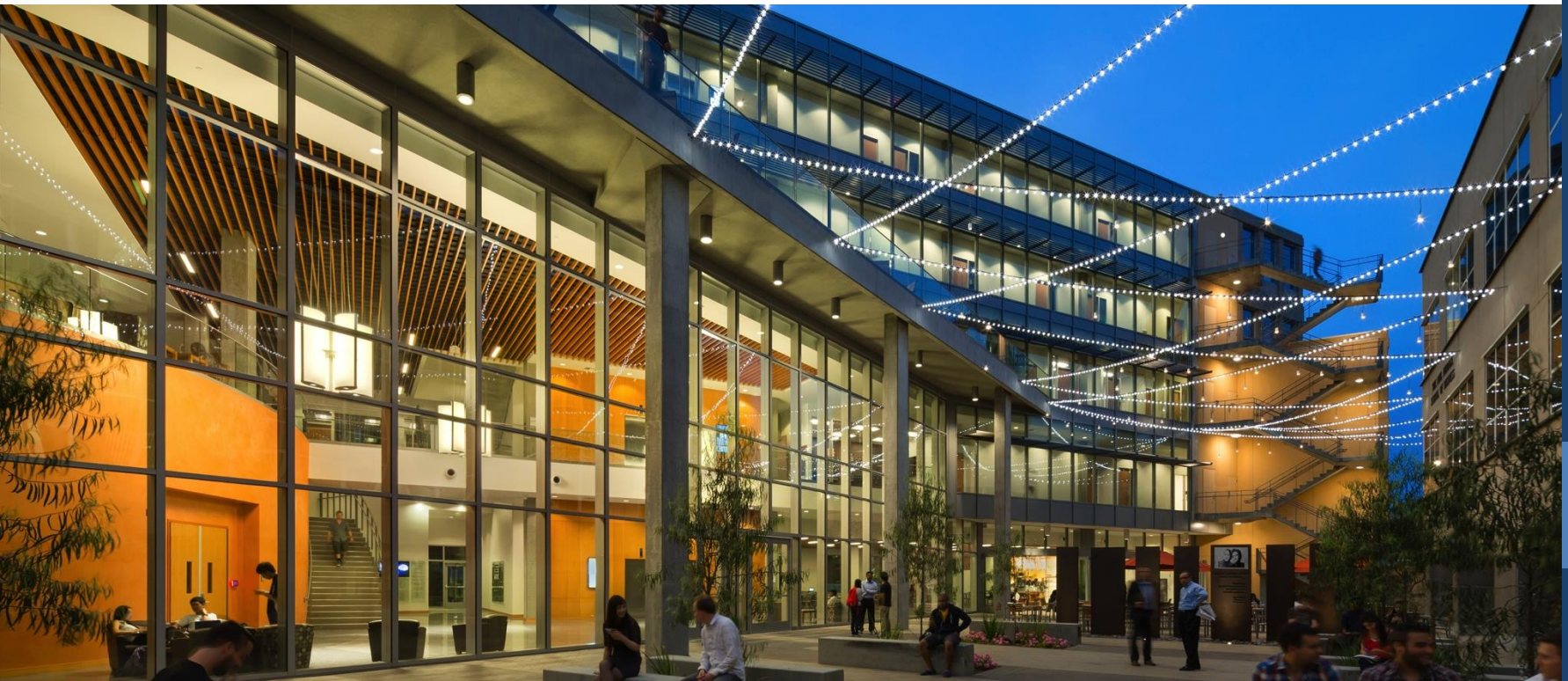


Economic Outlook  
Ed Coulson,  
Professor and Area Head, Economics  
Director, Center for Real Estate



# The Center for Real Estate

- One of the Centers of Excellence in the Paul Merage School of Business, UCI
- Our missions:
  - Research: Studies on a number of different topics in real estate and urban economics.
  - Teaching: Administers the real estate program and curriculum for the PMSOB graduate and undergraduate student populations
  - Service: Engagement with Orange County Real Estate community through organized events, public speaking, student recruitment, etc.

# Our next event...

**The Great Repositioning of  
CRE, Money & Assets:**  
*Implications of loans coming due,  
extensions, deeds in lieu, and the  
economics of repurposing of vacant  
buildings*

**Wednesday, January 24, 2024  
7:30 a.m. to 9:00 a.m. Pacific Time**

**The Pacific Club**  
4110 MacArthur Blvd.  
Newport Beach, CA 92660

**REGISTER NOW >**

**Moderator:**

**James E. Pugh, Esq.**, Partner,  
Sheppard Mullin

**Panelist:**

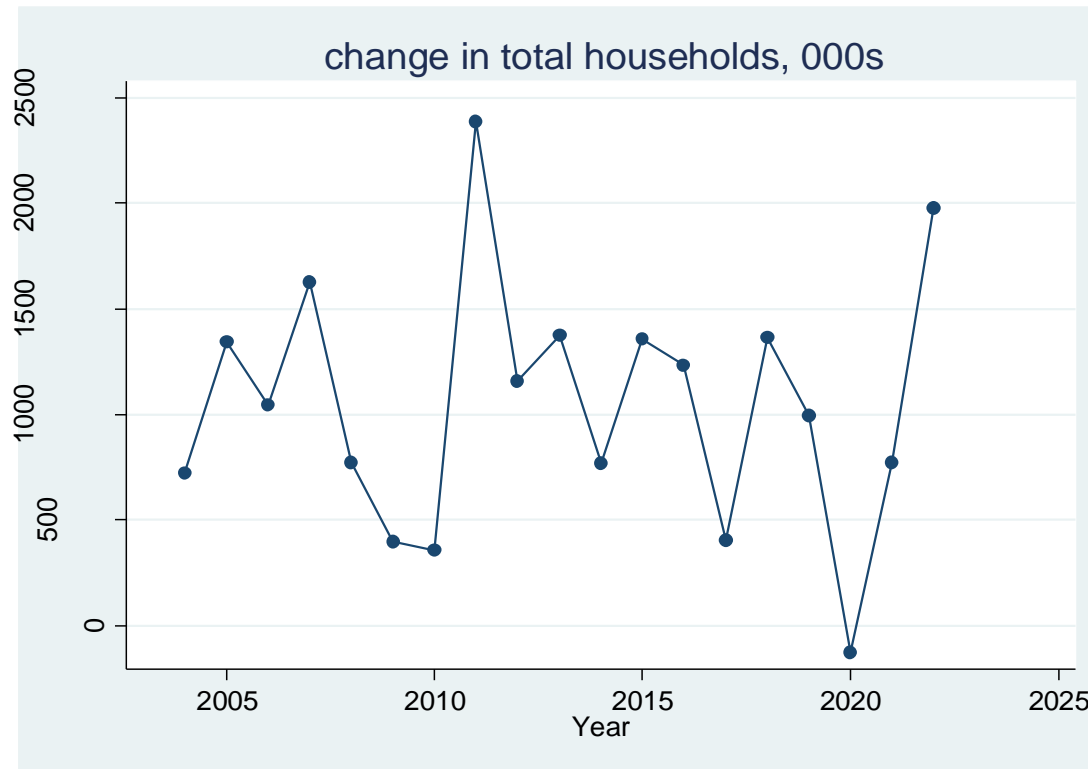
**Carrie Nikols**, CEO,  
The Nikols Company

**John Adams**, Co-Regional  
Managing Principal, Gensler

**Larry Sullivan**, President,  
Passco Companies

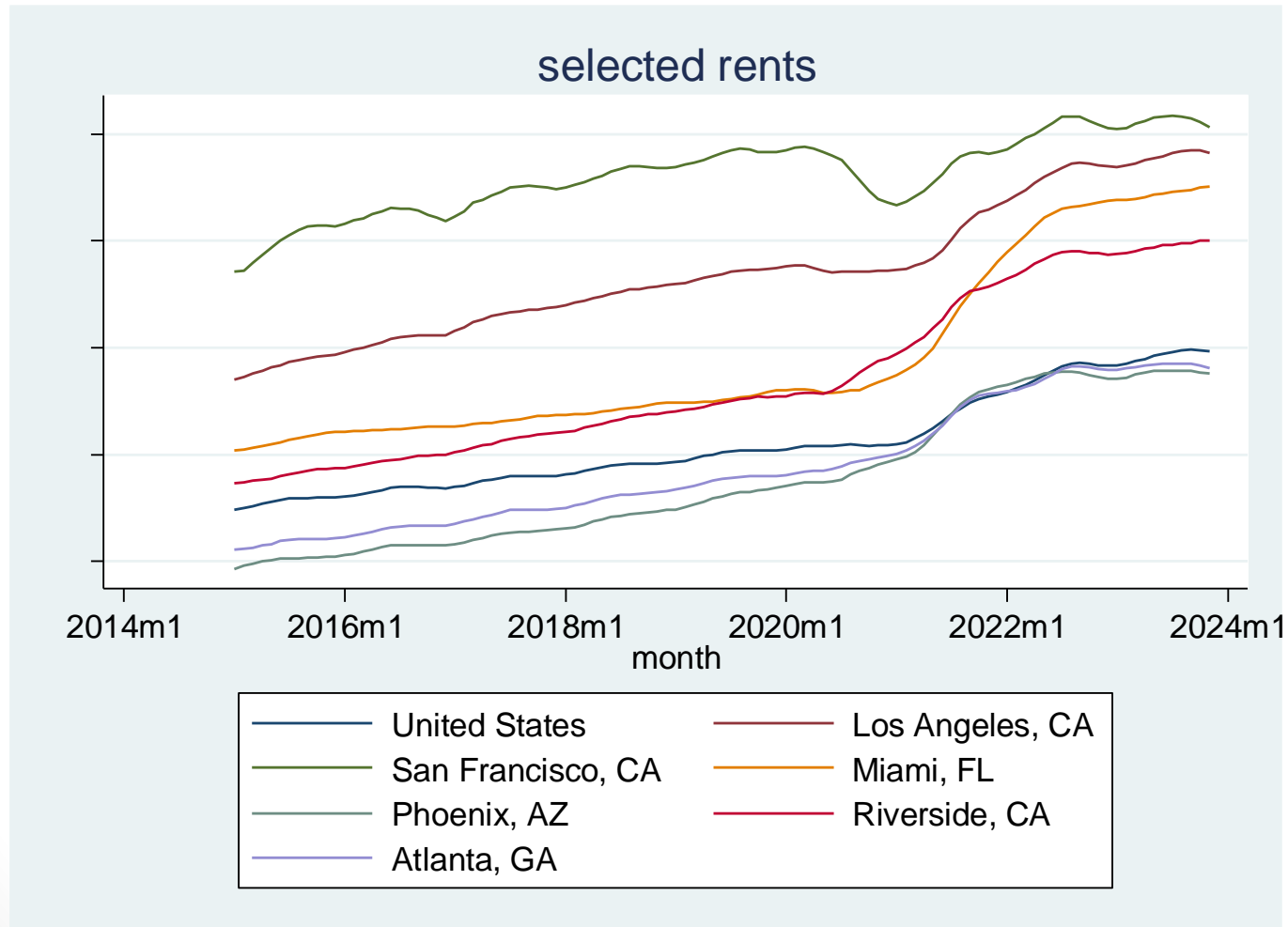
**Patrick Rhodes III**, Senior Vice President,  
Development/Commercial  
Brookfield Properties

# Take a look back...



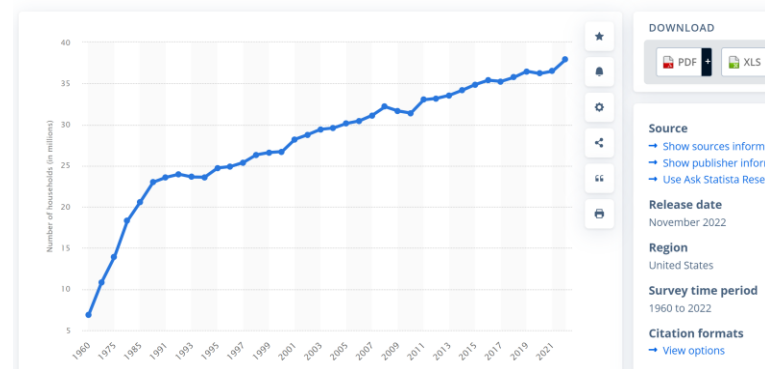
Almost 3 million households added in 2020-22

# A common pattern across the country



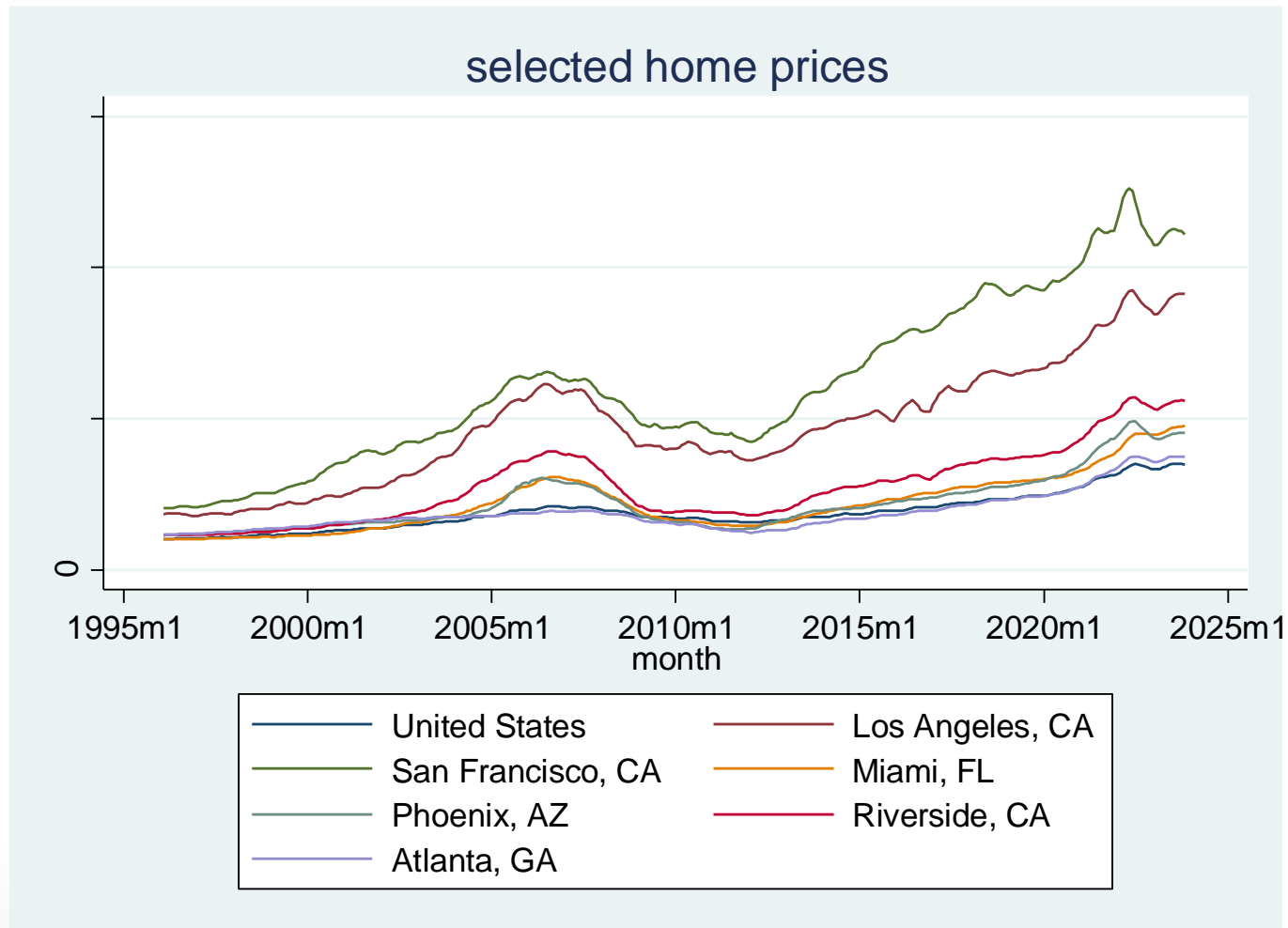
- Acceleration from mid 2020 through early 2022 as people find new housing arrangements.
  - Desire for single living
  - Need for WFH space

Number of single-person households in the United States from 1960 to 2022  
(in millions)

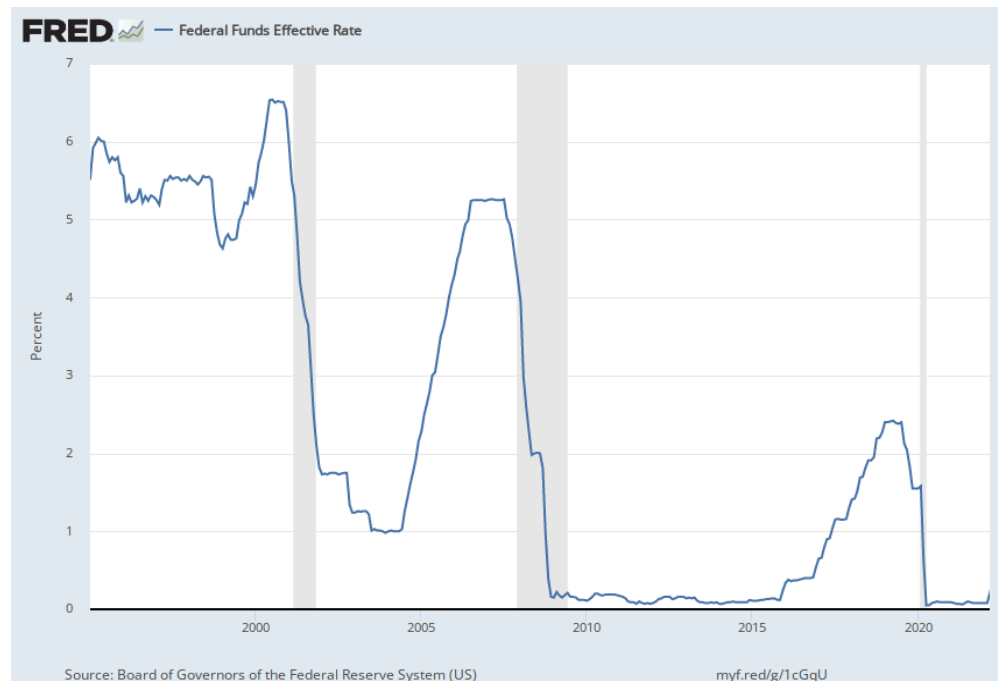


- As of 2023, a new equilibrium? Migration rates declining, rents flattening.

# Where rents go, house prices (largely) follow

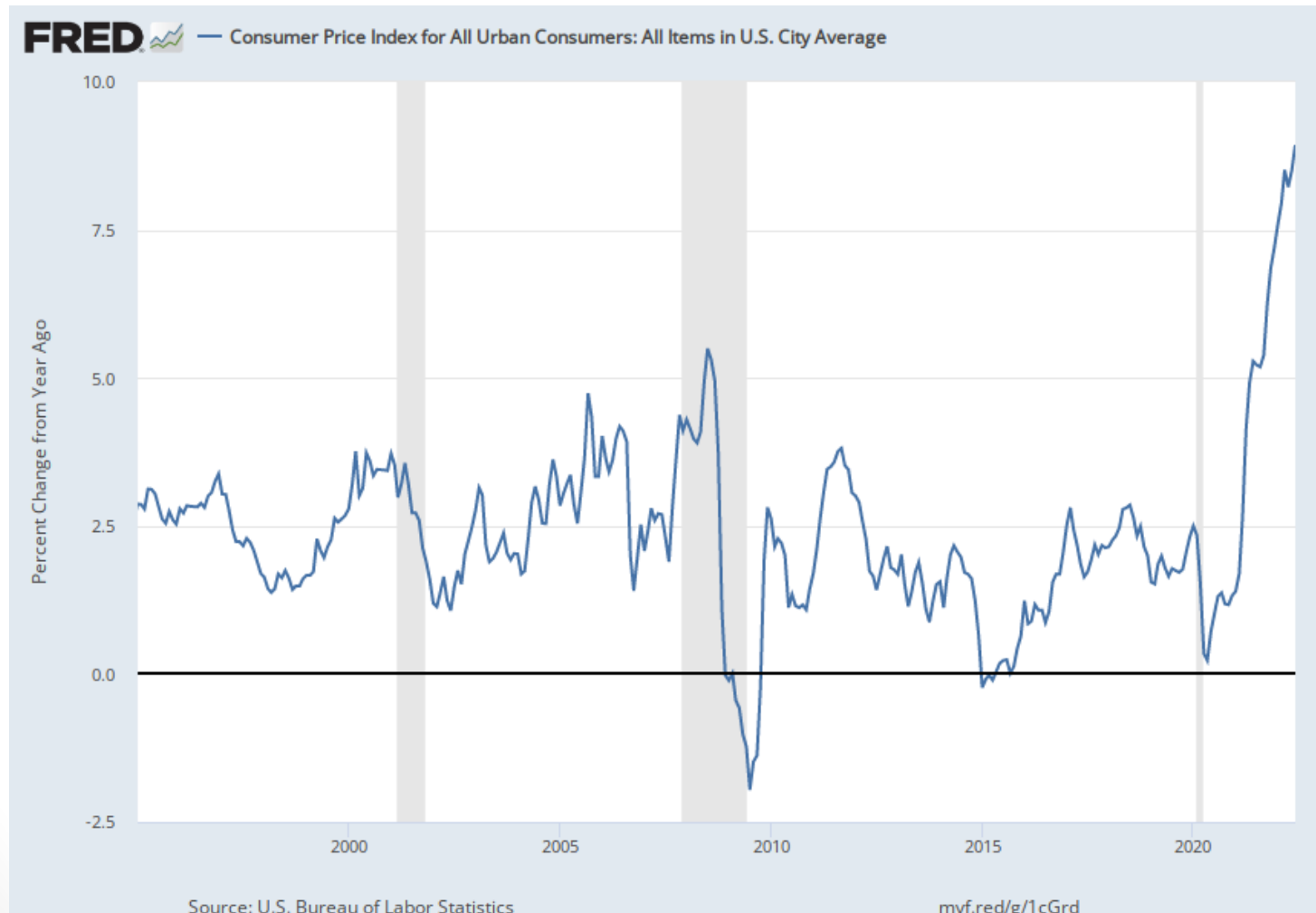


- Similar runup post-pandemic, but also a continuation of previous trend
- ... helped along by long run of low interest rates



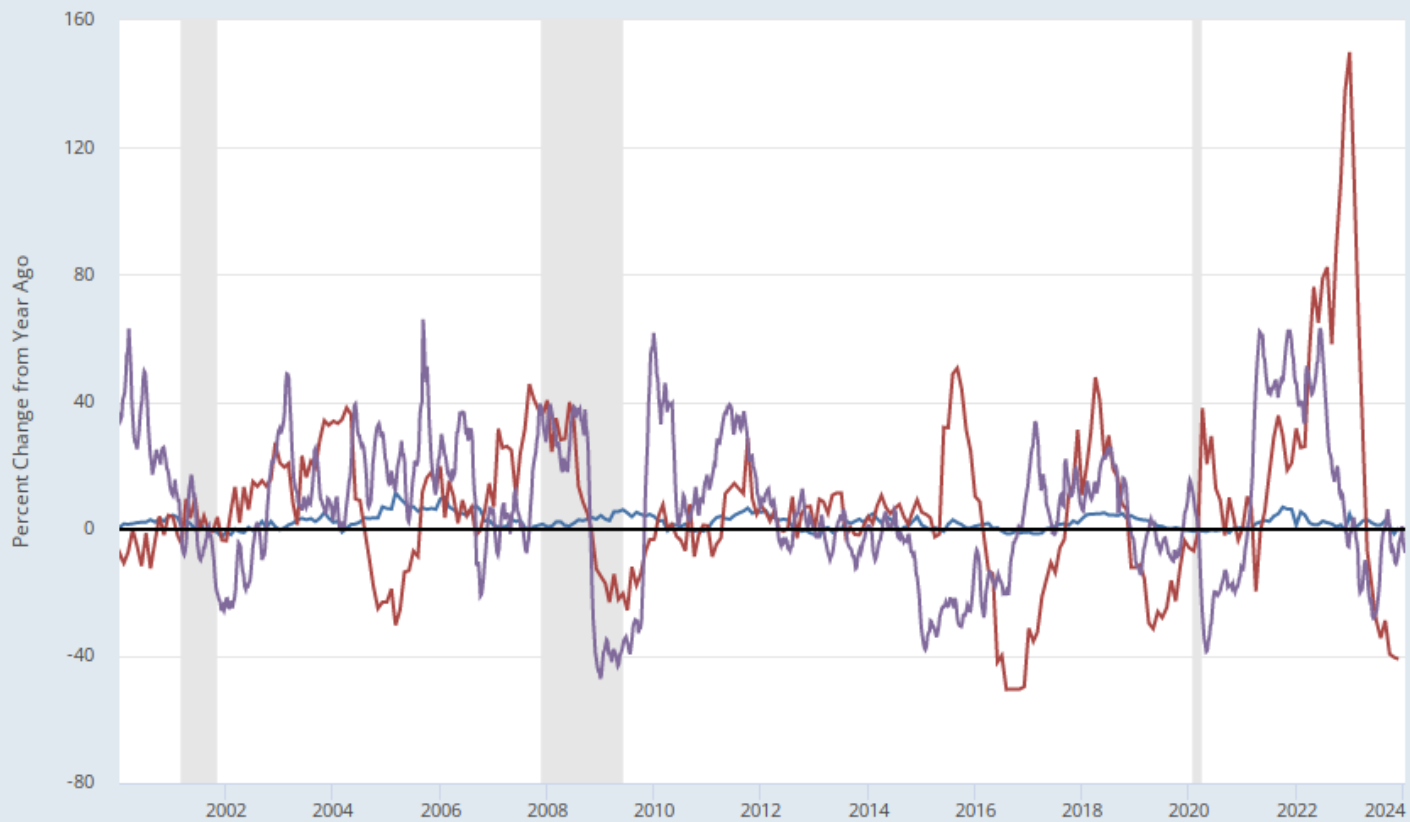


# But at the same time, inflation!



FRED

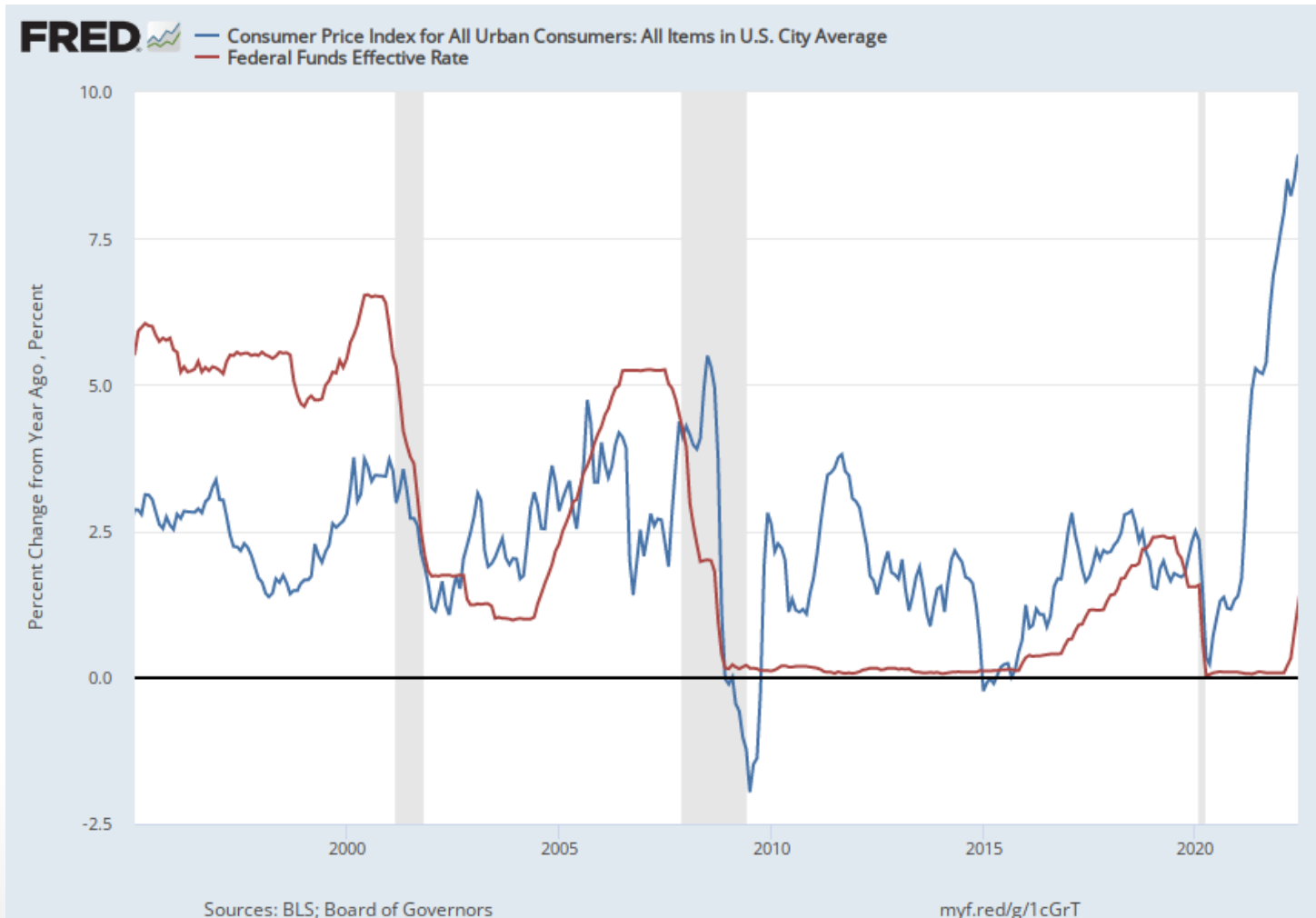
- Producer Price Index by Industry: Carpet and Rug Mills: Carpet and Rugs
- Average Price: Eggs, Grade A, Large (Cost per Dozen) in U.S. City Average
- US Regular All Formulations Gas Price



Sources: BLS; EIA

myf.red/g/1efwF

# This shall not pass



# The Fed's motto: We overreact and too late.



# We have been harping on this since 2015, finally getting attention paid.

## THE REPEAT RENT INDEX

Brent W. Ambrose, N. Edward Coulson, and Jiro Yoshida\*

*Abstract*—We employ a weighted repeat rent estimator to construct quarterly indexes that expand the profession's ability to make cross-sectional comparisons of housing markets. Our analysis shows that there is considerable heterogeneity in the behavior of rents across cities over the 2000–2010 decade, but the number of cities and years for which nominal rents fell is substantial; rents fell in many cities following the onset of the housing crisis in 2007; and the repeat rent and Bureau of Labor Statistics indexes differ due to sampling and construction methods.

only leases that are signed by new tenants in order to avoid possible tenure biases. Second, we employ a weighted repeat rent estimator that replicates for the rental market, as closely as possible, the weighted repeat sales estimator of Calhoun (1996), following Case and Shiller (1989) and Bailey, Muth, and Nourse (1963).<sup>1</sup> This method of estimating house price

## Reassessing Taylor rules using improved housing rent data\*\*

Brent W. Ambrose<sup>a</sup>, N. Edward Coulson<sup>b</sup>, Jiro Yoshida<sup>a,c</sup>



<sup>a</sup> Institute for Real Estate Studies and the Department of Risk Management, Smeal College of Business, The Pennsylvania State University, University Park, PA 16802-3306, USA

<sup>b</sup> Merage School of Business, University of California, Irvine, CA 92697-3125, USA

<sup>c</sup> Department of Risk Management, Smeal College of Business, The Pennsylvania State University, 368 Business Building, University Park, PA 16802, USA

DOI: 10.1111/jmcb.12971

BRENT W. AMBROSE  
N. EDWARD COULSON  
JIRO YOSHIDA

### ARTICLE INFO

*Keywords:*  
Monetary policy  
Federal funds rate  
Taylor rule  
Personal consumption expenditures  
Inflation measures  
Housing rent  
*JEL classification:*

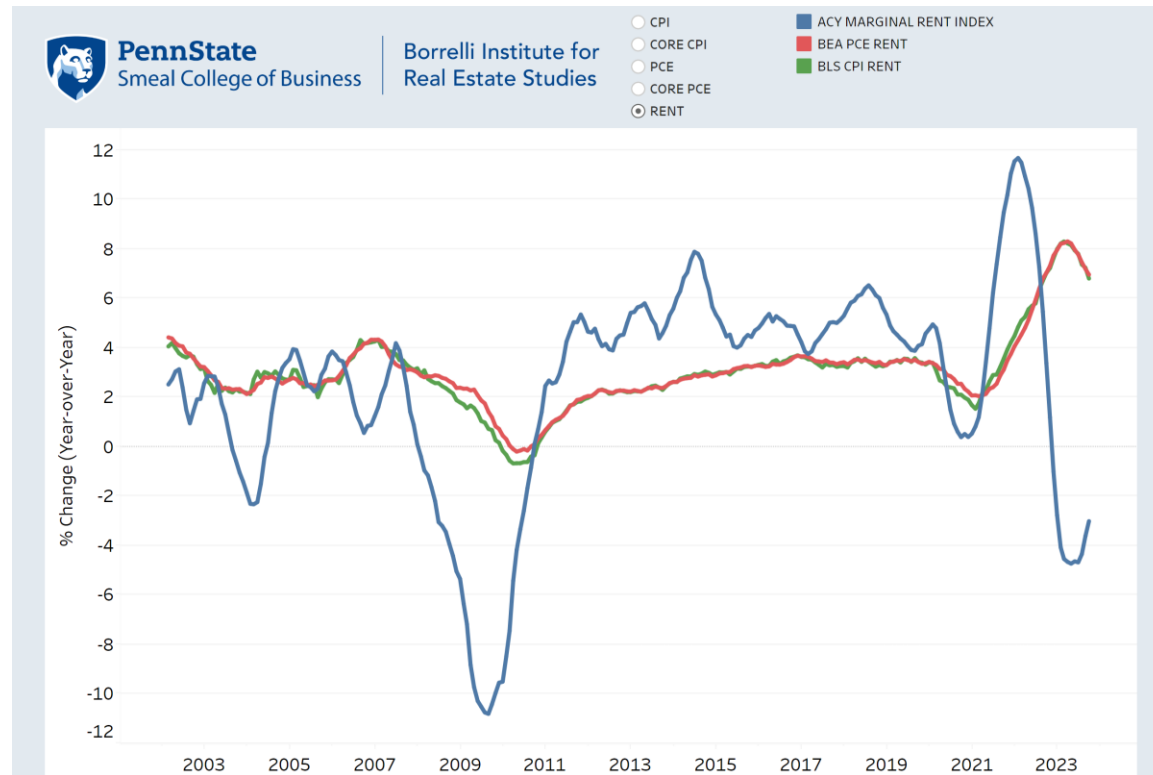
### ABSTRACT

There is a debate whether the federal funds rate deviated from the Taylor rule. We present evidence that standard inflation measures do not reflect the contemporaneous state of housing rents, which are a large part of price indexes. Using a new housing rent index (RRI) developed by Ambrose et al. (2015), we compute the RRI-based Taylor rule for the period from 2000 to 2010. The modified Taylor rule indicates that seemingly large deviations are better understood as delays due to the stale information regarding housing rents. It also provides a justification for Quantitative Easing and a better alternative to other versions of Taylor rules.

## Housing Rents and Inflation Rates

This paper develops a quality-adjusted measure of marginal housing rents using a monthly statistic of landlord net rental income. The marginal rent index (MRI) exhibits deflation during recessions and leads the official rent index by 7 months. The modified inflation rate based on MRI suggests that the annual official inflation rate was overestimated by 1.7–4.1% during the Great Recession but underestimated by 0.3–0.7% during the subsequent expansionary period.

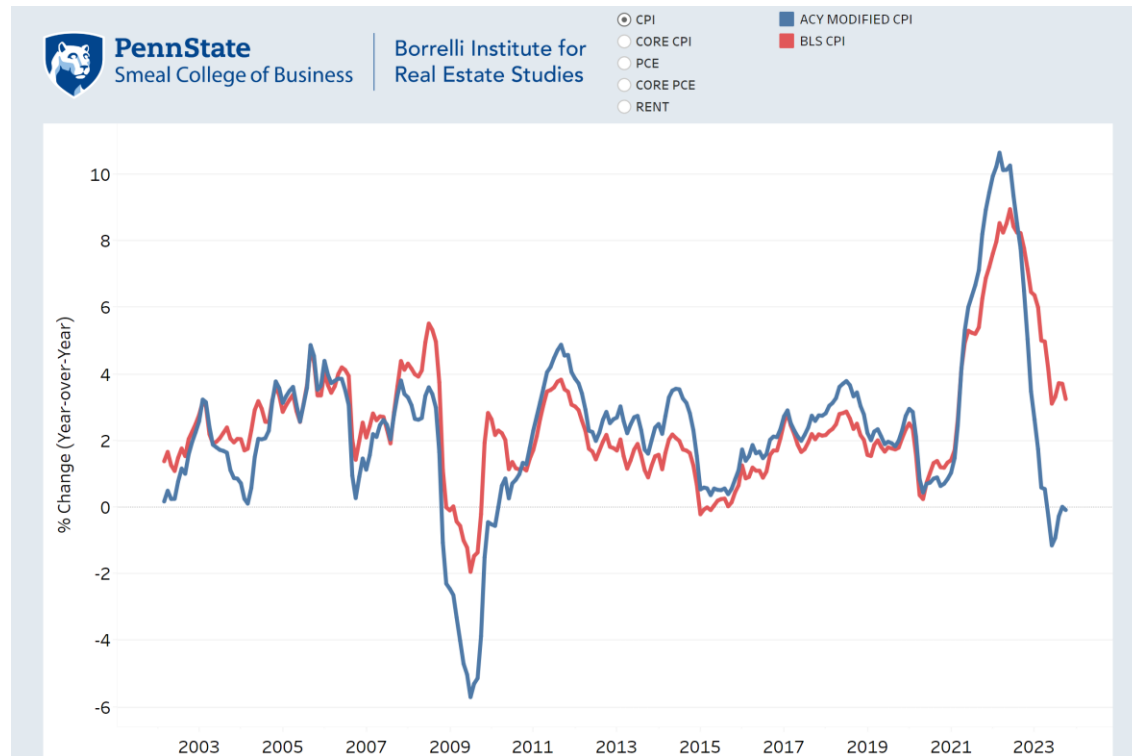
# And of course, it's worse than that



The mismeasurement of rent, acknowledged by Jerome Powell

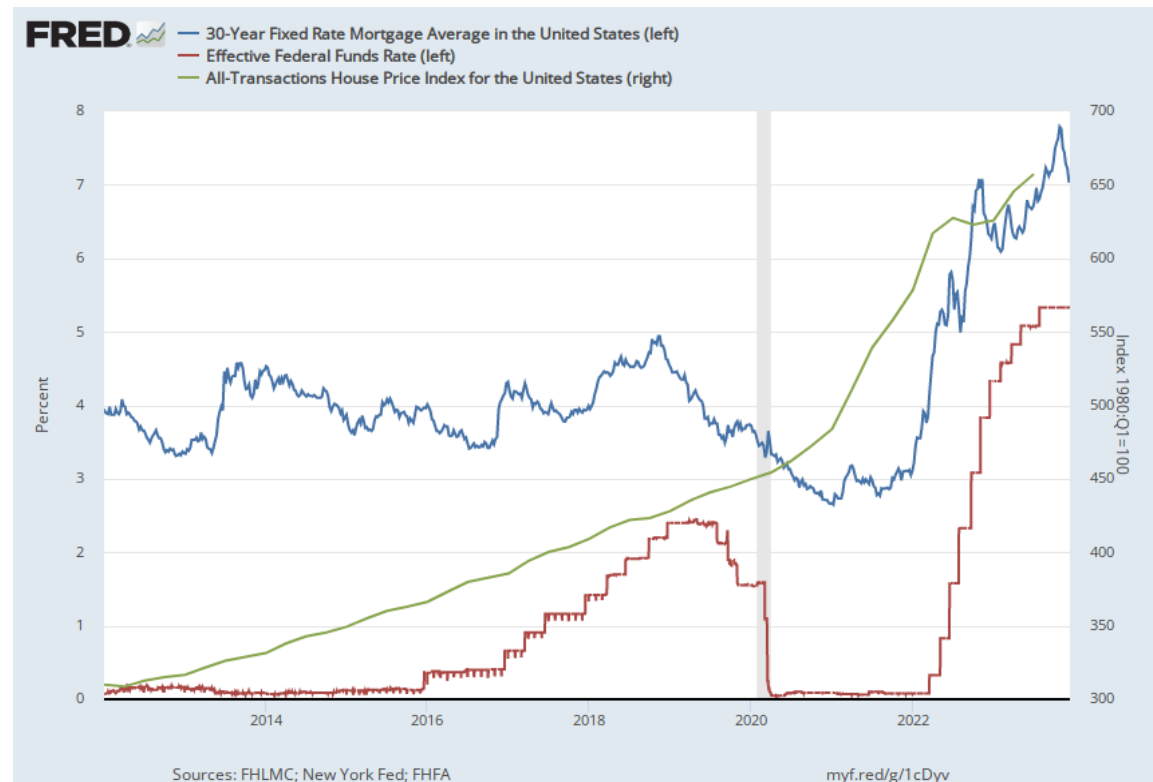
<https://www.youtube.com/watch?v=HsUNSHCFYkE>

# The war has been won, but nobody will know for 6-7 months.



# In the meantime, what is happening in mortgage market?

- 30 fixed rates haven't seen these levels in a long time.



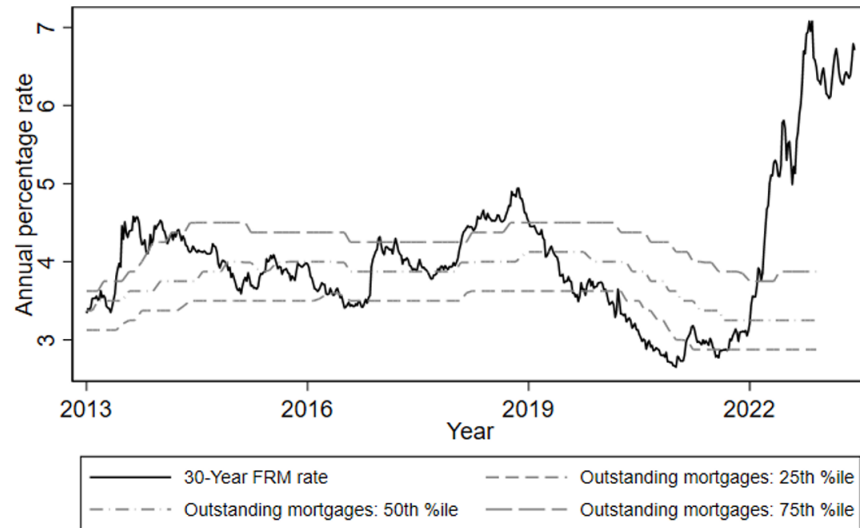


# Mortgage impossible

Steep rise in  
FFR=>  
Steep rise in  
30FRM =>  
Mortgage Lock

Buying a new  
home is hard!

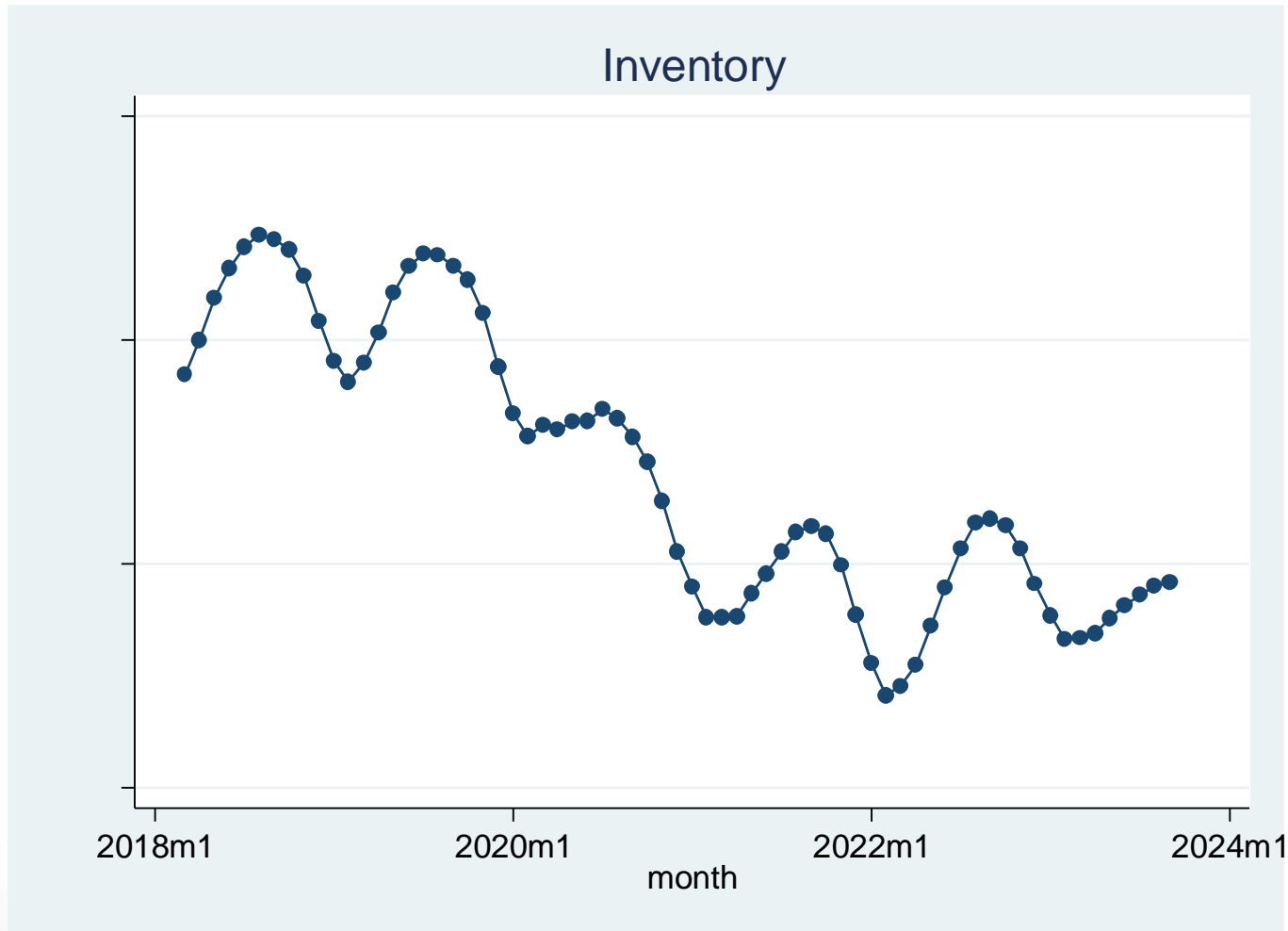
Figure 1: Mortgage Interest Rates and Rate Gaps



Source: Fannie Mae Single-Family Loan Performance Data

Note: Figure shows the current 30-year FRM interest rate for originating mortgages and the interest rate quartiles for a subset 30-year and less, single family, fixed rate outstanding mortgages held by Fannie Mae.

# The ordinary churn in housing market is diminished

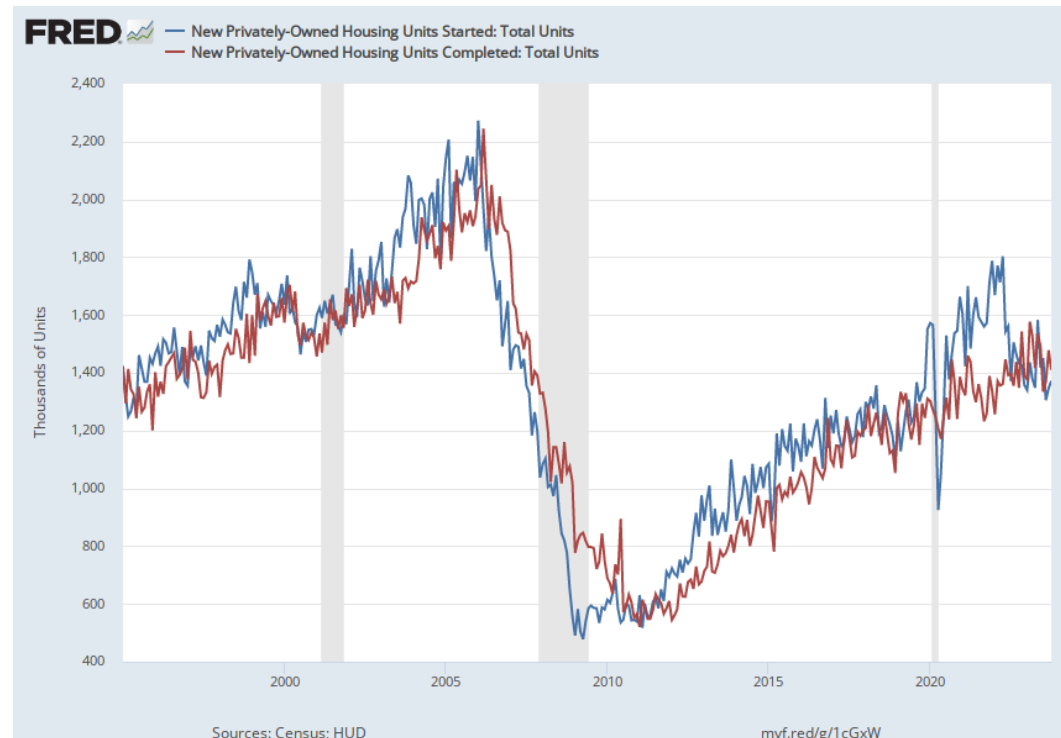




- Normally, we would expect to observe an inverse relationship between mortgage interest rates and home prices
- But low demand is matched by low supply (caused by the same thing!) means churn is low and prices have not fallen (though they have stabilized).

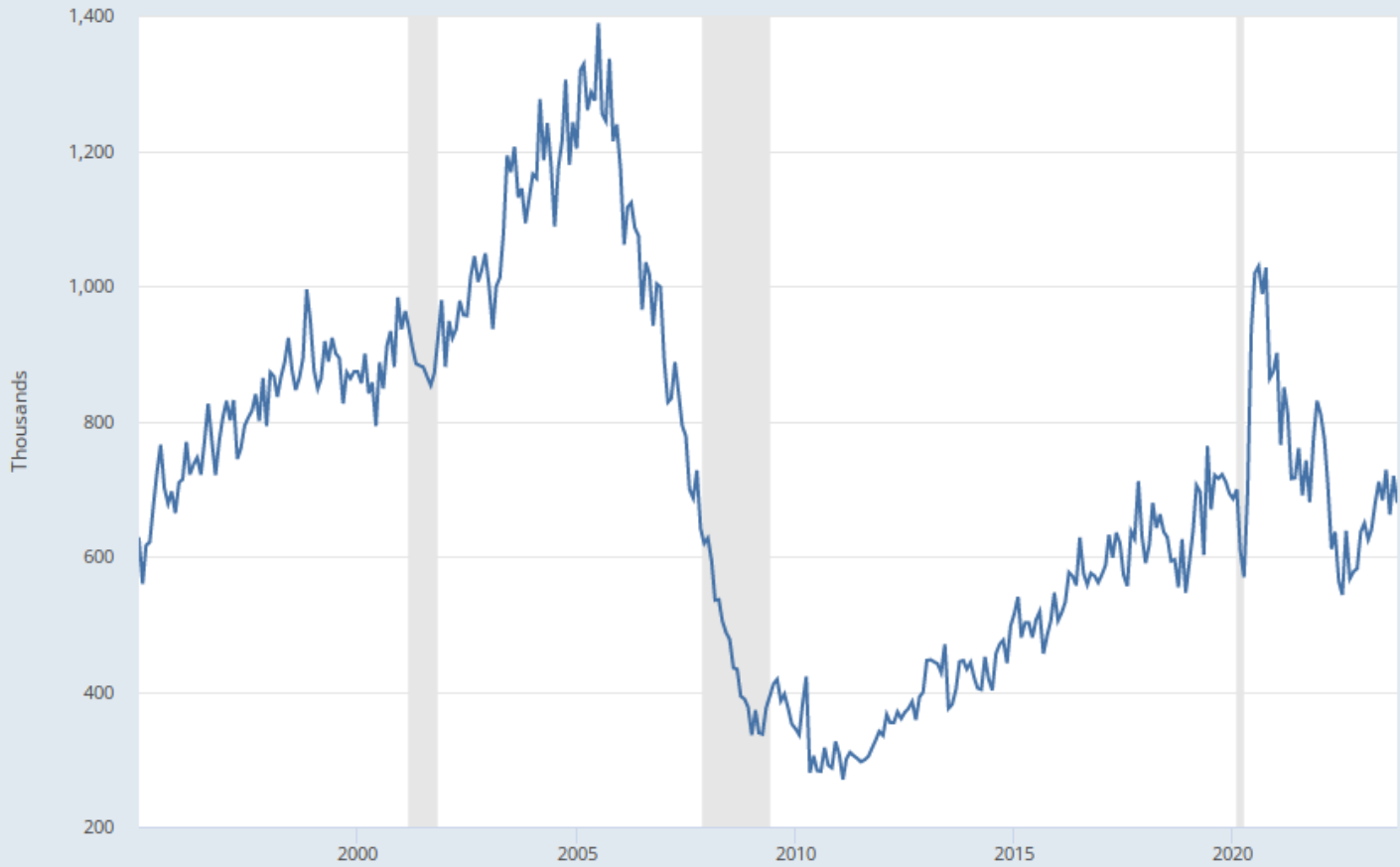
# New home market to the rescue

But note the drop in starts right as interest rates start to rise...



FRED

— New One Family Houses Sold: United States



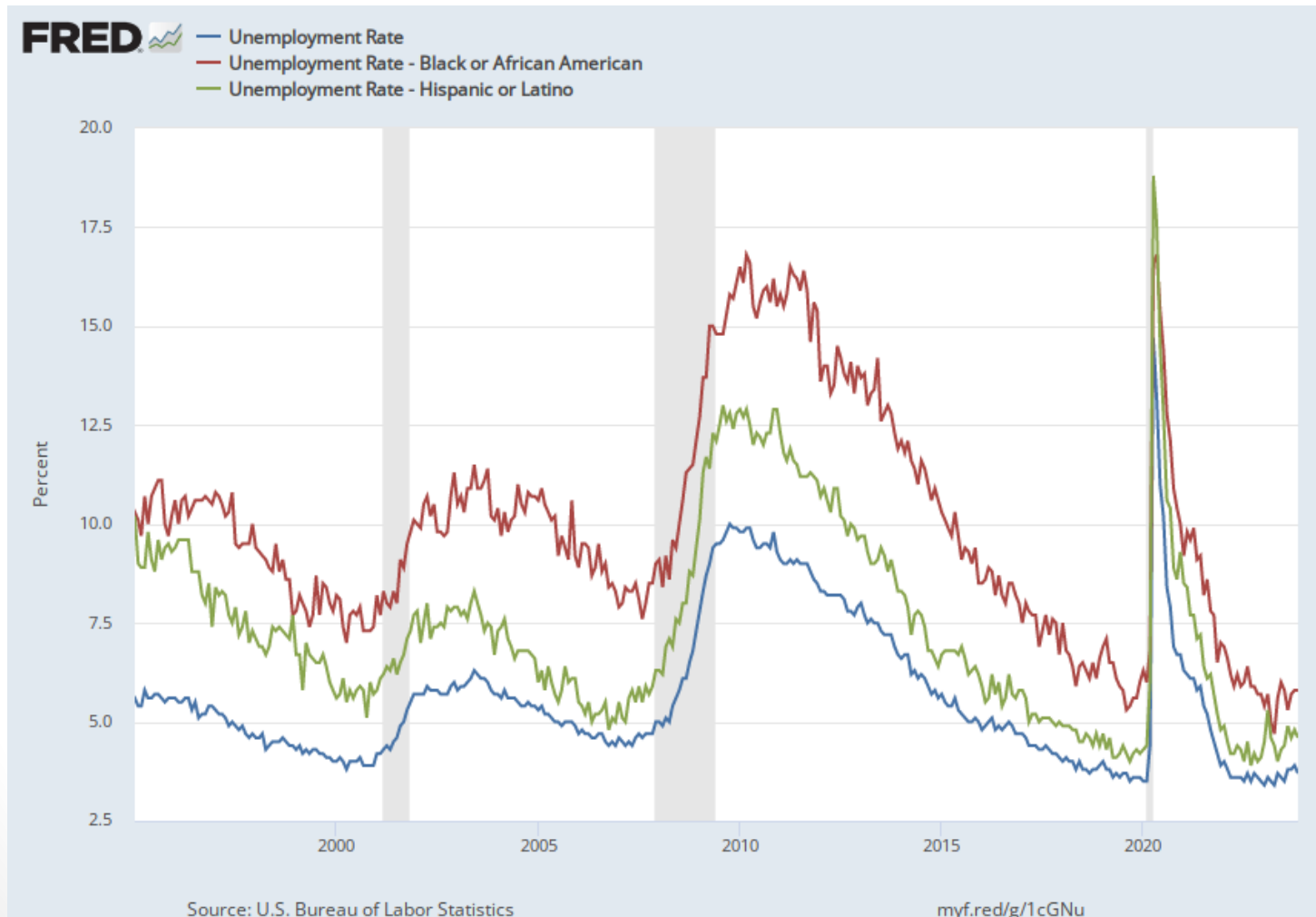
Sources: Census; HUD

myf.red/g/1cGQm

# Powell's announcement

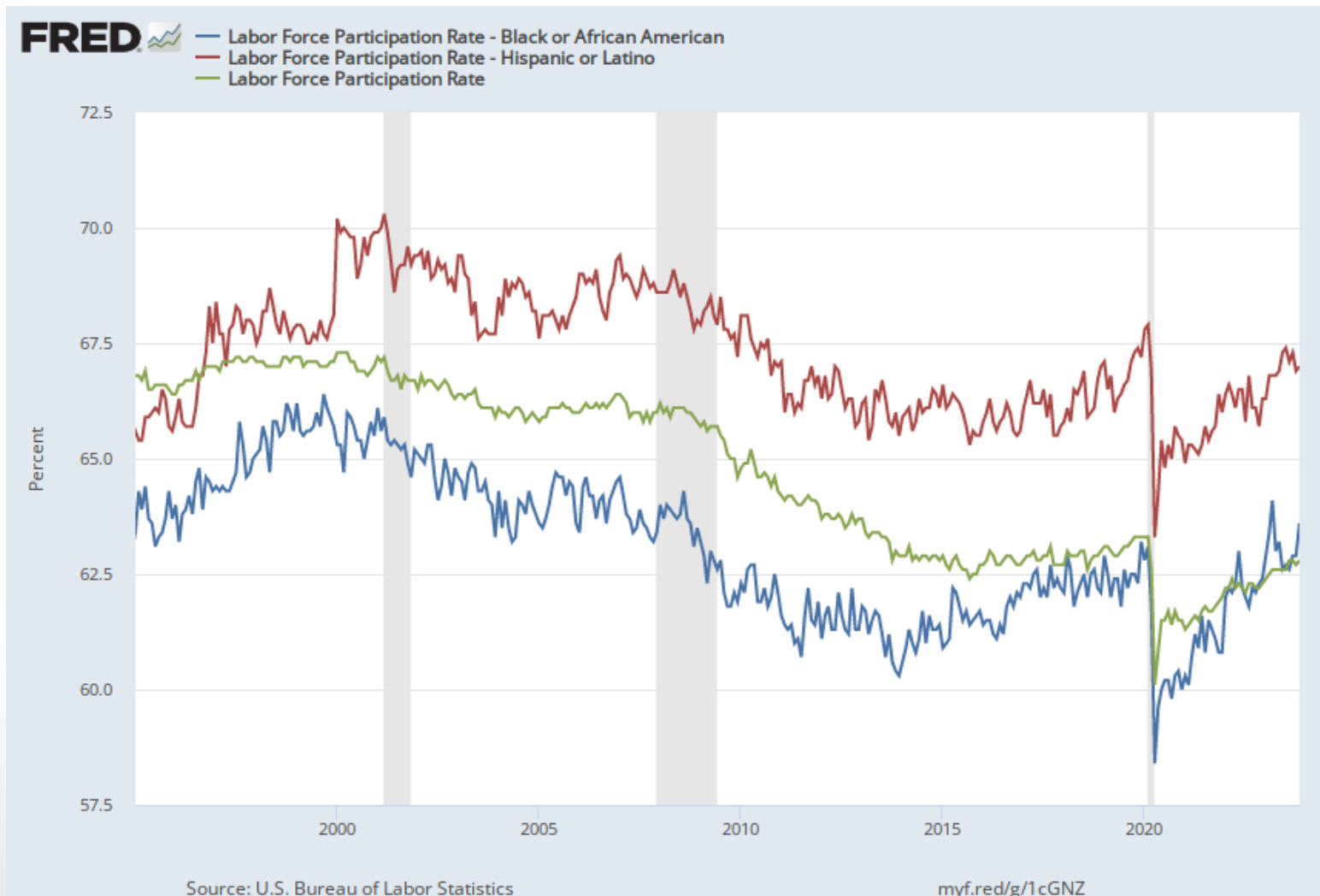
- The FED always follows through its hints
- Mortgage rates will follow rate cuts, but probably at a sluggish pace,
- Which will be affected more, housing supply or demand?

And so to the labor market. All indicators are pretty strong. Unemployment rates are good

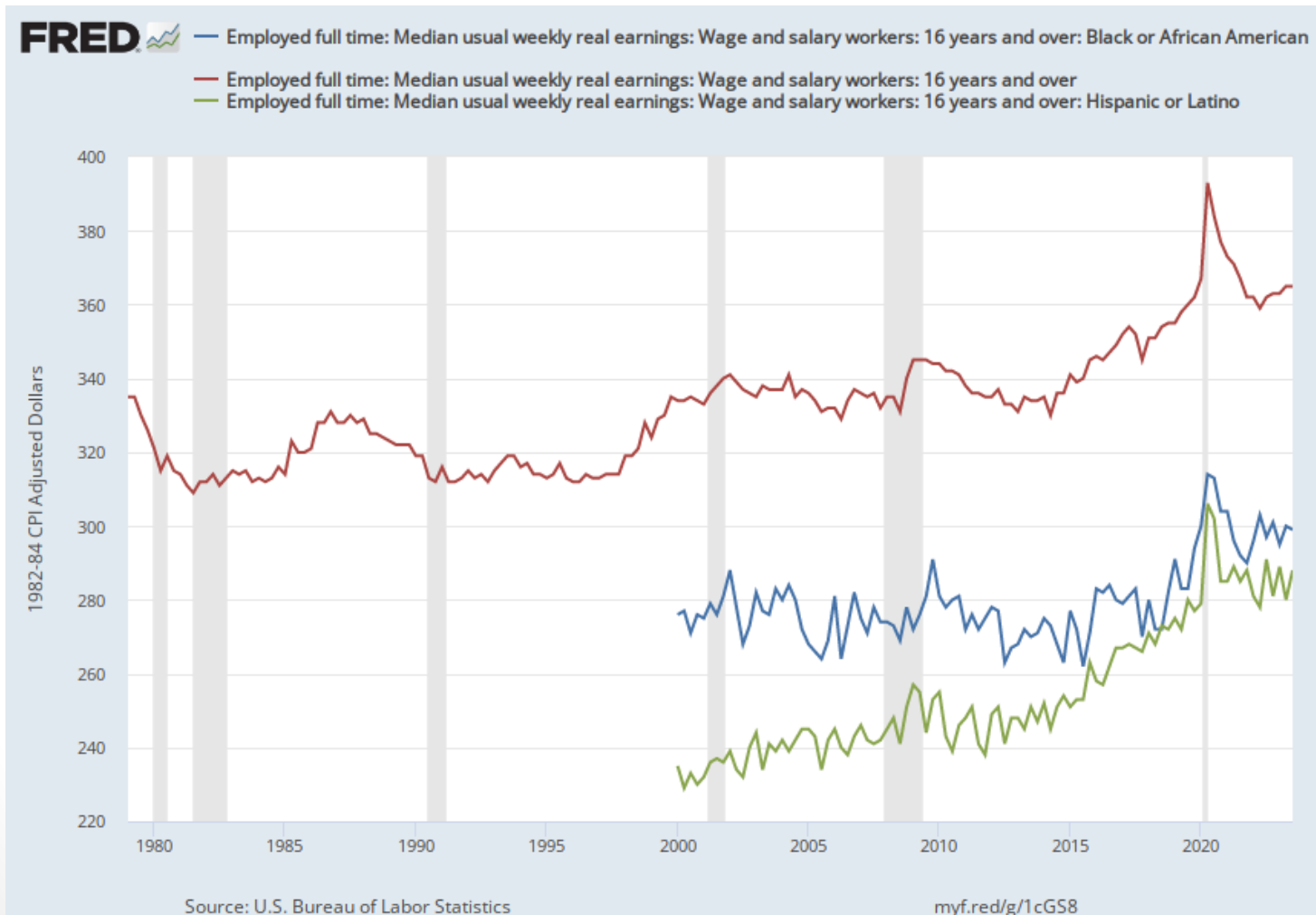




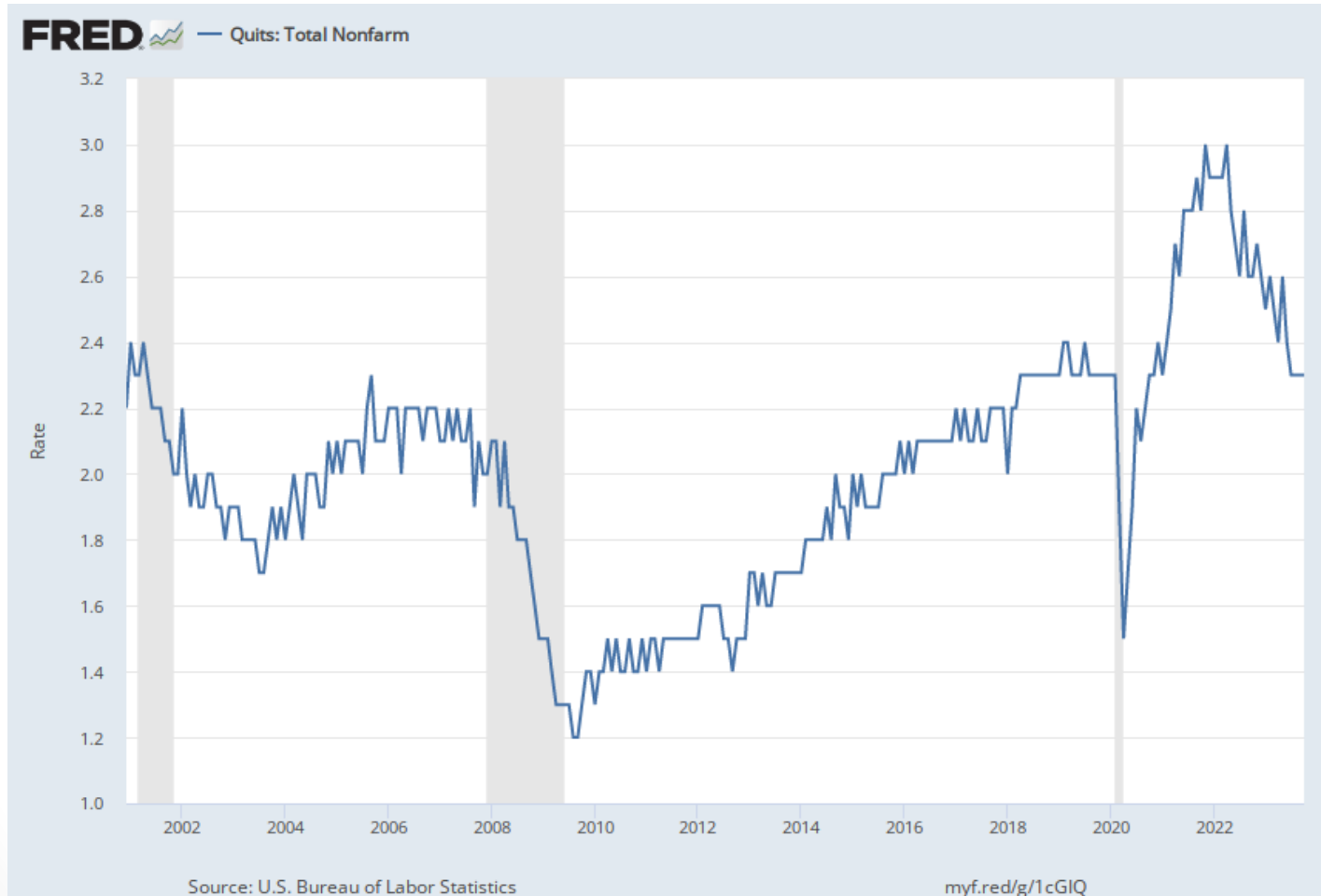
# Labor force participation back to pre-pandemic rates.



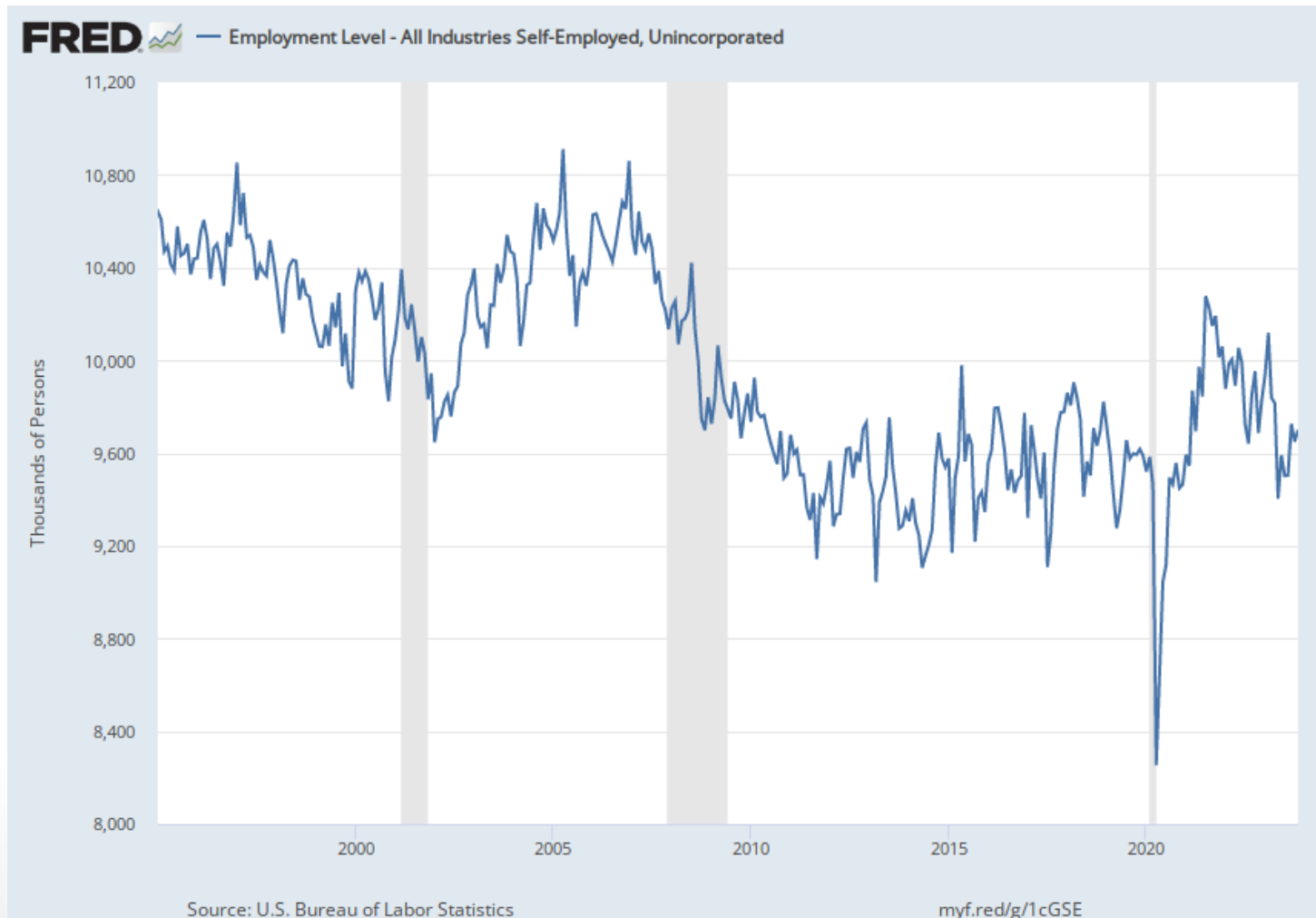
# Wages continue forward



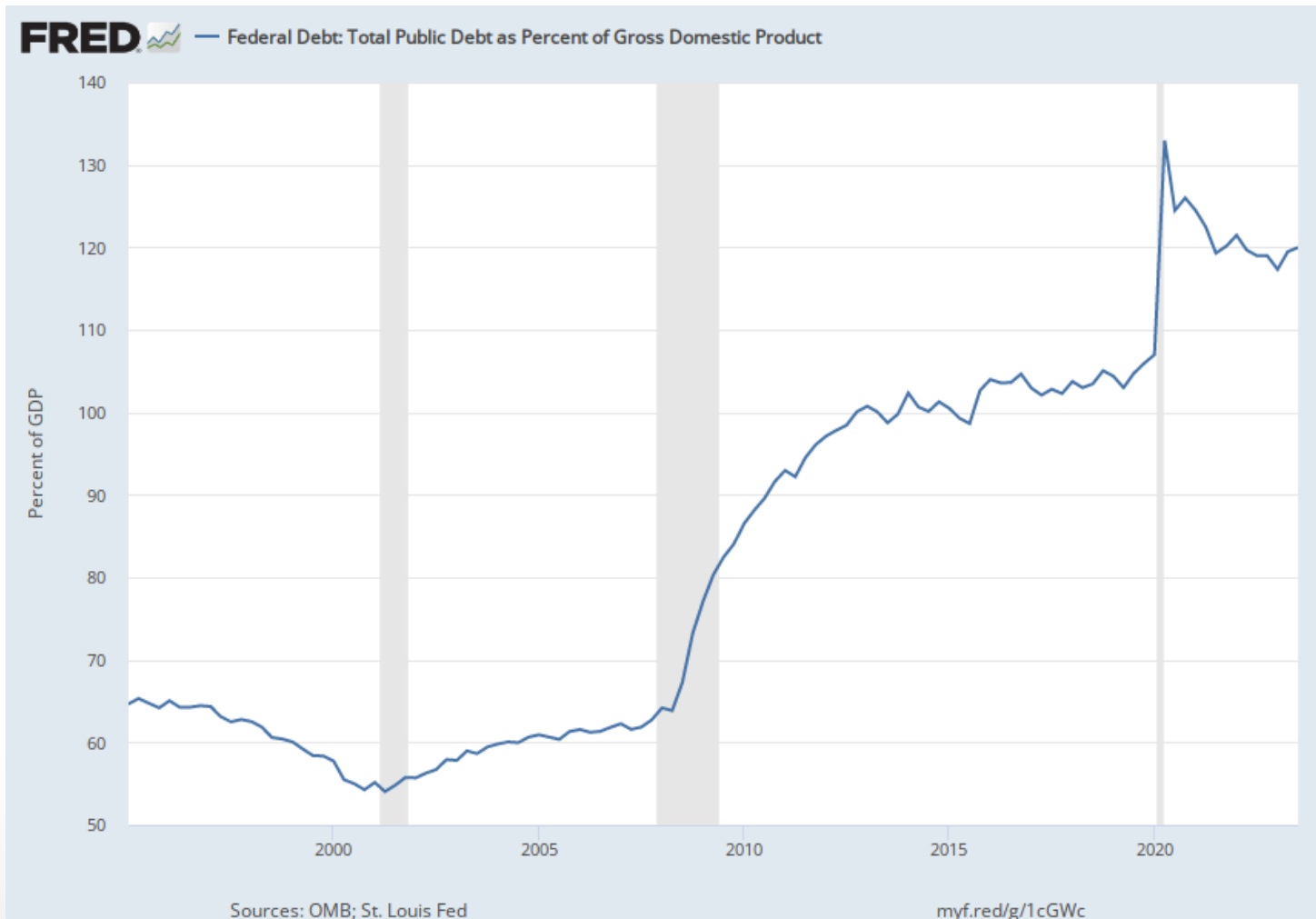
# Quit rate almost back to normal



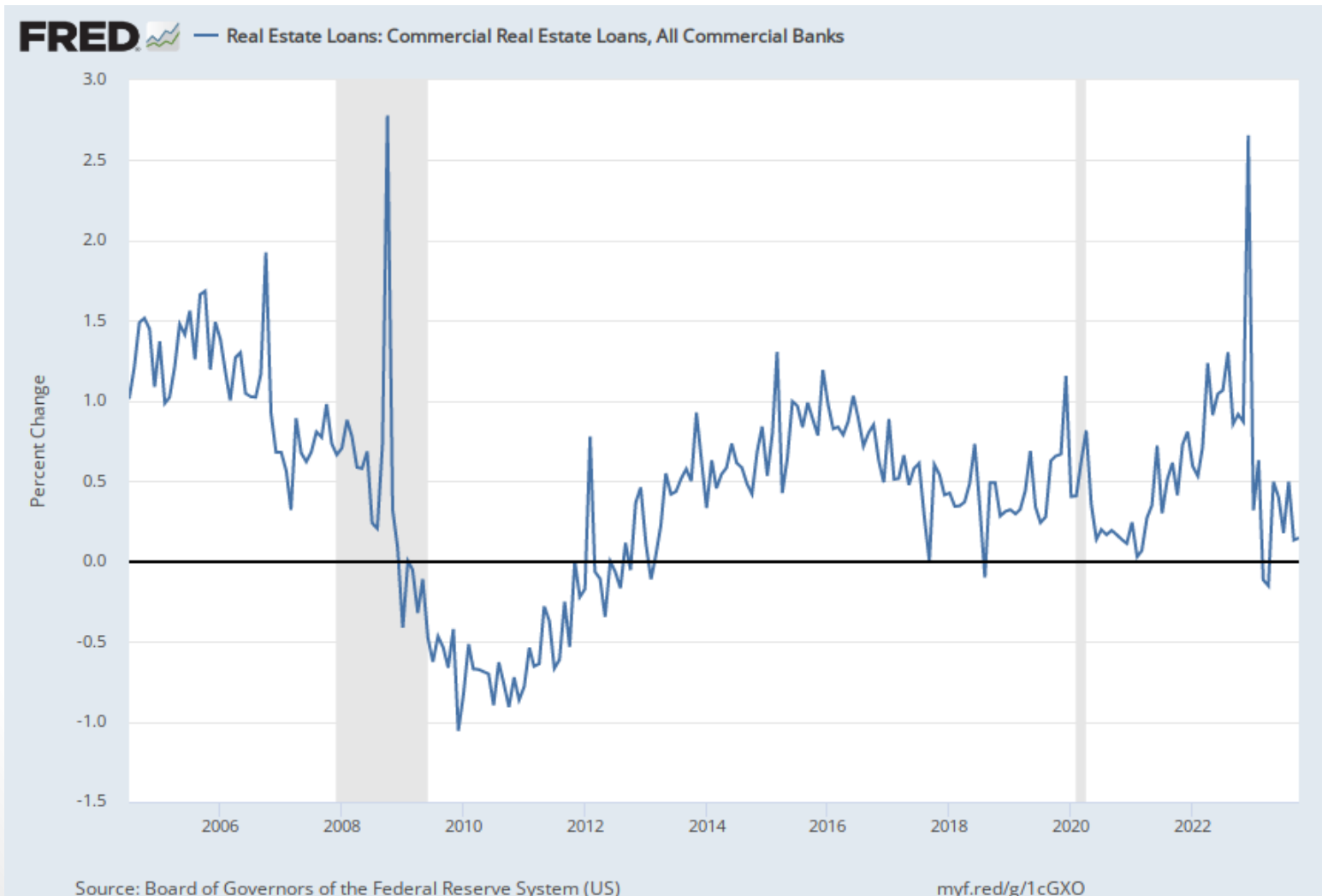
# So is self-employment



# The dark clouds

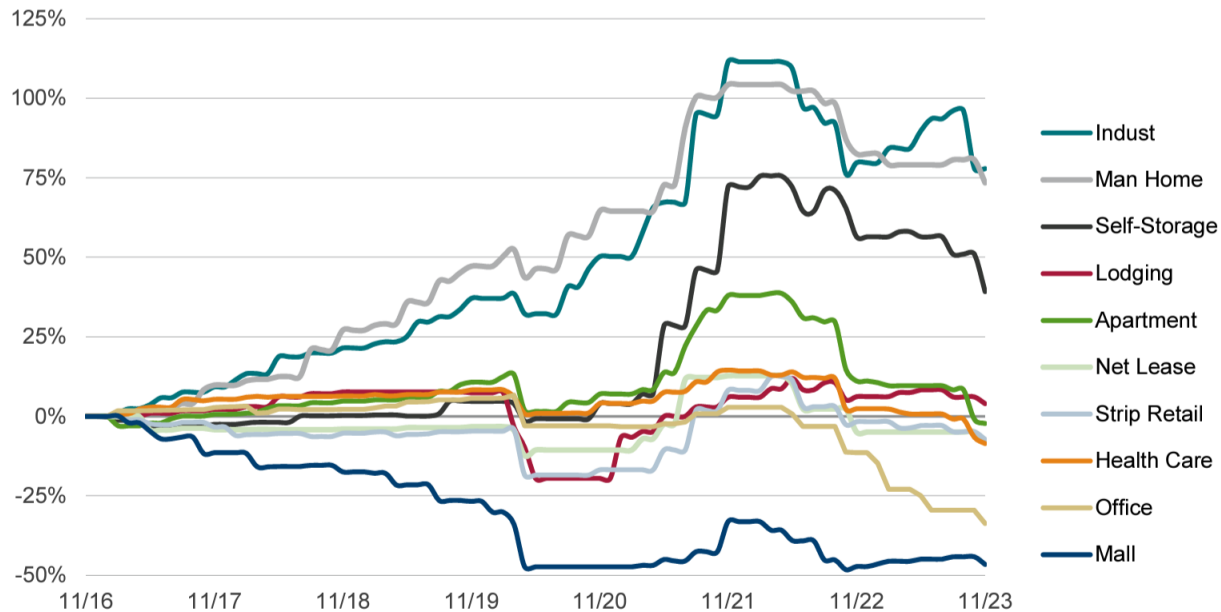


# Tightening of real estate credit markets

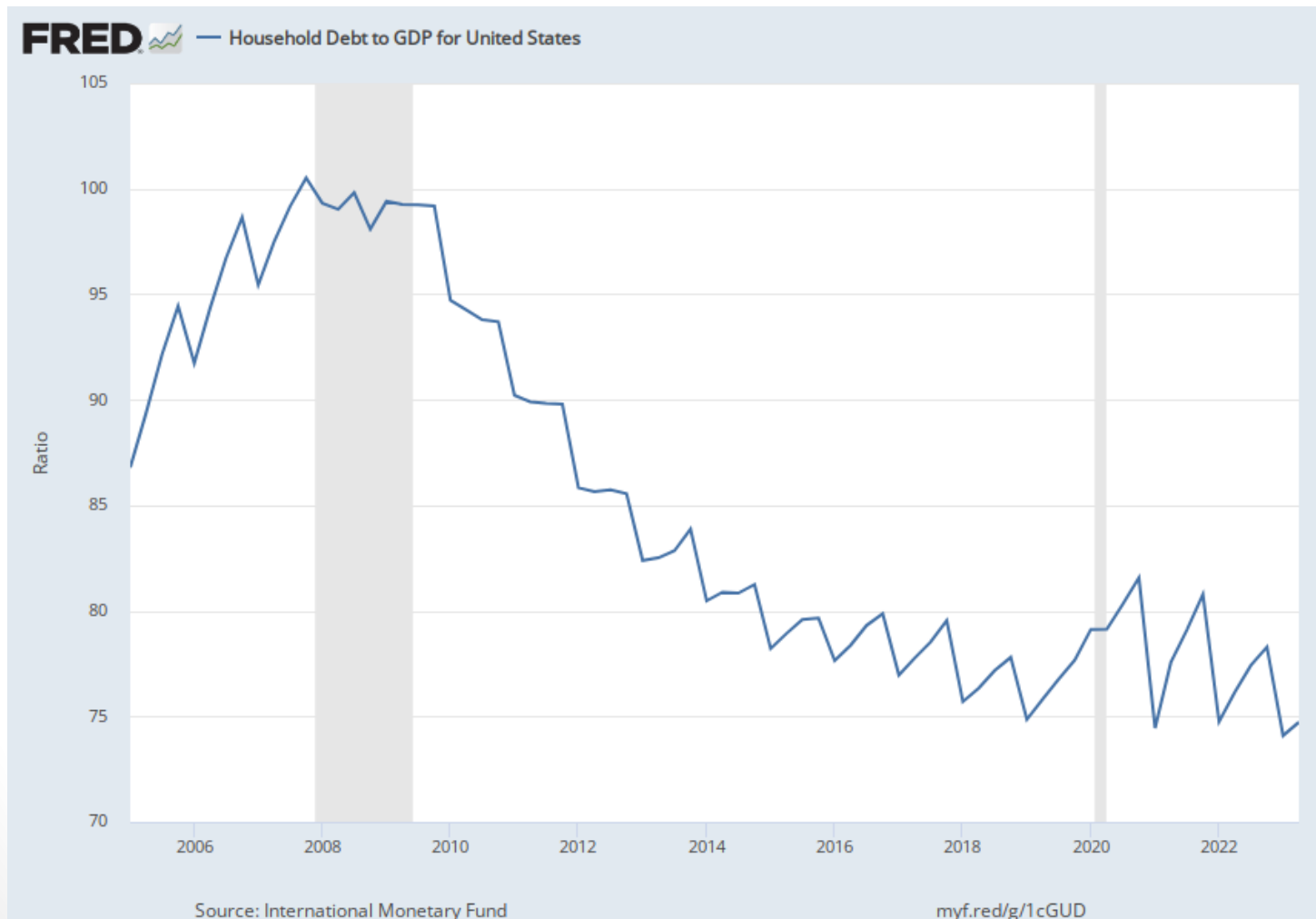


# Some sectors continue to be troubled: implications for bank balance sheets?

Cumulative Change in CPPI®: Past Seven Years

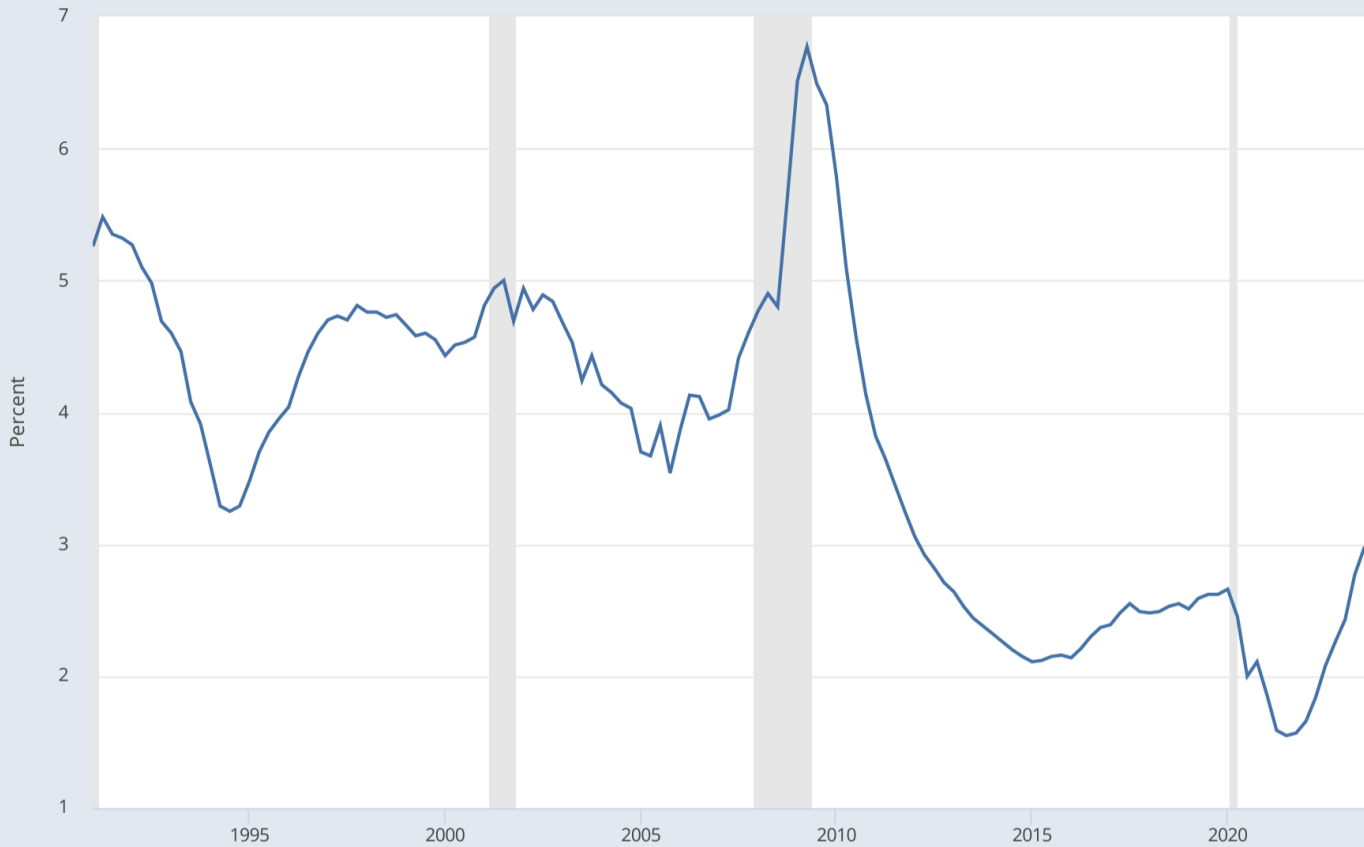


# But not consumer debt?





**FRED** — Delinquency Rate on Credit Card Loans, All Commercial Banks

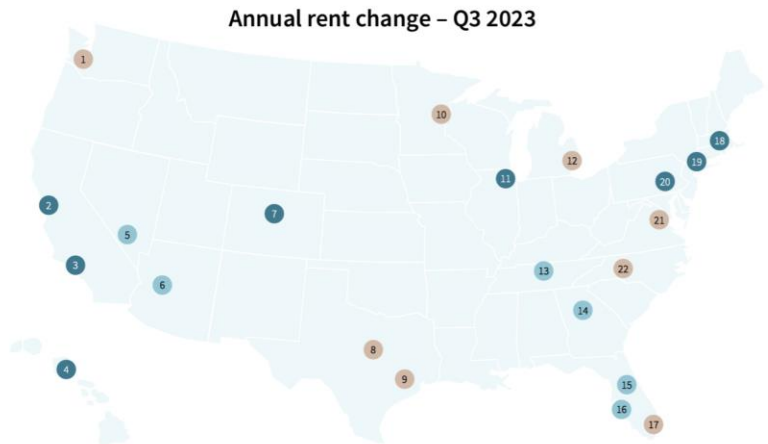


Source: Board of Governors of the Federal Reserve System (US)

fred.stlouisfed.org

# Retail seems all right...

Major metros see positive rent growth with strongest in Sunbelt markets



Source: CoStar

1	Seattle	4.7%	12	Detroit	3.5%
2	San Francisco	1.1%	13	Nashville	6.5%
3	Los Angeles	0.6%	14	Atlanta	6.1%
4	Honolulu	0.9%	15	Orlando	7.7%
5	Las Vegas	8.9%	16	Tampa	8.2%
6	Phoenix	9.7%	17	Miami	4.5%
7	Denver	0.8%	18	Boston	0.5%
8	Dallas	4.6%	19	New York	2.0%
9	Houston	4.1%	20	Philadelphia	2.3%
10	Minneapolis	4.5%	21	Washington, D.C.	4.0%
11	Chicago	1.2%	22	Charlotte	5.3%

● 3.1% - 6.0% ● < 3.0% ● > 6.0%

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## SPACE DEMAND / DELIVERIES

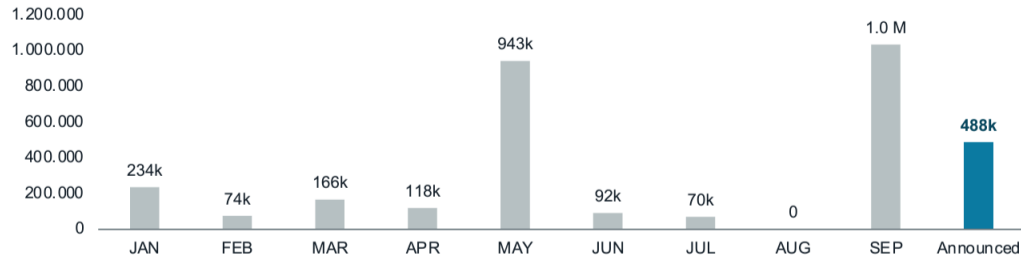


## OVERALL VACANCY & ASKING RENT

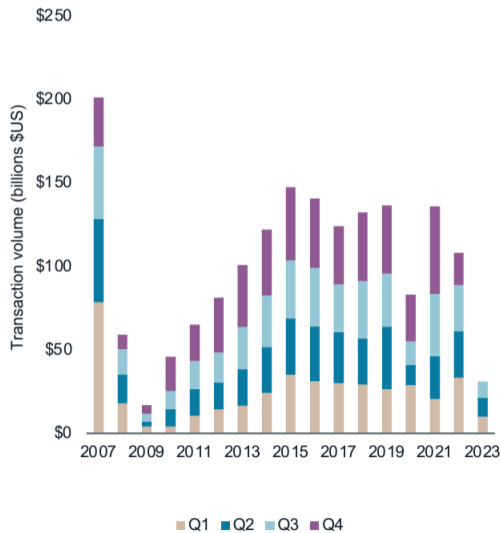


# Office: Green shoots most just shoots

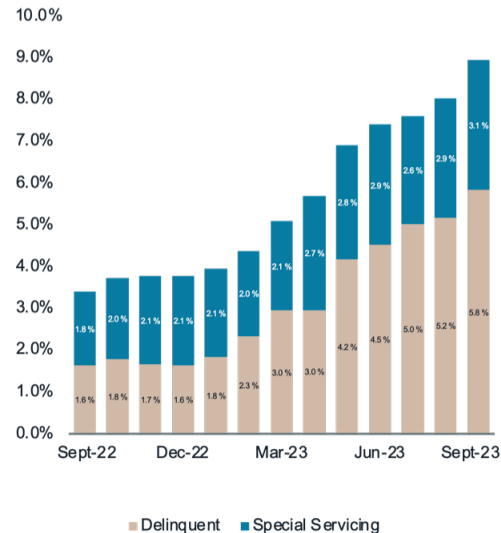
U.S. employees subject to newly effective return-to-office mandates



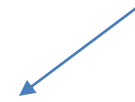
Office investment volume



Delinquency and special servicing rates on office CMBS debt

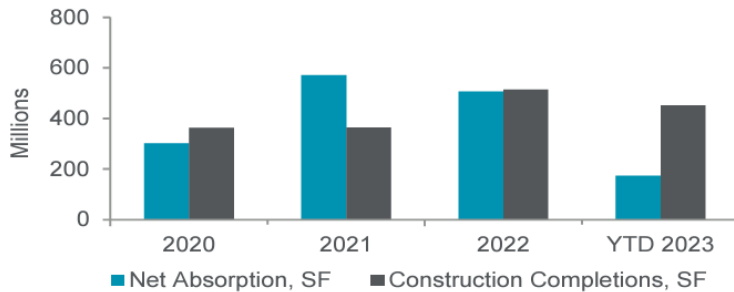


The scary bit

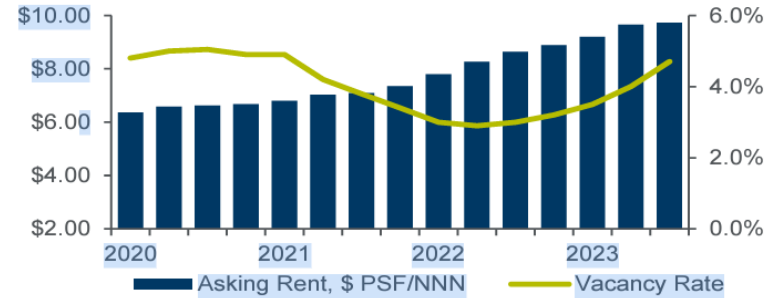


# Industrial: The age of miracles is winding down

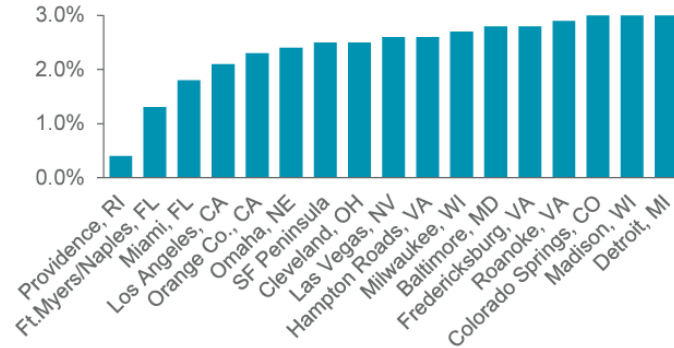
**SPACE DEMAND / DELIVERIES**



**OVERALL VACANCY & ASKING RENT**



**INDUSTRIAL VACANCY, SELECT MARKETS**



# Conclusion

- Labor market: returning to normal
- Housing market: returning to equilibrium
- Commercial market:
  - Office: Still troubled
  - Retail: Pretty Normal
  - Industrial: Hypersupply