Economic Outlook:

The Fed's Ongoing Dilemma:
Taming Inflation vs. Ensuring Recession

March 2023

STIFEL

Lindsey M. Piegza, Ph.D.
Chief Economist

311k Payrolls Added in February

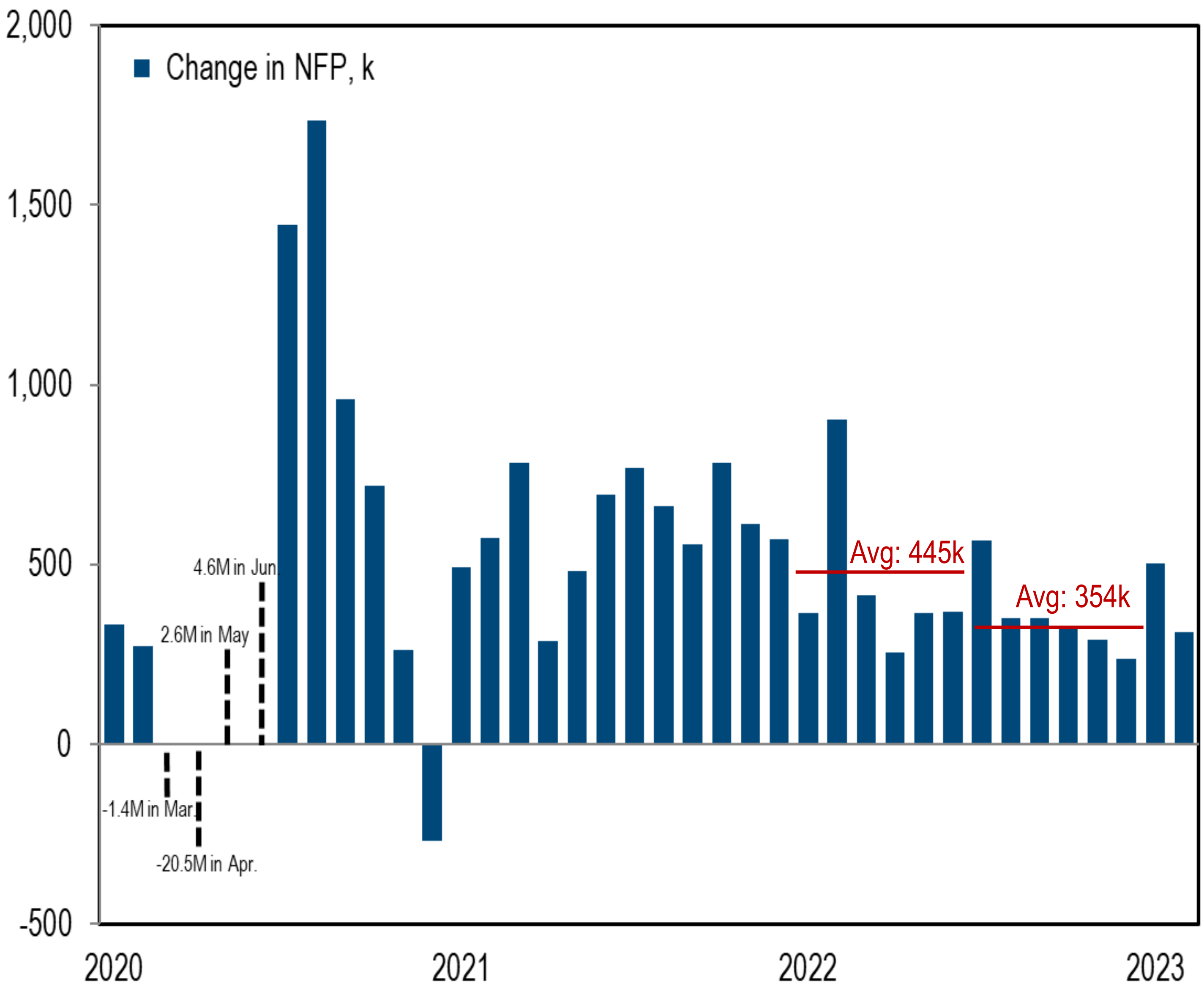
Other sectors of the economy are more clearly showing indications of waning momentum or slower growth, the labor market is not among them

Nonfarm payrolls rose by **311k** in February, the weakest pace of job creation since December

With earlier revisions to previous months, the overall change (February data + net revisions) was 277k

Nonfarm payrolls fell 1.5M in March and 20.5M in April of 2020, the largest monthly decline on record

For the full year of 2022, U.S. employers added 4.8m jobs, the second-best year for job creation on record after 2021's 7.3m gain. Payrolls dropped 9.3m in 2020, the largest decline on record, and more than the combined decline in 2008 and 2009



Source: Bureau of Labor Statistics/Haver Analytics

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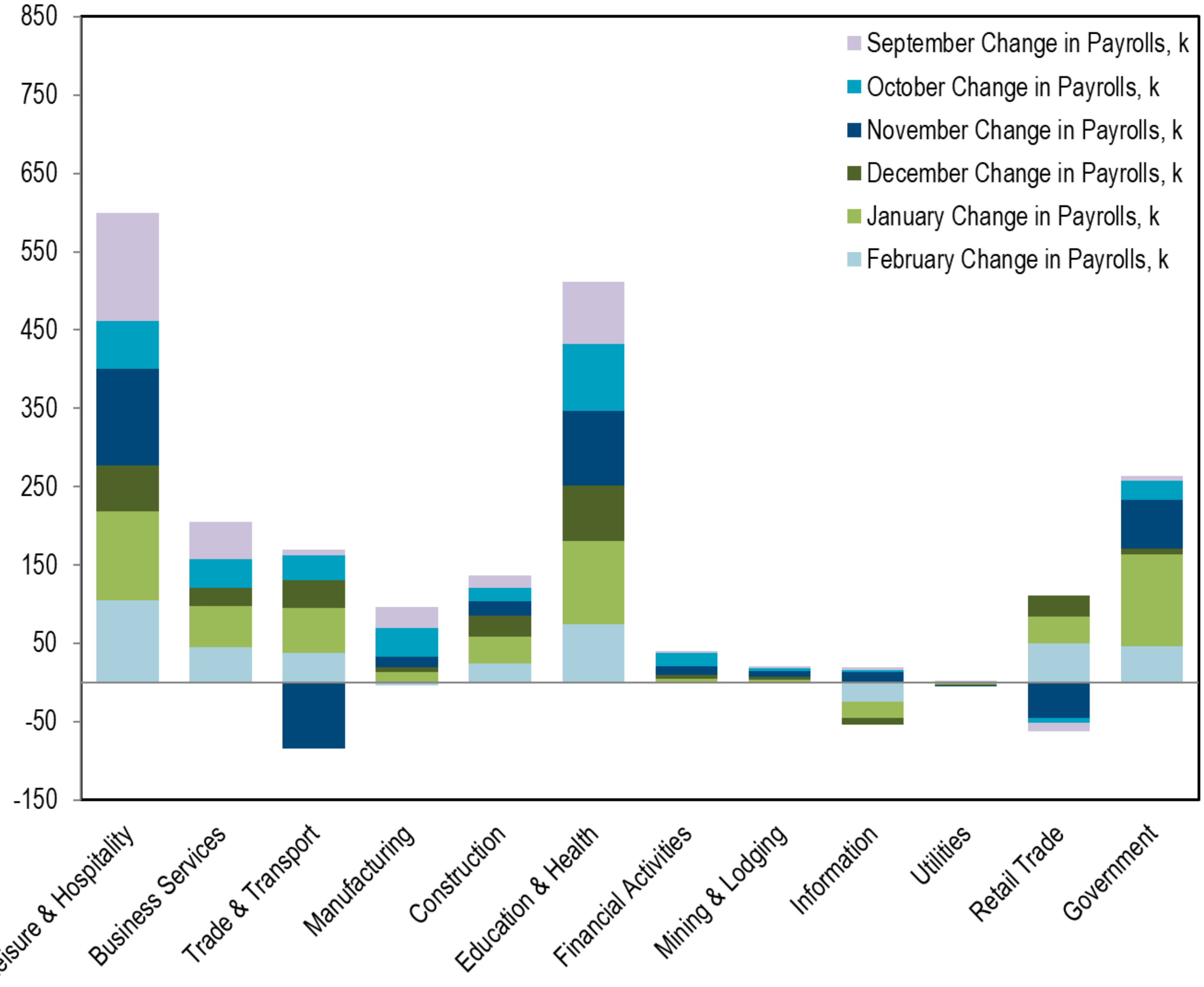
Payrolls by Category

Leisure and hospitality payrolls led the gain in job creation in February with payrolls rising **105k**

Education and health payrolls rose **74k**, business services payrolls gained **45k,**
trade and transport payrolls rose **38k**, due to a **50k** increase in retail trade payrolls, and government payrolls gained **46k**

On the other hand, information payrolls decreased **25k** and financial payrolls declined **1k**



Source: Haver Analytics/Bloomberg

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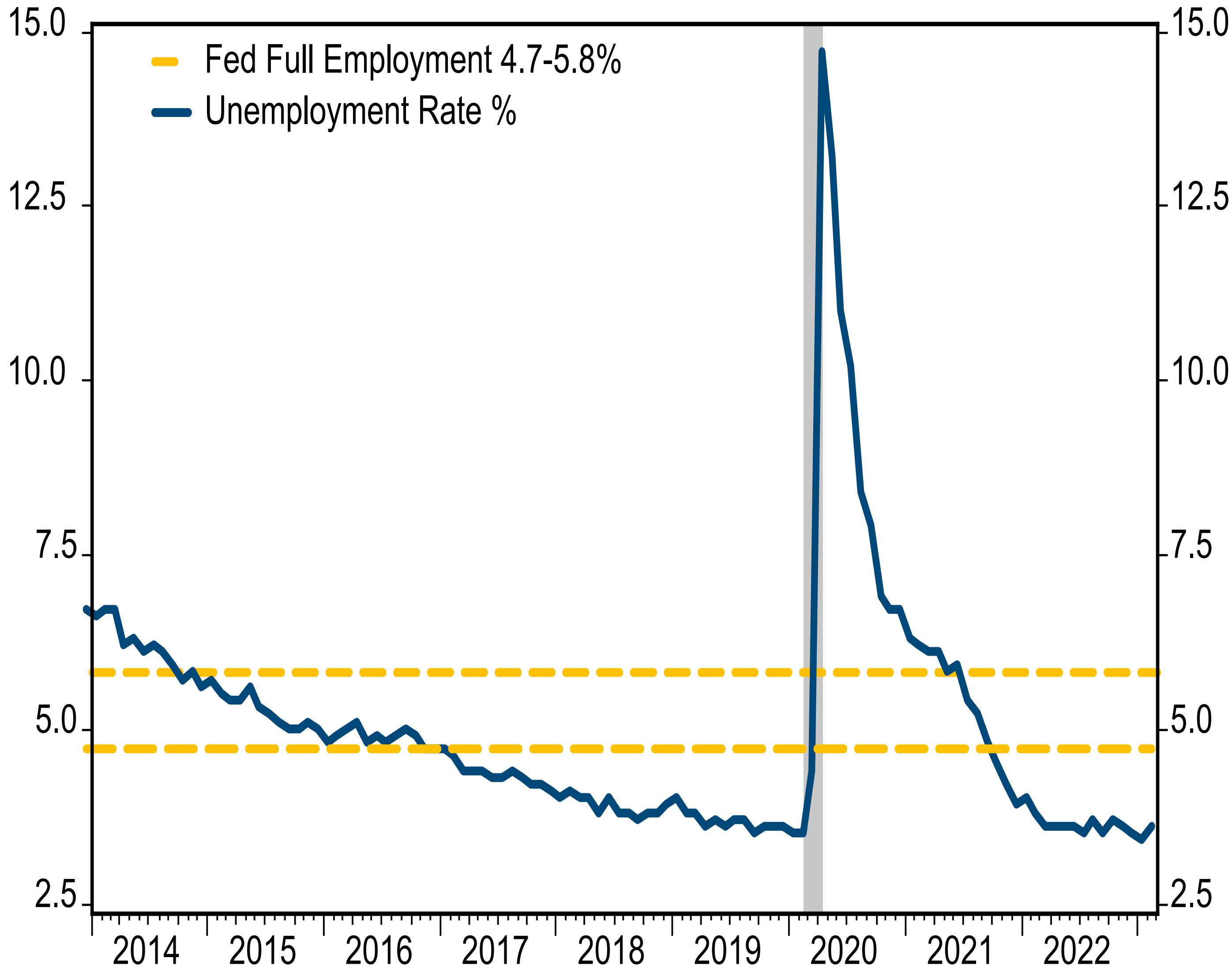
3.6% U.S. Unemployment Rate

The decline in the unemployment rate shows further improvement in labor market conditions

Household employment rose by **177k** in February, and the labor force rose by **419k**, resulting in an unemployment rate of **3.6%** in February, **near a five-decade low**

The decline in the unemployment rate reflects more employment *and* sidelined workers

Returning workers will push unemployment rate higher



Source: Bureau of Labor Statistics/Haver Analytics

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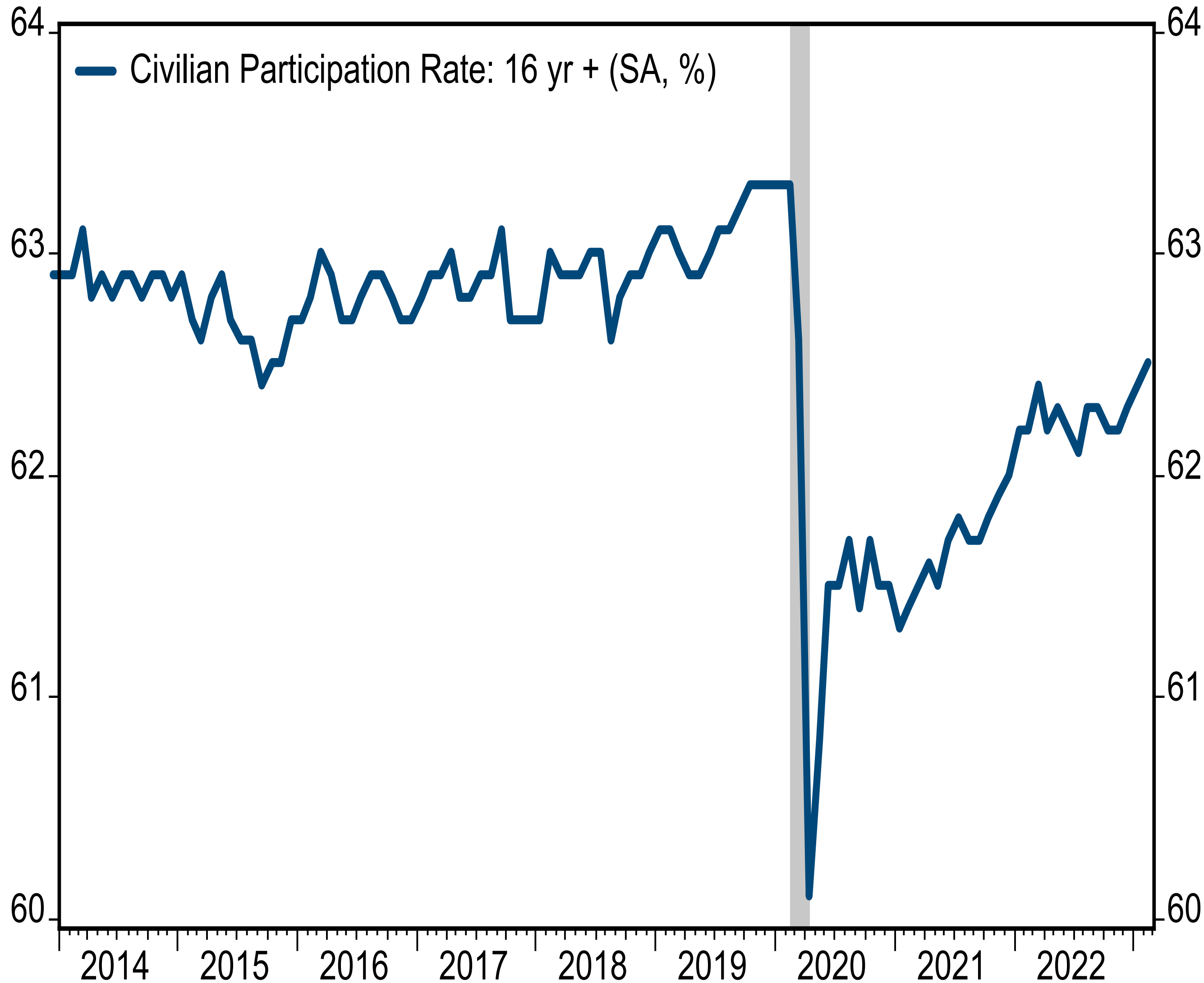
Participation Rate Stubbornly Low

The labor force rose by **177k** in February

The labor force participation rate gained from 62.4% to **62.5%** in February, the highest since March 2020, but still below the pre-crisis peak of 63.3%

The participation rate remains nearly 1.0% below the pre-Covid level, representing a potential gap of roughly 3M workers

Fewer workers is far from the ideal scenario particularly as businesses remain desperate for workers



Source: Bureau of Labor Statistics/Haver Analytics

Average Hourly Earnings Remain Solid

As businesses search for workers, compensation is elevated, although the trend appears to be moderating as businesses struggle to absorb costs

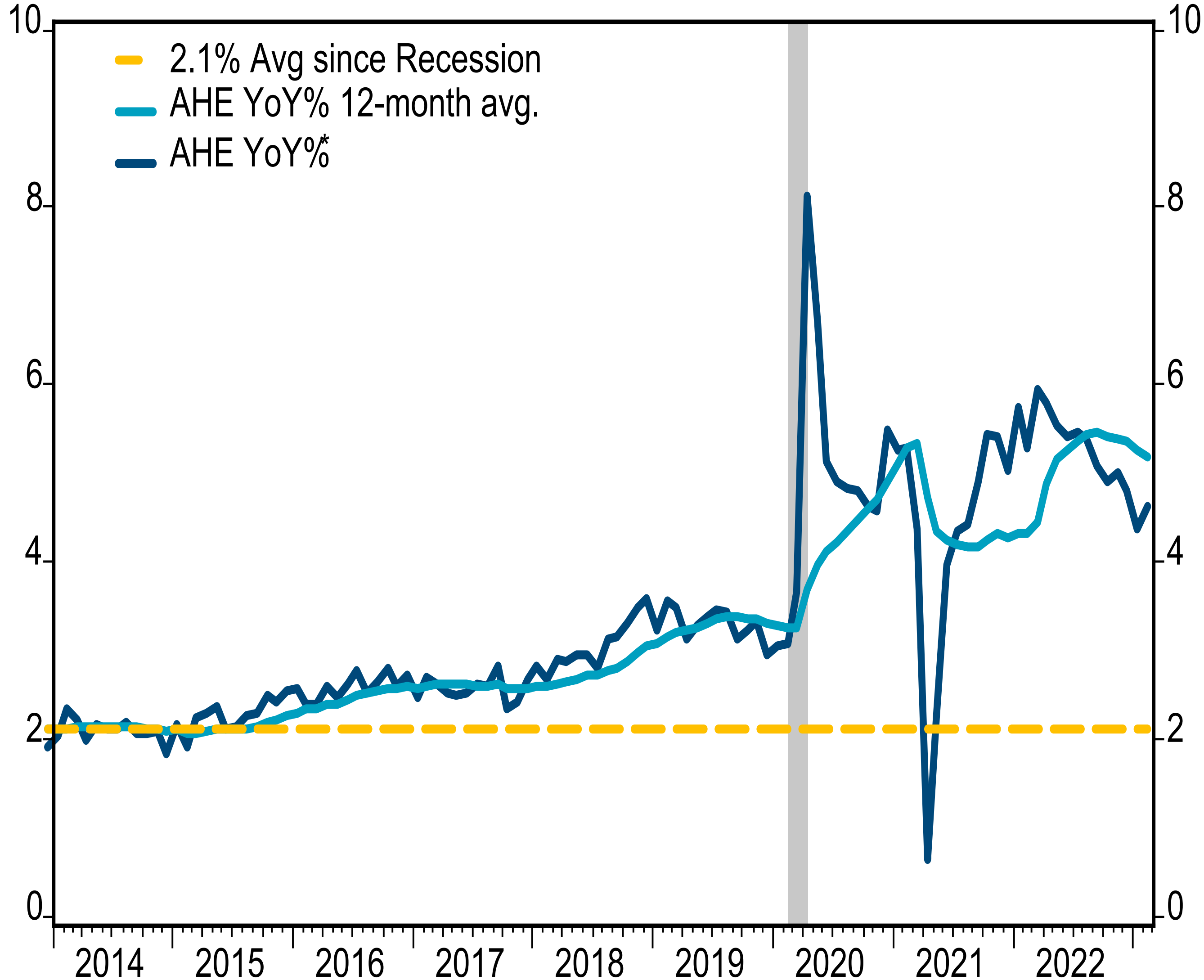
Average hourly earnings rose **0.2%** in February, following a 0.3% rise in January

Year-over-year, wages rose **4.6%** in February, up from the 4.4% increase in January, albeit below a recent peak of 8.2% in April 2020

Longer-term, businesses may turn to technology or close doors

For now, costs are likely to remain elevated as long as labor remains scarce

Average earnings increased early on during the pandemic as lower-wage workers dropped out of the workforce



Source: Bureau of Labor Statistics/Haver Analytics

*Does not include government assistance

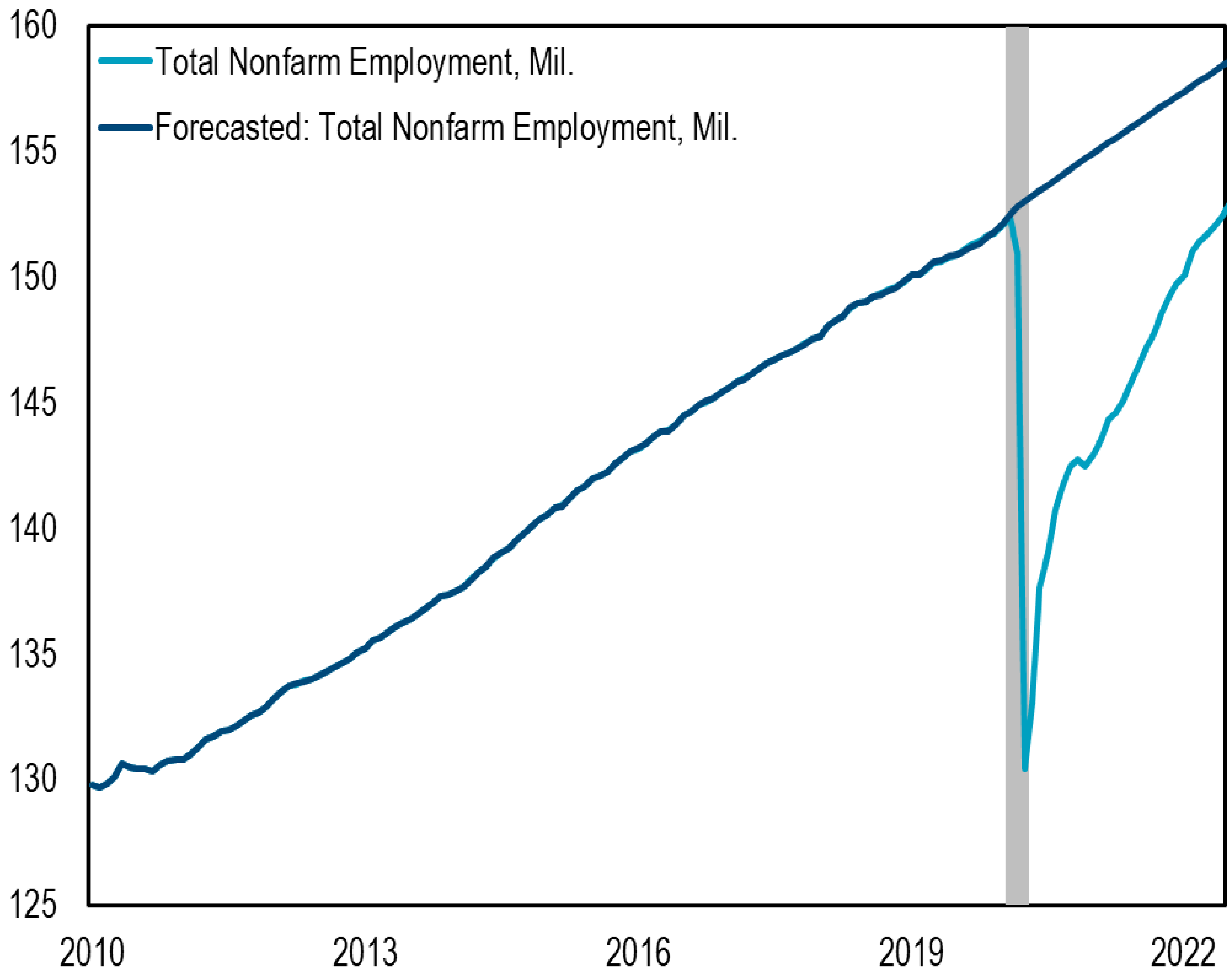
Total Employment Still Behind Pre-Covid Levels

While job creation remains solid, much of the improvement has been replacing jobs lost during the Covid-19 recession

Between March and April 2020, the U.S. lost 22M jobs

In July 2022, the labor market finally recaptured all of the 22M jobs lost at the onset of the Covid-19 pandemic

Total nonfarm employment remains around **5.0M** jobs short of potential job growth at 155M as of February



Source: Bureau of Labor Statistics/Haver Analytics

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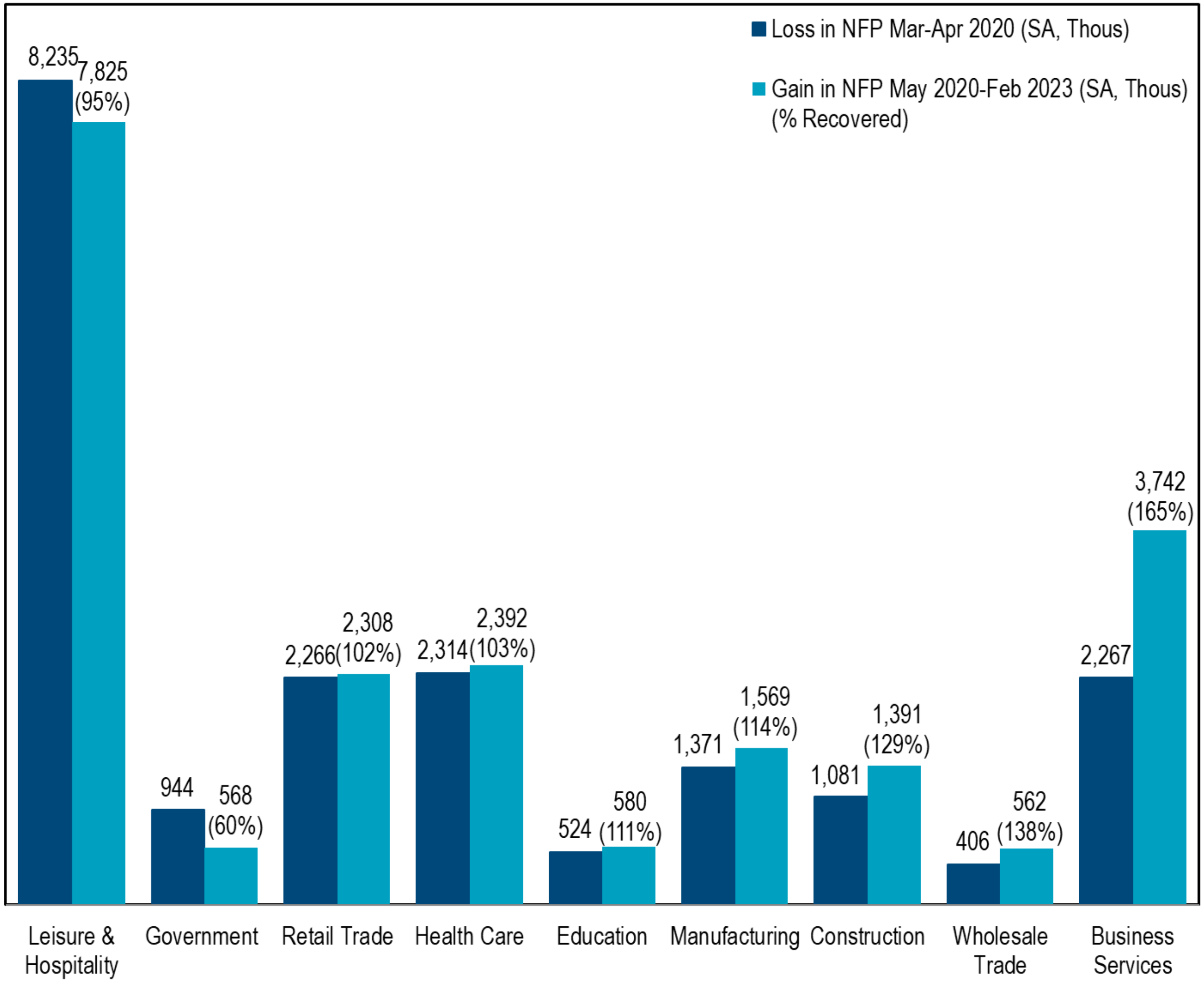
Hardest Hit Industries Still Struggle to Recapture Jobs

Labor market improvements have been uneven across sectors

Some of the hardest-hit sectors are still struggling to reconnect with customers, employees and supply chains, and thus, recapture lost jobs

The leisure and hospitality industry lost over **8M** jobs during the pandemic but has since recaptured over **7M** or **95%**

The hardest hit sectors have recaptured roughly 90% of lost jobs



Source: Bureau of Labor Statistics

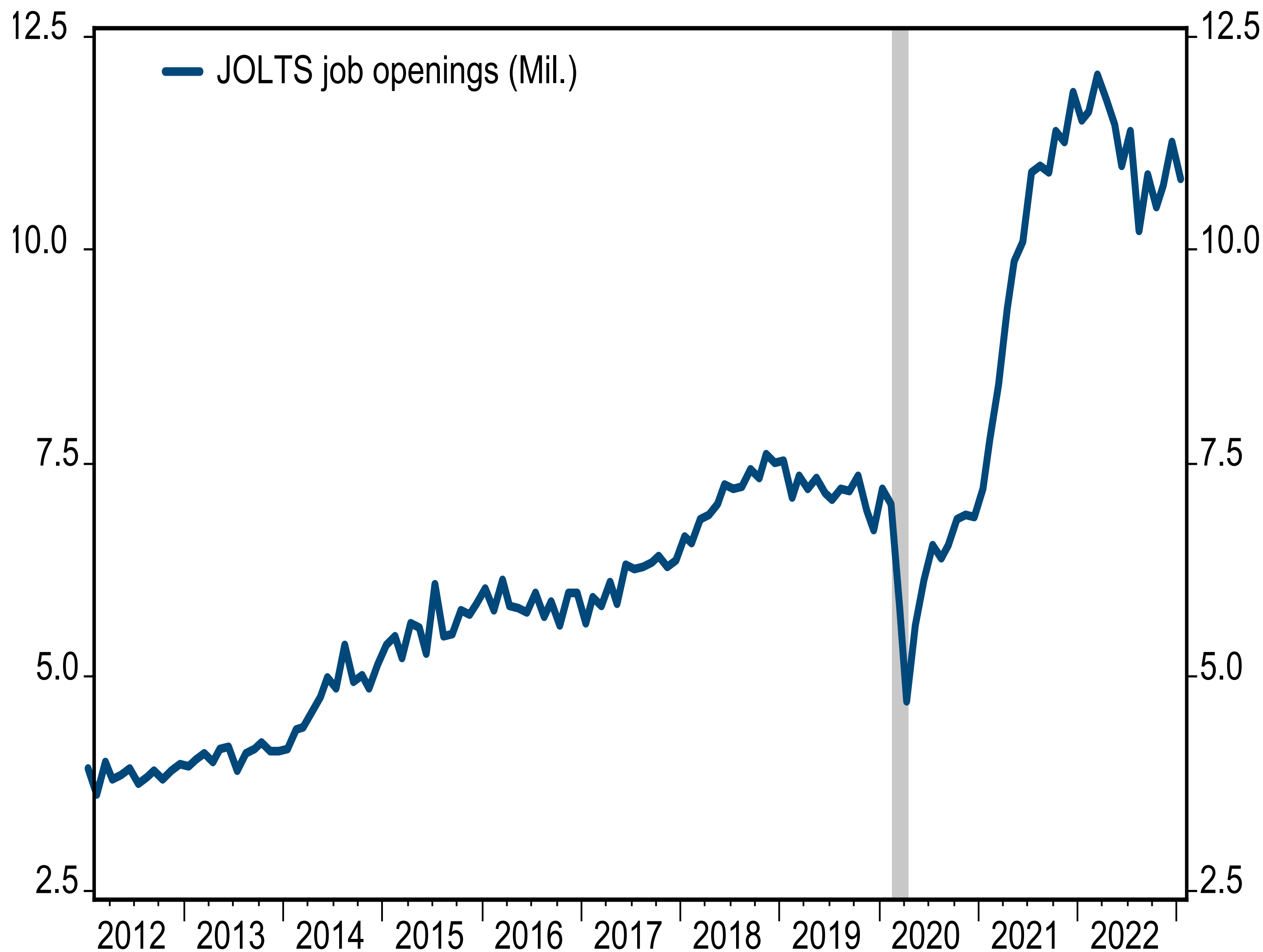
Labor Demand Outpaces Labor Supply

Hiring limited by supply, with demand far outpacing available workers

The number of job openings, according to JOLTS – the Job Openings and Labor Turnover Survey – unexpectedly jumped from 11.2M to **10.8M** in January

The nineteenth straight month above 10M, suggesting producers remain desperate for workers to increase output and meet a still-heightened level of demand for goods and services

There are roughly two vacant positions for every one person seeking a job



Source: Bureau of Labor Statistics/Haver Analytics

Where Have All the Workers Gone?

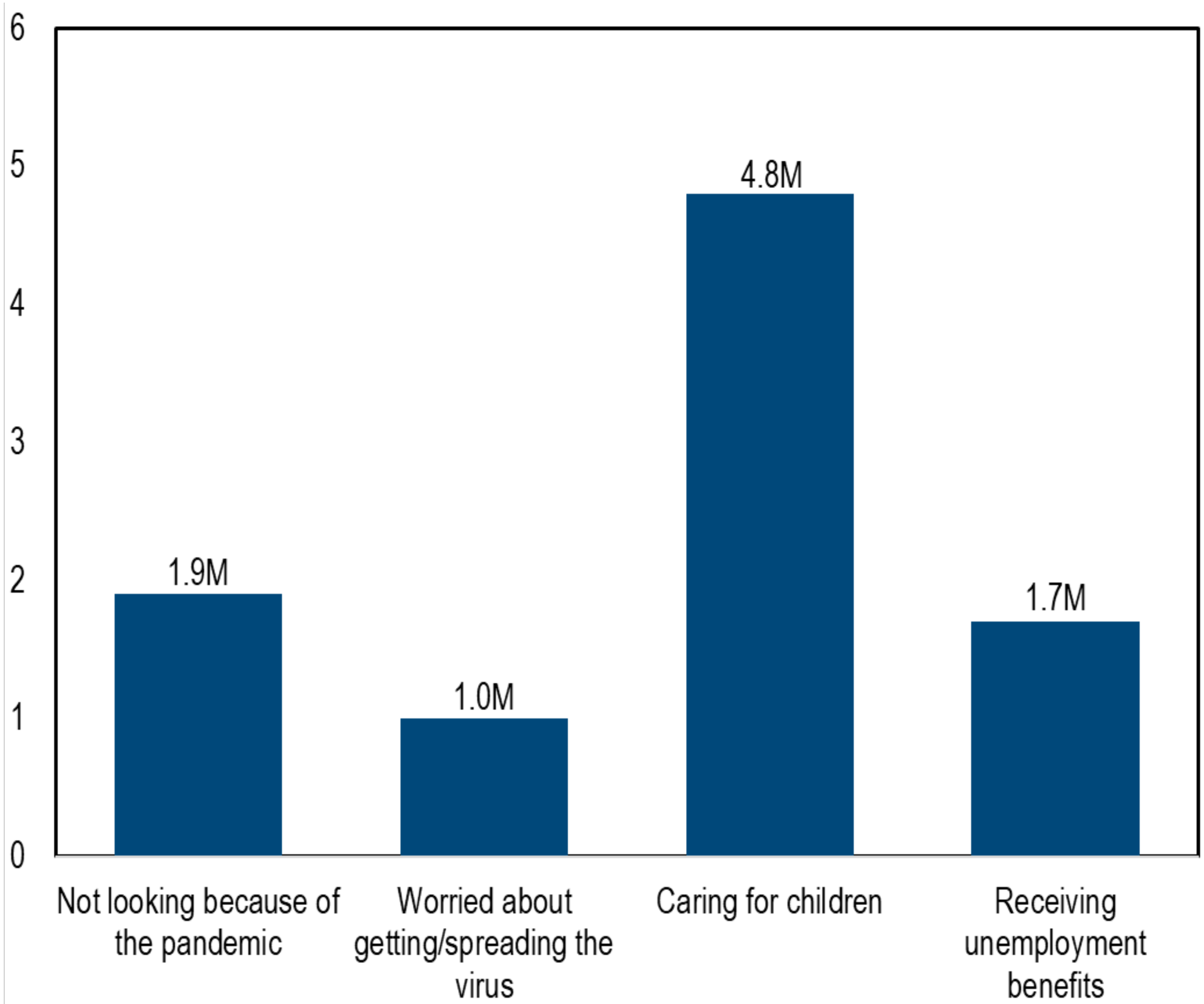
Some workers have lingering health concerns or ongoing health impacts resulting from the virus

Some face lingering childcare or elder care issues

Labor supply gap will be improved with schools reopen, higher vaccination rates and an end to federal benefits, but It will take time to entice workers back into the labor market

According to the Bureau of Labor Statistics, as of December, **1.0M** Americans report they remained sidelined due to *"worries about getting or spreading the virus"*

The Census Bureau reports that **4.8M** people are out of work because they were *"caring for children not in school or daycare"*



Source: Census Bureau/Bureau of Labor Statistics

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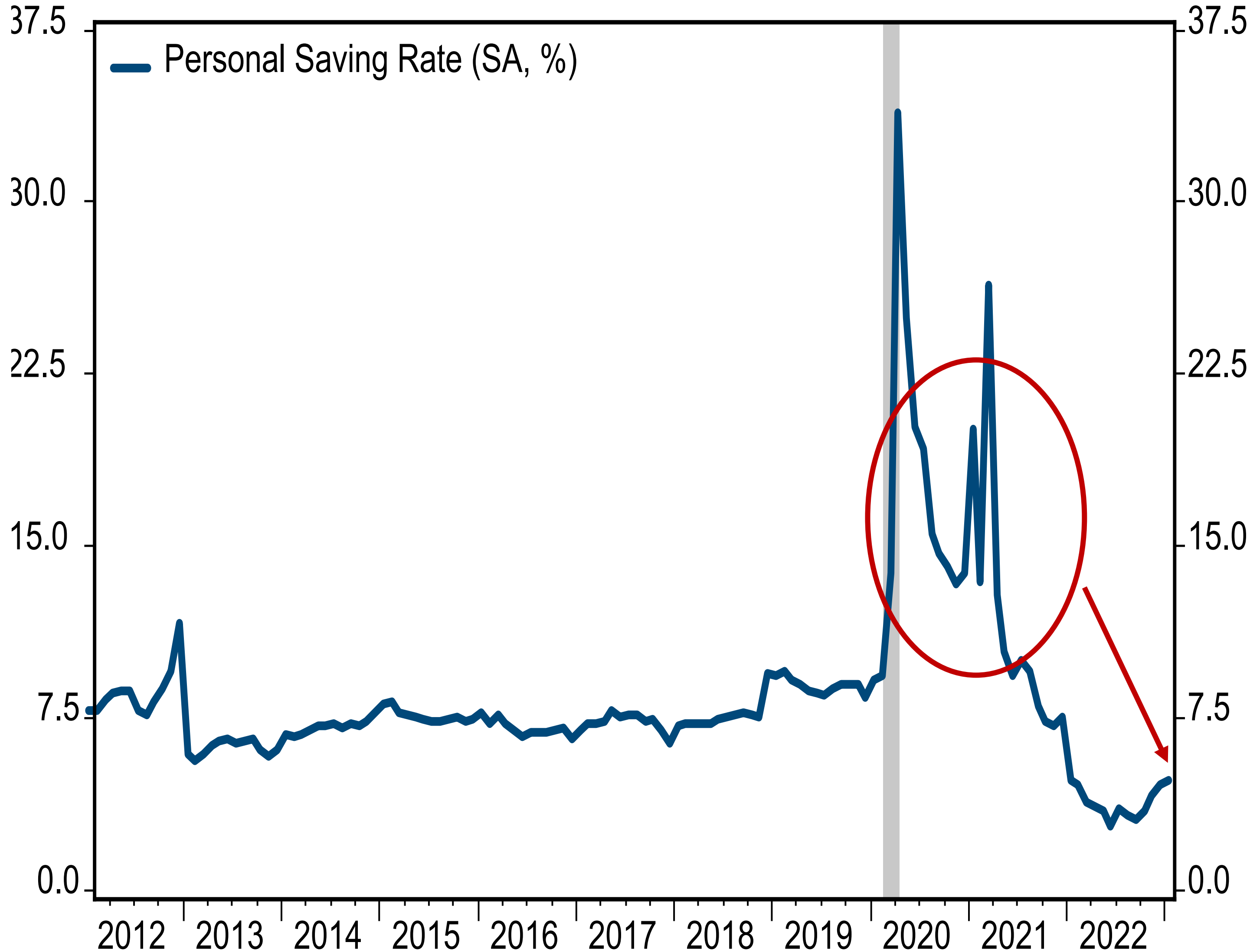
Trillions in Accumulated Savings Dwindle

The U.S. consumer remains solid with **$919B** in savings and a savings rate of **4.7%** as of January

Additional savings, higher wages and additional federal spending will help supplement the consumer and mitigate the fiscal cliff resulting from an end of pandemic stimulus

Savings won't support potential workers indefinitely – already the savings rate has slowed, and that stockpile of savings has dwindled markedly as spending adjusts back to pre-pandemic patterns, fiscal support wanes and prices rise



Source: Bureau of Economic Analysis/Haver Analytics

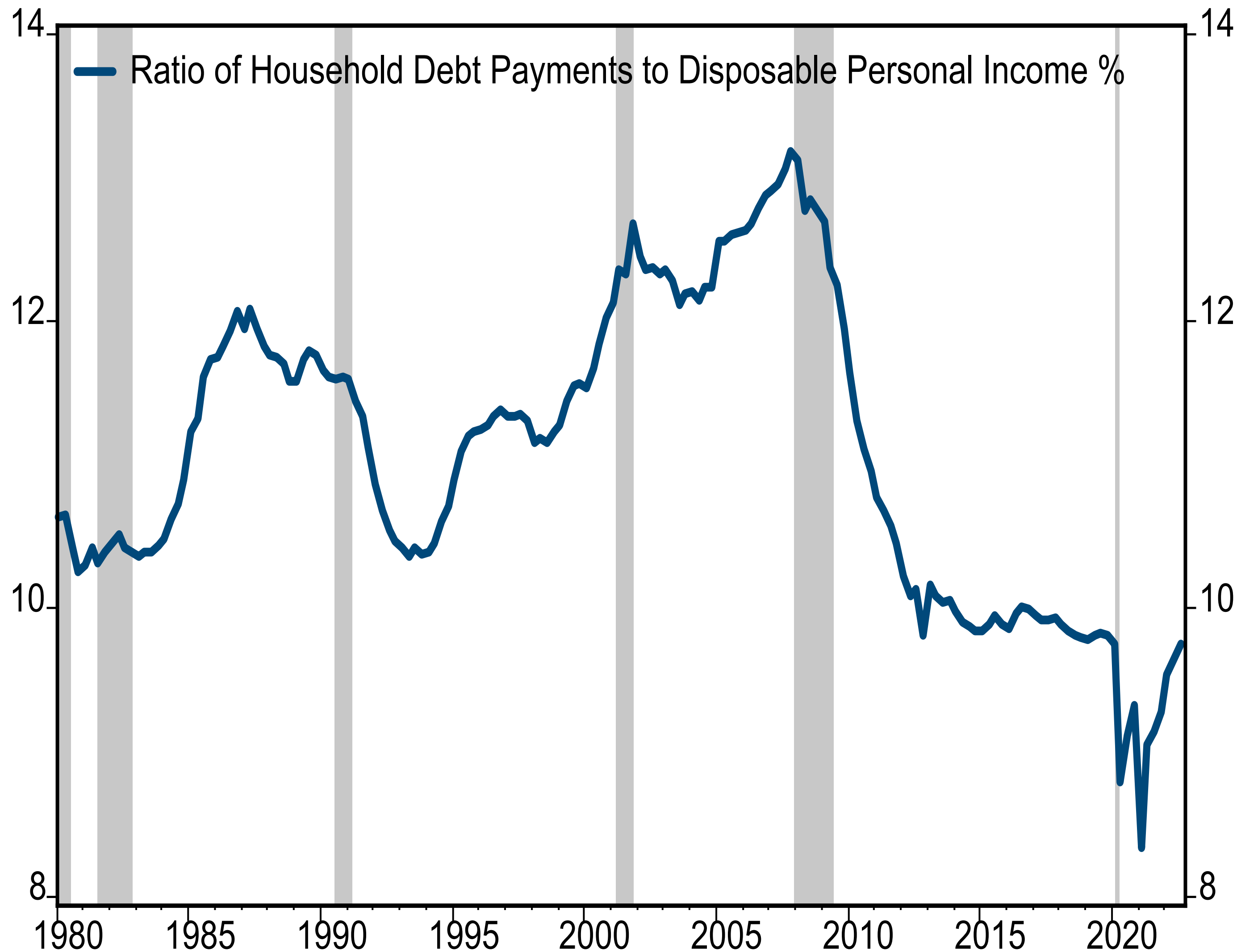
Debt as a Percent of Income Lowest Level on Record

At the same time, consumers are increasingly turning to credit cards and additional sources of debt to perpetuate their spending habits as fiscal support fades and savings dwindle

Credit card debt rose **15.2%** in Q4 from the year prior, the largest increase since Q3 2001

Most households are better positioned to take on at least some additional debt burden

Debt as a percent of disposable income rose from 9.6% to **9.7%** in Q3, still near the lowest on record



Source: Federal Reserve Board/Haver Analytics

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Retail Sales Trending Lower

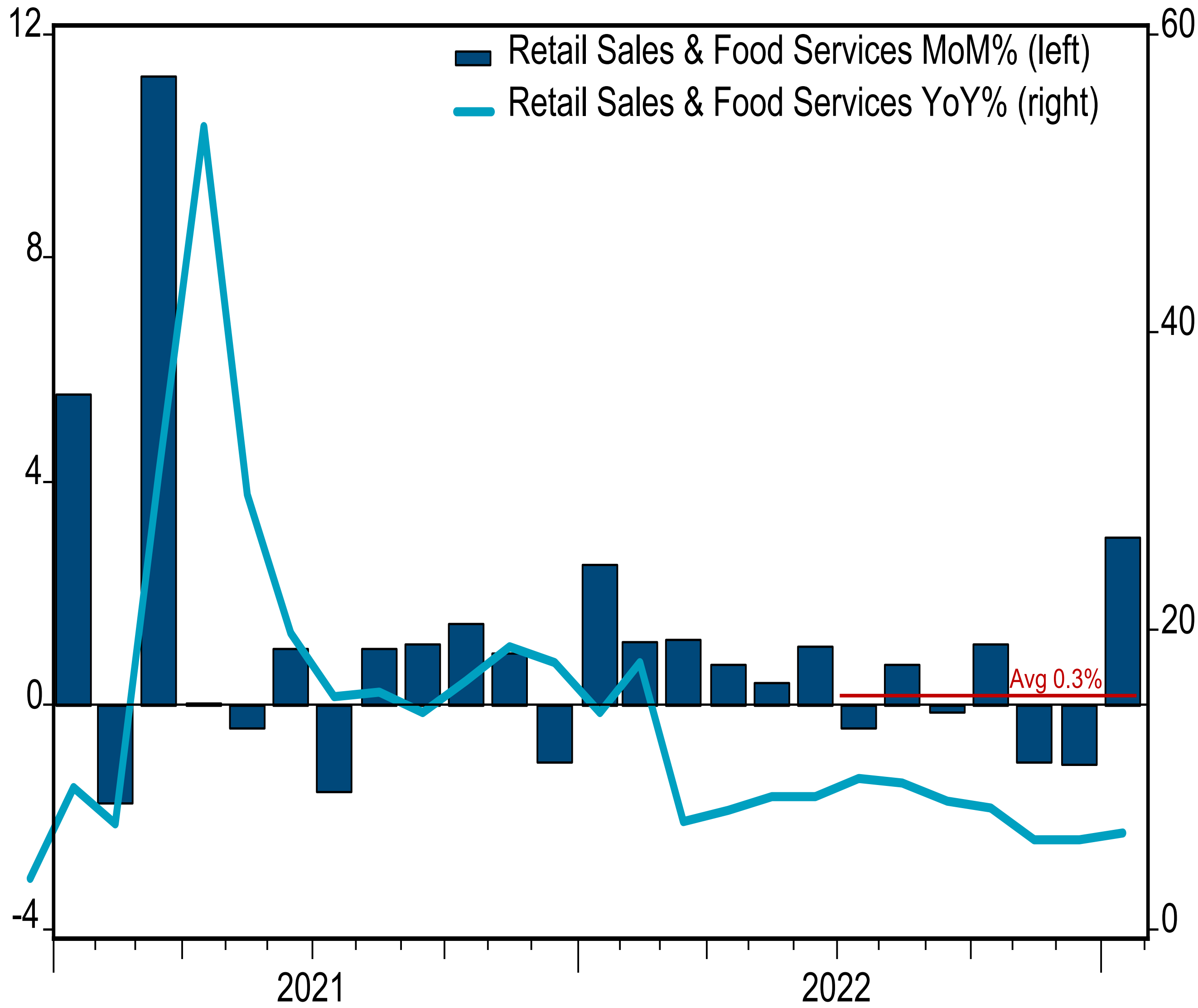
For some, the notion of a reduced or evaporated wealth cushion is causing an outright shift or reduction in spending habits

Trillions in savings and upward momentum in wages has helped consumers to weather different variants and to offset a loss of fiscal support, but inflation is complicating the picture

Large retailers report customers are cutting back as the balance sheet is becoming increasingly fragile amid rising costs and rates

Sales rose **3.0%** in January, following declines in November and December

Year-over-year, retail sales rose **6.4%** in January following a 5.9% gain in December



Source: Census Bureau/Haver Analytics

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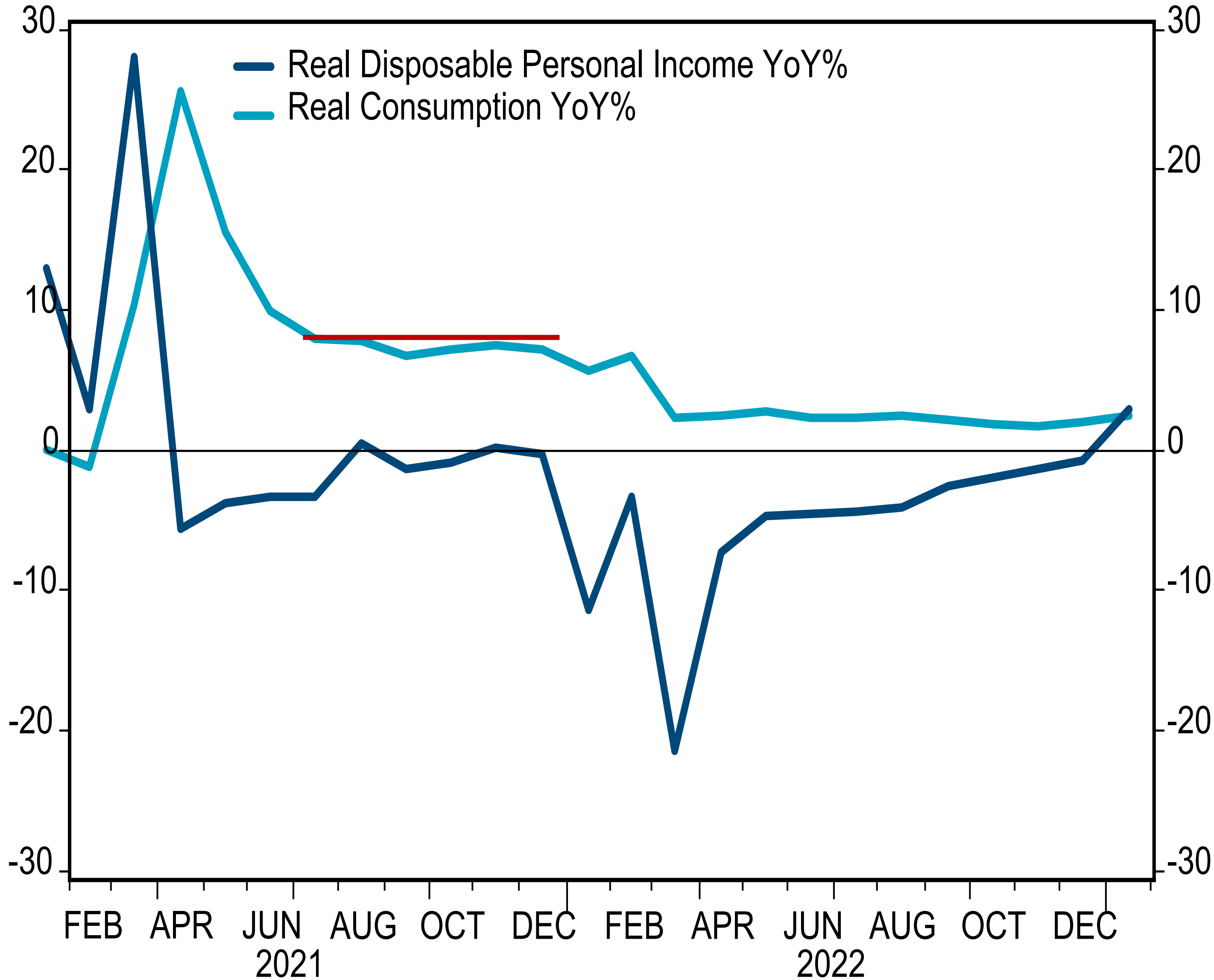
Real Consumption and Income Weak

Despite *nominal* wage growth, taking inflation into account, real income was in the red for 12 consecutive months, however in the latest January report, real income rose **2.8%**

Consumption remains positive – for now – but real spending is already trending lower

December real consumption rose **2.4%** over the past 12 months, down from a trend pace of **7.3%** in 2021



Source: Bureau of Economic Analysis/Haver Analytics

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Manufacturing Activity Slowing

Even with a *relative* decline in spending, positive nominal spending is keeping pressure on producers

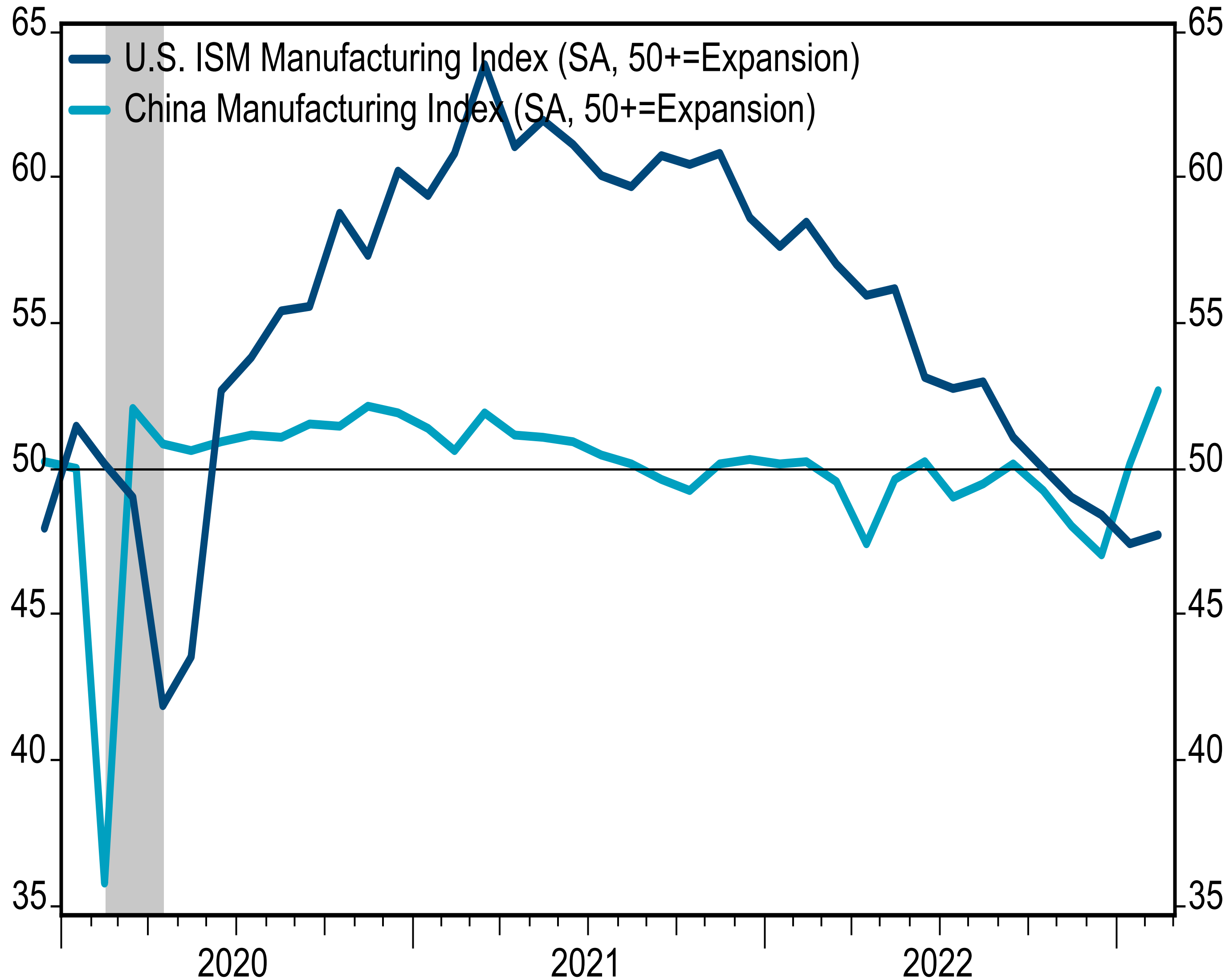
Producers face labor shortages and lingering supply chain disruptions which have improved but remain historically high

Shortages reported for lumber, tires, wire, etc. leading to extended wait times, higher prices and inventory complications

The ISM declined from a near-term peak of 60.8 in October 2021 to **47.7** as of February, **falling below 50 as of November 2022**

The China Manufacturing PMI rose to **52.6** in February, bouncing along breakeven since June 2021

Solution to supply chain disruptions will depend on global policy, trade relations and geo-response to the virus – even domestic producers are impacted resulting in price pressures



Sources: ISM, CFLP/NBS/Haver

Waning Demand for Housing

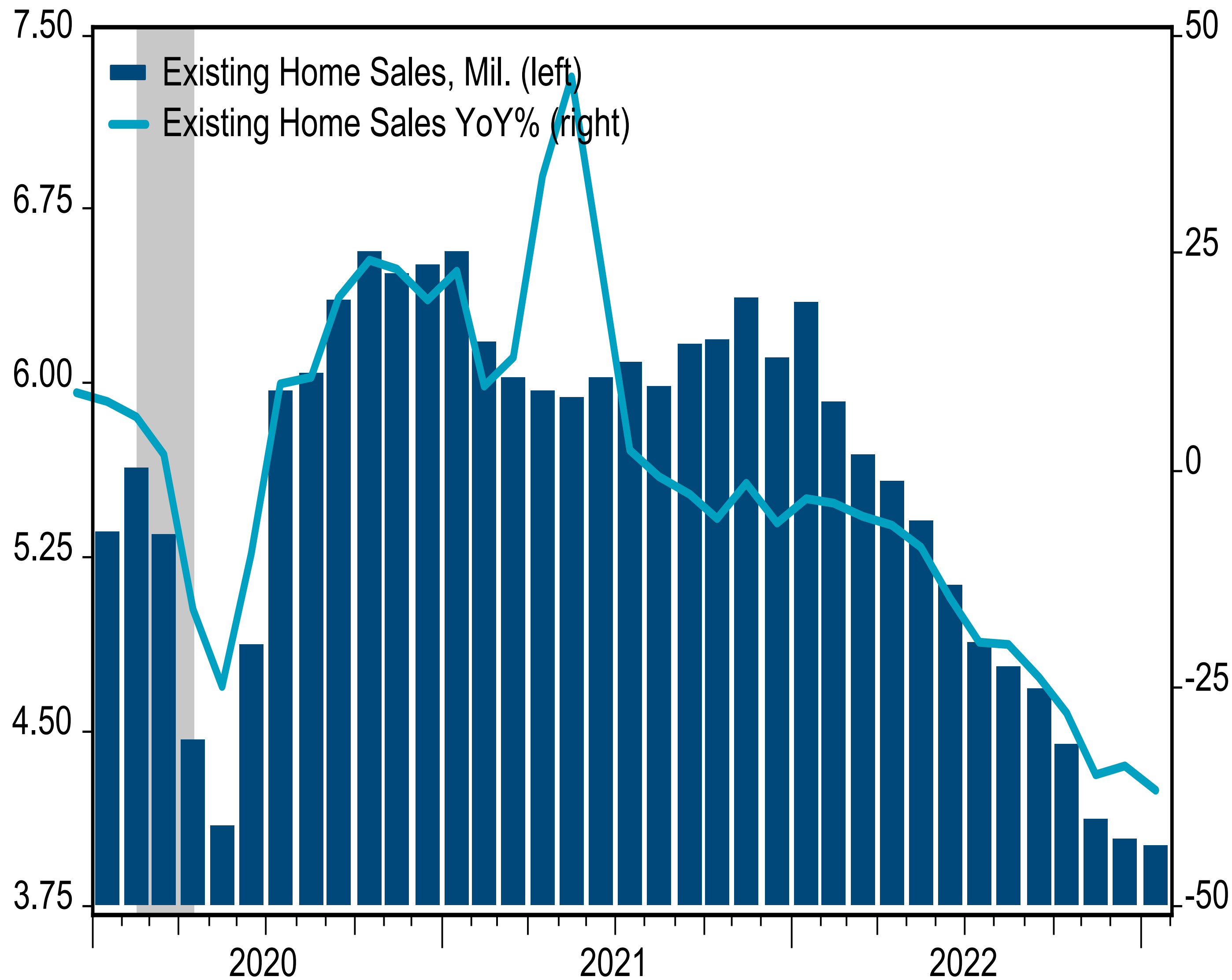
Americans view their home as a workplace, school and refuge

Home sales surged during the pandemic and immediate aftermath

Sales rose 6.6% at the start of 2022, reaching a peak pace of 6.49M units

Rising interest rates, rising costs of materials and declining real income is already taking a toll on some would-be buyers and prompting many more potential sellers anxious to offload in a still-hot market

Existing home sales dropped 0.7% in January to a **4.00M** unit pace, down 37% from a recent January 2022 peak



Source: National Association of Realtors/Haver Analytics

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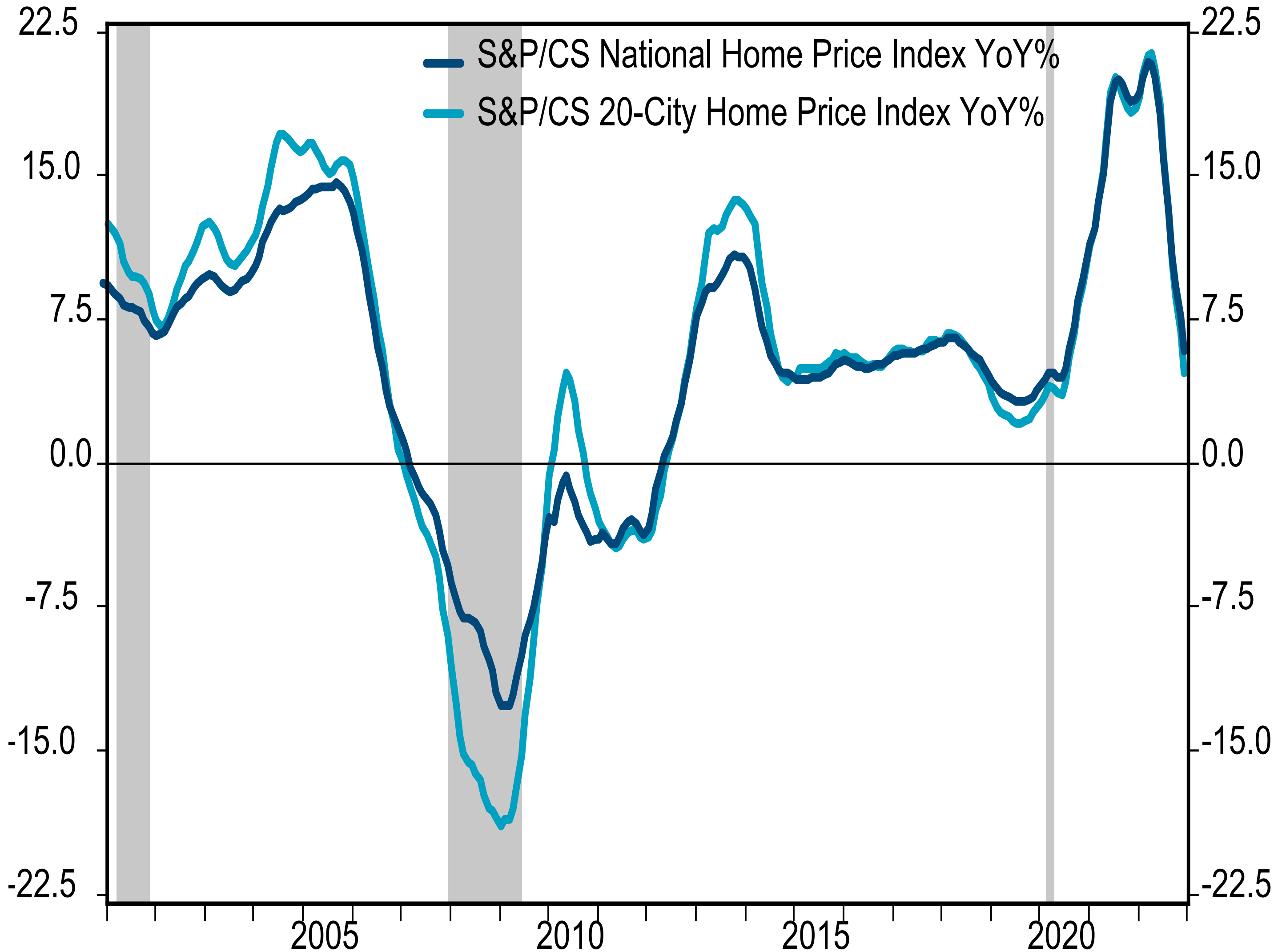
Home Prices Still Elevated

Demand is still *relatively* solid, supply is still *relatively* limited, keeping pressure on prices

Year-over-year, the 20-city home price index rose **4.7%** in December, following a 6.7% gain in November and down from the 21.3% peak in April, the largest gain on record

Nationally, home prices rose **5.8%**, following a 7.6% rise the month prior, and down from the 20.6% peak reached in April, the largest gain in the history of the index dating back to 1987

Price growth is not limited to downtown, urban markets



Source: Standard & Poor's/Haver Analytics

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Home Prices Still Elevated… But Slowing

House prices in the 20 major cities are up **4.7%** in Q4 2022, down from 6.8% in Q3

In Virginia, house prices are up **11.7%** as of Q4 2022, down from the 14.4% gain in Q3, while prices in the Richmond area are **13.1%** more expensive from the year prior with prices in the Virginia Beach area up **11.2%** in Q4

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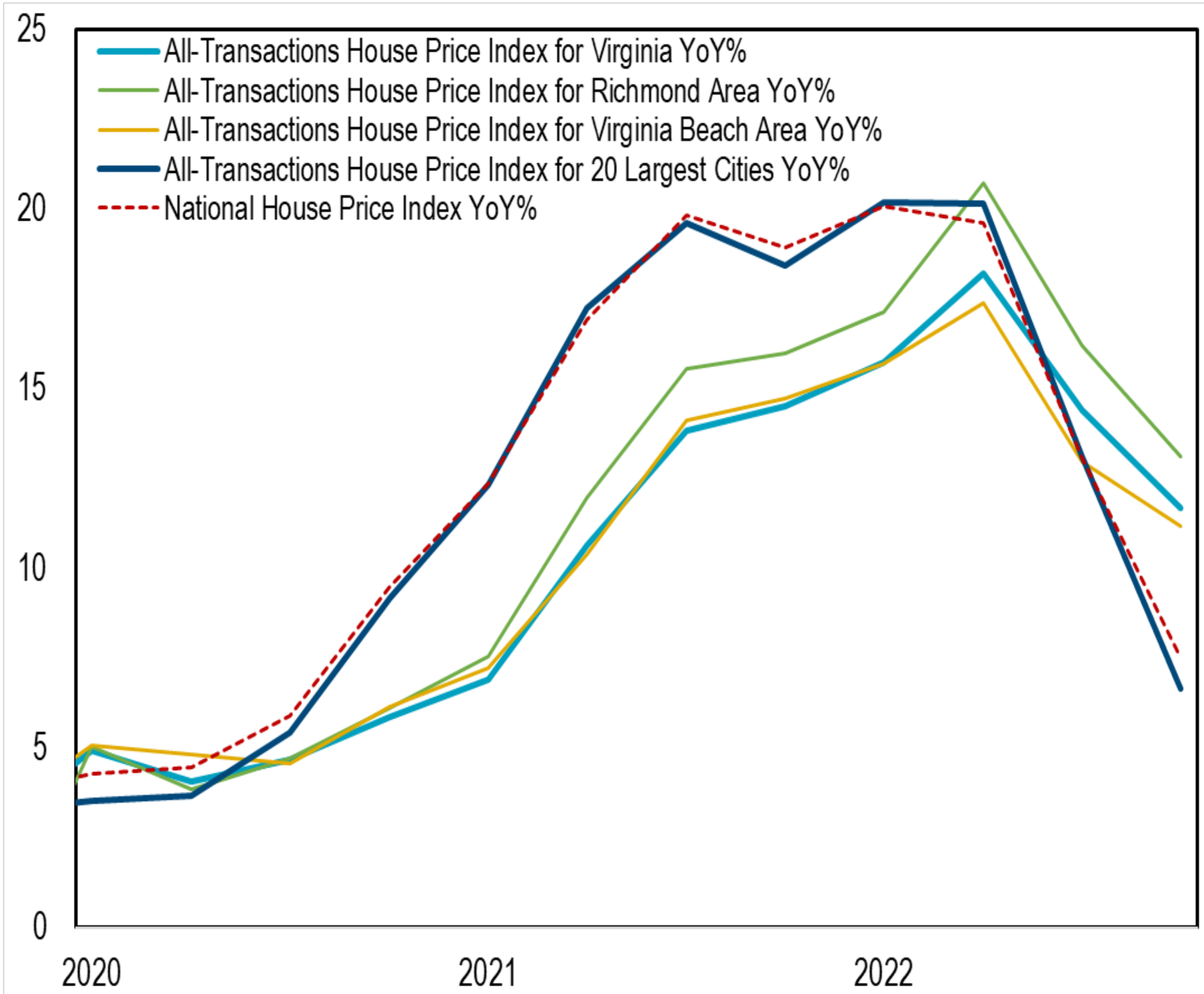

Source: FRED

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$1.2T Infrastructure Plan

Continued uncertainty creates an opportunity for officials in Washington to ramp up spending in the name of economic growth, job creation and taming inflation – despite further inflationary implications

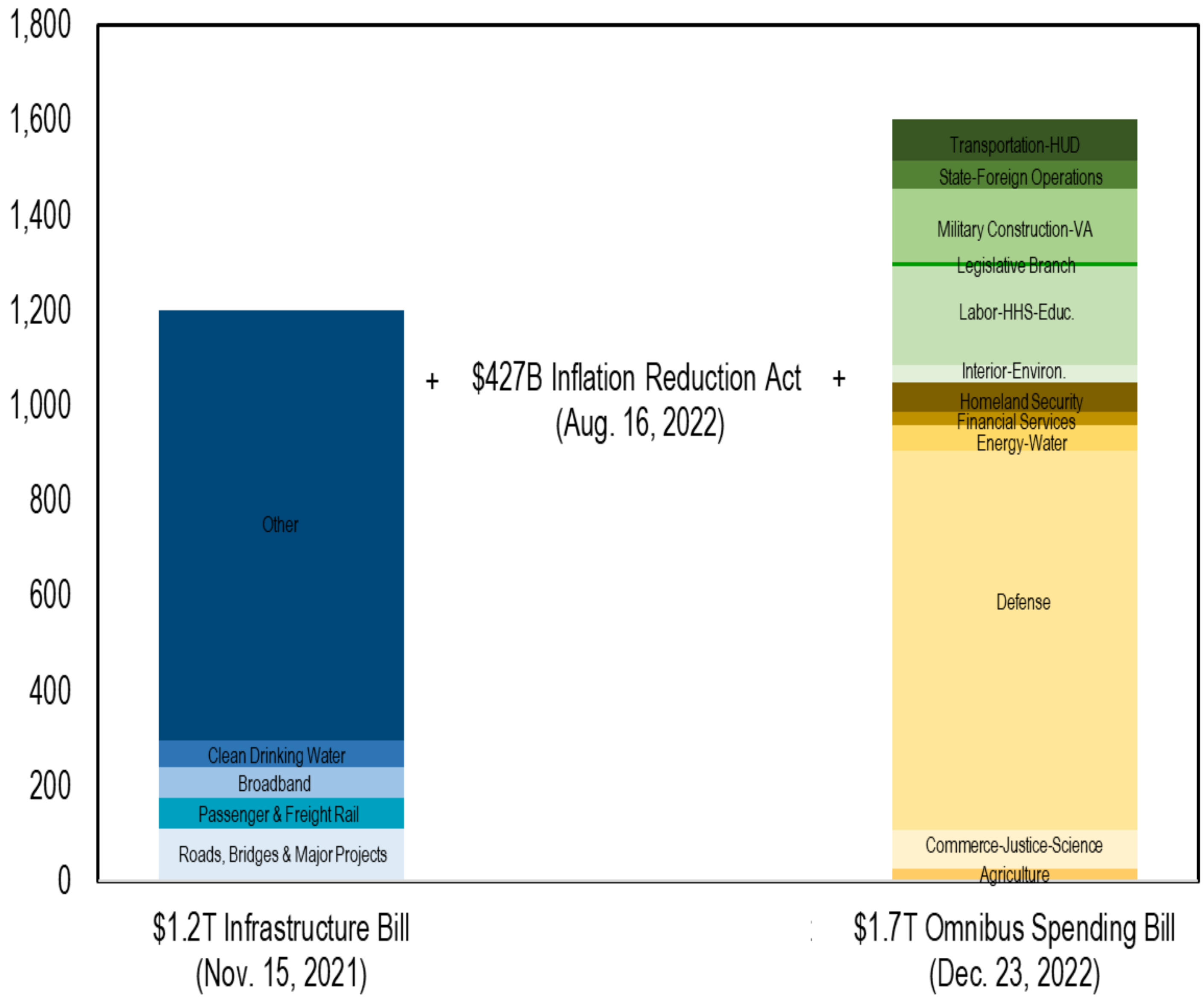
After months of negotiations and a standoff between progressive and moderate Democrats, the **$1.2T** package of road, broadband, and other *"hard"* infrastructure improvements passed in November

Key items include:
$110B for roads & bridges
$66B for passenger & freight rail
$55B for clean drinking water

The five-year spending initiative will have a limited impact on growth in near-term

In the SOTU, President Biden continued to push for BBB at $1.75T

The latest omnibus passed in December was a part of the FY 2023 budget which totaled **$1.7T,** a 9% increase over FY 2022



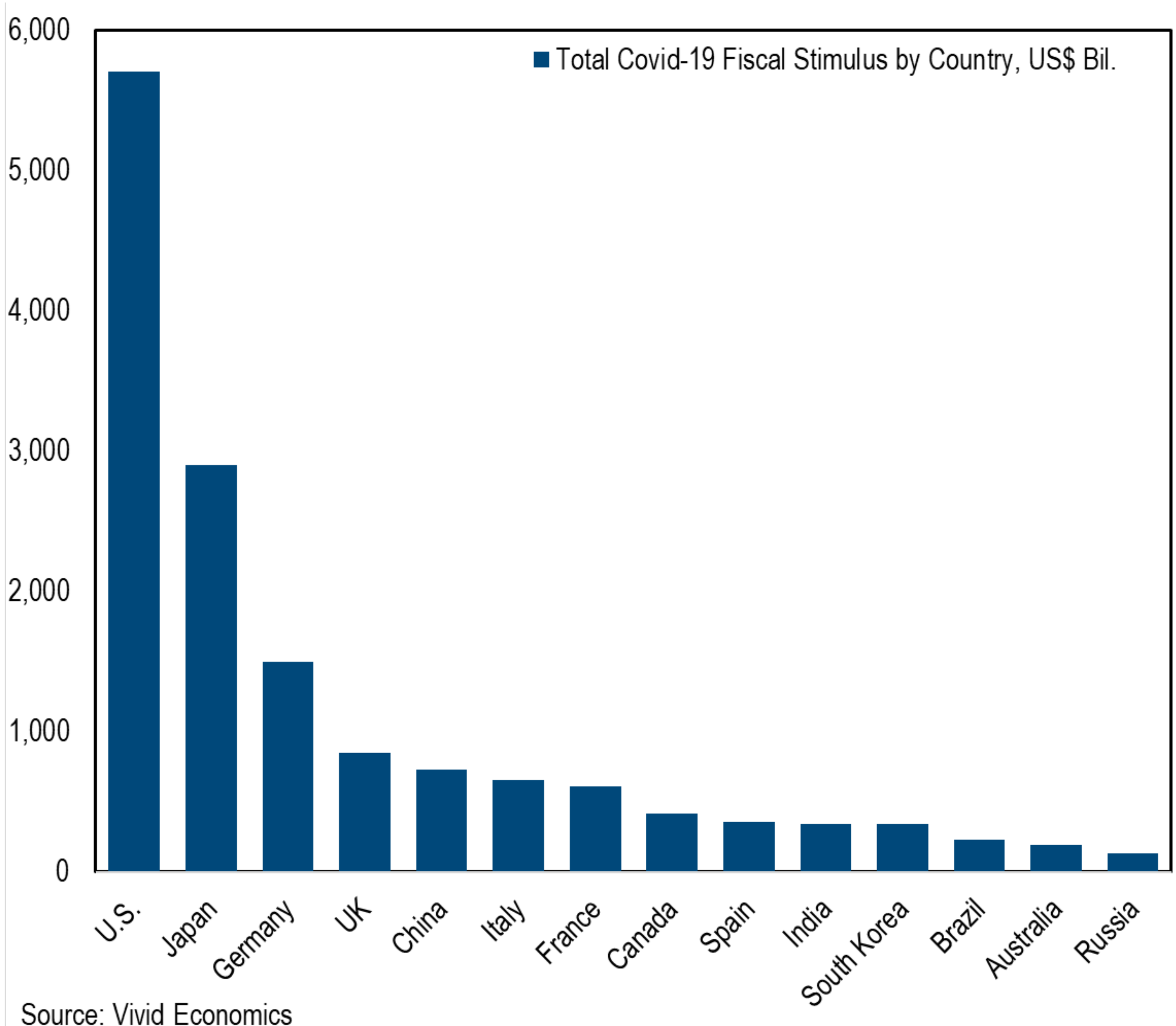
Source: Reuters/CRFB

Global Covid-19 Spending

Even without the IRA, the U.S. has spent nearly **$6T** in Covid relief grossly contributing to the nation's inflationary concerns

Developed nations in total spent **$17T** on the pandemic with government spending becoming a greater share of GDP in every major advanced economy, a relentless expansion of government

The U.S., however, spent more than double the next highest spender with much in the way of direct payments, leading to higher inflation rates than almost anywhere else in the world



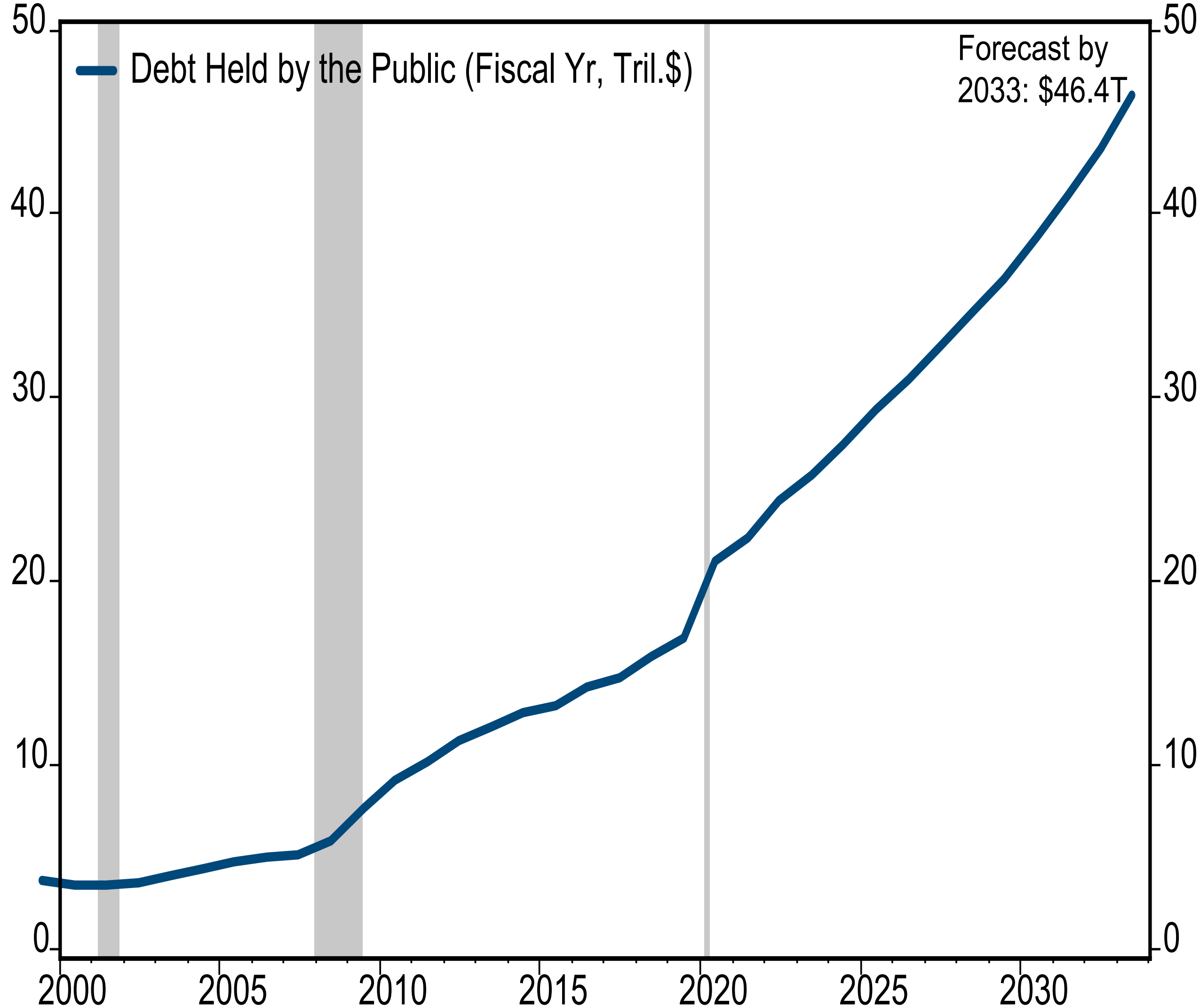
U.S. Debt Rises to All-Time High: $31T vs. $25T Economy

In FY 2022, the federal government ran a deficit of $1.38 trillion

The deficit for FY23, of course, will be markedly less than the year prior given the significant reduction in outlays from the waning federal response to the pandemic

Total public debt outstanding rose from $28T in FY 2021 to $31T in FY 2022, an all-time high

Total public debt is forecasted to reach over $46T by 2033



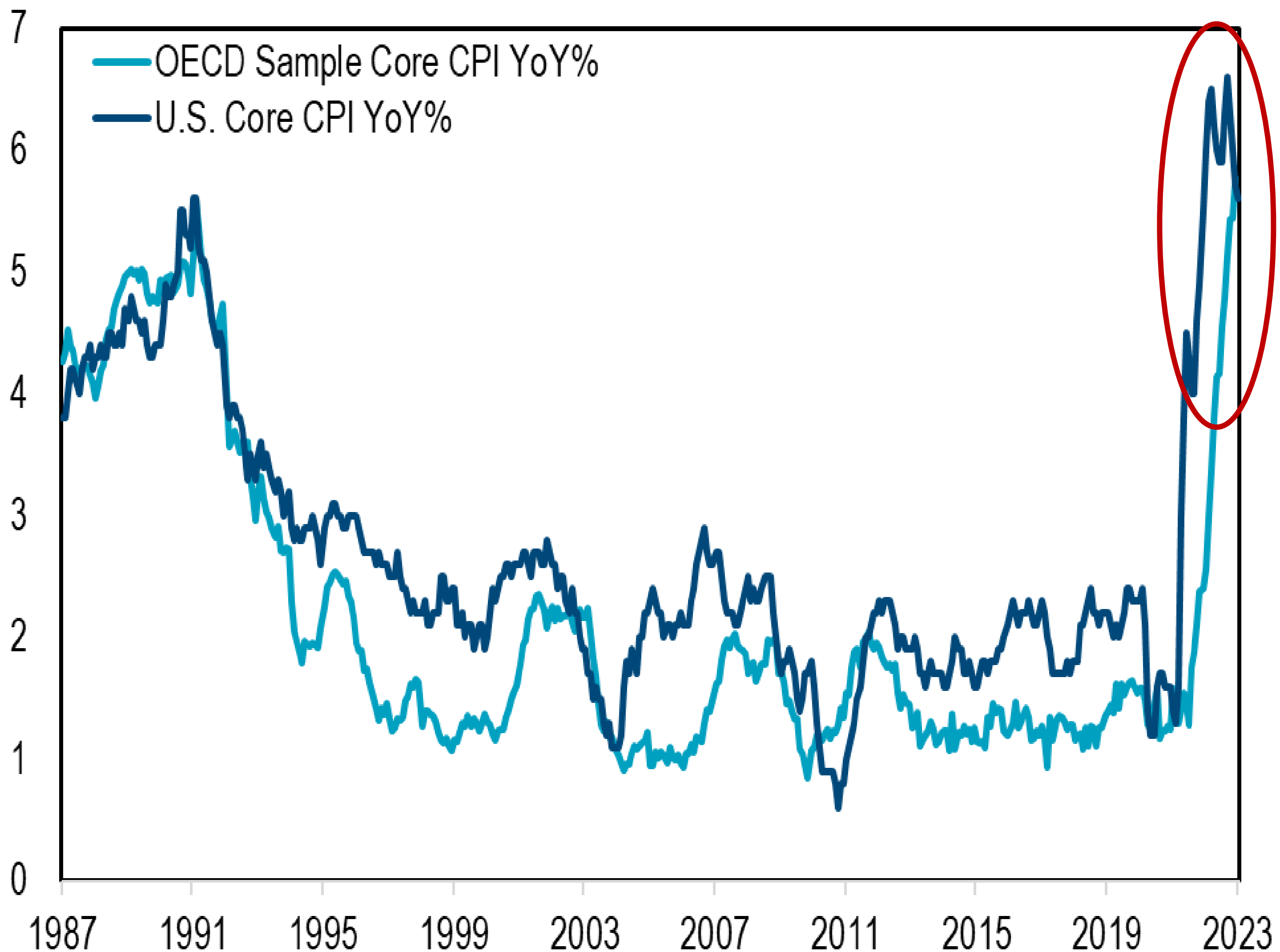
Source: Congressional Budget Office/Haver Analytics

U.S. Inflation Higher than Abroad

Countries are reeling from supply-side constraints

U.S. inflation has been exacerbated by fueling demand-side metrics and labor costs resulting from fiscal policy measures

U.S. inflation no longer continues to outpace other countries, rising **5.6%** as of January vs. **5.8%** elsewhere in the developed world



Source: FRED

*Sample includes: Canada, Denmark, Finland, France, Germany, Netherlands, Norway, Sweden, and the U.K.

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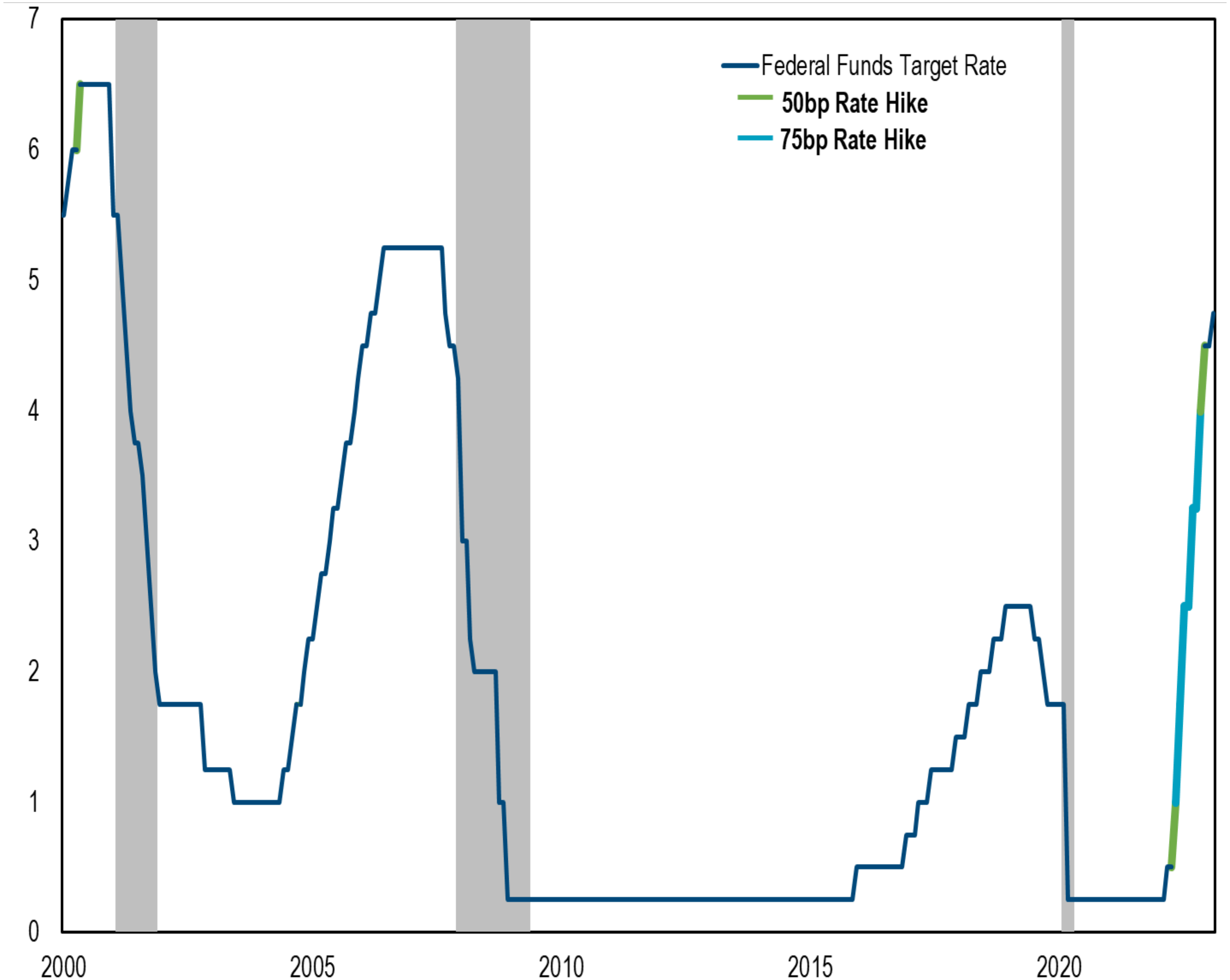
Rate Expectations Materially Increased

In March the Fed took a decisively more hawkish position

The Fed has raised rates 425bps since March: **25bps** in March, **50bps** in May, **75bps** in June, July, September & November, **50bps** in December, & **25bps** in February, reaching **4.50-4.75%**

The Fed's expected rate pathway has markedly increased with inflation still *"too-high"*

In December, the SEP showed expectations for **5.1%** in 2023 with rates declining to **4.1%** in 2024



Source: Federal Reserve Board

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*"Recent indicators point to **modest growth in spending** and production. **Job gains have been robust** in recent months, and the unemployment rate has remained low. **Inflation has eased somewhat but remains elevated.**"*

*"The Committee anticipates that **ongoing increases in the target range will be appropriate** in order to attain a stance of monetary policy that is sufficiently restrictive to return inflation to 2 percent over time. In determining the extent of future increases in the target range, **the Committee will take into account the cumulative tightening of monetary policy, the lags** with which monetary policy affects economic activity and inflation, and economic and financial developments."*

- February 2, 2023 FOMC Statement

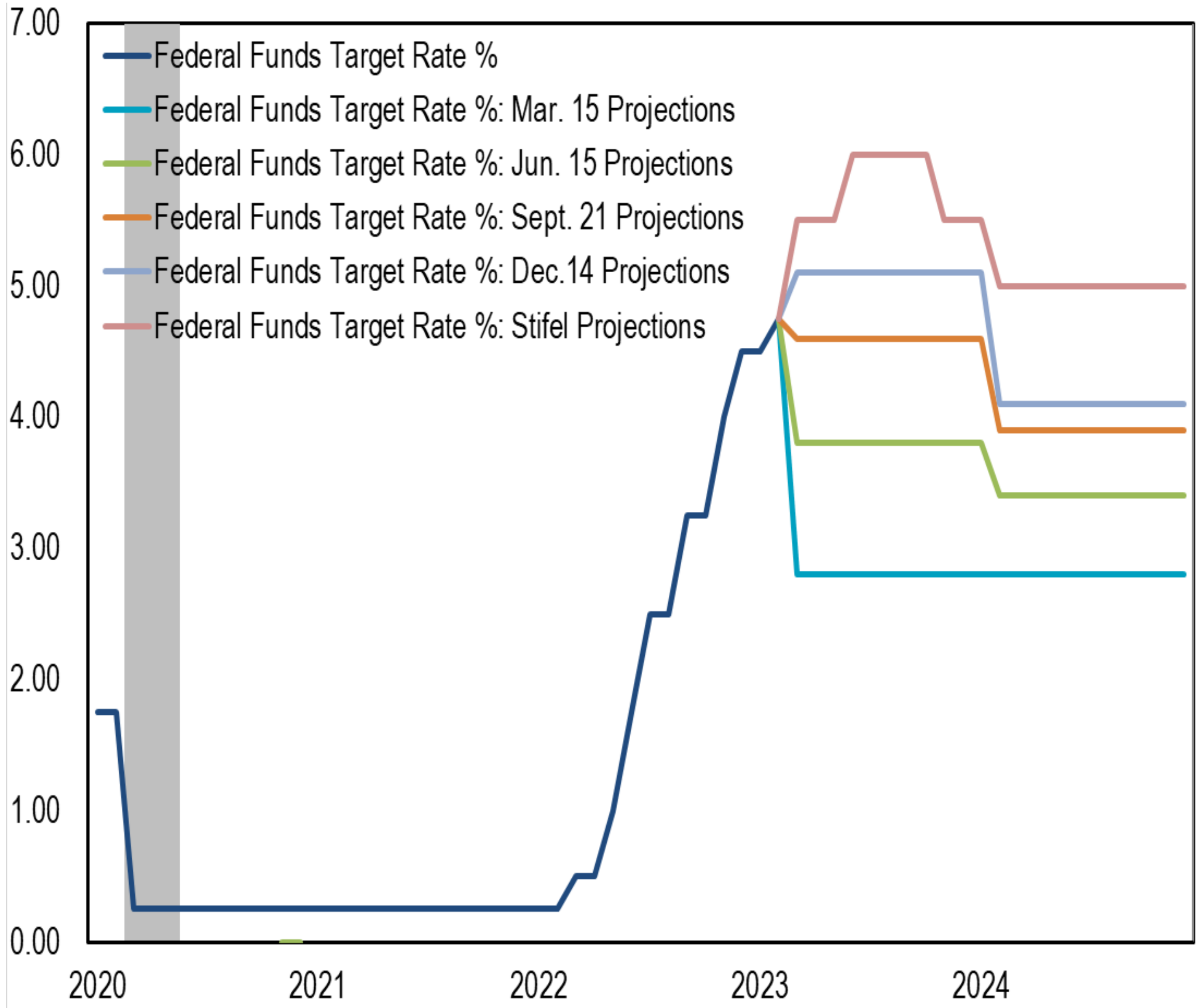
Consistently Higher Fed Forecast for Terminal Rate

At the February press conference, Chairman Powell was clear that the risk isn't that the Fed overtightens but that they do too little to control inflation

The Committee revised up its forecast for rates by 230bps since the initial March forecast

With inflation stubbornly elevated, the Fed revised expectations higher – for both rates and inflation – a fourth time in the final SEP release of 2022

SEP	Terminal FF Rate	PCE
Mar. 15	2.8%	4.3%
Jun. 15	3.8%	5.2%
Sep. 21	4.6%	5.4%
Dec. 14	5.1%	5.6%



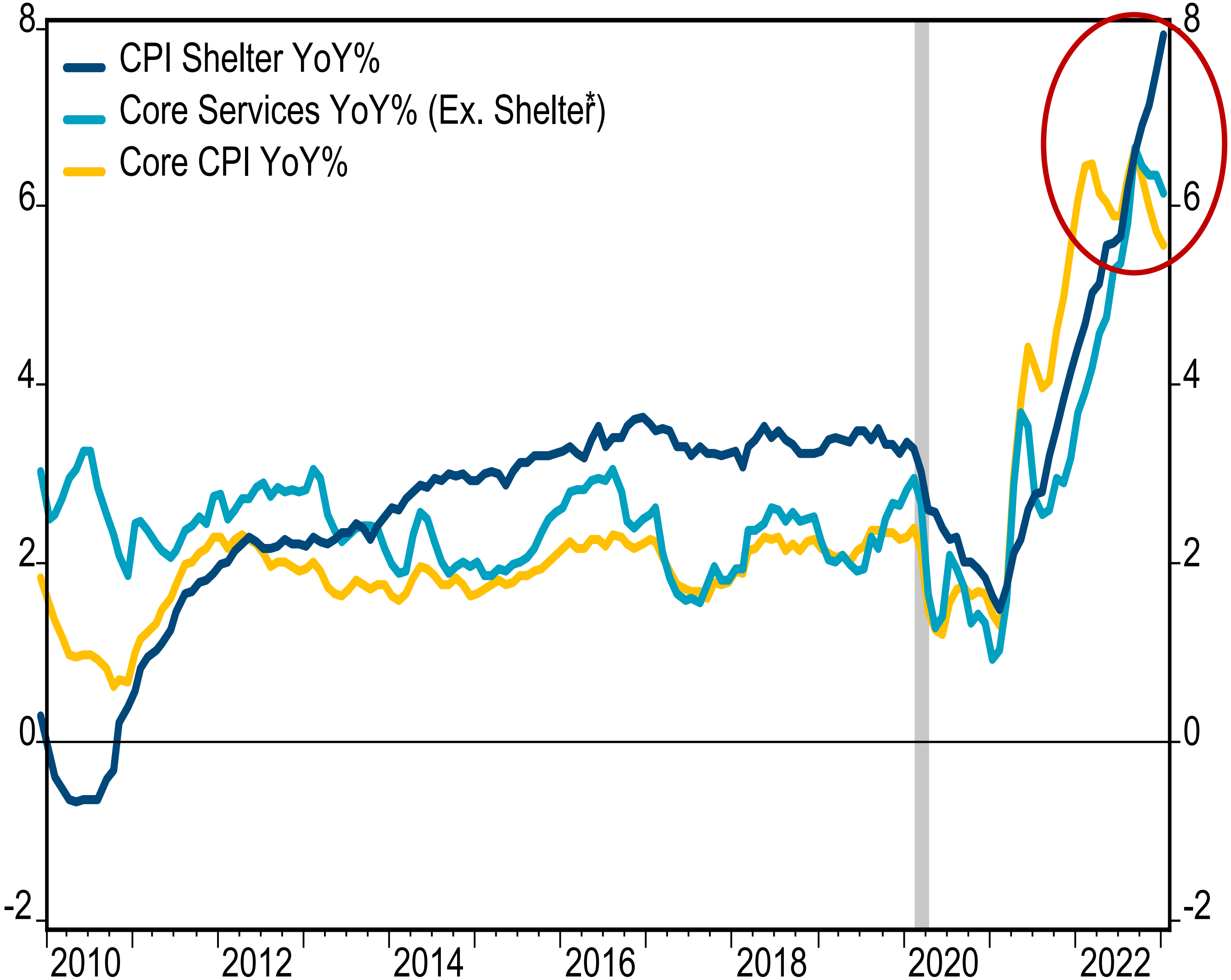
Source: Federal Reserve Board/Bloomberg

Inflation Remains Elevated with Core Services Pushing Higher

The CPI rose 0.5% in January and rose **6.4%** over the past 12 months, down from the 6.5% annual increase reported in December

The core CPI rose 0.4% in January and **5.6%** year-over-year, down from the 5.7% annual gain in December

Core services excluding shelter, meanwhile, rose **6.1%** year-over-year in January, following a 6.3% annual increase in December



Source: Bureau of Labor Statistics/Haver Analytics

*Core services inflation tracks healthcare, insurance, education, repairs, personal services, etc.

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U.S. Economy Showing Signs of Weakness

The Fed has vowed to raise rates enough to root out inflation but will it work?

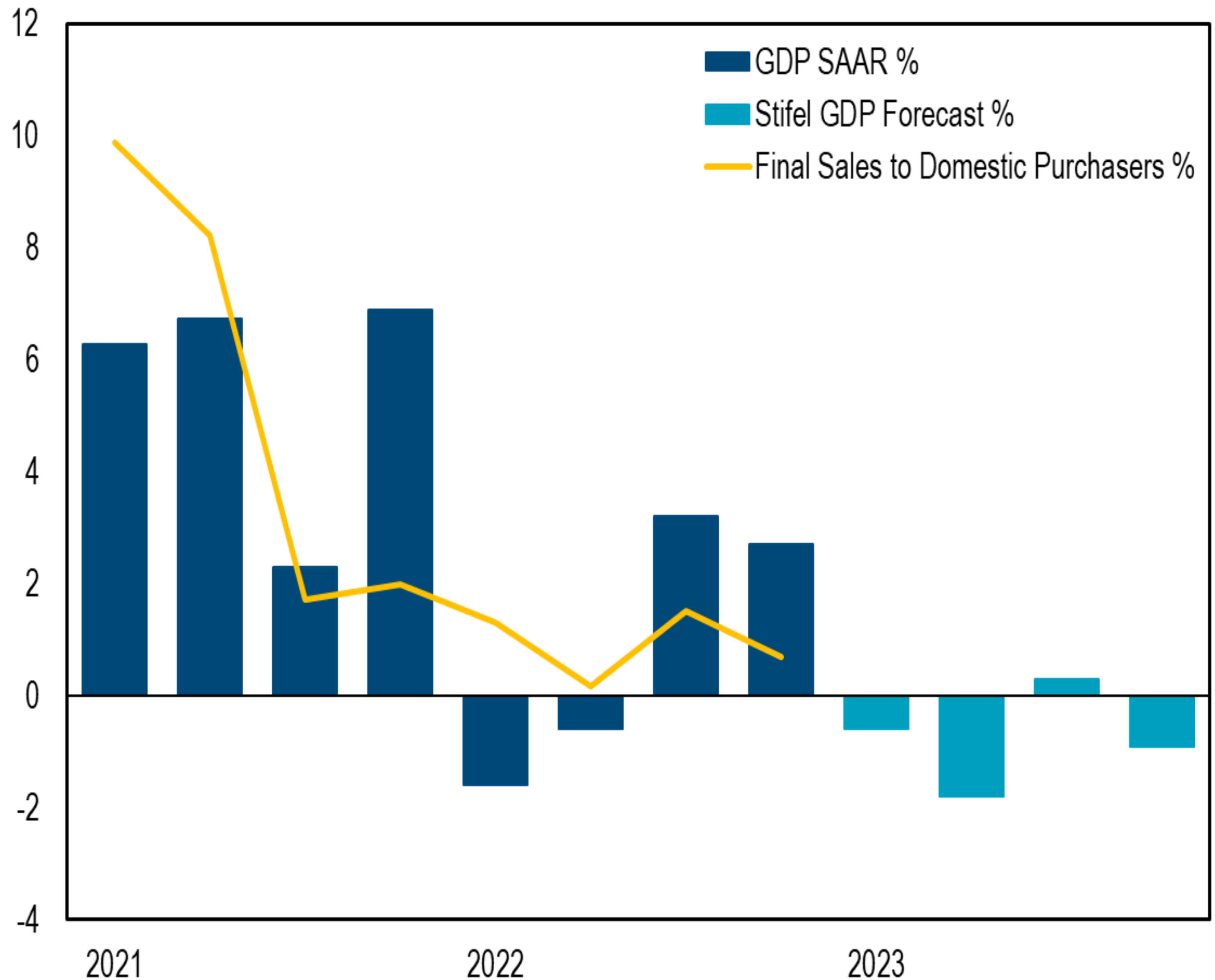
Typically, the Fed raises rates when the economy is overheating versus struggling to gain legs post-pandemic

The majority of price pressures stem from supply side constraints, limiting impact of Fed rate hikes

With an aggressive rate path, growth is likely to slow further into recession

GDP rose **2.7%** in Q4 2022, following a 3.2% rise in Q3

Excluding trade and inventories, final sales to domestic purchasers rose **0.7%**



Source: Bloomberg/Stifel

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Yes:

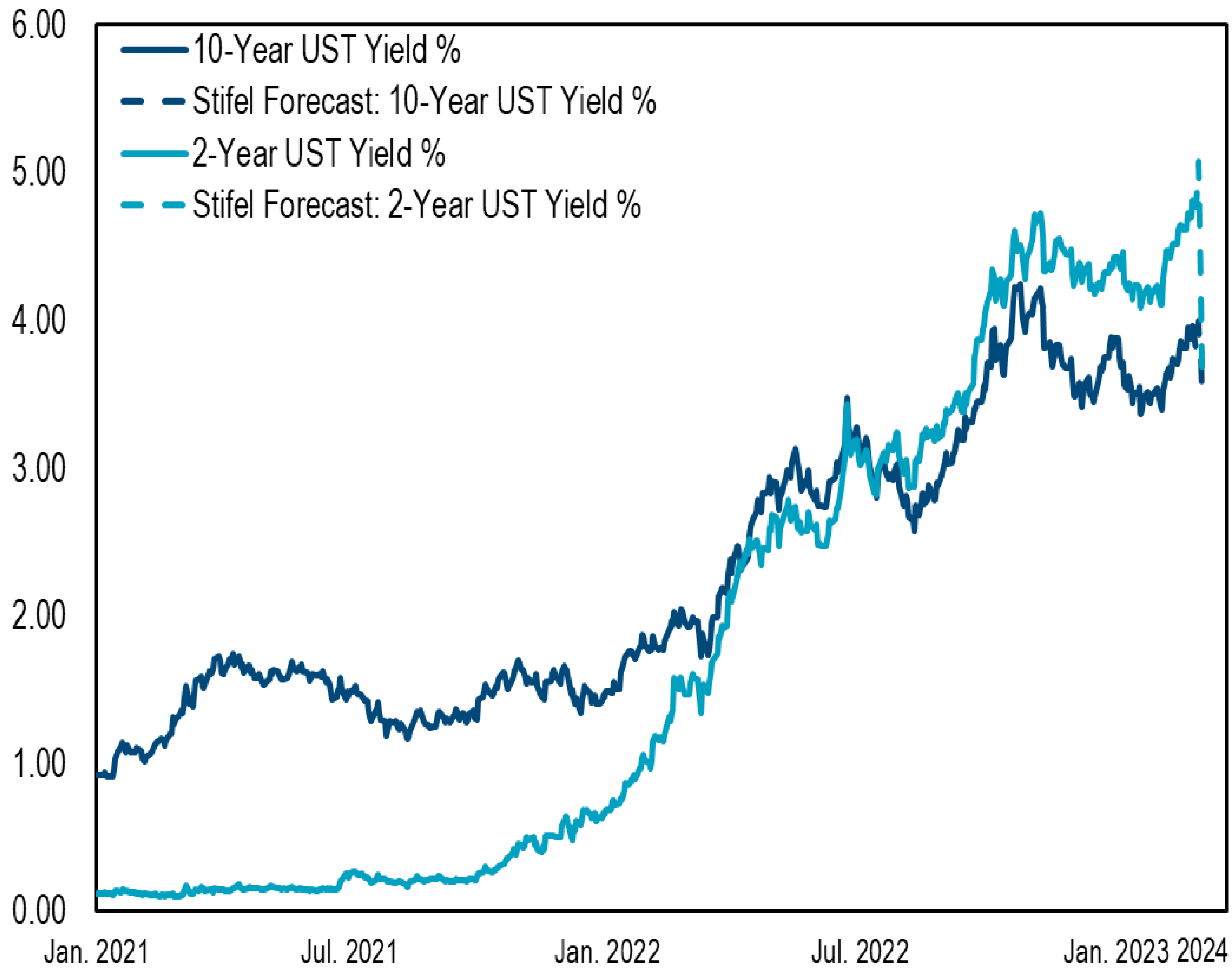
- Two consecutive quarters of negative GDP (Q1 and Q2)
- Manufacturing is slowing from a recent peak of 63.8 to 47.7 in February
- Real retail sales have slowed to 3.0% in February from a peak of 9.1% in February

No:

- Excluding inventories and trade, GDP rose 0.7% in Q4
- Real consumption still positive, up 2.4% in January
- Real income growth improved from a recent low of -21.6% to +2.8% in January
- Hiring rose from 311k in February, more than expected
- Unemployment rate rose to 3.6%, a five-decade low

What Does This Mean for Rates?

The short end of the curve will continue to move higher along with the Fed, while the long end will struggle to keep up with the Fed as policy intentionally tightens us into or further into a recession



Source: Bloomberg/Stifel

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Economic Forecast Grid

										Annual Rate	
	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	2022	2023	2024
Growth indicators												
GDP, QoQ %	***-0.6%***	***3.2%***	***2.7%***	**-0.6%**	**-1.8%**	**0.3%**	**-0.9%**	1.4%	1.8%	***0.9%***	**-0.7%**	**1.6%**
Consumer Spending, %	*2.0%*	*2.3%*	*1.4%*	-0.8%	0.1%	1.5%	1.2%	1.5%	1.6%	*1.8%*	0.5%	1.6%
Fixed Investment, %	*-5.0%*	*-3.5%*	*-4.6%*	-2.5%	-1.3%	-0.8%	0.0%	0.5%	0.8%	*-2.1%*	-1.1%	0.7%
Housing Starts, k, end of quarter, yr end	*1,575*	*1,465*	*1,382*	1,350	1,300	1,475	1,525	1,585	1,630	*1,382*	1,525	1,630
Unemployment Rate, %, qrt avg, yr end	*4.8%*	*3.7%*	*3.8%*	3.9%	4.4%	5.0%	5.2%	5.5%	5.6%	*3.8%*	5.2%	5.6%
Nonfarm Payrolls, k, qrt avg, ann avg	***293***	***269***	***223***	**200**	**-100**	**-50**	**100**	**150**	**150**	***296***	**38**	**150**
Inflation indicators, YoY%, yr end												
PCE	*7.0%*	*6.3%*	*5.0%*	4.6%	3.8%	3.6%	3.2%	3.0%	2.8%	*5.0%*	3.2%	2.8%
Core PCE	*5.0%*	*5.2%*	*4.4%*	4.2%	4.0%	3.8%	3.5%	3.2%	3.2%	*4.4%*	3.5%	3.2%
PPI	*11.2%*	*8.5%*	*6.2%*	6.0%	5.0%	4.8%	4.2%	3.9%	3.2%	*6.2%*	4.2%	3.2%
Interest rate, %, end of quarter, yr end												
FF	***1.75***	***3.25***	***4.50***	**5.00**	**5.50**	**6.00**	**6.00**	**5.50**	**5.50**	***4.50***	**6.00**	**5.50**
3month UST bills	*1.67*	*3.27*	*4.37*	4.95	5.45	5.95	5.85	5.40	5.40	*4.37*	5.85	5.40
2yr UST notes	*2.96*	*4.28*	*4.43*	4.77	5.07	4.67	4.17	3.67	3.65	*4.43*	4.17	3.65
5yr UST notes	*3.04*	*4.09*	*4.01*	4.14	3.89	3.64	3.39	3.14	3.04	*4.01*	3.39	3.04
10yr UST notes	***3.02***	***3.83***	***3.88***	**3.80**	**4.00**	**3.80**	**3.75**	**3.50**	**3.50**	***3.88***	**3.75**	**3.50**
30yr UST bonds	*3.19*	*3.78*	*3.97*	3.90	4.05	3.85	3.70	3.65	3.40	*3.97*	3.70	3.40
3mon to 2s spread bps	***129***	***101***	***6***	**-18**	**-38**	**-128**	**-168**	**-173**	**-175**	***6***	**-168**	**-175**
3mon to 10s Spread bps	***135***	***56***	***-50***	**-115**	**-145**	**-215**	**-210**	**-190**	**-190**	***-50***	**-210**	**-190**
2s to 10s Spread bps	***6***	***-45***	***-55***	**-97**	**-107**	**-87**	**-42**	**-17**	**-15**	***-55***	**-42**	**-15**

Thank you

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