



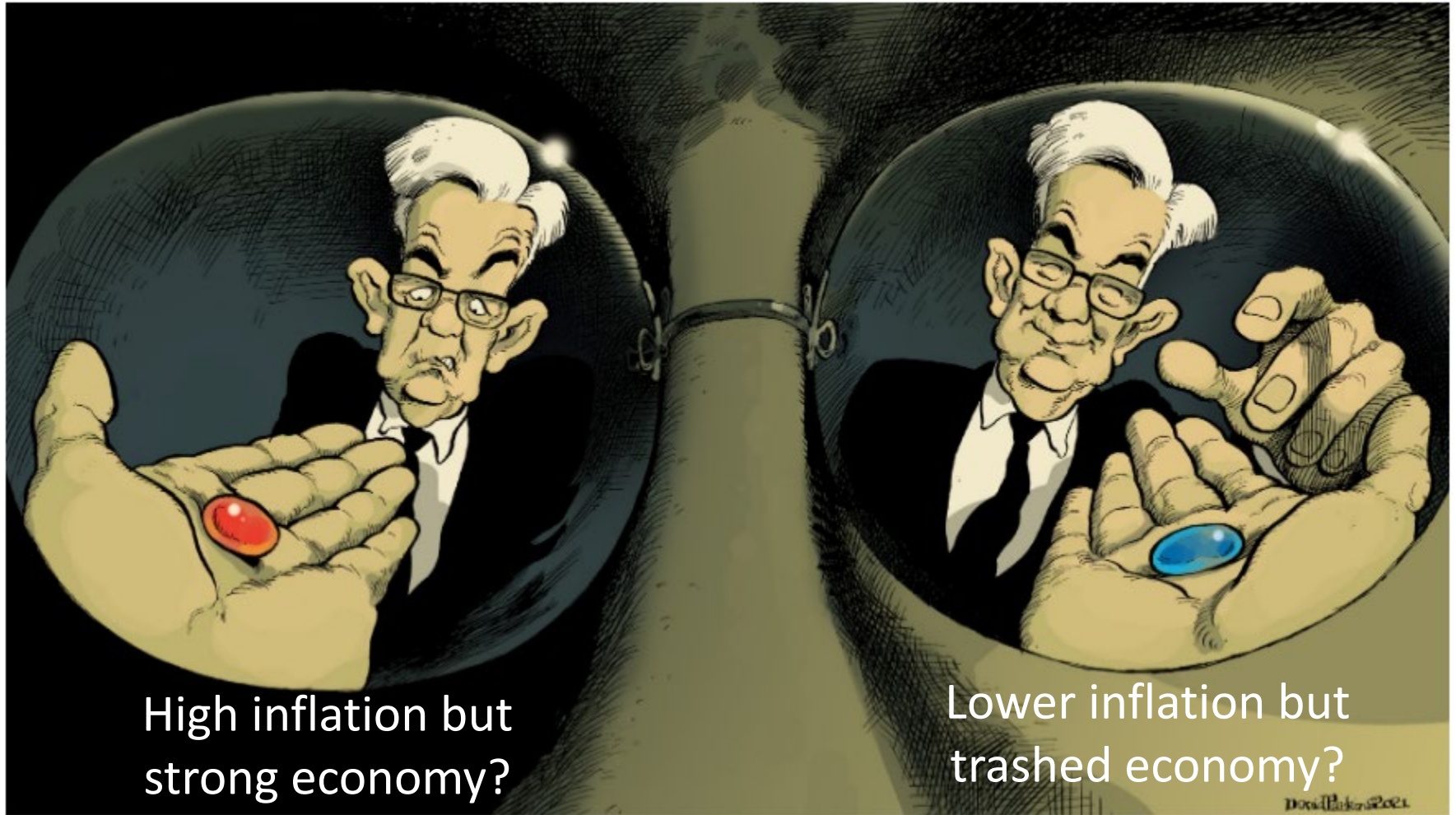
Member driven.
Community focused.

TDSML economic & market update

Call Agenda

- *FOMC update*
- *Economic update*
- *Inflation update*
- *Employment Update*
- *Yield Curve Change Review*

FOMC choices



Powell speech highlights from Jackson Hole

Restoring price stability will take some time and requires using our tools **forcefully** to bring demand and supply into better balance. Reducing inflation is likely to require a **sustained period of below-trend growth**. Moreover, there will very likely be some **softening of labor market** conditions.

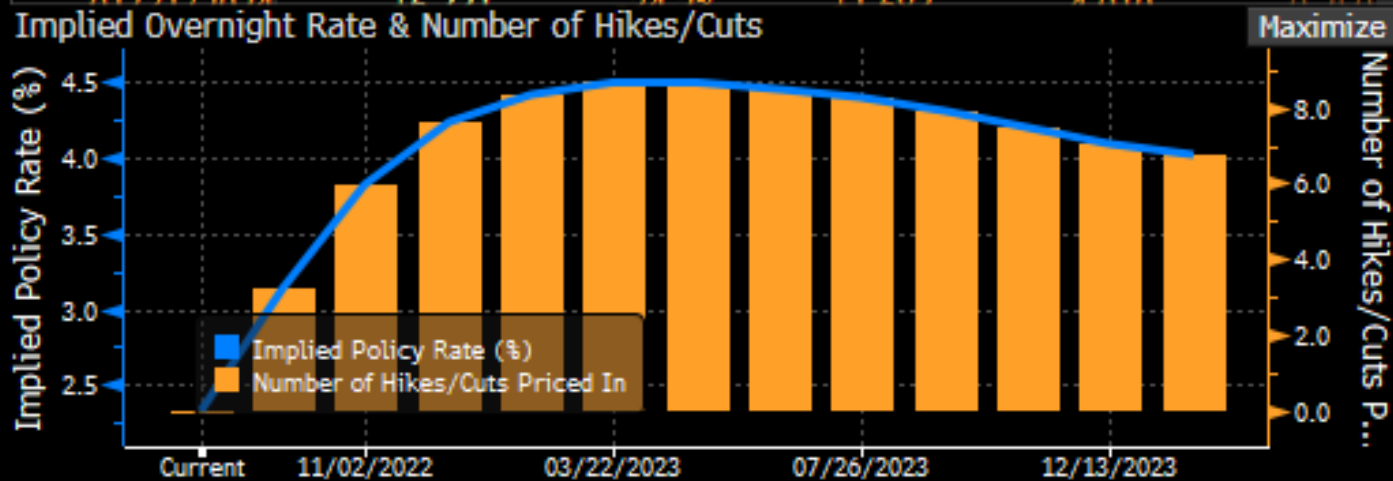
While higher interest rates, slower growth, and softer labor market conditions will bring down inflation, they will also **bring some pain** to households and businesses. These are the unfortunate costs of reducing inflation. **But a failure to restore price stability would mean far greater pain.**

Fed can and should bring down inflation; public expectations contribute to inflation; the **Fed must keep at it until the job is done.**

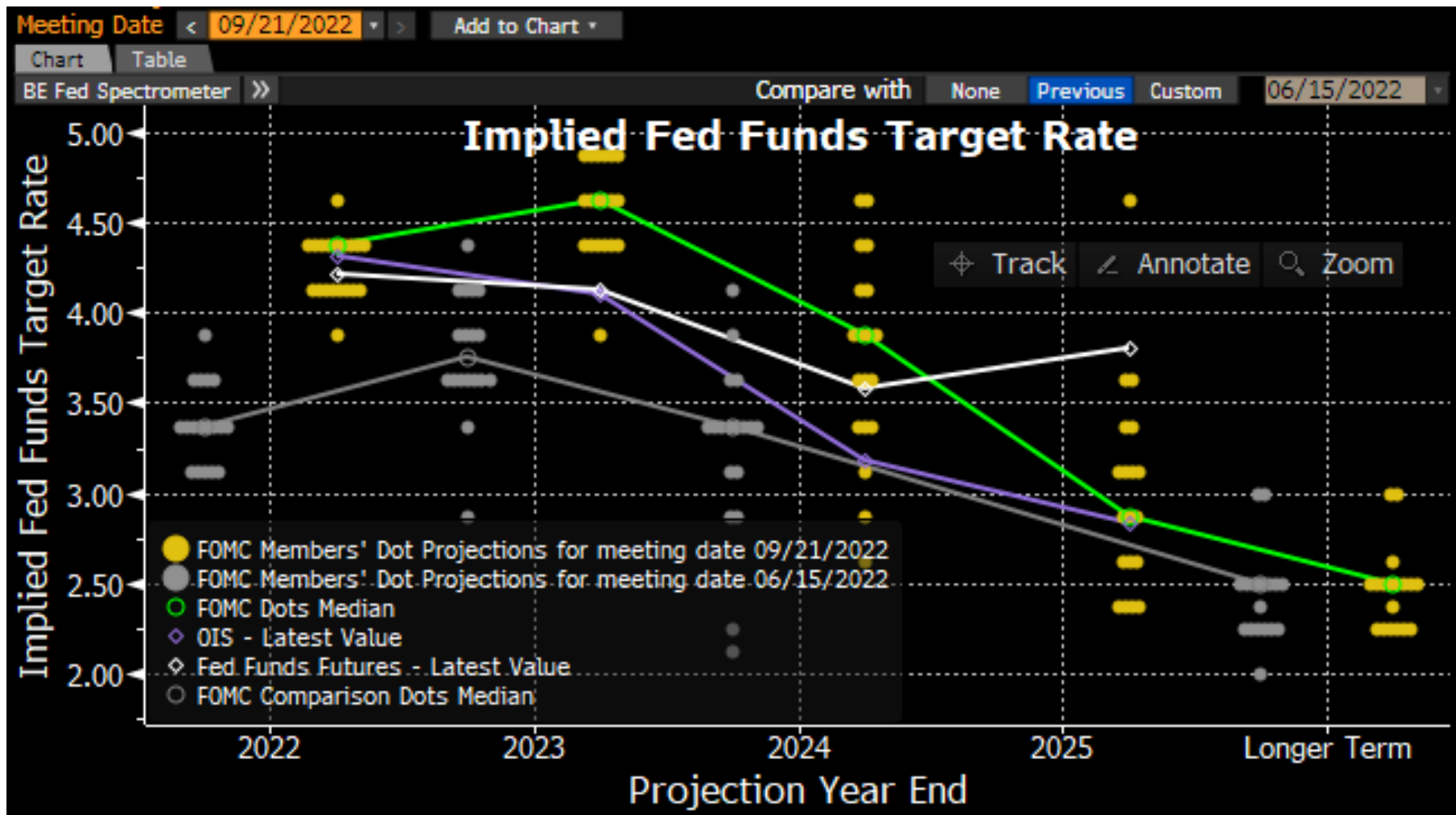
Hike expectations

Region: United States » Instrument: Fed Funds Futures »
 Target Rate 2.50 Pricing Date 09/21/2022
 Effective Rate 2.33 Cur. Imp. O/N Rate 2.327

Meeting	#Hikes/Cuts	%Hike/Cut	Imp. Rate Δ	Implied Rate	A.R.M. ▲
09/21/2022	+3.221	+322.1%	+0.805	3.132	0.250
11/02/2022	+5.954	+273.3%	+1.489	3.816	0.250
12/14/2022	+7.581	+162.7%	+1.895	4.222	0.250
02/01/2023	+8.334	+75.2%	+2.083	4.411	0.250
03/22/2023	+8.691	+35.8%	+2.173	4.500	0.250
05/03/2023	+8.658	-3.3%	+2.165	4.492	0.250
06/14/2023	+8.449	-21.0%	+2.112	4.439	0.250
07/26/2023	+8.231	-21.7%	+2.058	4.385	0.250
09/20/2023	+7.866	-36.5%	+1.967	4.294	0.250
11/01/2023	+7.458	-40.8%	+1.864	4.192	0.250
12/13/2023	+7.073	-38.5%	+1.768	4.095	0.250
01/21/2024	+6.721	-34.2%	+1.682	4.010	0.250



September Dot Race



How high is high?

Federal Funds Rate - Upper Bound (%)

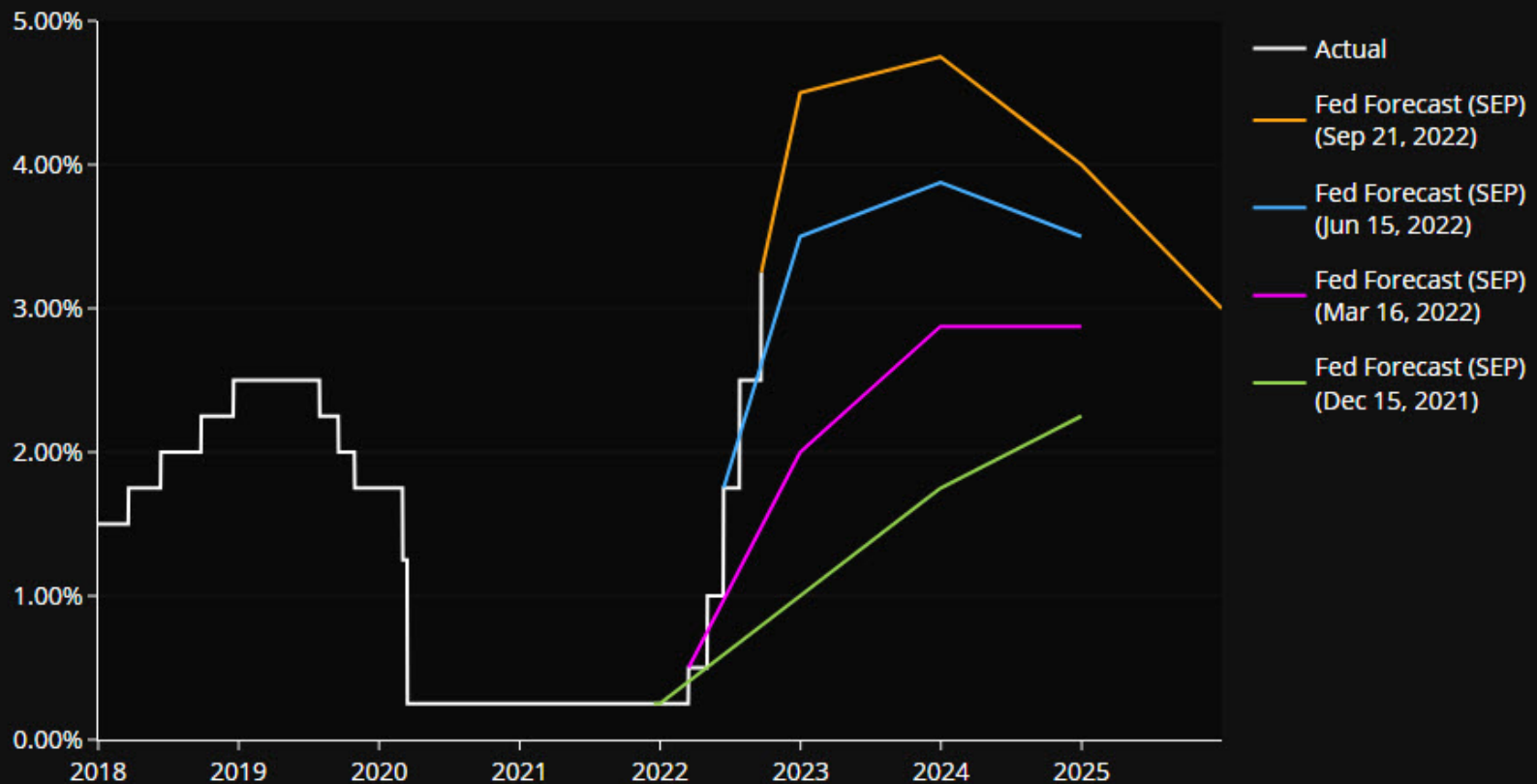


Chart Powered by Bloomberg BQNT

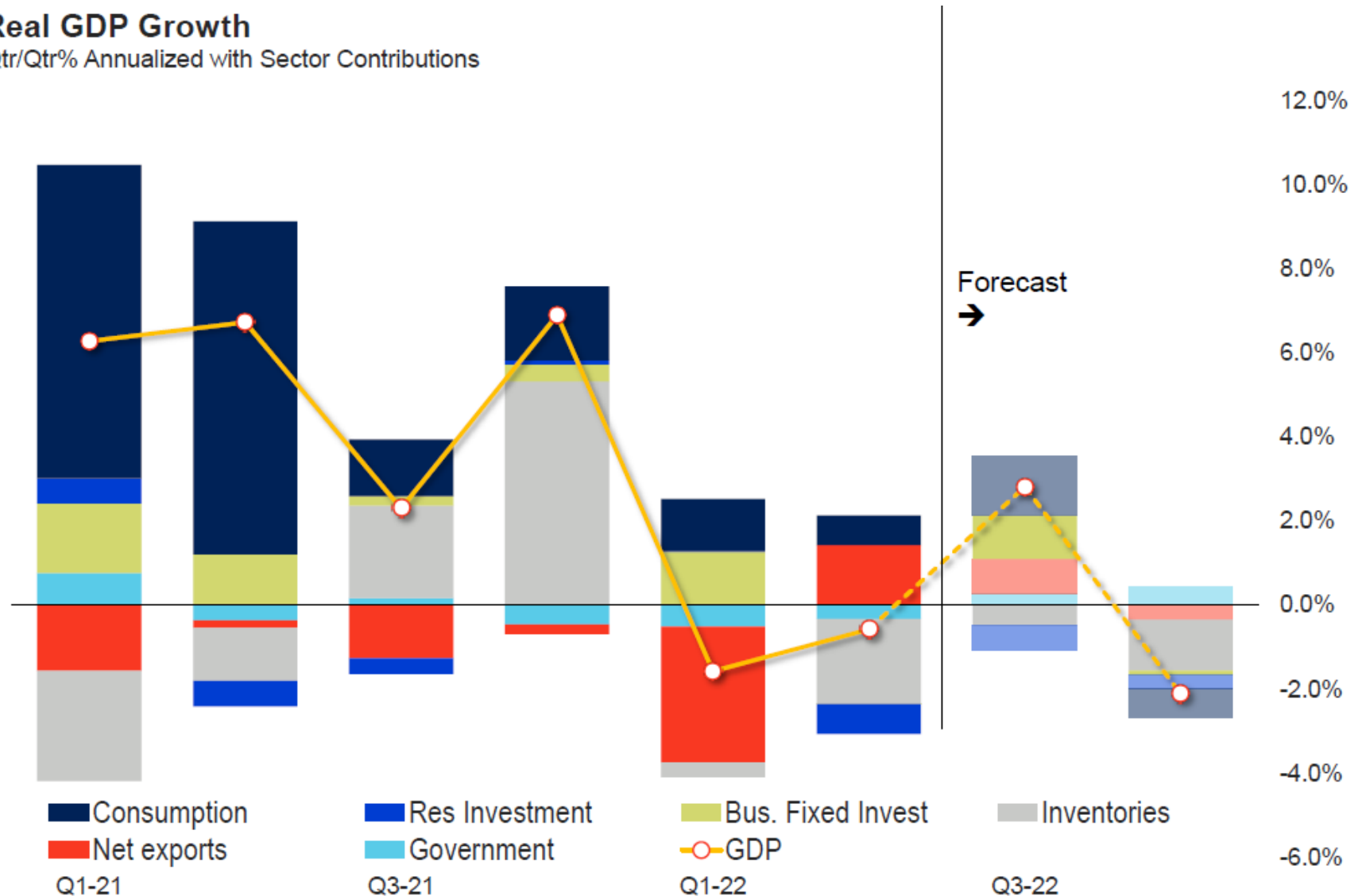
Economy so far is relatively resilient

- Atlanta Fed Now GDP is projecting slight growth path for Q3
- Jobless claims suggest employment no longer weakening
- Strong corporate profits help hiring and risk markets
- Fed is no longer mentioning soft-landing scenario
 - Recession in 2023/2024 is becoming much more likely

Real GDP Growth

Real GDP Growth

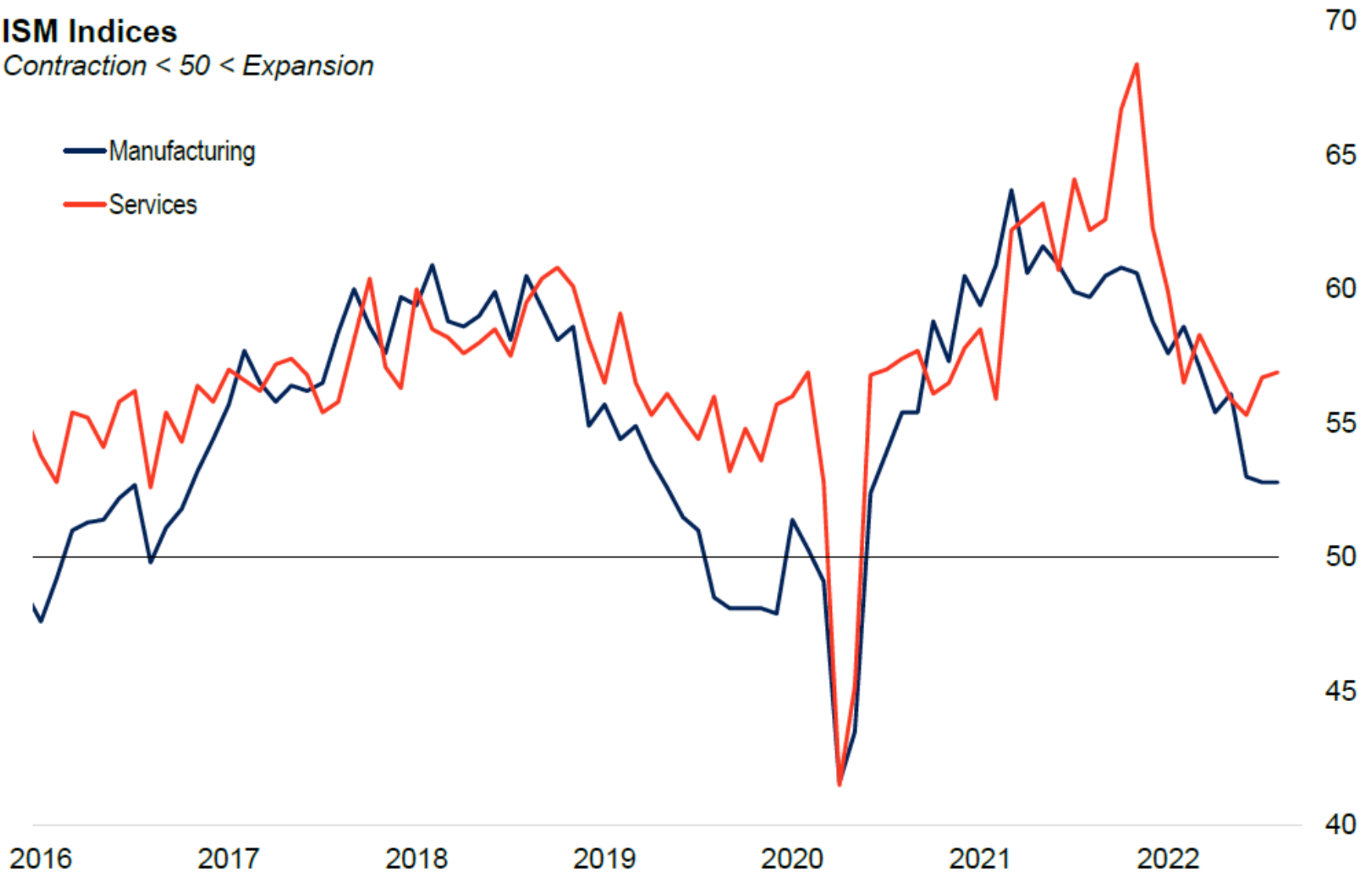
Qtr/Qtr% Annualized with Sector Contributions



ISM from 9/1

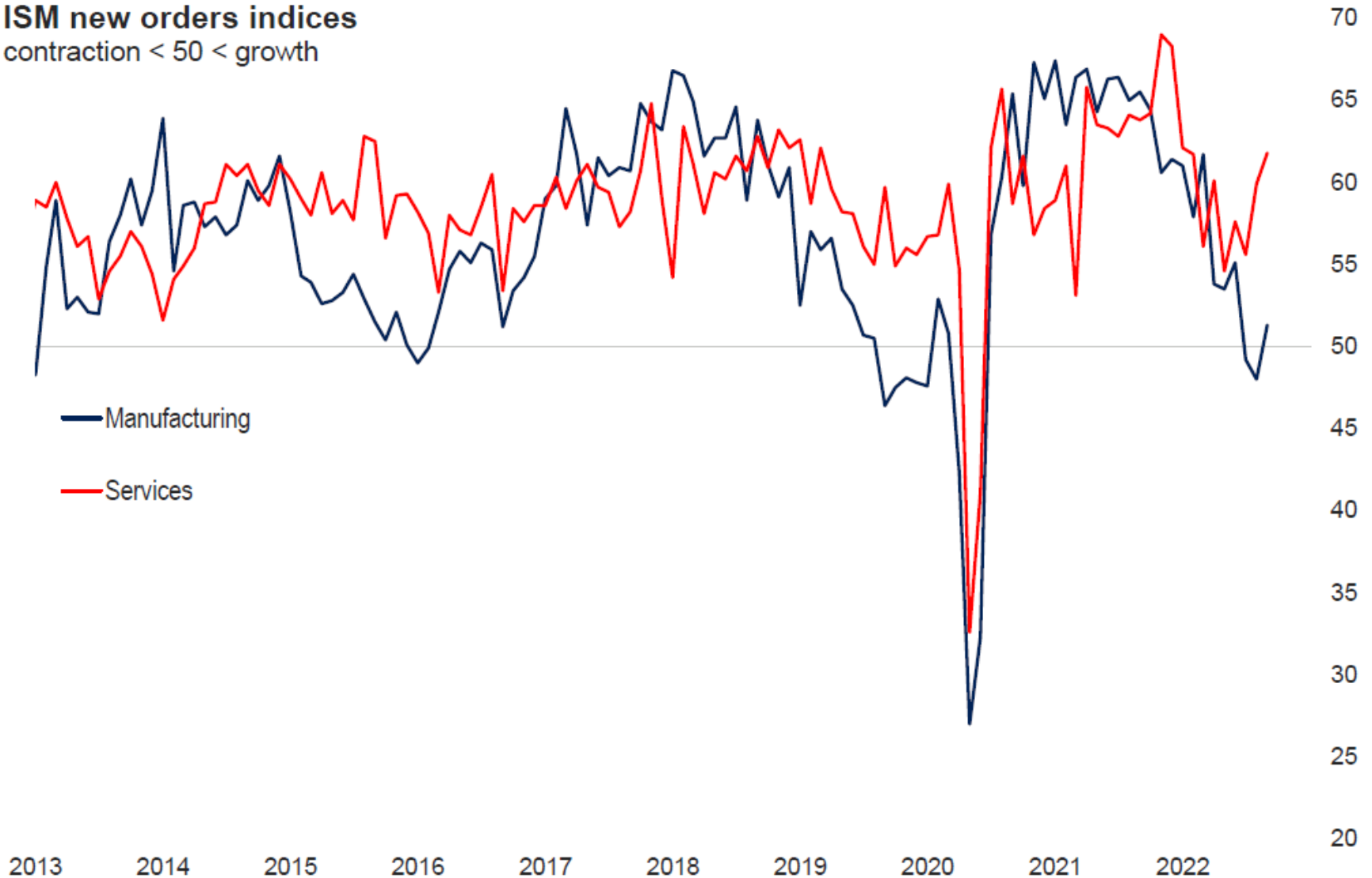
ISM Indices

Contraction < 50 < Expansion



New orders bounced

ISM new orders indices
contraction < 50 < growth

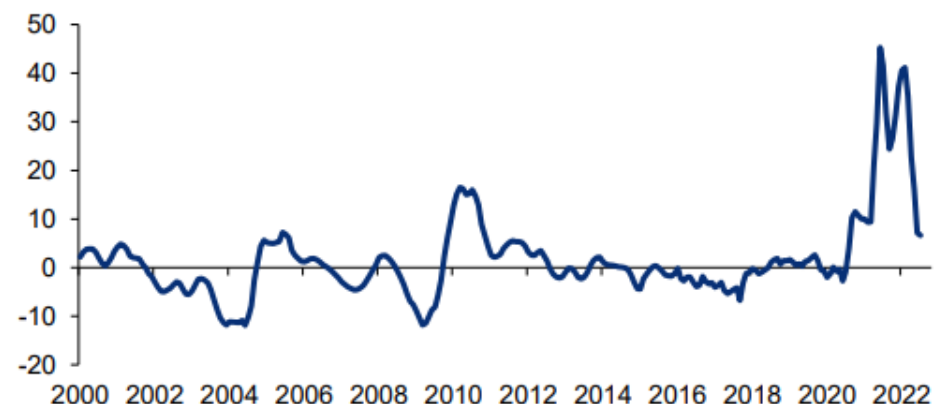


Transitory Inflation factors coming down

Europe Brent Spot Price, %y/y



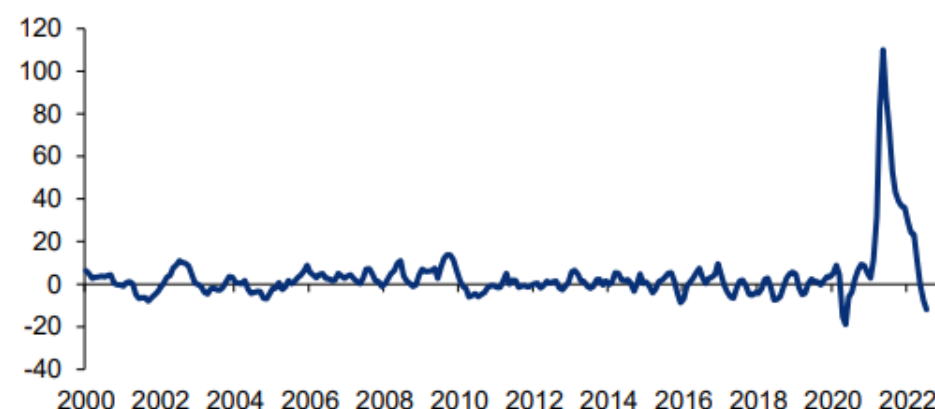
CPI-U: Used Cars and Trucks, %y/y



CPI-U: Airline Fare

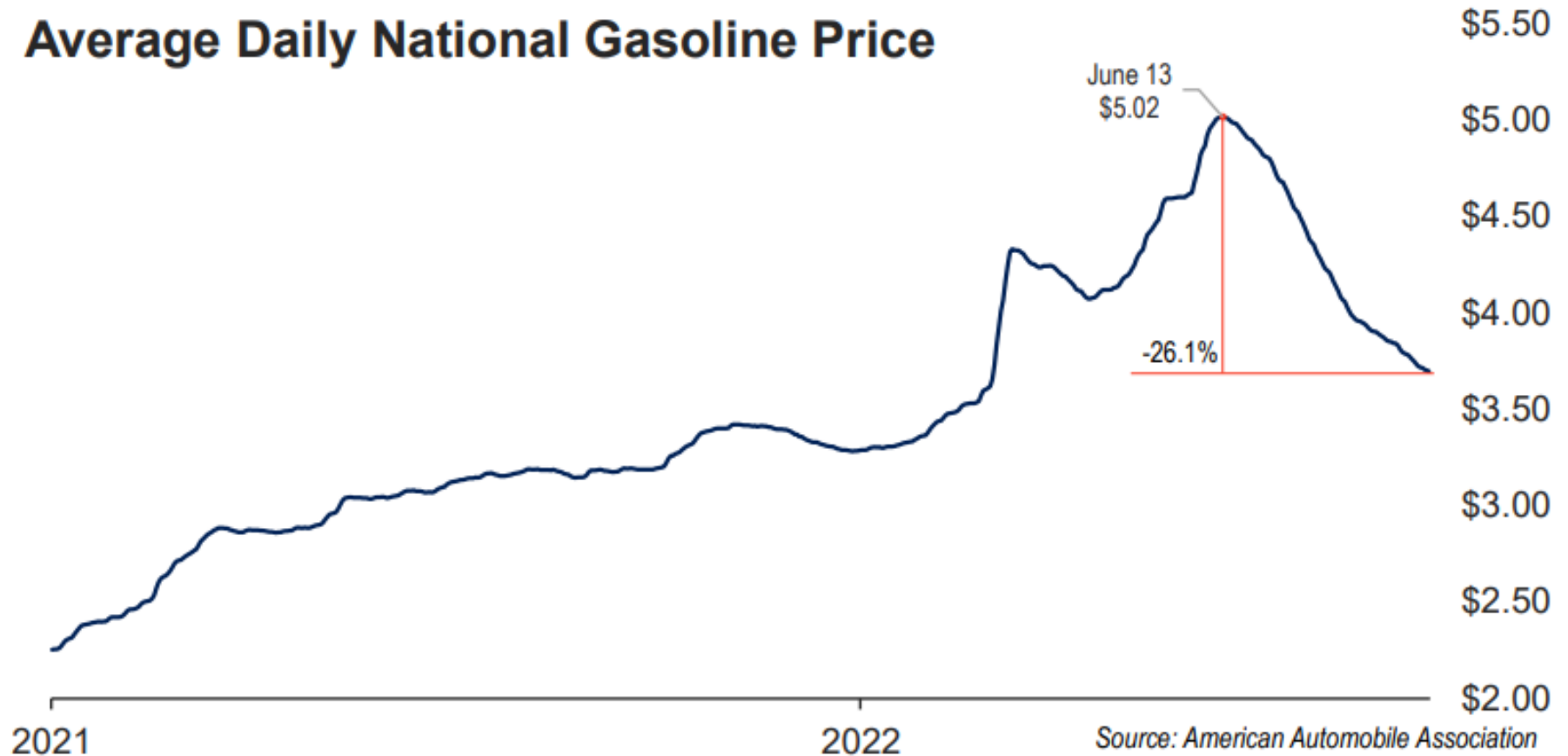


CPI-U: Car and Truck Rental



Gasoline

Average Daily National Gasoline Price



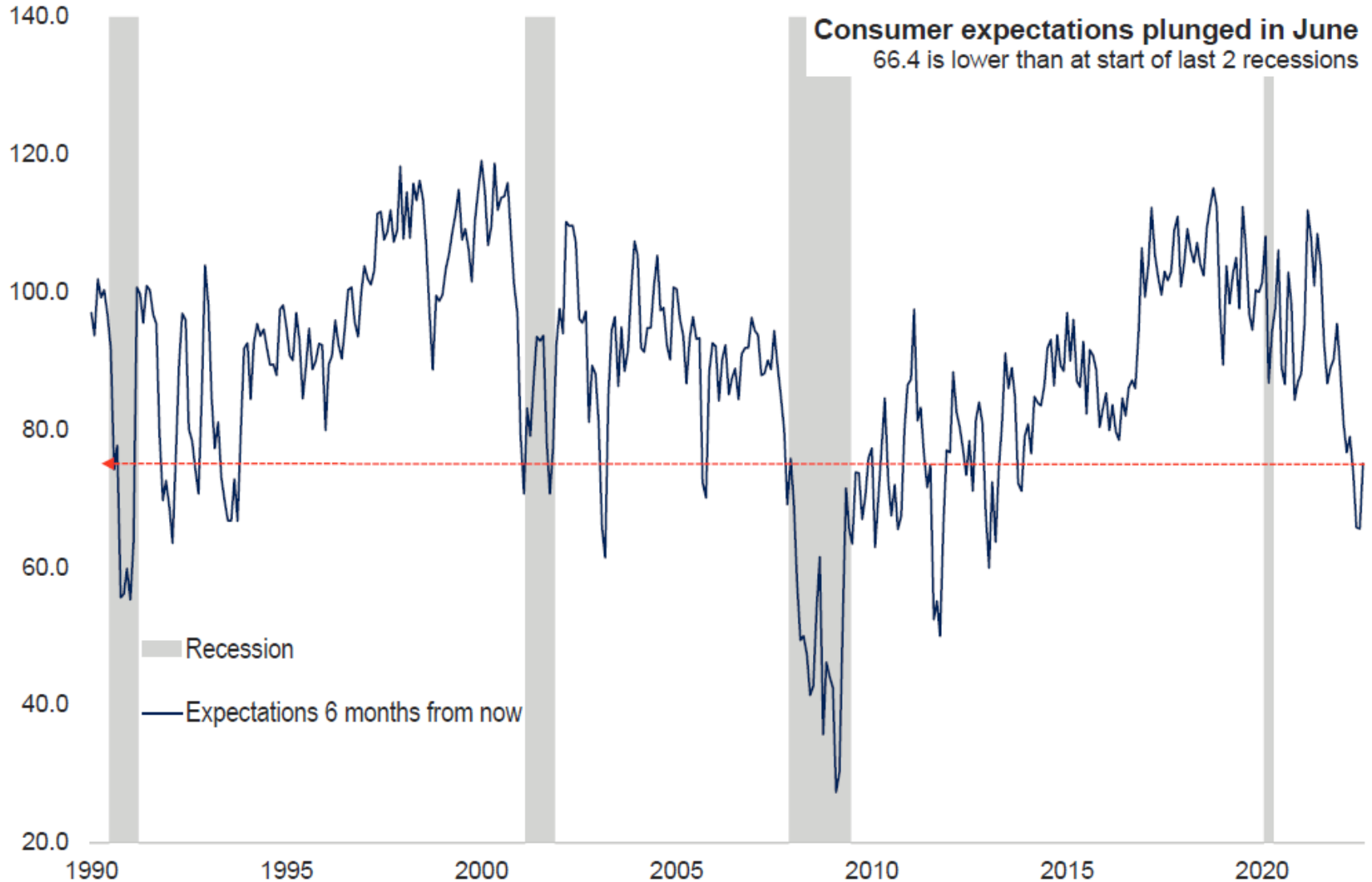
- Gasoline prices have fallen every day for 98 days.
- Gas was the primary cause of inflation in the first half

Consumer 1yr Inflation Expectations

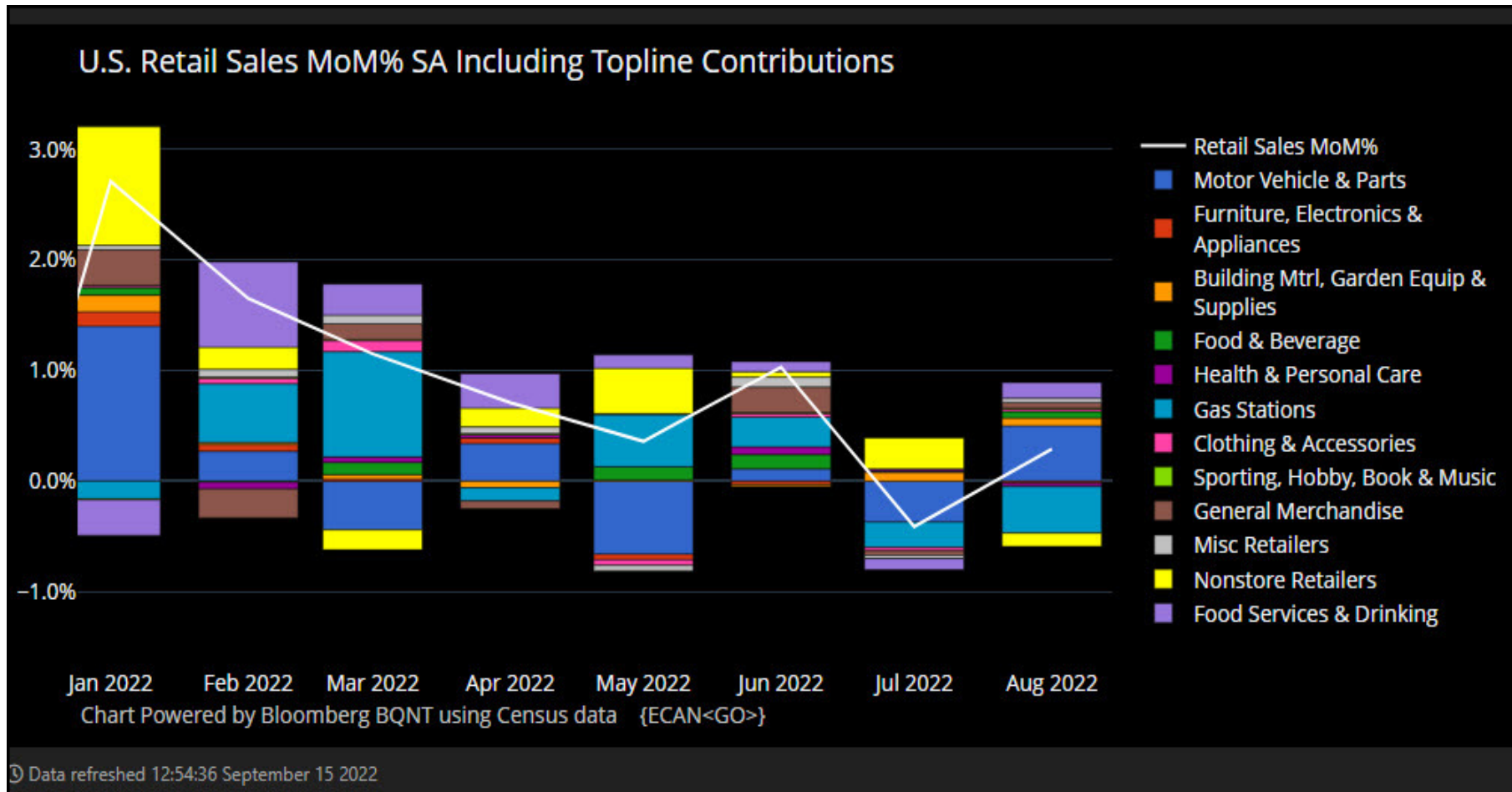


- You can see a clear rolling over in consumers inflation expectations.
- 1yr down to 4.6% vs 4.8% prior, 5-10yr expectations at 2.8% vs. 2.9% prior.

Consumer Sentiment comes back

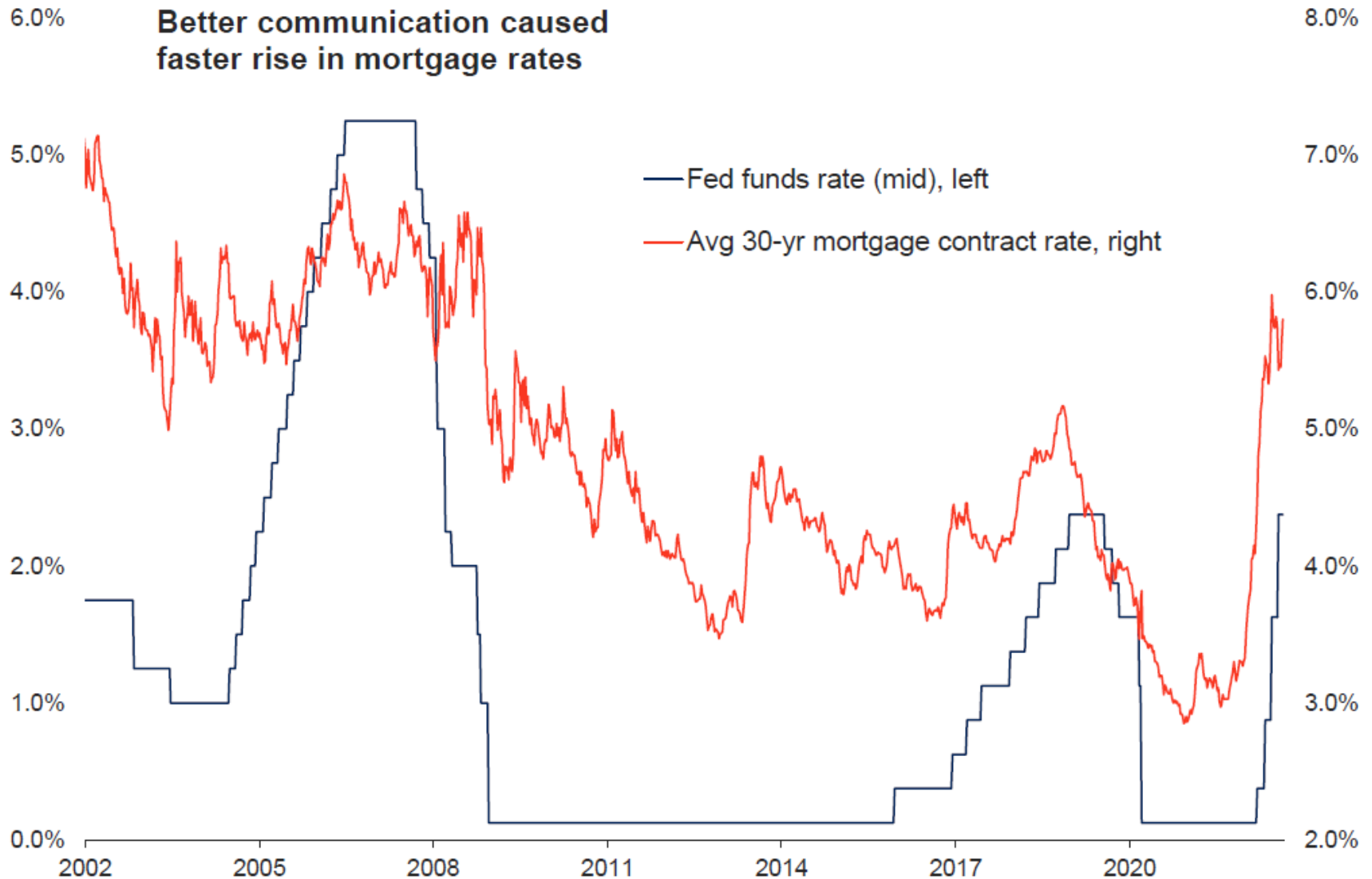


Retail Sales 9/15

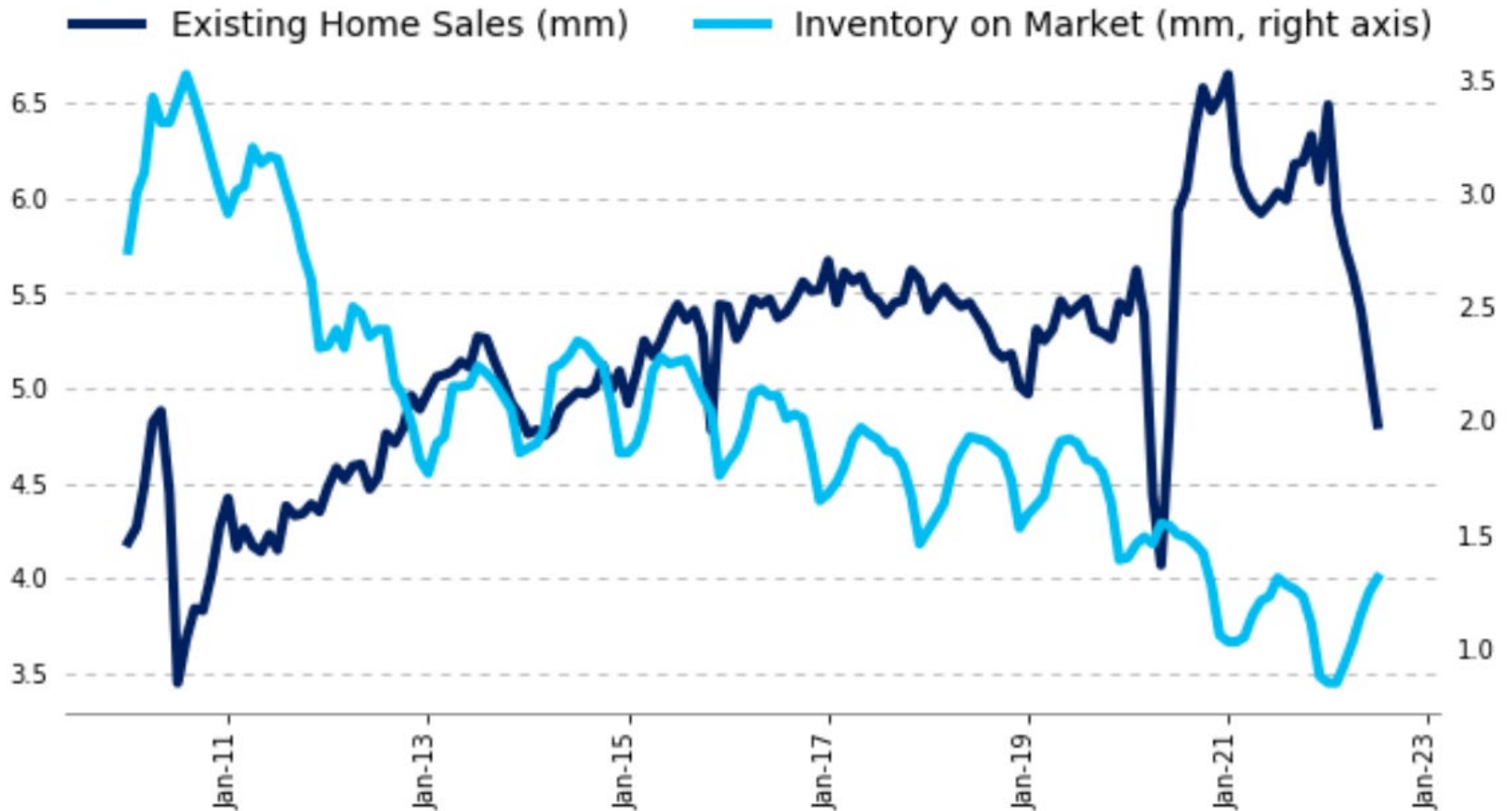


- Retail sales were surprisingly strong in August
- Gas prices came down leaving room for spending on other items

Mortgages up to early 2000s rates



Housing Supply Up but Demand Down



Payment effect on mortgages

Austin, Texas

Monthly Mortgage Payment Using Median Existing Home Price - Austin-Round Rock-San Marcos, TX
with a 20% Down Payment & Average 30Y Mortgage Rate

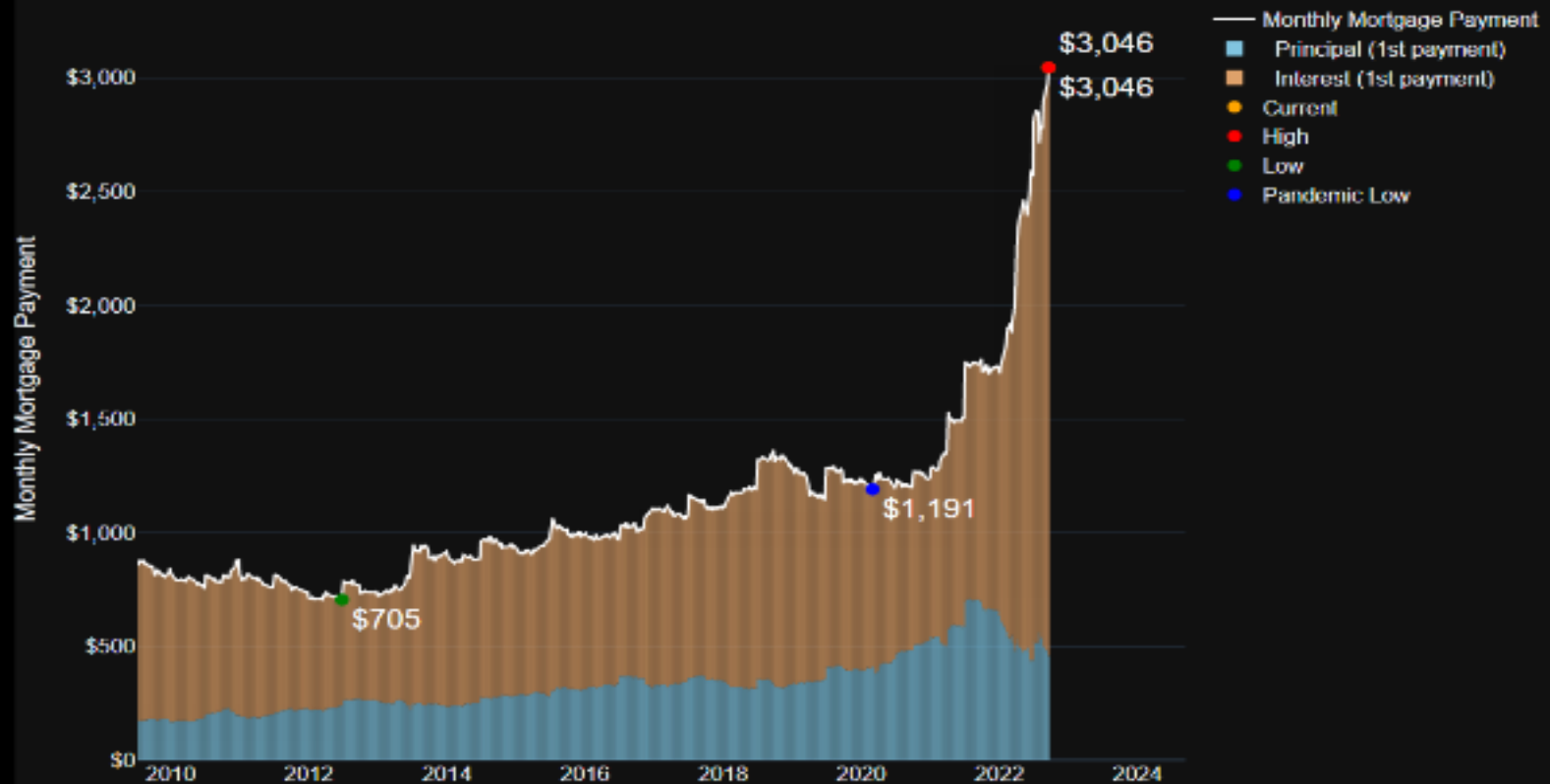
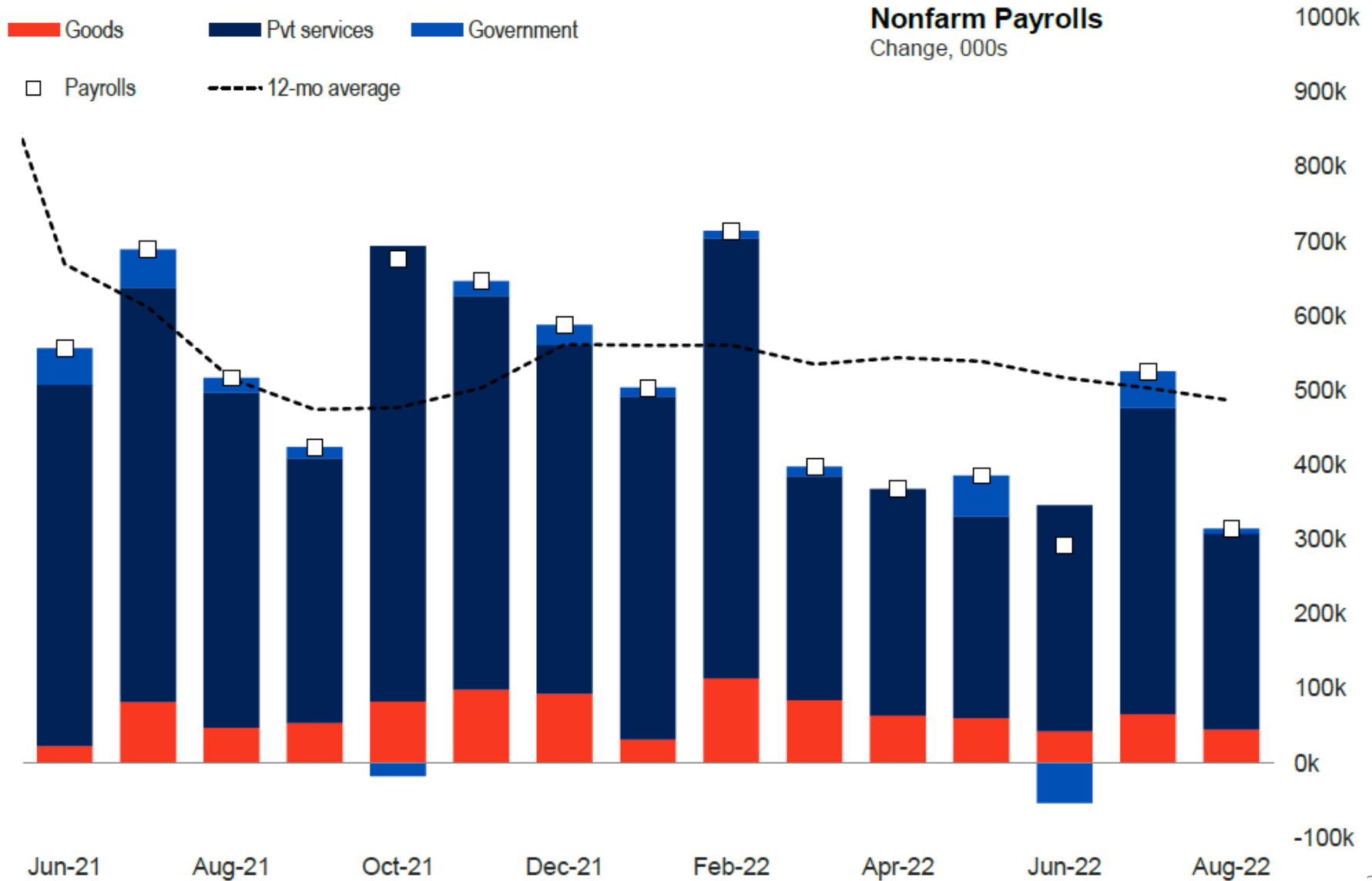


Chart Powered by Bloomberg BQNT using National Assoc. of Realtors & Bankrate.com Data [ECAN:GO>]



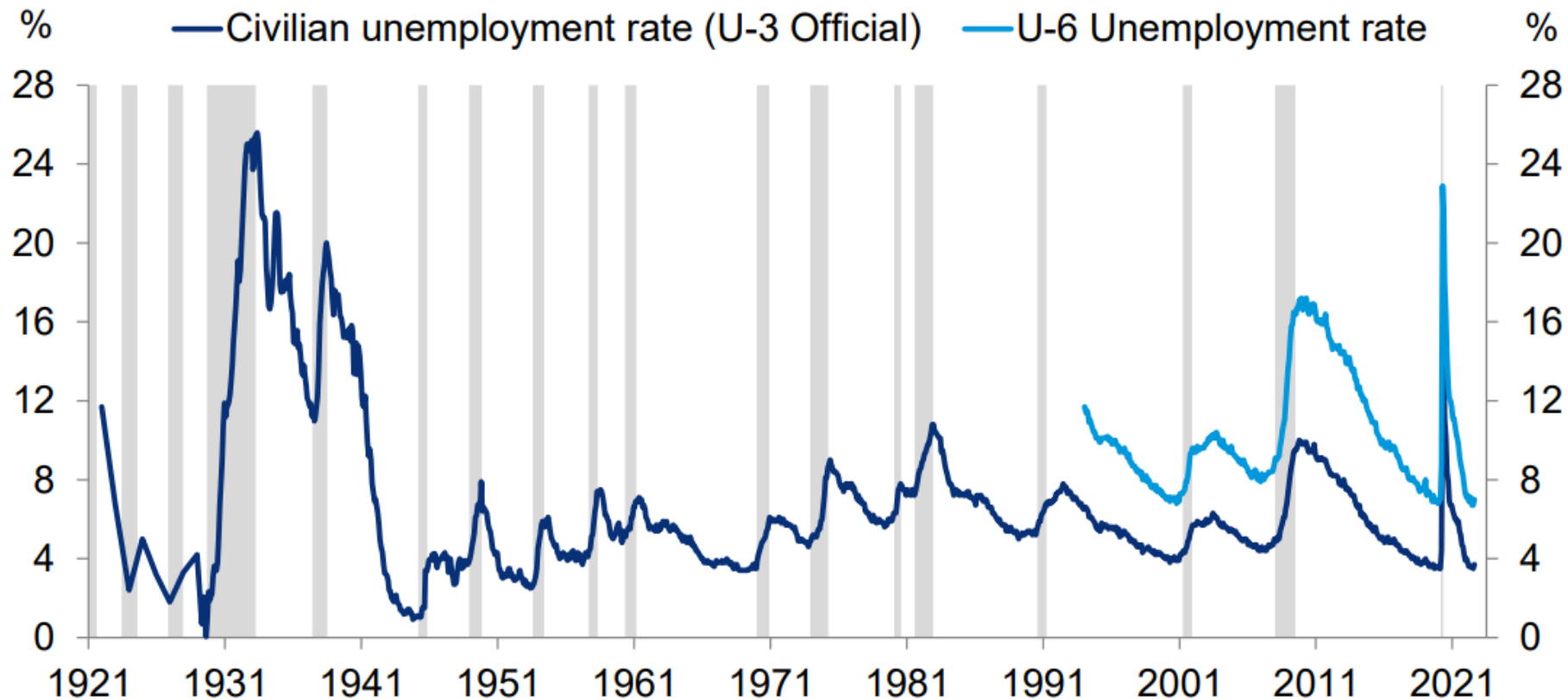
Employment Update

Job growth slowing but not slow



Unemployment rate up

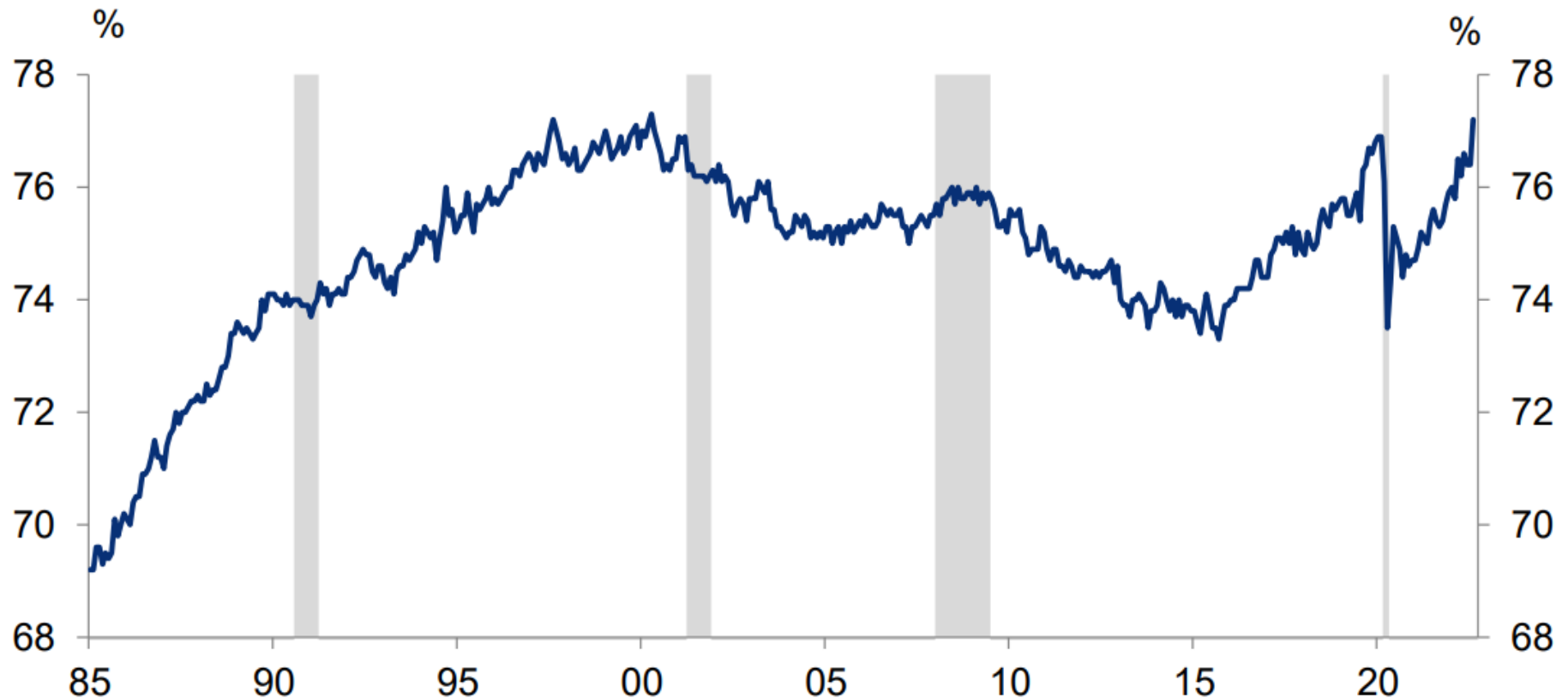
Unemployment rate and U-6 underemployment



Source: BLS, Haver Analytics, Deutsche Bank

Women are joining the workforce

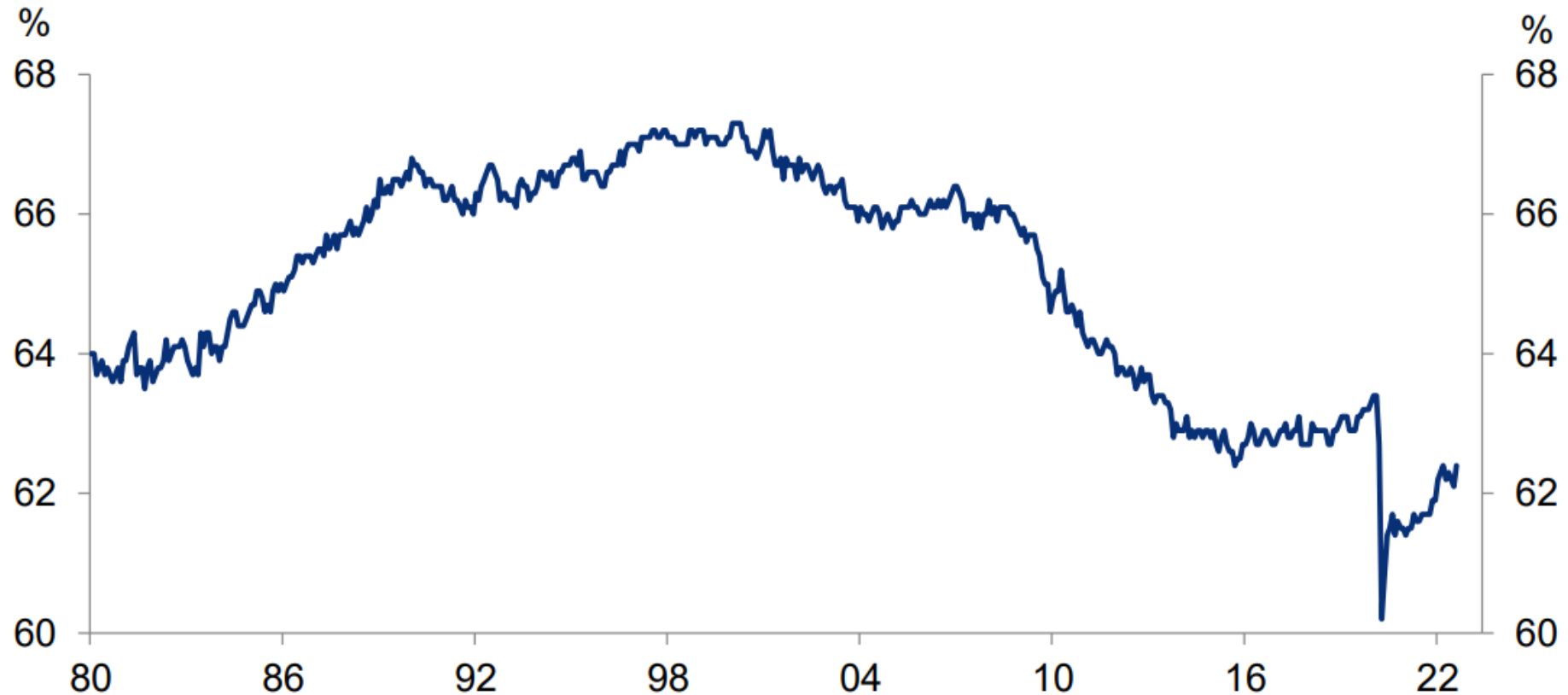
Labor force participation rate: women aged 25-54 years



Source: BLS, Haver Analytics, Deutsche Bank

Participation rate still low by historical standards

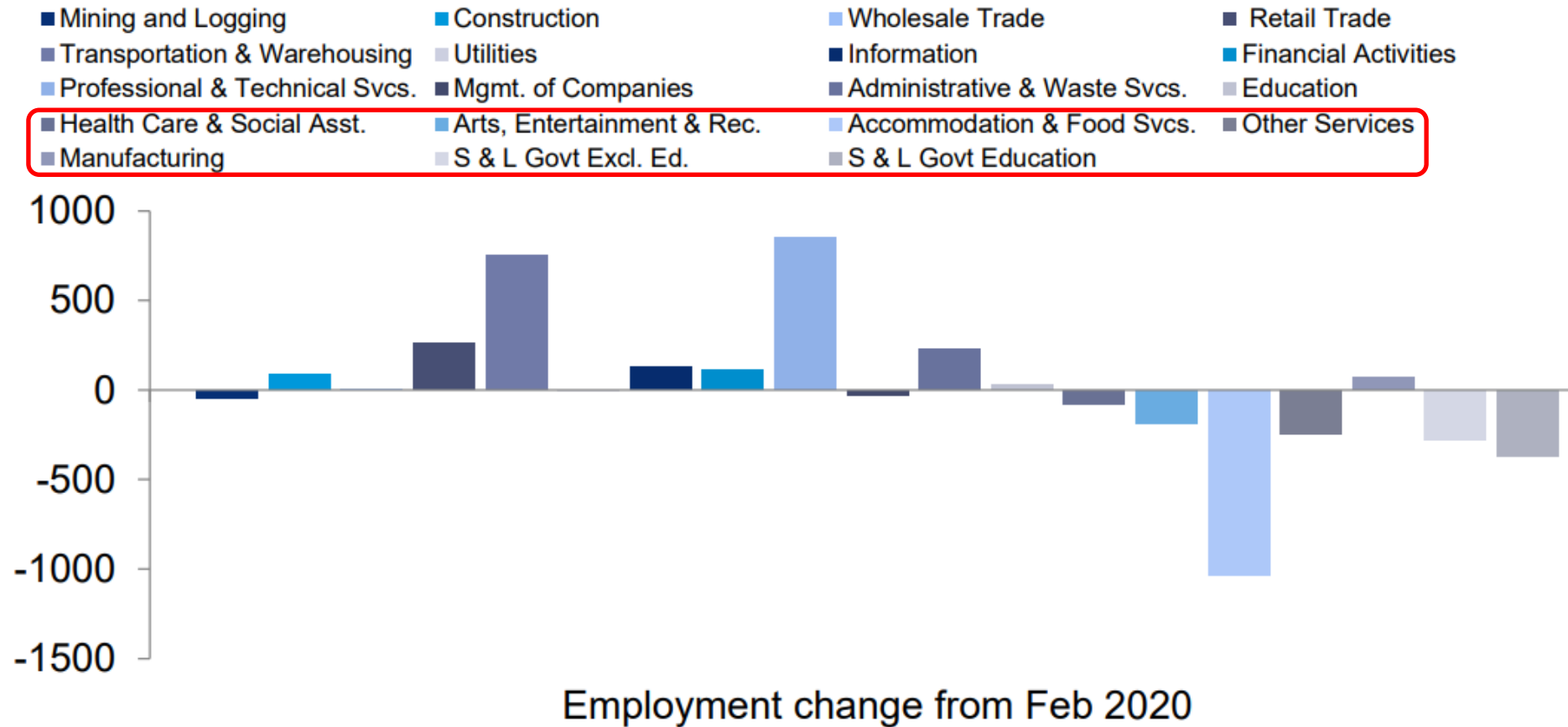
Labor force participation rate



Source: BLS, Haver Analytics, Deutsche Bank

Several service sector jobs still below pre-covid

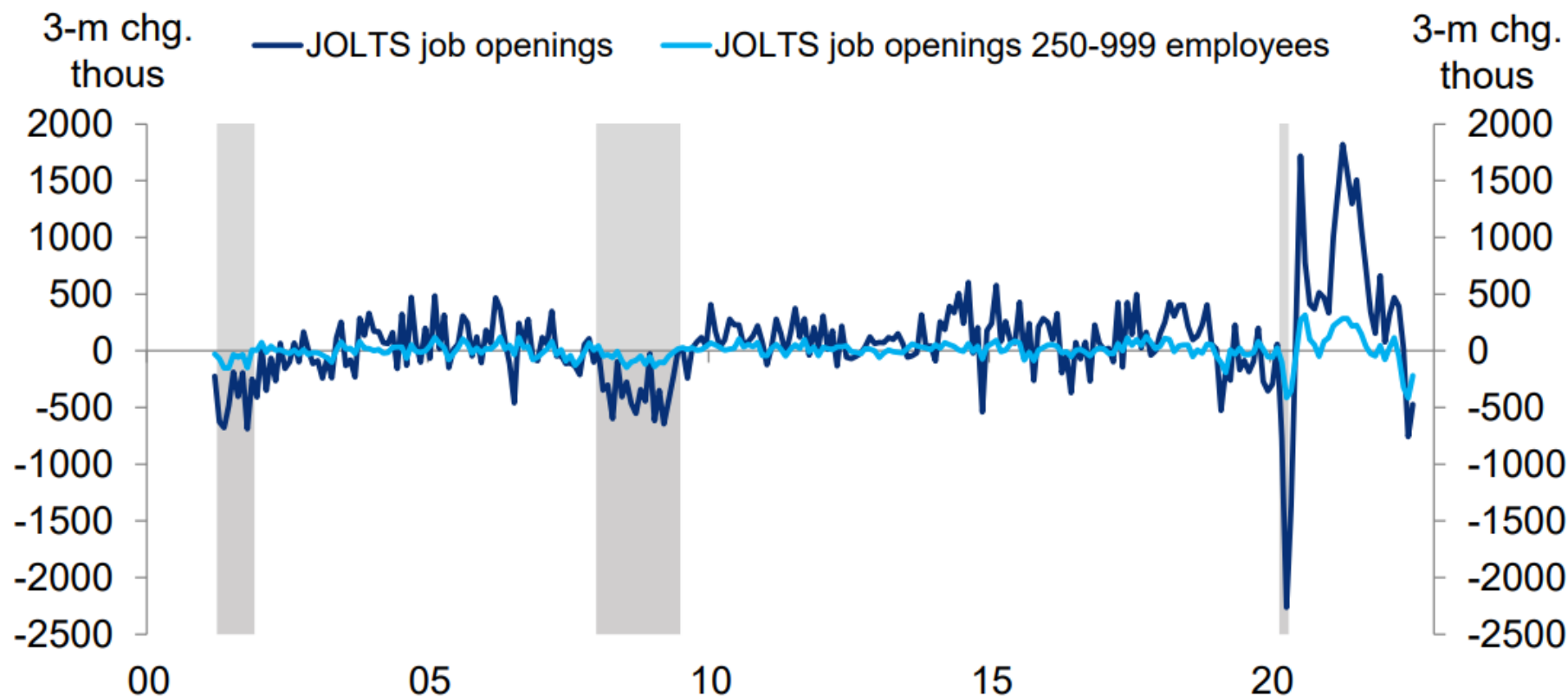
Change in employment since February 2020 by industry



Source: BLS, Haver Analytics, Deutsche Bank

Job Openings

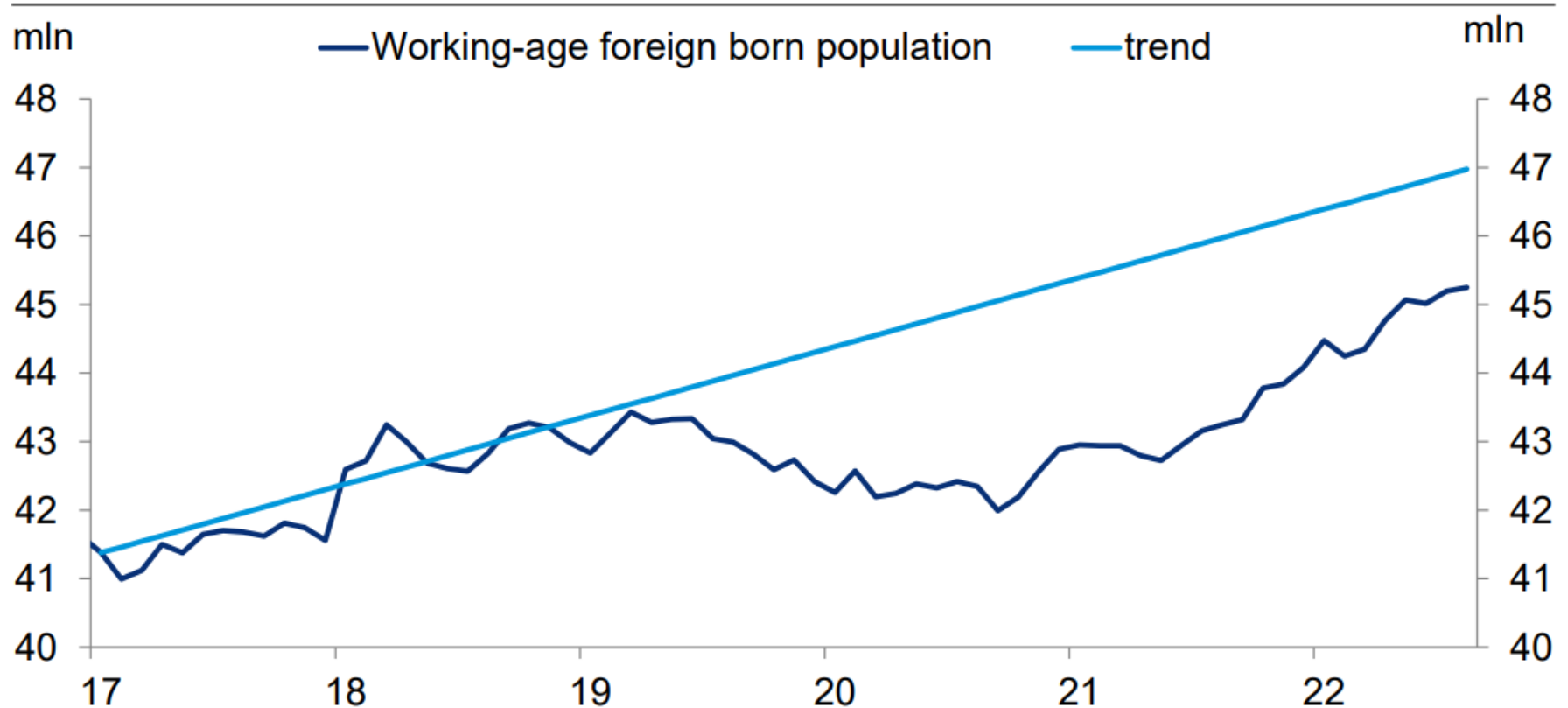
3-month change in total job openings versus job openings for medium-sized firms



Source: BLS, Haver Analytics, Deutsche Bank

Missing foreign born workers

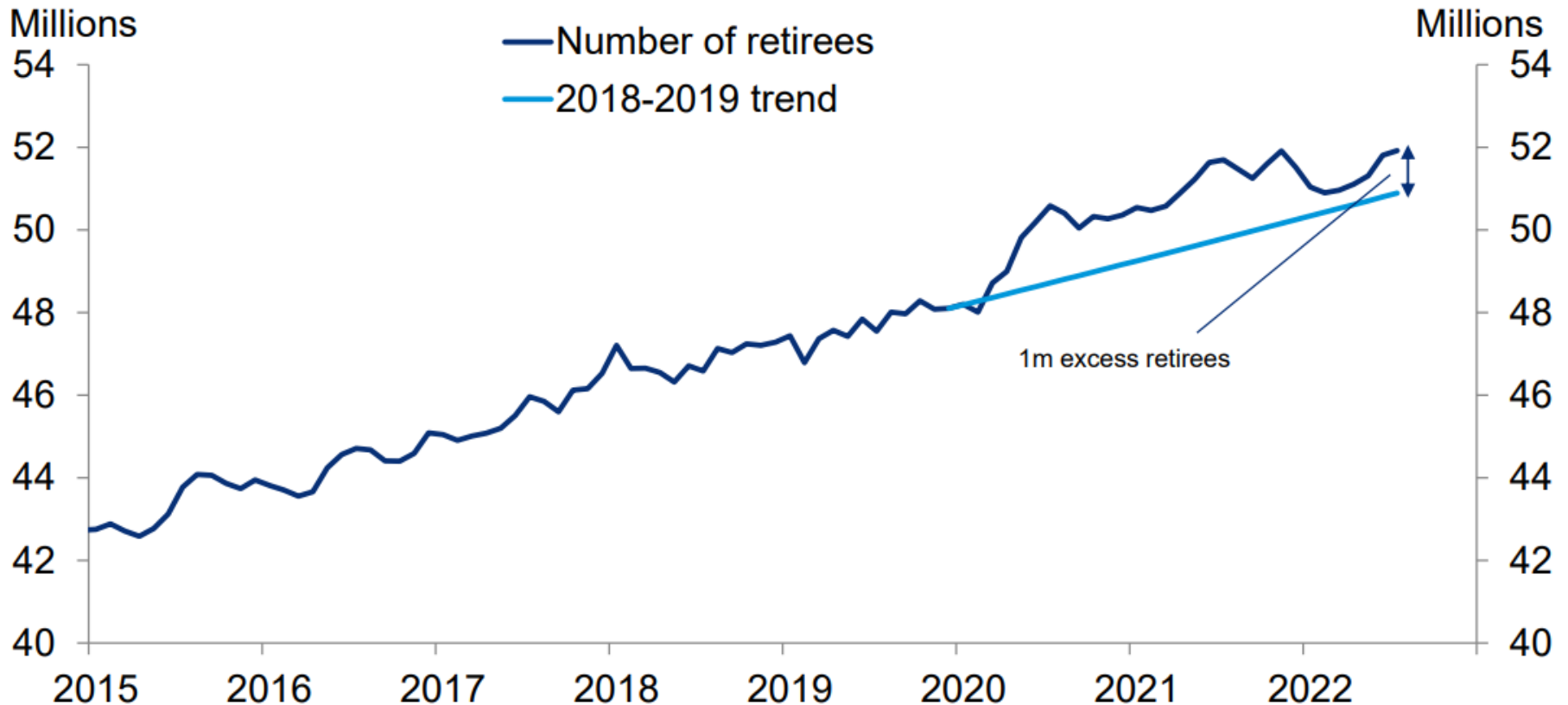
Working-age foreign-born population 2017-2022



Source: BLS, Haver Analytics, Deutsche Bank

Missing pre-retiree workers

Number of retirees



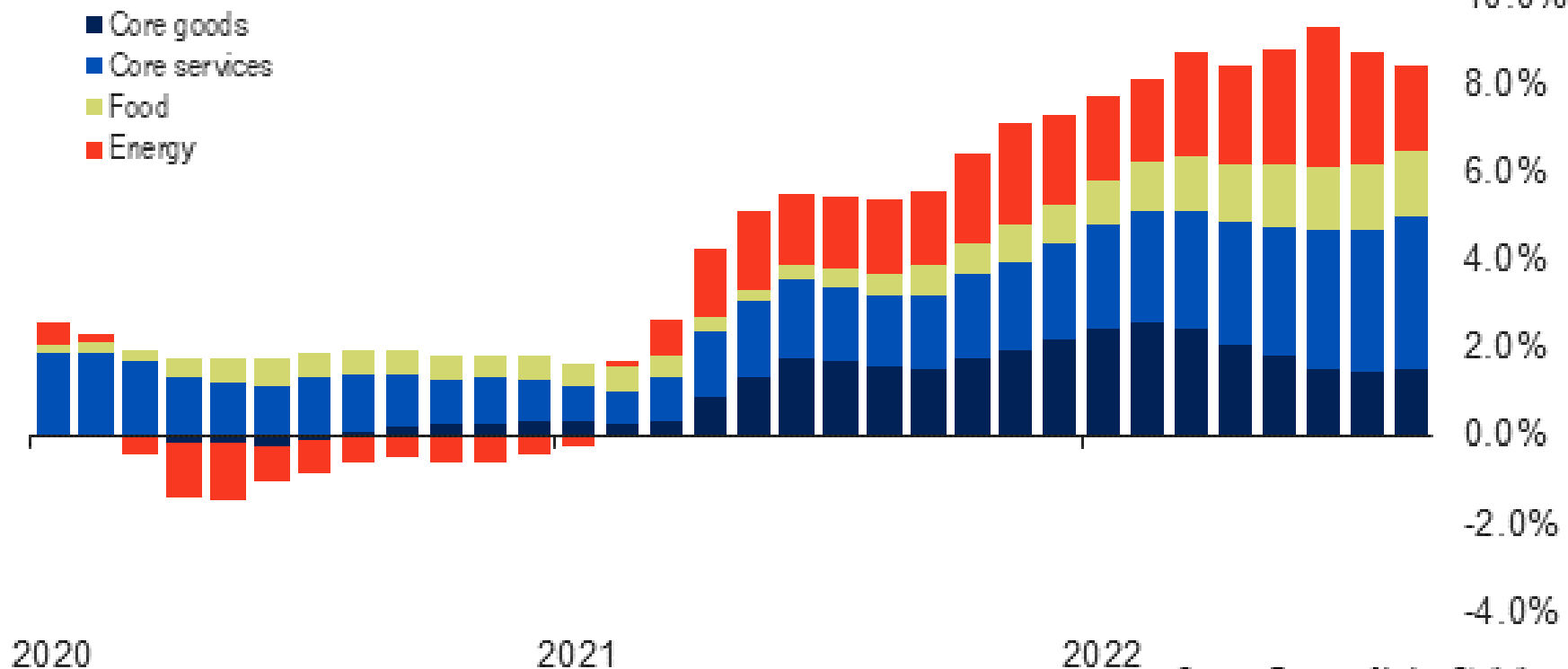
Source: CPS, IPUMS, Deutsche Bank



Inflation Update

CPI Inflation: 9/13

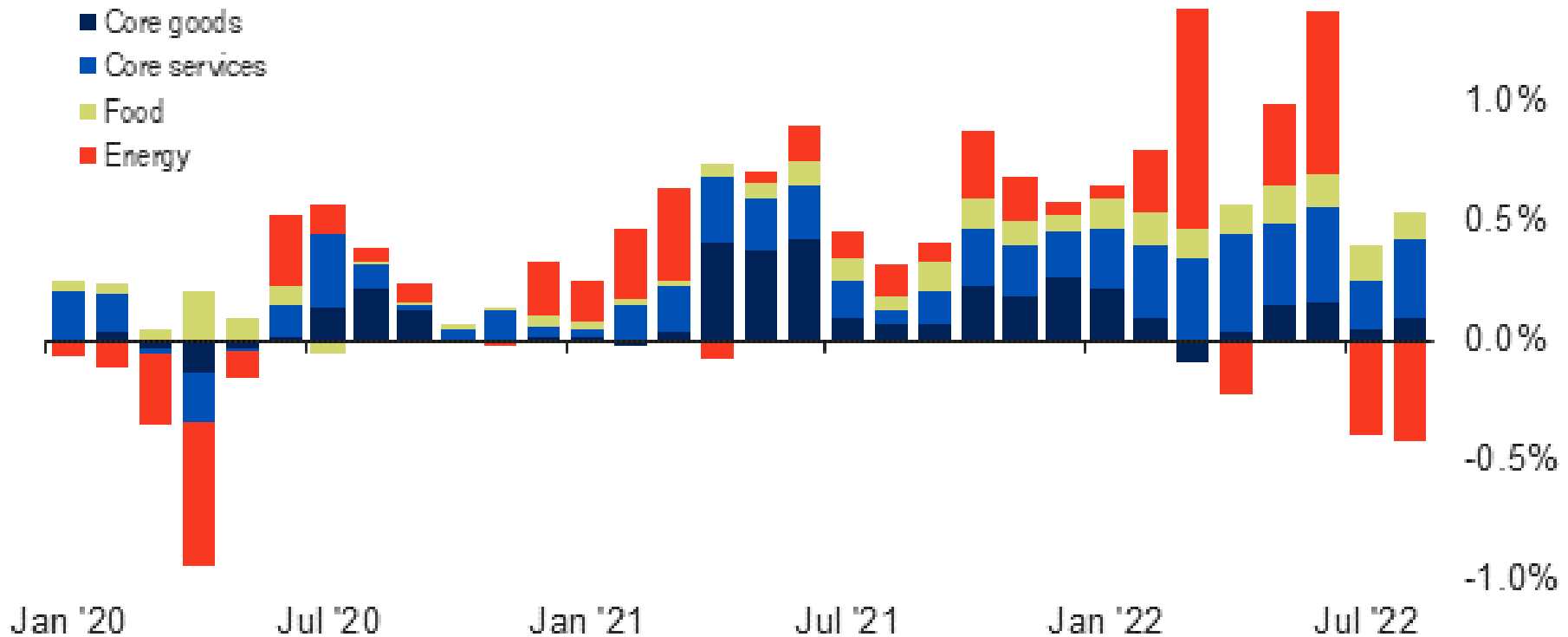
Yr/Yr CPI Inflation Contributions



Source: Bureau of Labor Statistics

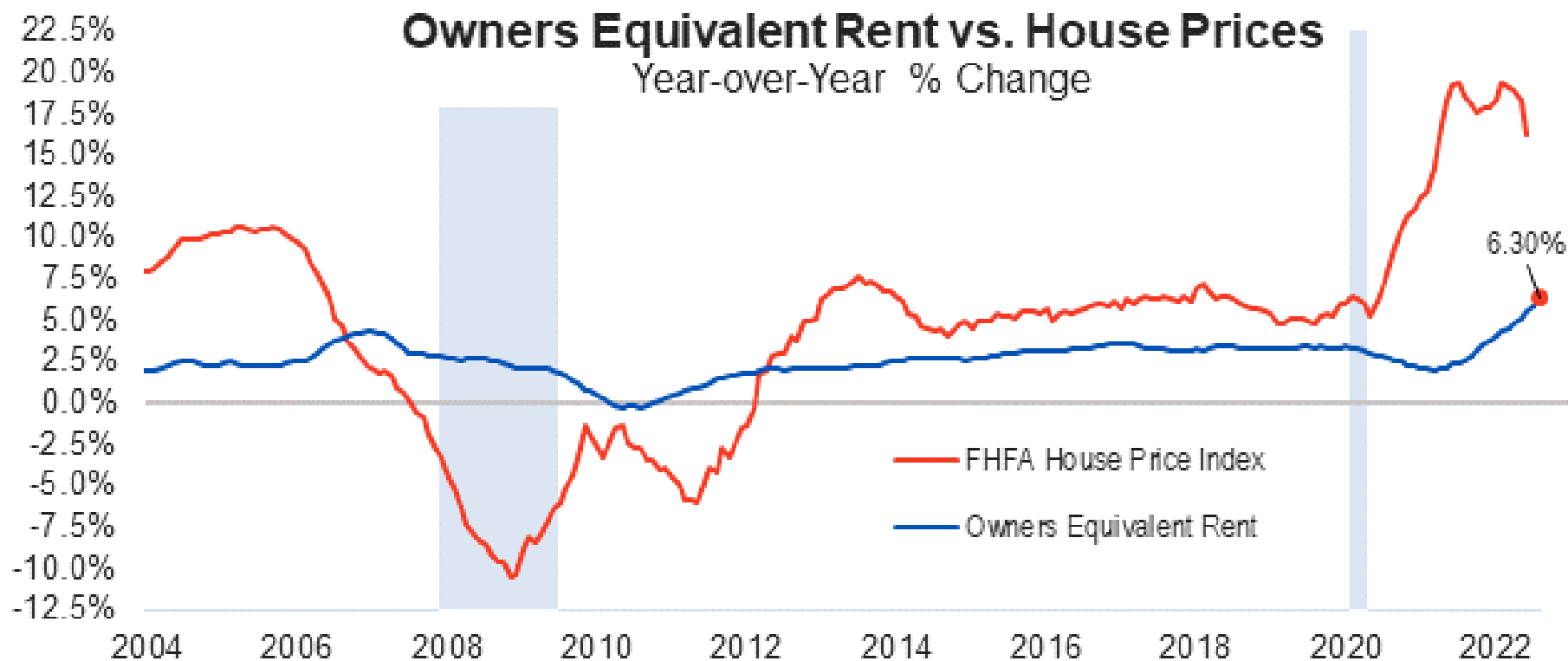
Inflation

Mth/Mth CPI Inflation Contributions



Source: Bureau of Labor Statistics

Rent costs



Source: Bureau of Labor Statistics, FHLMC

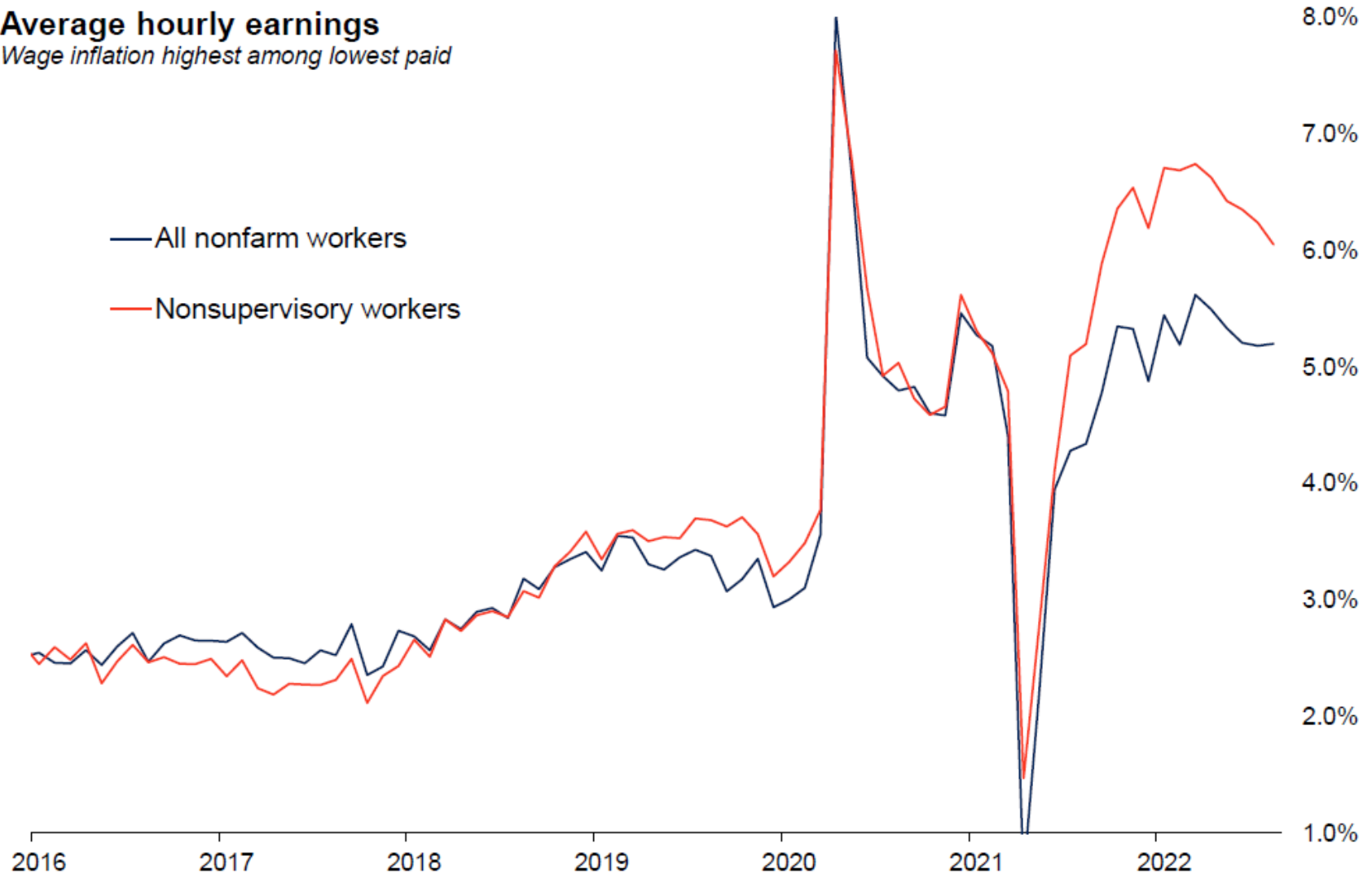
The mechanics of shelter inflation, which is a significant chunk of the core services index, suggest peak rent is still several months away.

- Owners' Equivalent Rent (OER) rose 0.7%
- Rent of primary residence rose 0.7%

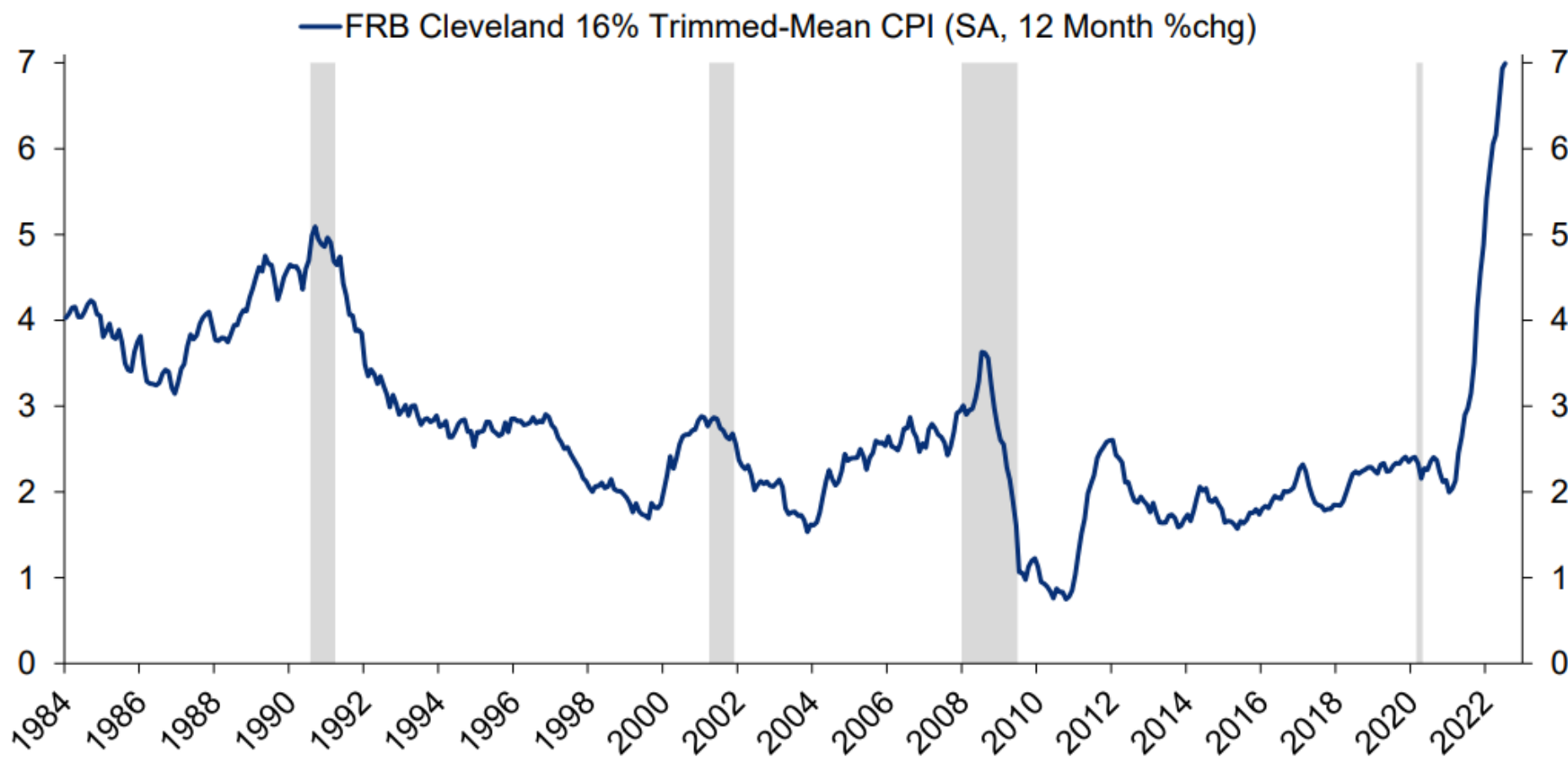
Pay Growth slowing but still quick

Average hourly earnings

Wage inflation highest among lowest paid



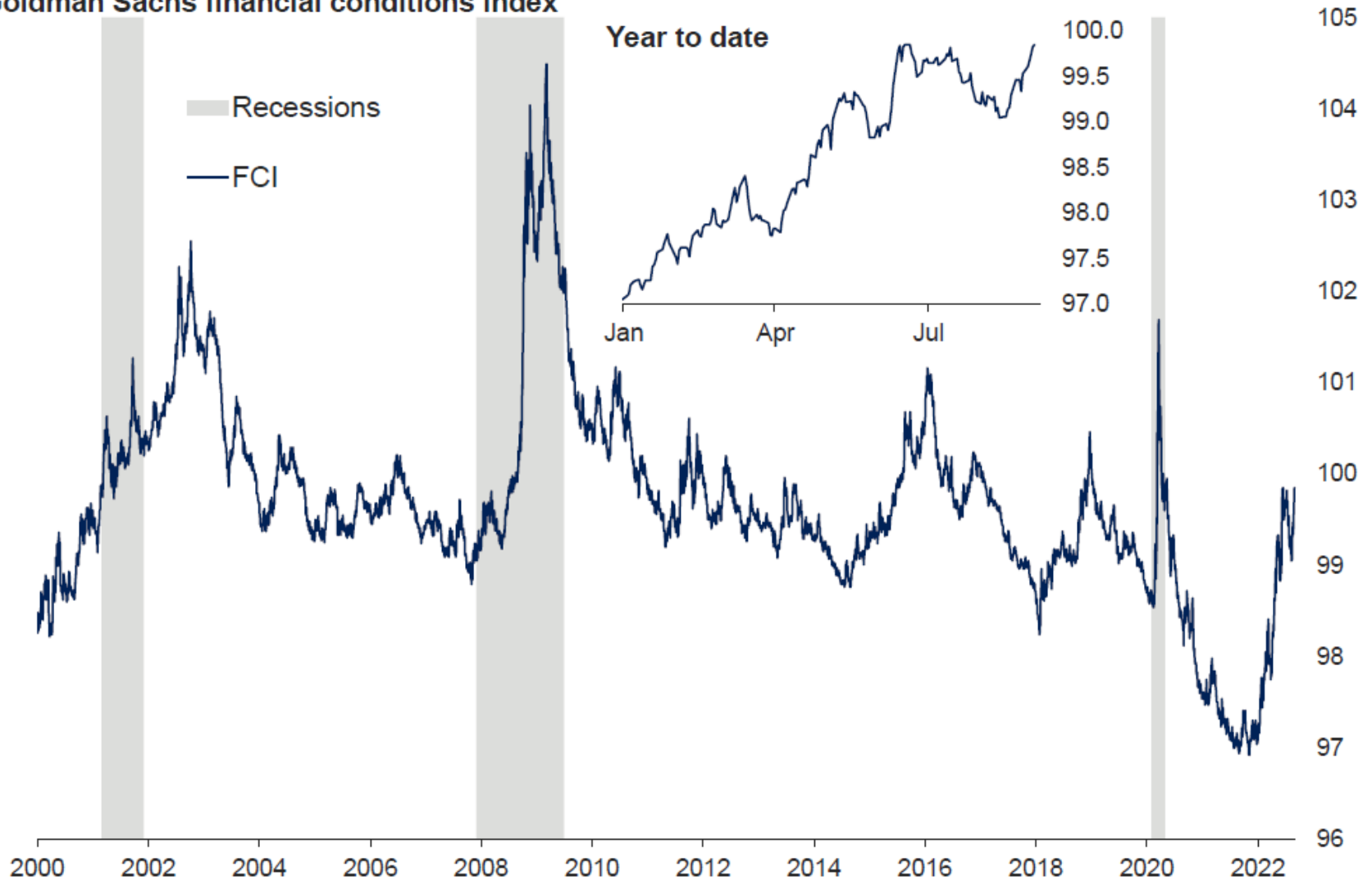
Higher and higher



Source: FRB of Cleveland, Haver Analytics, Deutsche Bank

Financial Conditions Eased in July

Goldman Sachs financial conditions index



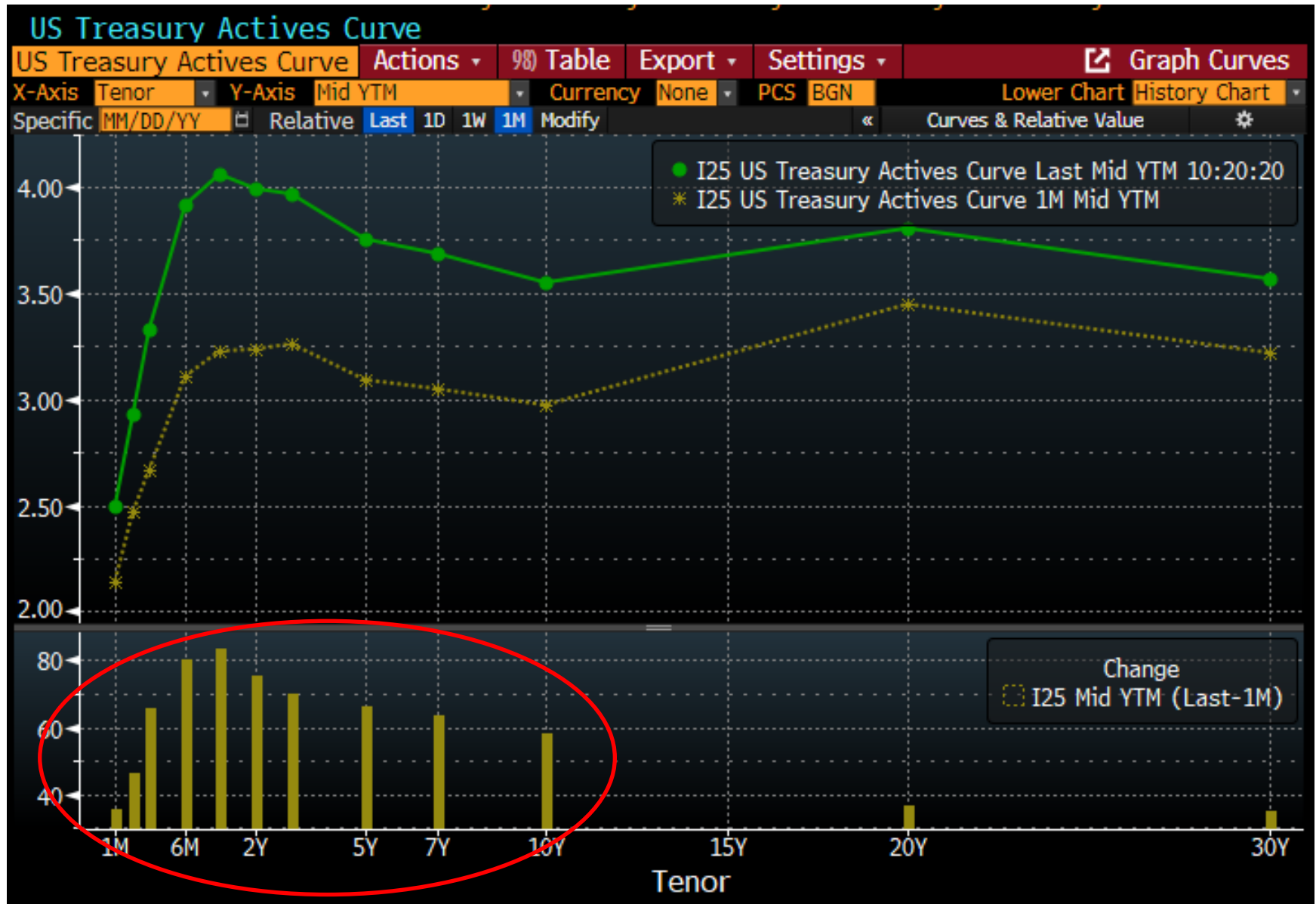
Dollar Strength vs Major currencies



Euro/\$ exchange rate



Monthly change in UST yields



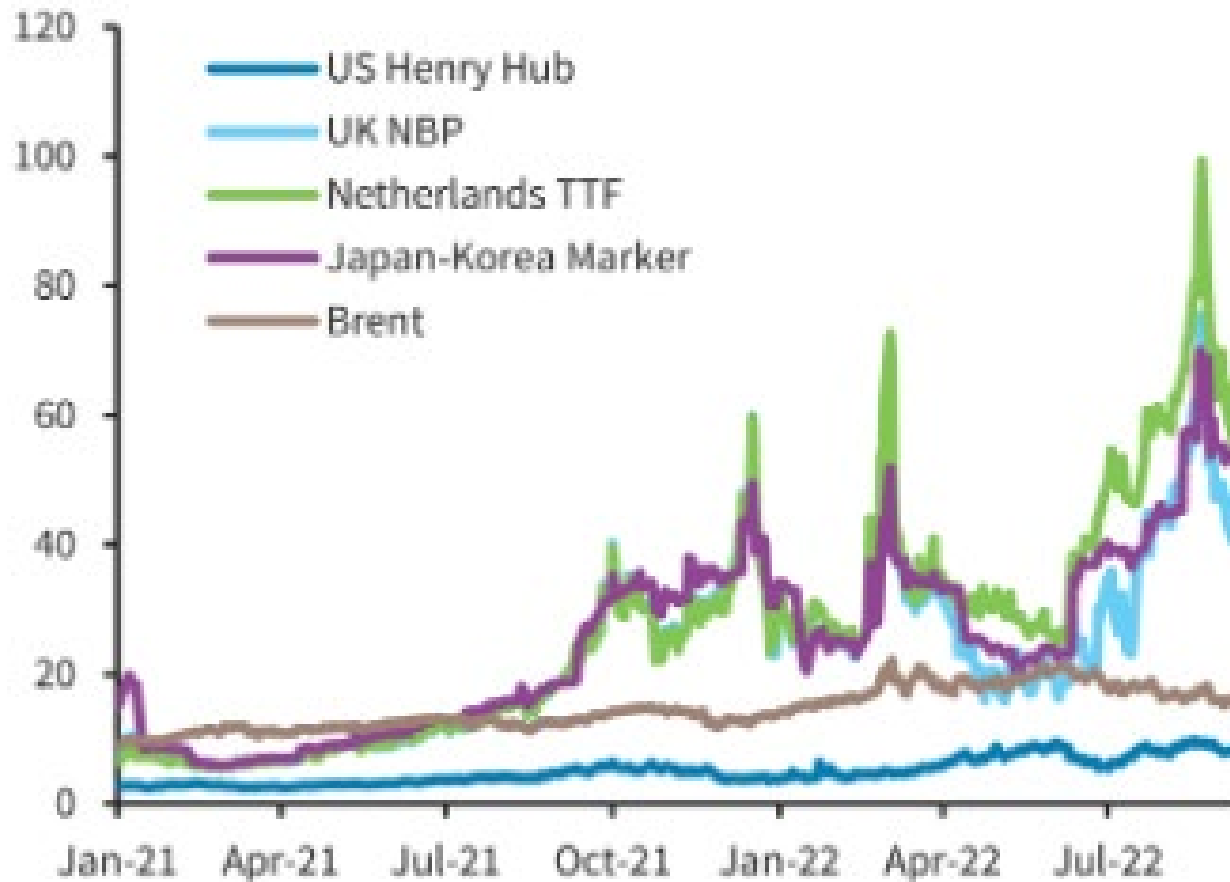
Copper to Gold Ratio



Biggest Current Financial Markets Macro Issues

- Russia – has all the swing energy and they are strangling Europe... contributing to higher inflation, weaker economy.
- China – has all the goods for supply chains and they are hurting the US... contributing to higher inflation.
 - Taiwanese tensions continue to grow
- U.S. – has the dollar, the strength of which is hurting all emerging economies... contributing to higher inflation.

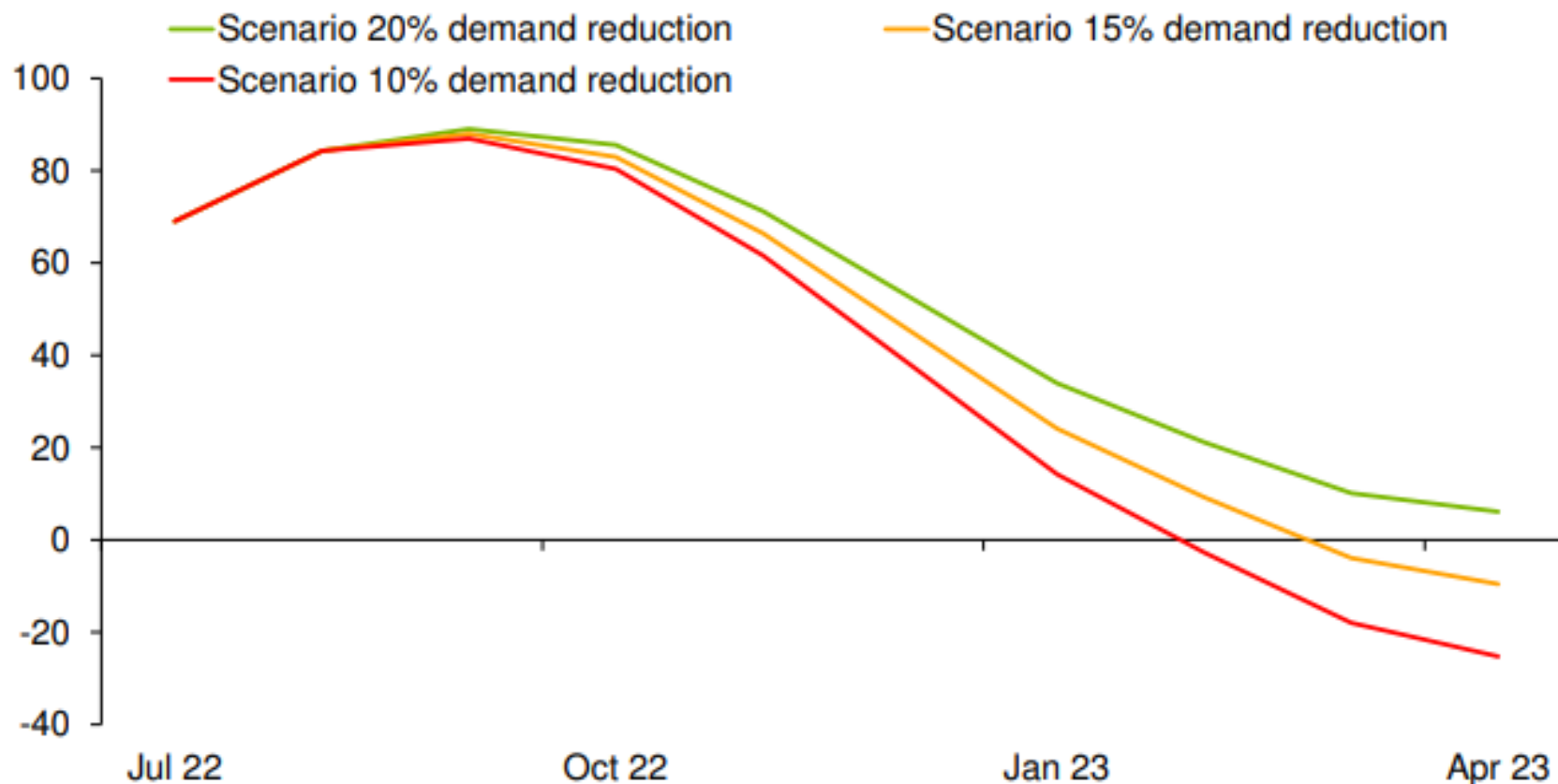
International gas trading at multiple times US



Note: All prices in USD/MMBtu.

Source: Bloomberg, Barclays Research

Figure 1: Depletion of gas storage scenario analysis (0% Russian Gas flows)



* Assumed share of re-exports in total gas imports: 40%.

Assumed gas supply from Russia: 0% of max. capacity

Source: Deutsche Bank Research