

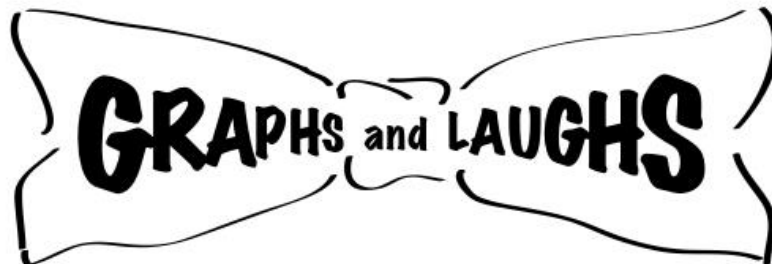
THE ECONOMY IN 2022: THE GREAT RENEGOTIATION

Presented by:

Elliot F. Eisenberg, Ph.D.

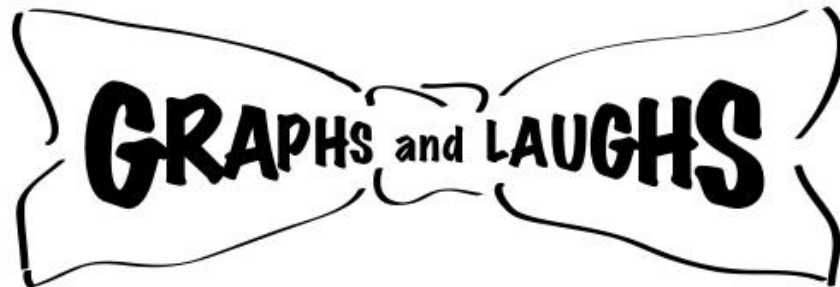
President: GraphsandLaughs, LLC

January 11, 2022



The Economy Is Improving

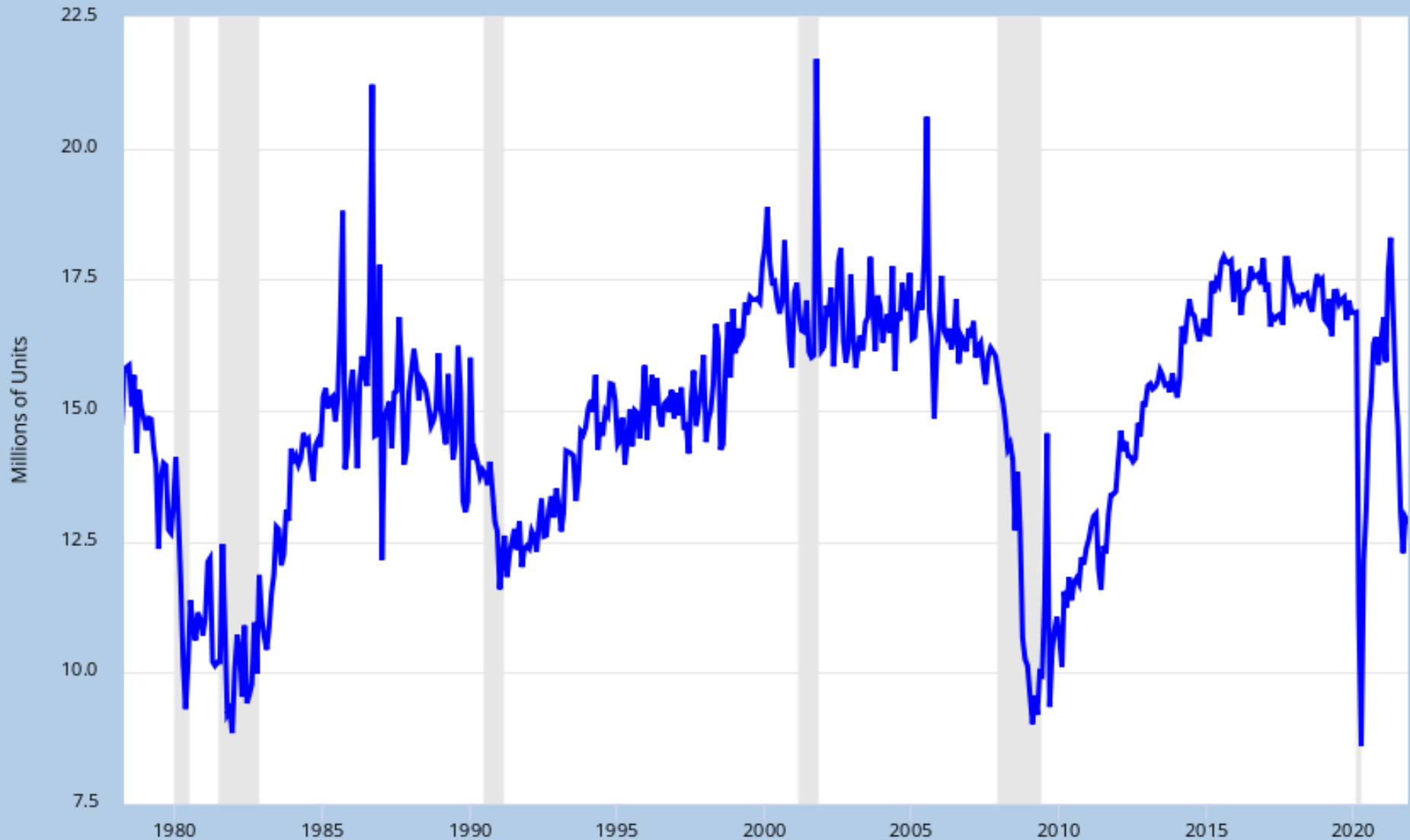
$$\text{GDP} = C + I + G + (X - M)$$



US Light Vehicle Sales Collapse

No inventory due to a lack of chips is a huge problem

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/jvu6

Real Retail Sales Decline Slightly

What is surprising is that it is not declining faster

FRED  — Advance Real Retail and Food Services Sales



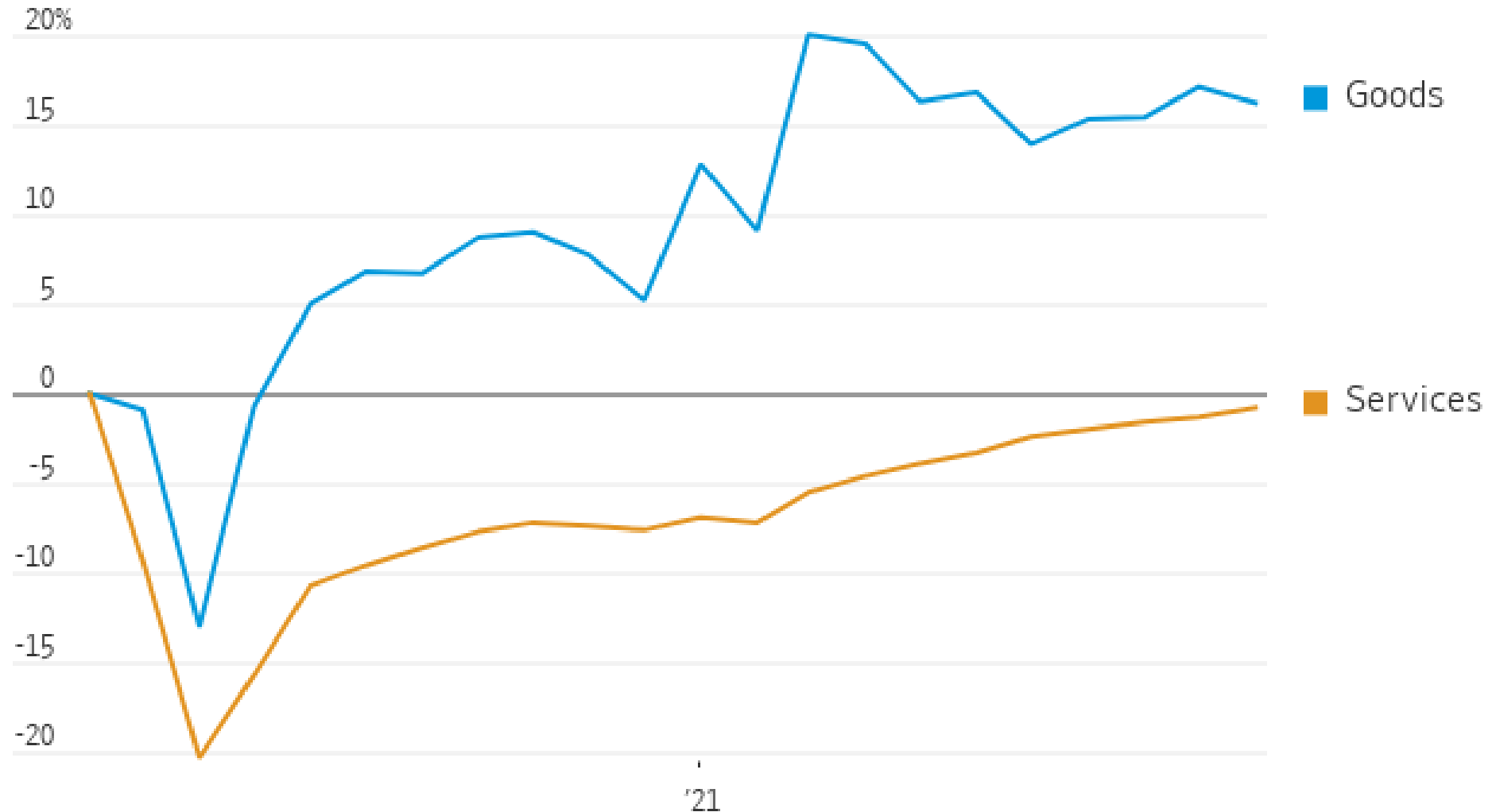
Source: Federal Reserve Bank of St. Louis

myf.red/g/JUz5

Retail Spending Through October 2021

It is way above trend

Change in inflation-adjusted consumer spending since February 2020

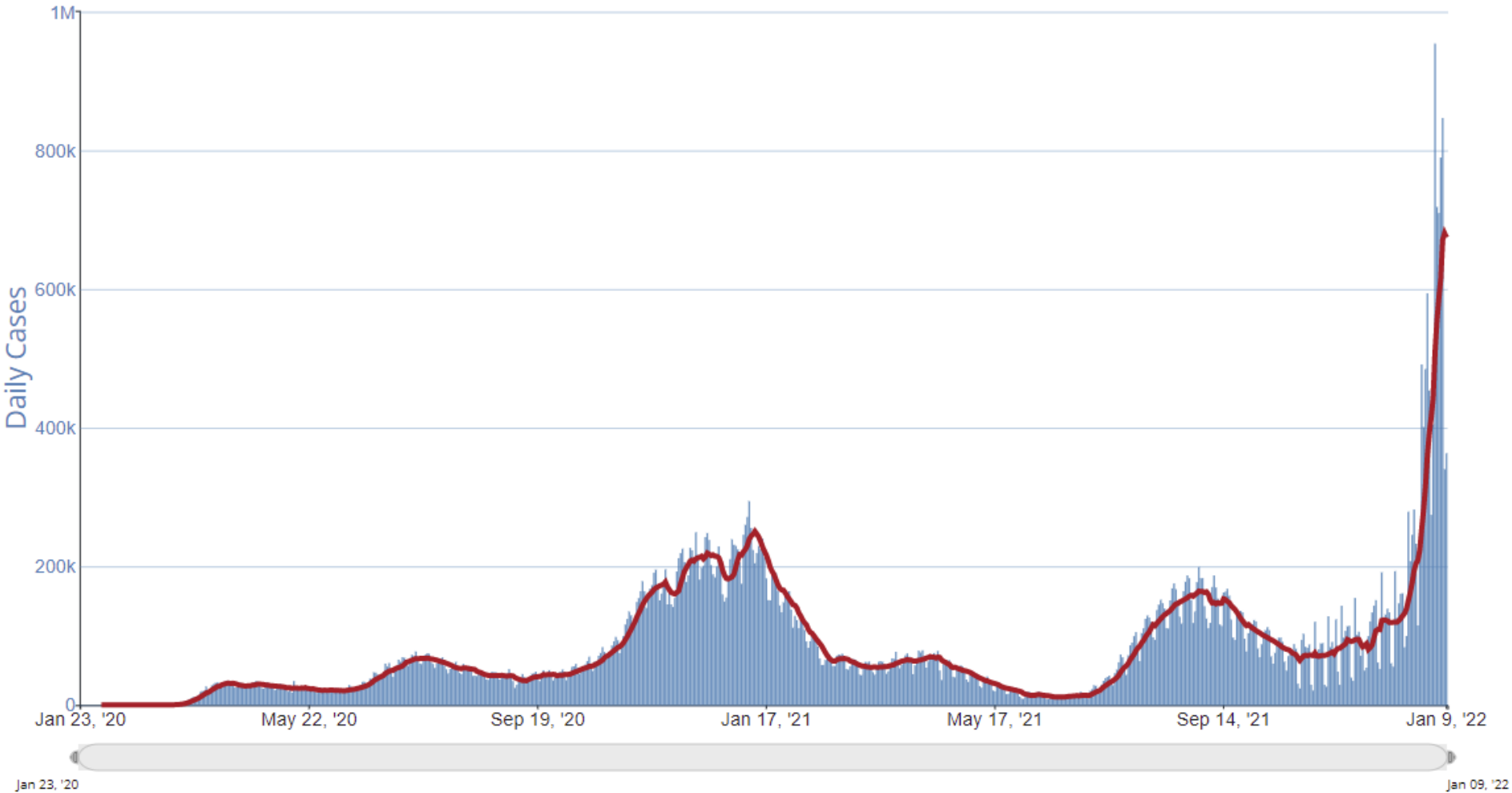


Source: Commerce Department

New US Coronavirus Cases/Day

US vaccination rate is approaching 65% which is decent

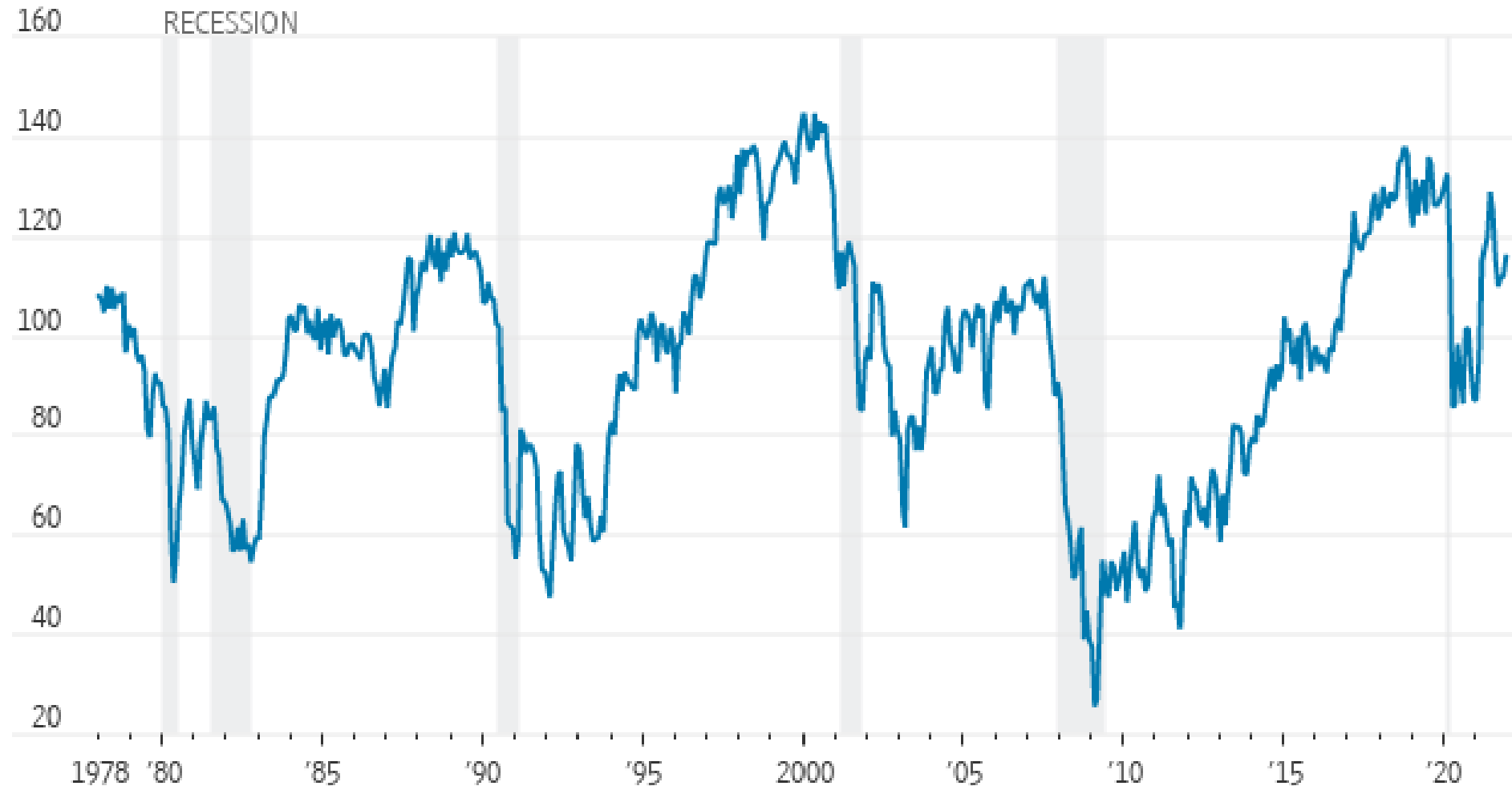
Daily Trends in Number of COVID-19 Cases in The United States Reported to CDC



Conference Board Consumer Confidence

It is again approaching pre-pandemic levels

Conference Board consumer confidence index



Note: Seasonally adjusted, 1985=100

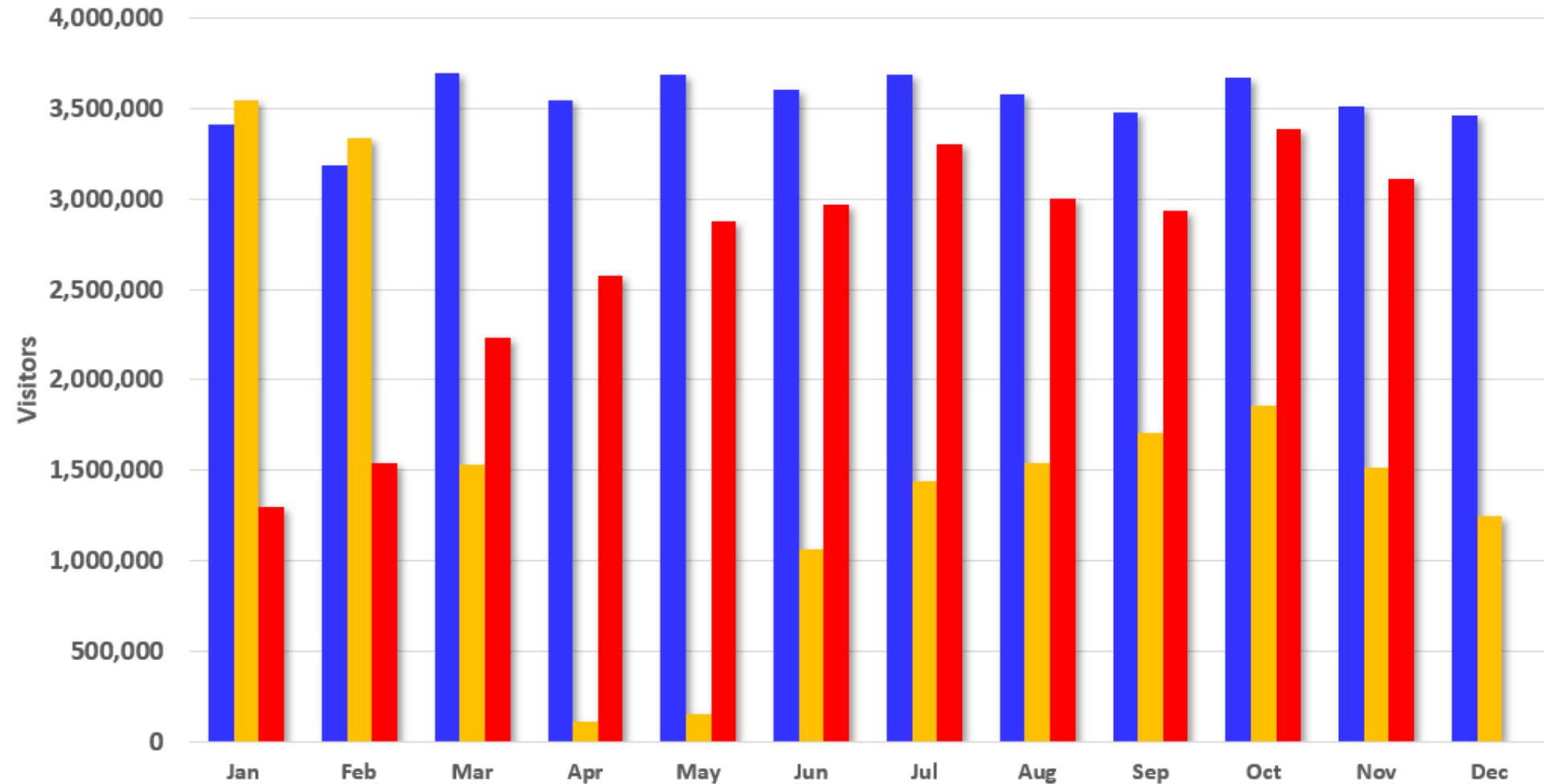
Source: The Conference Board

Las Vegas Attendance Steadily Recovers

Visitor traffic down 11.3% from 2019, convention attendance is down 100%,

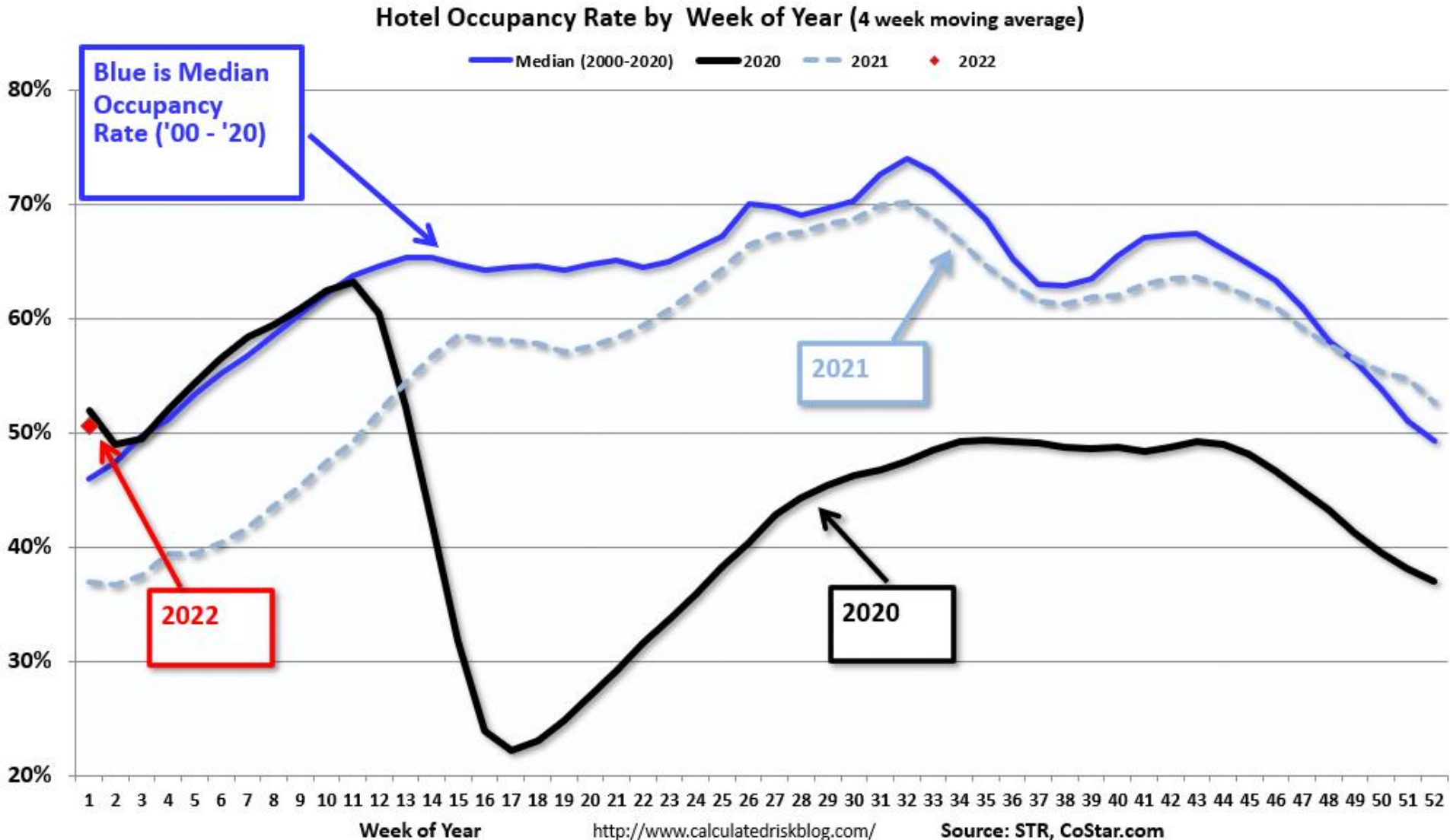
Las Vegas Visitors

■ 2019 Visitors ■ 2020 Visitors ■ 2021 Visitor



Hotel Occupancy Rate Steadily Improves

Occupancy is now above the 20-year median rate!

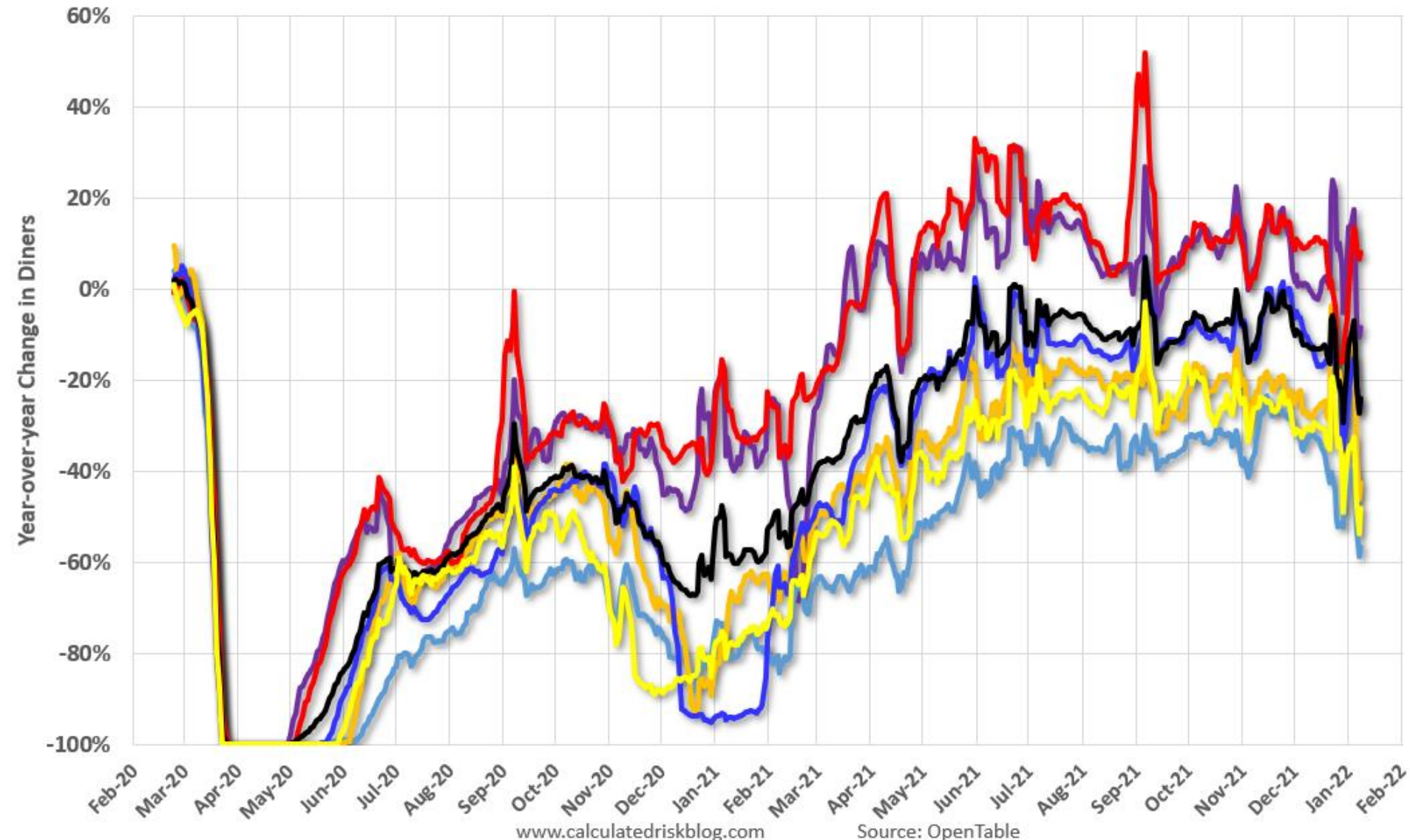


US Restaurant Footfall is Falling

Activity is down 24%. This only includes restaurants that have reopened

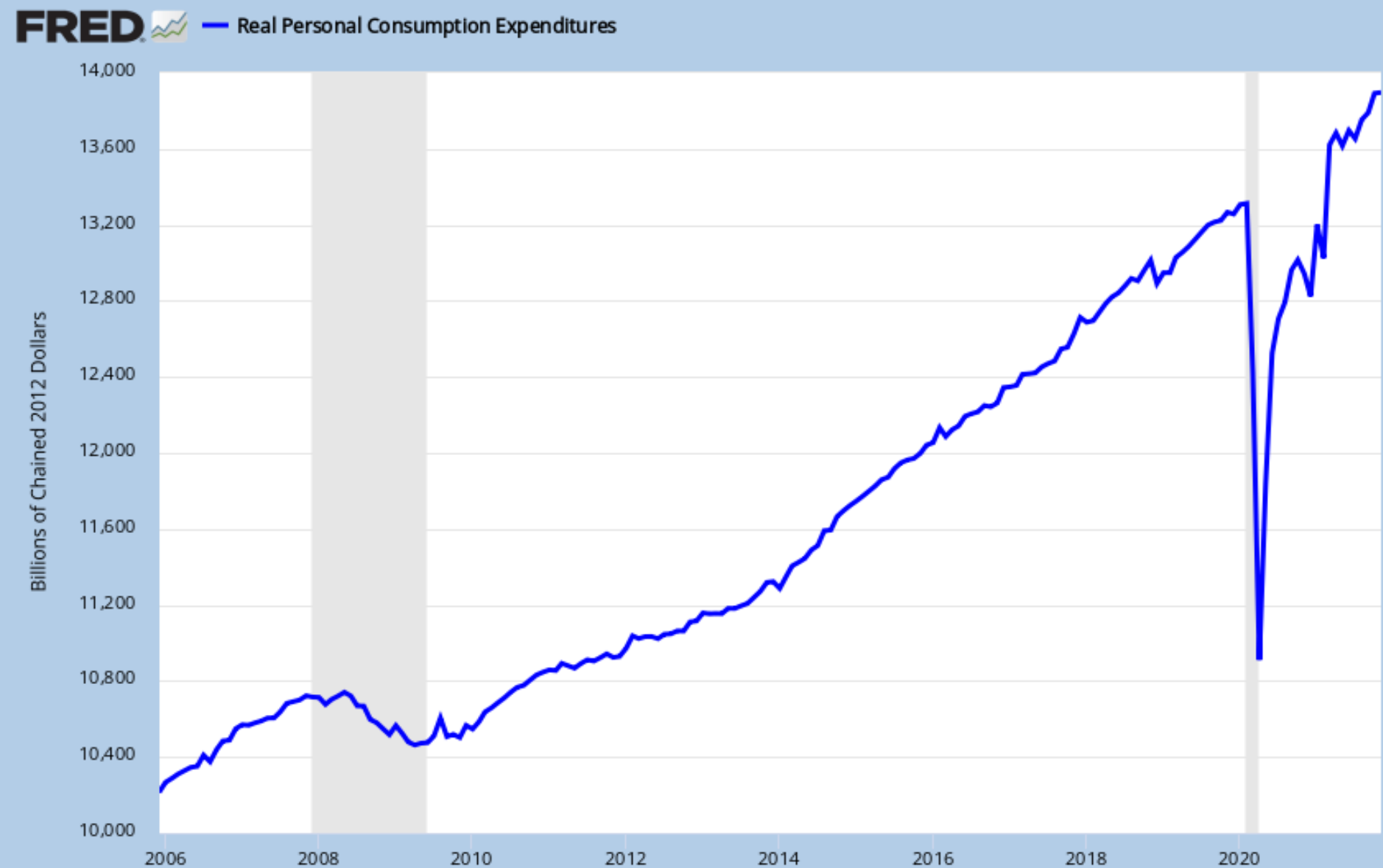
Compared to 2019, Seated Diners from Online, Phone or Walk-in Reservations, 7 Day Average

Texas New York Pennsylvania Florida California United States Illinois



Real Personal Consumption Expenditures

It has more than bounced back and this is why supply-chains struggle



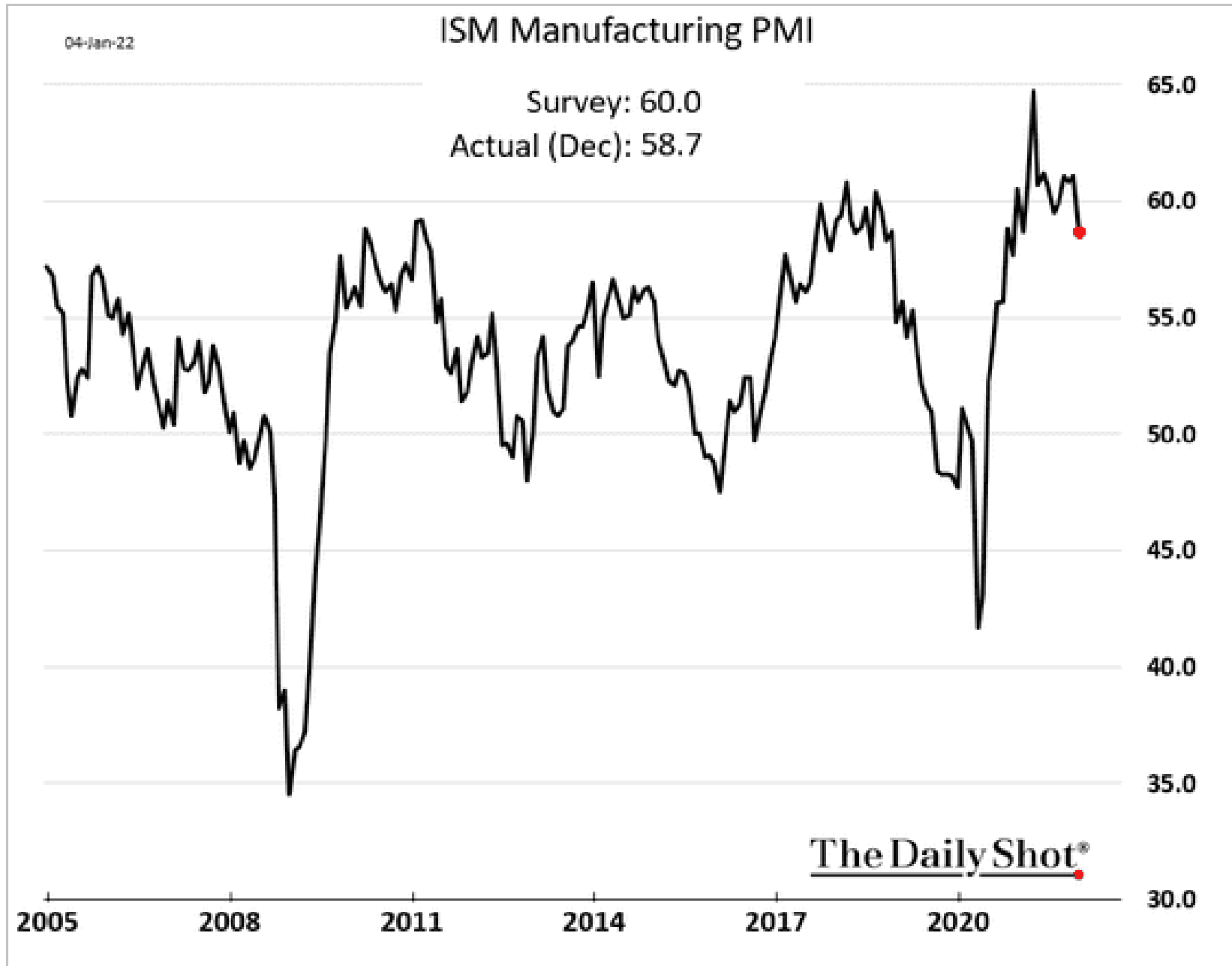
Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Economic Analysis

myf.red/g/KaME

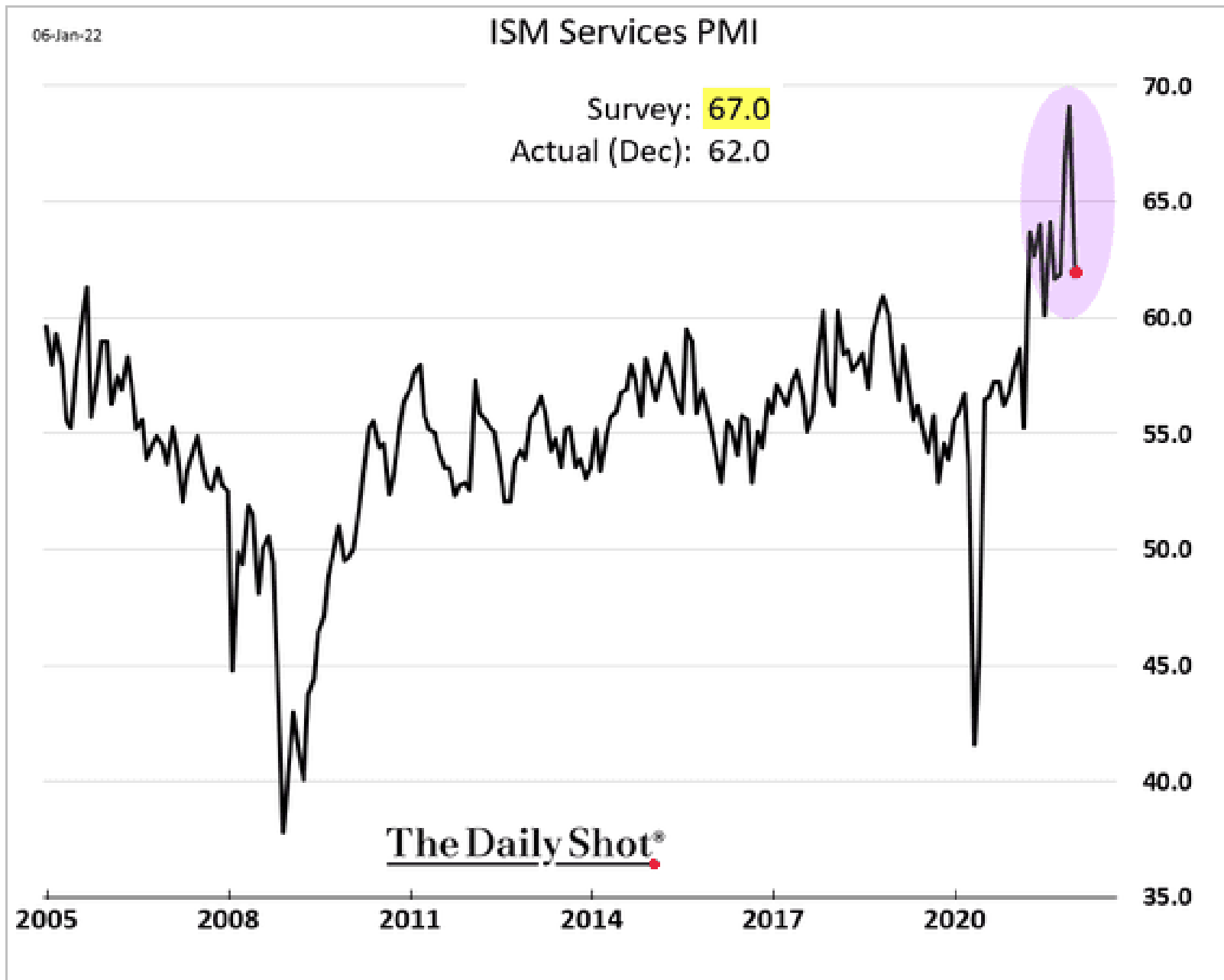
ISM Manufacturing Rebounds Strongly

Down a bit but still very strong



ISM Services Number Holds

It is doing exceptionally well

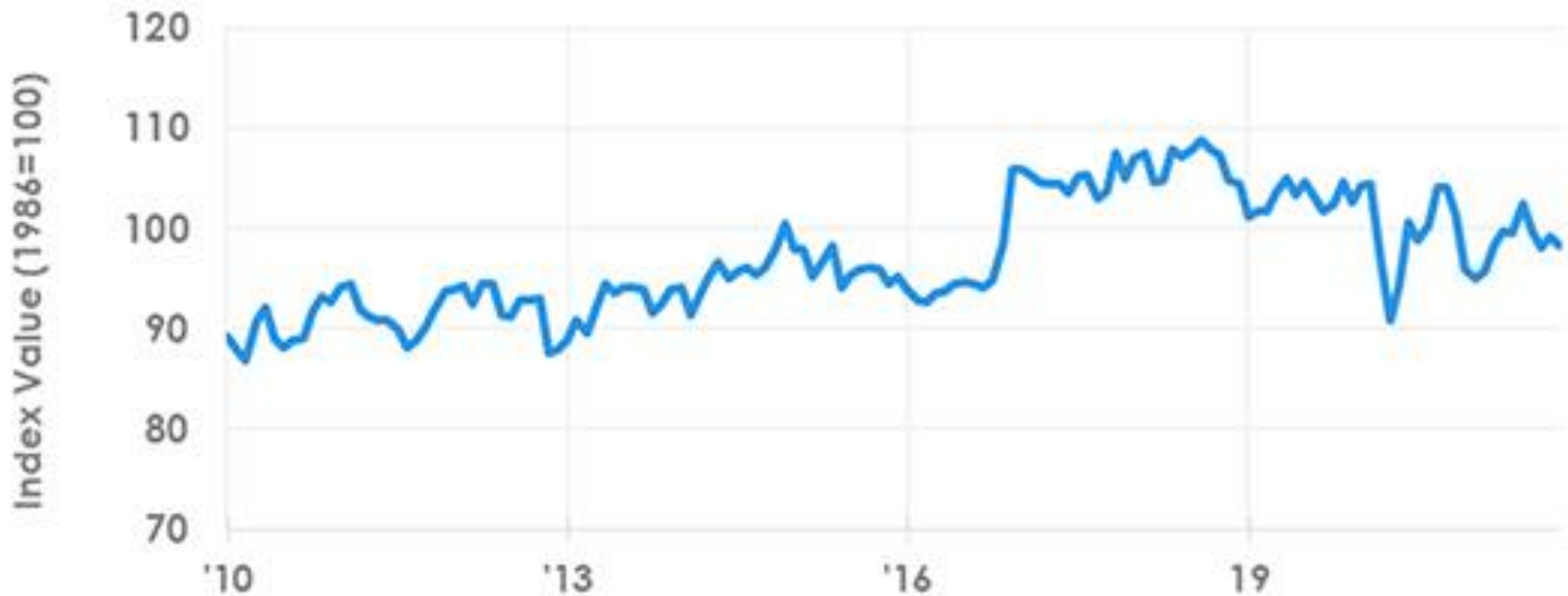


Small Business Confidence Struggles Slightly

The level is slightly above its long-term average of 98

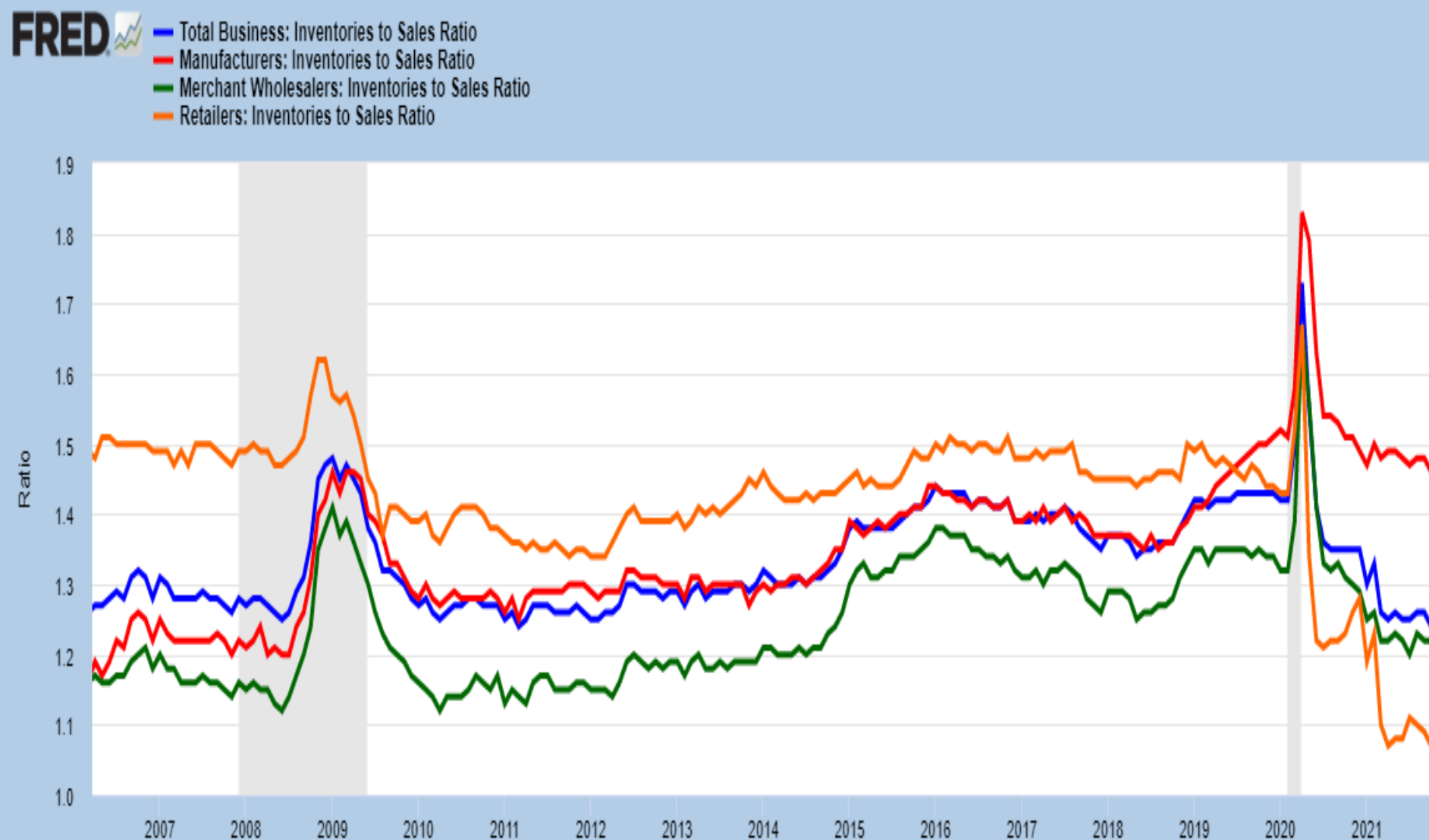
Small Business Optimism Index at 98.4

Based on 10 survey indicators, seasonally adjusted, Jan. '10 – Nov. '21



Inventory to Sales Ratios Stop Falling

All inventory ratios and especially retailer inventories are way too low



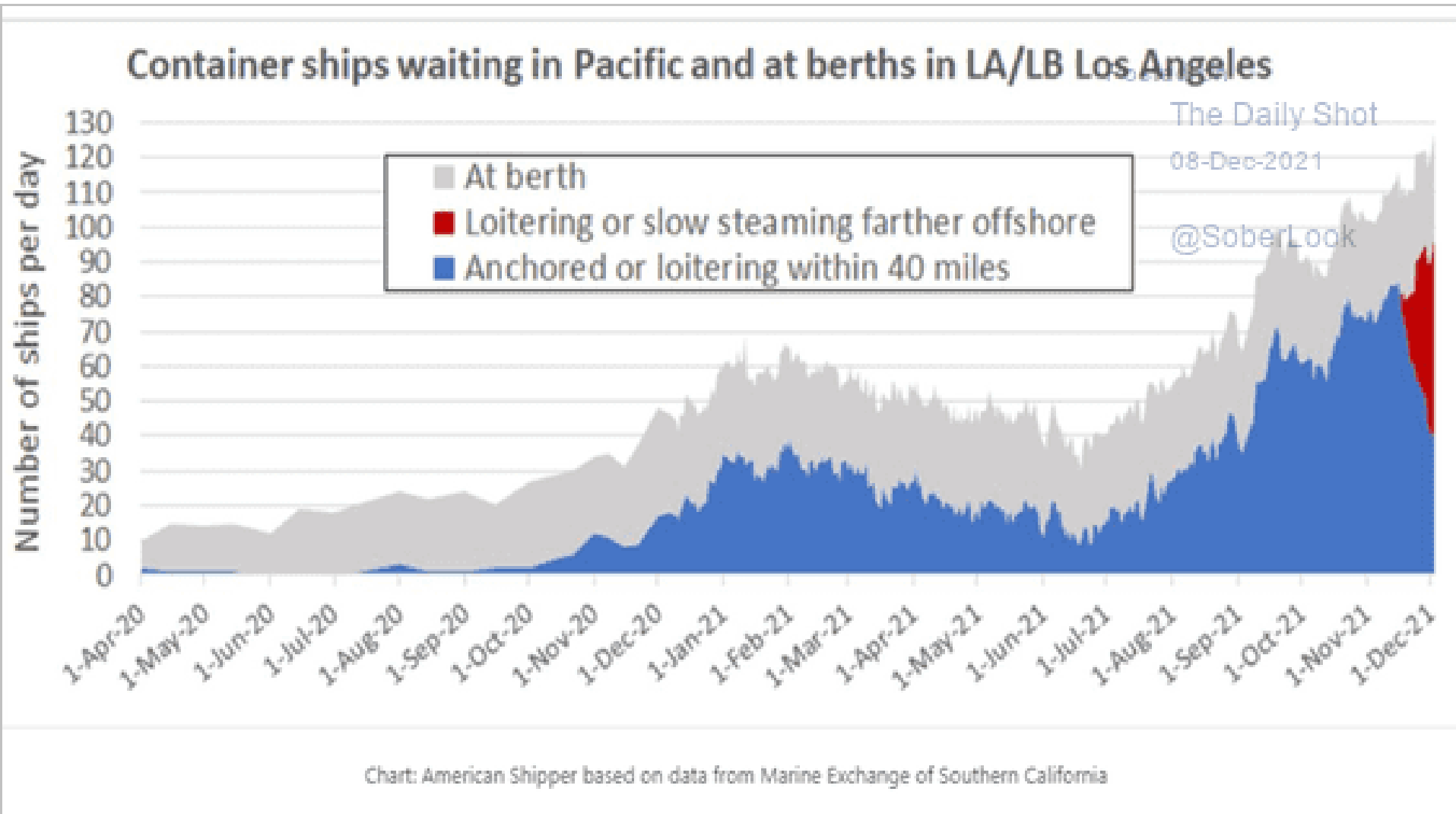
Shaded areas indicate U.S. recessions.

Source: U.S. Census Bureau

fred.stlouisfed.org

Ship Backup Lessens?

This is not a good thing



When Will Supply-Chains Ease?

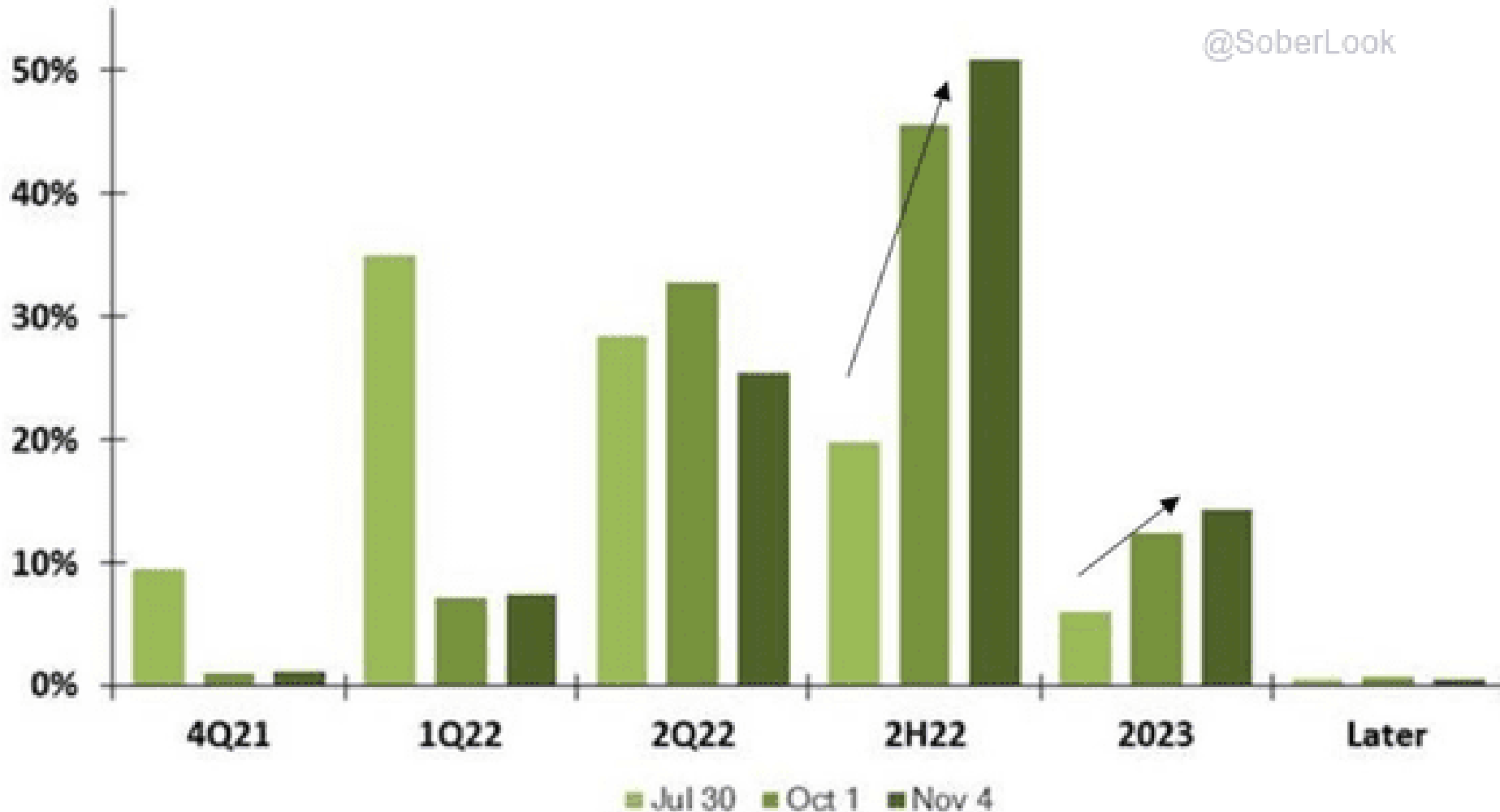
It looks like it will be a while

When Will The Broad Supply Chain Issues Currently Facing U.S. Companies Ease & Inventories Recover To "About Right"?

Posted on
The Daily Shot

08-Nov-2021

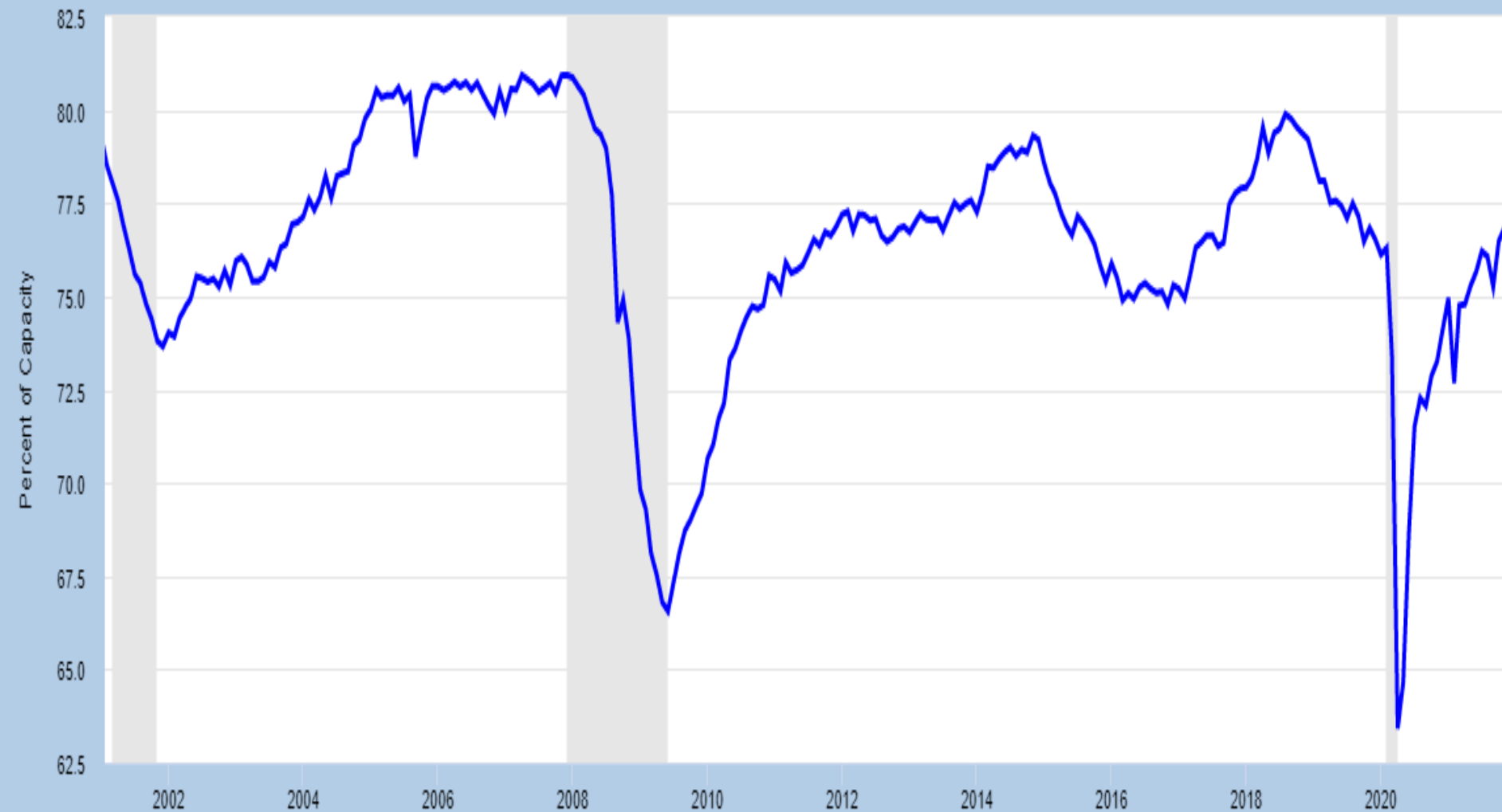
@SoberLook



Capacity Utilization Rates are Recovering

Close to its pre-Covid level. Weak due to ubiquitous shortages and bottlenecks

FRED  Capacity Utilization: Total Index



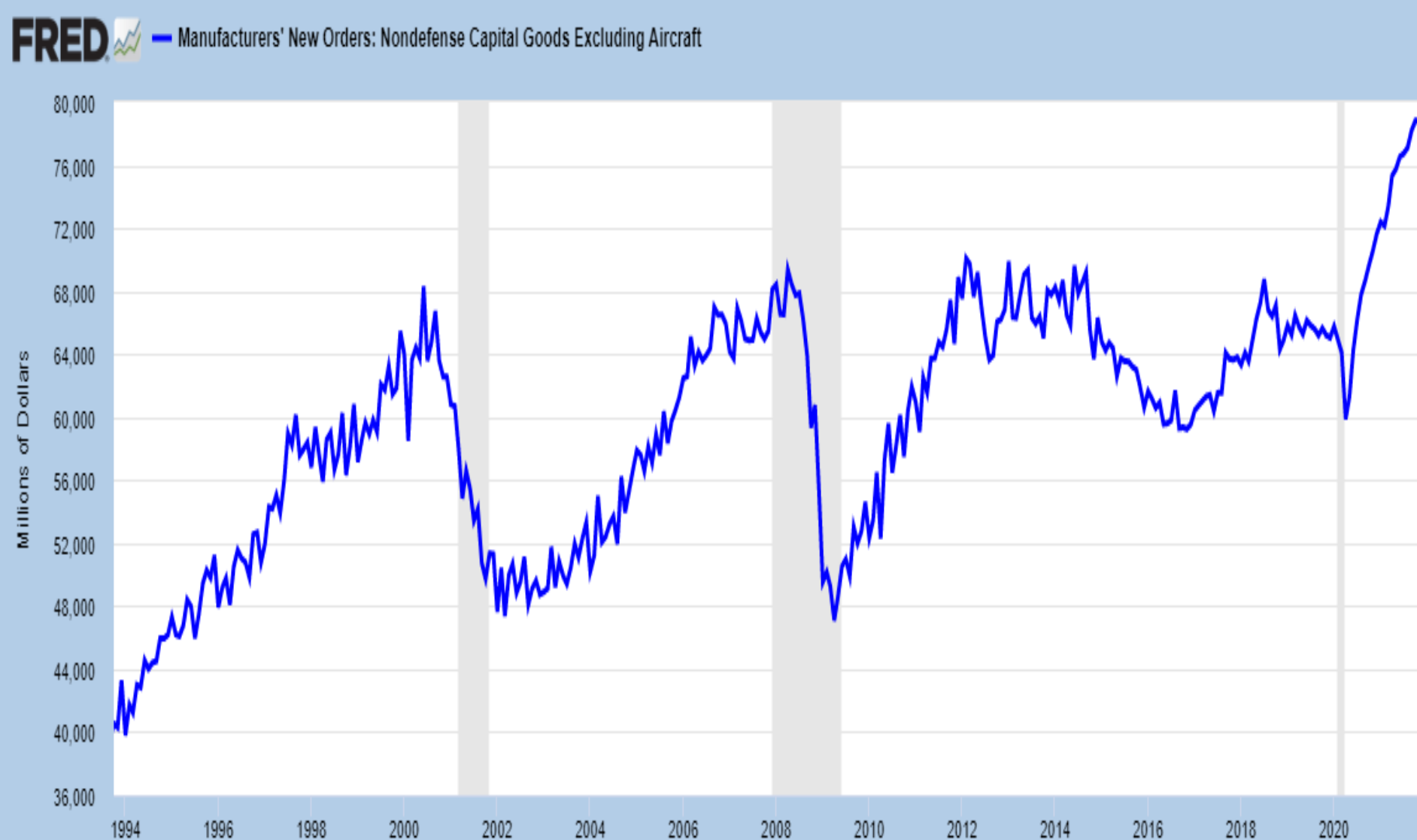
Shaded areas indicate U.S. recessions.

Source: Board of Governors of the Federal Reserve System (US)

fred.stlouisfed.org

Capital Goods Orders Are Superb

Despite all the recent trauma orders have more than recovered



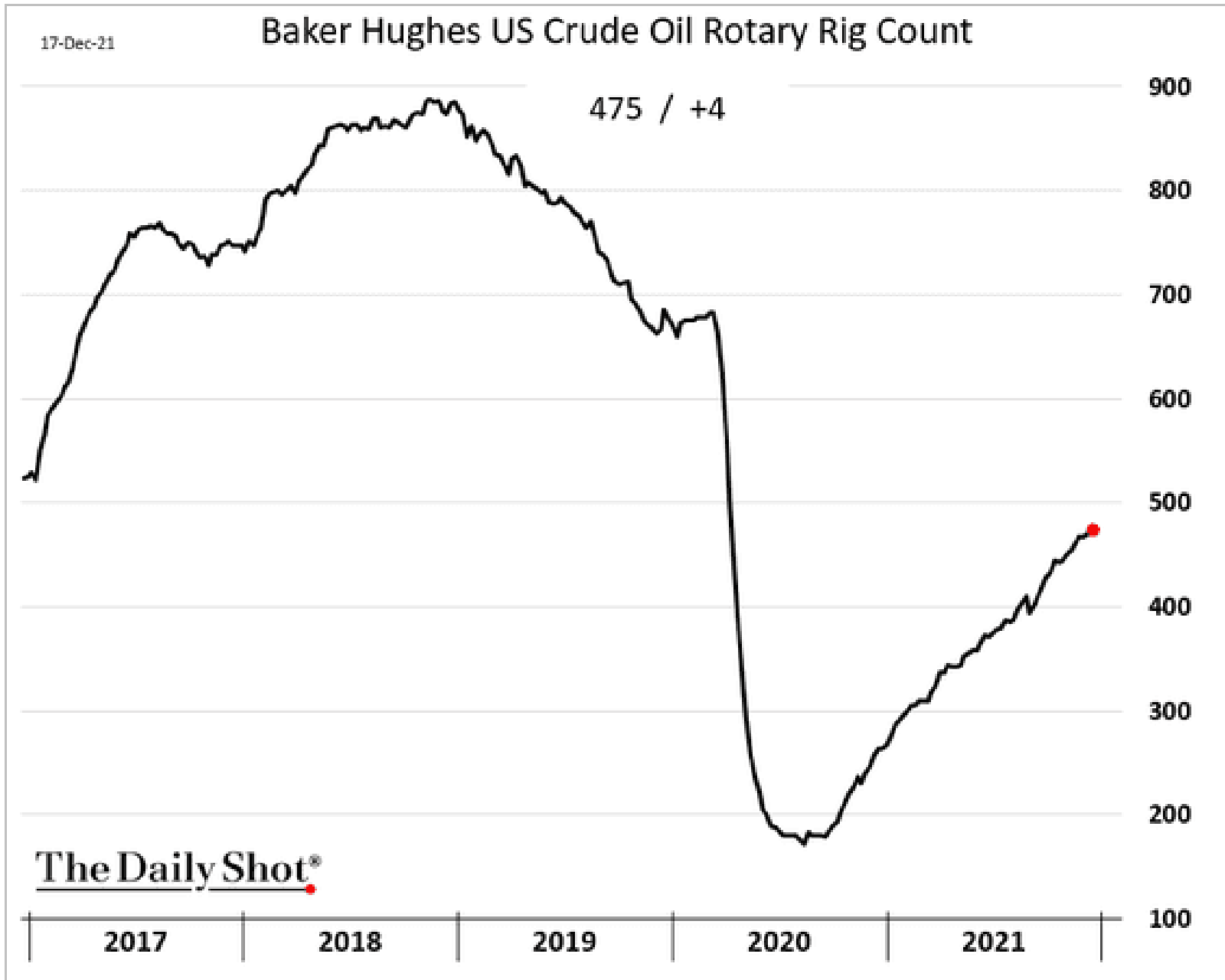
Shaded areas indicate U.S. recessions.

Source: U.S. Census Bureau

fred.stlouisfed.org

US Rig Counts Continue Rising

Higher prices, low inventories, and improving demand are key



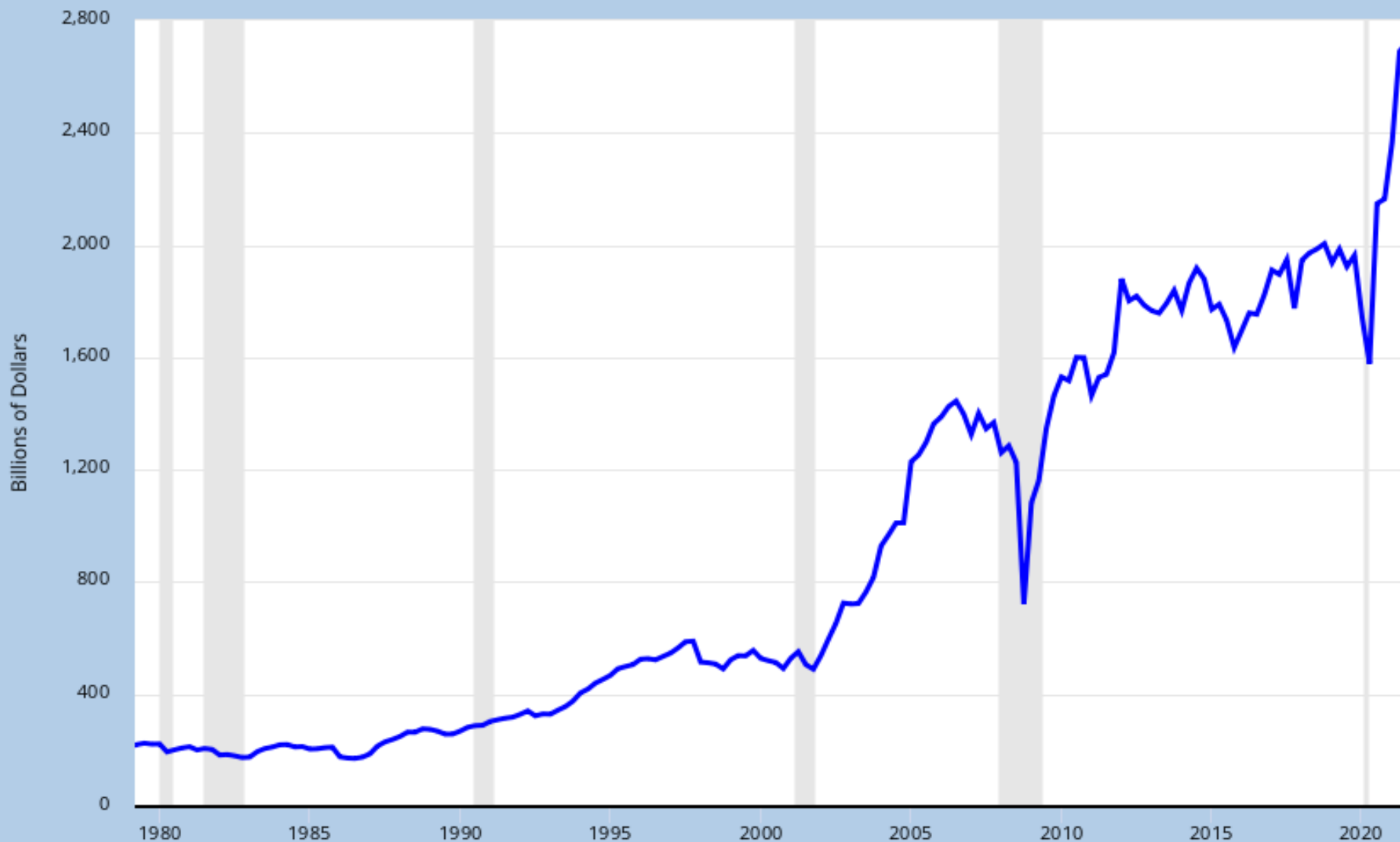
Corporate Profits Skyrocket

Corporate profits are at highest nominal level ever

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/KajP

Share Buybacks Jump

Up by over 200% over 2020

Exhibit 3: YTD buyback authorizations are over \$1 trillion

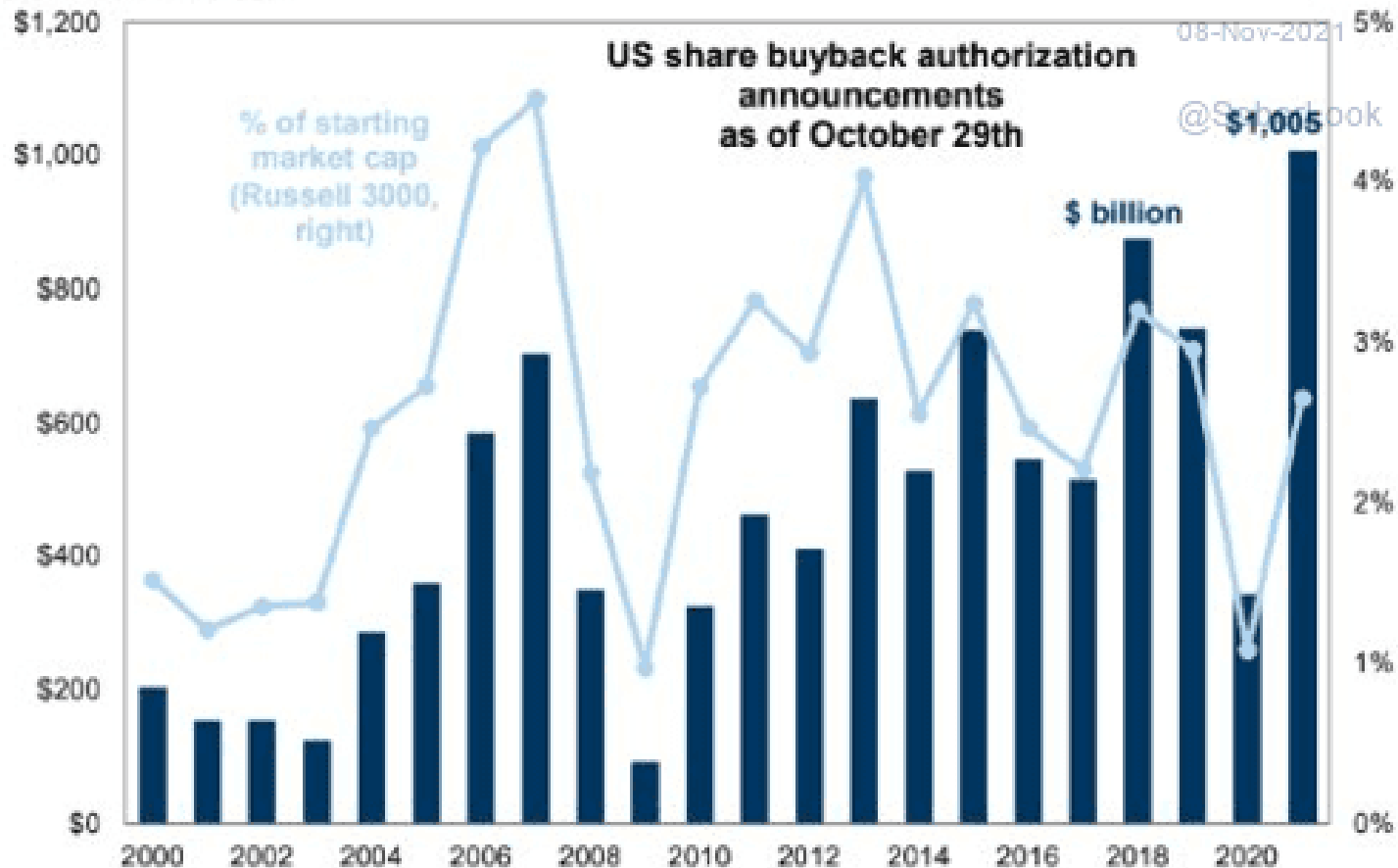
as of October 29, 2021

Posted on

The Daily Shot

08-Nov-2021

@Schoolbook



Source: Goldman Sachs Global Markets Division, Goldman Sachs Global Investment Research

29 October 2021

The Stock Market Is Doing Well

Despite numerous stressors



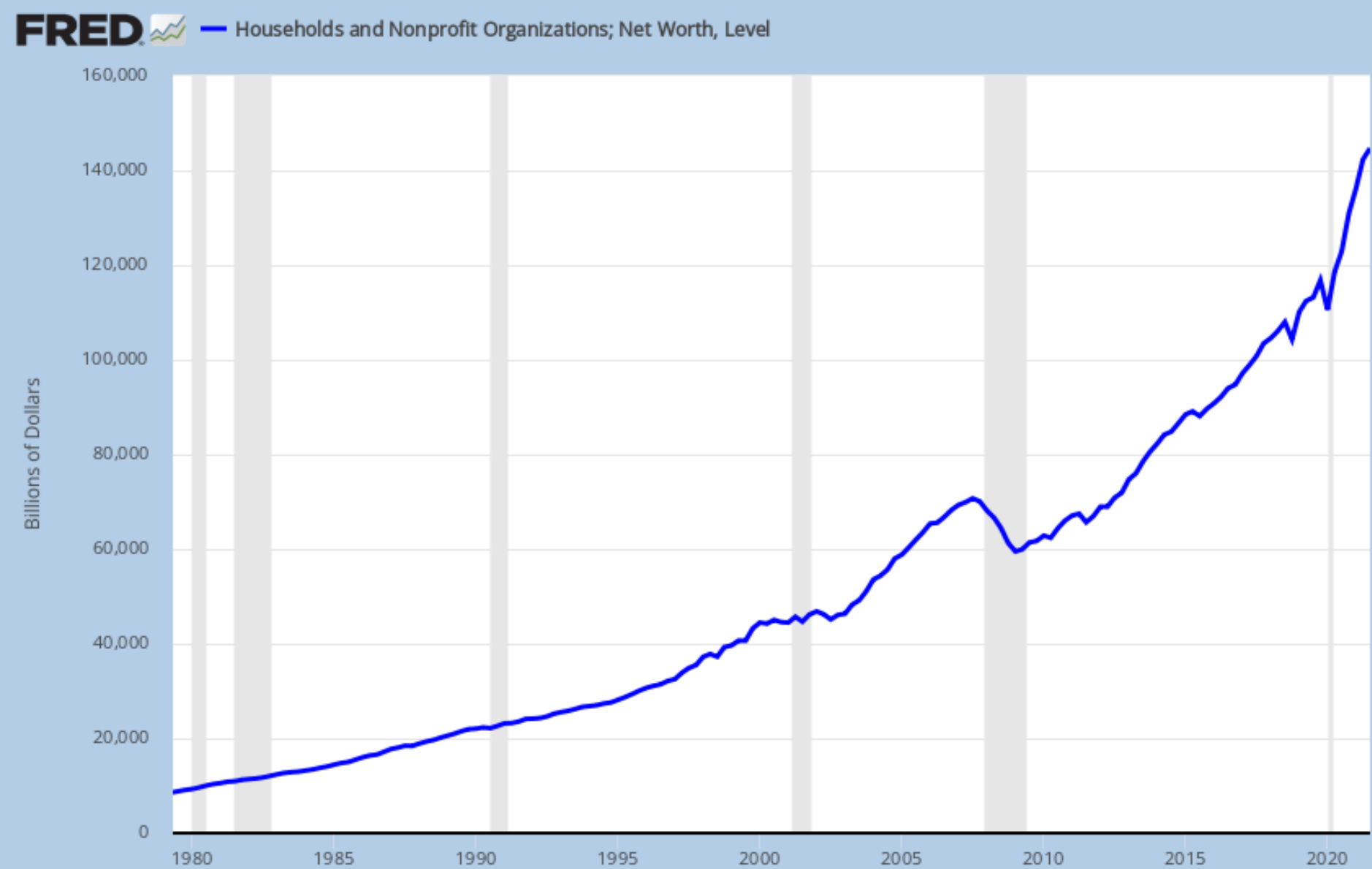
Shaded areas indicate U.S. recessions.

Source: S&P Dow Jones Indices LLC

myf.red/g/J2v5

Household Balance Sheets Recover Quickly

Trillions in net worth recovered; at a new record level



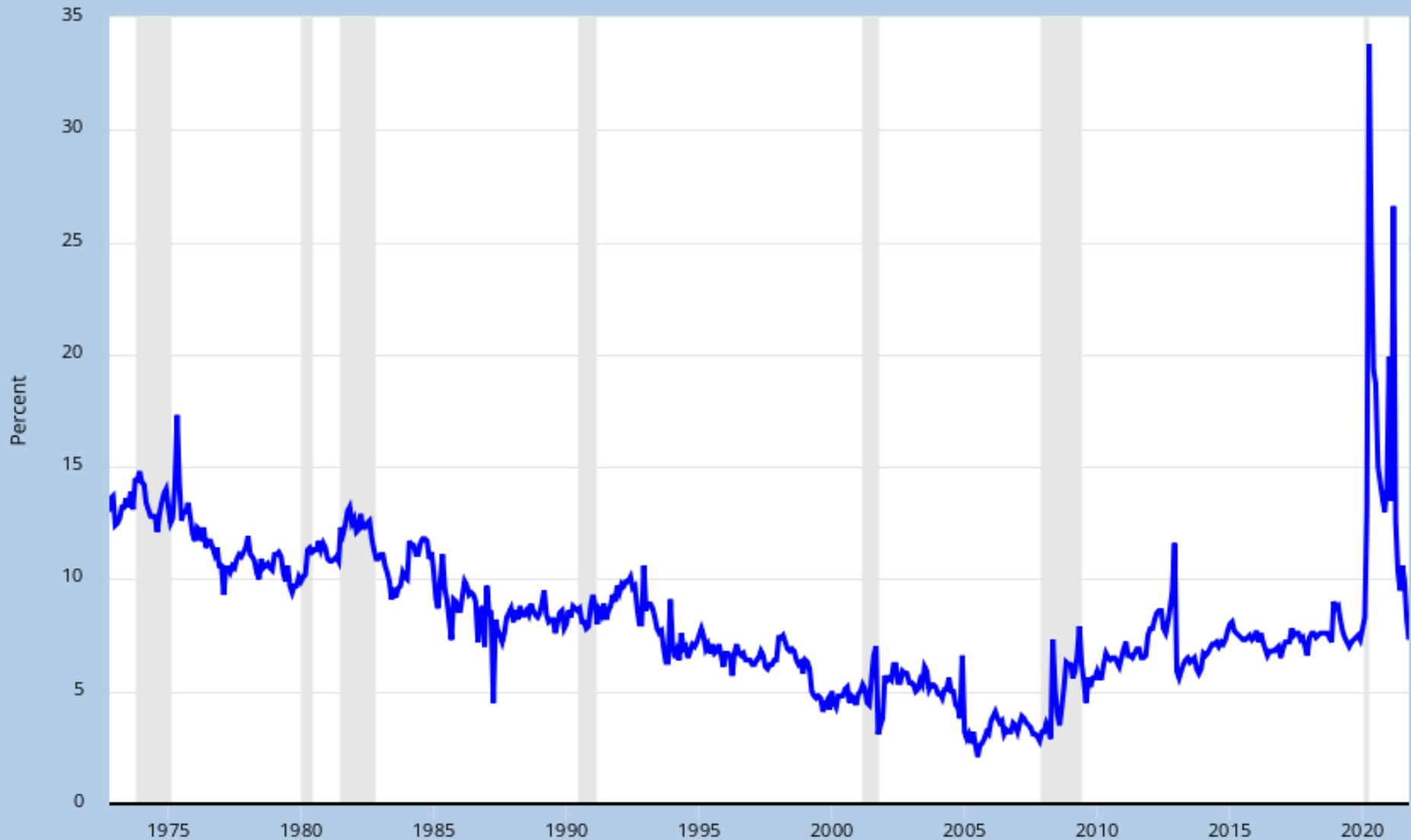
Source: Board of Governors of the Federal Reserve System (US)

myf.red/g/JJkk

Household Savings Rates

They are normalizing as enhanced UI benefits end and fiscal stimulus fades

FRED  — Personal Saving Rate



Shaded areas indicate U.S. recessions.

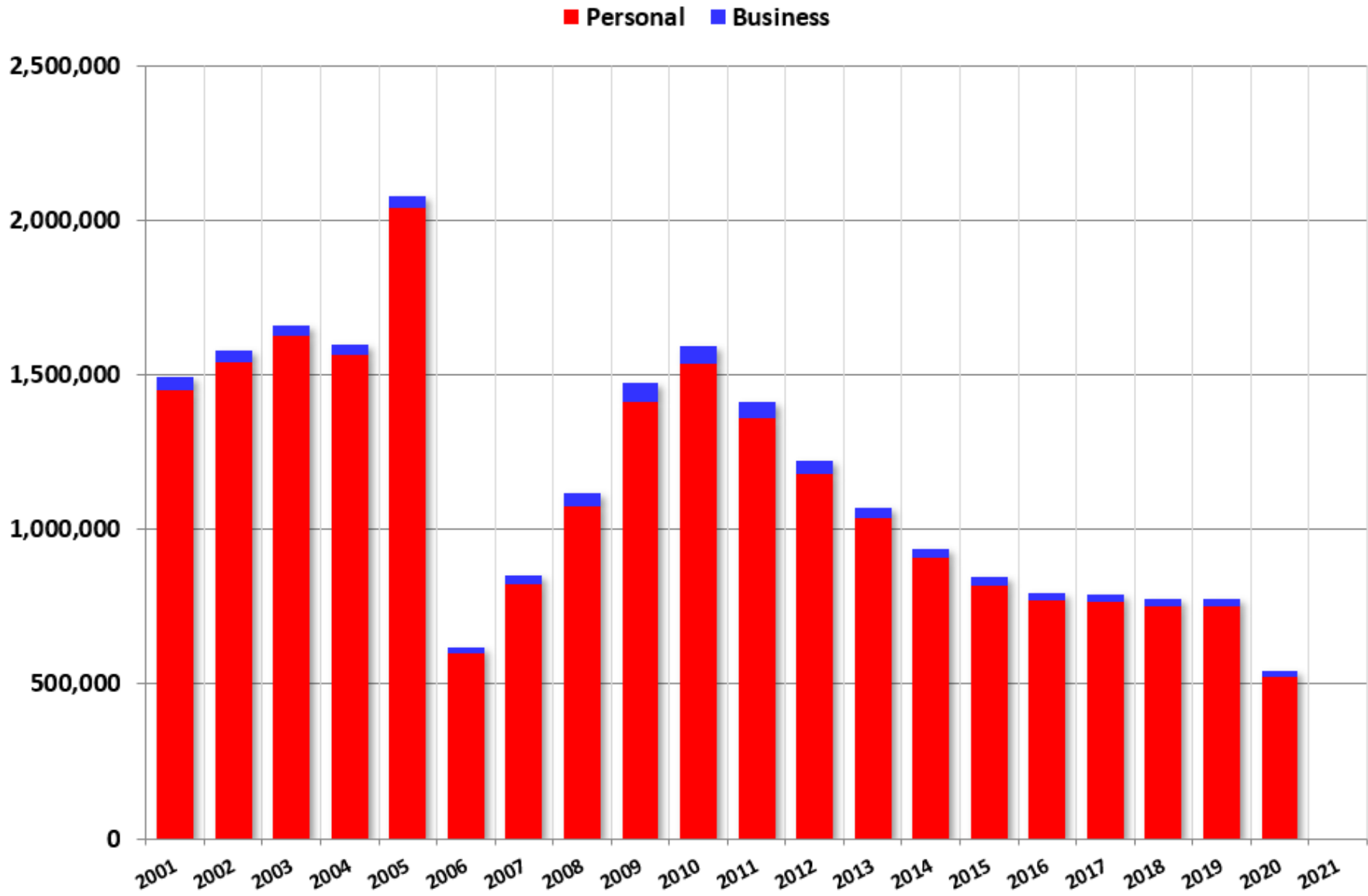
Source: U.S. Bureau of Economic Analysis

myf.red/g/Jfm8

Household and Business Bankruptcies are Low

This suggests a rebound in 2021 as helpful policies melt away

Bankruptcy Filings per Calendar Year



Fiscal Policy Was Very Stimulative

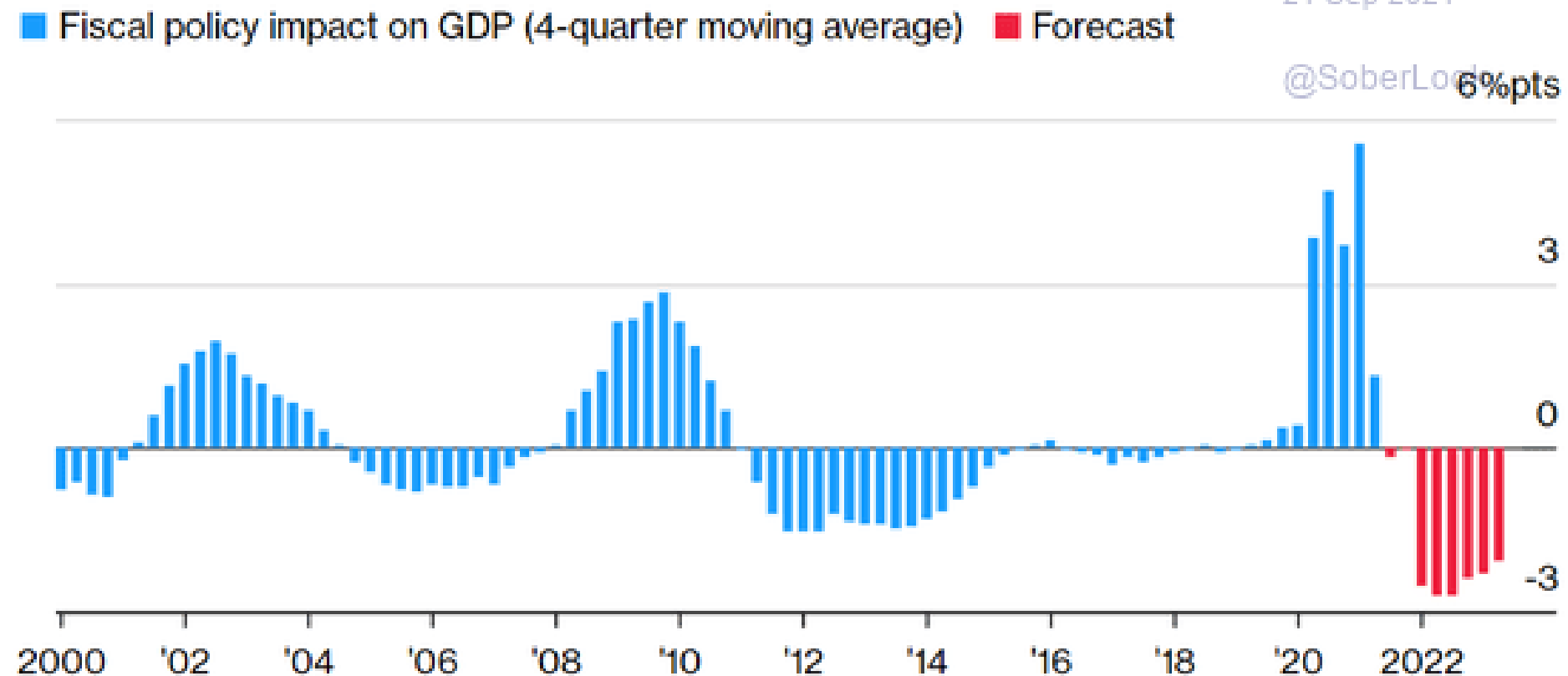
We are no longer enjoying fiscal stimulus

Becoming a Drag

The U.S. government spent historic sums to support the economy in the pandemic. Its withdrawal will create an unusually big fiscal cliff

Posted on
The Daily Shot
21-Sep-2021

@SoberLook 6%pts

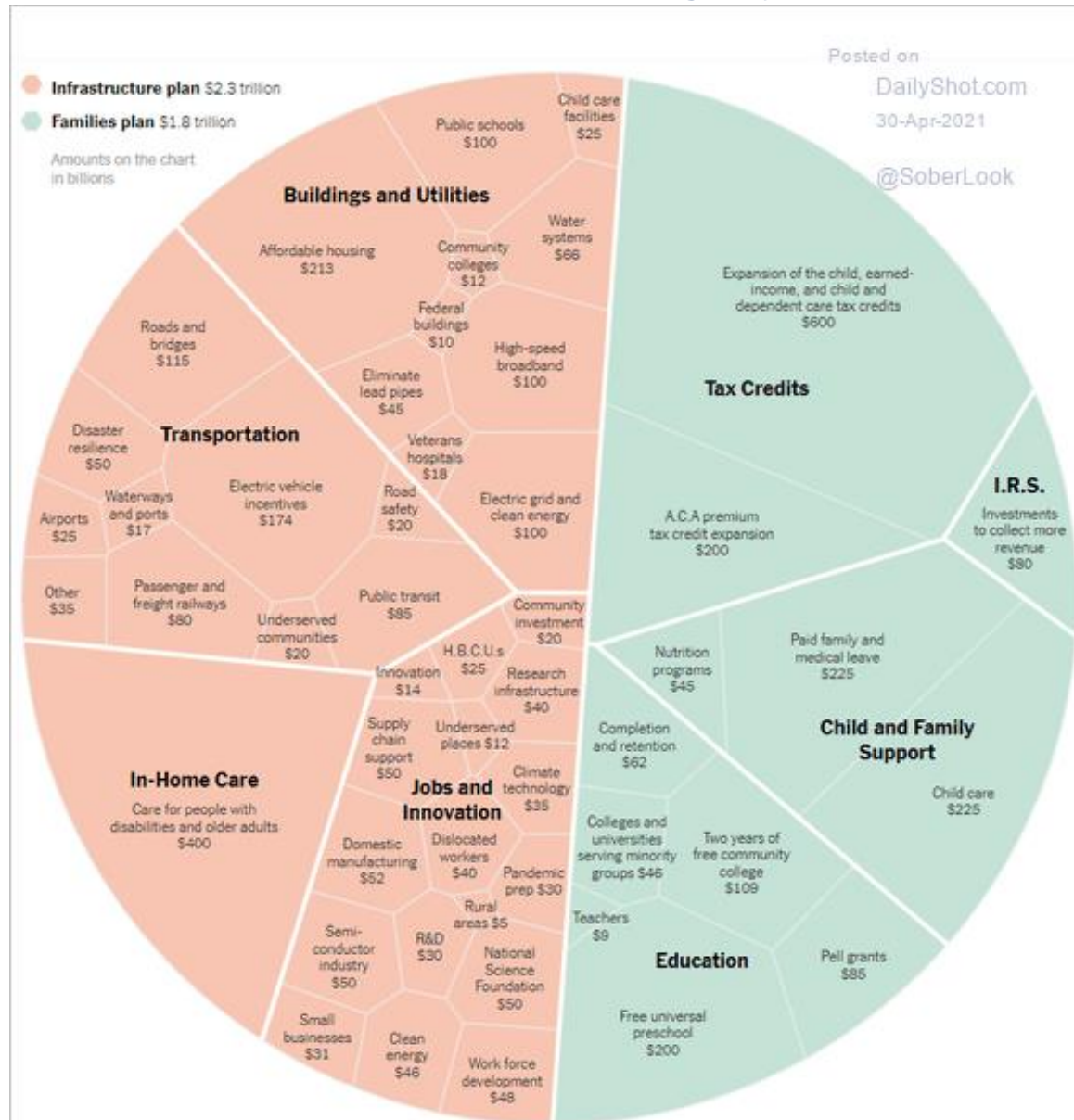


Source: Hutchins Center on Fiscal and Monetary Policy, Brookings Institution

Note: Figures include budgets of federal, state and local governments.

Biden's \$4 Trillion Family & Jobs Plans

How much will the bills change by the end?

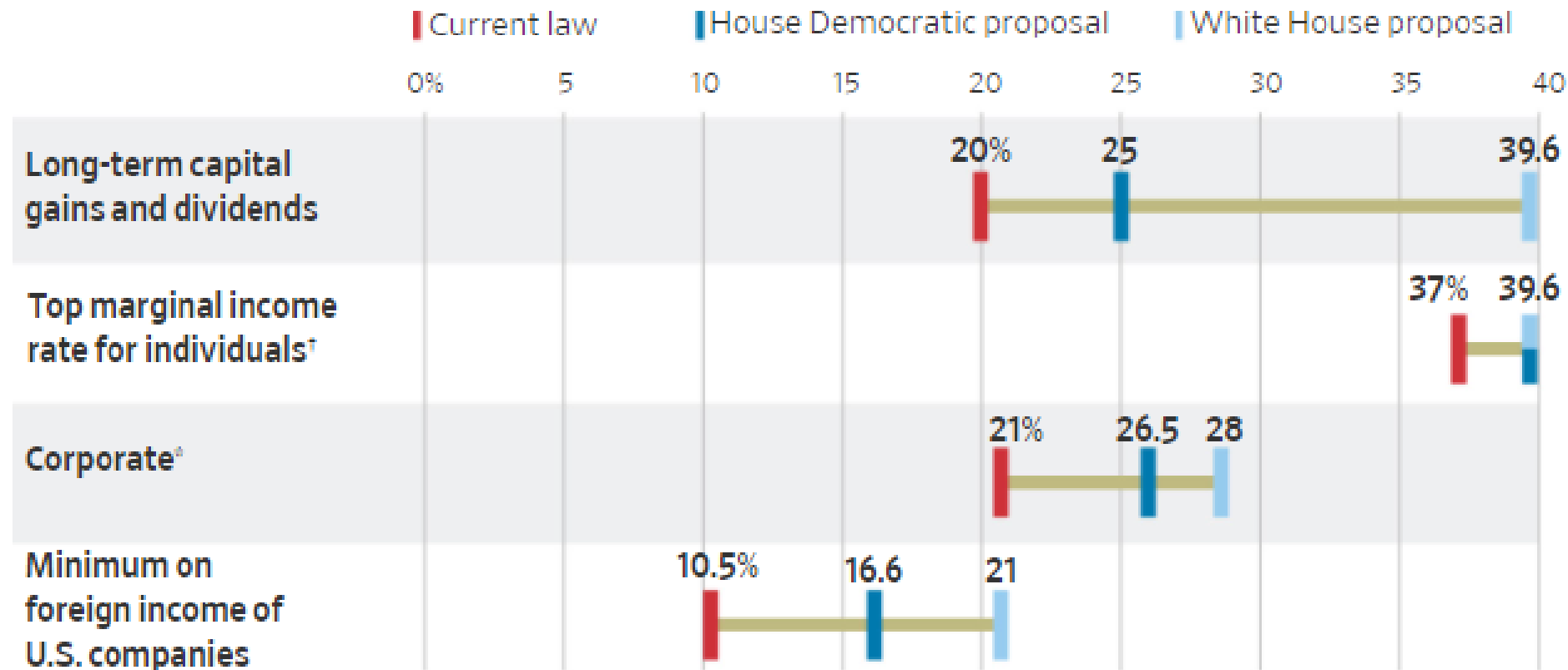


Note: The plan released by the White House did not include estimated costs for the expansion of the child tax credit, earned-income tax credit, or child and dependent care tax credit. The \$600 billion estimate is the difference between the total tax cuts mentioned in the plan (\$800 billion) and the \$200 billion included for Affordable Care Act premium tax credits. - Source: The White House

Democratic Tax Proposals

Support must be virtually unanimous

Current and proposed tax rates



^{*}Rate structure provides for a rate of 18 percent on the first \$400,000 of income; 21 percent on income up to \$5 million, and a rate of 26.5% on income thereafter. ^{*}Doesn't include a separate 3.8% tax on top earners and a separate proposed Ways and Means Committee 3% surtax above \$5 million

Source: House Ways and Means Committee

Global Growth in 2022 & 2023

Growth slows but remains quite elevated in developed nations

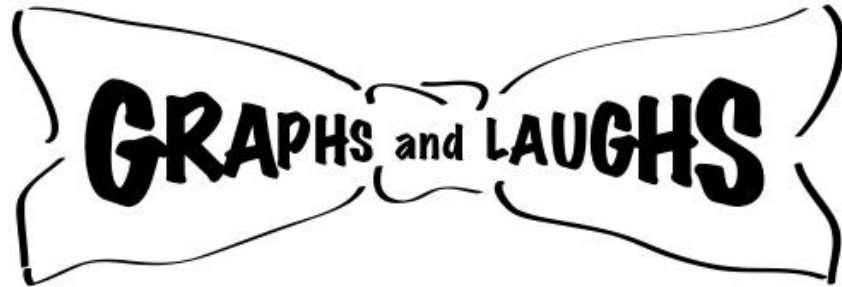
Exhibit 2: Another Strong Year Coming in 2022

Real GDP Growth								
Percent Change yoy	2020	2021			2022 (GS)			Potential
		GS	Consensus		GS	Consensus		
								GS
US	-3.4	5.5	5.7		3.9	4.0	2.1	1.8
Euro Area	-6.5	5.2	5.1		4.4	4.3	2.4	1.1
Germany	-4.9	2.9	2.8		4.0	4.3	2.4	1.4
France	-8.0	6.9	6.3		4.5	4.0	2.4	1.1
Italy	-9.0	6.4	6.1		4.5	4.3	2.1	0.6
Spain	-10.8	4.5	5.5		6.5	5.8	3.9	1.2
Japan	-4.6	2.3	2.4		2.8	2.6	1.6	1.0
UK	-9.7	7.1	7.0		5.3	5.0	2.3	1.4
Canada	-5.3	4.8	5.0		4.0	4.0	3.1	1.8
China	2.3	7.8	8.1		4.8	5.5	4.6	5.0
India	-7.0	8.0	8.0		9.1	7.8	6.4	6.0
Brazil	-4.1	4.9	5.0		0.8	1.8	2.2	1.9
Russia	-2.9	4.4	4.3		3.1	2.5	2.9	2.1
World	-3.2	5.9	6.0		4.5	4.5	3.4	3.1

Note: All forecasts calculated on calendar year basis. 2021-2023 are GS forecasts. Potential growth estimates are for 2022, based on our supply-side model and exclude scarring. IMF forecasts used for India 2023 consensus when quarters not available in Bloomberg.

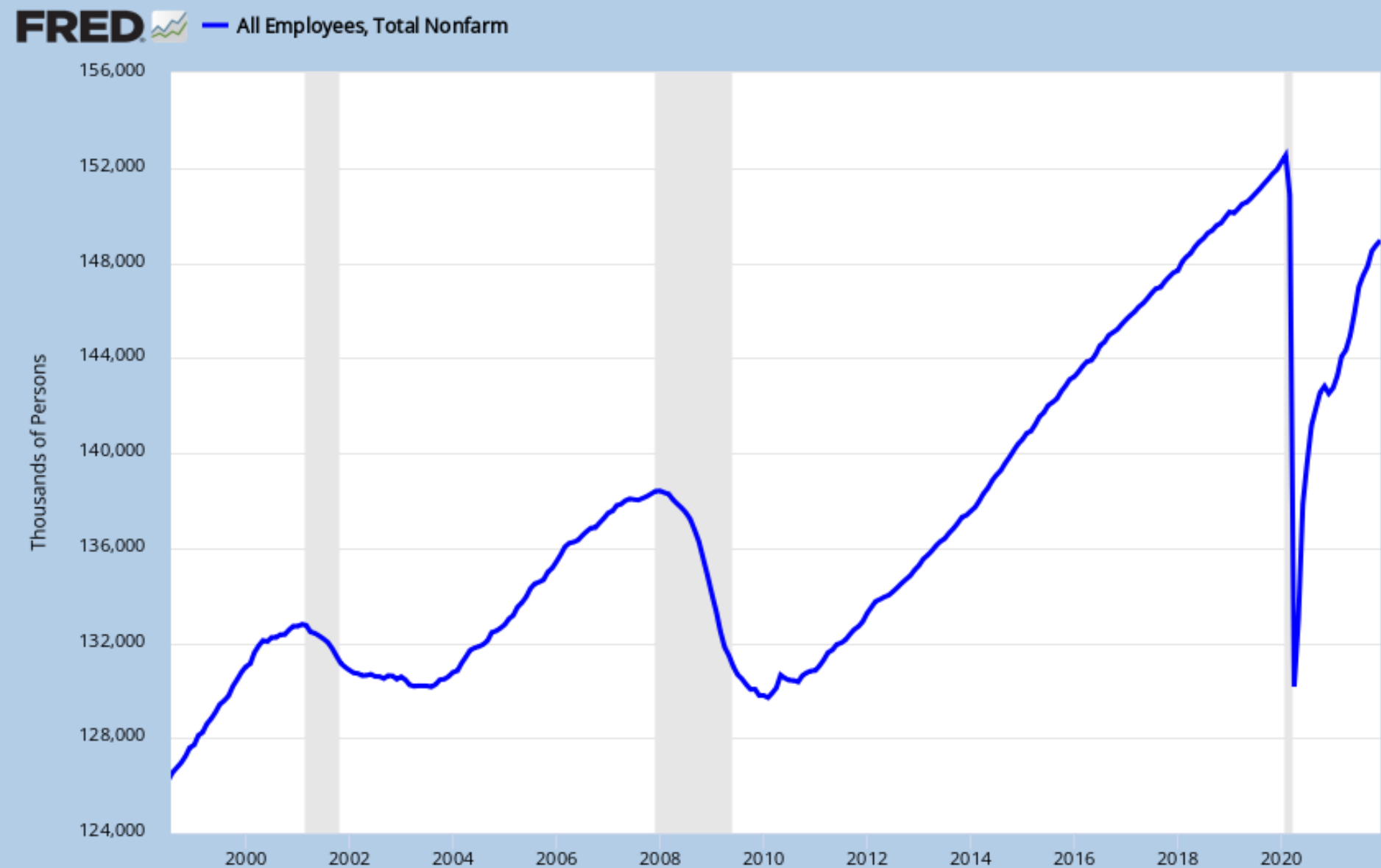
Labor Markets:

They Were Tight and
They are Again



Historical Job Totals

The employment Level. It's now down by 3.5 million



Shaded areas indicate U.S. recessions.

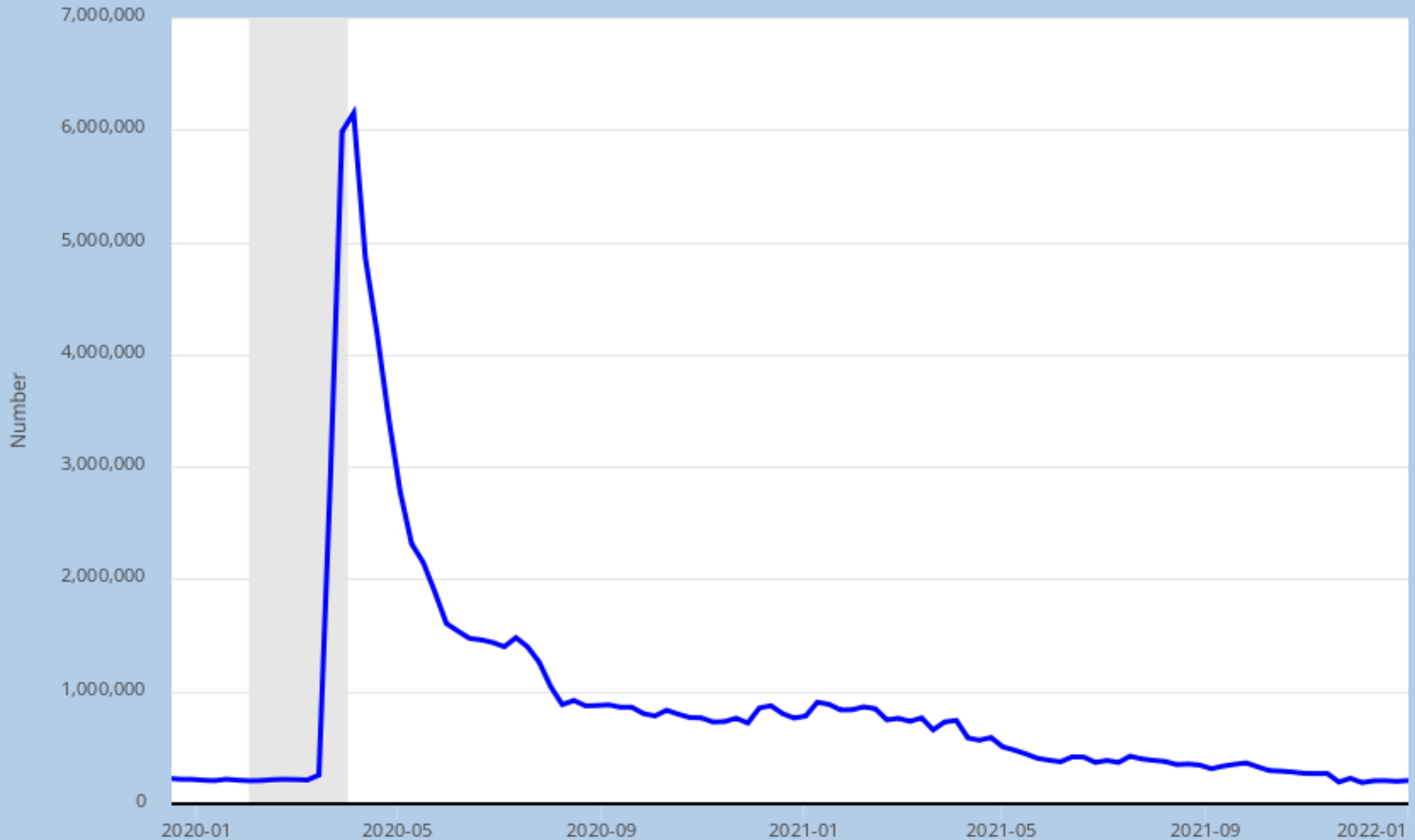
Source: U.S. Bureau of Labor Statistics

myf.red/g/KCGZ

Involuntary Separations Are Profoundly Low

Staggering improvement is evident

FRED  Initial Claims

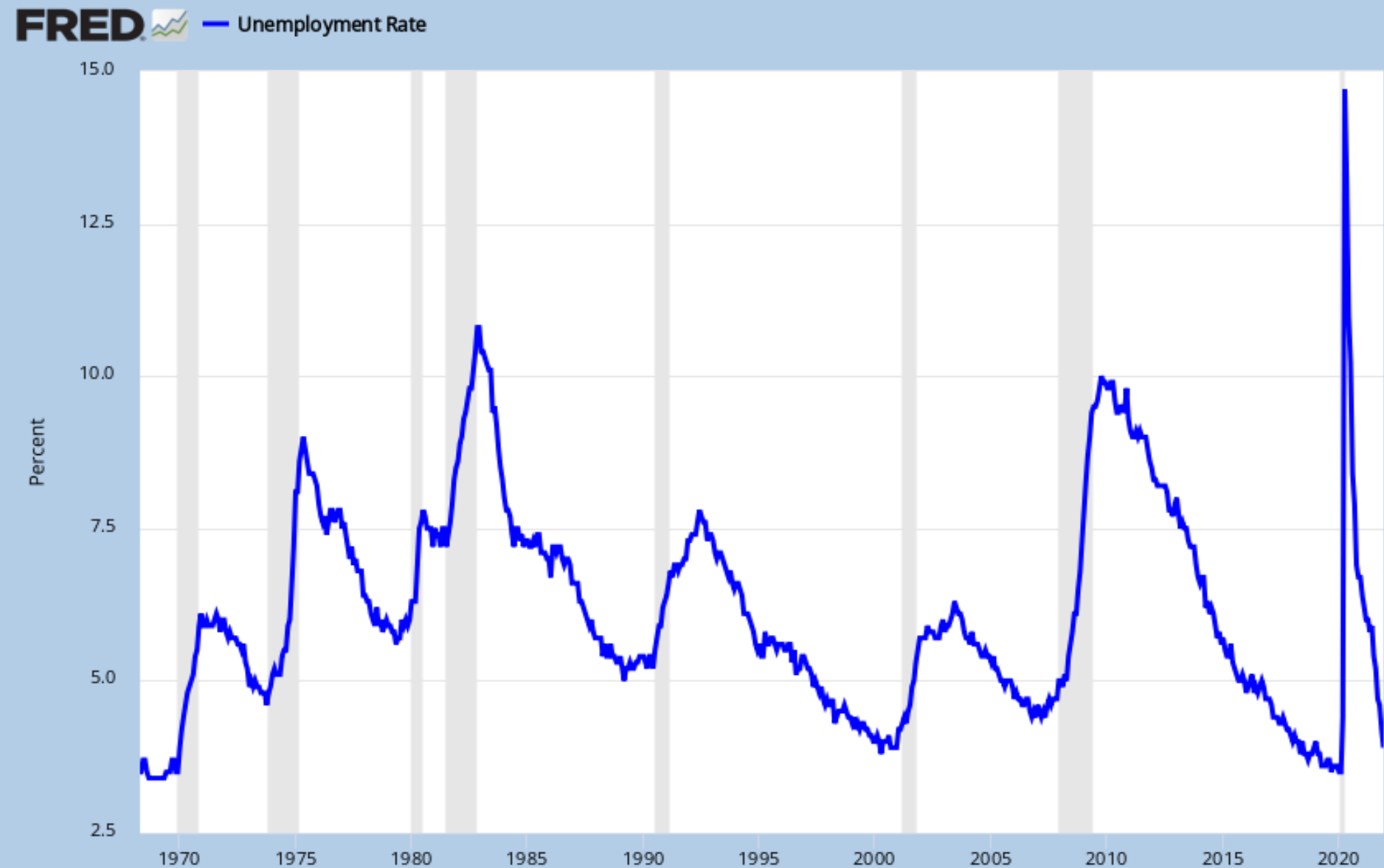


Source: U.S. Employment and Training Administration

myf.red/g/KAjd

The Unemployment Rate is Way Down

The decline is not quite as good as it looks



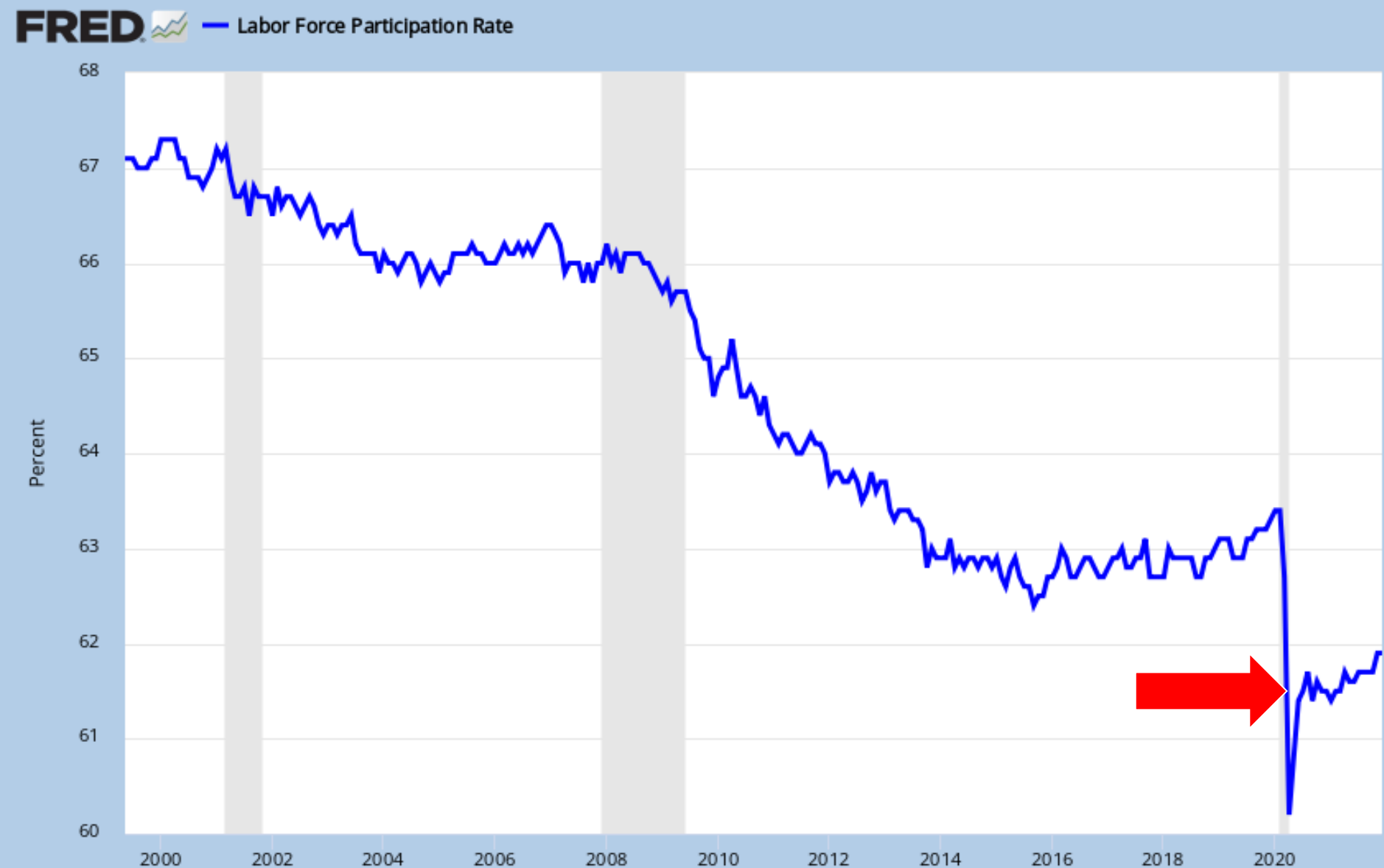
Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

myf.red/g/KCHo

It is Now Barely Improving

It must improve, it's imperative



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

myf.red/g/KCHs

Retirements Jump

These persons do not usually return to the labor force

Retirements have picked up, but partly due to lack of retirees returning to the labor market

Posted on

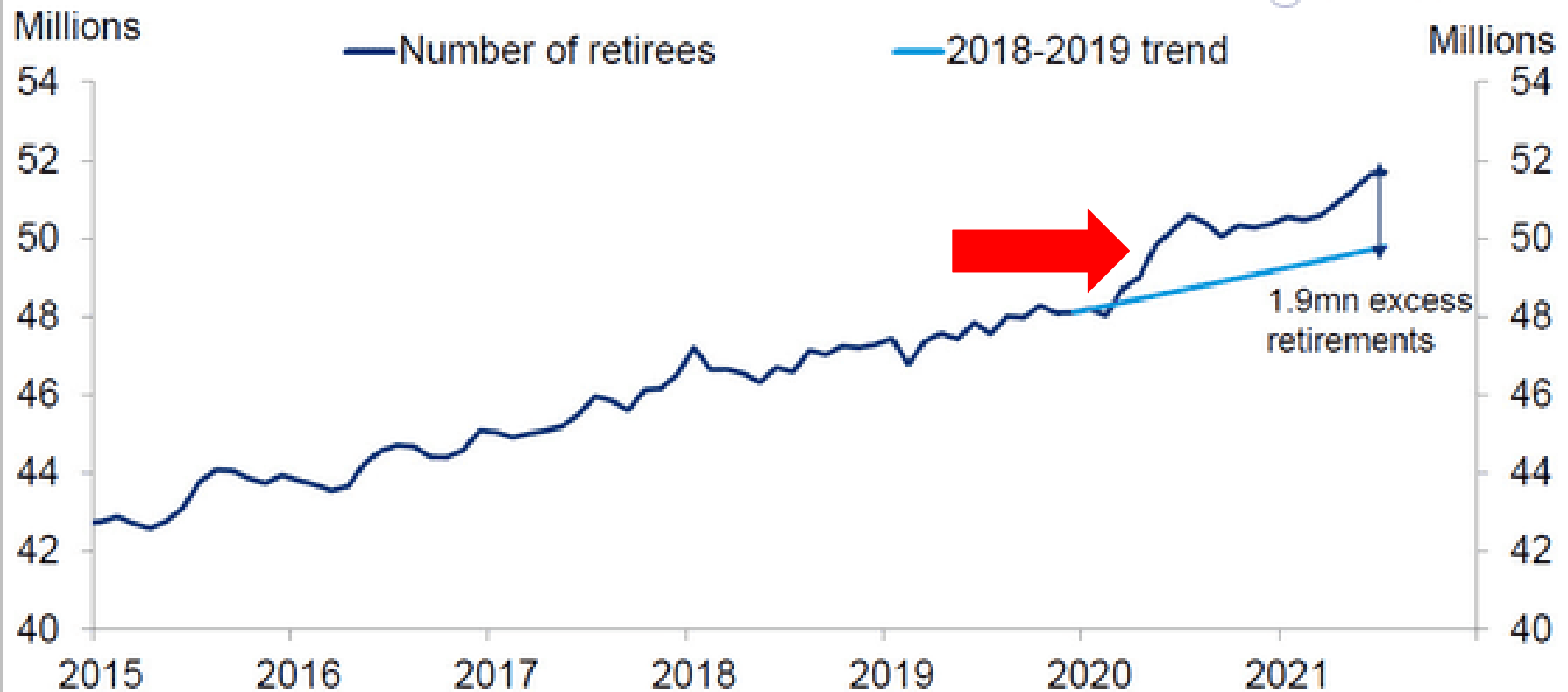
The Daily Signal

21-Sep-2021



@SoberLook

Number of retirees



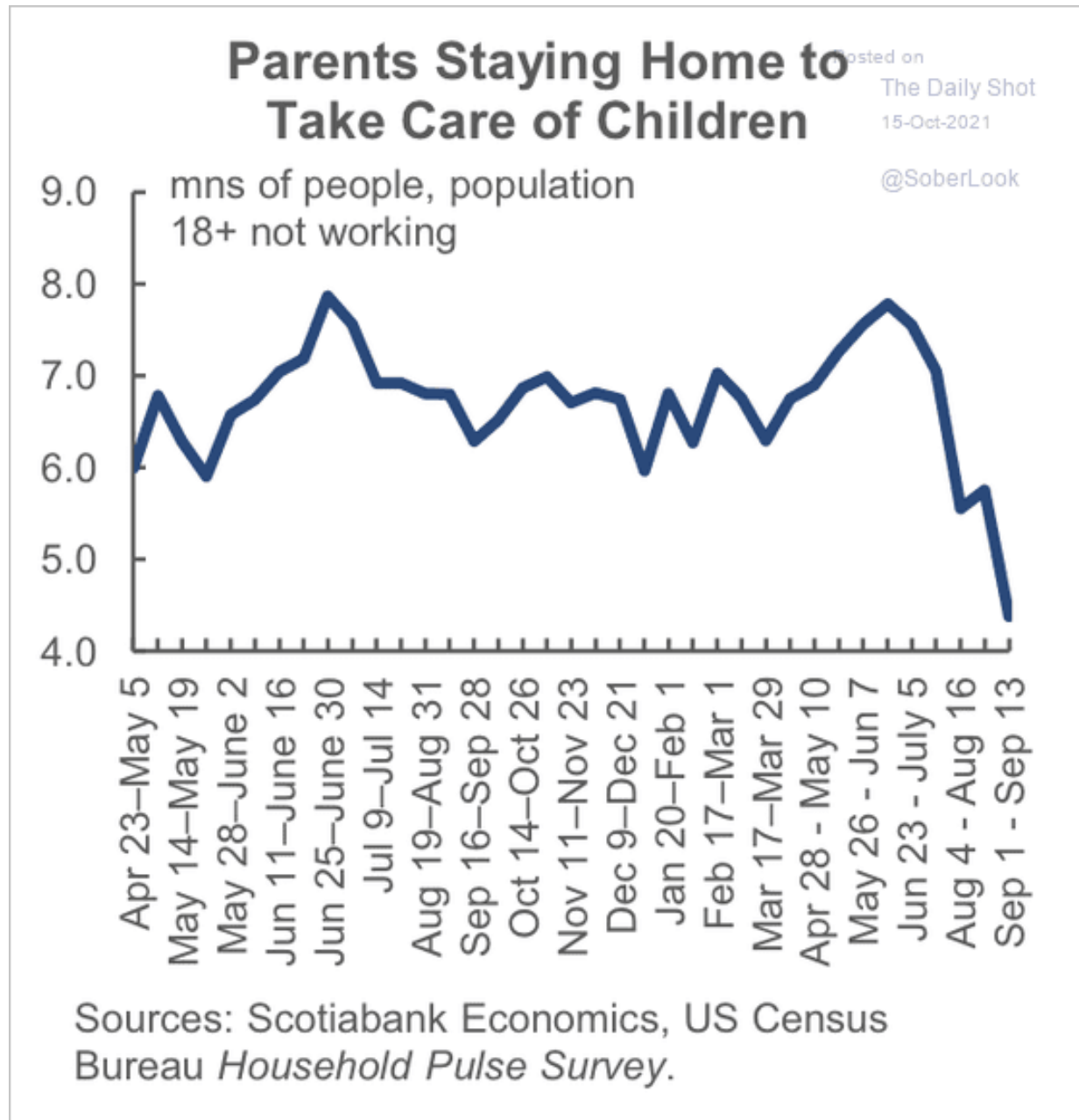
Source: CPS, IPUMS, Deutsche Bank

Deutsche Bank

Luzzetti, Ryan, Weidner

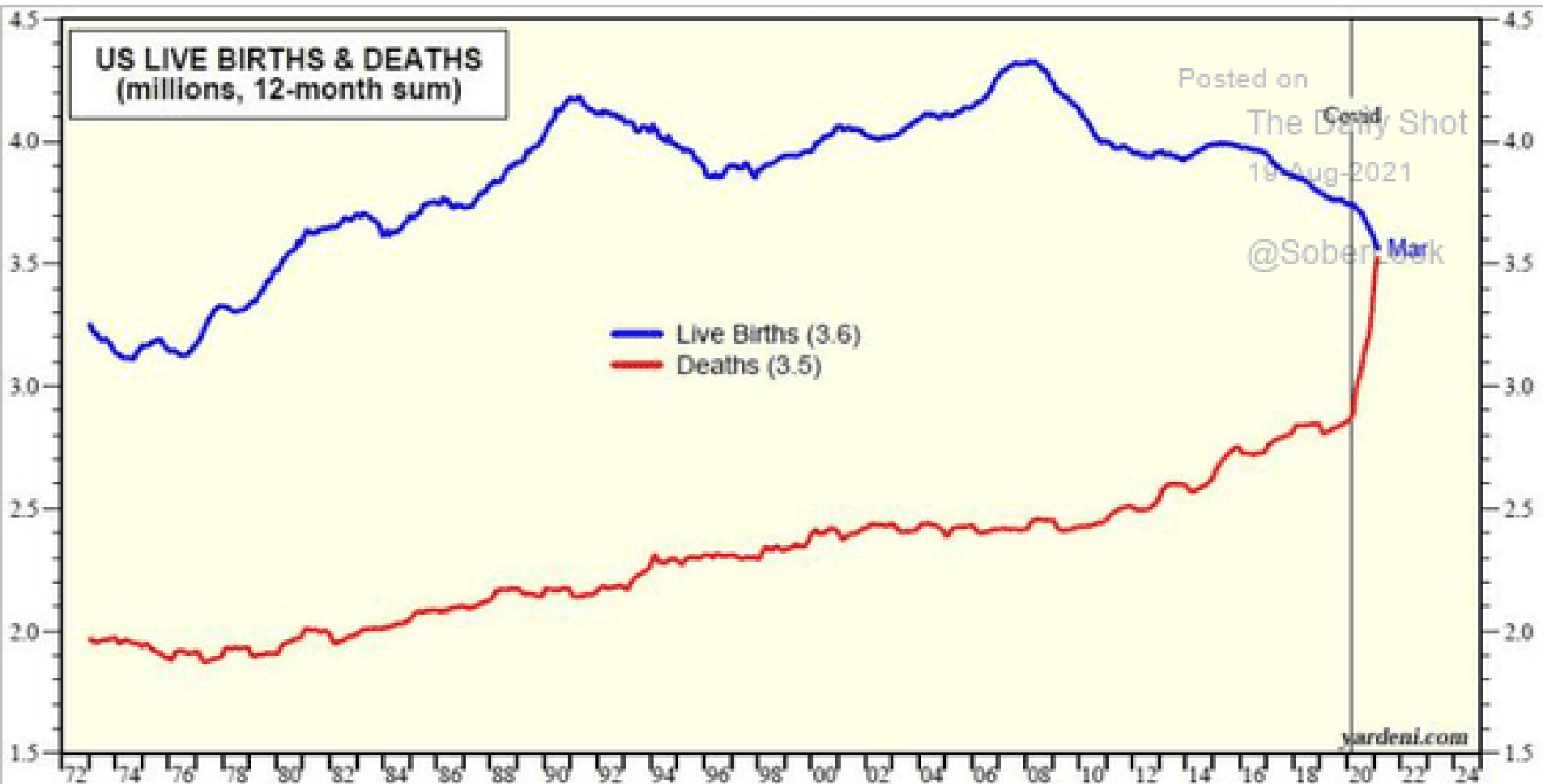
Why Are Persons Not Working?

In-person schooling helps



Births and Deaths in the USA 1972 - Present

Covid has been a disaster

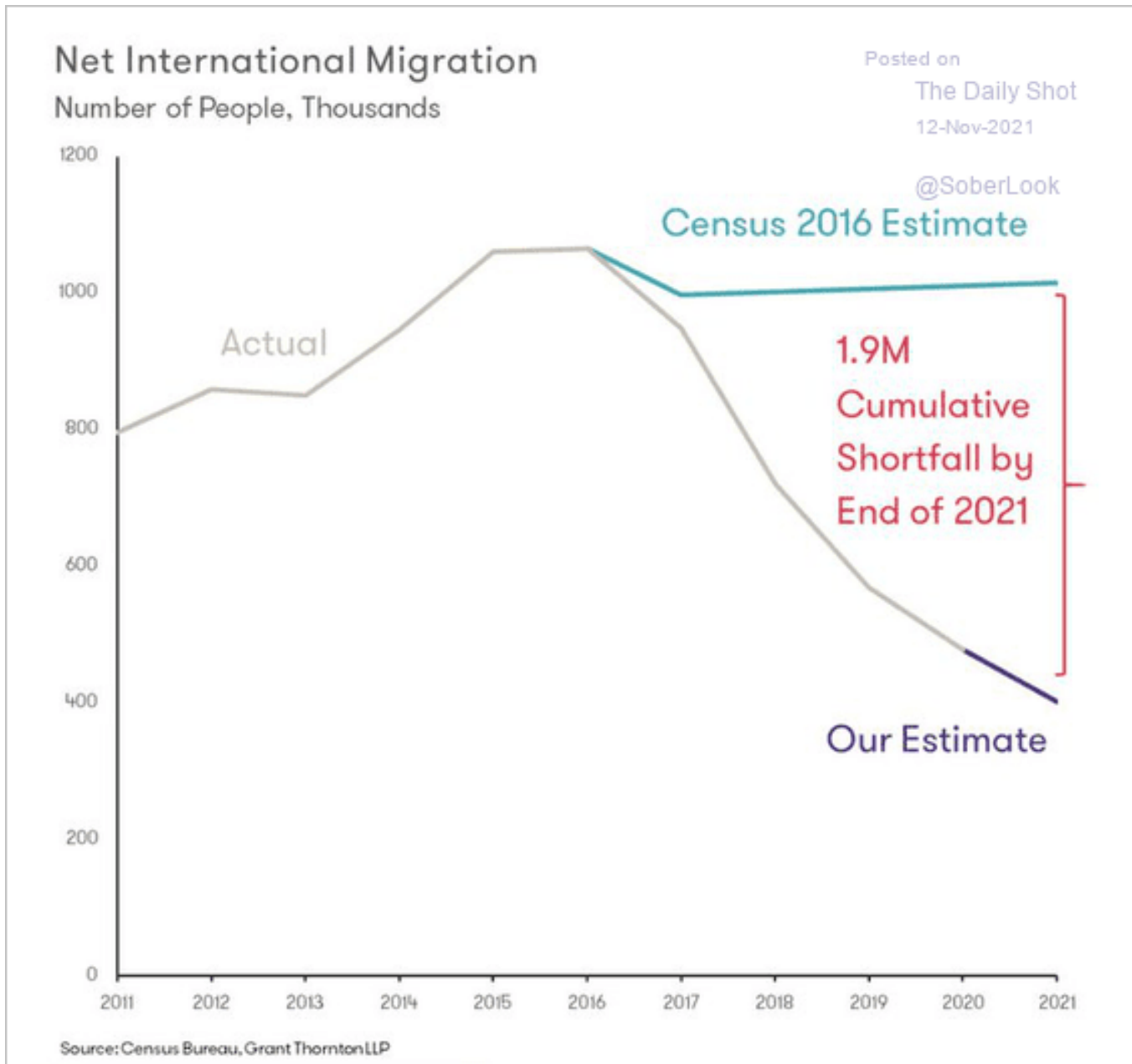


Note: WHO declared global COVID-19 pandemic on 3/11/2020.

Source: US National Center for Health Statistics, Vital Statistics of the United States, and National Vital Statistics report.

Immigration Has Dramatically Fallen

If it rises it will help soften the labor shortage



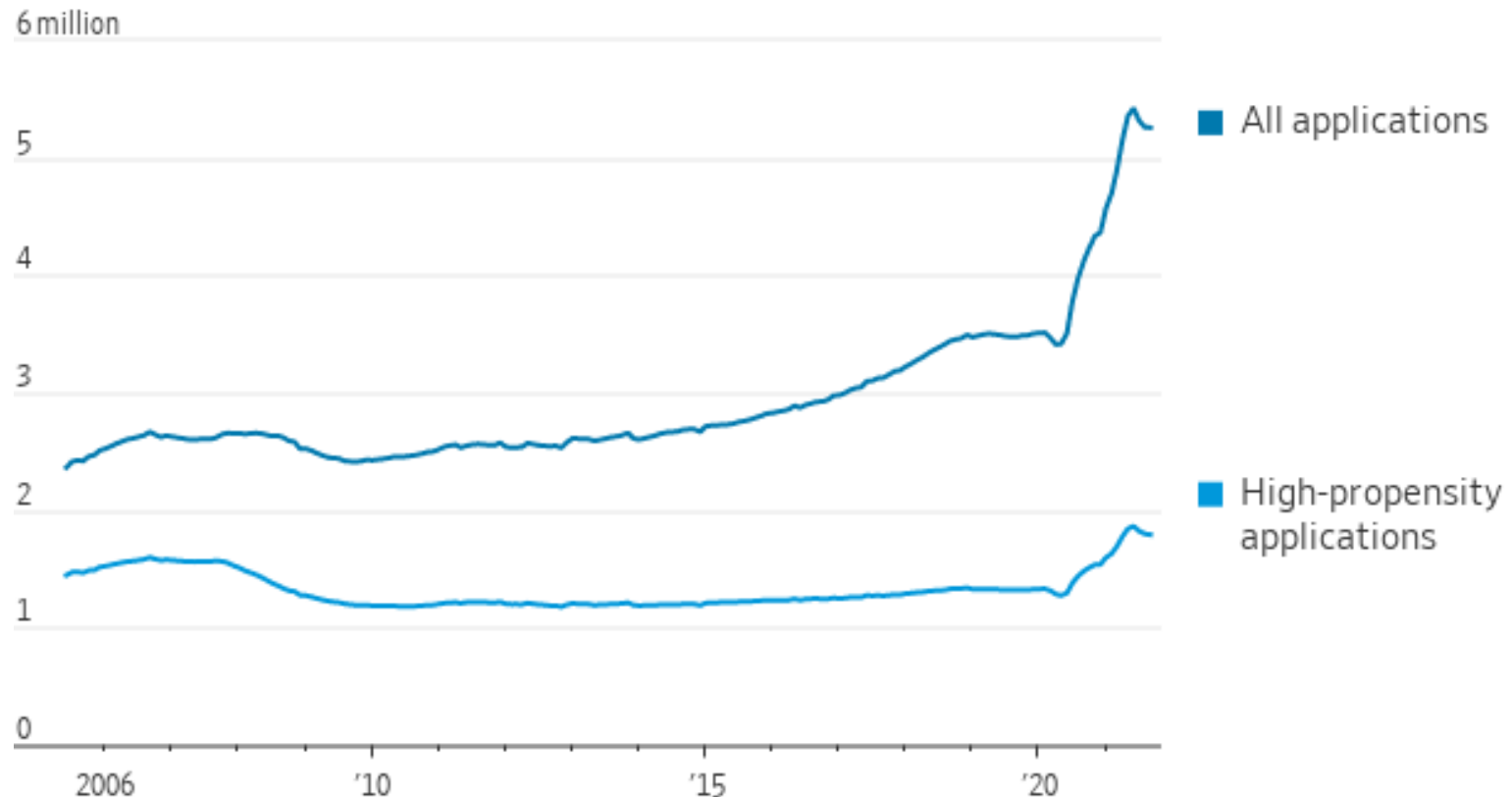
New Firm Creation

It is booming

Start Me Up

Applications to form businesses surged as coronavirus lockdowns lifted, though data suggest more interest in tiny startups rather than operations with a high propensity for hiring workers and paying wages.

U.S. business applications for tax IDs, 12-month rolling sum



Note: Seasonally adjusted

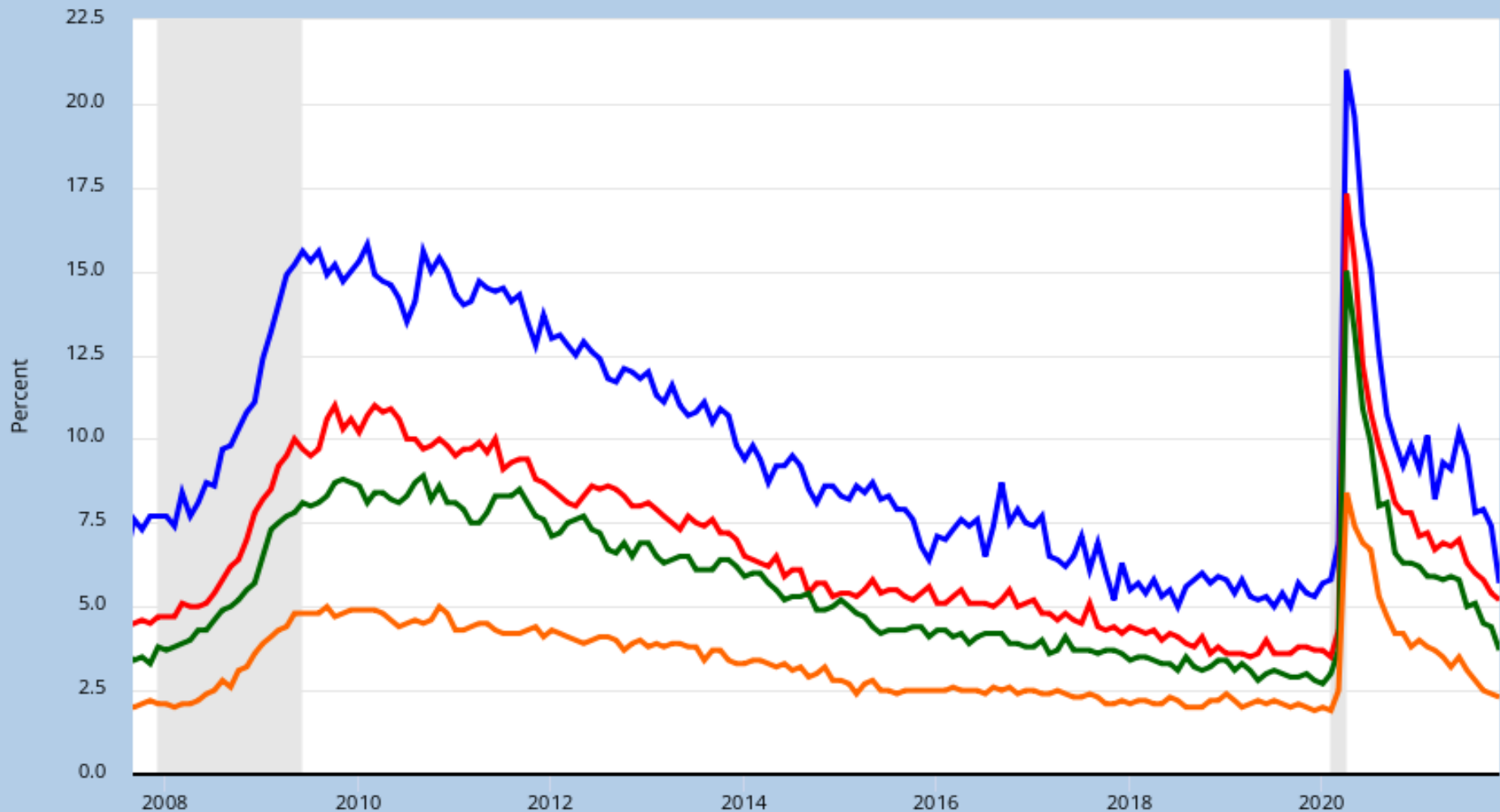
Source: Census Bureau

Unemployment Rate By Education

Rates now decline after skyrocketing. Rates are higher for the less educated

FRED

- Unemployment Rate - Less Than a High School Diploma, 25 Yrs. & over
- Unemployment Rate - High School Graduates, No College, 25 Yrs. & over
- Unemployment Rate - Some College or Associate Degree, 25 Yrs. & over
- Unemployment Rate - Bachelor's Degree and Higher, 25 Yrs. & over



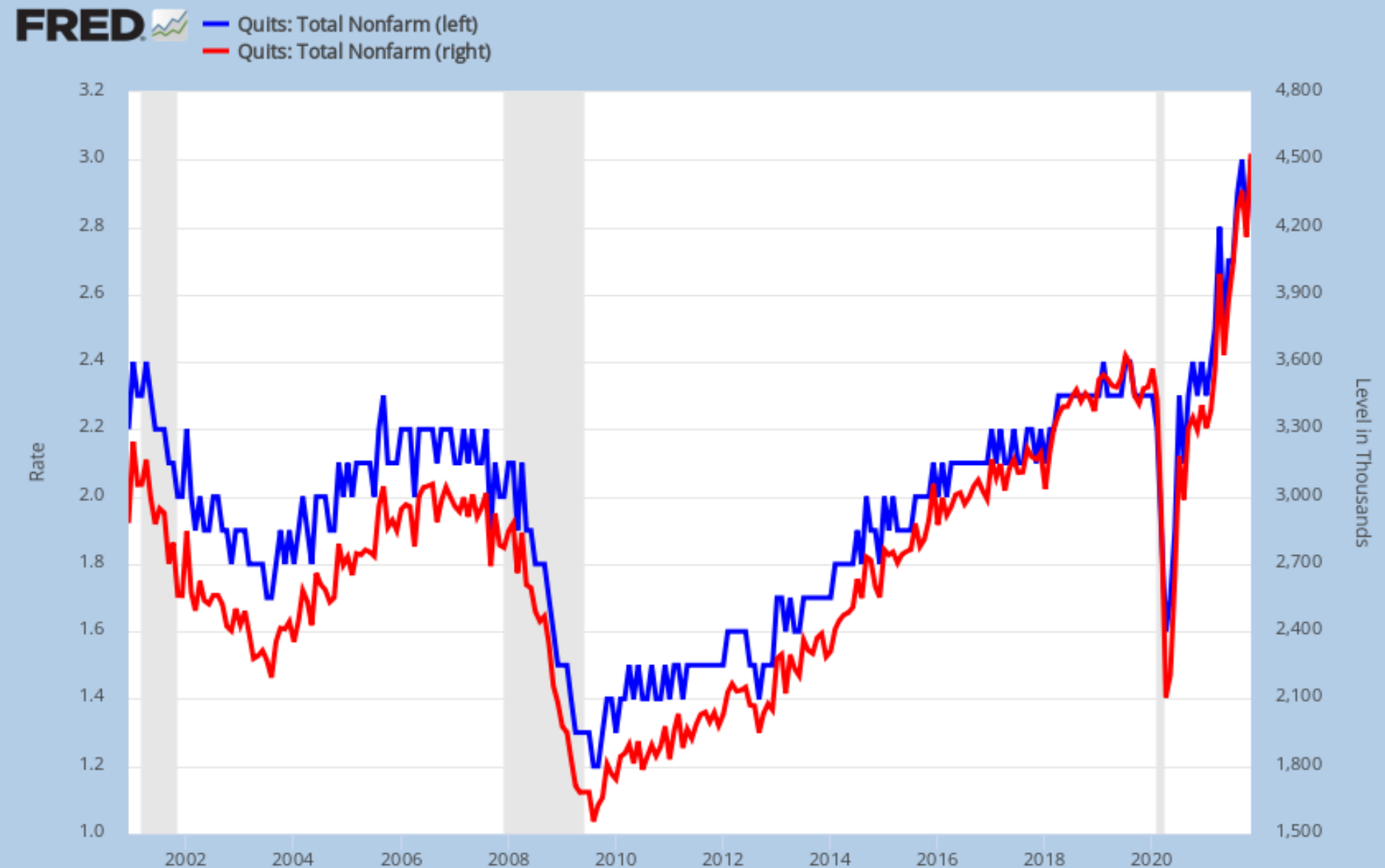
Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

myf.red/g/jvsV

Quit Rates Have Skyrocketed

Workers are quitting in droves



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

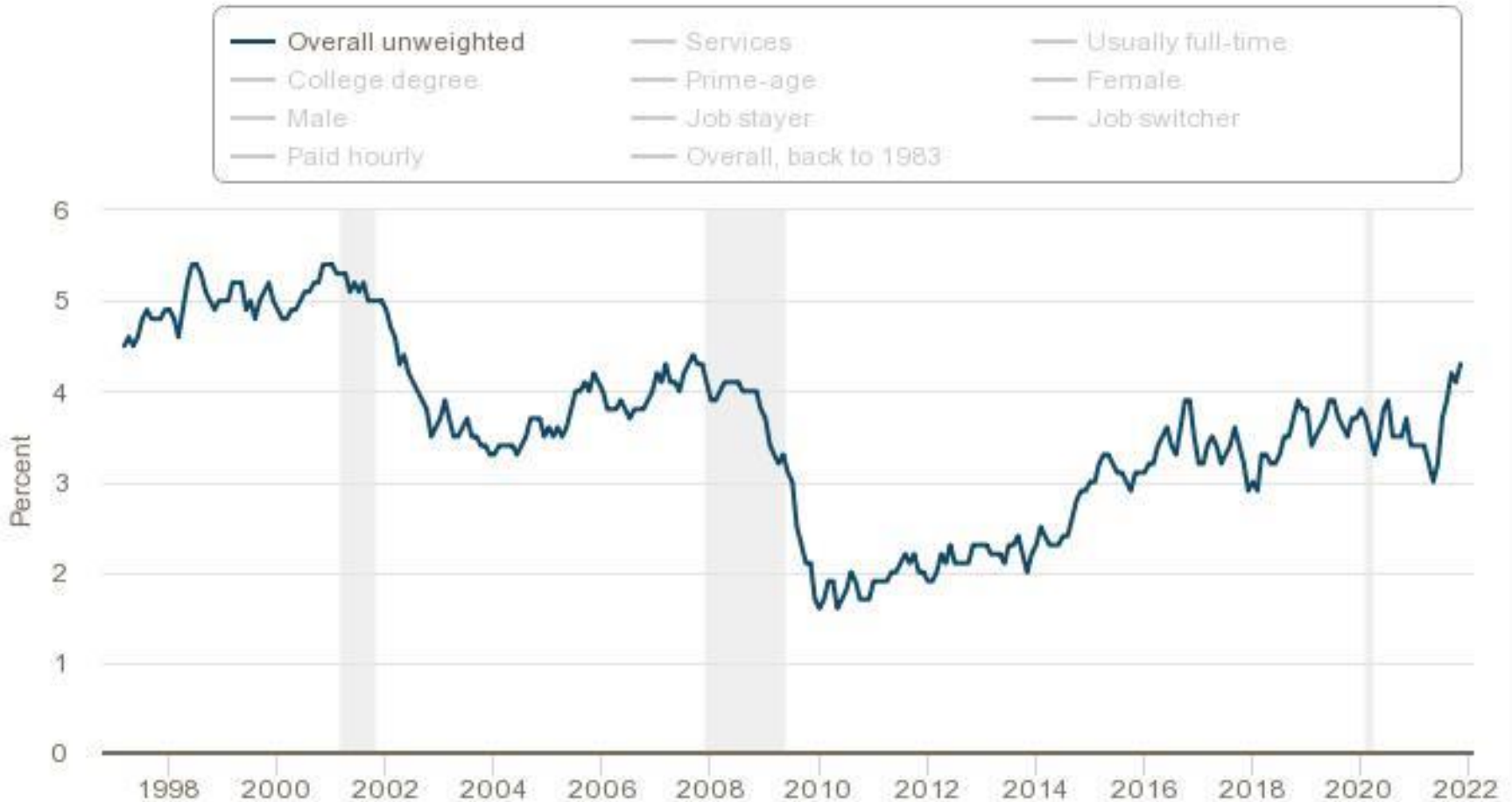
myf.red/g/KAS2

Changes in Median Wage Growth

Looks only at those continuously employed

Wage Growth Tracker

three-month moving average of median wage growth, hourly data



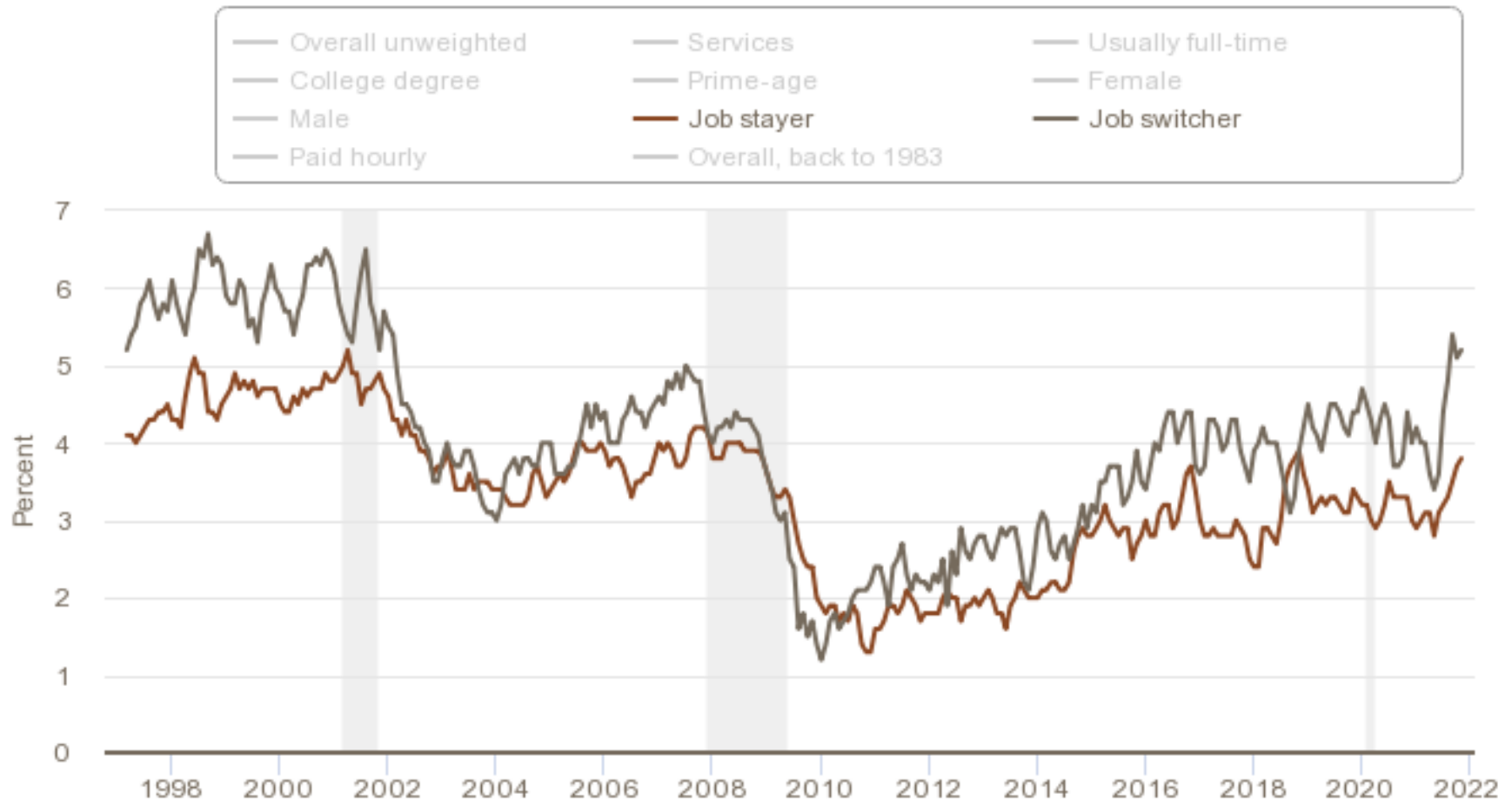
Sources: Current Population Survey, Bureau of Labor Statistics and author's calculations

Median Wage Growth Gap is Very Large

Of those continuously full-time employed

Wage Growth Tracker

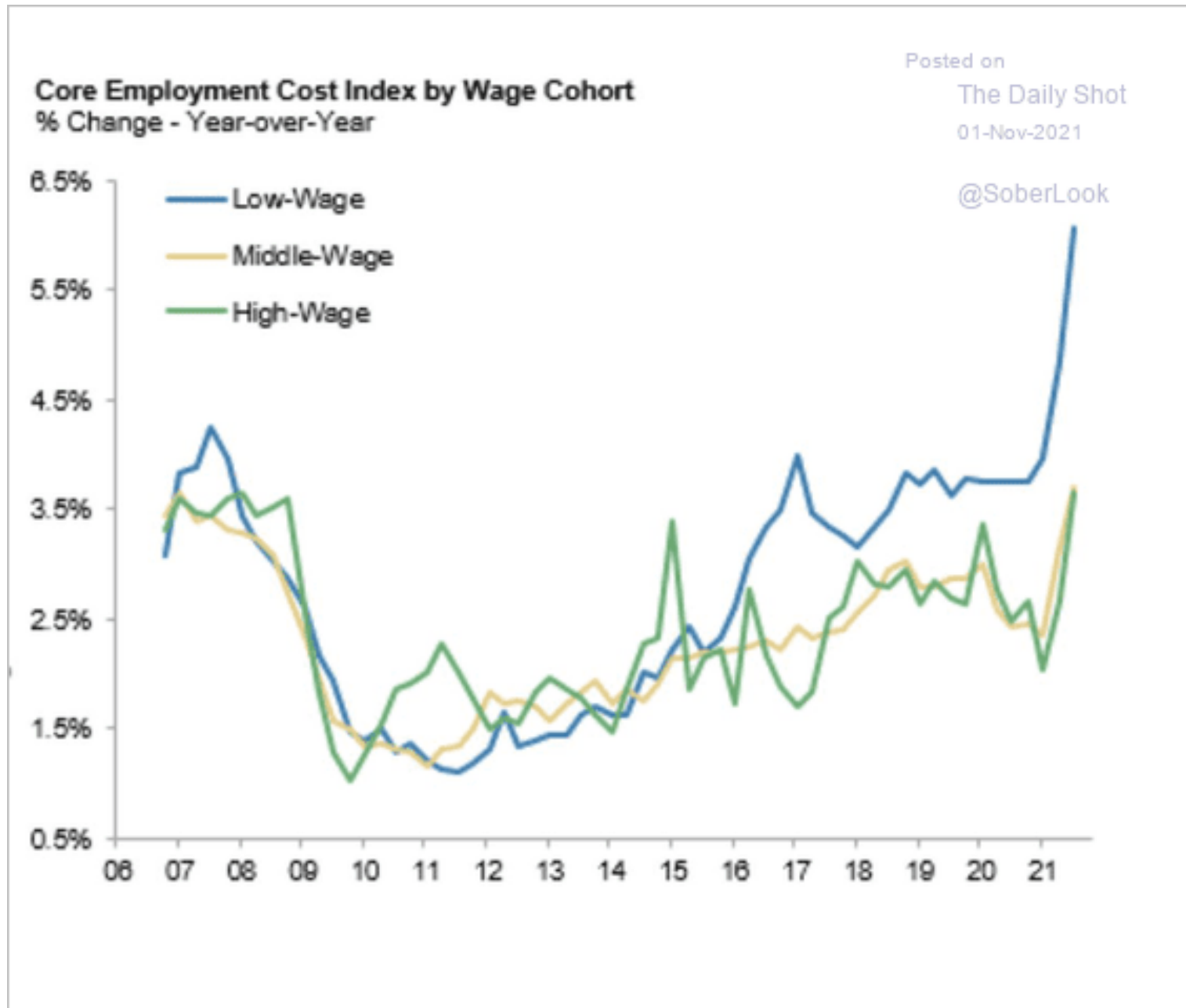
three-month moving average of median wage growth, hourly data



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

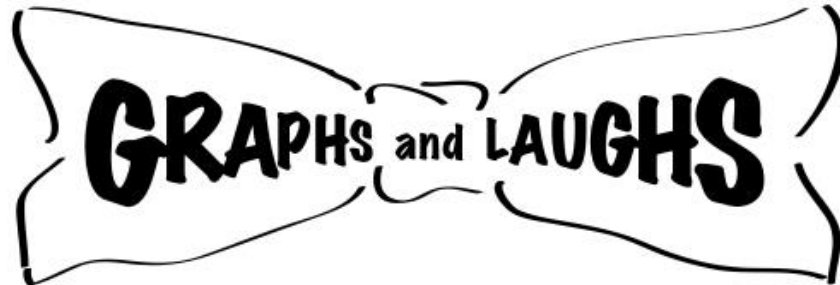
Why Wage Growth Will Slow

Low-wage sectors are driving pay increases



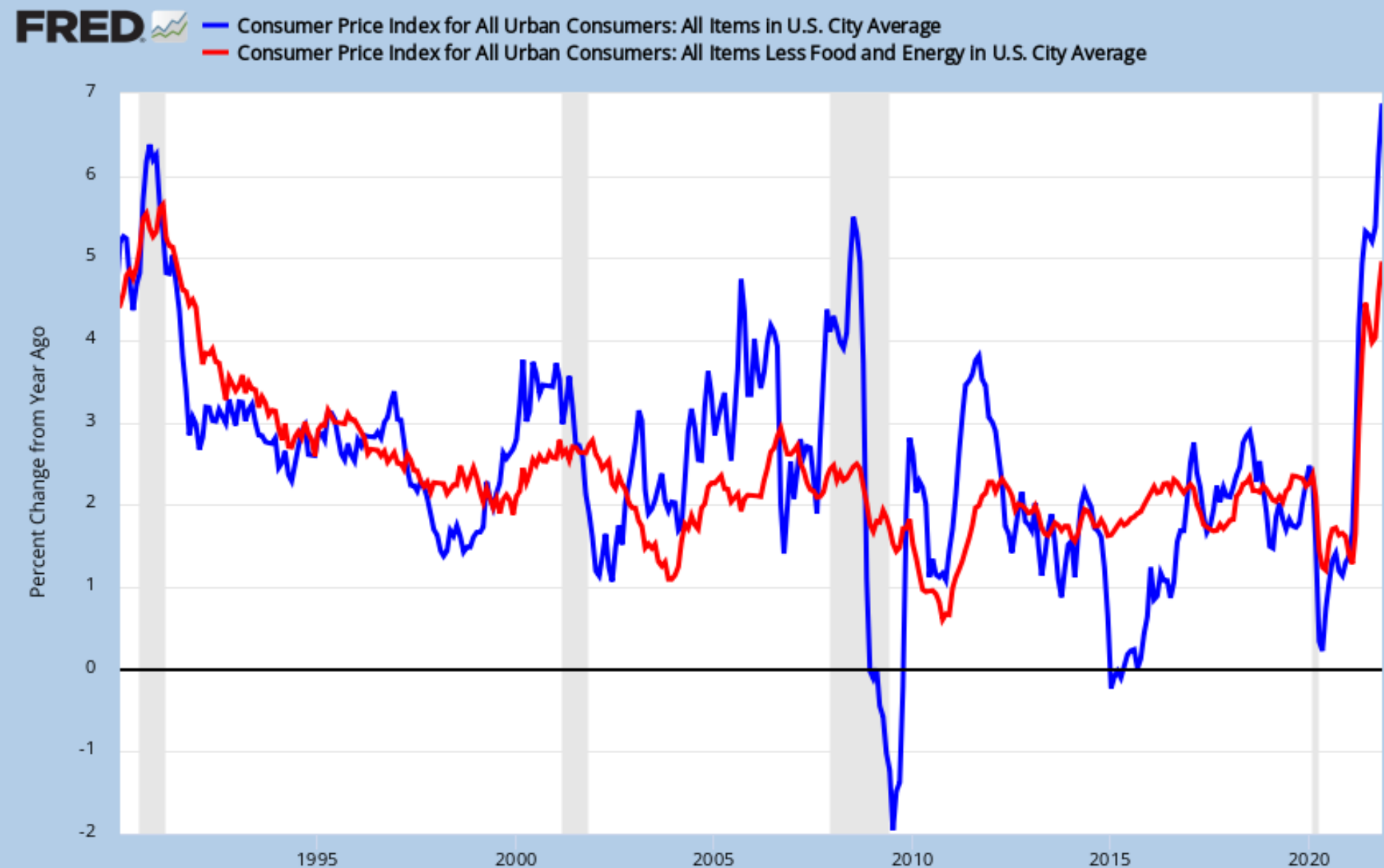
Inflation?

It's Here!



CPI: Inflationary Pressures are Hopefully Topping

Watch the core numbers closely



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

myf.red/g/JJIS

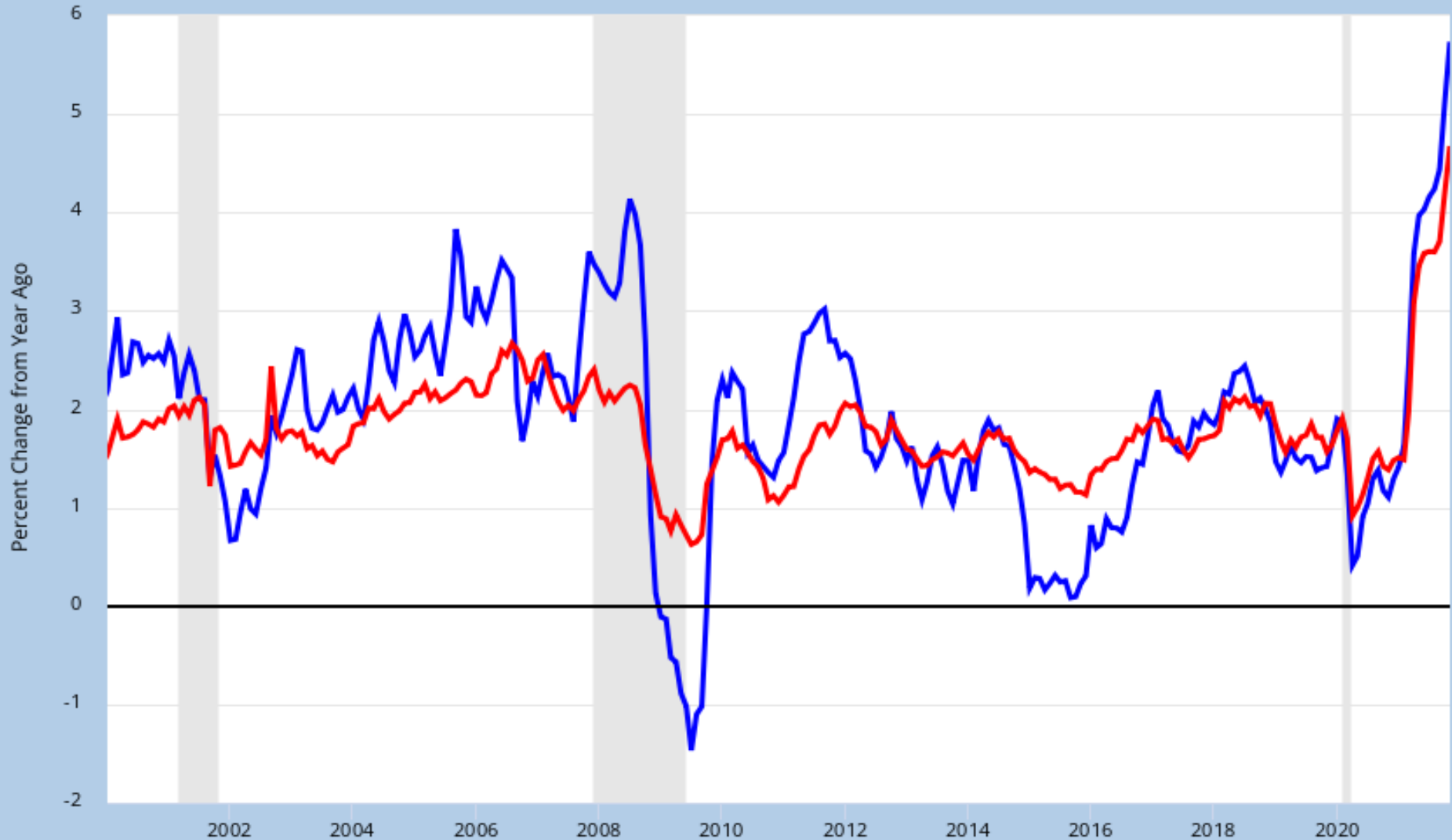
Core PCE Price Index

Focus on core (red) inflation

FRED



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



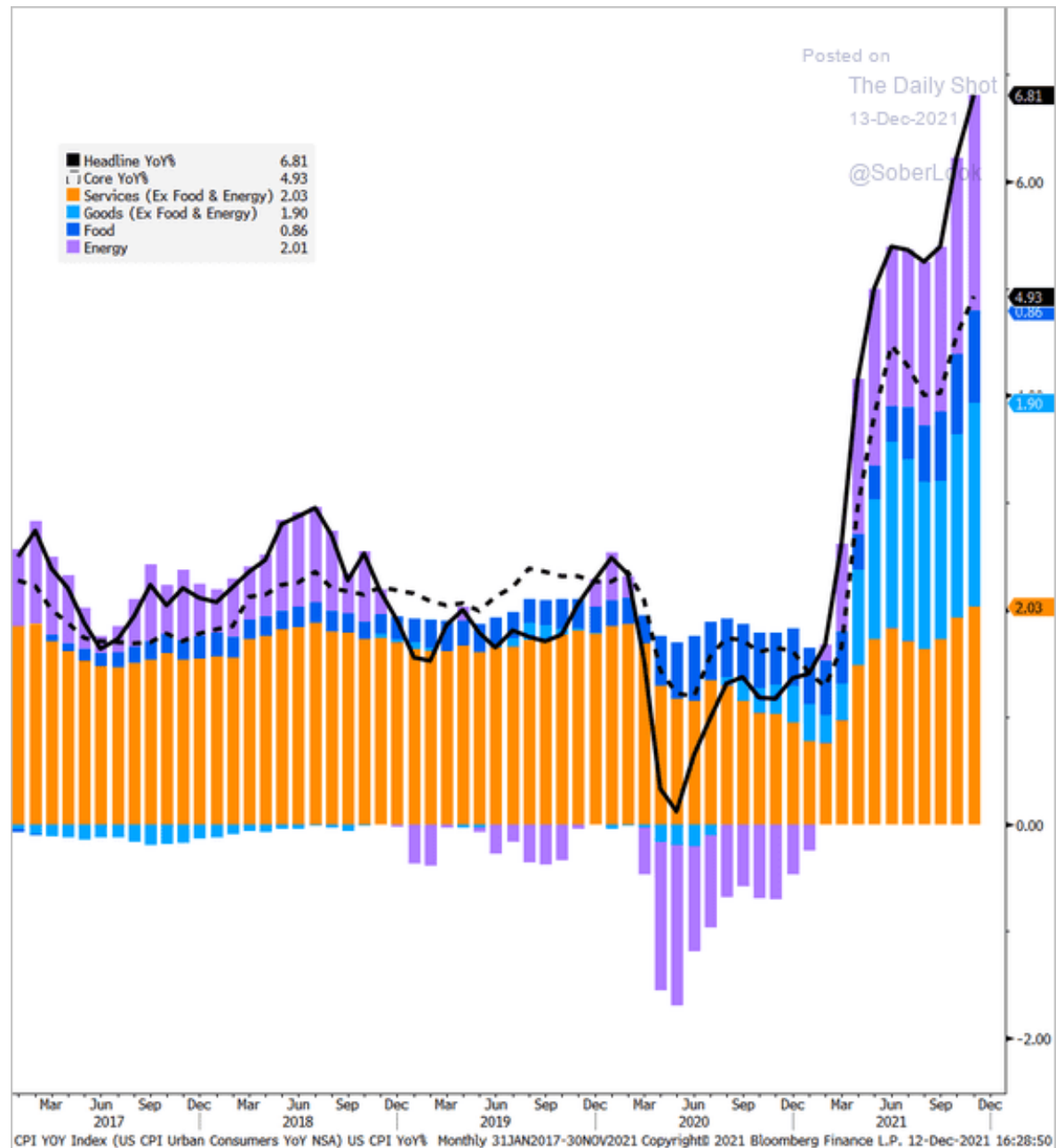
Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Economic Analysis

myf.red/g/KaLR

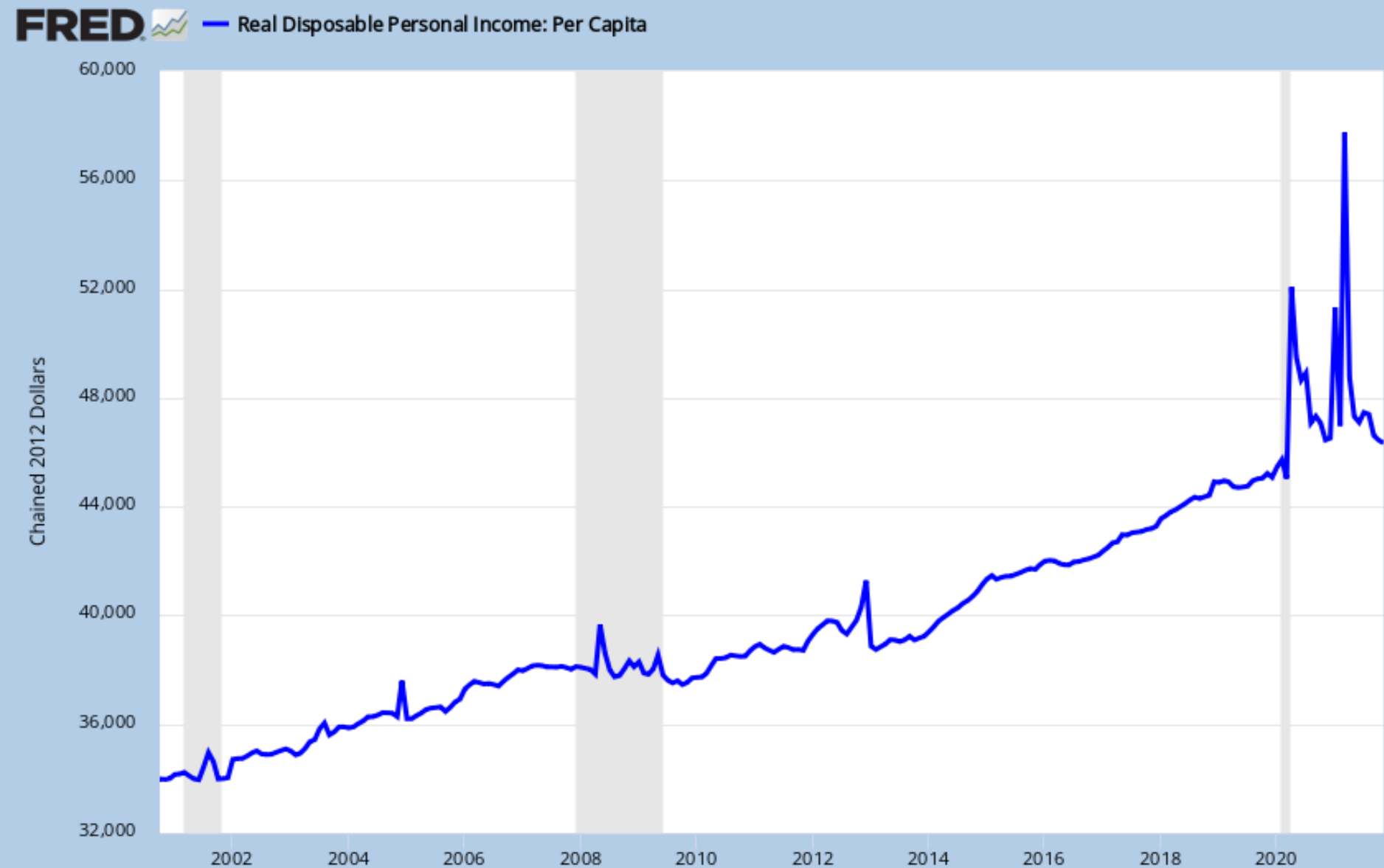
Contributions to CPI

Energy and goods are what is driving it



Real Per Capita Disposable Income

A huge jump due to gov't policies, but it declined and will now return to trend



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Economic Analysis

myf.red/g/KaMx

Fed Rate Hike Expectations

Markets are almost always wrong

Exhibit 1: The markets have a long history of prematurely anticipating Fed rate hikes

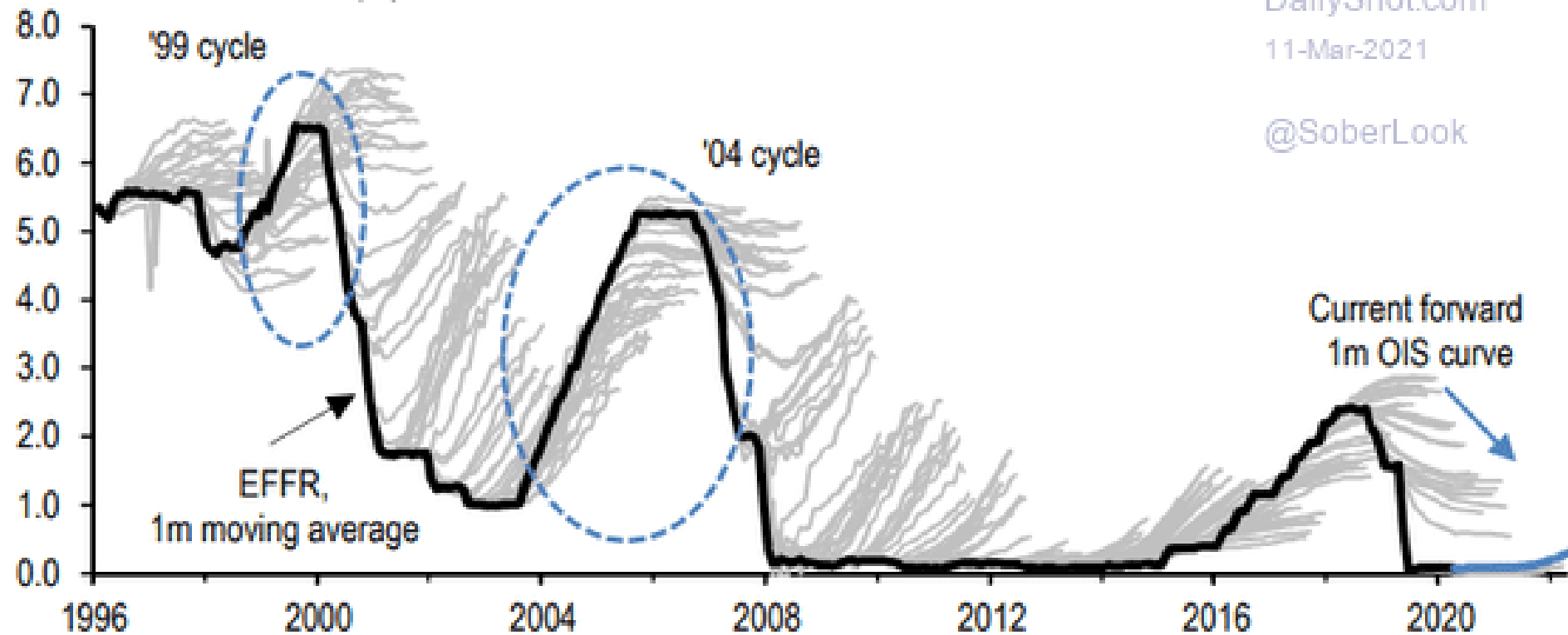
EFFR vs forward 1m OIS (%)

Posted on

DailyShot.com

11-Mar-2021

@SoberLook



Source: J.P. Morgan

Federal Reserve Behavior

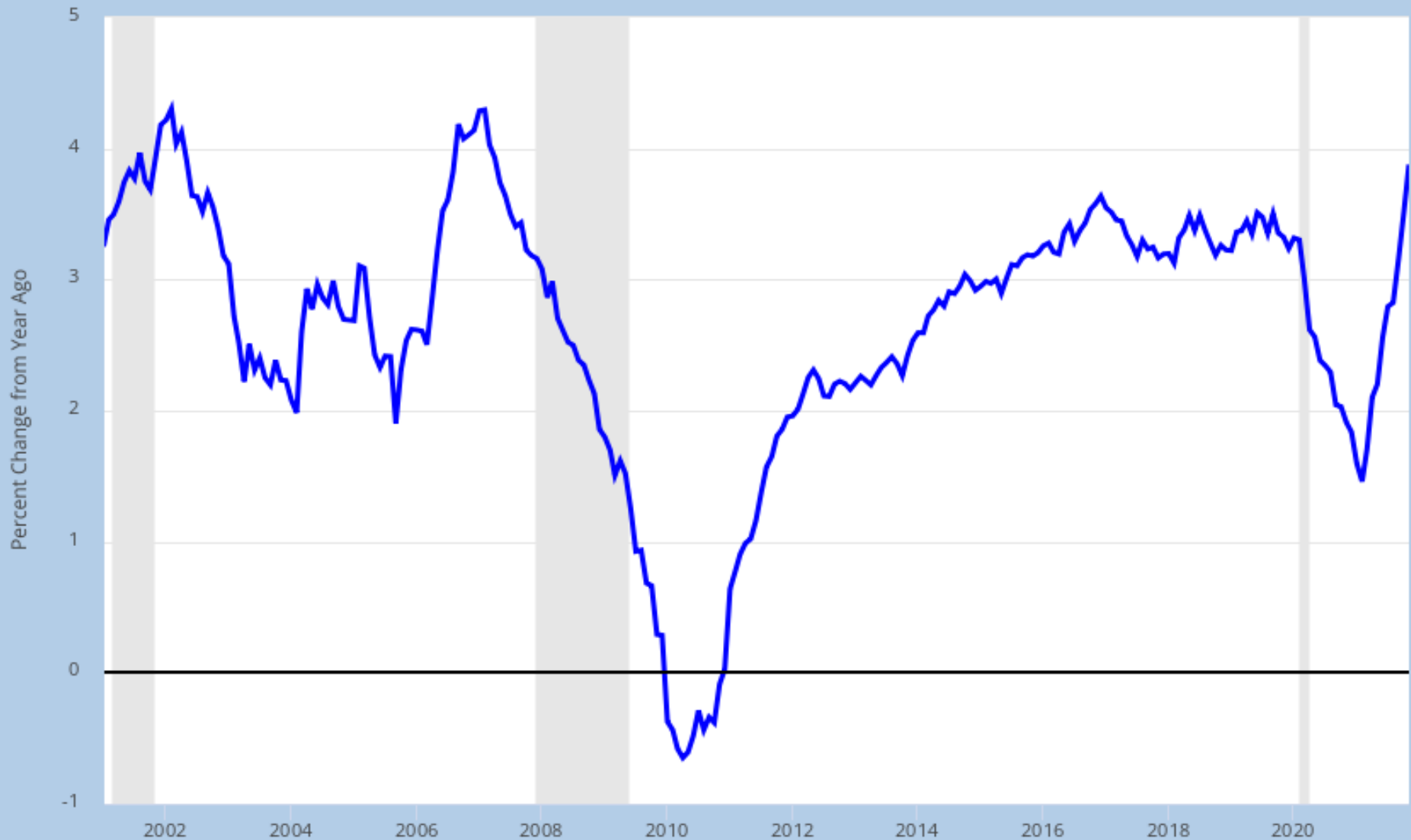
Best Case Scenario

- Fed funds is currently 0.125%
- 12/31/21: 0.125% 10-yr Treasury @ 1.70%
- 6/30/22: 0.375% 10-yr Treasury @ 1.90%
- 12/31/22: 0.625% 10-yr Treasury @ 2.10%

Increase in Shelter Cost Growth is Now Rising

Was at 3.25% for years but is now 3.9% and rising

FRED  — Consumer Price Index for All Urban Consumers: Shelter in U.S. City Average



Shaded areas indicate U.S. recessions.

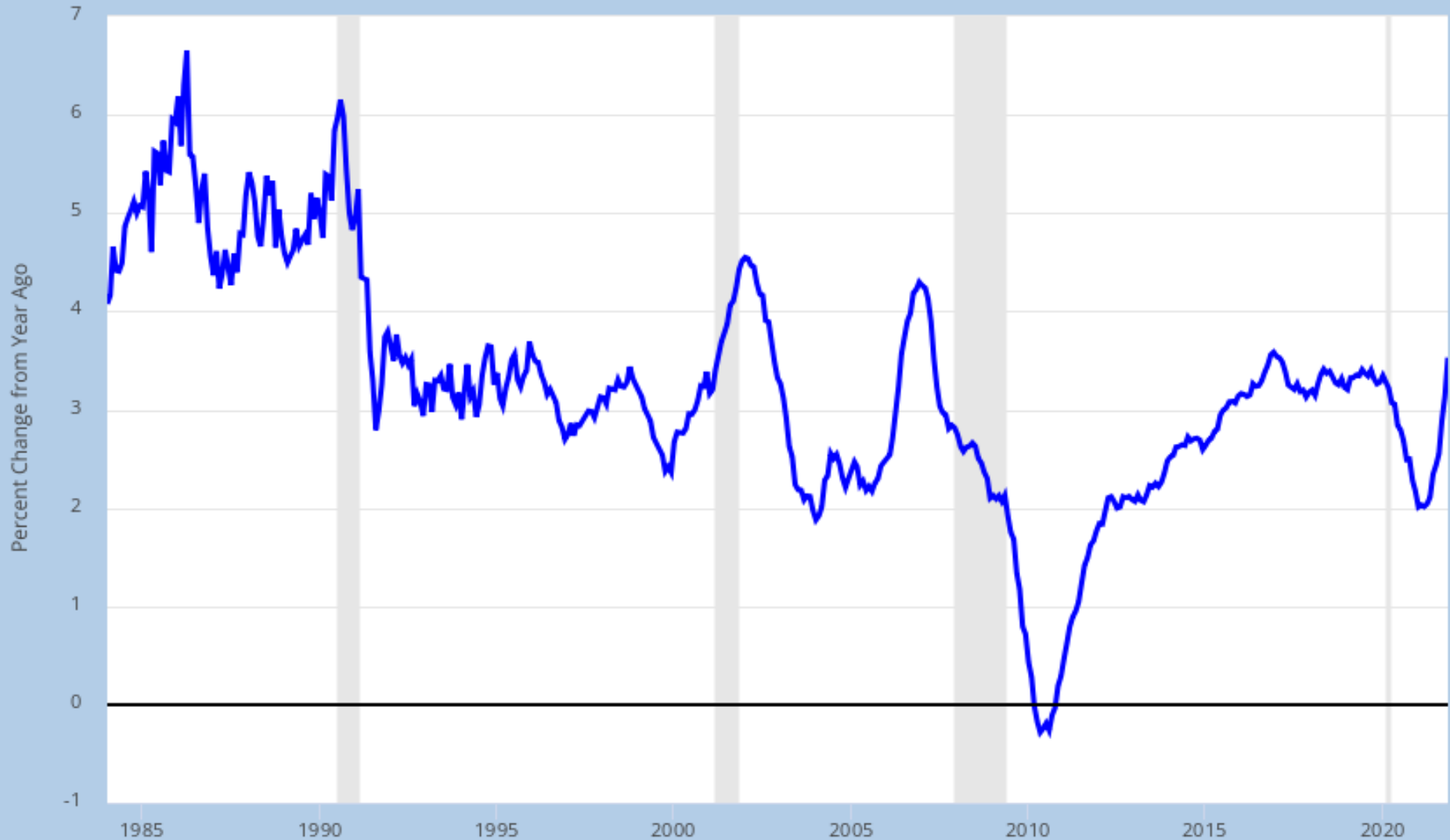
Source: U.S. Bureau of Labor Statistics

myf.red/g/jjji

Rents Increases Are Again Rising

This is 3.5% and will feed into inflation

FRED  — Consumer Price Index for All Urban Consumers: Owners' Equivalent Rent of Residences in U.S. City Average

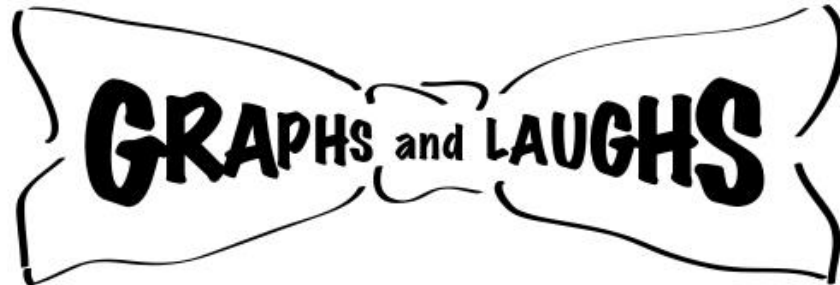


Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

myf.red/g/IIJn

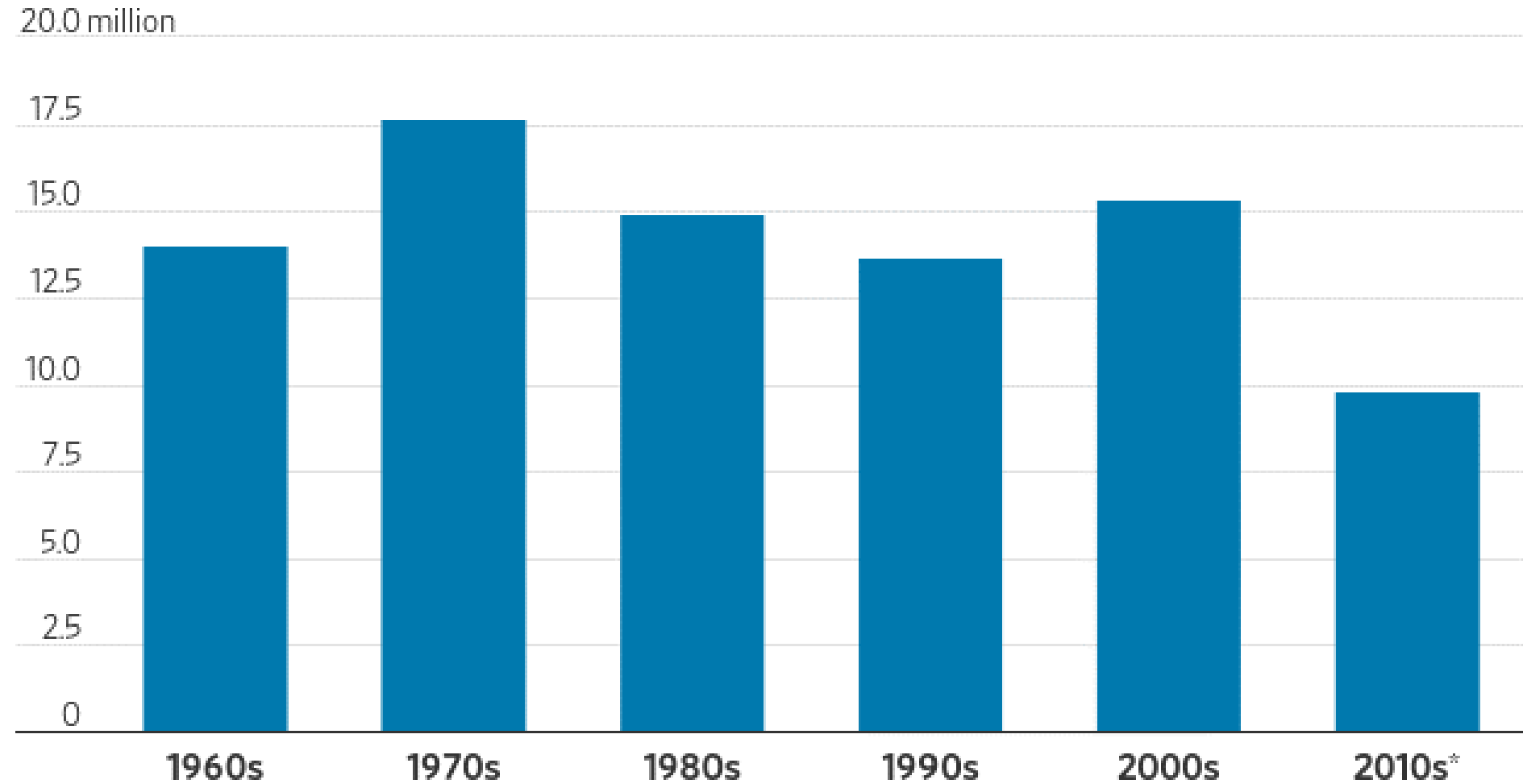
How About Housing?



US Housing Activity Was at a Multi-Decade Low

Supply of new housing is only now recovering

U.S. new-home construction by decade



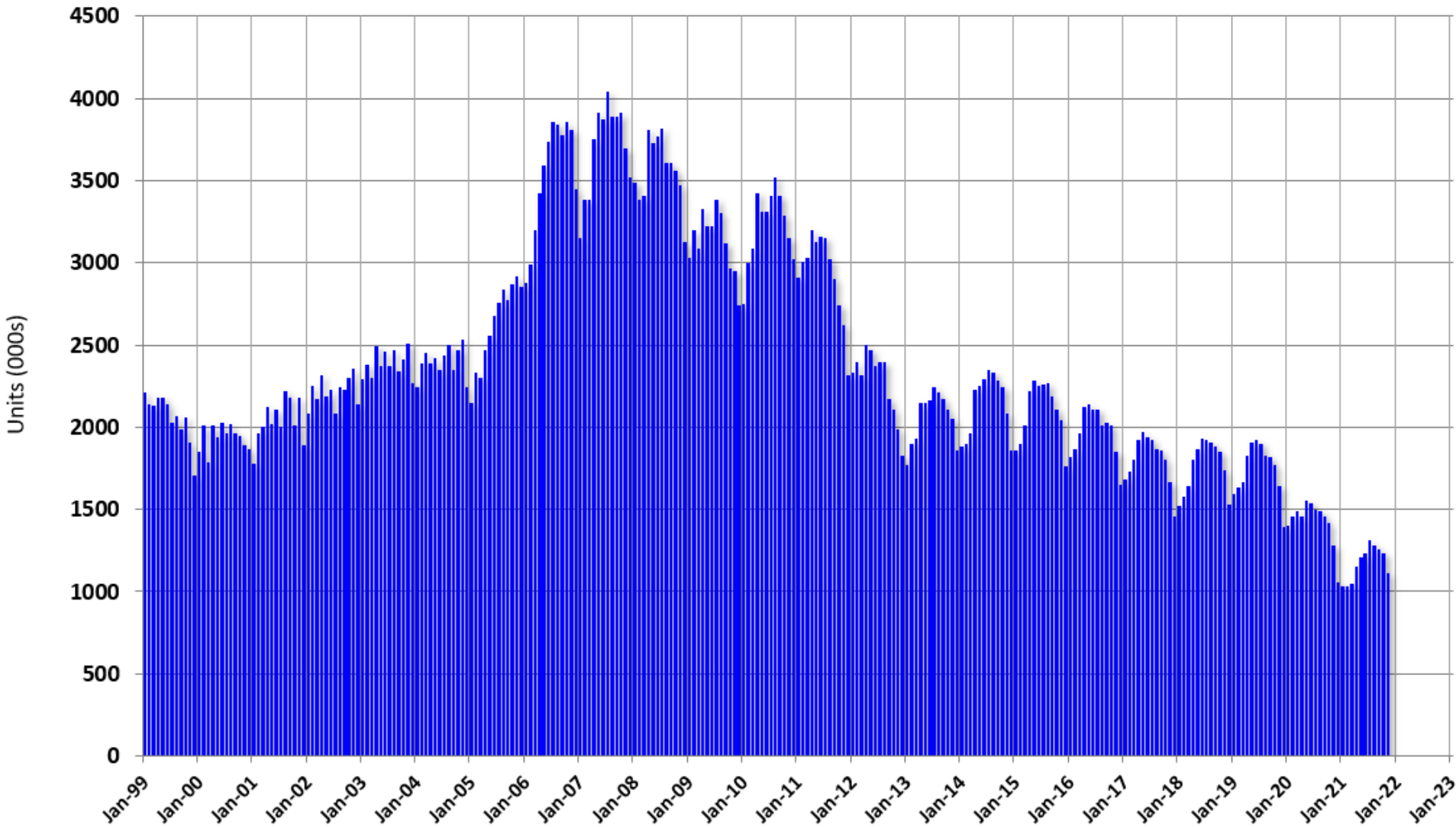
Note: Data for the 2010s is through November 2019.

Source: Commerce Department via the St. Louis Fed

Inventory Remains Low

How much it increases is the big question and not is the answer!

Existing Home Inventory



Existing Inventory is So Low!

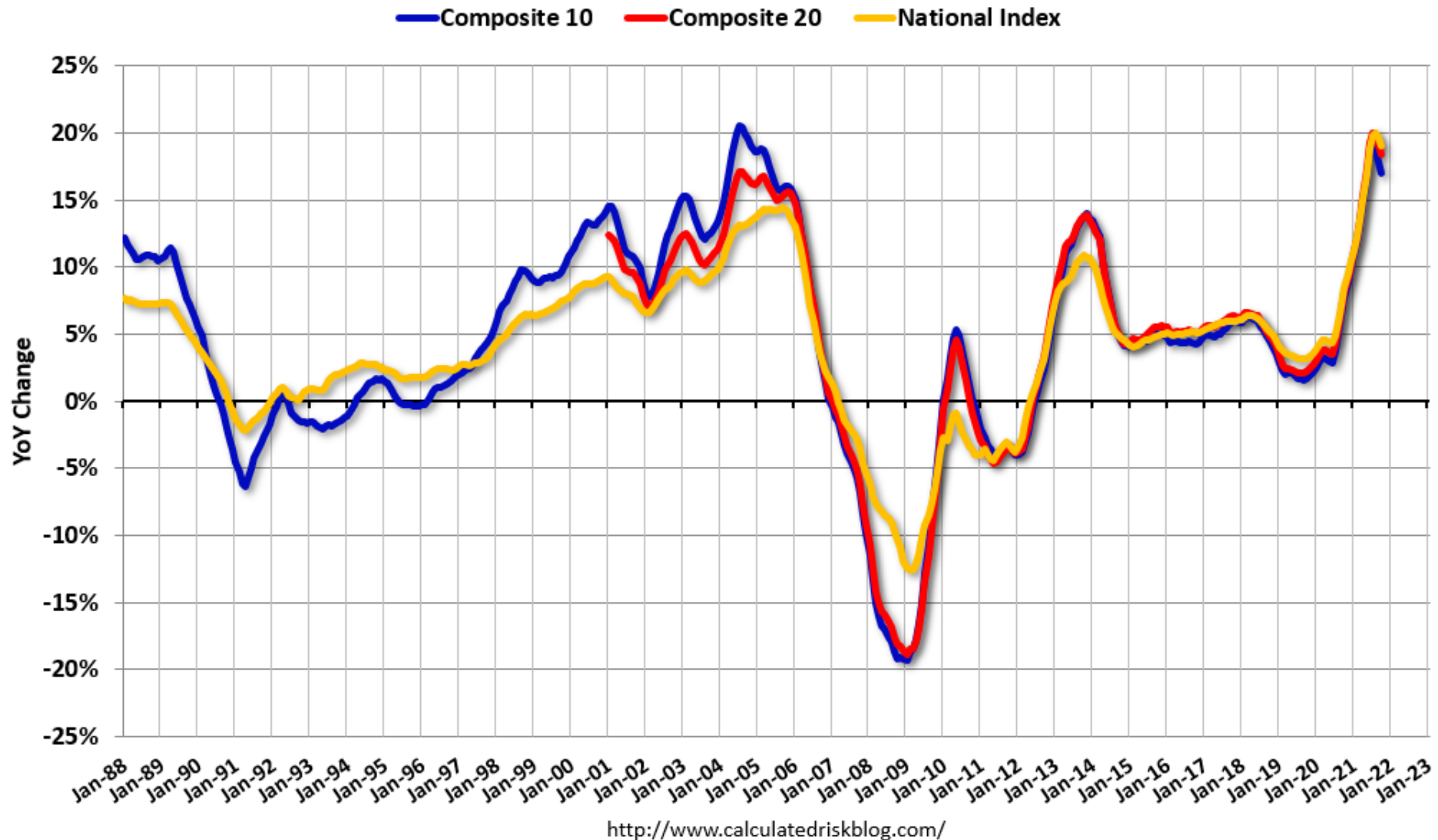
That is why home prices are rising so fast



Prices Keep Rising!

Prices in '90 and '00 didn't collapse. Y-o-Y prices are up 17.1%, 18.4% or 19.1%

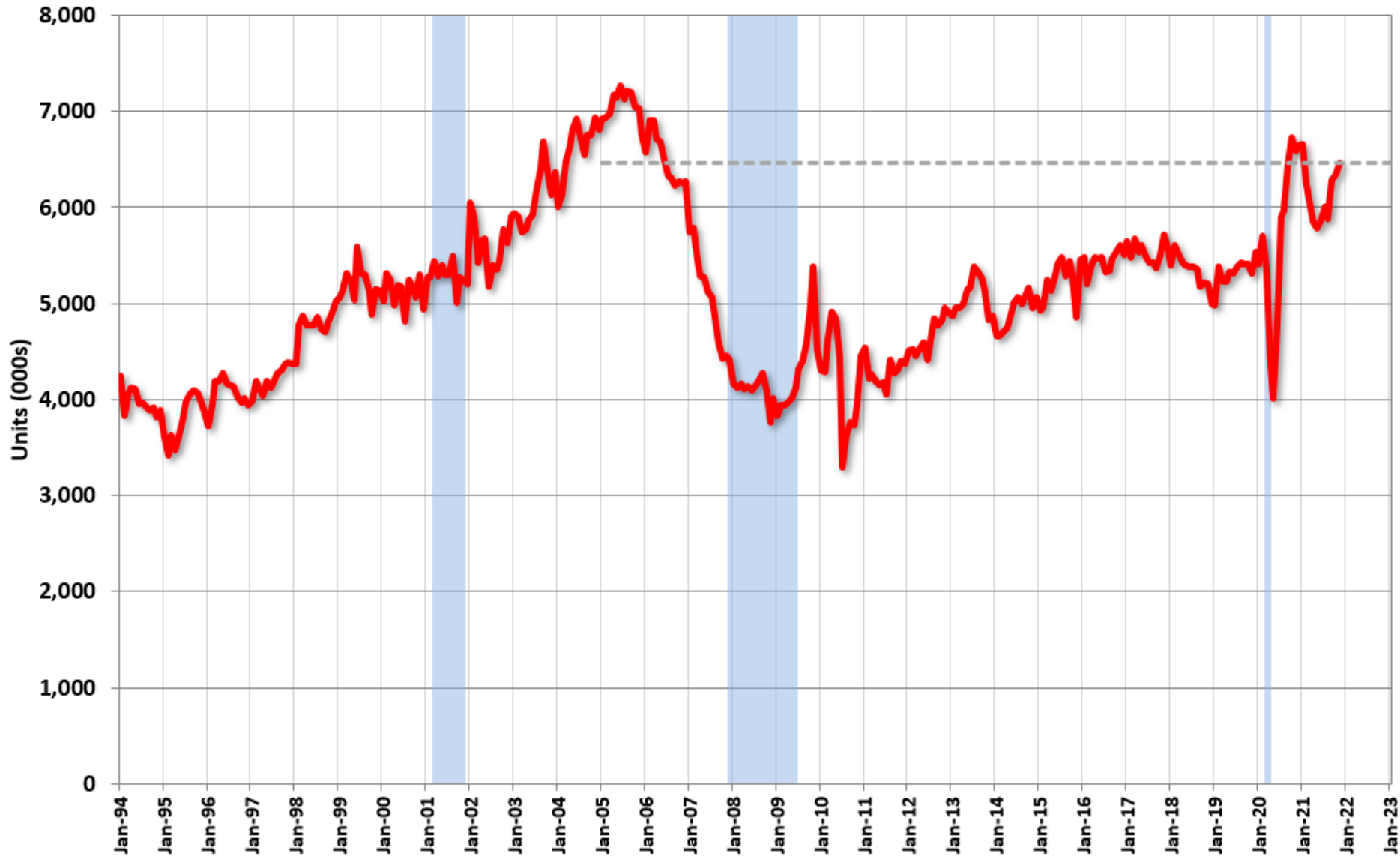
Case-Shiller National and Composite Indices SA, Year-over-year Change



Existing Home Sales Are Mean Reverting

Late 2020 and early 2021 was recent Peak House

Existing Home Sales (SAAR)

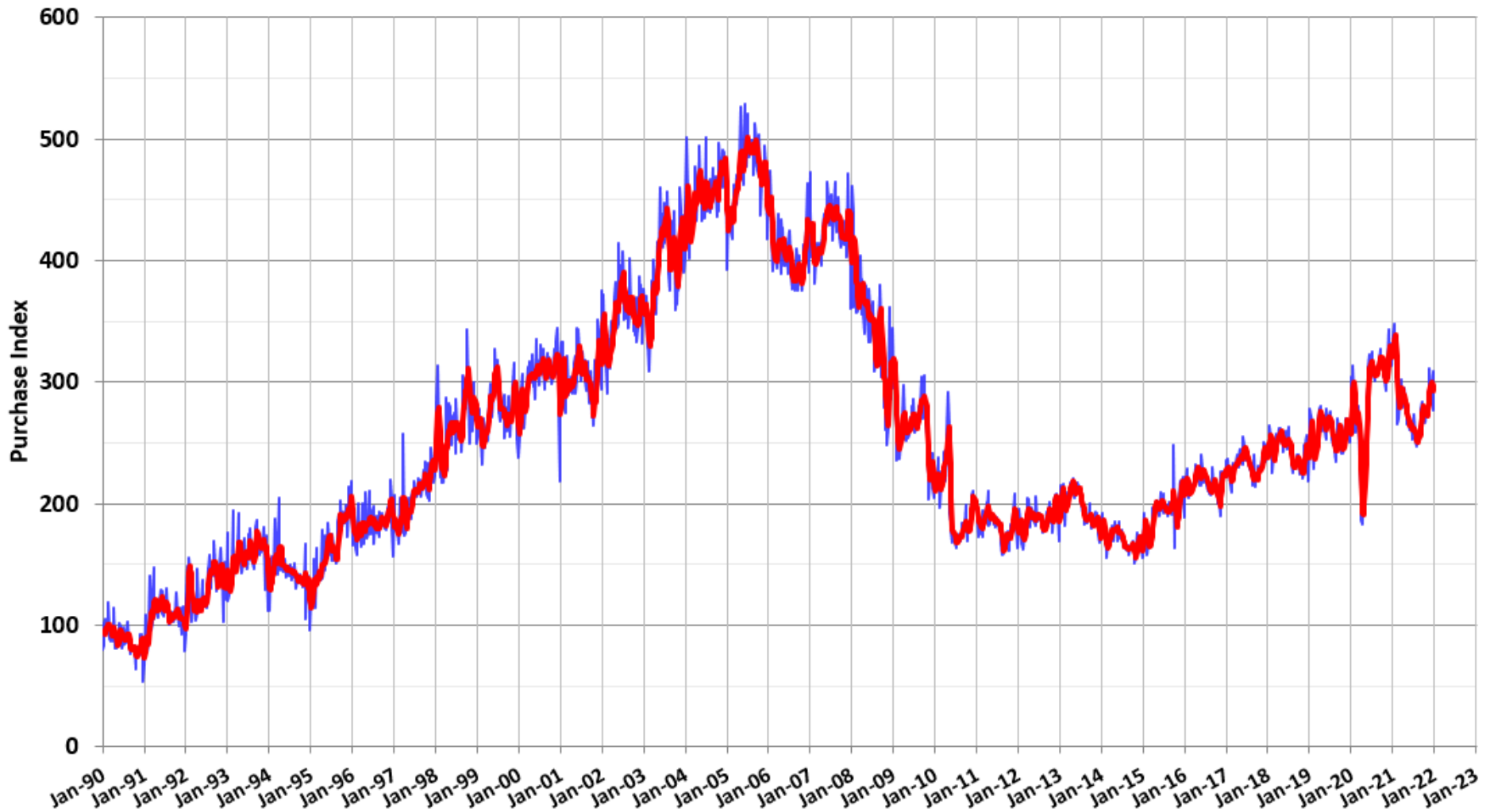


Mortgage Purchase Applications Slip

1st time applications are down 12% Y-o-Y, at level of early 2000s
Purchase volume should be \$1.7 trillion in 2022 up slightly from 2021

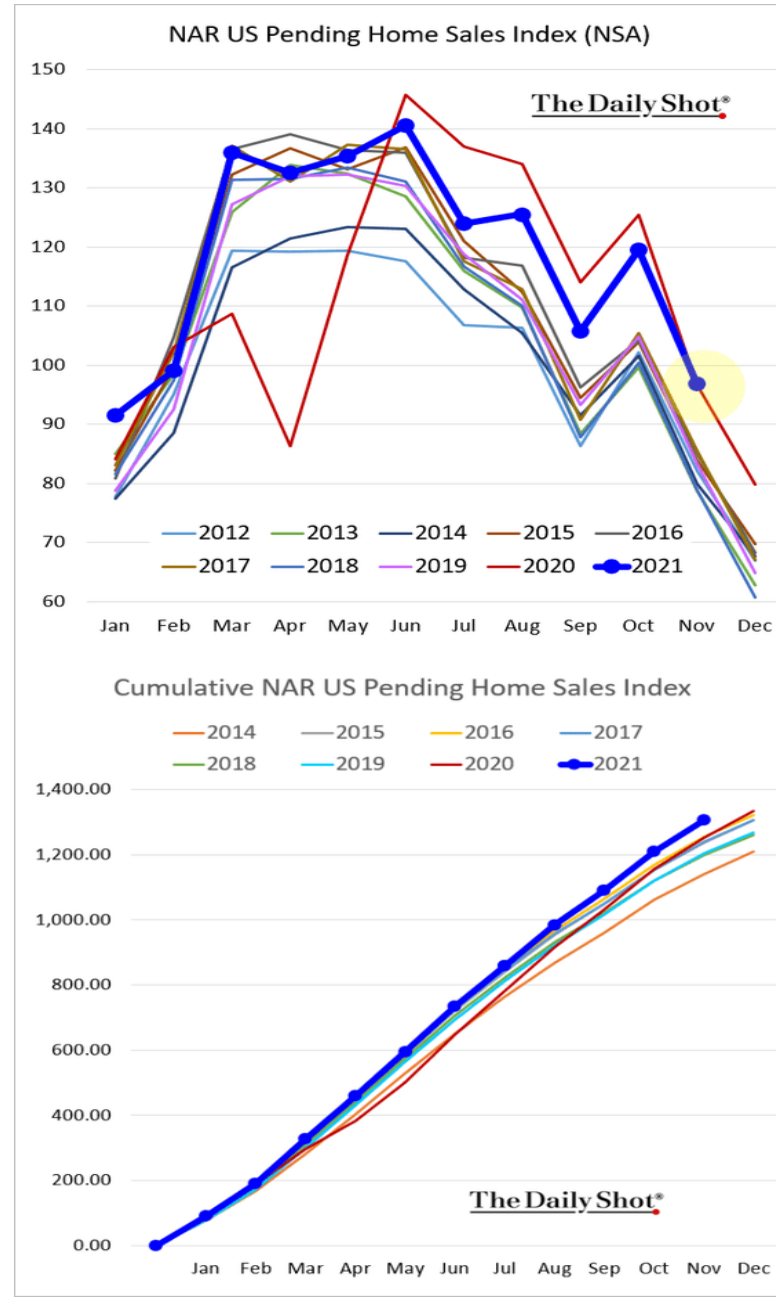
MBA Purchase Applications Index

Purchase Index 4 Week Moving Average



Pending Home Sales are Strengthening

Higher inventories and fear of higher rates are boosting activity

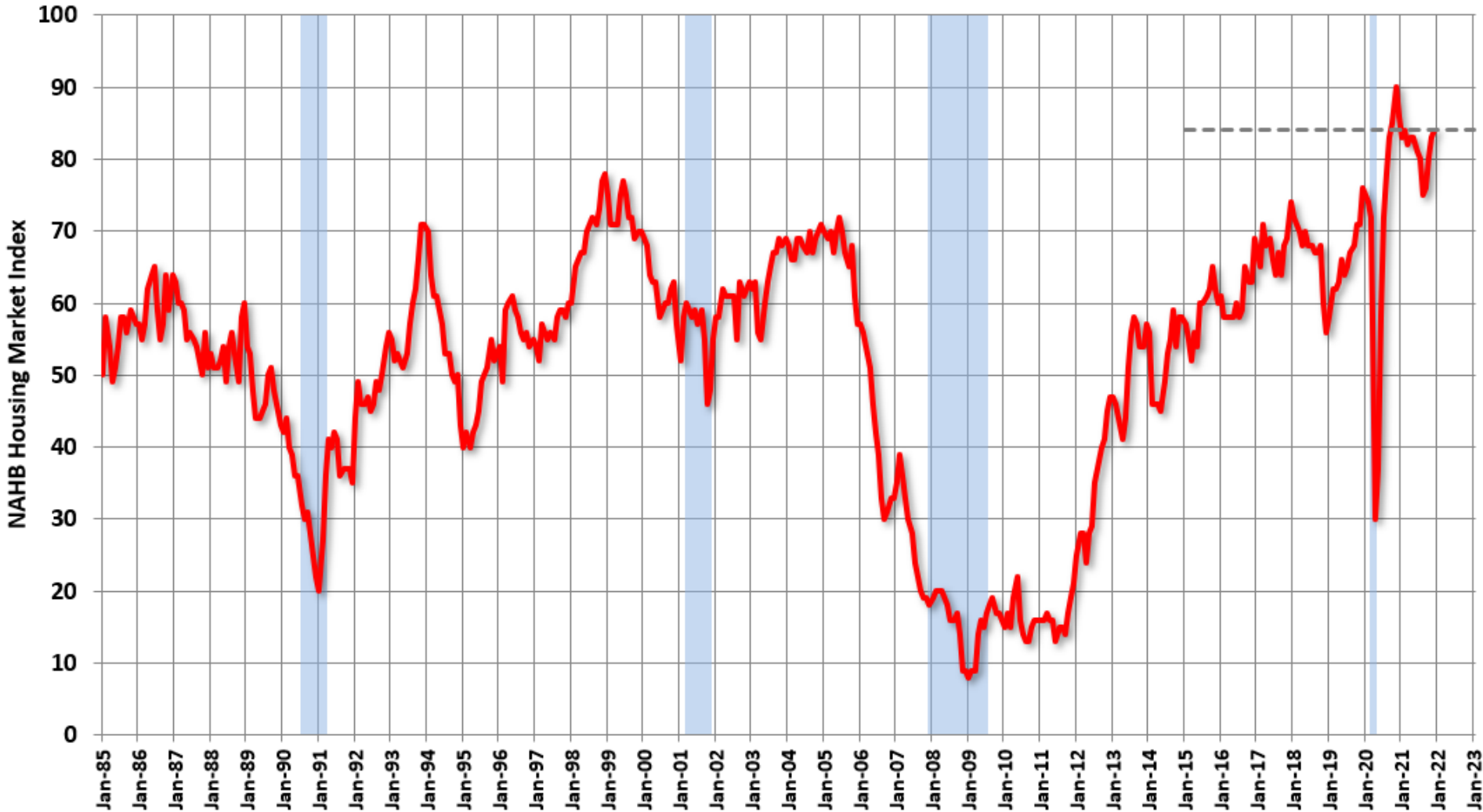


Home Builders are Generally Happy

Higher lumber prices, higher rates and supply chain issues don't matter

NAHB Housing Market Index

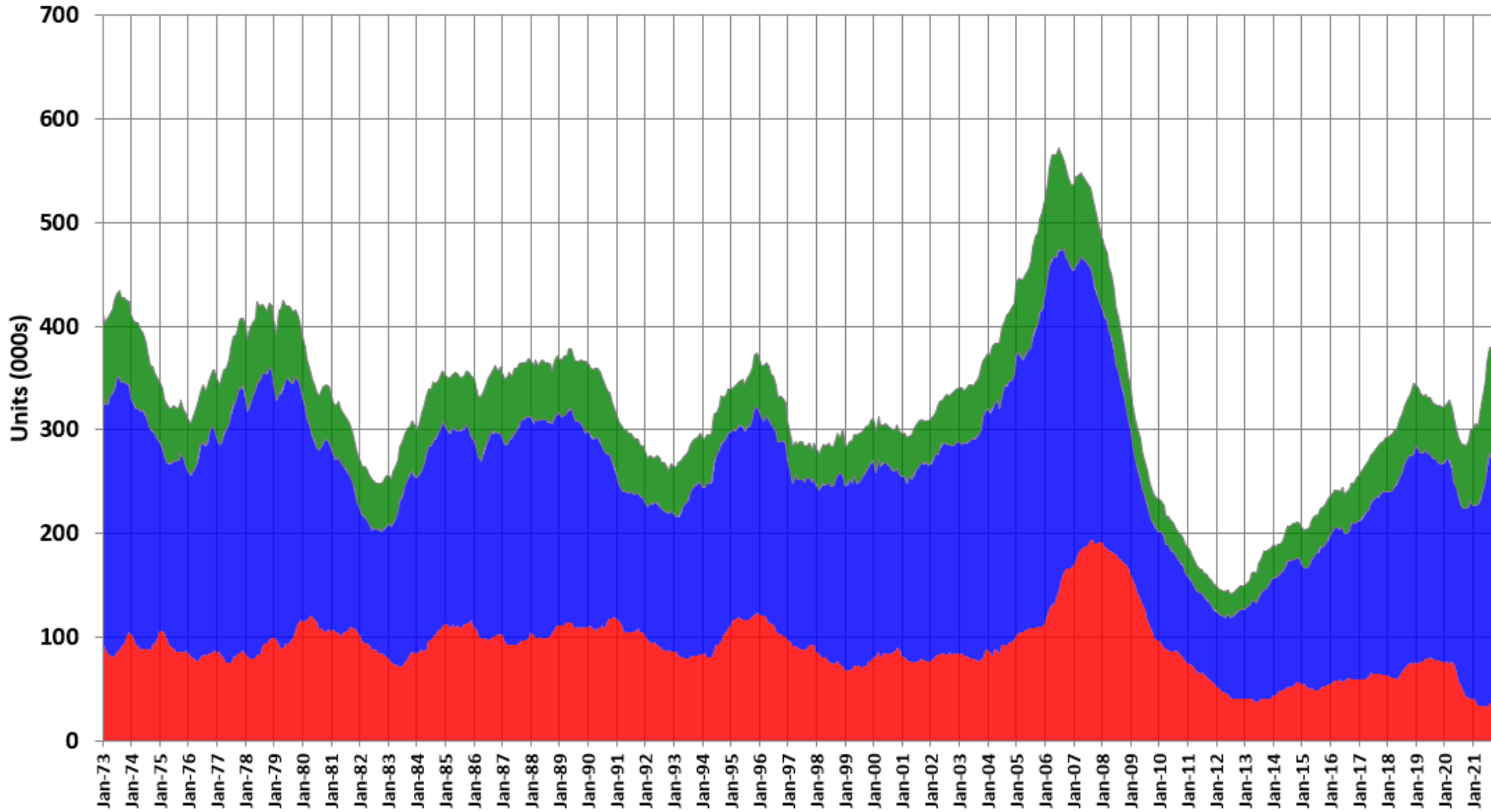
Recession HMI Current



New Home Inventories

New Home Inventory

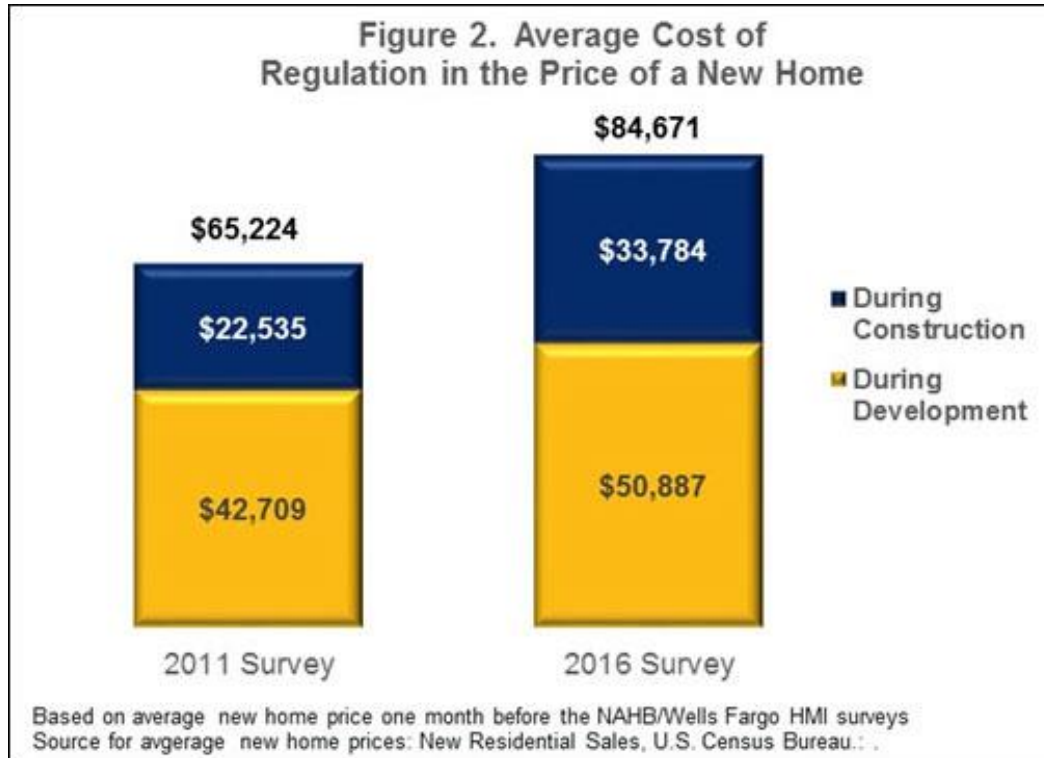
Completed Under Construction Not Started



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

New Home Prices Are Too High Due to Regulation

It keeps rising



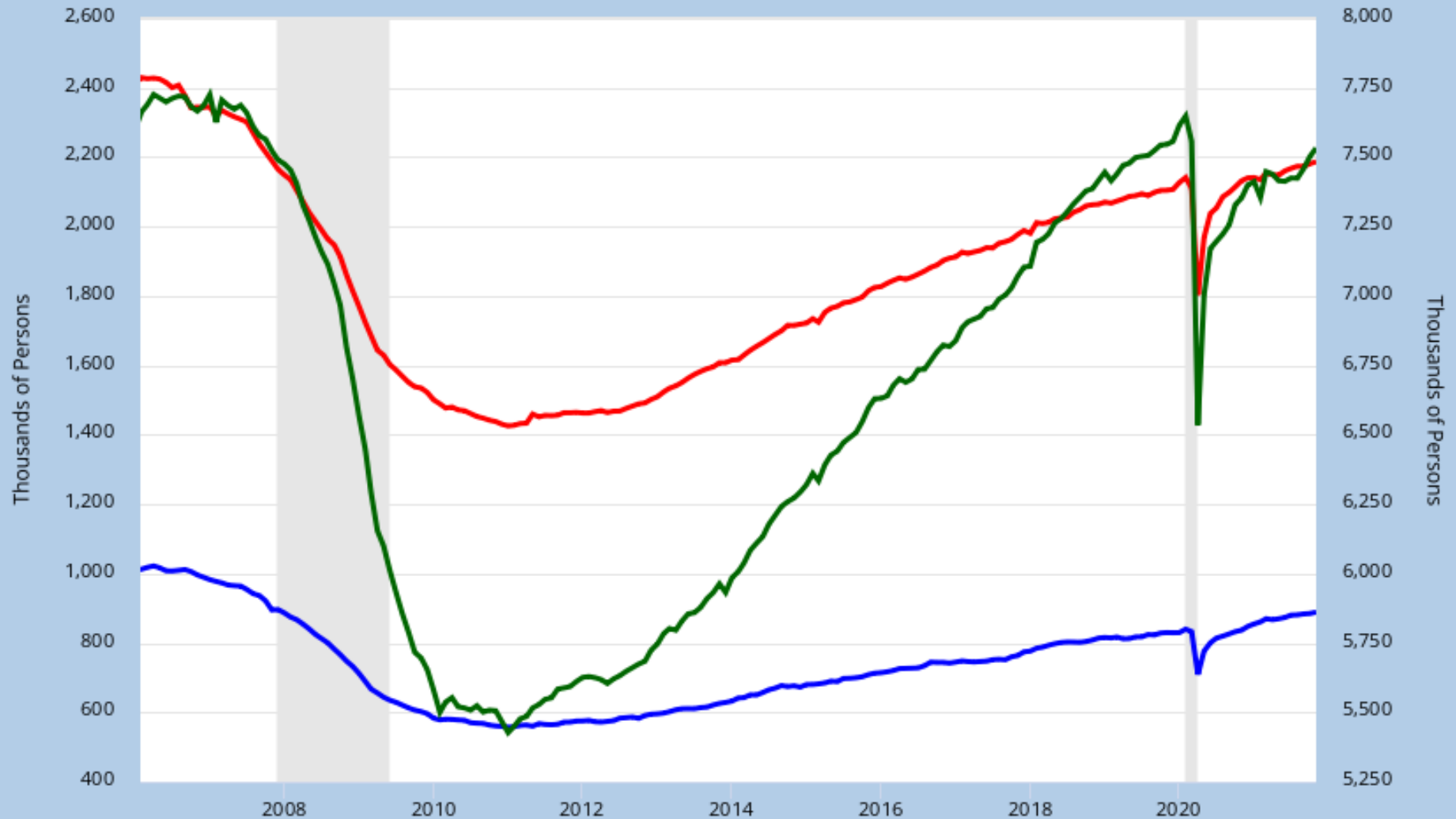
In the 2021 Survey, the average cost of regulation rose to \$93,870, or 23.8% of the new home price

Construction Employment: Residential & Otherwise

Total construction employment rebounds surprisingly well

FRED 

- All Employees, Residential Building (left)
- All Employees, Residential Specialty Trade Contractors (left)
- All Employees, Construction (right)



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

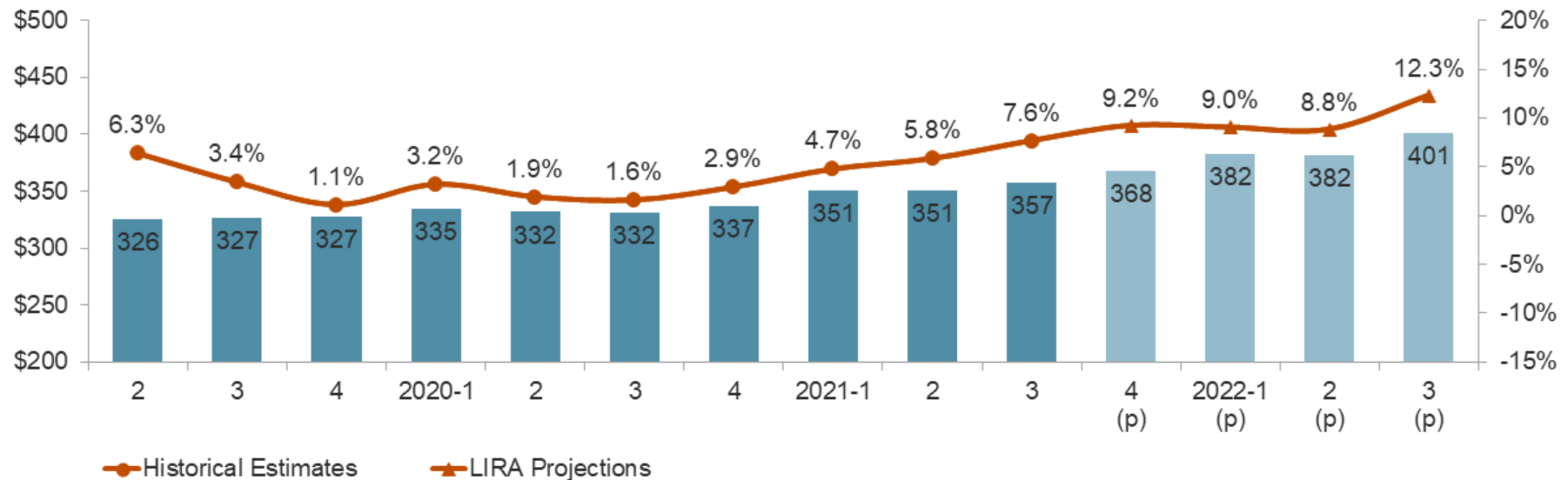
myf.red/g/INkD

Housing Improvements & Repairs Are Fine

Home prices rise, rates are low, existing sales are strong, and stim checks all help

Leading Indicator of Remodeling Activity – Third Quarter 2021

Homeowner Improvements & Repairs
Four-Quarter Moving Totals
Billions

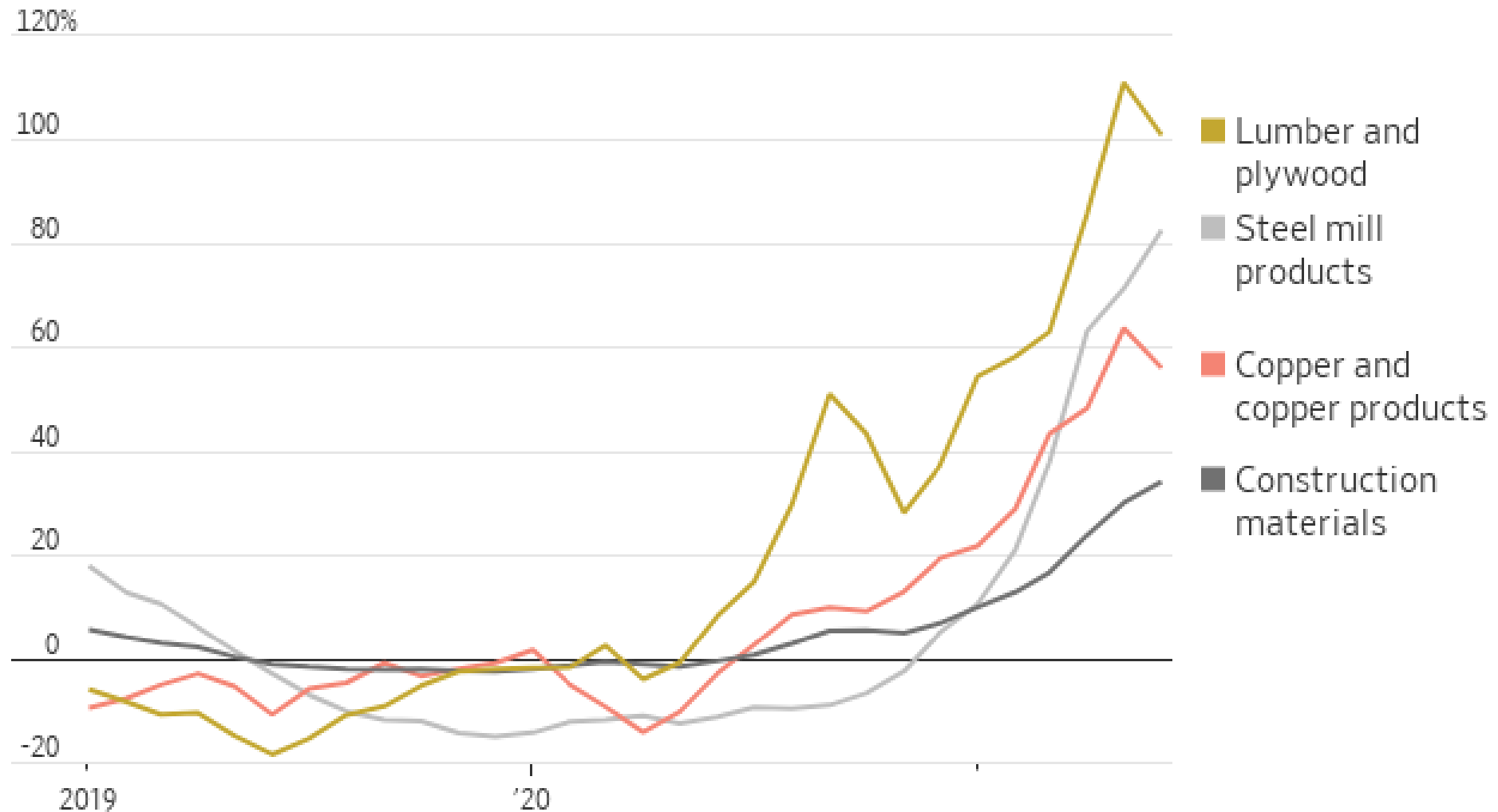


Notes: Improvements include remodels, replacements, additions, and structural alterations that increase the value of homes. Routine maintenance and repairs preserve the current quality of homes. Historical estimates since 2019 are produced using the LIRA model until American Housing Survey benchmark data become available.

More than Lumber Prices Are Under Pressure

Mills had been absolutely killing it

U.S. producer-price index, change from one year earlier



Source: Labor Department

Lumber Costs Bounce Wildly

Prices are up 75% Y-o-Y

Framing Lumber Prices per 1,000 board feet

— CME Futures Price — Current

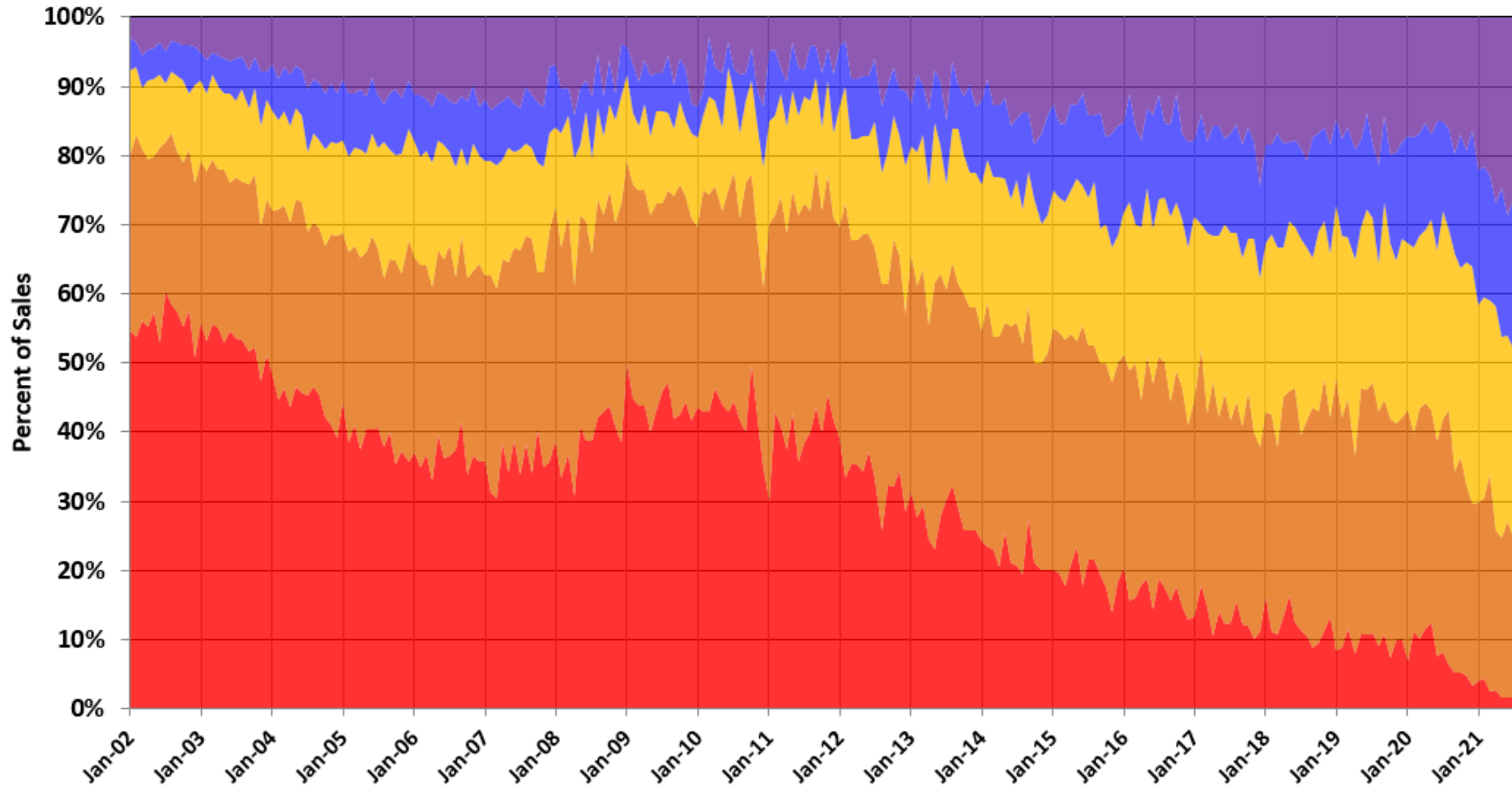


To Many Expensive Houses

Almost none are below \$200,000

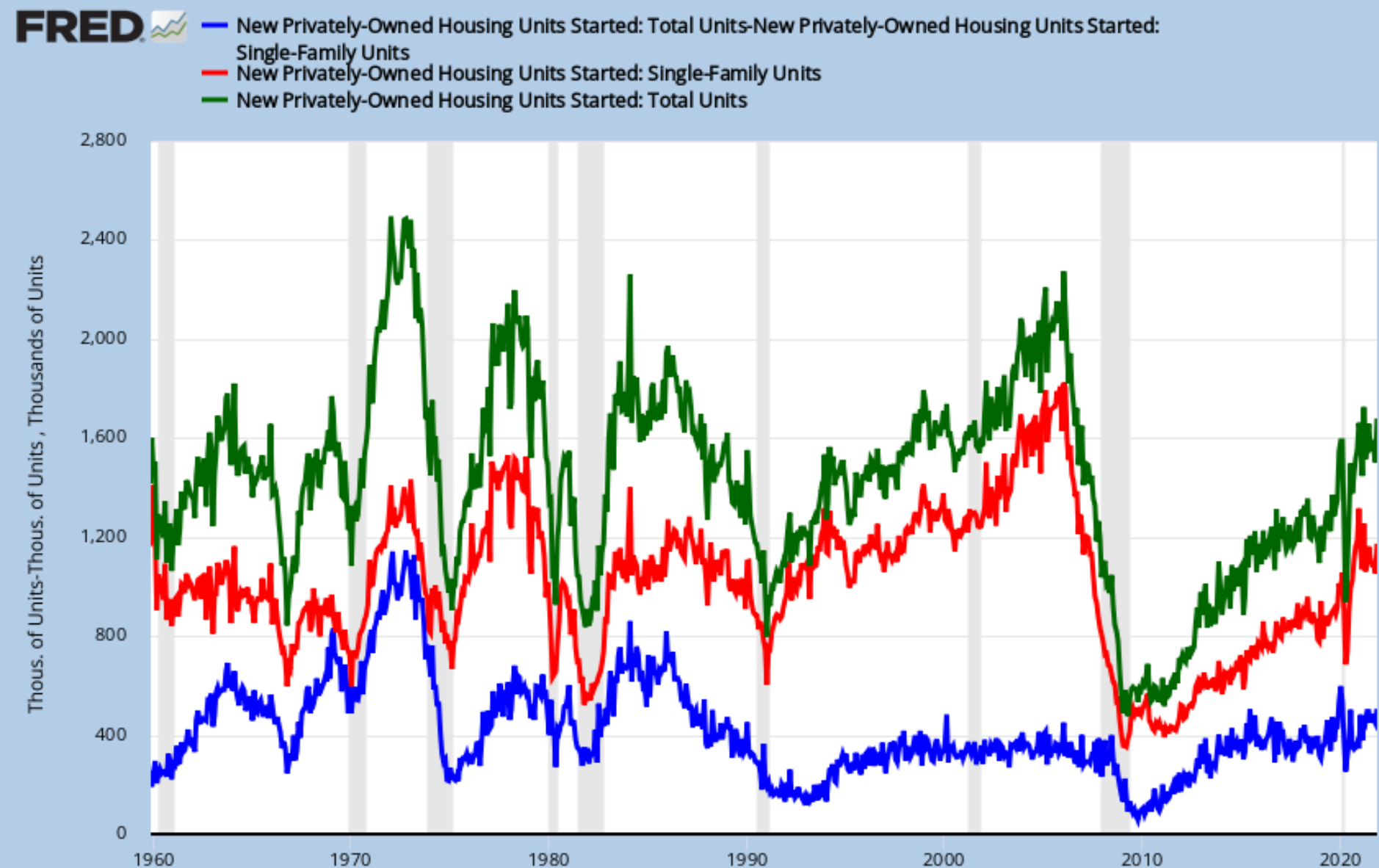
New Home Sales by Price

■ <\$200K ■ \$200K to \$299K ■ \$300K to \$399K ■ \$400K to \$499K ■ \$500K+



Single-Family and Multifamily Starts – A nice recovery

SF starts have turned around quickly but have topped out



Shaded areas indicate U.S. recessions.

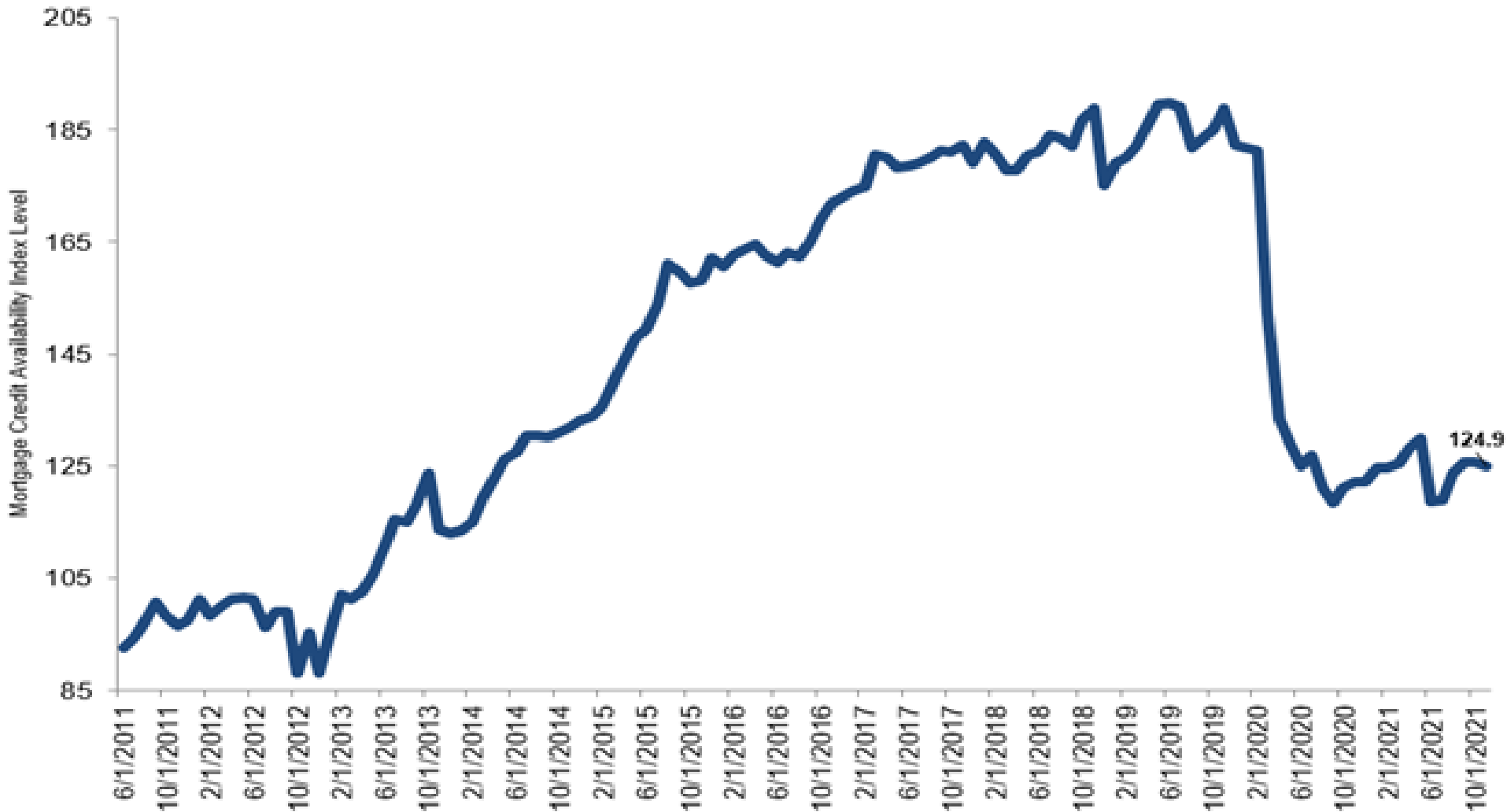
Sources: Census; HUD

myf.red/g/K4GW

Credit Remains Hard to Get

It was getting easier but now, not so much

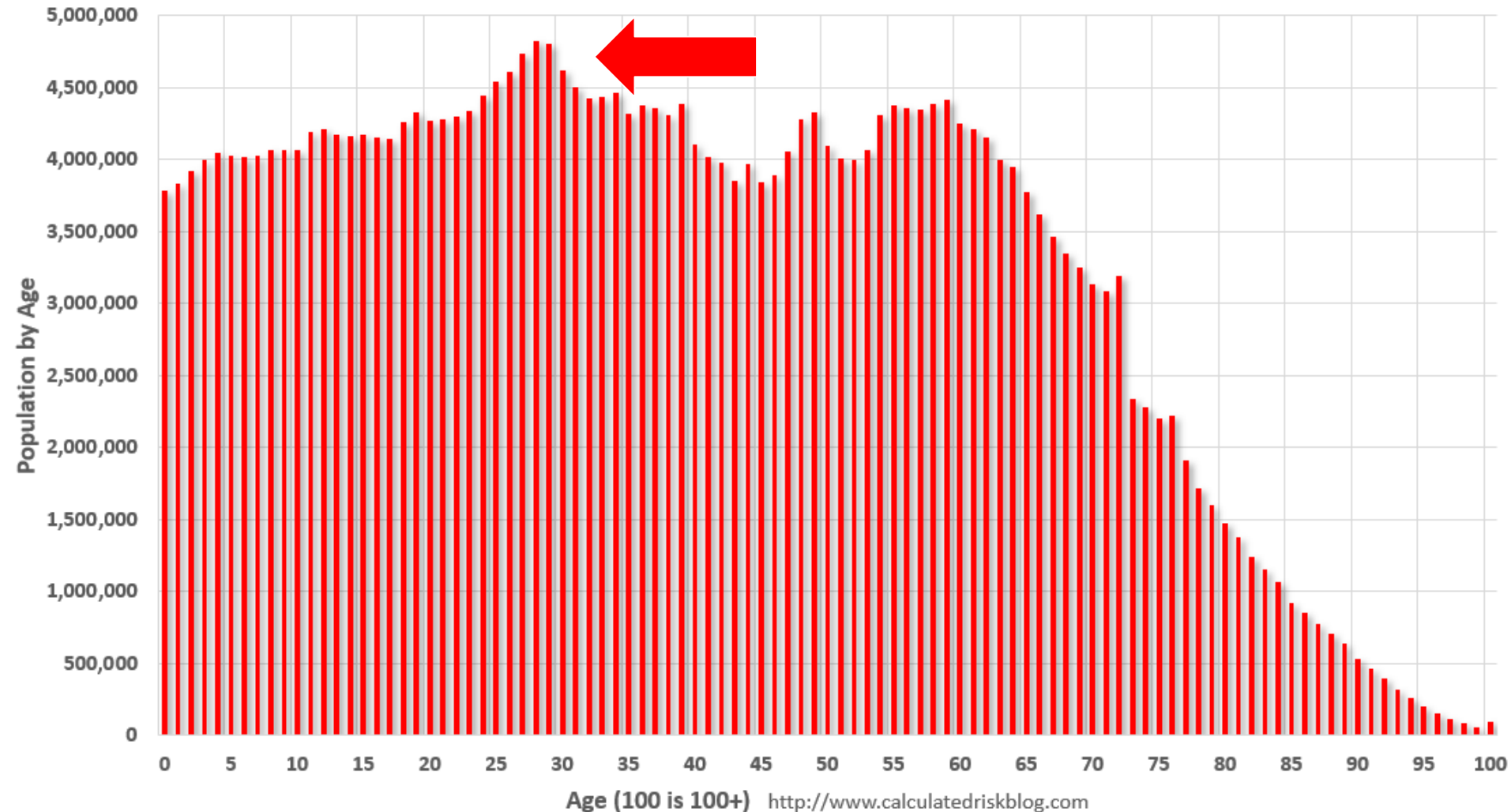
**Mortgage Credit Availability Index, Index Level by Month
(NSA, 3/2012=100)**



Millennials Will Keep This Issue Front and Center


Beginning to approach Peak Millennial. Chase them, move-up buyers and Boomers

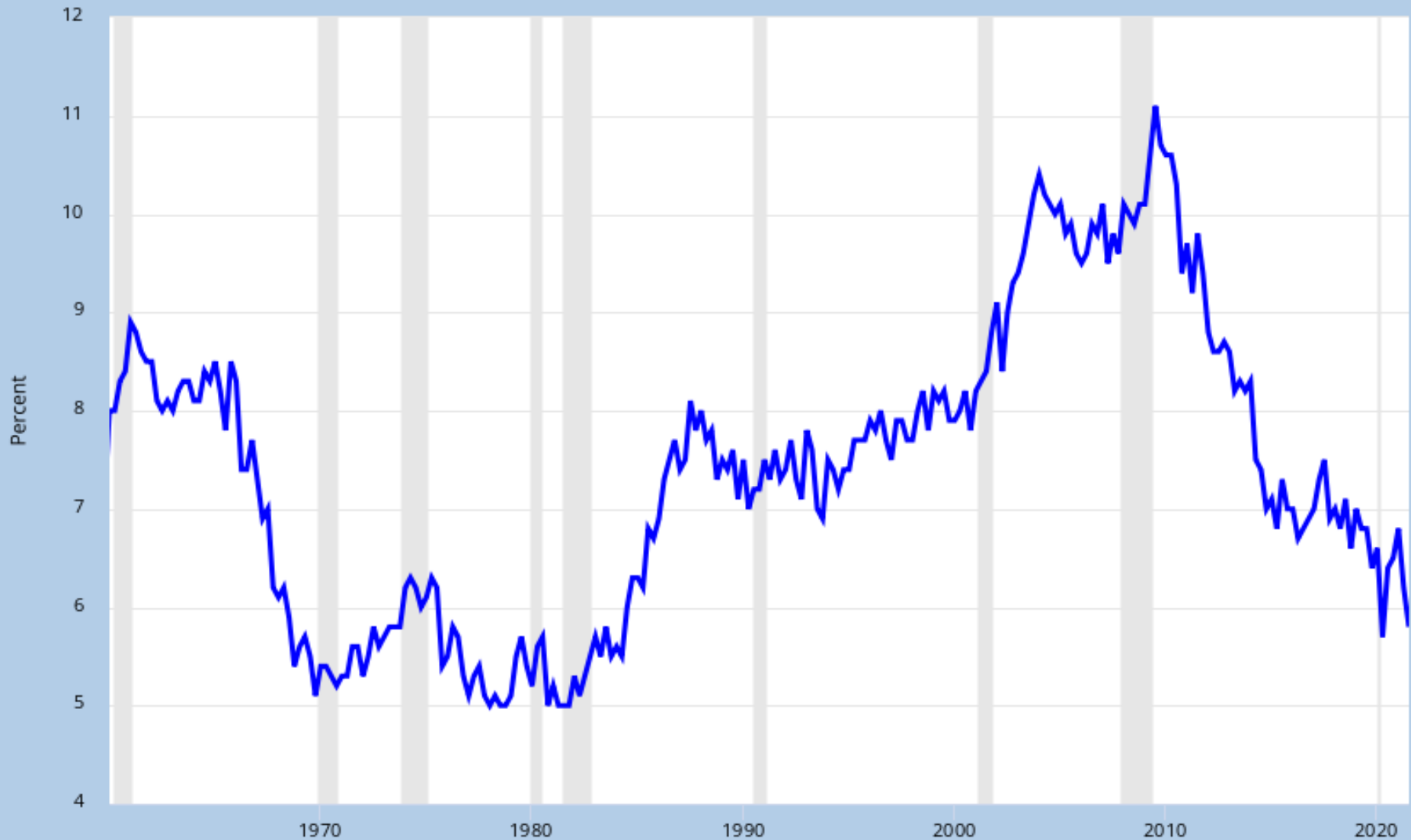
U.S. Population by Age, 2019 Census Estimate



Apartment Vacancy Rates

Rental vacancy rates look to be bottoming near 40-year lows

FRED  Rental Vacancy Rate in the United States



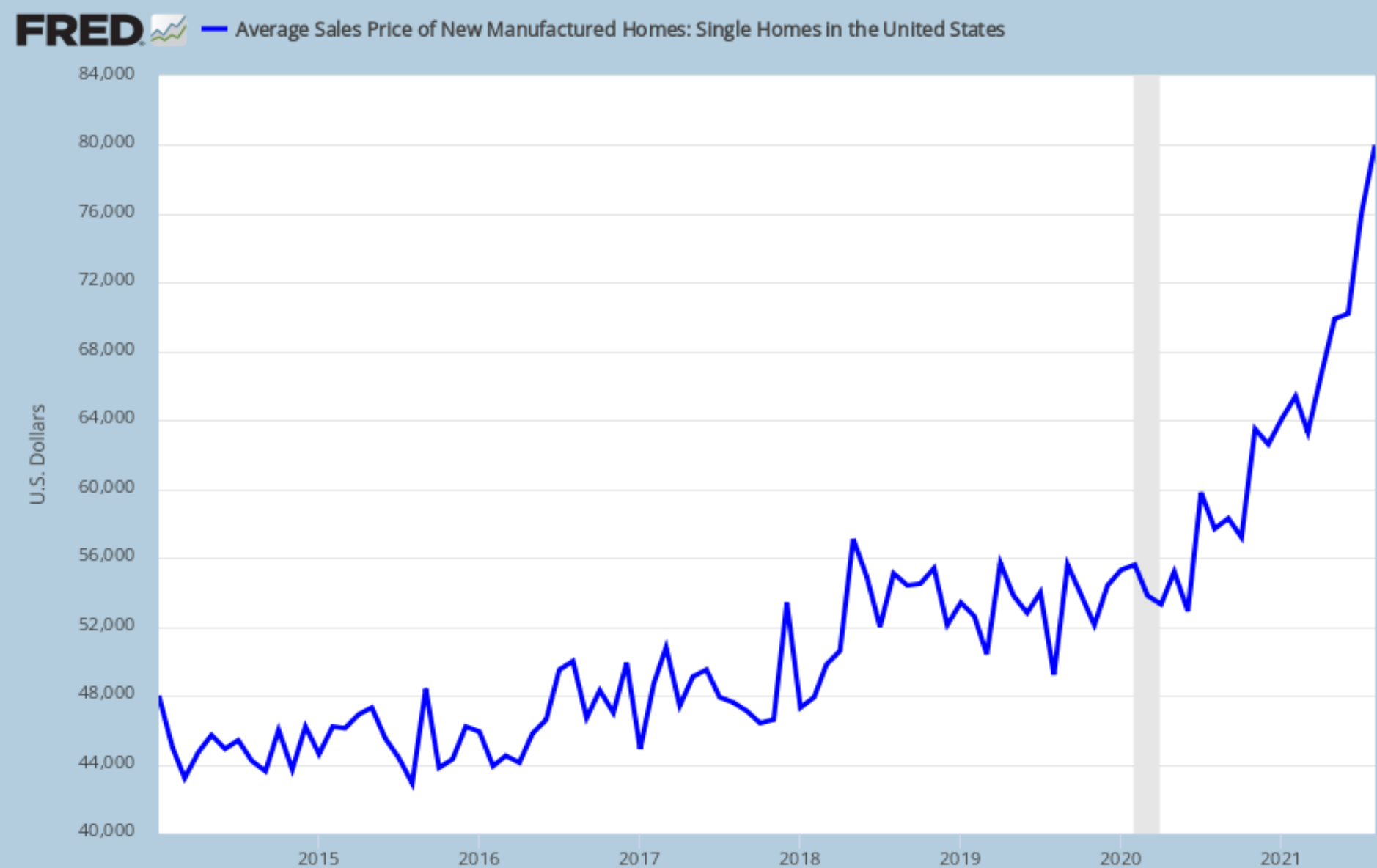
Shaded areas indicate U.S. recessions.

Source: U.S. Census Bureau

myf.red/g/luz8

Mobile Home Prices are Surging

Is this because home prices are out of reach? Supply-chain issues?



Shaded areas indicate U.S. recessions.

Source: U.S. Census Bureau

myf.red/g/KKzC

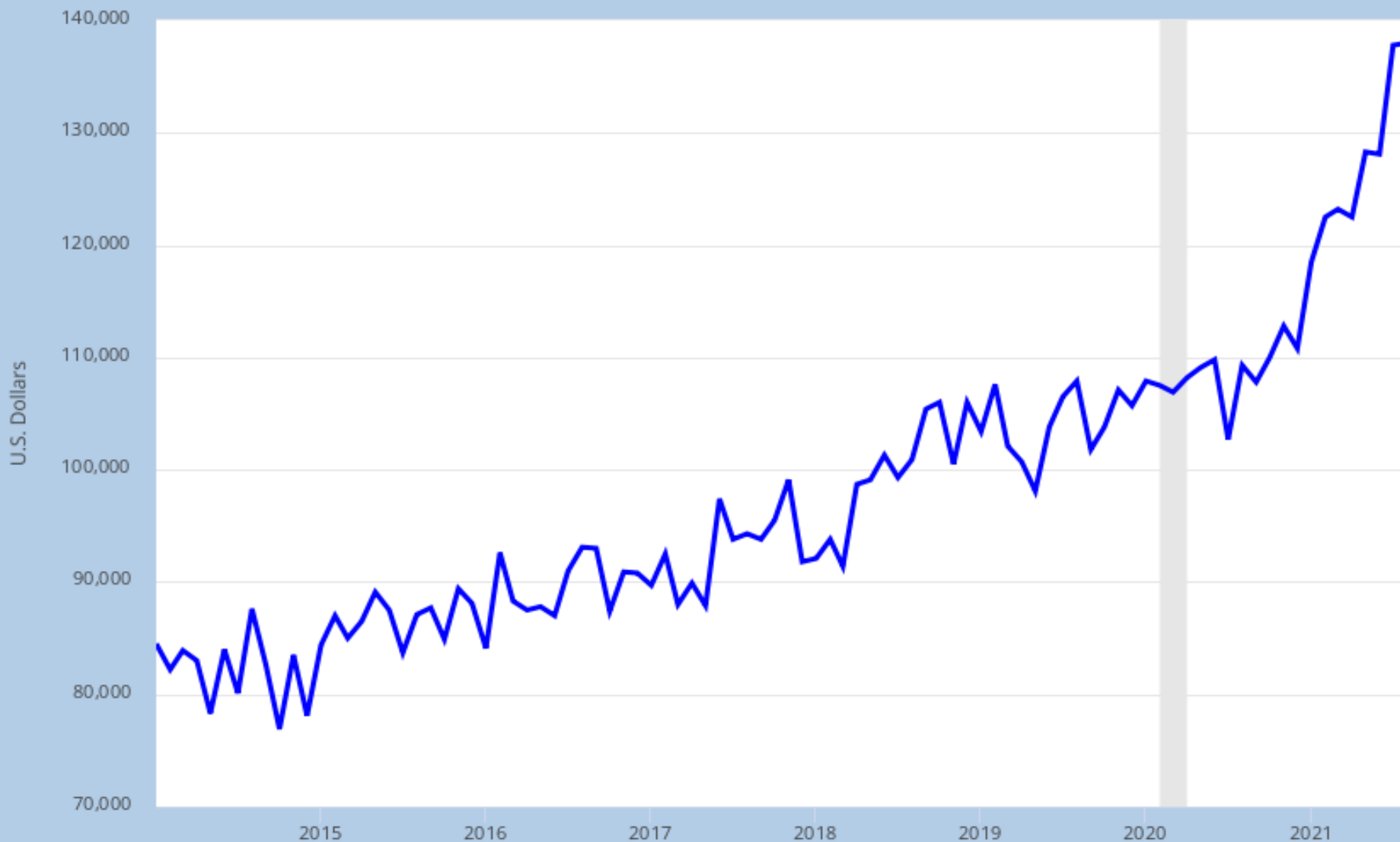
Double-Wide Mobile Home Prices are Surging

Is this because home prices are out of reach? Supply-chain issues?

FRED



— Average Sales Price of New Manufactured Homes: Double Homes in the United States



Shaded areas indicate U.S. recessions.

Source: U.S. Census Bureau

myf.red/g/KKzV

**What About
Things Here?**

Retirement Destinations

Moving Florida is #1, CA is #2 and TX is #3

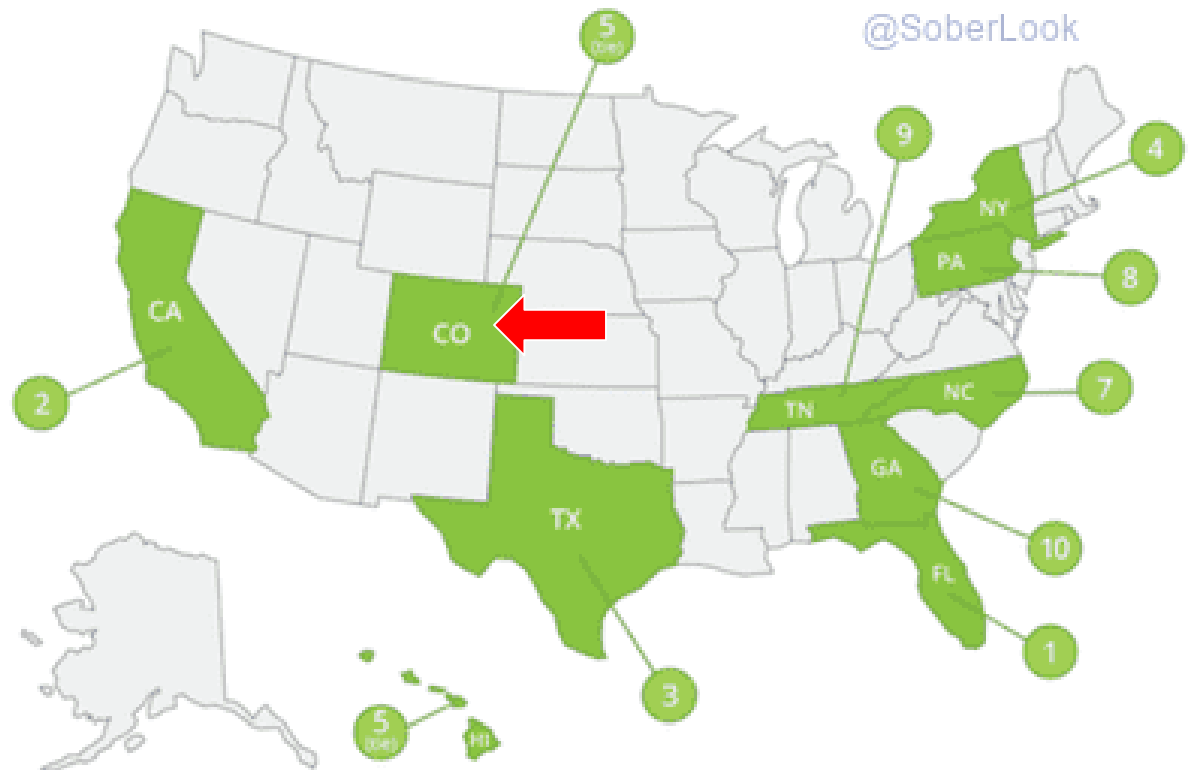
Where Americans most want to retire in the U.S.

Reported on
The Daily Shot

22-Nov-2021

@SoberLook

- 1 Florida
- 2 California
- 3 Texas
- 4 New York
- 5 Hawaii (tie)
- 5 Colorado (tie)
- 7 North Carolina
- 8 Pennsylvania
- 9 Tennessee
- 10 Georgia



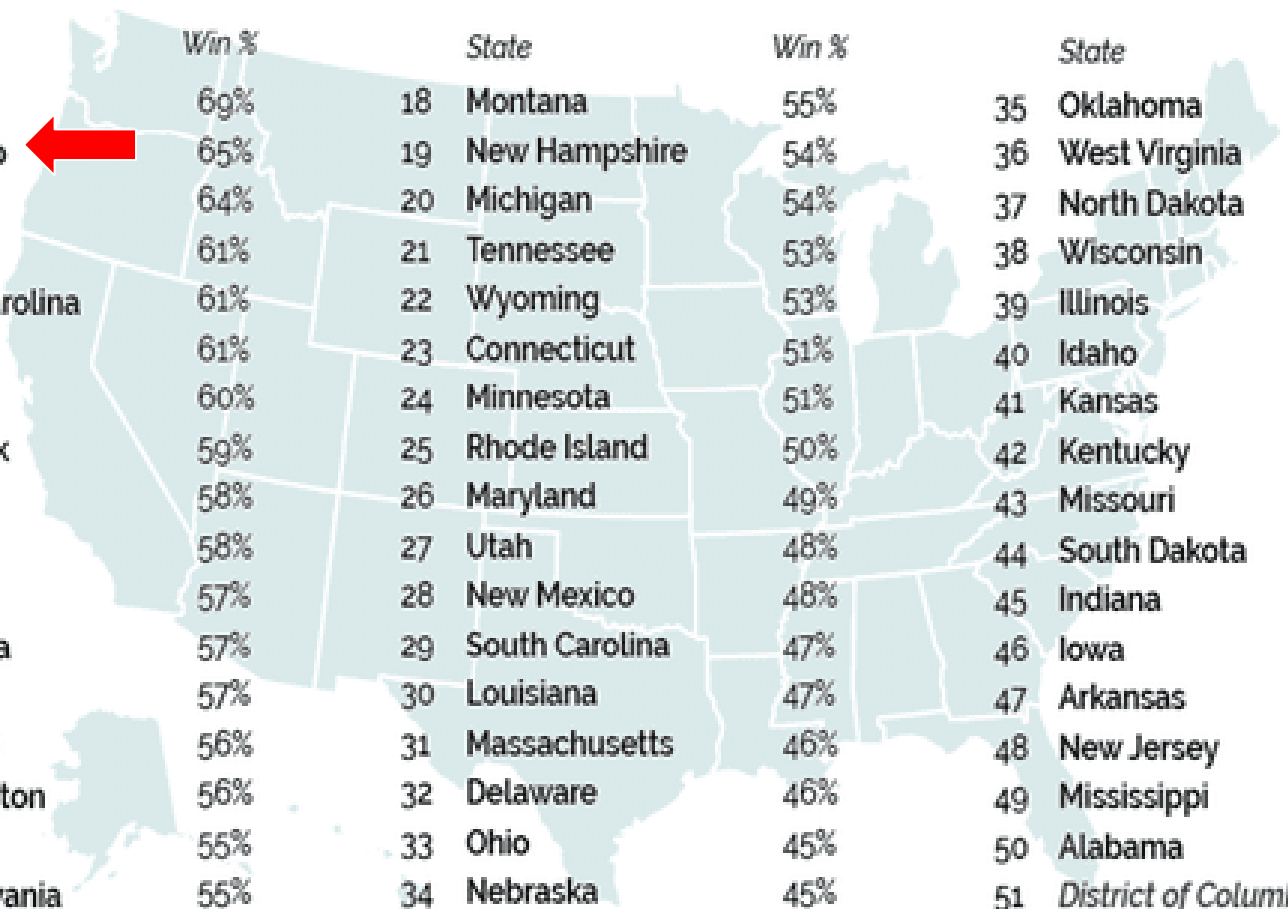
Source: MagnifyMoney survey of 1,783 consumers who want to retire in the U.S., conducted Sept. 23-30, 2021.

States Ranked by Popularity

California is #12

US states: ranked, according to Americans

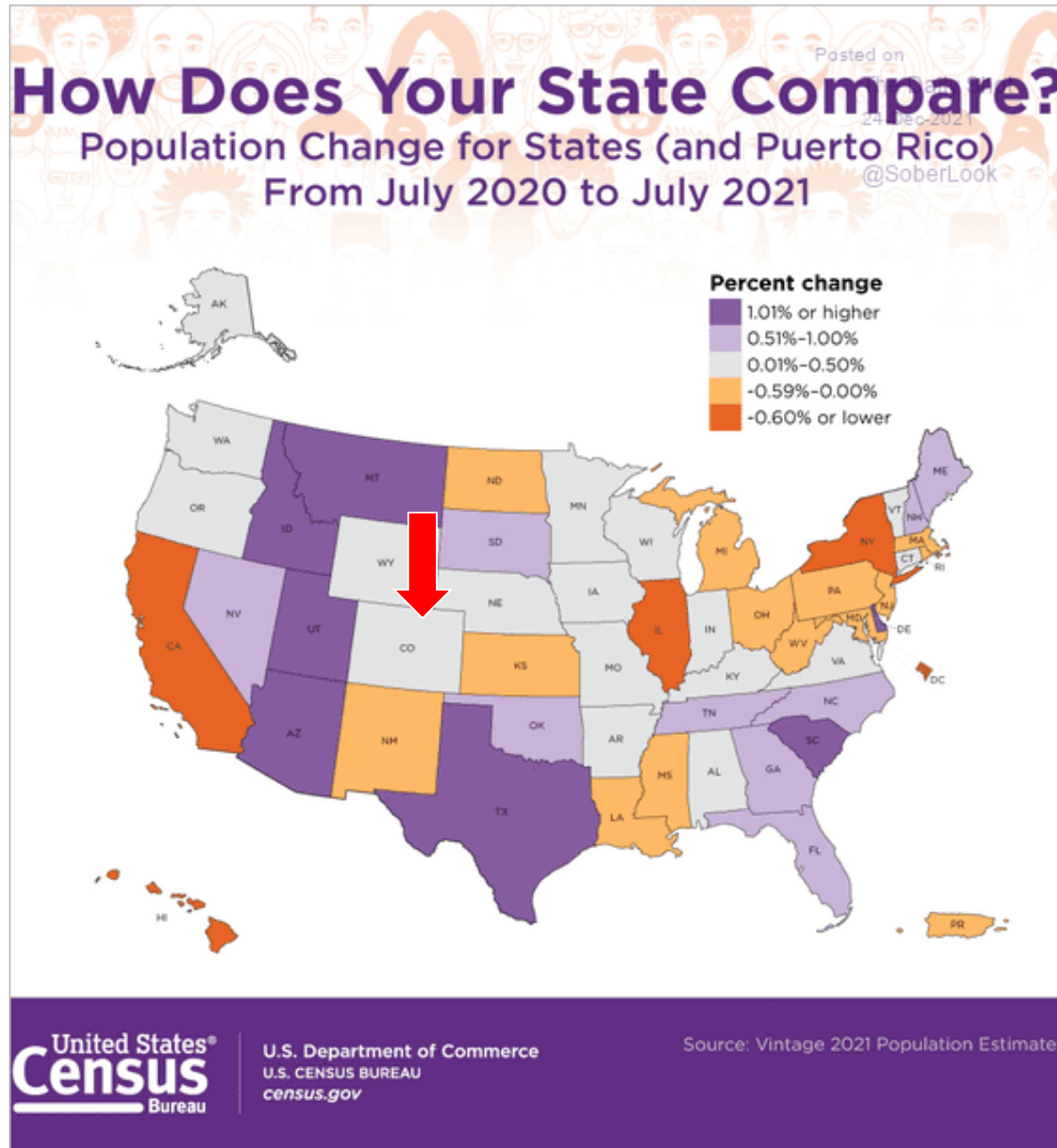
Respondents were asked to choose the better of two states from a list of the 50 states and Washington, D.C. in a series of head-to-head match-ups. Figures shown is the percentage of times each state won their match-up.



State	Win %	State	Win %	State	Win %
1 Hawaii	69%	18 Montana	55%	35 Oklahoma	45%
2 Colorado	65%	19 New Hampshire	54%	36 West Virginia	45%
3 Virginia	64%	20 Michigan	54%	37 North Dakota	44%
4 Nevada	61%	21 Tennessee	53%	38 Wisconsin	44%
5 North Carolina	61%	22 Wyoming	53%	39 Illinois	44%
6 Florida	61%	23 Connecticut	51%	40 Idaho	43%
7 Arizona	60%	24 Minnesota	51%	41 Kansas	42%
8 New York	59%	25 Rhode Island	50%	42 Kentucky	42%
9 Georgia	58%	26 Maryland	49%	43 Missouri	42%
10 Texas	58%	27 Utah	48%	44 South Dakota	40%
11 Maine	57%	28 New Mexico	48%	45 Indiana	40%
12 California	57%	29 South Carolina	47%	46 Iowa	39%
13 Alaska	57%	30 Louisiana	47%	47 Arkansas	39%
14 Vermont	56%	31 Massachusetts	46%	48 New Jersey	39%
15 Washington	56%	32 Delaware	46%	49 Mississippi	38%
16 Oregon	55%	33 Ohio	45%	50 Alabama	38%
17 Pennsylvania	55%	34 Nebraska	45%	51 District of Columbia	35%

Population Growth by State: 2020 - 2021

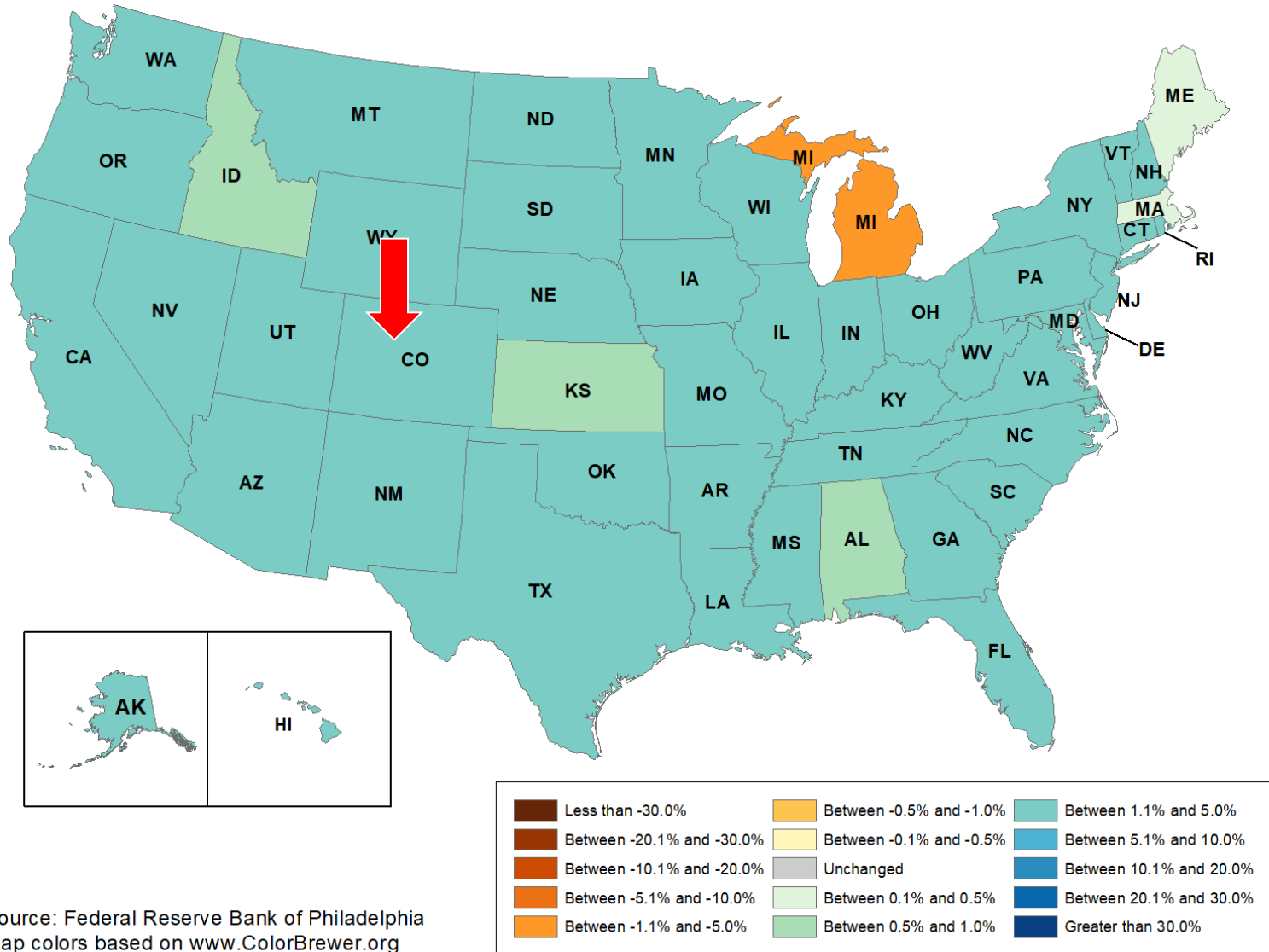
Best in Texas, the intermountain west and the South.



Things Are Definitely Improving

Growth is strong just about everywhere

November 2021 State Coincident Indexes: Three-Month Change



KEY TAKE AWAYS

- 1) 2022 will be a good year!
- 2) The Fed will not raise rates till 22Q2
- 3) The US should create 4 million jobs!
- 4) Inflation should not be a problem, but....
- 5) Spending on services will rise

ANY QUESTIONS?

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www.econ70.com

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