

THE US ECONOMY: REMARKABLY RESILIENT, SO FAR

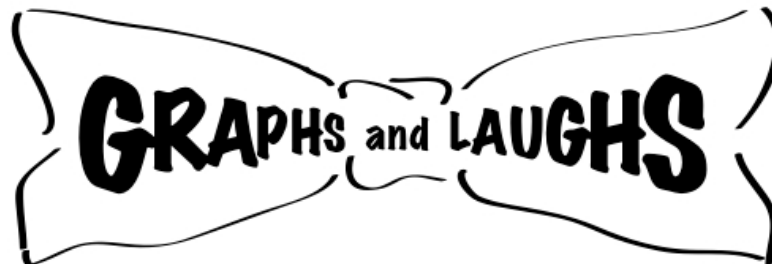
Presented by:

Elliot F. Eisenberg, Ph.D.

President: GraphsandLaughs, LLC

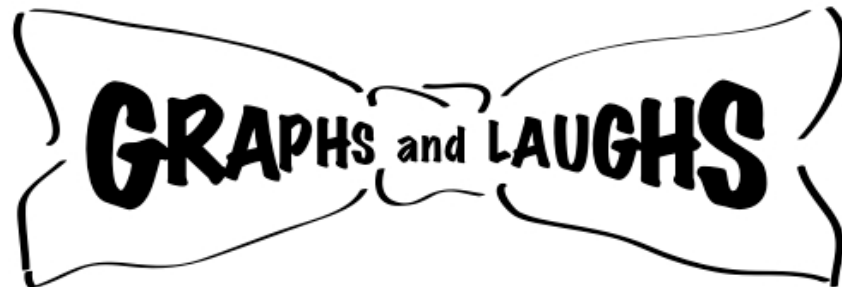
Novi, MID

June 27, 2024



The Economy Surprises

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

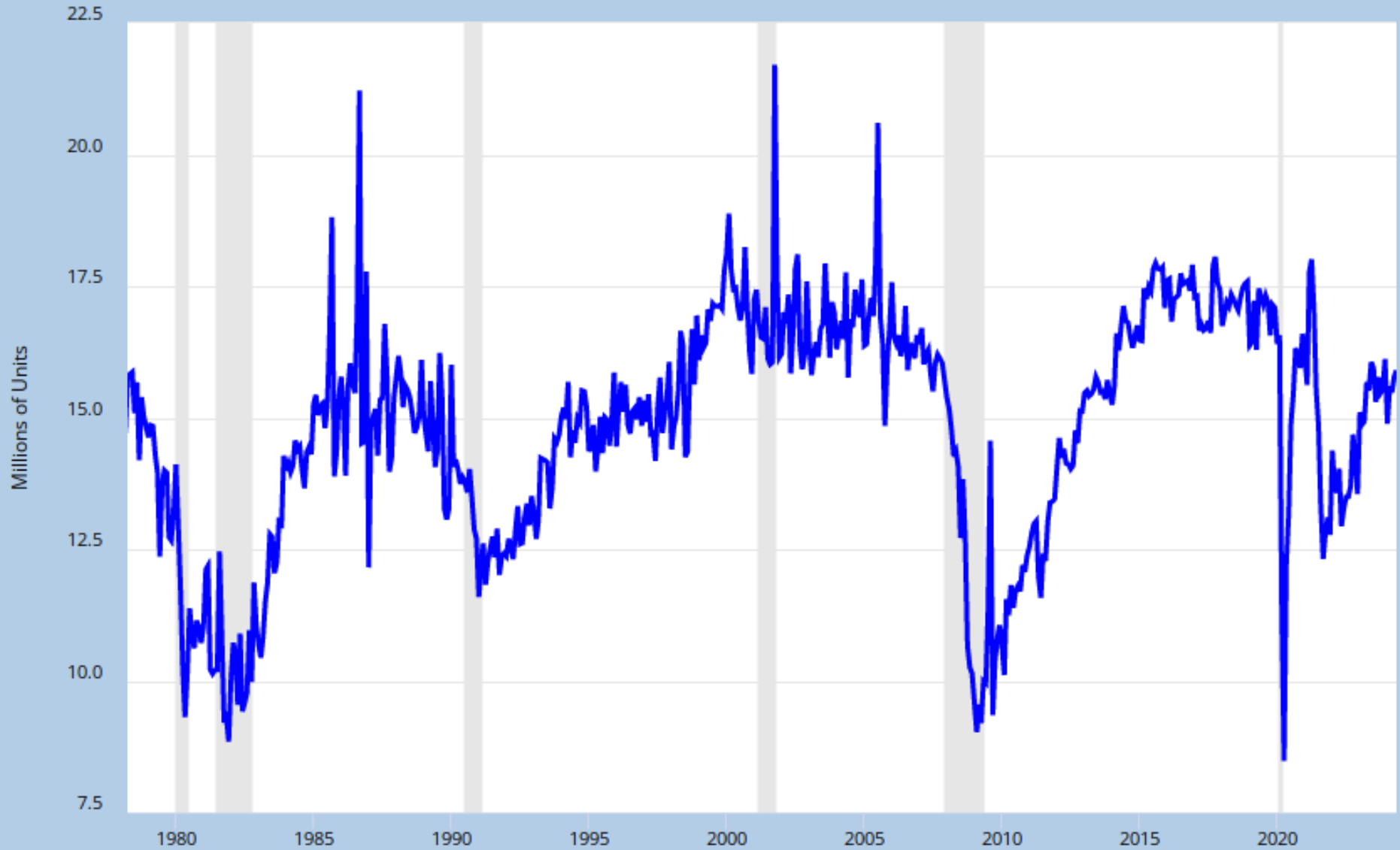


US Light Vehicle Sales

Chip shortages are not a problem. But now rates are

FRED 

— Light Weight Vehicle Sales: Autos and Light Trucks

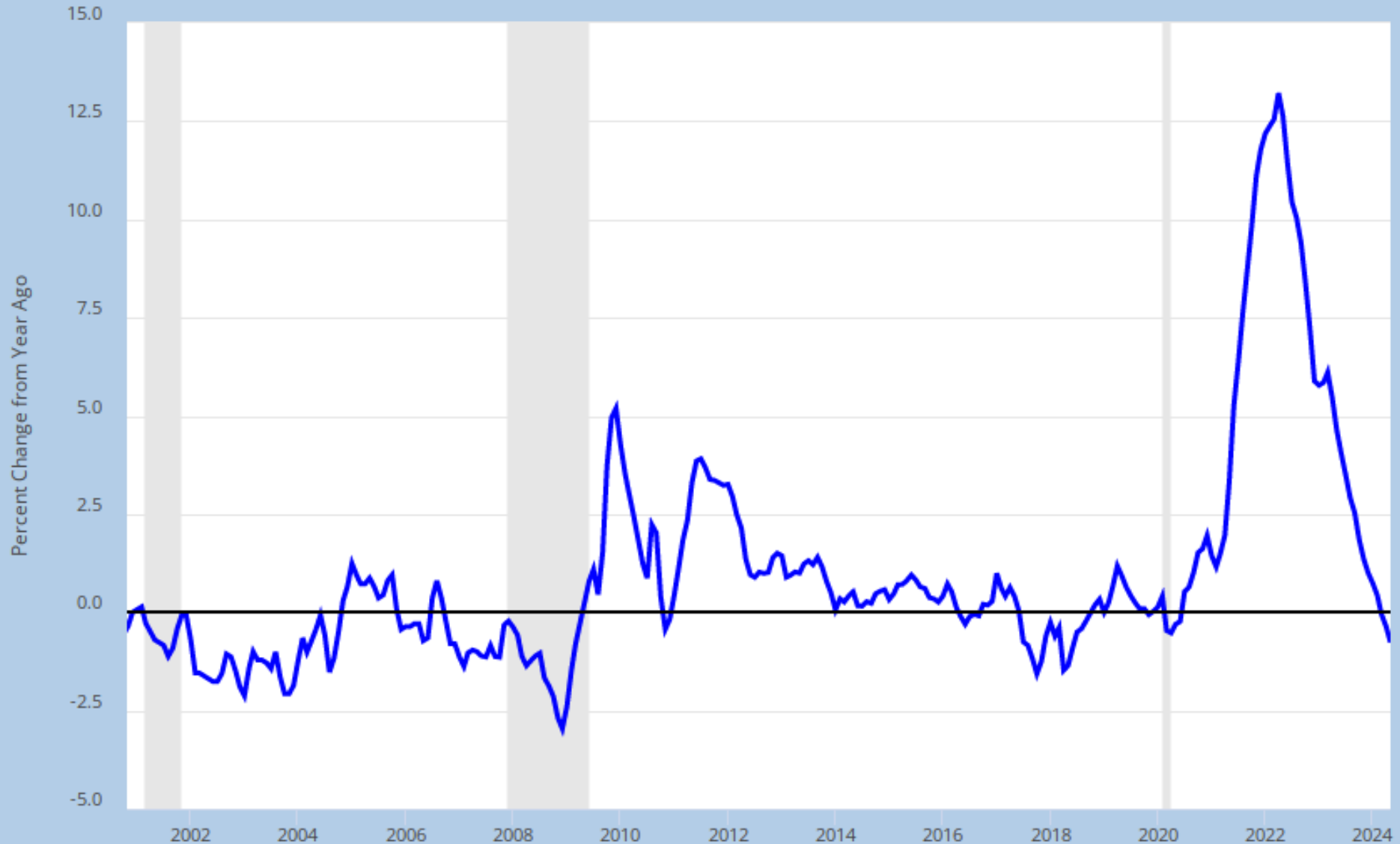


New Auto Prices

Inventories are improving, and prices are now falling



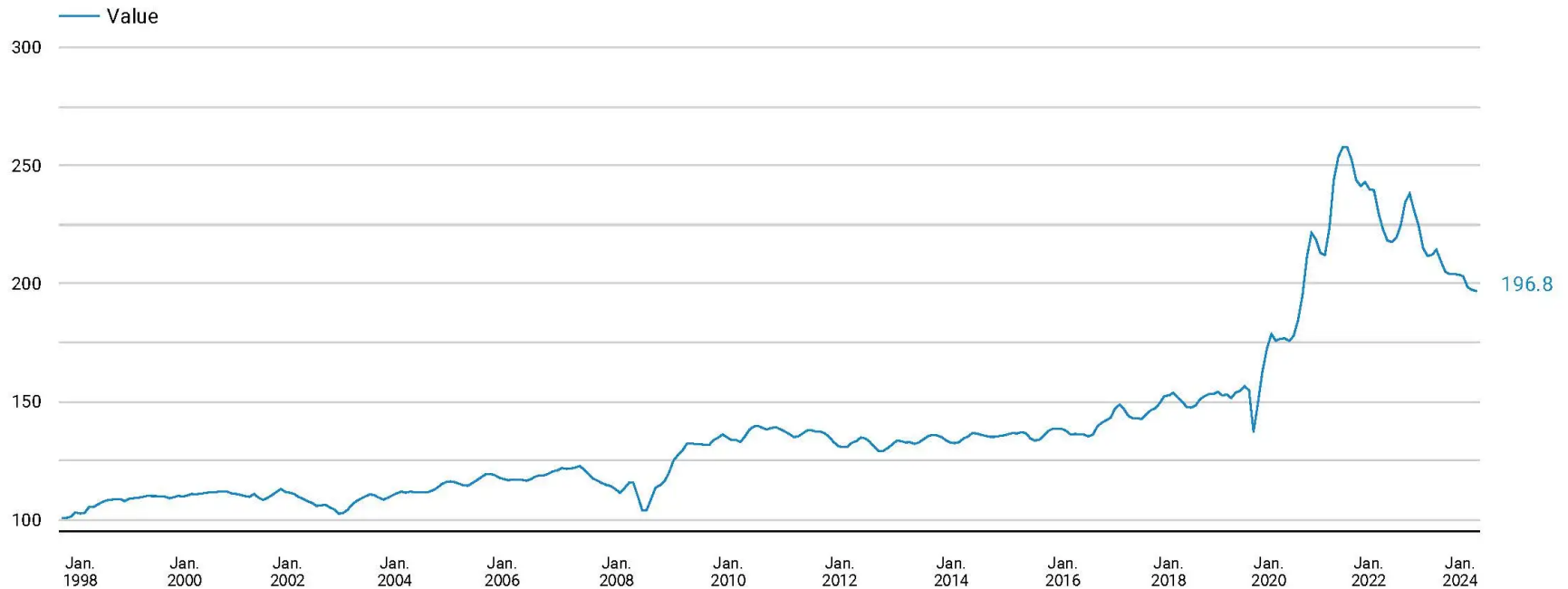
— Consumer Price Index for All Urban Consumers: New Vehicles in U.S. City Average



Used Cars Prices

They are now clearly declining. Peak was 12/21 at 257.7. Prices are down 8.5% Y-o-Y

MANHEIM USED VEHICLE VALUE INDEX
Mid-June 2024



Cox
AUTOMOTIVE



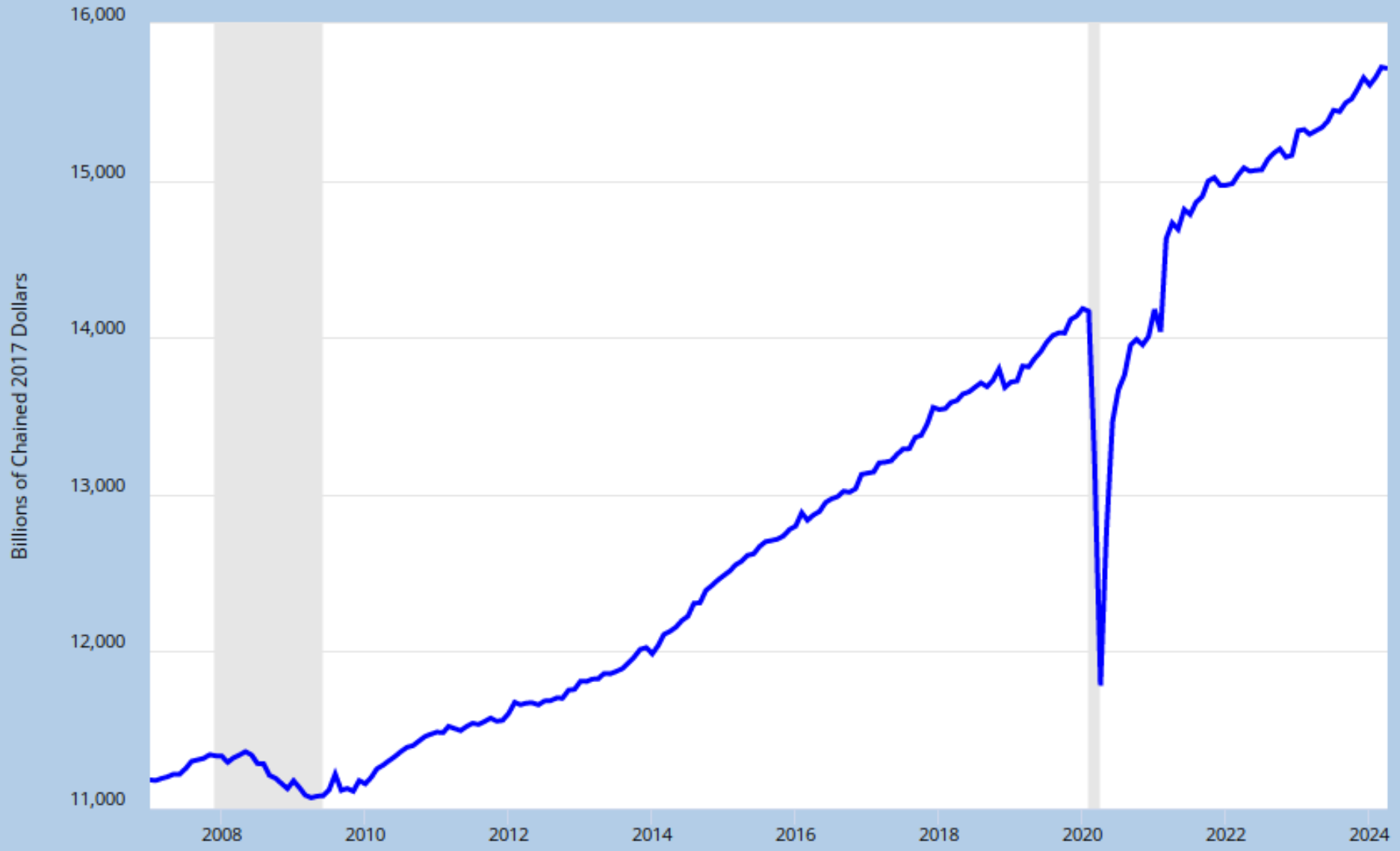
Manheim
by Cox Automotive

Real Personal Consumption Expenditures

It remains on trend, keeping the economy growing, and frustrating the Fed

FRED 

— Real Personal Consumption Expenditures



Source: U.S. Bureau of Economic Analysis

myf.red/g/1oIGd

Real Disposable Personal Income

It is above pre-Covid, but well below trend and growing very slowly

FRED



Real Disposable Personal Income

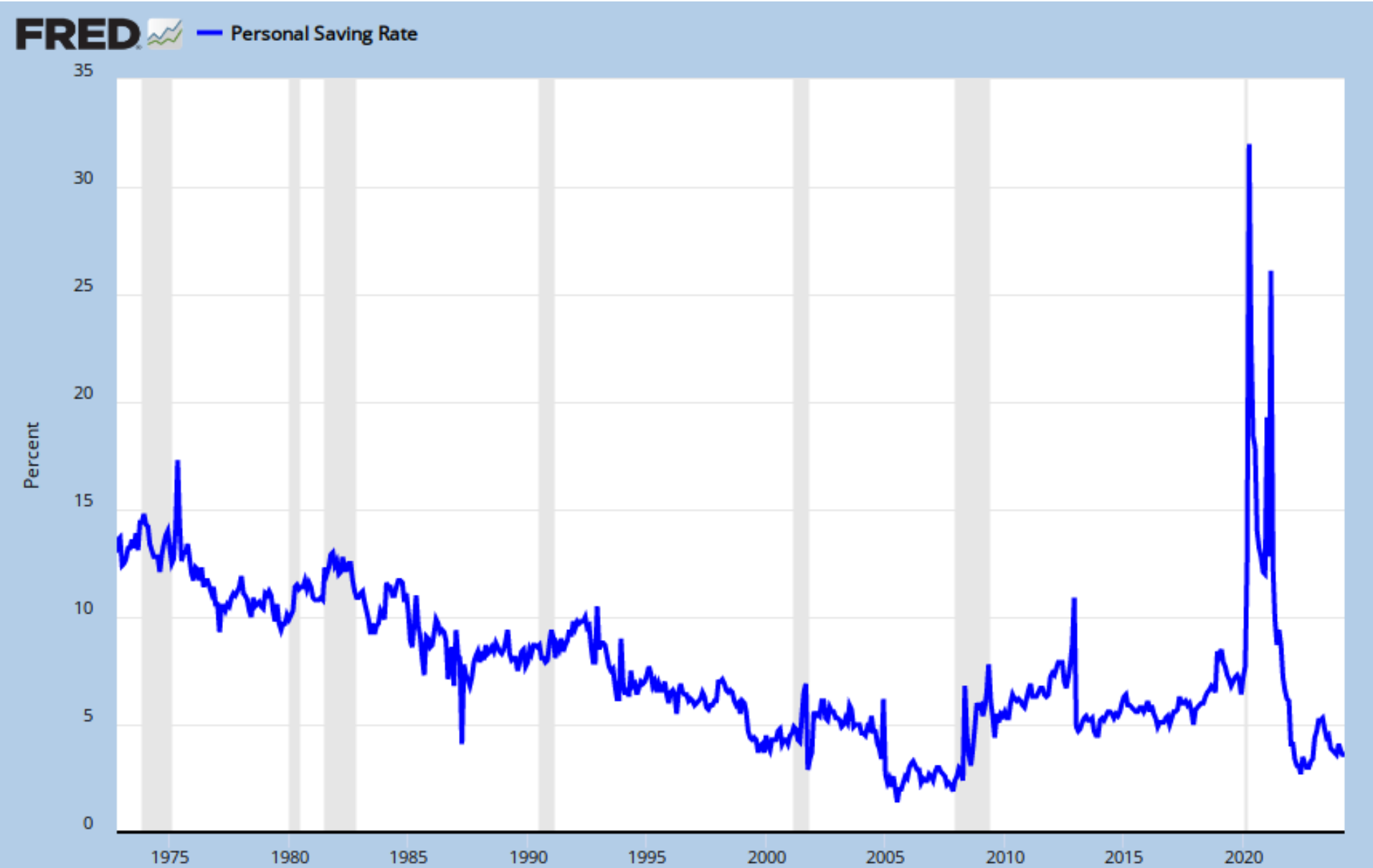


Source: U.S. Bureau of Economic Analysis

myf.red/g/1oIFW

Household Savings Rate

It is profoundly low, at 3.6%

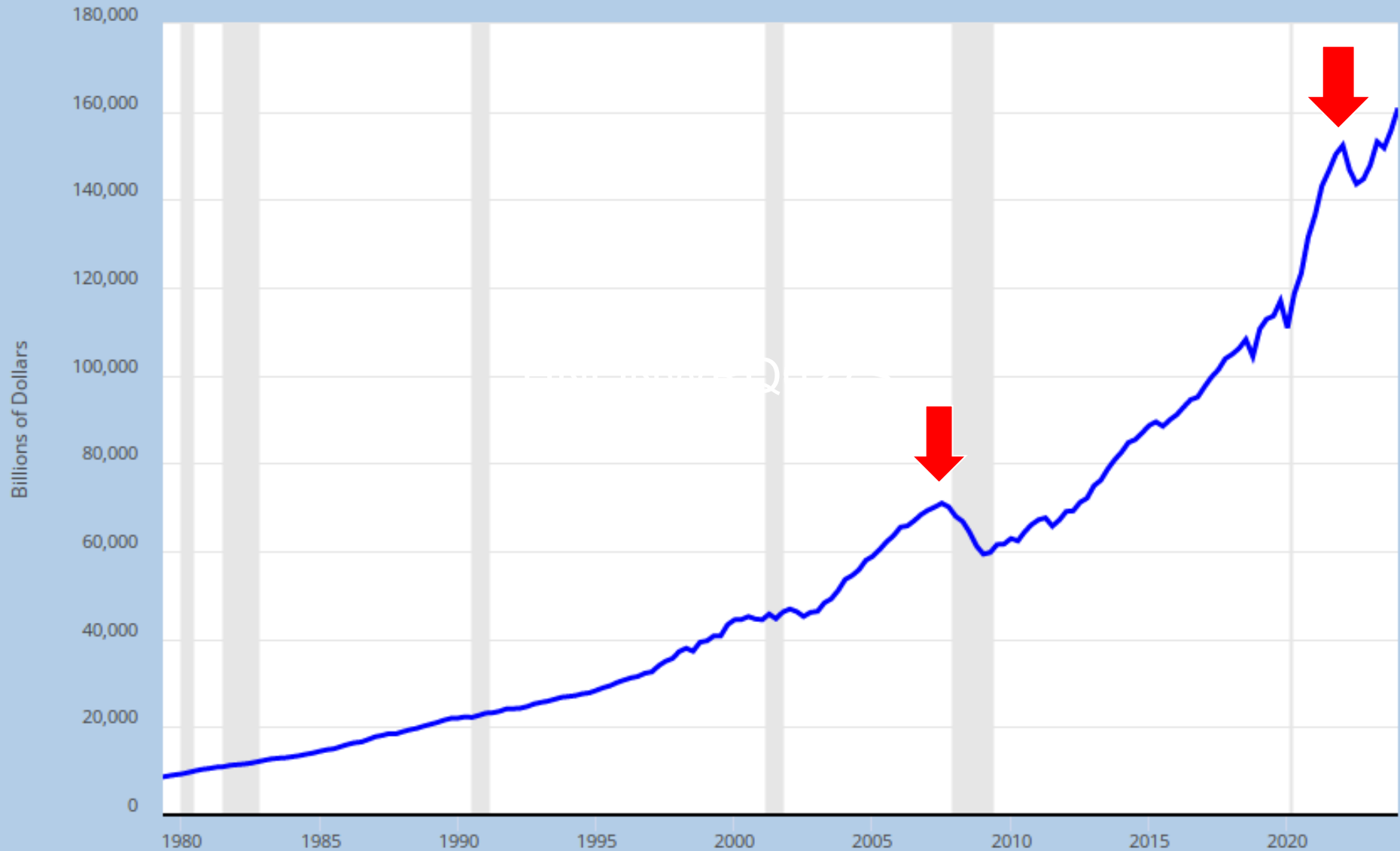


Household Balance Sheets

Growth in Household net worth has returned to trend

FRED 

— Households and Nonprofit Organizations; Net Worth, Level



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

myf.red/g/1oRll

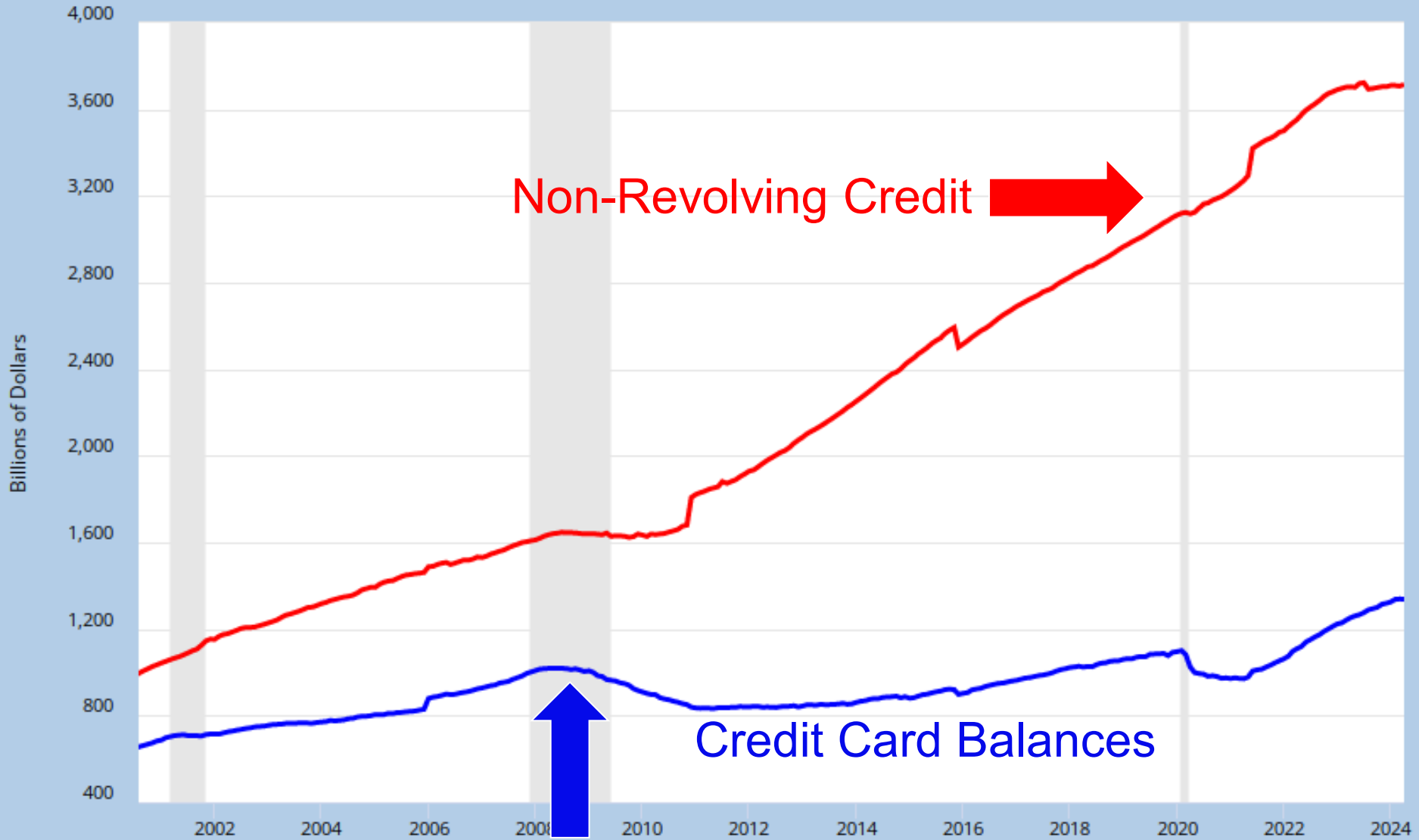
Non-Revolving Credit Growth Slows

Revolving credit is well above its pre-Covid trend, but is slowing

FRED

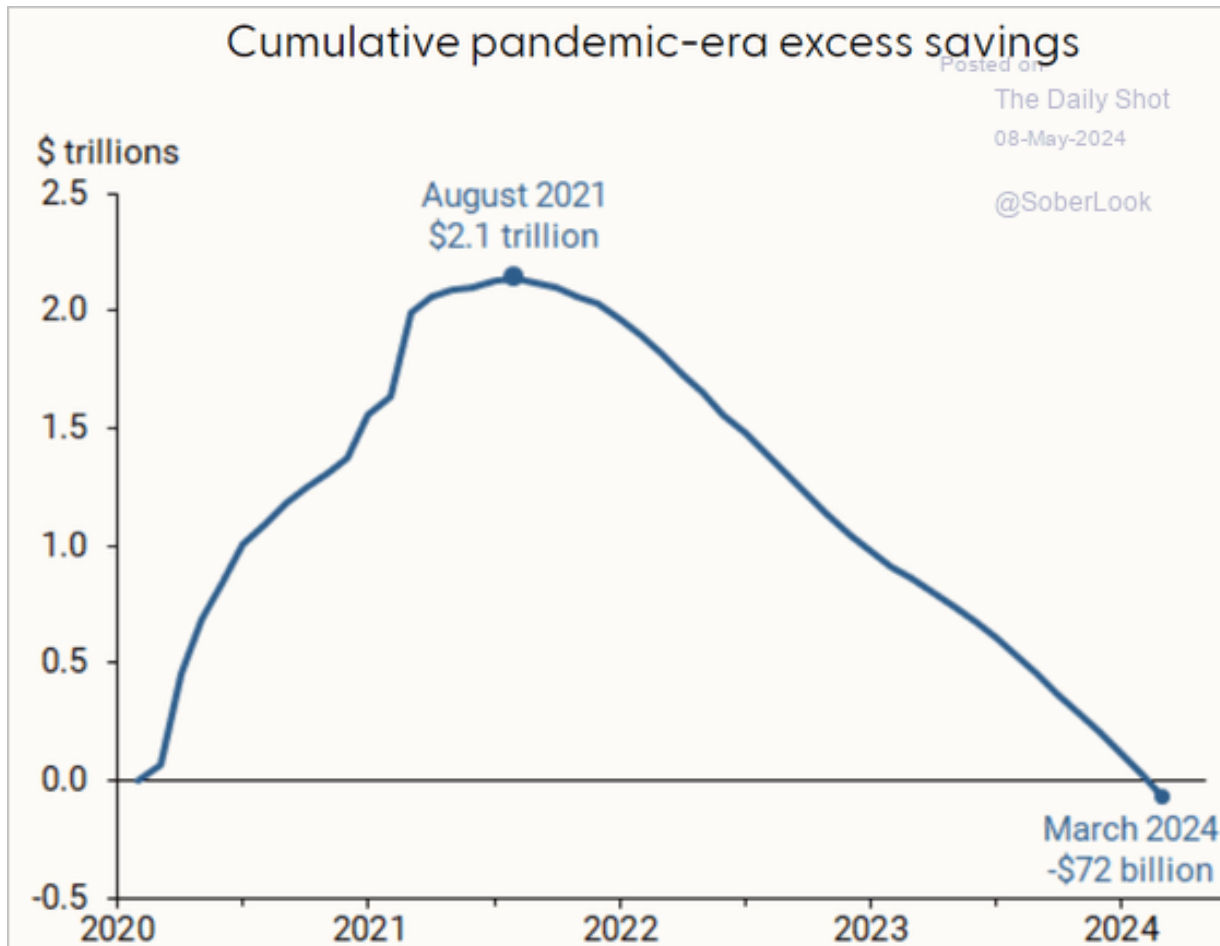


- Revolving Consumer Credit Owned and Securitized
- Nonrevolving Consumer Credit Owned and Securitized



Household Covid Savings

It is all gone



Note: Excess savings calculated as the accumulated difference in actual de-annualized personal savings and the trend implied by data for the 48 months leading up to the first month of the 2020 recession as defined by the National Bureau of Economic Research.

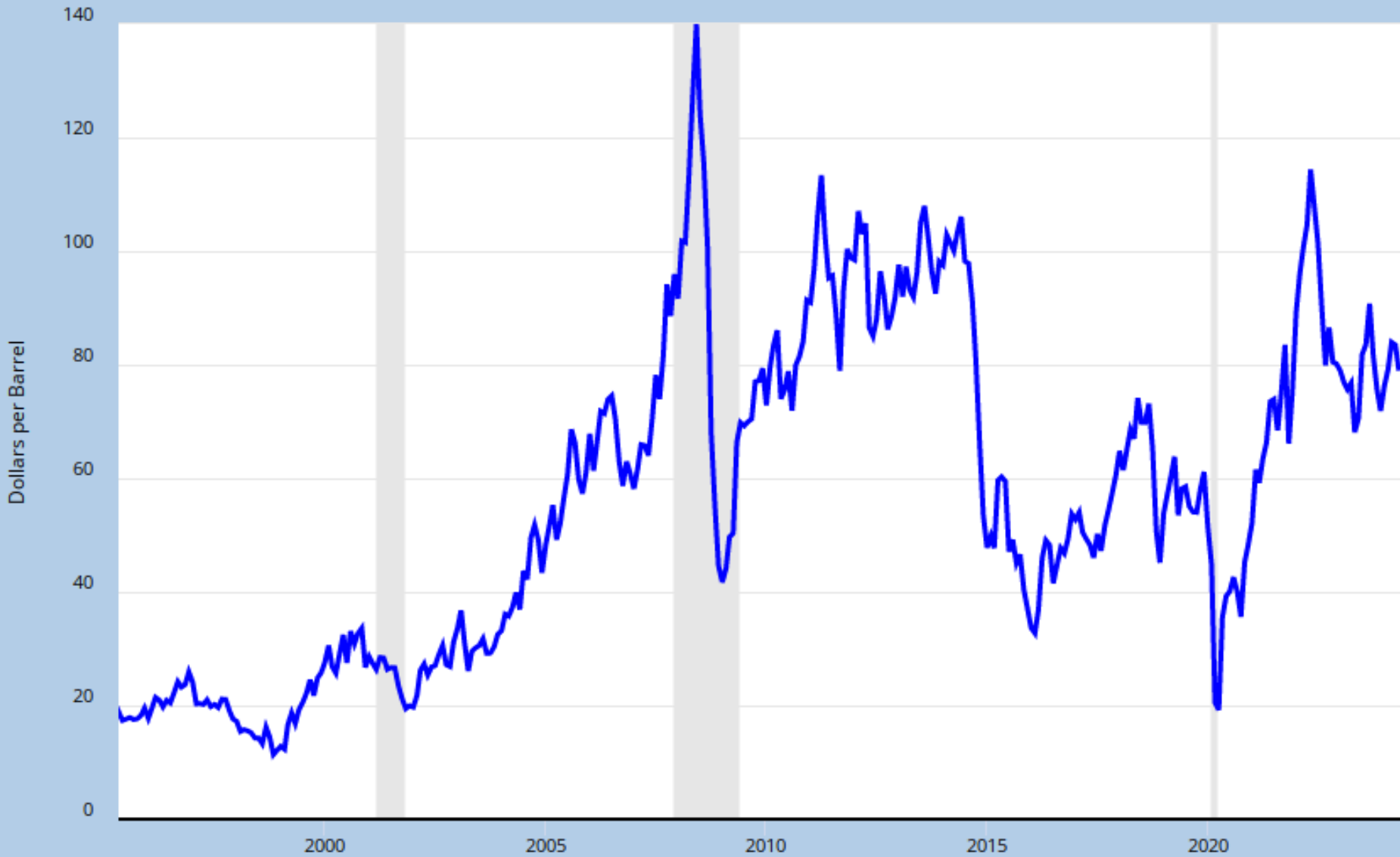
Source: Bureau of Economic Analysis and authors' calculations.

Oil Prices Stabilize

Production cuts from OPEC+ but production increases elsewhere



— Crude Oil Prices: West Texas Intermediate (WTI) - Cushing, Oklahoma

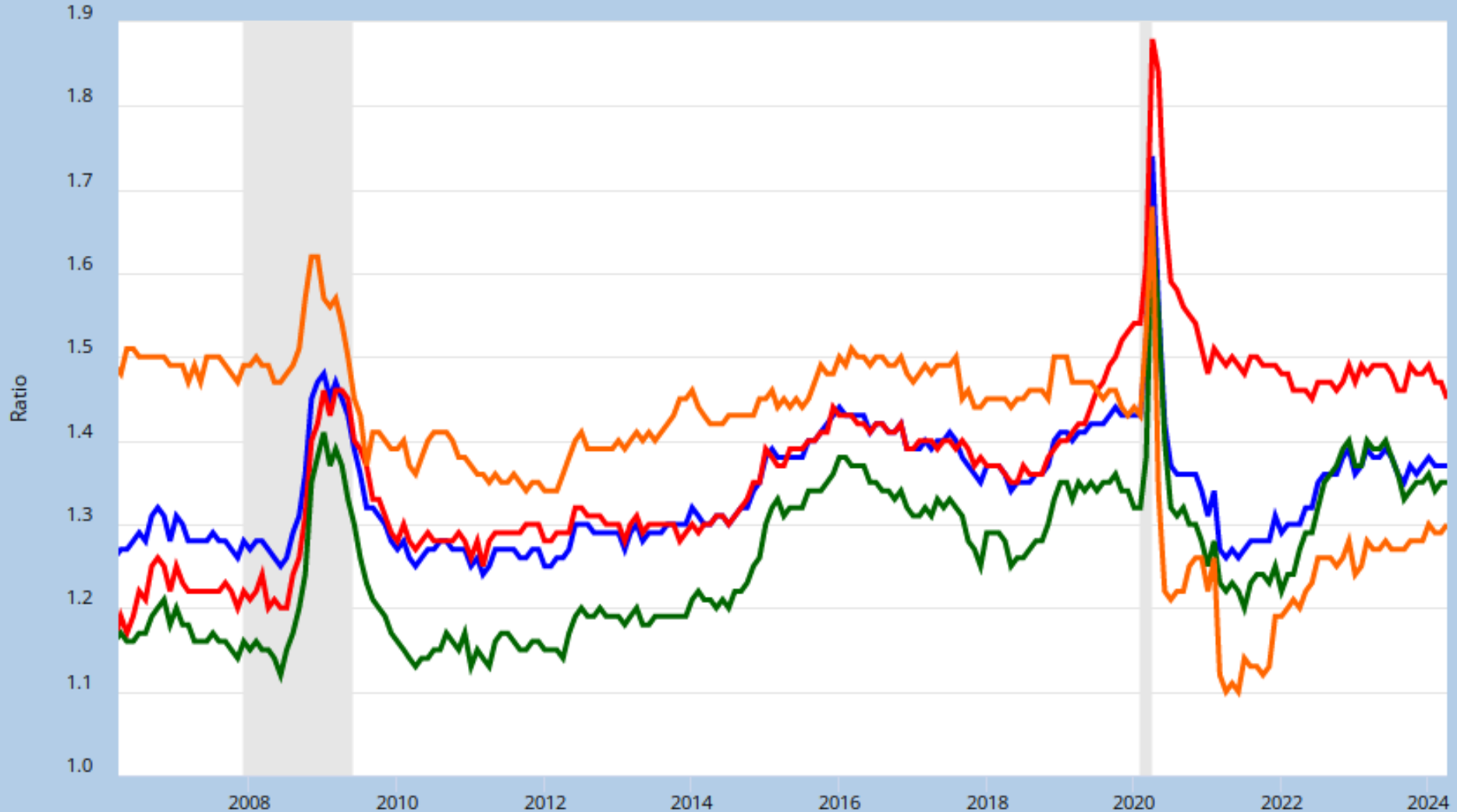


Inventory to Sales Ratios

Inventory ratios are approaching their new equilibria



- Total Business: Inventories to Sales Ratio
- Manufacturers: Inventories to Sales Ratio
- Merchant Wholesalers: Inventories to Sales Ratio
- Retailers: Inventories to Sales Ratio

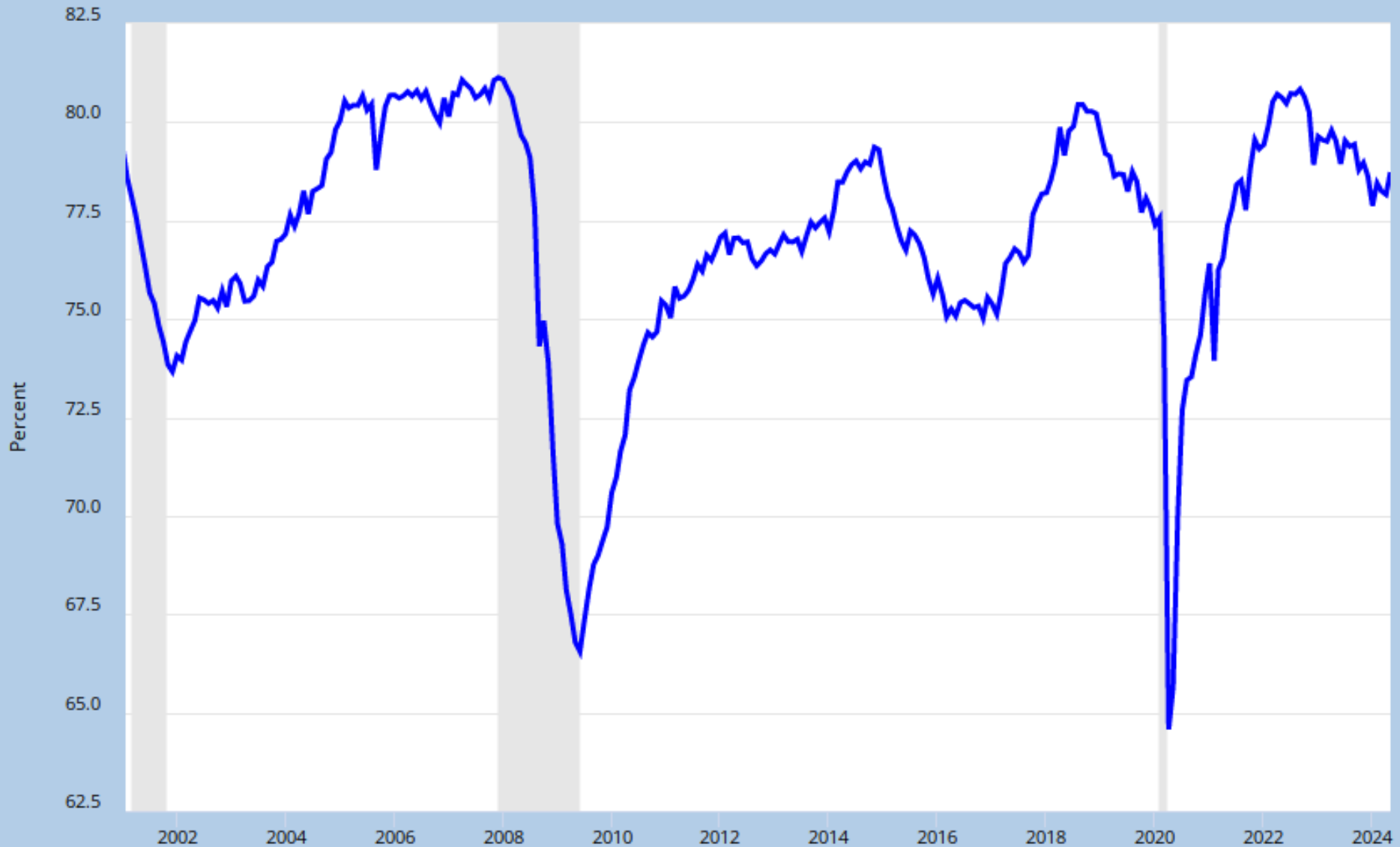


Capacity Utilization Rates Soften

Above pre-Covid levels, but now steadily weakening

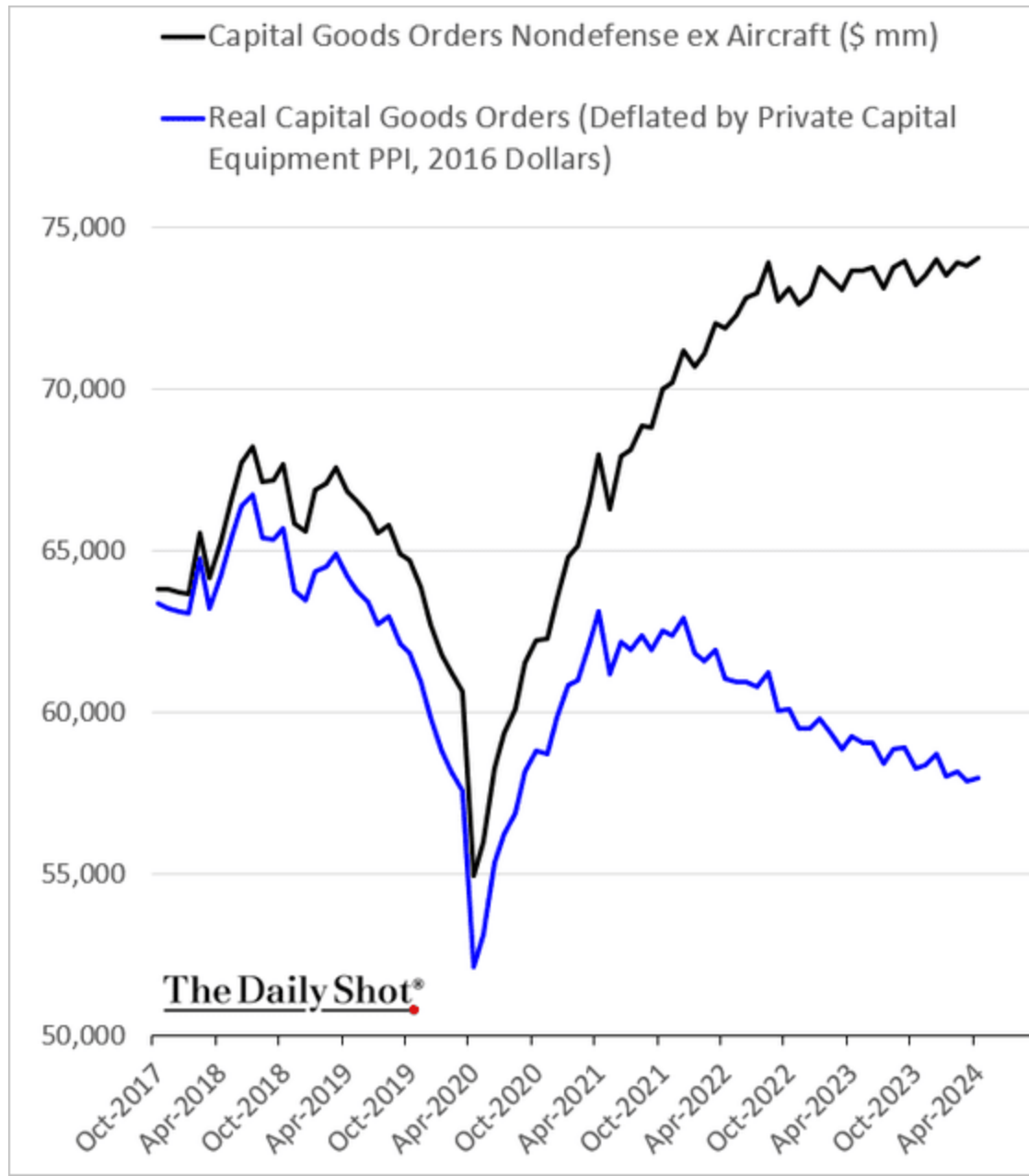
FRED 

— Capacity Utilization: Total Index



Real Capital Goods Orders

Firms are investing in IP. Think software and AI



Fiscal Policy Is Contractionary

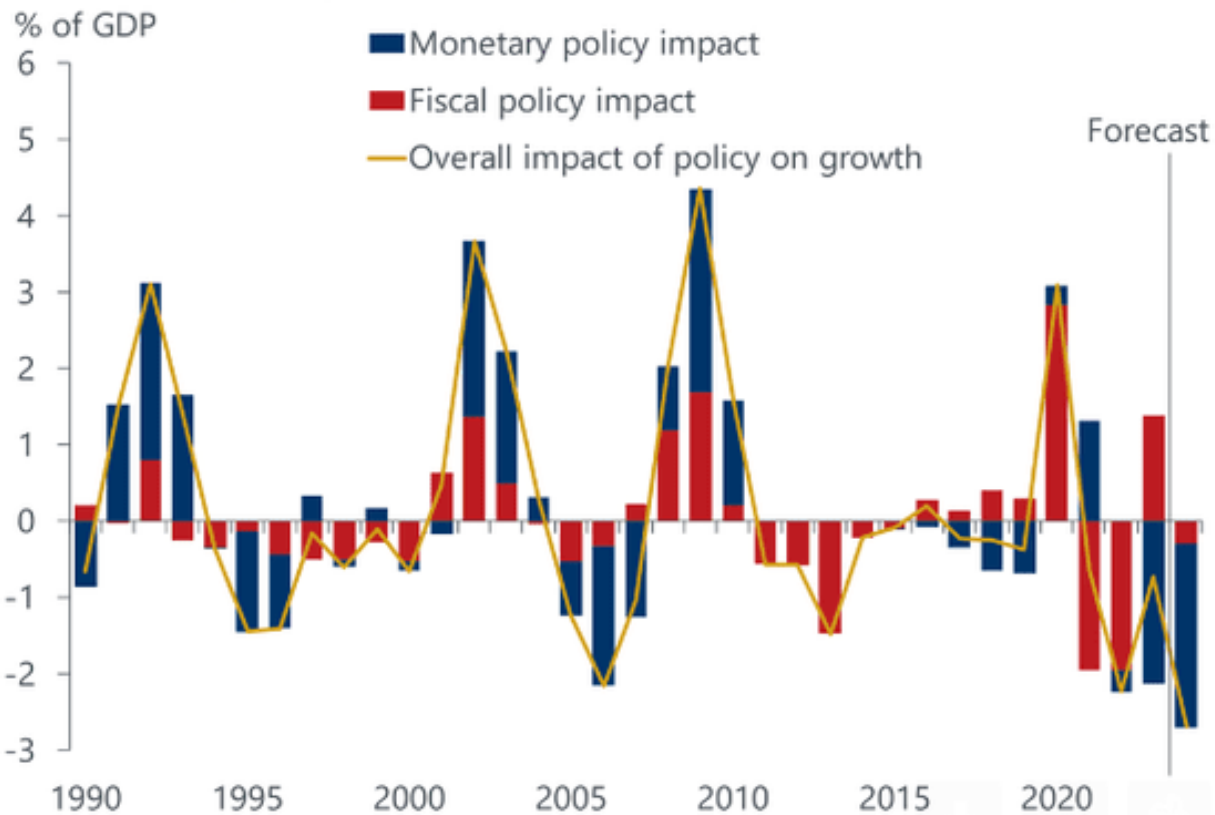
But look at monetary policy

Posted on
The Daily Shot
21-Nov-2023

Chart 1: Overall macroeconomic policy stance is set to tighten in 2024

@SoberLook

US: Macro policy is set to be more restrictive in 2024



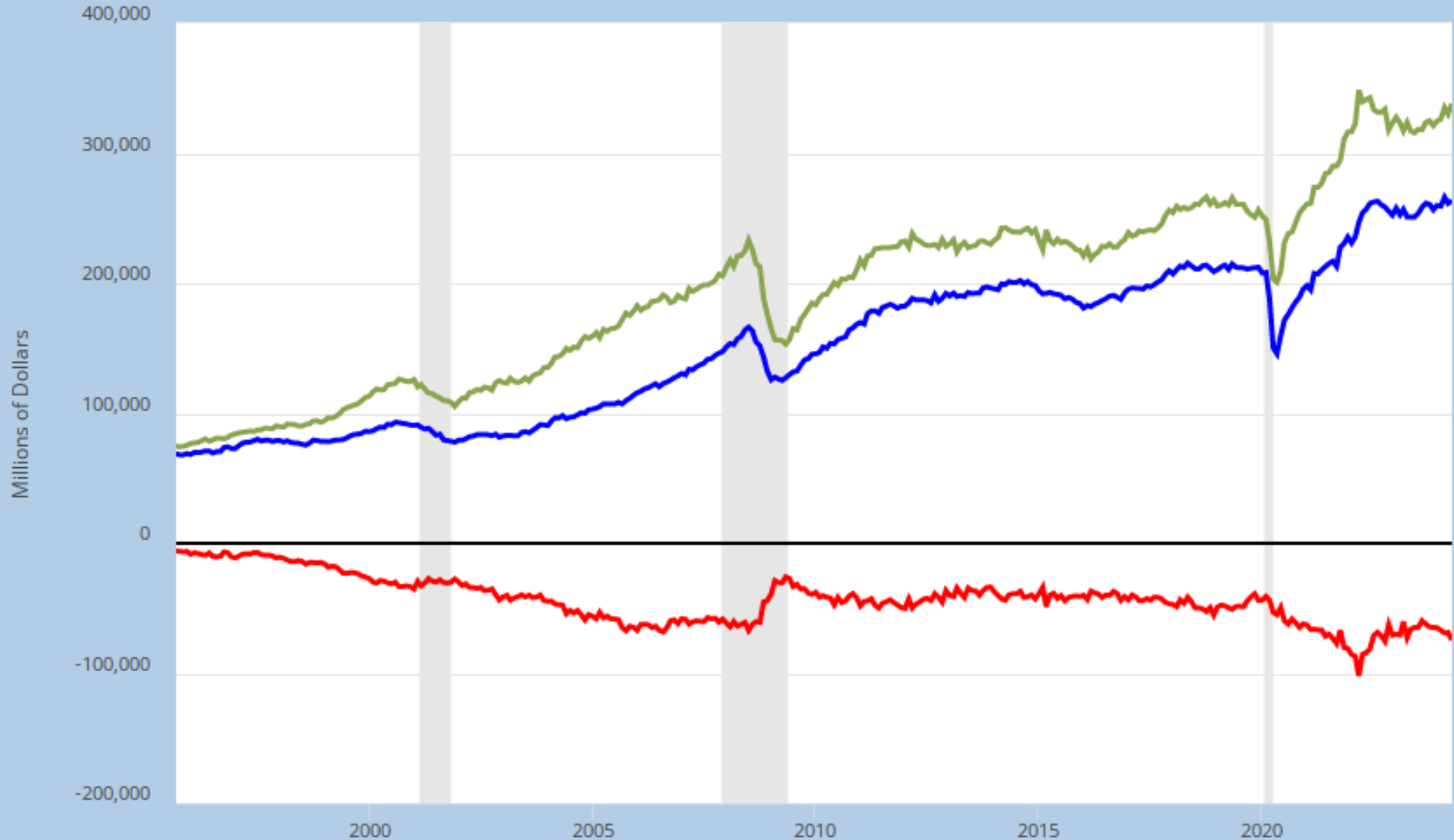
Source: Oxford Economics/Haver Analytics

The Trade Deficit Worsens

Imports are up and exports are flat

FRED 

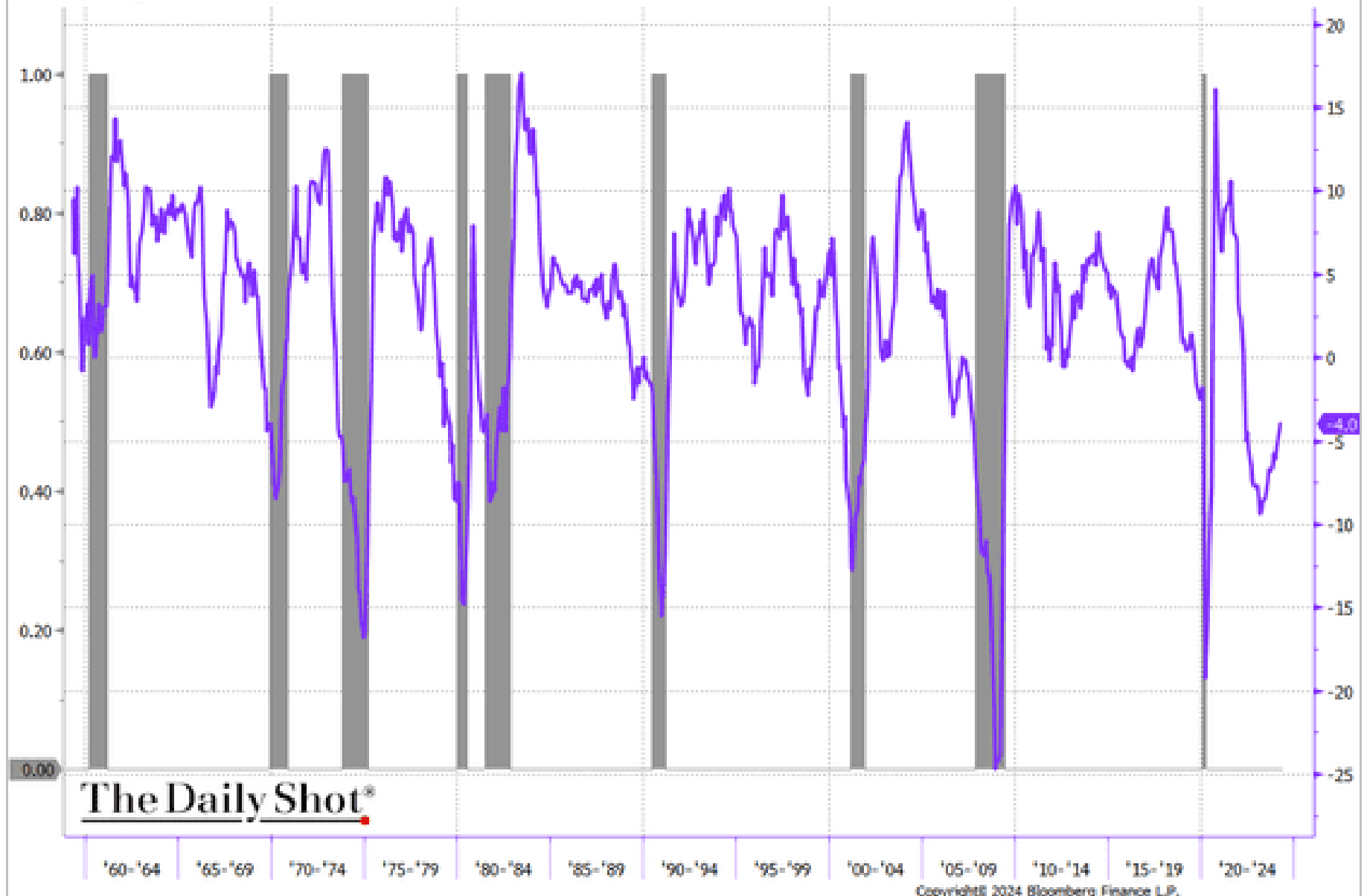
- Exports of Goods and Services, Balance of Payments Basis
- Trade Balance: Goods and Services, Balance of Payments Basis
- Imports of Goods and Services: Balance of Payments Basis



Conference Board Leading Economic Indicators

It is very low but rebounding

US Leading Index 6m/6m



The Daily Shot®

Loan Officers are Tightening Up

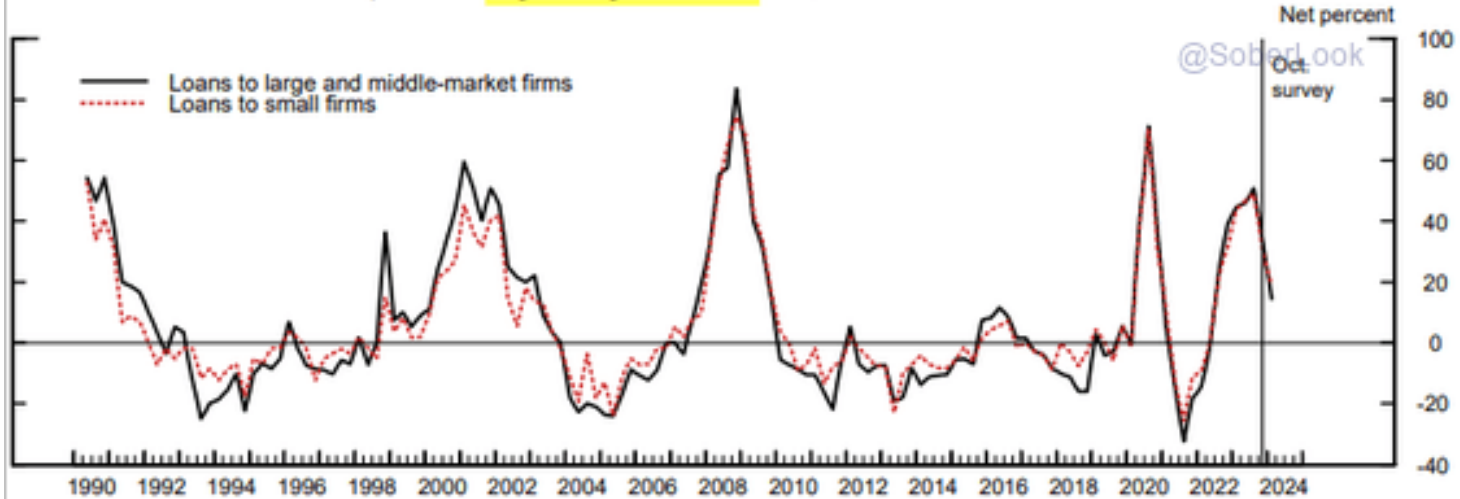
This is for C&I loans

Posted on
The Daily Shot

28 Feb-2024

@Soberlook
Oct. survey

Net Percent of Domestic Respondents **Tightening Standards** for Commercial and Industrial Loans



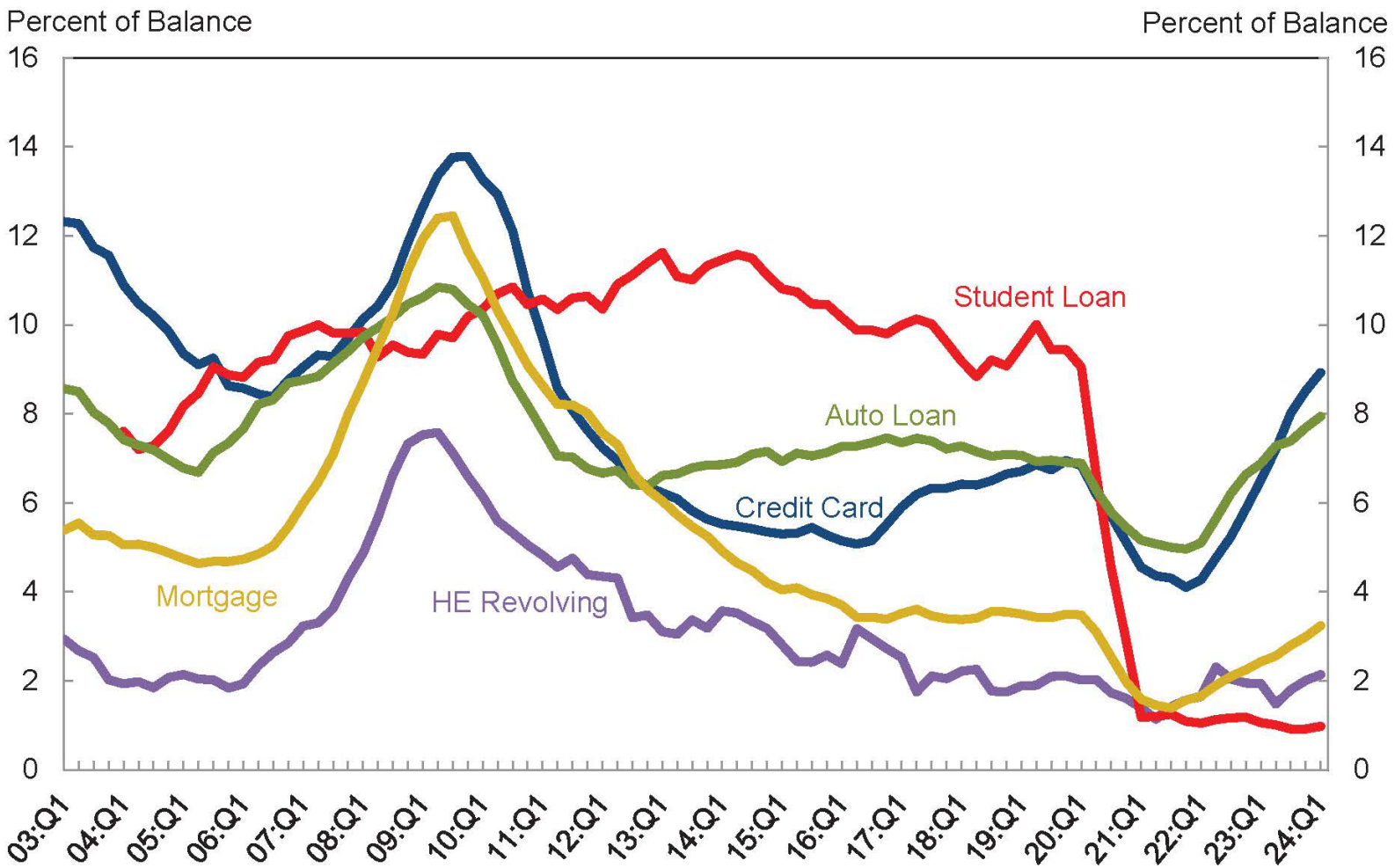
Net Percent of Domestic Respondents **Reporting Stronger Demand** for Commercial and Industrial Loans



Percent of Balance 30+ Days Delinquent

Most loan types now show deterioration

Transition into Delinquency (30+) by Loan Type



Source: New York Fed Consumer Credit Panel/Equifax

Note: 4 Quarter Moving Sum
Student loan data are not reported prior to 2004 due to uneven reporting

Fed Rate Hikes and Recessions

They generally travel together

Fed Tightening Has Preceded Every U.S. Recession

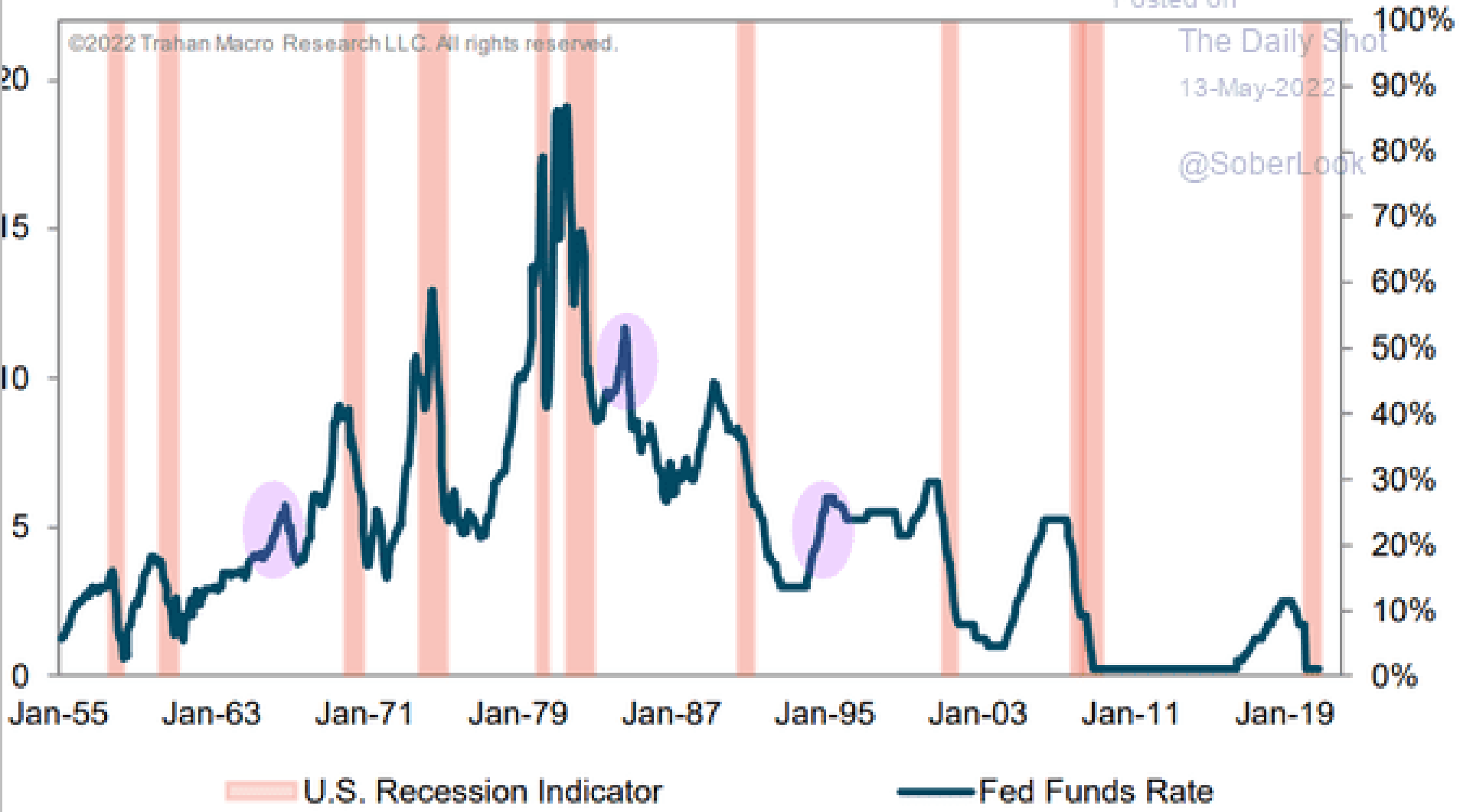
Posted on

The Daily Shot

13-May-2022

@SoberLook

©2022 Trahan Macro Research LLC. All rights reserved.

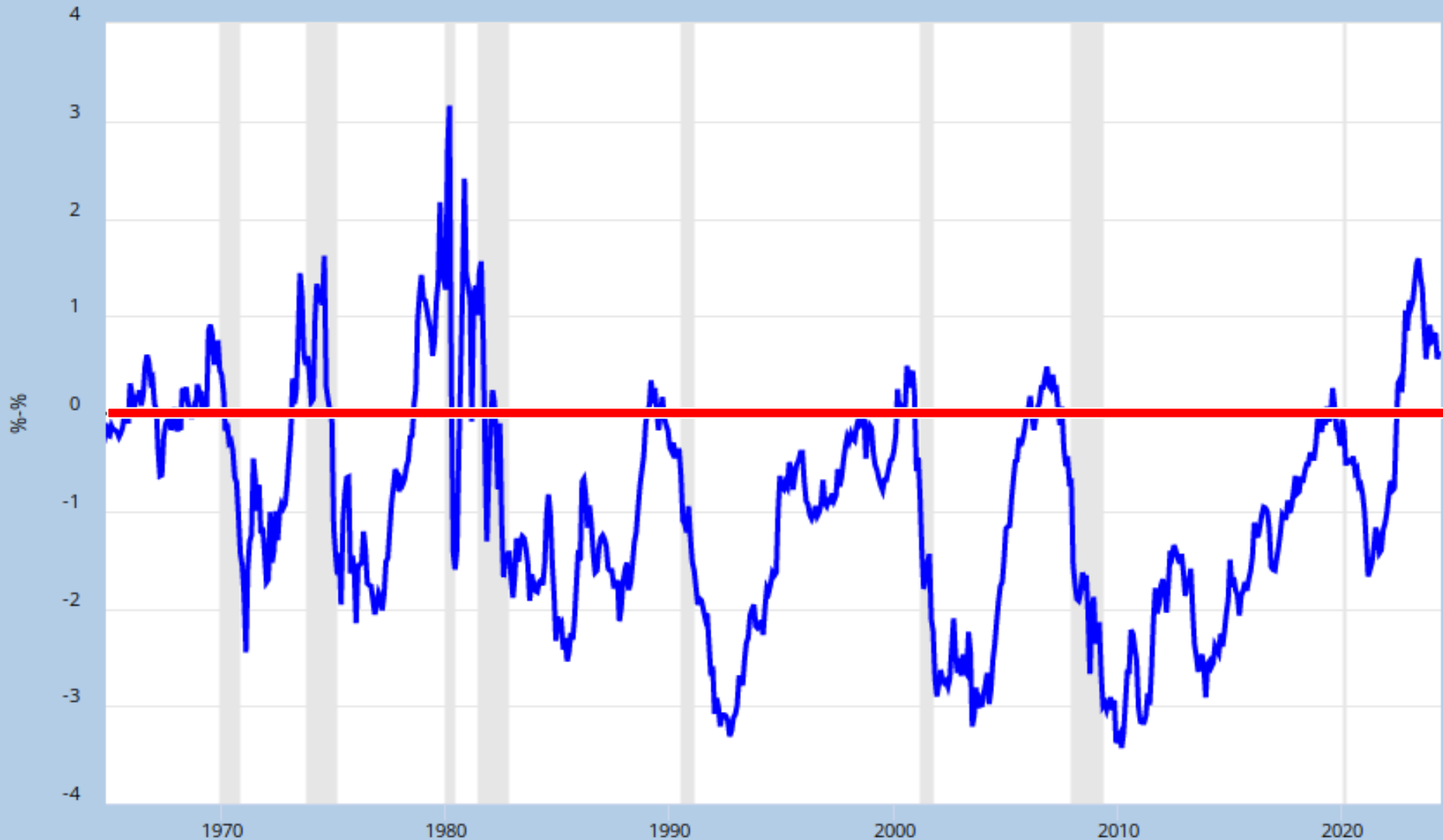


The Yield Curve is Inverted

Yield Curve Inversion Test: 1-Year Treasury Yield – 10-Year Treasury Yield



— Market Yield on U.S. Treasury Securities at 1-Year Constant Maturity, Quoted on an Investment Basis—Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis



Fed Rate Hikes and Recessions

They generally travel together

Fed hiking cycles and recessions

Start of hiking cycle	Start of recession	Gap from start of hiking (# months)
Aug-58	Apr-60	20
Nov-67	Dec-69	25
Mar-72	Nov-73	20
Dec-76	Jan-80	37
Aug-80	Jul-81	11
Mar-83	Jul-90	87
Jan-87	Jul-90	42
Feb-94	Mar-01	85
Jun-99	Mar-01	20
Jun-04	Dec-07	41
Dec-16	Feb-20	38
Average in hard landings		27
Median in hard landings		23

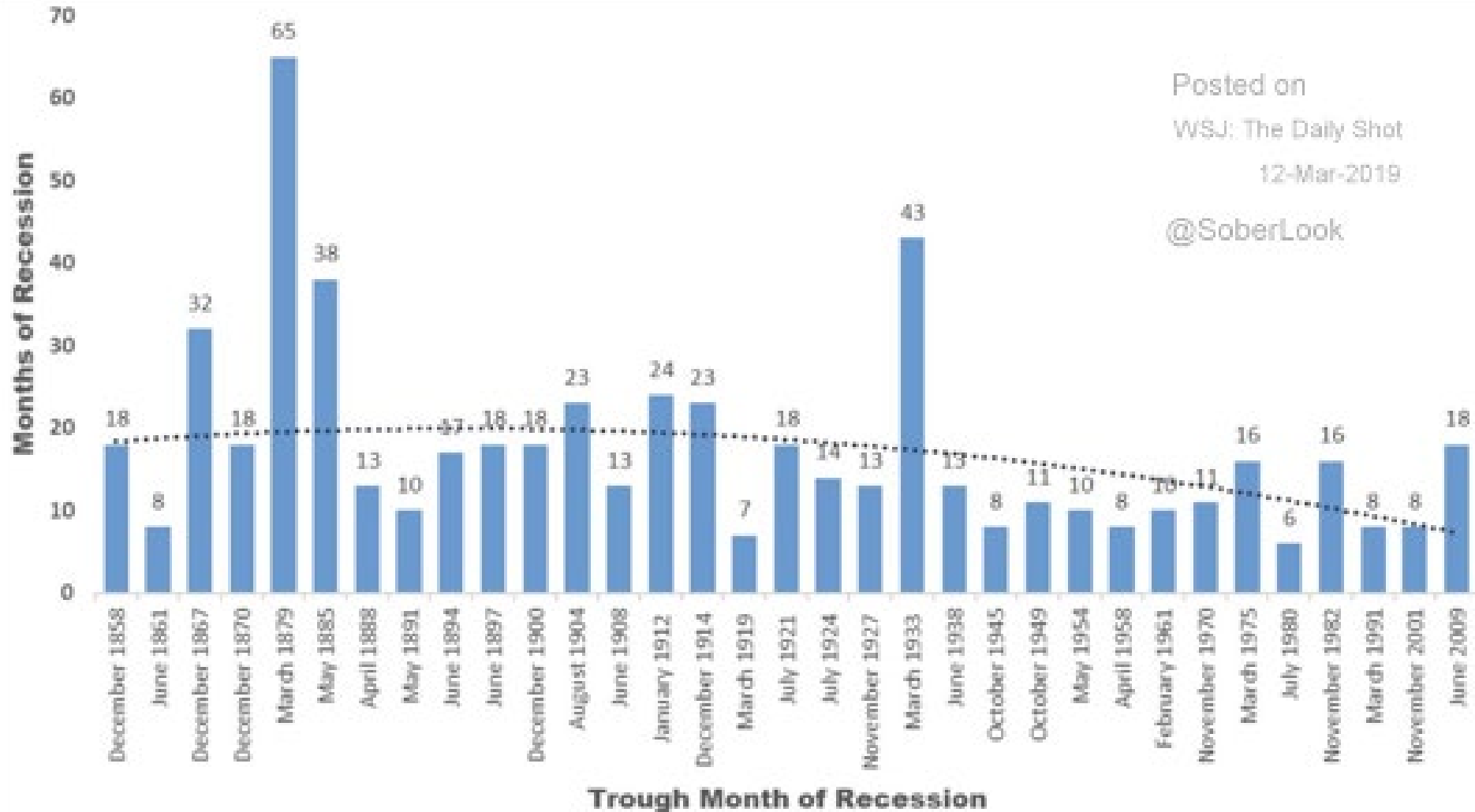
Shortest gap was 11 months

Typical gap was 2 years

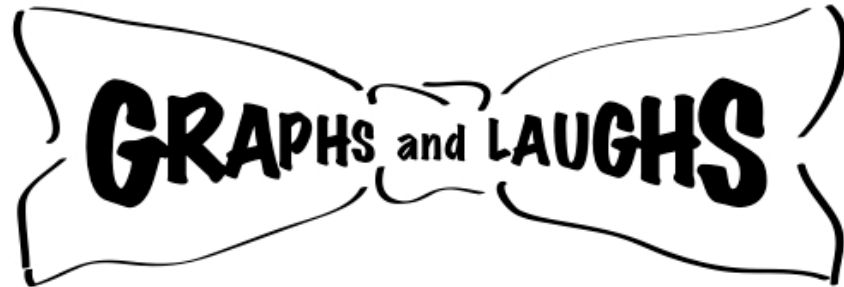
* Shaded episodes are soft landing cycles that avoided a recession

Duration of All Recorded US Recessions

Since the Depression they tend to be shorter



Labor Markets: They are Softening



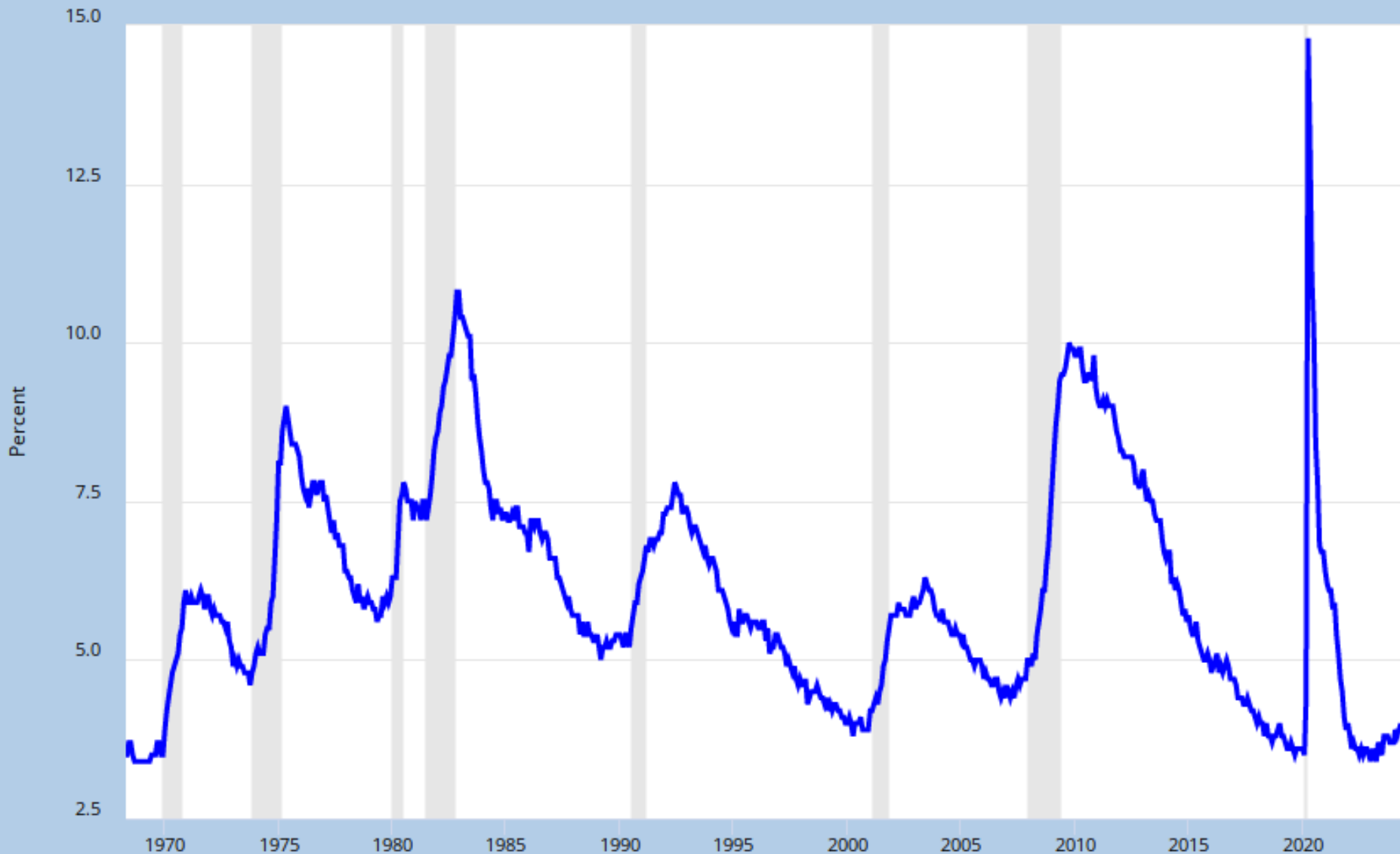
The Unemployment Rate

The rate is low at 4% but is clearly rising

FRED



— Unemployment Rate



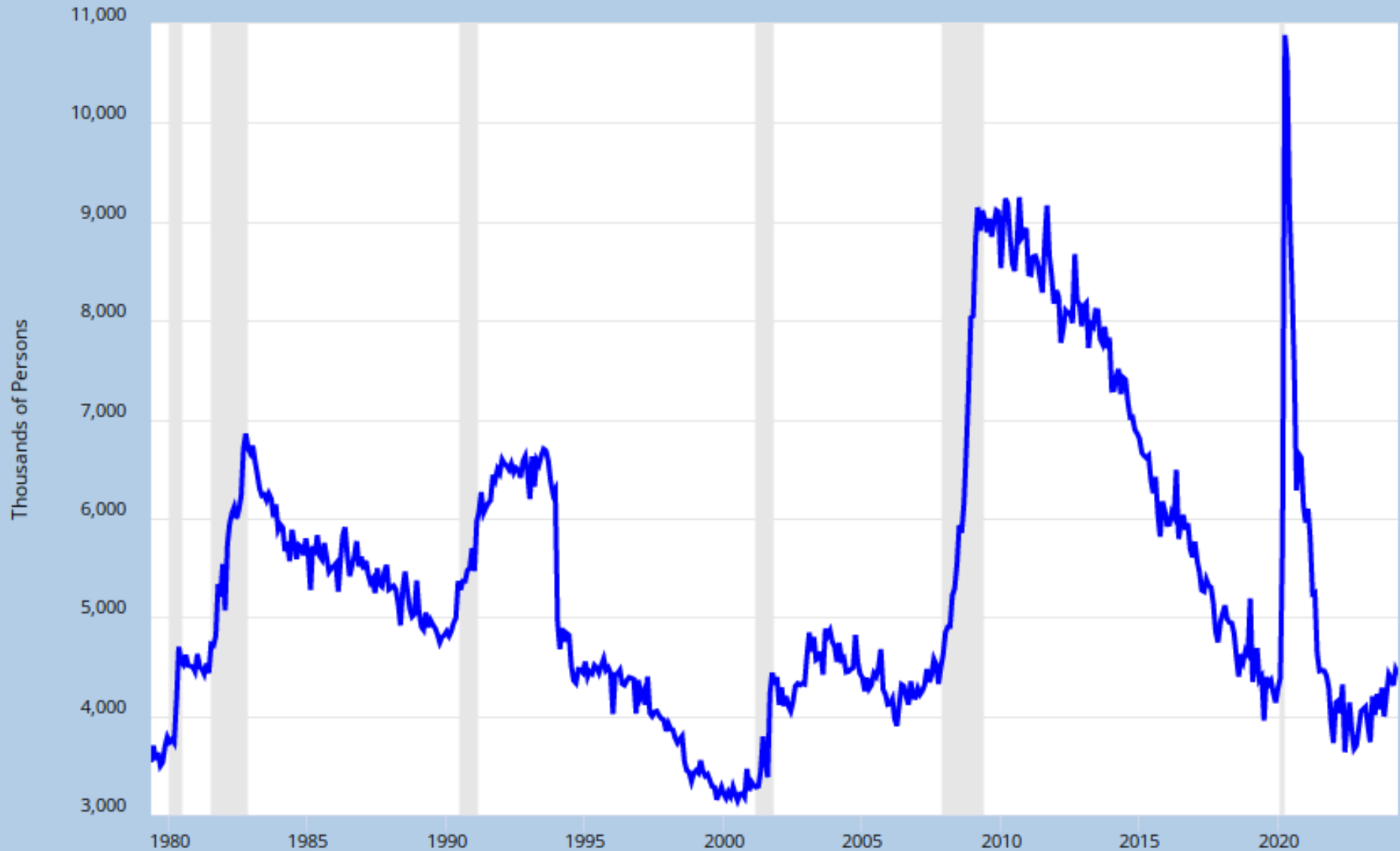
Working Part Time and Unhappy About It!

Skyrocketed then fell but is now rising

FRED



— Employment Level - Part-Time for Economic Reasons, All Industries



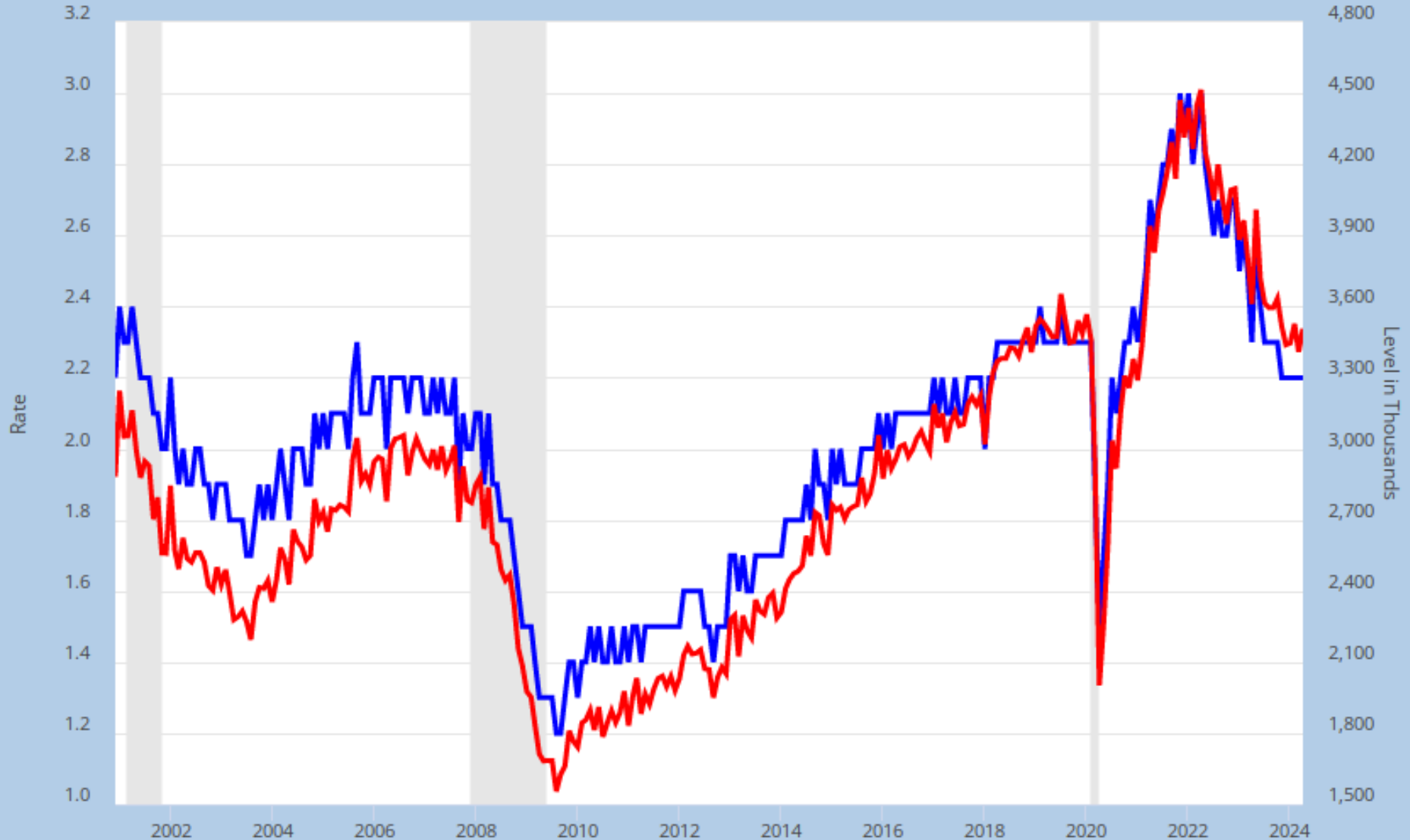
Quit Rates Are Rapidly Reversing

Workers were quitting in droves, but not now

FRED



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



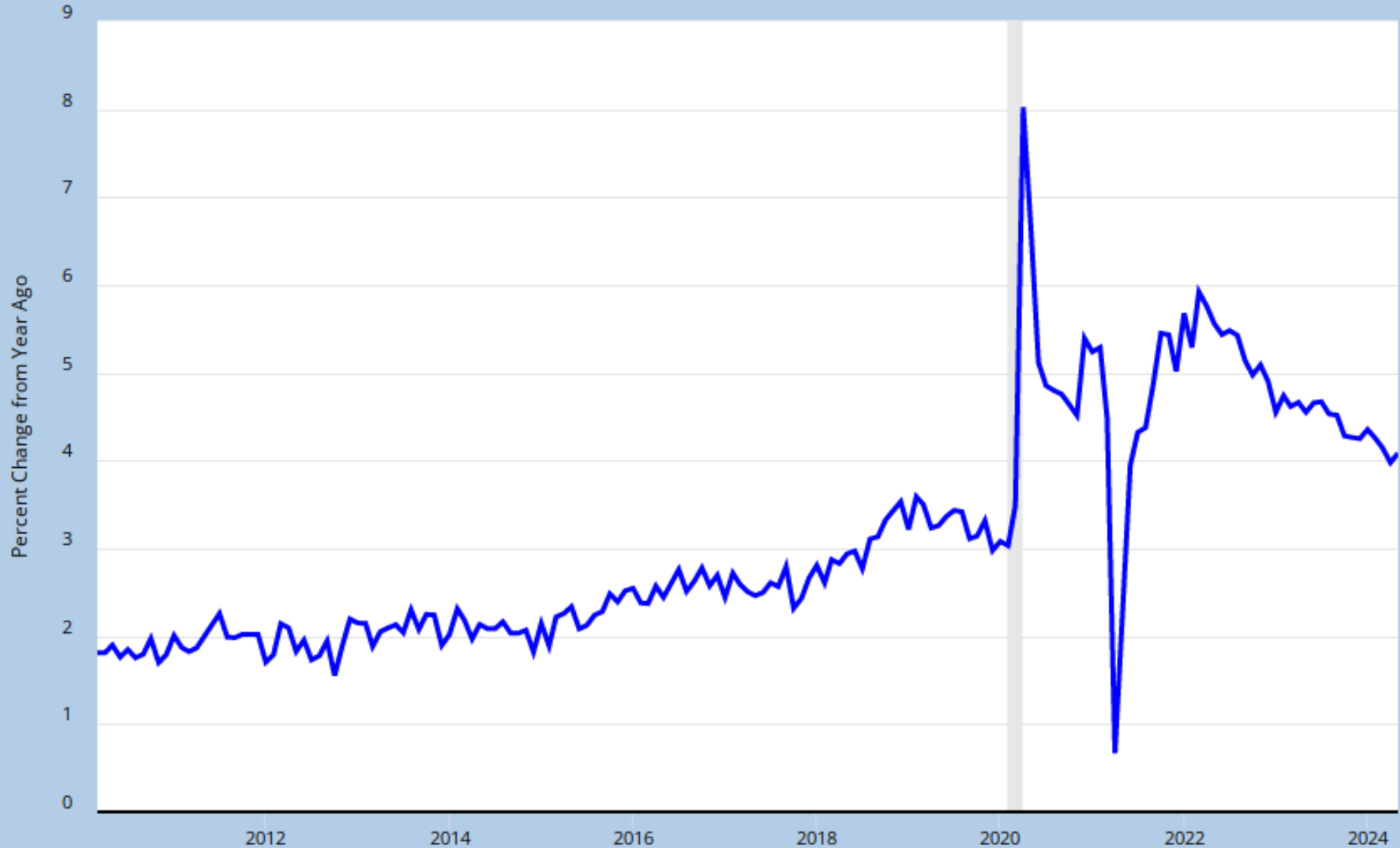
Y-o-Y Percent Change in Hourly Earnings

Wage growth is falling nicely but at 4.1% is too high

FRED



— Average Hourly Earnings of All Employees, Total Private



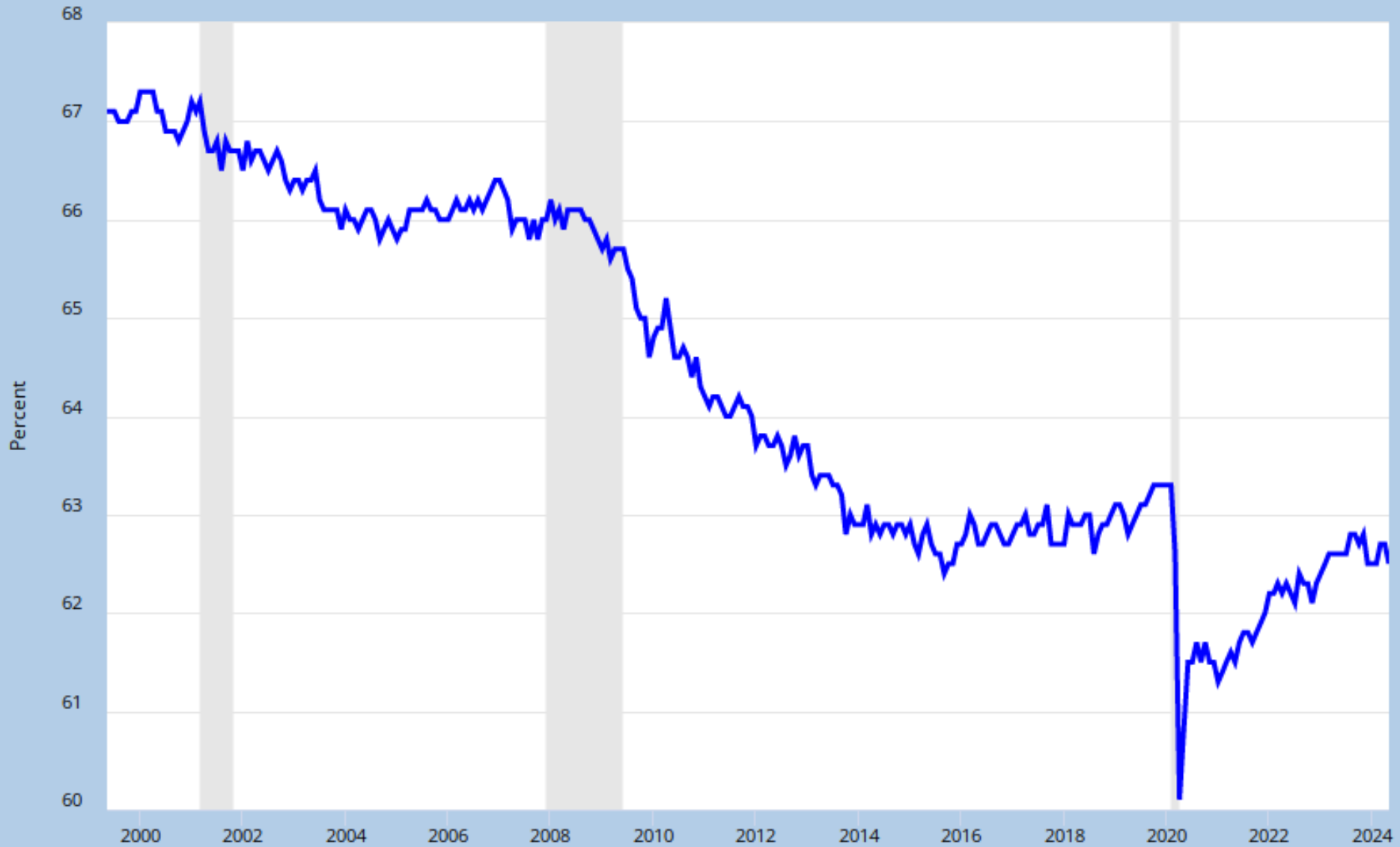
The Labor Force Participation Rate

Is it improving?

FRED



— Labor Force Participation Rate



Source: U.S. Bureau of Labor Statistics

myf.red/g/1oG9m

This Recent Rise is Substantial

It is close to 2 million persons

Foreign-born percentage of the U.S. civilian labor force

Posted on

The Daily Shot

05-Apr-2024

@SoberLook



Source: Federal Reserve Bank of St. Louis

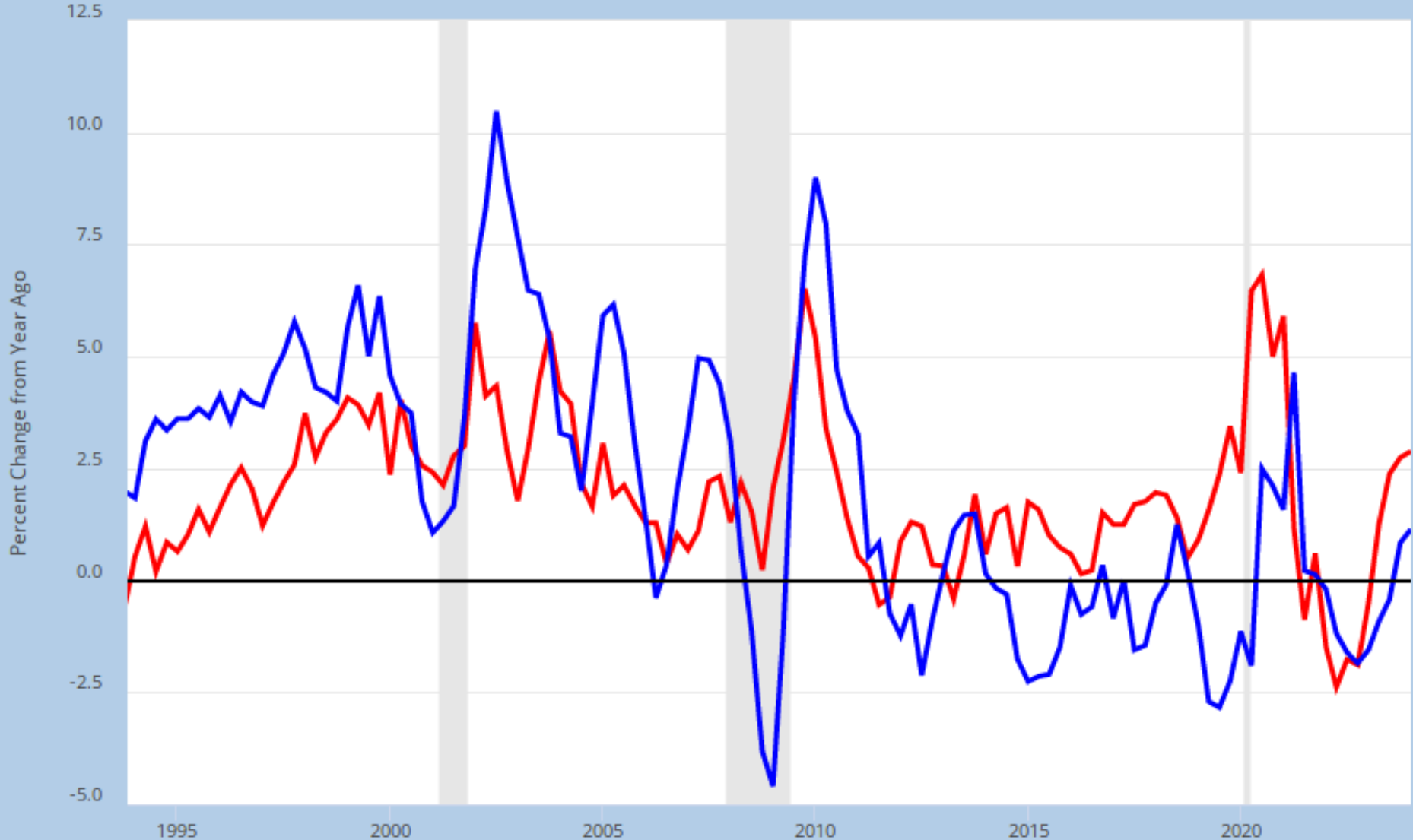
Labor Productivity Growth

It is now suddenly much better

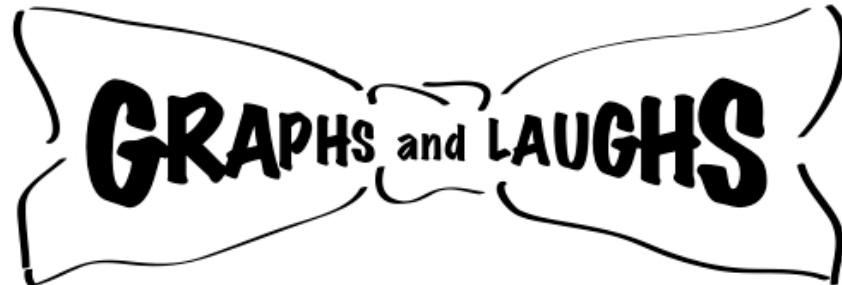
FRED



- Nonfarm Business Sector: Labor Productivity (Output per Hour) for All Workers
- Manufacturing Sector: Labor Productivity (Output per Hour) for All Workers



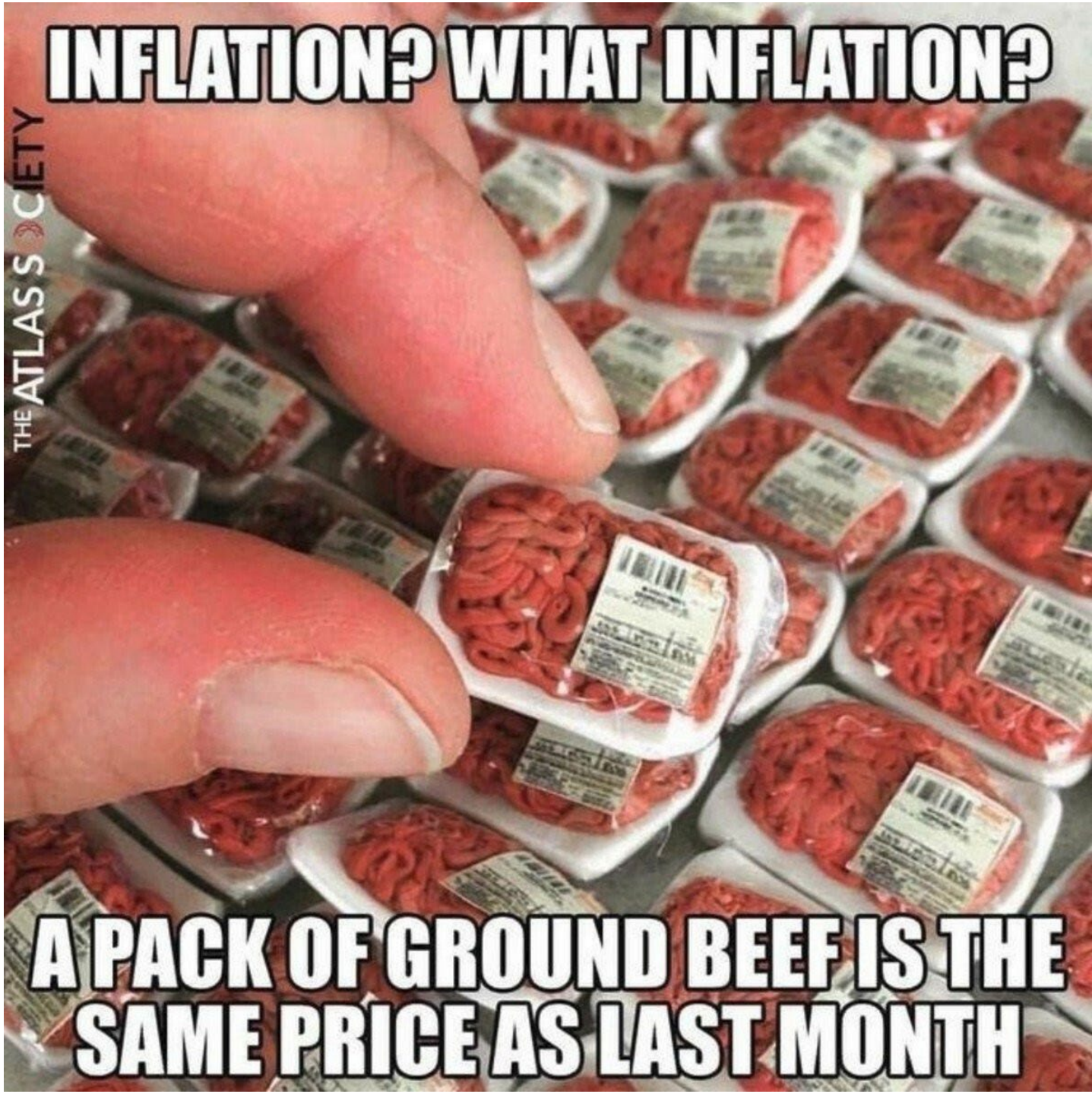
Inflation & The Fed



INFLATION? WHAT INFLATION?

THE ATLAS SOCIETY

**A PACK OF GROUND BEEF IS THE
SAME PRICE AS LAST MONTH**

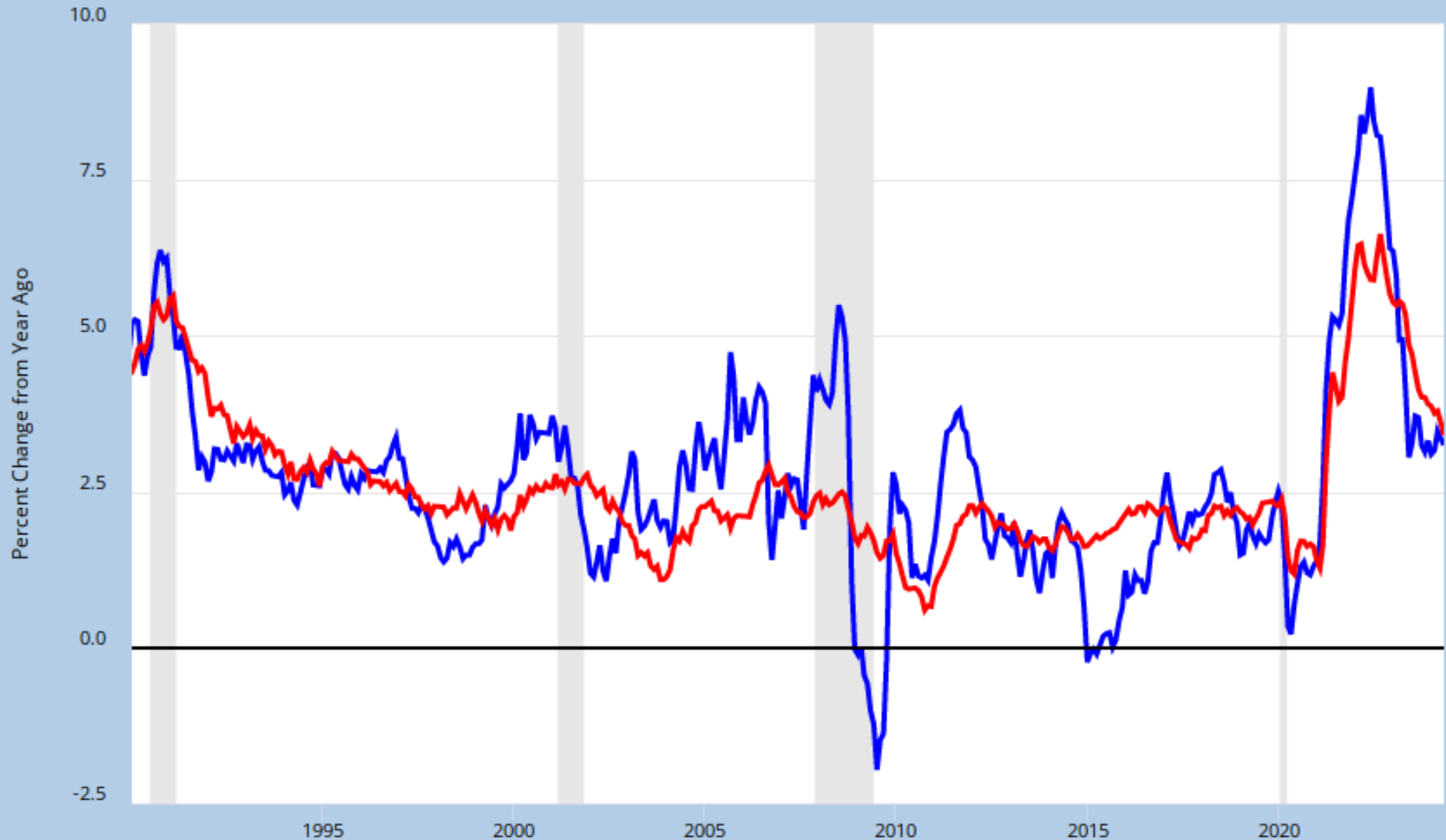


CPI: Inflationary Pressures Weaken

The core numbers are falling nicely



- Consumer Price Index for All Urban Consumers: All Items in U.S. City Average
- Consumer Price Index for All Urban Consumers: All Items Less Food and Energy in U.S. City Average



Federal Reserve Behavior

Most likely scenario

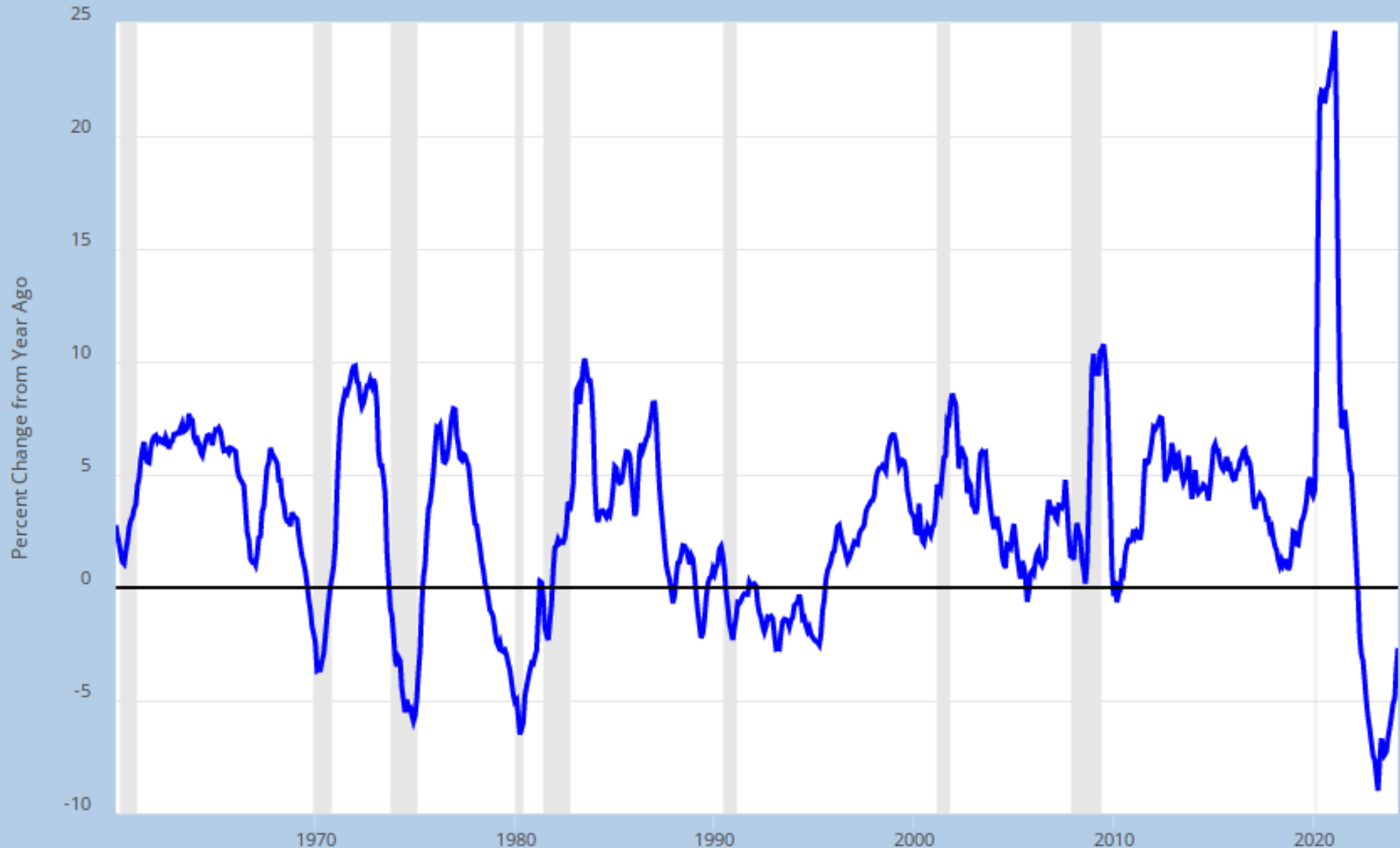
- Fed funds is currently 5.375%
- On 5/1/24 it stayed at 5.375%
- On 6/12/24 it stayed at 5.375%
- On 7/31/24 it will remain at 5.375%

Monetary Stock Shrinks

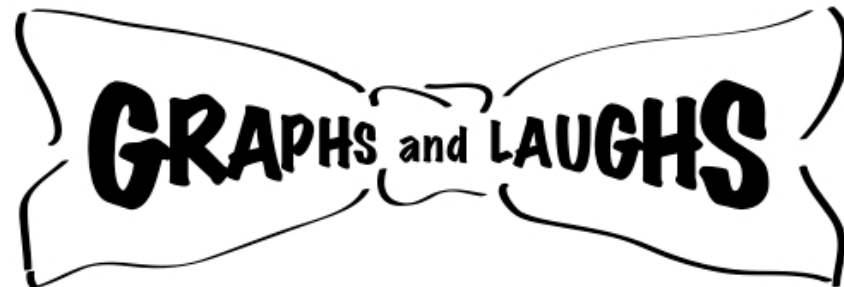
The shrinkage is fortunately shrinking

FRED 

— Real M2 Money Stock



How About Construction Activity?

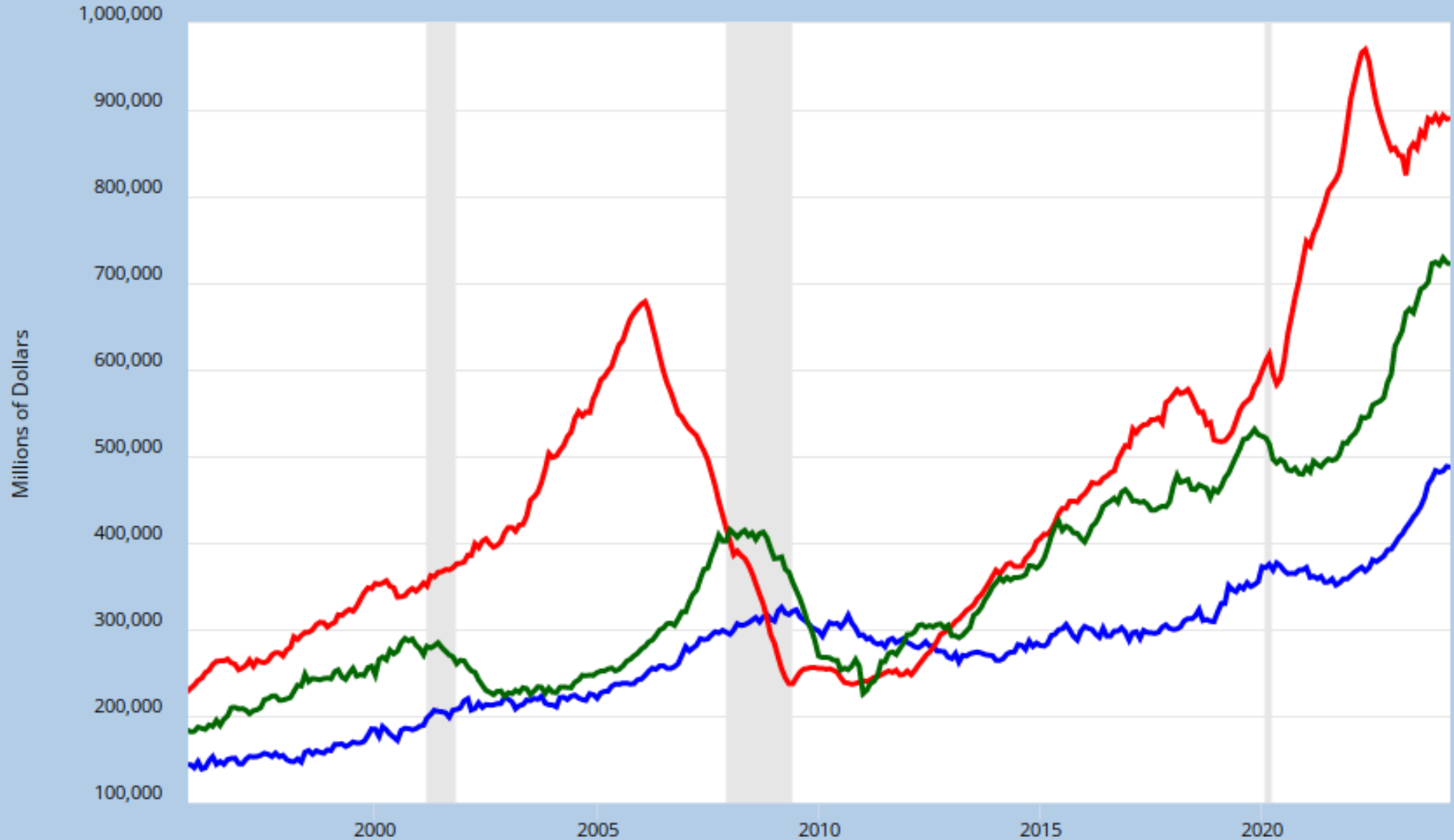


Construction Activity

All three areas have done well. All are currently flatlining



- Total Public Construction Spending: Total Construction in the United States
- Total Private Construction Spending: Residential in the United States
- Total Private Construction Spending: Nonresidential in the United States

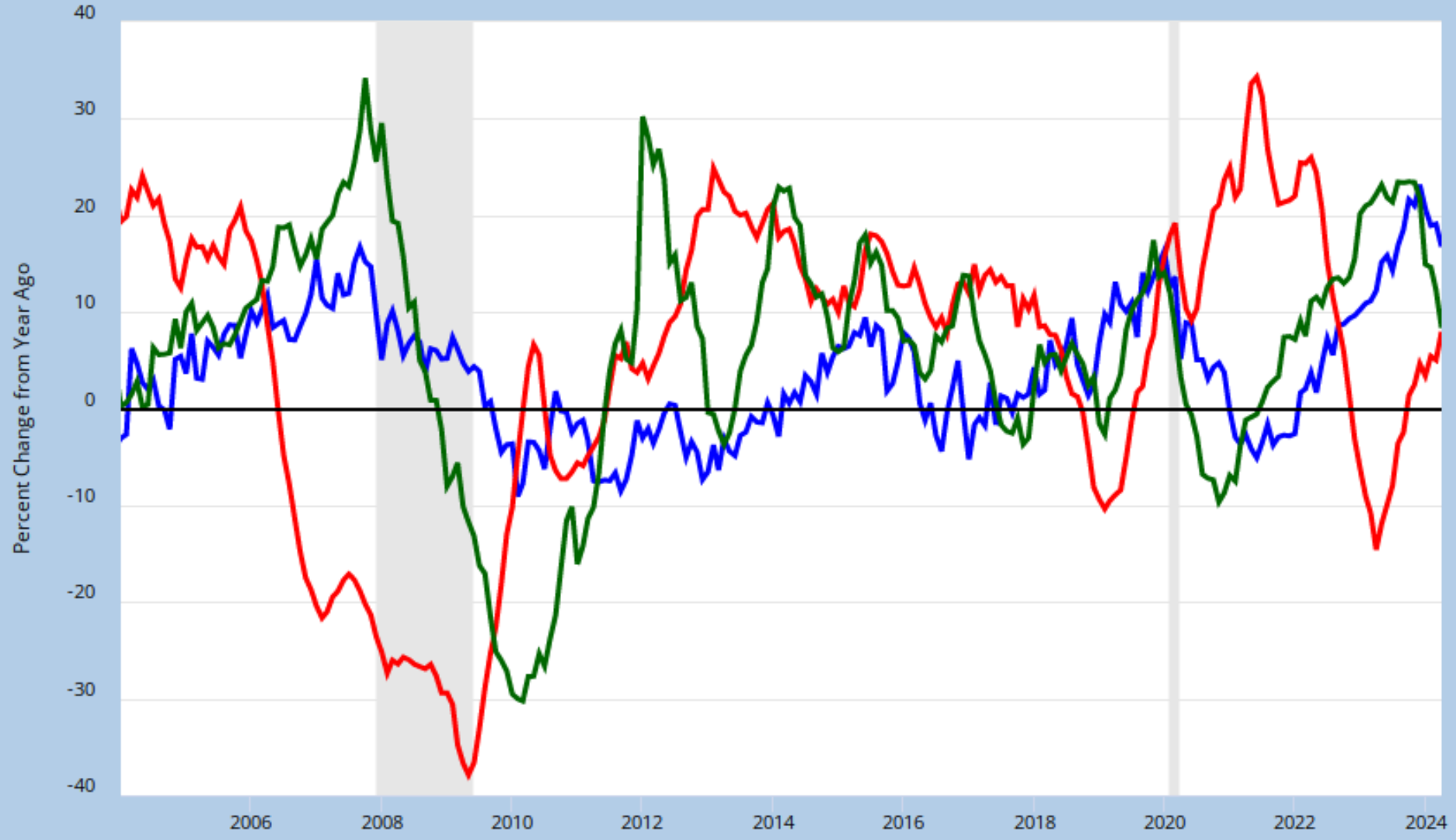


Public, Private Non-Res, and Private-Res Const

Residential is up 8%, non-res is up 8.3%, and public is up 16.7%



- Total Public Construction Spending: Total Construction in the United States
- Total Private Construction Spending: Residential in the United States
- Total Private Construction Spending: Nonresidential in the United States

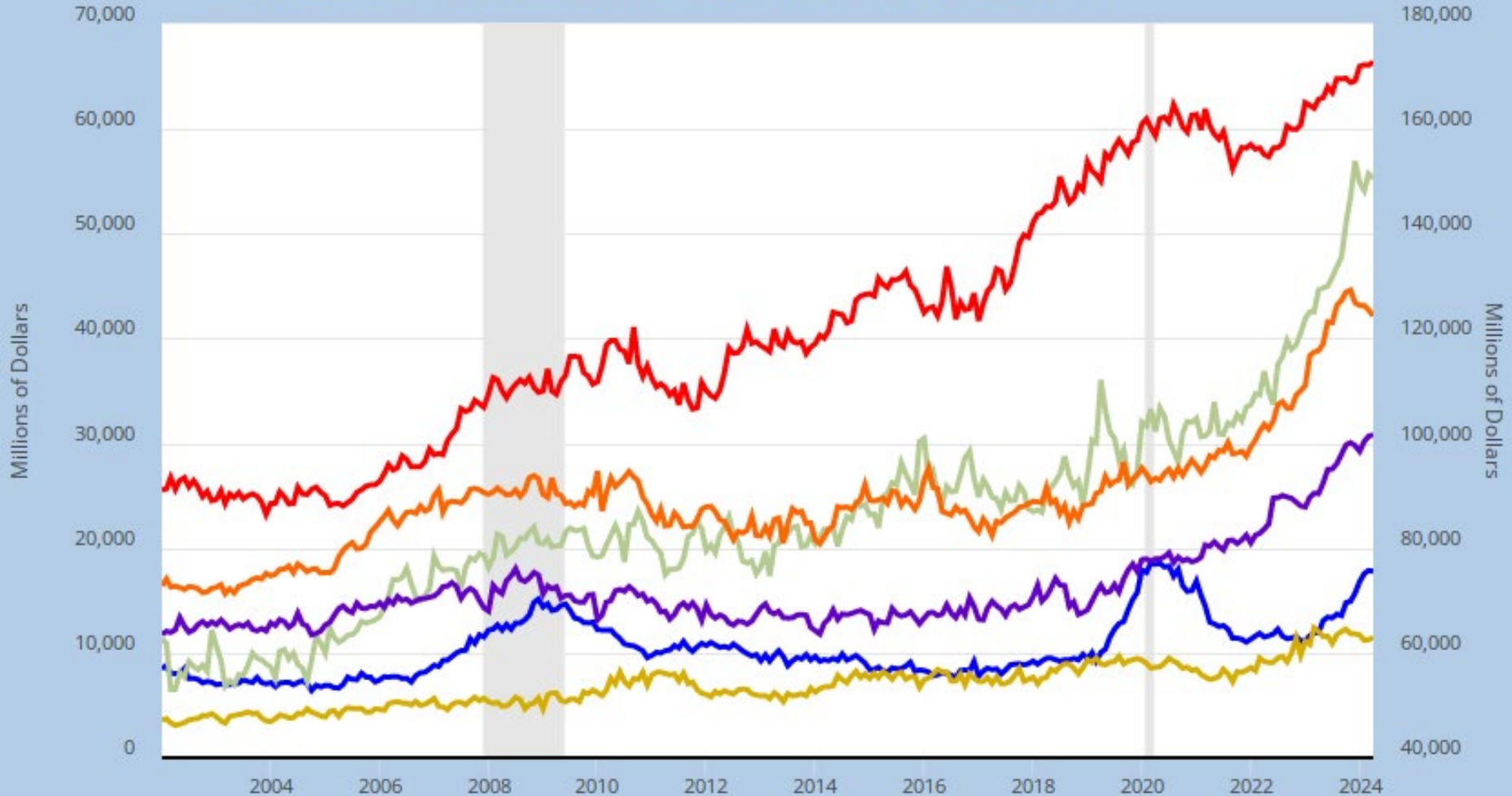


Public Construction Activity

All are flat to down except transportation, highways and water supply



- Total Construction Spending: Public Safety in the United States (left)
- Total Construction Spending: Transportation in the United States (left)
- Total Construction Spending: Highway and Street in the United States (right)
- Total Construction Spending: Water Supply in the United States (left)
- Total Construction Spending: Sewage and Waste Disposal in the United States (left)
- Total Construction Spending: Conservation and Development in the United States (left)

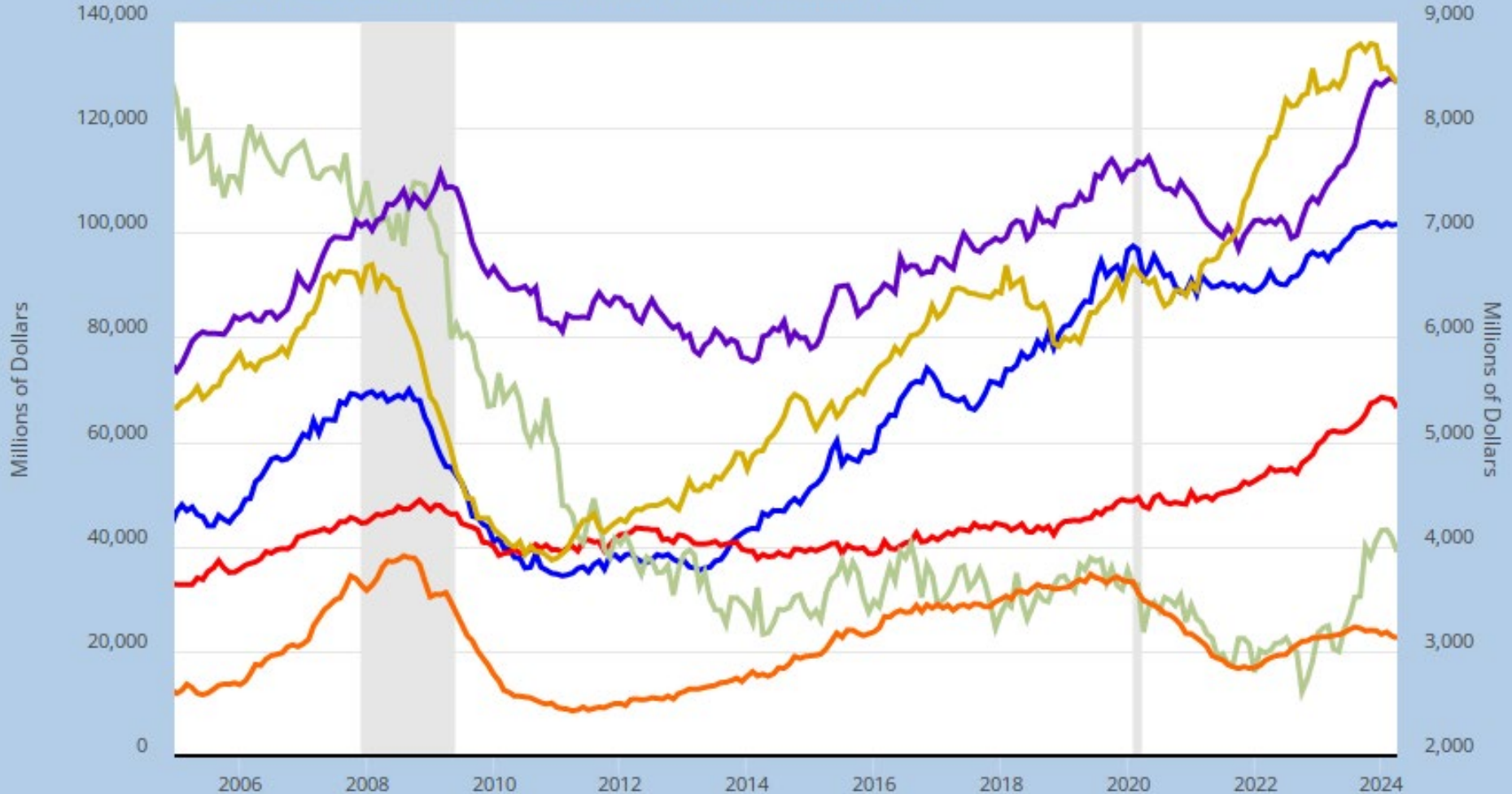


Private Construction Activity

All sectors are softening of late



- Total Construction Spending: Office in the United States (left)
- Total Construction Spending: Health Care in the United States (left)
- Total Construction Spending: Religious in the United States (right)
- Total Construction Spending: Educational in the United States (left)
- Total Construction Spending: Lodging in the United States (left)
- Total Construction Spending: Commercial in the United States (left)

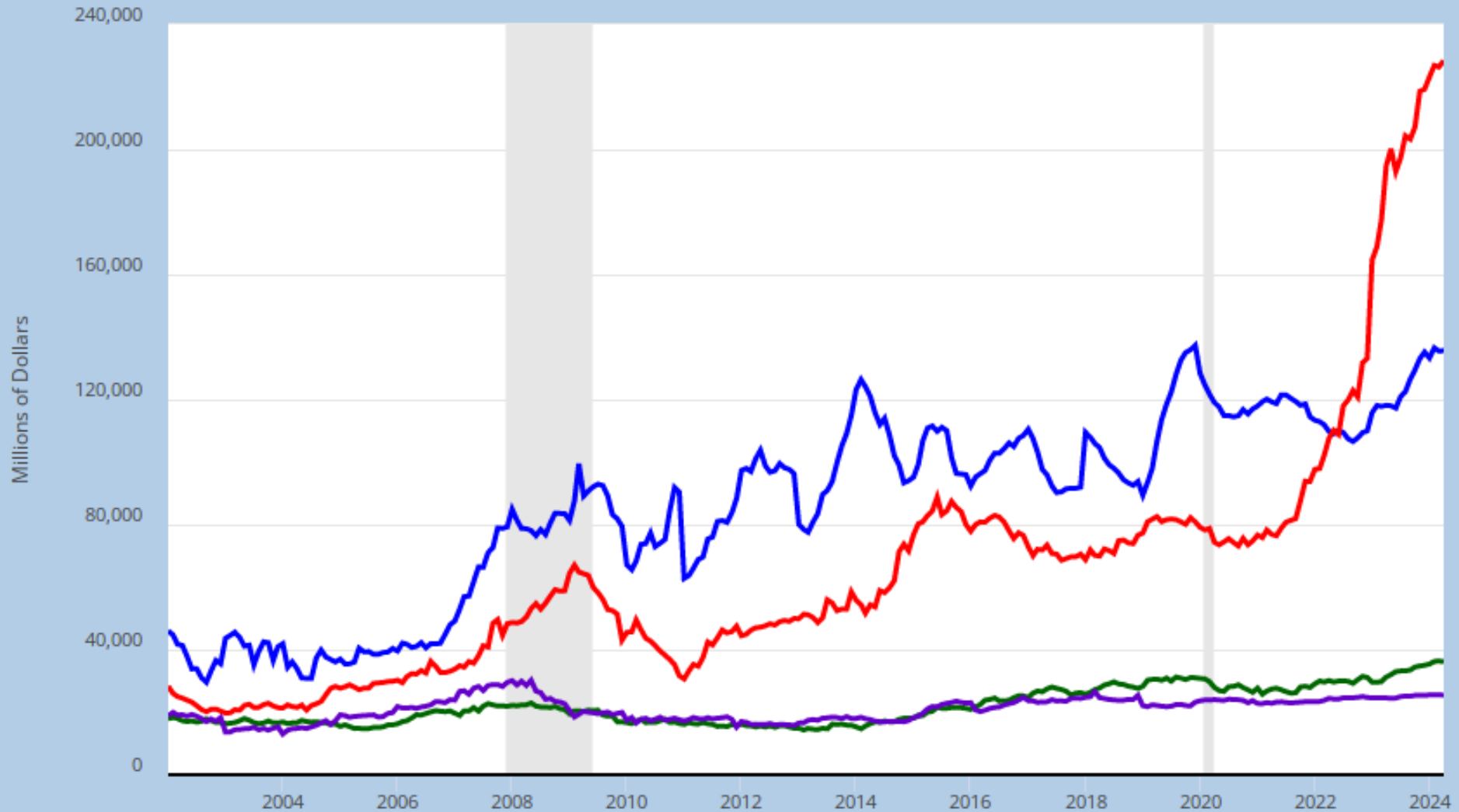


Other Construction Groups Diverge

Manufacturing has been exceptional



- Total Construction Spending: Power in the United States
- Total Construction Spending: Manufacturing in the United States
- Total Construction Spending: Amusement and Recreation in the United States
- Total Construction Spending: Communication in the United States



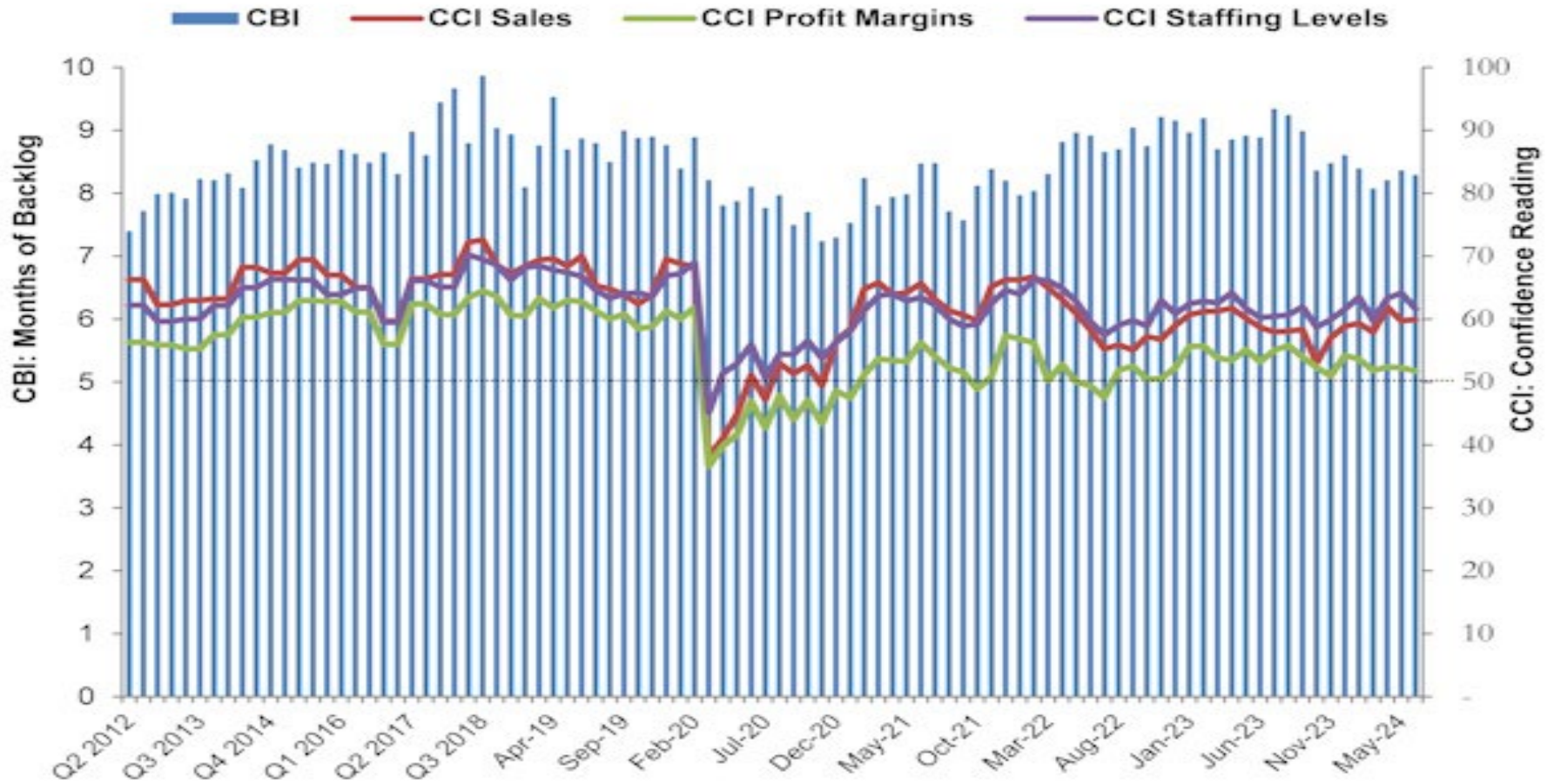
National Backlog Index

Up from the trough but down of late

NATIONAL BACKLOG AVERAGE



ABC Construction Backlog Indicator & Construction Confidence Index, 2012-May 2024

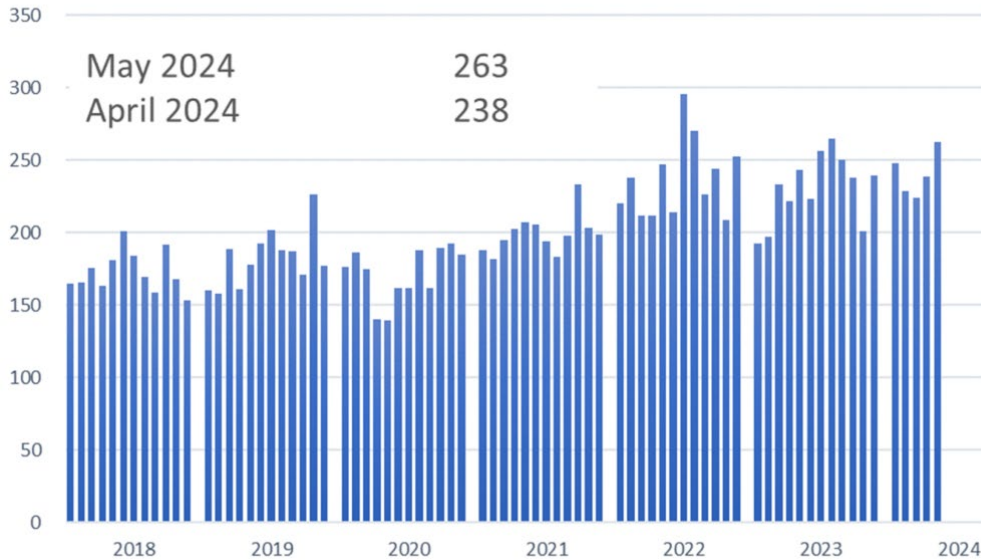


Construction Activity

High rates, labor shortages, and tighter lending standards hurt

THE DODGE INDEX

(2000=100, Seasonally Adjusted)



MONTHLY CONSTRUCTION STARTS

(Millions of Dollars, Seasonally Adjusted Annual Rate)

	May 2024	Apr 2024	% Change
Nonresidential Building	\$414,756	\$424,114	-2
Residential Building	364,796	391,997	-7
Nonbuilding Construction	462,604	309,962	49
Total Construction	\$1,242,156	\$1,126,073	10

YEAR-TO-DATE CONSTRUCTION STARTS

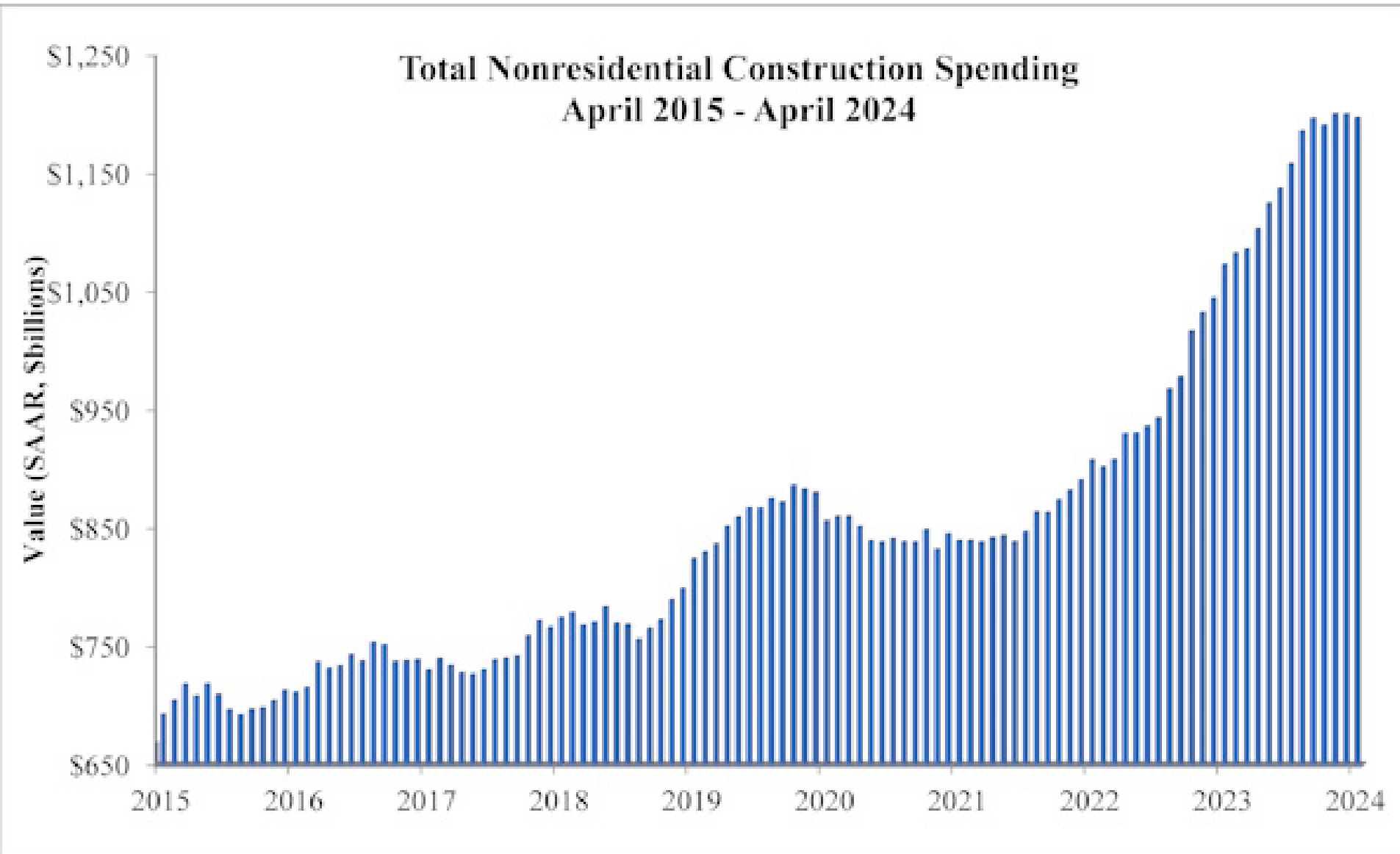
Unadjusted Totals, in Millions of Dollars

	5 Mos. 2024	5 Mos. 2023	% Change
Nonresidential Building	\$166,984	\$162,403	3
Residential Building	166,866	143,254	16
Nonbuilding Construction	134,761	114,894	17
Total Construction	\$468,611	\$420,551	11

Source: Dodge Construction Network

Nonresidential Construction Activity

It appears to be softening



Source: U.S. Census Bureau

Nonresidential Construction Activity

It is up Y-o-Y but down M-o-M

Nonresidential Spending Growth, Millions of Dollars, Seasonally Adjusted Annual Rate

	April 2024	March 2024	April 2023	1-Month % Change	12-Month % Change
Total Construction	\$2,099,039	\$2,101,511	\$1,907,837	-0.1%	10.0%
Residential	\$902,292	\$901,438	\$834,713	0.1%	8.1%
Nonresidential	\$1,196,747	\$1,200,074	\$1,073,124	-0.3%	11.5%
Conservation and development	\$11,487	\$11,256	\$12,044	2.1%	-4.6%
Manufacturing	\$228,441	\$226,396	\$194,818	0.9%	17.3%
Transportation	\$66,412	\$66,087	\$62,841	0.5%	5.7%
Water supply	\$30,820	\$30,678	\$25,208	0.5%	22.3%
Office	\$101,641	\$101,361	\$96,482	0.3%	5.3%
Power	\$135,650	\$135,540	\$118,185	0.1%	14.8%
Public safety	\$17,800	\$17,860	\$11,946	-0.3%	49.0%
Highway and street	\$150,551	\$151,444	\$129,324	-0.6%	16.4%
Amusement and recreation	\$36,135	\$36,353	\$31,258	-0.6%	15.6%
Educational	\$128,656	\$129,620	\$110,685	-0.7%	16.2%
Communication	\$25,383	\$25,588	\$24,540	-0.8%	3.4%
Commercial	\$128,646	\$130,084	\$128,809	-1.1%	-0.1%
Sewage and waste disposal	\$42,167	\$42,726	\$38,848	-1.3%	8.5%
Lodging	\$22,508	\$22,871	\$22,988	-1.6%	-2.1%
Health care	\$66,504	\$68,122	\$62,128	-2.4%	7.0%
Religious	\$3,946	\$4,089	\$3,021	-3.5%	30.6%
Private Nonresidential	\$721,470	\$723,796	\$665,887	-0.3%	8.3%
Public Nonresidential	\$475,277	\$476,278	\$407,238	-0.2%	16.7%

Source: U.S. Census Bureau

Construction Costs are Way Up

The increases since Covid-19 are astounding

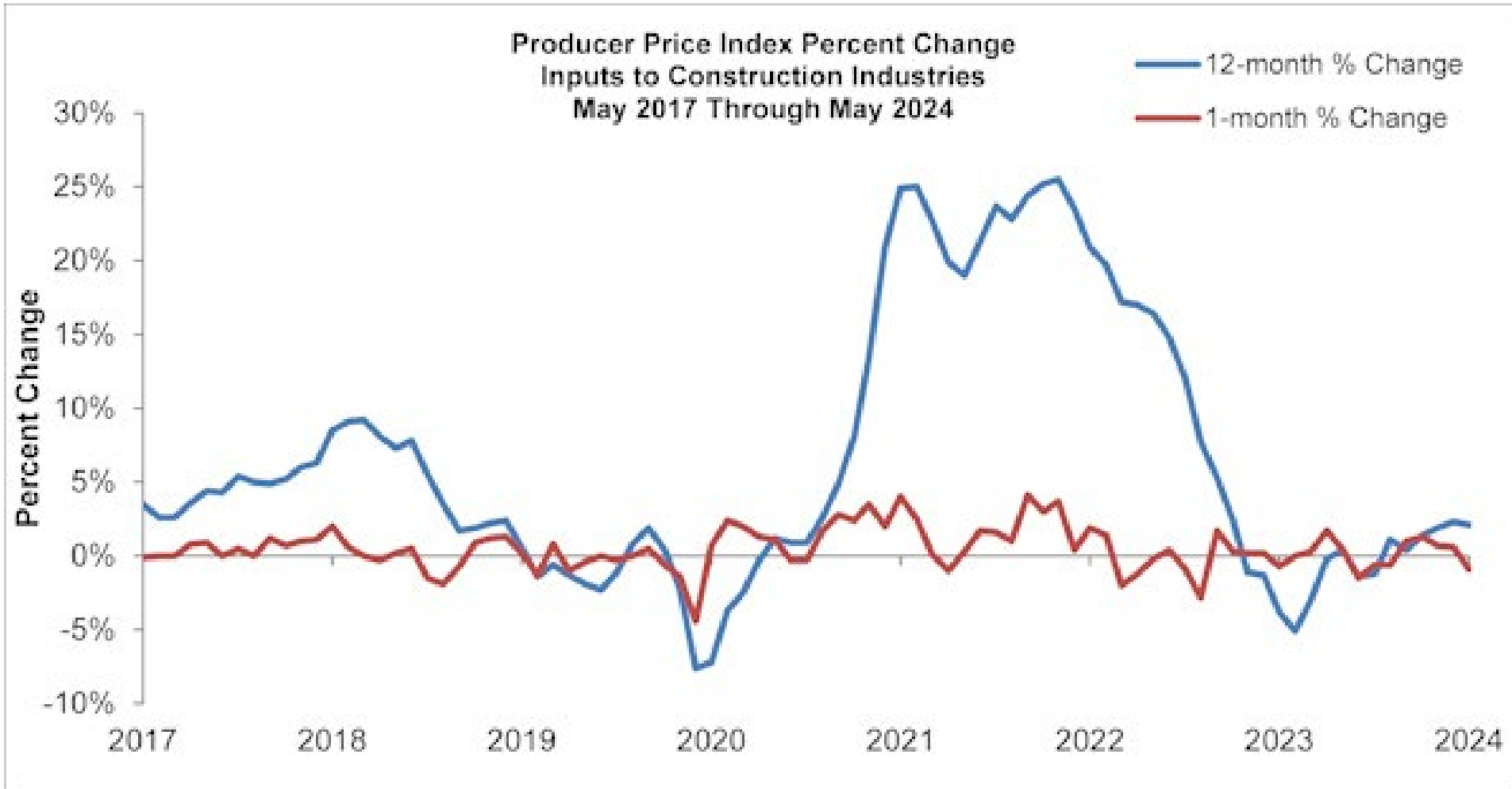
Producer Price Index, May 2024

	1-Month % Change	12-Month % Change	Change Since Feb 2020
Inputs To Industries			
Inputs to construction	-0.9%	2.1%	41.0%
Inputs to multifamily construction	-0.7%	2.6%	40.5%
Inputs to nonresidential construction	-0.8%	2.2%	41.6%
Inputs to commercial construction	-0.4%	2.1%	42.0%
Inputs to healthcare construction	-0.6%	2.0%	41.5%
Inputs to industrial construction	-0.7%	2.5%	37.7%
Inputs to other nonresidential construction	-0.9%	2.2%	41.5%
Inputs to maintenance and repair construction	-1.0%	1.8%	38.9%
Commodities			
Adhesives and sealants	0.0%	-0.3%	33.9%
Brick and structural clay tile	0.3%	4.5%	30.5%
Concrete products	-0.1%	5.0%	37.8%
Construction machinery and equipment	0.0%	3.8%	29.9%
Construction sand, gravel, and crushed stone	0.2%	7.3%	35.6%
Copper wire and cable	9.6%	18.0%	53.7%
Crude petroleum	-8.7%	7.6%	57.9%
Fabricated structural metal products	-0.1%	1.9%	54.0%
Gypsum products	0.4%	2.2%	46.2%
Hot rolled steel bars, plates, and structural shapes	-3.8%	-8.1%	44.1%
Insulation materials	0.9%	3.7%	43.8%
Iron and steel	-0.1%	-11.7%	50.4%
Lumber and wood products	-0.7%	-2.0%	24.6%
Natural gas	1.7%	-22.5%	-13.6%
Plumbing fixtures and fittings	0.2%	1.5%	18.6%
Prepared asphalt, tar roofing and siding products	2.7%	4.5%	43.2%
Softwood lumber	-3.6%	-8.1%	8.3%
Steel mill products	0.5%	-13.8%	59.7%
Switchgear, switchboard, industrial controls equipment	0.6%	7.1%	44.5%
Unprocessed energy materials	-6.6%	3.0%	58.0%

Source: U.S. Bureau of Labor Statistics

Construction Cost Inflation

The increases are softening of late

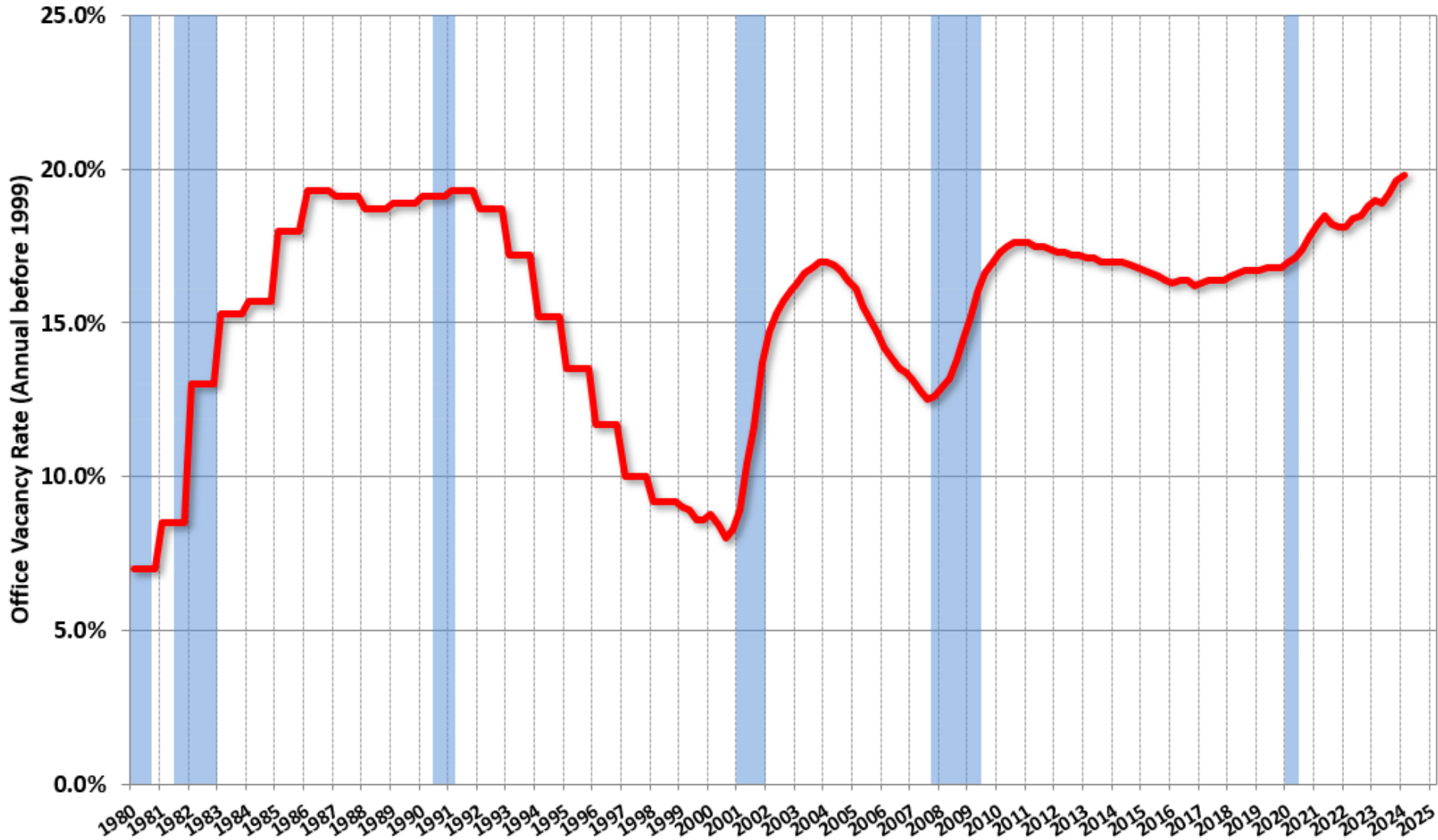


Source: U.S. Bureau of Labor Statistics

Office Vacancy Rates Rise

19.8% is a new high. Demand remains strong for Class A space

Office Vacancy Rate

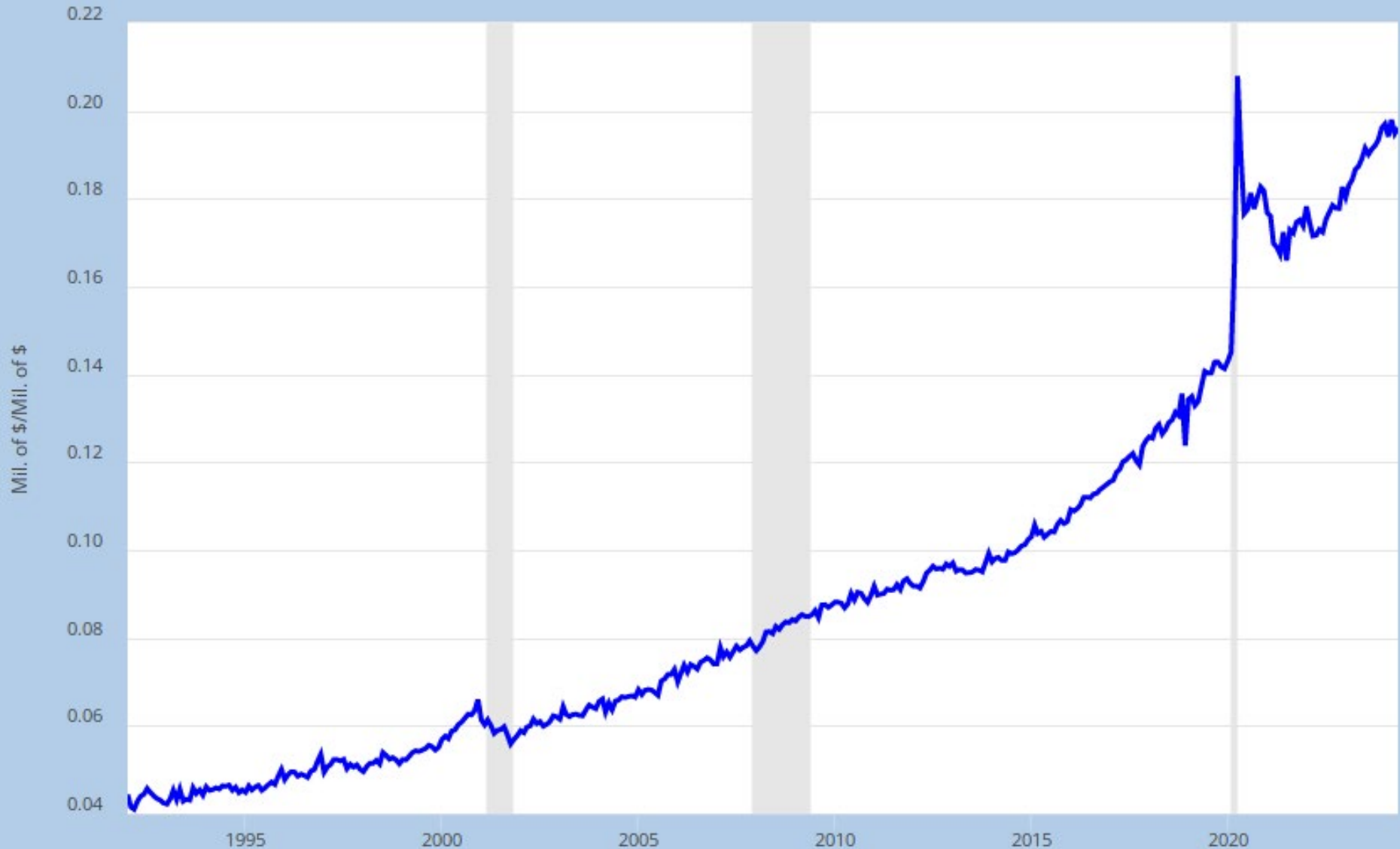


E-Commerce is Back at Trend Growth

E-commerce is now almost 20% of all retail sales. Think warehouses!!!!

FRED 

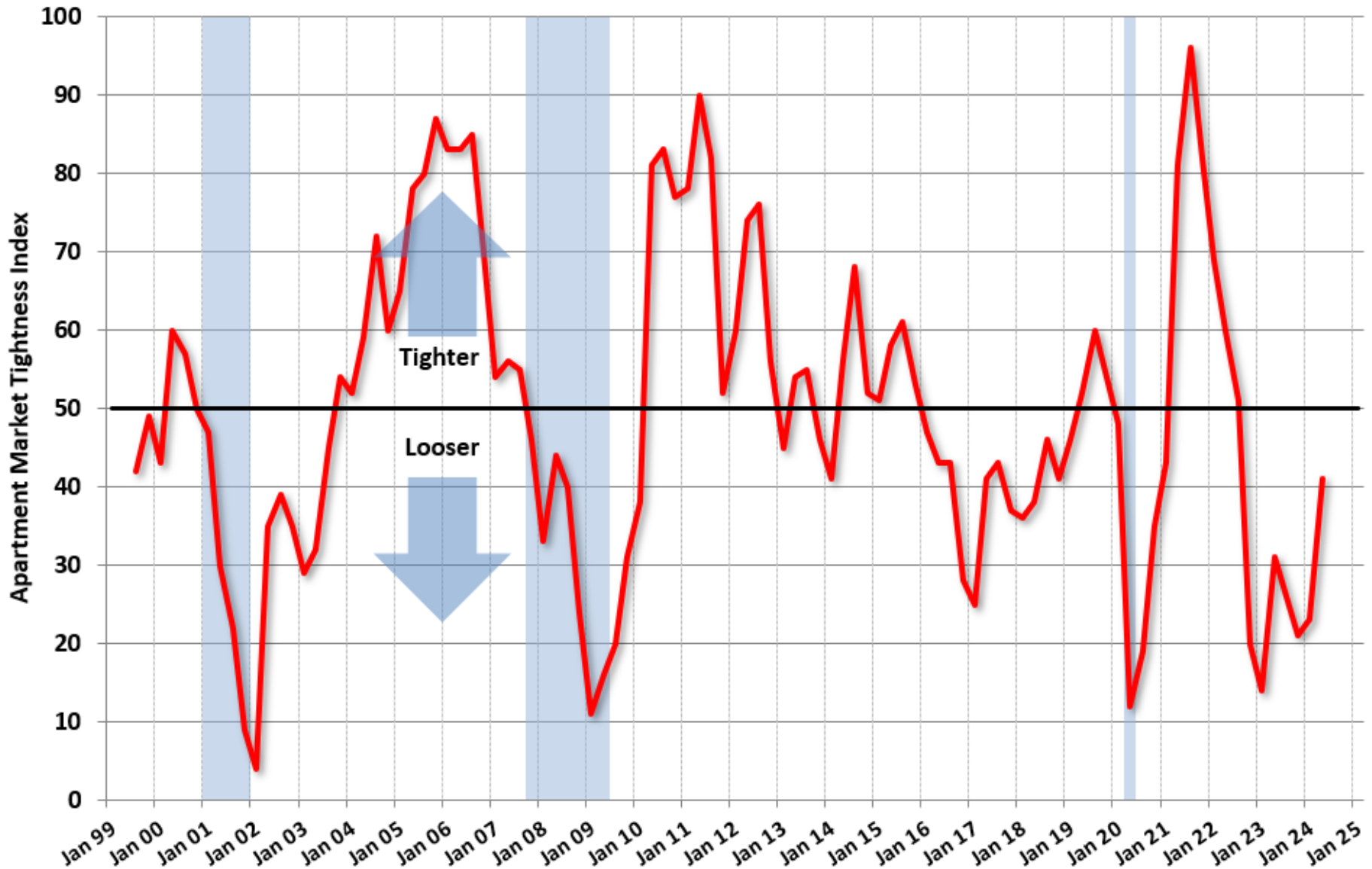
— Advance Retail Sales: Nonstore Retailers/Advance Retail Sales: Retail Trade



Apartment Rental Situation


The multifamily situation is weak. Higher rates, lower rents, recession fears

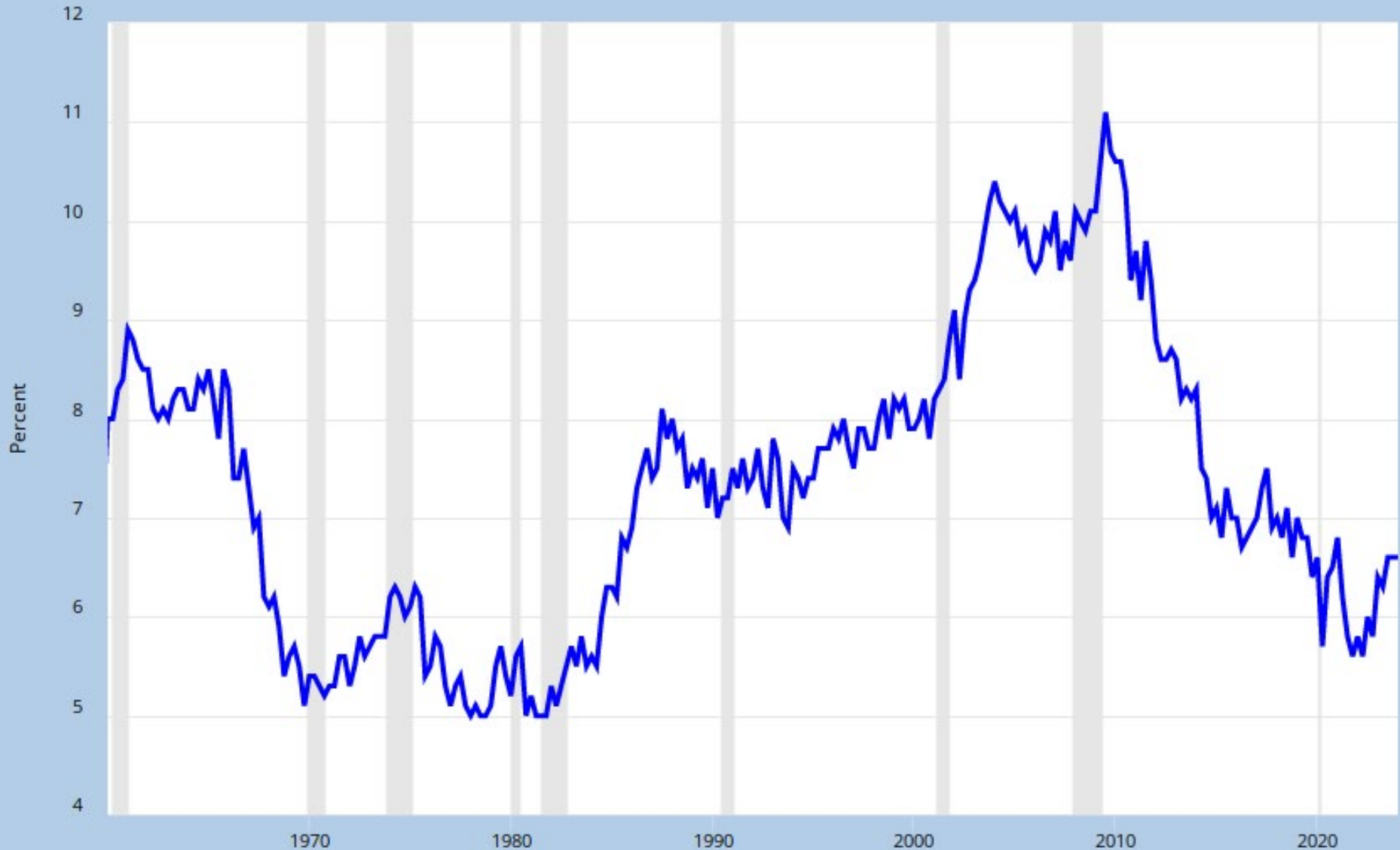
NMHC Quarterly Survey of Apartment Market Tightness



Apartment Vacancy Rates

Rental vacancy rate is well up from near 40-year lows

FRED  Rental Vacancy Rate in the United States



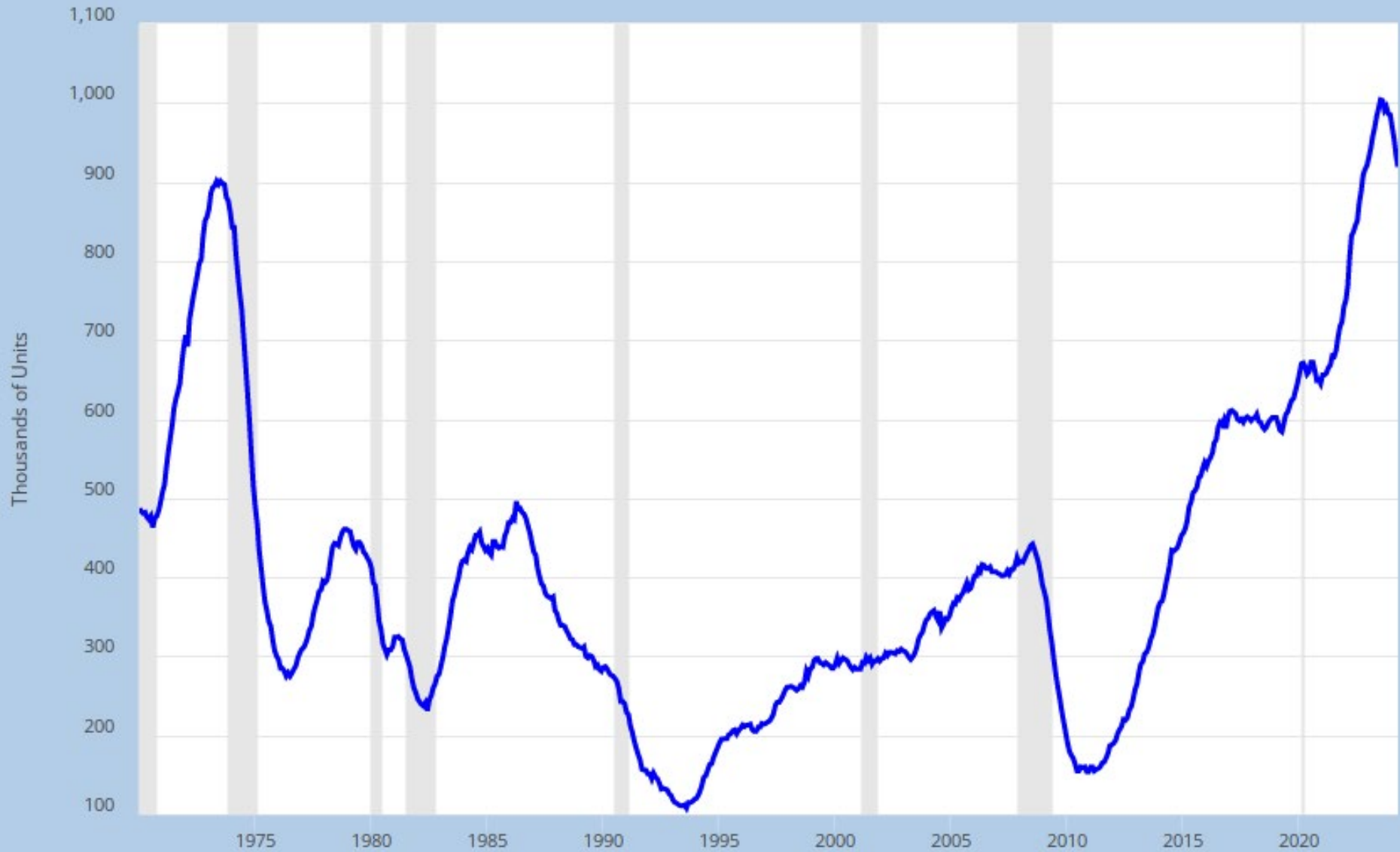
Number of Multifamily Units Under Construction

The number of units being built is very high due to supply-chain problems and so on

FRED



— New Privately-Owned Housing Units Under Construction: Units in Buildings with 5 Units or More



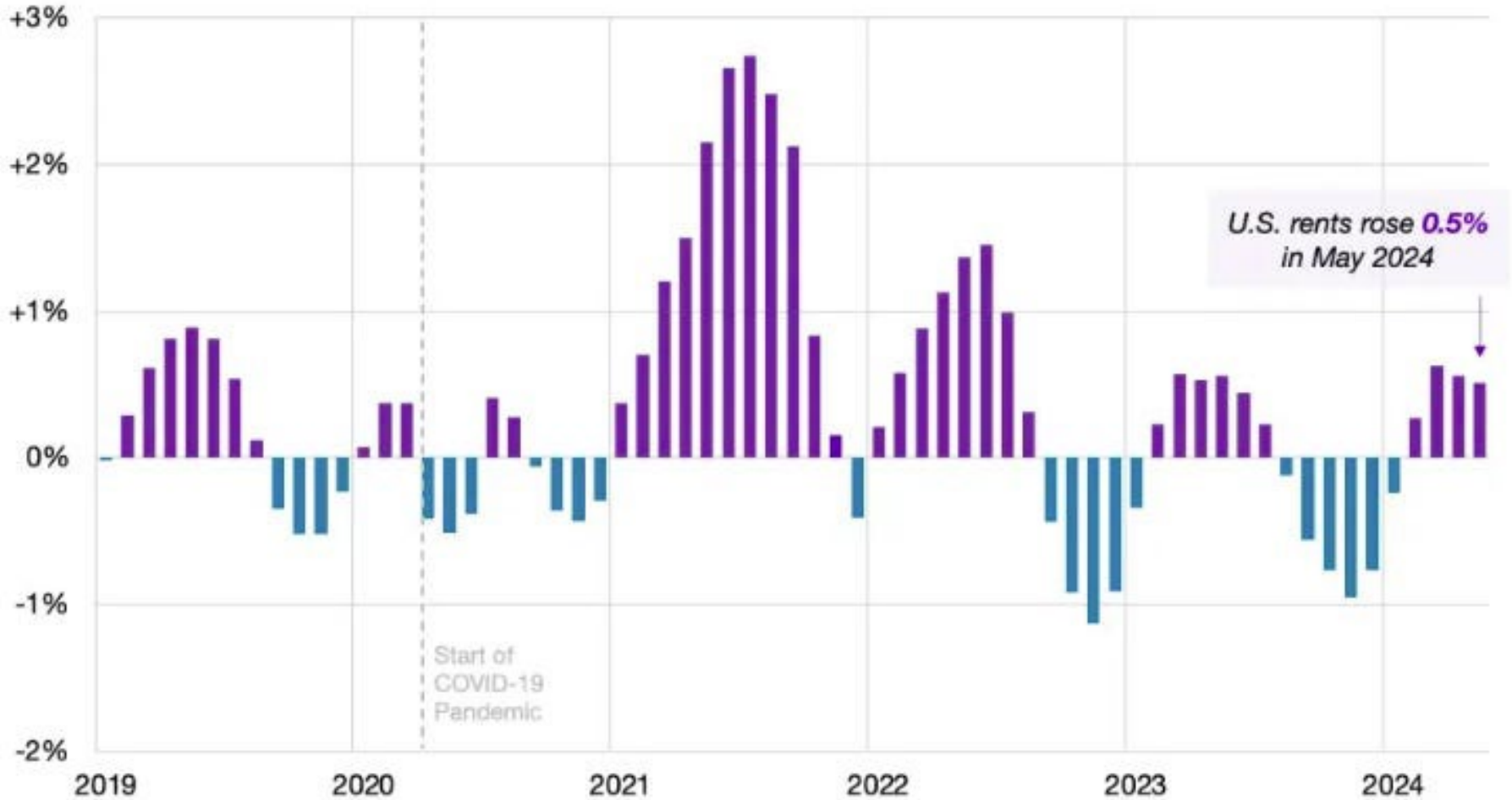
Sources: Census; HUD

myf.red/g/1o0Hu

Apartment Rents are Softening

They are now declining Y-o-Y

MoM Change in National Rent Index (2019 - Present)



Source: Apartment List Rent Estimates

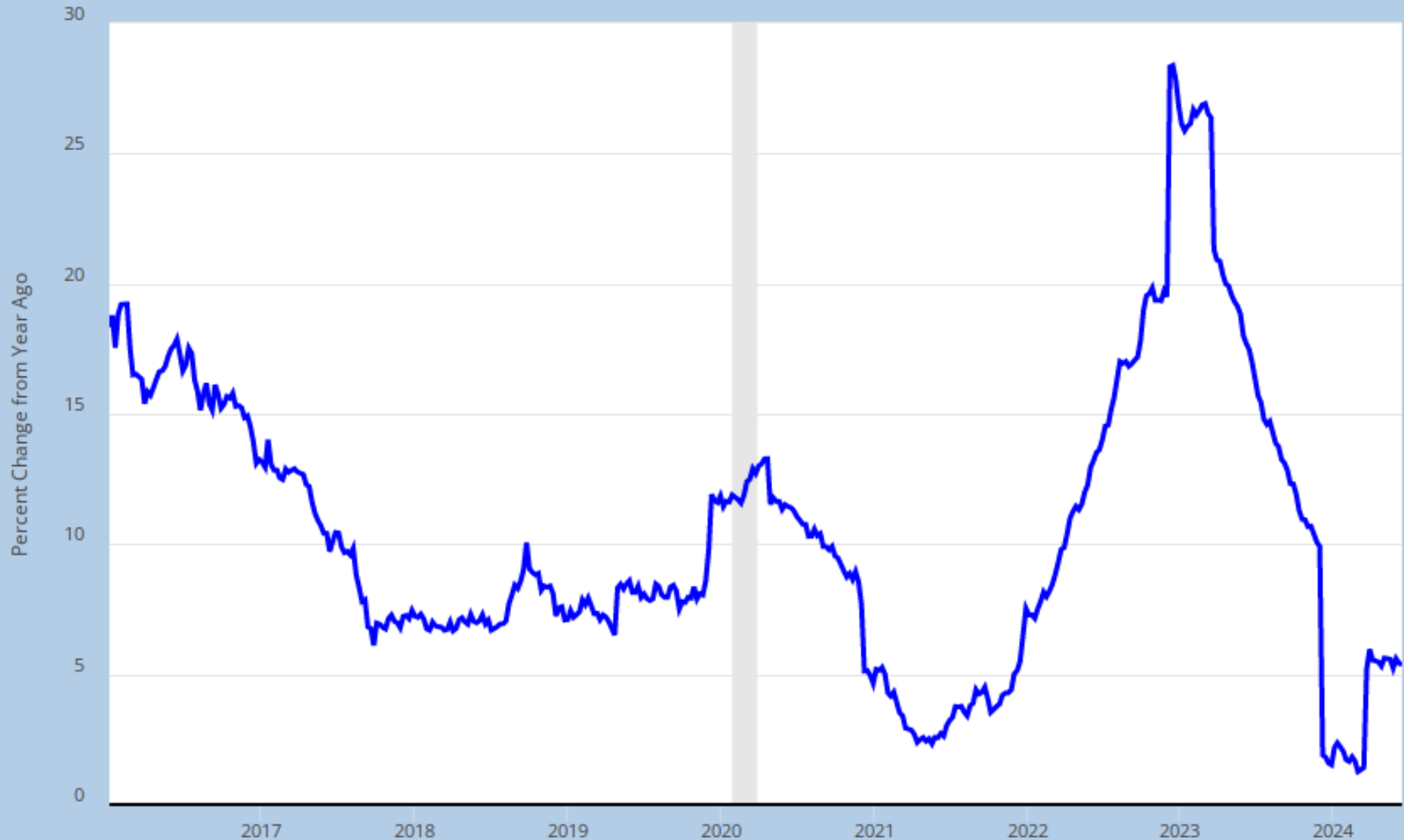
Data Available: www.apartmentlist.com/research/category/data-rent-estimates

Multifamily Construction Credit

It is growing more weakly



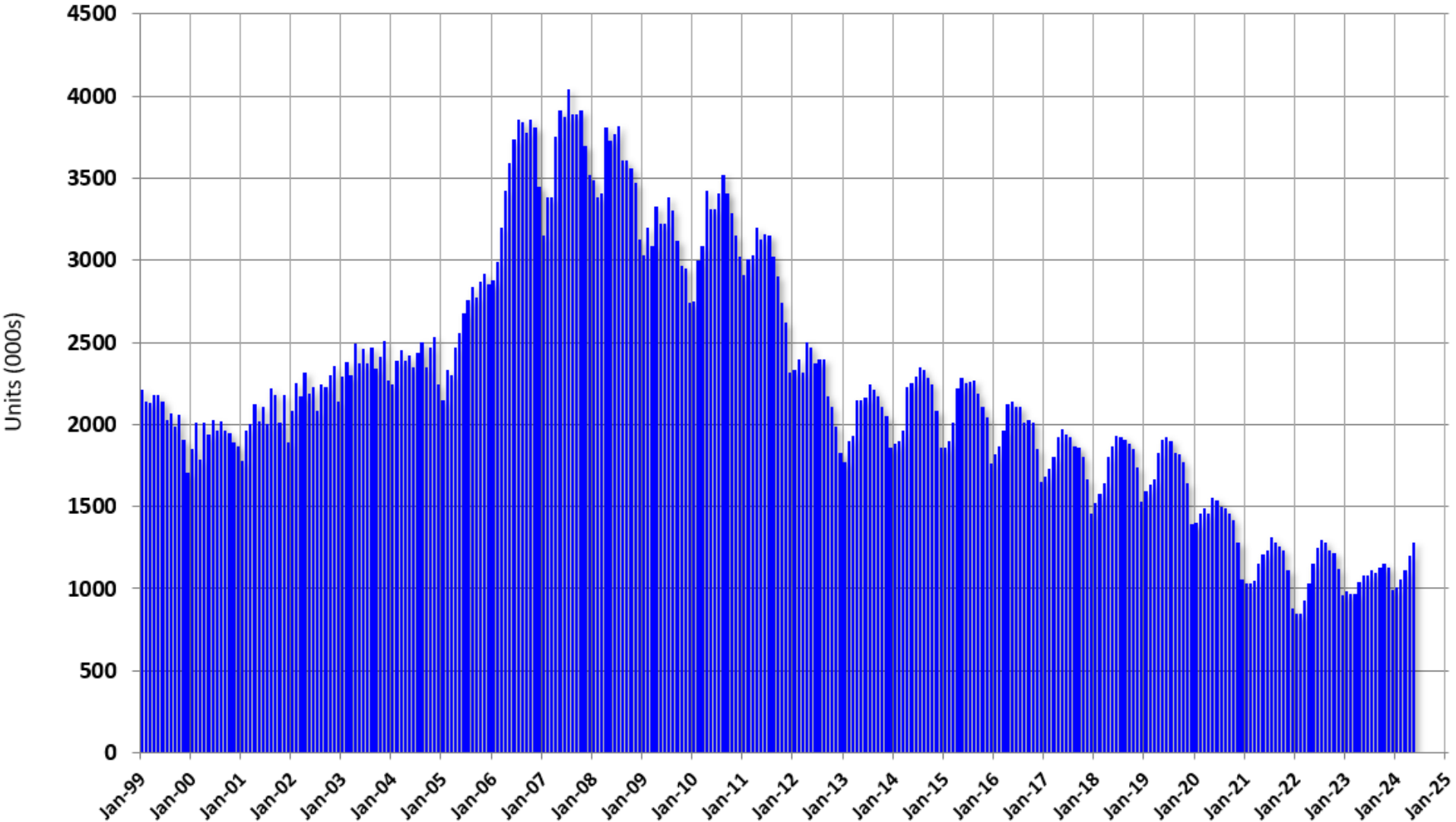
Real Estate Loans: Commercial Real Estate Loans: Secured by Multifamily Properties, All Commercial Banks



Inventory is Rising Slightly

But remains painfully low

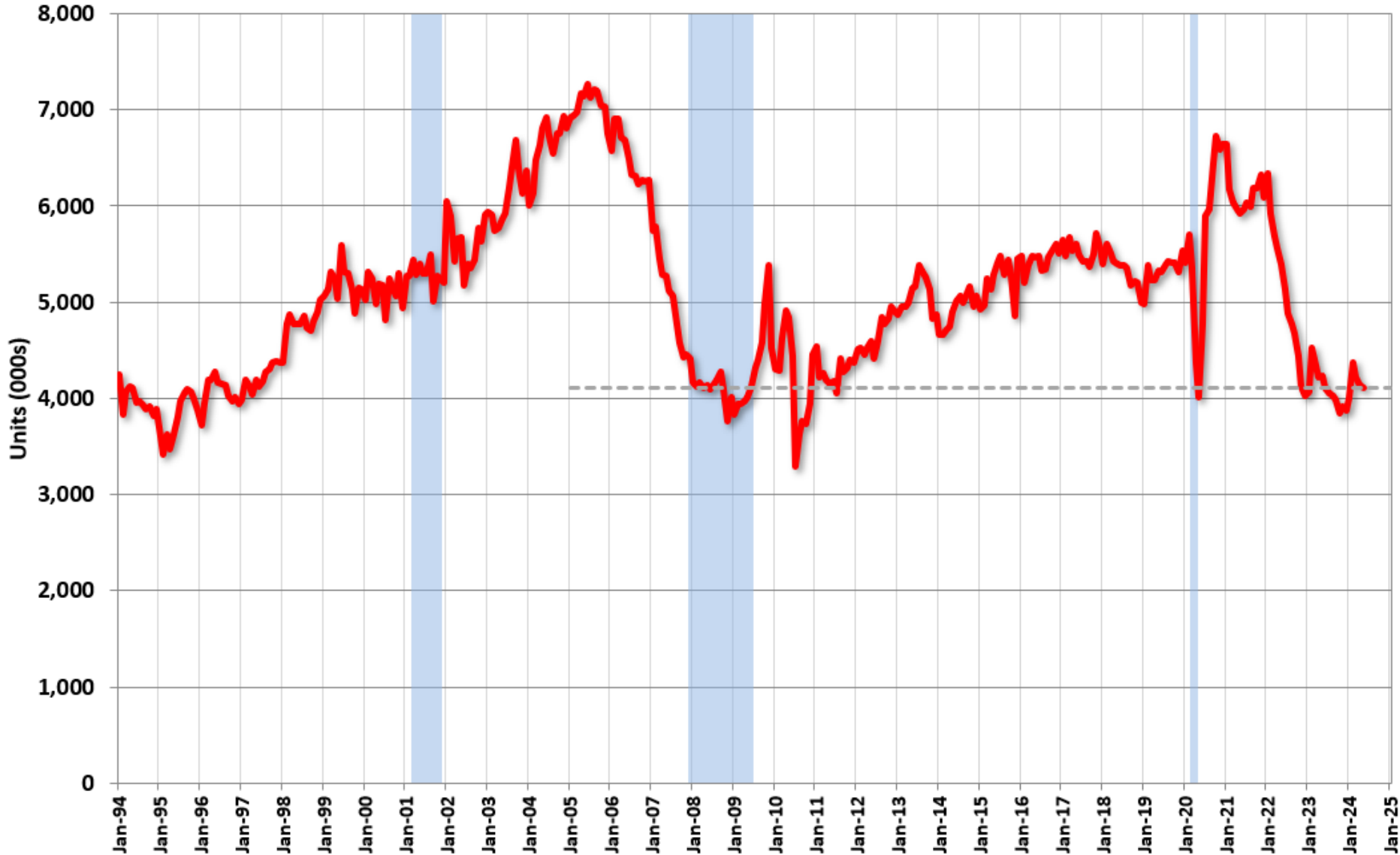
Existing Home Inventory



Existing Home Sales Are Soft

They should rise in 2024 as rates decline

Existing Home Sales (SAAR)

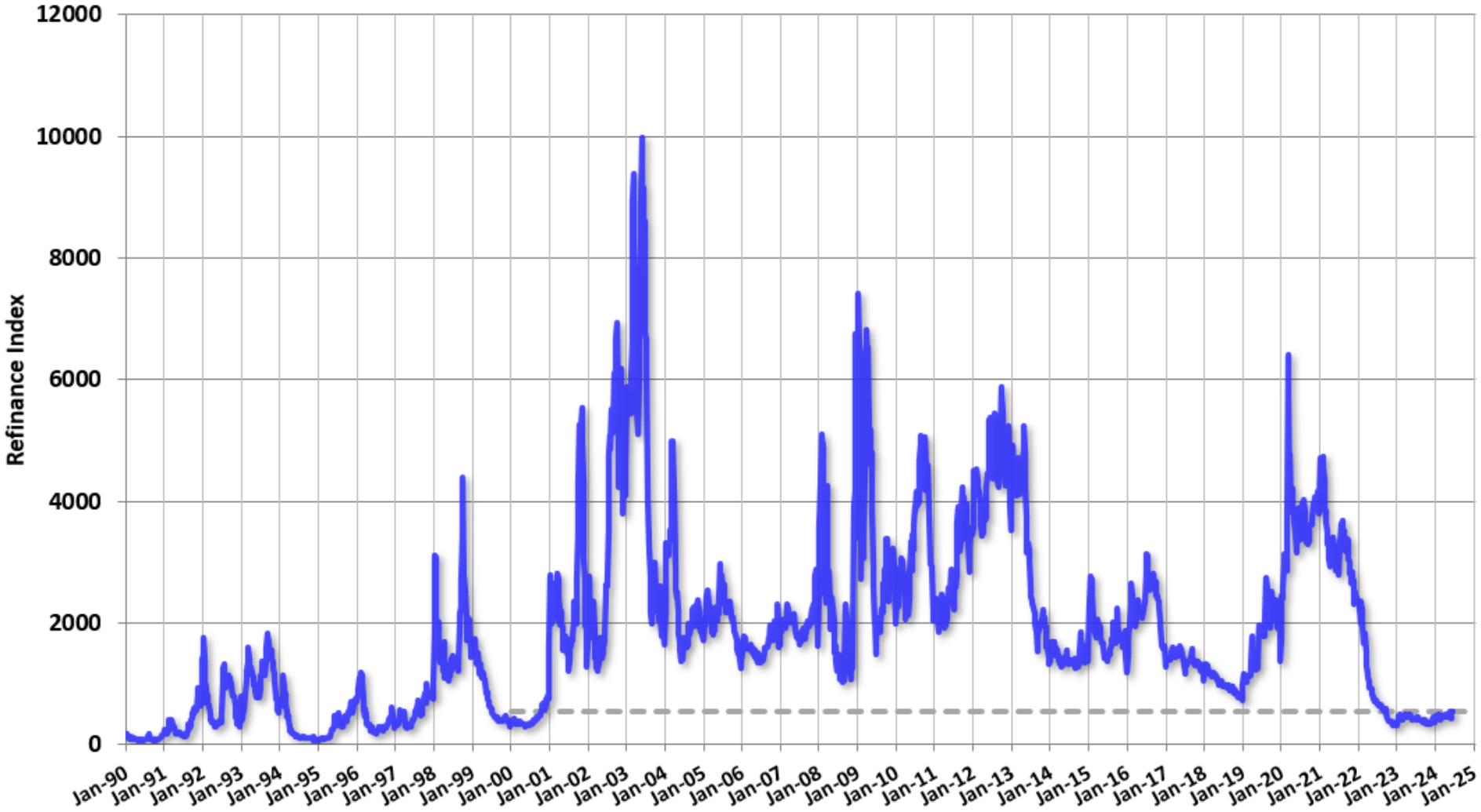


Refinance Activity is Dormant

Refi was \$2.6 trillion in '21, \$686 billion in '22, \$314 billion in '23, maybe \$425 billion in '24

MBA Refinance Applications Index

--- Current — Refinance Index

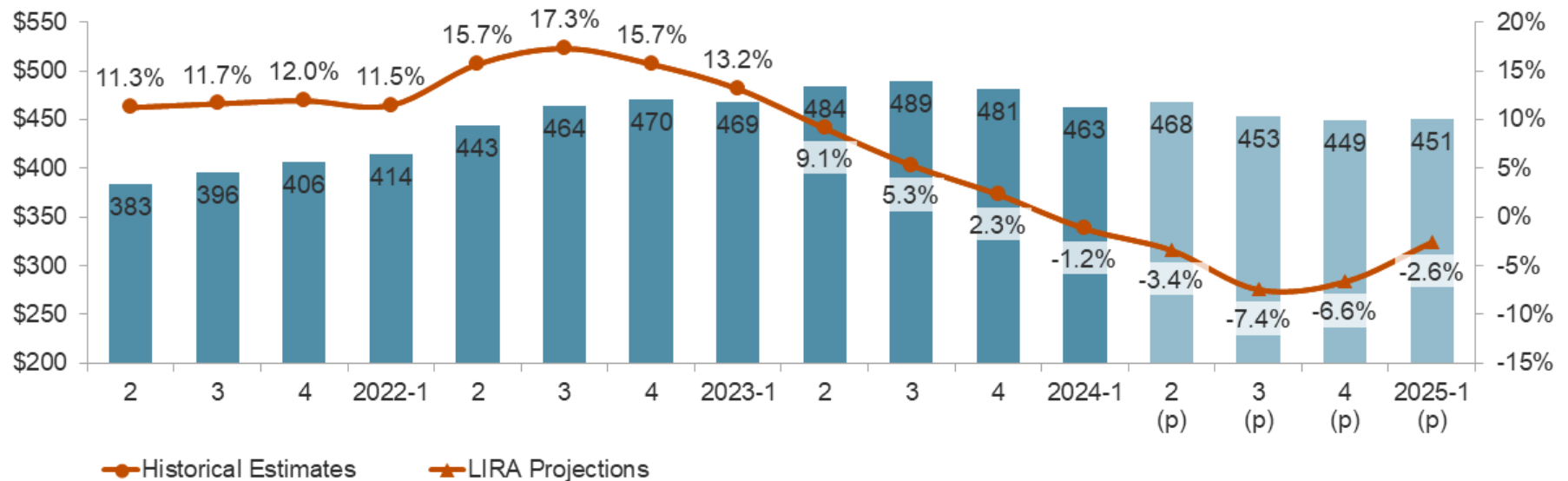


Housing Improvements & Repairs Weaken

Declining home prices, higher rates, fewer sales, and costlier materials all hurt
The exception: paint, flooring and molding

Leading Indicator of Remodeling Activity – First Quarter 2024

Homeowner Improvements & Repairs
Four-Quarter Moving Totals
Billions

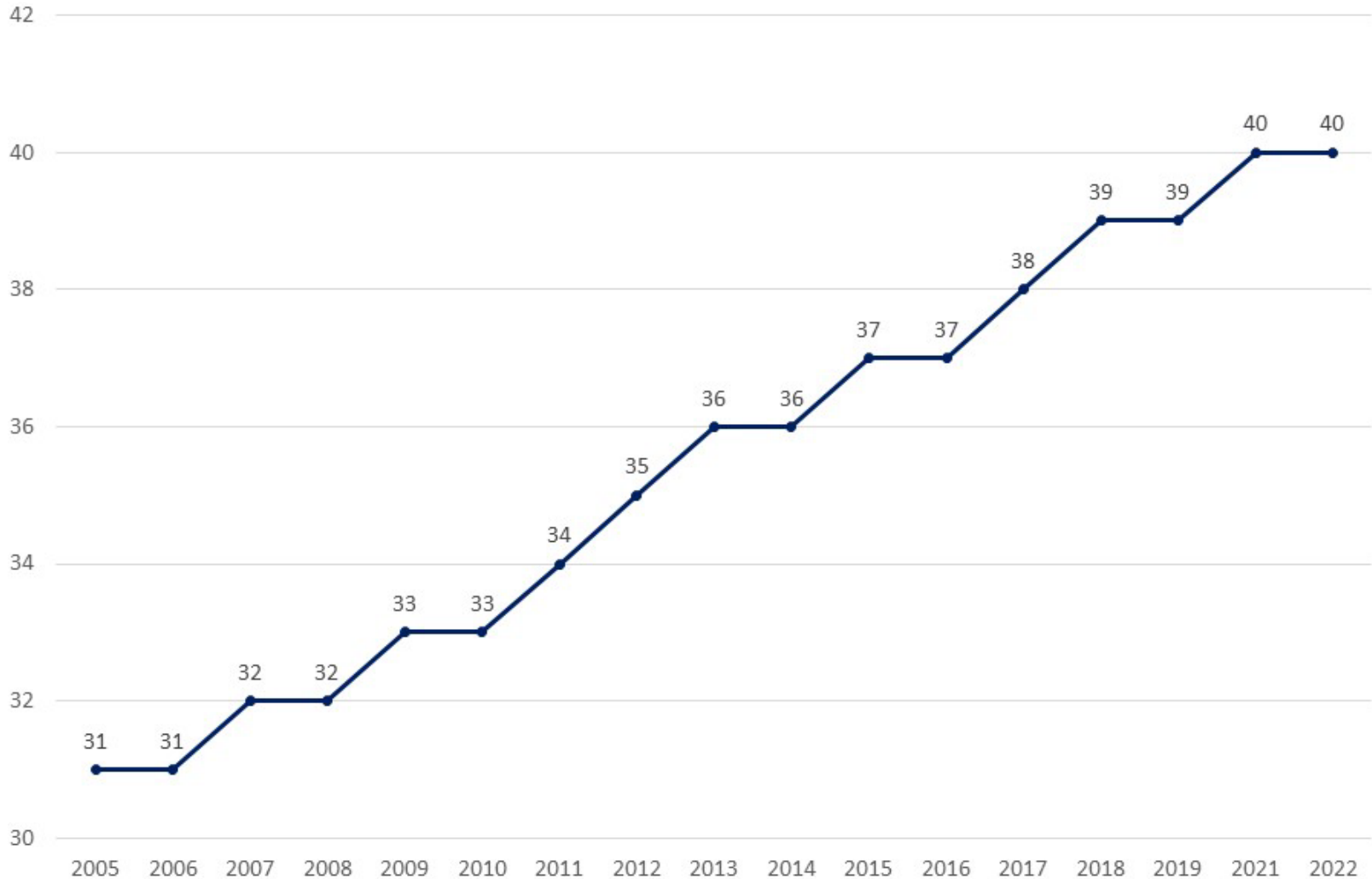


Notes: Improvements include remodels, replacements, additions, and structural alterations that increase the value of homes. Routine maintenance and repairs preserve the current quality of homes. Historical estimates since 2021 are produced using the LIRA model until American Housing Survey benchmark data become available.

Average Housing Stock Age

It keeps steadily rising

Median Age of Owner-Occupied Housing

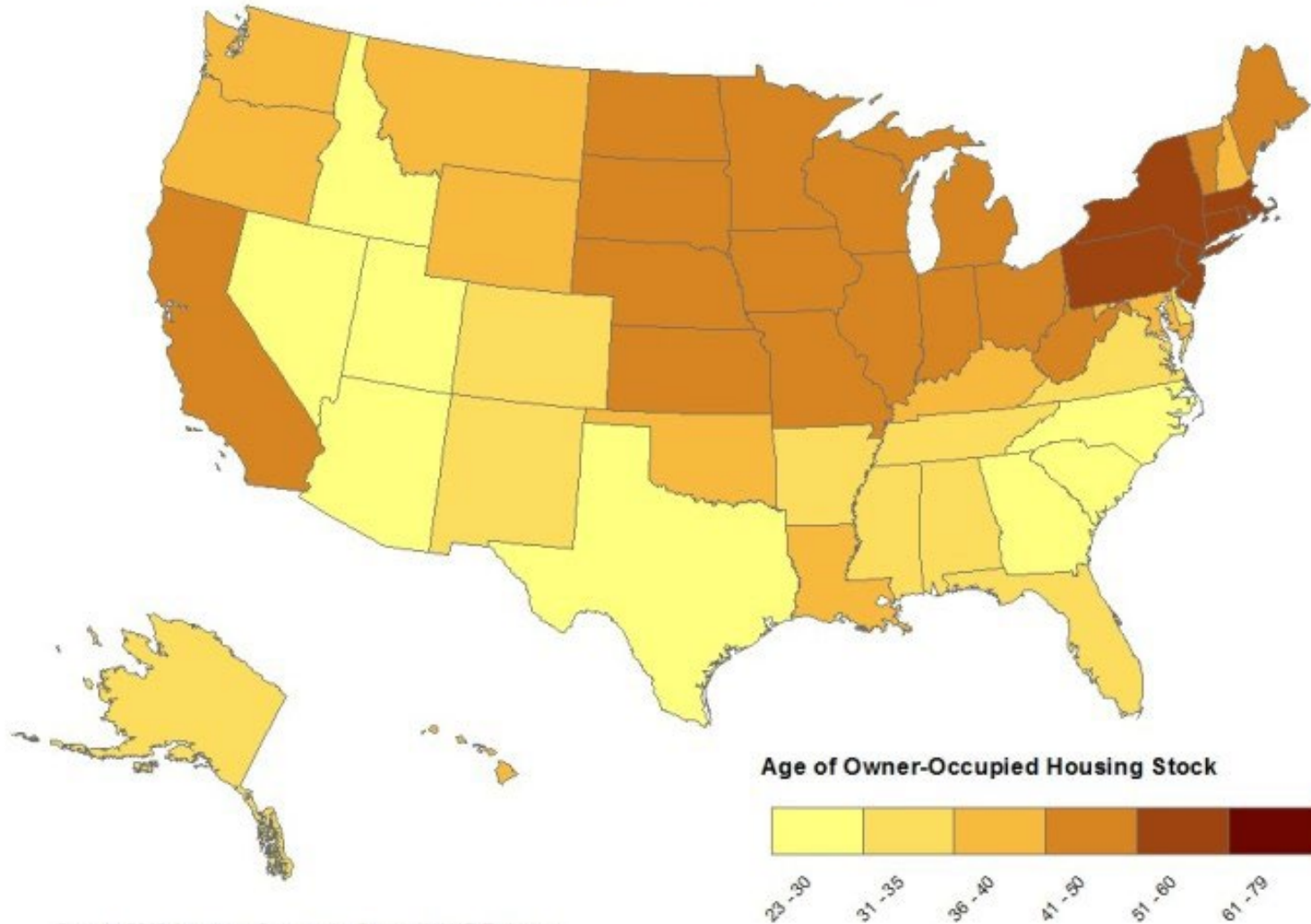


Source: 2005 – 2019, 2021-2022 American Community Survey Estimates

Average Housing Age by State

The Northeast and Midwest have the oldest houses

Median Age of Housing Stock By State

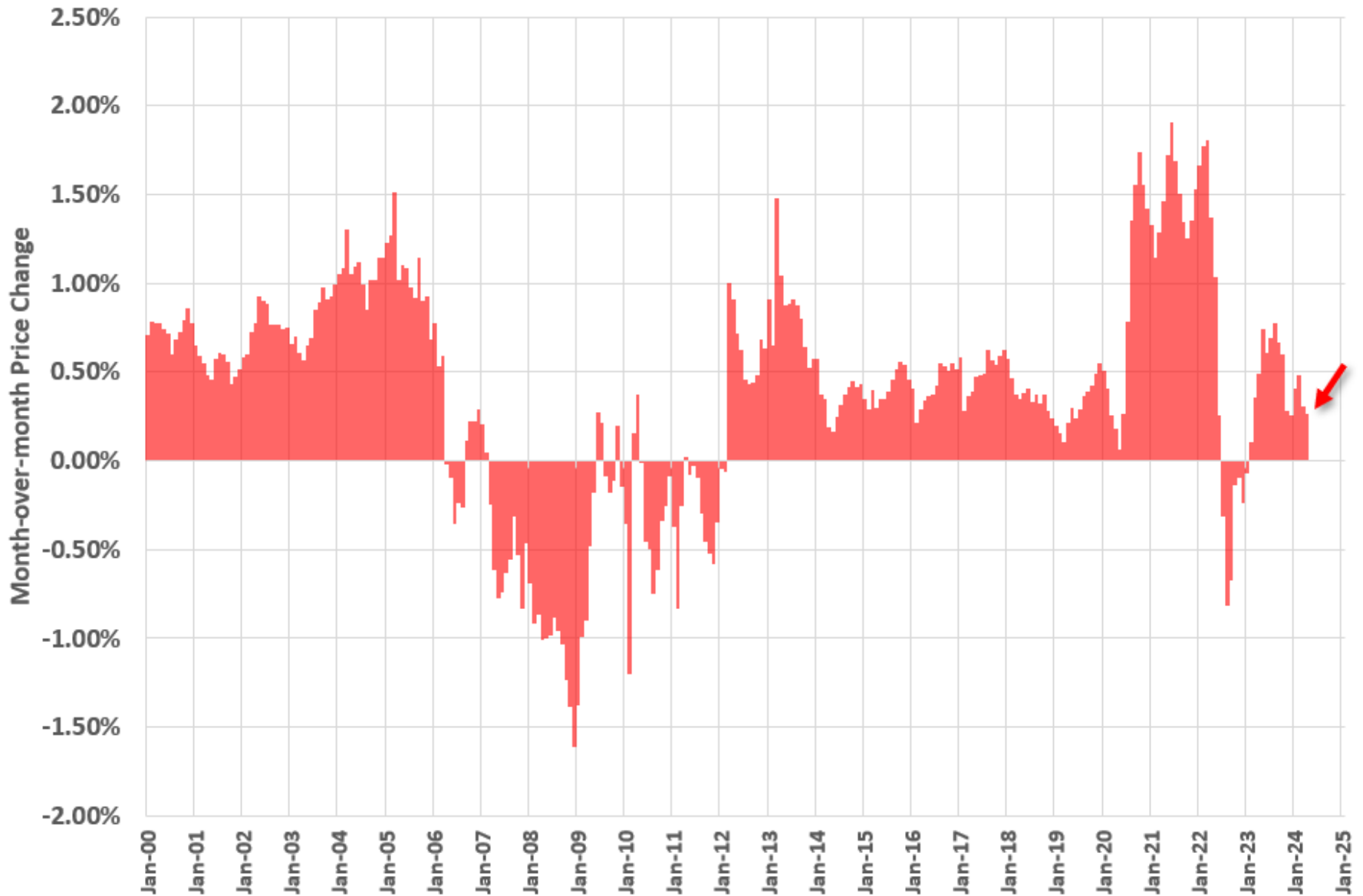


Source: 2019 American Community Survey, NAHB Estimates

Case-Shiller M-o-M Price Changes

House prices fell for 7 months but have been rising steadily since

Case-Shiller National Index, Month-over-month, Seasonally Adjusted

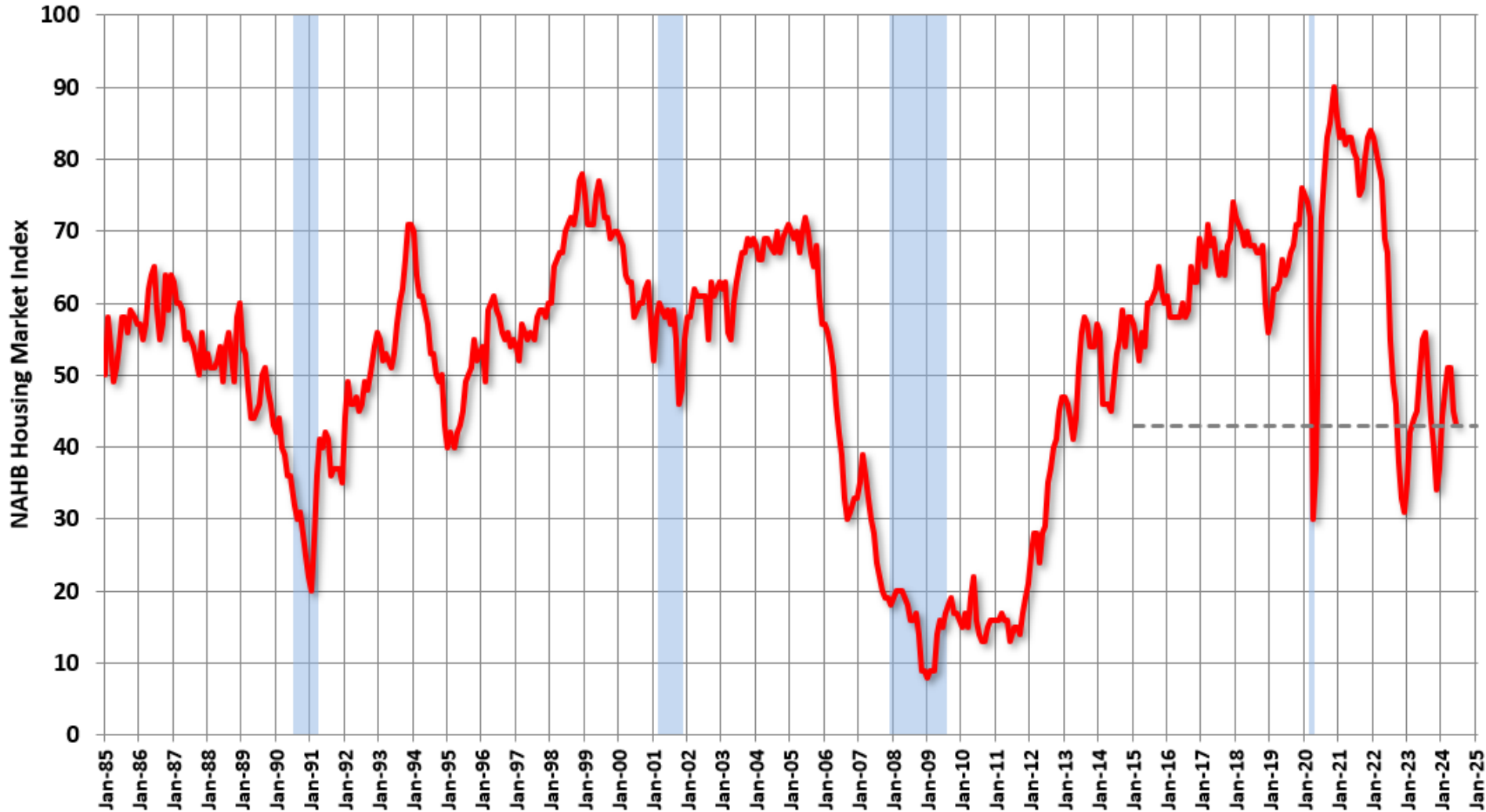


Home Builder Sentiment

High rates really hurt despite low inventories

NAHB Housing Market Index

Recession HMI Current

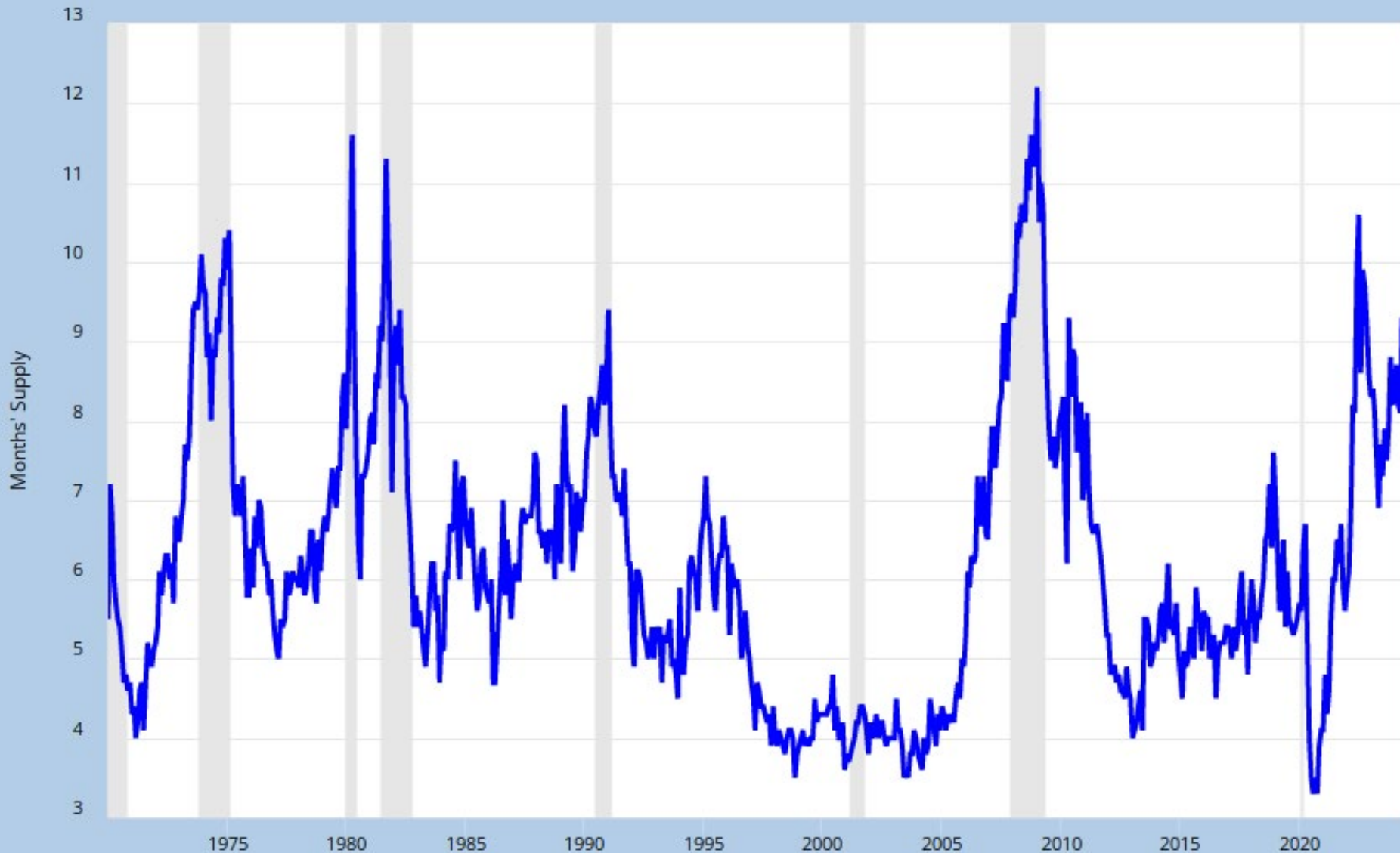


Inventory of New Homes

Six months supply is healthy. It's now 9.3. Builders must pull back

FRED 

— Monthly Supply of New Houses in the United States



Single-Family and Multifamily Starts

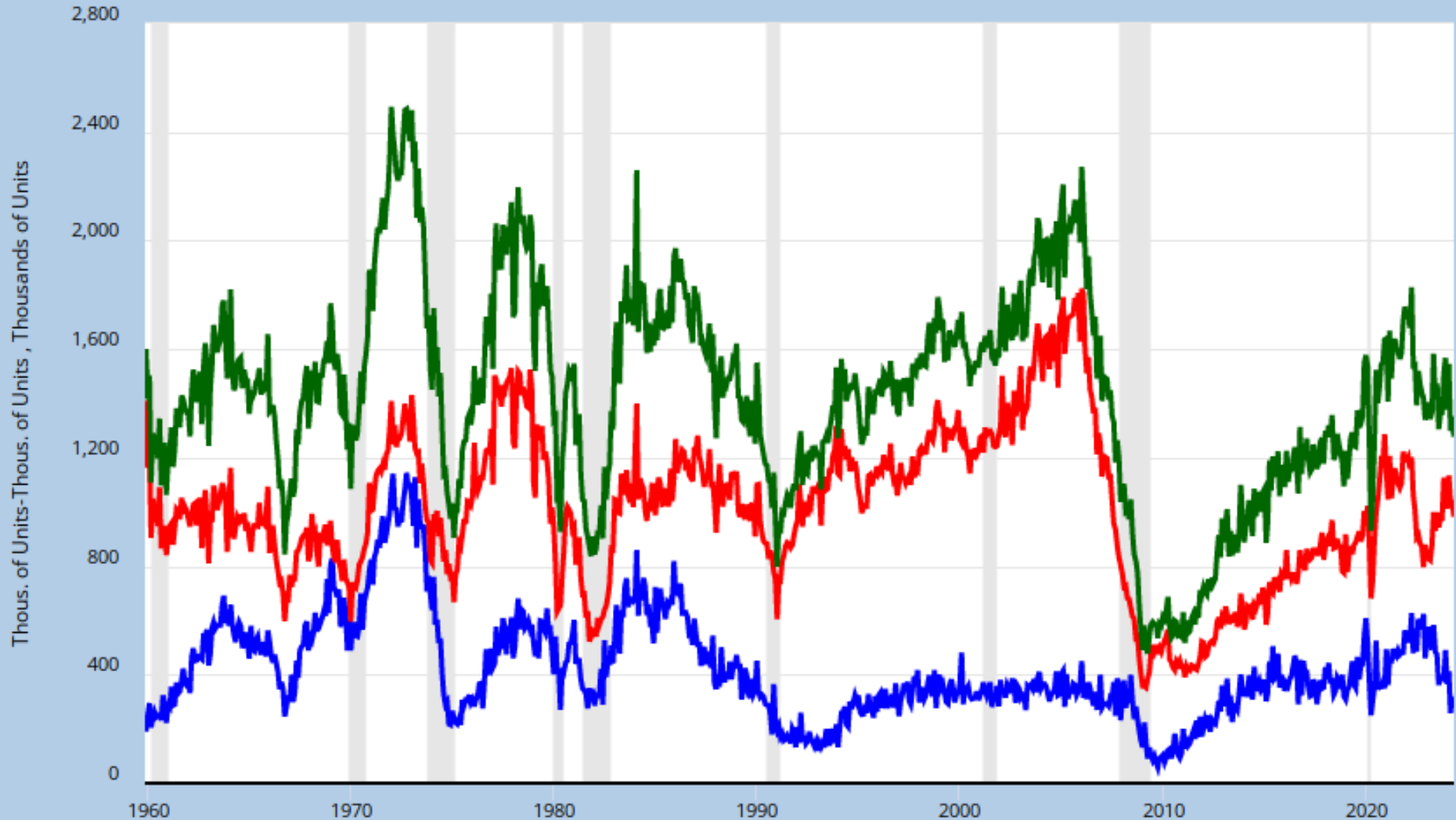
SF starts are very strong, MF starts struggle



— New Privately-Owned Housing Units Started: Total Units—New Privately-Owned Housing Units Started: Single-Family Units

— New Privately-Owned Housing Units Started: Single-Family Units

— New Privately-Owned Housing Units Started: Total Units

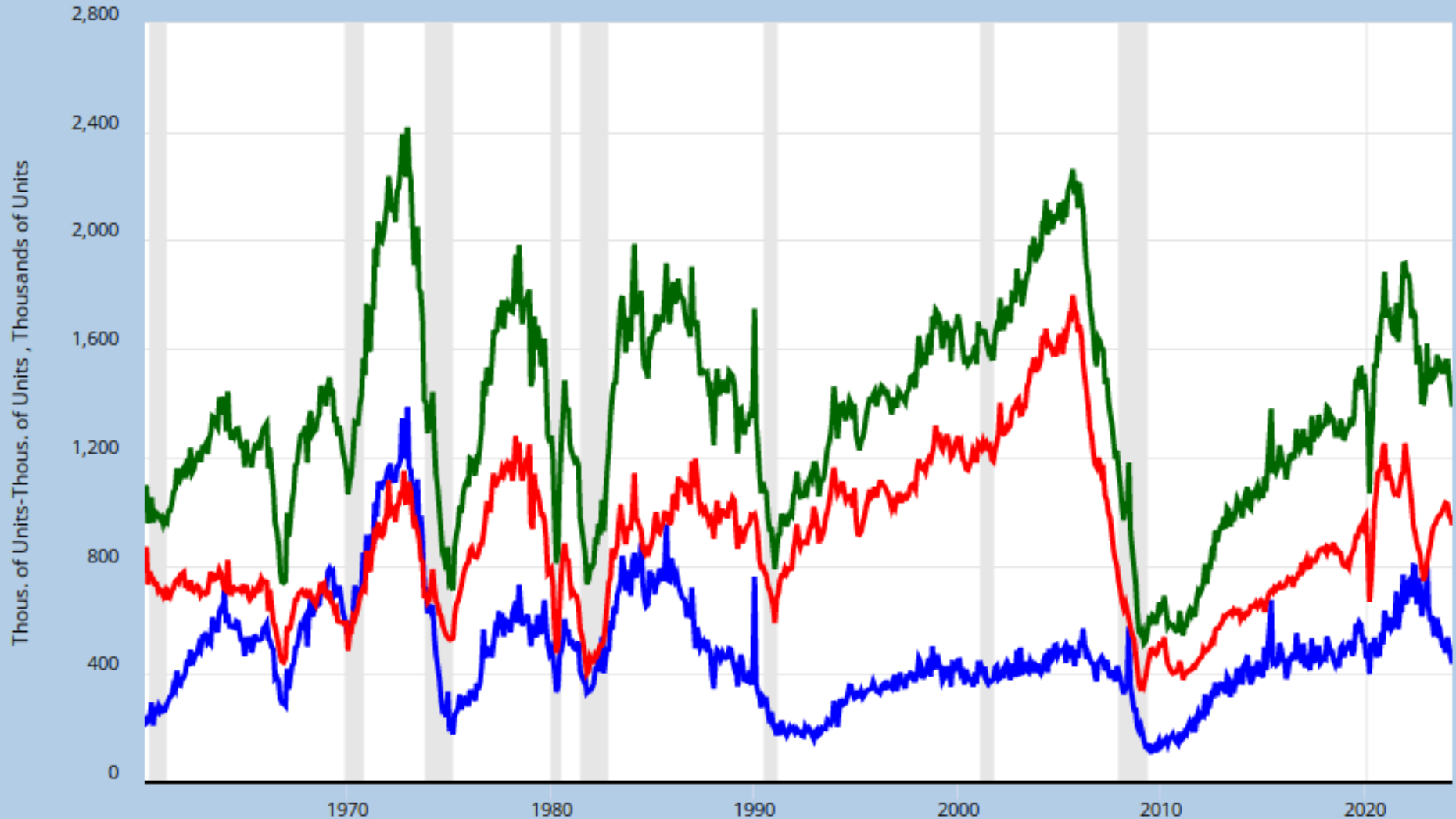


Residential Housing Permits

Single-family is good, multifamily weakens



- New Privately-Owned Housing Units Authorized in Permit-Issuing Places: Total Units-New Privately-Owned Housing Units Authorized in Permit-Issuing Places: Single-Family Units
- New Privately-Owned Housing Units Authorized in Permit-Issuing Places: Single-Family Units
- New Privately-Owned Housing Units Authorized in Permit-Issuing Places: Total Units

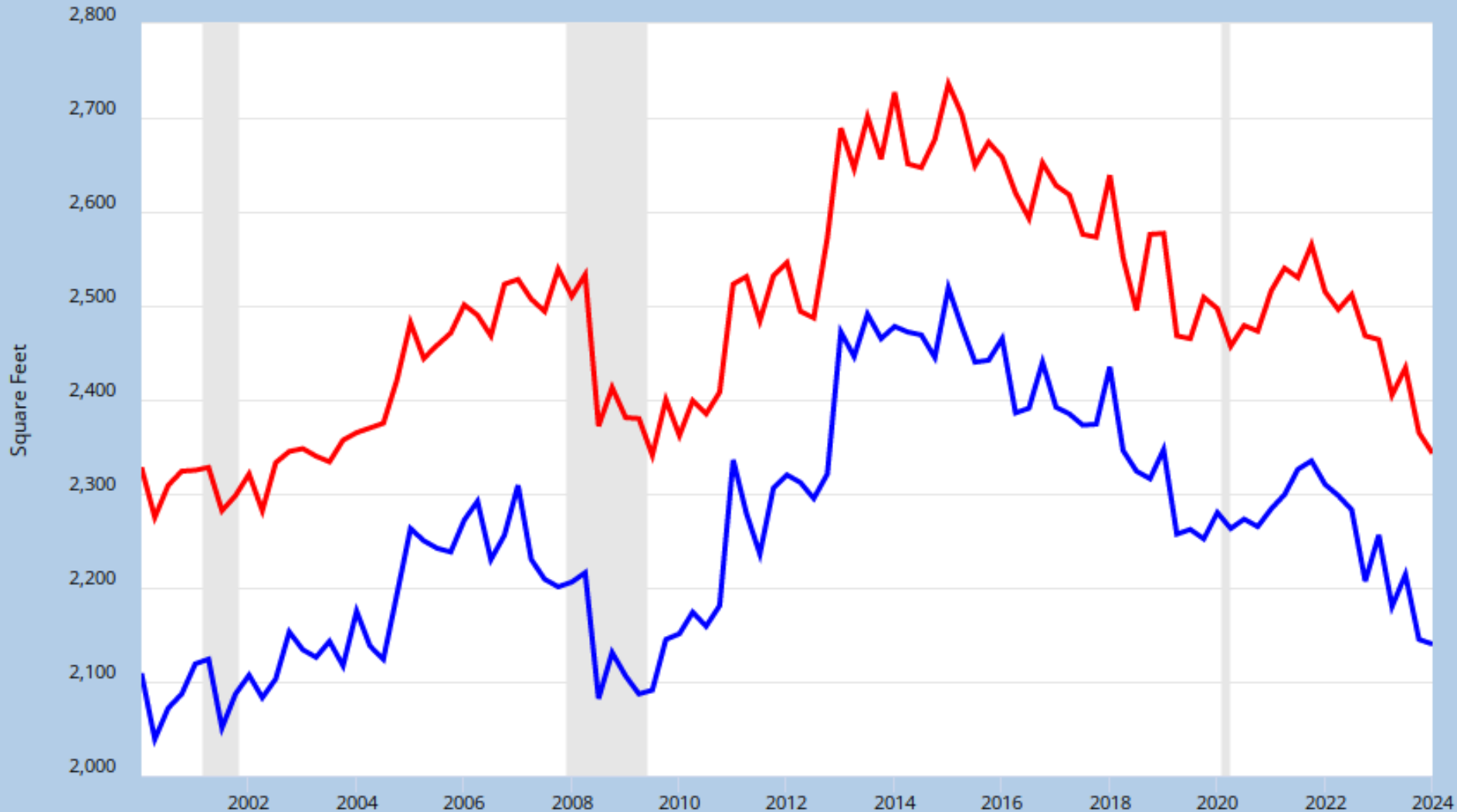


Average & Median House Size

They have been shrinking since 2015



- New Privately Owned Housing Starts in the United States, Median Square Feet of Floor Area for One-Family Units
- New Privately Owned Housing Starts in the United States, Average Square Feet of Floor Area for One-Family Units

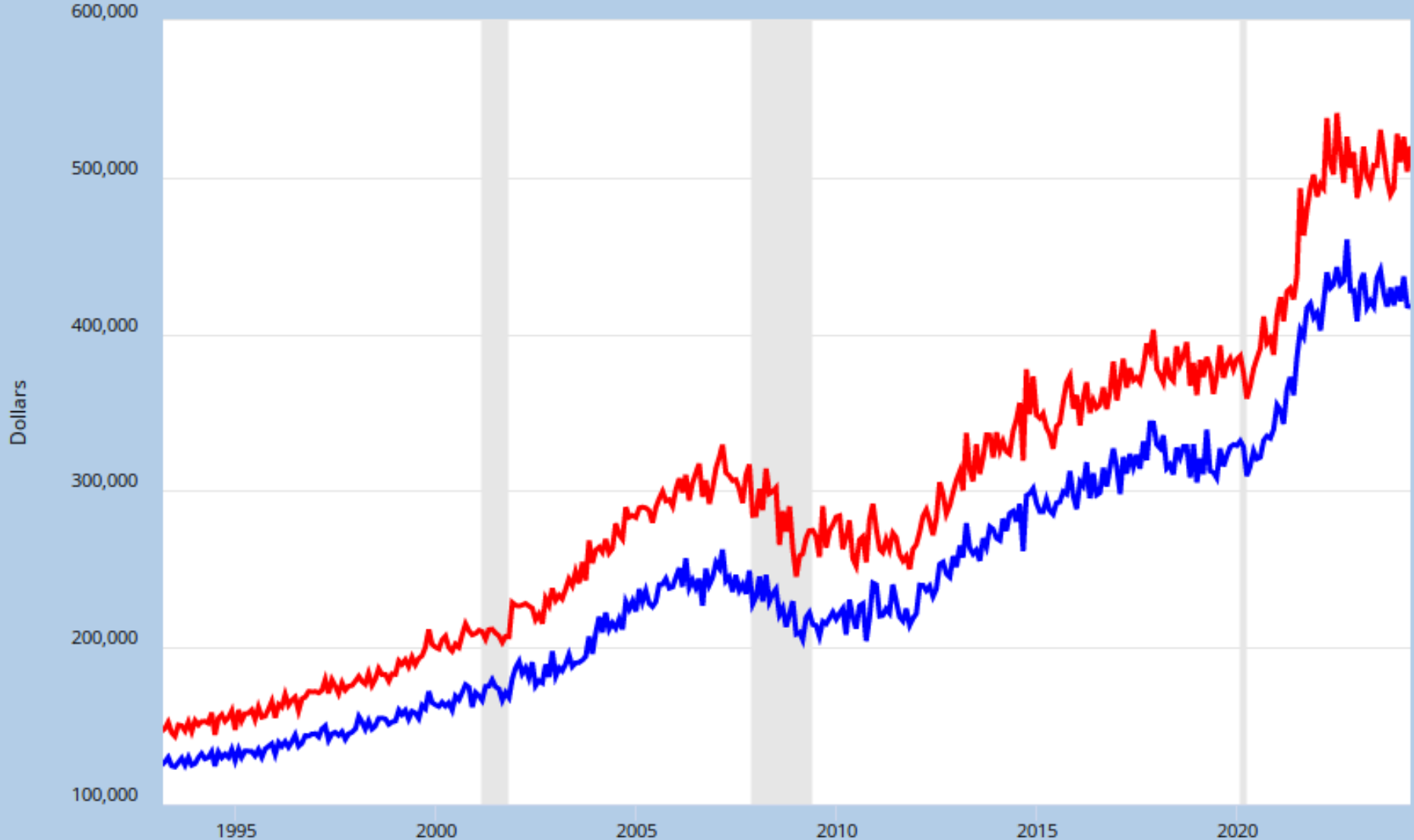


New Home Prices Are Stable

This is because new homes are getting smaller



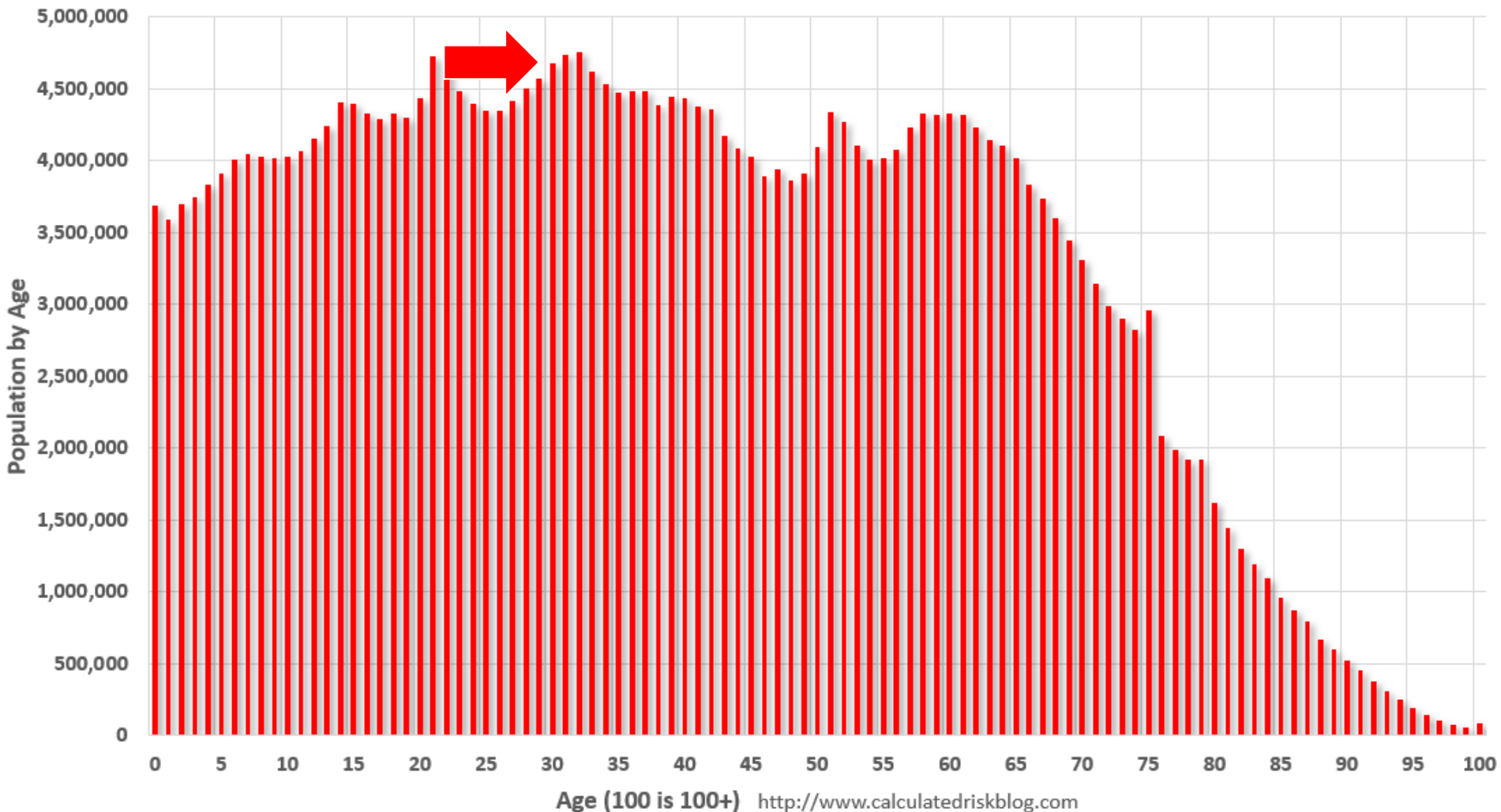
— Median Sales Price for New Houses Sold in the United States
— Average Sales Price for New Houses Sold in the United States



We are At Peak House

There is strong demand for a decade

U.S. Population by Age, 2022 Census Estimate

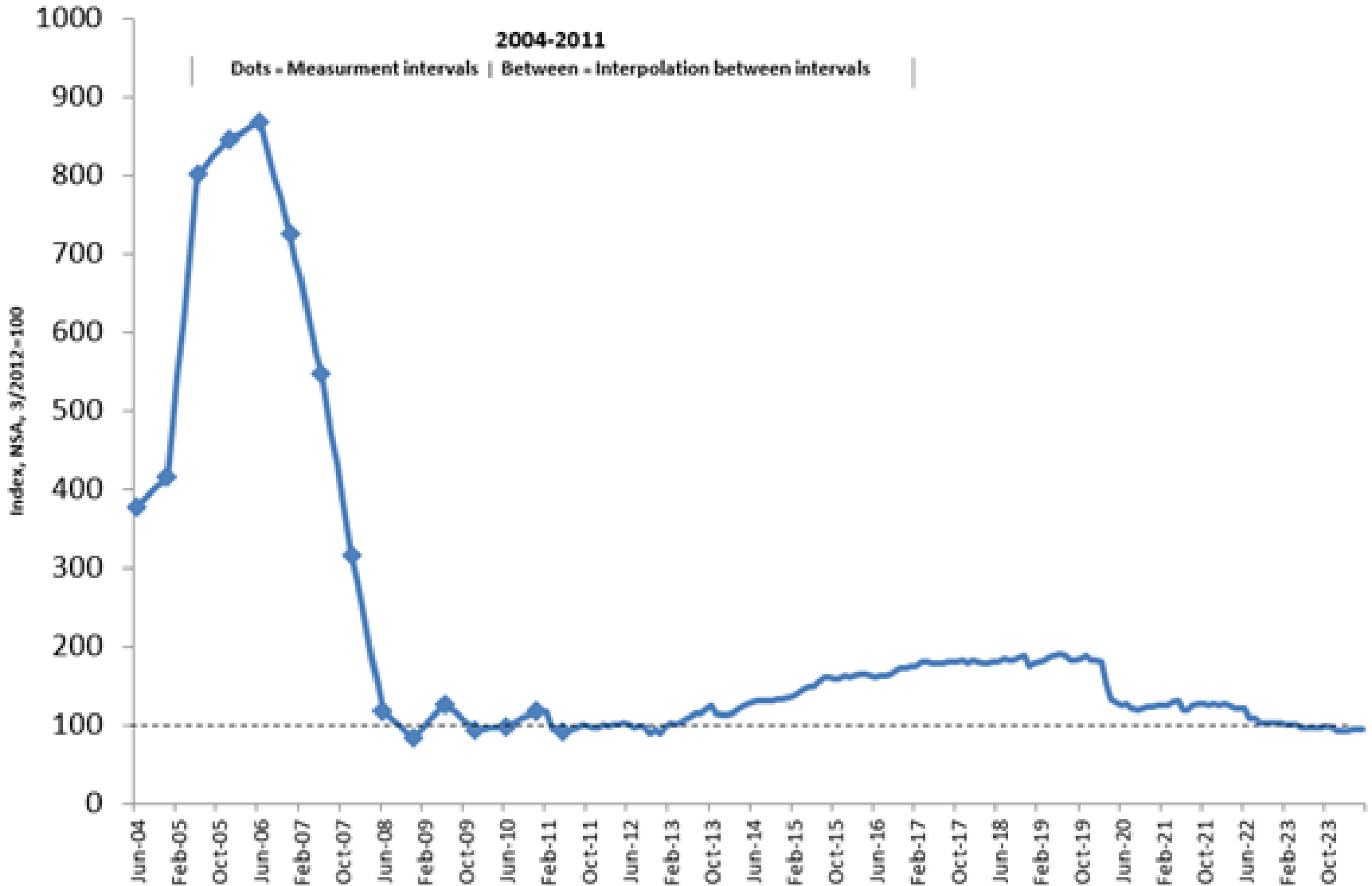


Credit is Generally Hard to Get

It was getting easier, but no longer!

Mortgage Credit Availability Index (NSA, 3/2012 = 100)

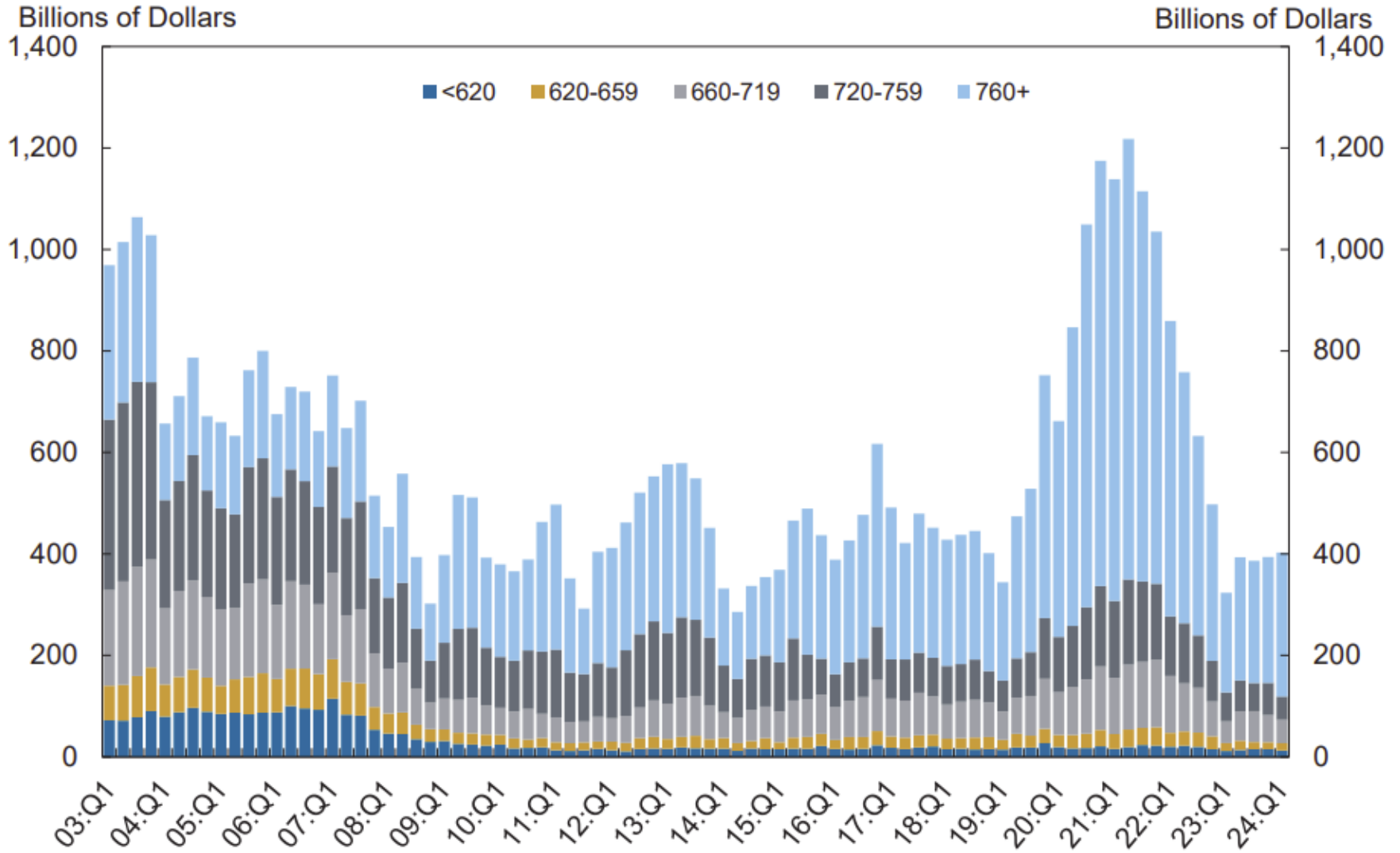
Expanded Historical Series



Mortgage Quality

It has meaningfully improved and remains high

Mortgage Originations by Credit Score*



Source: New York Fed Consumer Credit Panel/Equifax

* Credit Score is Equifax Riskscore 3.0

Negative Equity is Less and Less of a Problem

In 2011 25% of mortgages were upside down, now it's under 2%

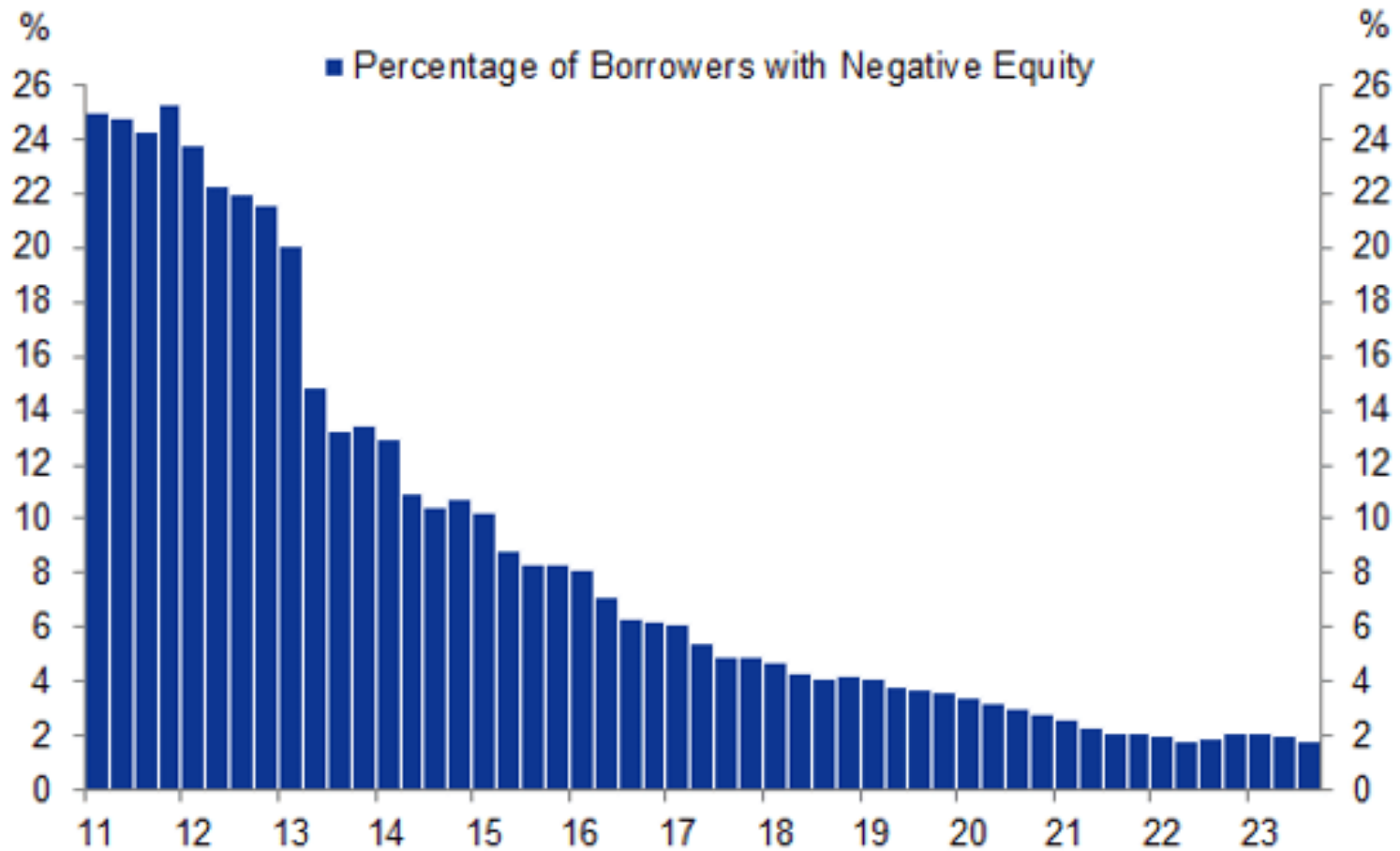
Exhibit 46 : 1.8% of mortgaged properties have negative equity

The Daily Shot

06-Mar-2024

@SoberLook

Percentage of mortgages with negative equity



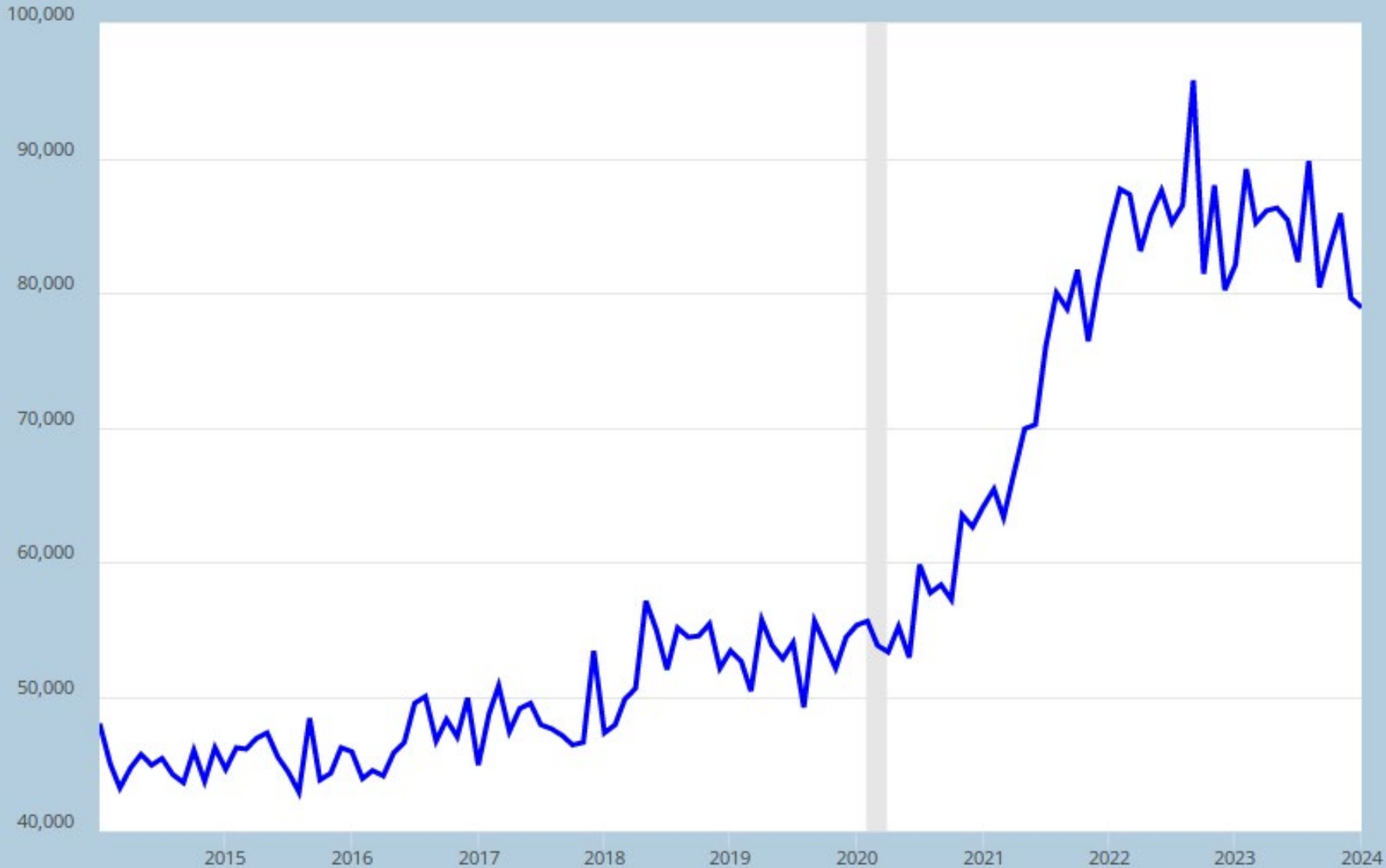
Source: CoreLogic, Goldman Sachs Global Investment Research

Mobile Home Prices are High

Is this because SF/Condo prices are out of reach? Supply-chain issues are better

FRED 

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



Source: U.S. Census Bureau

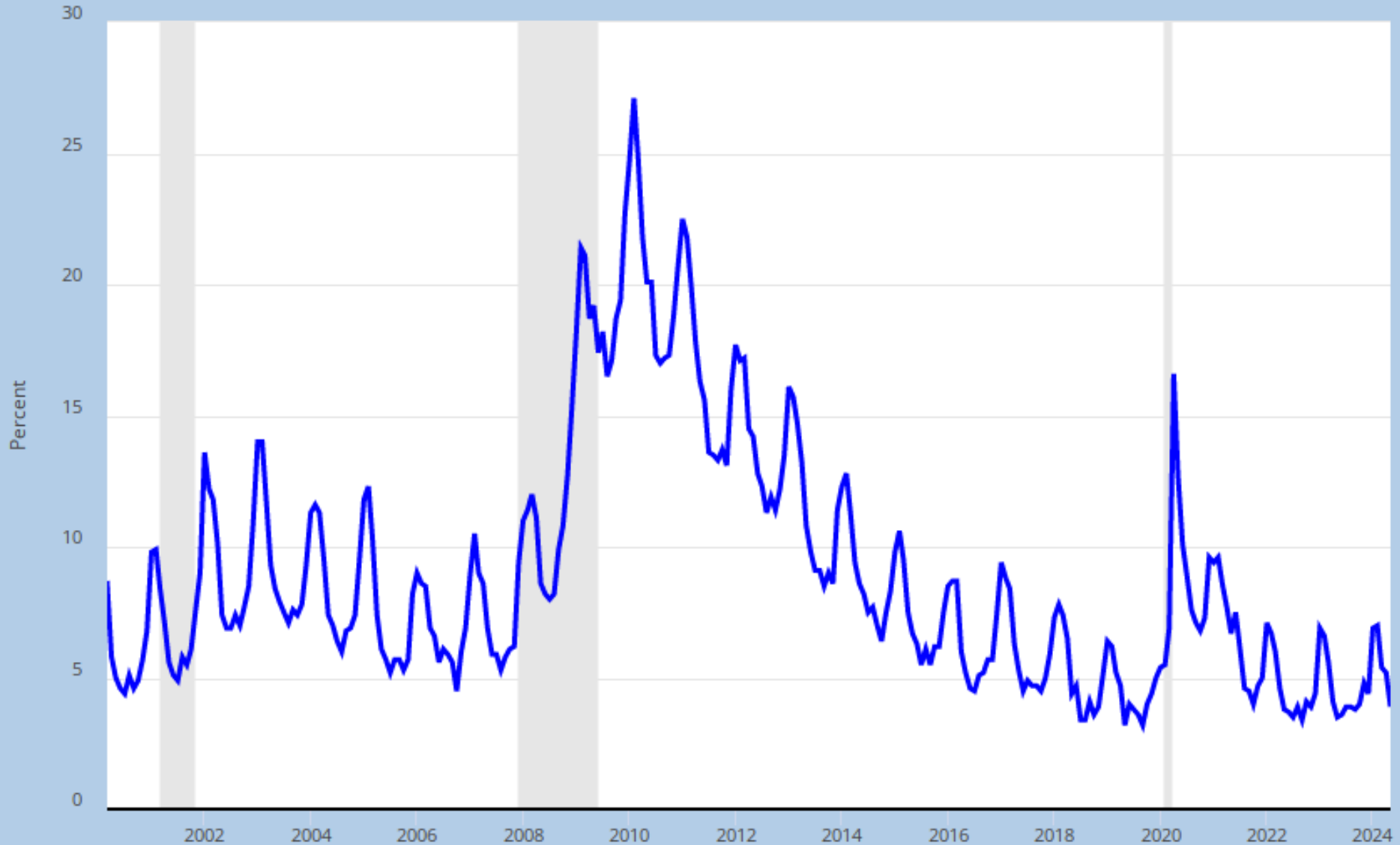
myf.red/g/1p74H

Construction Unemployment

Is near its best level in at least 20 years



— Unemployment Rate - Construction Industry, Private Wage and Salary Workers



Future Activity Looks Flat

Measures non-residential projects in the planning phase & is a 12-month leading economic indicator

DODGE MOMENTUM INDEX

(2000=100, Seasonally Adjusted)

	May-24	Apr-24	% Change
Dodge Momentum Index	179.0	174.3	2.7%
Commercial Building	230.6	218.7	5.5%
Institutional Building	115.2	119.3	-3.4%

Source: Dodge Construction Network

DODGE MOMENTUM INDEX

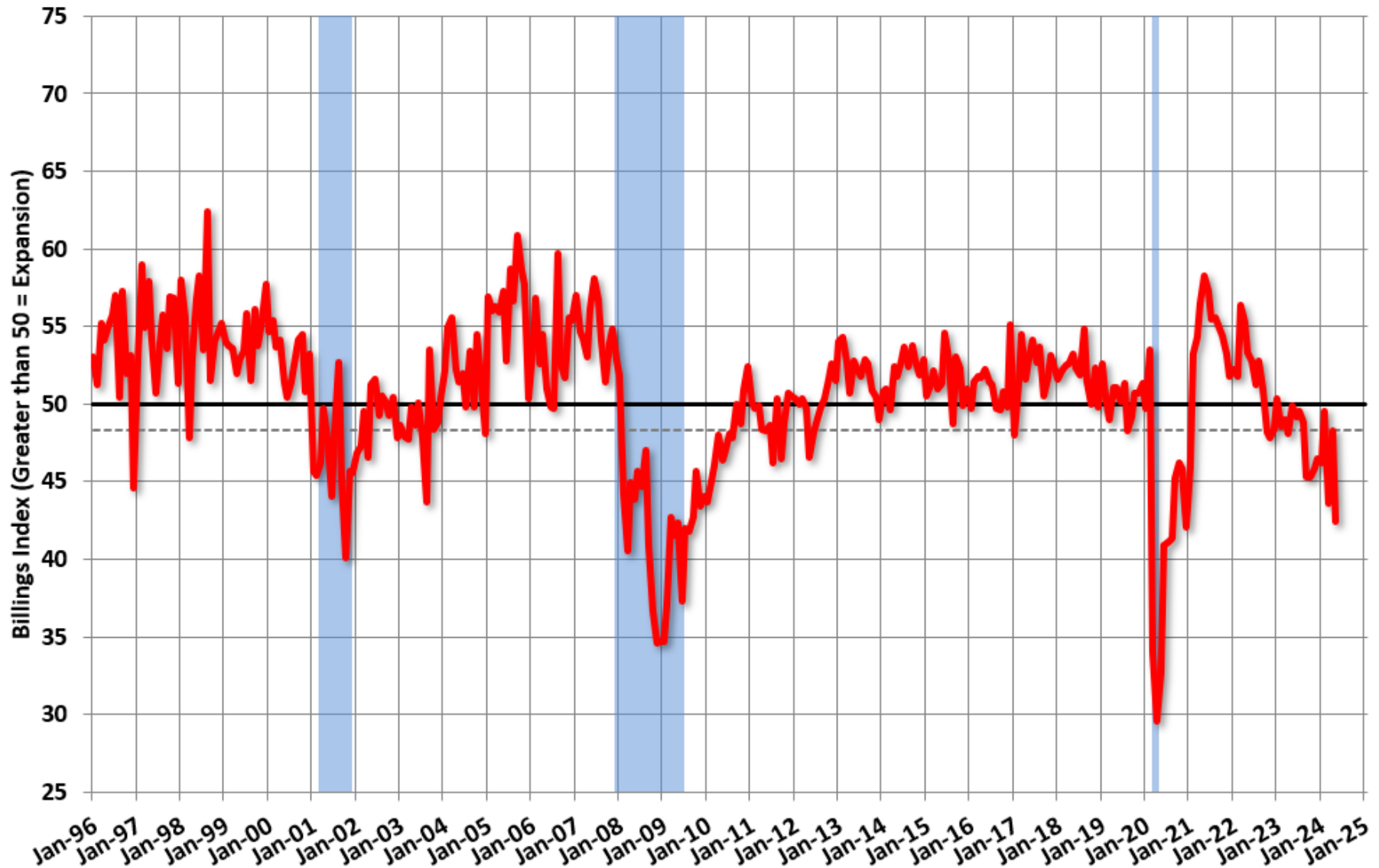
(2000=100, Seasonally Adjusted)



Architectural Billing Index

Is a 9 to 12-month leading indicator of CRE. Sub-50 means shrinking

Architecture Billings Index



**What About
Things Here?**

KEY TAKEAWAYS

- 1) 2024 will be a decent year**
- 2) The Fed has stopped raising rates**
- 3) Job growth will most likely slow**
- 4) Inflation should keep decelerating**
- 5) Watch inflation and unemployment**

ANY QUESTIONS?

Elliot F. Eisenberg, Ph.D.

Cell: 202.306.2731

elliott@graphsandlaughs.net

www.econ70.com

Do you want to get my daily 70-word economics email?
Please give me your business card or text "bowtie" to 66866

Thank YOU all very very much!

@ECON70

