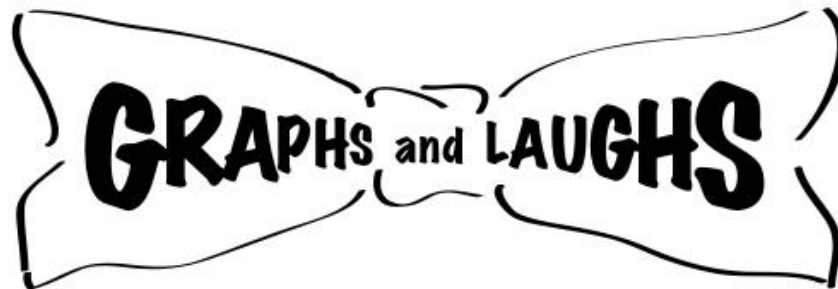
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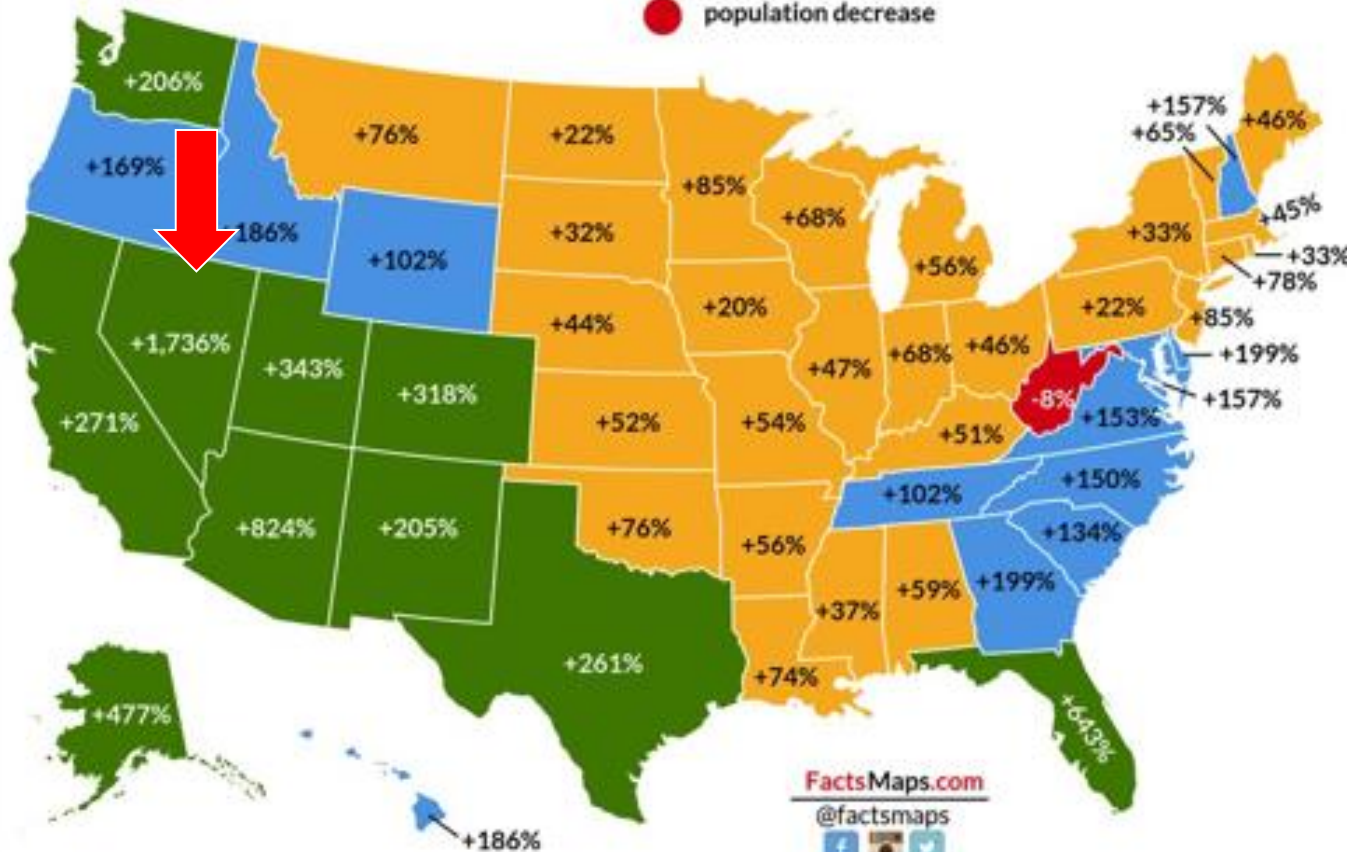
**What About
Things Here?**

Population Growth by State 1950 to Present

The west grows fastest!

U.S. states by population growth rate 1950-2016

- population growth above 200%
- population growth between 100% and 199%
- population growth between 1% and 99%
- population decrease




- Posted on
WSJ: The
- Nevada +1,736%
 - Arizona +824
 - Florida +643
 - Alaska +477
 - Utah +343
 - Colorado +318
 - California +271
 - Texas +261
 - Washington +206
 - New Mexico +205
 - Delaware +199
 - Georgia +199
 - Hawaii +186
 - Idaho +186
 - Oregon +169
 - Maryland +157
 - Virginia +153
 - New Hampshire +150
 - North Carolina +150
 - South Carolina +134
 - Tennessee +102
 - Wyoming +102
 - Minnesota +85
 - New Jersey +85
 - Connecticut +78
 - Montana +76
 - Oklahoma +76
 - Louisiana +74
 - Indiana +68
 - Wisconsin +68
 - Vermont +65
 - Alabama +59
 - Arkansas +56
 - Michigan +56
 - Missouri +54
 - Kansas +52
 - Kentucky +51
 - Illinois +47
 - Maine +46
 - Ohio +46
 - Massachusetts +45
 - Nebraska +44
 - Mississippi +37
 - New York +33
 - Rhode Island +33
 - South Dakota +32
 - North Dakota +22
 - Pennsylvania +22
 - Iowa +20
 - West Virginia -8

Source: United States Census Bureau

FactsMaps.com
@factsmaps

States With Fastest % Growth 7/1/17-6/30/18

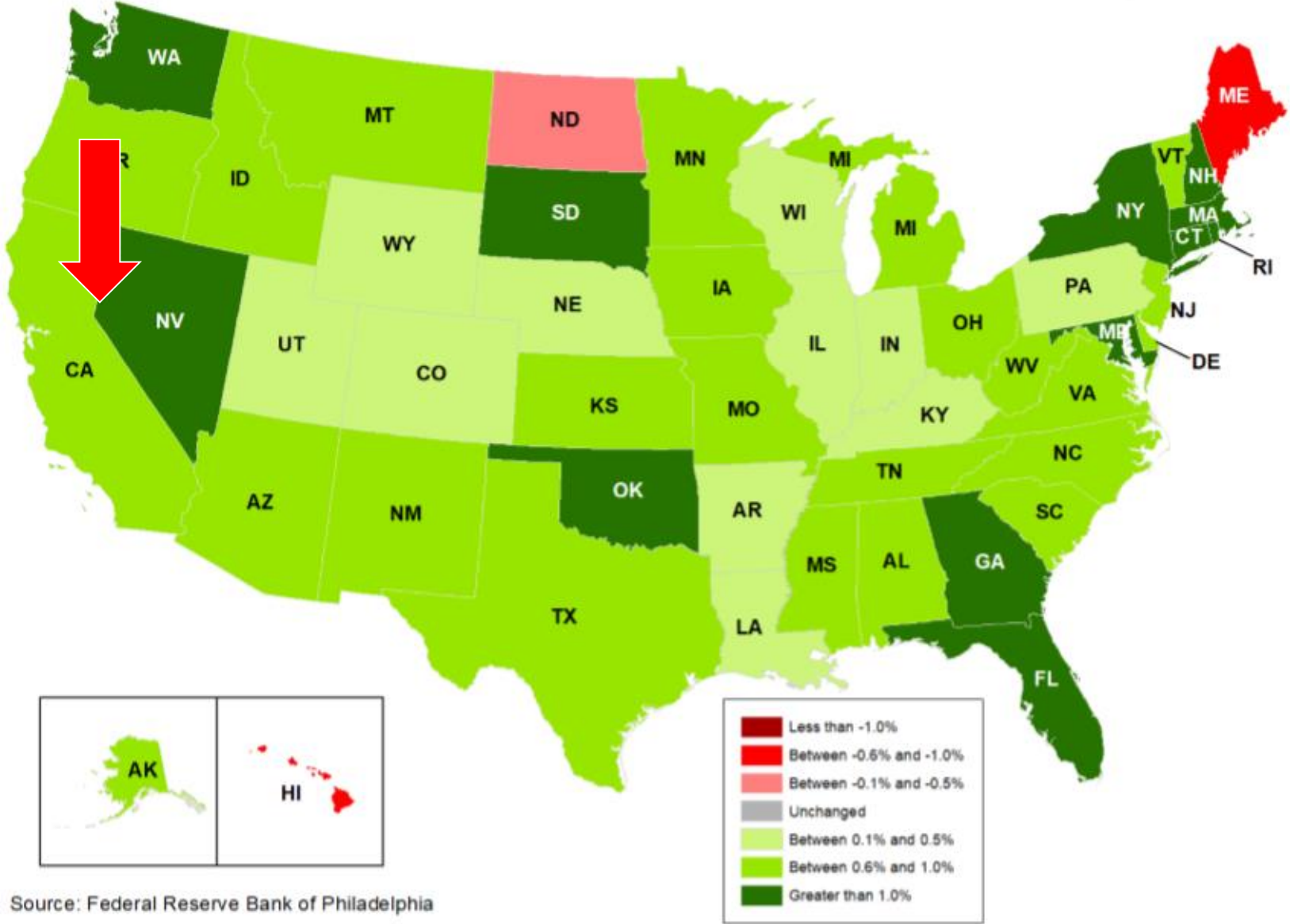
Rank	Name	2010	2017	2018	Percent growth
 1	Nevada	2,700,679	2,972,405	3,034,392	2.1
2	Idaho	1,567,657	1,718,904	1,754,208	2.1
3	Utah	2,763,891	3,103,118	3,161,105	1.9
4	Arizona	6,392,288	7,048,876	7,171,646	1.7
5	Florida	18,804,580	20,976,812	21,299,325	1.5
6	Washington	6,724,540	7,425,432	7,535,591	1.5
7	Colorado	5,029,316	5,615,902	5,695,564	1.4
8	Texas	25,146,114	28,322,717	28,701,845	1.3
9	South Carolina	4,625,381	5,021,219	5,084,127	1.3
10	North Carolina	9,535,736	10,270,800	10,383,620	1.1

States With Fastest Pop Growth 7/1/17-6/30/18

Rank	Name	2010	2017	2018	Numeric growth
1	Texas	25,146,114	28,322,717	28,701,845	379,128
2	Florida	18,804,580	20,976,812	21,299,325	322,513
3	California	37,254,523	39,399,349	39,557,045	157,696
4	Arizona	6,392,288	7,048,876	7,171,646	122,770
5	North Carolina	9,535,736	10,270,800	10,383,620	112,820
6	Washington	6,724,540	7,425,432	7,535,591	110,159
7	Georgia	9,688,709	10,413,055	10,519,475	106,420
8	Colorado	5,029,316	5,615,902	5,695,564	79,662
9	South Carolina	4,625,381	5,021,219	5,084,127	62,908
 10	Nevada	2,700,679	2,972,405	3,034,392	61,987

Things Are Good Now

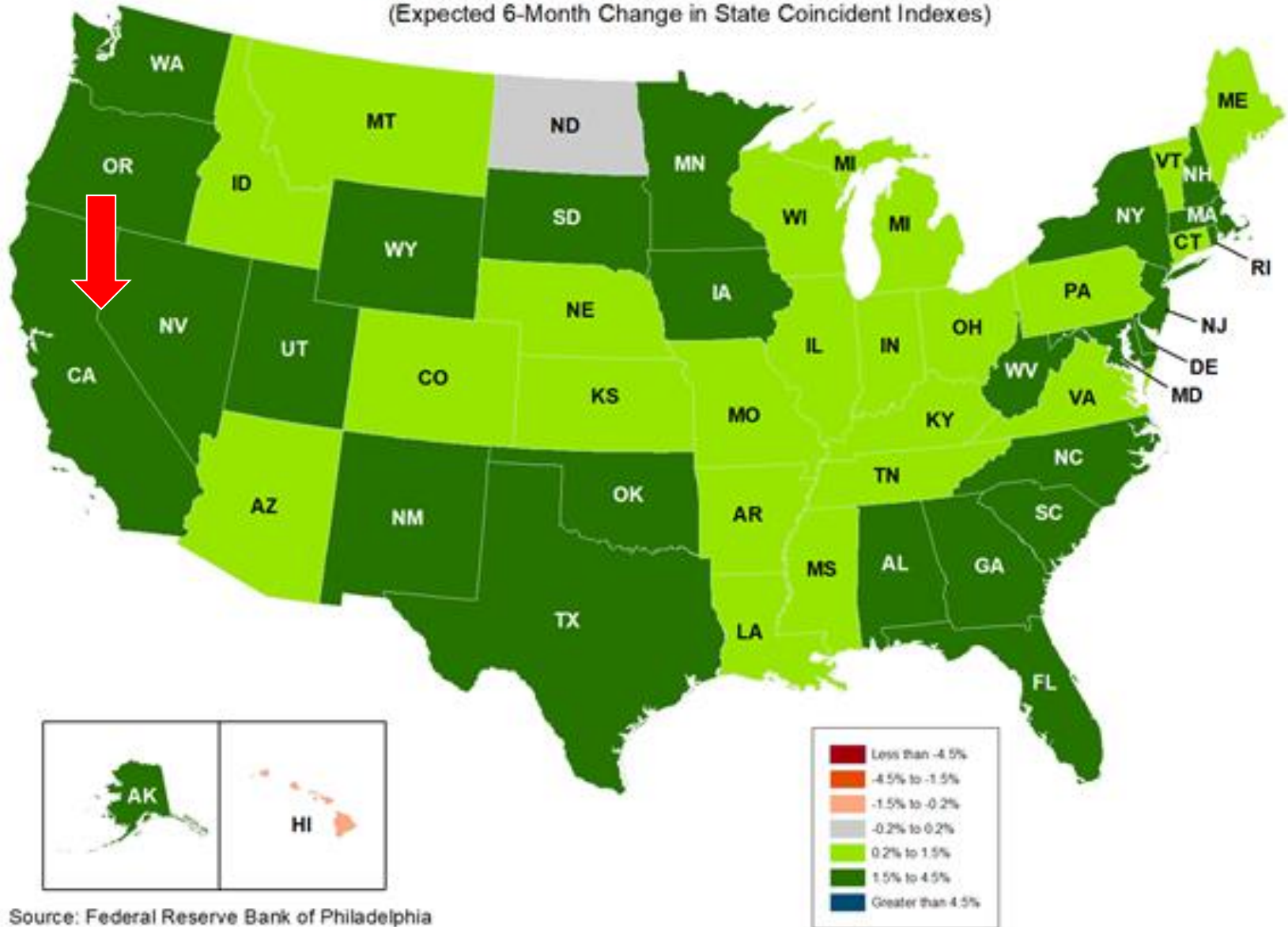
November 2018 State Coincident Indexes: Three-Month Change



Source: Federal Reserve Bank of Philadelphia

The Future Looks Good Too!

October 2018 State Leading Indexes
(Expected 6-Month Change in State Coincident Indexes)



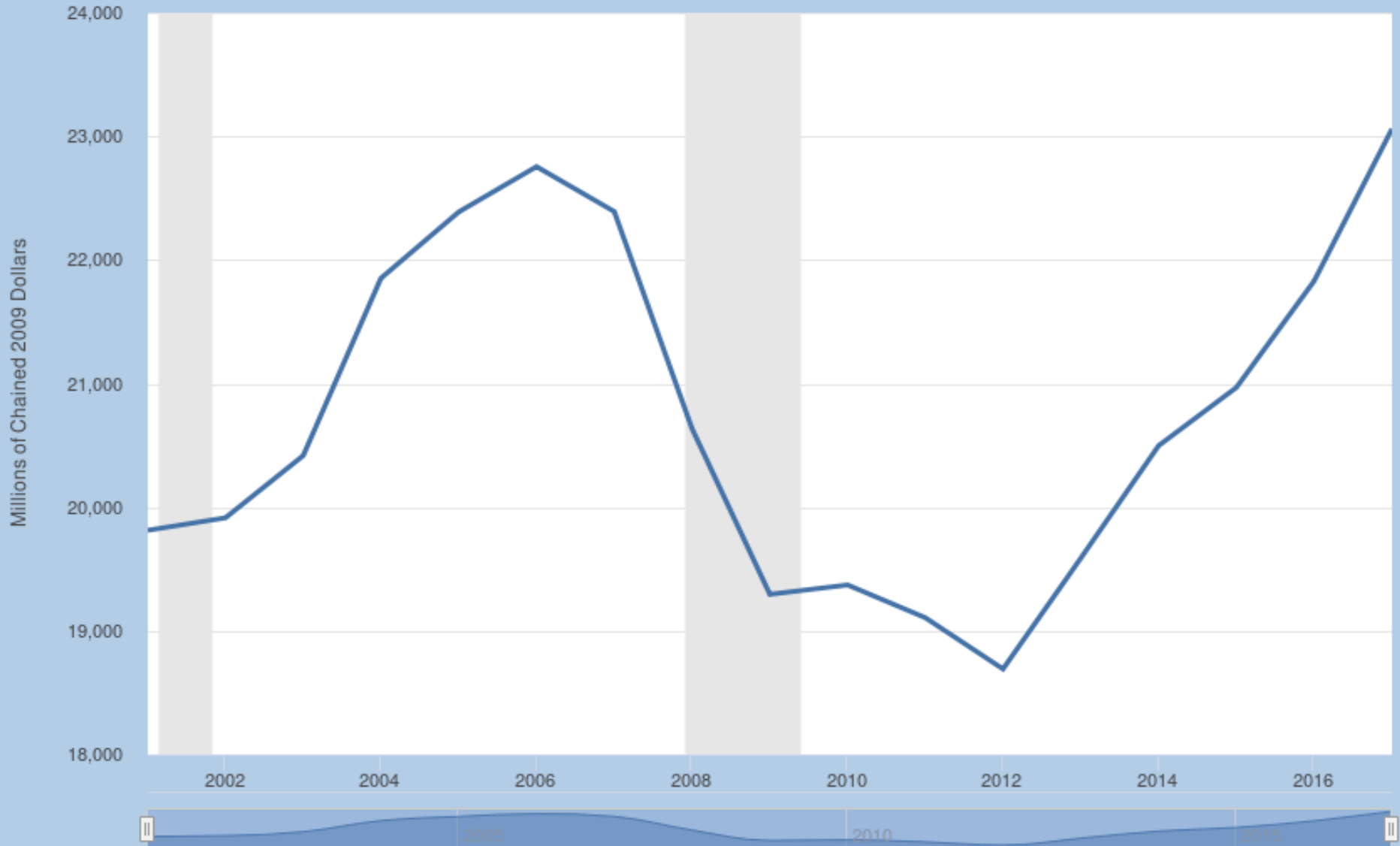
Source: Federal Reserve Bank of Philadelphia

GDP for the Reno MSA

Has been rising since 2013, and broke above the 2006 peak in 2017



— Total Real Gross Domestic Product for Reno, NV (MSA)



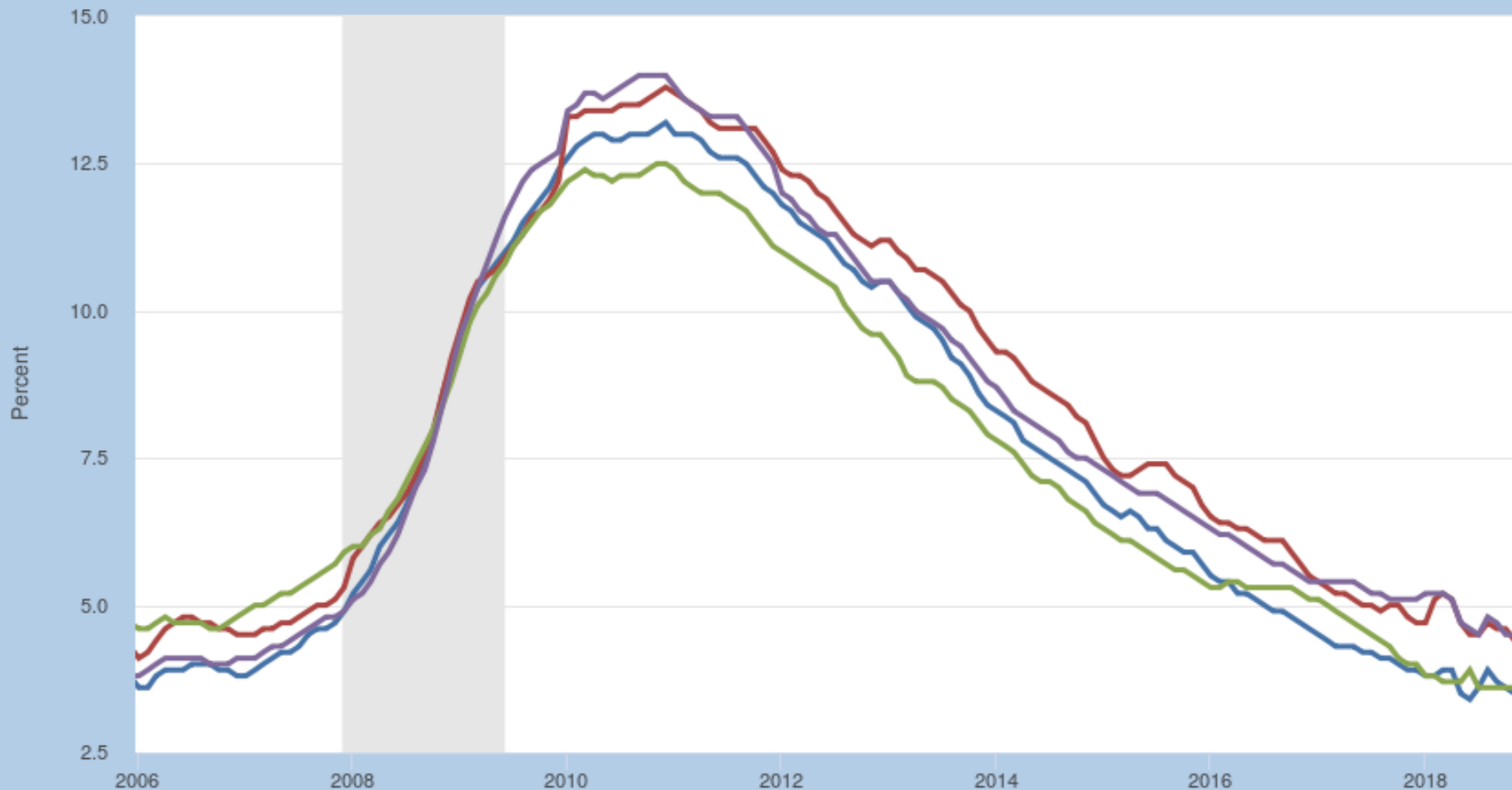
Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Economic Analysis

myf.red/g/mEdg

Unemployment Rates Around Lake Tahoe

Reno and Sac are above average. Carson City and Las Vegas are weaker. All have improved



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

[myf.fred/g/mEdt](https://myf.fred.stlouisfed.org/g/mEdt)

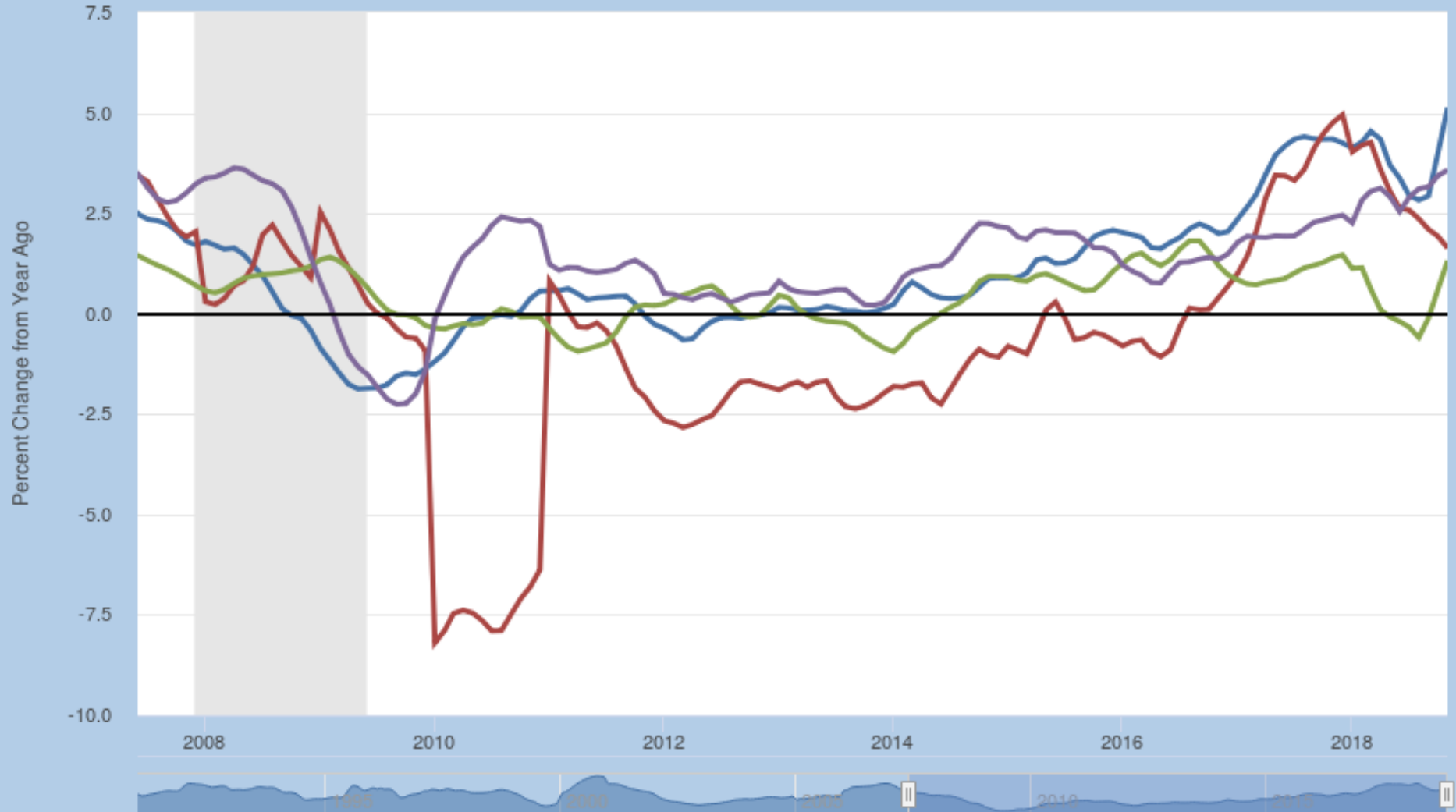
Labor Force Growth Rates Around Lake Tahoe

Reno is tops, then Las Vegas then Sacramento. Carson City slows

FRED



- Civilian Labor Force in Reno, NV (MSA)
- Civilian Labor Force in Carson City, NV (MSA)
- Civilian Labor Force in Sacramento--Roseville--Arden-Arcade, CA (MSA)
- Civilian Labor Force in Las Vegas-Henderson-Paradise, NV (MSA)



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

myf.red/g/mEdS

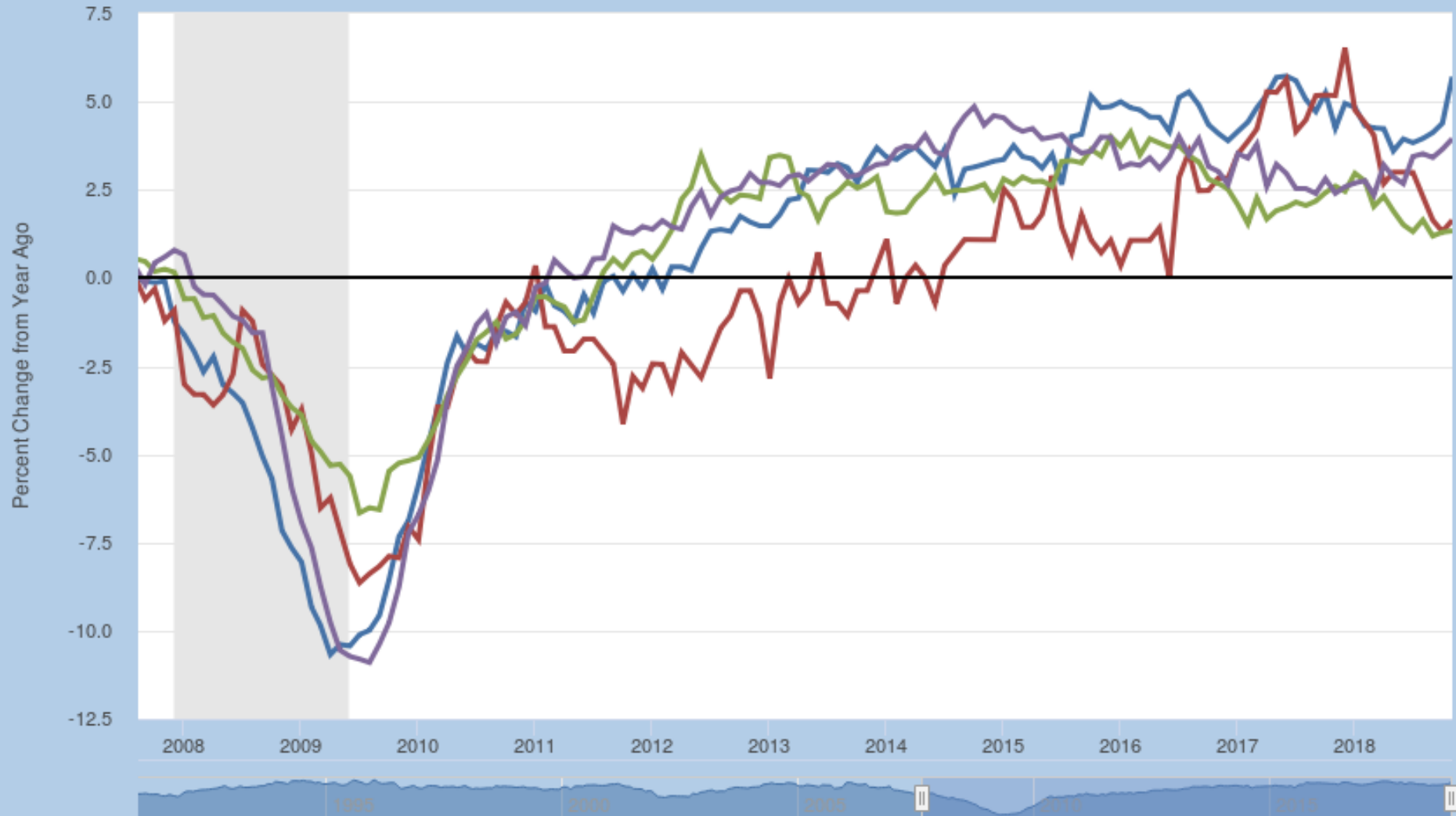
Employment Growth Rates In Nearby Cities

Las Vegas and Reno show strongest employment growth. Carson and Sac weaken

FRED



- All Employees: Total Nonfarm in Reno, NV (MSA)
- All Employees: Total Nonfarm in Carson City, NV (MSA)
- All Employees: Total Nonfarm in Sacramento--Roseville--Arden-Arcade, CA (MSA)
- All Employees: Total Nonfarm in Las Vegas-Henderson-Paradise, NV (MSA)



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

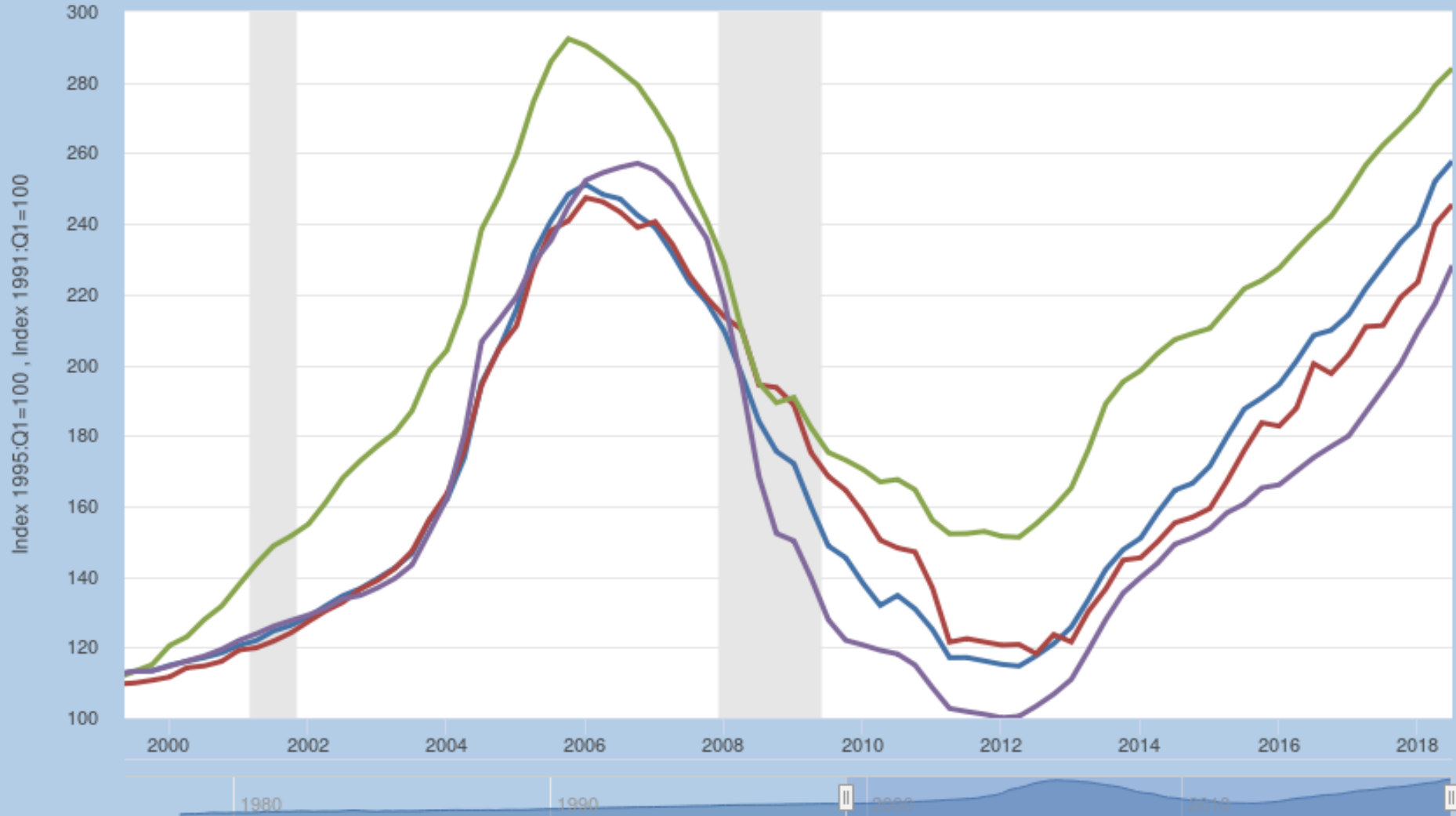
myf.red/g/mEdb

Housing Prices In Nearby Bigger Cities

All but Las Vegas have fully recovered. Housing is too expensive, again!



- All-Transactions House Price Index for Reno, NV (MSA)
- All-Transactions House Price Index for Carson City, NV (MSA)
- All-Transactions House Price Index for Sacramento-Roseville-Arden-Arcade, CA (MSA)
- All-Transactions House Price Index for Las Vegas-Henderson-Paradise, NV (MSA)



Shaded areas indicate U.S. recessions

Source: U.S. Federal Housing Finance Agency

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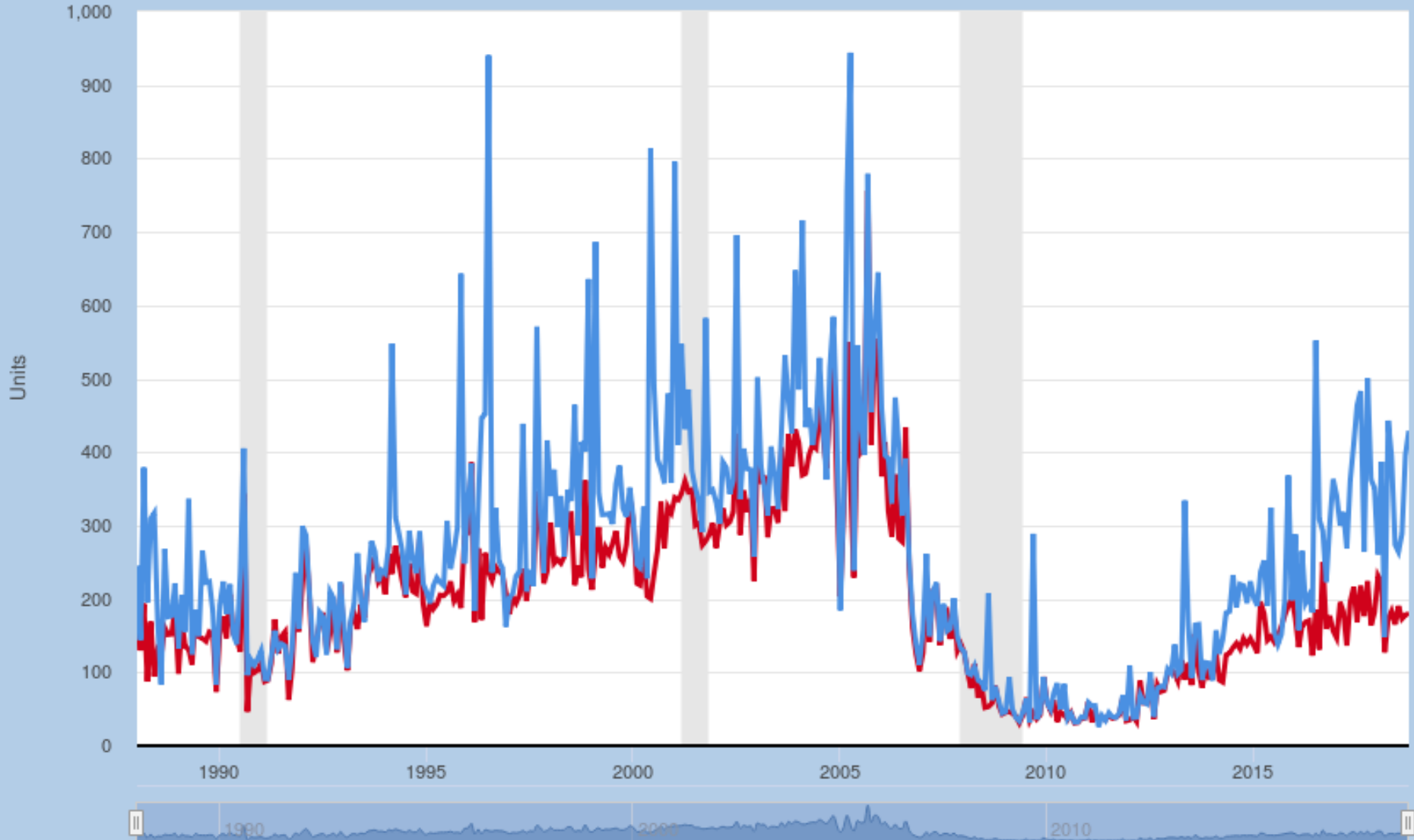
Housing Starts in Reno-Sparks

Single-family is flat, while multifamily is stronger but flat

FRED



- New Private Housing Units Authorized by Building Permits: 1-Unit Structures for Reno-Sparks, NV (MSA)
- New Private Housing Units Authorized by Building Permits for Reno-Sparks, NV (MSA)



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of the Census

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