

**Wilshire**

# Wilshire Quarterly Market Update

Third Quarter 2023

## Today's Agenda

- Is the Fed done (i.e., have they reached the "neutral rate")?
- How should investors manage duration risk against an inverted/flat yield curve... is Cash king?
- What's the outlook for corporate earnings and economic growth?
- Where is investor sentiment relative to earlier this year?
- How is Wilshire positioning for short-term opportunities and risks?
- What are the prospects for long-term capital market performance?

# Thank you for joining us!

## Questions

To submit questions for the end of the presentation Q&A or if you have any issues during the event:

- Click on the “Ask a question” tab below the video.
- Type your question in the text box.
- Click on the “Send question” button to submit your question.



The screenshot shows a user interface for asking questions. At the top, there are three tabs: 'Ask a question' (highlighted in green), 'Rate this', and 'Details'. Below the tabs is a section titled 'Ask a question' containing a large text input box with the placeholder text 'Type your question here...'. At the bottom of this section, there is a link that says 'Not hearing audio? Click here for help' and a grey button labeled 'Send question'. Three red arrows originate from a single point on the left and point to the 'Ask a question' tab, the text input box, and the 'Send question' button.

## Wilshire Advisors

Since 1972, Wilshire has been dedicated to improving investment outcomes for institutional investors and financial intermediaries worldwide.

- Institutional advisory and OCIO
- Discretionary and advisory solutions for financial intermediaries
- Full spectrum across traditional and alternative solutions
- Multi-asset analytics

500<sup>+</sup>  
clients

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\$88 Billion  
in assets under management<sup>1</sup>

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\$1.3 Trillion  
in assets under advisement<sup>1</sup>

<sup>1</sup> As of 6/30/2023. Assets under advisement includes assets under management.

Wilshire

# Wilshire Monday Market Flash

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For timely market insight, listen to our **weekly 10-minute market update** brought to you by Josh Emanuel, Chief Investment Officer for Wilshire.

Visit [wilshire.com](https://www.wilshire.com) to access the four most recent Wilshire Monday Market Flash updates.

**Wilshire**

The Week Ahead: 9/27/2021 – 10/1/2021

**Economic Data Releases:**

- Monday: Durable Goods
- Tuesday: Wholesale Inventories
- Wednesday: Pending Home Sales
- Friday: Personal Income & Spending, PCE Deflator

**Wilshire**

Market Performance as of 9/24/2021

U.S. Equity	WTD	MTD	YTD	1M	3M	6M	12M	5Y	International Equity (WTD)	WTD	MTD	YTD	1M	3M	6M	12M	5Y
S&P 500	0.52	1.45	5.34	2.25	4.25	4.25	4.25	4.25	EMEA	0.25	0.45	1.75	1.45	1.45	1.45	1.45	1.45
NASDAQ	0.52	1.45	5.34	2.25	4.25	4.25	4.25	4.25	EMEA	0.25	0.45	1.75	1.45	1.45	1.45	1.45	1.45
U.S. Bonds	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	EMEA	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Commodities	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	EMEA	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Real Estate	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	EMEA	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15



# Presenters



**Josh Emanuel, CFA**

Chief Investment Officer

20+ years of industry experience

As CIO, leads Wilshire's investment activities, including:

- investment strategy
- manager research
- quantitative alpha research
- portfolio management



**Steve Foresti**

Senior Advisor, Investments

30+ years of industry experience

Guides and supports Wilshire's investment and research efforts, including

- strategic asset allocation research
- capital market forecasts
- thought leadership

# Market Performance Summary



# Global Equities as of 9/30/2023

U.S. Equity	MTD (%)	QTD (%)	YTD (%)	1Y (%)
FT Wilshire 5000 Index <sup>SM</sup>	(4.78)	(3.28)	12.49	18.84
Standard & Poor's 500	(4.77)	(3.27)	13.07	19.79
FT Wilshire 4500 Index <sup>SM</sup>	(5.30)	(4.44)	4.12	11.39
MSCI USA Minimum Volatility	(2.82)	(2.04)	1.85	10.44

Source: Bloomberg. Indexes are total return. For illustrative purposes only.

U.S. Equity by Size/Style	MTD (%)	QTD (%)	YTD (%)	1Y (%)
FT Wilshire Large Cap Index <sup>SM</sup>	(4.71)	(3.12)	13.81	19.99
FT Wilshire Large Cap Growth Index <sup>SM</sup>	(5.63)	(3.47)	27.35	26.26
FT Wilshire Large Cap Value Index <sup>SM</sup>	(3.70)	(2.75)	1.79	13.73
FT Wilshire Small Cap Index <sup>SM</sup>	(5.18)	(4.16)	5.25	12.72
FT Wilshire Small Cap Growth Index <sup>SM</sup>	(5.61)	(5.14)	7.88	13.36
FT Wilshire Small Cap Value Index <sup>SM</sup>	(4.75)	(3.17)	2.69	12.10
FT Wilshire Micro Cap Index <sup>SM</sup>	(6.22)	(6.62)	(4.37)	1.40

Source: Bloomberg. Indexes are total return. For illustrative purposes only.

Non-U.S. Equity	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	(4.14)	(3.40)	10.06	19.83
MSCI ACWI ex USA	(3.16)	(3.77)	5.34	20.74
MSCI ACWI ex USA Minimum Volatility	(1.56)	(2.18)	4.19	13.03
MSCI EAFE	(3.42)	(4.11)	7.08	26.11
MSCI Emerging Markets	(2.62)	(2.93)	1.82	12.02
MSCI ACWI ex USA Small Cap	(3.76)	(1.70)	5.03	20.05

Source: Bloomberg. Indexes are total return. For illustrative purposes only.

Non-U.S. Equity (local currency)	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	(3.49)	(2.50)	11.18	18.32
MSCI ACWI ex USA	(1.43)	(1.37)	8.24	16.84
MSCI ACWI ex USA Minimum Volatility	(0.13)	(0.16)	7.79	11.65
MSCI EAFE	(1.08)	(1.27)	10.67	20.54
MSCI Emerging Markets	(1.79)	(1.43)	4.05	10.93
MSCI ACWI ex USA Small Cap	(2.13)	0.88	9.33	16.65

Source: Bloomberg. Indexes are total return. For illustrative purposes only.



# Fixed Income Markets as of 9/30/2023

U.S. Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg U.S. Aggregate	(2.54)	(3.23)	(1.21)	0.34
Bloomberg Long Term Treasury	(7.29)	(11.83)	(8.55)	(10.03)
Bloomberg Long Term Corporate	(5.26)	(7.23)	(2.71)	2.48
Bloomberg U.S. TIPS	(1.85)	(2.60)	(0.78)	0.70
Bloomberg U.S. Credit	(2.60)	(3.01)	0.03	3.42
Bloomberg U.S. Corporate High Yield	(1.18)	0.46	5.86	10.47
S&P/LSTA Leveraged Loan	0.94	3.43	10.16	12.90

Source: Bloomberg. Indexes are total return. For illustrative purposes only.

Market Rates	Sept 30	June 30	Mar 31	Dec 31
10-Year Treasury	4.57	3.84	3.47	3.88
10-Year Breakeven Inflation	2.34	2.23	2.32	2.30

Source: Bloomberg. Indexes are total return.

Global Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg Global Aggregate	(2.92)	(3.59)	(2.21)	2.47
Bloomberg Global Aggregate (Hdg)	(1.72)	(1.82)	1.09	2.09
Bloomberg EM LC Gov't Universal	(1.70)	(1.48)	0.44	6.16
Bloomberg EM LC Gov't Universal (Hdg)	(0.66)	0.31	4.24	6.18

Source: Bloomberg. Indexes are total return. For illustrative purposes only.

Real Assets	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire US Real Estate Securities Index <sup>SM</sup>	(6.52)	(6.42)	(0.01)	5.42
Wilshire Global Real Estate Securities Index <sup>SM</sup>	(5.88)	(5.21)	(1.17)	6.48
FTSE Global Core Infrastructure 50/50	(4.60)	(7.80)	(7.21)	(0.03)
Alerian Midstream Energy	(0.67)	2.49	7.11	15.40
Bloomberg Commodity	(0.69)	4.71	(3.44)	(2.24)
Gold	(4.72)	(3.68)	1.35	11.33
Bitcoin	3.42	(11.48)	62.27	37.91

Source: Bloomberg. Indexes are total return. For illustrative purposes only.

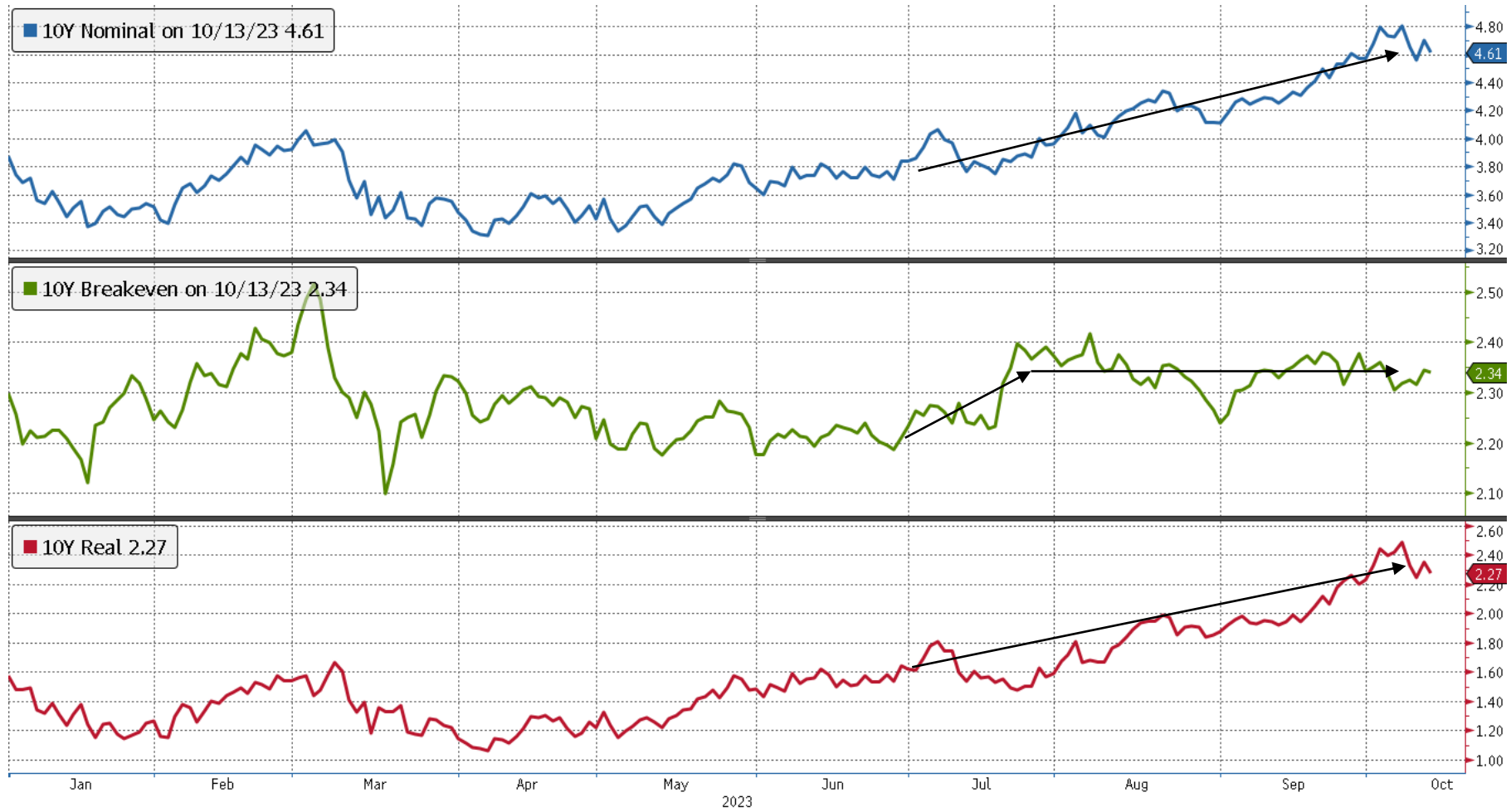
Alternatives	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire Liquid Alternative Index <sup>SM</sup>	(0.74)	(0.20)	2.39	3.96
Wilshire Liquid Alternative Equity Hedge Index <sup>SM</sup>	(1.66)	(0.51)	5.66	10.28
Wilshire Liquid Alternative Event Driven Index <sup>SM</sup>	0.24	1.94	2.14	2.81
Wilshire Liquid Alternative Global Macro Index <sup>SM</sup>	1.90	0.39	0.90	(3.81)
Wilshire Liquid Alternative Multi-Strategy Index <sup>SM</sup>	(0.01)	0.95	3.58	6.02
Wilshire Liquid Alternative Relative Value Index <sup>SM</sup>	(1.24)	(1.00)	0.33	1.41

Source: Bloomberg. Indexes are total return. For illustrative purposes only.



# Economic Backdrop: In Search of the “Neutral Rate”

# 2023 Rate Environment



USGG10YR Index (US Generic Govt 10 Yr) 10yr Splits Daily 30DEC2022-13OCT2023

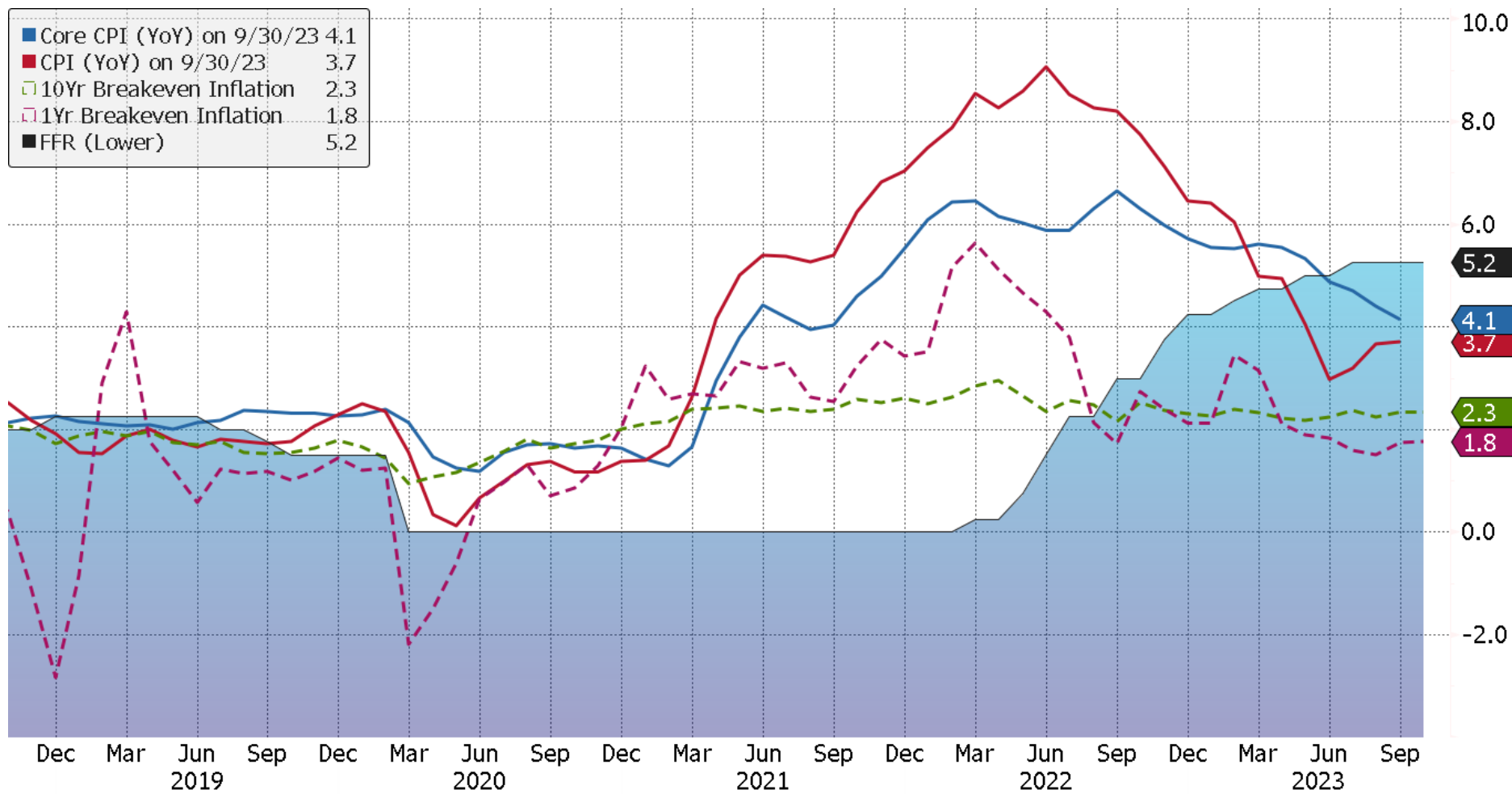
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Data Source: Wilshire, Bloomberg

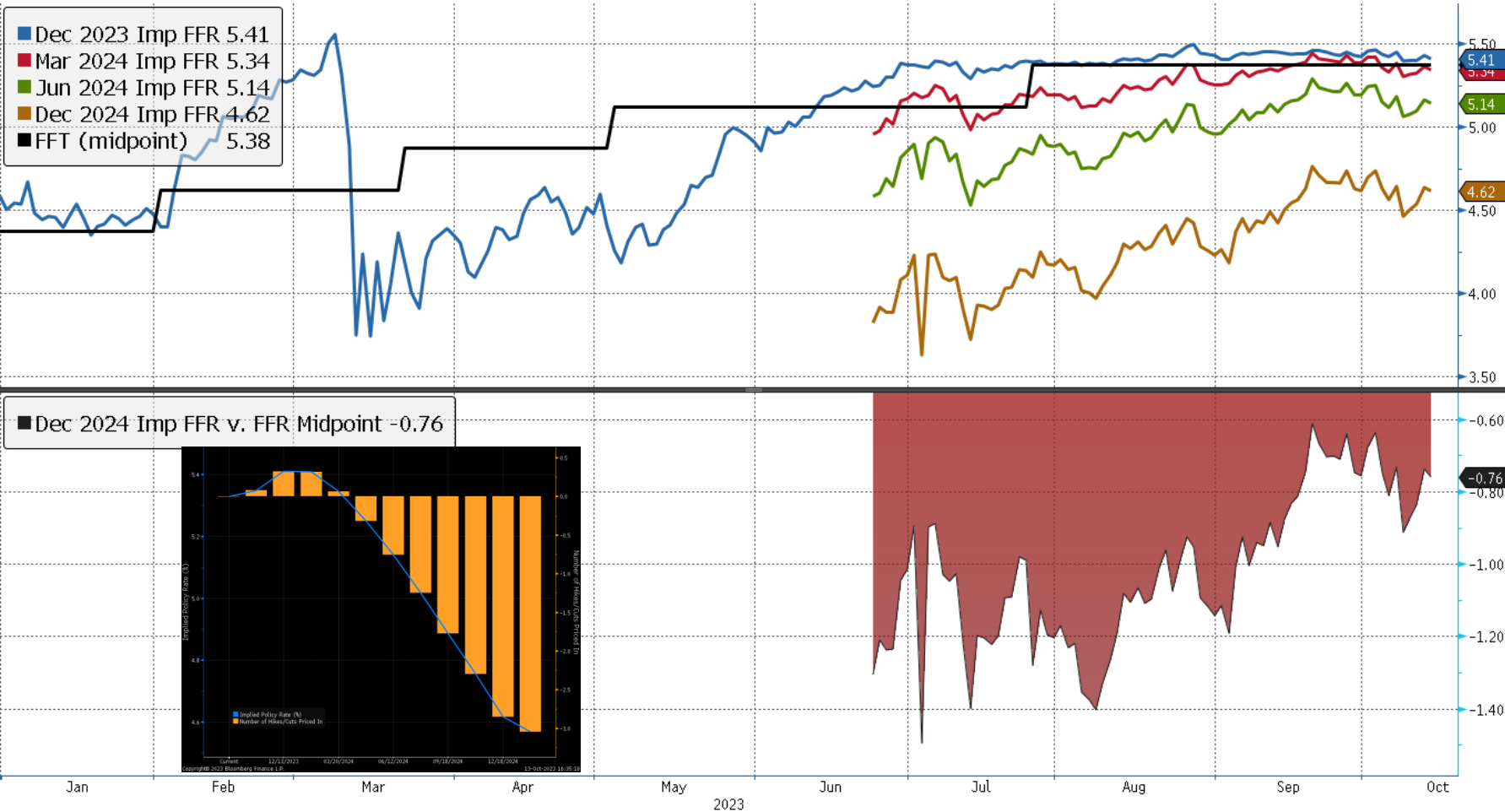


# Inflation Update vs. Fed Policy: At/Near the Neutral Rate?



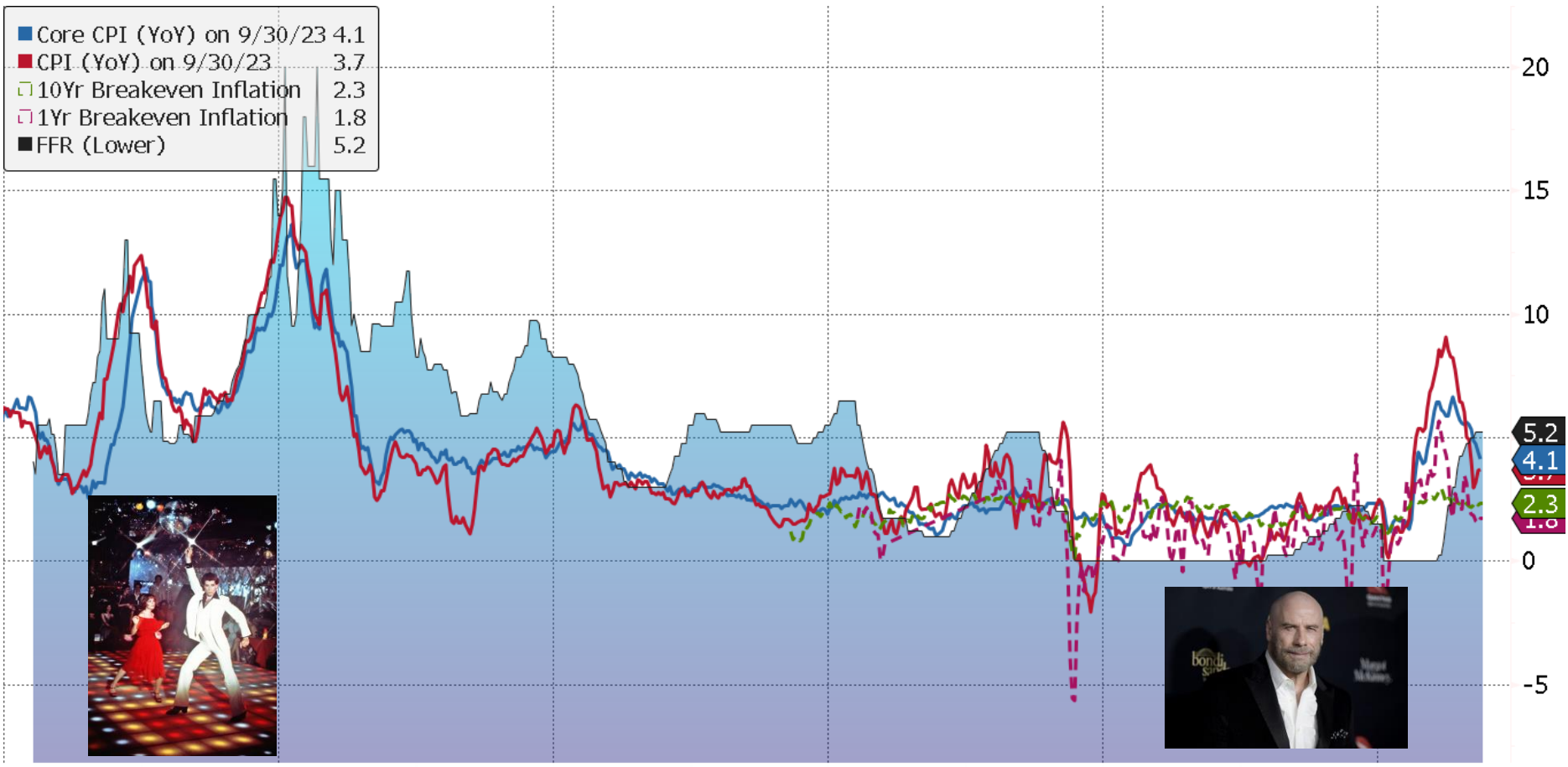
CPUPXCHG Index (US CPI Urban Consumers Less Food & Energy MoM SA) BE v CPI Monthly 14OCT2018-13OCT2023  
 Copyright © 2023 Bloomberg Finance L.P. 13-Oct-2023 16:27:19  
 Data Source: Bloomberg

At/Near Neutral Rate?: The Market Thinks So (and that we'll be lower next year)...



Data Source: Bloomberg

# Inflation: I Know, It's Not the 70s, but the Path Back to Target Might Be Bumpy....



'70-'74   '75-'79   '80-'84   '85-'89   '90-'94   '95-'99   '00-'04   '05-'09   '10-'14   '15-'19   '20-'24

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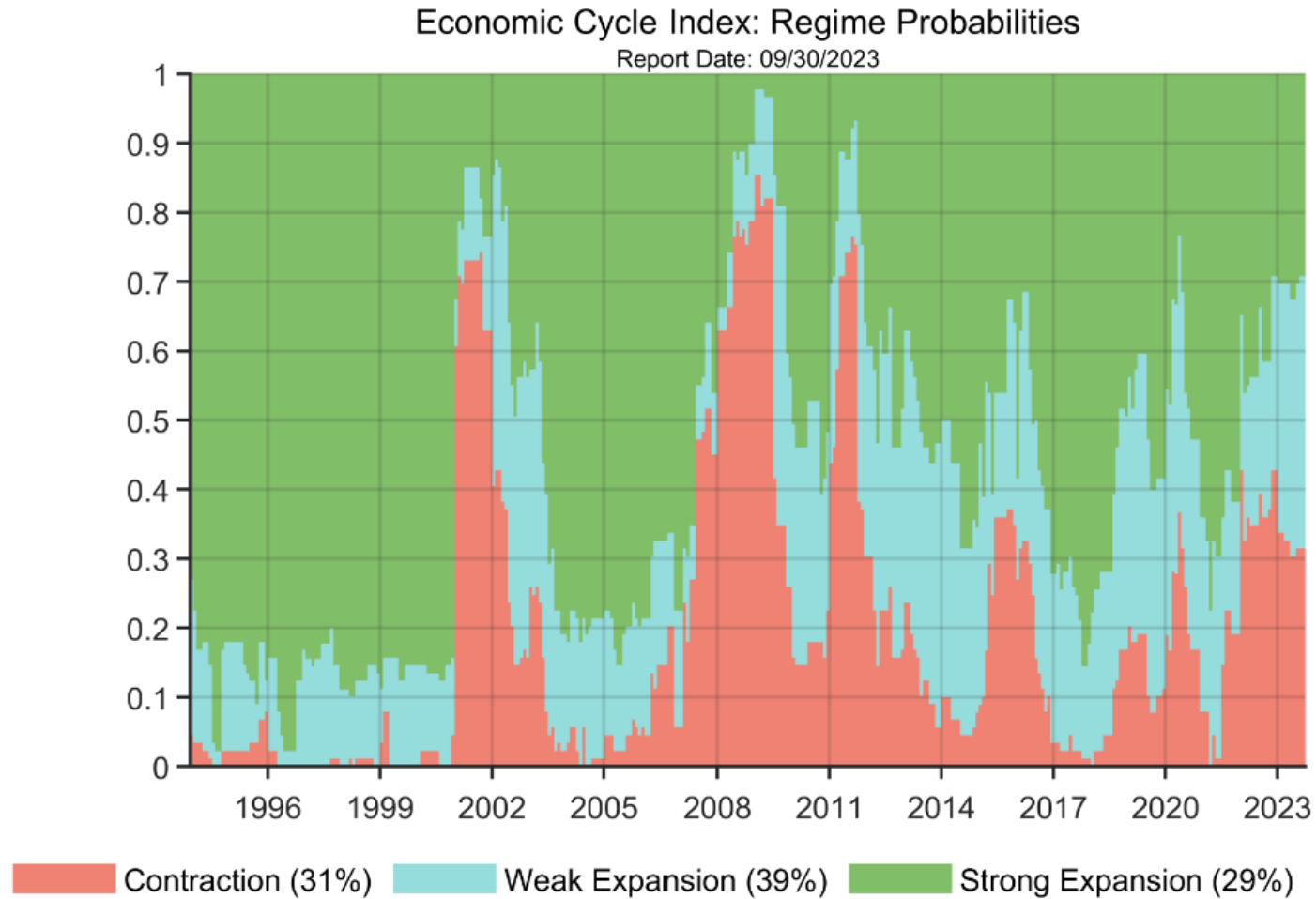
Data Source: Bloomberg



# Economic & Market Outlook



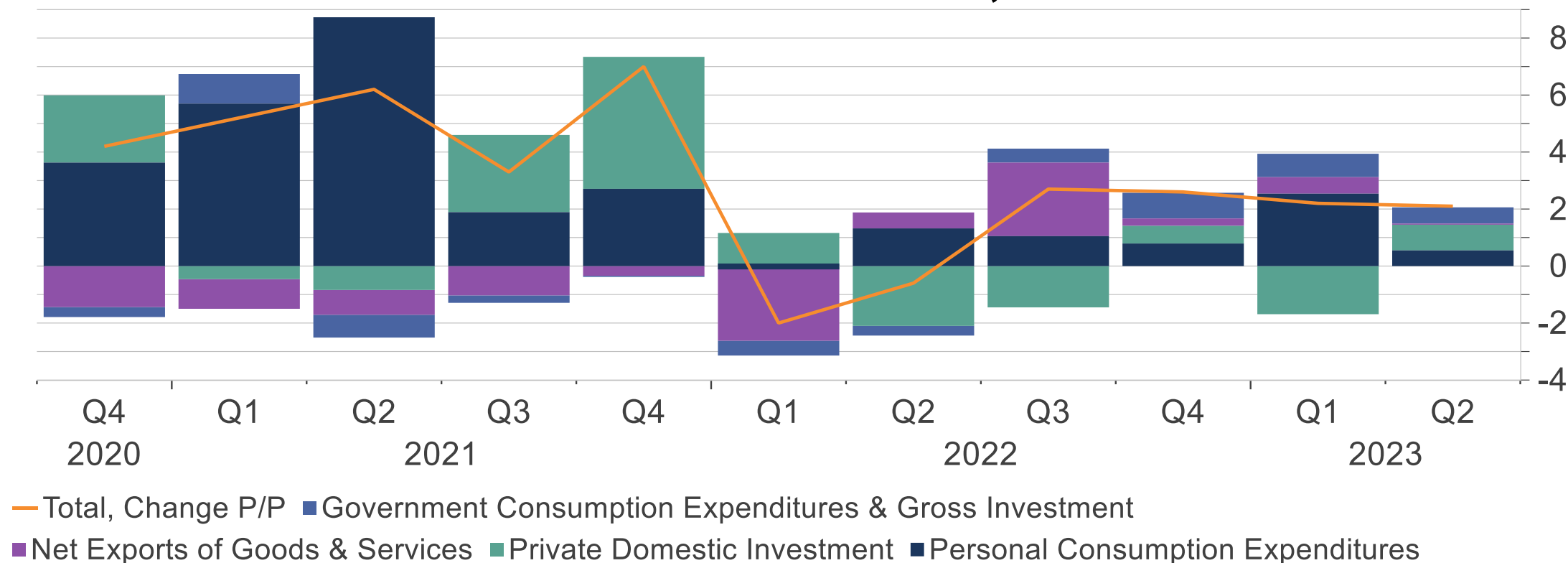
## U.S. Economy Signals are Decreasing Probability of a Recession



Data Source: Wilshire

## The U.S. Economic Continued to Expand on Consumption and Private Investment

### United States Real Gross Domestic Product, SA

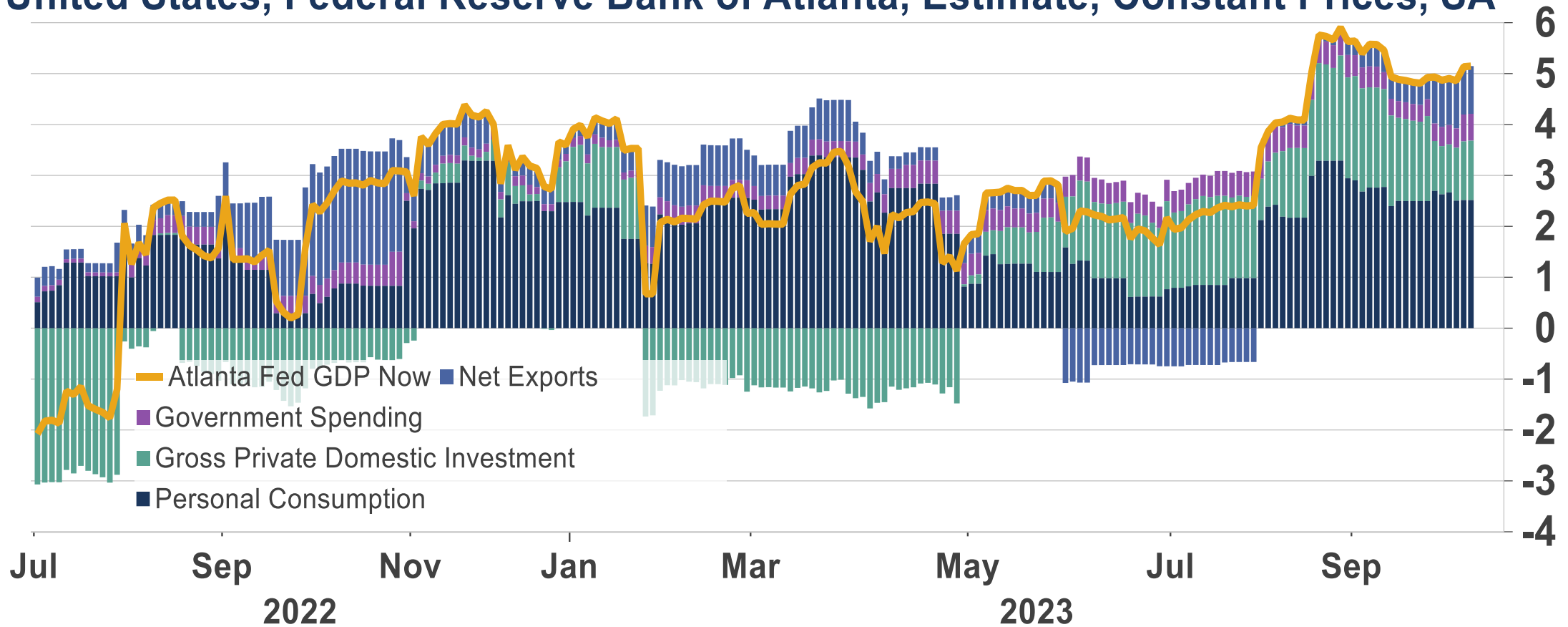


Source: U.S. Bureau of Economic Analysis (BEA), Macrobond

Data Source: Bloomberg

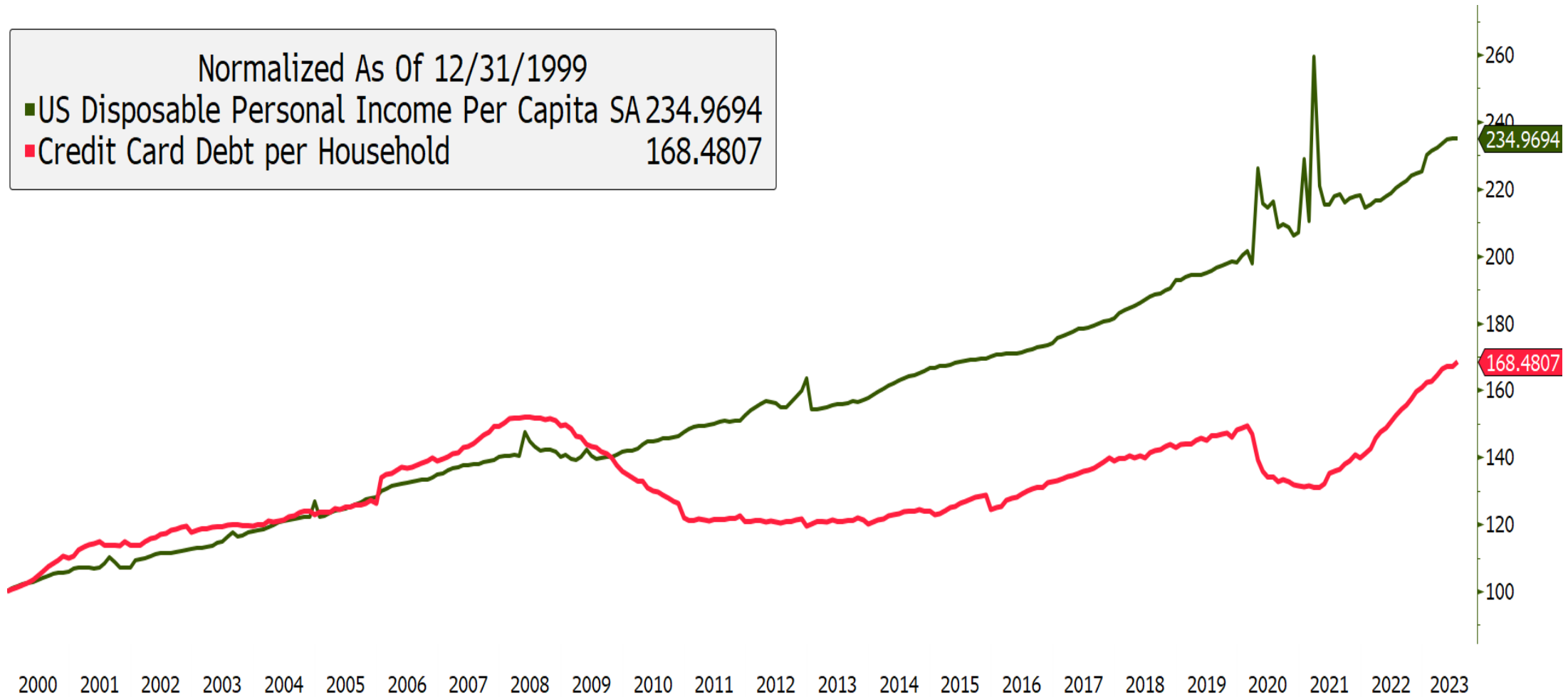
## Growth Estimates have Declined, but Remain Elevated

### United States, Federal Reserve Bank of Atlanta, Estimate, Constant Prices, SA



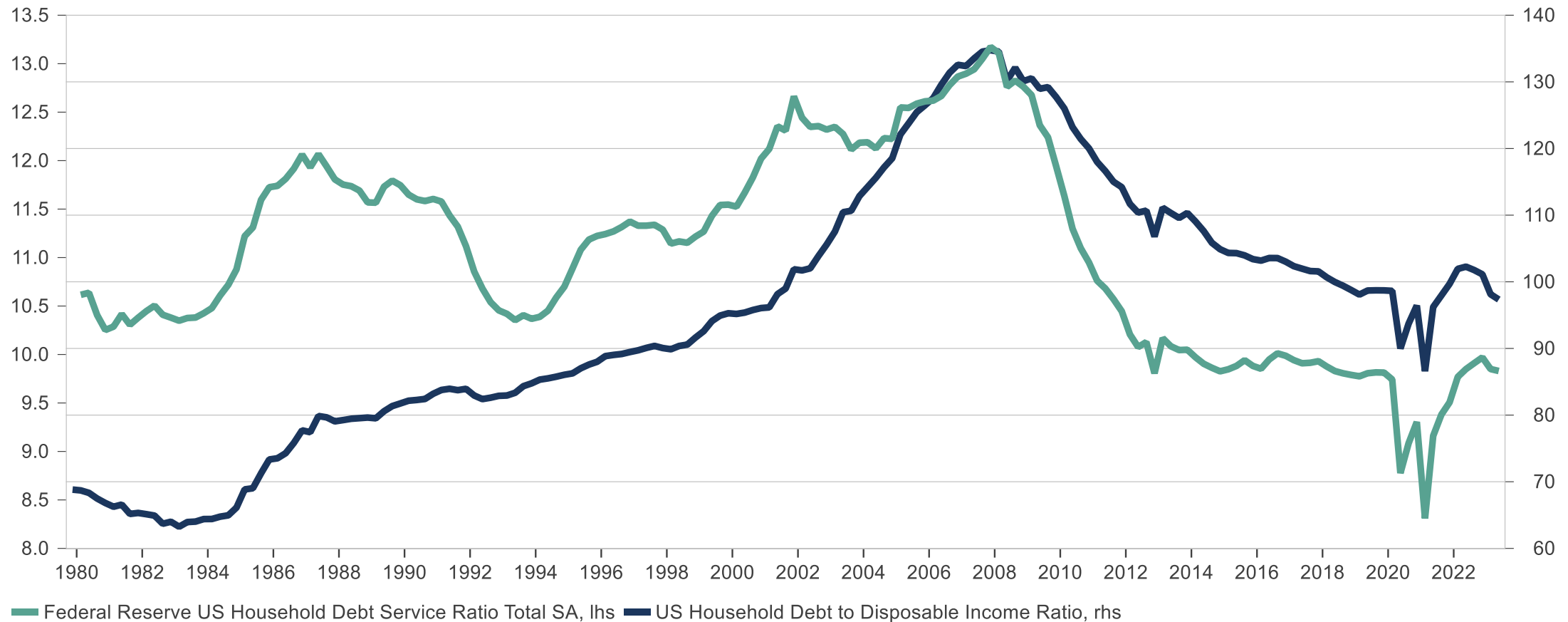
Source: Federal Reserve Bank of Atlanta, Macrobond

## Running on Empty? How Much Consumption Capacity Remains?



Data Source: Bloomberg

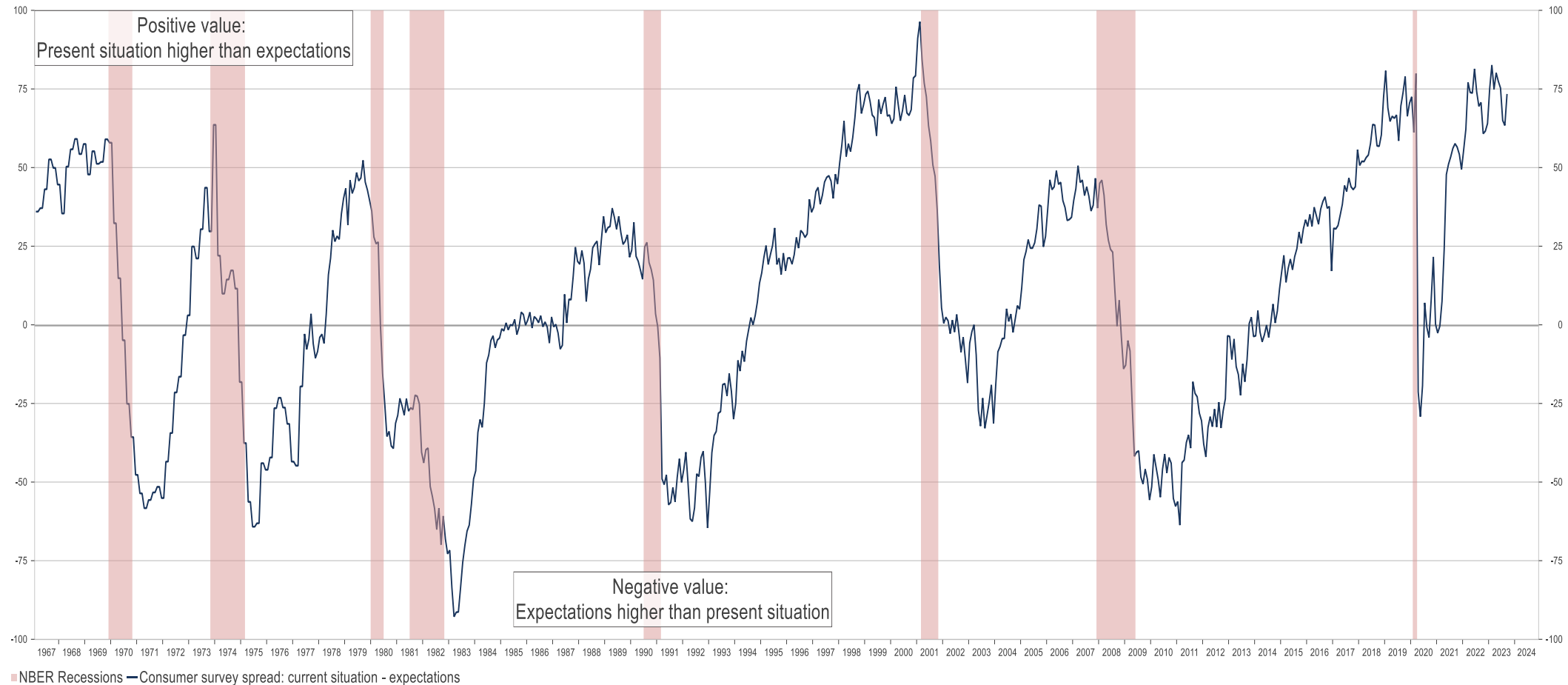
## Debt Service is Still Manageable, but It's a Choice



Source: , Macrobond

Data Source: U.S. Bureau of Economic Analysis (BEA), Macrobond

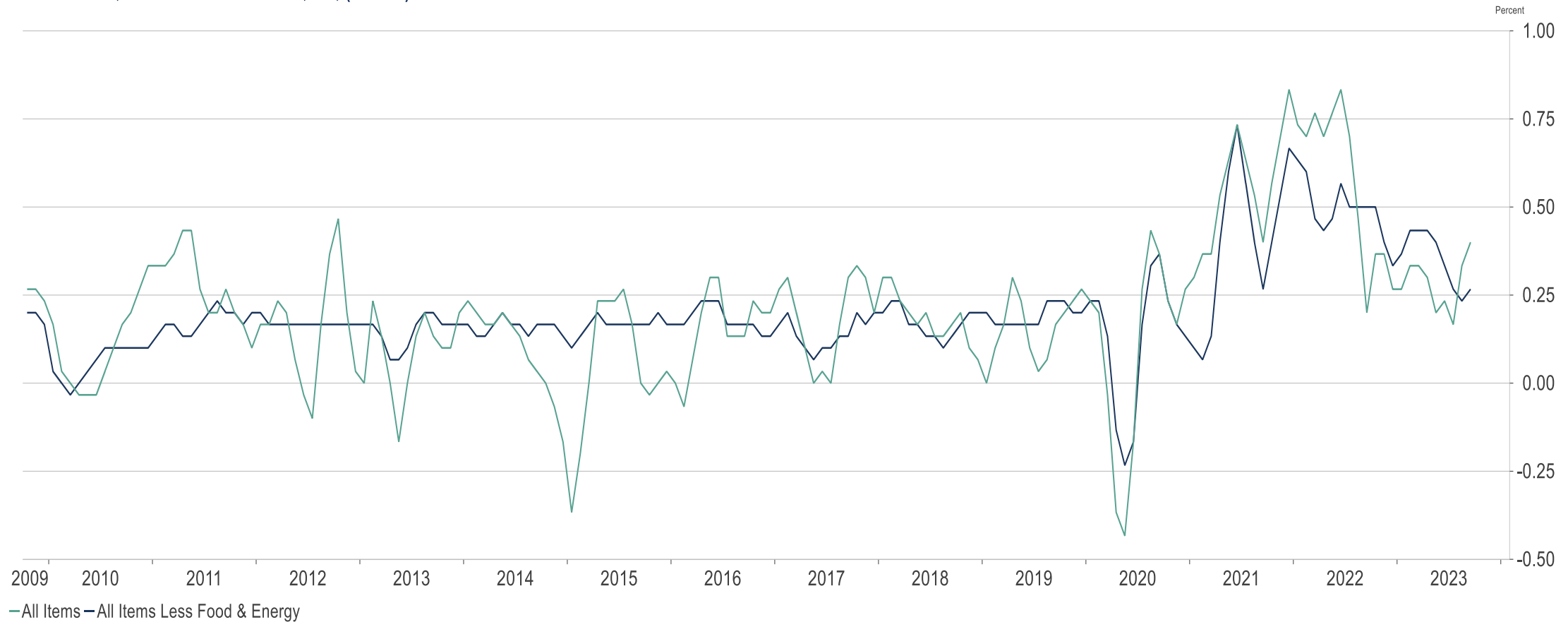
## There's a Lag Between How Consumers Feel About the Future & Economic Downturns



Data Source: Wilshire, Macrobond

## Headline CPI Susceptible to Middle East Tensions; Higher Energy Prices

United States, Consumer Price Index, SA, (3M MA)

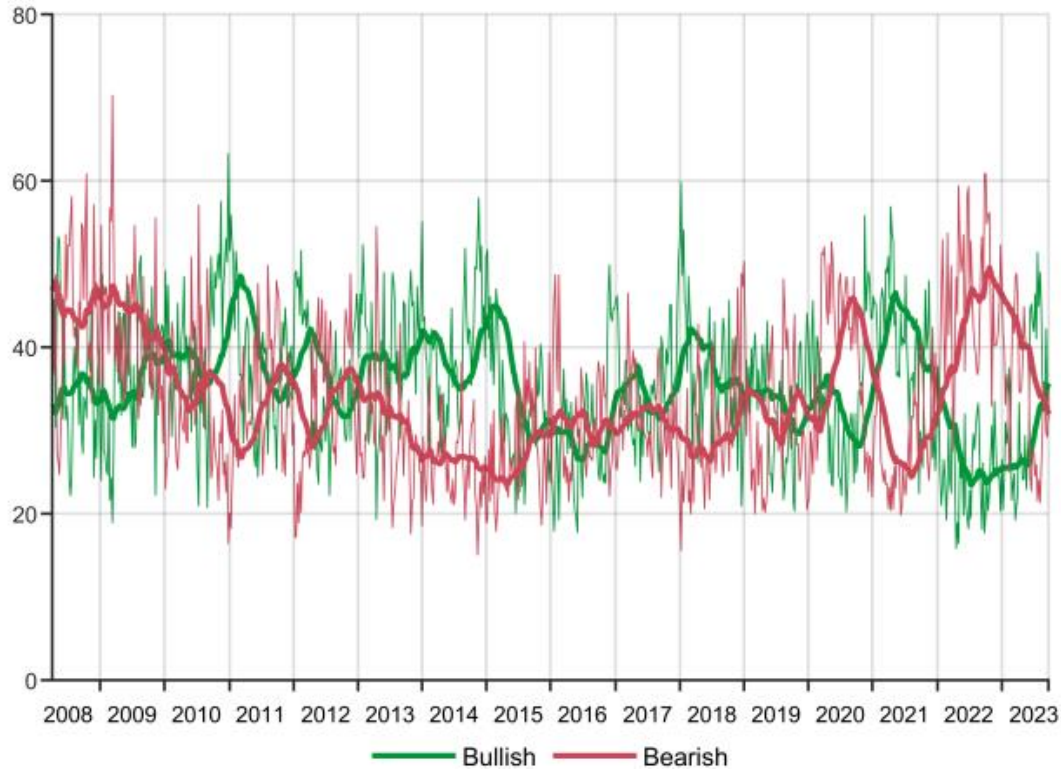


Source: U.S. Bureau of Labor Statistics (BLS), Macrobond

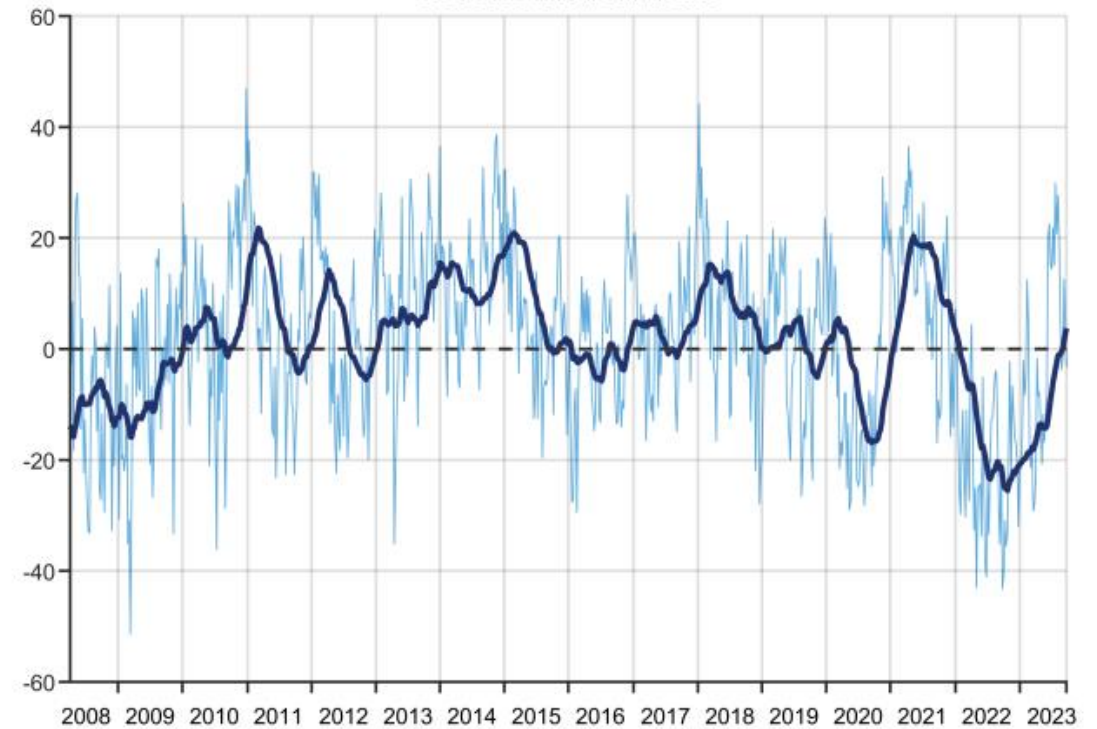


## Investor Sentiment has Improved from Lows, but Still not Overextended

AAll US Investor Sentiment Indices With 26W Moving Average  
Last Observation: 09/22/2023



AAll Bull Bear Spread With 26W Moving Average  
Last Observation: 09/22/2023



Data Source: Wilshire, Bloomberg Data



# View in Focus: Underweight Equities vs. Fixed Income



# There are Outsized Relative Valuation Opportunities

Global Equity Markets Fundamentals As of 09/26/2023

	Dividend Yield			Profit Margin			Price to Sales			Price to Book			TR12M P/E			Forward P/E		
	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y
<b>U.S. Equity</b>	1.6	-0.3	-1.0	10.2	0.0	0.7	2.3	-0.3	0.8	4.1	0.3	1.3	21.0	-0.3	0.6	18.6	-0.4	0.6
<b>Developed Market</b>	3.3	0.4	-0.1	9.1	0.9	1.6	1.2	-0.3	0.7	1.6	0.2	0.5	13.2	-0.9	-0.8	13.2	-0.8	-0.5
Eurozone	3.5	0.7	-0.1	8.7	0.9	1.7	1.1	-0.2	0.7	1.7	0.6	1.2	12.1	-0.9	-0.7	11.8	-1.0	-0.5
Japan	2.2	-0.6	0.1	6.7	0.7	1.2	1.0	0.7	1.3	1.5	1.0	1.1	17.2	0.1	-0.2	15.5	0.1	-0.1
UK	4.0	-0.5	-0.3	11.8	1.3	1.9	1.2	0.1	0.6	1.7	0.4	-0.0	10.8	-1.0	-1.1	11.1	-0.7	-0.8
<b>Emerging Market</b>	2.9	0.5	0.5	8.7	-0.5	-0.1	1.2	-0.6	-0.0	1.5	-0.8	-0.6	13.8	-0.3	-0.1	12.0	-0.6	0.1
China	2.6	1.1	0.1	8.4	-1.4	-2.1	1.0	-1.1	-0.9	1.1	-1.4	-1.5	12.3	-0.7	-0.3	9.5	-1.3	-0.9
India	1.3	-0.1	-0.3	8.8	0.5	-0.2	2.4	0.4	1.0	3.5	0.4	0.7	26.3	-0.1	0.9	22.4	0.1	0.9
Brazil	5.7	0.1	0.7	12.9	0.3	0.8	0.9	-1.4	-1.3	1.5	-1.3	-0.6	6.6	-0.9	-1.6	7.5	-0.9	-1.6
South Korea	2.1	-0.7	0.8	4.5	-1.1	-1.0	0.7	-0.4	0.2	0.9	-0.5	-1.0	17.1	0.7	1.2	12.7	0.6	1.2

U.S. Equities Fundamentals As of 09/26/2023

	Dividend Yield			Profit Margin			Price to Sales			Price to Book			TR12M P/E			Forward P/E		
	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y
Large Cap	1.6	-0.3	-1.0	10.2	0.0	0.7	2.3	-0.3	0.8	4.1	0.3	1.3	21.0	-0.3	0.6	18.6	-0.4	0.6
Large Cap Growth	0.8	-0.8	-1.7	11.5	-0.7	0.7	3.9	-0.1	1.1	11.1	0.4	1.5	31.4	0.1	1.1	24.8	-0.2	0.9
Large Cap Value	2.5	0.3	-0.1	8.7	0.3	0.7	1.5	-0.7	0.3	2.3	-0.1	1.0	16.0	-0.5	-0.3	14.7	-0.7	-0.1
Mid Cap	1.8	0.4	0.2	6.1	0.1	0.5	1.5	-1.1	0.1	2.7	-0.8	0.3	20.4	-0.7	-0.4	16.7	-0.9	-0.6
Small Cap	1.8	1.3	0.9	2.2	0.3	0.4	1.1	-0.7	-0.2	1.8	-1.2	-0.7	27.5	-0.6	-0.6	23.0	-0.6	-0.3

Equities Relative Fundamentals As of 09/26/2023

	Dividend Yield			Profit Margin			Price to Sales			Price to Book			TR12M P/E			Forward P/E		
	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y	Value	Z-5Y	Z-15Y
US vs. EAFE	-1.7	-0.8	-1.2	1.1	-2.0	-1.4	1.9	-0.3	1.0	2.5	0.3	1.4	1.6	1.8	2.0	1.4	1.1	1.8
EAFE vs. EM	0.4	-0.3	-1.0	0.3	2.0	2.4	1.0	0.9	0.8	1.1	1.7	1.0	1.0	-2.7	-1.2	1.1	-0.8	-0.9
US LC vs. US SC	-0.2	-2.2	-2.7	8.0	-0.6	0.4	2.1	1.3	1.9	2.2	2.2	2.6	0.8	1.3	1.9	0.8	0.8	1.5
US LCG vs. US LCV	-1.7	-1.2	-1.2	2.8	-1.0	-0.2	2.5	0.6	1.6	4.8	0.7	1.7	2.0	1.2	2.0	1.7	0.7	1.6

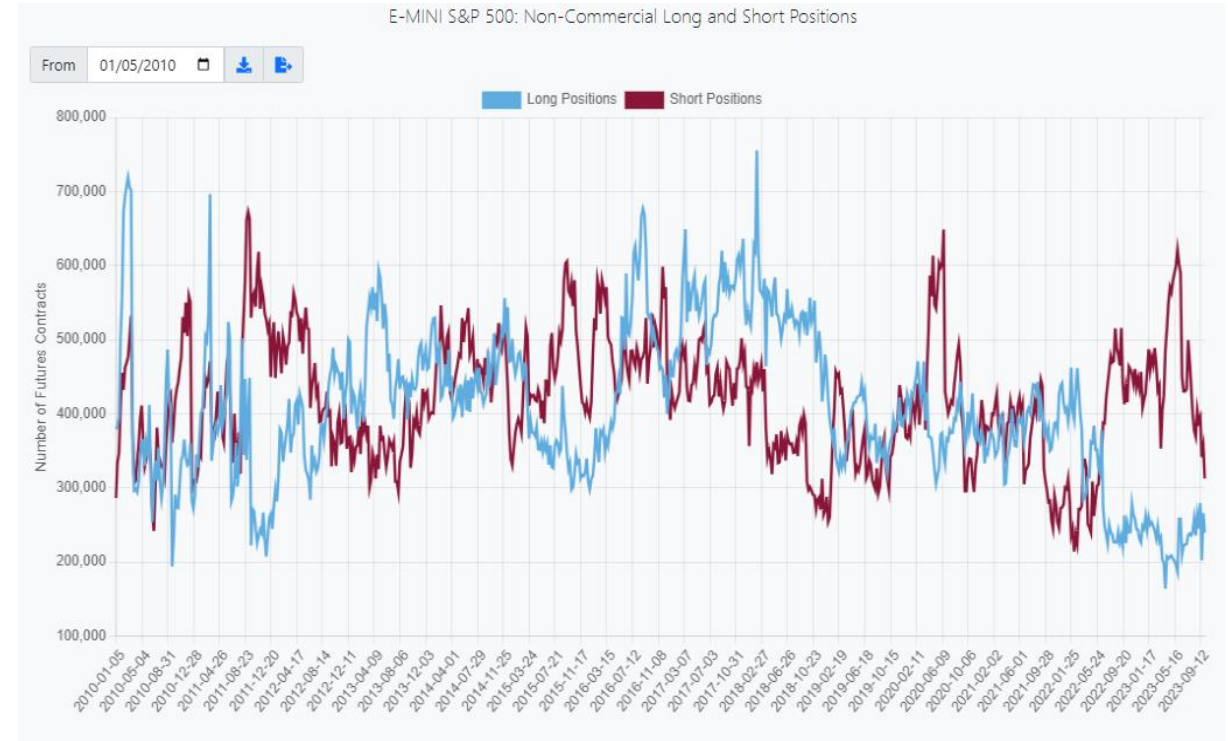
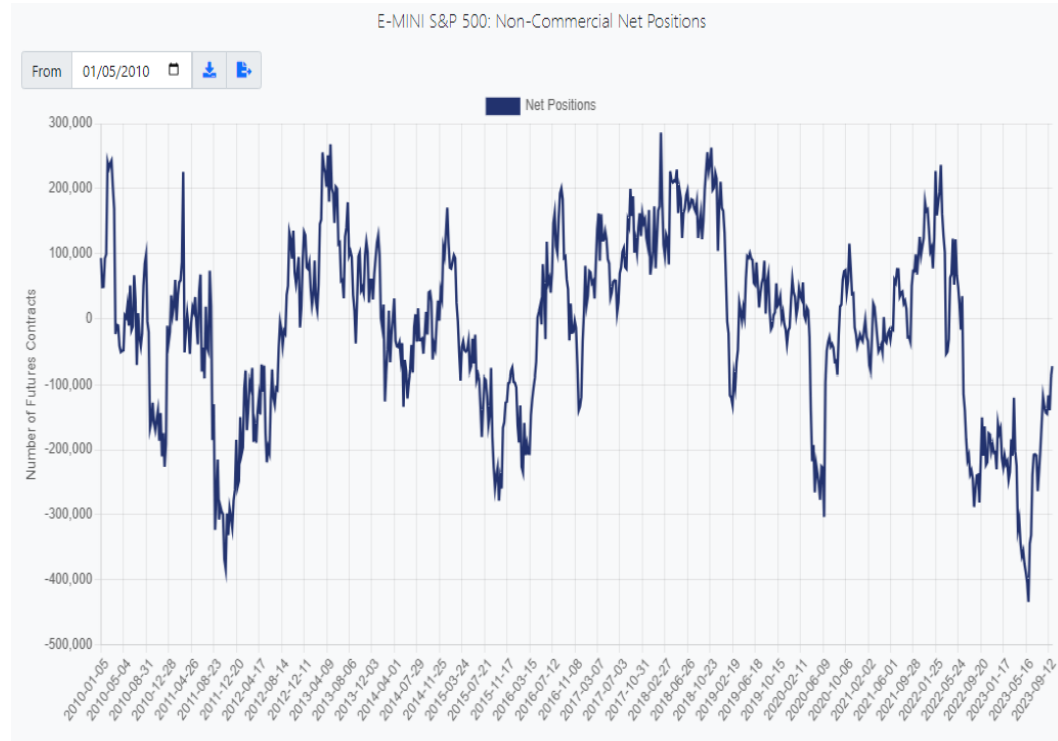
Data Source: Wilshire, Bloomberg

## Equities Found Technical Support in the Face of Higher Rates and Elevated Geopolitical Risk, but Lower Highs May Indicate the Beginning of a Downward Trend



Data Source: Bloomberg

## Speculative U.S. Equity Positioning Near Neutral; Shorts Covered



Data Source: Wilshire, CFTC

# Equity Valuations: Stocks are Expensive, Even if You Assume EPS of \$248 in 2024

US Equity 2024 EPS (\$)	US 10 Year Treasury Yield (%)															
	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	
	275	28%	21%	16%	11%	6%	2%	-2%	-6%	-9%	-12%	-15%	-18%	-20%	-23%	-25%
	270	25%	19%	14%	9%	4%	0%	-4%	-7%	-11%	-14%	-17%	-19%	-22%	-24%	-26%
	265	23%	17%	12%	7%	2%	-2%	-5%	-9%	-12%	-15%	-18%	-21%	-23%	-26%	-28%
	260	21%	15%	10%	5%	0%	-4%	-7%	-11%	-14%	-17%	-20%	-22%	-25%	-27%	-29%
	250	16%	10%	5%	1%	-3%	-7%	-11%	-14%	-17%	-20%	-23%	-25%	-28%	-30%	-32%
	245	14%	8%	3%	-1%	-5%	-9%	-13%	-16%	-19%	-22%	-24%	-27%	-29%	-31%	-33%
	240	11%	6%	1%	-3%	-7%	-11%	-14%	-18%	-21%	-23%	-26%	-28%	-30%	-33%	-35%
	235	9%	4%	-1%	-5%	-9%	-13%	-16%	-19%	-22%	-25%	-27%	-30%	-32%	-34%	-36%
	230	7%	2%	-3%	-7%	-11%	-15%	-18%	-21%	-24%	-26%	-29%	-31%	-33%	-35%	-37%
	225	4%	-1%	-5%	-9%	-13%	-17%	-20%	-23%	-25%	-28%	-30%	-33%	-35%	-37%	-39%
	220	2%	-3%	-7%	-11%	-15%	-18%	-22%	-24%	-27%	-30%	-32%	-34%	-36%	-38%	-40%
	215	0%	-5%	-9%	-13%	-17%	-20%	-23%	-26%	-29%	-31%	-34%	-36%	-38%	-40%	-41%
	210	-3%	-7%	-11%	-15%	-19%	-22%	-25%	-28%	-30%	-33%	-35%	-37%	-39%	-41%	-43%
	205	-5%	-9%	-14%	-17%	-21%	-24%	-27%	-30%	-32%	-34%	-37%	-39%	-41%	-42%	-44%
	200	-7%	-12%	-16%	-19%	-23%	-26%	-29%	-31%	-34%	-36%	-38%	-40%	-42%	-44%	-45%
	195	-10%	-14%	-18%	-21%	-25%	-28%	-30%	-33%	-35%	-38%	-40%	-42%	-43%	-45%	-47%
	190	-12%	-16%	-20%	-23%	-27%	-30%	-32%	-35%	-37%	-39%	-41%	-43%	-45%	-47%	-48%
	185	-14%	-18%	-22%	-25%	-29%	-31%	-34%	-36%	-39%	-41%	-43%	-45%	-46%	-48%	-50%
180	-17%	-21%	-24%	-27%	-30%	-33%	-36%	-38%	-40%	-42%	-44%	-46%	-48%	-49%	-51%	

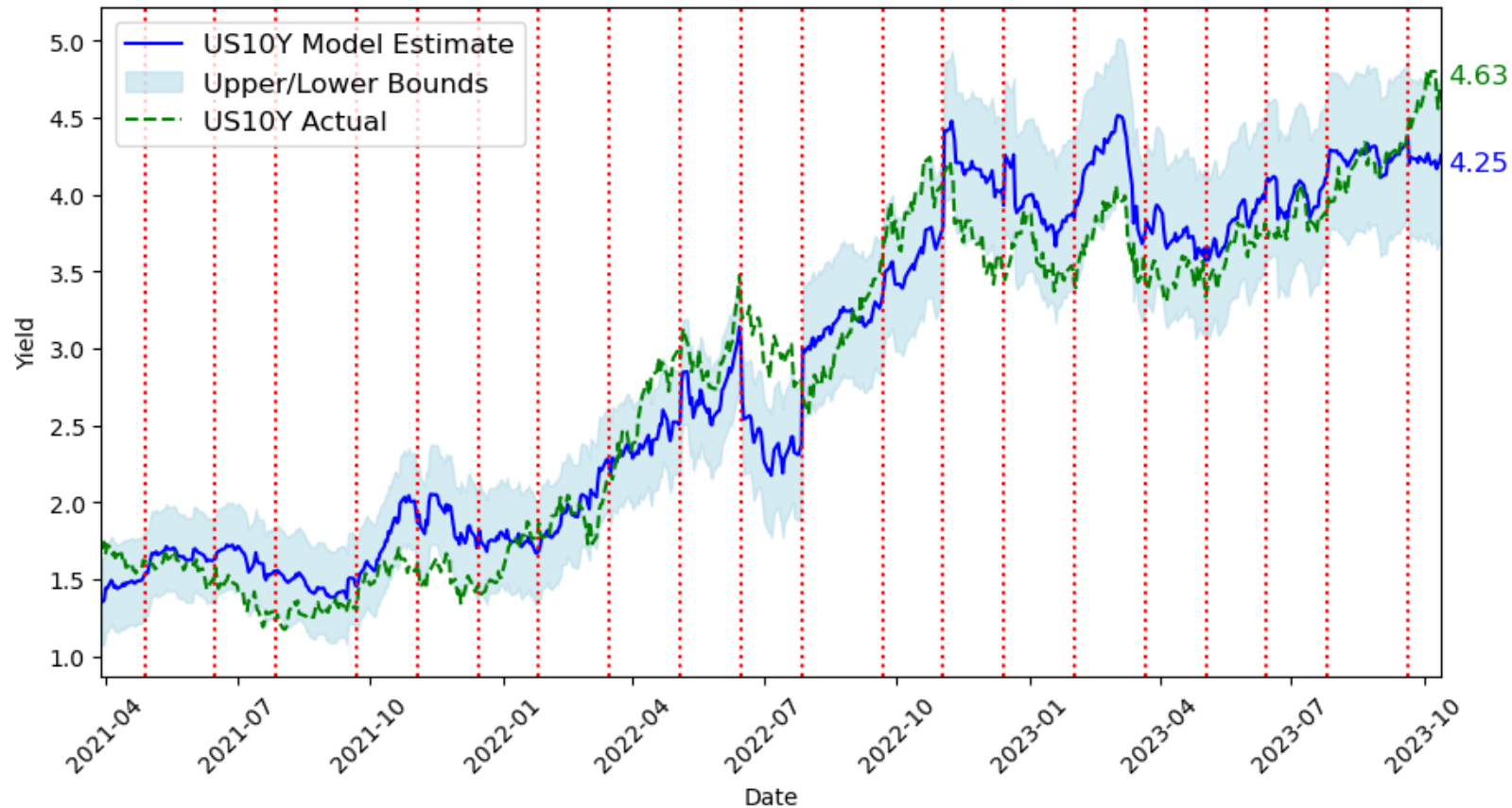
Data Source: Wilshire, Bloomberg

## Treasury Yields Rally to Levels Not Seen Since 2007



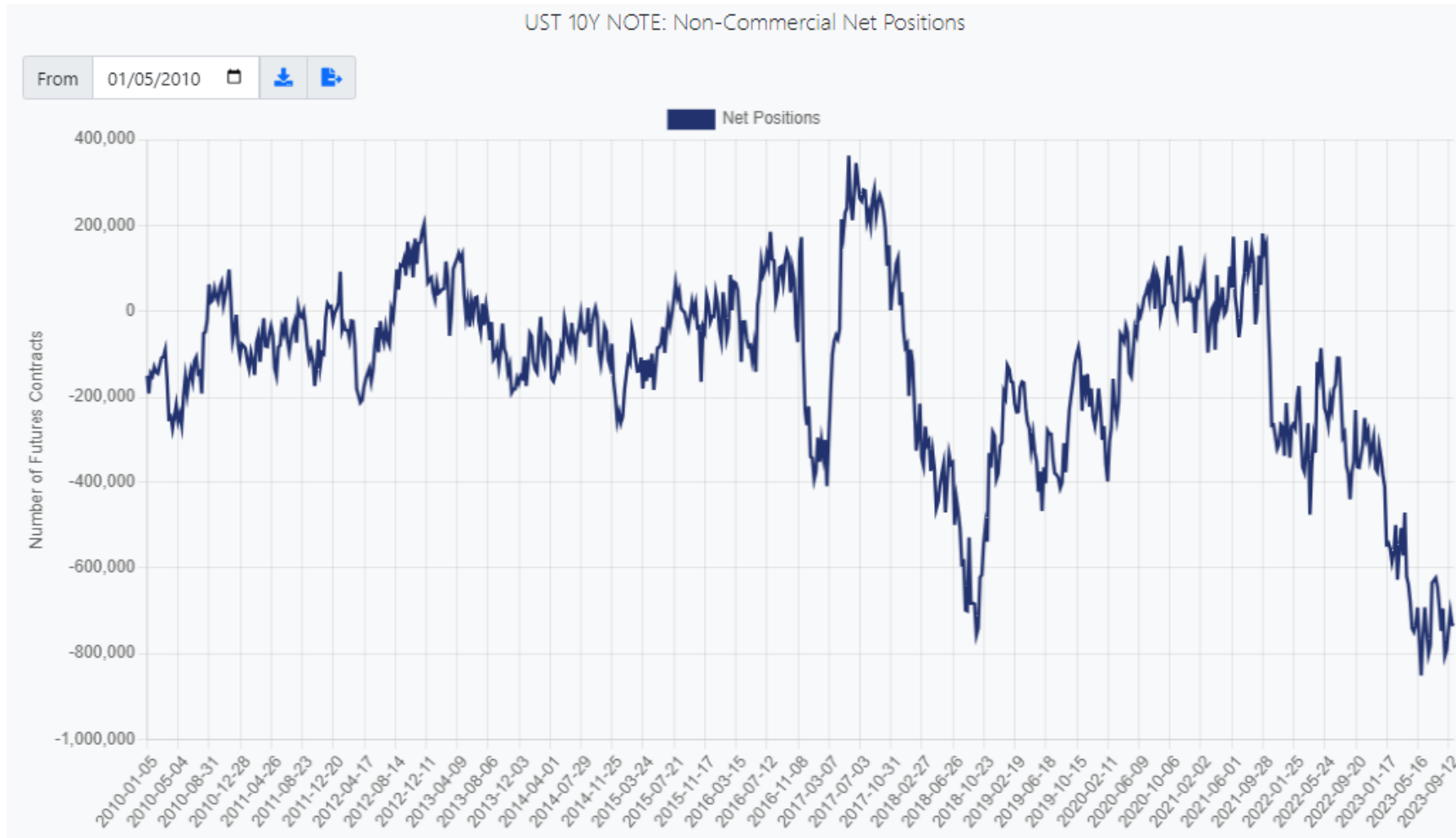


## Wilshire 10-year Fair Valuation Model is Below Market



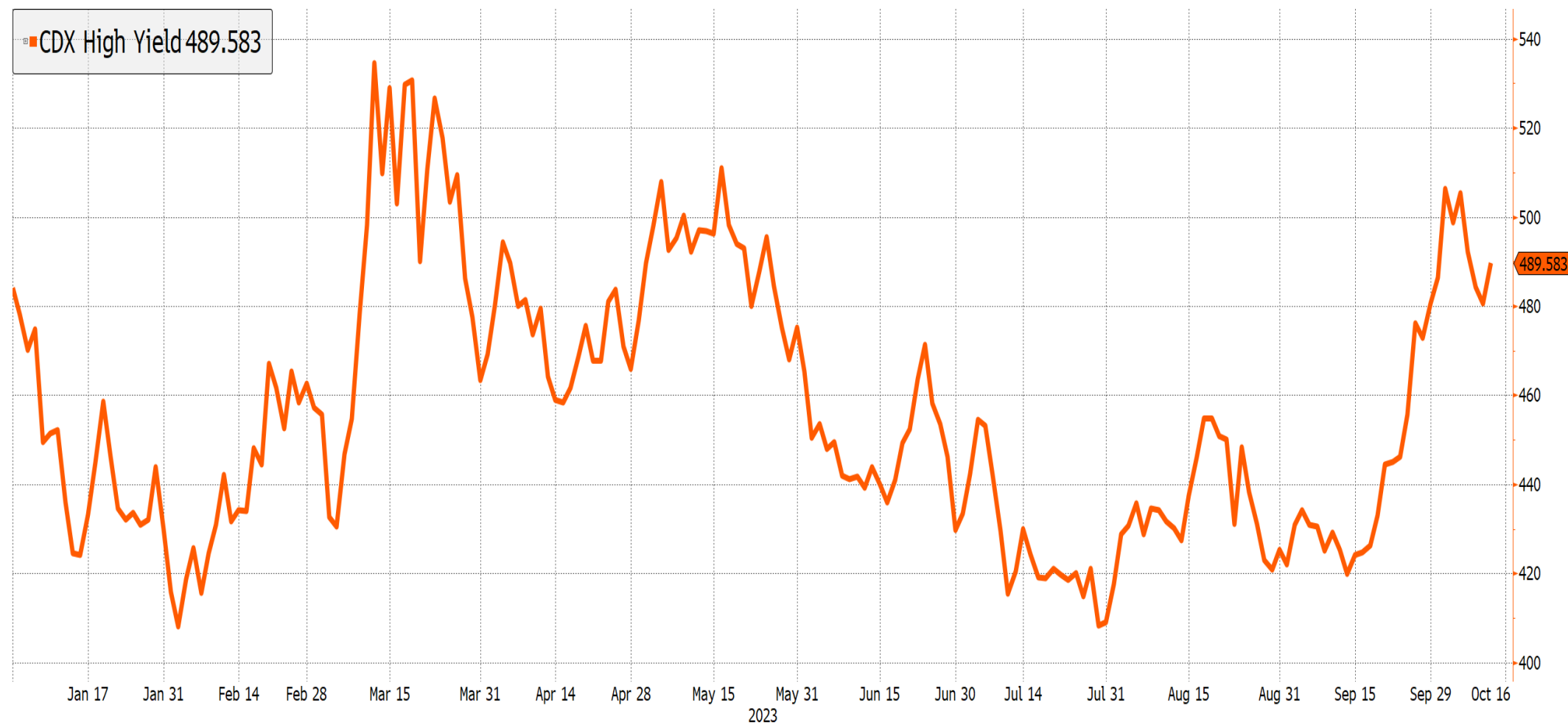
Latest FOMC Statement:  
2023-09-20

## Rates Positioning Extremely Short, Indicating Very Negative Sentiment



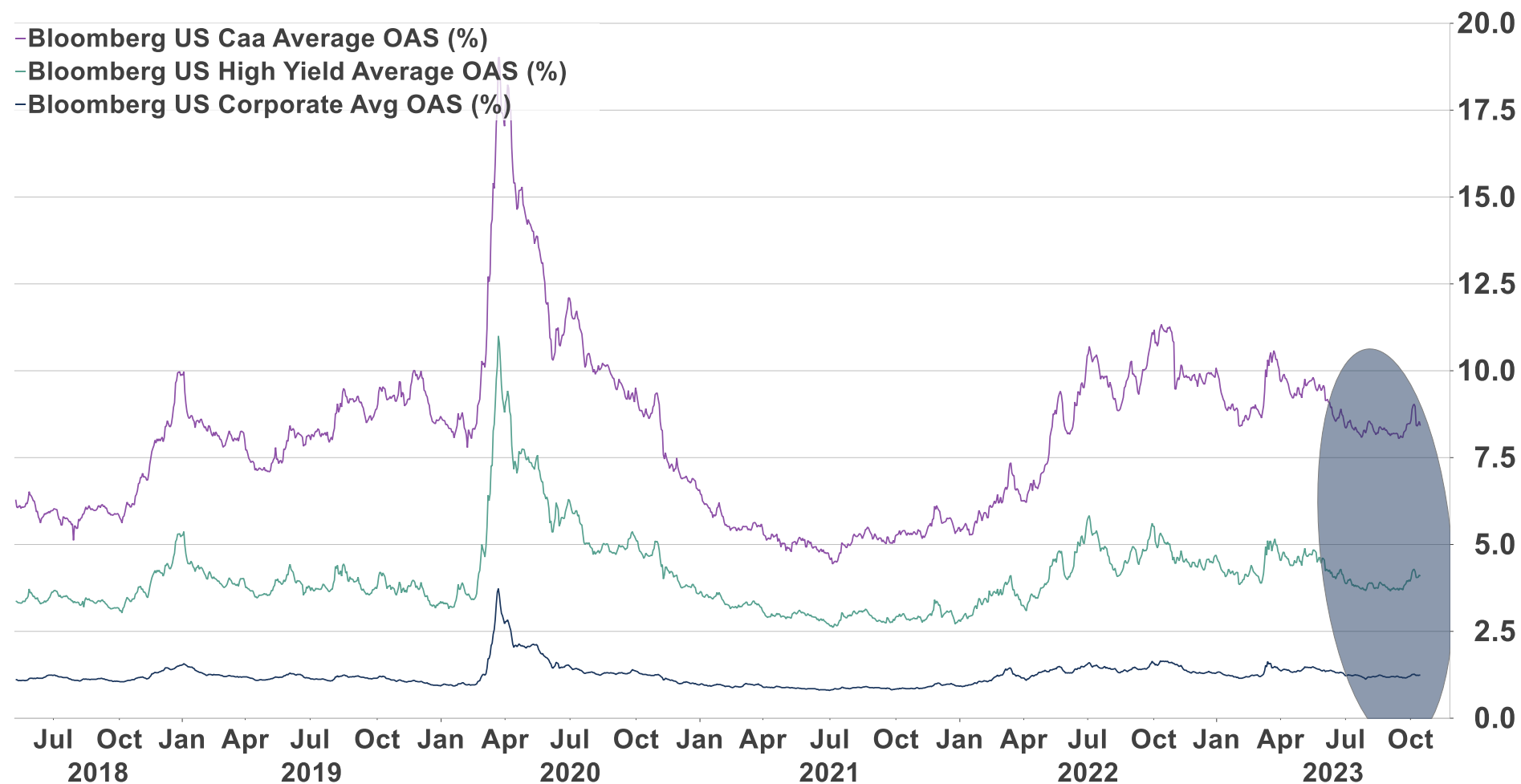
Data Source: Wilshire, CFTC

## Tipping Point: High Yield Spreads are Moving in Response to Higher Treasury Yields



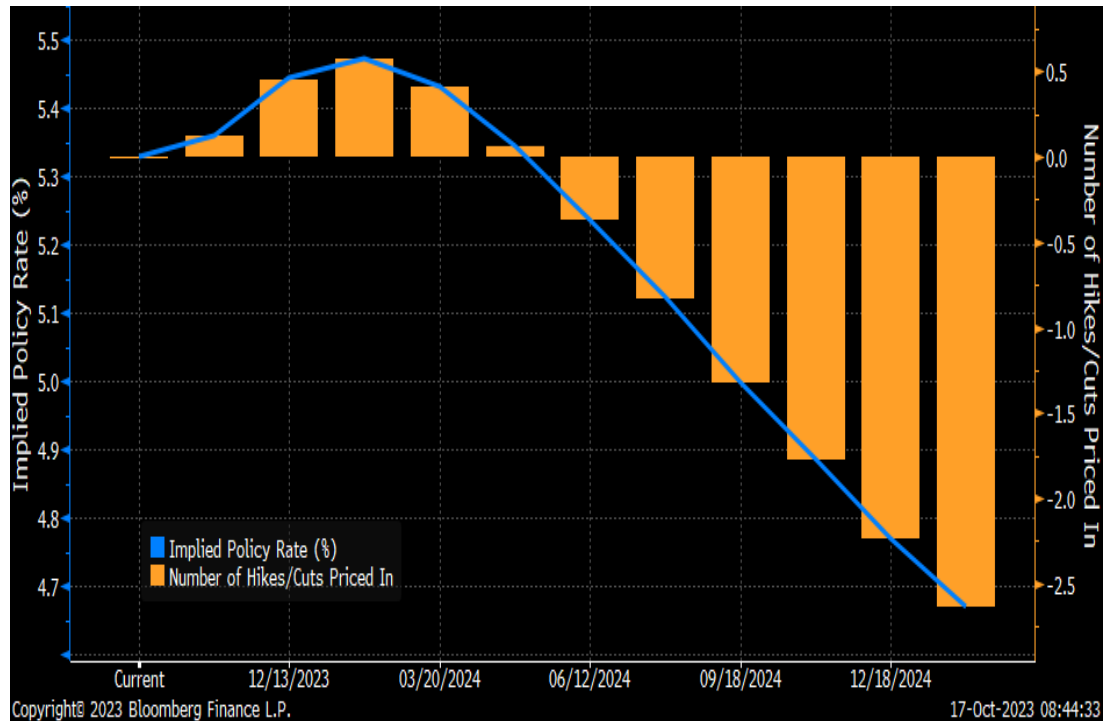
Data Source: Bloomberg

## Lowest Quality Credit Spreads are Indicative of Risk Ahead



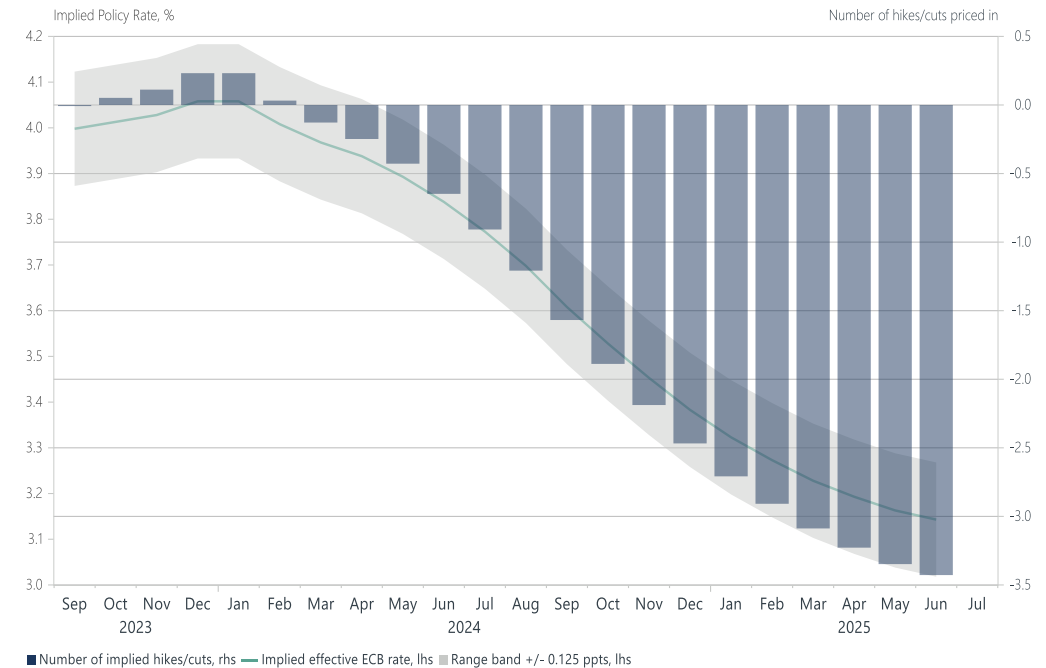
Data Source: Macrobond, Bloomberg

## Global Interest Rate Markets Imply Several Cuts in the next 16 Months, Indicating a Softer Growth Outlook or Higher Risk of Accidents



### Implied number of hikes/cuts from the ECB

Assuming uniform 0.25 ppt hikes/cuts  
Based on €STR futures and the spread between ECB Deposit Facility Rate and €STR of 0.098



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# Wilshire Investment Strategy Views



# Market Forecasts



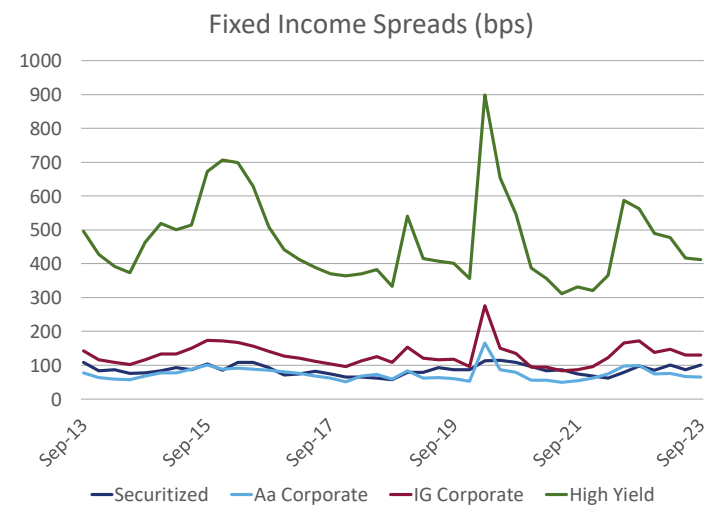
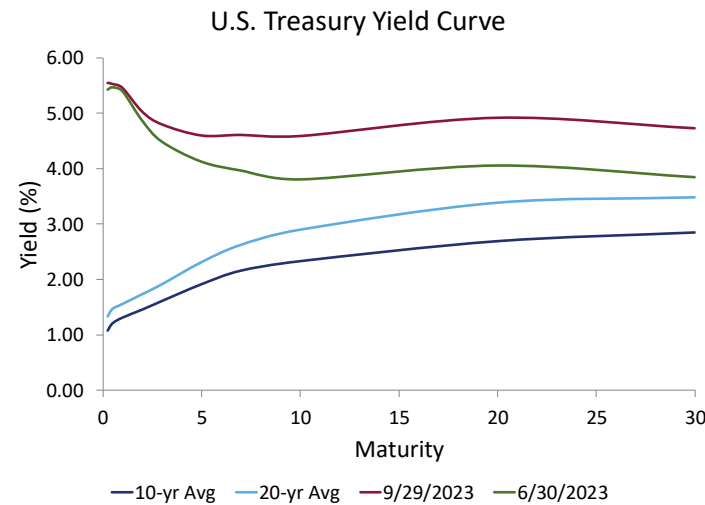
## Summary Changes

- Yield curve up across the maturity spectrum
  - Curve movements resulted in higher forecasts for government bond fixed income segments
  - Minor decrease in spreads for investment grade and high yield bonds; assumption for both are up for the quarter
- Yields on public real asset securities are up from last quarter; inflation assumption up slightly to 2.35%
- Equity assumptions are up, mainly on lower current valuations but also higher income return
- Equity risk premium continues to fall

Asset Class Assumption	Total Return (%)		Risk (%)	
	Jun 2023	Change	Sep 2023	
Inflation	2.25	0.10	2.35	1.75
Cash Equivalents	3.85	0.40	4.25	0.75
Treasuries	4.40	0.60	5.00	5.00
Core Bonds	4.85	0.75	5.60	4.70
LT Core Bonds	4.80	0.75	5.55	9.85
High Yield Bonds	6.20	0.65	6.85	10.00
Private Credit	8.35	0.60	8.95	12.75
Global RE Securities	5.90	0.45	6.35	16.45
Private Real Estate	6.00	0.20	6.20	13.90
U.S. Stocks	5.50	0.50	6.00	17.00
Dev. ex-U.S. Stocks	6.50	0.50	7.00	18.00
Emerging Market Stocks	6.75	0.50	7.25	26.00
Private Equity	9.00	0.65	9.65	29.65
Global 60/40 (ACWI/U.S. Core)	5.95	0.60	6.55	10.80

Implied Risk Premia	Relative Return (%)		
	Jun 2023	Change	Sep 2023
Cash - Inflation	1.60	0.30	1.90
Treasury - Cash	0.55	0.20	0.75
Core - Treasury	0.45	0.15	0.60
Long-Term Core - Core	-0.05	0.00	-0.05
High Yield - Core	1.35	-0.10	1.25
Global RESI - Core	1.05	-0.30	0.75
U.S. Stocks - Core	0.65	-0.25	0.40
Private Equity - U.S. Stocks	3.50	0.15	3.65
Implied Real Return (ACA - CPI)			
U.S. Stocks	3.25	0.40	3.65
U.S. Bonds	2.60	0.65	3.25
Cash Equivalents	1.60	0.30	1.90

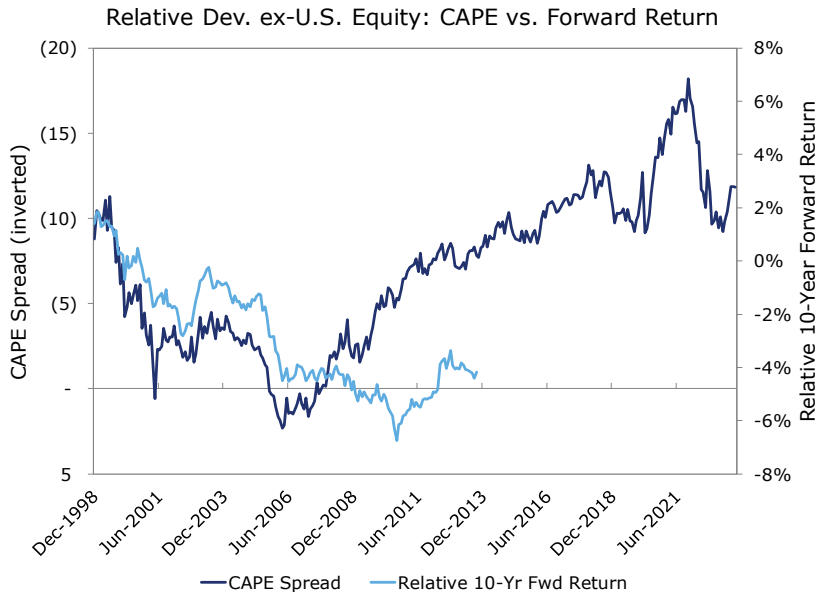
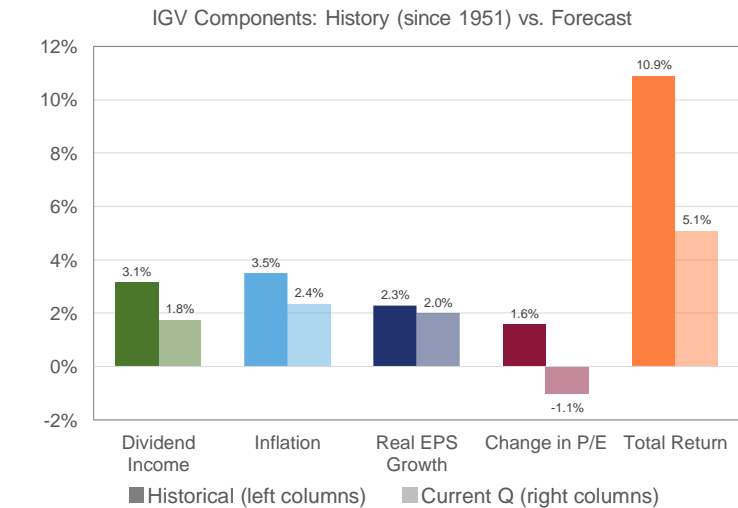
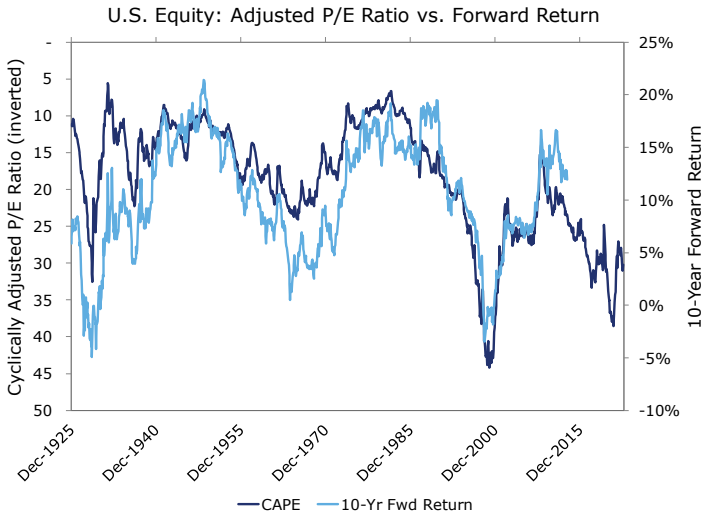
# Fixed Income



Inflation & Fixed Income		Jun 2023	Change	Sep 2023
Inflation	10-Year Treasury Yield	3.84	0.73	4.57
	10-Year Real Yield	<u>1.62</u>	<u>0.61</u>	<u>2.23</u>
	Breakeven Inflation	2.22	0.12	2.34
	Inflation Forecast	2.25	0.10	2.35
Cash	91-Day T-Bill Yield	5.43	0.12	5.55
	T-Bill Yield in 10 Yrs	3.50	0.50	4.00
	Cash Forecast	3.85	0.40	4.25
Treasury	U.S. Treasury Idx Yield	4.37	0.48	4.85
	Treasury Idx Yield in 10 Yrs	4.40	0.85	5.25
	Treasury Idx Forecast	4.40	0.60	5.00
	U.S. LT Treasury Idx Yield	3.97	0.88	4.85
	LT Treasury Idx Yield in 10 Yrs	3.95	0.89	4.84
	LT Treasury Idx Forecast	4.00	0.85	4.85
Spread	U.S. Corporate Idx OAS	1.31	(0.01)	1.29
	Corporate Idx OAS in 10 Yrs	1.53	(0.00)	1.53
	Corporate Idx Forecast	5.50	0.60	6.10
	U.S. Core Bond Forecast	4.85	0.75	5.60
	U.S. LT Core Bond Forecast	4.80	0.75	5.55
	U.S. High Yield Idx OAS	4.17	(0.05)	4.12
	High Yield Idx OAS in 10 Yrs	5.33	(0.02)	5.31
	High Yield Bond Forecast	6.20	0.65	6.85

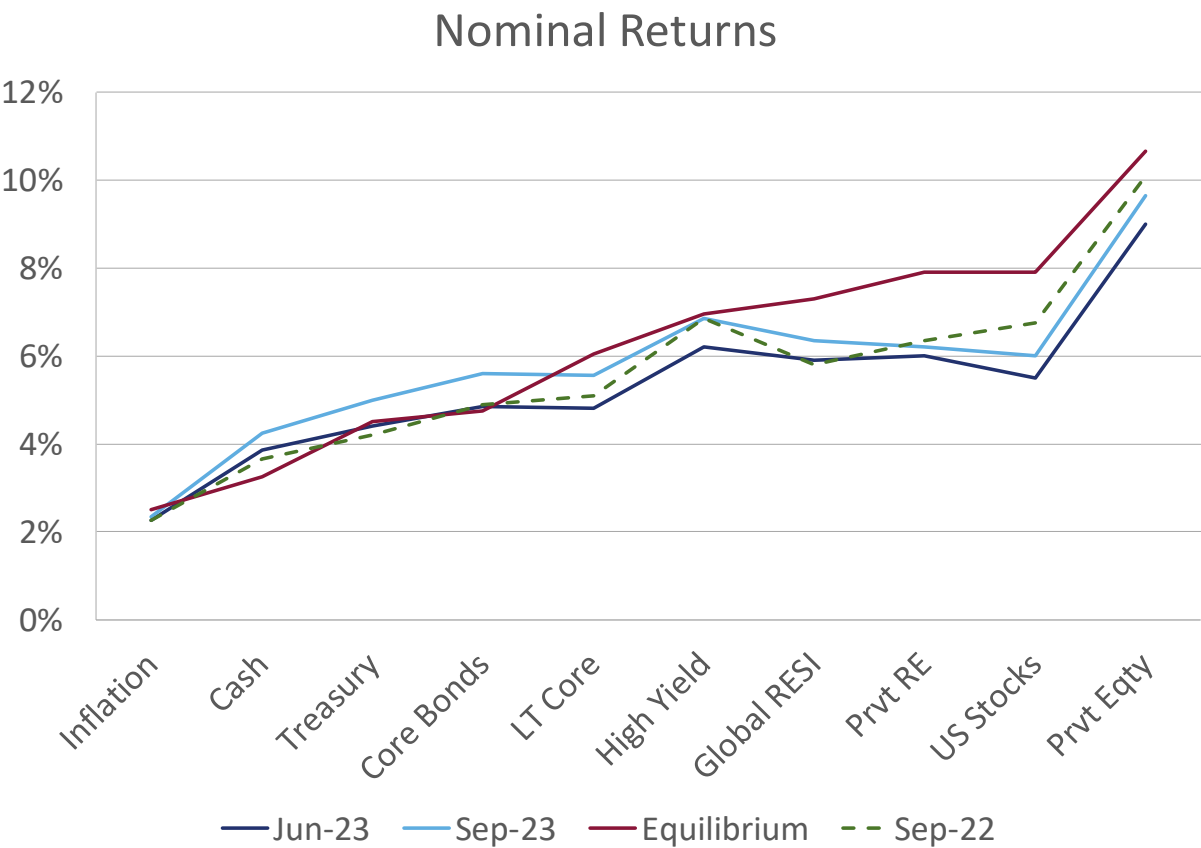
# Equity Markets

Equity: Public & Private		Jun 2023	Change	Sep 2023
Equity	DDM	6.60	0.25	6.85
	IGV	4.40	0.70	5.10
	CAPE	5.85	0.00	5.85
U.S. Equity Forecast		5.50	0.50	6.00
Dev-ex-US Equity Forecast		6.50	0.50	7.00
EM Equity Forecast		6.75	0.50	7.25
Private	Cost of Debt (Public)	5.65	0.60	6.25
	Cost of Debt (Private)	7.80	0.40	8.20
	Private Market Basket Forecast	9.00	0.65	9.65

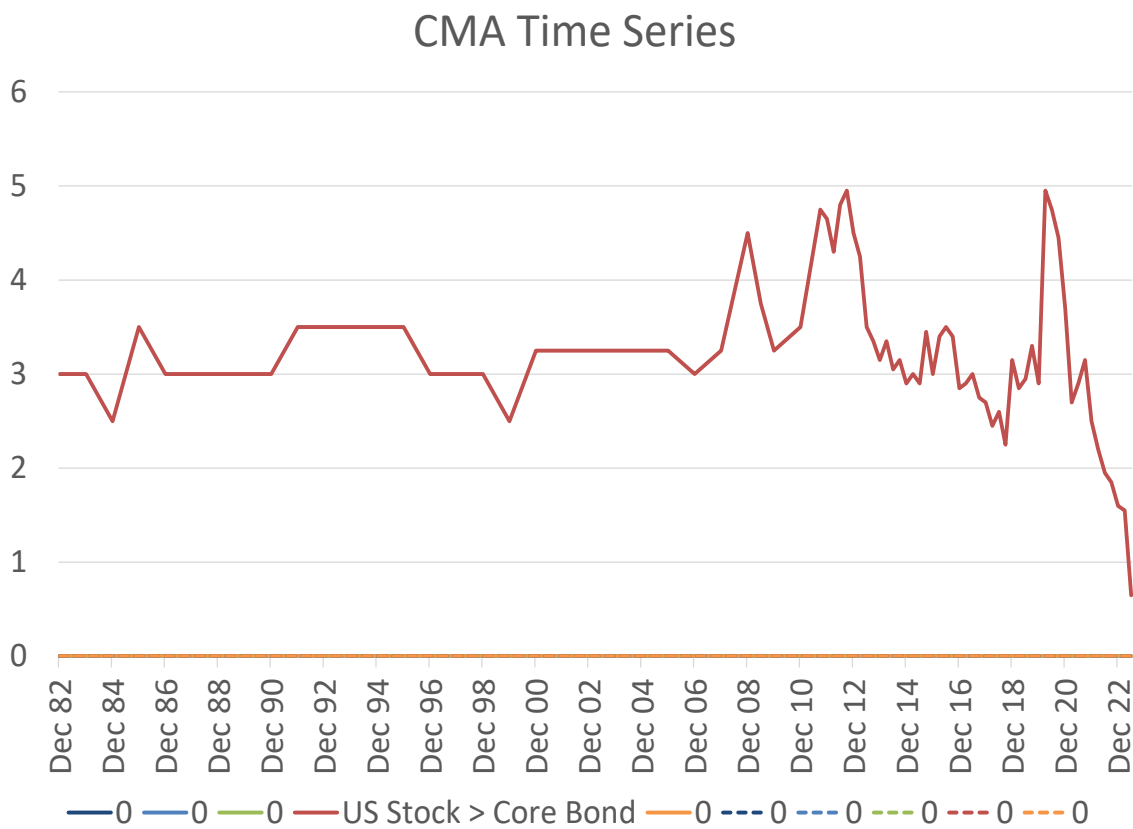


# Equilibrium Assumptions

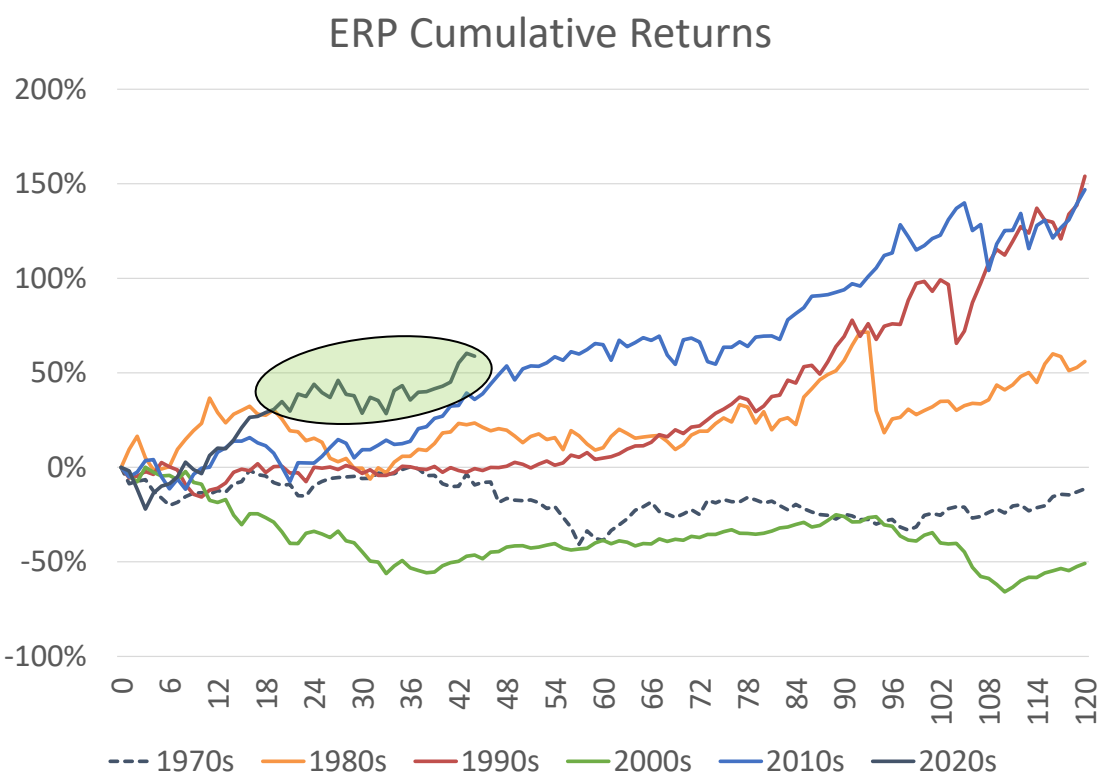
Current versus Equilibrium Asset Class Assumptions



# Equity Risk Premium: Expected & Realized



Data Source: Wilshire, Bloomberg



# Question & Answer

Thank you for joining us!

Please use the Q&A panel to submit questions.



The screenshot shows a web interface for asking questions. At the top, there are three tabs: 'Ask a question' (highlighted in green), 'Rate this', and 'Details'. Below the tabs is a section titled 'Ask a question' containing a large text input field with the placeholder text 'Type your question here...'. At the bottom of this section is a link that says 'Not hearing audio? Click here for help'. To the right of the input field is a grey button labeled 'Send question'. Two red arrows originate from the text 'Please use the Q&A panel to submit questions.'; one arrow points to the 'Ask a question' link, and the other points to the 'Send question' button.

To find out more about our solutions or speak to one of our experts, we're ready to connect you to the right team and answer any of your questions.

[wilshire.com](https://wilshire.com)  
[contactus@wilshire.com](mailto:contactus@wilshire.com)  
 +1 310 451 3051

**Josh Emanuel**  
 Chief Investment Officer  
[jemanuel@wilshire.com](mailto:jemanuel@wilshire.com)

**Steve Foresti**  
 Senior Advisor  
[sforesti@wilshire.com](mailto:sforesti@wilshire.com)

**Suehyun Kim**  
 Senior Vice President  
[shkim@wilshire.com](mailto:shkim@wilshire.com)

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