
Global Economic Update

3rd Quarter 2022

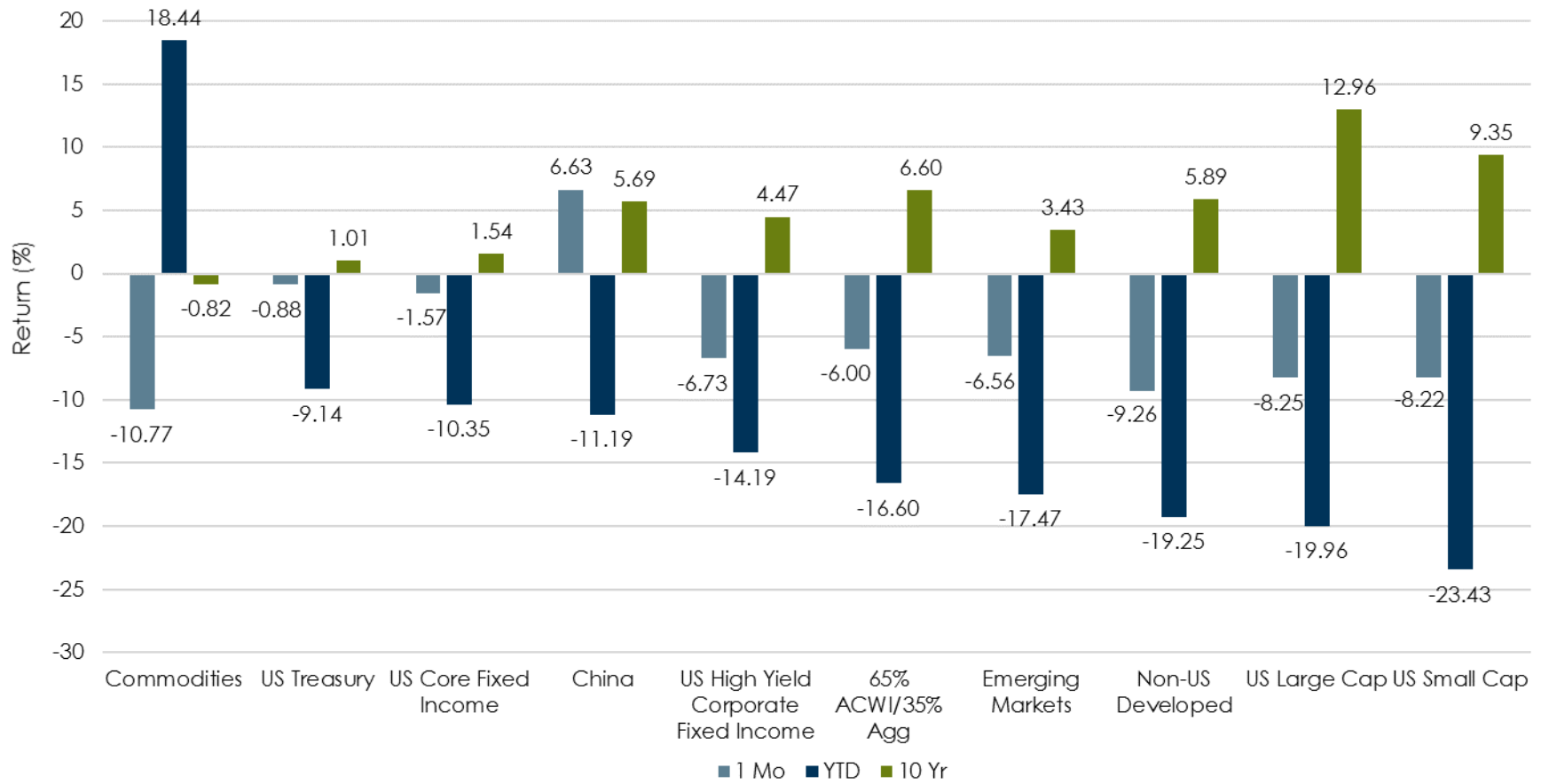
- **First half of 2022 was one of the worst drawdowns for a balanced portfolio in decades**
- **Economic growth has slowed** and consumer sentiment remains weak
- US GDP declined at a 1.6% annualized rate in Q1 and **odds of a near-term recession have risen**
- **Fed funds rate could surpass 3.0% by year-end** and yield curve continues to flatten
- Despite current high inflation, commodity prices have started to roll over and **longer-term deflationary forces remain in place**
- **Labor market remains tight** as households draw on last few years of stimulus and investment savings
- Recent declines in equities and reduced stimulus could bring **more people back into the labor force and lead to a moderation in wages**
- Higher interest rates and lower stock prices have generally led to **improved valuations and future return potential**
- **Maintaining portfolio diversification** across asset classes and disciplined rebalancing remains key to achieving long-term investment goals

Inflation Concerns Prompt Equities to Fall in June



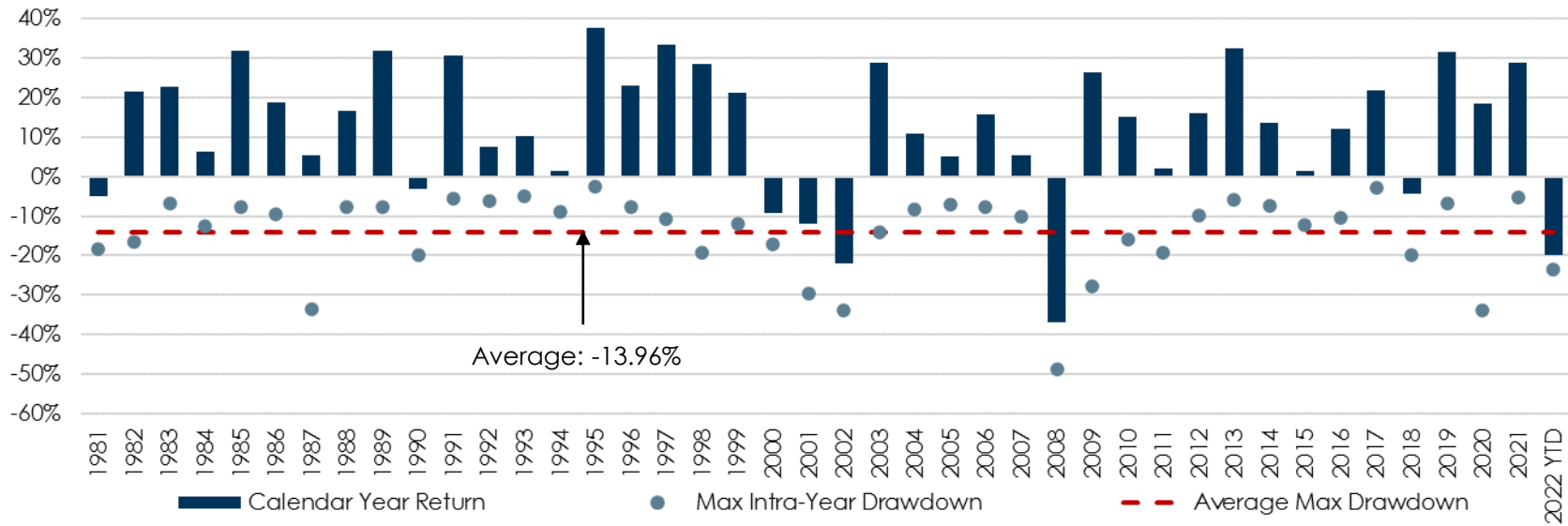
Source: ACG Research, Bloomberg (as of June 30, 2022)

Despite Recent Challenges, Longer-term Performance Still Solid for Most Asset Classes



Source: ACG Research, Morningstar (as of June 30, 2022). The following indices used as proxy for asset classes: Russell 2000, Bloomberg Commodity, S&P 500, MSCI EAFE, MSCI Emerging Markets, MSCI China, Bloomberg US Corporate High Yield, Bloomberg US Aggregate, Bloomberg US Treasury

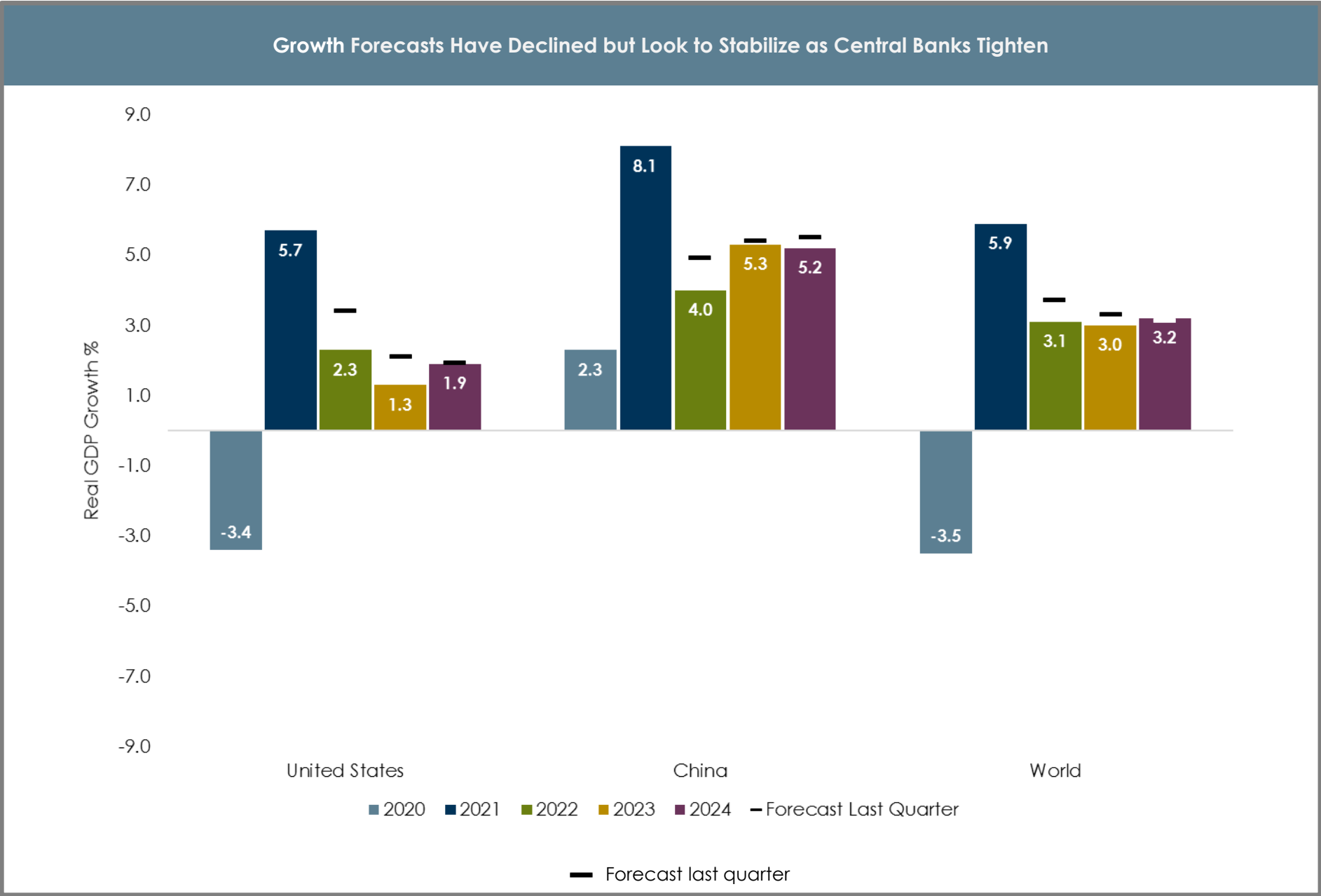
Market Drawdowns are Common, and the Recovery is Often Significant



Largest S&P 500 Drawdowns Since 1980 and Next Year's Return (Using Monthly Return Data)

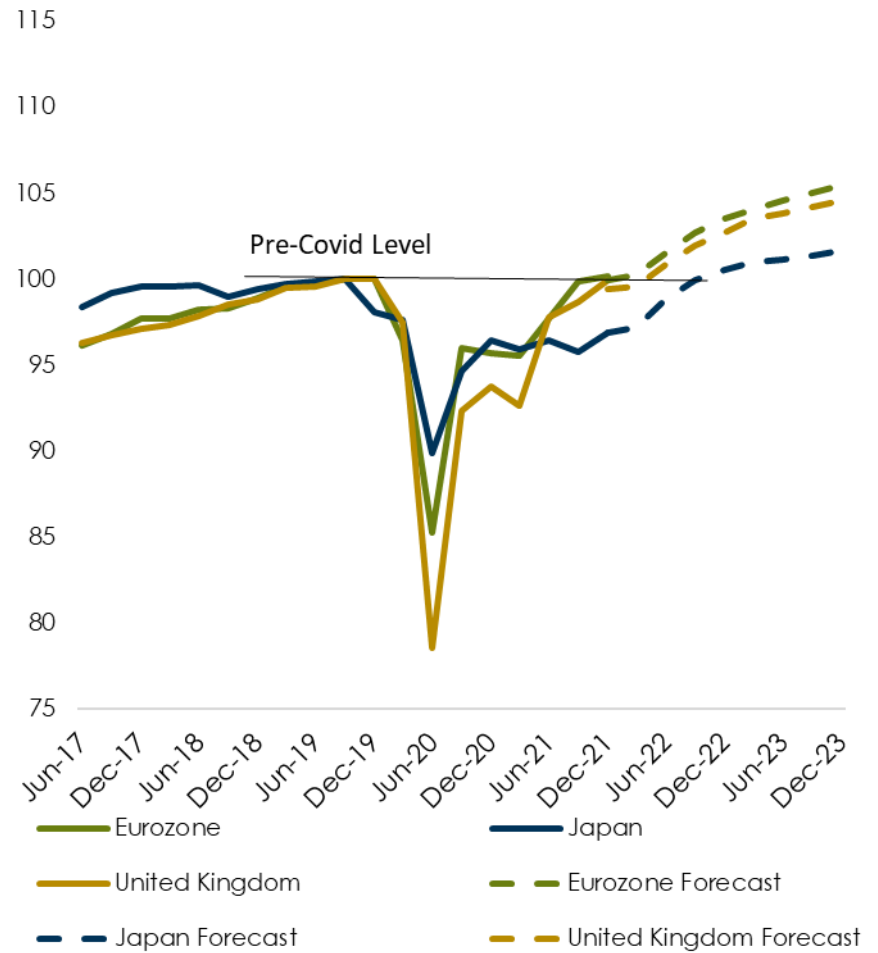
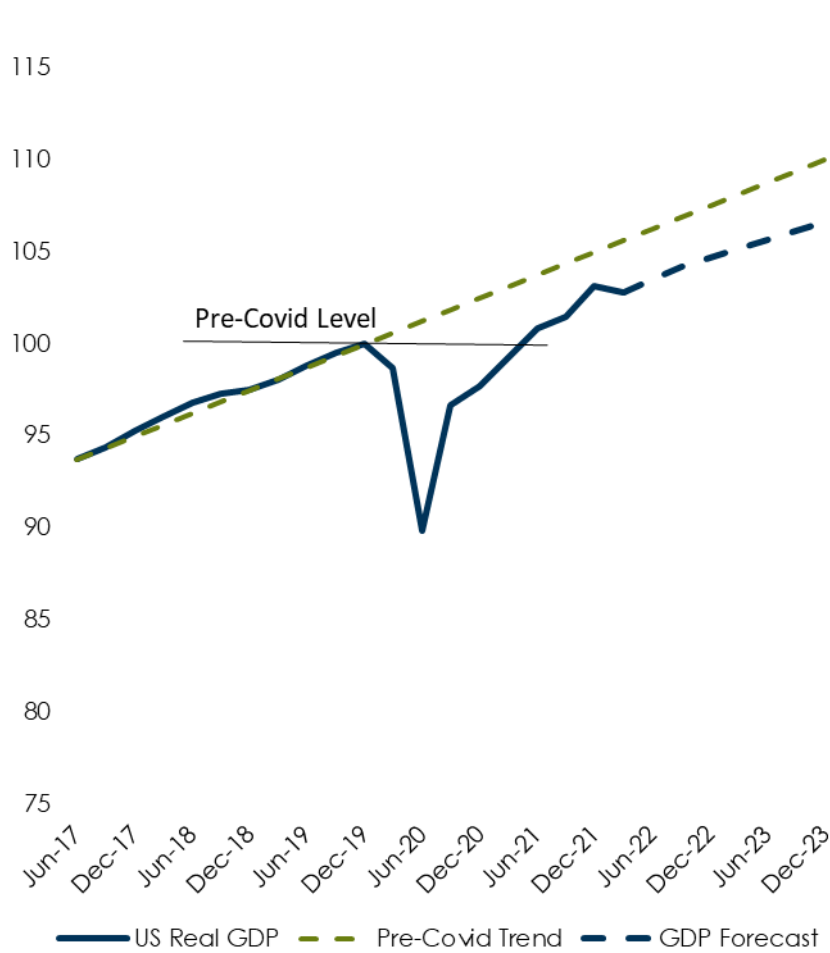
	S&P 500 Drawdown (%)	Length	Recovery	Peak	Valley	12-Month Forward Return (%)
	-50.95	16	37	Oct-07	Feb-09	53.62
	-44.73	25	49	Aug-00	Sep-02	24.40
	-29.58	3	18	Aug-87	Nov-87	23.33
Current Period →	-19.96	6	N/A	Dec-21	Jun-22	???
	-19.60	3	4	Dec-19	Mar-20	56.35
	-16.50	20	3	Nov-80	Jul-82	59.26
	-16.26	5	12	Apr-11	Sep-11	30.20
	-15.37	2	3	Jun-98	Aug-98	39.82
	-14.69	5	4	May-90	Oct-90	33.50

Source: ACG Research, Bloomberg



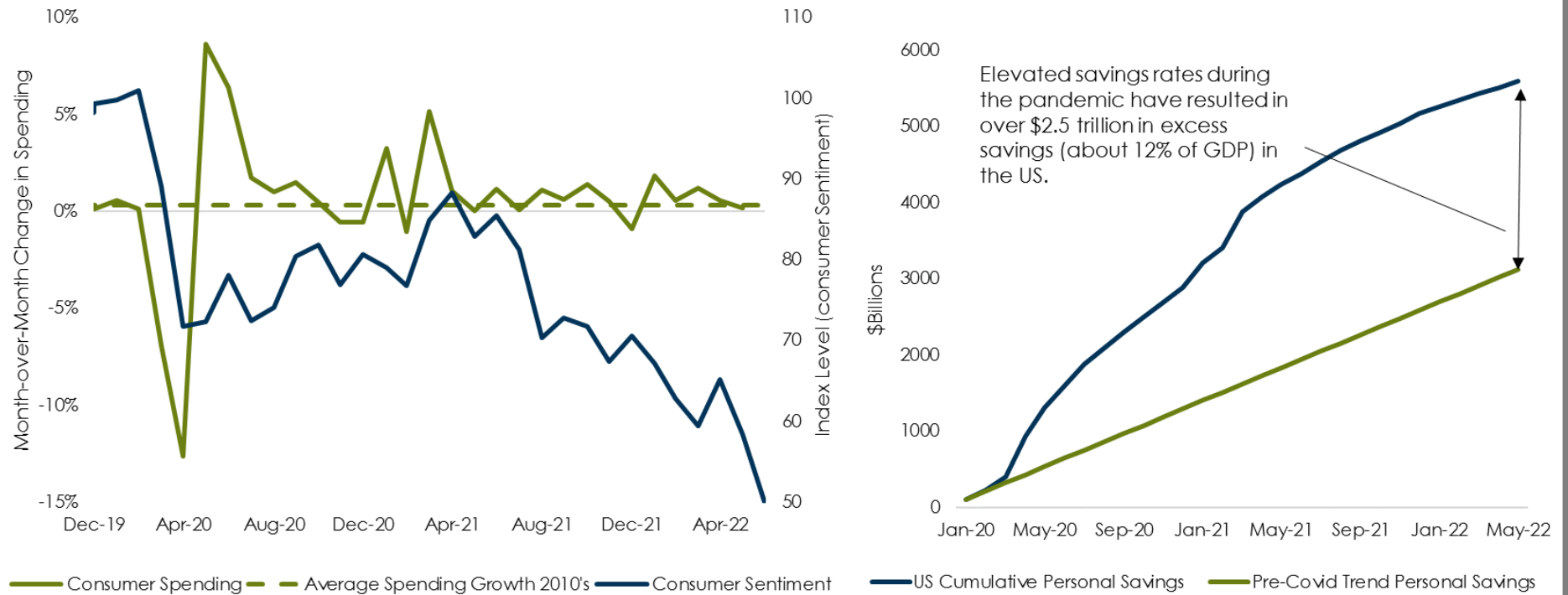
Source: ACG Research, Oxford Economics (as of June 30, 2022)

Most Developed Market Economies Have Advanced Past Pre-Covid Level



Source: ACG Research, Bloomberg, Oxford Economics (as of March 31, 2022)

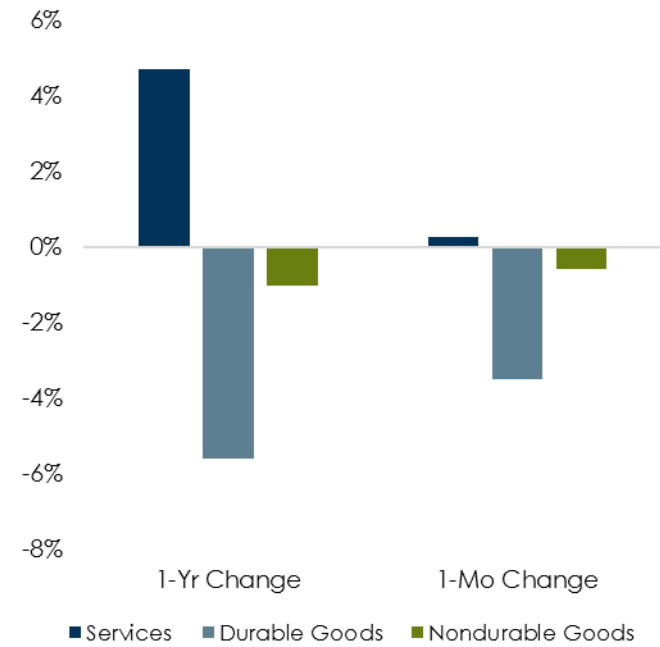
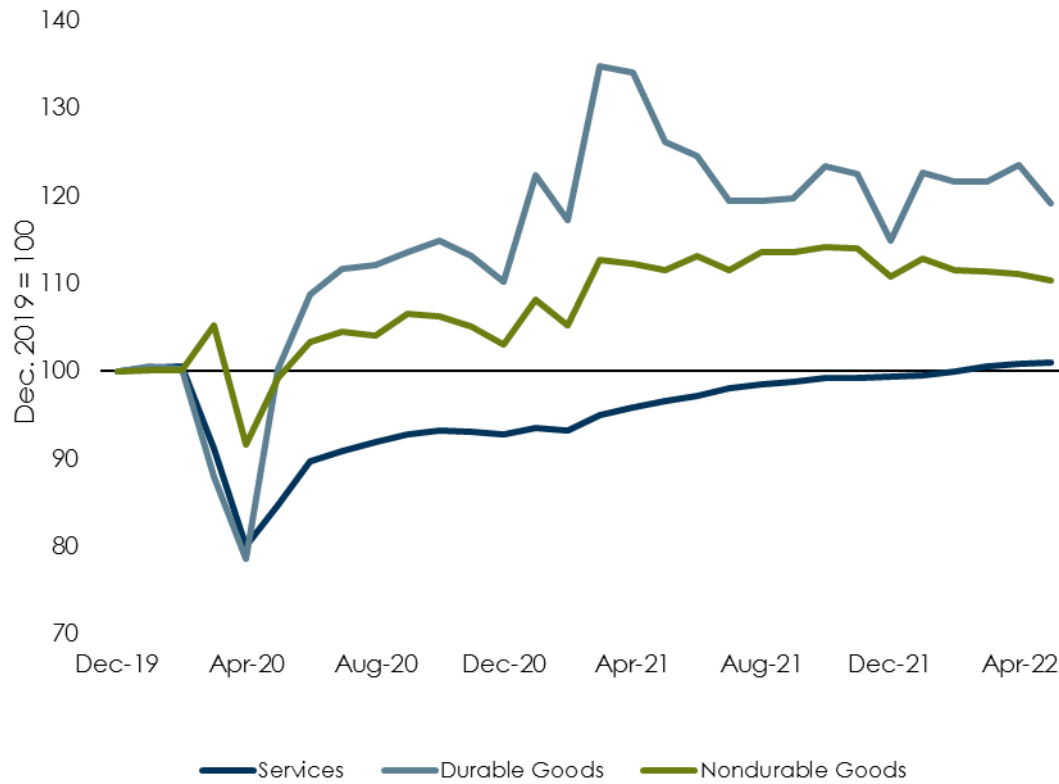
Consumer Spending Growth Slowing but Supported by High Personal Savings



Source: ACG Research, Bloomberg, University of Michigan (as of May 31, 2022)

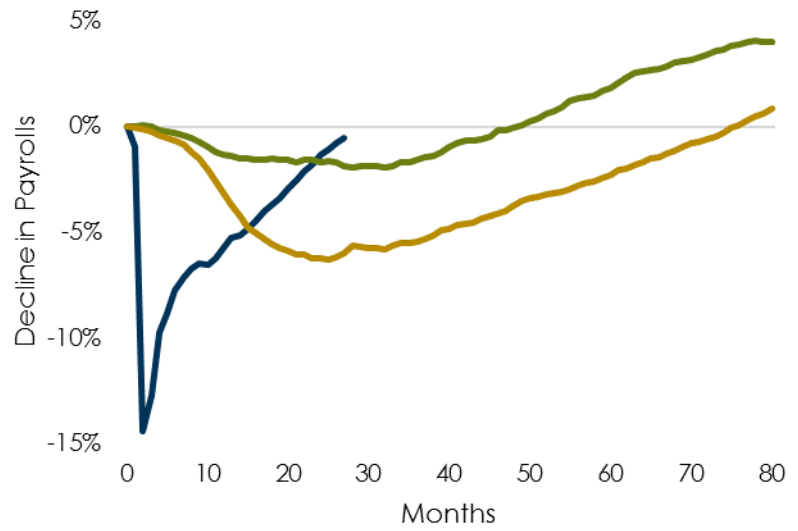
Higher Prices and Easing Covid Fears Shift Consumer Behavior

Real Personal Consumption Components

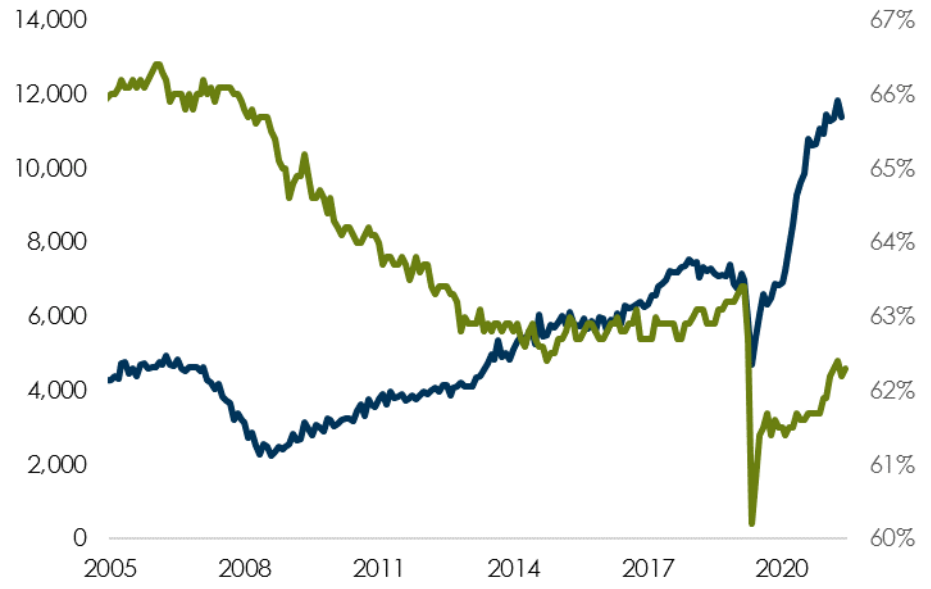


Source: ACG Research, Bloomberg (as of June 30, 2022)

Overall Jobs Recovery Continues, but Labor Shortages Persist



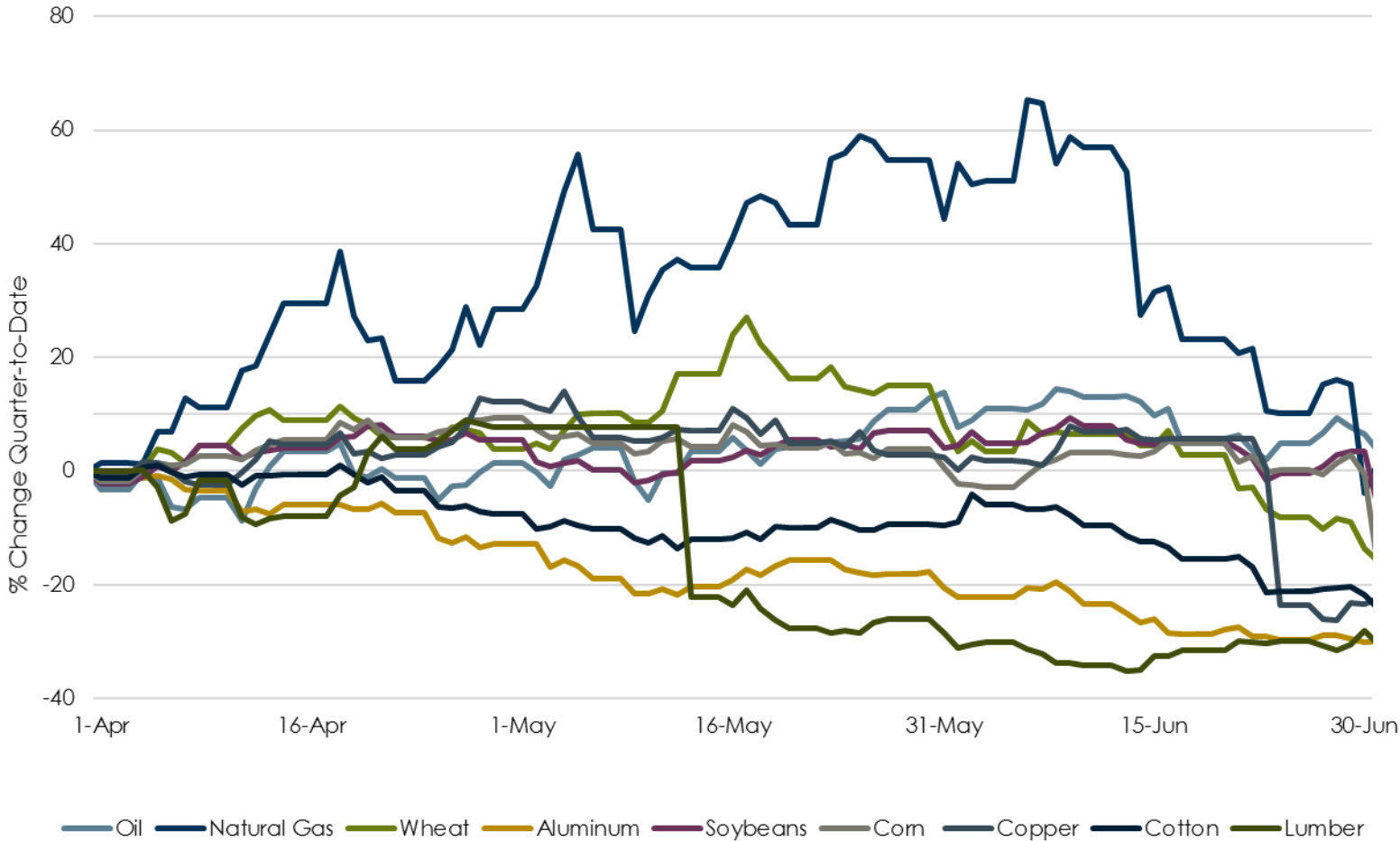
— 2020 Pandemic — 2000 Tech Bust — 2007 Financial Crises



— Job Openings (Thousands) (LHS) — Labor Force Participation (RHS)

Source: ACG Research, Bloomberg, Bureau of Labor Statistics (as of June 30, 2022)

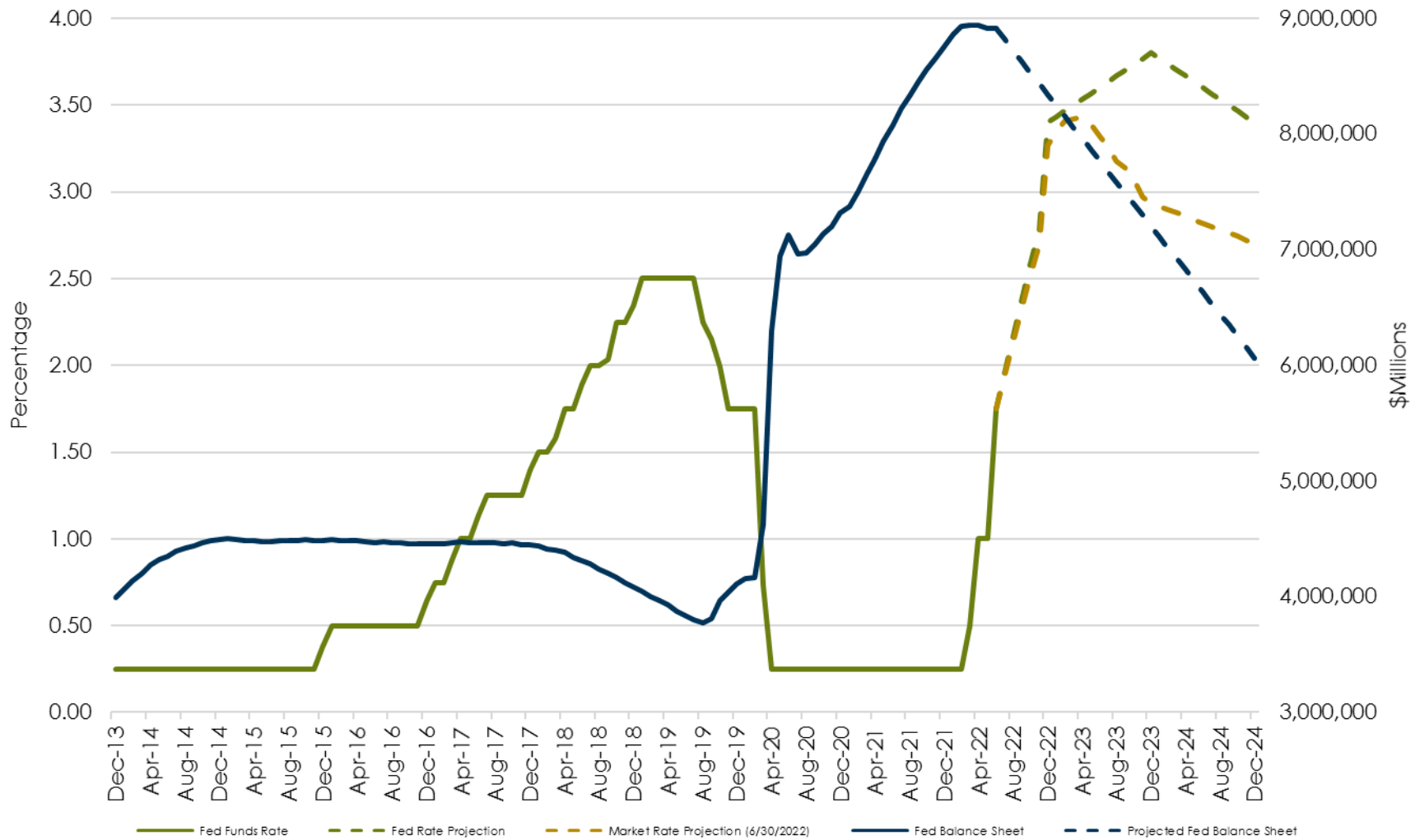
Commodity Prices Have Declined Off Peaks, Should Dampen Headline Inflation



Source: ACG Research, Bloomberg (as of June 30 2022)

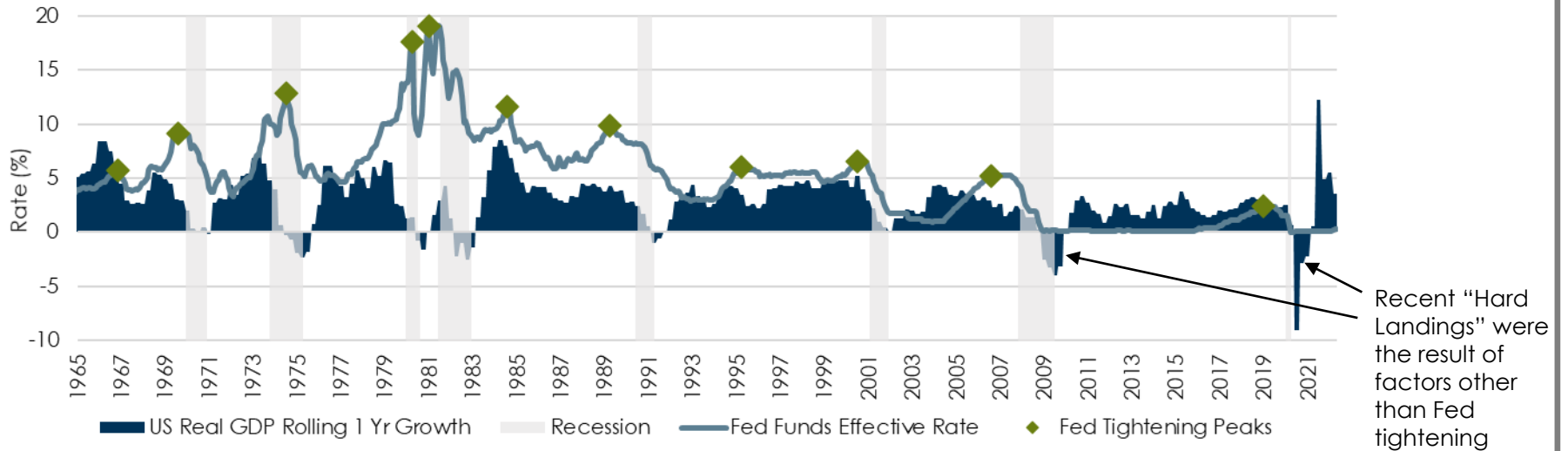
Current Policy Still Supportive but Direction is Hawkish

Fed Balance Sheet and Fed Funds Rate

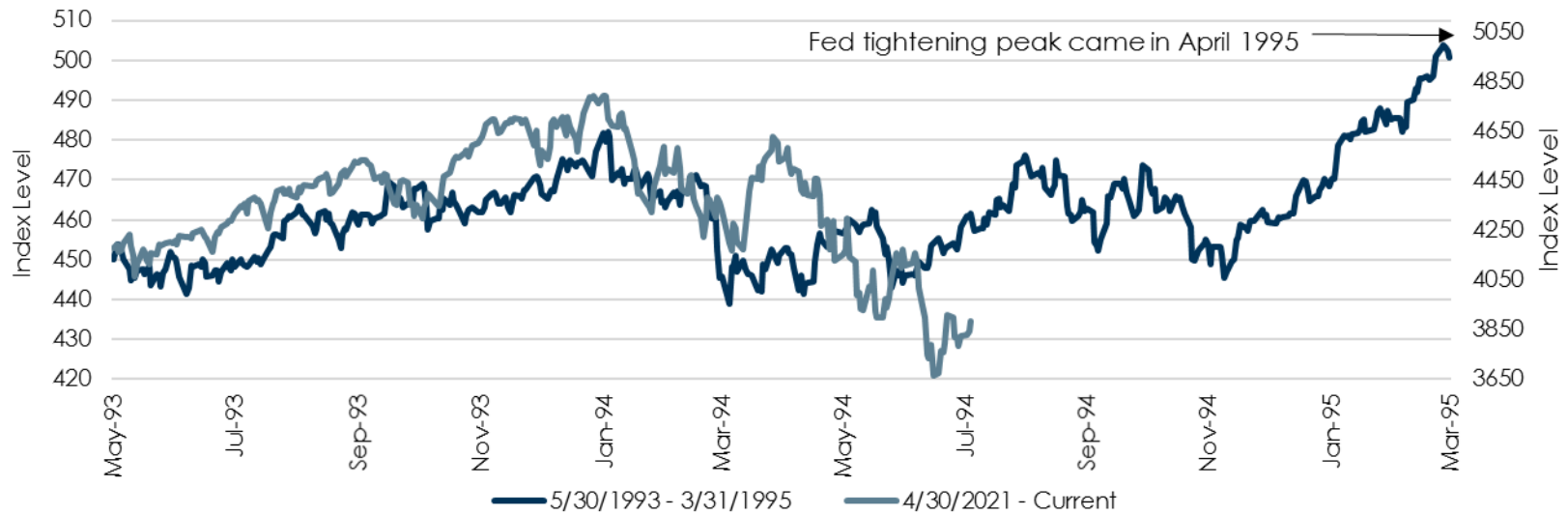


Source: ACG Research, Bloomberg, St. Louis Federal Reserve (as of June 30, 2022). Balance Sheet Projection based on guidance from Fed meeting minutes.

The Fed Last Executed a "Soft Landing" in 1994, but Soft and Soft-ish Landings are Not Uncommon

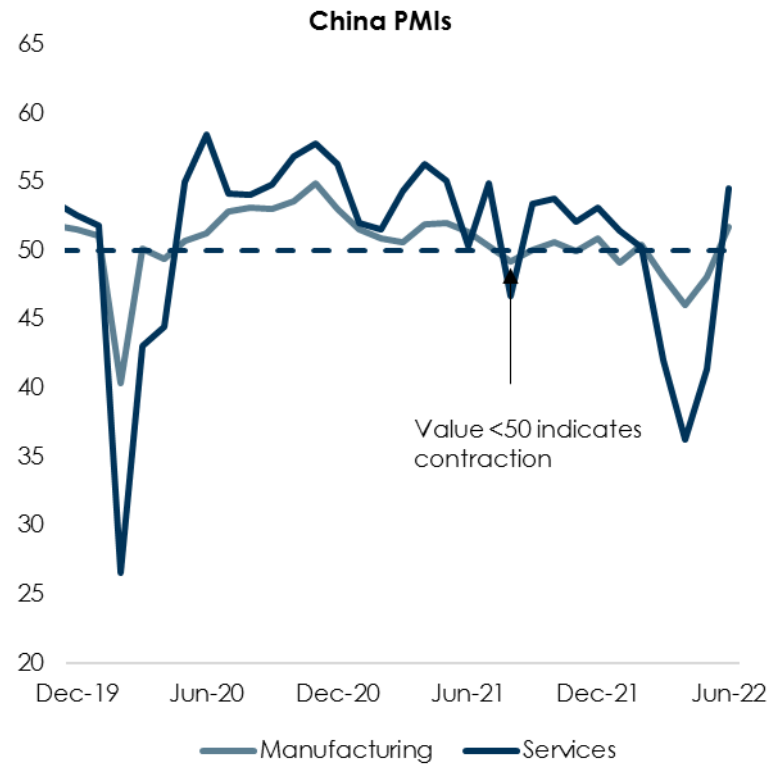
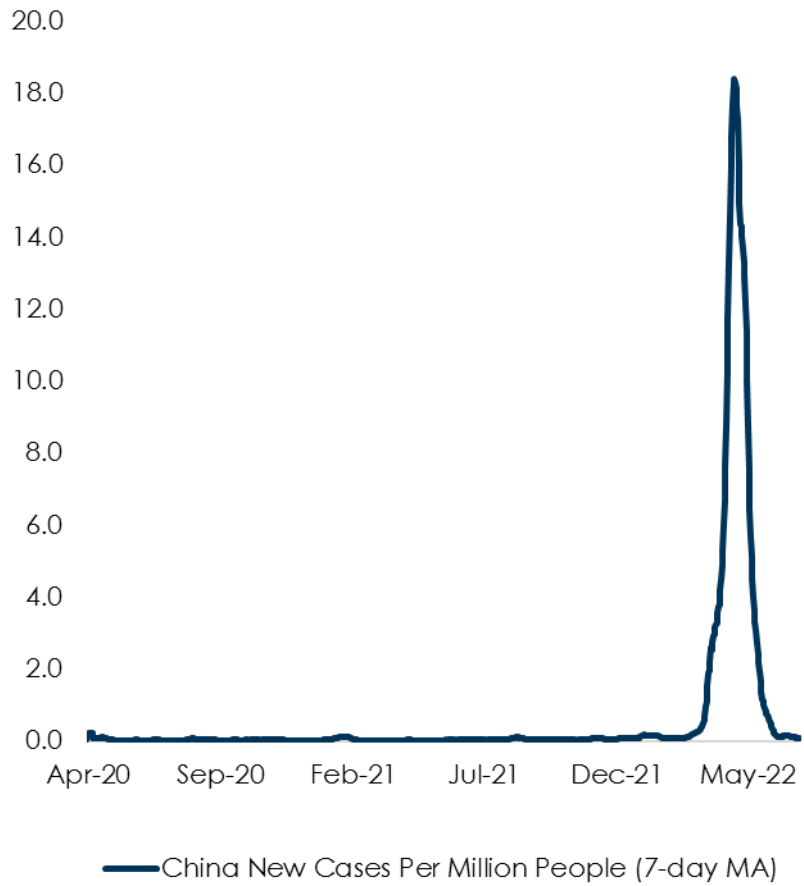


S&P 500 Price Durina 1994 Fed Soft Landina Compared to Current Market



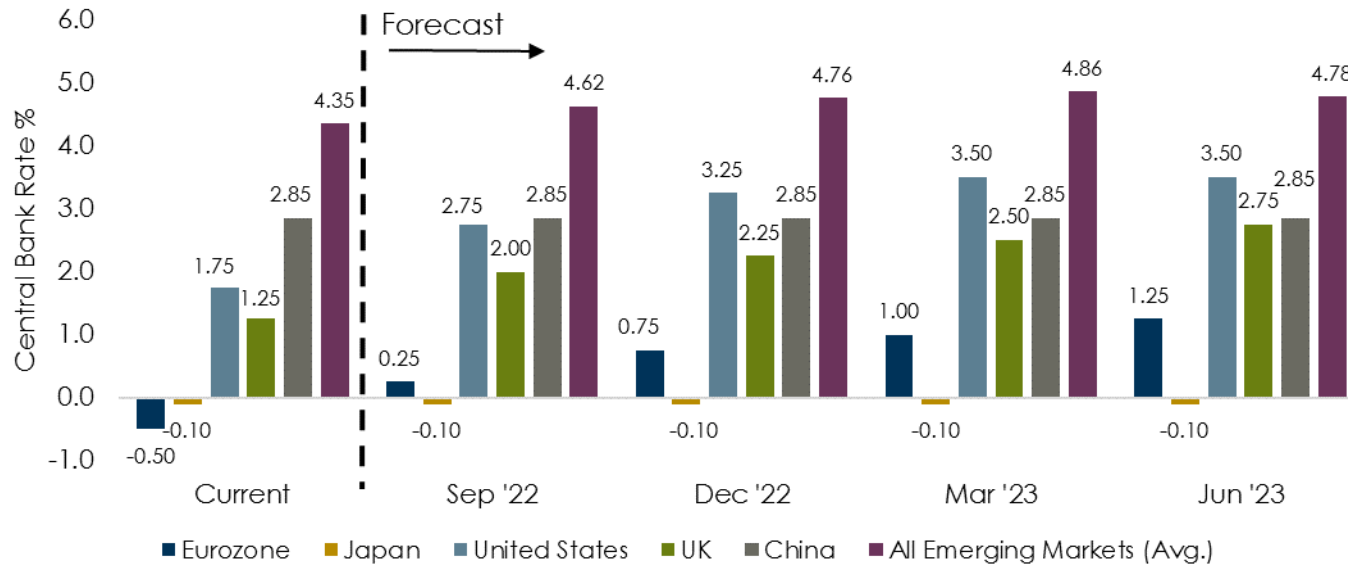
Source: ACG Research, Bloomberg (as of June 30, 2022)

China's Covid Surge Eases, Economic Output Expanding Again

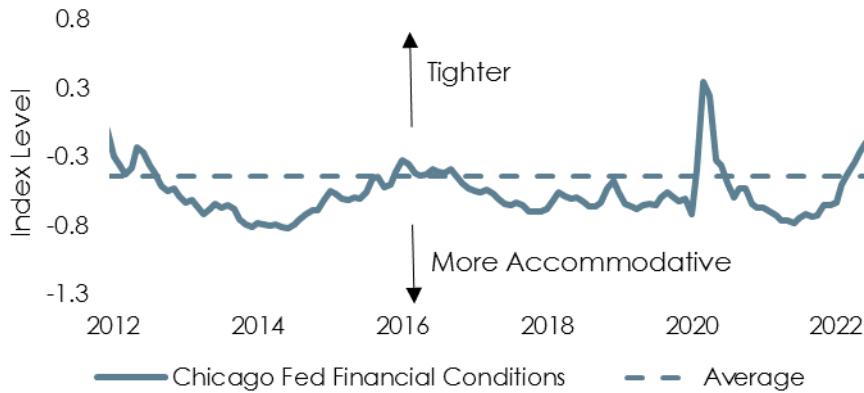


Source: ACG Research, Our World in Data, Bloomberg (as of June 30, 2022)

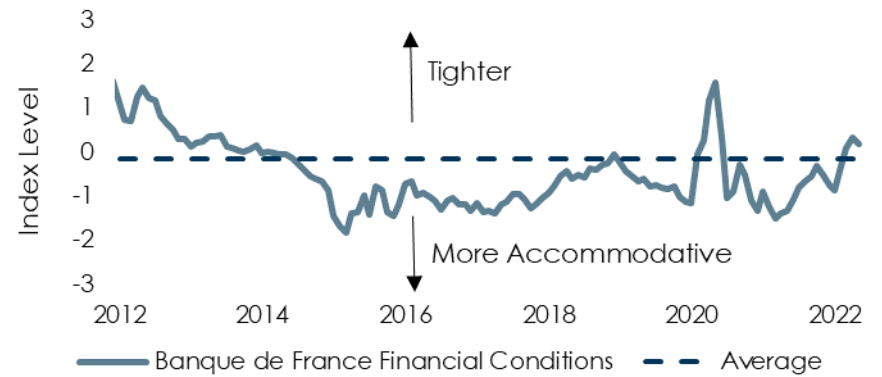
Financial Conditions Tightening for Most Markets



US Financial Conditions

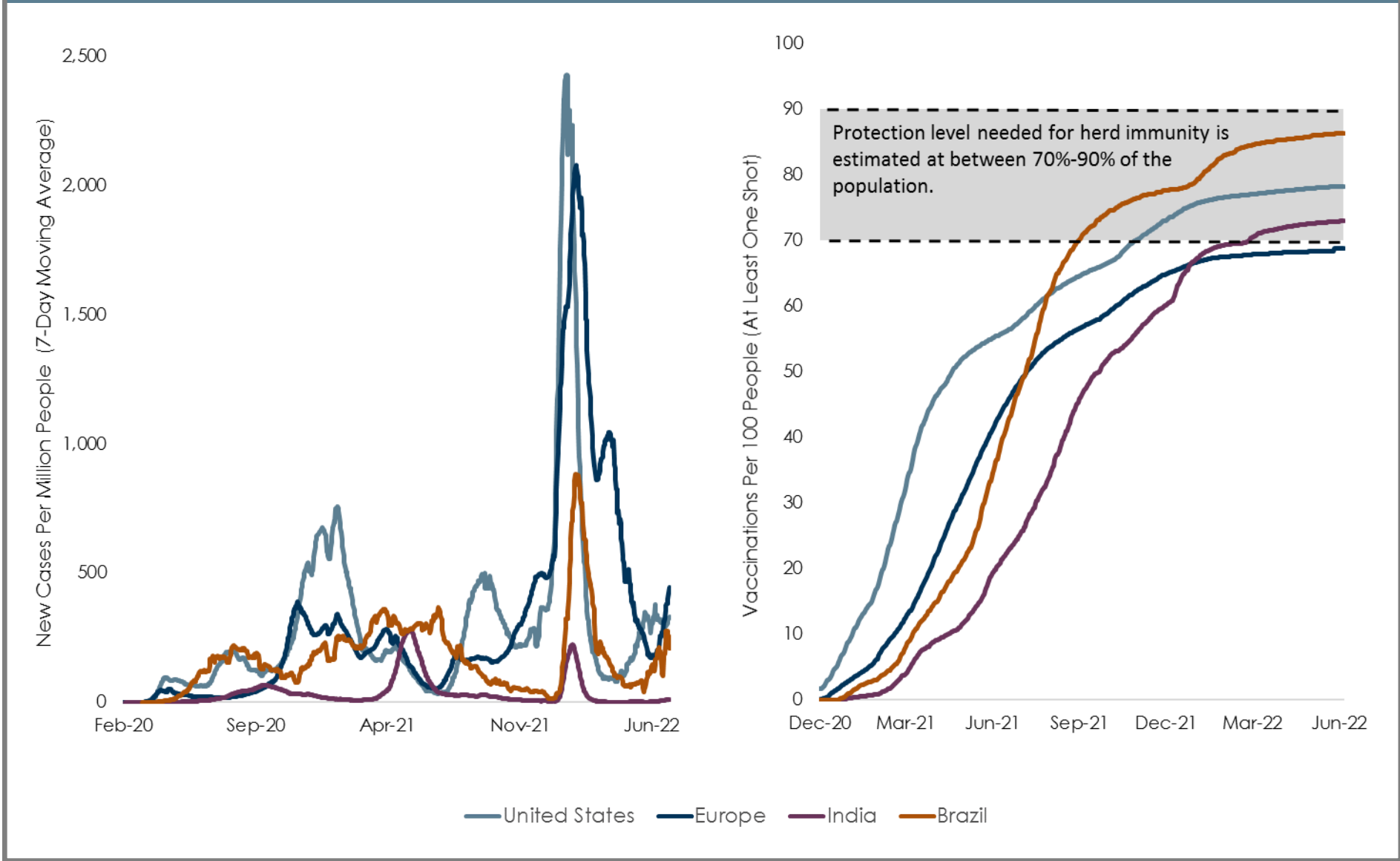


Euro Area Financial Conditions



Source: ACG Research, Bloomberg, Federal Reserve, Banque de France, Forecasts from JP Morgan (as of June 30, 2022)

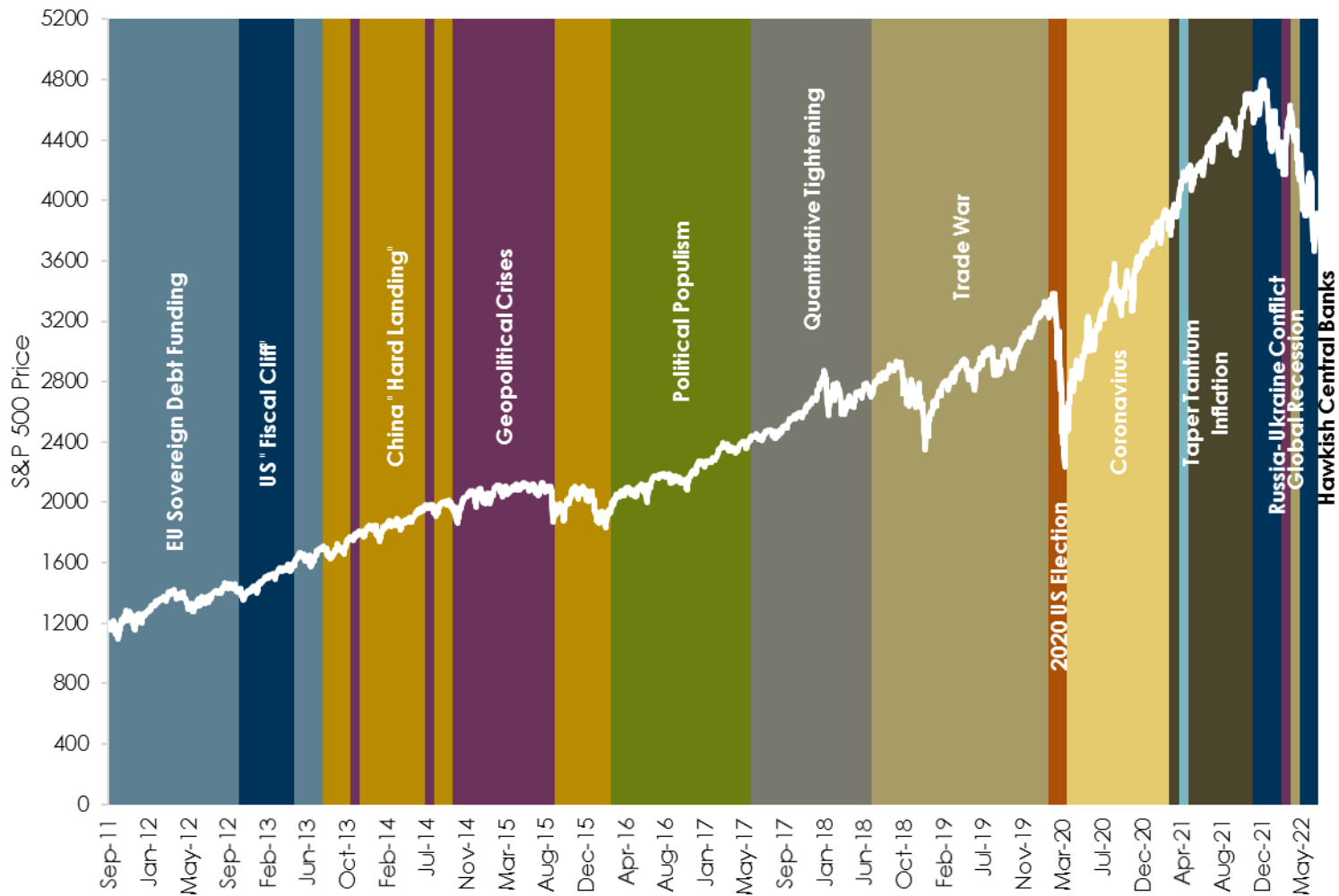
Pandemic Fading for Most of the World, Rising Herd Immunity Expected to Support Economic Growth



Source: ACG Research, Our World in Data (as of June 30, 2022)

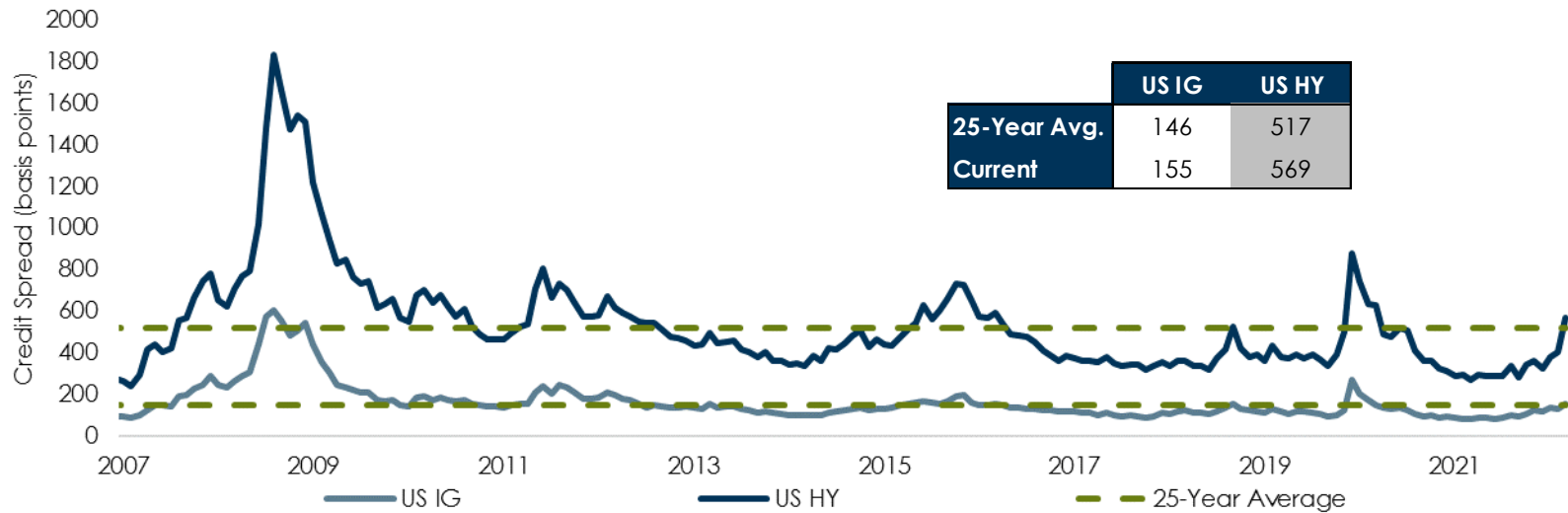
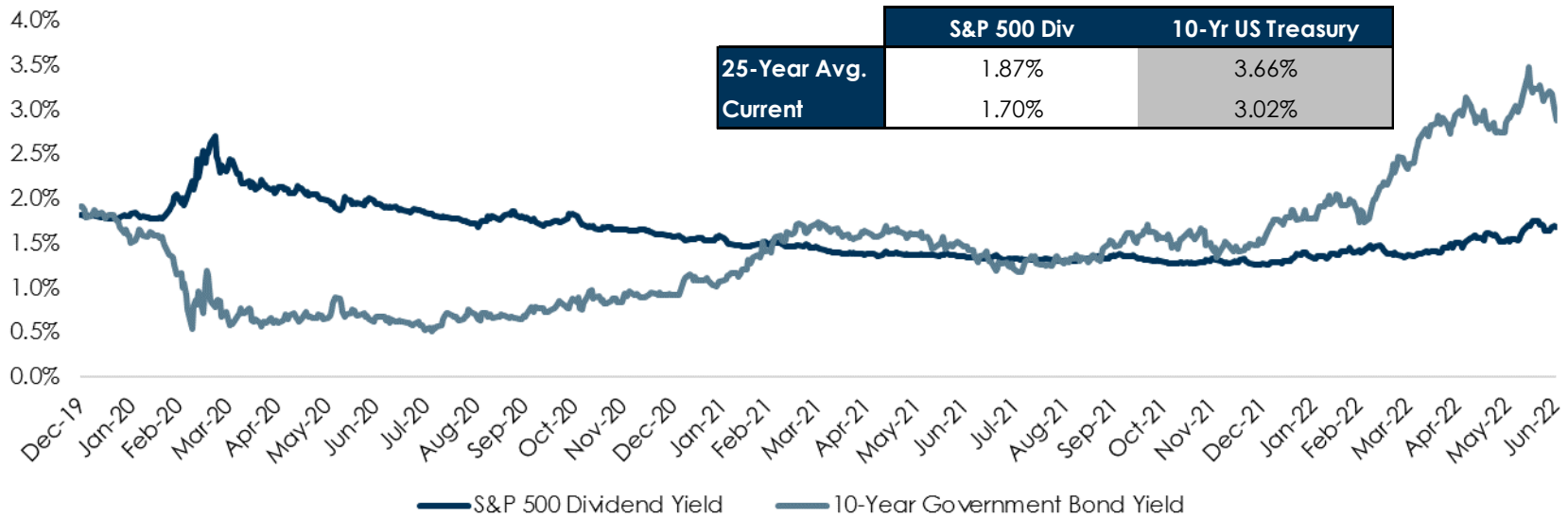
“Hawkish Central Banks” Returns to the Top of Fund Managers’ List of Concerns

History of top answers for “biggest tail risk” in Global Fund Manager Survey

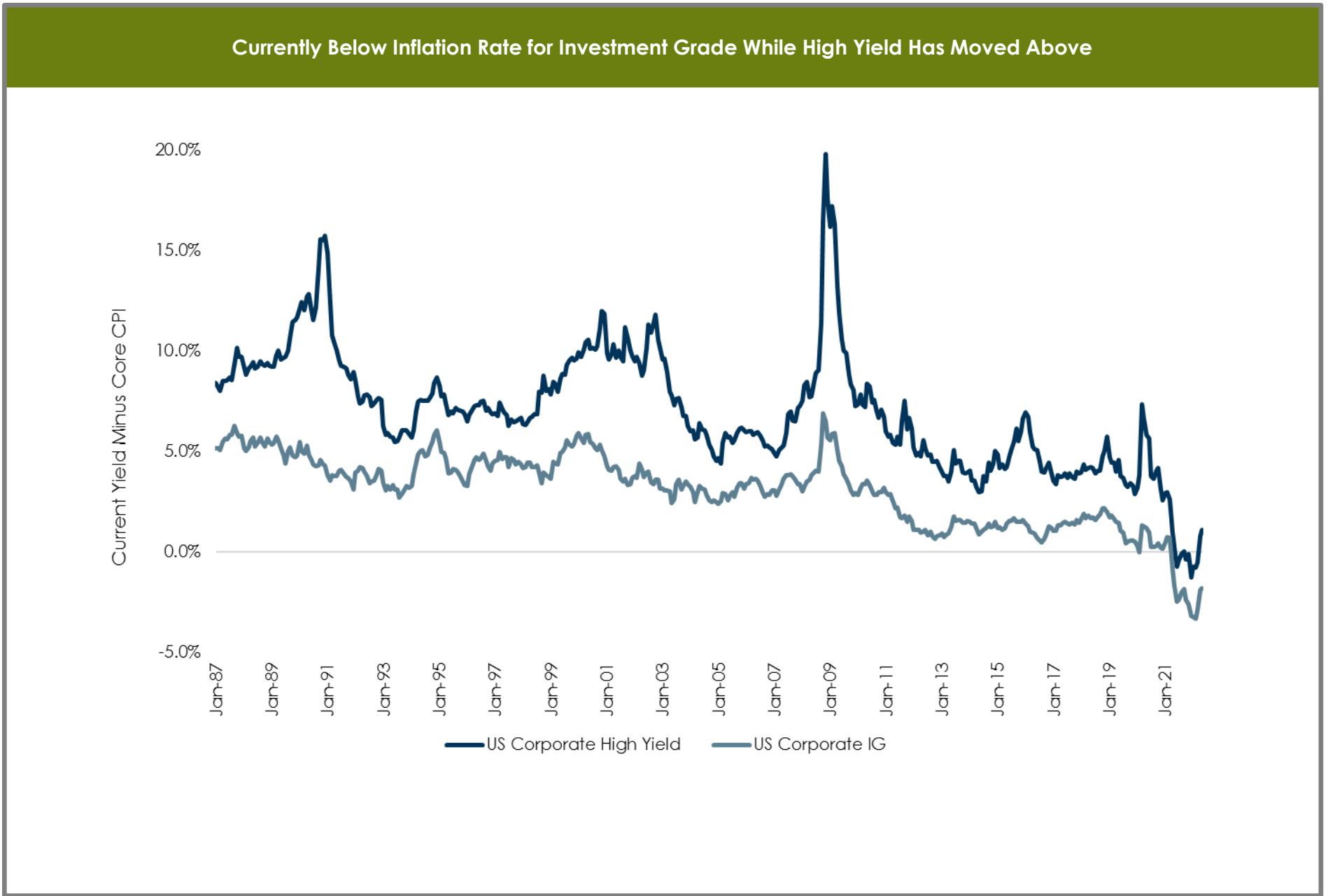


Source: ACG Research, BofA Global Fund Manager Survey (as of June 30, 2022)

Investors Seeking Income - Bond Yields Now Exceed Dividend Yields by Wide Margin

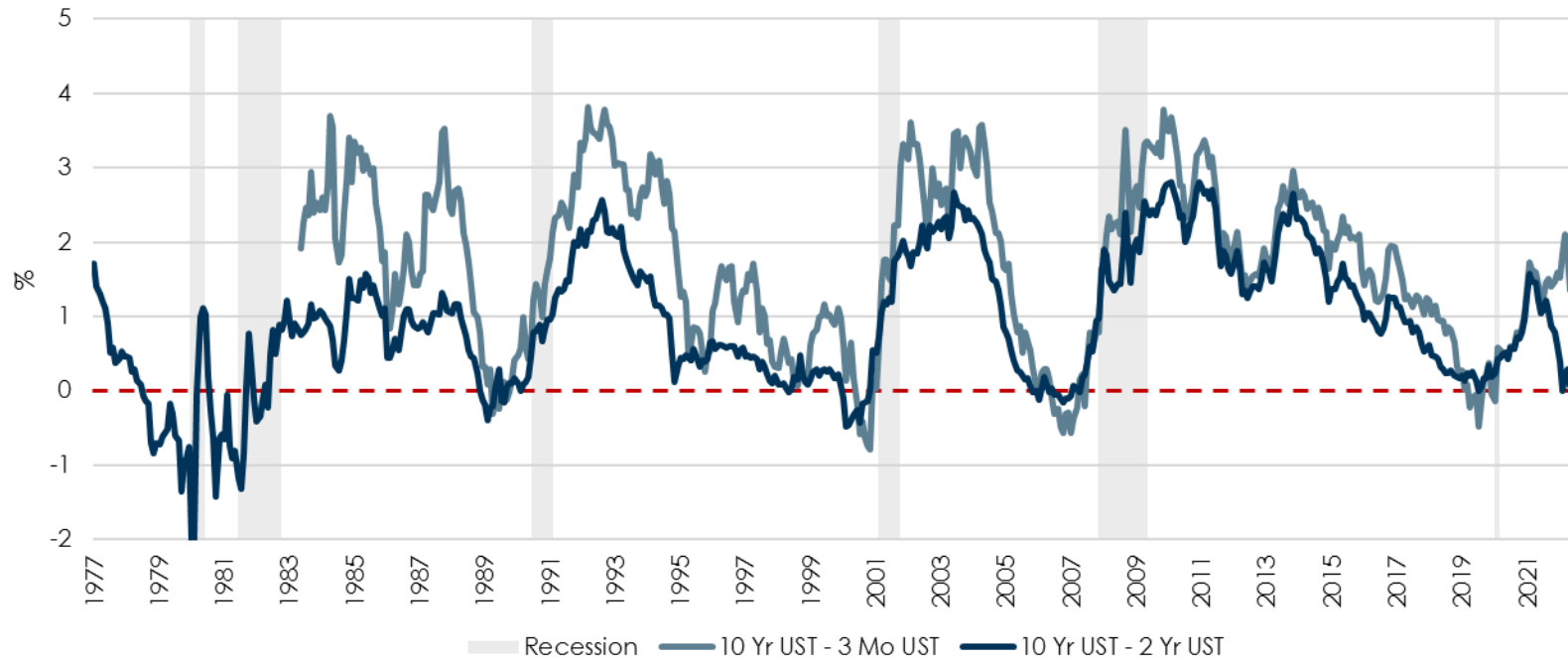


Source: ACG Research, Bloomberg (as of June 30, 2022)



Source: ACG Research, Bloomberg (as of June 30, 2022)

But Still Too Early to Call Recession

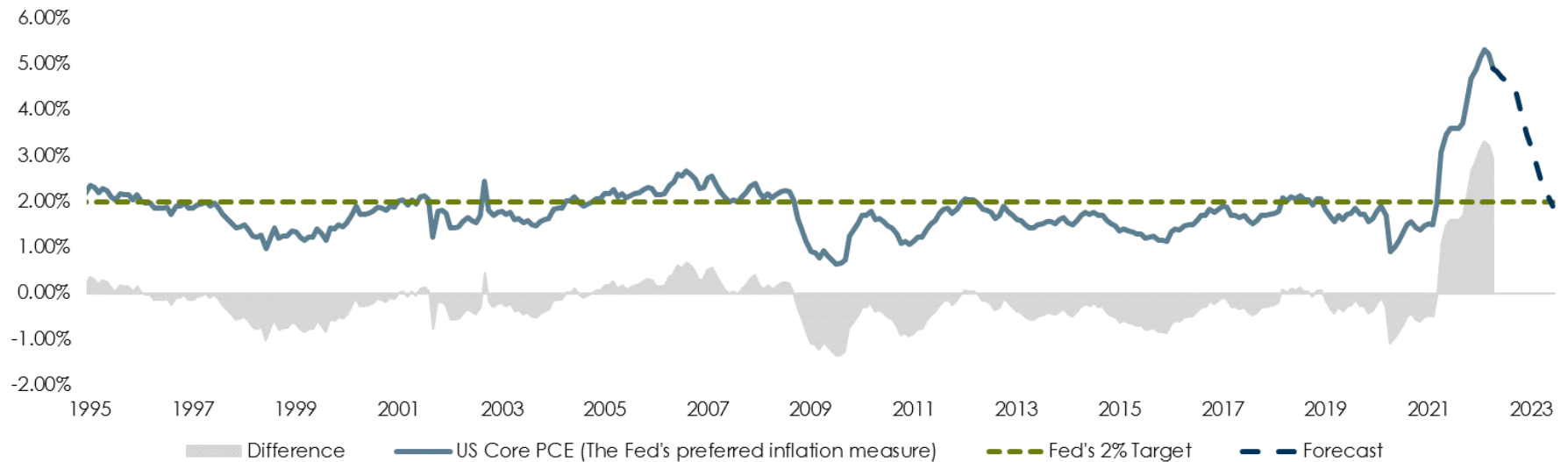


Long and variable lead times between the 10-year/2-year inversion and recessions

Initial Inversion	Recession Start	Months Between
August-78	January-80	16.5
September-80	July-81	9.5
December-88	July-90	18.5
March-98	March-01	35
December-05	December-07	23
August-19	February-20	6
Average		18

Source: ACG Research, Bloomberg, Oxford Economics (as of June 30, 2022)

After Recent Surge, Forecasts Point to Normalization by 2023/4



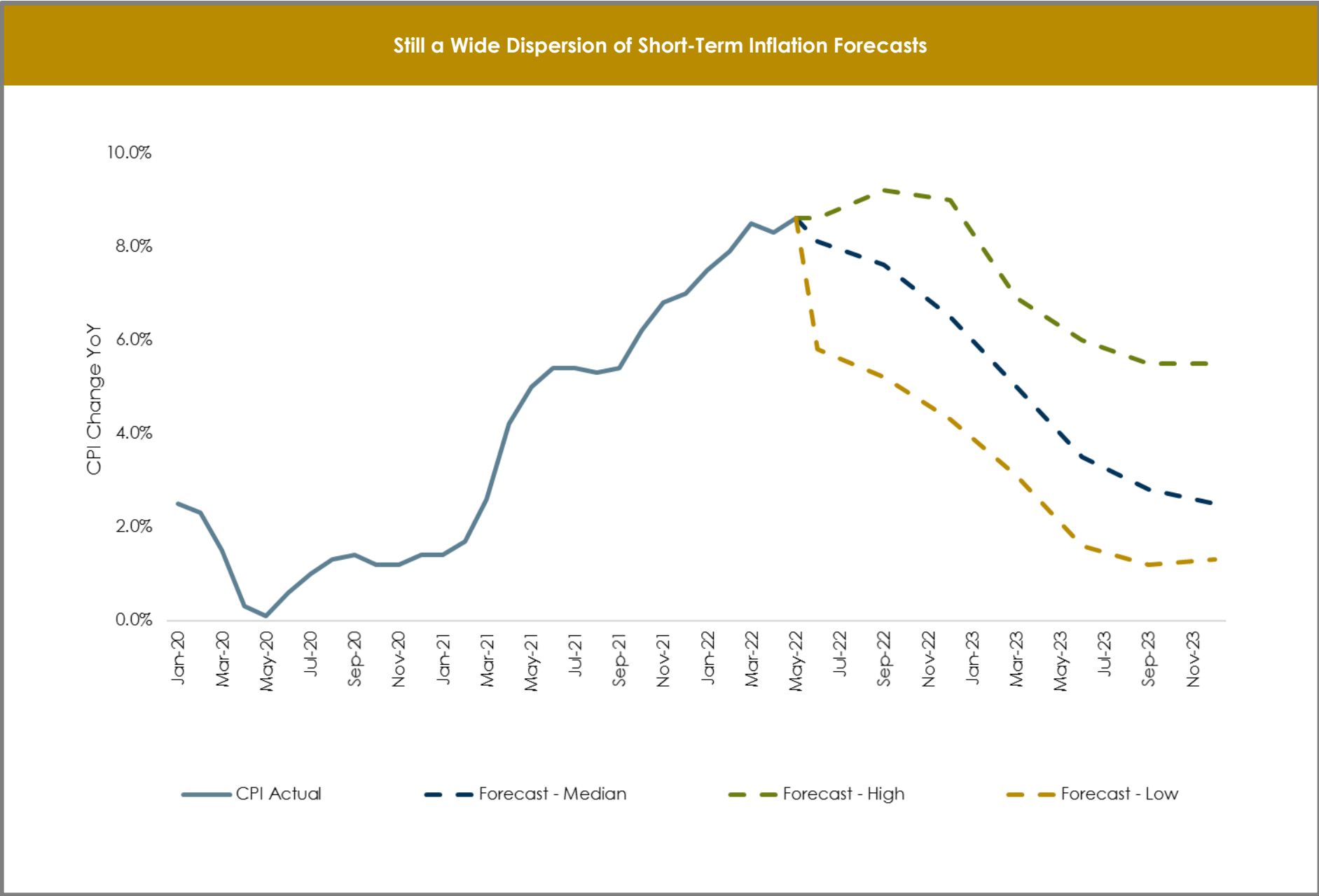
Deflationary Signals

- Demographic trends (lower birth rate, aging population)
- Technological innovations
- Stagnant wage growth
- Unemployment
- High savings rate
- Reduced velocity of money
- Inequality

Inflationary Signals

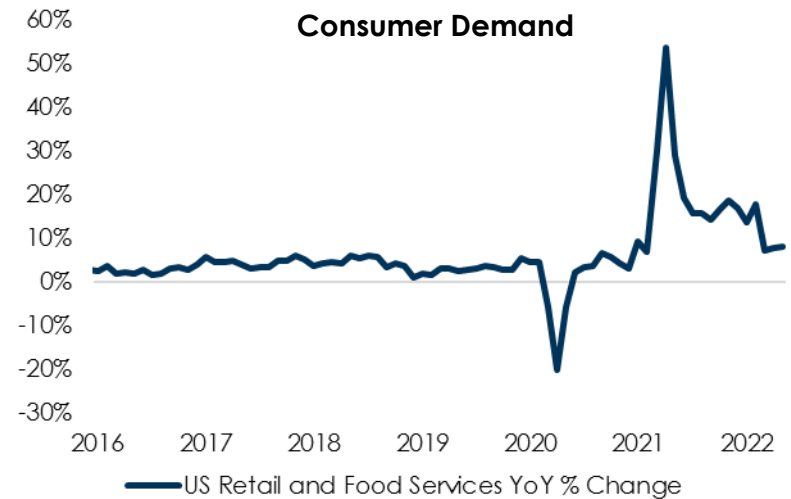
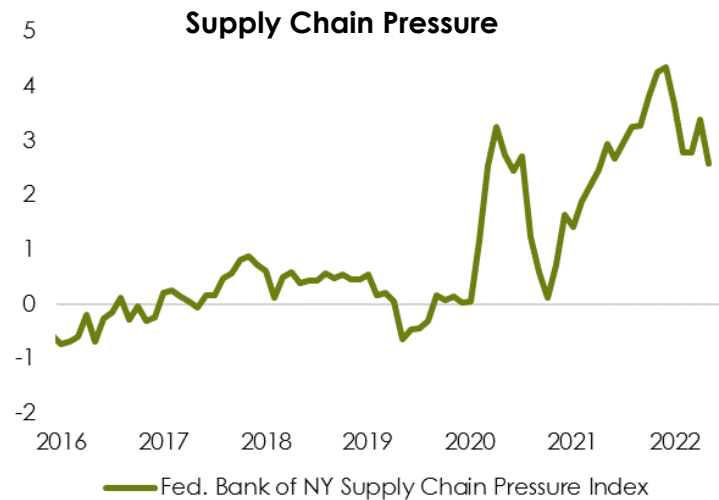
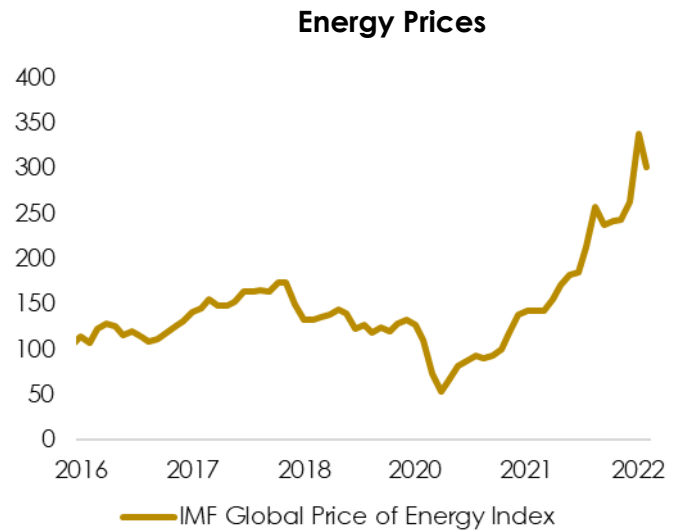
- Fed accommodation
- Consumer demand induced by economic recovery
- Fiscal policy support
- Weaker USD
- Supply chain disruption
- Deglobalization
- Reduced competition

Source: ACG Research, Oxford Economics, Bloomberg (as of May 31, 2022)



Source: ACG Research,, Bloomberg Forecasts sourced from 52 institutions (as of June 30, 2022)

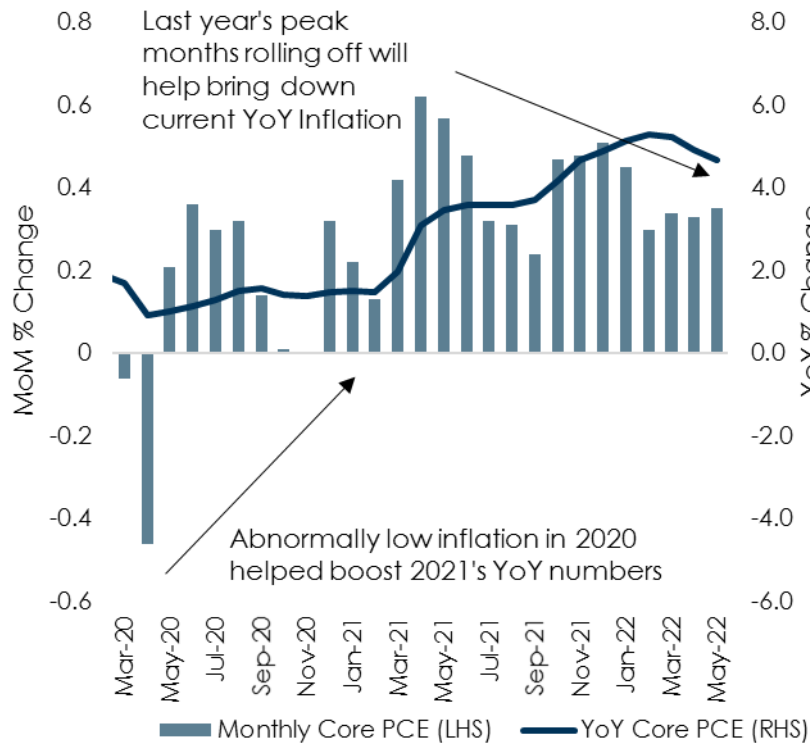
Key Inflation Drivers Showing Signs of Abating



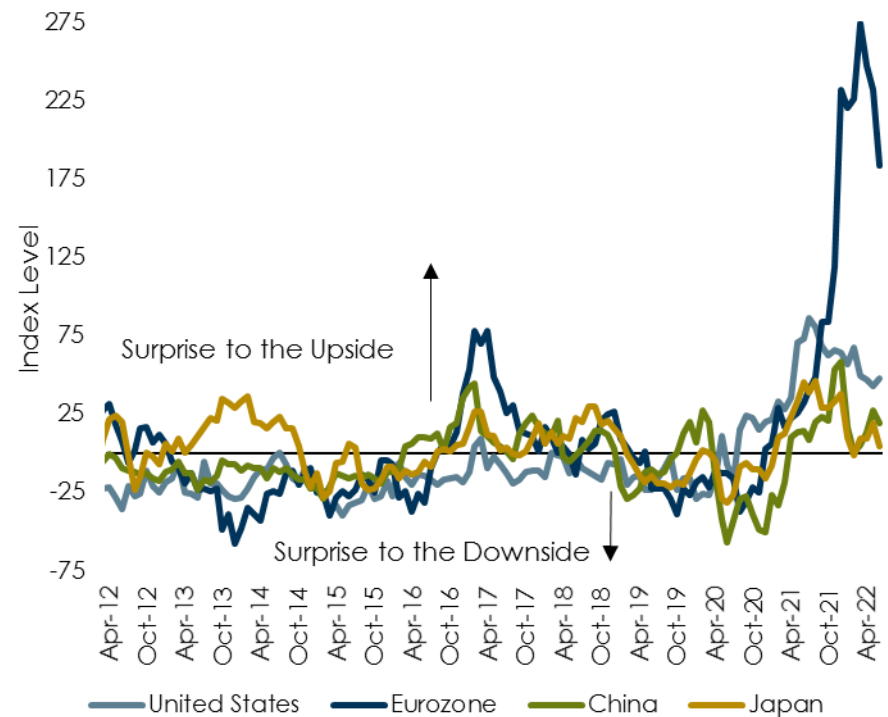
Source: ACG Research, Bloomberg, FRED, IMF (as of June 30, 2022)

Base Effects Should Help This Time; Inflation Surprises Becoming More Subdued

Monthly and Yearly Core PCE



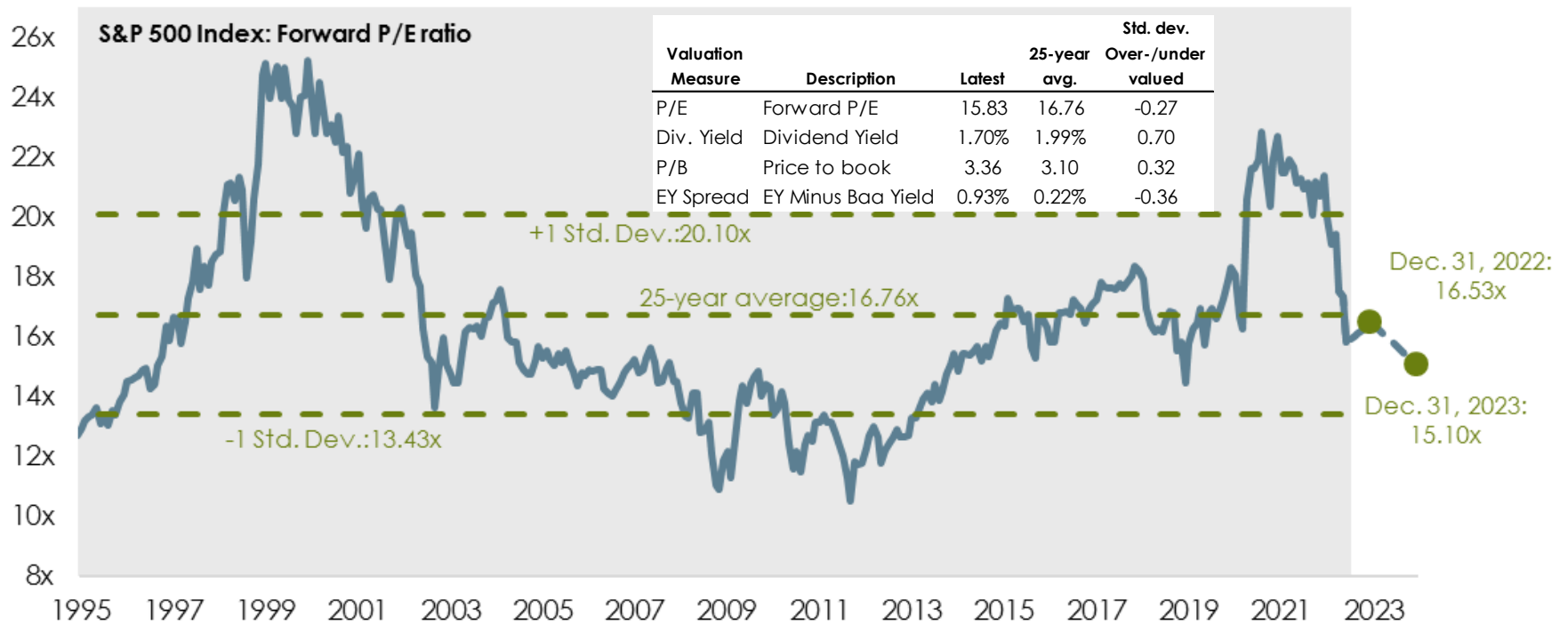
Citi Inflation Surprise Index



Source: ACG Research, Bloomberg, FRED, IMF (as of June 30, 2022)

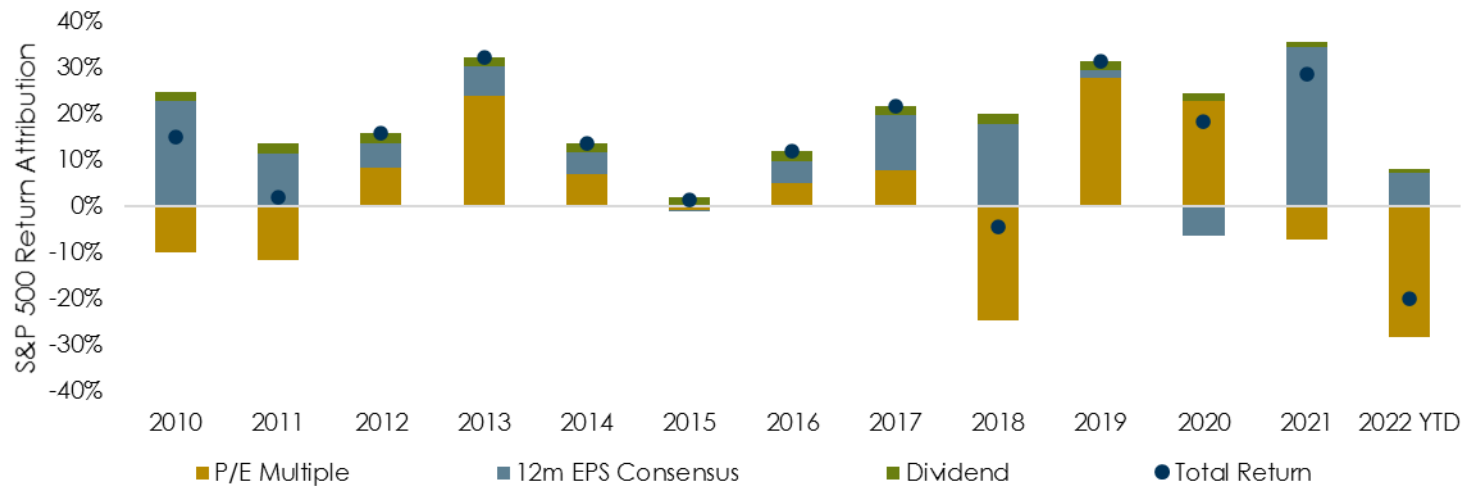
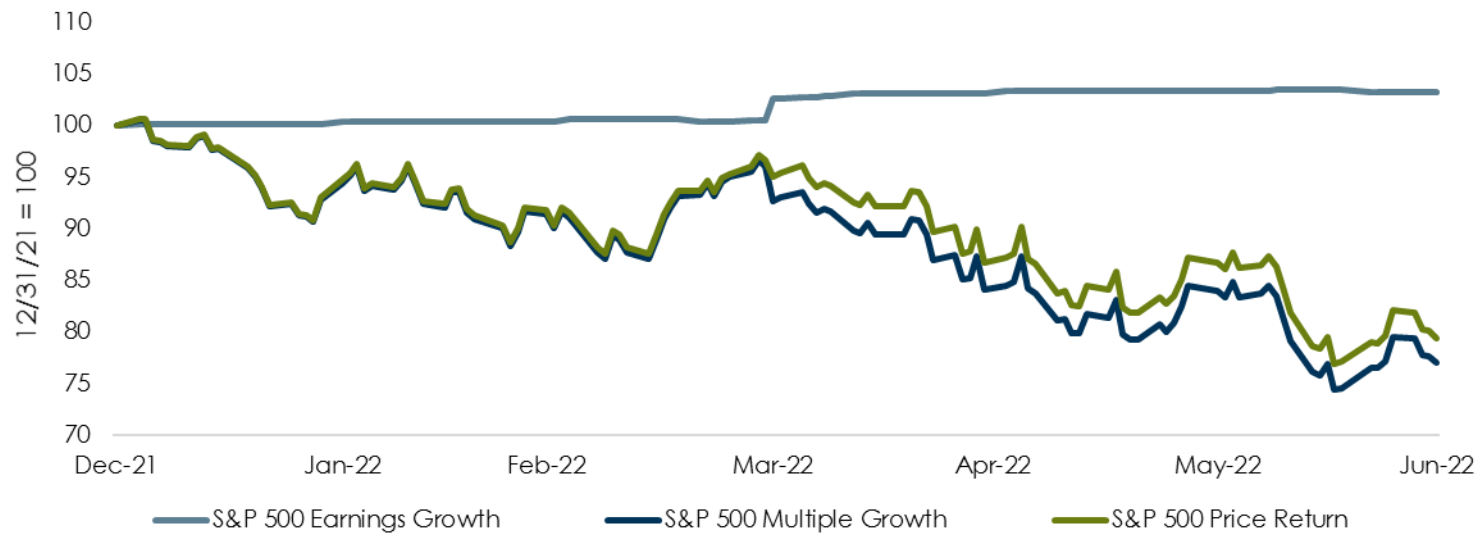
P/E Multiples Have Moderated but are Not Cheap

- **S&P 500 Index p/e now in line with 25-year average (6/30/22 closing price of \$3785)**
- Consensus earnings estimates for 2022 (\$229) suggest a forward p/e of 16.5x (vs. 25-year average of 16.8x)
- Consensus estimates are higher for 2023 (\$251), forward p/e for '23 is 15.1x (vs. 25-year average of 16.8x)
- **Downward earnings revisions** could be expected if economy continues to weaken



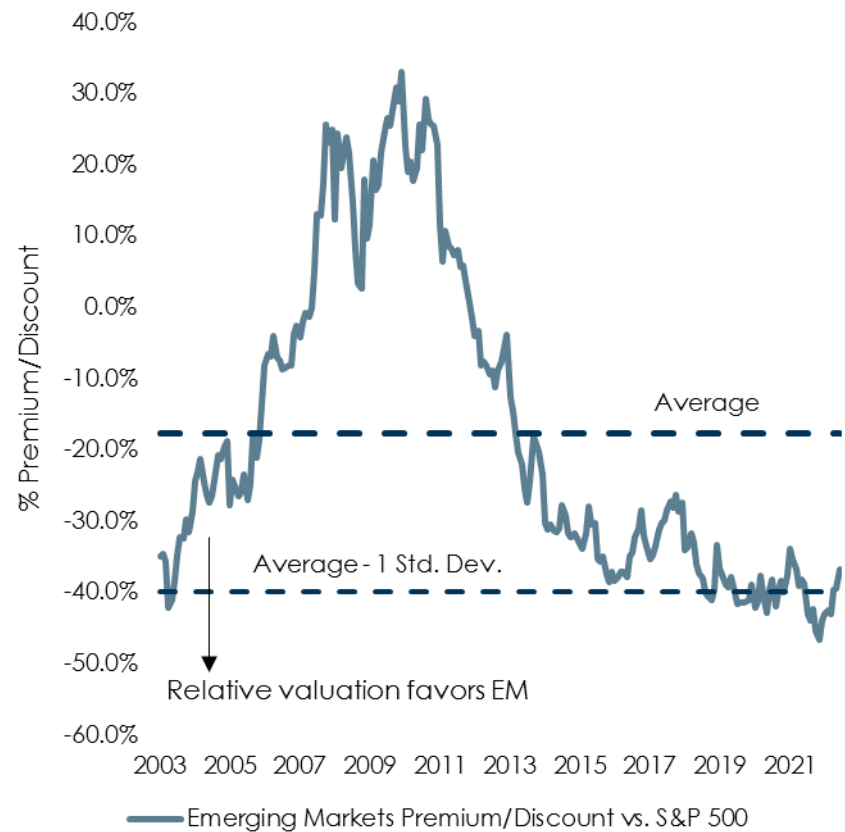
Source: FactSet, FRB, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management

Price Decline and Continued Earnings Growth Have Led to Significant Multiple Contraction

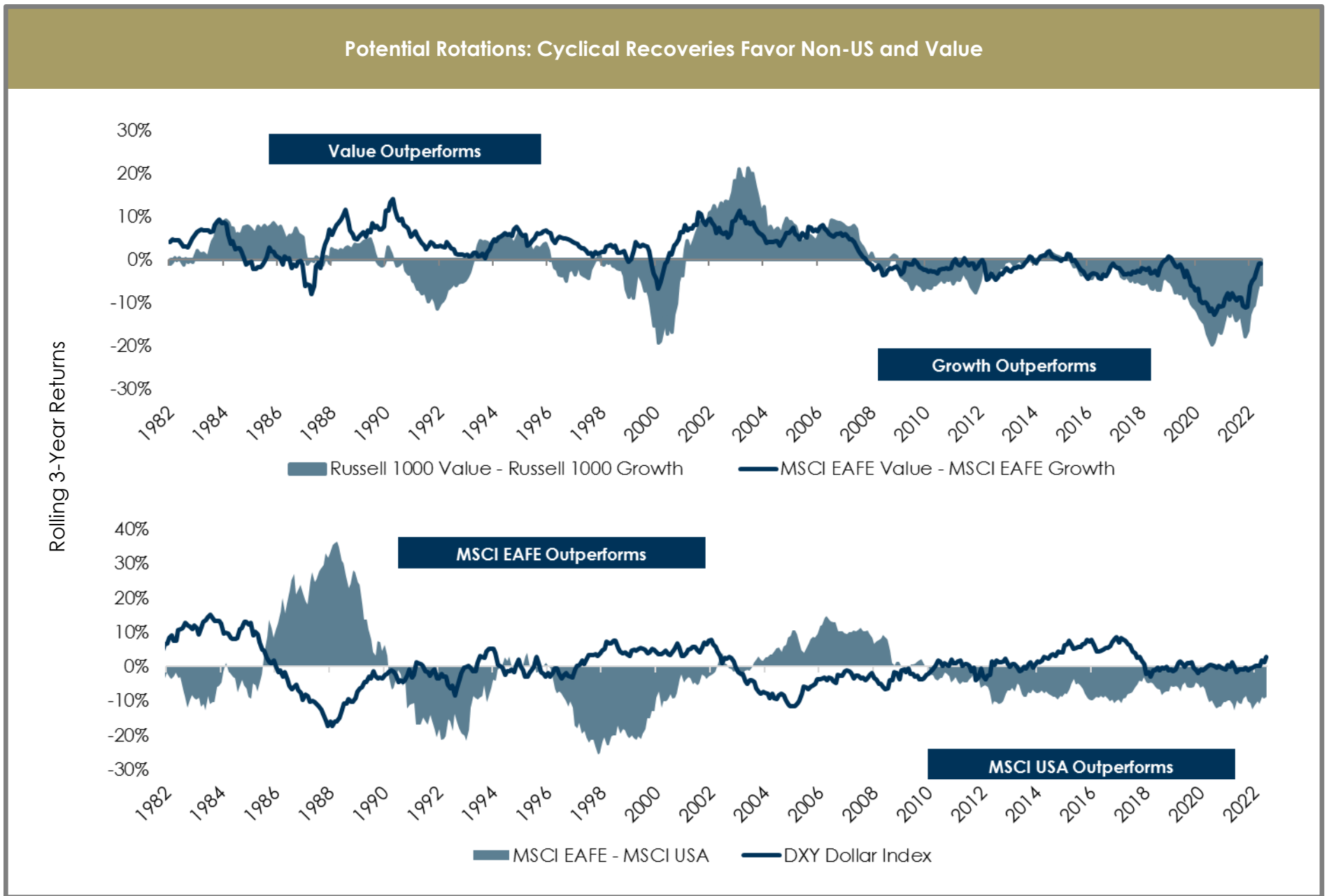


Source: ACG Research, Bloomberg, Robert Shiller (as of June 30, 2022)

Valuations of EAFE and Emerging Markets Indices Relative to the S&P 500 Near Historical Lows

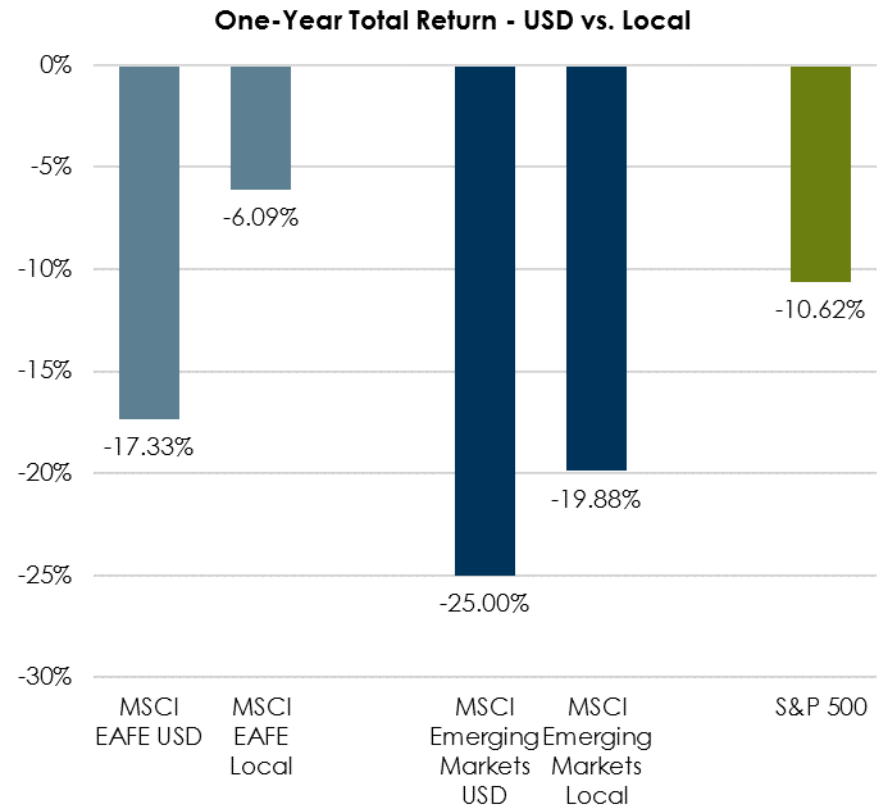
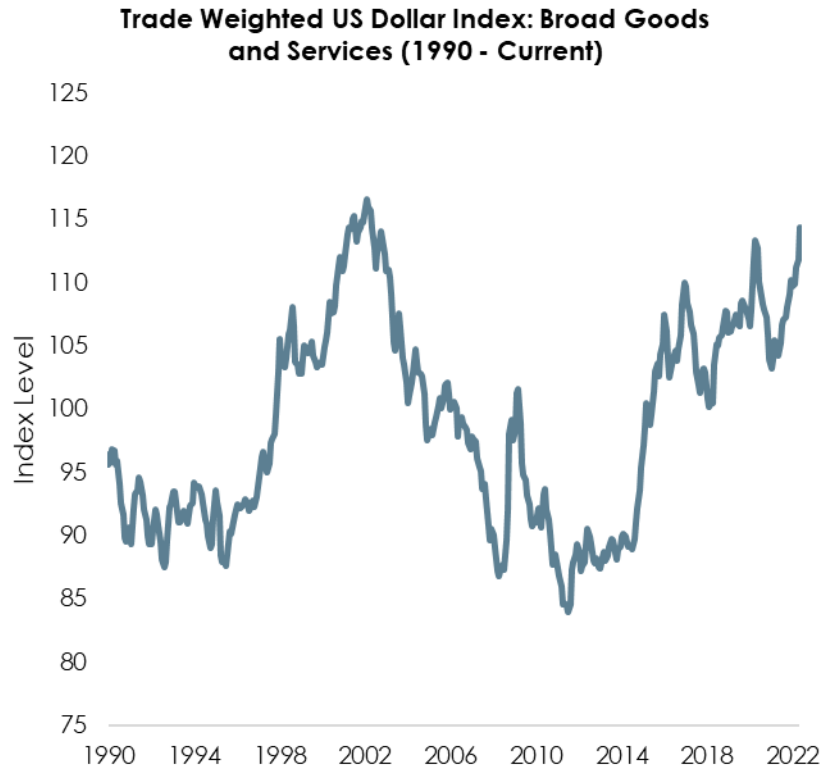


Source: ACG Research, Bloomberg (Valuations are Bloomberg's "Long-Term" PE, using an average of the last 10 years earnings discounted for inflation) (as of June 30, 2022)



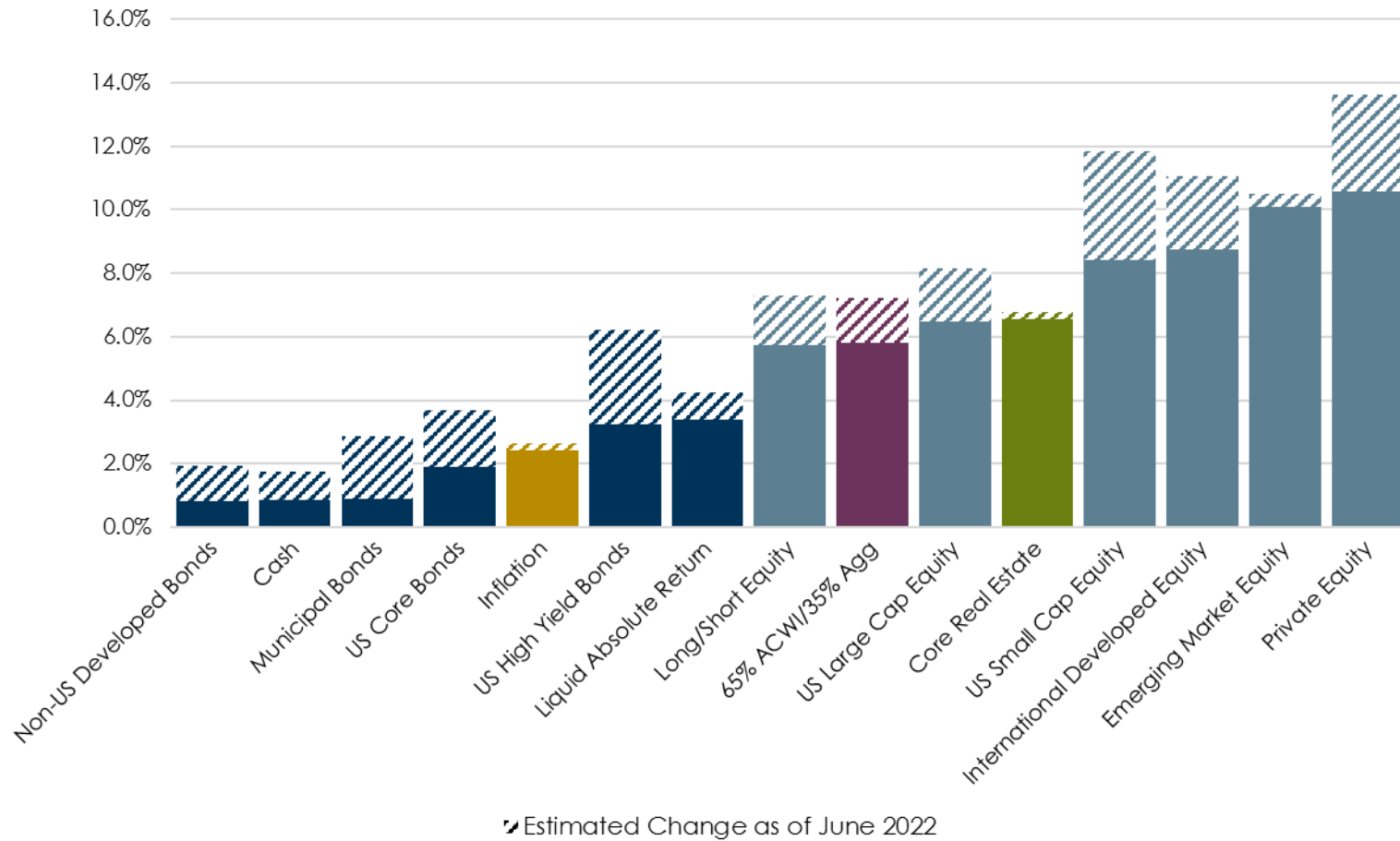
Source: ACG Research, Bloomberg, MSCI, Morningstar (as of June 30, 2022)

Dollar Strength Approaches Multi-Decade High, Resulting in Significant Impact to USD Returns

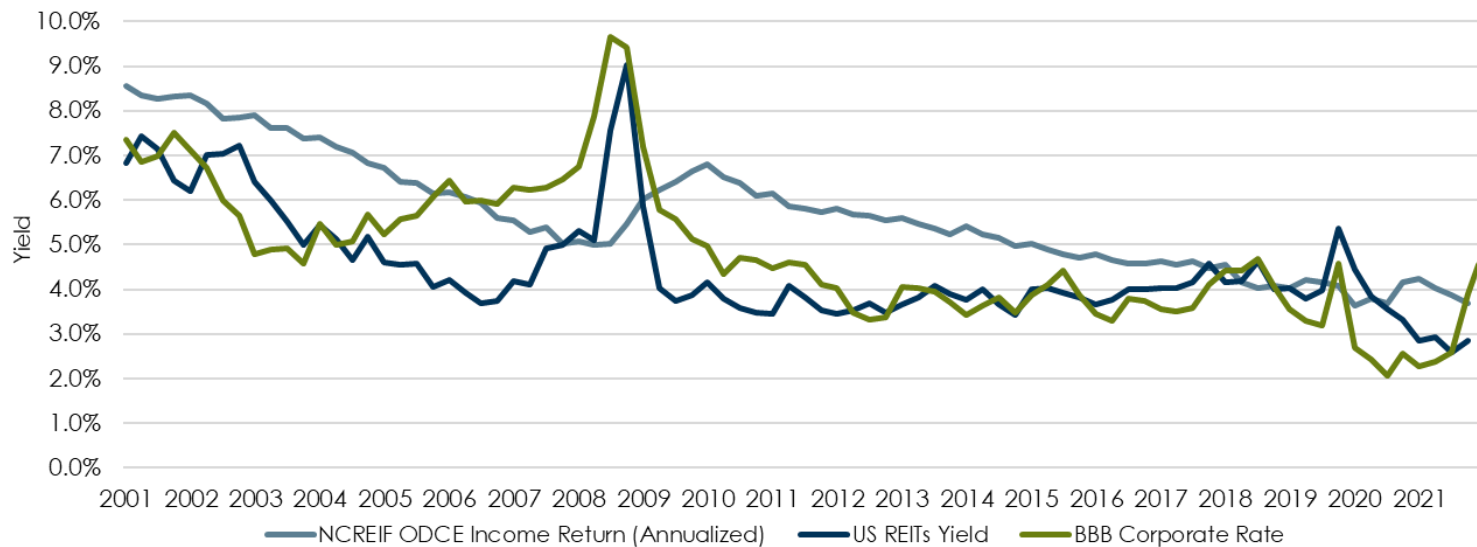
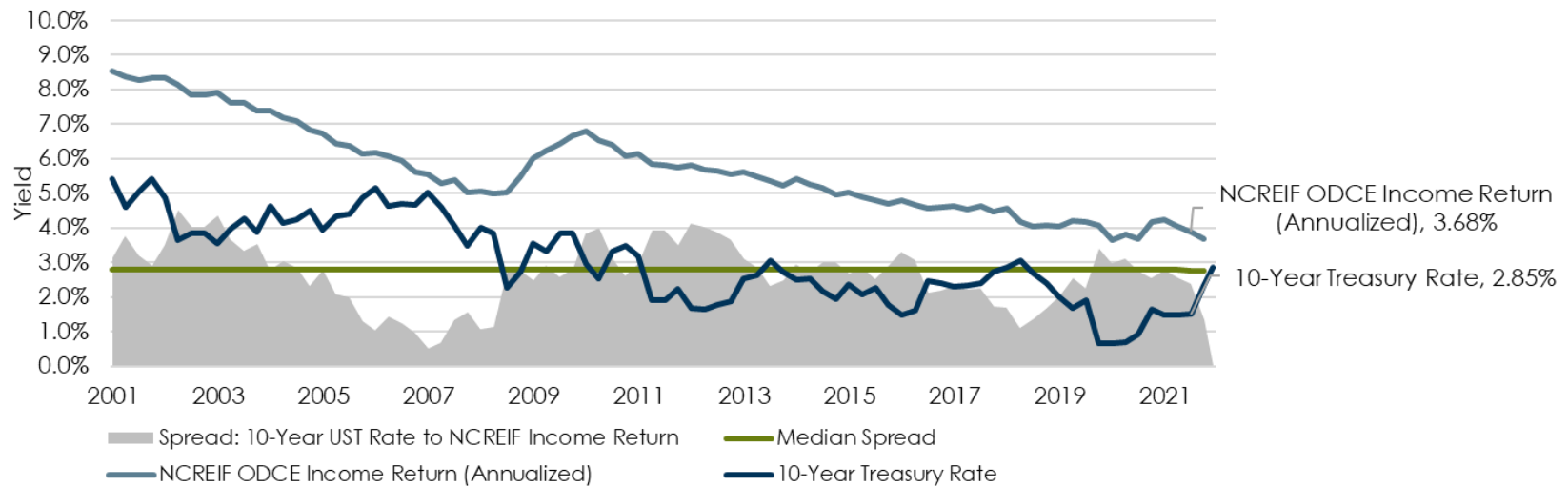


Source: ACG Research, Bloomberg, Morningstar (as of June 30, 2022)

Market Moves Year-To-Date Would Result in Significant Upward Shifts to Most Capital Market Assumptions

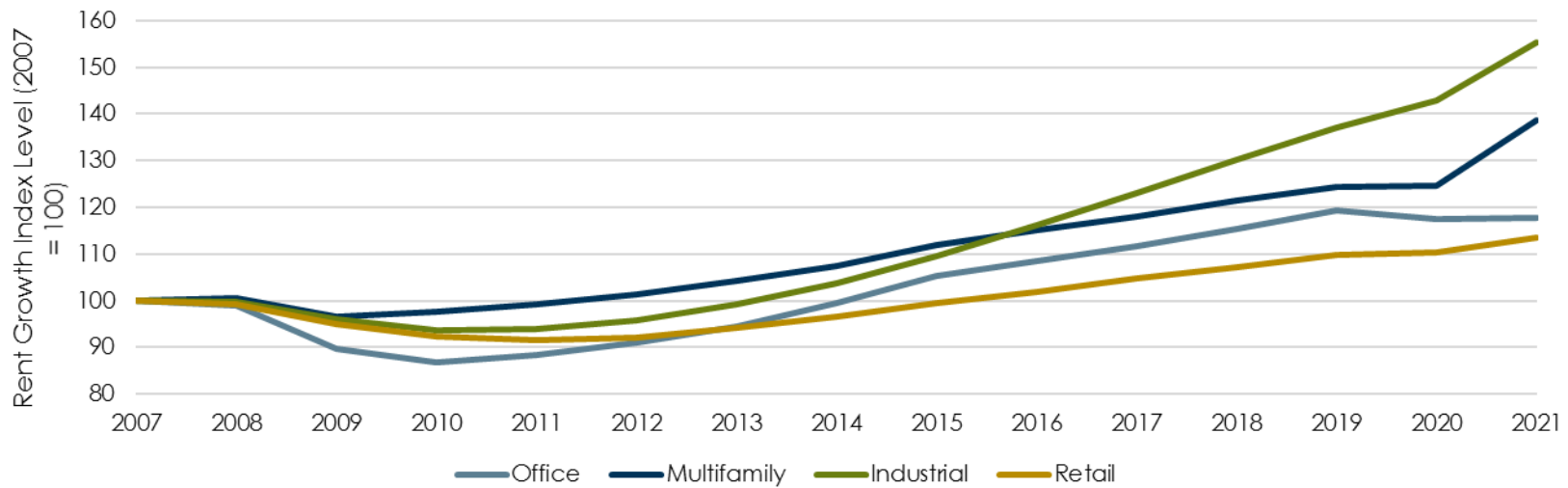
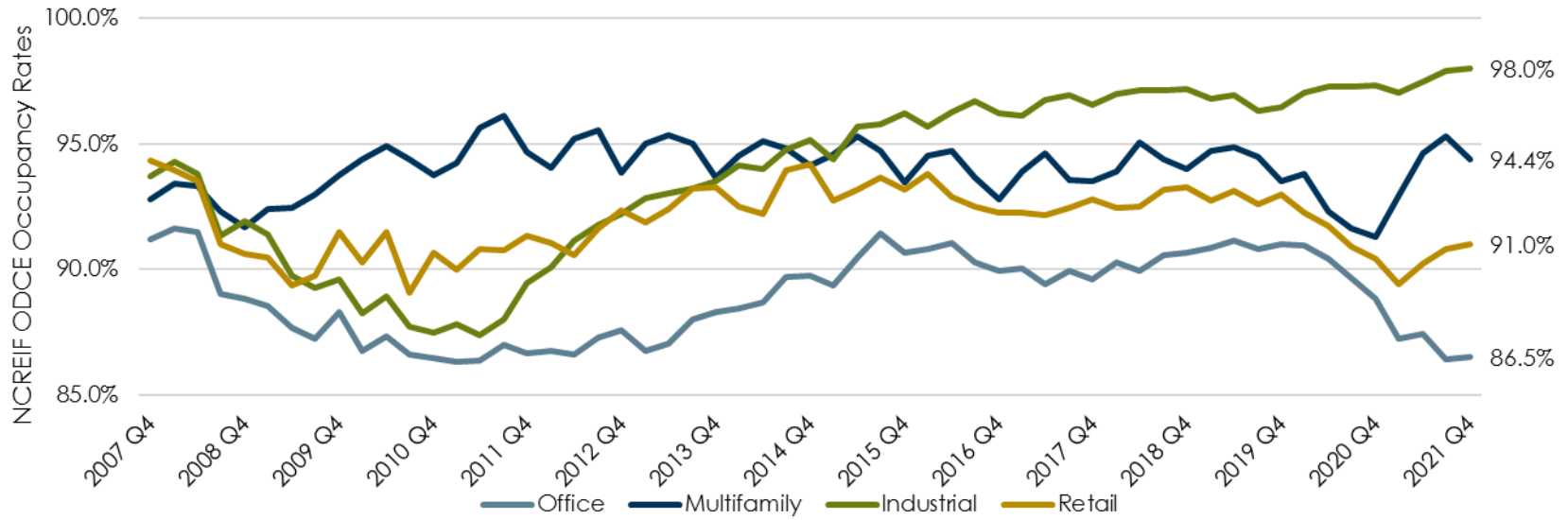


Private Real Estate Yields Remain Attractive Relative to Fixed Income and Public Real Estate



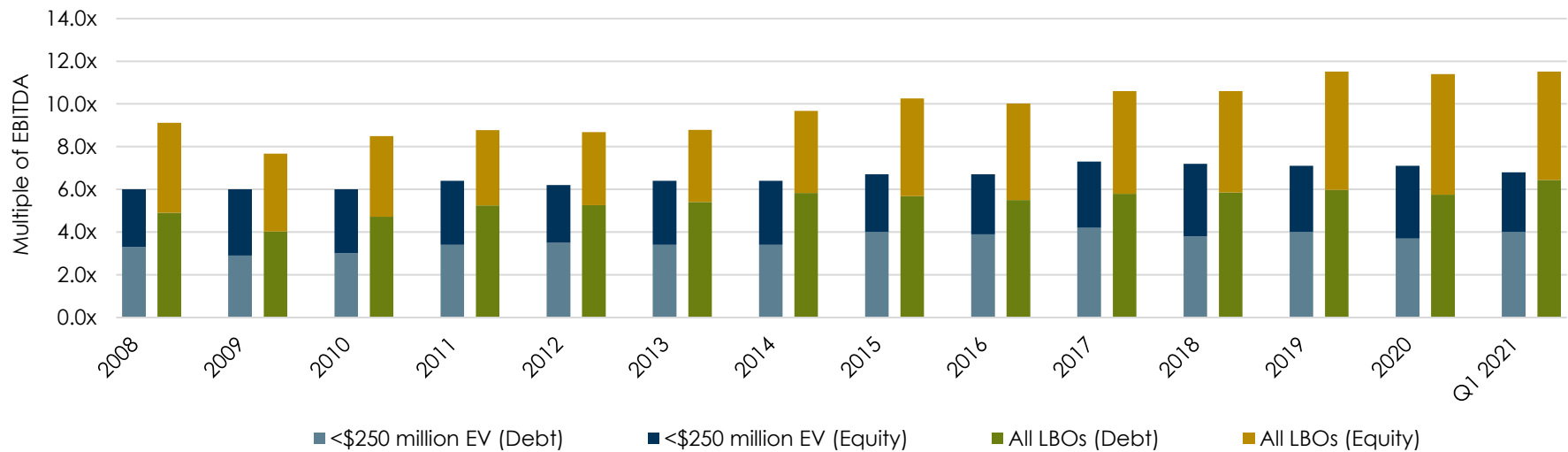
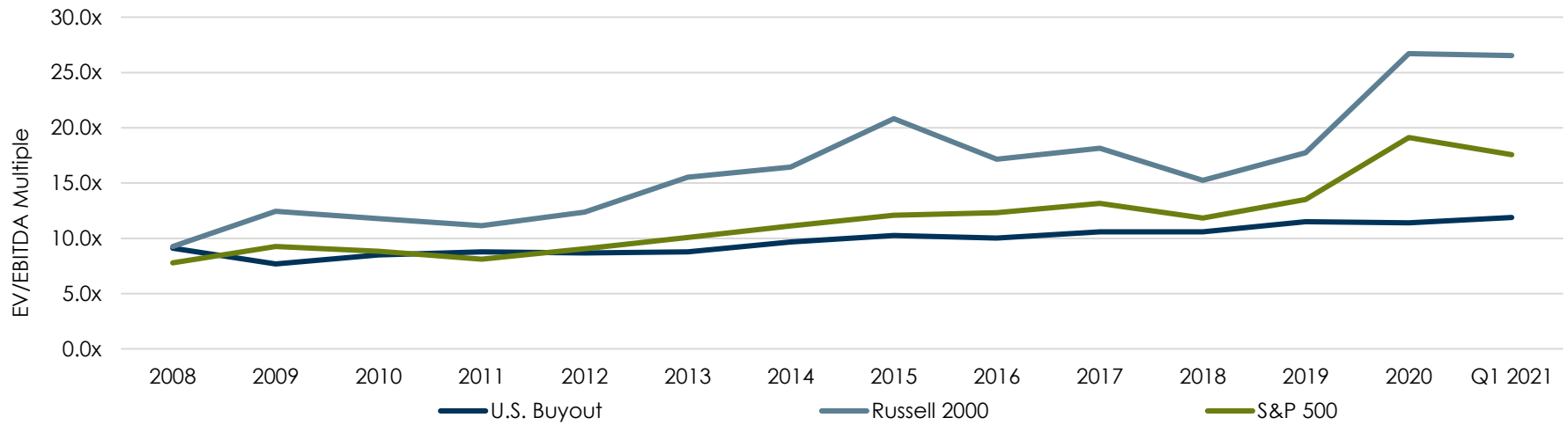
Source: Bloomberg, ACG Research (10-Yr Treasury and BBB Corporate Rate as of May 31, 2022, other data as of March 31, 2022)

Real Estate Recovery Varies by Property Type but the Overall Trend is Positive



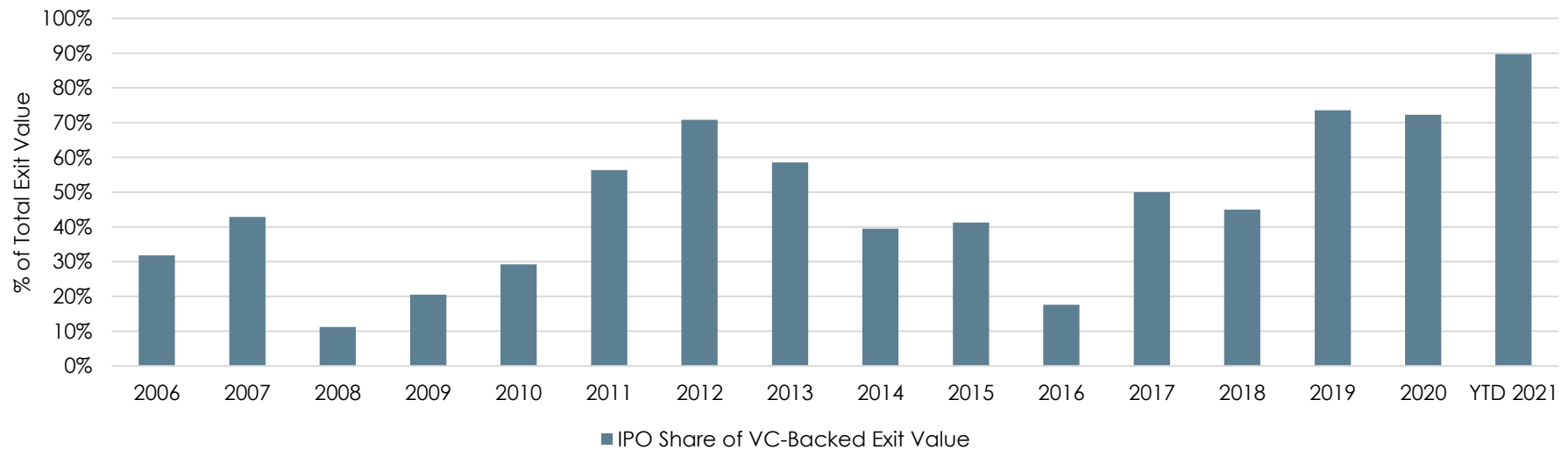
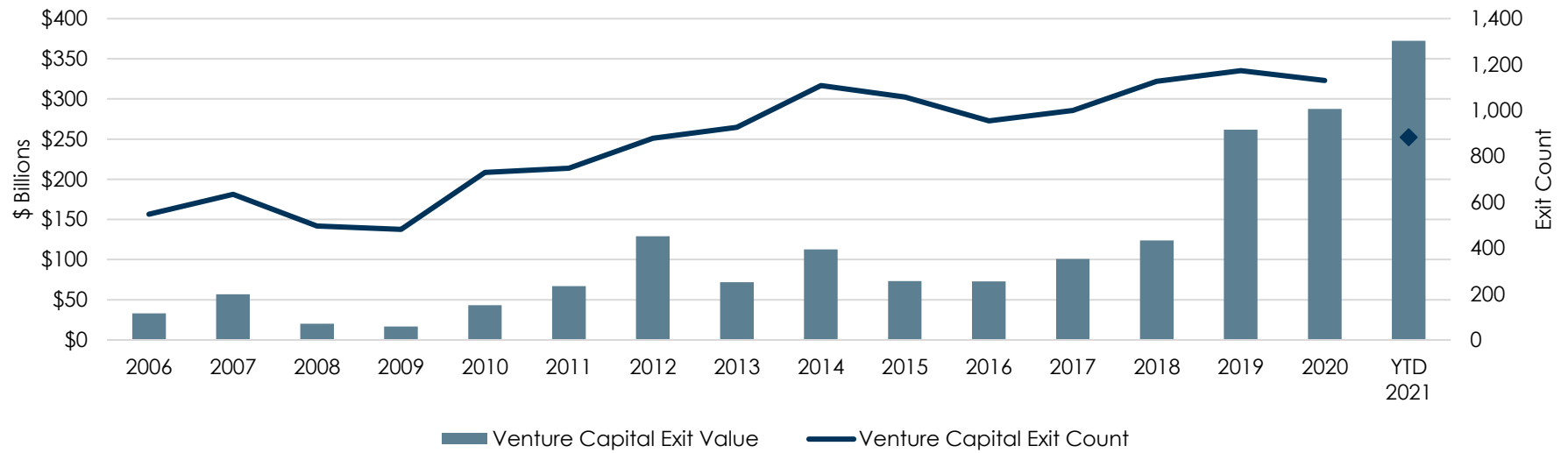
Source: AEW, CoStar, ACG Research (as of December 31, 2021)

Valuation Discount Exists in Private vs. Public Markets and in Small vs. Large Private Transactions



Source: S&P LCD, CIBC Capital Markets, GF Data, ACG Research (as of March 31, 2021)

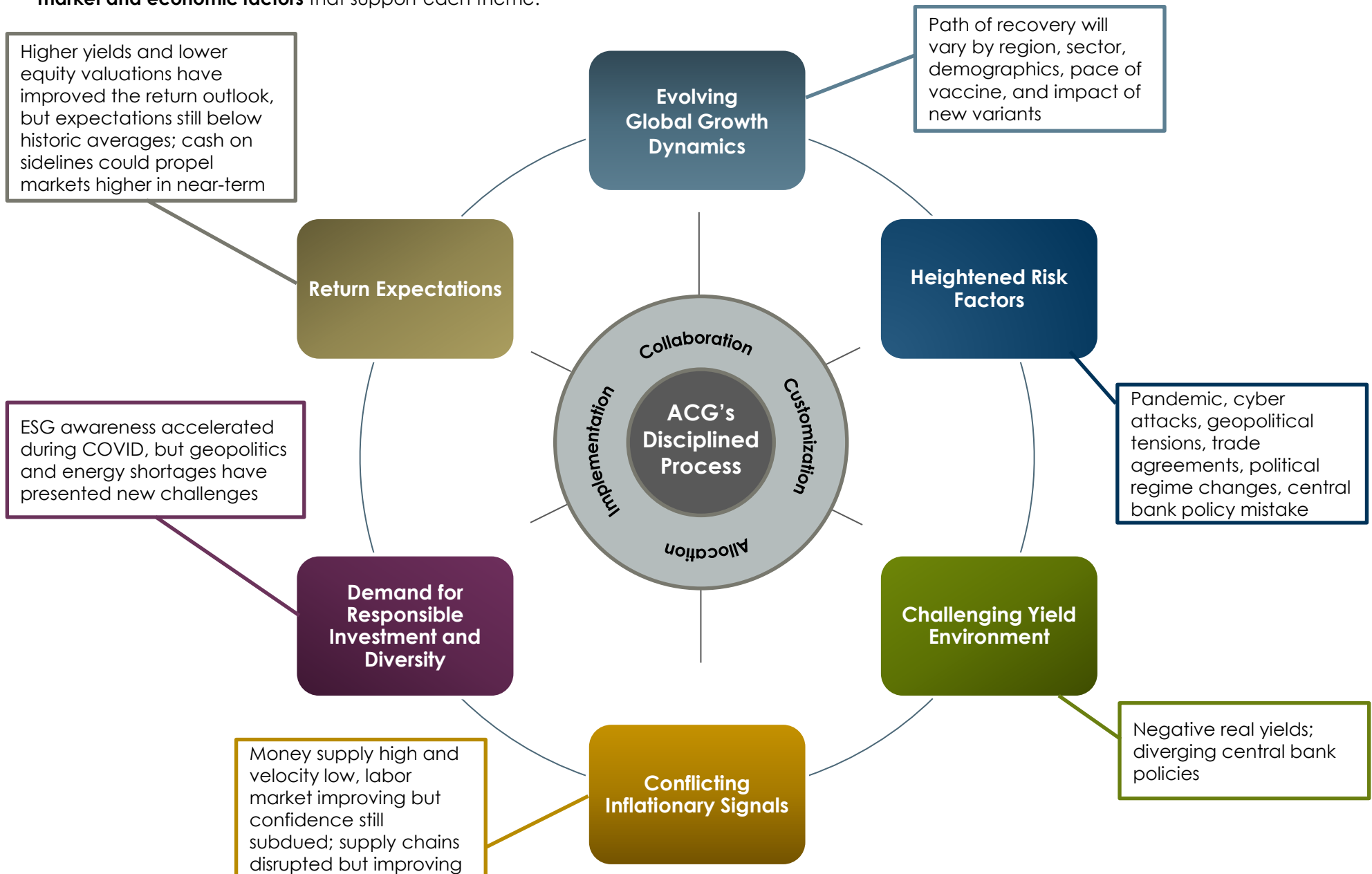
Venture Capital Exit Volume is at Record Levels, with Activity Increasingly Dominated by IPO vs. M&A Activity



Source: Renaissance Capital, PitchBook, ACG Research (as of June 30, 2021)

Key Themes

ACG's Investment Committee outlines key themes that will drive investment returns **over the intermediate term**. In this quarterly update, we highlight **market and economic factors** that support each theme.



Implementation Strategies

Evolving Global Growth Dynamics

- Maintain long-term strategic allocations
- Pursue active/focused/opportunistic strategies in less efficient markets

Heightened Geopolitical & Social Risks

- Embrace global diversification, with a modest reserve of dry powder
- Private strategies and long/short equity can limit near-term price impacts

Challenging Yield Environment

- Maintain high-quality core fixed income exposures for portfolio ballast
- Incorporate "non-traditional" strategies for flexibility and yield enhancement

Conflicting Inflationary Signals

- Shorter-dated fixed income and floating rate securities protect against inflationary surprise
- Diversified real assets can provide enhanced income amid rising prices

Demand for Responsible Investment

- Consider a high-quality portfolio orientation
- Opportunities in both stocks and bonds for impact oriented investment

Muted Return Expectations

- Revisit overall risk tolerance and investment objectives
- Focus on strategic plan versus frequent tactical shifts

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