Blackstone

Getting Ready for the "New Normal"

APRIL 2022

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I. Introduction

INTRODUCTION

Slowing Momentum: In our Ten Surprises of 2022, we laid out the view that robust economic and earnings growth would meet persistent inflation and rising interest rates, creating a difficult backdrop for markets. Russia's war on Ukraine has created a tragic humanitarian crisis and untold suffering. Elevated geopolitical uncertainty has upended global markets and pushed many kinds of inflation to new extremes. Forecasters have responded by lowering their estimates for growth and raising estimates for inflation, in some cases tripping over themselves to be more negative than the next. This sort of race to the bottom often goes too far.

Remaining Optimistic: Our economic outlook remains firmly above consensus. In the US and elsewhere, we think this summer will see the resumption of many elements of "normal" life, such as personal and business travel and the shift of consumption from goods back towards services. We think that real GDP growth in the US could be as high as 4% in 2022 and 3% in 2023, both of which are solidly ahead of the consensus. Our ongoing optimism in the US recovery is centered on the fact that it has been relatively insulated from the economic risks associated with the Russia-Ukraine crisis, with many signs of sustained strength across various measures of household, corporate and economic health. Globally, the picture is mixed. The momentum is slowing in China's economy, and European economies have higher exposure to Russia and its energy exports. We do not yet anticipate a global or European recession, but the risks there are certainly higher than they are for the US.

Acknowledging Risks: There are a handful of risks that we are watching carefully in order to consider the probability of various downside scenarios. One such risk is escalation of the Russia-Ukraine crisis, which would further exacerbate supply chain and commodity price pressures. More generally, the geopolitical climate feels less favorable now than it did even just a few months ago. There is a feeling that this chapter of globalization is ending, and what comes next is uncertain. Another risk is that consumers around the world, to varying extents, respond to higher inflation and lower real disposable income by adding to, rather than drawing down, their savings. Finally, there remains the risk of the Fed making a monetary policy mistake. Markets seem to think that will be the case, having priced in a yield curve inversion next year. Markets often get the timing of such things wrong, but this is an important indicator to watch, as yield curve inversions have preceded every recent recession. At the time of publication, the spread between the 10-year and 2-year Treasurys (the portion of the curve with the most reliable recession signal) has narrowed to just [25 bps].

Finding Opportunities: The environment that we expect will be a challenging one for many companies, featuring elevated inflation, higher interest rates, tight labor markets, strong wage growth, and continued, albeit slowly improving, supply chain issues. Markets will also face significant challenges, as rising rates historically are associated with lower equity market multiples. In addition, traditional fixed income may be facing the first significant backup in rates in four decades. There is a whole generation of investors today who have never lived through rising inflation or higher rates, and they are about to experience a trial by fire. Over the past decade, the longest bull market of all time was driven by an economy awash with excess liquidity. The rising tide lifted all stocks, but as the Fed tightens monetary policy significantly, we expect that the importance of fundamentals will be restored to markets. Against this backdrop, it will be critical to evaluate the fixed income side of a portfolio with a fresh eye to managing duration, credit and interest rate risk. While duration risk is more traditionally associated with fixed income, equities have an implied duration as well, which is something that investors should keep in mind, in addition to the quality of a company's earnings growth and pricing power. The beta strategies of the last cycle will be unequipped for newfound differentiation in the markets, and it's time for alpha to shine. Investors who can focus on the themes that are unfolding and invest with conviction will find opportunities to outperform.

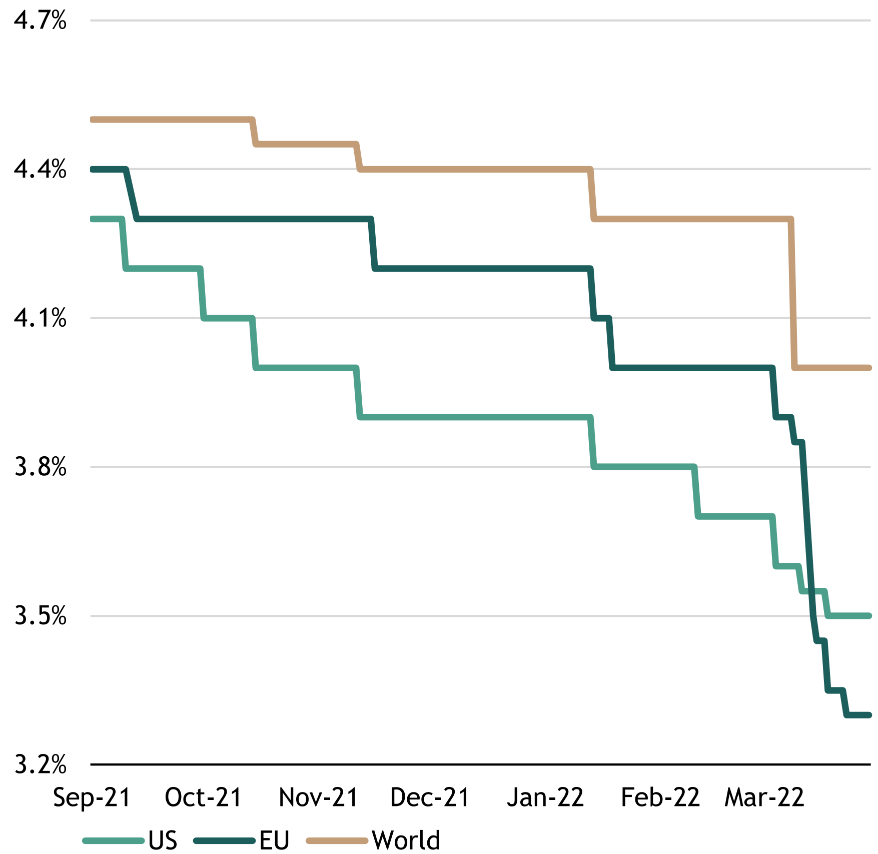
Note: As detailed in the "Disclaimers" section, the above and all subsequent commentary in this presentation reflect the personal views of Joseph Zidle, Senior Managing Director, and Byron Wien, Vice Chairman of the Private Wealth Solutions group, and do not necessarily reflect the view of Blackstone.

II. Crosscurrents to Global Growth

Estimates for 2022 are being revised down for GDP growth and revised up for inflation

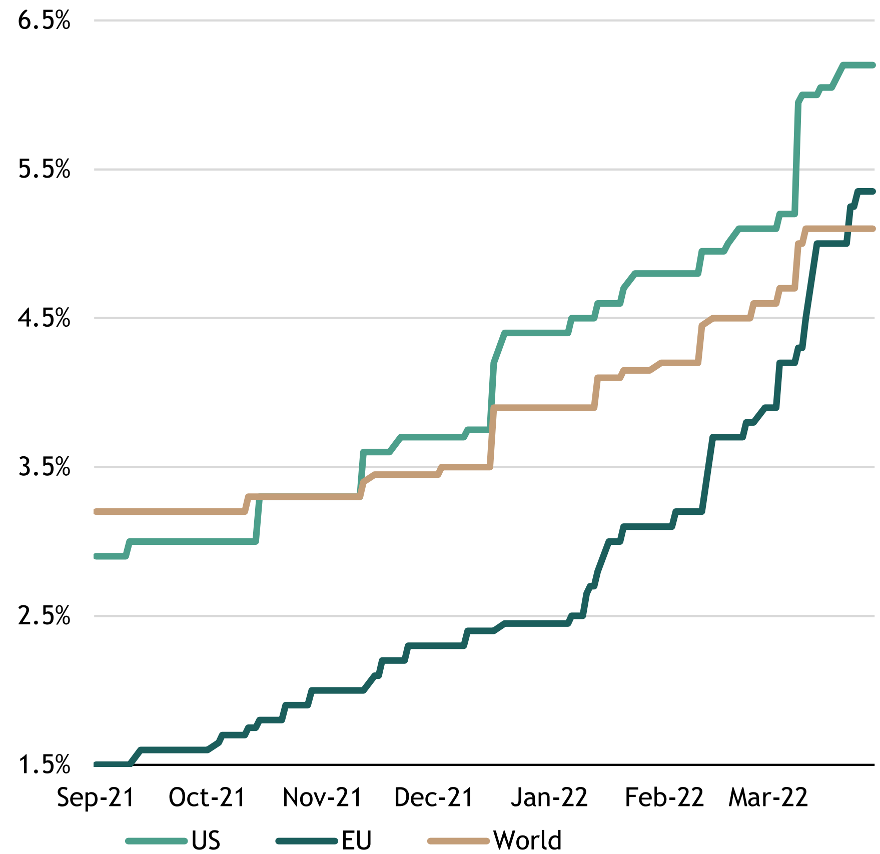
Estimates for Real GDP Growth in 2022

(YoY change)



Estimates for CPI Increase in 2022

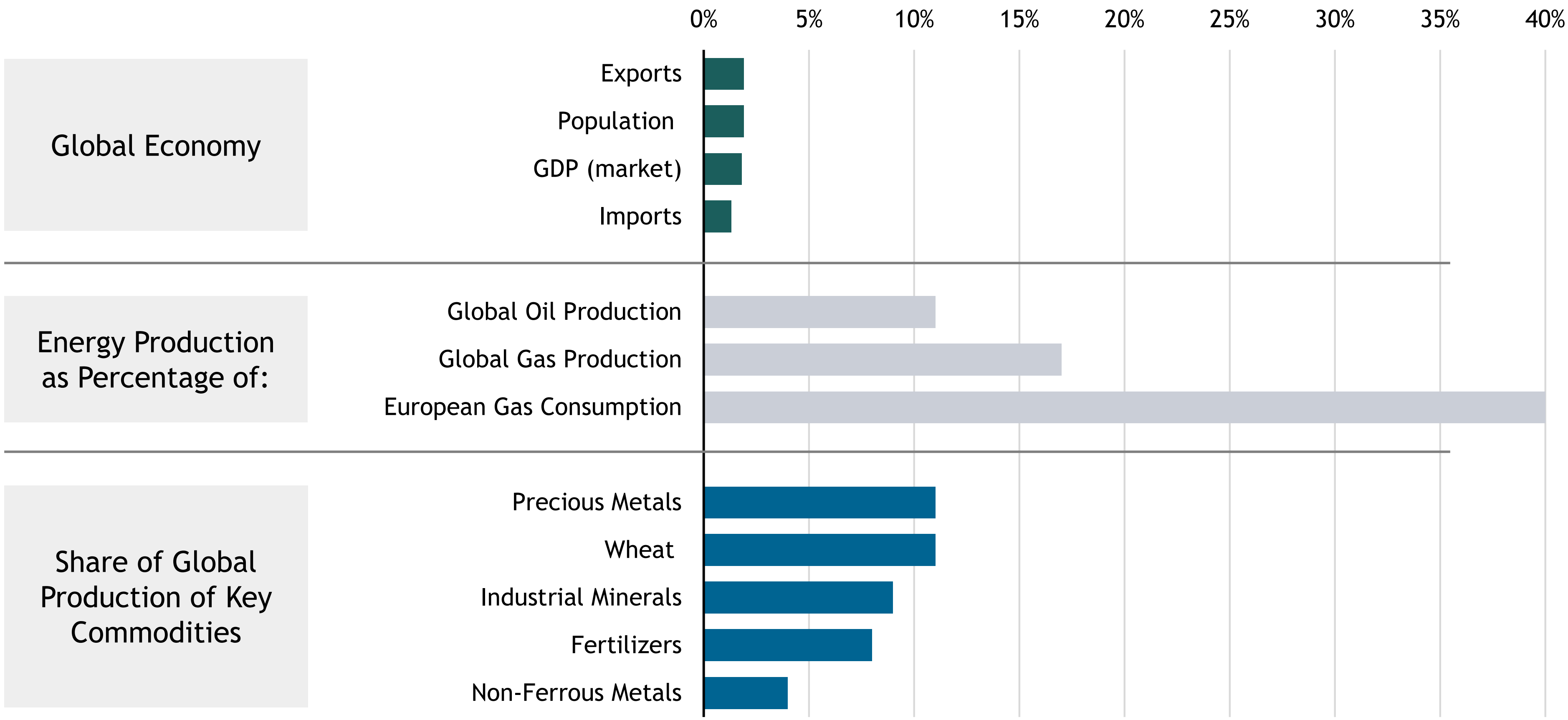
(YoY change)



Source: Bloomberg consensus forecasts, as of March 29, 2022.

Russia is a medium-sized economy that punches above its weight in energy and commodity production

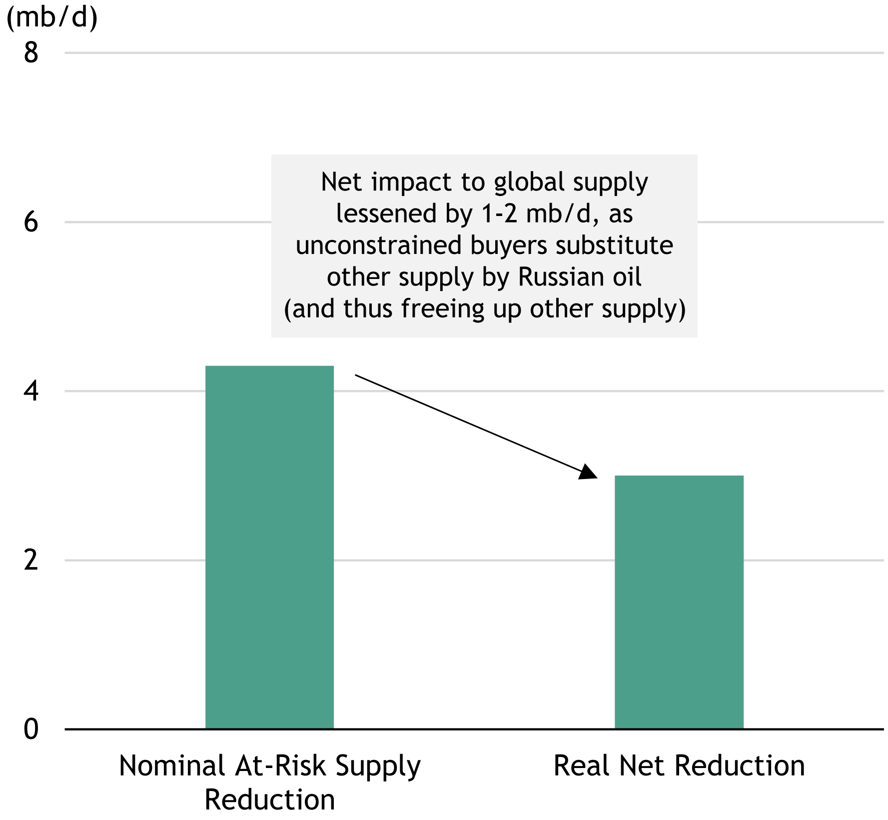
Russia's Share of Various Global Economic Measures



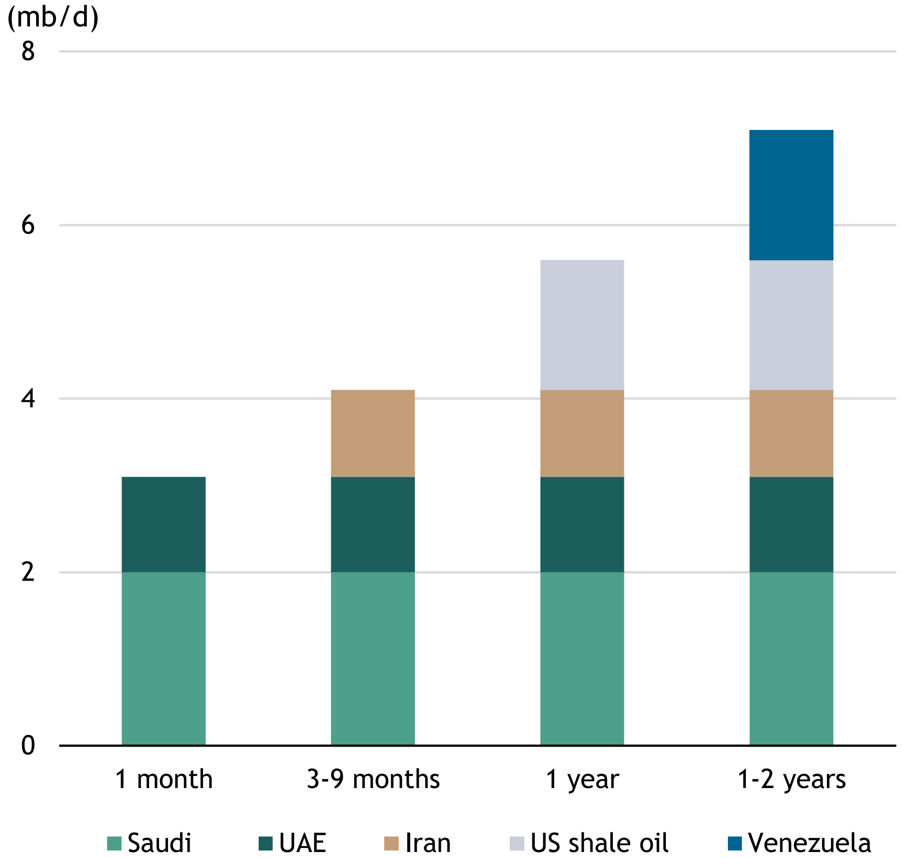
Source: IMF, Goldman Sachs Global Investment Research, as of March 6, 2022.

Incremental supply exists to eventually replace Russian oil, subject to output increases and time to come online

Quantity of Russian Oil Supply at Risk of Coordinated US/EU Sanctions(1)



Prospective Sources of Incremental Supply, by Estimated Time to Come Online



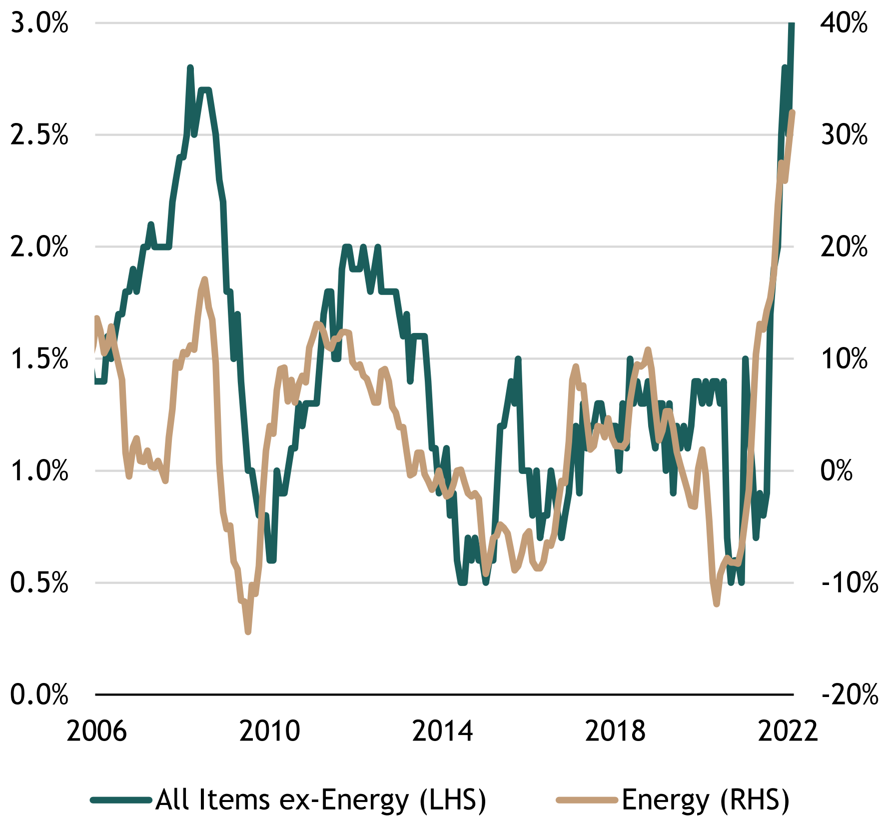
Source: Deutsche Bank, International Energy Agency, as of March 8, 2022.

(1) In the case of coordinated US/EU sanctions on Russian oil and product exports, the nominal quantity at risk might be the total of European and US imports of at least 4.3 mmb/d, with the EU importing 3.9 mmb/d in 2019 and the US importing 400 kb/d in December.

European energy prices continue to soar due to limited supply, pressuring household budgets and consumption

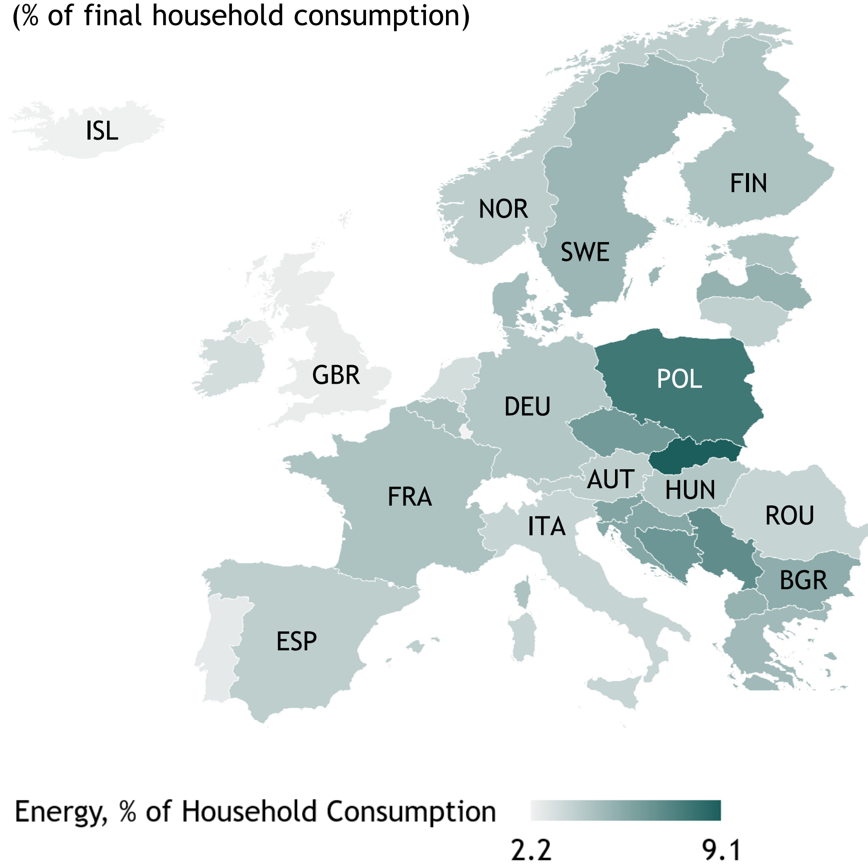
Eurozone Inflation[1]

(YoY %)



Europe Energy Consumption, by Country[2]

(% of final household consumption)



Note: Represents Blackstone's view of the current market environment as of the date appearing in this material only. See "Important Disclosure Information" including "Index Comparison" and "Trends".

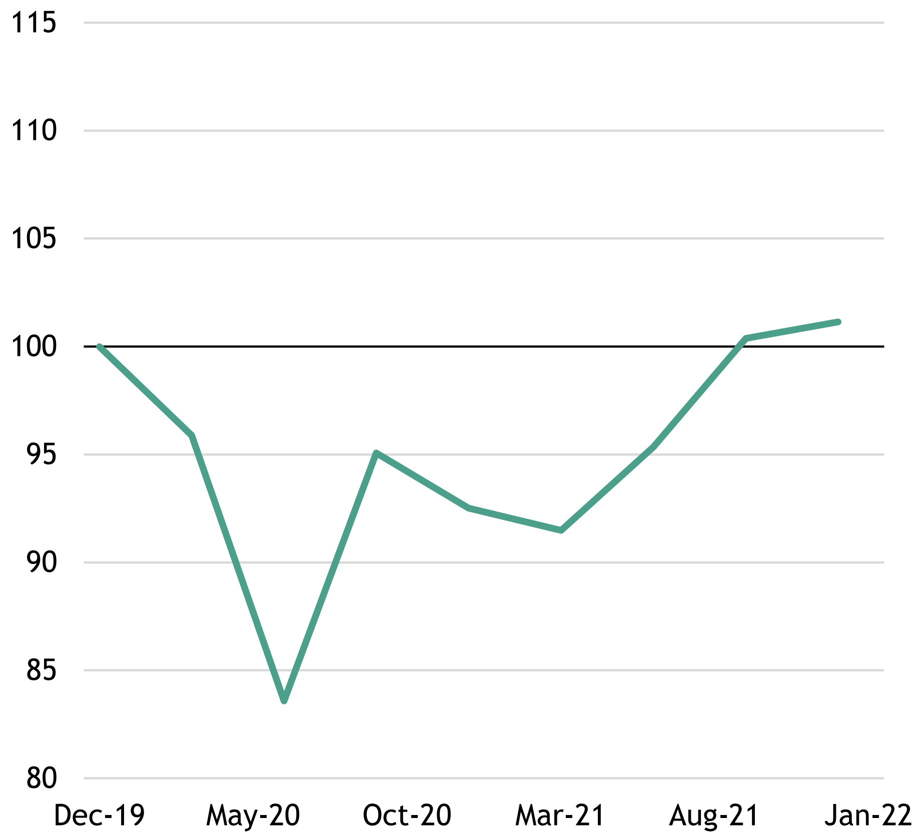
(1) Source: Blackstone Investment Strategy, Bloomberg, and Eurostat, as of March 28, 2022. Data are not seasonally adjusted.

(2) Source: Blackstone Investment Strategy and Eurostat. Data are annual figures as of December 31, 2020, except for Denmark, Norway, the UK, and North Macedonia, which are as of December 31, 2019. Represents the percentage of households' final consumption expenditures spent on electricity, gas, and other fuels.

EU consumer spending has barely recovered to pre-COVID levels, in contrast to robust US consumption

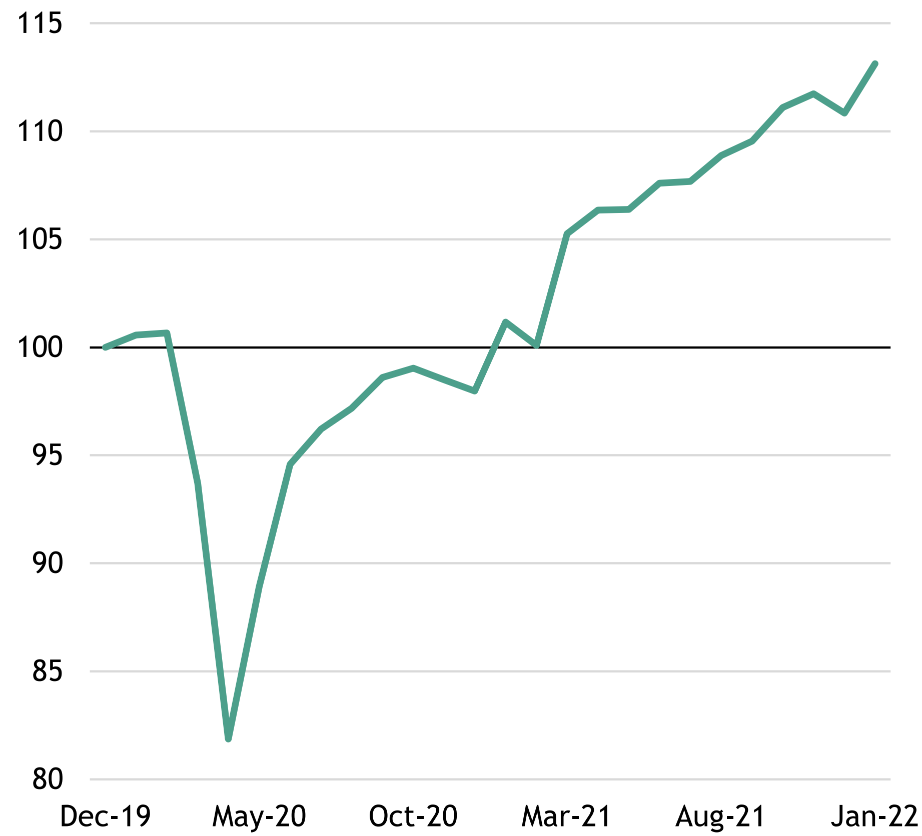
EU Personal Consumption Expenditures

(indexed to 100 as of December 2019)



US Personal Consumption Expenditures

(indexed to 100 as of December 2019)

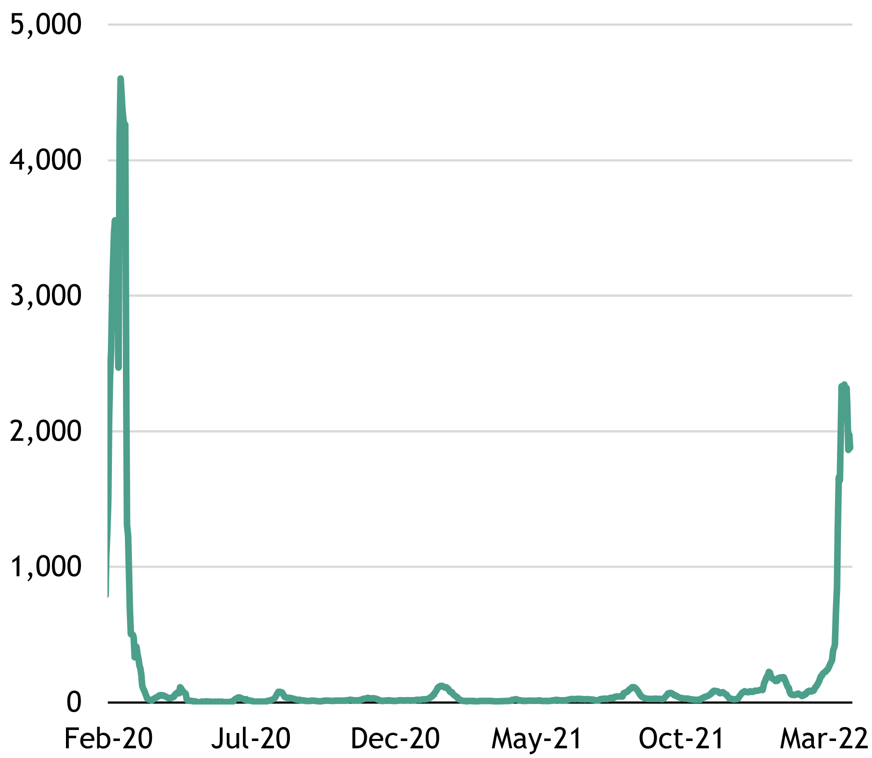


Source: Blackstone Investment Strategy, Eurostat, Bureau of Economic Analysis and Macrobond. EU data represent Household & NPISH Final Consumption Expenditures, quarterly and seasonally adjusted observations, as of December 31, 2021. US data represent Personal Consumption Expenditures, monthly and seasonally adjusted observations, as of January 31, 2022.

China's zero tolerance COVID policy is challenging growth amid highest case counts in over two years

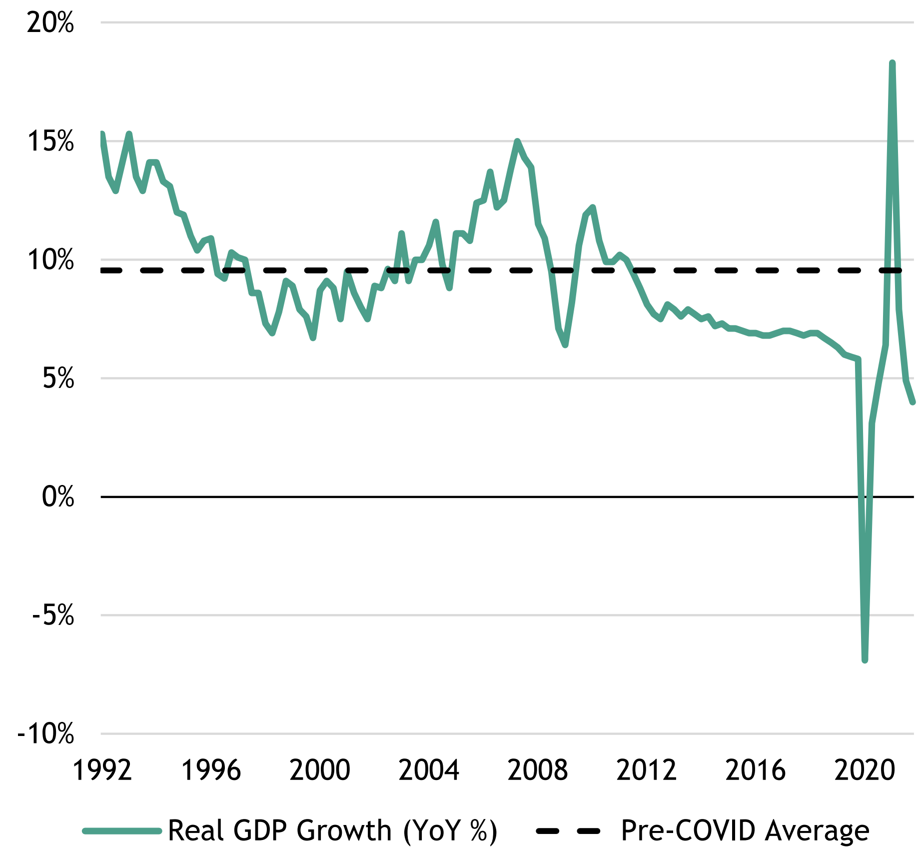
China New Daily Confirmed COVID Cases

(7-day moving average)



China Real GDP Growth

(YoY change)

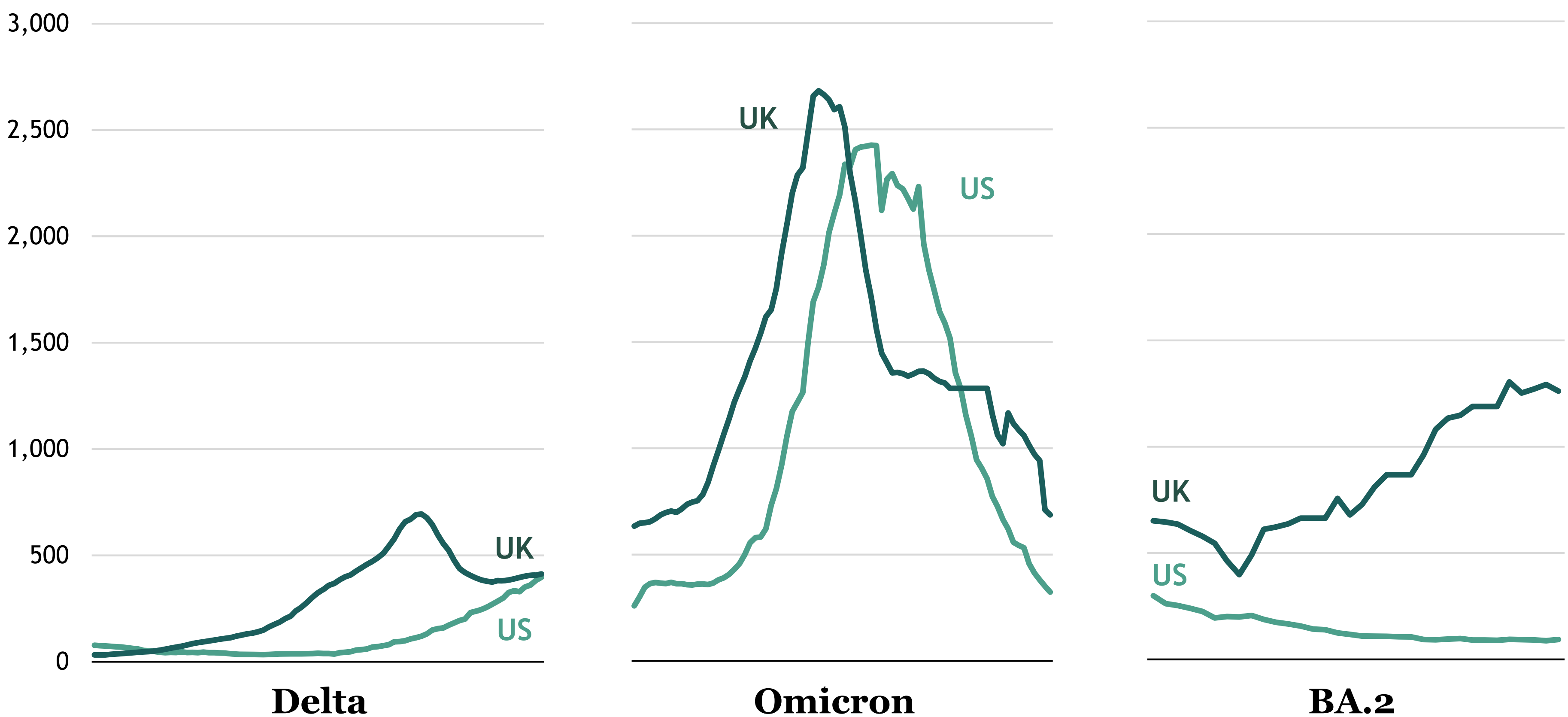


Source: Blackstone Investment Strategy, Our World in Data and Macrobond, as of March 28, 2022 (COVID cases) and December 31, 2021 (GDP Growth). "Pre-COVID Average" is calculated from 1992 to 2019.

BA.2 variant causing rise in UK's COVID cases; US cases have previously tended to follow those of the UK on a lag

New COVID Cases in the UK and US

(7-day moving average)



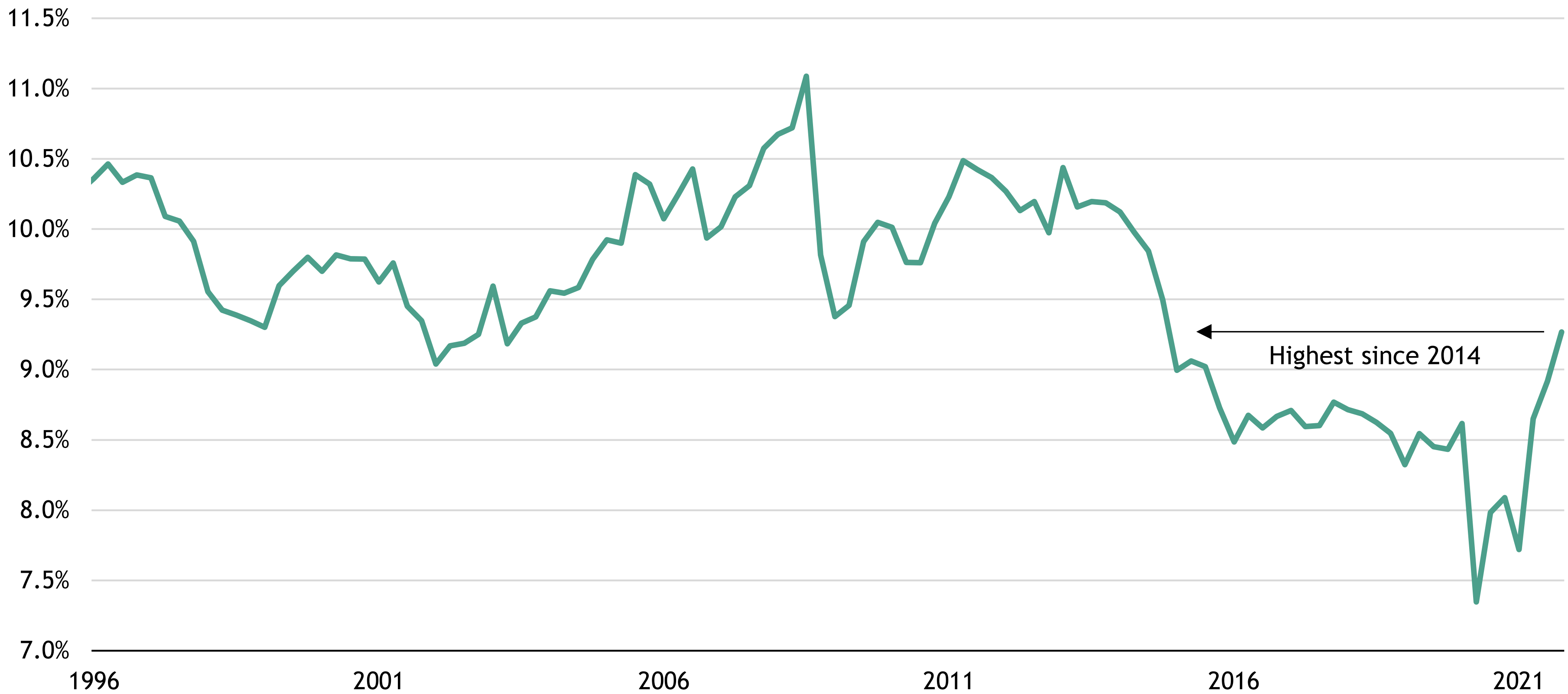
Source: Blackstone Investment Strategy, Our World in Data and Macrobond, as of March 27, 2022.

III. Remaining Optimistic on the US Recovery

After declining to record lows, the share of PCE on food and energy in the US at the highest level since 2014

Personal Consumption Expenditures on Food and Energy

(share of disposable personal income)

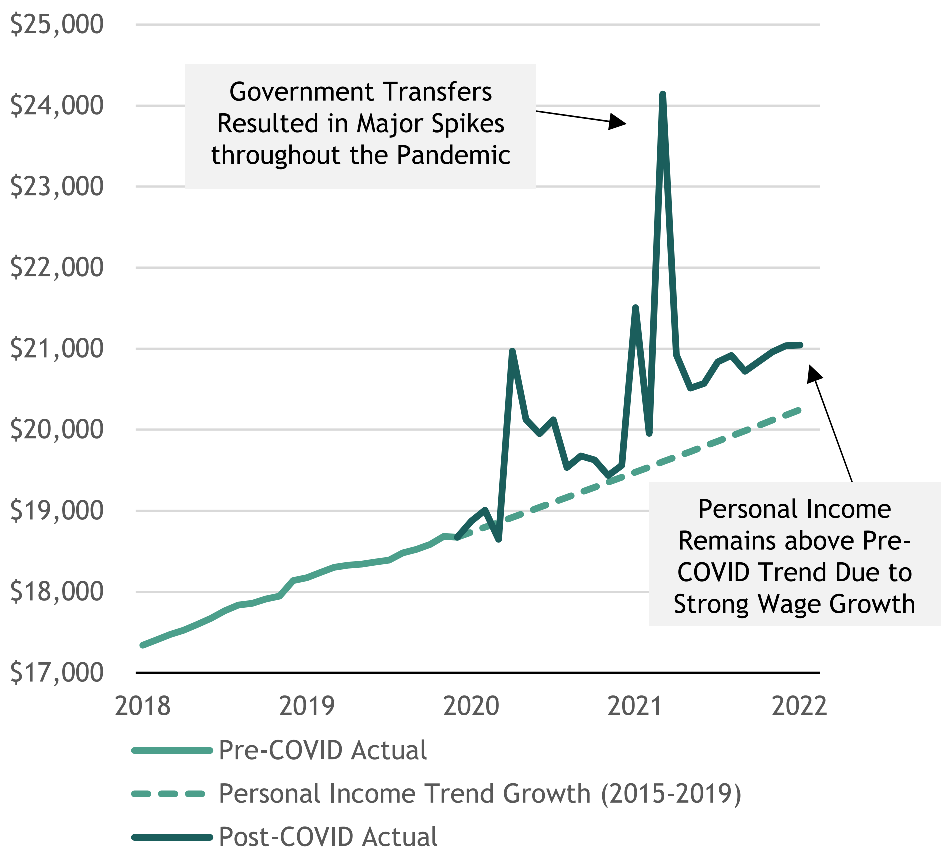


Source: Blackstone Investment Strategy, Bureau of Economic Analysis and Macrobond, as of December 31, 2021. Represents PCE on gasoline, fuel oil and other energy goods, plus food and beverage purchased for off-premises consumption, as a share of disposable personal income. Represents quarterly observations at seasonally adjusted annual rate.

Despite rising costs, households remain in excellent shape, with high income and low debt service

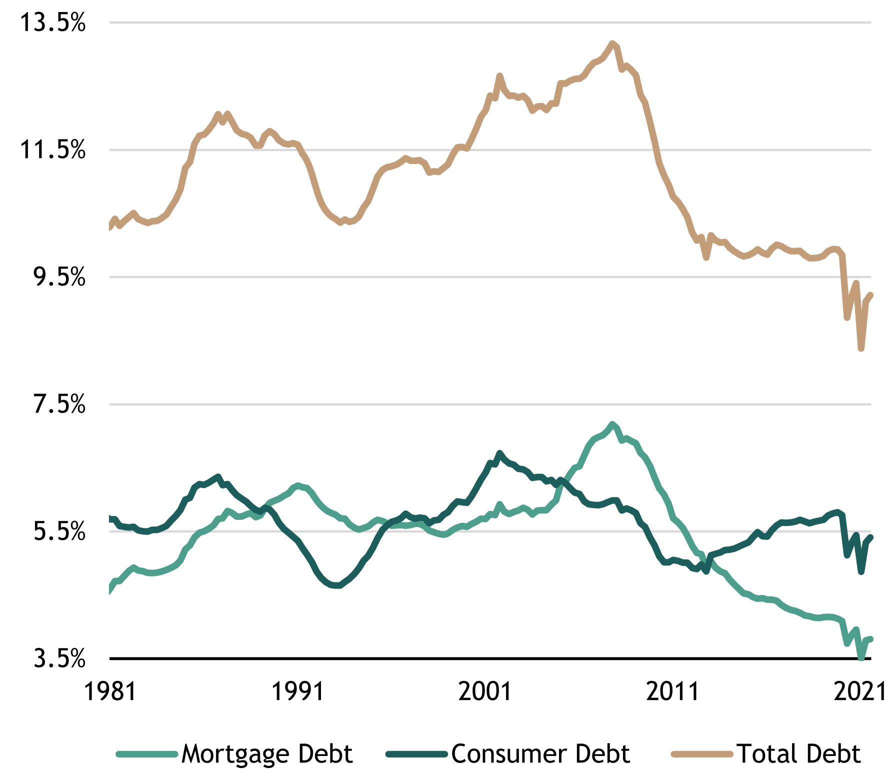
Personal Income

(US$ in billions, seasonally adjusted annual rate)



Debt-Service Ratios

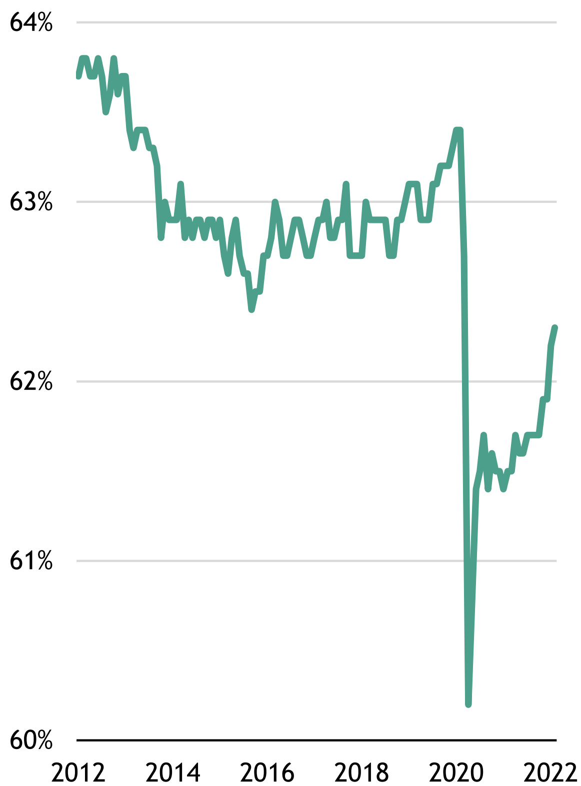
(debt-service payments as percent of disposable income)



Source: Blackstone Investment Strategy calculations, Bureau of Economic Analysis and Macrobond, as of 2/28/2022 (personal income) and 12/31/2021 (debt service ratios).

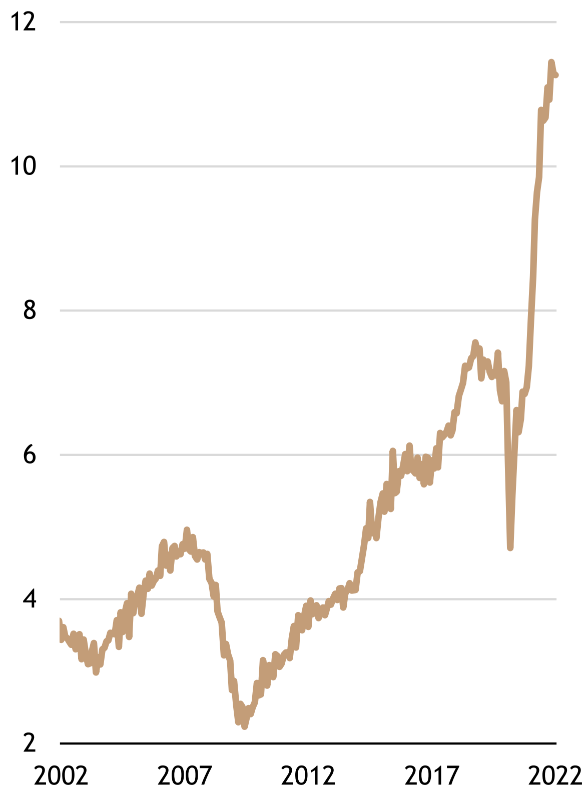
Tight labor markets are evident in lower participation and record job openings, supporting strong wage growth

Labor Force Participation Rate



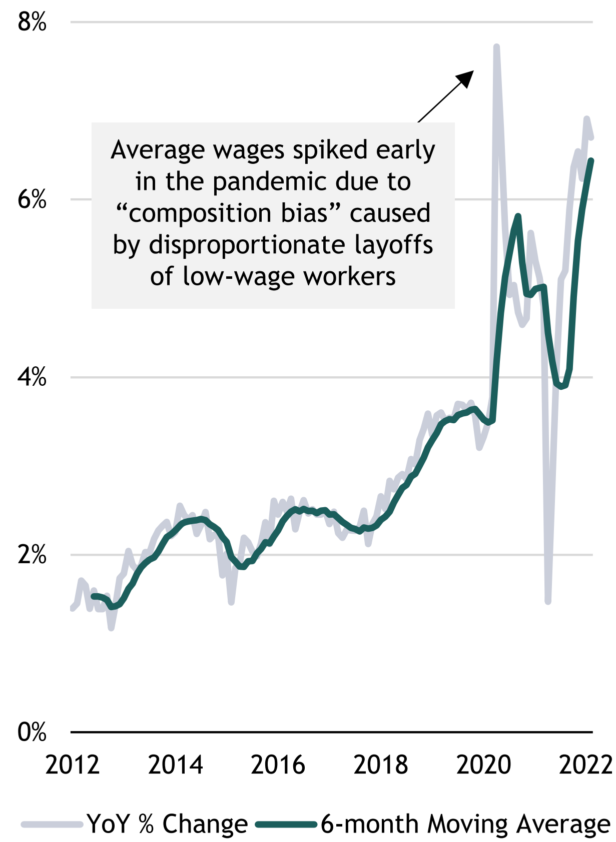
Total Nonfarm Job Openings

(in millions)



Average Hourly Earnings

(YoY % change)

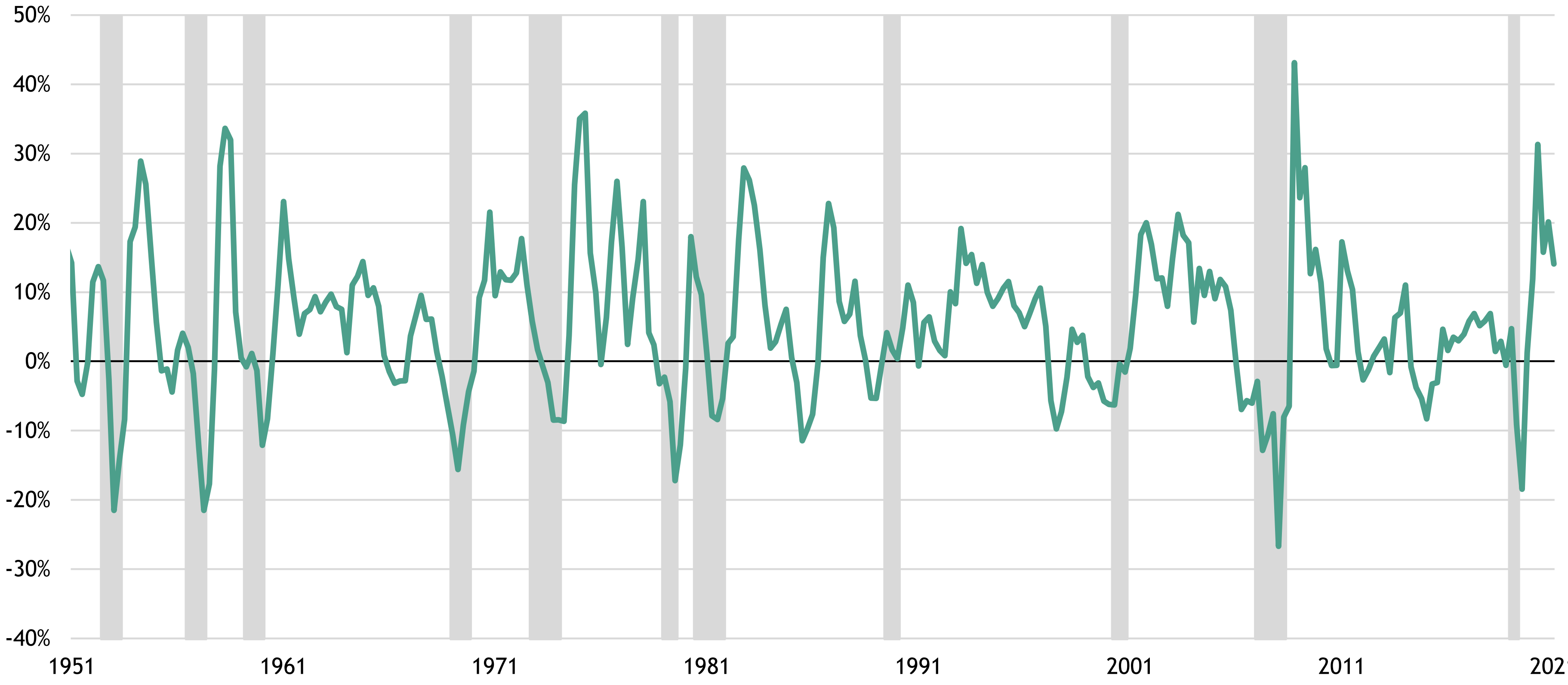


Source: Blackstone Investment Strategy and Bureau of Labor Statistics, as of February 28, 2022, (job openings as of January 31, 2022). Average hourly earnings are for production and nonsupervisory employee, total private.

Profit growth remains strong; there has never been a recession when corporate profit growth is positive

US Corporate Profit Growth

(YoY change)



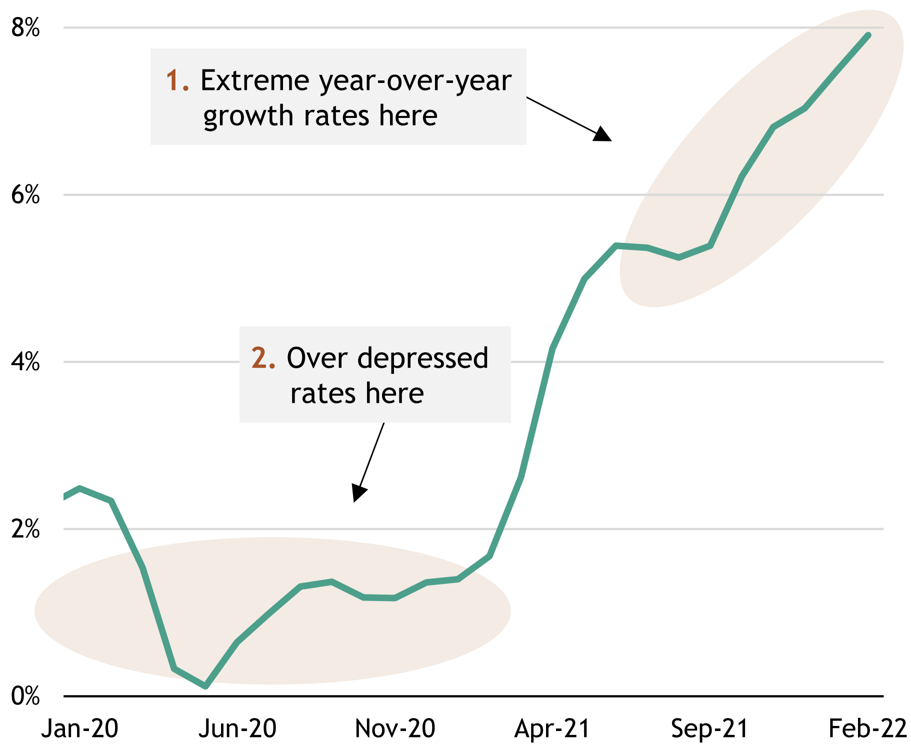
Source: Blackstone Investment Strategy and Bureau of Economic Analysis, as of December 31, 2021. Represents corporate profits before tax with inventory valuation and capital consumption adjustments.

IV. Inflation Is Peaking, but Not Transitory

Recent CPI growth has largely been over depressed levels in 2020 / early 2021, otherwise known as "base effects"

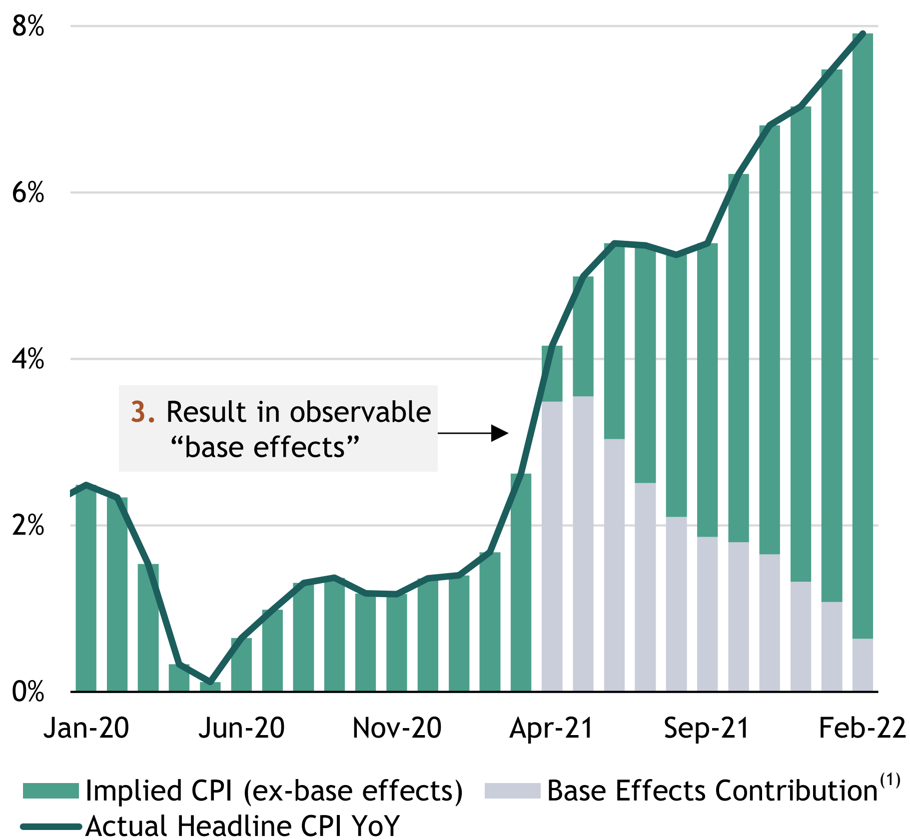
US Headline Consumer Price Index

(YoY growth)



"Base Effects" Contribution to Headline CPI

(YoY growth)



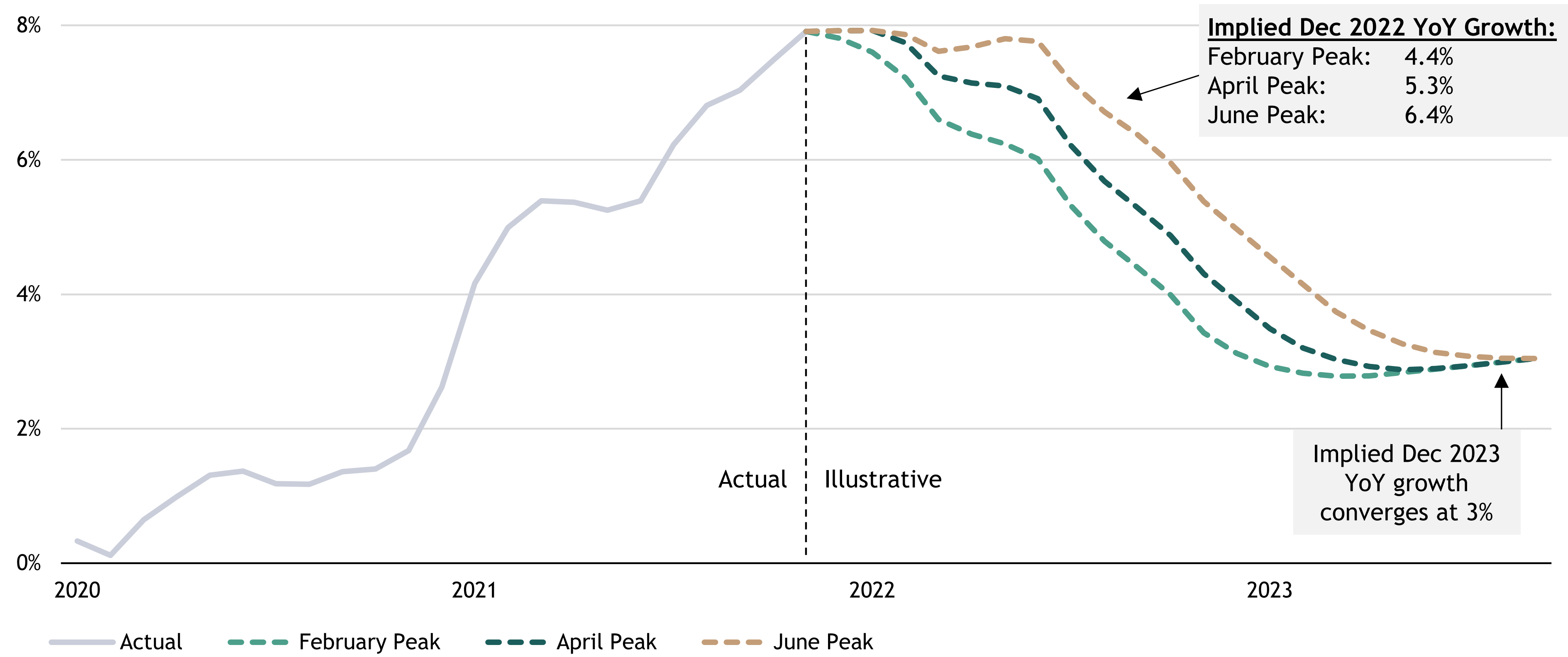
Source: Blackstone Investment Strategy calculations and Bureau of Labor Statistics, as of February 28, 2022.

(1) The "Base Effects" component shows the hypothetical amount by which headline CPI would have risen on a year-over-year basis if prices were held constant from March 2021 levels (i.e., the mechanical increase that would have occurred in the year-over-year figure, even were there no month-over-month price rises after March 2021).

Year-over-year growth rates are generally expected to peak in the coming months as “base effects” roll-off

US Headline Consumer Price Index: Actual and Illustrative Based on Hypothetical “Peak Growth” Dates(1)

(YoY change)

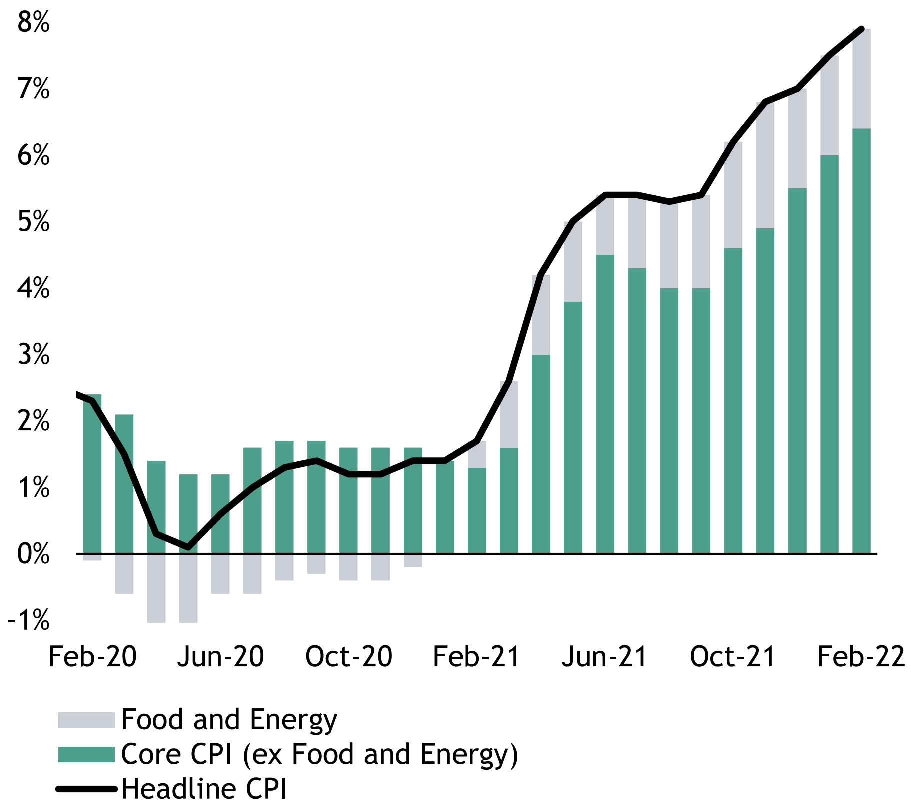


Note: Data shown are illustrative only and are not intended as forecasts of actual inflation patterns.
Source: Blackstone Investment Strategy calculations and Bureau of Labor Statistics, as of February 28, 2022.
(1) Hypothetical “Peak Growth” dates assume that month-over-month CPI growth remains at February 2022 levels until the specified month in 2022. Then, month-over-month growth is assumed to fall at various assumed rates until settling at terminal month-over-month growth of 0.25%.

Over the past year, acceleration in core CPI has been largely driven by items impacted by supply issues

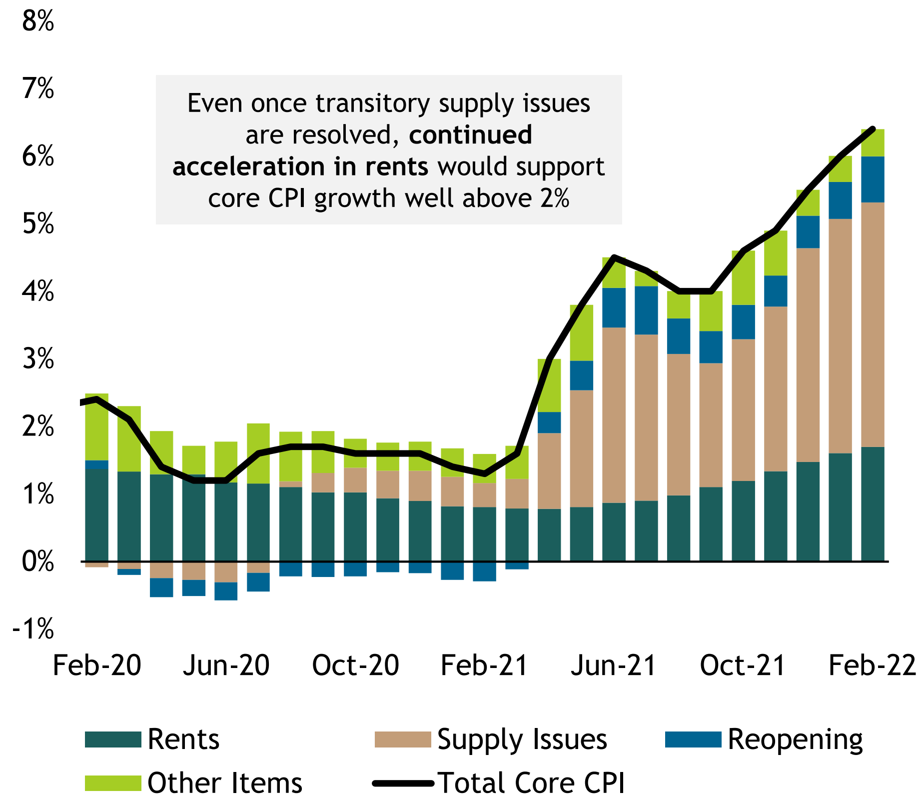
Contribution to US Headline CPI

(YoY % change)



Contribution to US Core CPI[1]

(YoY % change)



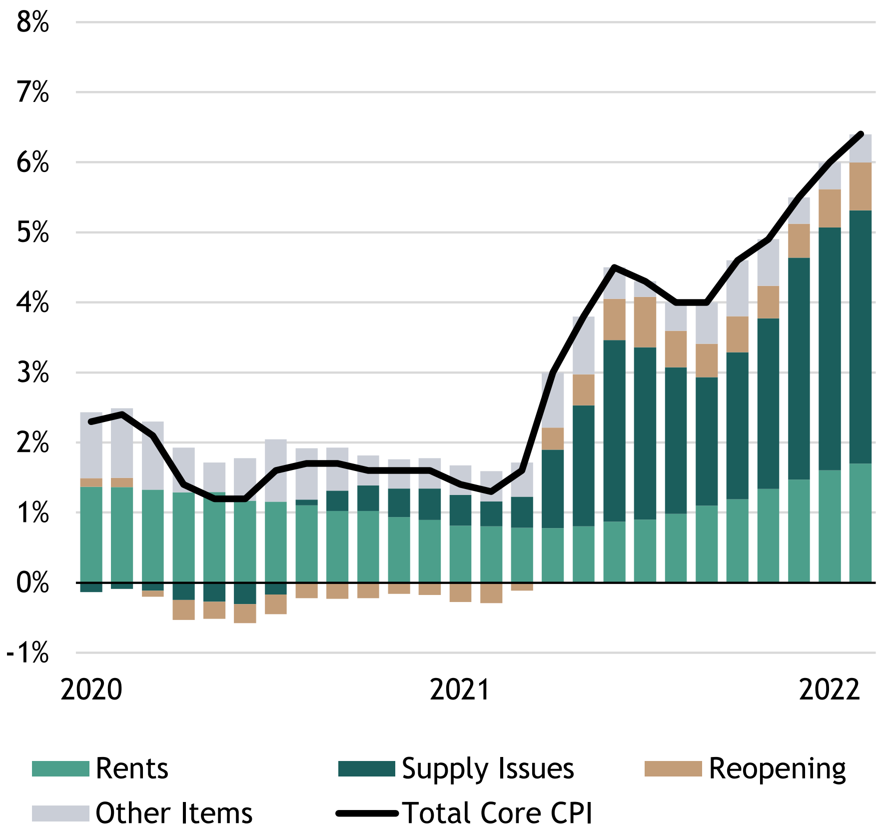
Source: Blackstone Investment Strategy calculations, Bureau of Labor Statistics, and Haver Analytics, as of February 28, 2022.

(1) "Supply Issues" category items are those affected by supply disruptions and bottlenecks, and comprise new and used vehicles, motor vehicle parts and equipment, and household furnishings and supplies (including electronics). "Reopening" category items are those affected by the reopening of the economy, and comprise apparel; recreation goods (excluding electronics); recreation services; hotels/motels; and airline fares. "Rents" category comprises rent of primary residence and owners' equivalent rent.

Persistent inflation is less likely in the EU vs. the US, given vastly different drivers of inflation in both places

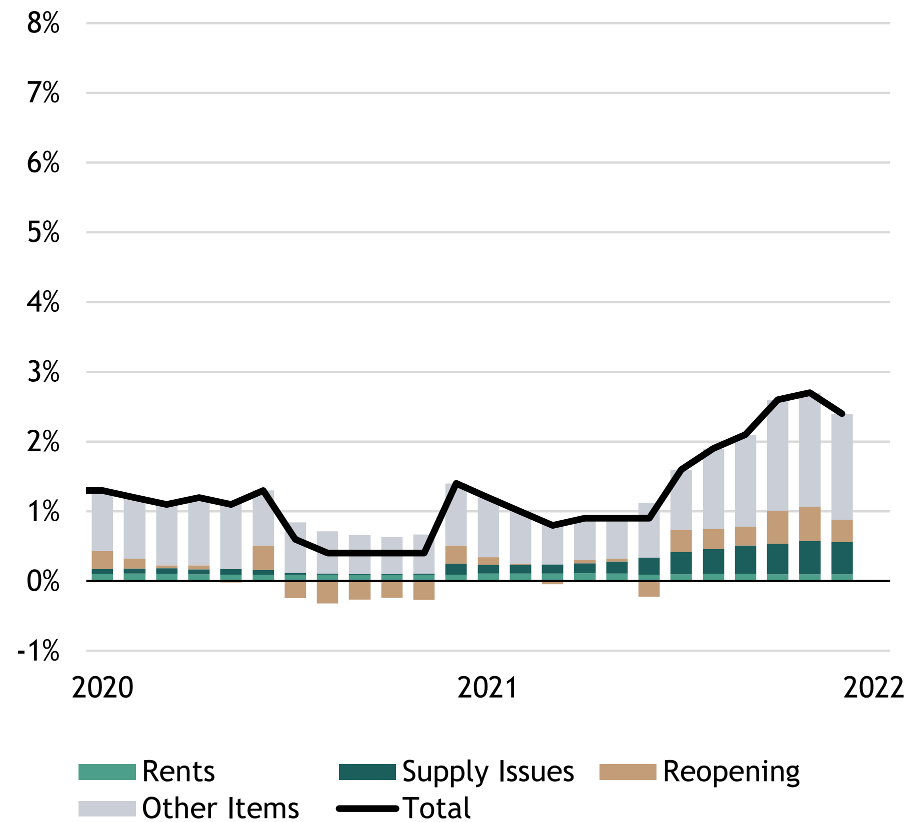
US Core CPI Contributors[(1)]

(YoY change)



EU Core CPI Contributors[(1)]

(YoY change)



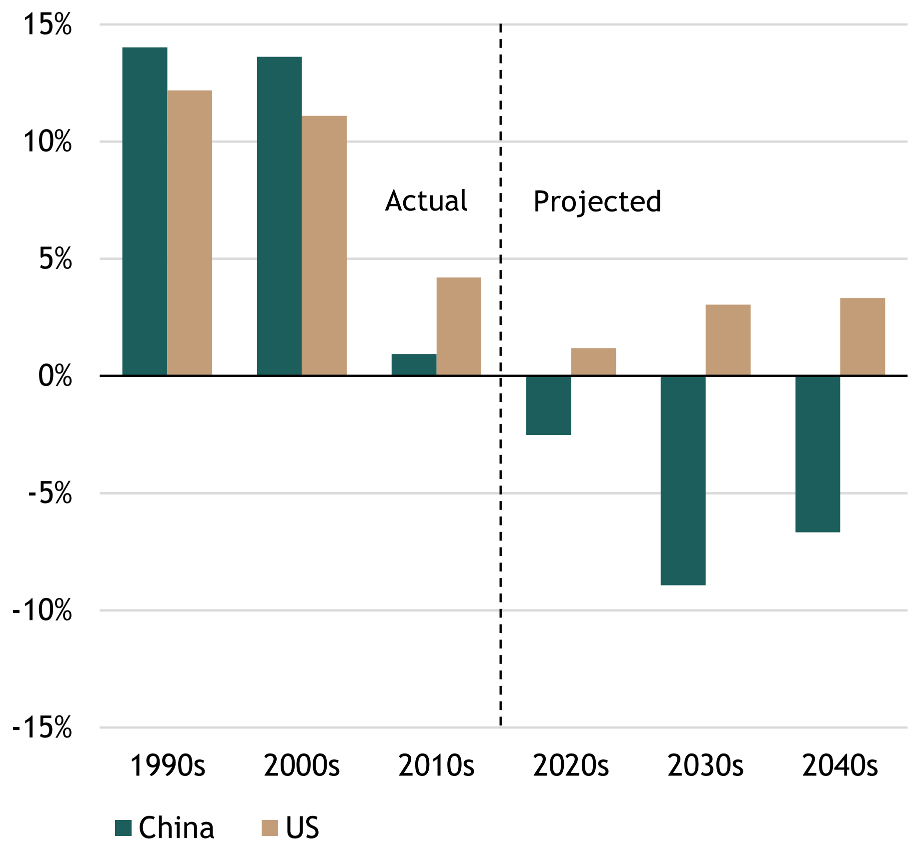
Source: Blackstone Investment Strategy calculations, ECB, Bureau of Labor Statistics, Eurostat and Haver Analytics, as of January 31, 2022.

(1) "Supply Issues" category items are those affected by supply disruptions and bottlenecks, and comprise new motor cars, second-hand motor cars, spare parts and accessories for personal transport equipment, and household furnishings and equipment (including electronics). "Reopening" category items are those affected by the reopening of the economy, and comprise clothing and footwear; recreation and culture; recreation services; hotels/motels; and domestic and international flight prices. "Rents category" comprises actual rents paid by tenants – and for the United States also imputed rents for owner-occupied housing.

China's demographics are set to age significantly over coming decades, reducing ability to export disinflation

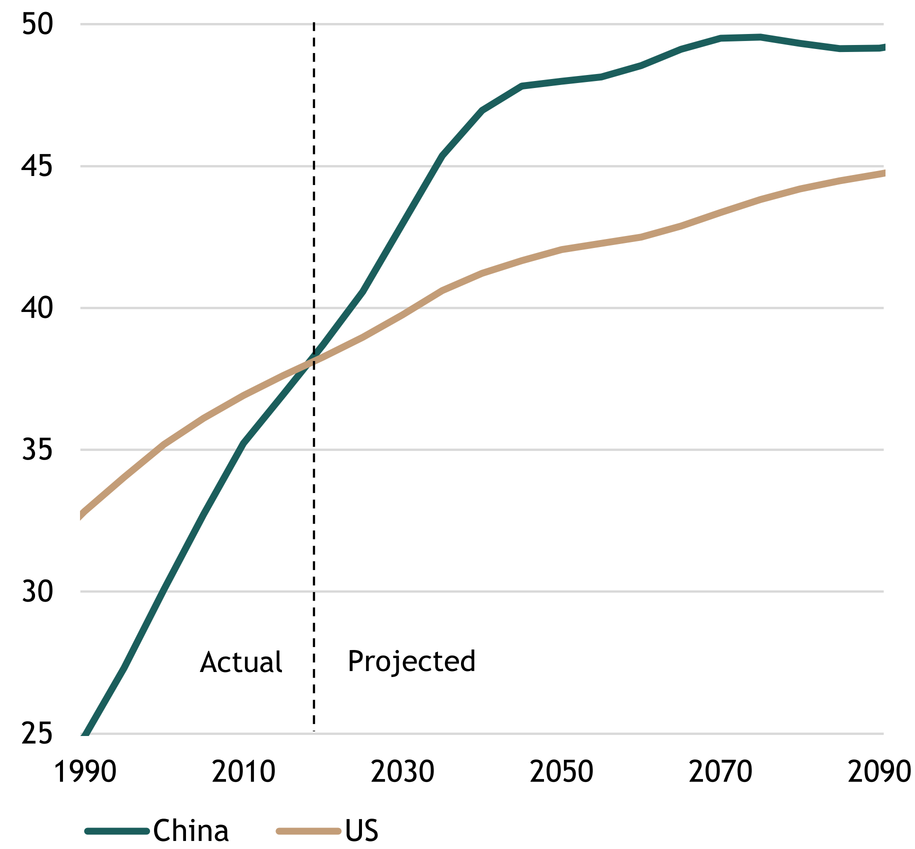
Change in Working Age Population

(ages 15-64)



Old-Age Dependency Ratio

(ratio of population aged 65+ per 100 people aged 20-64)

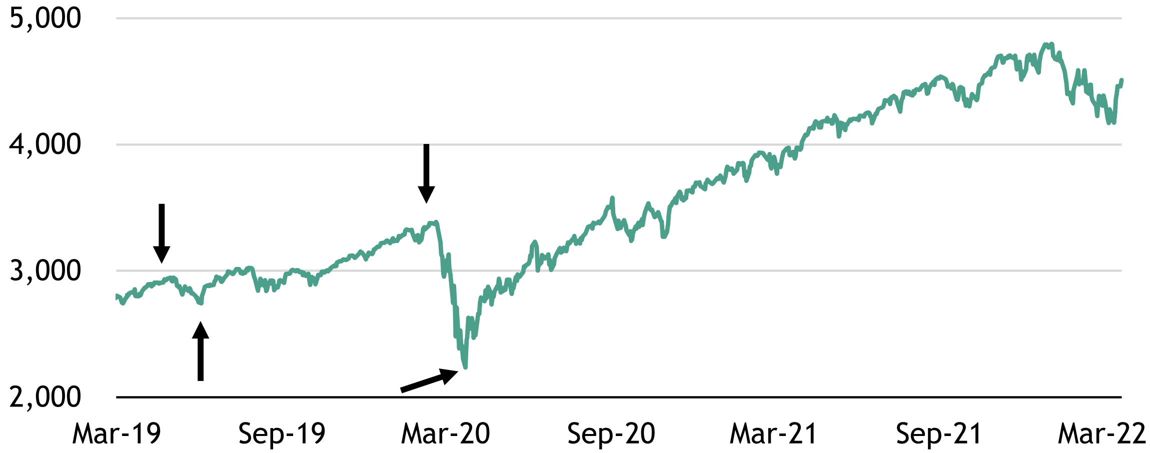


Source: Blackstone Investment Strategy calculations, Macrobond, and the United Nations World Population Prospects (2019), as of December 31, 2019. Note: All data are based on the UN's "medium variant" scenario, which corresponds to the median of several thousand projected trajectories of specific demographic components.

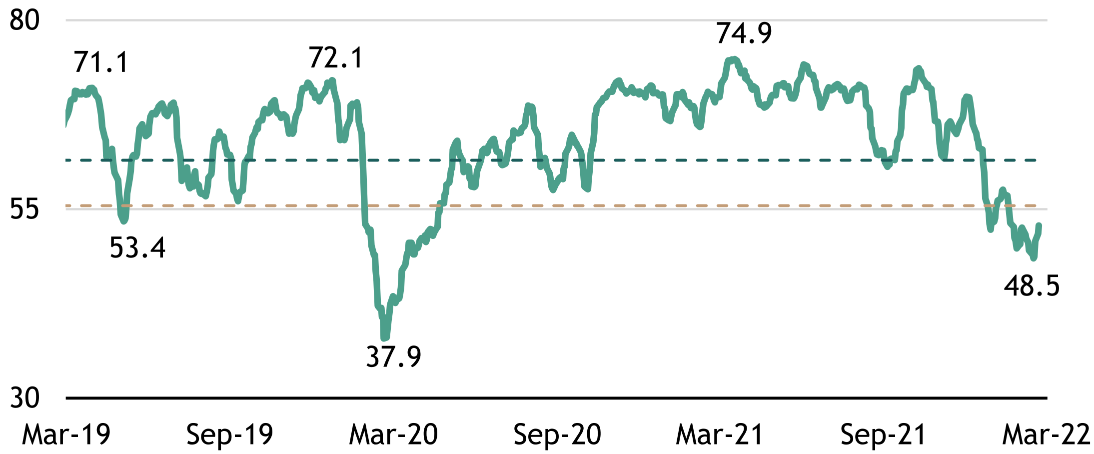
V. Markets Climbing a Wall of Worry

Market sentiment is currently extremely pessimistic

S&P 500 Composite Index



NDR Crowd Sentiment Poll



S&P 500 Index Performance(1)

Full History: 12/1/1995 – 3/22/2021

NDR Crowd Sentiment Poll is:	% Gain / Annum	% of Time
Above 66.0	-0.4%	28%
57.0 – 66.0 from Above	2.0%	18%
57.0 – 66.0 from Below	21.5%	19%
Below 57.0	11.9%	34%
Buy / Hold = 8.2% Gain / Annum		

Historical average value of Crowd Sentiment Poll at:(2)

- Optimistic extremes (down arrows) = 68.8
- Pessimistic extremes (up arrows) = 46.8
- Average spread between extremes = 22.1

Extremes generated when sentiment reading:(3)

- Rises above 61.5 = Extreme Optimism
- Declines below 55.5 = Extreme Pessimism

Source: Ned Davis Research, as of March 22, 2022.
(1) Totals may sum to >100 due to rounding.
(2) Arrows represent extremes in optimism and pessimism. They do not represent buy and sell signals and can only be known for certain (and added to the chart) in hindsight.
(3) Sentiment must reverse by 10 percentage points to signal an extreme, in addition to reaching the above extreme levels.

Dividend discount model shows implied S&P 500 price levels at various levels of earnings and risk-free rates

S&P 500 Dividend Discount Model[1]

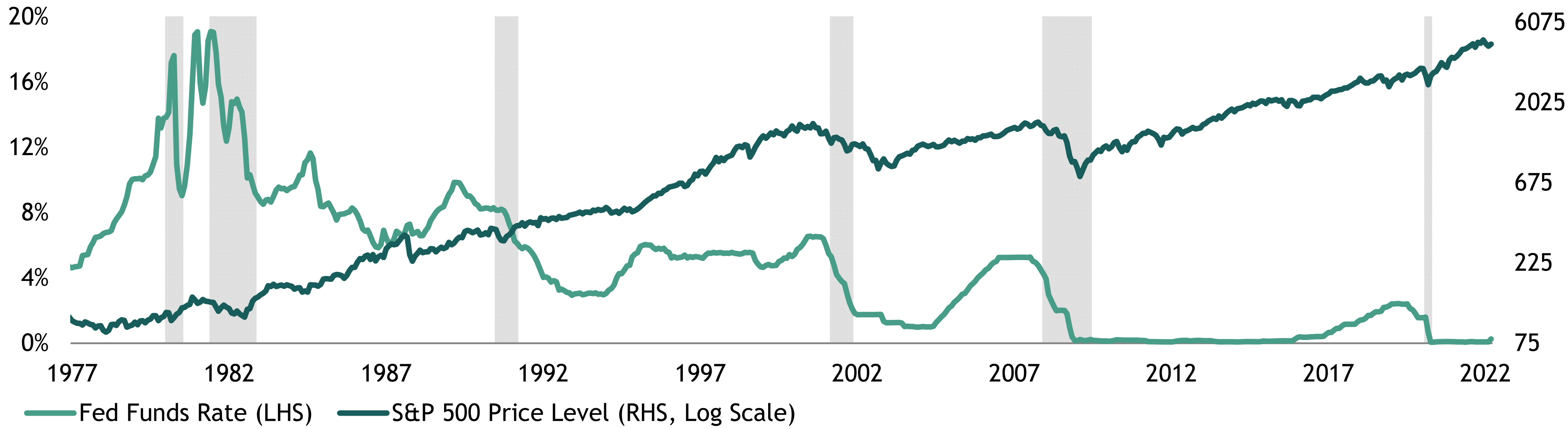
Trailing Twelve-Month EPS	10-Year Treasury Yield										
	1.25%	1.50%	1.75%	2.00%	2.25%	2.50%	2.75%	3.00%	3.25%	3.50%	3.75%
$208	24,216	12,108	8,072	6,054	4,843	4,036	3,459	3,027	2,691	2,422	2,201
$210	24,449	12,224	8,150	6,112	4,890	4,075	3,493	3,056	2,717	2,445	2,223
$213	24,798	12,399	8,266	6,200	4,960	4,133	3,543	3,100	2,755	2,480	2,254
$216	25,147	12,574	8,382	6,287	5,029	4,191	3,592	3,143	2,794	2,515	2,286
$219	25,497	12,748	8,499	6,374	5,099	4,249	3,642	3,187	2,833	2,550	2,318
$222	25,846	12,923	8,615	6,461	5,169	4,308	3,692	3,231	2,872	2,585	2,350
$225	26,195	13,098	8,732	6,549	5,239	4,366	3,742	3,274	2,911	2,620	2,381
$228	26,544	13,272	8,848	6,636	5,309	4,424	3,792	3,318	2,949	2,654	2,413
$231	26,894	13,447	8,965	6,723	5,379	4,482	3,842	3,362	2,988	2,689	2,445
$234	27,243	13,622	9,081	6,811	5,449	4,541	3,892	3,405	3,027	2,724	2,477
$237	27,592	13,796	9,197	6,898	5,518	4,599	3,942	3,449	3,066	2,759	2,508
$240	27,942	13,971	9,314	6,985	5,588	4,657	3,992	3,493	3,105	2,794	2,540
$243	28,291	14,145	9,430	7,073	5,658	4,715	4,042	3,536	3,143	2,829	2,572
$246	28,640	14,320	9,547	7,160	5,728	4,773	4,091	3,580	3,182	2,864	2,604
$249	28,989	14,495	9,663	7,247	5,798	4,832	4,141	3,624	3,221	2,899	2,635
$252	29,339	14,669	9,780	7,335	5,868	4,890	4,191	3,667	3,260	2,934	2,667

Source: Blackstone Investment Strategy, as of March 31, 2022.

(1) Assumes starting S&P 500 Earnings Per Share (EPS) of $208, and that EPS start the period increasing / decreasing to level indicated in first column, before increasing / decreasing linearly over 2 years to a 4% nominal growth rate and remaining there in perpetuity. Further assumes dividend payout ratio remains at prior year's level of 29% and equity risk premium is a constant 3.0%.

After the first Fed rate hike, markets have an average cumulative return of 11% (7.2% annualized)

Fed Funds Rate and S&P 500 Levels



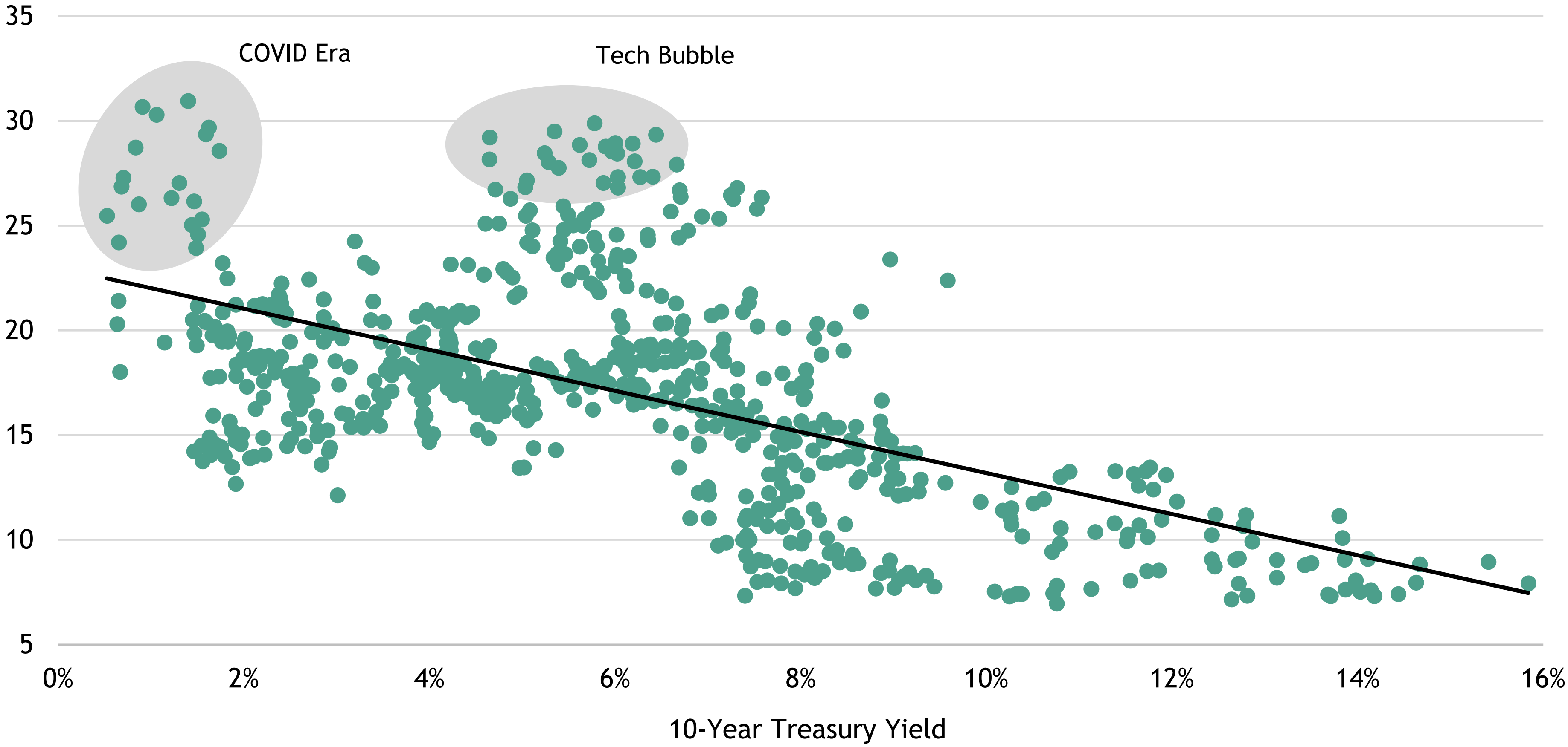
First Fed Hike	S&P Level	Last Fed Hike	S&P Level	Annualized Price Return	Stock Market Peaked	Recession Started
12/1/1976	102	3/3/1980	113	2.9%	2/13/1980	Feb-80
8/7/1980	123	5/8/1981	132	9.1%	11/28/1980	Aug-81
3/29/1988	260	2/24/1989	287	11.5%	7/16/1990	Aug-90
6/30/1999	1373	5/16/2000	1466	7.8%	3/24/2000	Apr-01
6/30/2004	1141	6/29/2006	1273	5.6%	10/9/2007	Jan-08
12/16/2015	2073	12/19/2018	2506	6.5%	2/19/2020	Feb-20
Average: Fed Hiking Cycles				**7.2%**		
Average: Full Time Period (1976 to 2018)				**7.9%**		

Source: Blackstone Investment Strategy and Bloomberg, as of February 28, 2022.

Higher 10-Year Treasury yields associated with lower equity multiples

S&P 500 P/E Ratio and 10-Year Treasury Yield

(P/E multiple)



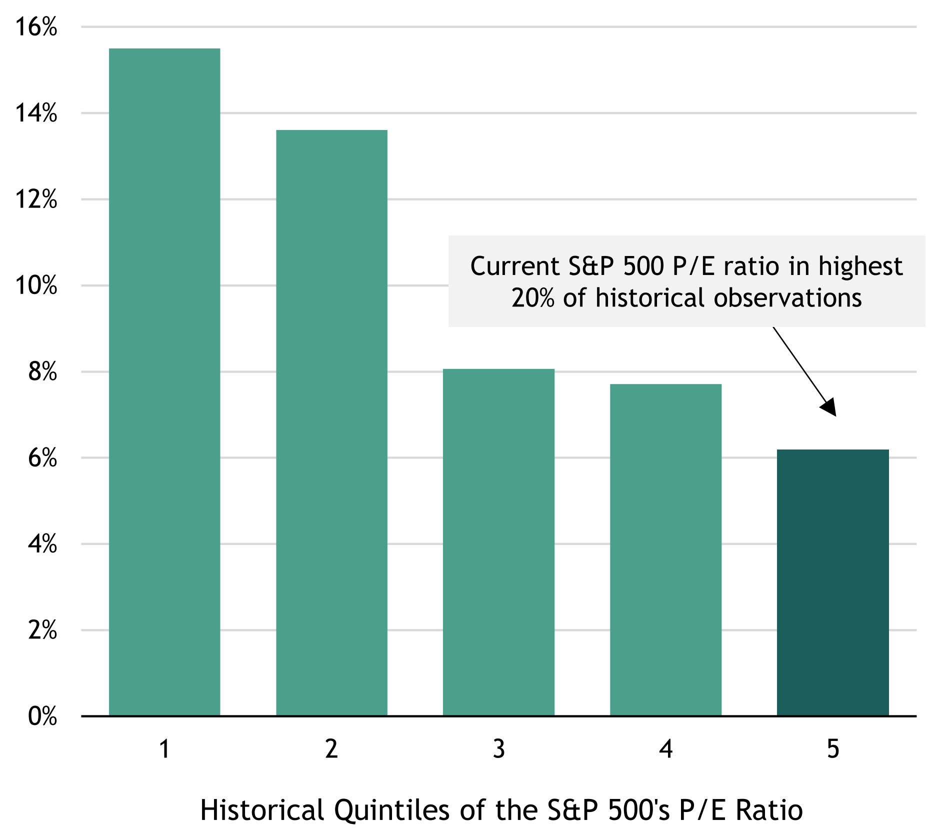
Source: Blackstone Investment Strategy and Bloomberg, as of February 28, 2022. “P/E Ratio” is the trailing 12-month price-to-earnings ratio. Historical sample size extends from January 1957 through February 2022.

Historically high valuations imply lower forward returns

Based on historical trends, current S&P 500 P/E of 23.6x implies forward 10-year CAGR of 5.5%.

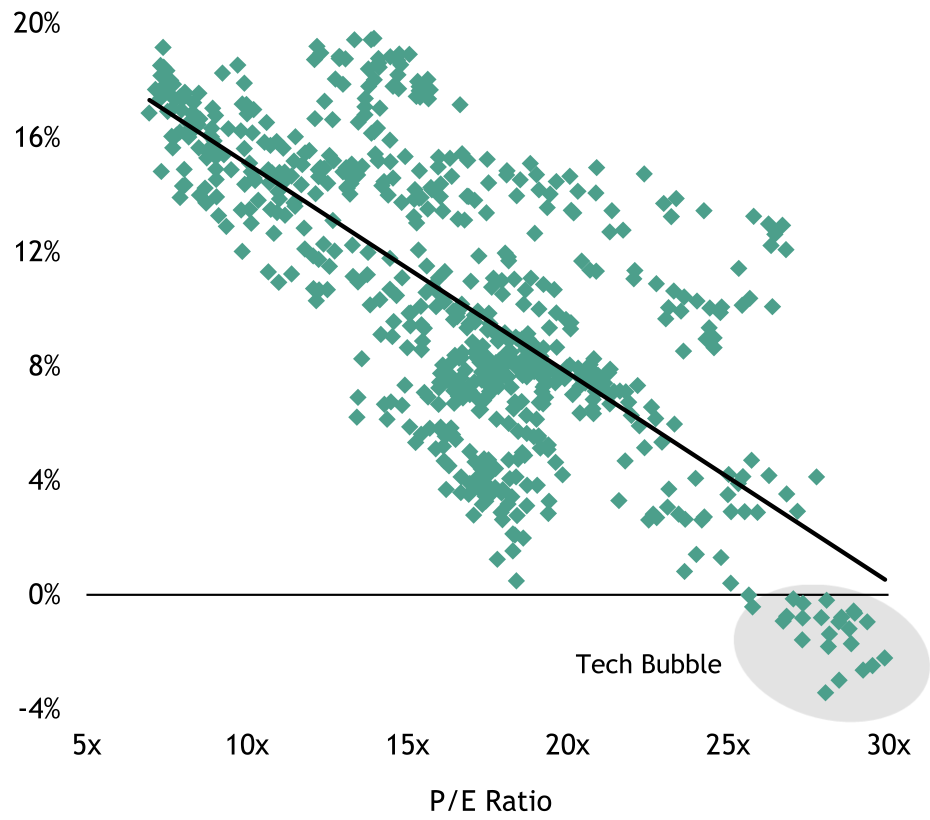
S&P 500 Forward 10-Year CAGR

(average by P/E quintile)



S&P 500 Forward 10-Year CAGR[1]

(by P/E ratio level)



Source: Blackstone Investment Strategy, Bloomberg, and Standard & Poor's. Historical analysis for the period January 1957 through February 2022, current P/E multiple as of March 31, 2022."Forward 10-Year CAGR" is computed using monthly total returns (gross of dividends). "P/E Ratio" is the trailing 12-month price-to-earnings ratio.

(1) Each data point represents the S&P 500's trailing 12-month price-to-earnings ratio for a given month and the index's corresponding forward ten-year CAGR.

Market value of global negative-yielding debt recently fell below $3 trillion, the lowest since 2015

Market Value of Global Negative-Yielding Debt

(US$ in trillions)

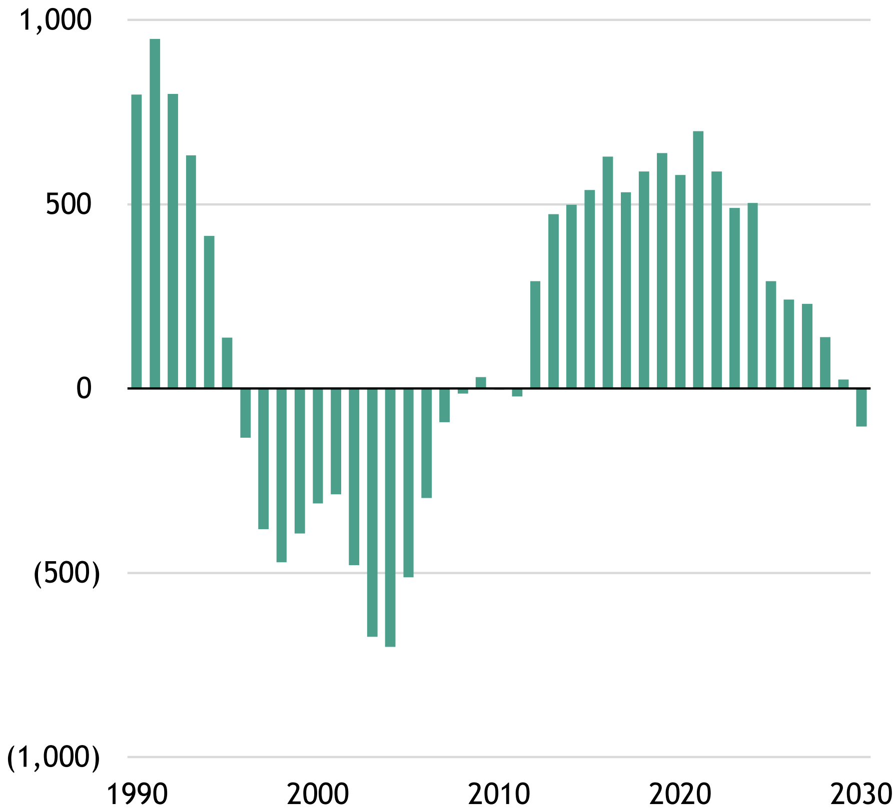
Source: Bloomberg, as of 3/4/22. Represents the market value of the Bloomberg Global Aggregate Negative Yielding Debt Index. Data are available on monthly frequency through 2016. From 2017 onward, represents 7-day moving average.

VI. Expecting Continued Strength in Housing Markets

Wave of millennials entering home-buying age, leaving parents' home should create strong demand for housing

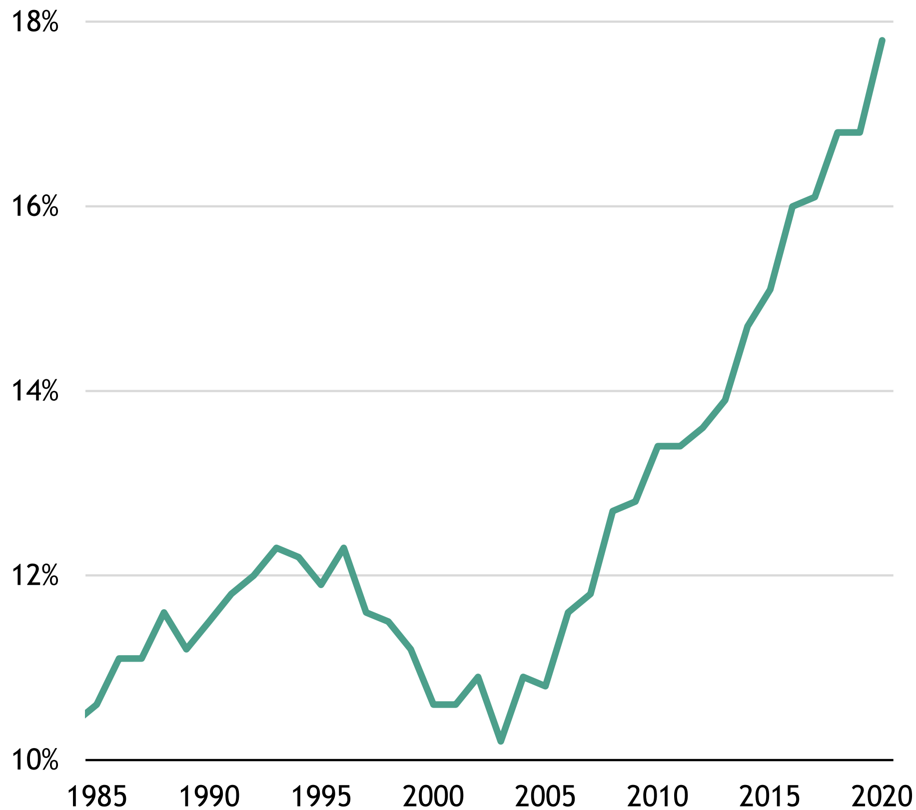
Annual Change in Number of US Residents Aged 30-39[1]

(in thousands)



Share of Young Adults Living with Parents[2]

(share of people aged 25-34 years old)

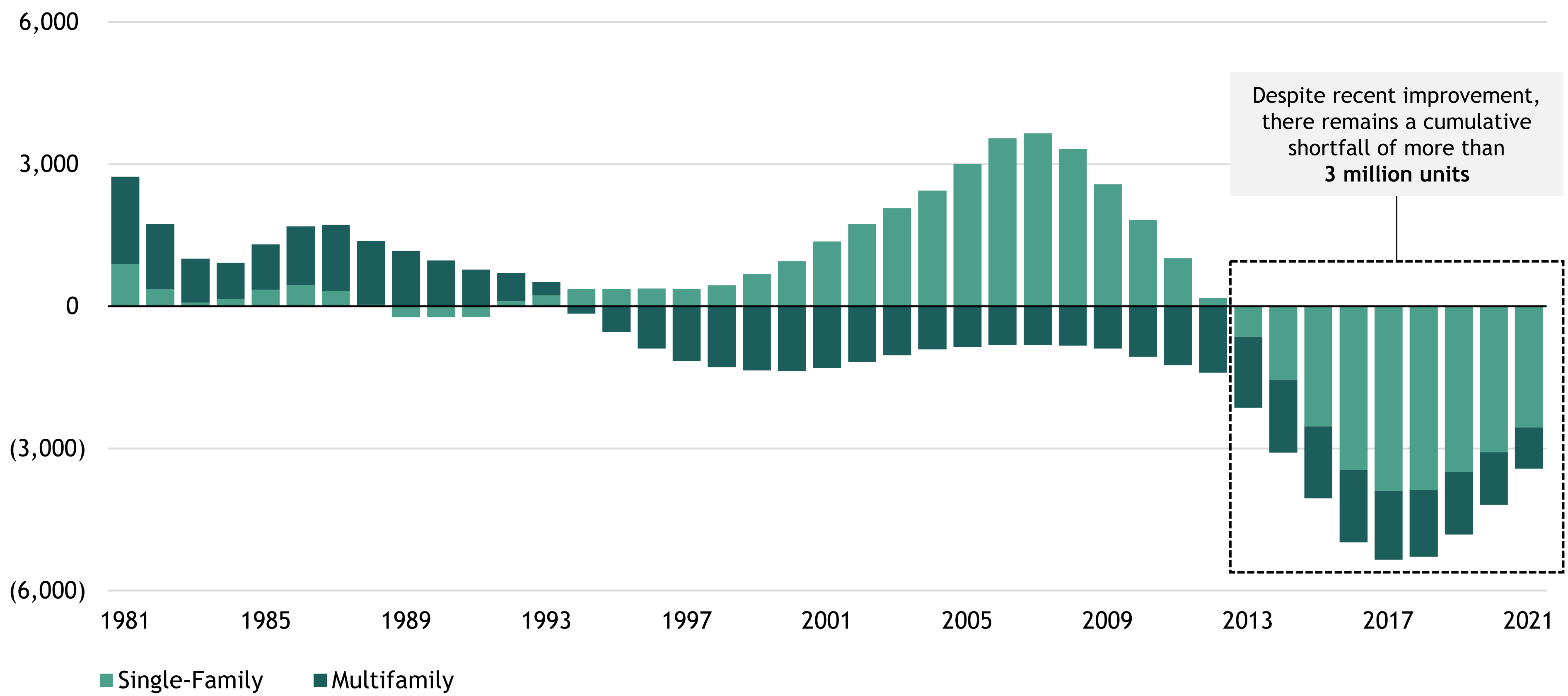


(1) Source: Blackstone Investment Strategy, Census Bureau projections, and Haver Analytics. Actual data as of 2017; data for 2018 and beyond represent Census Bureau projections.
(2) Source: Blackstone Investment Strategy, Census Bureau, and Haver Analytics, as of December 31, 2021.

Consistent underbuilding of new housing has led to a cumulative shortfall of more than 3M housing units

Surplus (Shortfall) of US Home Completions, Relative to Historical Average

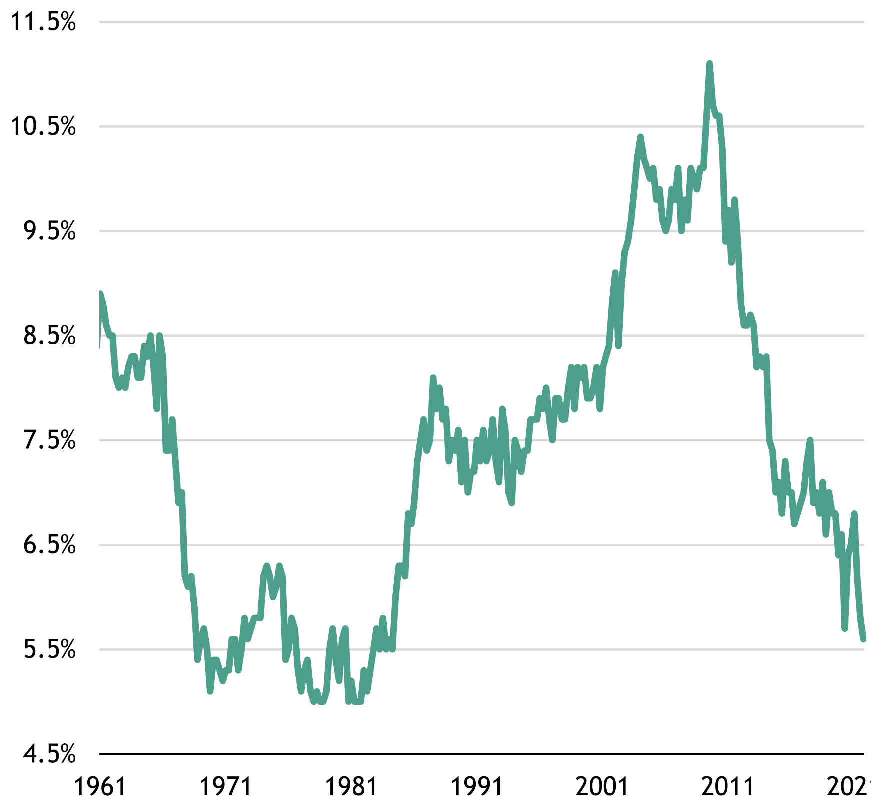
(thousands of units, rolling 10-year sum)



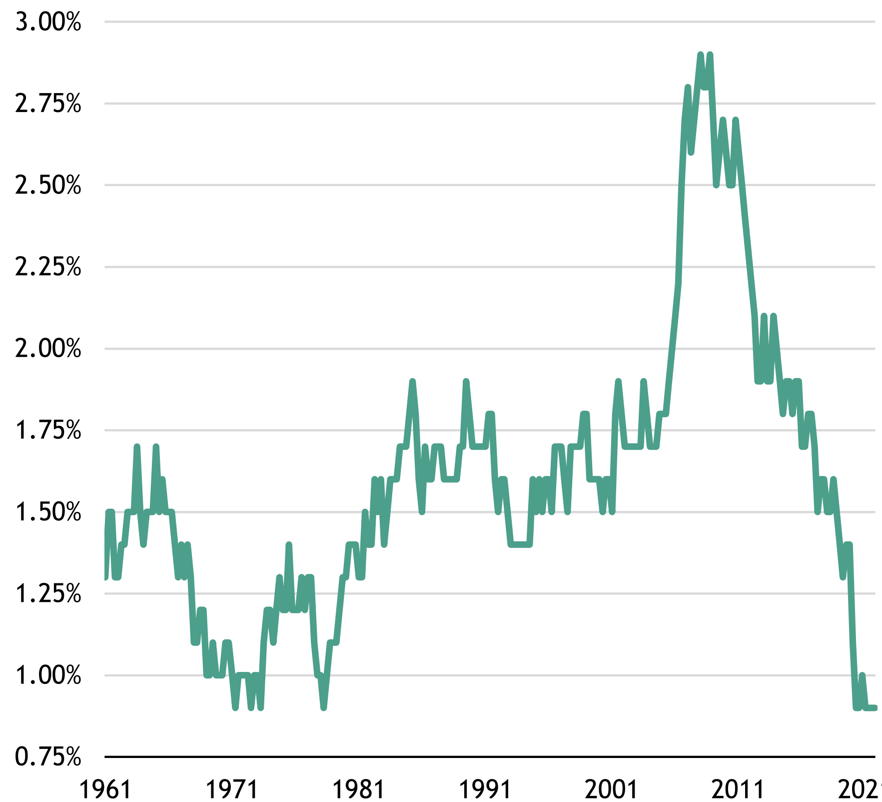
Source: Blackstone Investment Strategy calculations, US Census Bureau, US Department of Urban Housing and Development, as of December 31, 2021. "Home Completions" is the number of total new privately owned housing units completed in each calendar year, calculated as the average of monthly units completed at a seasonally adjusted annual rate. "Multiamily" housing units are defined as total less single-family. The "historical average" is the average of annual housing completions in each respective category from 1968 (earliest data available) to 2020.

Rental and homeowner vacancy rates are at historically low levels

Rental Vacancy Rate



Homeowner Vacancy Rate

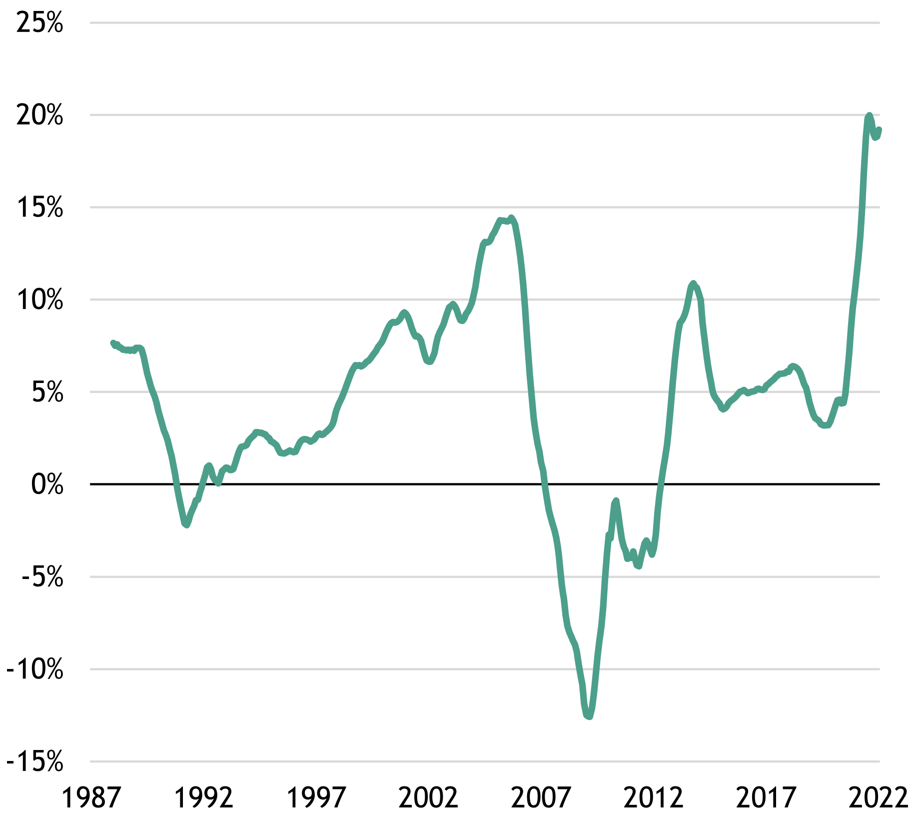


Source: Census Bureau and Macrobond, as of December 31, 2021.

Demographic tailwinds, strong consumer backdrop, and reduced supply have led to record gains in shelter prices

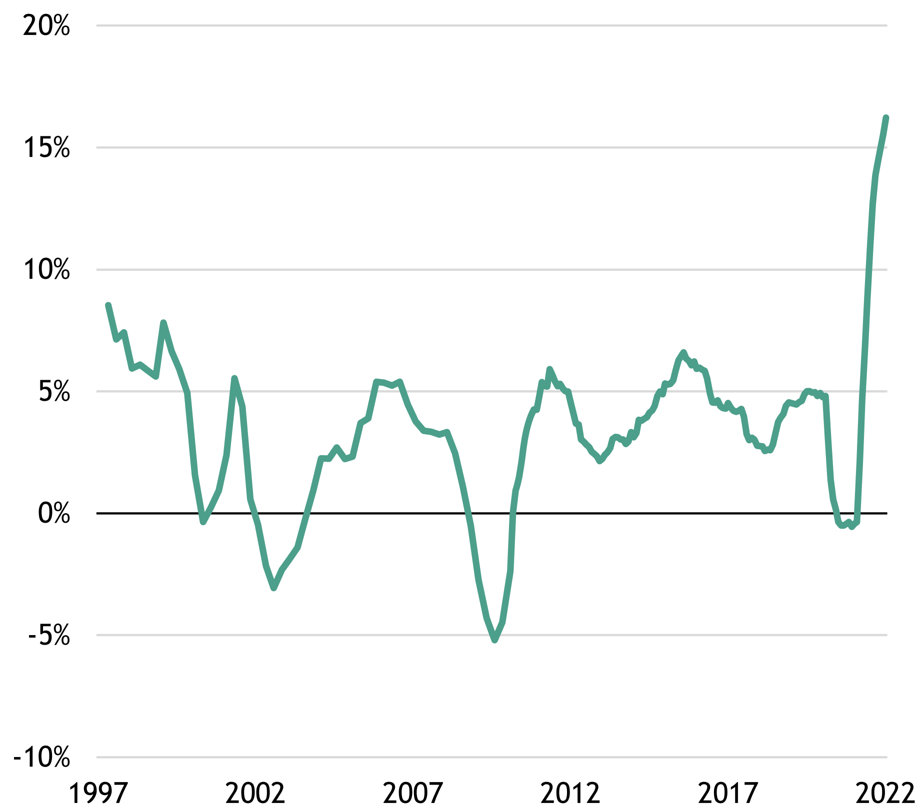
US National Home Price Index

(YoY % change)



US National Effective Rent

(YoY % change, rolling 13-month average)

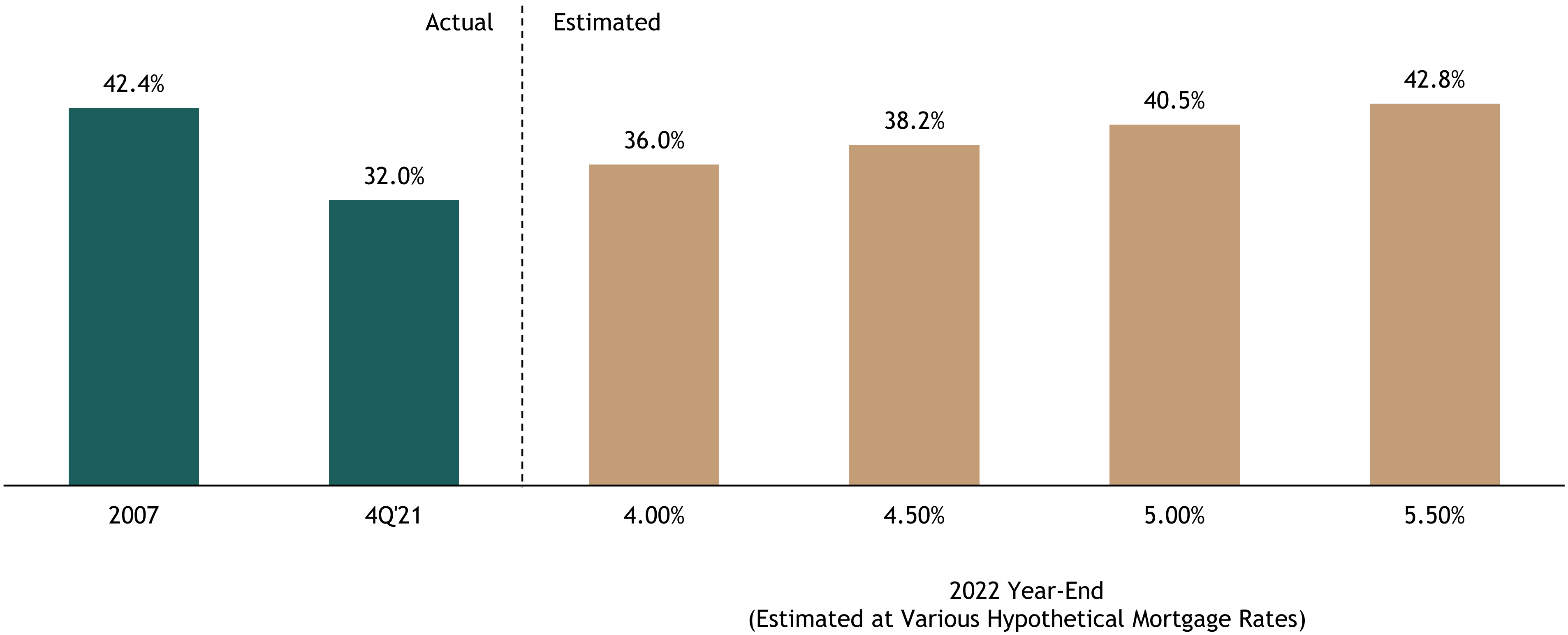


Source: Blackstone Investment Strategy, S&P 500 Dow Jones Indices and RealPage/Axiometrics, as of January 31, 2022 (home prices) and February 28, 2022 (rents). "National Home Price Index" represents the S&P/Case-Shiller US National Home Price Index. "National Effective Rent" shows year-over-year growth of national rents measured on a rolling 13-month basis; observations are quarterly from June 1997 through March 2010 and monthly from April 2010 onwards.

Despite record home prices strong personal earnings growth supports affordability at higher mortgage rates

Mortgage Affordability: Actual and Estimated at Various Hypothetical Mortgage Rates

(ratio of monthly mortgage payment to monthly personal earnings)



Source: Blackstone Investment Strategy calculations of BLS, Census, HUD and Freddie Mac data, as of January 31, 2022. Ratio calculated using average 30-year fixed mortgage rate, median sales price of US homes, and a proxy for average monthly personal earnings. Estimates assume consensus forecasts for home price / earnings growth.

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