CHINA BEARS AND INFLATION SCARES

NEPC Q3 2021 MARKET OUTLOOK

OCTOBER 18, 2021

SPEAKERS

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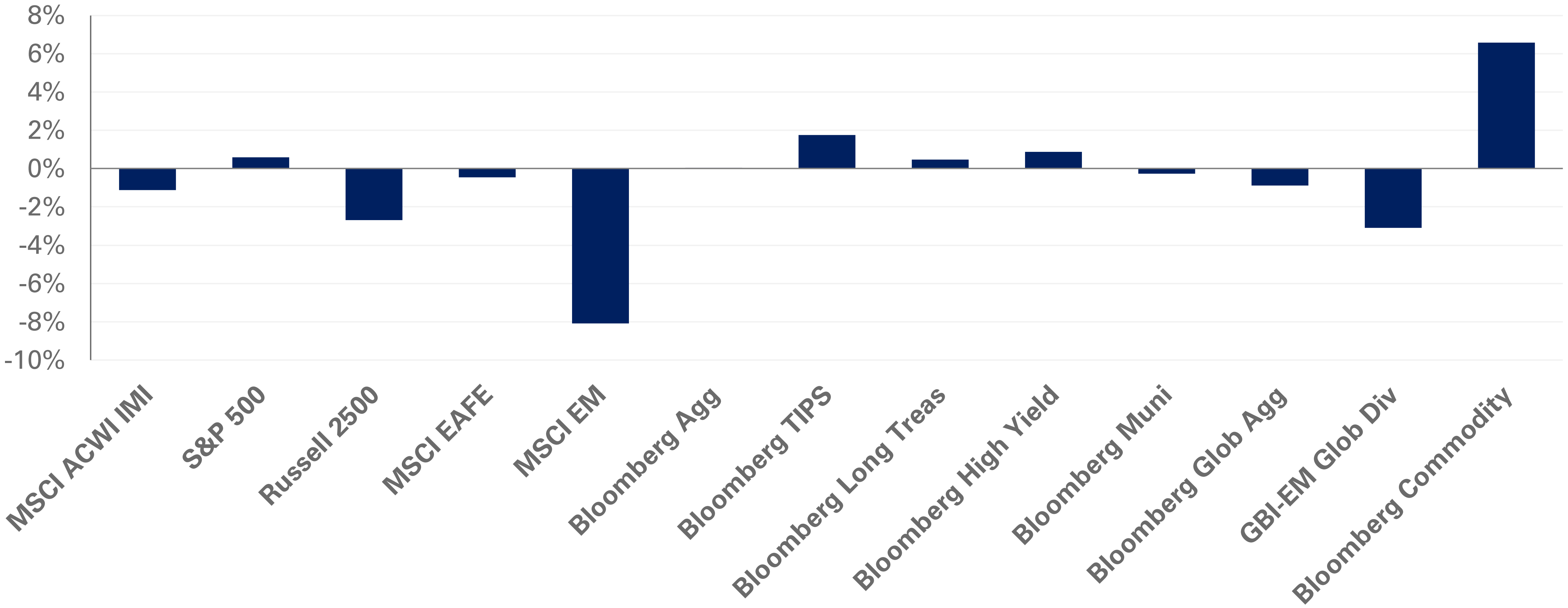
MARKETS IN REVIEW

EMERGING MARKETS UNDERPERFORMED

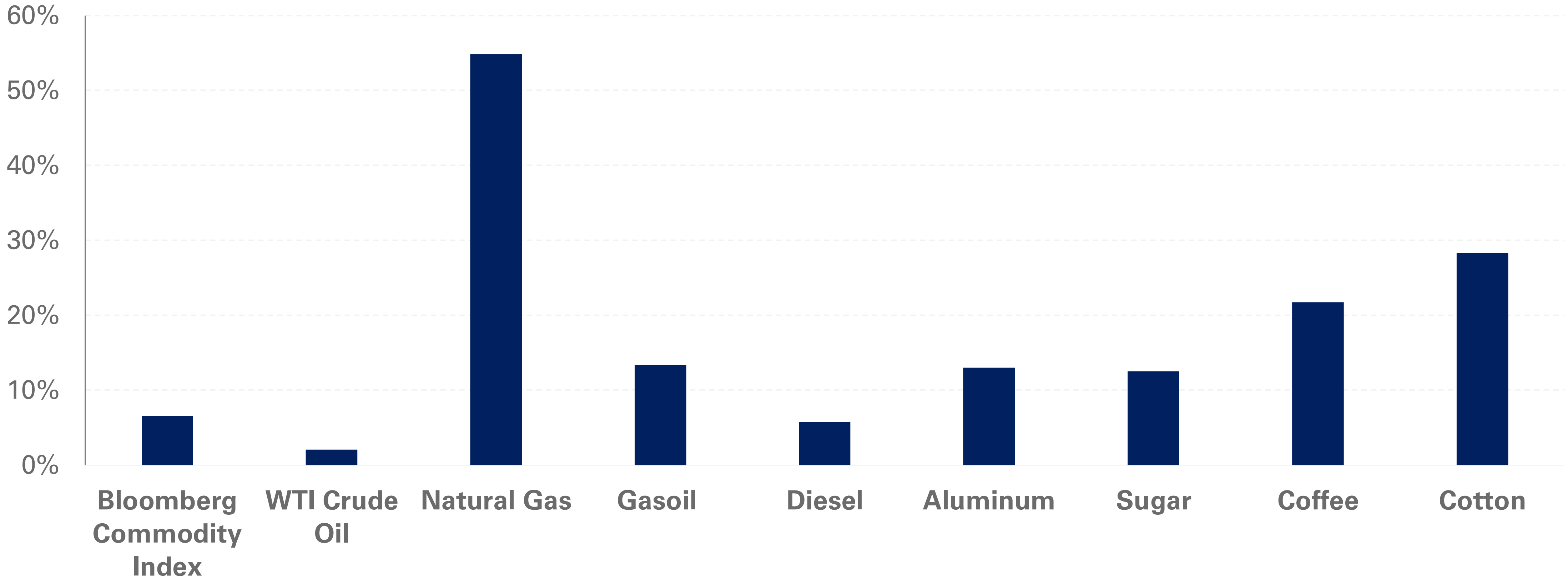
Q3 2021 QUARTERLY TOTAL RETURNS



Source: MSCI, S&P, Russell, MSCI, Bloomberg, JPM, FactSet

COMMODITY PRICES INCREASED

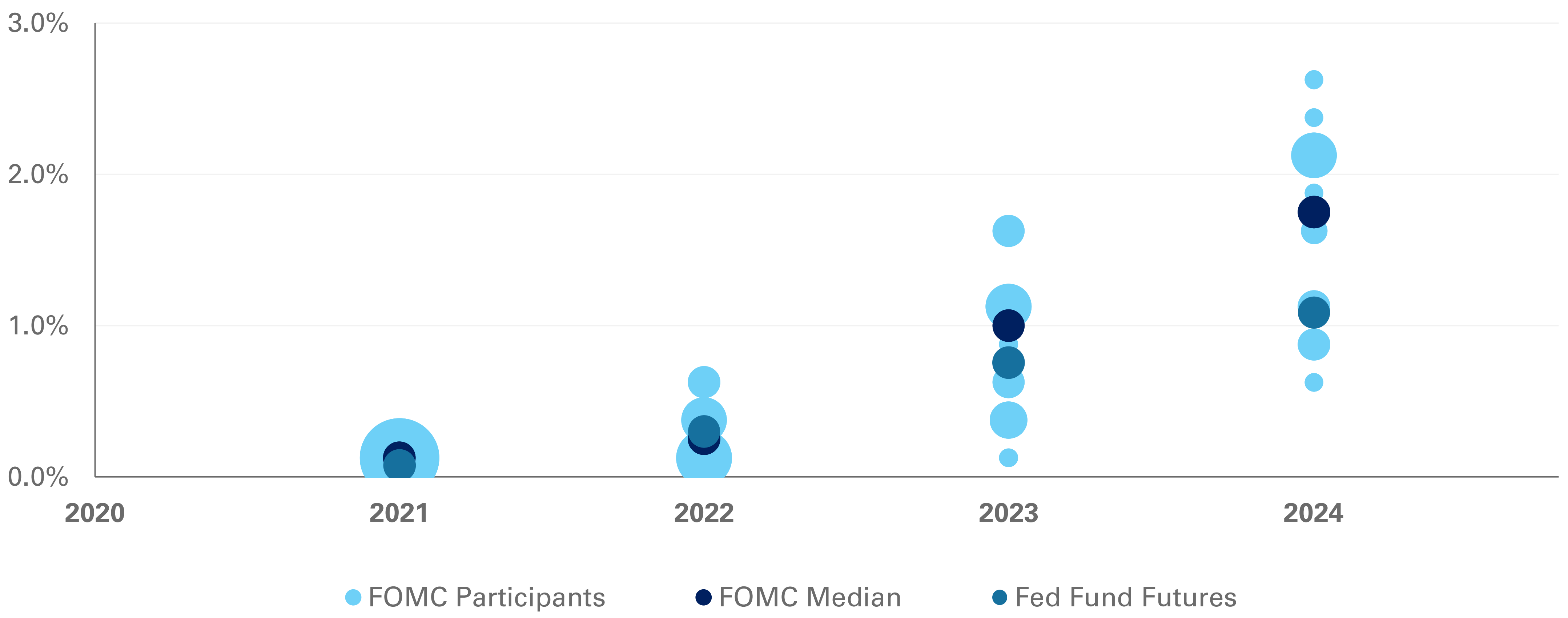
QUARTERLY CHANGES IN COMMODITY SPOT PRICE



Source: Bloomberg, FactSet

FED PROJECTING THREE RATE HIKES IN 2023

FED DOT PLOT VERSUS FED FUND FUTURES



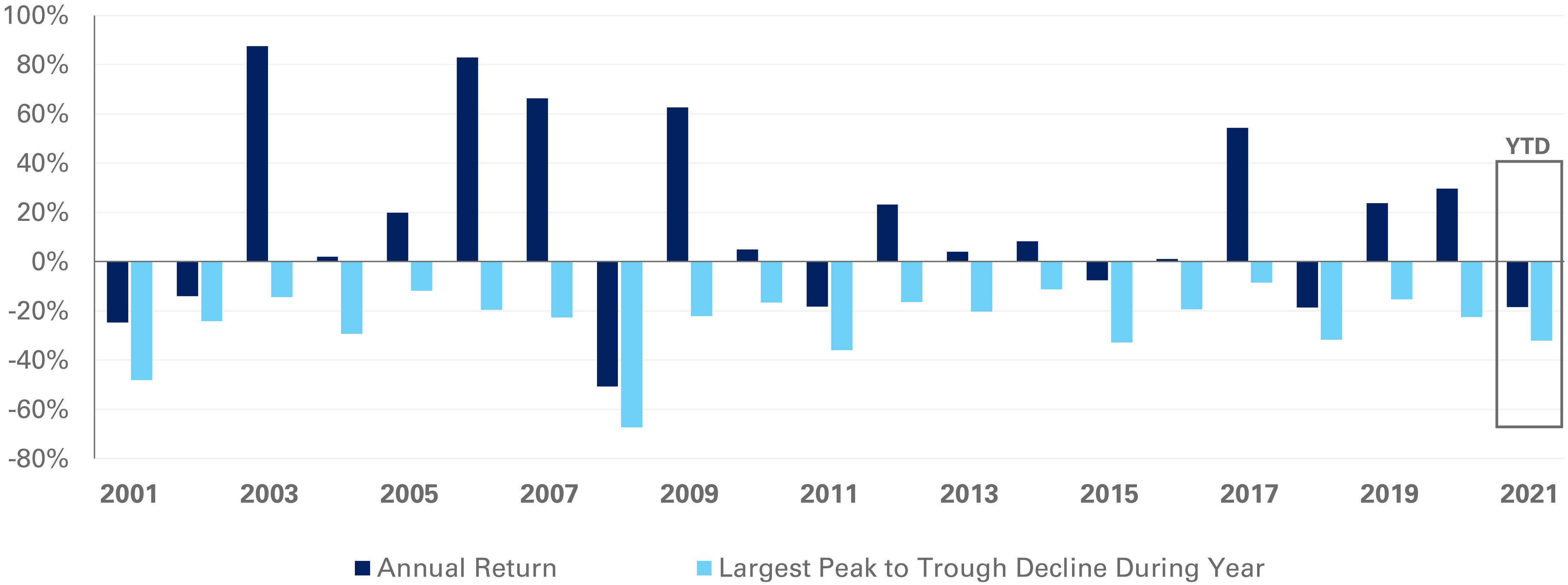
FOMC Participant dot size reflects the number of policymakers forecasts of federal fund rate at the end of each calendar year
Source: FOMC, FactSet

CHINESE EQUITIES HAVE WEIGHED ON MARKETS

YEAR-TO-DATE CUMULATIVE INDEX RETURNS

CHINESE EQUITIES HAVE BEEN VOLATILE

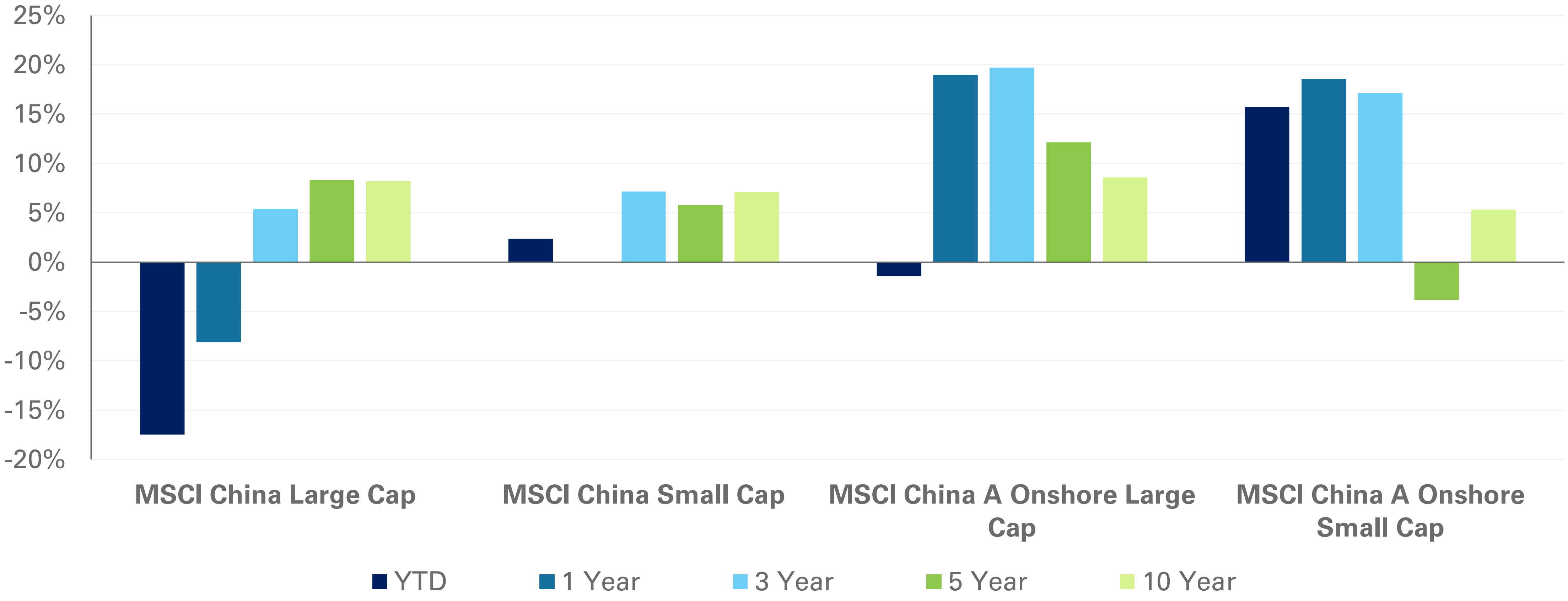
HISTORICALLY HAVE BEEN COMPENSATED FOR THE VOLATILITY



Notes: Represents annual percentage returns of the MSCI China Index; 2021 reflects pricing through 09/30/2021
Source: MSCI, FactSet, NEPC

THE SELL-OFF HAS BEEN TARGETED

LOCAL MARKETS HAVE BEEN RESILIENT



Source: MSCI, FactSet, NEPC

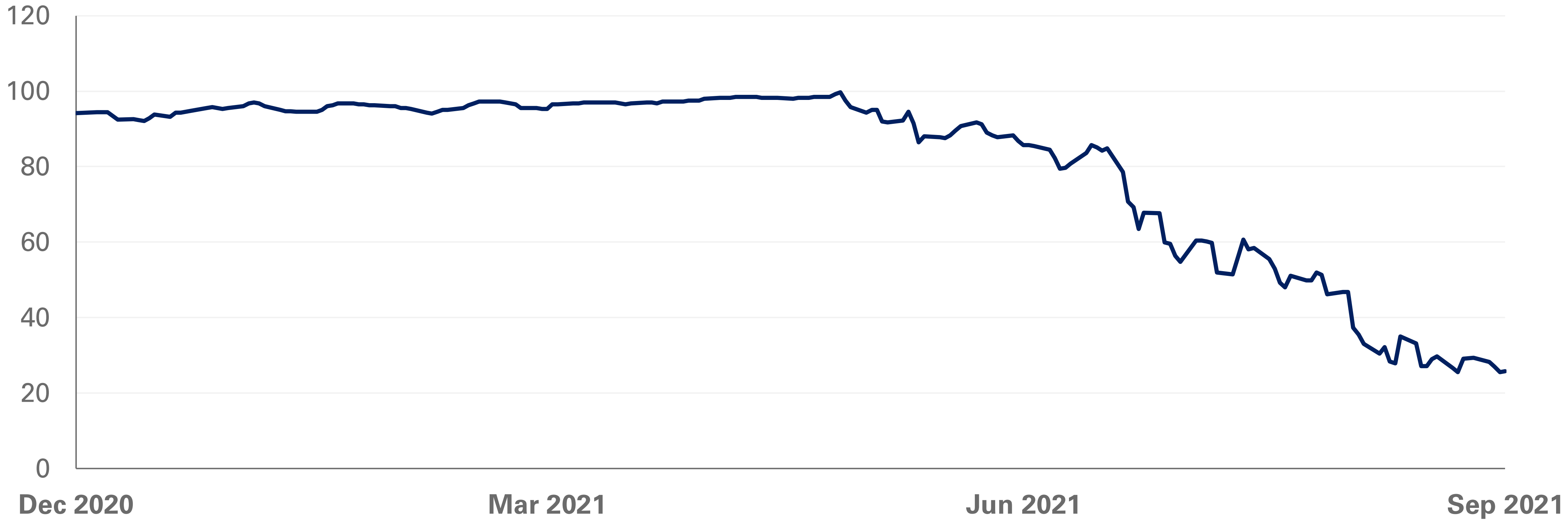
CHINA'S REGULATORY RESET

- **China introduced a wave of new regulations, implementing anti-monopoly, industry-specific, and consumer protection regulations**

Education	Technology	Entertainment/ Gaming	Real Estate
Banned for-profit tutoring in core school subjects, required institutions offering tutoring to be registered as non-profit organizations, and limited the number of new licenses granted	Introduced anti-monopoly legislation. The regulations imposed fines on industry titans, restrictions on social media algorithms, and new data-security laws	Called for tighter restrictions on the gaming industry, limited the amount of time children can play video games, and cracked down on online fan groups and platforms	Imposed debt and land-buying limits, reduced access to funding for highly-levered companies, and streamlined mortgage approvals for first time home buyers
The move combats soaring education costs, which have hampered family budgets and influenced declining birth rates for the country	**The country is aiming to limit pricing power of its largest companies and exhibit control over consumer data**	**These restrictions are aimed at promoting core social values and molding the younger generation**	**These limits are an attempt by the country to reduce broad risks in the real estate sector and to make housing more available and affordable**

EVERGRANDE BOND PRICES PLUNGED

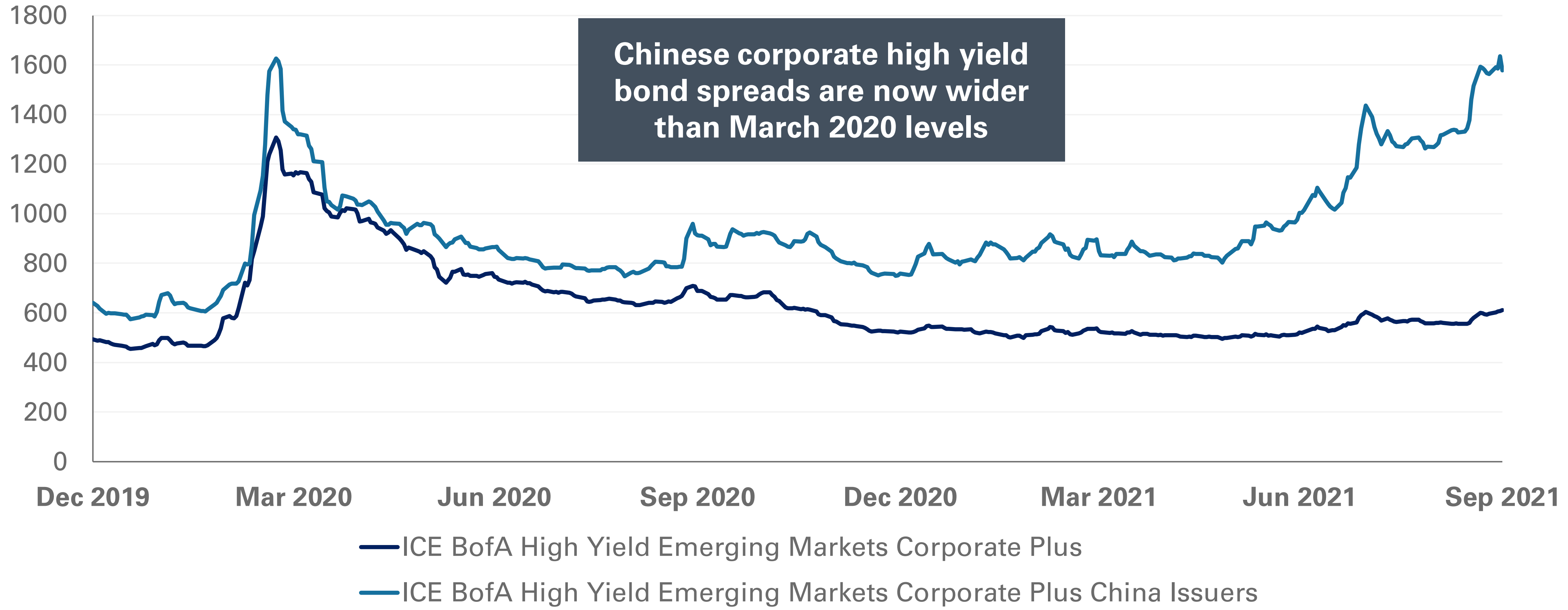
CHINA EVERGRANDE GROUP MARCH 2022 BOND PRICE



Source: FactSet

CHINA HIGH YIELD SPREADS WIDENED

OPTION ADJUSTED SPREAD



Source: ICE, FactSet

STRATEGIC ASSET ALLOCATION OUTLOOK

- NEPC’s Key Market Theme of Permanent Interventions **sustains positive risk asset sentiment** and elevated valuation levels for equity
- Consider **higher strategic equity targets** as the long-term forward return differential relative to fixed income remains elevated
- We continue to support a **strategic overweight to emerging market equities** relative to MSCI ACWI IMI, but expect a volatile path
- **Be mindful of adding public real assets**, as inflation-sensitivity and portfolio objectives inform an investor’s strategic allocation
- **Maintain adequate portfolio liquidity** levels as market stress can inject bouts of illiquidity across public assets

INFLATION OUTLOOK

INFLATION OVERVIEW

- **Several factors are contributing to "stickier" inflation levels including continued supply shocks and the potential for elevated shelter costs**

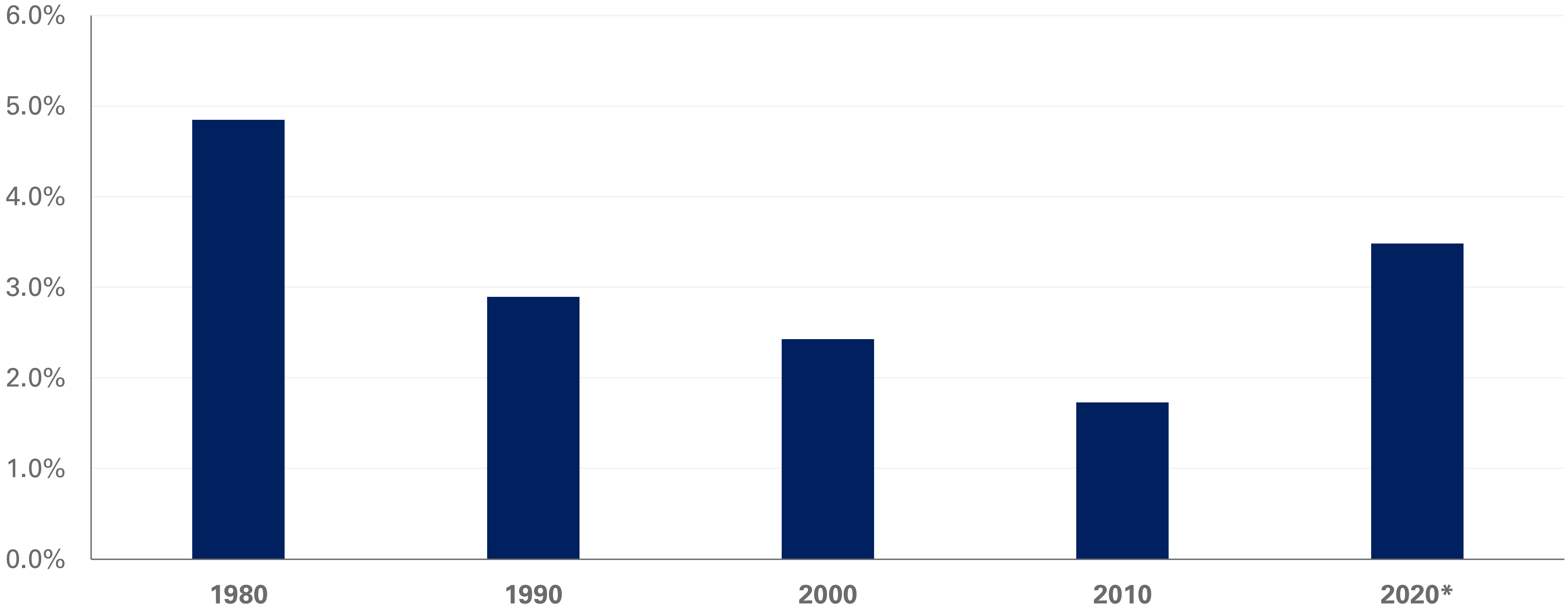
- **NEPC's expectation for inflation has increased over the near-term (1-5 years), but the long-term inflation view (year 10 inflation) is unchanged**

- **We believe that deflationary pressures, such as demographics and technology, will overwhelm inflationary pressures in the long-run**

- **We expect the 5%+ inflation prints are transitory, but have an increased conviction that ~3% inflation could persist over the next 3 years**
  - Current market pricing and break-even inflation expectations do not reflect the potential for ~3% inflation and this can be a source of disruption for equities and real interest rates

REFRAMING INFLATION EXPECTATIONS

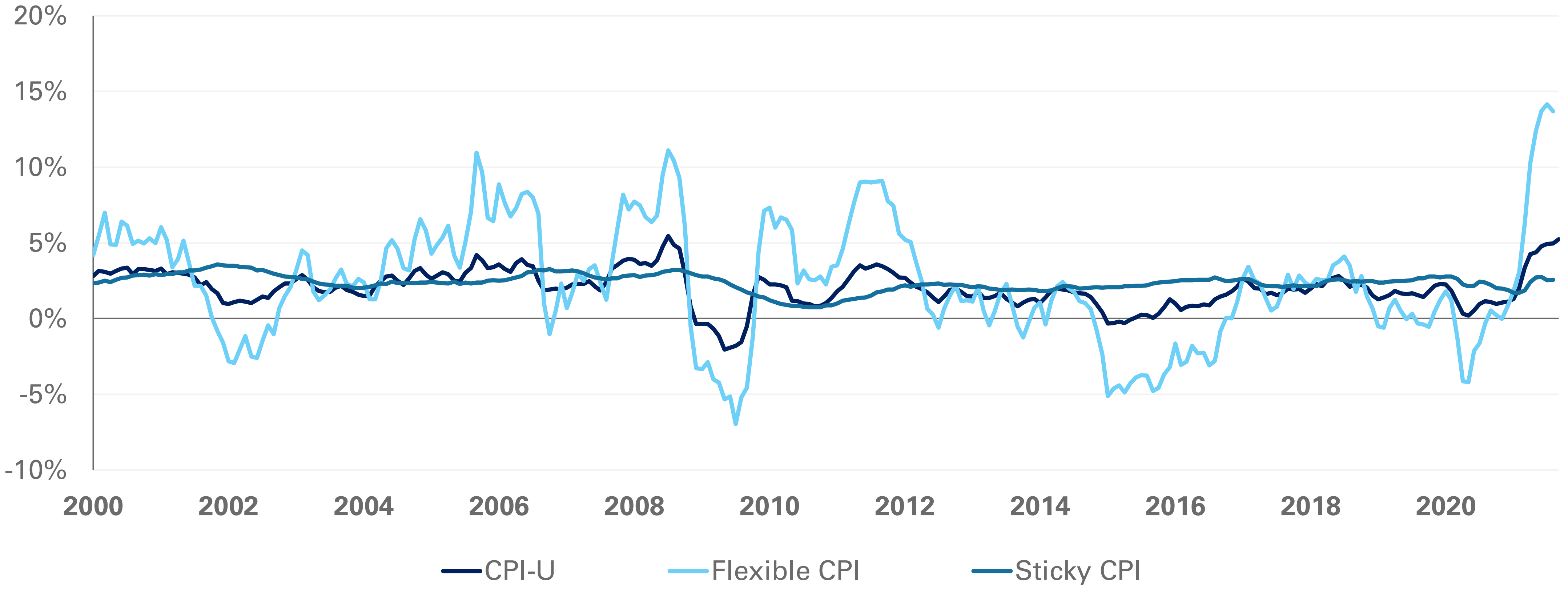
ANNUALIZED INFLATION BY DECADE



Notes: *2020 reflects returns through September 30, 2021
Source: Bureau of Labor Statistics, FactSet, NEPC

U.S. CPI IS ELEVATED FROM FLEXIBLE FACTORS

TRAILING 12-MONTH CPI METRICS

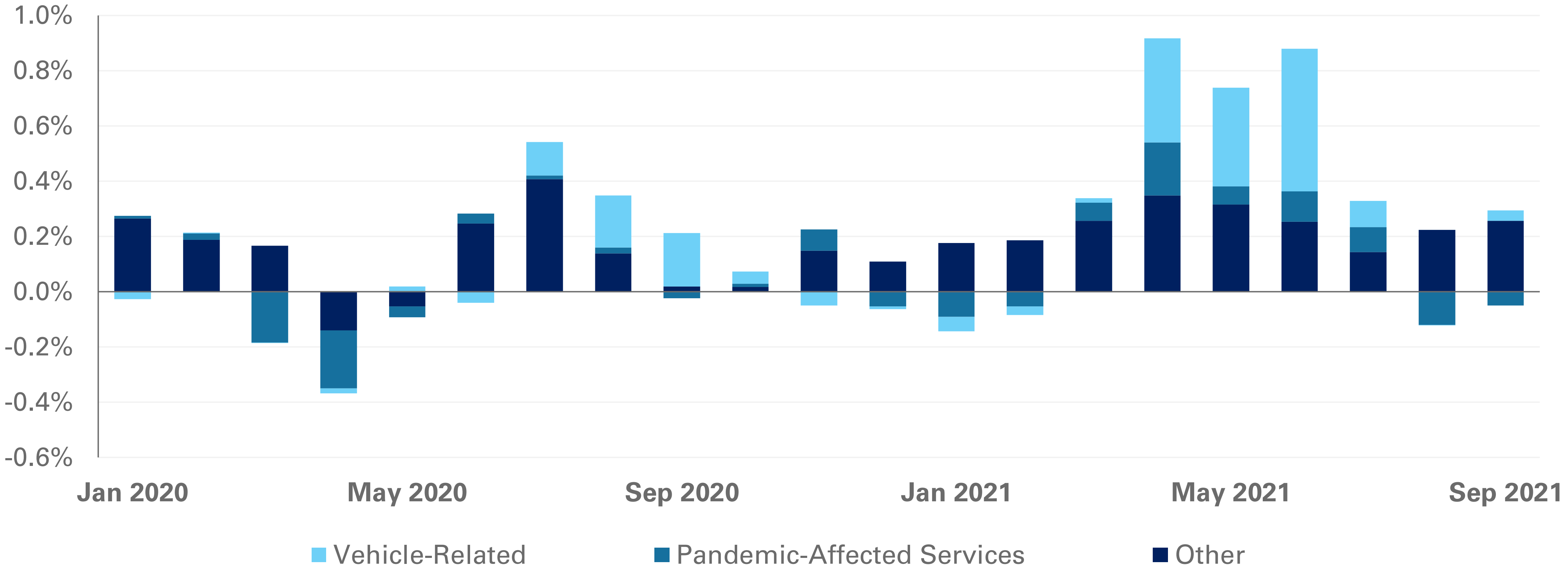


Notes: Flexible CPI represents a weighted basket of items that change price relatively frequently. Sticky CPI represents a weighted basket of items that change price relatively slowly. Data as of 09/30/2021.

Sources: Atlanta Fed, Bureau of Labor Statistics, FactSet

TRANSITORY FACTORS HAVE WANED…

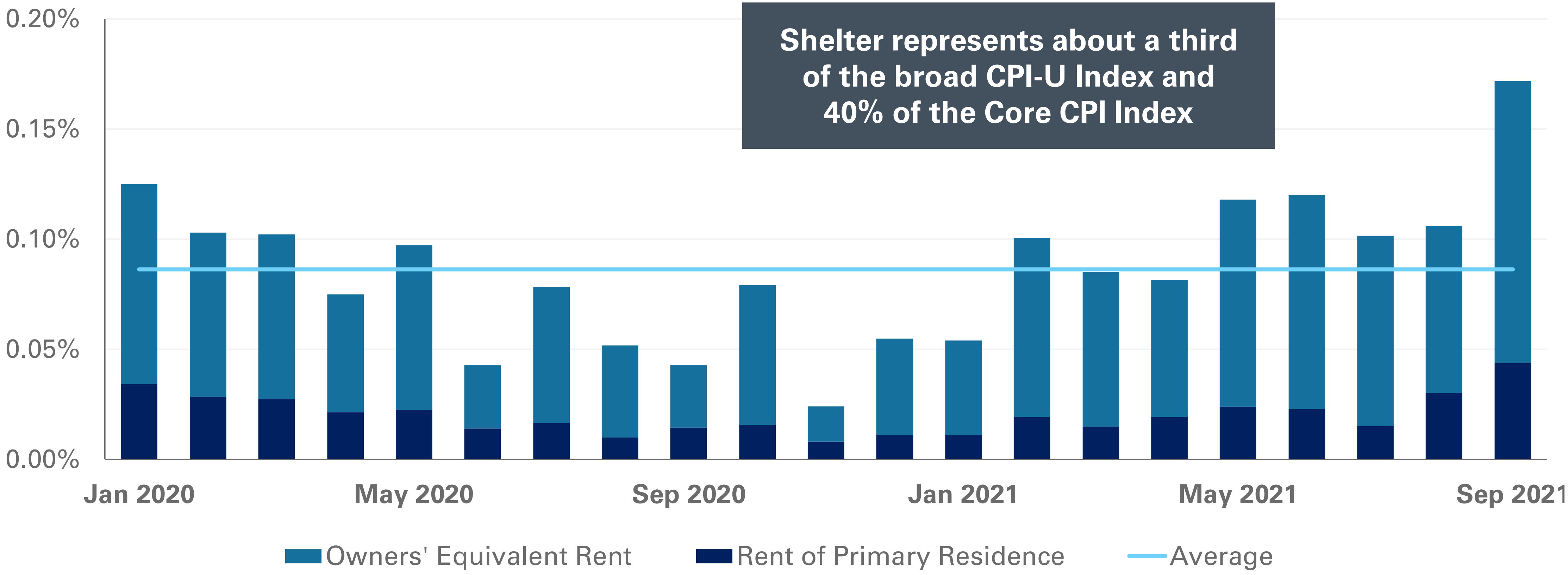
CONTRIBUTION TO MONTHLY CORE CPI-U



Notes: Vehicle-Related includes New Vehicles, Used Cars & Trucks, and Motor Vehicle Parts. Pandemic-Affected Services includes Airfare, Hotels, and Admissions to Events.
Source: Bureau of Labor Statistics, FactSet, NEPC

…STICKIER FACTORS MAY BE ON THE RISE

CONTRIBUTION OF SHELTER TO MONTHLY CORE CPI-U



Notes: Average calculated 01/31/2019-09/30/2021
Sources: Bureau of Labor Statistics, FactSet, NEPC

PORTFOLIO POSITIONING

PORTFOLIO POSITIONING THOUGHTS

- Look to severely **underweight lower quality credit** exposure as credit spread levels approach historical lows

- We **recommend reducing lower quality credit** and shifting the exposure equally to U.S. equity and safe-haven fixed income

- **Add U.S. large-cap value exposure** to mitigate the price disruption to equities should inflation levels normalize above market expectations

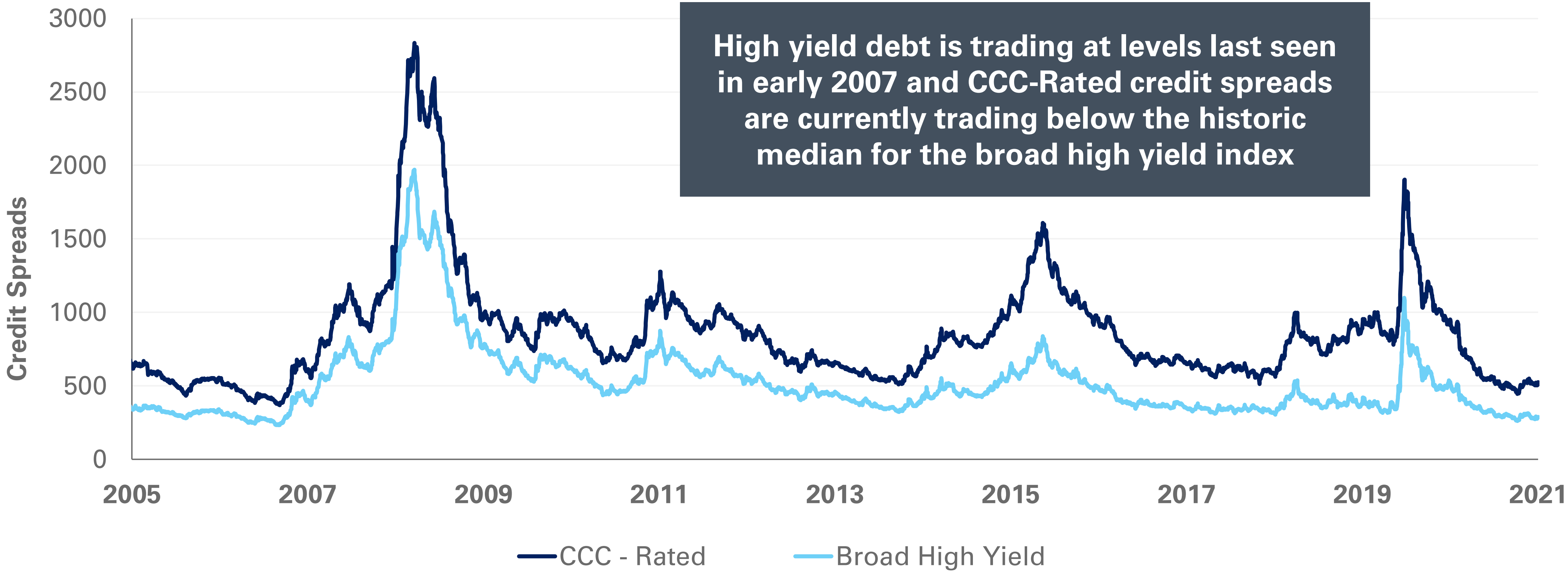
- **Reduce TIPS exposure** as TIPS may respond poorly to “stickier” inflation levels due to tighter Fed policy and changes in real rates

NEPC CURRENT OPPORTUNITIES

	RATIONALE	IMPLEMENTATION VIEW
Reduce Lower Quality Credit Exposure *Shift exposure equally to U.S. equity and safe-haven fixed income*	▪ Credit spreads, particularly in the lower-quality space, are near cyclical lows	**Return-Seeking Credit Portfolio Tilt:** Shift exposure to U.S. equity/ safe-haven FI **Opportunity Cost:** Bloomberg U.S. High Yield
Reduce U.S. TIPS Exposure *Disperse TIPS proceeds to safe-haven fixed income and/or the portfolio*	▪ We are concerned TIPS will be negatively impacted relative to nominal Treasuries should real rates increase due to a surprise in the speed the Fed tightens monetary policy	**Safe-Haven Fixed Income Portfolio Tilt:** 75% Treasury and 25% TIPS **Opportunity Cost:** 50% TIPS and 50% Treasury
Add U.S. Large-Cap Value Exposure *Add large-cap value exposure to U.S. equity, while maintaining overall equity exposure*	▪ U.S. large-cap value exposure can help mitigate the portfolio impact relative to the S&P 500 of heightened inflation levels normalizing above market expectations and interest rates rising	**U.S. Large Cap Equity Portfolio Tilt:** 70% S&P 500, 30% Russell 1000 Value **Opportunity Cost:** S&P 500

CCC-RATED CREDIT SPREADS ARE CONCERNING

RETURN POTENTIAL FOR LOWER QUALITY CREDIT IS LIMITED

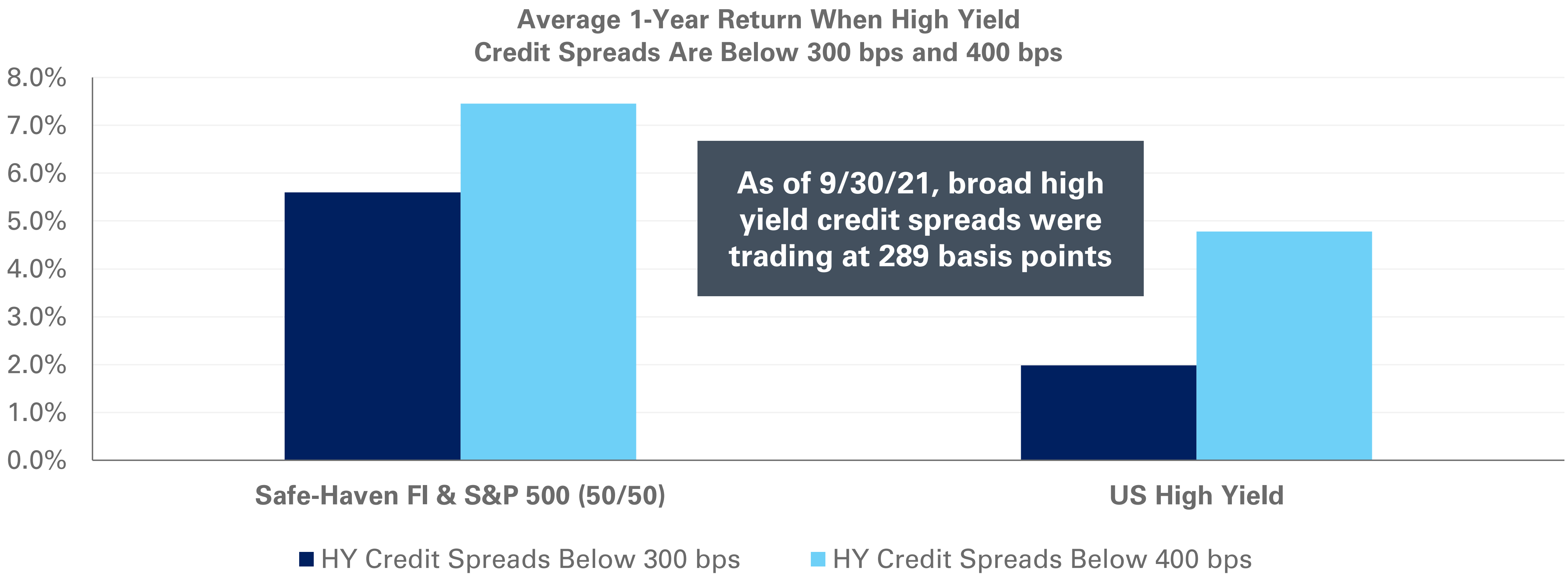


High yield debt is trading at levels last seen in early 2007 and CCC-Rated credit spreads are currently trading below the historic median for the broad high yield index

Source: Bloomberg, FactSet

NEPC OUTLOOK: REDUCE LOWER QUALITY CREDIT

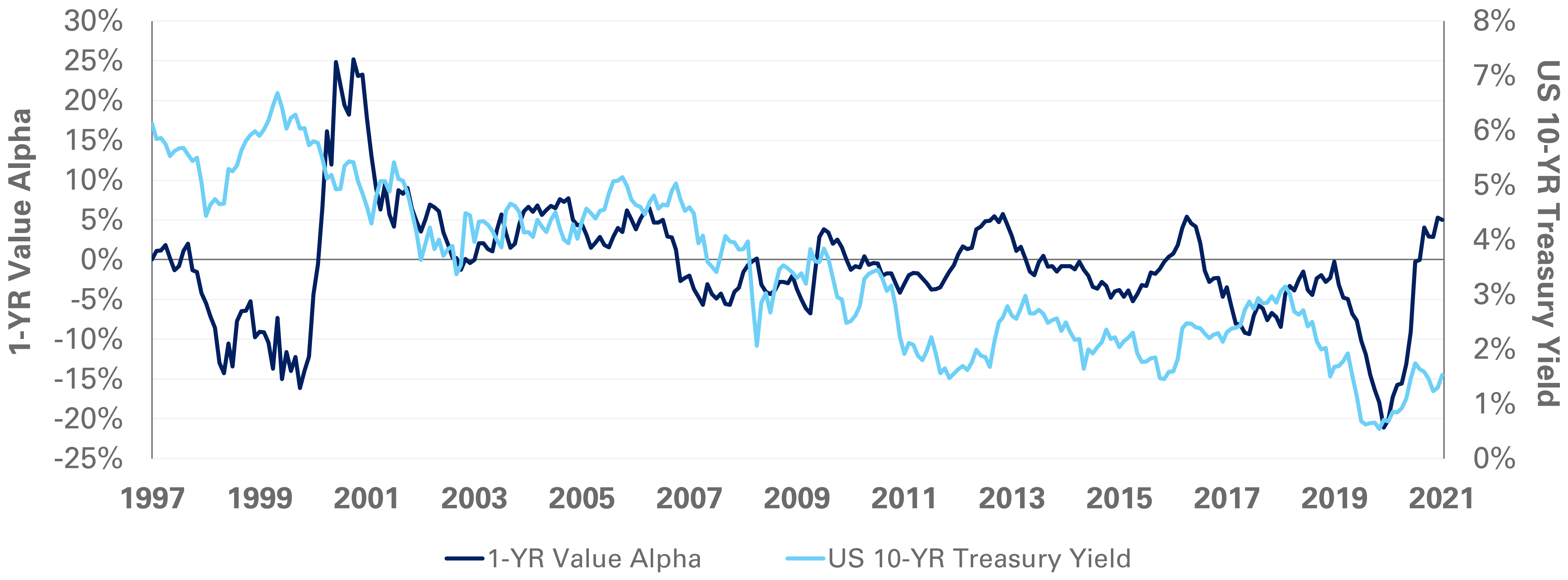
LOOK TO HOLD PUBLIC EQUITY OVER HIGH YIELD



Notes: Safe-Haven FI & S&P 500 represents 25% US Treasuries, 25% US TIPS, and 50% S&P 500. Data reflects last 20 years.
Source: NEPC, Bloomberg, FactSet

INTEREST RATE SHIFTS IMPACT EQUITY TRENDS

LARGE-CAP VALUE MAY BENEFIT FROM RISING INTEREST RATES



Notes: Value Alpha is defined as Russell 1000 Value vs S&P 500
Source: NEPC, Bloomberg, FactSet

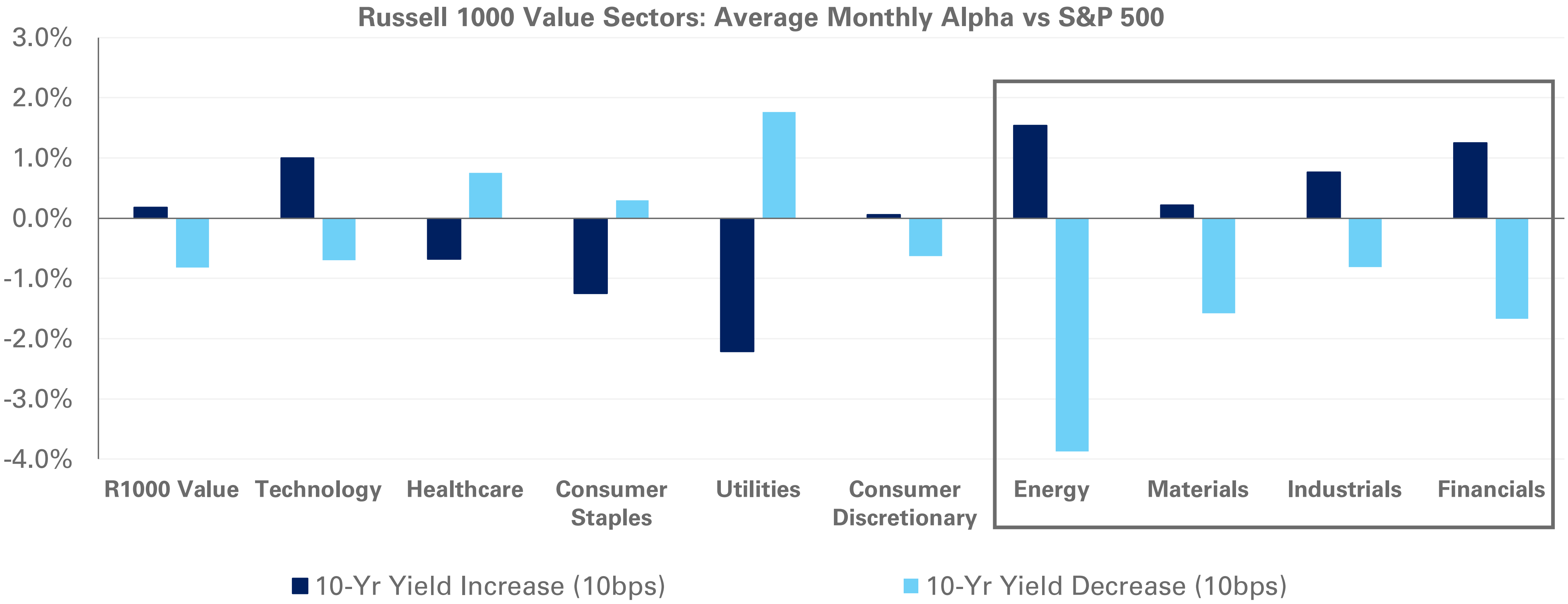
NEPC OUTLOOK: U.S. STOCKS AND INFLATION

LOOK TO ADD U.S. LARGE CAP VALUE EXPOSURE

- **Should we see "stickier" inflation and higher interest rate levels, we are concerned U.S. equities and the portfolio could see price disruptions**
  - We are looking to implement a solution to address potential portfolio risks, while also maintaining overall portfolio equity exposure
- **U.S. large-cap value exposure is the simplest implementation options to address the portfolio impact of rising interest rates and inflation**
  - The associated repricing of risk premia in both Treasury and equity markets constrains the implementation tools to mitigate the potential price disruption
- **We encourage adding U.S. large-cap value exposure to mitigate the portfolio impact of inflation normalizing above market expectations**
  - Within U.S. large-cap equity exposure, we recommend replicating a target exposure of 70% S&P 500 and 30% Russell 1000 Value
  - The sizing of large-cap value exposure and portfolio tracking error tolerance must be heavily considered relative to strategic asset allocation objectives

INTEREST RATES INFLUENCE STOCKS UNEQUALLY

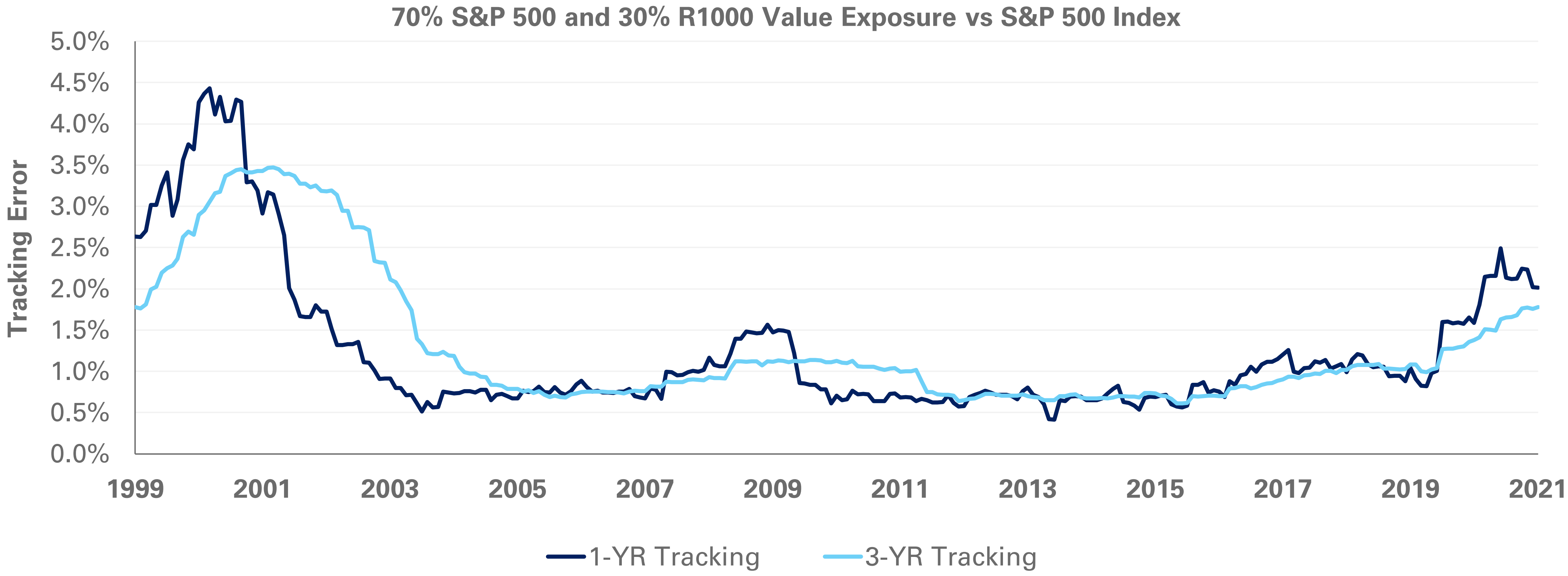
SECTOR MAKEUP OF VALUE EXPOSURE MAY OFFER BENEFITS



Notes: Average Monthly Alpha is defined as Russell 1000 Value and Sectors vs S&P 500 over the last 10 years
Source: NEPC, Bloomberg, FactSet

BRACE FOR TRACKING ERROR SPIKES VS S&P 500

TRACKING ERROR RISK TOLERANCE MUST BE CONSIDERED

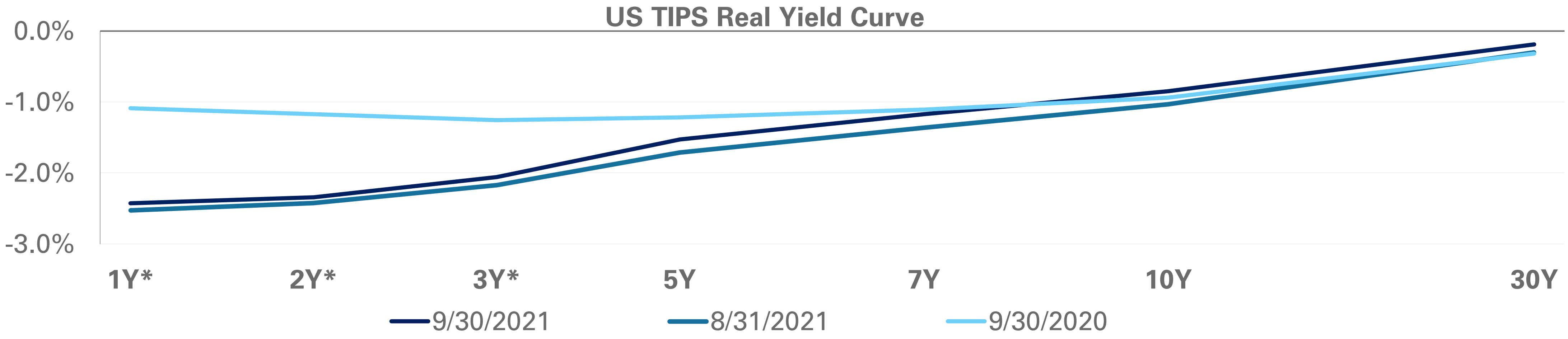


Notes: Tracking Error of 70% S&P 500 and 30% Russell 1000 Value Exposure vs S&P 500
Source: NEPC, Bloomberg, FactSet

NEPC OUTLOOK: U.S. TIPS AND INFLATION

REDUCE TIPS VS STRATEGIC TARGETS BY MORE THAN 50%

- **TIPS have significantly outperformed Treasuries over the last 2 years**
  - TIPS have been a NEPC recommendation since 2016 and we have seen strong excess returns relative to both Treasury and Core Bonds
- **Current market conditions have caused us to question whether TIPS will respond positively should we see "stickier" elevated inflation levels**
  - We are concerned TIPS will be negatively impacted relative to nominal Treasuries as real rates increase due to surprises in Fed policy tightening



Source: FactSet, NEPC

QUESTIONS?

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