

**Blackstone**

# Conviction despite Uncertainties

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**Conviction despite Uncertainties** Recent volatility amid strong inflation growth has caused some market watchers to fear that the specter of stagflation lurks among us. While we are concerned about the possibility of elevated inflation over the medium term, we caution against reading too much into volatile growth numbers. Just as many of last year’s data prints qualified as the “worst ever,” so many of the numbers this year are being heralded as the “best ever.” That can’t continue forever, nor should it be expected to. We maintain our conviction in this recovery’s durability, especially in the US, largely due to the historic strength of the American consumer.

**When Risks Seem to Multiply before Your Very Eyes** To be sure, concerning issues around the world seemingly propagate by the day, and we remain clear-eyed about several economic risks. Domestically, the US faces stubborn labor market tightness, worsening supply chain problems, and political brinkmanship around the debt ceiling. Globally, China’s recovery has slowed, commodity prices continue to soar, and countries around the world are printing surprisingly large inflation numbers. Each of these developments threatens the rapid, broad-based recovery that has unfolded over the past year. For some economies, recoveries will simply be delayed, and growth will be pushed forward. For others, lost growth might not be made up. But we think that, especially in the US, these uncertainties are more appropriately viewed as road bumps on the path to a full economic recovery, rather than treacherous detours.

**Outlooks Are Diverging** Among developed markets, inflation has been higher than expected, though this is mostly attributable to transitory factors. Over the next several years, there is likely to be global divergence. In the US, we are more convinced than consensus that inflation will stay higher for longer. But we also think that the economy has entered a self-sustaining cycle and will achieve “escape velocity,” in stark contrast to the stagnant growth of the post-GFC era. As a result, we expect that the Federal Reserve will achieve its dual mandate, allowing it to wind down monetary stimulus and enabling rates to grind higher. Among emerging markets, the inflationary picture is mixed. In China, for example, consumer price growth remains relatively muted despite significant producer price increases. But the average inflationary trend in EMs has been higher, and central banks are reacting with aggressive rate hikes and withdrawal of liquidity. This represents a headwind for many developing economies, especially as commodity and food prices soar.

**A More Challenging Operating Environment** As supply chain chaos continues unabated, it’s clear that economies’ ability to import disinflation from China has been reduced. Persistent supply bottlenecks continue to worsen; we think these are unlikely to be resolved until the end of 2022 at the earliest, with many constraints lasting through 2023. In addition, a significant and growing number of companies cite the inability to find qualified labor as their top concern and are raising wages as a result. Despite this, profit margins have continued to expand as many companies have successfully pushed higher input and labor costs onto consumers. While firms will attempt to continue this pass-through, it’s clear that supply challenges are starting to take their toll, with several big companies missing recent earnings estimates. We think that the overall operating environment will likely become more complicated over the next 1-2 years. But it’s not all bad: businesses’ capital expenditures are increasing as firms seek to increase capacity and the efficiency of existing labor forces.

**Investment Considerations** We think it is critical that investors consider the risk factors discussed above. These include the potential for elevated inflation, higher interest rates, ongoing supply chain snags, and more challenging operating conditions. But the environment that we’ve described will also have significant opportunities. Assets that are tied to the real economy are likely to benefit from the strong recovery that we expect. Housing markets, one of the most significant drivers of real economic growth, should continue to perform well amid solid demand, historic undersupply, and favorable demographic tailwinds. There will be myriad opportunities for high-conviction investors to find creative ways to tap into historically strong consumer and business spending. The world remains full of uncertainty, and we may not have clarity on many of these risks for several quarters. But investors who refuse to give in to short-term market agita and take a long-term view of this recovery have the potential to be rewarded accordingly.

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

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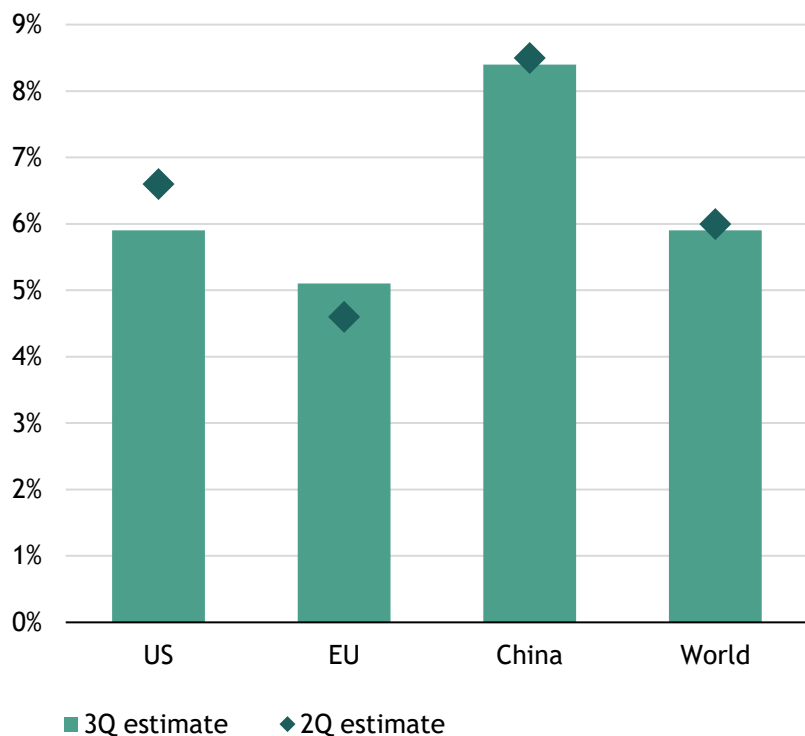
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# **I. Global Recovery**

# GDP growth estimates for 2021 revised down for US, up for EU; estimates for 2022 relatively stable

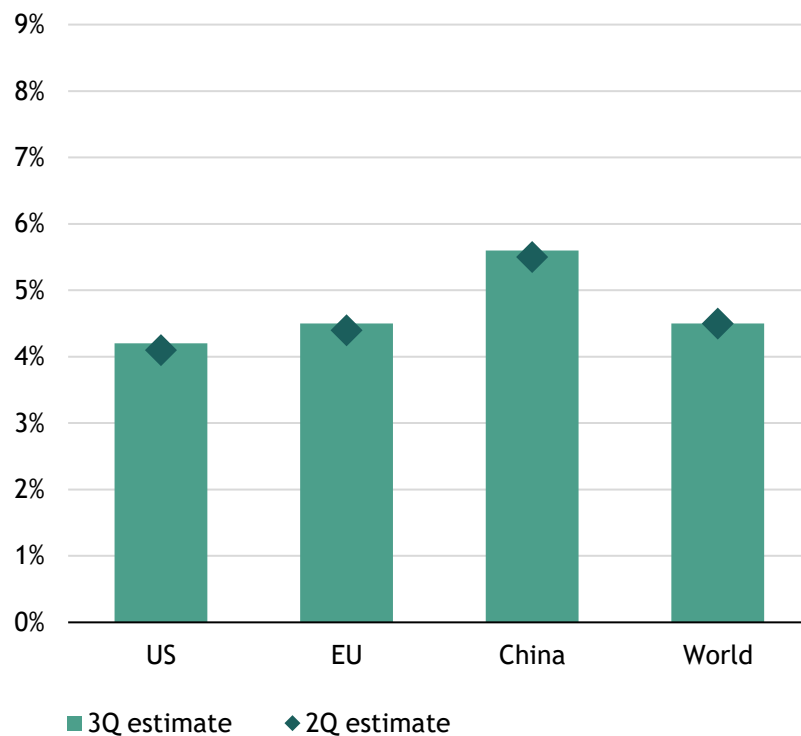
## 2021 Real GDP Growth Estimates

(YoY change)



## 2022 Real GDP Growth Estimates

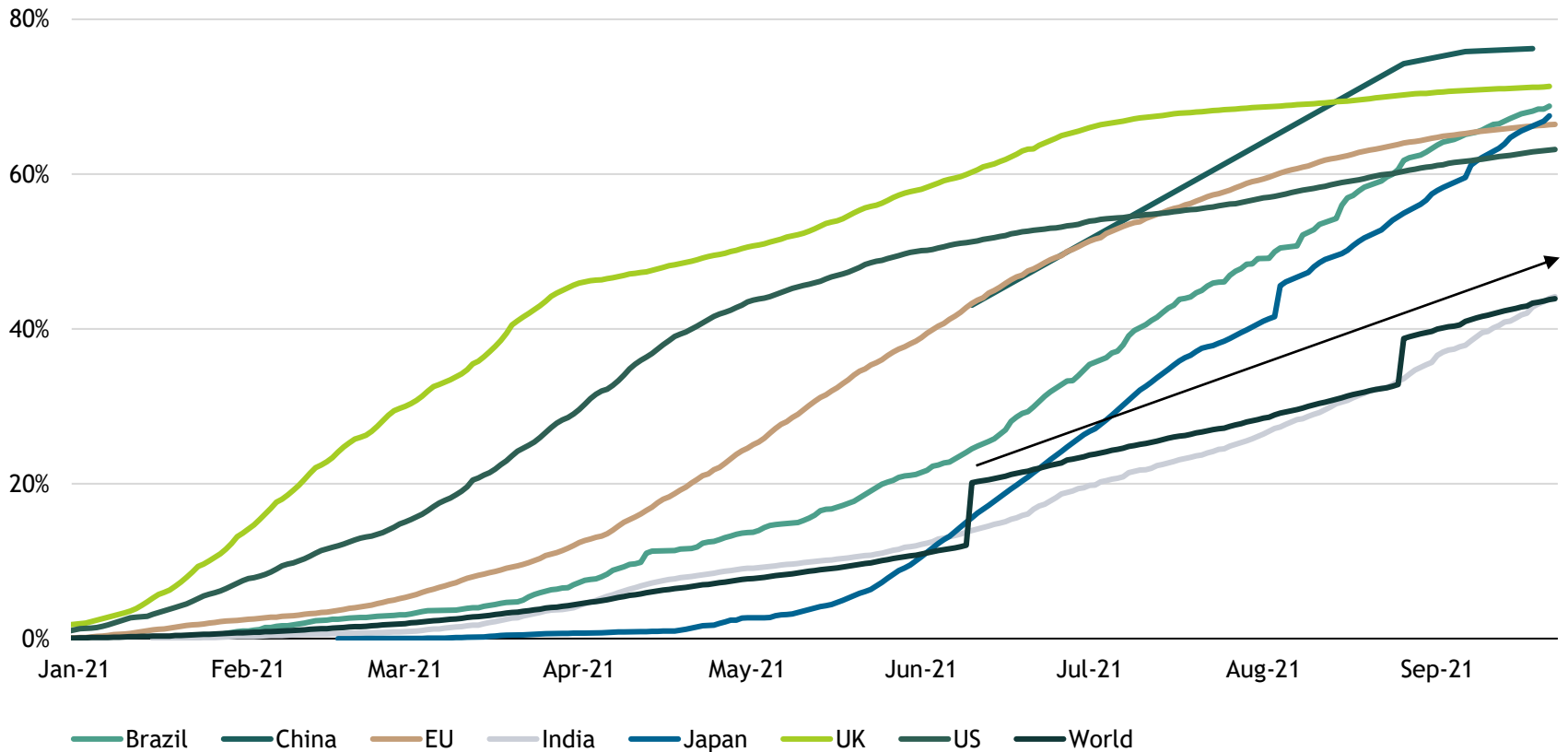
(YoY change)



Source: Bloomberg consensus forecasts. "2Q estimates" as of June 30, 2021, "3Q estimates" as of September 23, 2021.

# The world has made significant progress in vaccinations, more than doubling from ~20% in 2Q21 to 44% today

Share of Total Population Having Received at Least One COVID-19 Vaccine Dose

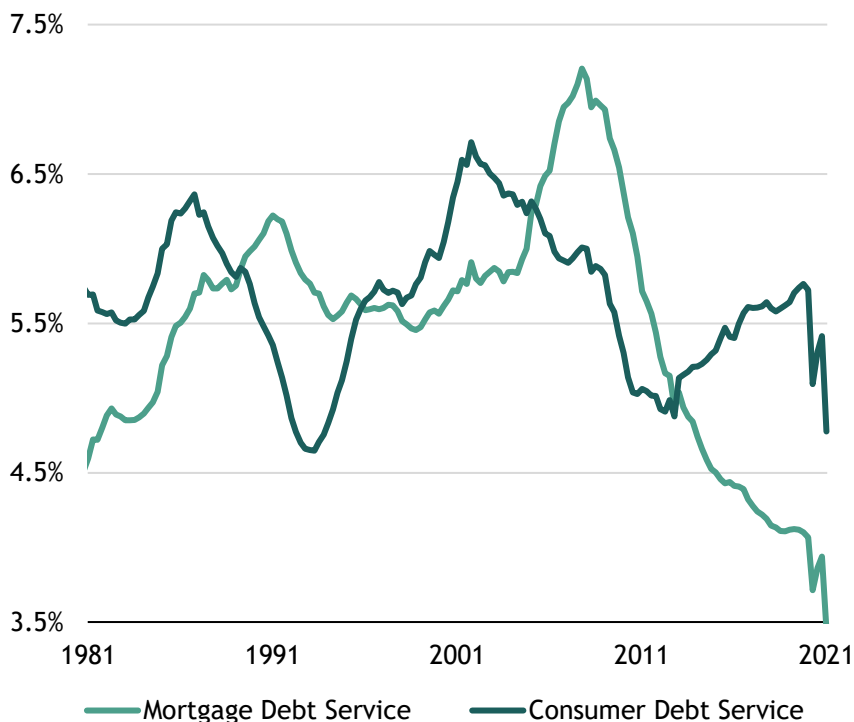


Source: Our World in Data, as of September 23, 2021.

# Our conviction in the strength of the US recovery is based on the historic strength of the US consumer

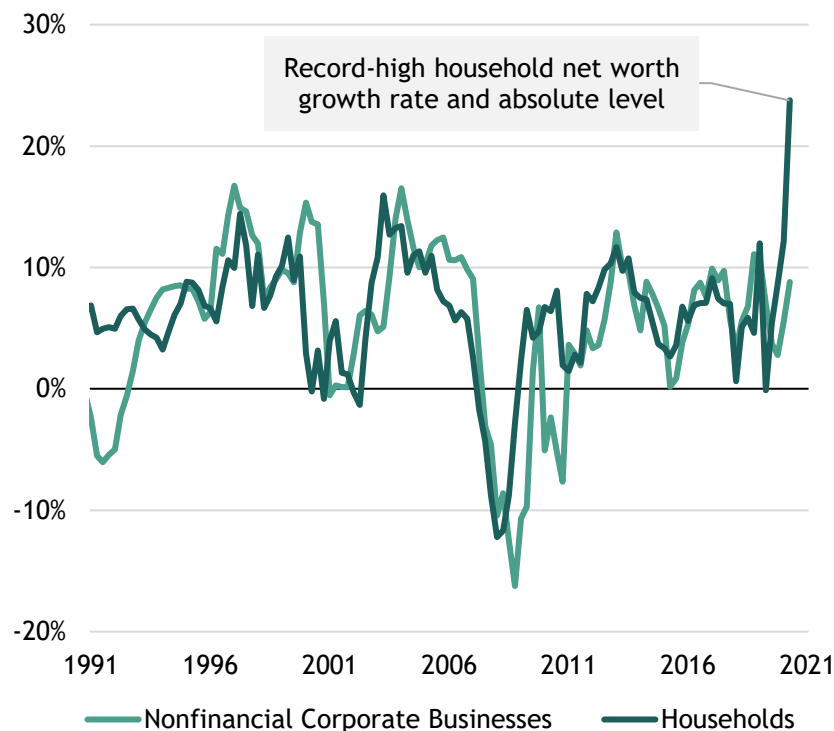
## Debt Service Payments<sup>(1)</sup>

(percentage of disposable personal income, seasonally adjusted)



## Net Worth Growth Rates

(YoY change)



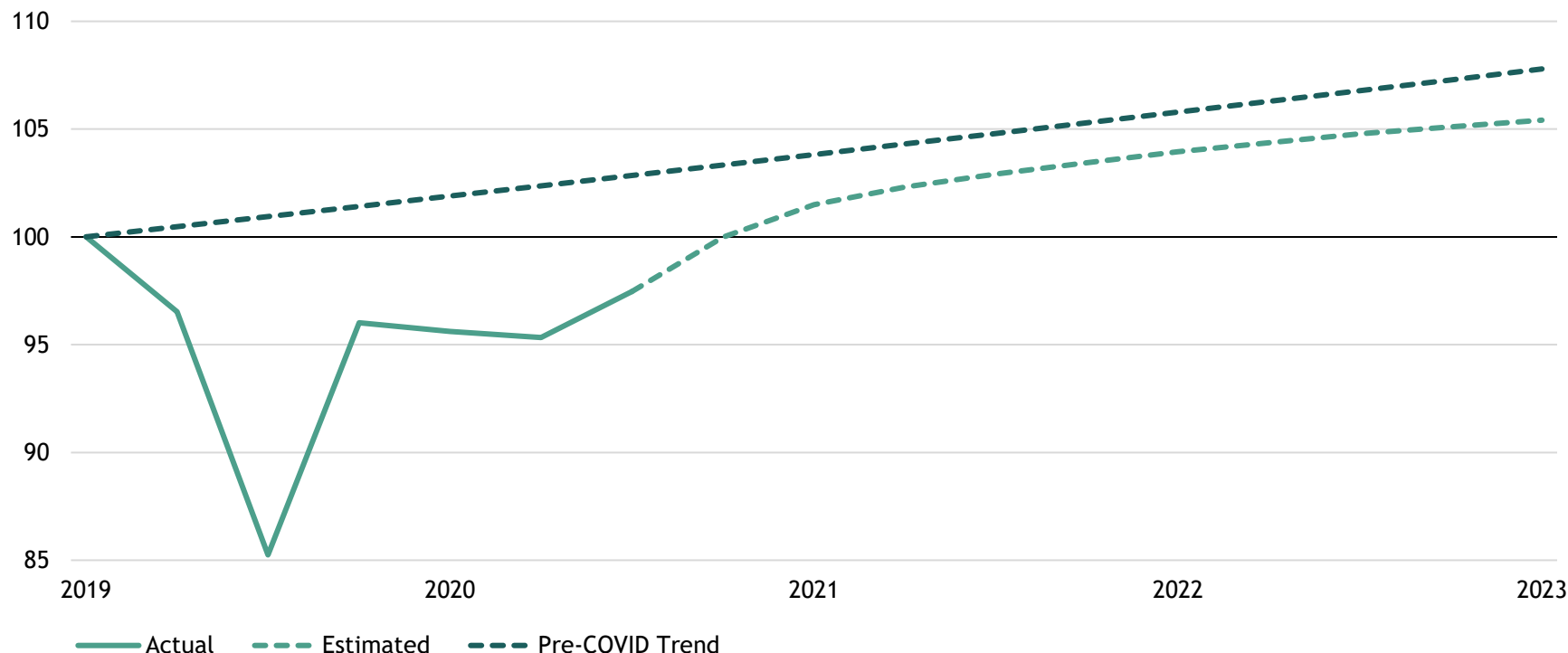
Source: Blackstone Investment Strategy, Federal Reserve Board, and Haver Analytics, as of March 31, 2021. Data available on a one-quarter lag.

(1) "Mortgage Debt Service" represents total quarterly required mortgage payments divided by total quarterly disposable personal income. "Consumer Debt Service" represents total quarterly scheduled consumer debt payments divided by total quarterly disposable personal income.

# Eurozone GDP estimated to return to pre-COVID levels by 4Q'21, but remain below pre-COVID growth path

## Eurozone GDP Growth Paths

(indexed to 100 as of 12/31/19)



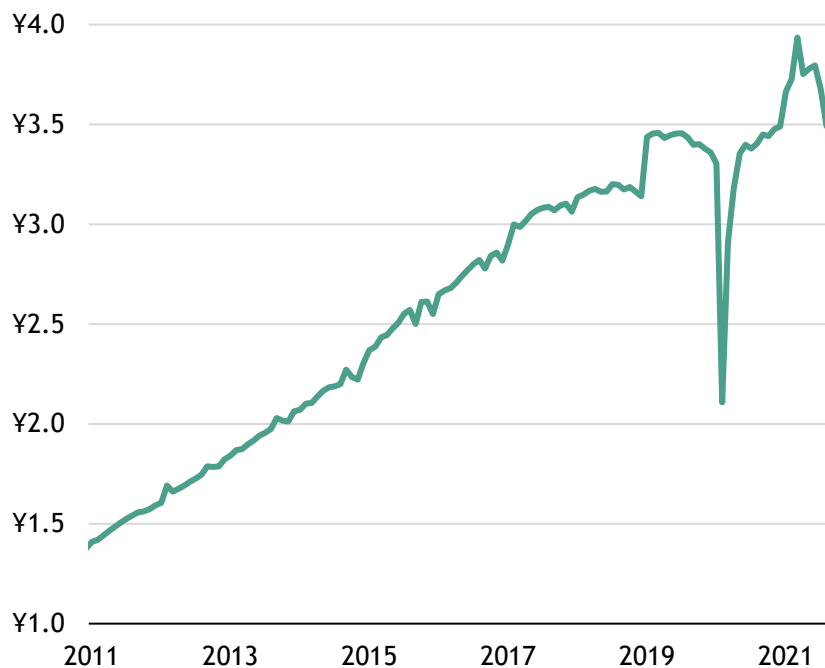
Source: Eurostat, Haver Analytics and Goldman Sachs Global Investment Research. GDP data are non-seasonally adjusted, as of June 30, 2021. GDP data beyond June 30, 2021 represent Goldman Sachs forecasts, as of September 14, 2021. "Pre-COVID Trend" represents the average growth for the Eurozone from 2015 through 2019.



# China's rapid economic growth has begun to slow, with regulatory and Evergrande concerns rattling markets

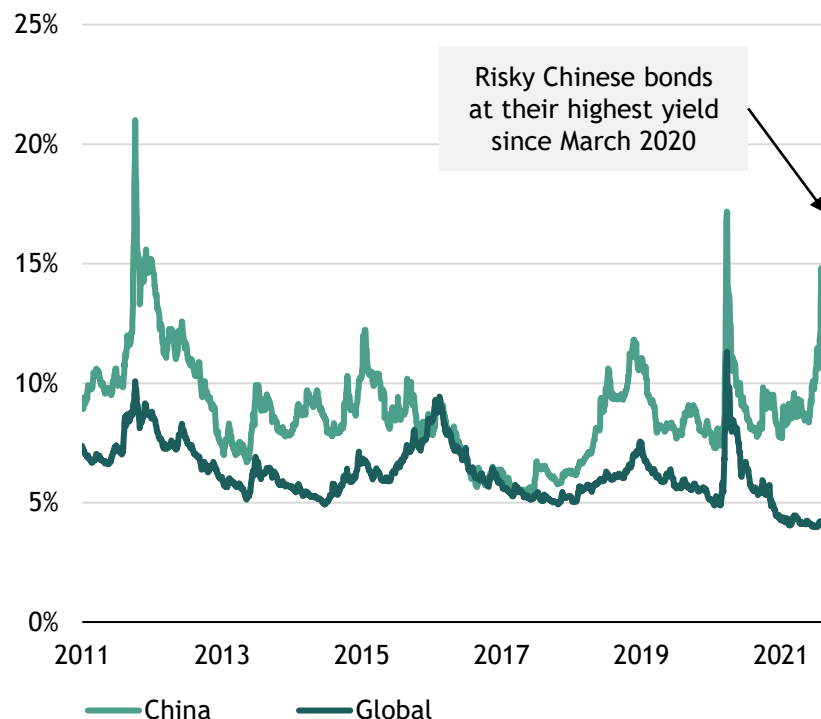
## Chinese Nominal Retail Sales<sup>(1)</sup>

(CNY in trillions, seasonally adjusted)



## High Yield Corporate Debt Indices<sup>(2)</sup>

(yield-to-worst)



(1) Source: Blackstone Investment Strategy, China National Bureau of Statistics, and Haver Analytics, as of August 31, 2021.

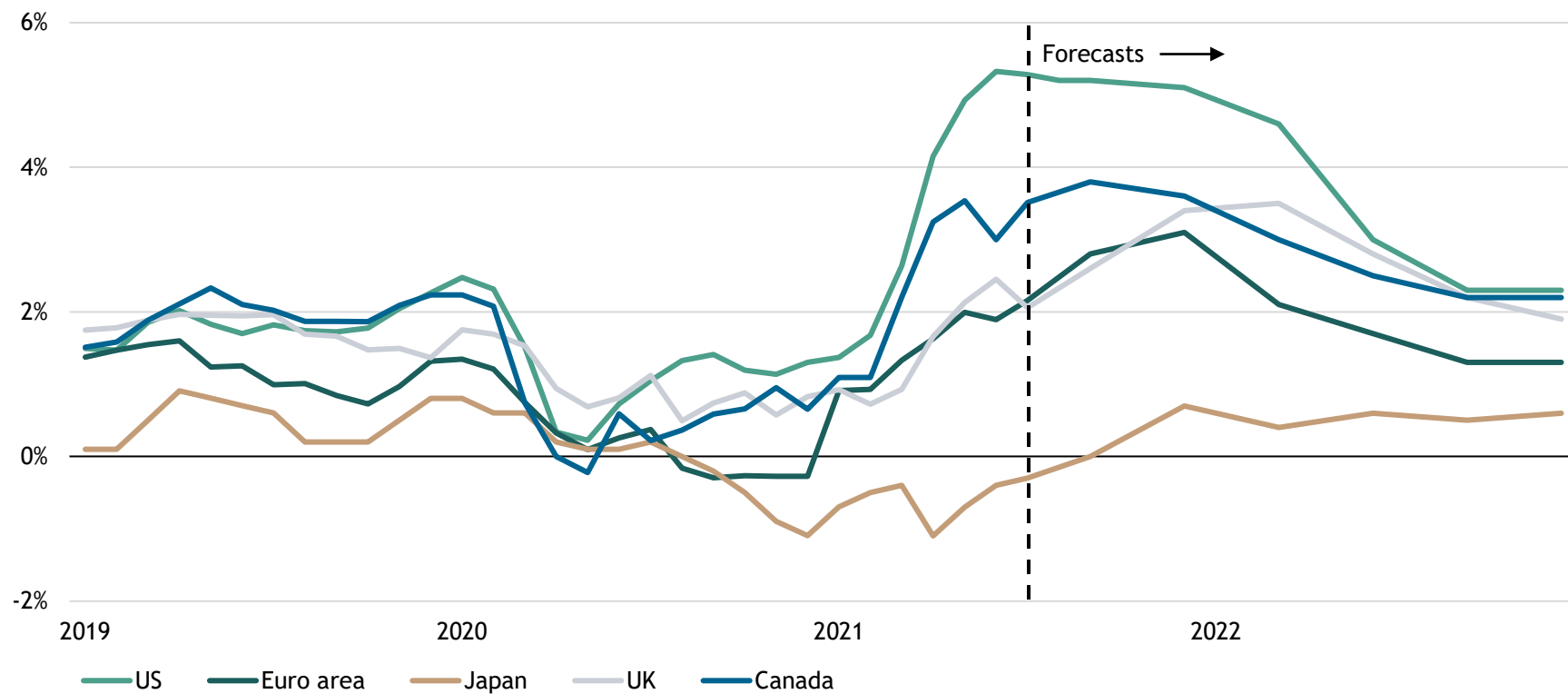
(2) Source: Blackstone Investment Strategy, ICE Bank of America, and Bloomberg, as of September 22, 2021.

# II. Inflation

# US leads major developed economies in inflation growth; estimated to converge towards the end of 2022

## Consumer Price Index Comparison

(YoY change)

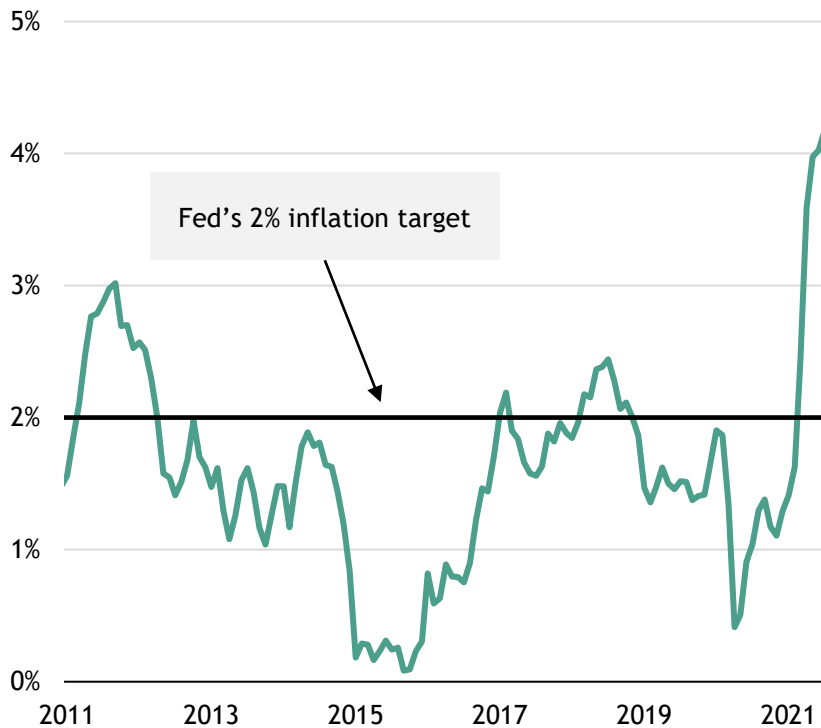


Source: National sources, Haver Analytics, and Bloomberg. Actual data as of July 31, 2021 for all countries (U.S. data as of August 31, 2021.) All data beyond these dates represent consensus economic forecasts.

# Fed argues that prices have not been high for long, but average inflation over the last 5 years is now above 2%

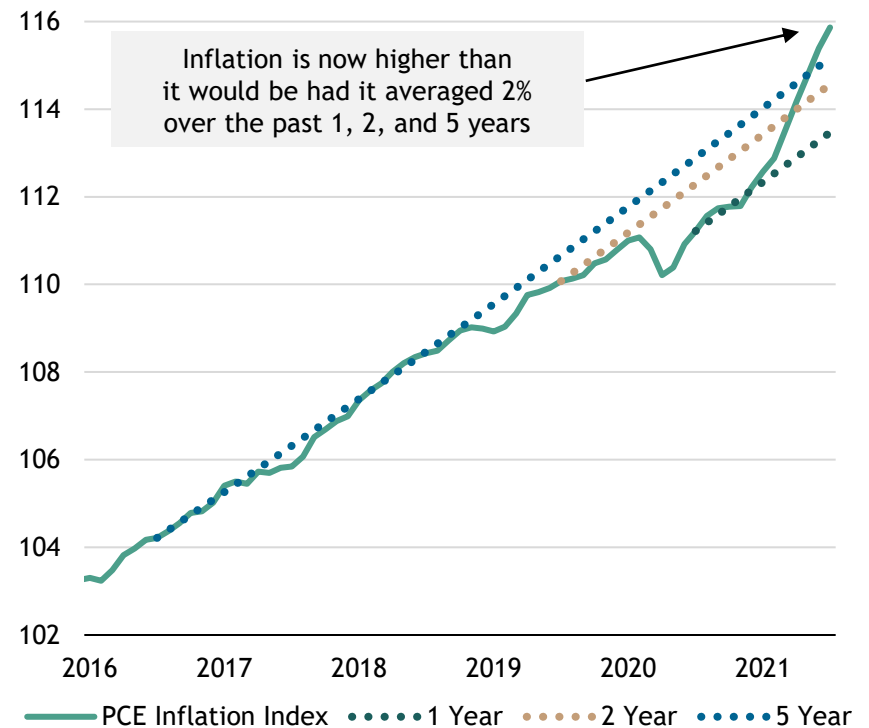
## PCE Inflation Growth<sup>(1)</sup>

(YoY change)



## PCE Inflation Index and Look-Back Periods<sup>(2)</sup>

(indexed to 100 as of 2012, seasonally adjusted)



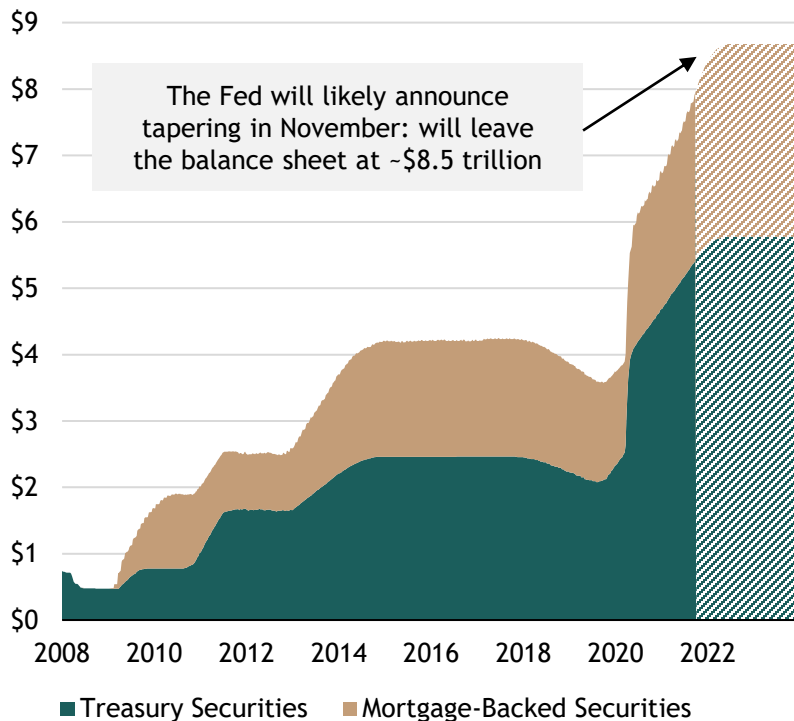
Source: Blackstone Investment Strategy and Bureau of Economic Analysis, as of July 31, 2021. "PCE" is Personal Consumption Expenditures.

(1) Dotted lines represent the hypothetical path of the PCE inflation index if the index's average annualized monthly percentage change over the stated period (i.e., over 1 year, 2 years, or 5 years) had equaled 2%.

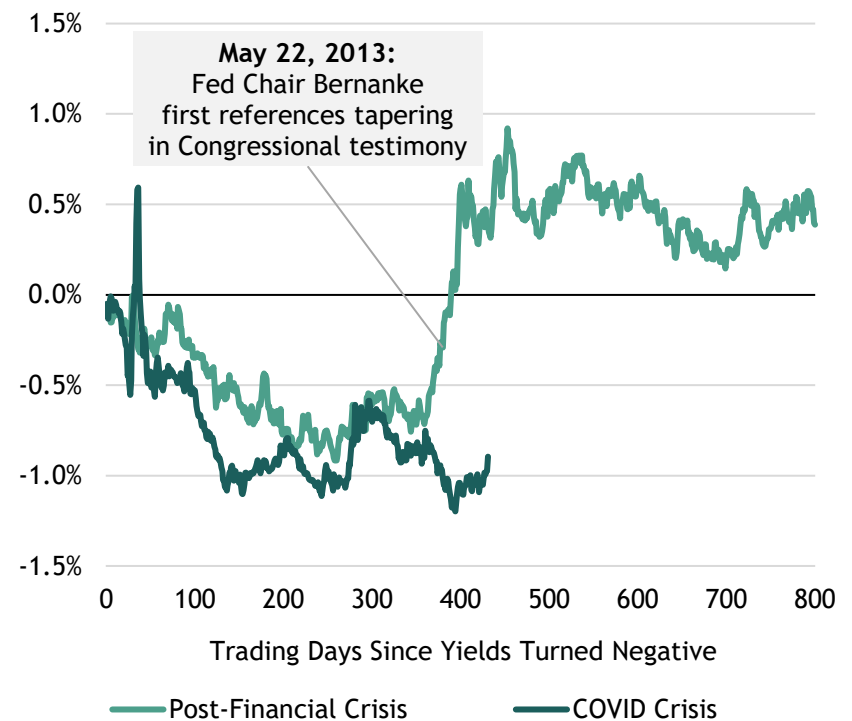
# Fed's balance sheet will still grow once tapering begins, but yields will likely begin to rise due to lower demand

## Federal Reserve Assets Held Outright<sup>(1)</sup>

(US\$ in trillions, Wednesday level)



## Periods with Negative 10-Year US TIPS Yields<sup>(2)</sup>

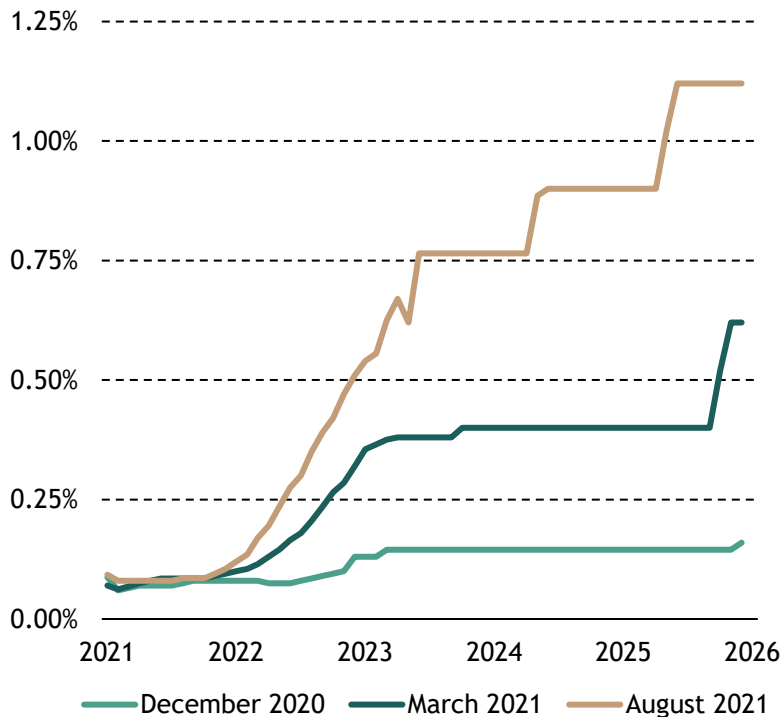


(1) Source: Blackstone Investment Strategy and Federal Reserve Board, as of September 22, 2021. Shaded area represents potential evolution of the Fed's asset holdings once tapering begins, and assumes a linear, proportional reduction in purchases of Treasury and mortgage-backed securities, to take effect at each scheduled FOMC meeting and to be completed by the June 2022 meeting.  
 (2) Source: Blackstone Investment Strategy and Bloomberg, as of September 23, 2021. TIPS are Treasury Inflation-Protected Securities.

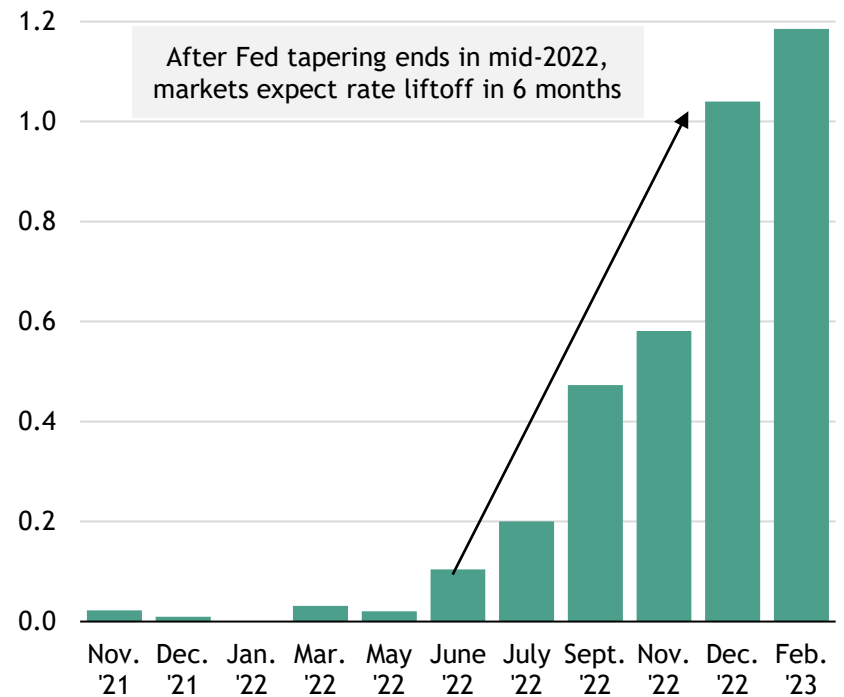
# Market's expected timeline for Fed rate hikes has accelerated significantly after high inflation prints

## Market Expectations of Fed Funds Rate<sup>(1)</sup>

(as of month-end)



## Number of Fed Rate Hikes Priced In By Each Scheduled FOMC Meeting<sup>(2)</sup>



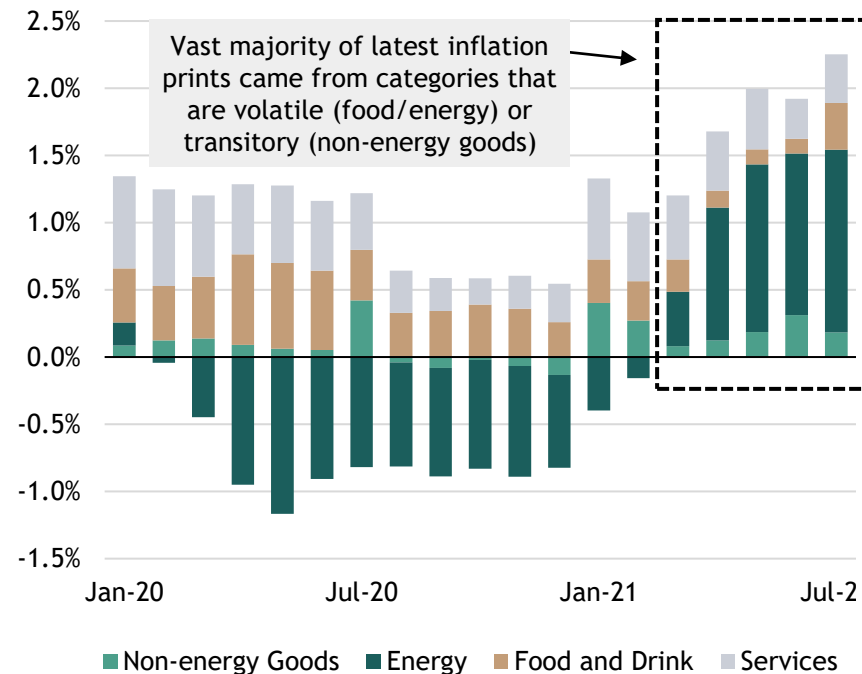
(1) Source: Blackstone Investment Strategy and Bloomberg, as of August 31, 2021. Market expectations are represented by the interest rates implied by prices on monthly fed funds futures contracts, as of month-end for each month shown.  
 (2) Source: Bloomberg, as of September 23, 2021. Based on interest rates implied by prices on monthly fed funds futures contracts.

# Inflation expectations remain below ECB's 2% target, with most inflation in volatile / transitory categories

## Long-Term Inflation Expectations<sup>(1)</sup>



## Eurozone Inflation (HICP) by Component<sup>(2)</sup> (YoY change)

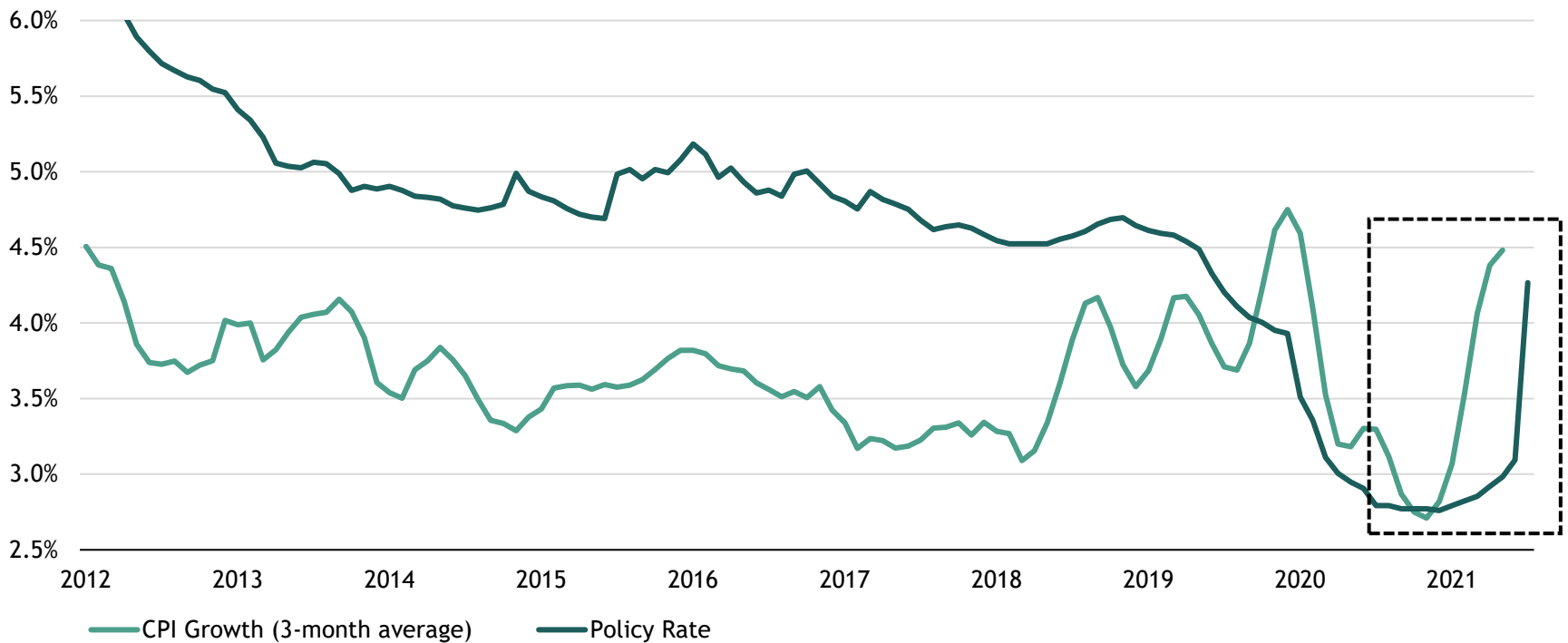


(1) ECB and Bloomberg. "5Y5Y Forward Inflation-Linked Securities" represents the 5-year, 5-year EUR inflation swap rate and is a common measure to look at the market's future inflation expectations, and is daily as of September 14, 2021. "Inflation Expectations 5 Years Forward" represents the European Central Bank's Survey of Professional Forecasters estimate for the average growth in the HICP measure of inflation over the next 5 years, and is quarterly, with the most recent survey as of July 23, 2021.  
 (2) Eurostat and Haver Analytics. Contribution data as of July 31, 2021. Inflation contribution is derived by weighting each component's change by its relative weighting in the overall HICP basket.

# Emerging market central banks are raising policy rates to combat rapid growth in inflation

## Emerging Market Inflation and Policy Rates

(average of selected emerging markets)<sup>(1)</sup>



Source: Haver Analytics, as of July 31, 2021 (CPI) and September 30, 2021 (policy rates).

(1) Represents the average of 52 emerging markets' CPI growth and a subset of 40 emerging markets' policy rates, for which monthly policy rate data are available.

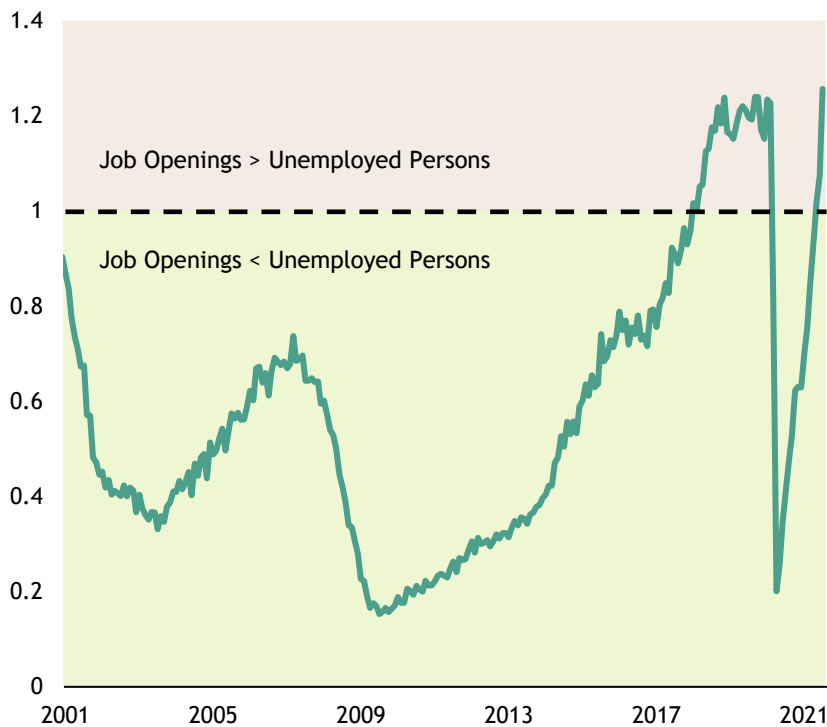


# III. Operating Environment

# Firms continue to report unprecedented difficulty finding workers as job openings remain at record highs

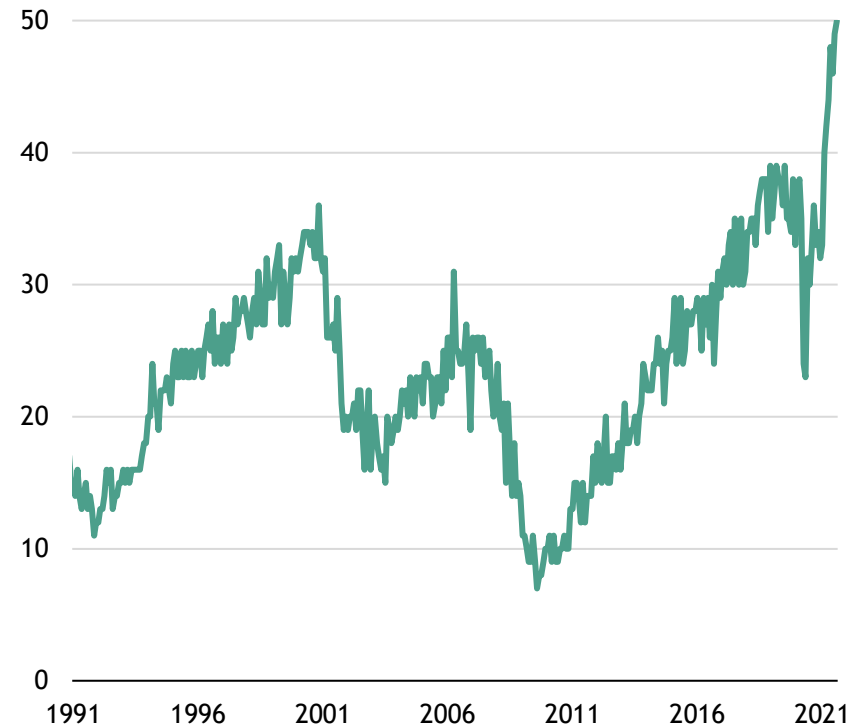
## Job Openings per Unemployed Person<sup>(1)</sup>

(seasonally adjusted)



## Small Business “Jobs Hard to Fill” Index<sup>(2)</sup>

(diffusion index, seasonally adjusted)

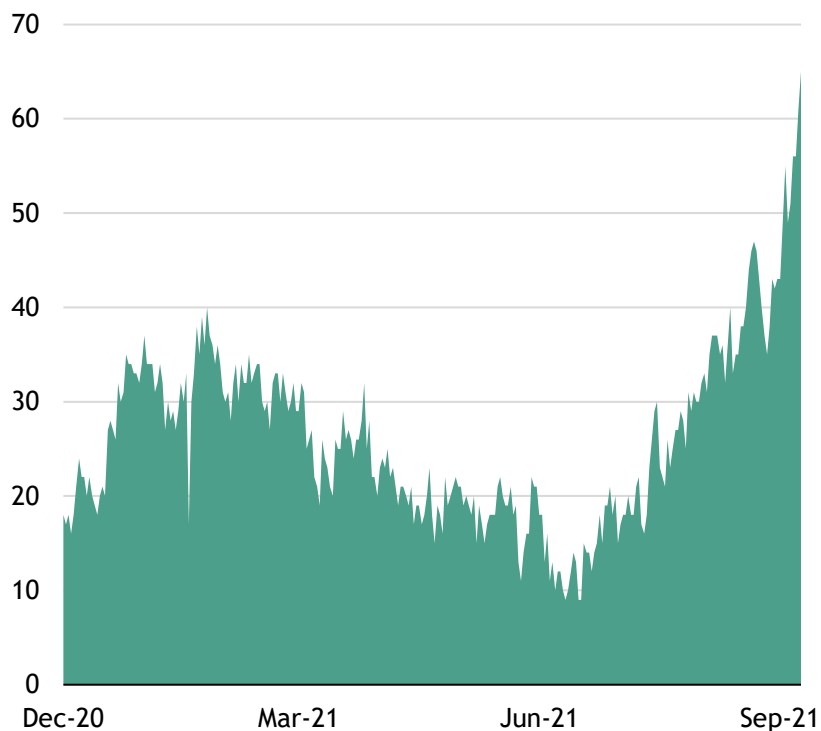


(1) Source: Blackstone Investment Strategy and US Bureau of Labor Statistics, as of July 31, 2021.

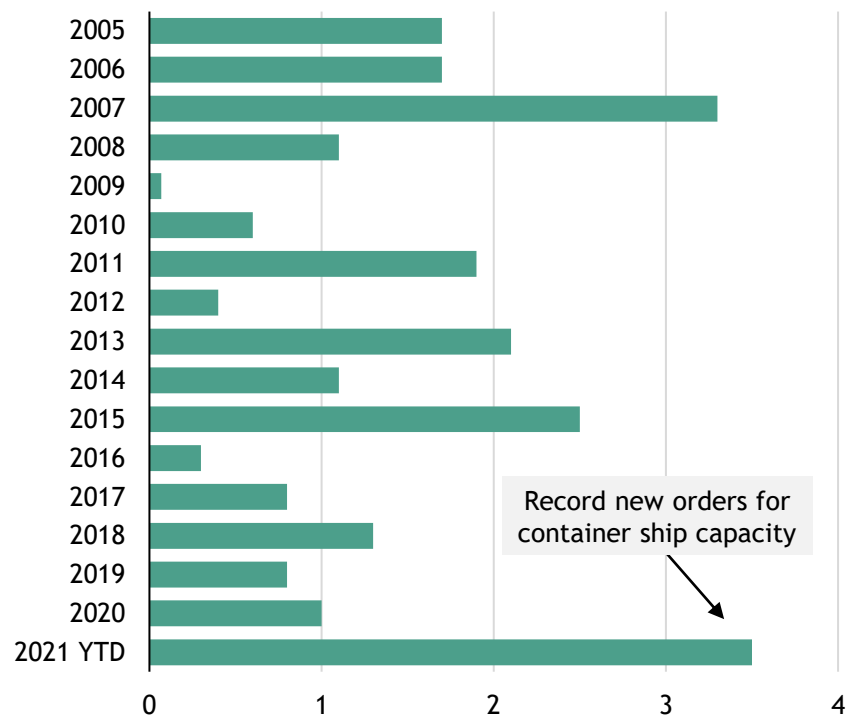
(2) Source: National Federation of Independent Business (NFIB), as of August 31, 2021. Based on a survey of 800 small companies that are members of NFIB.

# Global shipping traffic continues to worsen, as firms compete for limited freight space on container ships

**Anchored Container Ships Waiting to Offload at Los Angeles and Long Beach<sup>(1)</sup>**



**New Orders of Container Ship Capacity<sup>(2)</sup>**  
(millions of twenty-foot units)

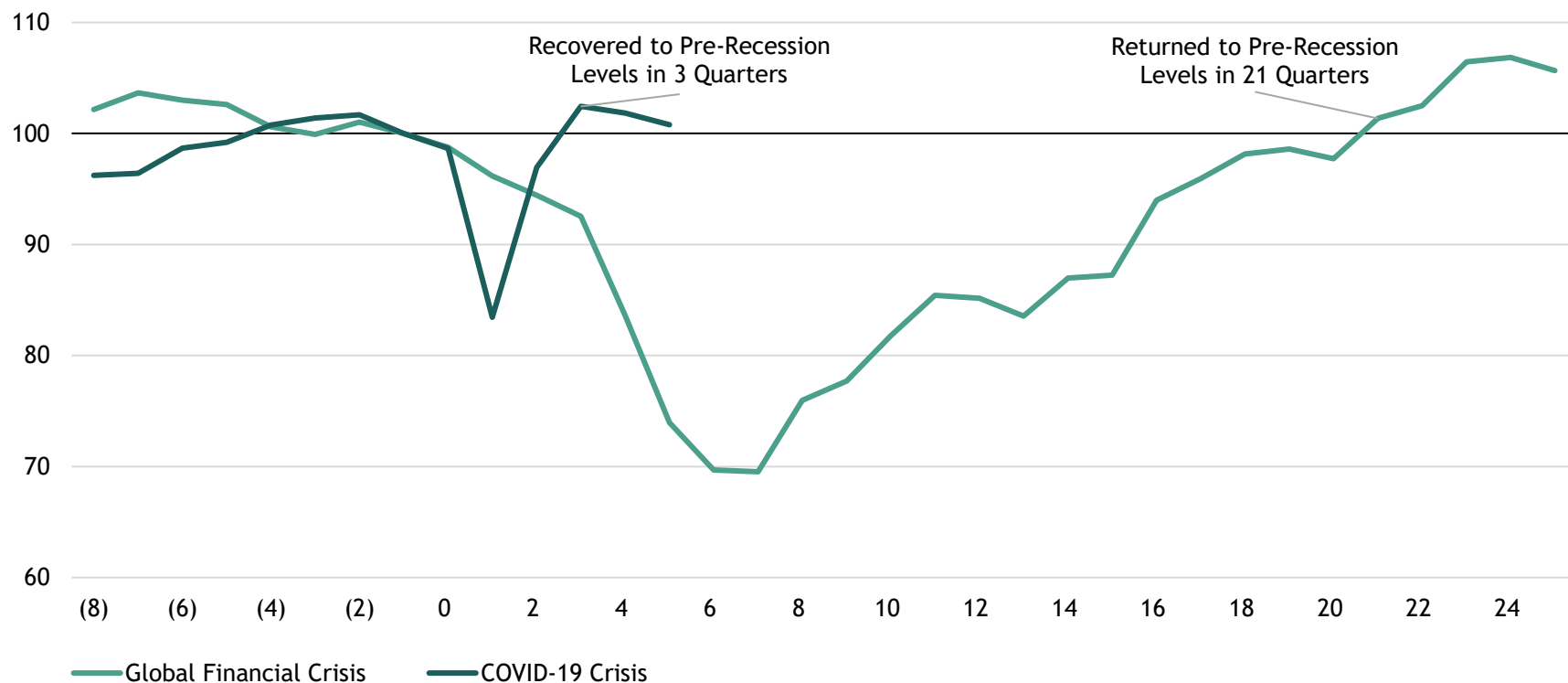


(1) Source: Marine Exchange of Southern California, Vessel Traffic Service of Los Angeles and Long Beach, and Bloomberg, as of September 16, 2021.  
 (2) Source: Drewry Maritime Research and Bloomberg, as of September 15, 2021.

# Companies are solving for labor market tightness and supply chain constraints by investing for productivity

## Real Gross Private Domestic Investment

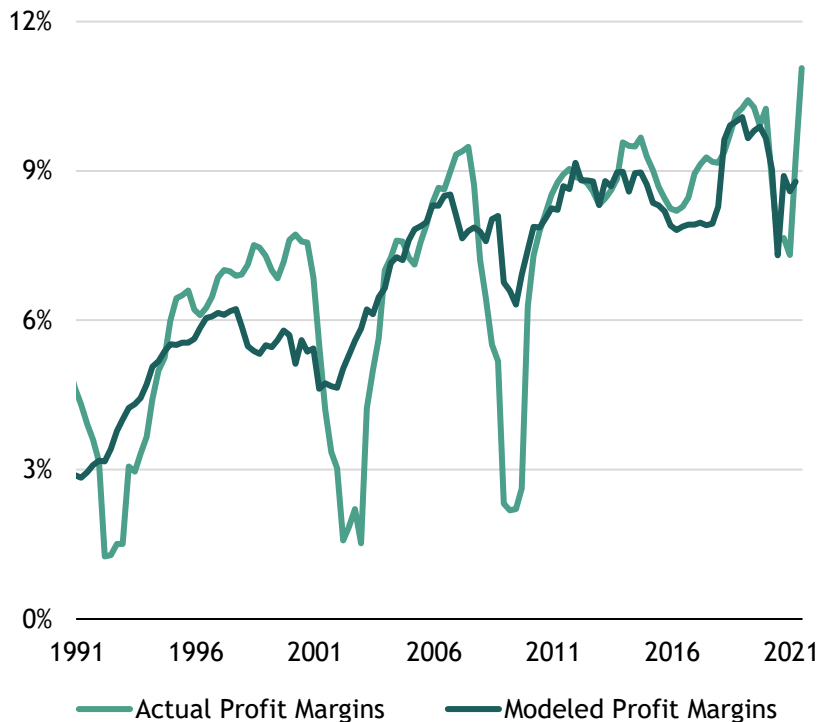
(indexed to 100 as of 1 quarter preceding recession start)



Source: Blackstone Investment Strategy and US Bureau of Economic Analysis, as of June 30, 2021. "Global Financial Crisis" is indexed to 100 as of September 30, 2007; "COVID-19 Crisis" is indexed to 100 as of December 31, 2019. Data are seasonally adjusted annual rate.

# Reversal of four secular corporate tailwinds could weigh on profit margin expansion over the longer term

## Impact of Four Corporate Tailwinds on S&P 500 Profit Margins<sup>(1)</sup>



## Four Corporate Tailwinds: History and Expected Future Contribution<sup>(2)</sup>

Profit Margin Driver	Change from 1970 to 2020	Future Contribution to Margins
US Corporate Tax Rate	Decreased from 48% to 21%	▼
Globalization (Trade, % of Global GDP)	Increased from 18% to 44%	▼ / ►
Labor Share of Output (Compensation, % of US GDP)	Decreased from 58% to 53%	▼
Interest Rates (AAA-rated IG Bond Yield)	Decreased from 8% to 2% (peaked at 16% in 1981)	▼

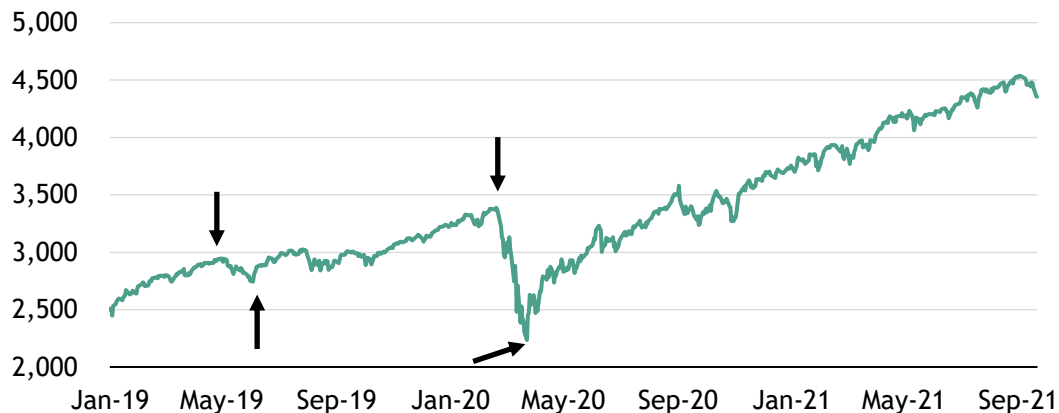
(1) Source: Bureau of Economic Analysis, Federal Reserve, Bloomberg, Haver Analytics, and Blackstone Investment Strategy, as of June 30, 2021. Data available on a quarterly frequency. “Corporate Tailwinds” are defined as labor compensation as a share of GDP, imports of goods and services as a share of GDP, implied interest rates on corporate debt (nonfinancial corporate net interest divided by business debt), and the US statutory corporate income tax rate. “Modeled Profit Margins” represents the linear decomposition of quarterly S&P 500 profit margins on these tailwinds.

(2) Source: Haver Analytics, World Bank, University of California at Davis, and Moody’s, as of December 31, 2020.

# **IV. Market Outlook**

# Market sentiment at optimistic extreme in recent months

## S&P 500 Composite Index



## S&P 500 Index Performance<sup>(1)</sup>

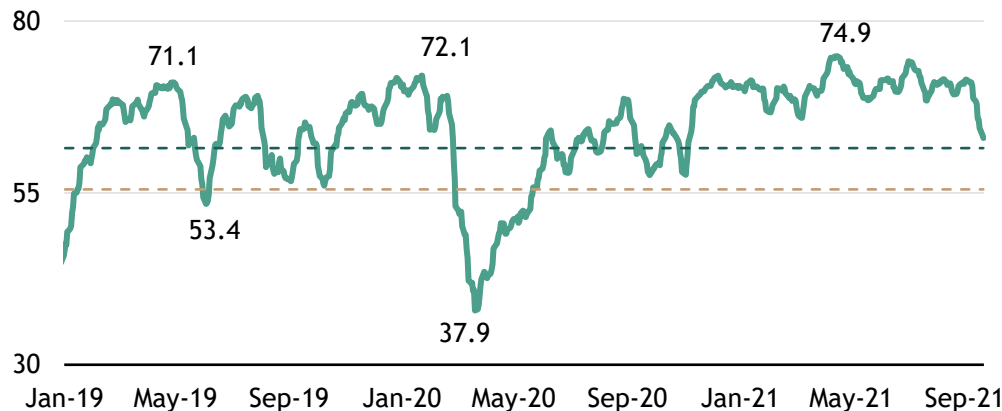
Full History: 12/1/1995 - 8/31/2021

NDR Crowd Sentiment Poll is:	% Gain / Annum	% of Time
Above 66.0	0.1	28
57.0 - 66.0 from Above	1.9	18
57.0 - 66.0 from Below	22.3	19
Below 57.0	11.1	35
Buy / Hold = 8.1% Gain / Annum		

## Historical average value of Crowd Sentiment Poll at:<sup>(2)</sup>

- Optimistic extremes (down arrows) = 68.7
- Pessimistic extremes (up arrows) = 46.8
- Average spread between extremes = 21.9

## NDR Crowd Sentiment Poll



## Extremes generated when sentiment reading:<sup>(3)</sup>

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

Source: Ned Davis Research, as of September 21, 2021.

(1) Totals may not sum 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<sup>(1)</sup>

		10-Year Treasury Yield										
		1.00%	1.25%	1.50%	1.75%	2.00%	2.25%	2.50%	2.75%	3.00%	3.25%	3.50%
Trailing Twelve-Month EPS	\$220	8,024	6,591	5,592	4,856	4,292	3,845	3,482	3,182	2,929	2,714	2,528
	\$222	8,097	6,651	5,643	4,901	4,331	3,880	3,514	3,211	2,956	2,739	2,551
	\$224	8,170	6,711	5,694	4,945	4,370	3,915	3,545	3,240	2,983	2,763	2,574
	\$226	8,243	6,771	5,745	4,989	4,409	3,950	3,577	3,269	3,009	2,788	2,597
	\$228	8,316	6,831	5,796	5,033	4,448	3,985	3,609	3,298	3,036	2,813	2,620
	\$230	8,388	6,891	5,847	5,077	4,487	4,019	3,640	3,326	3,062	2,837	2,643
	\$232	8,461	6,950	5,897	5,121	4,526	4,054	3,672	3,355	3,089	2,862	2,666
	\$234	8,534	7,010	5,948	5,166	4,565	4,089	3,704	3,384	3,116	2,887	2,689
	\$236	8,607	7,070	5,999	5,210	4,604	4,124	3,735	3,413	3,142	2,911	2,712
	\$238	8,680	7,130	6,050	5,254	4,643	4,159	3,767	3,442	3,169	2,936	2,735
	\$240	8,753	7,190	6,101	5,298	4,682	4,194	3,799	3,471	3,196	2,961	2,758
	\$242	8,826	7,250	6,152	5,342	4,721	4,229	3,830	3,500	3,222	2,985	2,781
	\$244	8,899	7,310	6,202	5,386	4,760	4,264	3,862	3,529	3,249	3,010	2,804
	\$246	8,972	7,370	6,253	5,430	4,799	4,299	3,894	3,558	3,275	3,035	2,827
	\$248	9,045	7,430	6,304	5,475	4,838	4,334	3,925	3,587	3,302	3,059	2,850
	\$250	9,118	7,490	6,355	5,519	4,877	4,369	3,957	3,616	3,329	3,084	2,873

Source: Blackstone Investment Strategy, as of September 30, 2021.

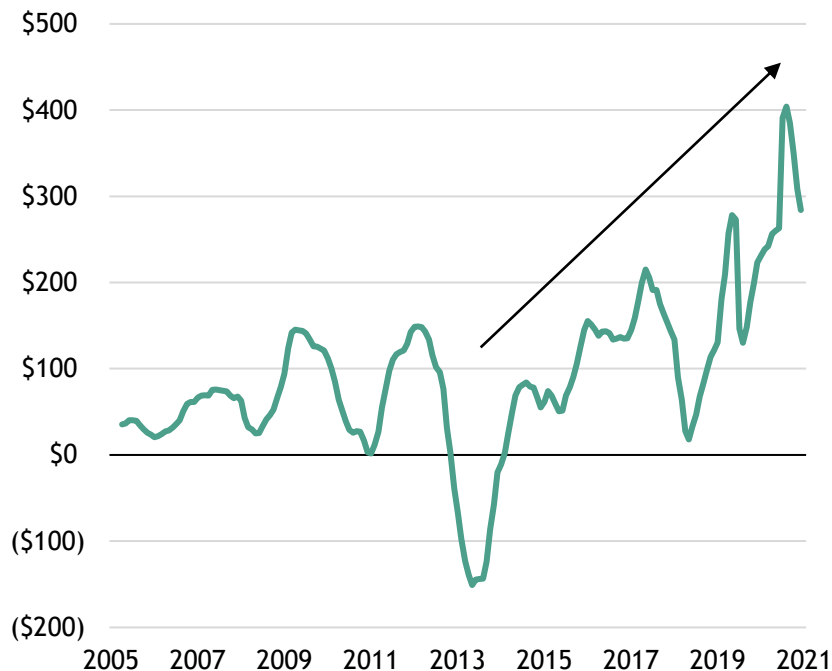
(1) Assumes starting S&P 500 Earnings Per Share (EPS) of \$140.55, and that EPS start the period increasing / decreasing to level indicated in first column, before increasing / decreasing linearly over 2 years to a 4% nominal growth rate and remaining there in perpetuity. Further assumes dividend payout ratio remains at prior year's level of 41.94% and equity risk premium is a constant 4.15%.



# Record net retail flows into intermediate- and long-term bond funds highlight duration risk should rates rise

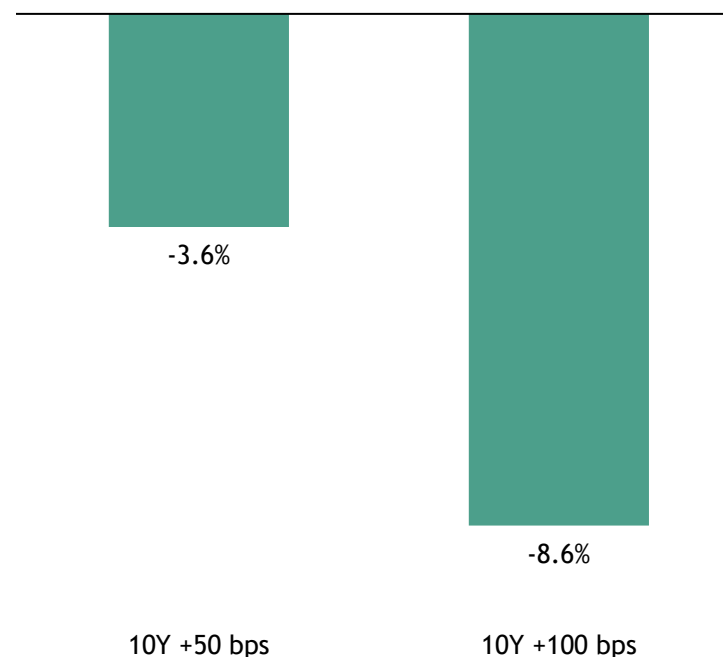
## Net Flows into Intermediate- and Long-Term Bond Funds (Mutual Funds + ETFs)<sup>(1)</sup>

(US\$ in billions, rolling 12-month sum)



## Hypothetical Total Return Loss To Traditional Fixed Income<sup>(2)</sup>

(Bloomberg Barclays US Agg Bond Index)



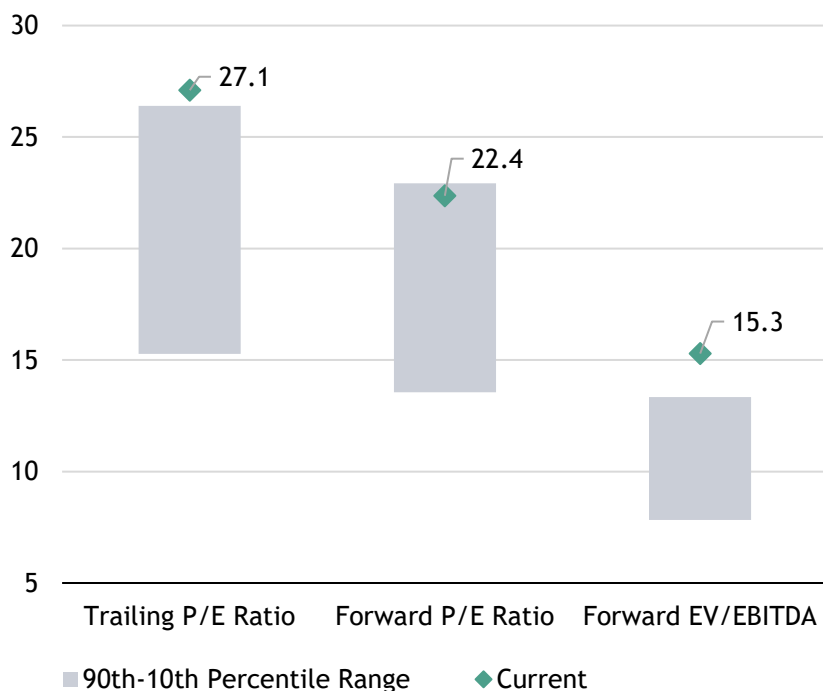
(1) ICI, Morningstar Direct and Blackstone Investment Strategy, as of August 31, 2021. “Traditional Fixed Income” represents net flows into the following US mutual fund and ETF categories: Corporate Bond, Intermediate Core Bond, Intermediate Core-Plus Bond, Intermediate Government, Long Government and Long-Term Bond.

(2) Blackstone Investment Strategy, as of September 16, 2021. Projections based on a linear model that decomposes the price of the Bloomberg Barclays US Aggregate Bond Index on the index’s average duration of underlying securities and on the 10-year Treasury yield’s level and 30-day percentage change, based on daily data from January 3, 1989 to March 25, 2021.

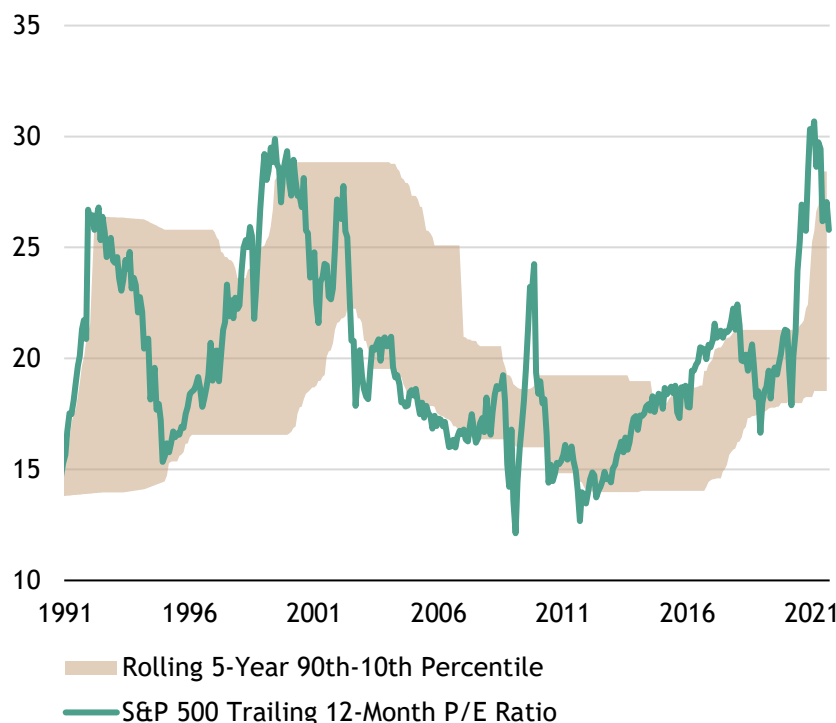
# Equity market valuations remain highly elevated relative to historical levels

## S&P 500 Historical Valuations<sup>(1)</sup>

(January 1990 - August 2021)



## S&P 500 Trailing 12-Month P/E Ratio<sup>(2)</sup>



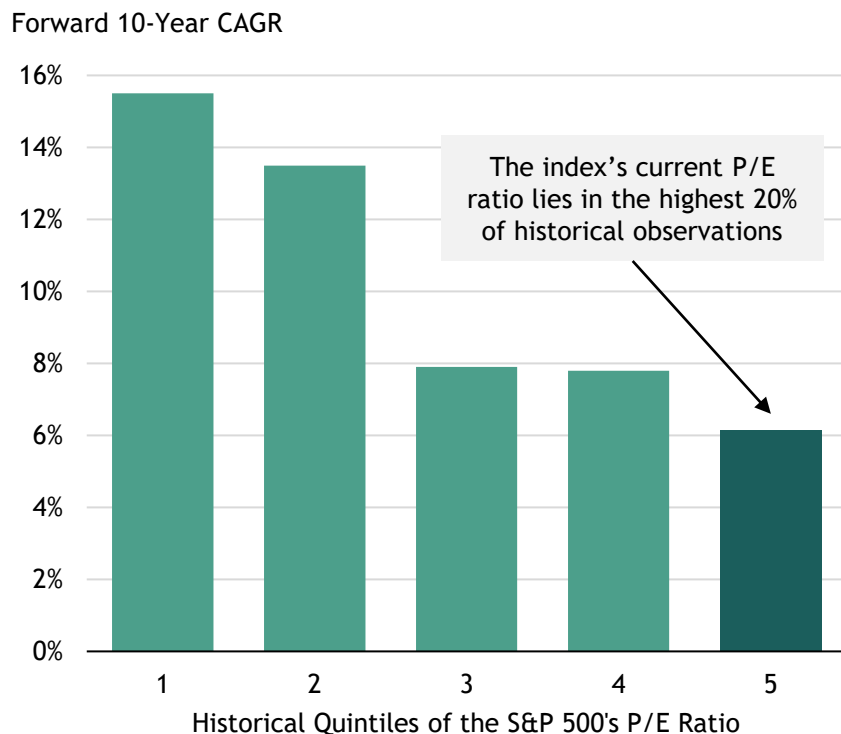
Source: Blackstone Investment Strategy and Bloomberg, as of August 31, 2021.

(1) Forward data are Bloomberg estimates. Percentiles are calculated using monthly observations beginning in January 1990. “Trailing P/E Ratio” is the trailing 12-month price-to-earnings ratio. “Forward P/E Ratio” is the estimated price-to-earnings ratio over the next 4 quarters. “EV” is enterprise value per share. “Forward EV/EBITDA” data series begins in August 2005.

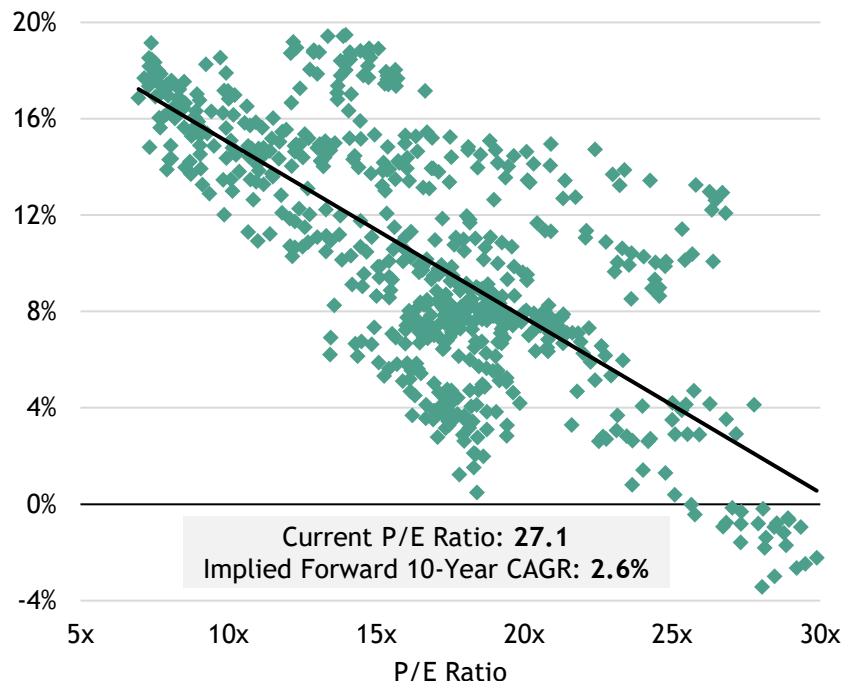
(2) “Rolling 5-Year 90th-10th Percentile” represents the region between the historical 90th and 10th percentiles of the green line, calculated over the previous 60 months’ observations.

# Record-high valuation multiples imply potential public equity underperformance over the coming cycle

**Average S&P 500 Forward 10-Year CAGR by Valuation Quintile**



**S&P 500 Valuation and Forward 10-Year CAGR<sup>(1)</sup>**



Source: Blackstone Investment Strategy, Bloomberg, and Standard & Poor's, as of August 31, 2021. "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. Historical sample size extends from January 1957 through August 2021.

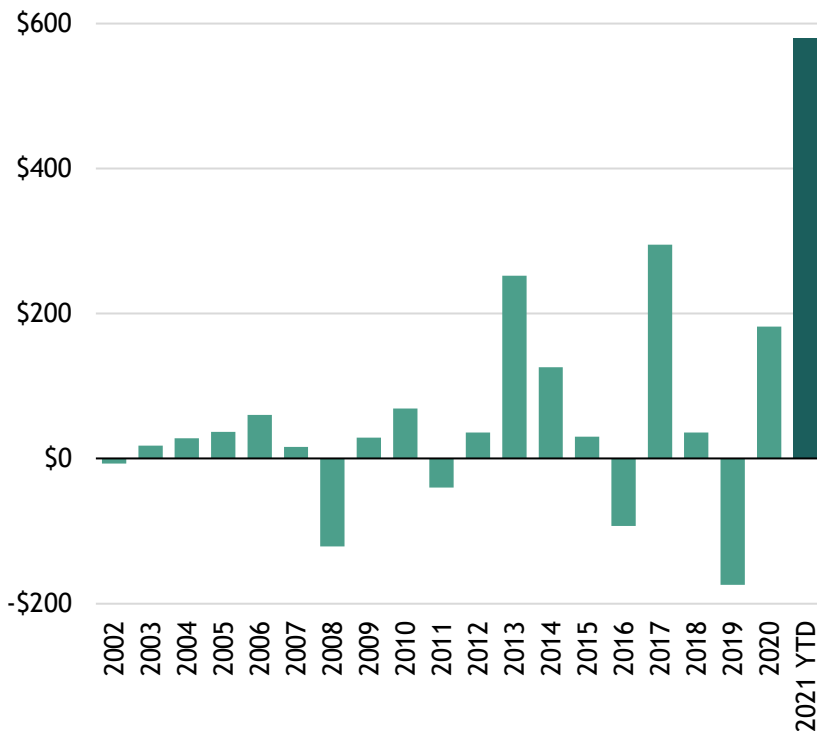
(1) Each dot represents the S&P 500's trailing 12-month price-to-earnings ratio for a given month and the index's resulting forward CAGR over the next 10 years from that month.

# **V. Investing Mega-Trends**

# YTD flows into equity funds have already set record high as investors hunt for yield amid low rates, high prices

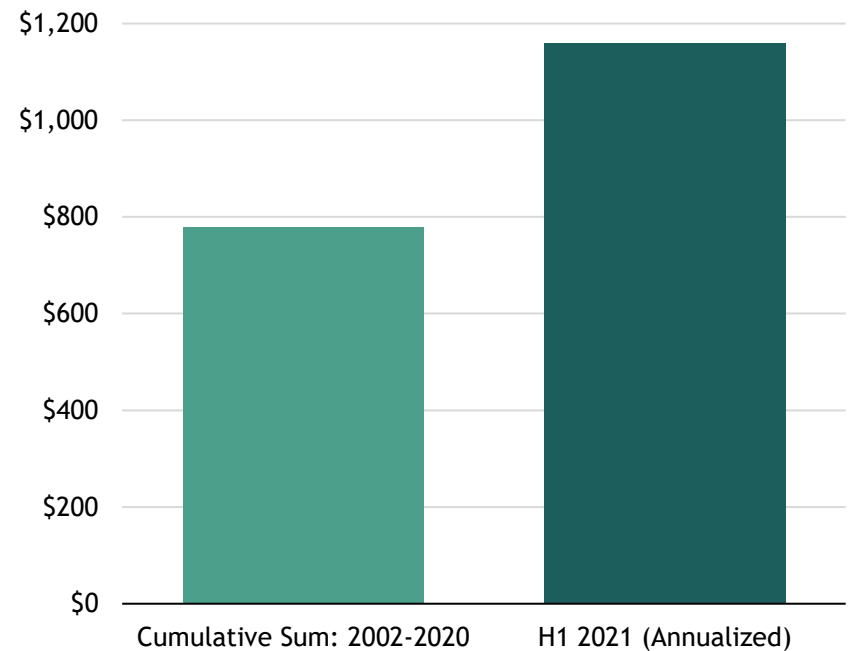
## Annual Global Equity Flows

(US\$ in billions)



## Global Equity Flows: Historical vs. 2021 Pace

(US\$ in billions)

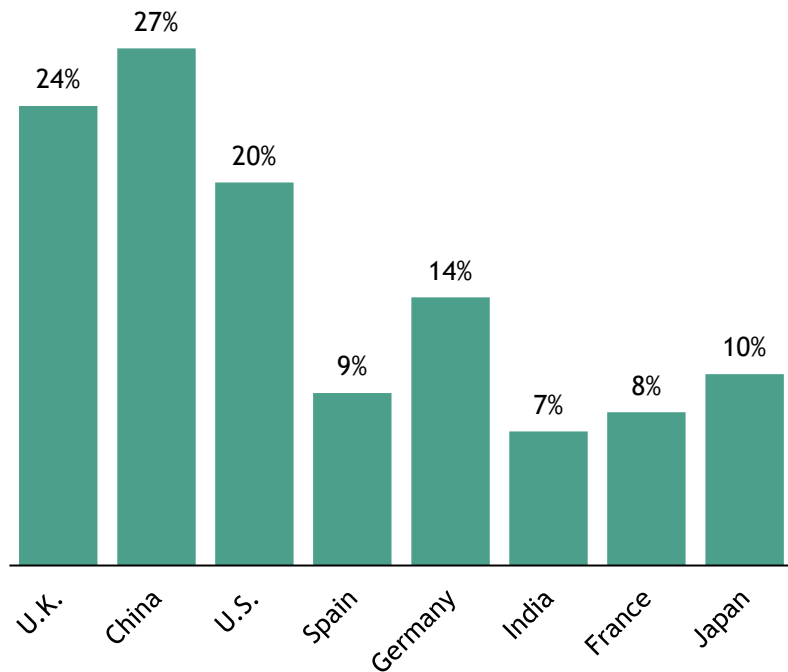


Source: BofA Global Investment Strategy and EPFR Global, as of June 30, 2021. Represents net inflows into global equity funds.

# The historic strength of the US consumer should continue to benefit trends such as e-commerce

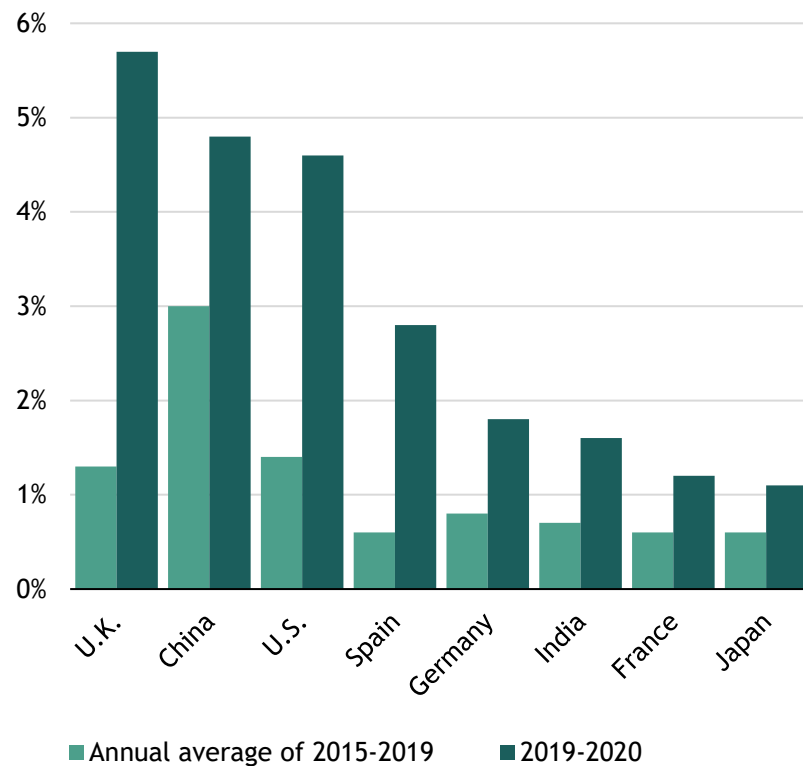
## 2020 E-Commerce Sales

(share of total retail sales)



## E-Commerce Sales Growth

(YoY share of total retail sales)

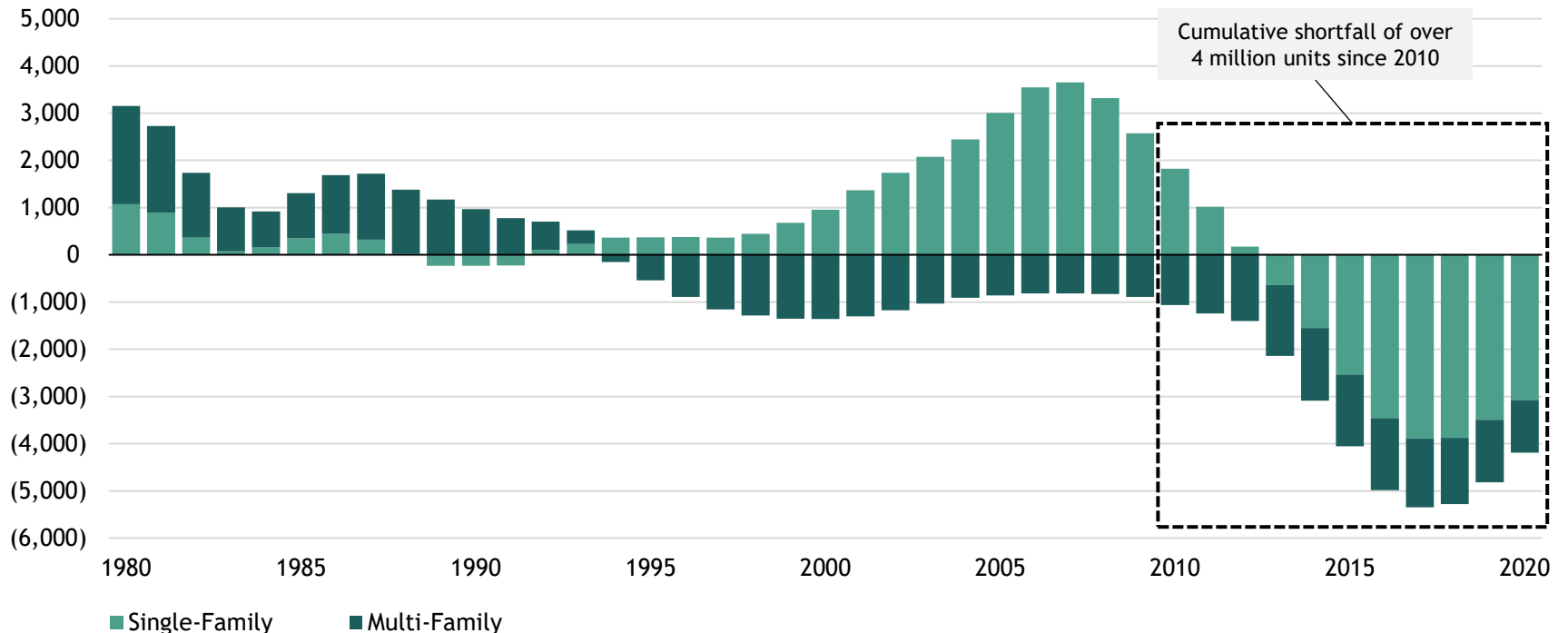


Source: Euromonitor International Retailing 2021 Edition; McKinsey Global Institute analysis.

# House construction has lagged consistently since the GFC bubble, setting up a new housing “super-cycle”

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

(thousands of units, rolling 10-year sum)



Source: US Census Bureau, US Department of Urban Housing and Development, and Blackstone Investment Strategy, as of December 31, 2020. “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. “Multi-Family” 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 to 2020.

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