Darius Dale Macro Voices Interview
Thursday, February 1, 2024
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Executive Summary: Monday, January 29, 2024

Modal Outcome: The latest data indicate the "resilient US economy" theme we authored in the summer of 2022 persists. While we expect the resiliency of the US economy to begin dissipating in 4Q23 (demonstrated by Q4 GDP), a sharp, sudden slowdown to a well-below-trend growth rate is likely to be avoided. Leading indicators currently indicate only a low probability of a developing recession in the US economy. "Immaculate disinflation" persists in the US economy. The recent surge in productivity growth in the US reduces pressure on corporate margins, which reduces the need for corporations to shed costs and/or raise prices. That said, the current level of productivity growth is north of its structural trend and may not be sustained. While fiscal policy was a dominant driver of persistent upside surprises in US growth in recent quarters, it is unlikely to remain as supportive over the medium term. Transitory factors dramatically inflated the federal budget deficit throughout FY23 in ways that are unlikely to be matched in FY24. That said, the US economy is unlikely to experience a fiscal cliff in a general election year – especially with an incumbent president on the ballot.

Right Tail Risks: The Fed has implemented a dovish pivot with likely rate cuts over the NTM. Although we expect balance sheet roll off to persist over the medium term, we expect the Treasury to offset balance sheet roll off via its low-net-bond-supply financing regime until the RRP balance is largely depleted. The decline in the RRP increases USD liquidity and coincides with rising global liquidity.

Left Tail Risks: Per our fall 2022 analysis of historical yield curve inversion cycles, a recession has the highest probability of commencing in the US economy in the Nov-23 to Apr-24 timeframe. Emergent signs of "sticky inflation" support our view that the "last mile" of disinflation required for the Fed to achieve its price stability mandate will be difficult to traverse in the absence of a recession.

Quantitative Risk Management Summary: Monday, January 29, 2024

Short-Term Signals (<1mo):

- **Crowding Model:** Not currently generating any bullish or bearish signals.

- **Probable Range Model:** No key macro market indicator is currently overbought or oversold.

Short-to-Medium-Term Signals (1-3mos):

- **Dispersion Model:** Balanced flows into Defensive and Cyclical equity sectors and factors on a trend basis suggests long/short equity investors are not likely to experience a violent reversal in dispersion in the near term.

- **Positioning Model:** Retail trader positioning is modestly overweight Stocks per the AAII Bulls-Bears Spread. Discretionary investor positioning is likely to be modestly overweight Stocks, neutral Bonds, and modestly underweight Cash per the AAII Survey. Systematic investor positioning is likely to be modestly overweight Stocks per the trend in realized volatility. Investor positioning in US Treasurys and Commodities is at extreme bearish levels per the CTFC Commitment of Traders Report, which has historically been bullish for Bonds and bearish for Commodities. US Equities are unlikely to find valuation support at current levels. The terminal Fed Funds Rate is the dominant driver of the S&P 500 on a trending basis. Cyclical inflation expectations are the dominant driver of Bitcoin on a trending basis.

- **Volatility-Adjusted Momentum Signal (VAMS):** Among the Four Horsemen of Market Risk, the VVIX/VIX Ratio and High Beta/Low Beta Ratio are bullish, and the Small Cap/Mega Cap Ratio and Value/Growth Ratio are neutral. Risk Assets are mostly bullish. Stocks are bullish. Commodities are neutral. Crypto is bullish. Defensive Assets are mixed. The CVIX, MOVE Index, and VIX are bearish. The US Dollar Index is neutral. Gold and Treasury Bonds are bullish.

Medium-Term Signals (3mos):

- **Global Macro Risk Matrix:** GOLDILOCKS is the Top-Down Market Regime. GOLDILOCKS is a risk-on regime in which investors are generally rewarded for increasing risk. *Key portfolio construction considerations in GOLDILOCKS: Risk Assets > Defensive Assets, High Beta > Low Beta, Growth > Value, International > US, EM > DM, Spread Products > Treasurys, Short Rates > Belly > Long Rates, High Yield > Investment Grade, and FX > USD.*

- **Macro Weather Model:** Currently generating a bullish three-month outlook Bonds and Bitcoin, and a neutral three-month outlook for Stocks, the US Dollar, and Commodities. The composite signals indicate the Top-Down Market Regime has a middling probability of remaining in a risk-on condition (i.e., GOLDILOCKS or REFLATION) over the next three months. Our Fundamental Research Summary currently implies little risk of a RORO phase transition (i.e., risk-on-to-risk-off or vice versa) in the next 0-6mos and elevated risk of that outcome in the 6-12mo time horizon. This week's gauntlet of key macro updates may change that.

We Use Our Global Macro Risk Matrix To Nowcast The Top-Down Market Regime, Which Investors Must Position For To Consistently Perform Well

Global Macro Risk Matrix:
Sum Of Confirming Markets

- GOLDILOCKS = 24 (t3yr peak = 32)
- REFLATION = 13 (t3yr peak = 32)
- INFLATION = 4 (t3yr peak = 33)
- DEFLATION = 15 (t3yr peak = 24)
- Strength of Signal = 54% (r-axis)
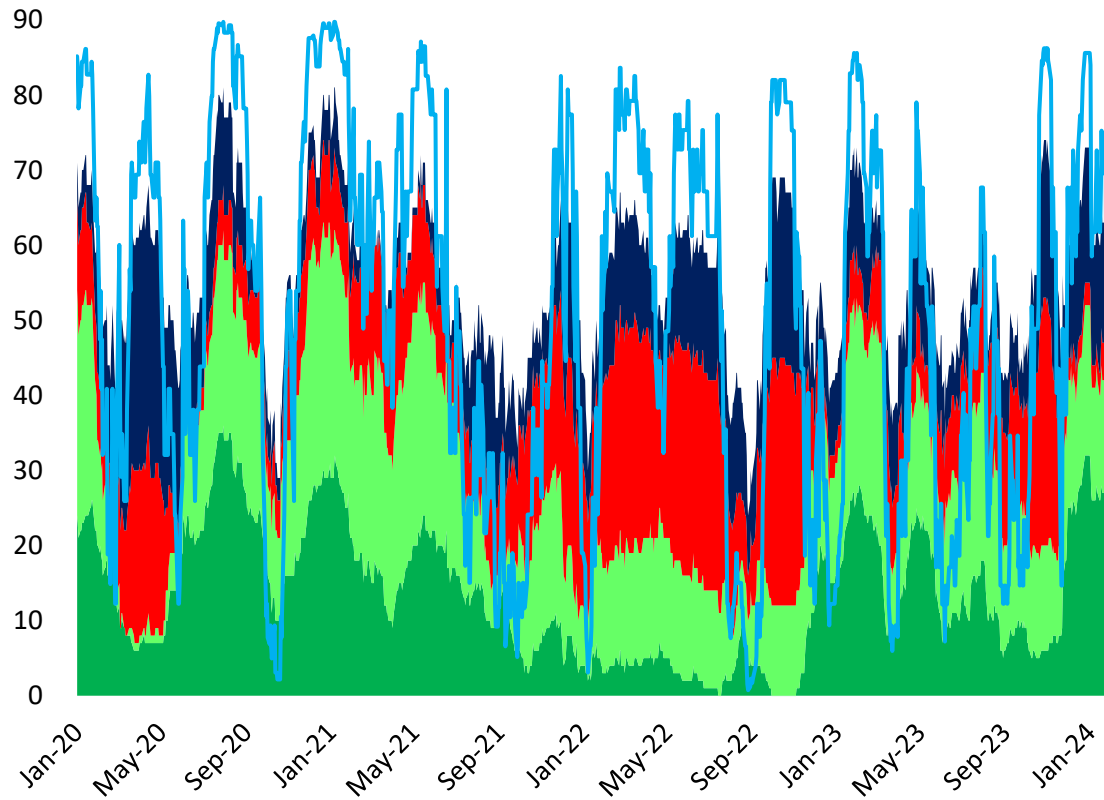
Global Macro Risk Matrix:
Share Of Confirming Markets

- GOLDILOCKS = 43% (t3yr peak = 44%)
- REFLATION = 23% (t3yr peak = 49%)
- INFLATION = 7% (t3yr peak = 50%)
- DEFLATION = 27% (t3yr peak = 41%)
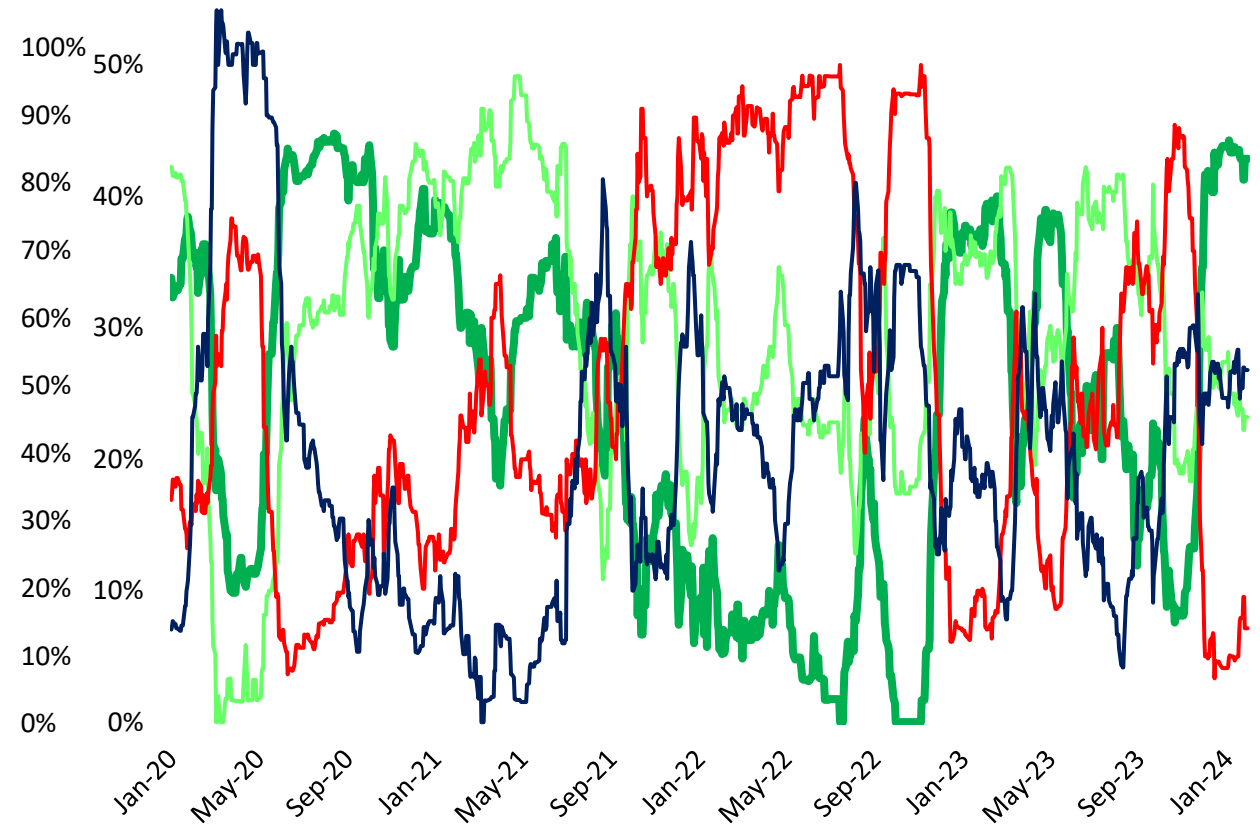
© 42 Macro LLC. Data Source: Bloomberg.

GOLDILOCKS = risk on with a disinflationary bias. REFLATION = risk on with an inflationary bias.
INFLATION = risk off with an inflationary bias. DEFLATION = risk off with a disinflationary bias.

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Global Macro Risk Matrix:
Top-Down Market Regime

- Risk-On Regime (GOLDILOCKS or REFLATION)
- Risk-Off Regime (INFLATION or DEFLATION)
- S&P 500 (r-axis)

Global Macro Risk Matrix:
Cross-Asset Correction Risk Indicator

- INFLATION + DEFLATION Shares (smoothed) = 41%; RISING = Systematic SELLING; FALLING = Systematic BUYING
- Consensus Complacency Zone Threshold (SELL ↑ on breach)
- Consensus Fear Zone Threshold (BUY ↓ on breach)
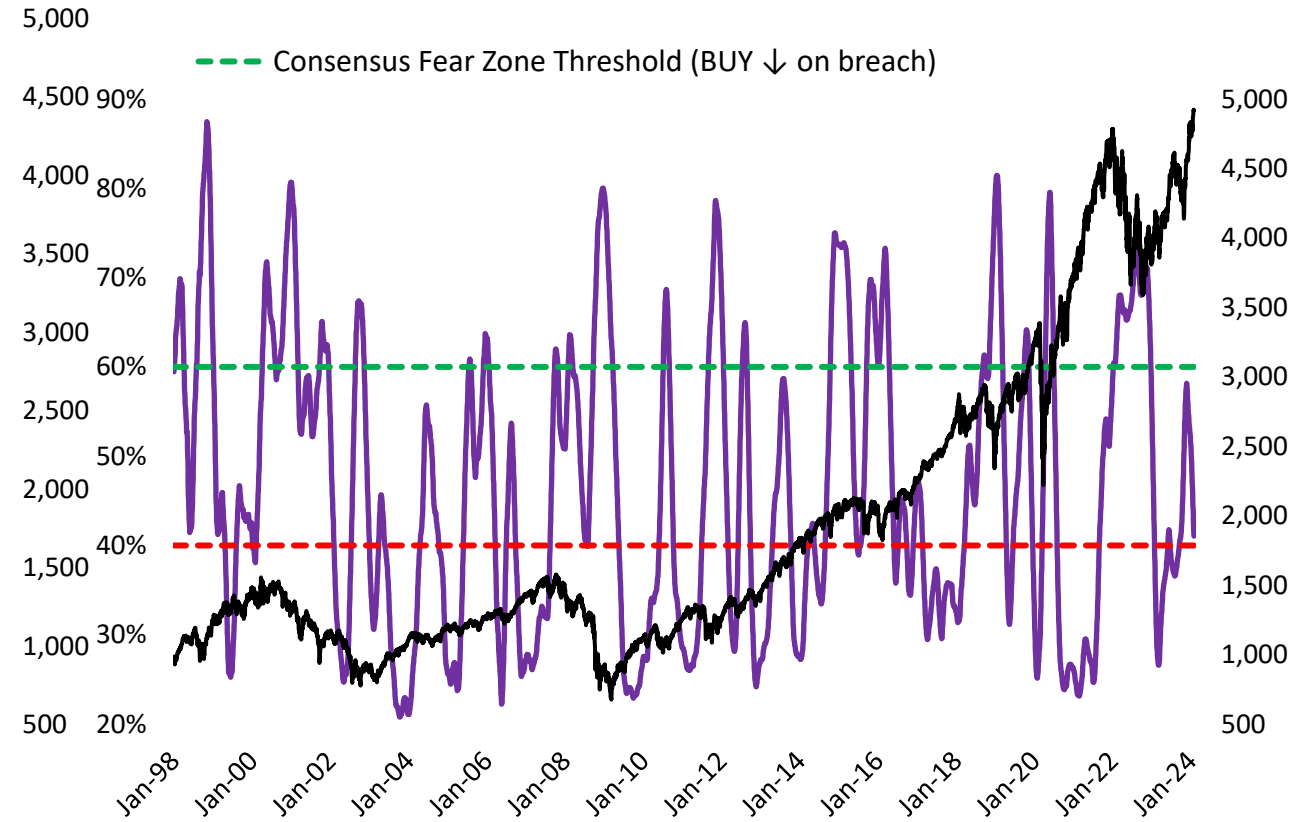
© 42 Macro LLC. Data Source: Bloomberg.
GOLDILOCKS = risk on with a disinflationary bias. REFLATION = risk on with an inflationary bias.
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Global Macro Risk Matrix Top-Down Market Regime Phase Transition Statistics

Legend (left chart): ■ Risk On: GOLDILOCKS or REFLATION   ■ Risk Off: INFLATION or DEFLATION

Metric	Risk On	Risk Off
1mo Signal Persistence Probability	80%	71%
3mo Signal Persistence Probability	67%	53%
1mo Signal Persistence Probability: Lower Third Strength of Signal	73%	65%
1mo Signal Persistence Probability: Middle Third Strength of Signal	79%	71%
1mo Signal Persistence Probability: Upper Third Strength of Signal	88%	81%
3mo Signal Persistence Probability: Lower Third Strength of Signal	60%	51%
3mo Signal Persistence Probability: Middle Third Strength of Signal	66%	52%
3mo Signal Persistence Probability: Upper Third Strength of Signal	73%	56%
1mo Signal Persistence Probability: Strength of Signal Rising MoM	82%	75%
1mo Signal Persistence Probability: Strength of Signal Falling MoM	78%	68%
3mo Signal Persistence Probability: Strength of Signal Rising MoM	69%	69%
3mo Signal Persistence Probability: Strength of Signal Falling MoM	64%	51%

RORO Phase Transitions Per Year (RORO = risk-on-to-risk-off or vice versa)

Period	Transitions
1yr	3.0
3yrs	3.0
5yrs	3.0
10yrs	3.5
20yrs	3.2

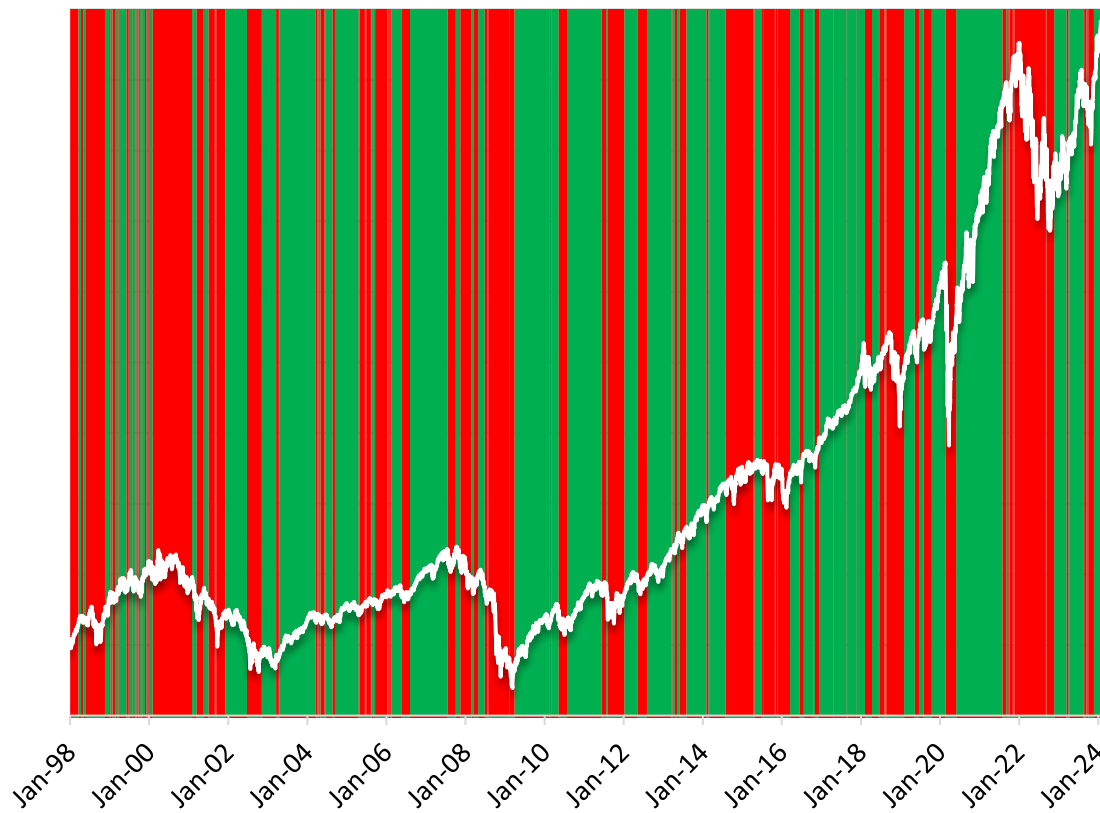© 42 Macro LLC. Data Source: Bloomberg. Regime persistence probability study begins in Jan-98. GOLDILOCKS = risk on with a disinflationary bias. REFLATION = risk on with an inflationary bias. INFLATION = risk off with an inflationary bias. DEFLATION = risk off with a disinflationary bias.

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We Use Our Macro Weather Model (And Fundamental Research) To Determine How Long The Current Top-Down Market Regime Is Likely To Persist
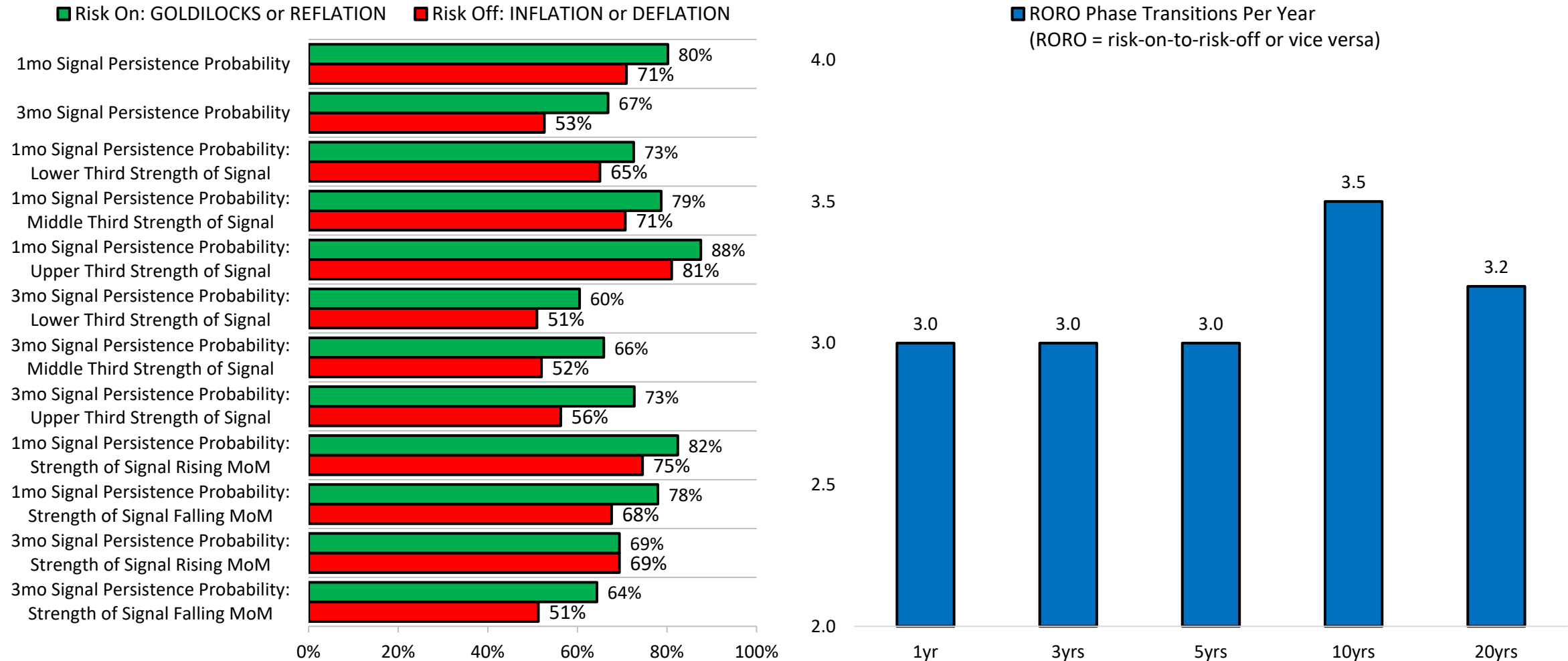
Ten Principal Components of Macro: Real Economy Cycles					United States 1/29/2024	Ten Principal Components of Macro: Financial Economy Cycles					

Growth	Previous Value	Latest Value	Previous Signal	Latest Signal	Stock Market 3-Month Outlook	Latest Signal	Previous Signal	Latest Value	Previous Value	Liquidity
OECD Composite Leading Indicator	99.6	99.7	⬆	⬆	🟡	⬆	⬆	$6,276	$6,289	42 Macro Net Liquidity $bn
Consensus NTM Real GDP Δ	-190bps	-190bps	⬇	⬇		⬆	⬆	$132,643	$132,699	42 Macro Global Liquidity Proxy $bn

Inflation	Previous Value	Latest Value	Previous Signal	Latest Signal	Bond Market 3-Month Outlook	Latest Signal	Previous Signal	Latest Value	Previous Value	Credit
Headline CPI YoY	3.1%	3.4%	⬇	⬇	🟢	⬇	⬇	-2.3%	-0.9%	Domestic Broad Money Supply YoY
Consensus NTM Headline CPI Δ	-60bps	-110bps	⬇	⬇		⬇	⬇	2.7%	5.1%	Global PPP-Weighted Broad Money Supply YoY

Employment	Previous Value	Latest Value	Previous Signal	Latest Signal	US Dollar 3-Month Outlook	Latest Signal	Previous Signal	Latest Value	Previous Value	Interest Rates
Unemployment Rate	3.7%	3.7%	⬆	⬆	🟡	➡	➡	5.50%	5.50%	Benchmark Policy Rate
Consensus NTM Unemployment Rate Δ	50bps	50bps	⬆	⬆		⬇	⬇	-115bps	-115bps	2yr Nominal Yield-Benchmark Policy Rate Spread

Corporate Profits	Previous Value	Latest Value	Previous Signal	Latest Signal	Commodities 3-Month Outlook	Latest Signal	Previous Signal	Latest Value	Previous Value	Fear
Consensus NTM/TTM S&P 500 Sales Growth Rate	3.4%	3.4%	⬇	⬇	🟡	⚠	⚠	-13%	-16%	Aggregated US Dollar Positioning
Consensus NTM/TTM S&P 500 EPS Growth Rate	-4.0%	-4.0%	⬆	⬆		❌	❌	-20%	-20%	Aggregated US Treasurys Positioning

Fiscal Policy	Previous Value	Latest Value	Previous Signal	Latest Signal	Bitcoin 3-Month Outlook	Latest Signal	Previous Signal	Latest Value	Previous Value	Greed
Sovereign Fiscal Balance/Nominal GDP Ratio	-6.3%	-6.5%	⬇	⬆	🟢	❌	❌	-0%	-1%	Aggregated Commodities Positioning
USD Real Effective Exchange Rate	108.4	106.6	⬆	⬆		⚠	⚠	-4%	-3%	Aggregated US Equities Positioning

GRID Regime: GOLDILOCKS

Conviction: MEDIUM

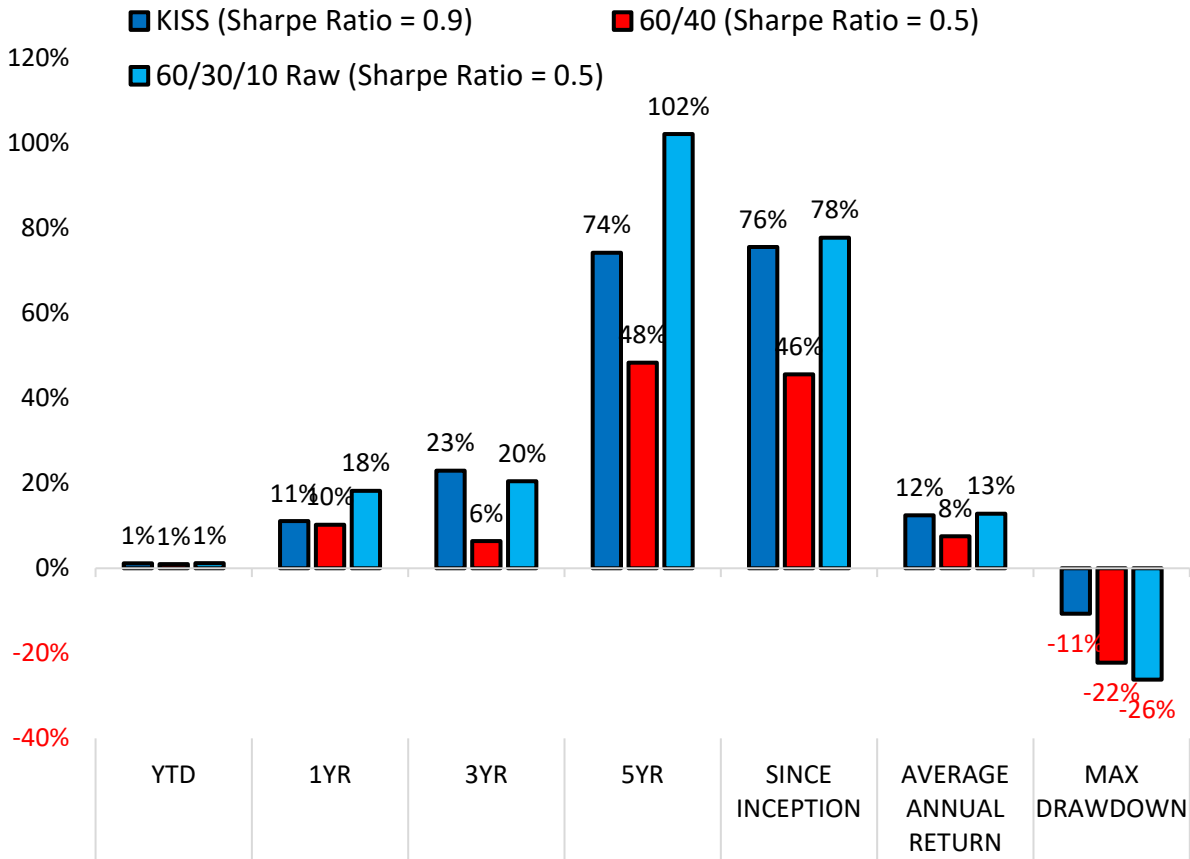# KISS Portfolio Construction Process: Keep It Simple & Systematic

I. **Factor Selection Process: We have developed a 60/30/10 trend-following strategy that is likely to materially outperform the standard 60/40 portfolio over the long term.**

- The 42 Macro KISS Portfolio Construction Process is a thoughtful evolution of the 60/40 portfolio framework. Our 60/30/10 trend-following strategy is designed to simplify investing, minimize downside capture during bear markets, and maximize upside capture during bull markets.

- **60% Equities:** Our default exposure is the S&P 500 ($SPY). Investors may allocate that 60% to an alternate equity ETF or basket of equity ETFs that is better aligned with their individual investment preferences, risk tolerance, and/or product availability. Consult our Discretionary Investment Ideas Summary for ideas.

- **30% Fixed Income:** Our default exposure is the Core US Aggregate ($AGG). Investors may allocate that 30% to an alternate fixed income ETF or basket of fixed income ETFs that is better aligned with their individual investment preferences, risk tolerance, and/or product availability. Consult our Discretionary Investment Ideas Summary for ideas.

- **10% Bitcoin:** Our default exposure is Bitcoin ($FBTC). Investors may allocate that 10% to the Bitcoin token directly, or to Gold, a basket of physical commodities, or a basket of cryptocurrencies that is better aligned with their individual investment preferences, risk tolerance, and/or product availability. Consult our Discretionary Investment Ideas Summary for ideas.

II. **Top-Down Risk Management Overlay: We use our Macro Weather Model to incorporate volatility targeting into our 60/30/10 trend-following strategy.**

- If the Weather Model composite signal for the Stock Market is BULLISH, then the Target Allocation for the $SPY = 60%. If the Weather Model composite signal for the Stock Market is NEUTRAL, then the Target Allocation for the $SPY = 50%. If the Weather Model composite signal for the Stock Market is BEARISH, then the Target Allocation for the $SPY = 40%.

- If the Weather Model composite signal for the Bond Market is BULLISH, then the Target Allocation for the $AGG = 30%. If the Weather Model composite signal for the Bond Market is NEUTRAL, then the Target Allocation for the $AGG = 25%. If the Weather Model composite signal for the Bond Market is BEARISH, then the Target Allocation for the $AGG = 20%.

- If the Weather Model composite signal for Bitcoin is BULLISH, then the Target Allocation for the $FBTC = 10%. If the Weather Model composite signal for Bitcoin is NEUTRAL, then the Target Allocation for the $FBTC = 7.5%. If the Weather Model composite signal for Bitcoin is BEARISH, then the Target Allocation for the $FBTC = 5%.

III. **Bottom-Up Risk Management Overlay: We use our Volatility-Adjusted Momentum Signal to incorporate dynamic positioning sizing into our 60/30/10 trend-following strategy.**

- If an ETF is Bullish VAMS, then the Actual Exposure = 100% of the Target Allocation.

- If an ETF is Neutral VAMS, then the Actual Exposure = 50% of the Target Allocation.

- If an ETF is Bearish VAMS, then the Actual Exposure = 0% of the Target Allocation.

KISS Portfolio Construction Process Backtest

Hypothetical Performance of a $100,000 Portfolio Since January 1, 2018

- KISS (Sharpe Ratio = 0.9)
- 60/40 (Sharpe Ratio = 0.5)
- 60/30/10 Raw (Sharpe Ratio = 0.5)
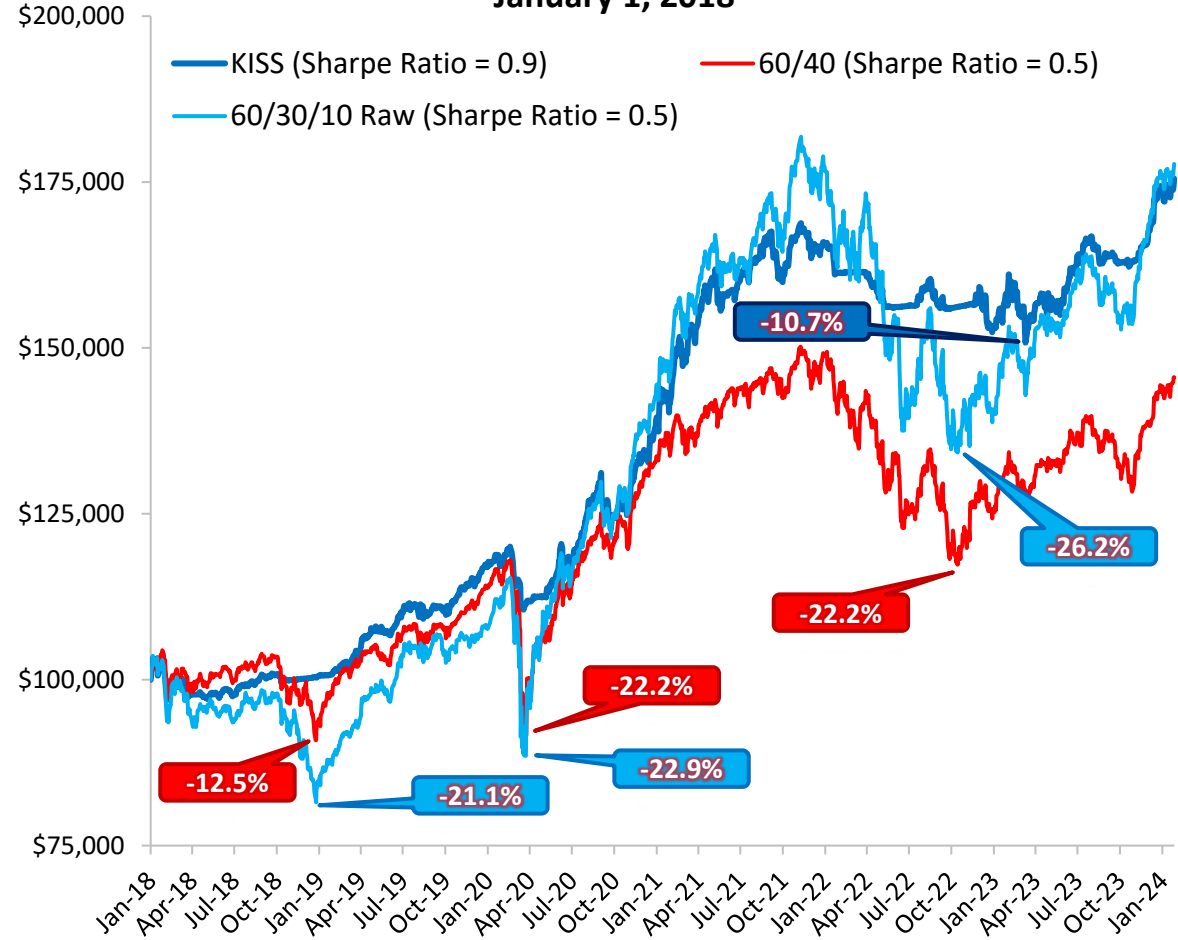
Hypothetical Performance of a $100,000 Portfolio Over Industry-Standard Reporting Horizons (Inception = January 1, 2018)
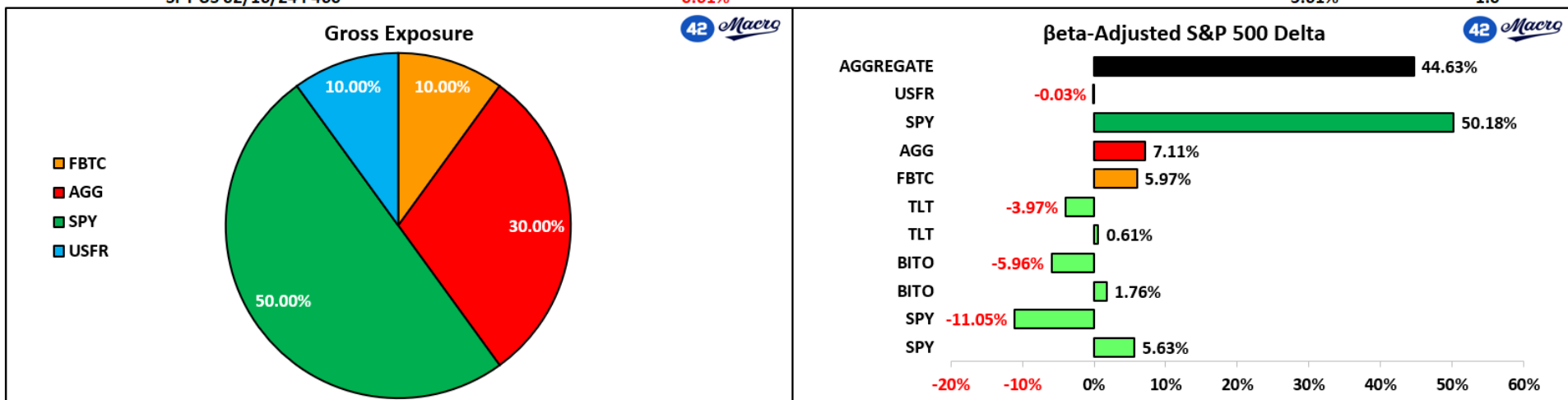
- KISS (Sharpe Ratio = 0.9)
- 60/40 (Sharpe Ratio = 0.5)
- 60/30/10 Raw (Sharpe Ratio = 0.5)

Our Current KI**SS** Portfolio Construction

42 Macro KISS Portfolio Construction: 1/29/24

Liquidity (Percent of MAX Exposure of 100%): 10%	Weather Model Target Allocation	VAMS Actual Exposure	Δ Since Prior Update	6mo βeta to S&P 500
USFR	n/a	10.00%		-0.0

Equities (Percent of MAX Exposure of 60%): 83%	Weather Model Target Allocation (60%/50%/40%)	VAMS Actual Exposure (100%/50%/0%)	Δ Since Prior Update	6mo βeta to S&P 500
SPY	50.00%	50.00%		1.0

Fixed Income (Percent of MAX Exposure of 30%): 100%	Weather Model Target Allocation (30%/25%/20%)	VAMS Actual Exposure (100%/50%/0%)	Δ Since Prior Update	6mo βeta to S&P 500
AGG	30.00%	30.00%		0.2

Bitcoin (Percent of MAX Exposure of 10%): 100%	Weather Model Target Allocation (10%/7.5%/5%)	VAMS Actual Exposure (100%/50%/0%)	Δ Since Prior Update	6mo βeta to S&P 500
FBTC	10.00%	10.00%		0.6

Options Overlay: 2.68%	Premium	Margin	Delta	6mo βeta to S&P 500
TLT US 02/16/24 P90	1.20%		-7.45%	0.5
TLT US 02/16/24 P85	-0.37%		1.15%	0.5
BITO US 03/15/24 P20	2.22%		-9.98%	0.6
BITO US 03/15/24 P16	-0.89%		2.94%	0.6
SPY US 02/16/24 P470	1.13%		-11.01%	1.0
SPY US 02/16/24 P460	-0.61%		5.61%	1.0

Gross Exposure

- FBTC: 10.00%
- AGG: 30.00%
- SPY: 50.00%
- USFR: 10.00%

βeta-Adjusted S&P 500 Delta

- AGGREGATE: 44.63%
- USFR: -0.03%
- SPY: 50.18%
- AGG: 7.11%
- FBTC: 5.97%
- TLT: -3.97%
- TLT: 0.61%
- BITO: -5.96%
- BITO: 1.76%
- SPY: -11.05%
- SPY: 5.63%

Options insight

Investors May Use Our Discretionary Investment Ideas Summary To Implement Customized Version Of KISS OR As A Risk Management Overlay To Their Discretionary Trading Process: Monday, January 29, 2024

TOP-DOWN MARKET REGIME: GOLDILOCKS

STOCK MARKET MACRO WEATHER MODEL SIGNAL				BOND MARKET MACRO WEATHER MODEL SIGNAL				US DOLLAR MACRO WEATHER MODEL SIGNAL				COMMODITIES MACRO WEATHER MODEL SIGNAL				BITCOIN MACRO WEATHER MODEL SIGNAL			
		NEUTRAL				BULLISH				NEUTRAL				NEUTRAL				BULLISH	
US EQUITY SECTORS	VAMS	RSI	PROPER TRADE	US EQUITY FACTORS	VAMS	RSI	PROPER TRADE	GLOBAL EQUITIES	VAMS	RSI	PROPER TRADE	FIXED INCOME SECTORS	VAMS	RSI	PROPER TRADE	MACRO EXPOSURES	VAMS	RSI	PROPER TRADE
Beta (SPY)	✓	71	LONG: Max Position	Dividend Compounders (SPHD)	✓	54	LONG: Max Position	Australia (EWA)	✓	55	LONG: Max Position	0-5yr TIPS (STIP)	✓	59	LONG: Max Position	Agriculture (DBA)	!	64	LONG: Half Position
Consumer Discretionary (XLY)	✓	43	LONG: Max Position	Growth (IWF)	✓	74	LONG: Max Position	Brazil (EWZ)	✓	47	LONG: Max Position	1-3yr Treasurys (SHY)	✓	58	No Position	Australian Dollar (FXA)	!	41	LONG: Half Position
Consumer Staples (XLP)	✓	57	LONG: Max Position	High Beta (SPHB)	!	59	LONG: Half Position	Canada (EWC)	✓	58	LONG: Max Position	5-10yr TIPS (TIP)	✓	49	No Position	Base Metals (DBB)	!	57	LONG: Half Position
Communication Services (XLC)	✓	79	LONG: Half Position	Low Beta (SPLV)	✓	55	LONG: Max Position	China (FXI)	!	47	LONG: Half Position	5-10yr Treasurys (IEF)	✓	47	No Position	Bitcoin (BITO)	✓	49	LONG: Max Position
Energy (XLE)	!	57	LONG: Half Position	Mega Caps (OEF)	✓	74	LONG: Max Position	Emerging Markets (EEM)	!	50	LONG: Half Position	25+ Year Treasurys (TLT)	✓	42	No Position	British Pound (FXB)	!	53	LONG: Half Position
Financials (XLF)	✓	72	LONG: Max Position	Mega Cap Growth (QQQ)	✓	70	LONG: Max Position	Eurozone (EZU)	✓	61	LONG: Max Position	Barclays Agg (AGG)	✓	49	LONG: Max Position	Commodities (DBC)	✗	61	No Position
Health Care (XLV)	✓	59	LONG: Max Position	Mid Caps (VO)	✓	57	LONG: Max Position	India (INDA)	✓	55	LONG: Max Position	BDCs (BIZD)	✓	63	LONG: Max Position	Energy (USO)	!	65	LONG: Half Position
Industrials (XLI)	✓	59	LONG: Max Position	Momentum (MTUM)	✓	76	LONG: Half Position	Japan (EWJ)	✓	55	LONG: Max Position	Convertibles (CWB)	✓	55	LONG: Max Position	Euro (FXE)	!	45	LONG: Half Position
Information Technology (XLK)	✓	69	LONG: Max Position	Quality (QUAL)	✓	69	LONG: Max Position	United Kingdom (EWU)	✓	54	LONG: Max Position	EM Local Currency Bonds (EMLC)	✓	48	LONG: Max Position	Gold (GLD)	✓	47	LONG: Max Position
Materials (XLB)	✓	46	LONG: Max Position	Small Caps (IWM)	!	55	LONG: Half Position					EM USD Bonds (EMB)	✓	51	LONG: Max Position	Japanese Yen (FXY)	✗	39	SHORT: Max Position
Real Estate (XLRE)	✓	46	LONG: Max Position	Value (IWD)	!	61	LONG: Half Position					High Yield Credit (HYG)	✓	61	LONG: Max Position	Swiss Franc (FXF)	!	48	SHORT: Half Position
Utilities (XLU)	!	42	LONG: Half Position									Investment Grade Credit (LQD)	✓	51	LONG: Max Position	US Dollar (UUP)	!	62	SHORT: Half Position
												Leveraged Loans (BKLN)	✓	40	LONG: Max Position	60/40 Portfolio (BIGPX)	!	61	LONG: Half Position
												MBS (MBB)	✓	49	LONG: Max Position				
												Preferreds (PFF)	✓	73	LONG: Max Position				

Data Source: Bloomberg. Intellectual Property of 42 Macro LLC. VAMS = Volatility-Adjusted Momentum Signal. RSI = 14-Day Relative Strength Index. Highlighted exposures indicate change in PROPER TRADE signal from the previous report. GREEN = directionally bullish change. RED = directionally bearish change.

Fundamental Research Summary: Monday, January 29, 2024

Growth:

- The latest data indicate the "resilient US economy" theme we authored in the summer of 2022 persists. While we expect the resiliency of the US economy to begin dissipating in 4Q23 (demonstrated by Q4 GDP), a sharp, sudden slowdown to a well-below-trend growth rate is likely to be avoided.

- Per our fall 2022 analysis of historical yield curve inversion cycles, a recession has the highest probability of commencing in the US economy in the Nov-23 to Apr-24 timeframe. That said, leading indicators currently indicate only a low probability of a developing recession in the US economy.

- Japan and Australia currently have the most favorable growth dynamics abroad. China and Switzerland currently have the least favorable growth dynamics abroad.

Inflation:

- "Immaculate disinflation" persists in the US economy. Emergent signs of "sticky inflation" support our view that the "last mile" of disinflation required for the Fed to achieve its price stability mandate will be difficult to traverse in the absence of a recession.

- The recent surge in productivity growth in the US reduces pressure on corporate margins, which reduces the need for corporations to shed costs and/or raise prices. That said, the current level of productivity growth is north of its structural trend and may not be sustained.

- China and India currently have the most favorable inflation dynamics abroad. The UK and Australia currently have the least favorable inflation dynamics abroad.
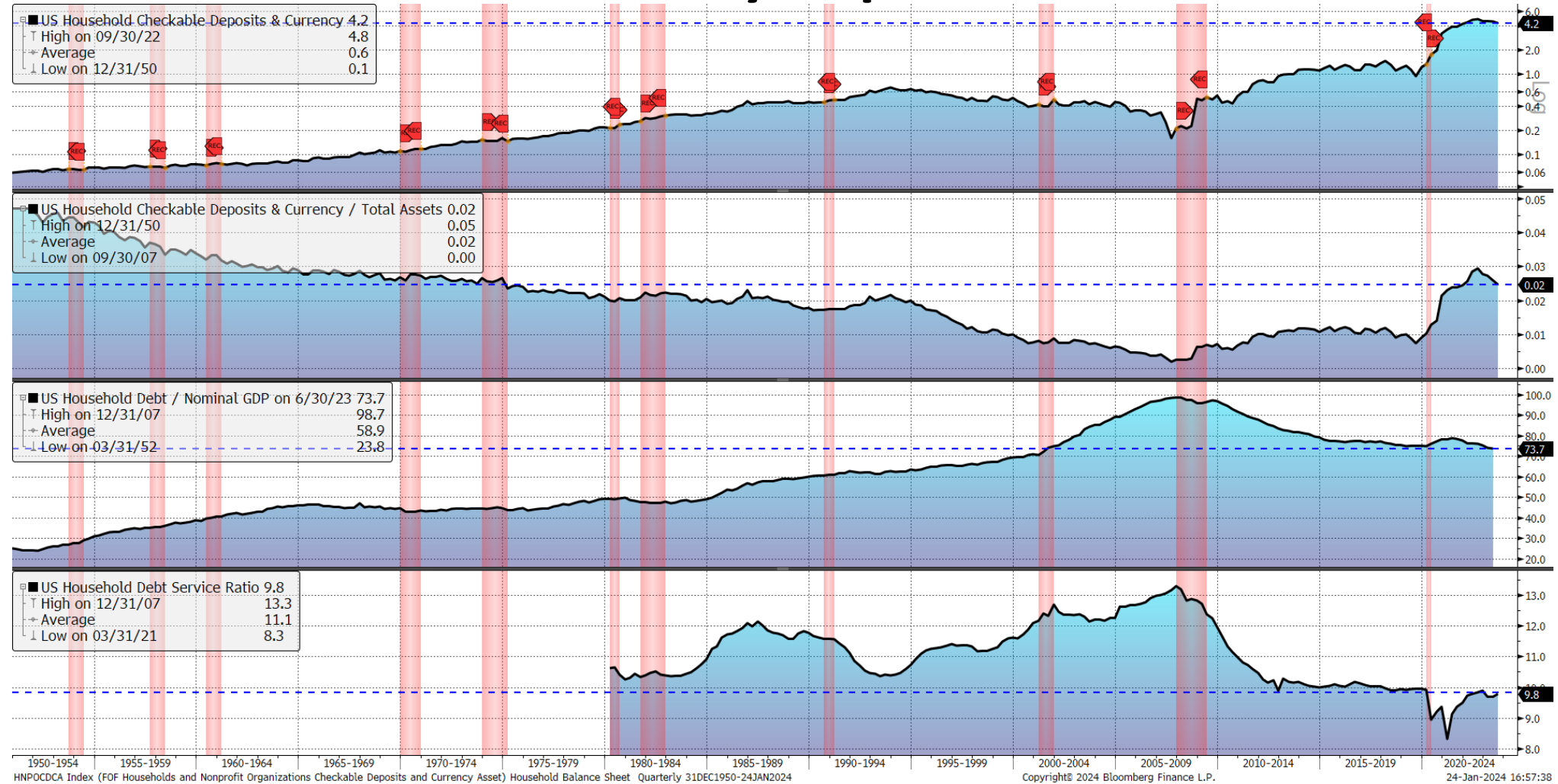
Policy:

- The Fed has implemented a dovish pivot with likely rate cuts over the NTM. We expect balance sheet roll off to persist over the medium term. We expect the Treasury to offset balance sheet roll off via its low-net-bond-supply financing regime until the RRP balance is largely depleted. The decline in the RRP increases USD liquidity and coincides with rising global liquidity.

- While fiscal policy was a dominant driver of persistent upside surprises in US growth in recent quarters, it is unlikely to remain as supportive over the medium term. Transitory factors dramatically inflated the federal budget deficit throughout FY23 in ways that are unlikely to be matched in FY24. That said, the US economy is unlikely to experience a fiscal cliff in a general election year – especially with an incumbent president on the ballot.

- The UK and Brazil currently have the most favorable policy dynamics abroad. Australia and Switzerland currently have the least favorable policy dynamics abroad.
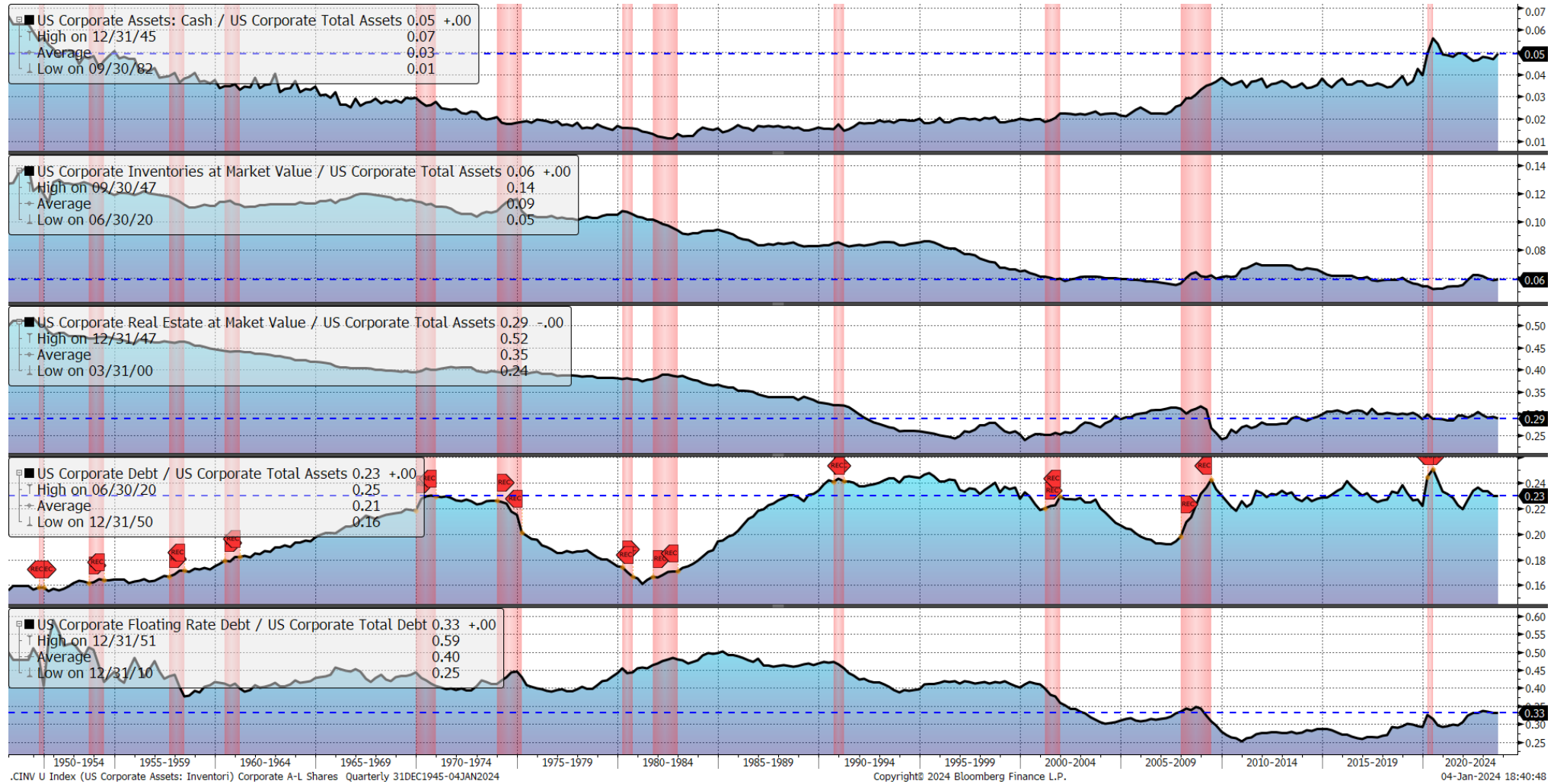
Modal Outcome
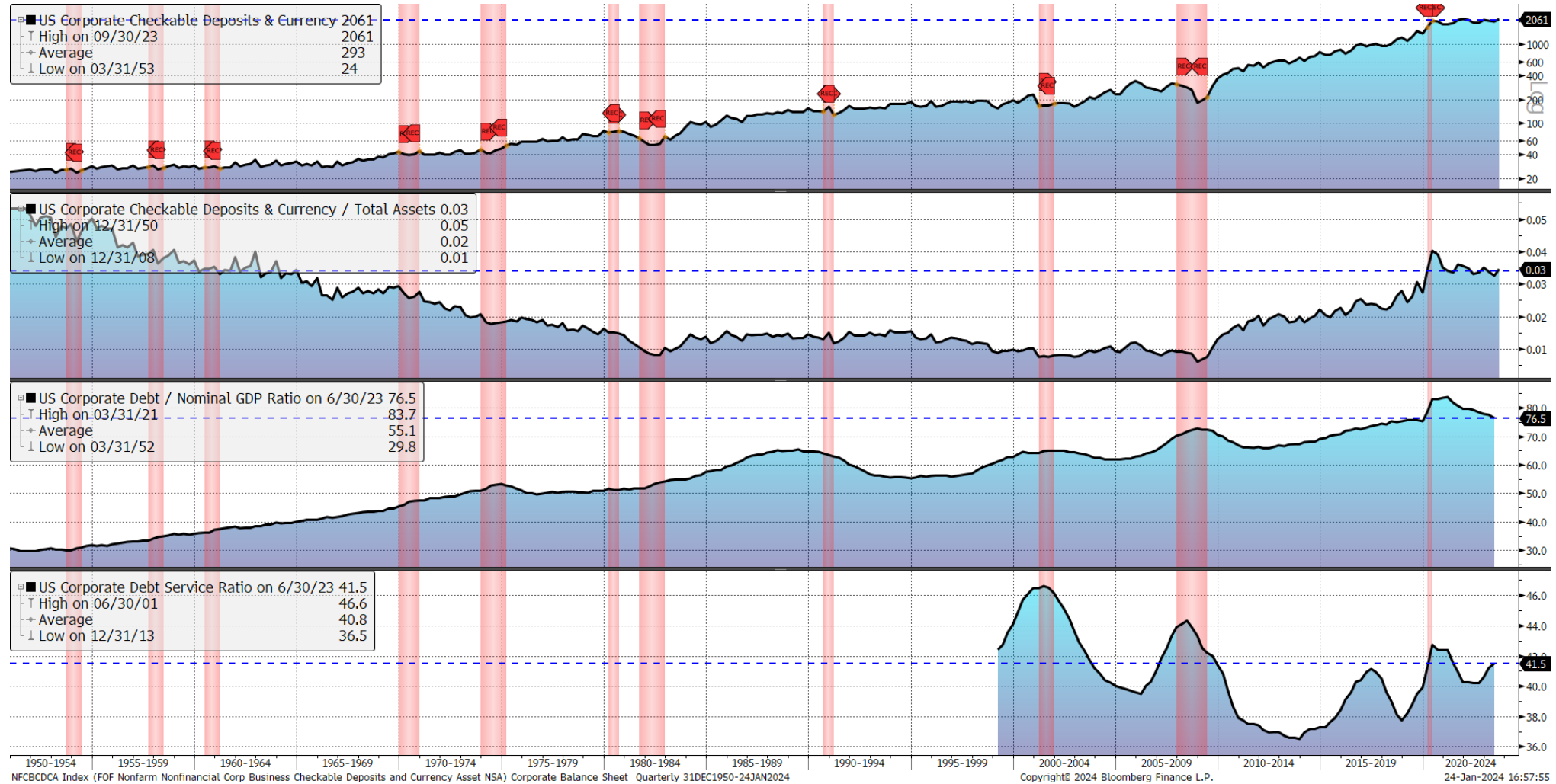
Household Balance Sheets Remain Flush With Cash

.HHCASH U Index (US Household Assets: Cash) Household Asset Shares Quarterly 31DEC1945-04JAN2024   Copyright© 2024 Bloomberg Finance L.P.   04-Jan-2024 18:38:04
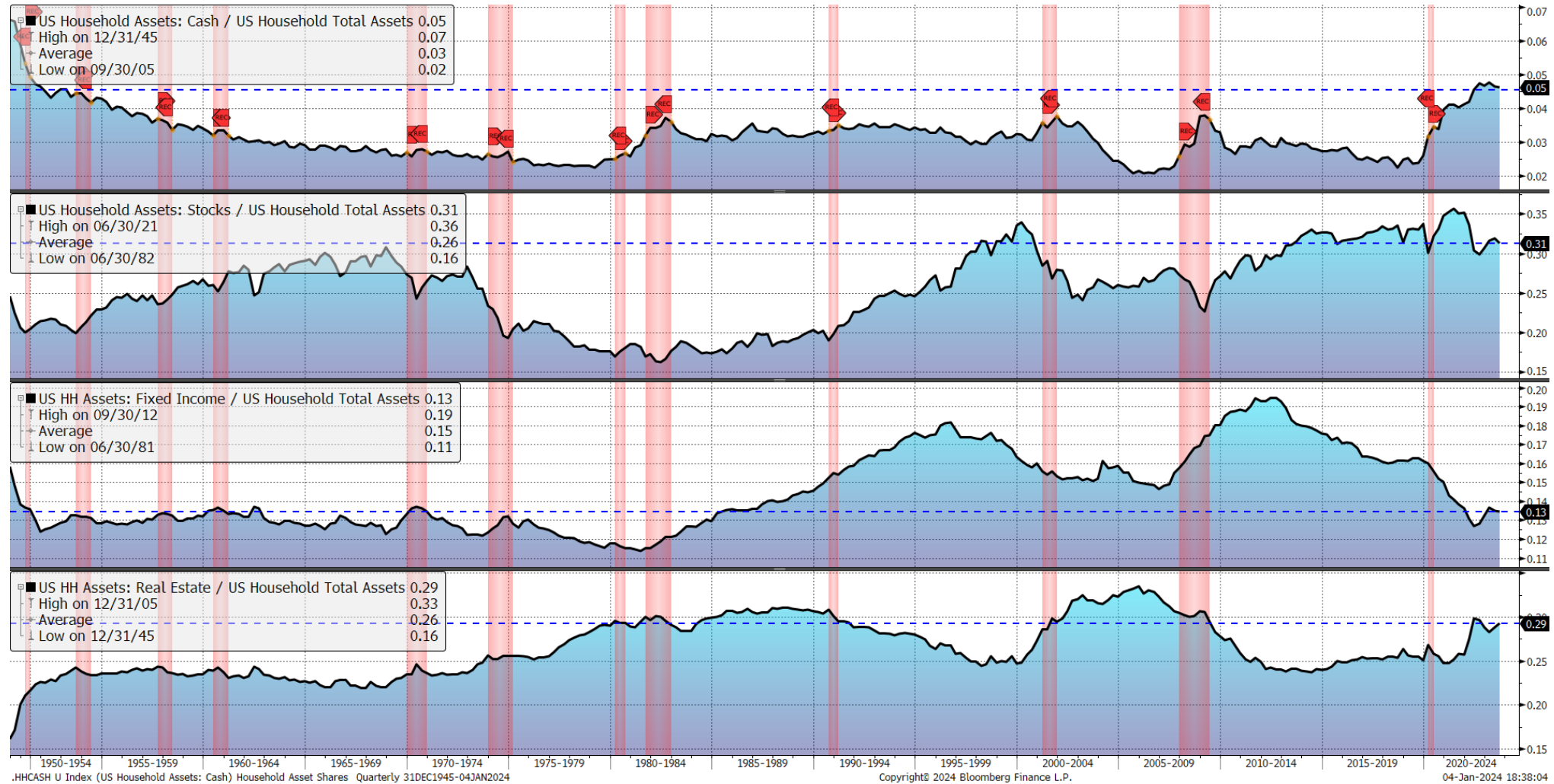
Household Leverage Is Cyclically Depressed And The Household Debt Service Ratio Is Structurally Depressed

HNPOCDCA Index (FOF Households and Nonprofit Organizations Checkable Deposits and Currency Asset) Household Balance Sheet Quarterly 31DEC1950-24JAN2024   Copyright© 2024 Bloomberg Finance L.P.   24-Jan-2024 16:57:38

Corporate Balance Sheets Remain Flush With Cash

The Corporate Debt Service Ratio Is Well Shy Of Recession-Inducing Levels And Is Unlikely To Deteriorate Further Given Policy Easing And Improving Profitability

US Corporate Checkable Deposits & Currency 2061
High on 09/30/23   2061
Average   293
Low on 03/31/53   24

US Corporate Checkable Deposits & Currency / Total Assets 0.03
High on 12/31/50   0.05
Average   0.02
Low on 12/31/08   0.01

US Corporate Debt / Nominal GDP Ratio on 6/30/23 76.5
High on 03/31/21   83.7
Average   55.1
Low on 03/31/52   29.8

US Corporate Debt Service Ratio on 6/30/23 41.5
High on 06/30/01   46.6
Average   40.8
Low on 12/31/13   36.5

NFCBCDCA Index (FOF Nonfarm Nonfinancial Corp Business Checkable Deposits and Currency Asset NSA) Corporate Balance Sheet   Quarterly 31DEC1950-24JAN2024   Copyright© 2024 Bloomberg Finance L.P.   24-Jan-2024 16:57:55

A Favorable Asset-Liability Mix Has Made The Private Sector As Immunized To Rate Hikes As It Has Been Since The 1950s
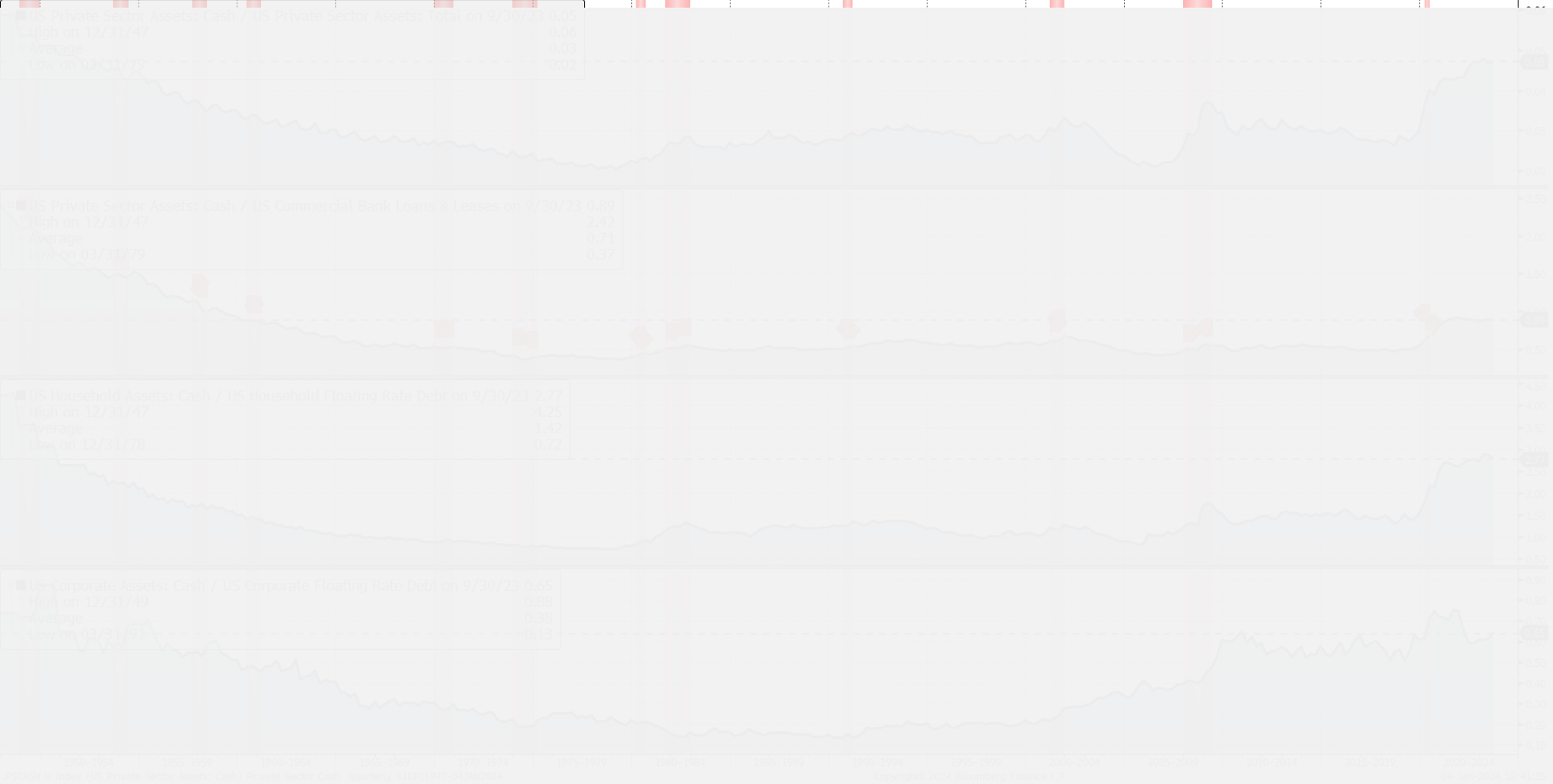
Reminder, This Has Been An Income-Driven Business Cycle, Not A Credit Driven Business Cycle... Focus On Income, Not Credit
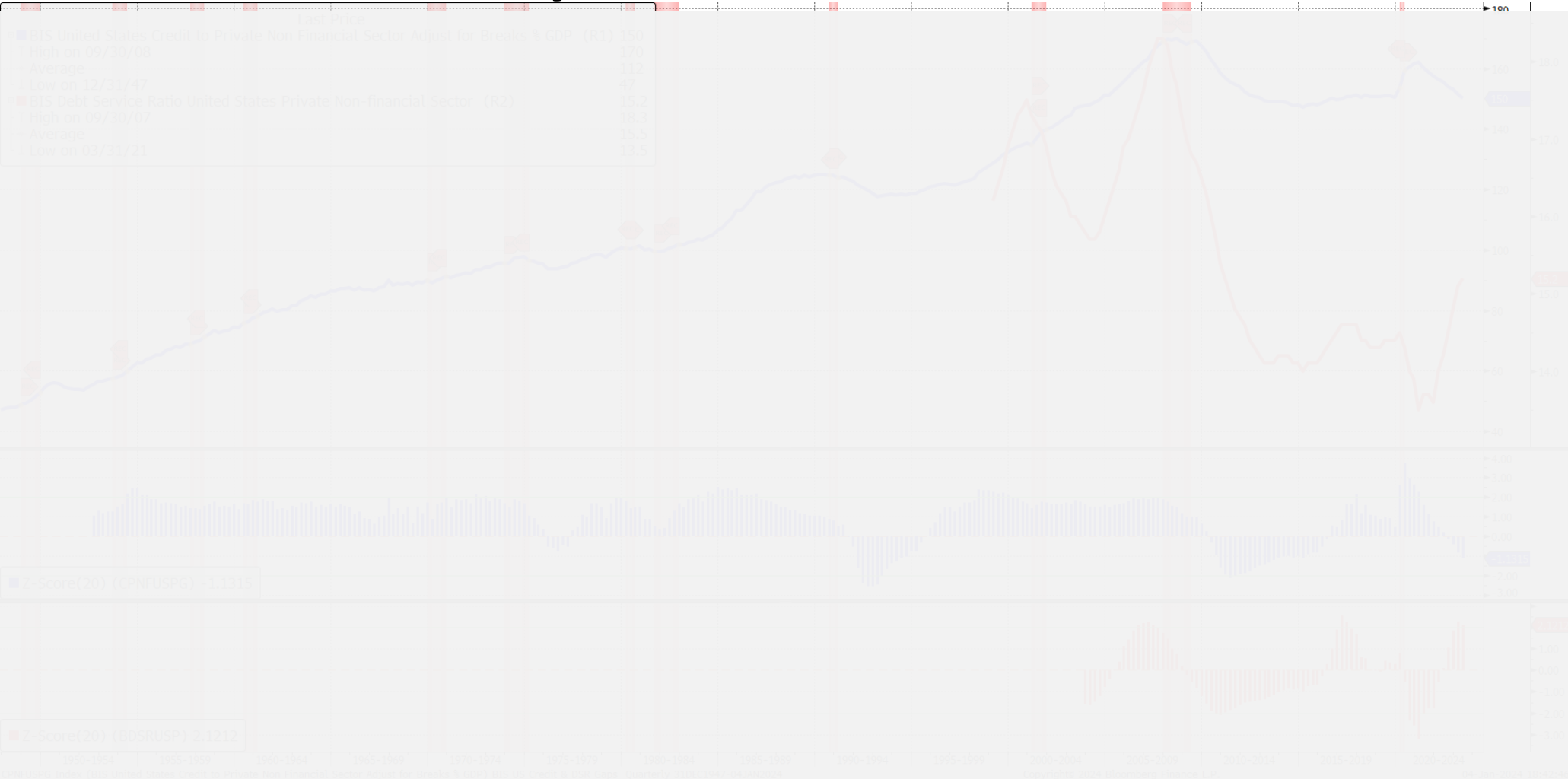
Speaking Of Credit, Easing Financial Conditions Currently Signal The "Maturity Wall" Can Is Likely To Be Kicked Down The Road In The Hyperfinancialized US Economy
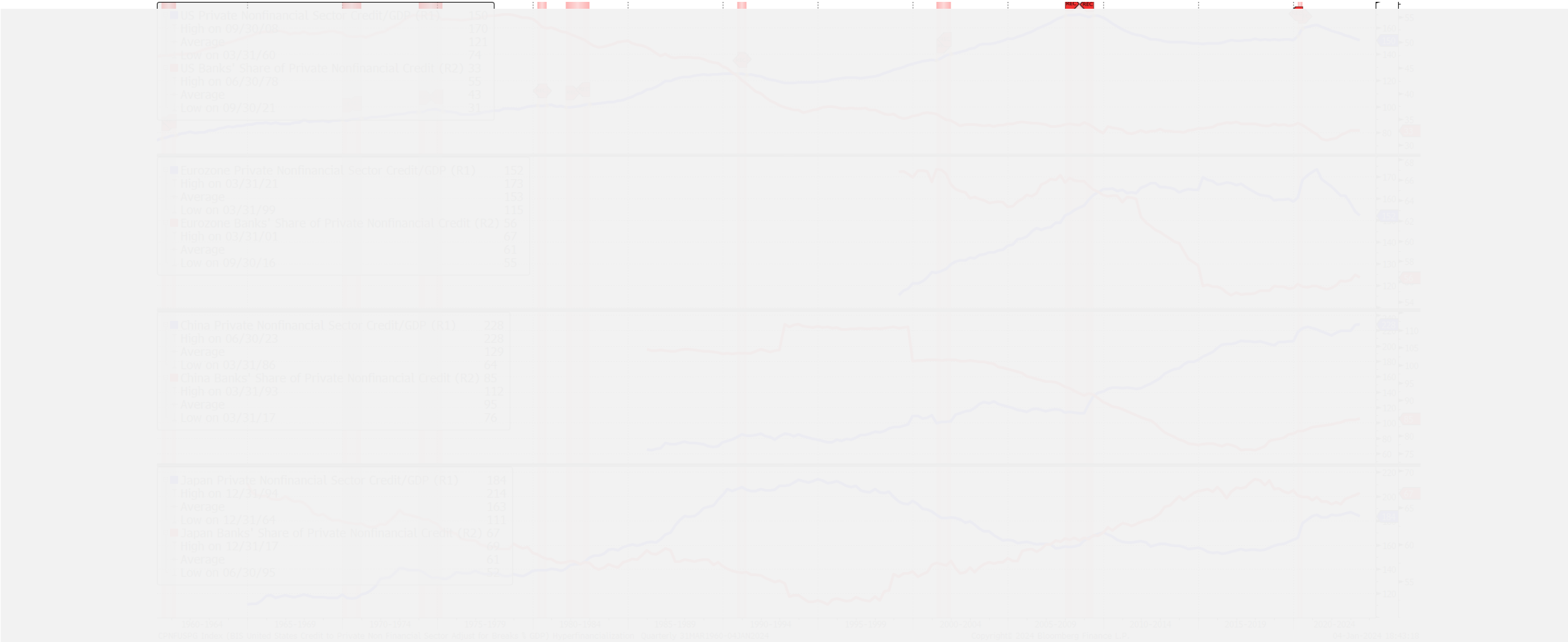
"Maturity Walls" Turn Into "Maturity Turnstiles" When Liquidity Is Rising And Animal Spirits Are Robust

US Speculative-Grade Debt Annual Maturity Profile $bn

As Such, The US Economy Remains Resilient (For Now)
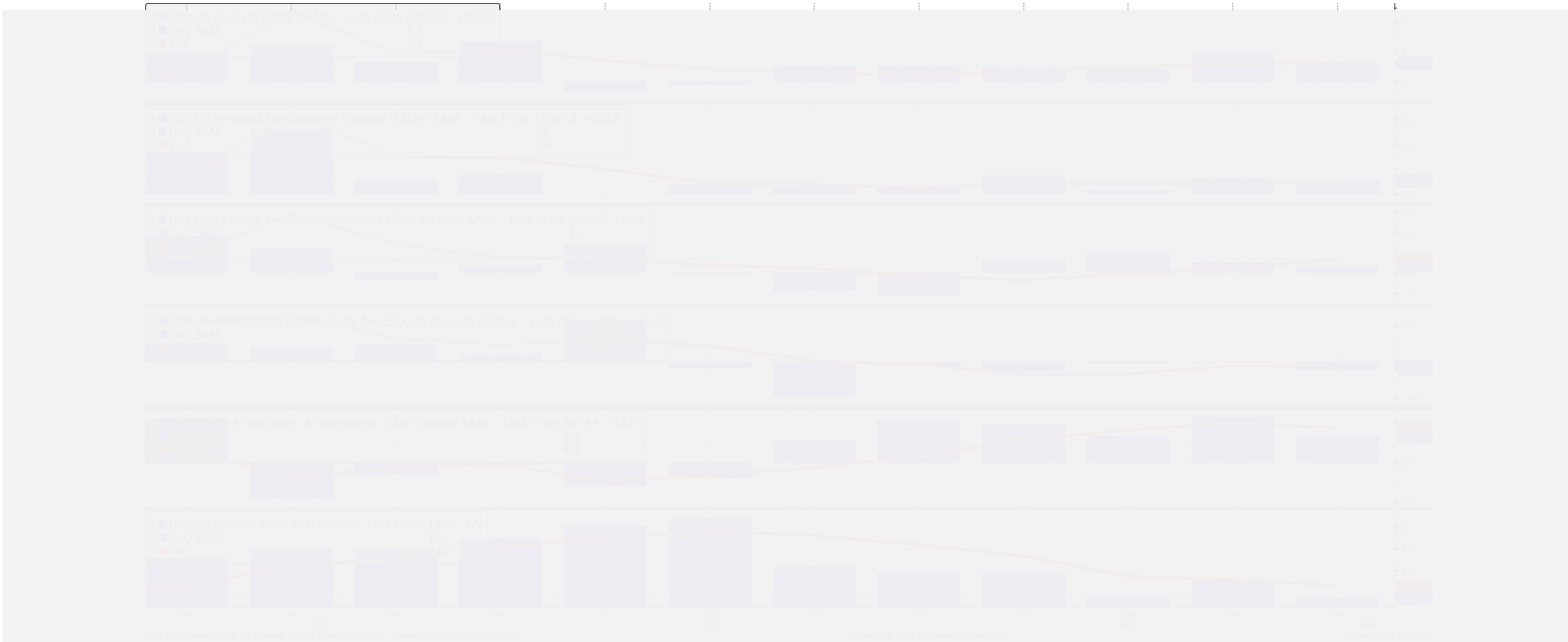
Per Our Expectation, The Resiliency Of The Economy Began Dissipating In 4Q23
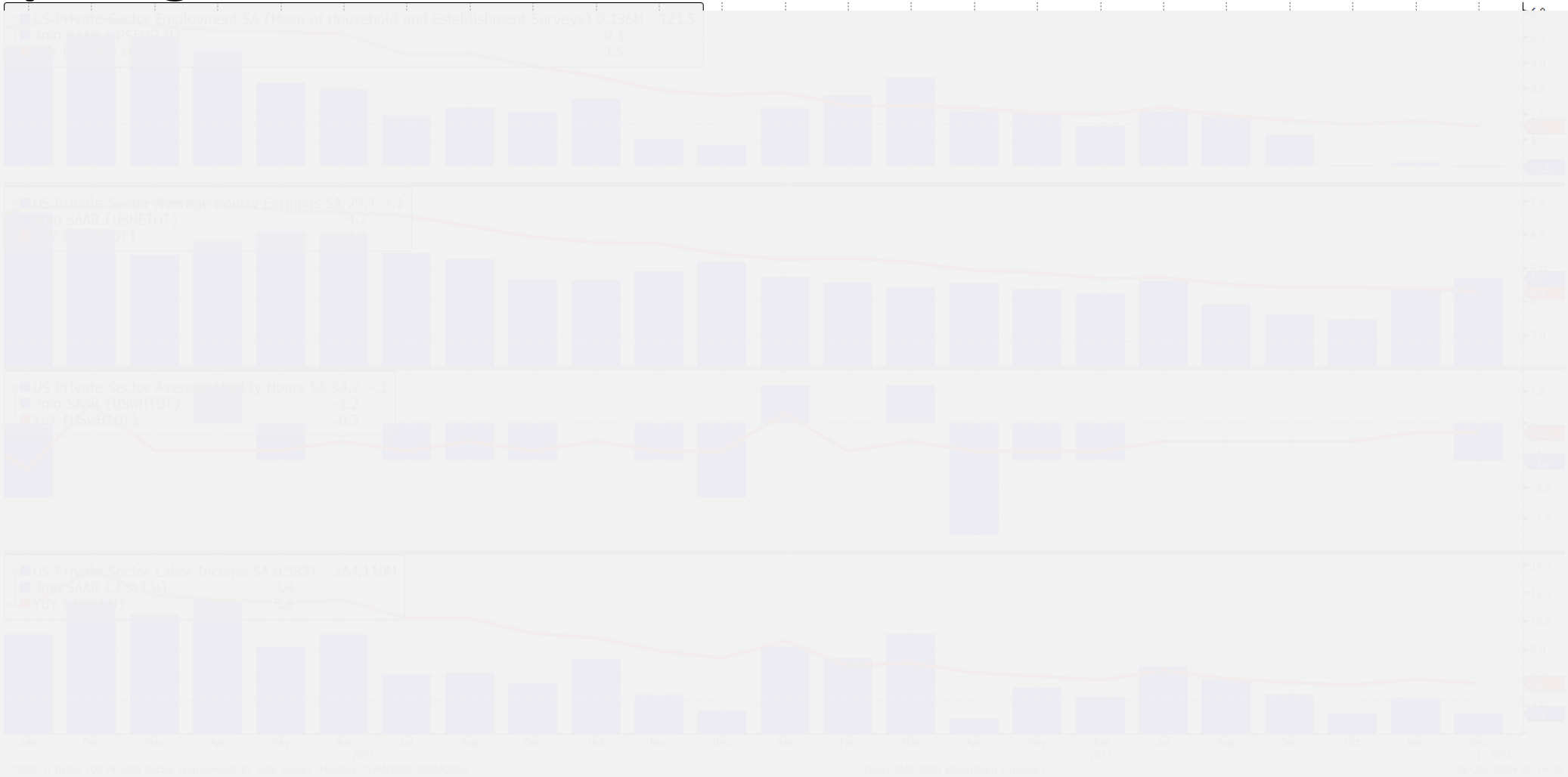
Labor Hoarding Has Spared The Business Cycle Thus Far... How Long Will This Dynamic Persist?
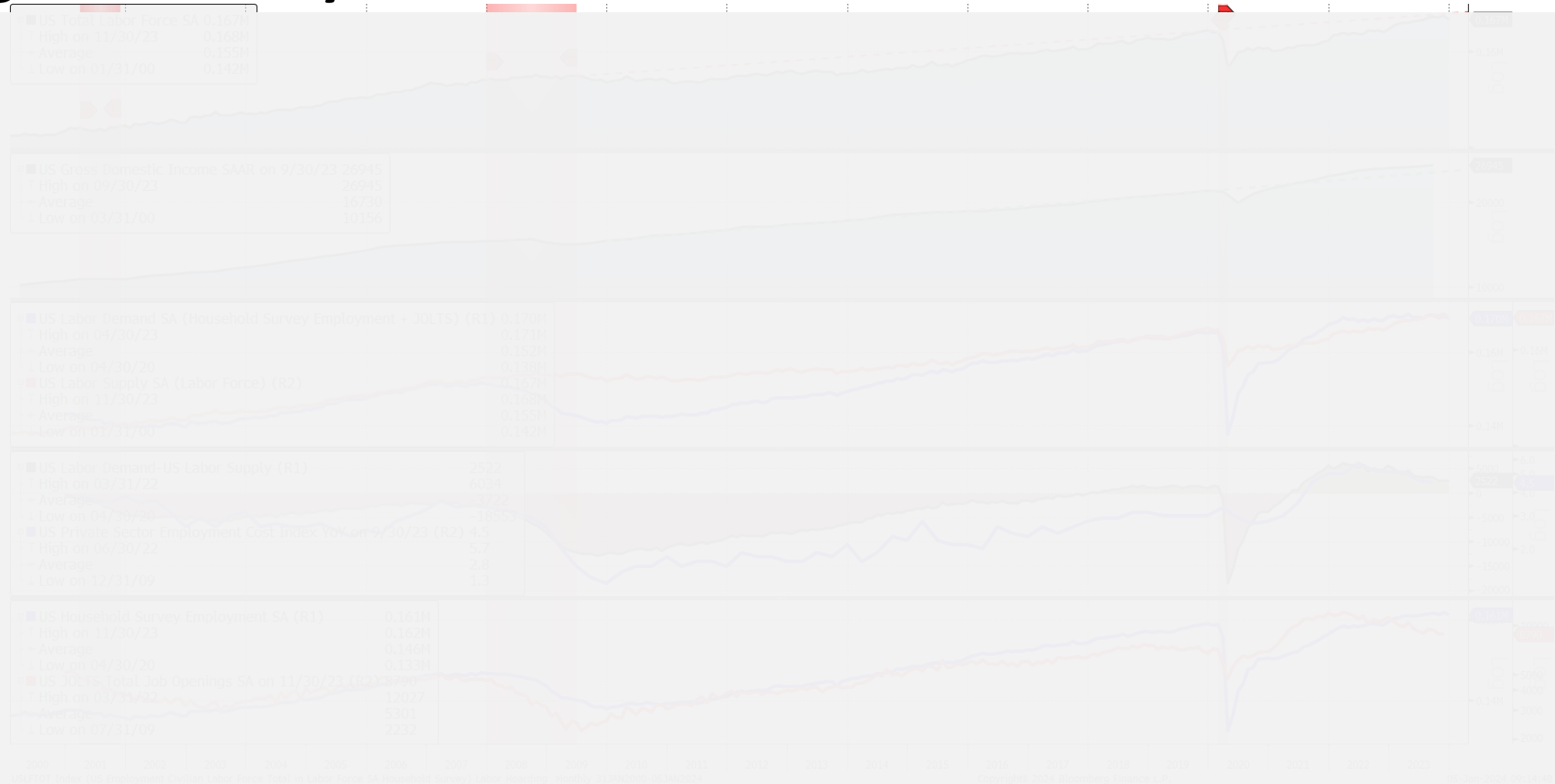
The 42 Macro "Fab Five" Recession Signaling Indicators Currently Indicate A Low Probability Of A Developing Recession
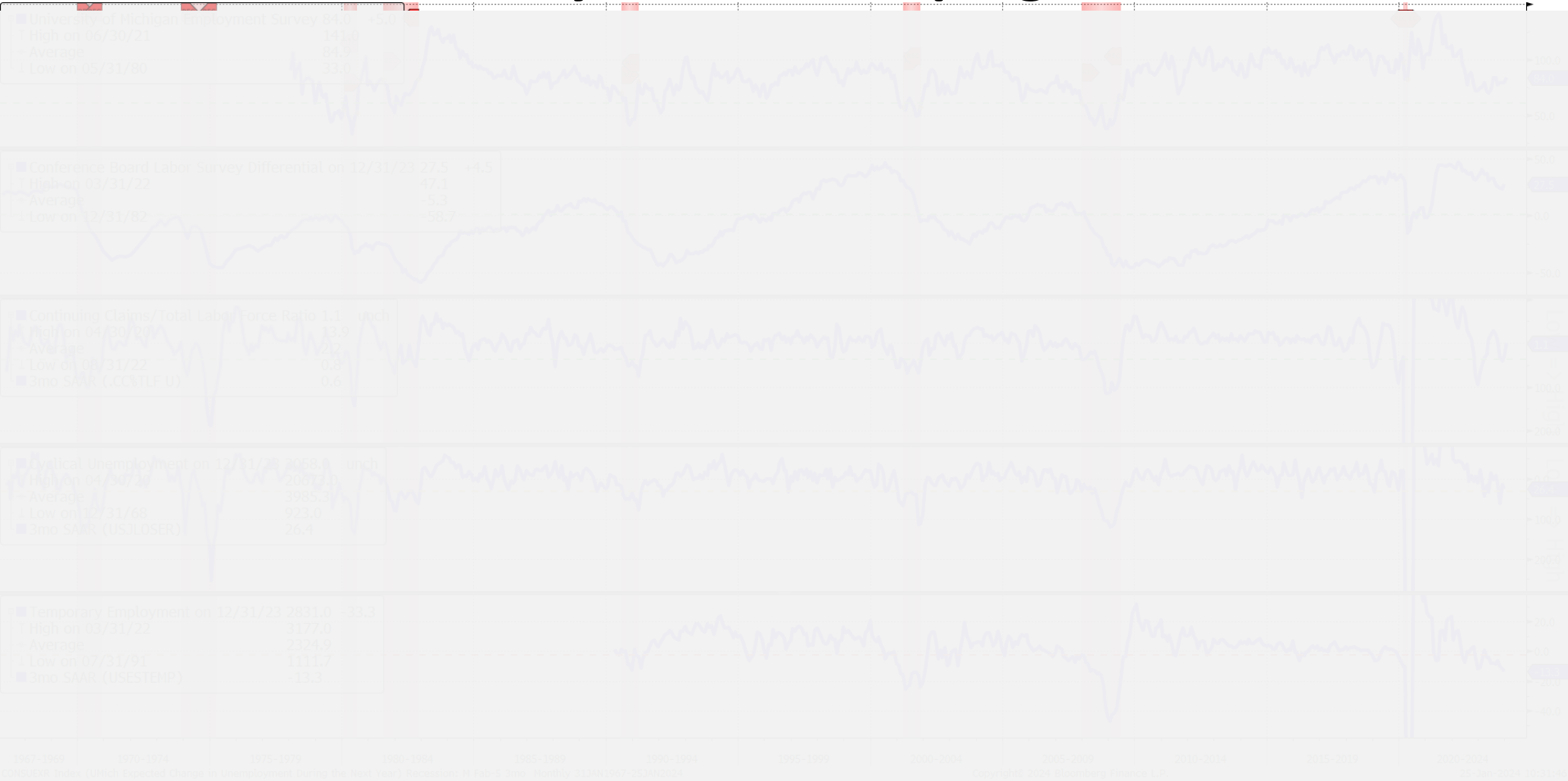
Initial And Continuing Jobless Claims Currently Indicate A Low Probability Of A Developing Recession

Lower Worker Turnover Is Supportive Of The Economic Expansion

Workers That Change Jobs Experience Faster Wage Growth, So Less Turnover Should Slow Wage Growth In The Months Ahead
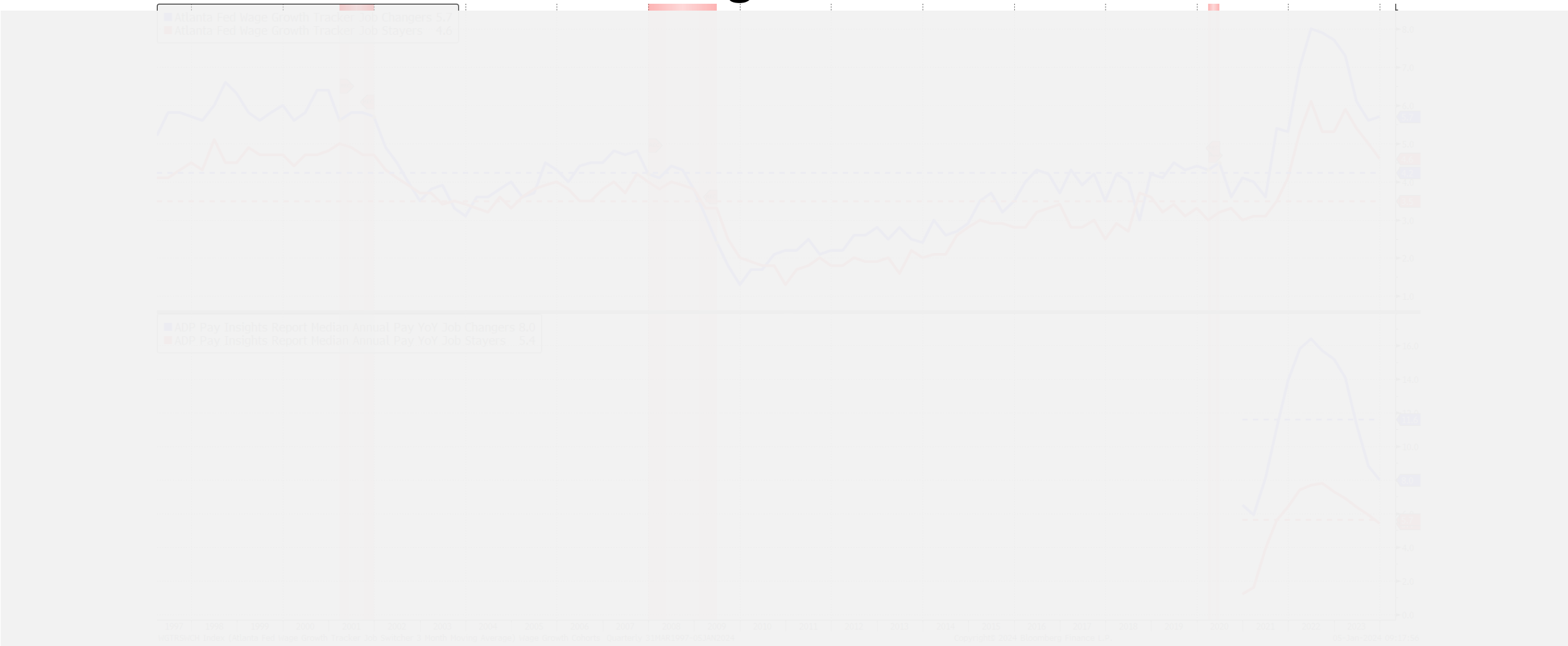
Positive Income Growth Means The US Consumer Remains Resilient – For Now
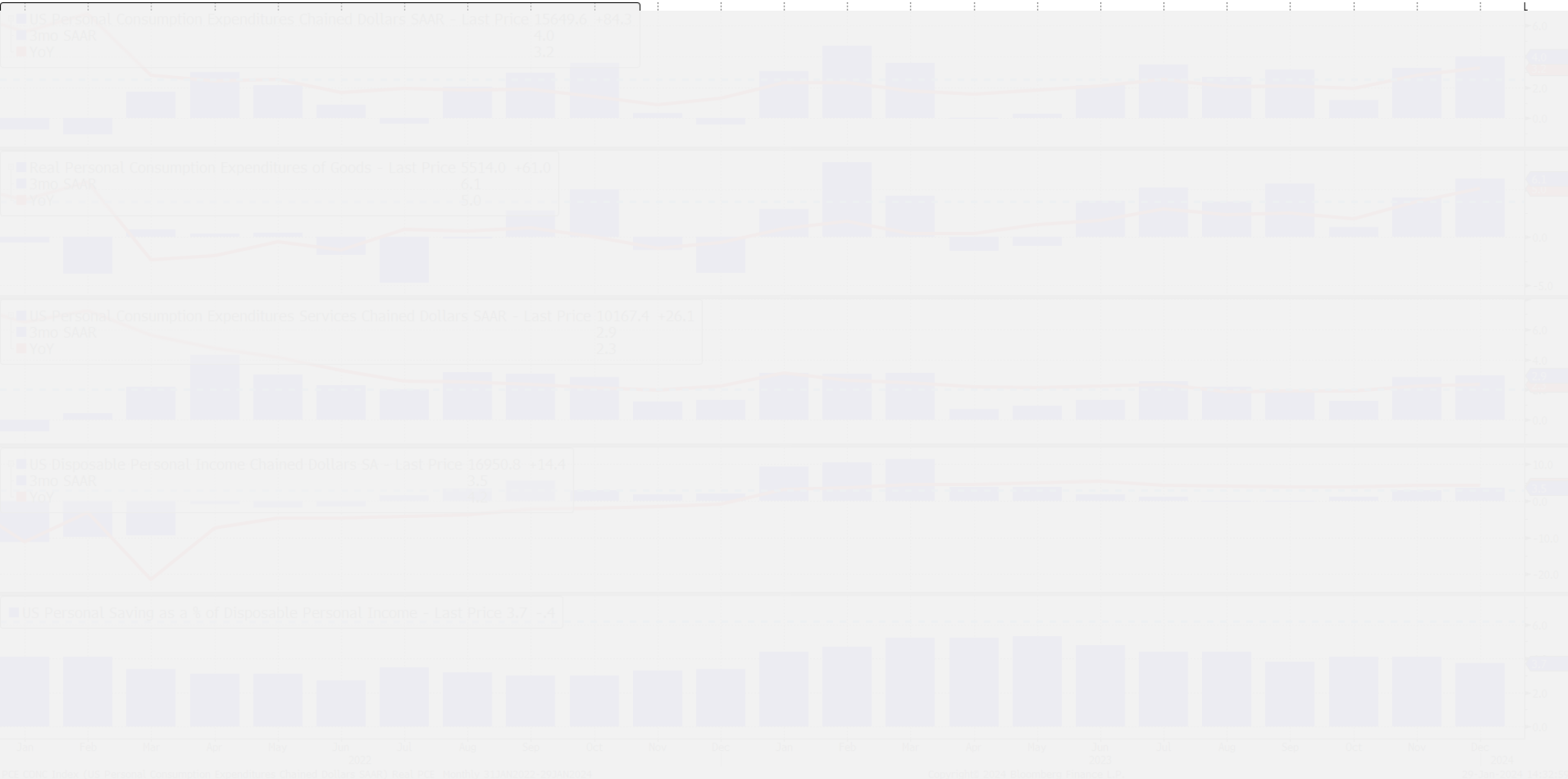
Fiscal Stimulus Has Been A Major Contributing Factor To The Resiliency Of Household Income… This Dynamic Is Dissipating At The Margins, But Is Unlikely To Fall Off A Cliff

42 Macro US Fiscal Policy Monitor	Nominal YTD Sum $bn 2019	2020	2021	2022	2023	Share of Total, by Category 2019	2020	2021	2022	2023	YoY % Change 2019	2020	2021	2022	2023	Trailing 10yr Z-Score of YoY % Δ 2019	2020	2021	2022	2023
Federal Revenue	$3497.5	$3416.8	$4294.5	$4869.8	$4521.3	100%	100%	100%	100%	100%	5%	-2%	26%	13%	-7%	(0.1)	(1.4)	2.3	0.7	(1.3)
Corporate Income Taxes	$242.5	$215.3	$401.6	$431.6	$464.1	7%	6%	9%	9%	10%	24%	-11%	87%	7%	8%	0.6	(0.7)	2.3	(0.1)	(0.0)
Customs Duties	$74.1	$65.6	$85.6	$98.0	$77.4	2%	2%	2%	2%	2%	49%	-12%	31%	15%	-21%	1.9	(1.2)	0.9	0.0	(1.4)
Estate Taxes	$16.3	$19.2	$27.6	$33.0	$35.1	0%	1%	1%	1%	1%	-29%	18%	44%	20%	6%	(1.0)	0.4	1.2	0.4	(0.0)
Excise Taxes	$90.1	$81.9	$80.1	$88.2	$76.8	3%	2%	2%	2%	2%	-14%	-9%	-2%	10%	-13%	(1.6)	(0.9)	(0.3)	0.7	(1.0)
Federal Reserve Transfers	$54.4	$89.9	$103.7	$80.4	$0.7	2%	3%	2%	2%	0%	-18%	65%	15%	-22%	-99%	(0.8)	2.2	(0.9)	(2.1)	(0.0)
Individual Income Taxes	$1729.9	$1570.8	$2232.8	$2601.3	$2196.9	49%	46%	52%	53%	49%	4%	-9%	42%	17%	-16%	(0.7)	(2.1)	2.6	0.6	(1.4)
Miscellaneous Receipts	$86.0	$126.8	$134.5	$113.5	$35.5	2%	4%	3%	2%	1%	-19%	48%	6%	-16%	-69%	(1.0)	1.9	0.0	(0.8)	(2.0)
Other Retirement Taxes	$4.9	$5.3	$5.8	$6.3	$7.1	0%	0%	0%	0%	0%	5%	10%	8%	9%	14%	0.5	1.2	0.7	0.6	1.7
Social Security Taxes	$1213.1	$1285.0	$1263.8	$1439.9	$1579.7	35%	38%	29%	30%	35%	7%	6%	-2%	14%	10%	0.4	0.2	(1.3)	1.2	1.0
Unemployment Insurance Premiums	$40.7	$46.9	$62.8	$58.2	$48.7	1%	1%	1%	1%	1%	-9%	15%	34%	-7%	-16%	(0.8)	1.4	2.3	(0.5)	(1.1)
Federal Expenditures	$4519.5	$6765.0	$6874.8	$6289.0	$6305.0	100%	100%	100%	100%	100%	8%	50%	2%	-9%	0%	1.3	2.8	(0.4)	(1.0)	(0.5)
Administration of Justice	$65.6	$72.9	$71.8	$73.7	$82.8	1%	1%	1%	1%	1%	2%	11%	-1%	3%	12%	(0.1)	1.7	(0.8)	(0.0)	1.7
Agriculture	$40.2	$58.0	$31.8	$37.7	$35.6	1%	1%	0%	1%	1%	56%	44%	-45%	19%	-6%	1.8	1.4	(1.8)	0.4	(0.4)
Commerce and Housing Credits	($13.1)	$572.0	$301.7	($21.2)	$160.5	-0%	8%	4%	-0%	3%	-86%	4475%	-47%	-107%	856%	0.1	2.8	(0.3)	(0.3)	0.2
Community and Regional Development	$27.5	$95.7	$46.8	$68.1	$86.8	1%	1%	1%	1%	1%	-24%	248%	-51%	46%	27%	(1.1)	2.7	(0.9)	0.2	(0.0)
Education, Training, Employment, and Social Services	$136.2	$241.0	$314.7	$692.9	($16.8)	3%	4%	5%	11%	-0%	39%	77%	31%	120%	-102%	1.0	1.8	0.4	2.0	(2.1)
Energy	$7.0	$7.6	$5.1	($12.1)	$5.3	0%	0%	0%	-0%	0%	338%	9%	-34%	-340%	144%	2.6	(0.1)	(0.4)	(2.0)	0.9
General Budget	$20.1	$183.5	$266.0	$132.4	$29.8	0%	3%	4%	2%	0%	7%	814%	45%	-50%	-77%	0.2	2.8	(0.2)	(0.5)	(0.6)
General Science, Space, and Technology	$33.1	$34.5	$35.9	$38.2	$41.7	1%	1%	1%	1%	1%	4%	4%	4%	7%	9%	0.5	1.1	0.8	1.4	2.2
Health	$586.8	$789.8	$835.9	$909.2	$889.0	13%	12%	12%	14%	14%	10%	35%	6%	9%	-2%	0.5	2.2	(0.3)	(0.2)	(1.1)
Income Security	$518.0	$1352.8	$1670.0	$813.0	$741.8	11%	20%	24%	13%	12%	3%	161%	23%	-51%	-9%	0.7	2.8	0.1	(1.2)	(0.4)
International Affairs	$52.4	$70.0	$46.0	$76.9	$68.1	1%	1%	1%	1%	1%	9%	34%	-34%	67%	-12%	0.8	2.6	(2.1)	2.2	(0.7)
Medicare	$663.2	$781.5	$693.8	$737.0	$865.5	15%	12%	10%	12%	14%	8%	18%	-11%	6%	17%	1.8	2.6	(2.2)	0.3	1.4
National Defense	$709.6	$734.3	$757.3	$774.6	$844.3	16%	11%	11%	12%	13%	6%	3%	3%	2%	9%	1.0	0.6	0.4	0.2	1.4
Natural Resource and Environment	$37.9	$41.8	$41.6	$39.5	$48.9	1%	1%	1%	1%	1%	7%	10%	-1%	-5%	24%	0.8	1.1	(0.1)	(0.6)	2.1
Net Interest	$375.4	$332.6	$366.7	$517.7	$730.4	8%	5%	5%	8%	12%	10%	-11%	10%	41%	41%	0.3	(1.5)	0.5	2.1	1.6
Social Security	$1059.2	$1132.3	$1119.8	$1243.7	$1392.0	23%	17%	16%	20%	22%	6%	7%	-1%	11%	12%	0.4	0.6	(1.6)	1.6	1.4
Transportation	$97.3	$151.6	$154.2	$132.8	$128.9	2%	2%	2%	2%	2%	3%	56%	2%	-14%	-3%	0.8	2.8	(0.3)	(1.0)	(0.4)
Undistributed Offsetting Receipts	($100.1)	($110.4)	($127.8)	($235.7)	($143.0)	-2%	-2%	-2%	-4%	-2%	0%	-10%	-16%	-84%	39%	0.2	(0.4)	(0.7)	(2.5)	1.5
Veterans Benefits and Services	$203.3	$223.7	$240.2	$270.6	$313.3	4%	3%	3%	4%	5%	7%	10%	7%	13%	16%	(0.3)	1.2	0.3	2.0	2.0
Federal Budget Balance	($1022.0)	($3348.2)	($2580.4)	($1419.2)	($1783.7)	100%	100%	100%	100%	100%	-17%	-228%	23%	45%	-26%	(0.8)	(2.7)	0.6	0.8	(0.0)

YoY Nominal Δ of Federal Budget Deficit $364

Considerable Monetary Easing Has Been Priced Into Money Markets... Are Those Rate Cut Expectations Warranted?

FDTR Index (Federal Funds Target Rate - Upper Bound) OIS-Policy Rate Spreads Daily 16JAN2021-29JAN2024   Copyright© 2024 Bloomberg Finance L.P.   29-Jan-2024 14:34:10
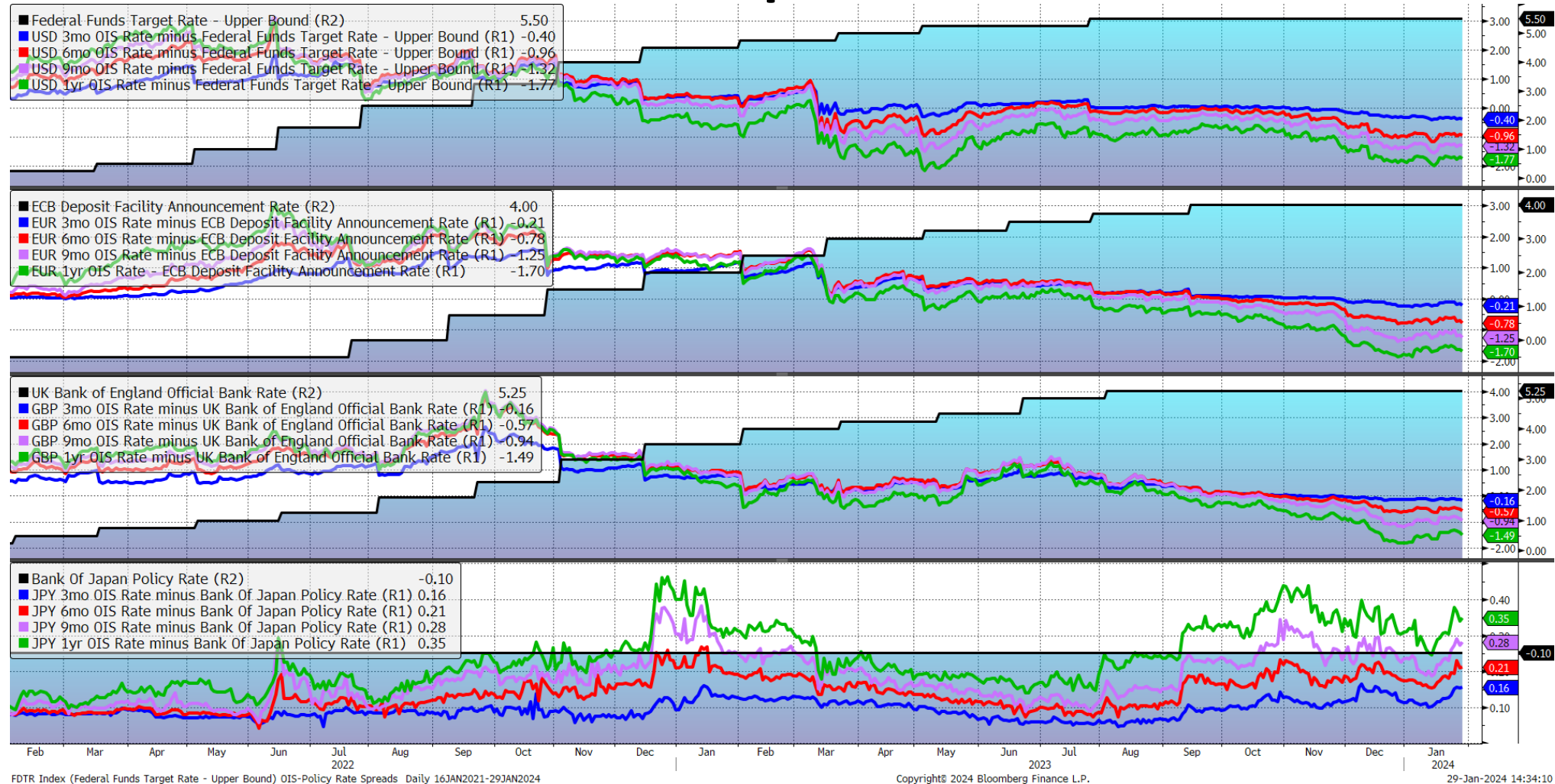
Broad-Based Producer Price Disinflation Is Supportive Of Market Expectations For Rate Cuts Throughout 2024
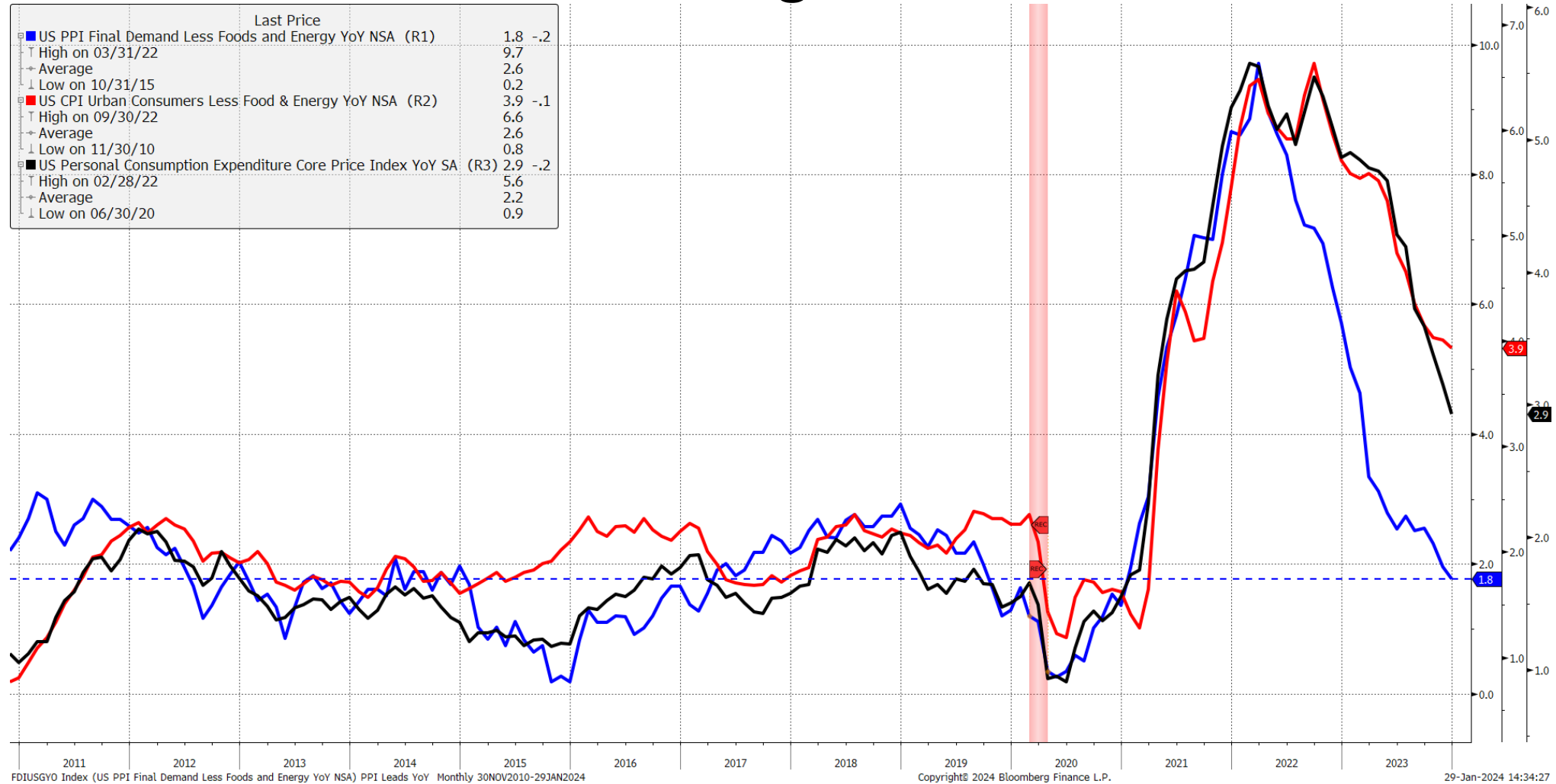
© 42 Macro LLC. Data Source: Bloomberg.

"Immaculate Disinflation" In Core PCE Is Supportive Of Market Expectations For Rate Cuts Throughout 2024

Core PCE Deflator SA	120.3	+.2
High on 12/31/23	120.3	
Average	105.3	
Low on 01/31/15	96.2	
3mo SAAR (PCE CORE)	1.5	
6mo SAAR (PCE CORE)	1.9	
Core PCE Deflator YoY	2.9	-.2
High on 02/28/22	5.6	
Average	2.5	
Low on 06/30/20	0.9	

PCE CORE Index (US Personal Consumption Expenditures Ex Food & Energy Deflator SA) Core PCE Deflator Monthly 31JAN2015-29JAN2024

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29-Jan-2024 14:34:57
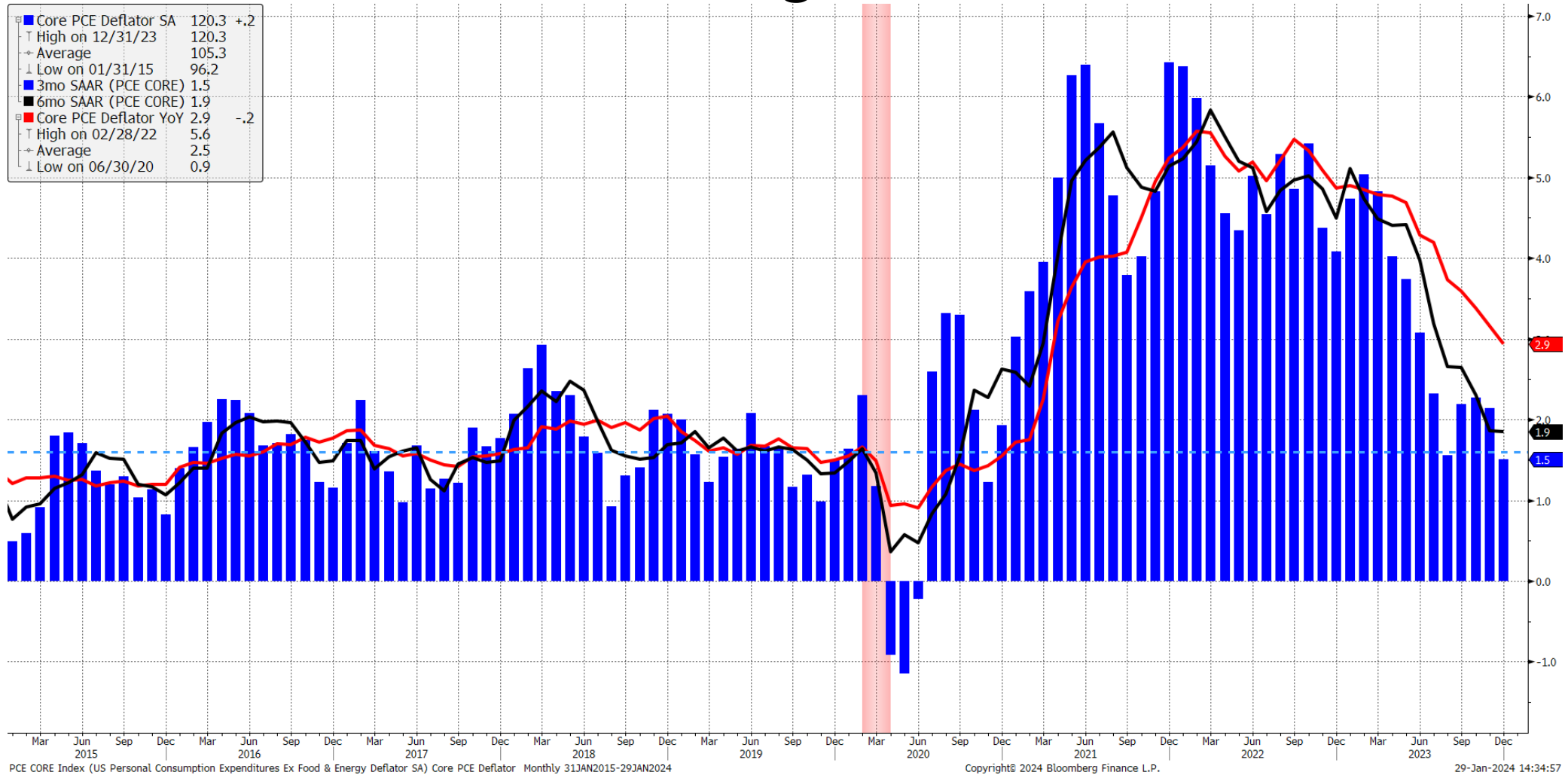
"Immaculate Disinflation" In Super Core PCE Is Supportive Of Market Expectations For Rate Cuts Throughout 2024

⊟ ■ Super Core PCE Deflator SA	122.7	+.3	
⊤ High on 12/31/23	122.7		
→ Average	106.1		
⊥ Low on 01/31/15	95.2		
■ 3mo SAAR (CSXHPPI)	2.1		
■ 6mo SAAR (CSXHPPI)	2.7		
■ Super Core PCE Deflator YoY	3.3	-.2	
⊤ High on 12/31/21	5.2		
→ Average	2.8		
⊥ Low on 04/30/20	1.2		

CSXHPPI Index (US Bloomberg BEA PCE Core Services Less Housing) Super Core PCE Deflator Monthly 31JAN2015-29JAN2024

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29-Jan-2024 14:35:08
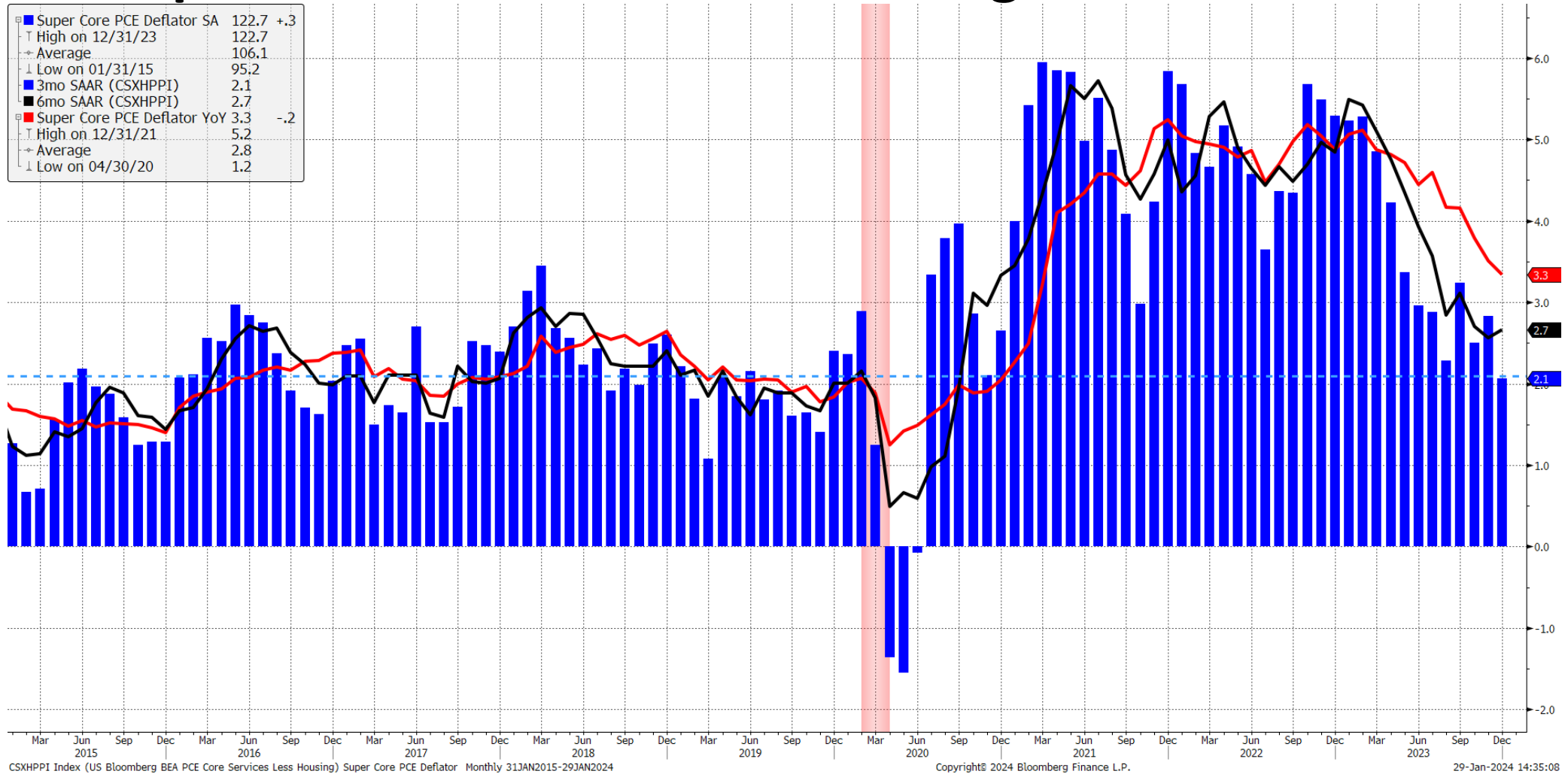
Alongside Fiscal And Monetary Easing, The Sharp Recovery In Productivity Growth Increases The Probability Of A Soft Landing In The US Economy
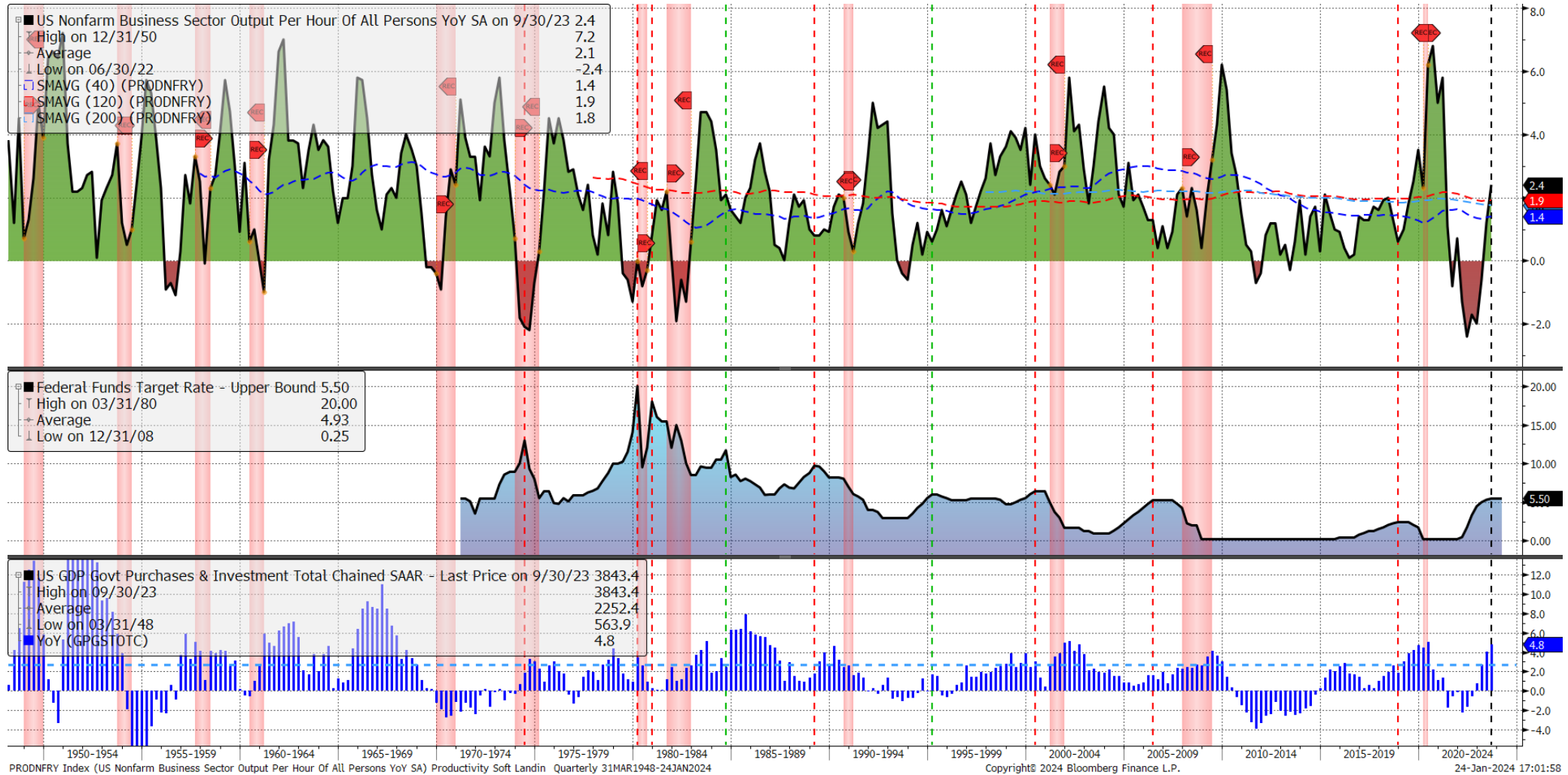
US Nonfarm Business Sector Output Per Hour Of All Persons YoY SA on 9/30/23	2.4
High on 12/31/50	7.2
Average	2.1
Low on 06/30/22	-2.4
SMAVG (40) (PRODNFRY)	1.4
SMAVG (120) (PRODNFRY)	1.9
SMAVG (200) (PRODNFRY)	1.8

Federal Funds Target Rate - Upper Bound	5.50
High on 03/31/80	20.00
Average	4.93
Low on 12/31/08	0.25

US GDP Govt Purchases & Investment Total Chained SAAR - Last Price on 9/30/23	3843.4
High on 09/30/23	3843.4
Average	2252.4
Low on 03/31/48	563.9
YoY (GPGSTDTC)	4.8

PRODNFRY Index (US Nonfarm Business Sector Output Per Hour Of All Persons YoY SA) Productivity Soft Landin Quarterly 31MAR1948-24JAN2024   Copyright© 2024 Bloomberg Finance L.P.   24-Jan-2024 17:01:58

Corporate Profitability Is Broadly Improving, Reducing The Need For Corporations To Shed Costs And/Or Pass On Price Increases To Consumers

US Corporate Profits with IVA & CCA YoY SA (R1) -0.6
High on 12/31/50 57.1
Average 7.5
Low on 12/31/08 -31.1
42 Macro Corporate Profitability Model = N-GDI minus (ULC - Productivity) (R2) 384
High on 12/31/50 2438
Average 578
Low on 09/30/74 -616

CPFTYOY Index (US Corporate Profits with IVA & CCA YoY SA) Corporate Profitability   Quarterly 31MAR1948-04JAN2024

04-Jan-2024 18:50:34
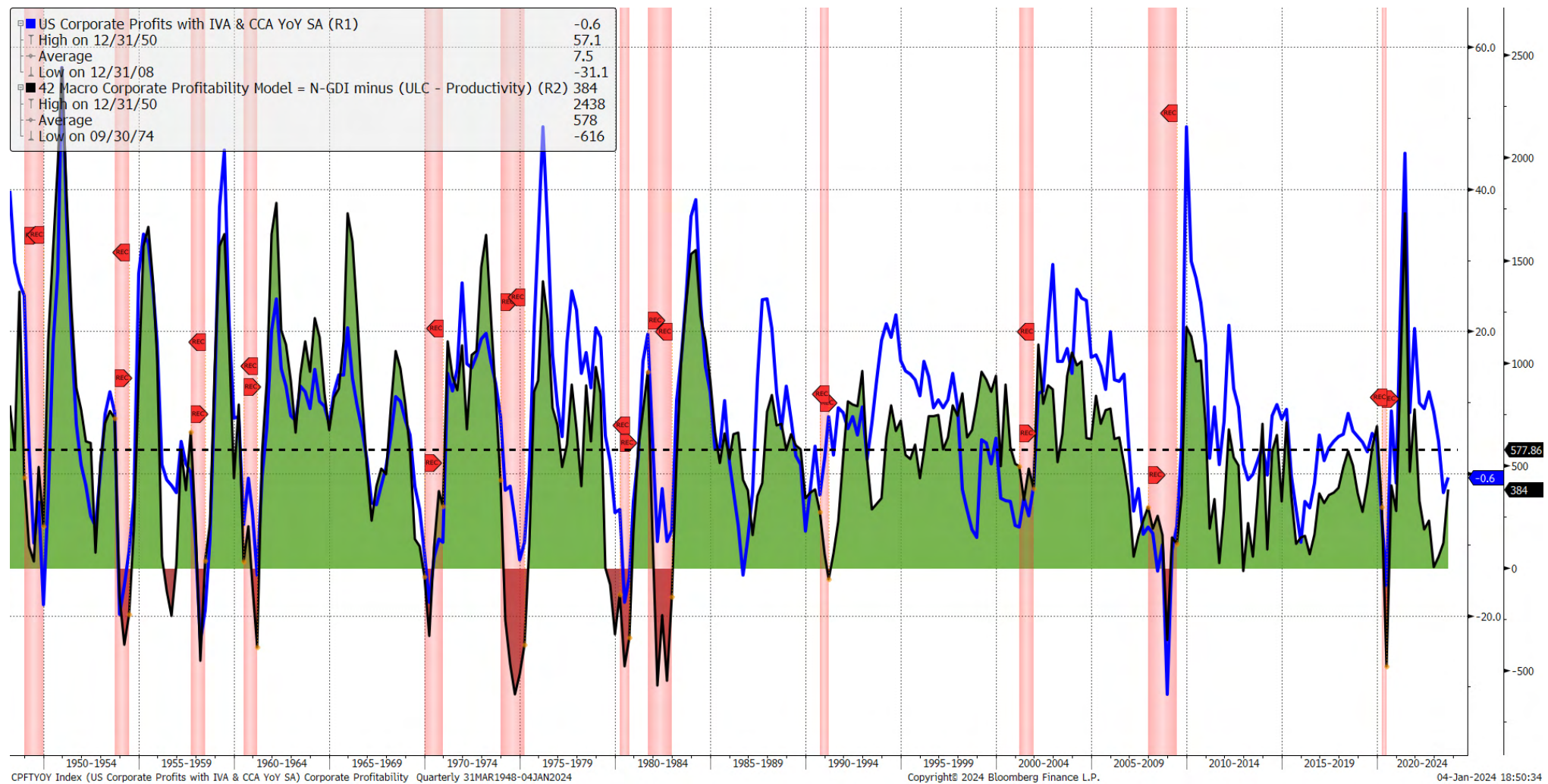
The **42 Macro Corporate Profitability Model** Indicates A Deep Earnings Recession Has Likely Been Avoided
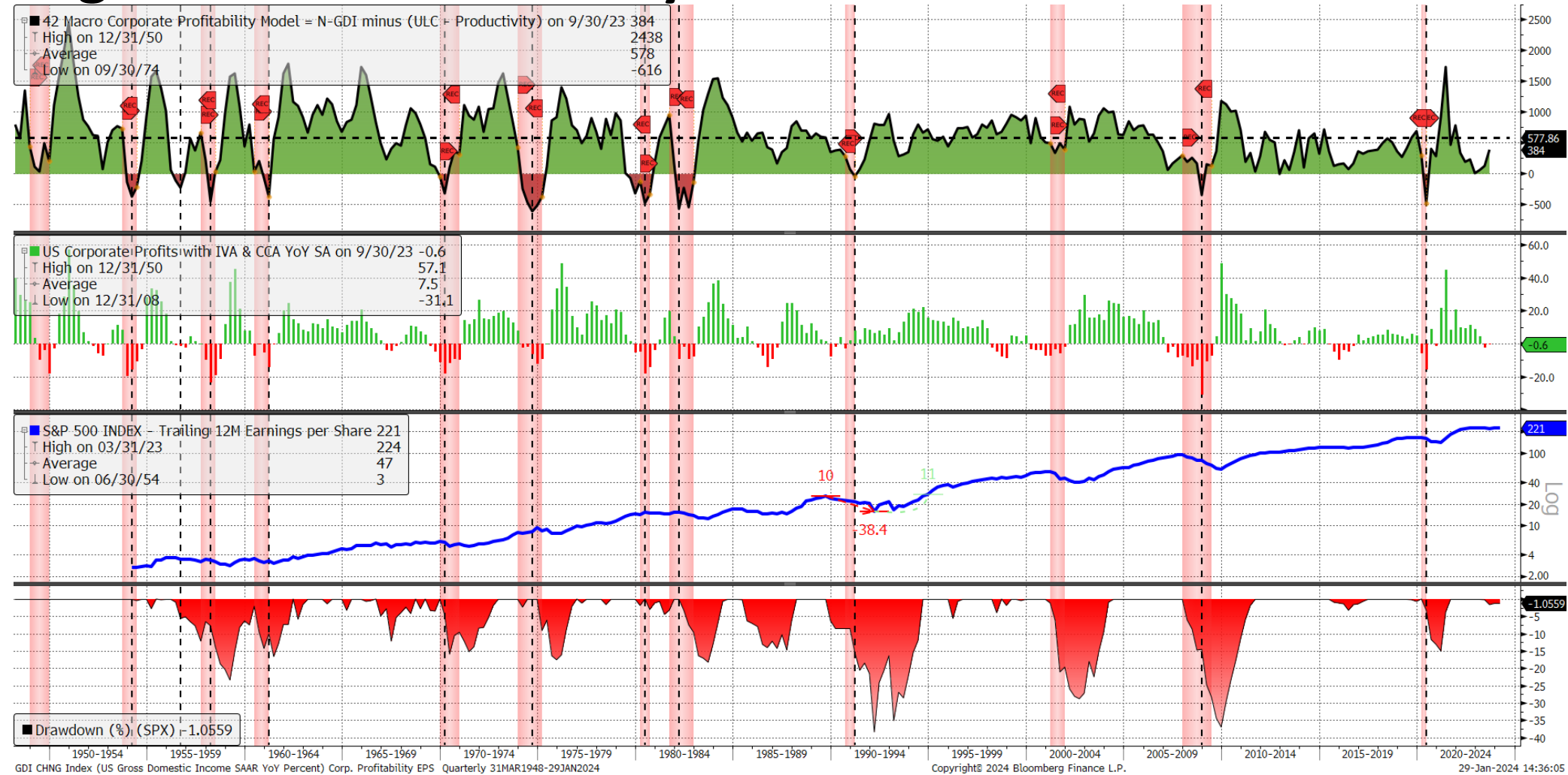
Corporate Profits Failed To Draw Down Materially Enough To Perpetuate The Mass Firing And Unemployment Required For A Recession

CPFTTOT Index (US Corporate Profits With IVA and CCA Total SAAR) Recession: Corp. Profits Quarterly 31MAR1947-04JAN2024   Copyright© 2024 Bloomberg Finance L.P.   04-Jan-2024 18:51:33
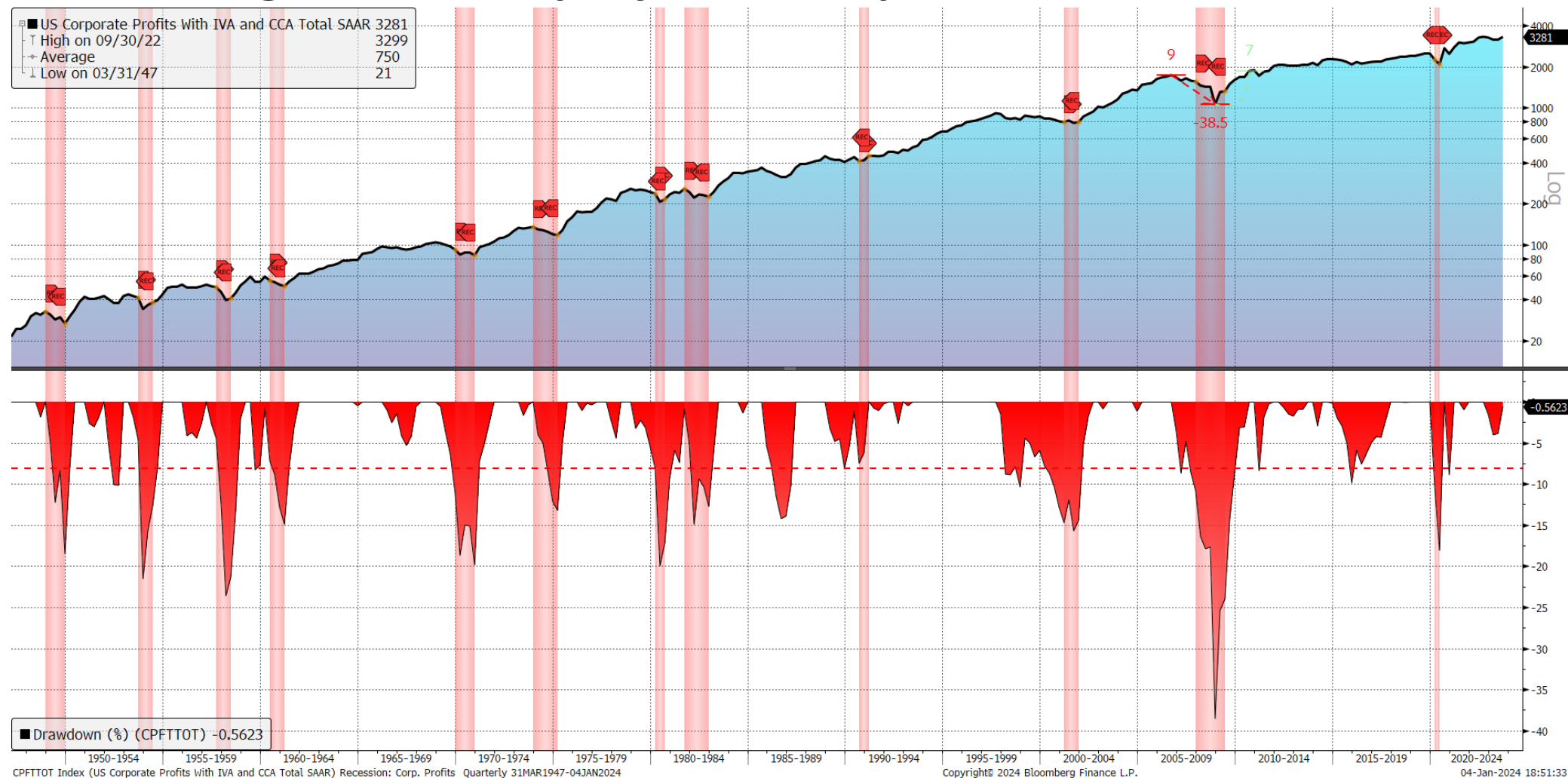
The Improvement In Productivity Growth Also Reduces The Need For Corporations To Pass On Price Increases To Consumers

Legend (top right):
- Private Sector Average Hourly Earnings YoY less Nonfarm Productivity YoY, Spread 1.9 -.1
  - High on 10/31/74 — 10.5
  - Average — 2.3
  - Low on 04/30/21 — -4.3
- US CPI Urban Consumers YoY NSA — 3.4 +.2
  - High on 03/31/80 — 14.8
  - Average — 4.0
  - Low on 07/31/09 — -2.1
- US Personal Consumption Expenditure Core Price Index YoY SA — 2.9 -.2
  - High on 02/28/75 — 10.2
  - Average — 3.4
  - Low on 07/31/09 — 0.6

.WAGEPROD U Index (P.S. Wages - N.F. Productivity) Wages-Productivity Spre Monthly 31JAN1965-29JAN2024   Copyright© 2024 Bloomberg Finance L.P.   29-Jan-2024 14:37:11

Right Tail Risks

Stocks Typically Perform Well Into Presidential Elections – Especially When An Incumbent Democrat Is On The Ballot

Investors Should Expect A Recovery In The US And Global Manufacturing Sectors Over The Medium Term, Which Has Historically Been Bullish For Risk Assets
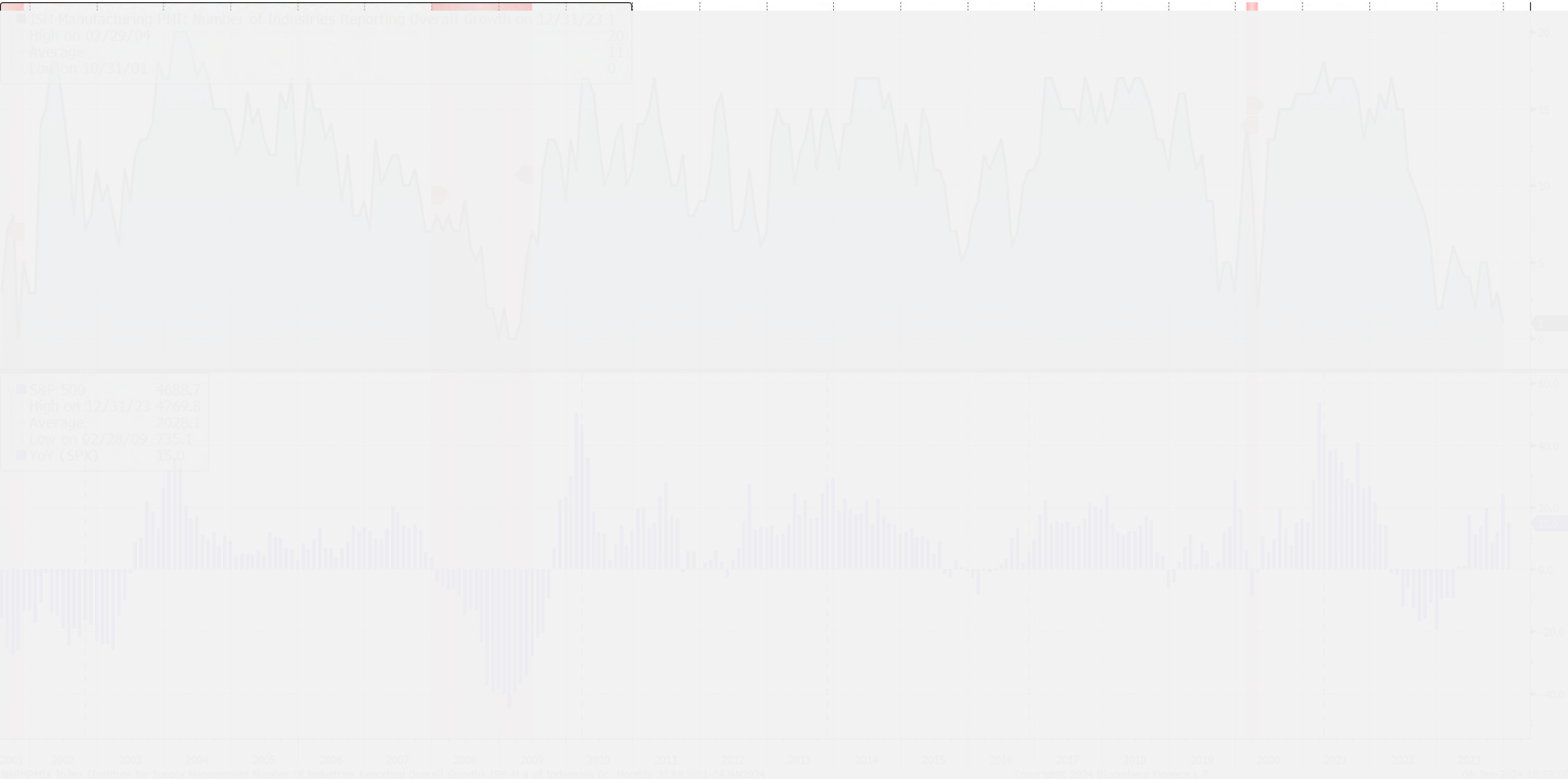
Asset Markets Are Highly Cointegrated With Global Liquidity, As Measured By The 42 Macro Global Liquidity Proxy

Legend:
- 42 Macro Global Liquidity Proxy (R1) — 133
- S&P 500 (R2) — 4929
- Bitcoin (R3) — 43097
- Ethereum (R4) — 2301
- Bloomberg US Treasury Total Return Index (L1) — 2246
- Bloomberg US Corporate Total Return Index (L2) — 3186

Drawdown (%) (.42MGLP2 U) -4.7453

Drawdown (%) (ES1) 0.00

.42MGLP2 U Index (42M Global Liquidity Proxy $tn) GLOBAL LIQUIDITY Daily 01JAN2009-29JAN2024

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29-Jan-2024 14:38:48

42 Macro Global Liquidity Proxy = Global Central Bank Balance Sheet + Global Broad Money Supply + Global FX Reserves ex-Gold.

46

The 42 Macro Global Liquidity Proxy Bottomed Almost Perfectly One Year After Its Prior Cycle Low

The Global Liquidity Impulse Is Now Appreciably Positive

© 42 Macro LLC. Data Source: Bloomberg.

42 Macro Global Liquidity Proxy = Global Central Bank Balance Sheet
+ Global Broad Money Supply + Global FX Reserves ex-Gold.

48
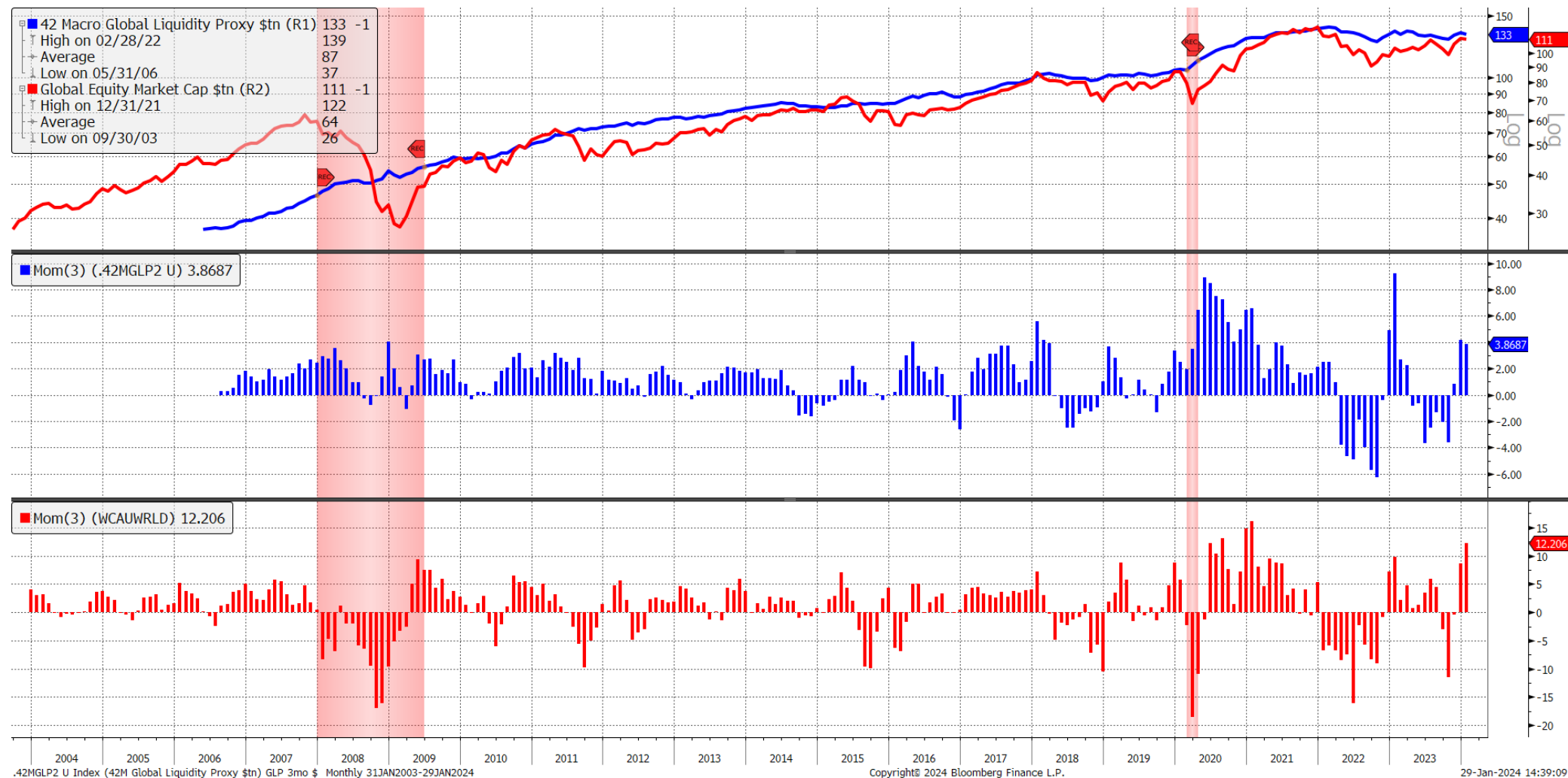
We Have Not Observed Enough Disinflation And/Or Economic Deterioration To Force Central Banks To Provide Substantial Liquidity Over The Medium Term…

Trailing 10yr Correlation to the YoY % Change in the 42 Macro Global Liquidity Proxy
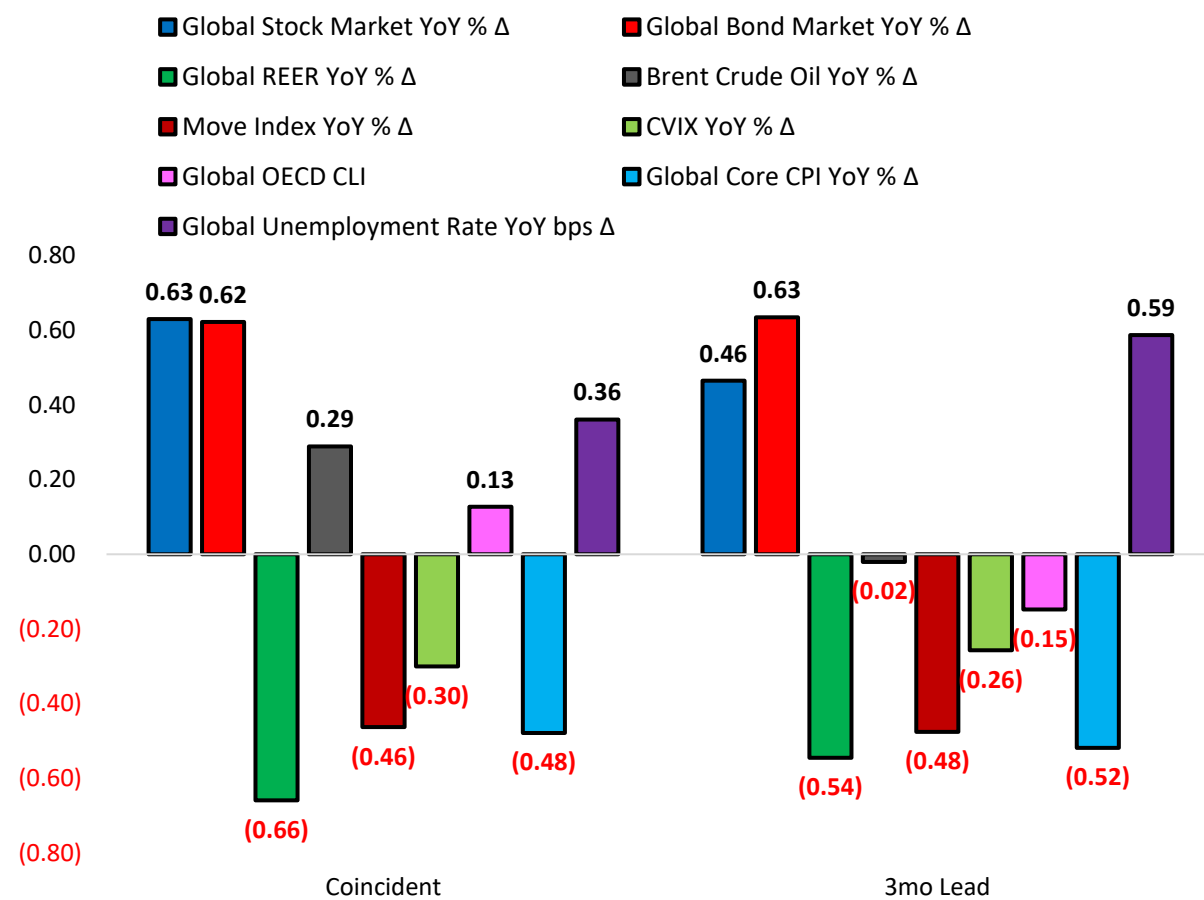
Z-Scores of Select Leading and Coincident Indicators of the 42 Macro Global Liquidity Proxy
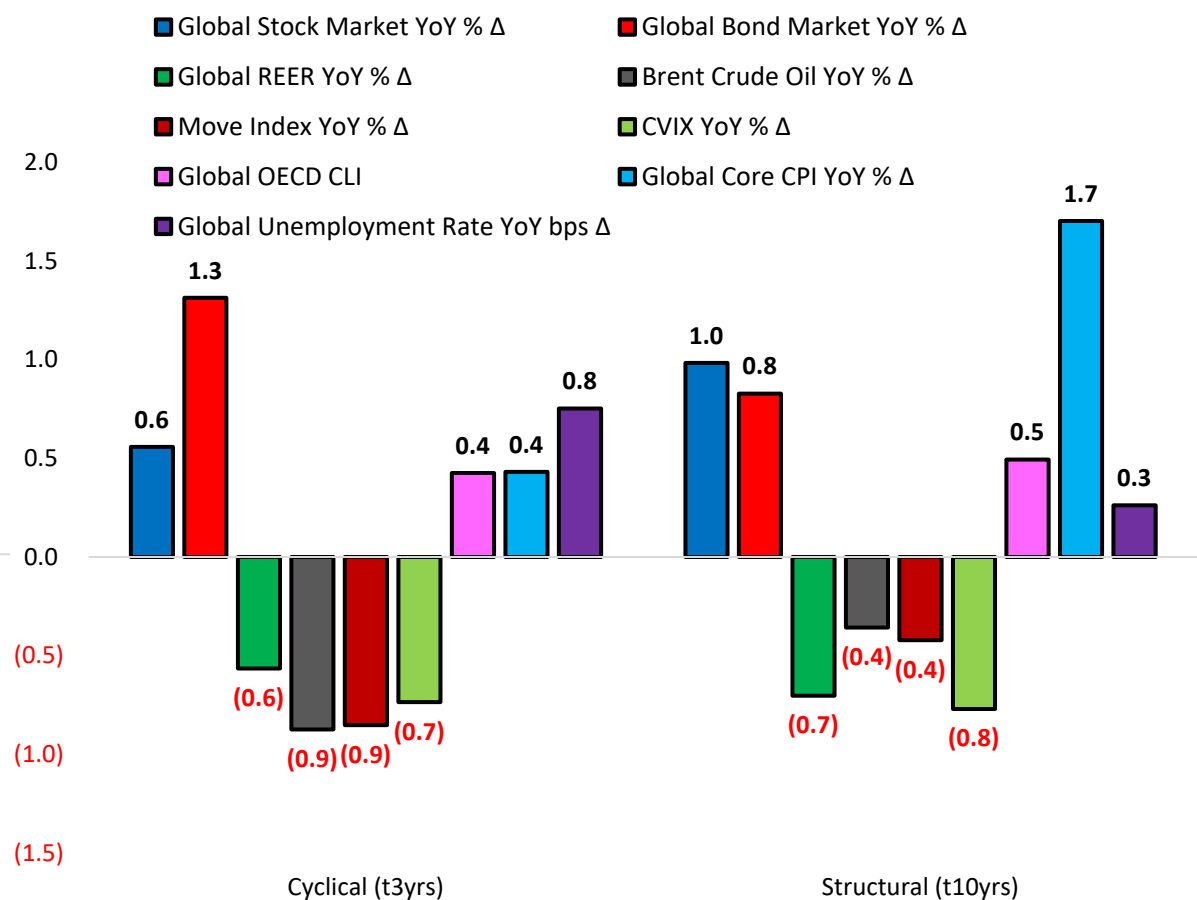
... Which Means The Private Sector Is The Key Driver Of The Rebound In Global Liquidity
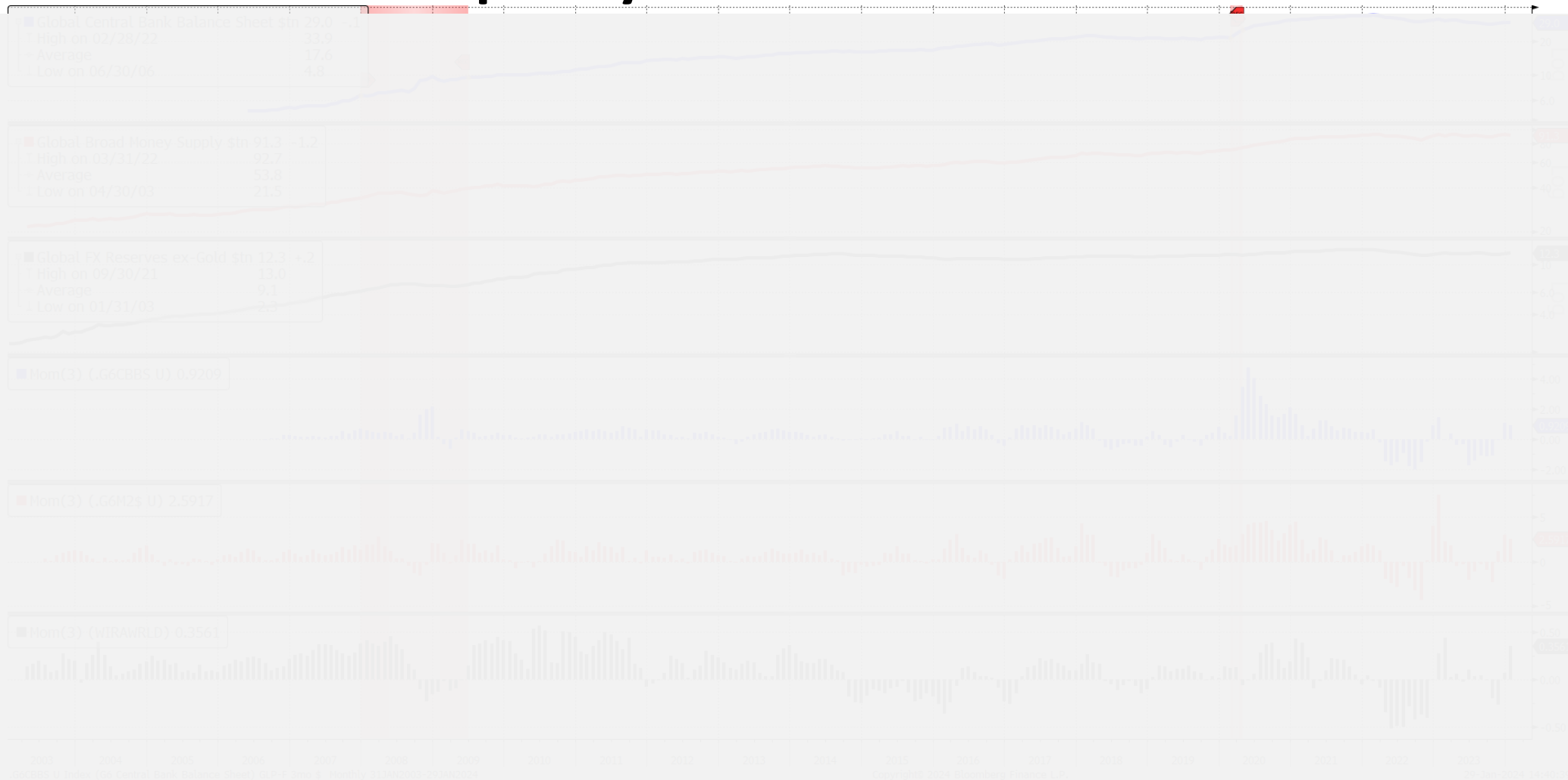
The Fed's Reverse Repo Facility (RRP) Still Has Roughly $600bn Dollars Of Excess Demand For T-Bills Relative To Coupons...
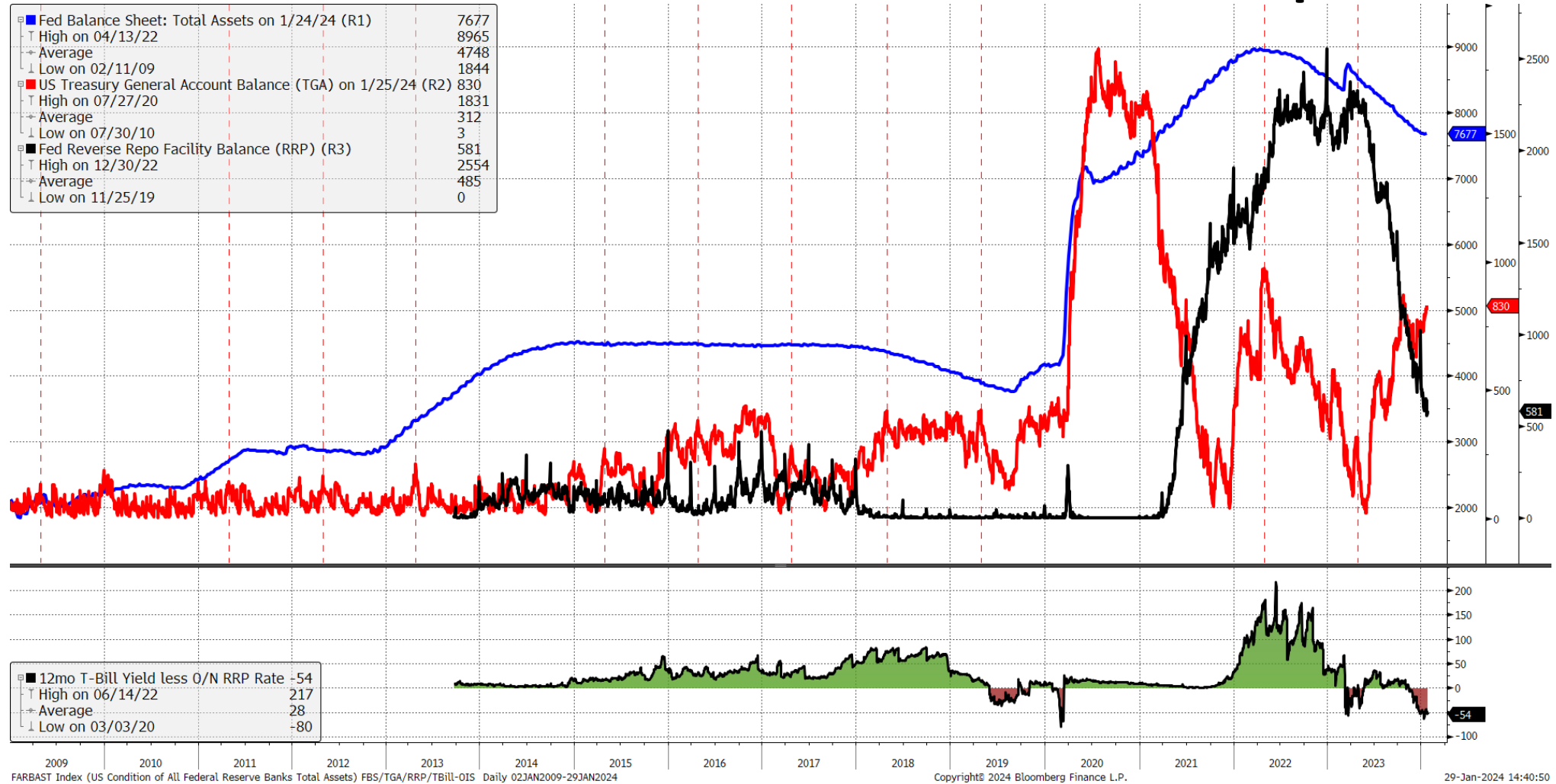
□ Fed Balance Sheet: Total Assets on 1/24/24 (R1)	7677
⊤ High on 04/13/22	8965
⊢ Average	4748
⊥ Low on 02/11/09	1844
■ US Treasury General Account Balance (TGA) on 1/25/24 (R2)	830
⊤ High on 07/27/20	1831
⊢ Average	312
⊥ Low on 07/30/10	3
■ Fed Reverse Repo Facility Balance (RRP) (R3)	581
⊤ High on 12/30/22	2554
⊢ Average	485
⊥ Low on 11/25/19	0

□ 12mo T-Bill Yield less O/N RRP Rate	-54
⊤ High on 06/14/22	217
⊢ Average	28
⊥ Low on 03/03/20	-80

FARBAST Index (US Condition of All Federal Reserve Banks Total Assets) FBS/TGA/RRP/TBill-OIS Daily 02JAN2009-29JAN2024   Copyright© 2024 Bloomberg Finance L.P.   29-Jan-2024 14:40:50

… Which Is Why Yellen Continues To Flood The Market With T-Bills

US Treasury Nominal Net Marketable Borrowing Composition

■ Net Bill Issuance $bn   ■ Net Coupon Issuance $bn

Net Coupon Issuance Will Remain In The ██████ Range Of Total Net Marketable Borrowing It Has Been In Since The Start Of 2023
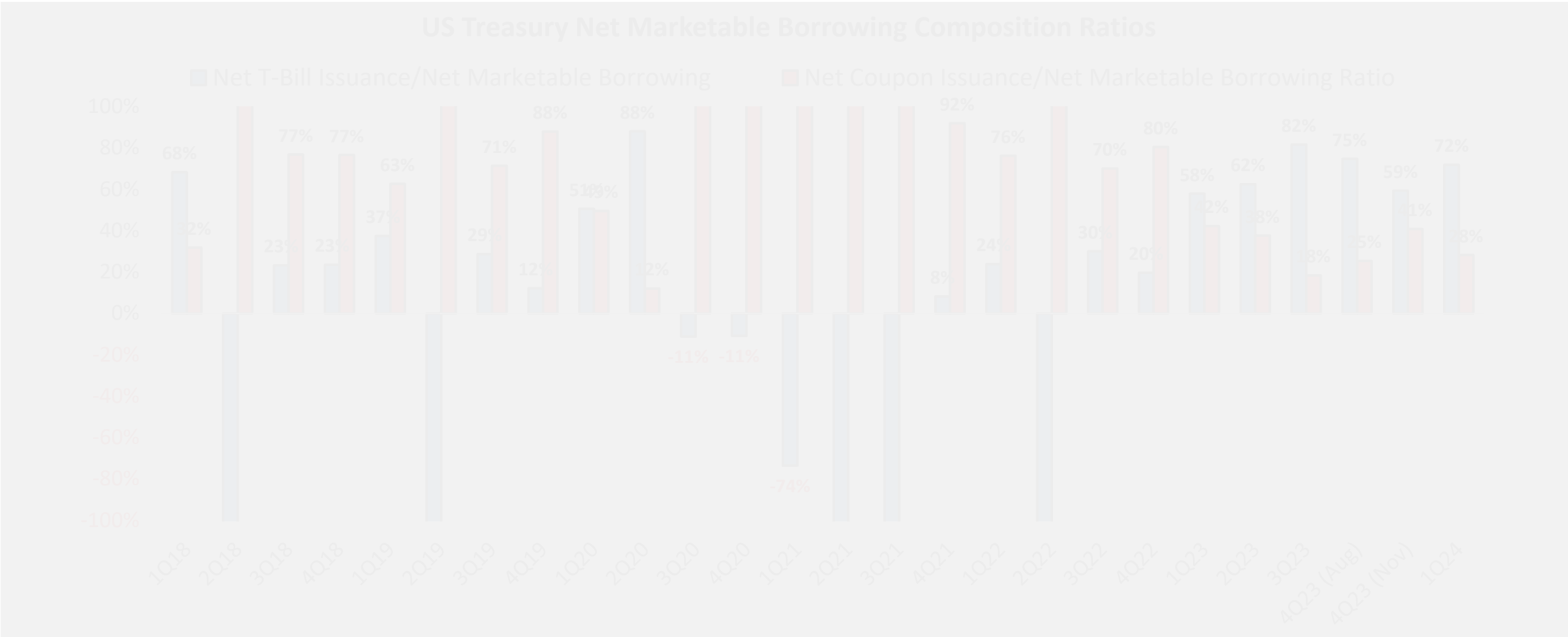
On A TTM Basis, Net Coupon Issuance Will Account For Only ▮ Of Net Marketable Borrowing Through Q1 – The Lowest Ratio Since At Least ▮

US Treasury Net Marketable Borrowing Composition TTM Ratios

■ TTM Bills/Net Marketable Borrowing   ■ TTM Coupons/Net Marketable Borrowing Ratio
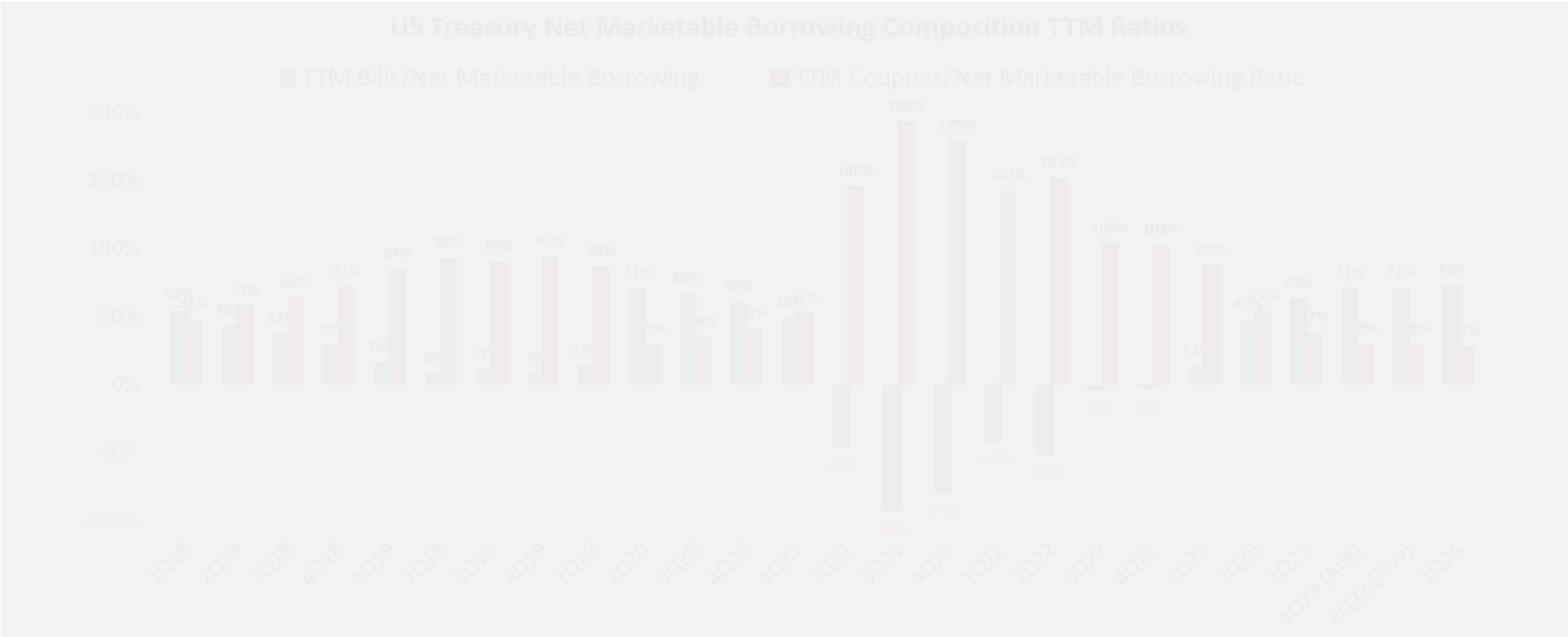
Net Nominal Bond Issuance Will Total ▓▓▓▓ In The Two Quarters Through Q1, Which Is Well Shy Of The ▓▓▓▓▓ Range In The Two Years Through 2Q22

US Treasury Net Marketable Borrowing Composition Ratios

© 42 Macro LLC. Data Source: US Treasury Department.
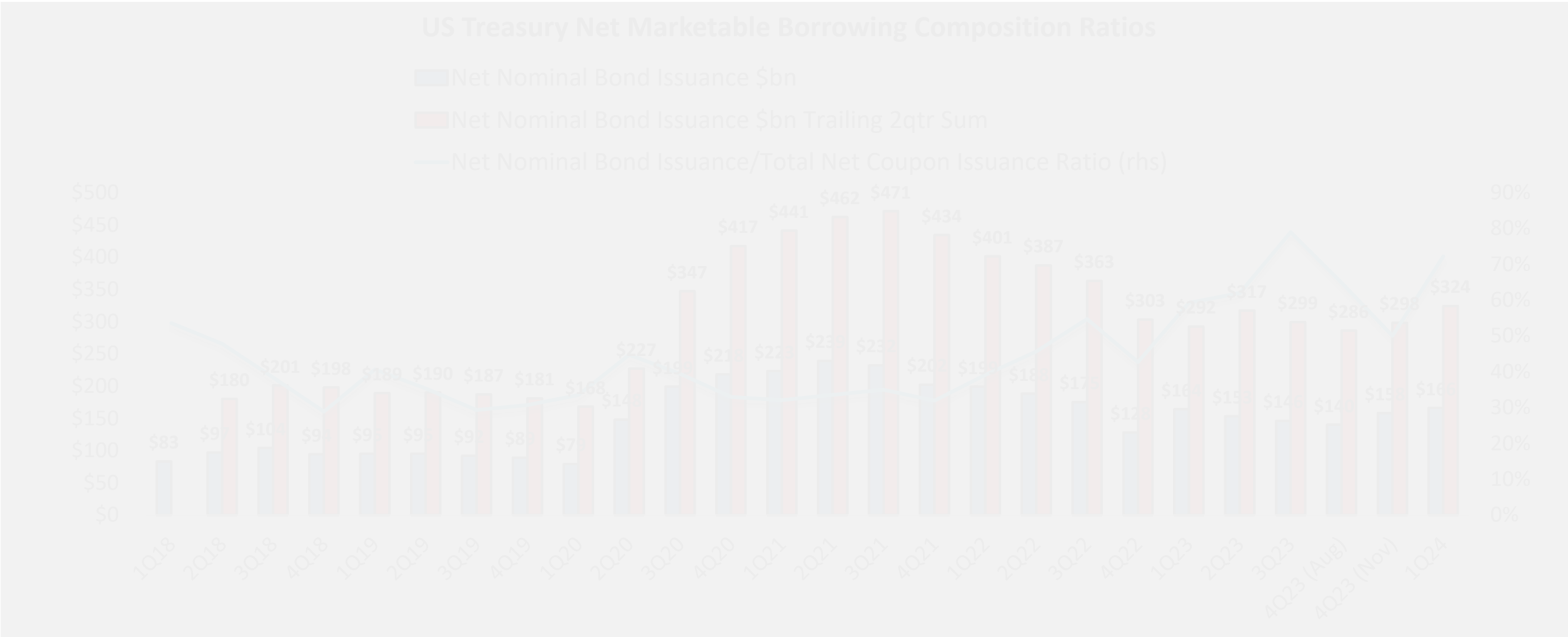
Left Tail Risks

The Most Reliable Leading Indicator Of The Business Cycle Still Indicates A Recession Is The Highest Probability Outcome

Our Analysis Of 3M10Y Yield Curve Inversions Suggests A Recession Is Most Likely To Commence In The Nov-23 Through Apr-24 Period

Stocks Are Always Very Buoyant In The Periods Leading Up To Recessions And Tend To Accelerate Late In The Pre-Phase 2 Process

Inflation Is The Most Lagging Indicator Of The Business Cycle

**Median Trailing 10yr Delta-Adjusted Z-Score of a Basket of Select Indicators
n-Months Before/After Recession Start**

Legend: HOUSING — ORDERS — PRODUCTION/PROFITS — EMPLOYMENT — INFLATION
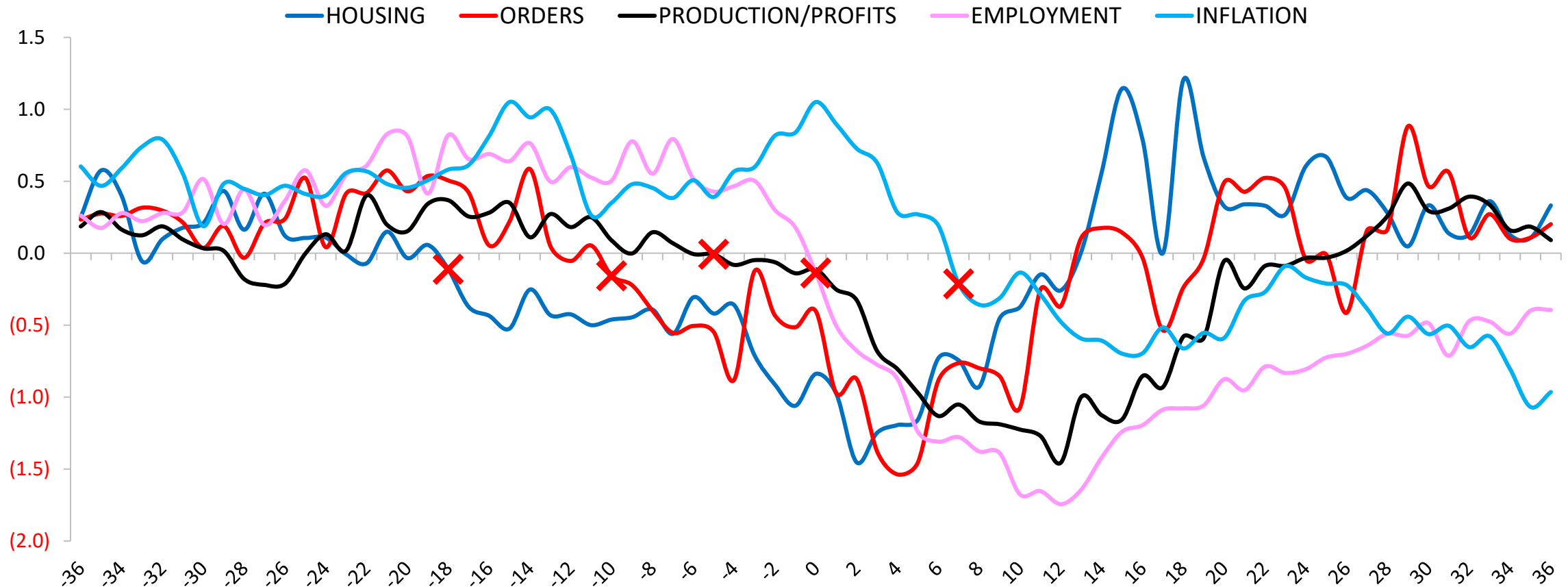
# History Confirms The Fed Must Break The Economy To Achieve Its Price Stability Mandate

Start	End	Primary Trigger	Real GDP Contraction	Starting Private Non-Financial Sector Credit Gap*	Peak Unemployment Rate	Nonfarm Payrolls Max Drawdown	Manufacturing Sector Share of Nonfarm Payrolls	Manufacturing Sector Share of NFP Drawdown	S&P 500 Max Drawdown	S&P 500 TTM EPS Max Drawdown	NIPA Corporate Profits Max Drawdown	Core PCE YoY Peak	Core PCE YoY Trough	bps Change t-1	bps Change	bps Change t+1	Fed Funds Rate* Peak	Fed Fund Rate* Trough	bps Change t-1	bps Change	bps Change t+1
Aug-29	Mar-33	Monetary Tightening	-26.7%		24.9%				-86%												
May-37	Jun-38	Fiscal Tightening	-18.2%		19.0%				-54%												
Feb-45	Oct-45	Fiscal Tightening	-12.7%		1.9%	-9%	42%	106%	-6%												
Nov-48	Oct-49	Monetary Tightening	-1.7%	0.9	7.9%	-5%	39%	85%	14%		-16%										
Jul-53	May-54	Monetary Tightening	-2.6%	1.2	6.1%	-3%	39%	98%	11%		-22%										
Aug-57	Apr-58	Pandemic	-3.7%	1.5	7.5%	-4%	37%	84%	15%	-20%	-24%						3.51%	1.02%	84bps	-249bps	165bps
Apr-60	Feb-61	Monetary Tightening	-1.6%	1.4	7.1%	-2%	35%	95%	28%	-11%	-15%	2.2%	1.2%		-94bps	10bps	4.68%	2.05%	19bps	-263bps	13bps
Dec-69	Nov-70	Monetary Tightening/Fiscal Tightening	-0.6%	1.7	6.1%	-1%	32%	212%	14%	-18%	-20%	4.8%	4.5%	3bps	-23bps	-88bps	8.08%	4.80%	176bps	-328bps	-70bps
Nov-73	Mar-75	Energy Price Shock	-3.2%	1.8	9.0%	-2%	30%	188%	16%	-4%	-12%	4.9%	4.9%	179bps	0bps	-387bps	11.00%	5.50%	350bps	-550bps	-75bps
Jan-80	Jul-80	Monetary Tightening/Energy Price Shock	-2.2%	2.0	7.8%	-1%	27%	153%	19%	-4%	-18%	8.2%	8.2%	144bps	0bps	-37bps	15.50%	9.50%	400bps	-600bps	600bps
Jul-81	Nov-82	Monetary Tightening	-2.7%	0.8	10.8%	-3%	26%	94%	32%	-22%	-9%	9.8%	5.9%	-37bps	-389bps	-138bps	20.00%	9.00%	600bps	-1100bps	50bps
Jul-90	Mar-91	Energy Price Shock	-1.4%	0.9	7.8%	-1%	22%	121%	11%	-43%	-6%	4.1%	3.7%	1bps	-42bps	-36bps	9.00%	6.00%	-100bps	-300bps	-200bps
Mar-01	Nov-01	Monetary Tightening	-0.3%	1.4	6.3%	-2%	18%	107%	20%	-29%	-8%	2.0%	1.2%	3bps	-82bps	-12bps	6.50%	2.00%	-100bps	-450bps	-75bps
Dec-07	Jun-09	Monetary Tightening	-5.1%	1.9	10.0%	-6%	16%	55%	16%	-35%	-37%	2.6%	0.7%	9bps	-184bps	84bps	5.25%	0.25%	-100bps	-500bps	0bps
Feb-20	Apr-20	Pandemic	-19.2%	0.5	14.7%	-14%	14%	12%	22%	-15%	-18%	1.8%	0.9%	6bps	-92bps	221bps	2.50%	0.25%	-75bps	-225bps	
		MEDIAN - All	**-2.7%**	**1.4**	**7.8%**	**-3%**	**30%**	**98%**	**15%**	**-19%**	**-17%**	**4.1%**	**3.7%**	**5bps**	**-82bps**	**-36bps**	**7.3%**	**3.4%**	**52bps**	**-389bps**	**0bps**
		25th Percentile	-1.7%	0.9	6.7%	-2%	22%	85%	19%	-12%	-11%	2.2%	1.2%	3bps	-23bps	10bps	4.8%	1.3%	-94bps	-272bps	-74bps
		75th Percentile	-8.9%	1.7	10.4%	-5%	37%	121%	11%	-27%	-20%	4.9%	4.9%	43bps	-94bps	-88bps	10.5%	5.9%	307bps	-538bps	41bps
		MEDIAN - Monetary Tightening	-2.2%	1.4	7.8%	-3%	30%	96%	16%	-20%	-17%	3.7%	2.9%	3bps	-88bps	-24bps	7.3%	3.4%	98bps	-475bps	6bps
		MEDIAN - Fiscal Tightening	-12.7%	1.7	6.1%	-5%	37%	159%	-6%	-18%	-20%	4.8%	4.5%	3bps	-23bps	-88bps	8.1%	4.8%	176bps	-328bps	-70bps
		MEDIAN - Energy Price Shock	-2.2%	1.8	7.8%	-1%	27%	153%	16%	-4%	-12%	4.9%	4.9%	144bps	0bps	-37bps	11.0%	6.0%	350bps	-550bps	-75bps
		MEDIAN - Pandemic	-11.5%	1.0	11.1%	-9%	25%	48%	19%	-18%	-21%	1.8%	0.9%	6bps	-92bps	221bps	3.0%	0.6%	5bps	-237bps	83bps
		MILD Recession	-2.0%	1.3	7.0%	-2%	29%	124%	17%	-25%	-13%	3.3%	2.7%	2bps	-60bps	-31bps	7.07%	3.71%	-1bps	-335bps	-83bps
		MODERATE Recession	-2.7%	1.5	8.2%	-3%	32%	123%	19%	-13%	-17%	7.6%	6.3%	95bps	-130bps	-187bps	12.50%	6.26%	359bps	-625bps	185bps
		SEVERE Recession	-4.2%	1.2	14.1%	-10%	24%	58%	-22%	-25%	-28%	2.2%	0.8%	8bps	-138bps	152bps	3.88%	0.25%	-88bps	-363bps	0bps
		Correlation* to Real GDP Contraction	**1.00**	**0.49**	**(0.79)**	**0.24**	**0.67**	**0.75**	**0.80**	**(0.03)**	**(0.45)**	**0.31**	**0.36**	**0.08**	**0.06**	**(0.57)**	**0.41**	**0.46**	**0.25**	**(0.26)**	**0.01**
		r²	1.00	0.24	0.63	0.06	0.45	0.56	0.64	0.00	0.20	0.10	0.13	0.01	0.00	0.33	0.17	0.21	0.06	0.07	0.00

Intellectual Property of 42 Macro LLC. Data Source: NBER, Bloomberg. Asterisk = 3mo T-Bill Yield prior to the 1973-75 recession. Mild, Moderate, and Severe recession statistics are averages based on the magnitude of the Max Drawdown in Nonfarm Payrolls.
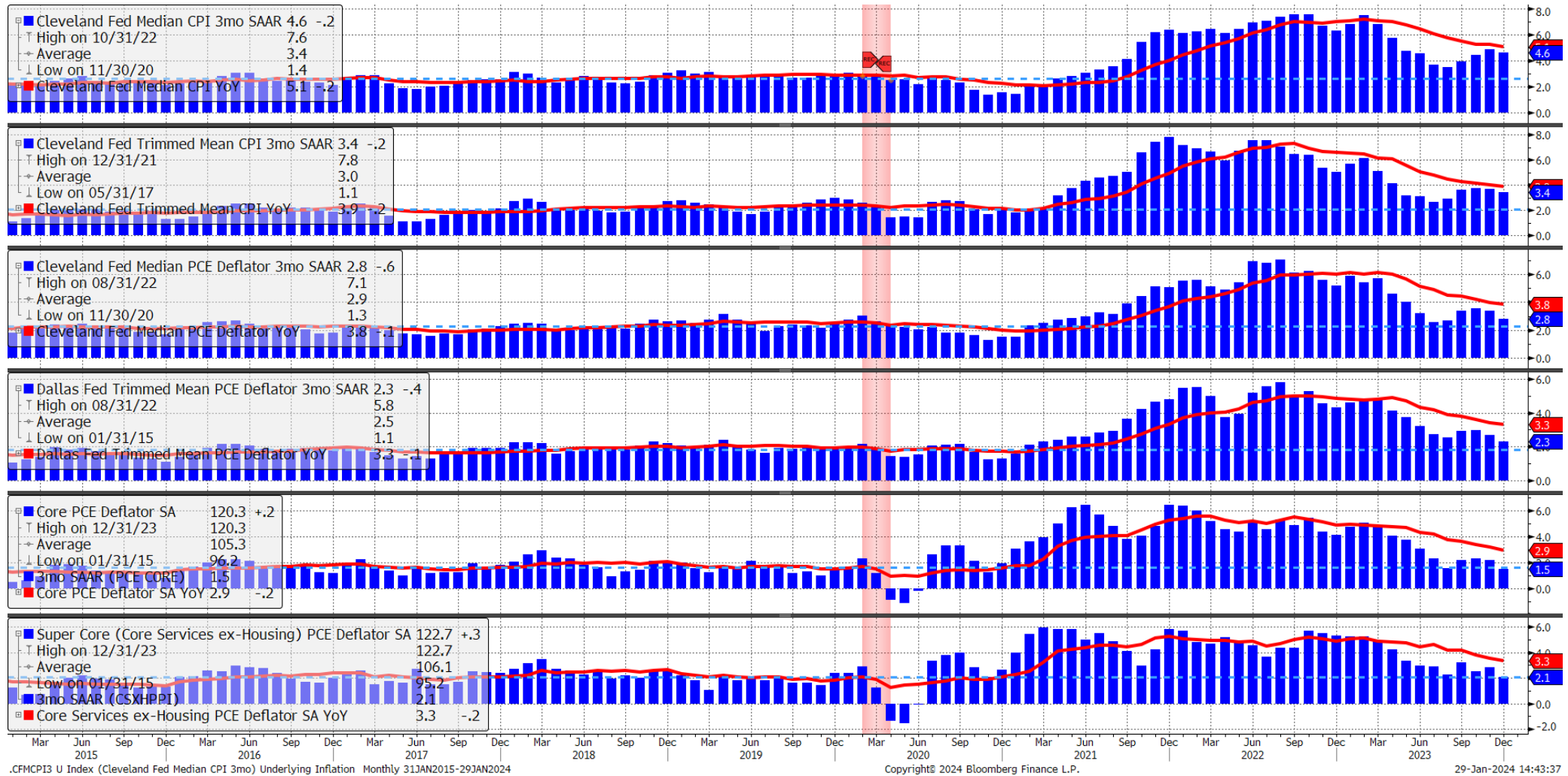
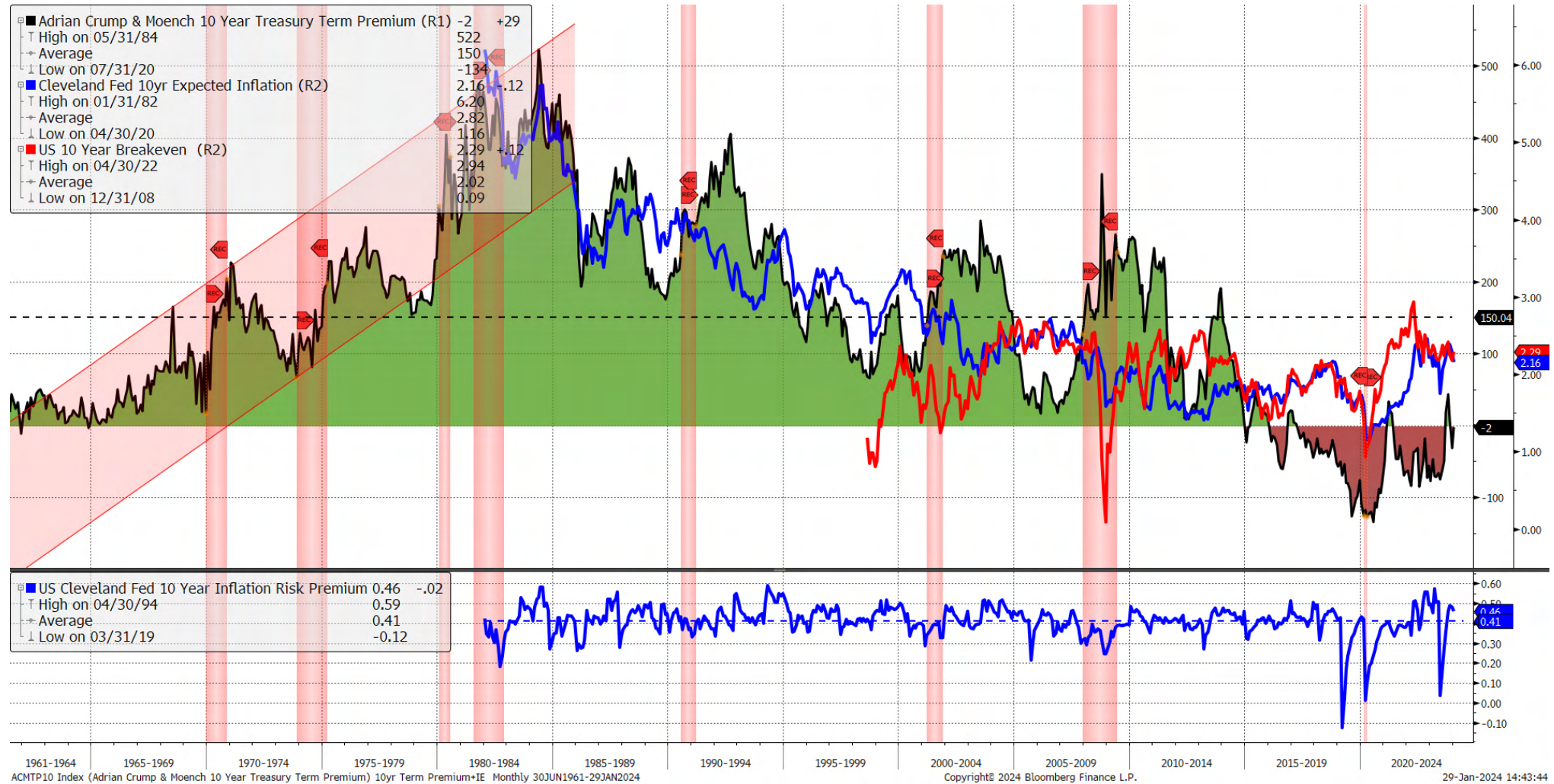# A "No Landing" In The Economy = A "No Landing" In Headline Inflation

A "No Landing" In The Economy = A "No Landing" In Core Inflation
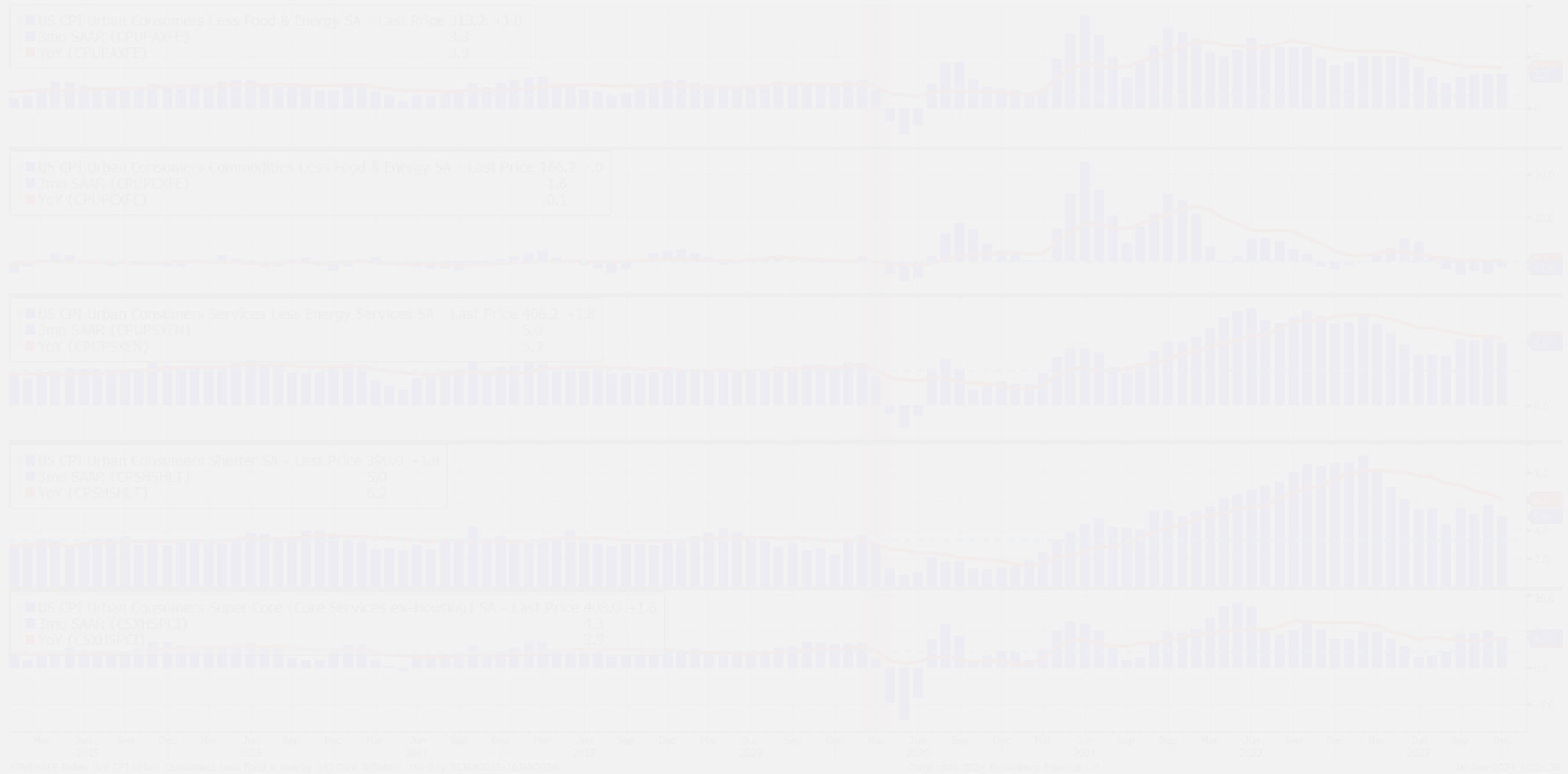
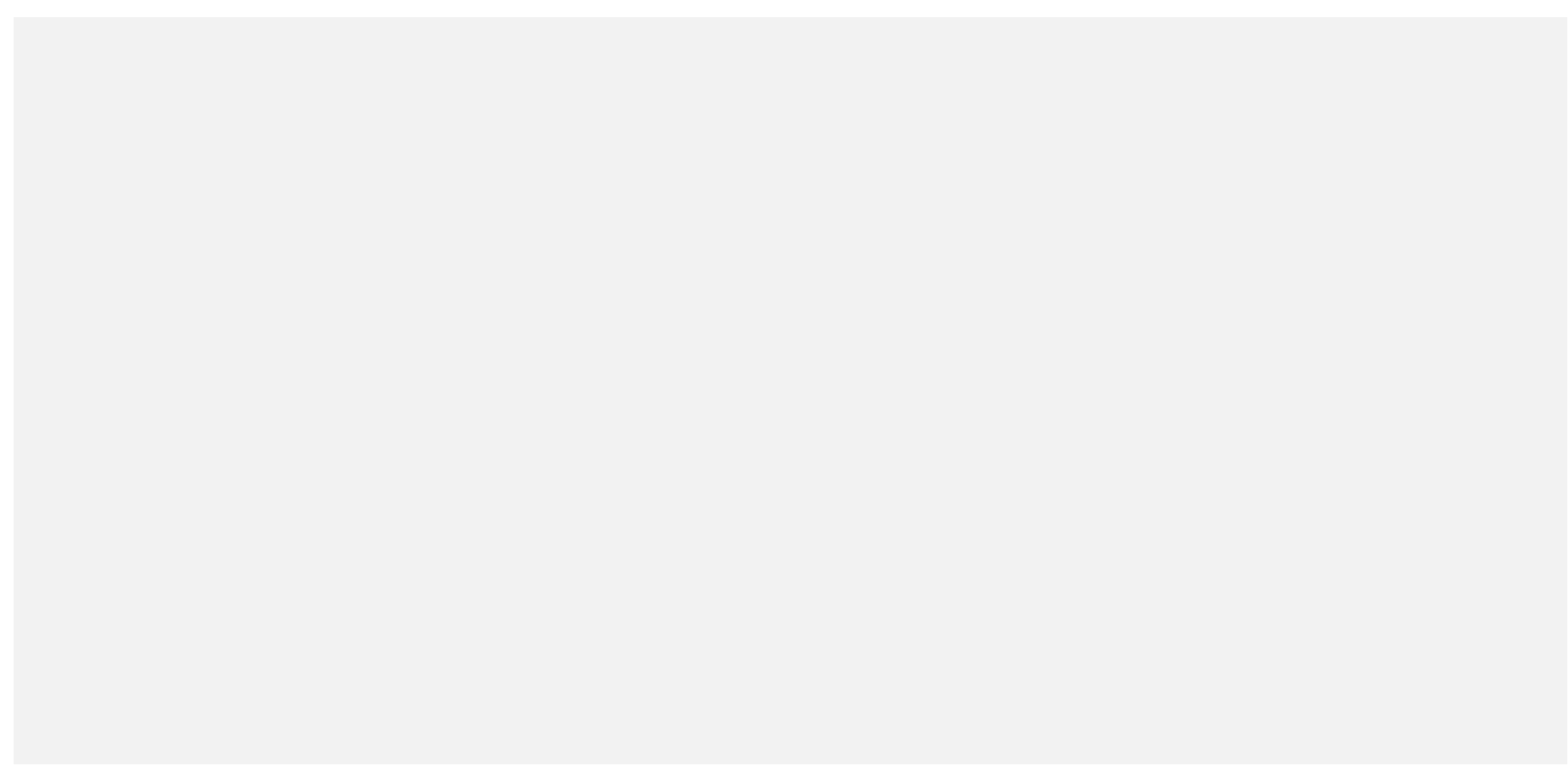# A "No Landing" In The Economy = A "No Landing" In Underlying Inflation

# The Treasury Bond Market May Still Be Underpricing Structural Inflation Risks

Adrian Crump & Moench 10 Year Treasury Term Premium (R1) -2 +29
- High on 05/31/84 — 522
- Average — 150
- Low on 07/31/20 — -134

Cleveland Fed 10yr Expected Inflation (R2) 2.16 -.12
- High on 01/31/82 — 6.20
- Average — 2.82
- Low on 04/30/20 — 1.16

US 10 Year Breakeven (R2) 2.29 +.12
- High on 04/30/22 — 2.94
- Average — 2.02
- Low on 12/31/08 — 0.09

US Cleveland Fed 10 Year Inflation Risk Premium 0.46 -.02
- High on 04/30/94 — 0.59
- Average — 0.41
- Low on 03/31/19 — -0.12

ACMTP10 Index (Adrian Crump & Moench 10 Year Treasury Term Premium) 10yr Term Premium+IE Monthly 30JUN1961-29JAN2024

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29-Jan-2024 14:43:44

Nominal Interest Rate = Expected Nominal Rate (trend Real GDP + trend Headline CPI)
+ Nominal Term Premium (Real Term Premium + Inflation Risk Premium).

Appendix: Investing During A Fourth Turning Regime

Headline CPI Tends To Be Relatively Strong And Spike During Fourth Turnings
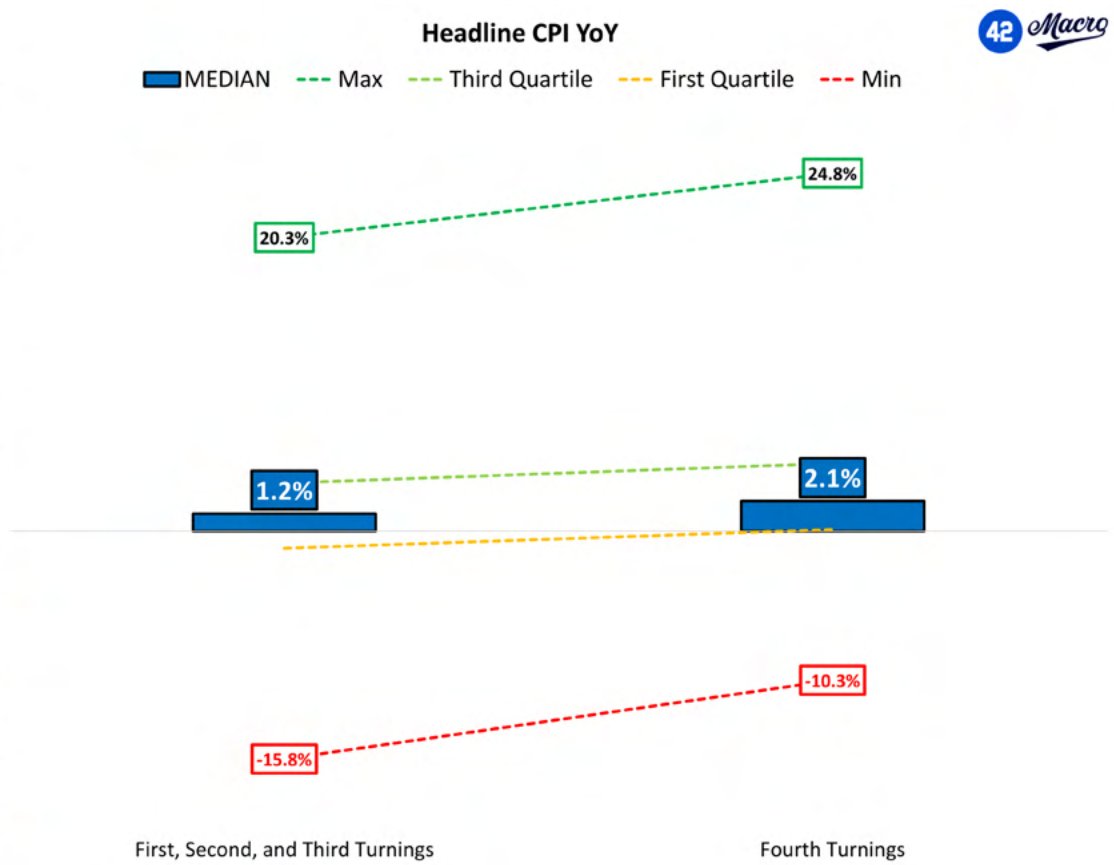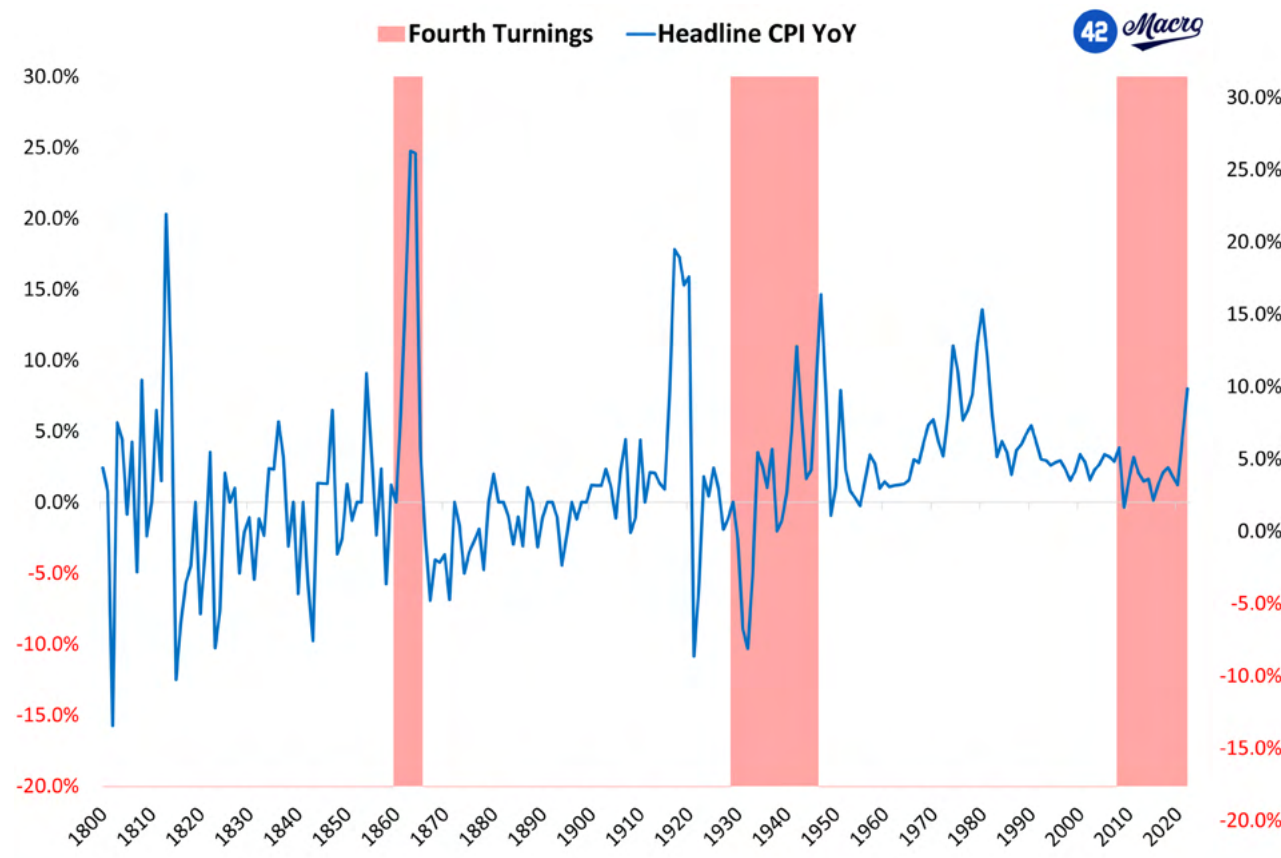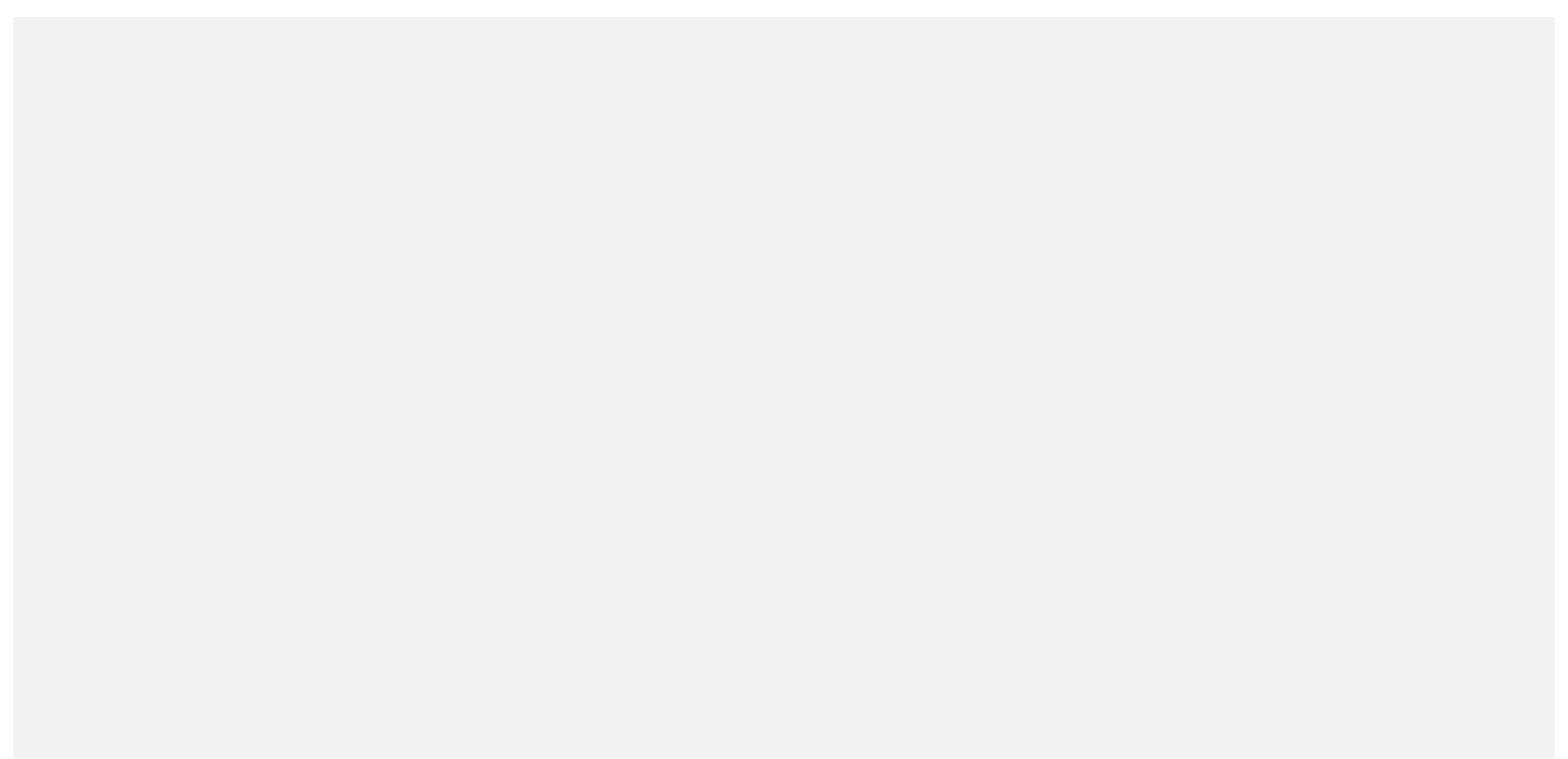
42 Macro Secular Inflation Model: Our Analysis Suggests Core PCE Is Likely To Trend 50-100% Higher Throughout This Decade; 3% Is The New 2%
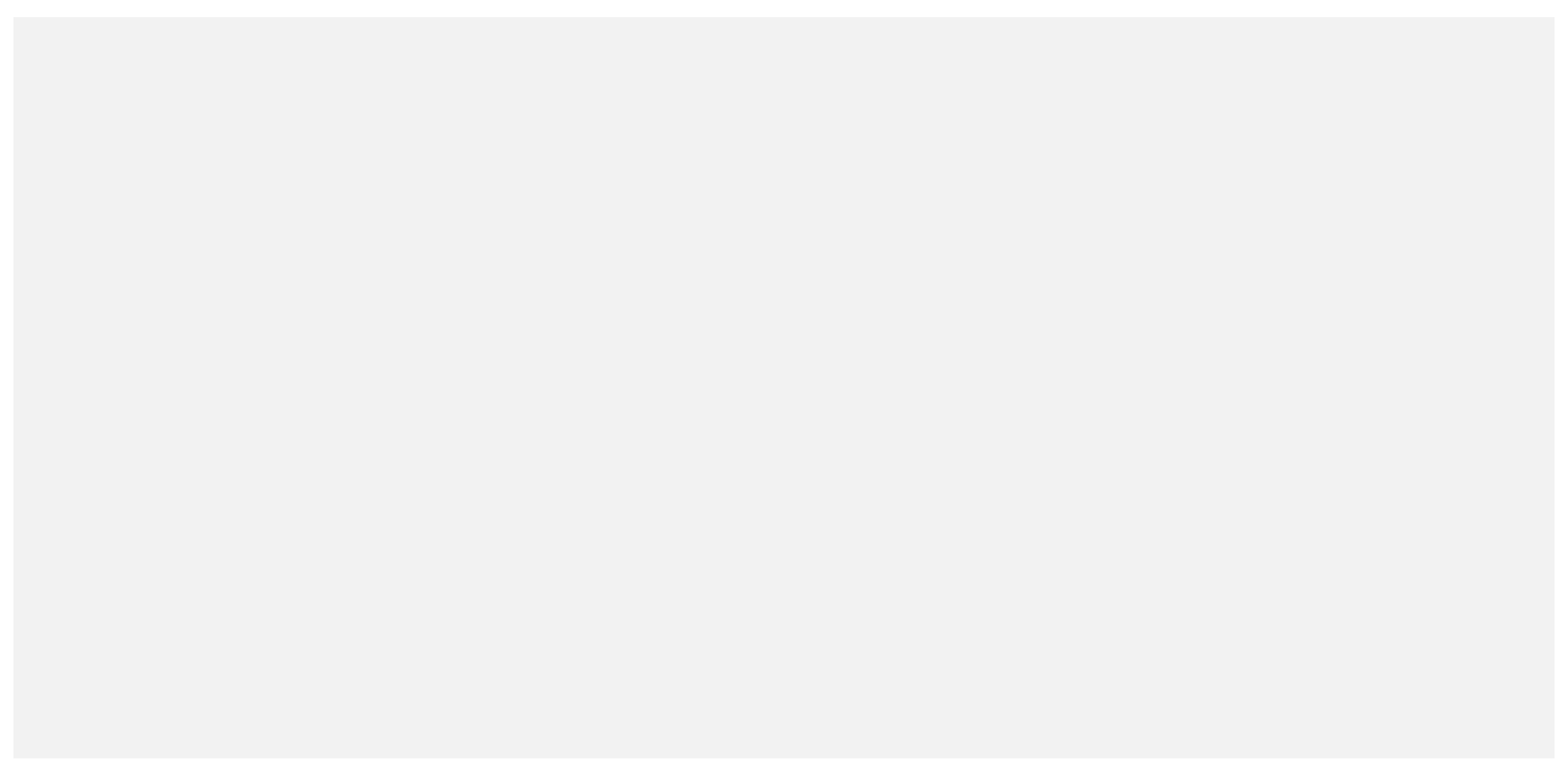
US SECULAR INFLATION MODEL FEATURES	Δ-ADJUSTED Z-SCORE (Latest Value vs. 2010-19 Sample)
Automation: Capex/Employee Compensation (Latest Value = 27%)	(1.1)
Commodities: CRB Index (Latest Value = 521)	1.8
Demographics: Share of Population ≥ 65 Years Old (Latest Value = 17%)	2.2
Fed Reaction Function: Fed Balance Sheet as a % of GDP (Latest Value = 29%)	2.3
Fiscal Policy: Sovereign Fiscal Balance as a % of GDP (Latest Value = -6.5%)	**0.8**
Globalization: Imports of Goods and Services as a % of GDP (Latest Value = 15%)	**1.2**
Household Formation: Net Change in Domestic Households (Latest Value = 1628)	1.8
Income Inequality: Gini Coefficient (Latest Value = 0.49)	(1.9)
Labor Supply: Labor Force Participation Rate (Latest Value = 62.5)	1.2
Money Supply: M2 YoY (Latest Value = -2.3%)	(4.3)
Money Velocity: M2/Nominal GDP (Latest Value = 1.3)	(2.0)
Monopsony Power: S&P 100 Market Cap/S&P 500 Market Cap (Latest Value = 68%)	(5.7)
Populism: 25-54 Employment-to-Population Ratio (Latest Value = 80%)	(1.5)
Productivity: Output Per Hour of Nonfarm Labor YoY (Latest Value = 2.4%)	**(1.1)**
Public Debt: Federal Debt Held by the Public as a % of GDP (Latest Value = 107%)	6.0
Technology: NASDAQ 100 Market Cap/Russell 3000 Market Cap (Latest Value = 42%)	(4.7)
Wages: Employment Cost Index YoY (Latest Value = 4.3%)	**5.8**
Wealth Effect: Household Checkable Deposits as a % of Total Assets (Latest Value = 2%)	**9.6**
Wealth Inequality: Top-10% Share of Household Wealth (Latest Value = 49%)	4.5
Mean Z-Score	0.8
Weighted Z-Score	2.1
2010-19 Trend of Core PCE YoY	1.6%
2020-29 Trend Projection: Mean Z-Score Model	2.6%
2020-29 Trend Projection: Weighted Z-Score Model	3.0%
2020-to-date Trend of Core PCE YoY	3.6%

The 42 Macro Secular Inflation Model interpolates the normalized change of key indicators upon the underlying trend of Core PCE inflation on a raw and weighted basis. **Bold** font = highest weighted features.
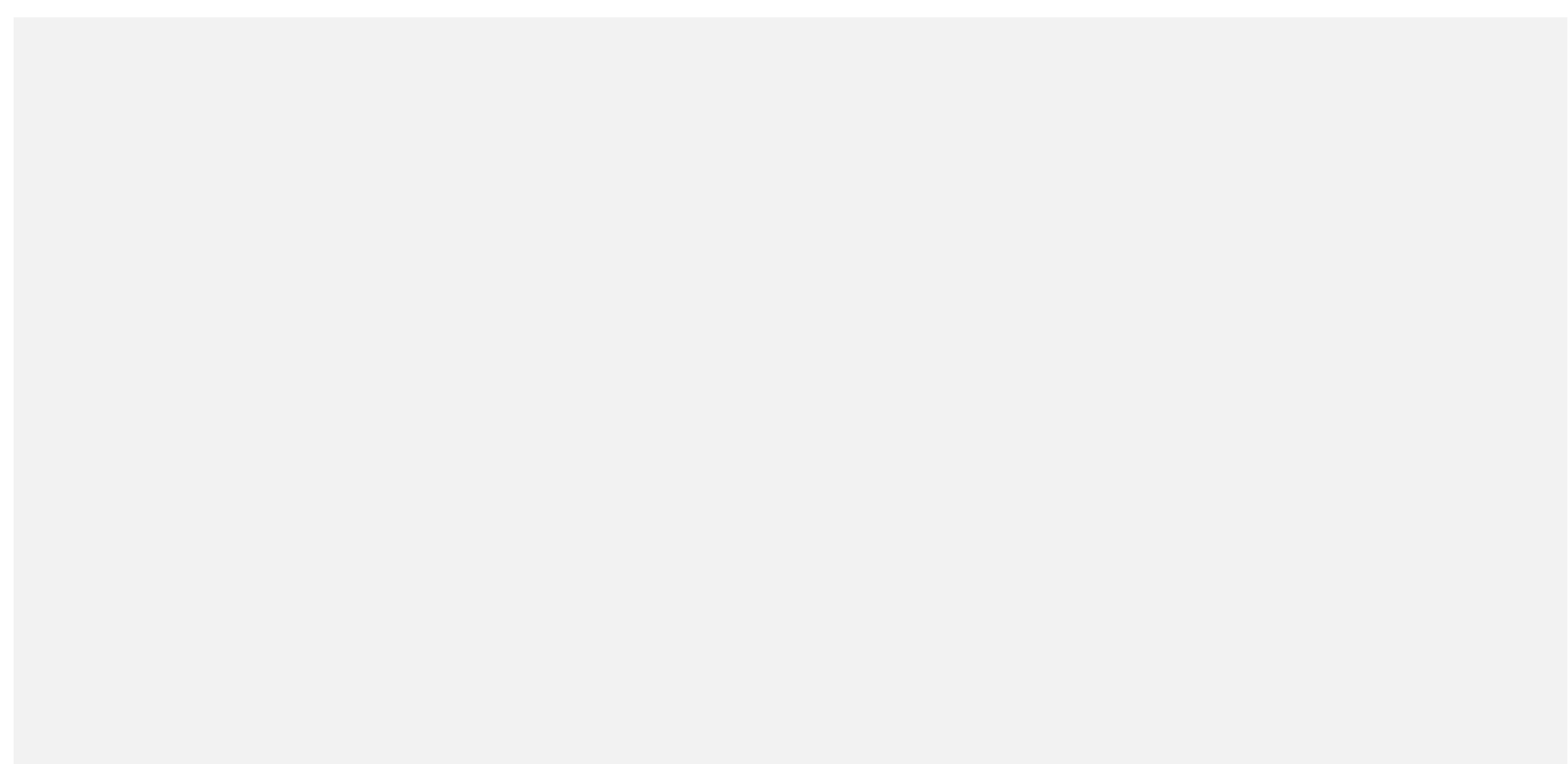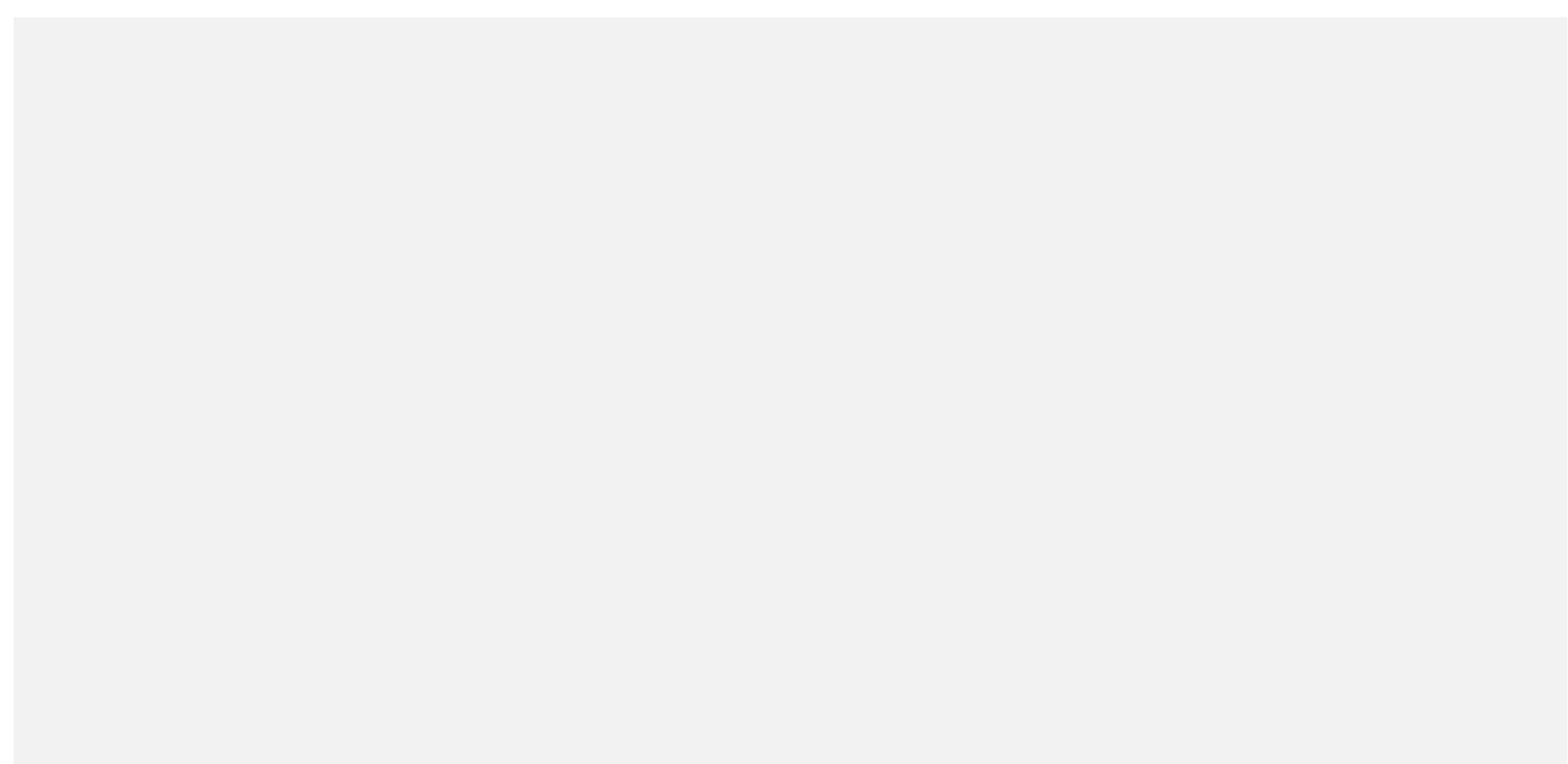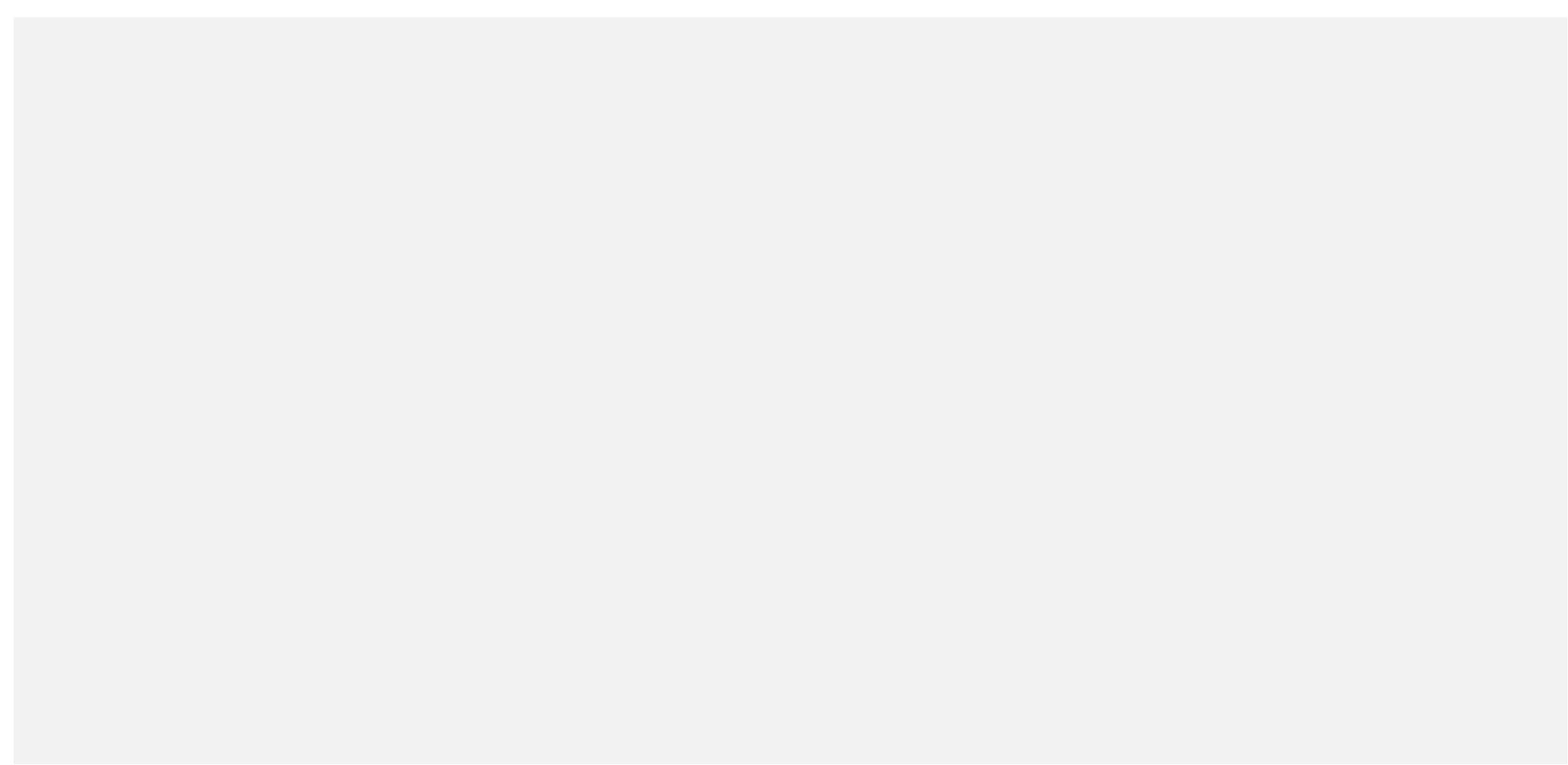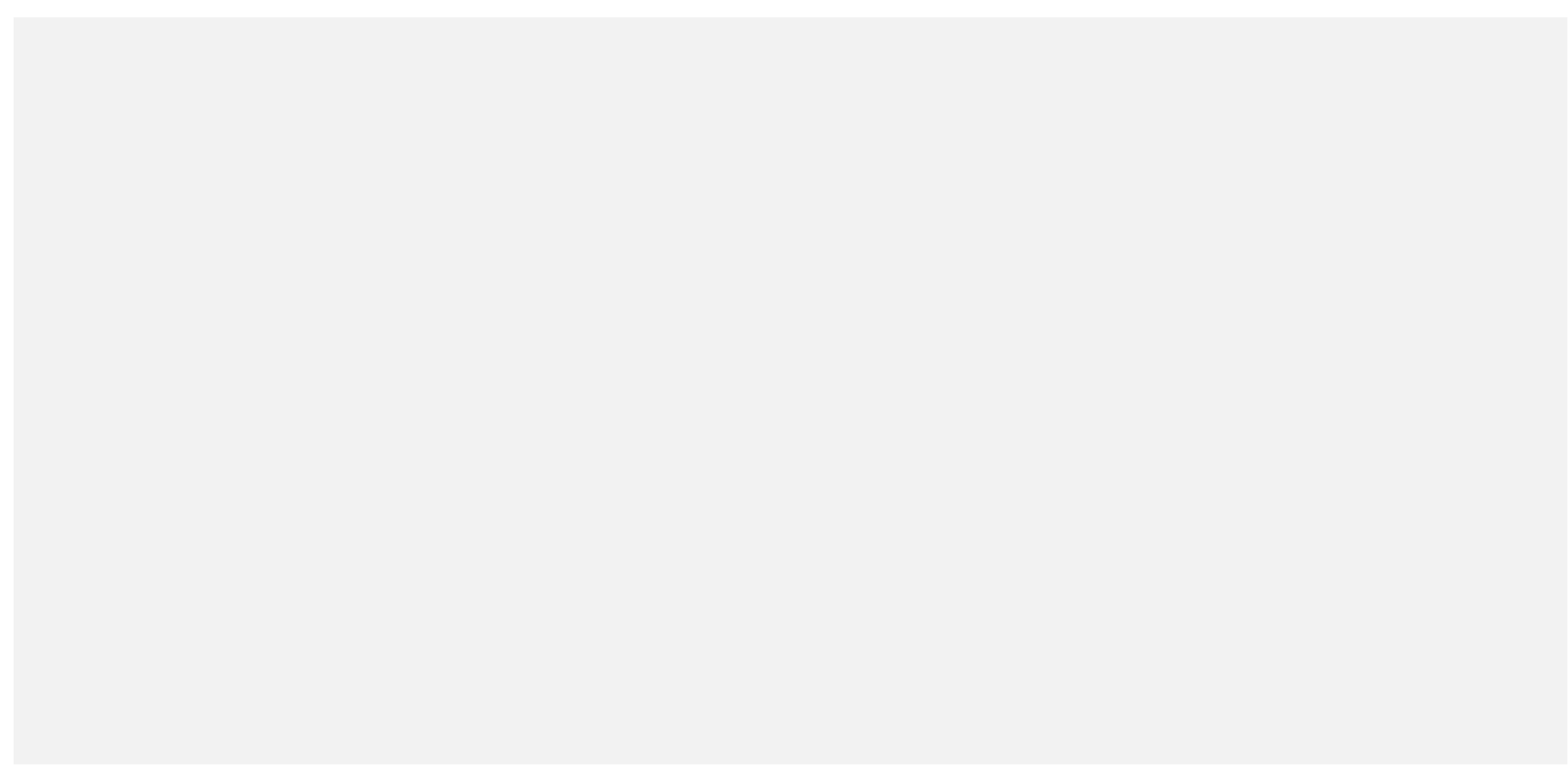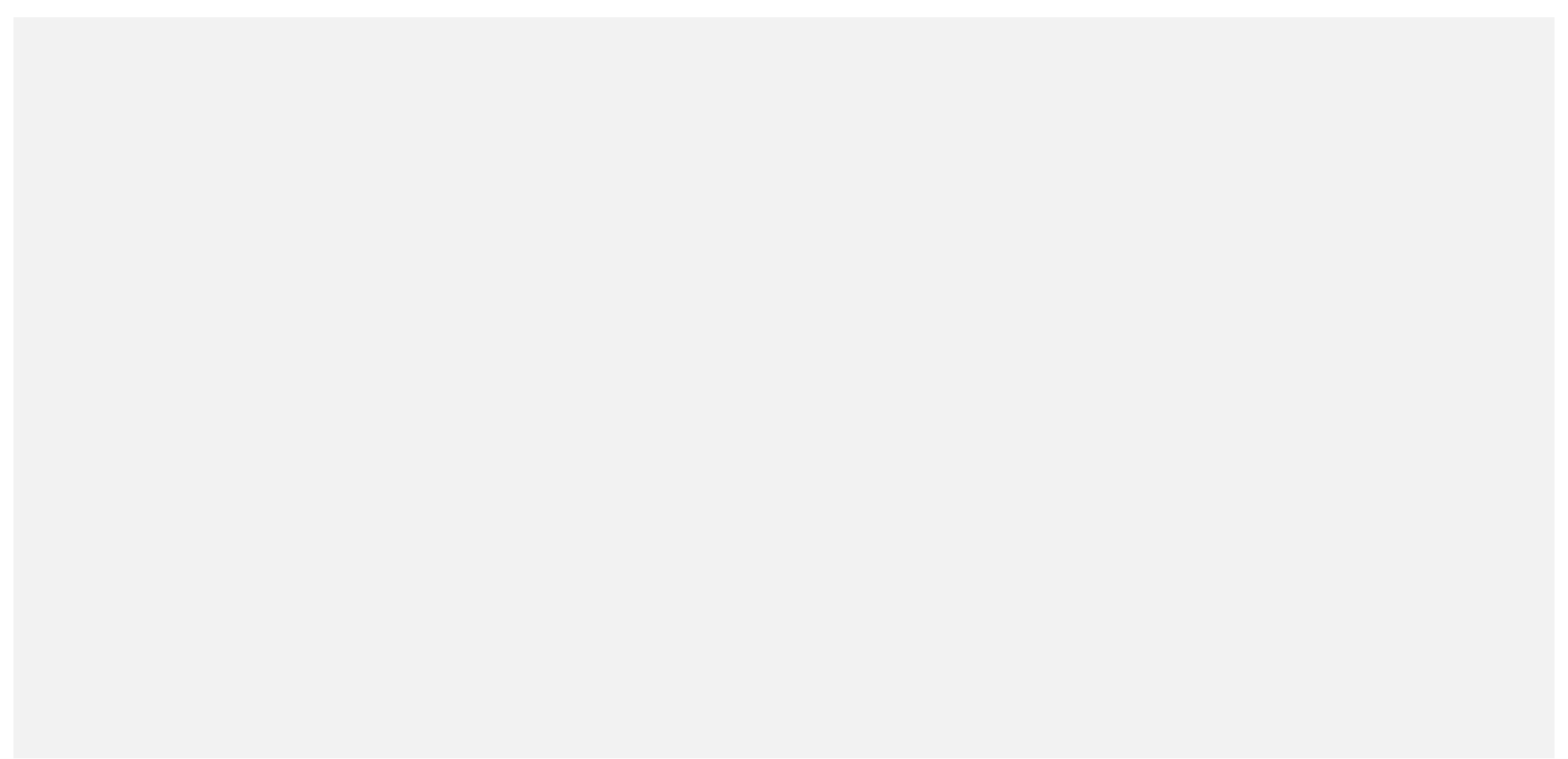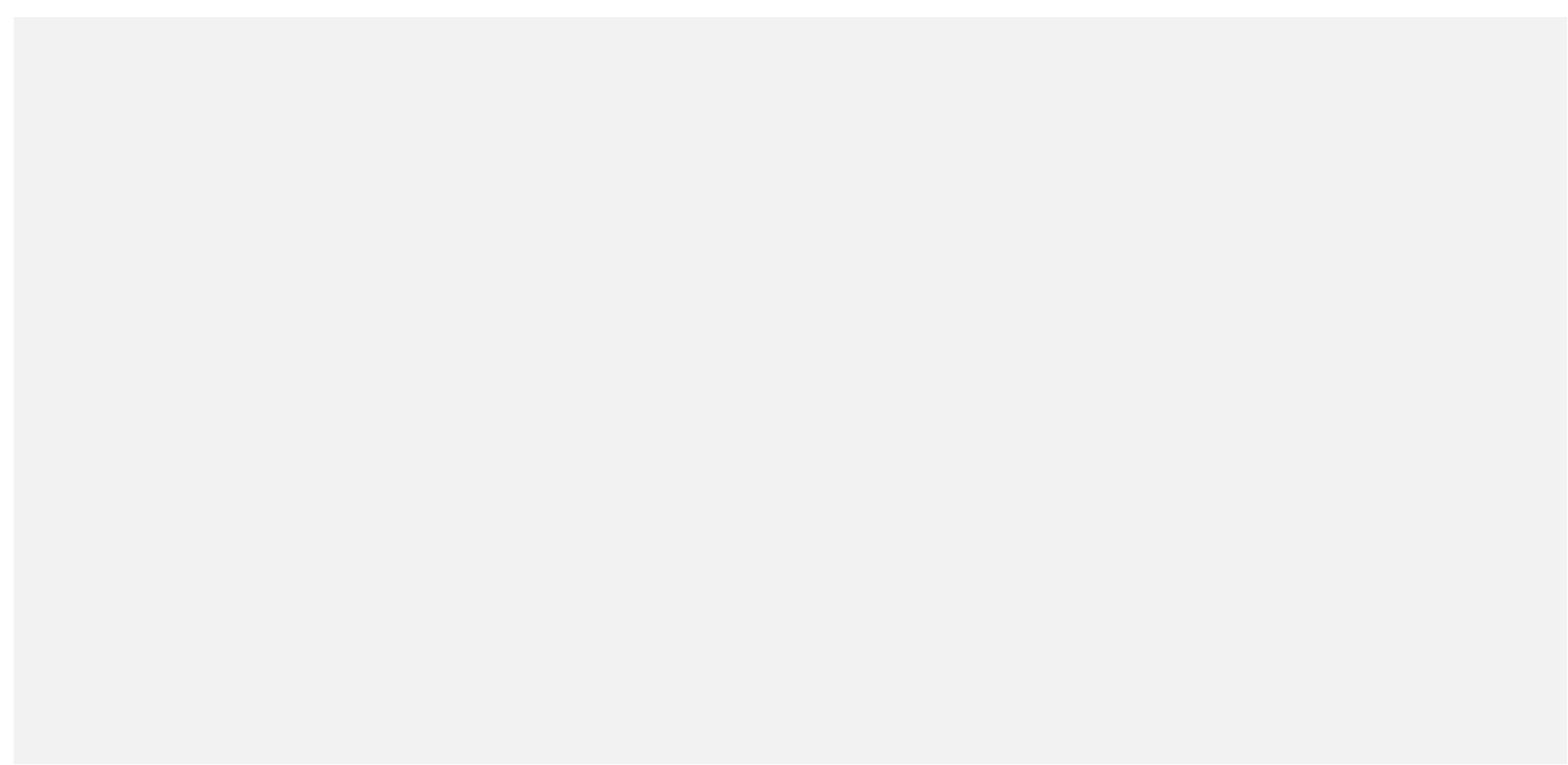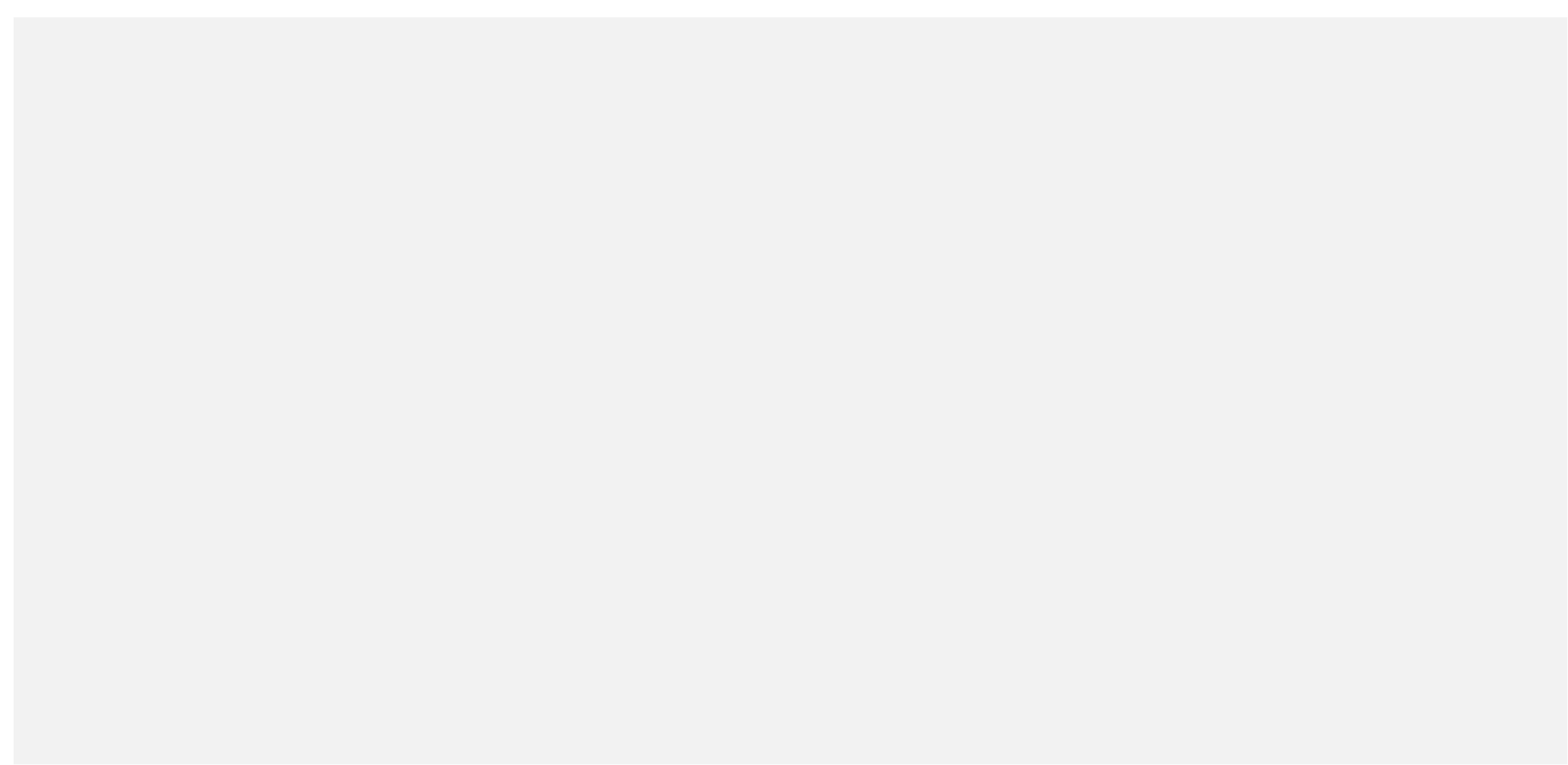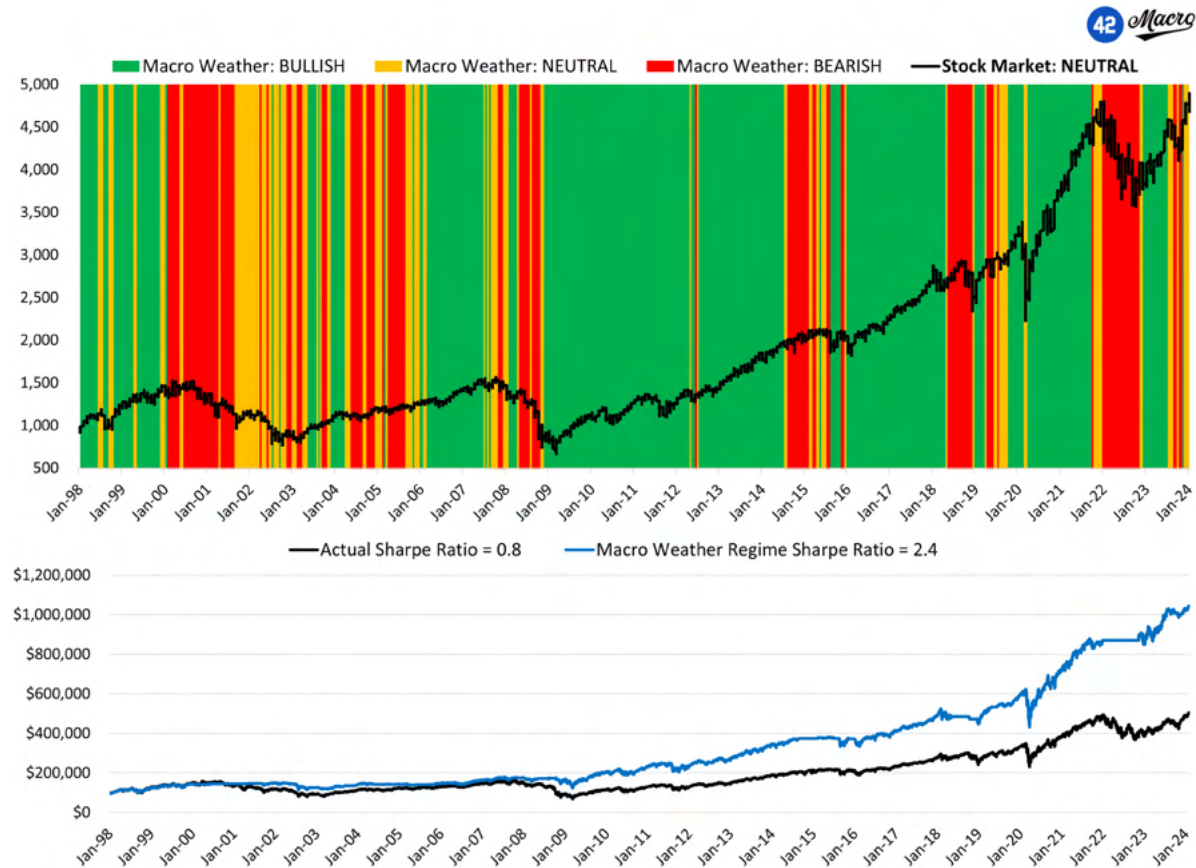
Appendix: Macro Weather Model Component Features

We Use Our Macro Weather Model (And Fundamental Research) To Determine How Long The Current Top-Down Market Regime Is Likely To Persist
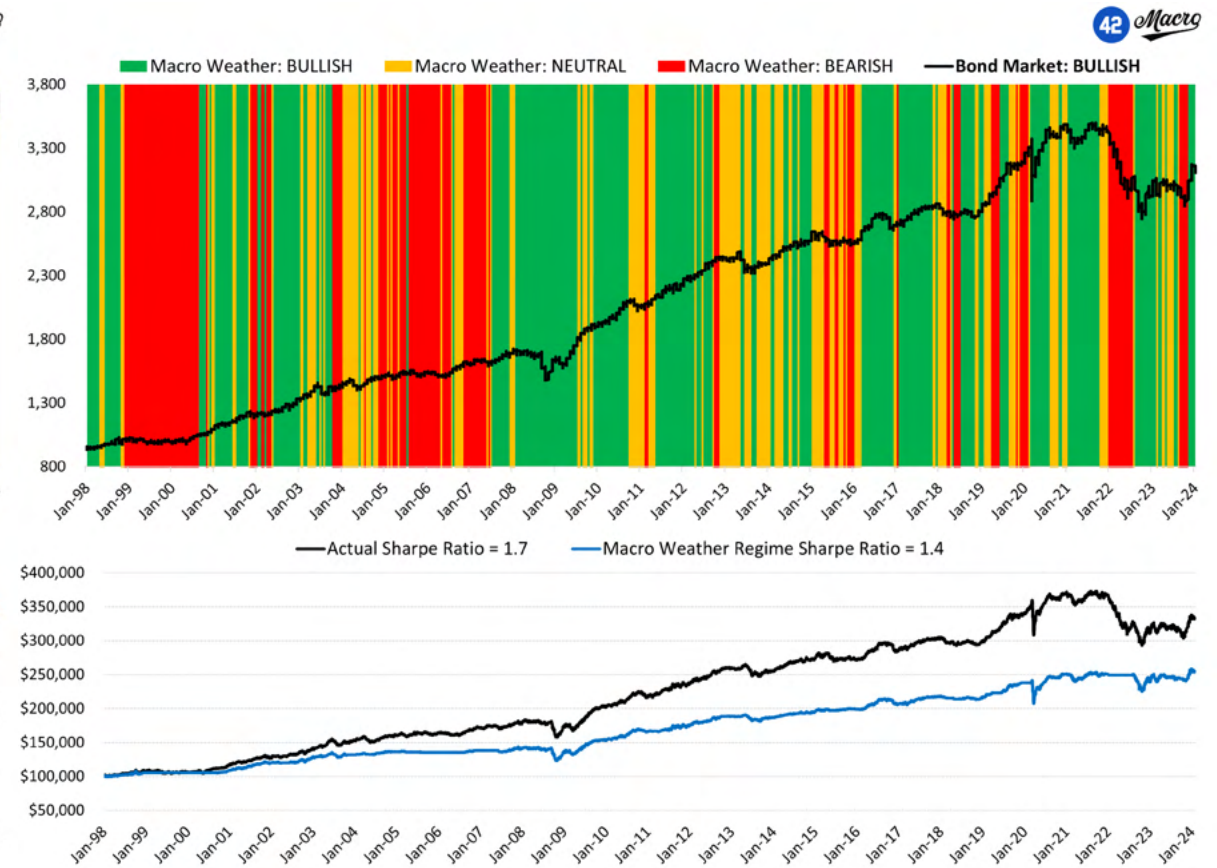
Ten Principal Components of Macro: Real Economy Cycles

Growth	Previous Value	Latest Value	Previous Signal	Latest Signal
OECD Composite Leading Indicator	99.6	99.7	⬆	⬆
Consensus NTM Real GDP Δ	-190bps	-190bps	⬇	⬇

Inflation	Previous Value	Latest Value	Previous Signal	Latest Signal
Headline CPI YoY	3.1%	3.4%	⬇	⬇
Consensus NTM Headline CPI Δ	-60bps	-110bps	⬇	⬇

Employment	Previous Value	Latest Value	Previous Signal	Latest Signal
Unemployment Rate	3.7%	3.7%	⬆	⬆
Consensus NTM Unemployment Rate Δ	50bps	50bps	⬆	⬆

Corporate Profits	Previous Value	Latest Value	Previous Signal	Latest Signal
Consensus NTM/TTM S&P 500 Sales Growth Rate	3.4%	3.4%	⬇	⬇
Consensus NTM/TTM S&P 500 EPS Growth Rate	-4.0%	-4.0%	⬆	⬆

Fiscal Policy	Previous Value	Latest Value	Previous Signal	Latest Signal
Sovereign Fiscal Balance/Nominal GDP Ratio	-6.3%	-6.5%	⬇	⬆
USD Real Effective Exchange Rate	108.4	106.6	⬆	⬆

United States 1/29/2024

Asset	3-Month Outlook
Stock Market	🟡
Bond Market	🟢
US Dollar	🟡
Commodities	🟡
Bitcoin	🟢

Ten Principal Components of Macro: Financial Economy Cycles

Latest Signal	Previous Signal	Latest Value	Previous Value	Liquidity
⬆	⬆	$6,276	$6,289	42 Macro Net Liquidity $bn
⬆	⬆	$132,643	$132,699	42 Macro Global Liquidity Proxy $bn

Latest Signal	Previous Signal	Latest Value	Previous Value	Credit
⬇	⬇	-2.3%	-0.9%	Domestic Broad Money Supply YoY
⬇	⬇	2.7%	5.1%	Global PPP-Weighted Broad Money Supply YoY

Latest Signal	Previous Signal	Latest Value	Previous Value	Interest Rates
➡	➡	5.50%	5.50%	Benchmark Policy Rate
⬇	⬇	-115bps	-115bps	2yr Nominal Yield-Benchmark Policy Rate Spread

Latest Signal	Previous Signal	Latest Value	Previous Value	Fear
⚠	⚠	-13%	-16%	Aggregated US Dollar Positioning
❌	❌	-20%	-20%	Aggregated US Treasurys Positioning

Latest Signal	Previous Signal	Latest Value	Previous Value	Greed
❌	❌	-0%	-1%	Aggregated Commodities Positioning
⚠	⚠	-4%	-3%	Aggregated US Equities Positioning

GRID Regime: GOLDILOCKS

Conviction: MEDIUM

Weather Model Composite Signal: Stock Market

Weather Model Composite Signal: Bond Market

Weather Model Composite Signal: US Dollar
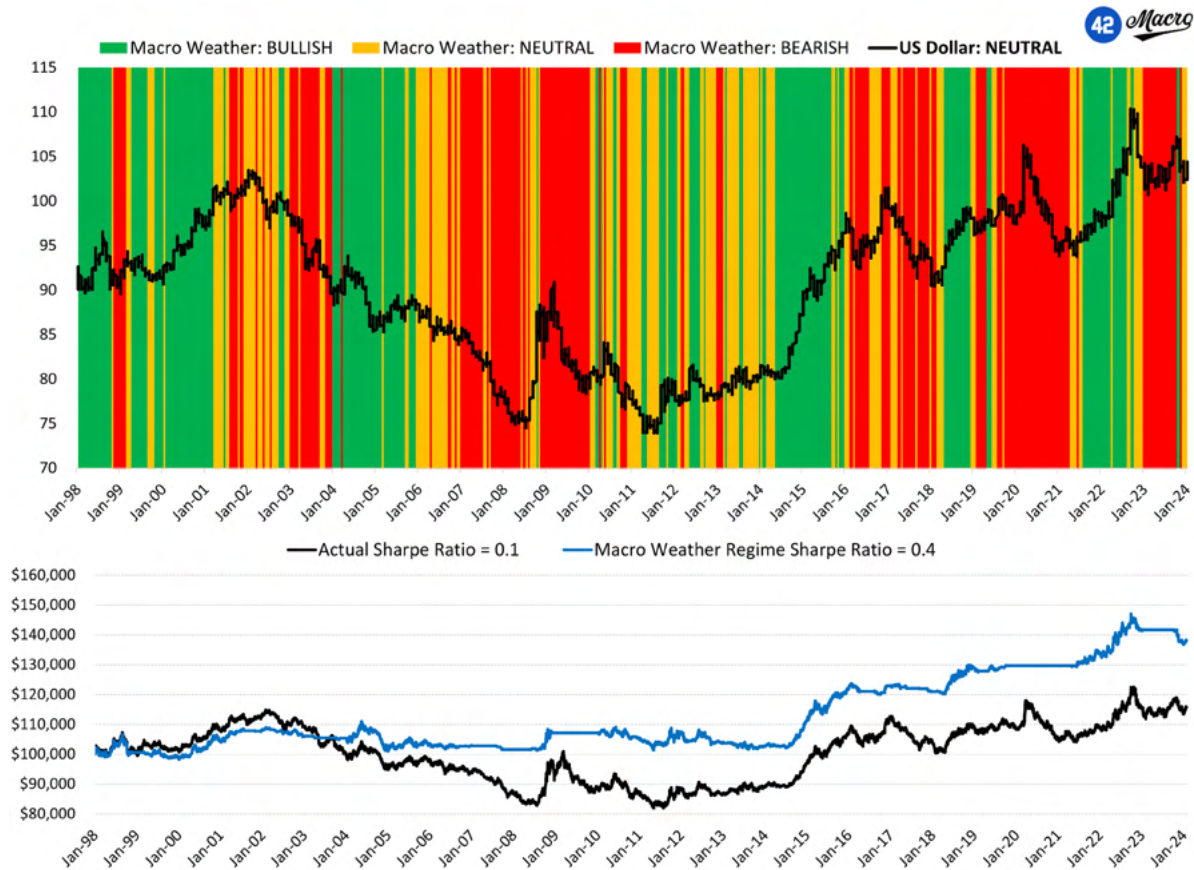
Weather Model Composite Signal: Commodities
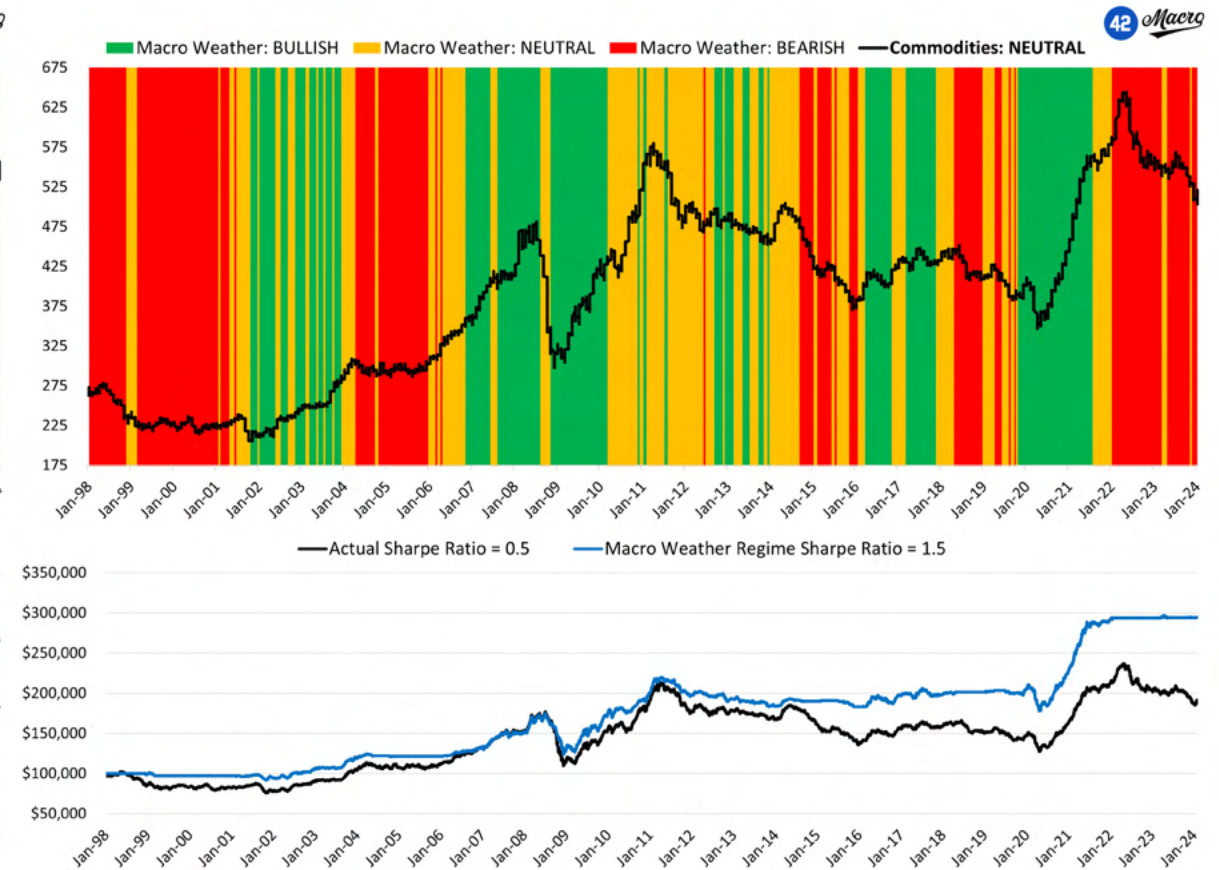
102

Weather Model Composite Signal:
Bitcoin
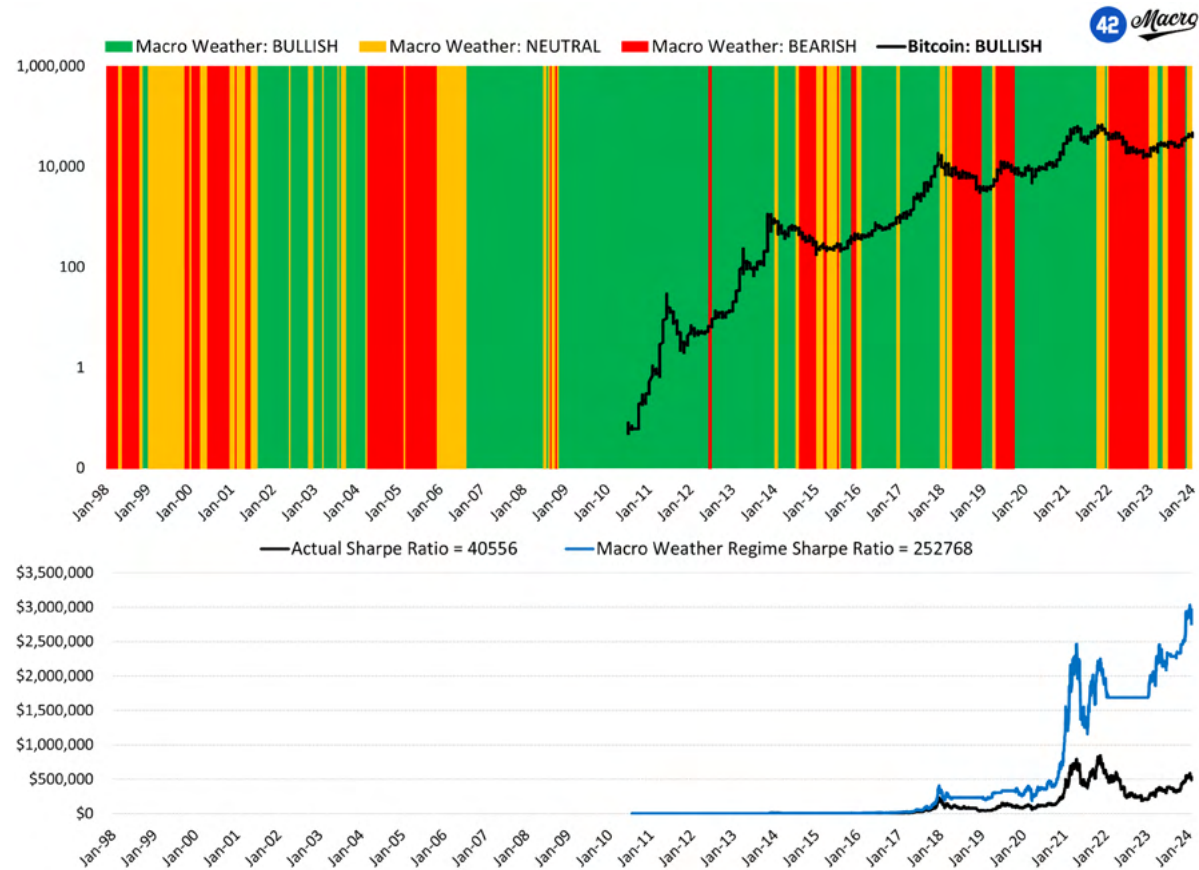
Growth: OECD Composite Leading Indicator   Growth: Consensus NTM Real GDP Δ
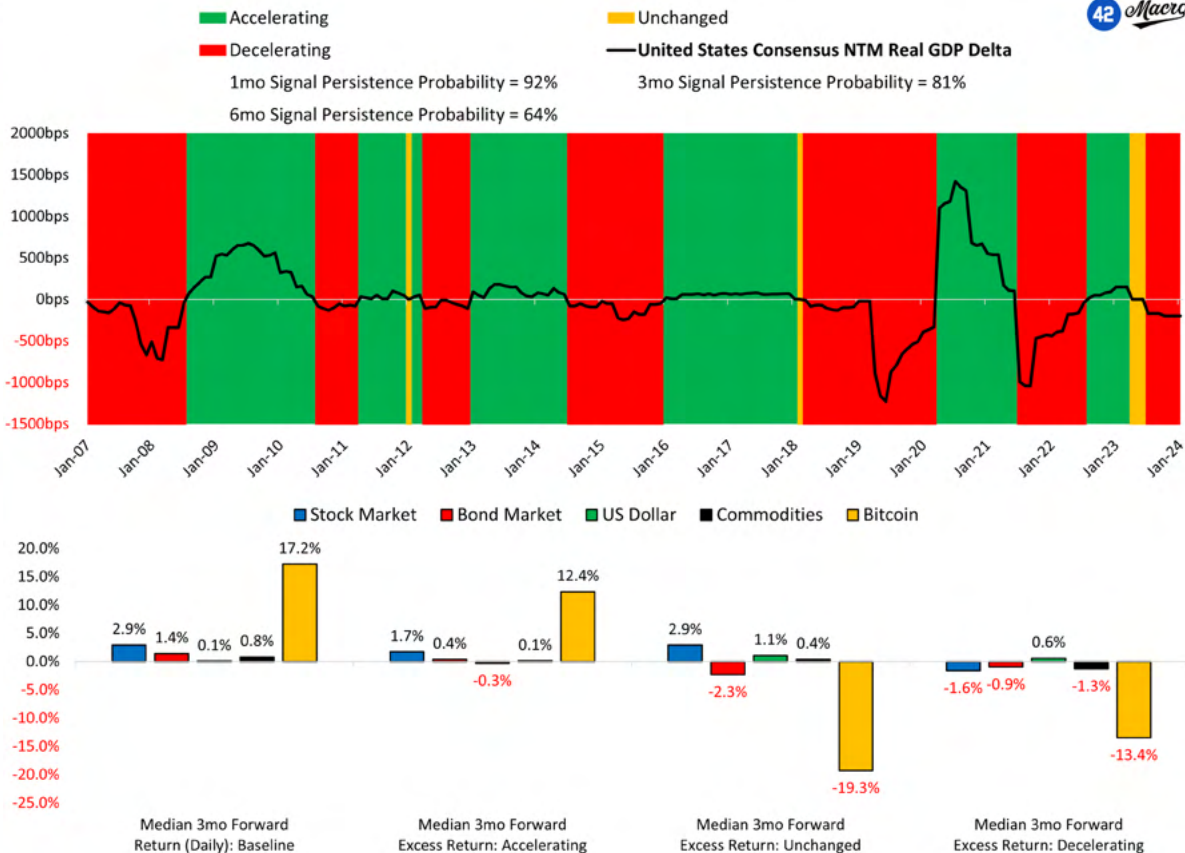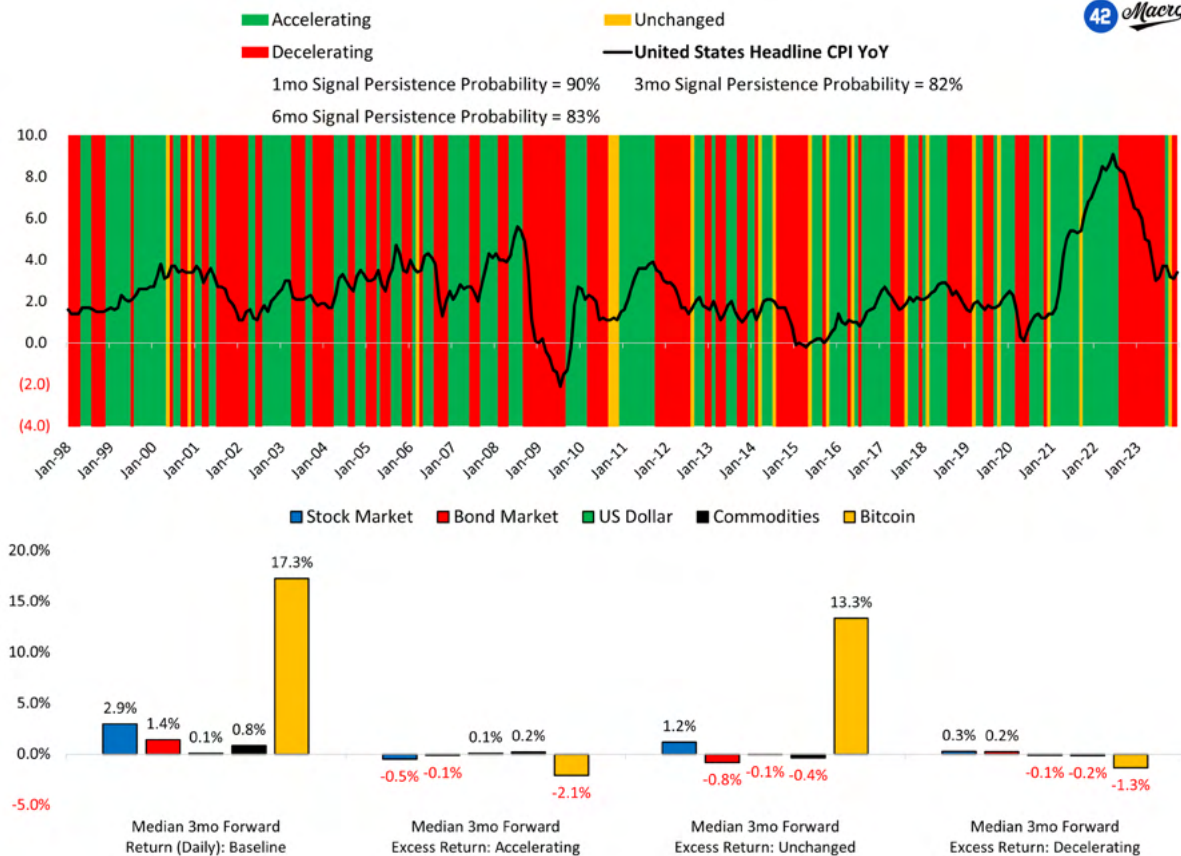
Inflation: Headline CPI YoY
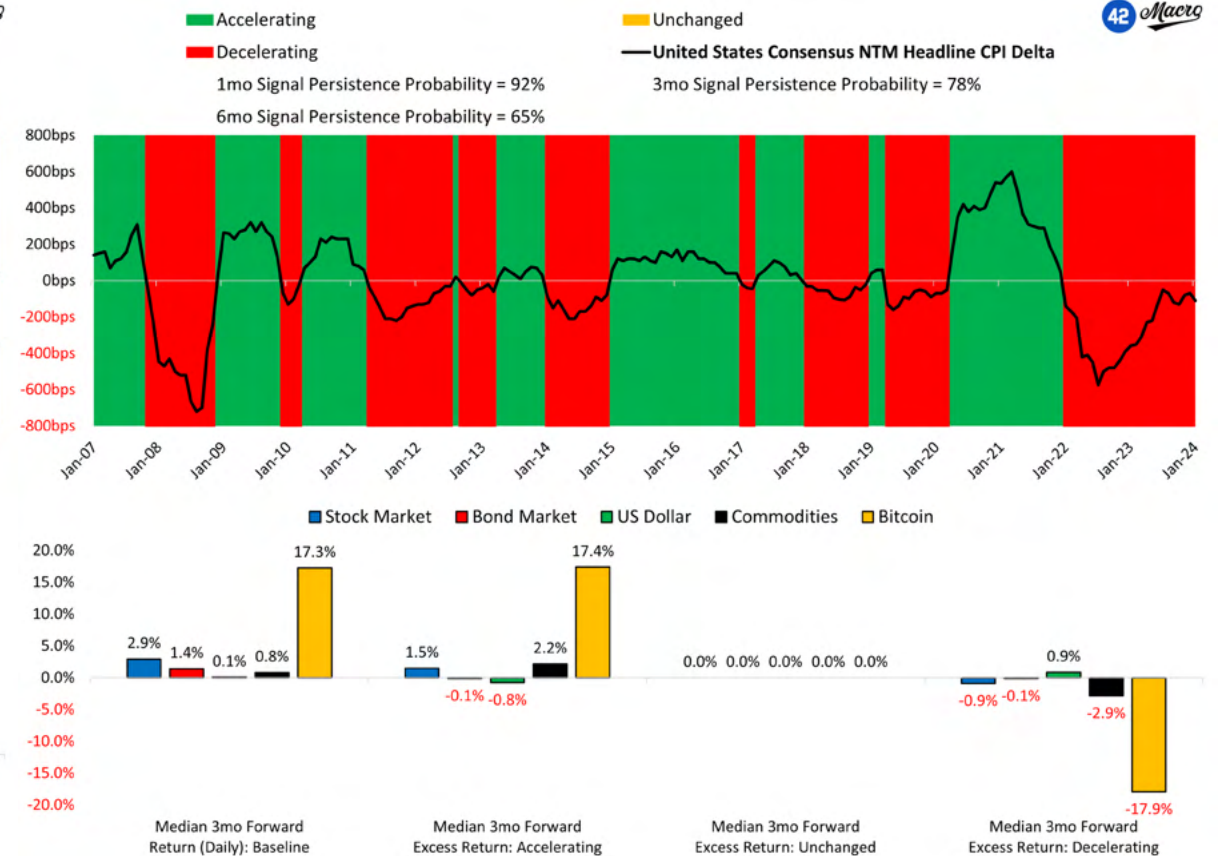
Inflation: Consensus NTM Headline CPI Δ

© 42 Macro LLC. Data Source: Bloomberg. The 42 Macro Weather Model works by segmenting each feature into distinct regimes and conducting rolling out-of-sample backtests on indiscrete periods to quantify dispersion across regimes, for each liquid asset class. The excess return dispersion projected by these independent out-of-sample backtests contribute independently to each independent Composite Signal.

Employment: Unemployment Rate

Employment: Consensus NTM Unemployment Rate Δ

© 42 Macro LLC. Data Source: Bloomberg. The 42 Macro Weather Model works by segmenting each feature into distinct regimes and conducting rolling out-of-sample backtests on indiscrete periods to quantify dispersion across regimes, for each liquid asset class. The excess return dispersion projected by these independent out-of-sample backtests contribute independently to each independent Composite Signal.
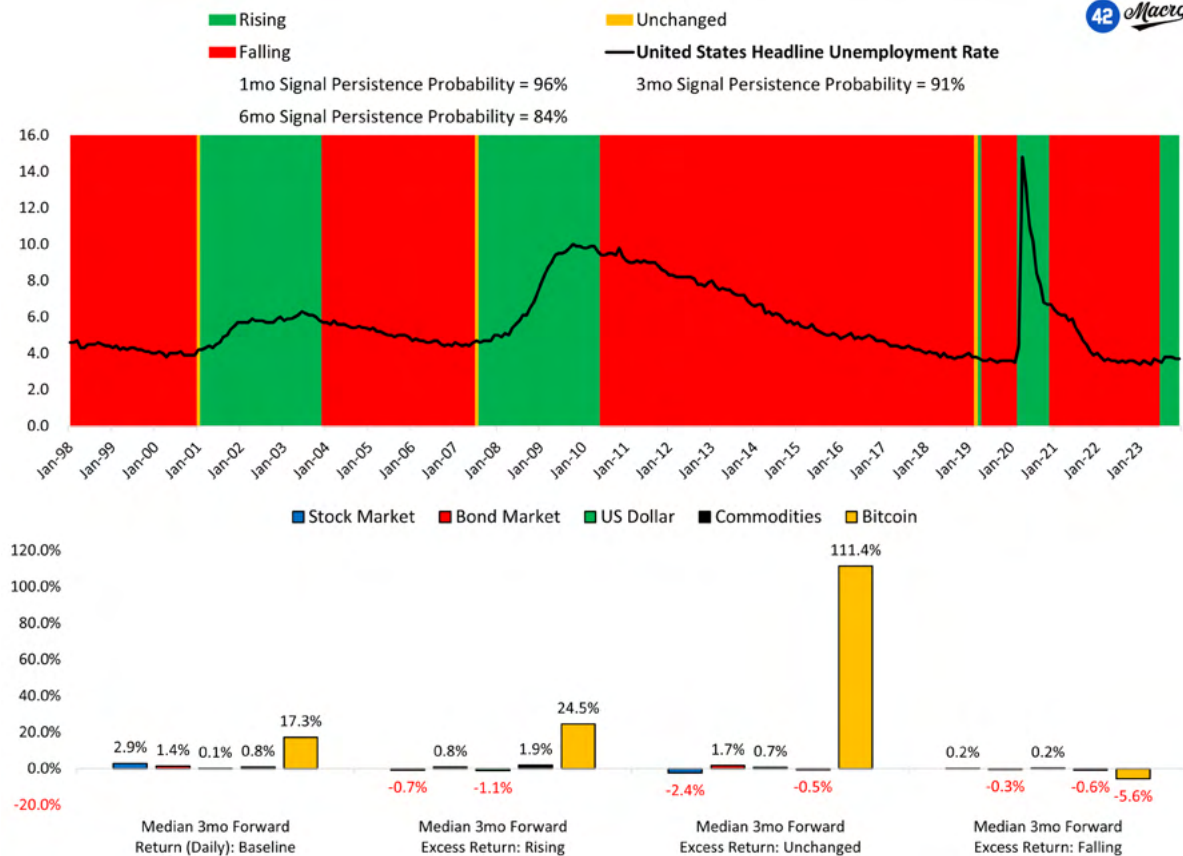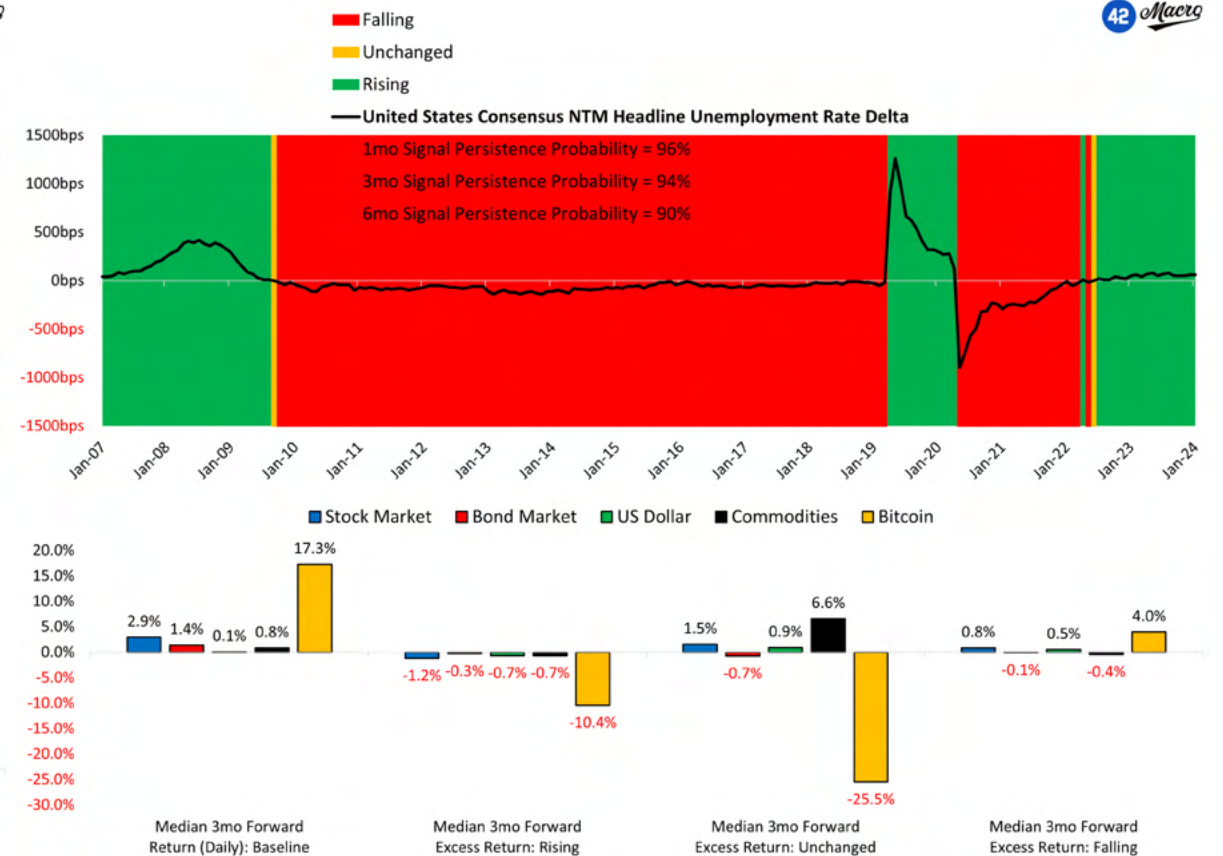
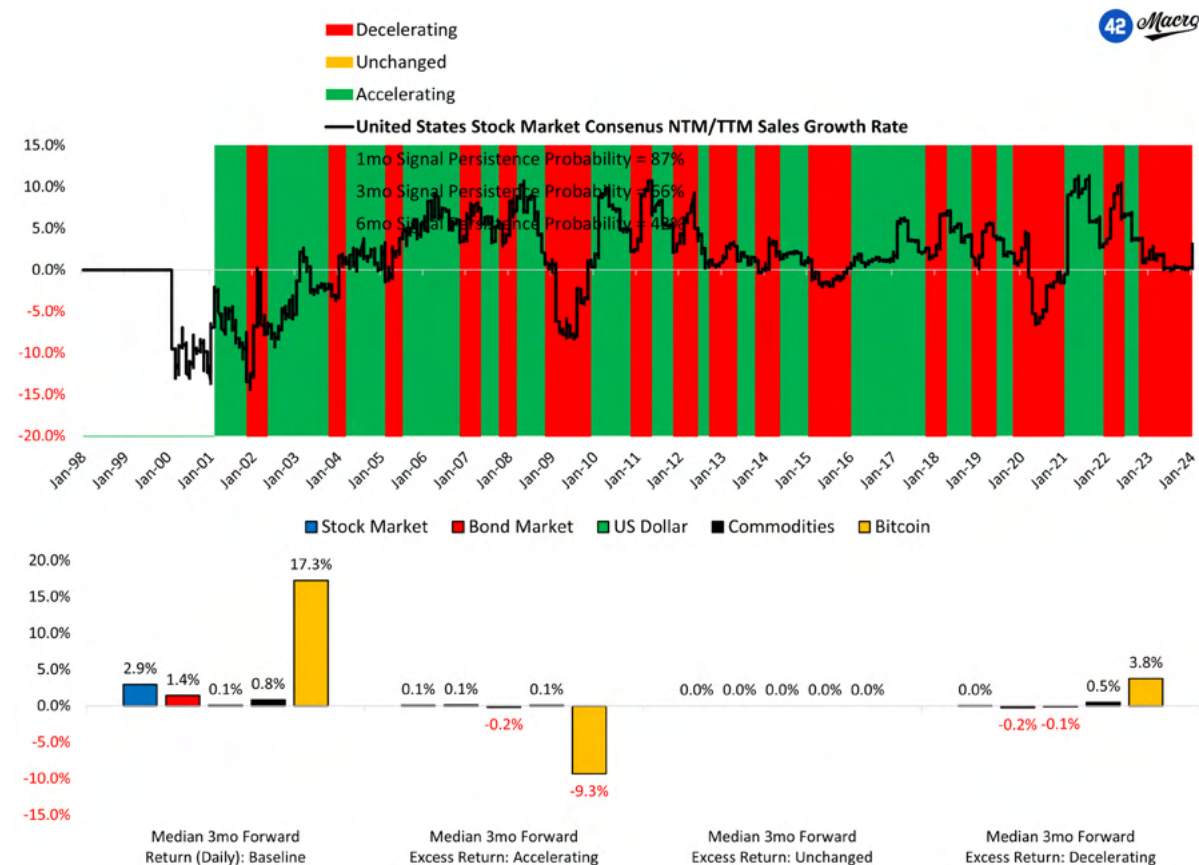# Corporate Profits: Consensus NTM/TTM S&P 500 Sales Growth Rate

Corporate Profits: Consensus NTM/TTM S&P 500 EPS Growth Rate

Fiscal Policy: Sovereign Fiscal Balance/Nominal GDP Ratio
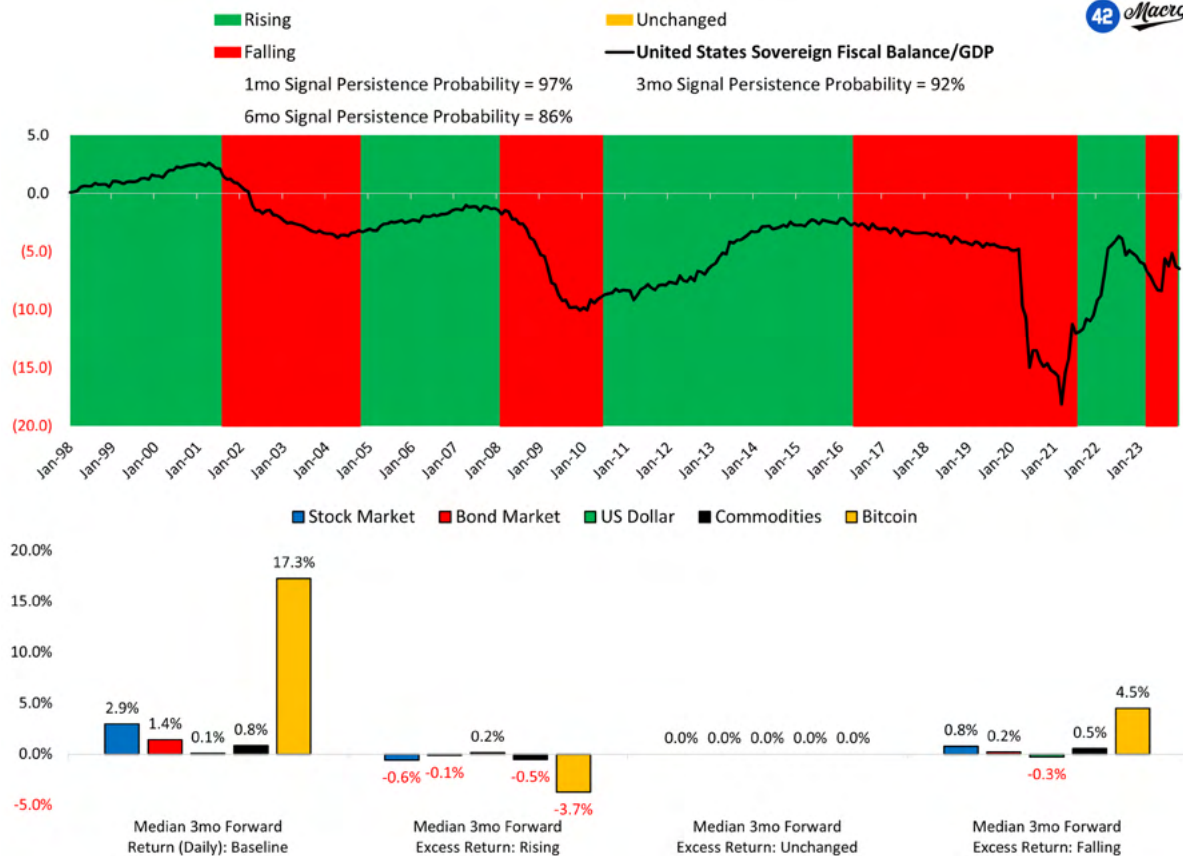
Fiscal Policy: USD Real Effective Exchange Rate

Liquidity: 42 Macro Net Liquidity
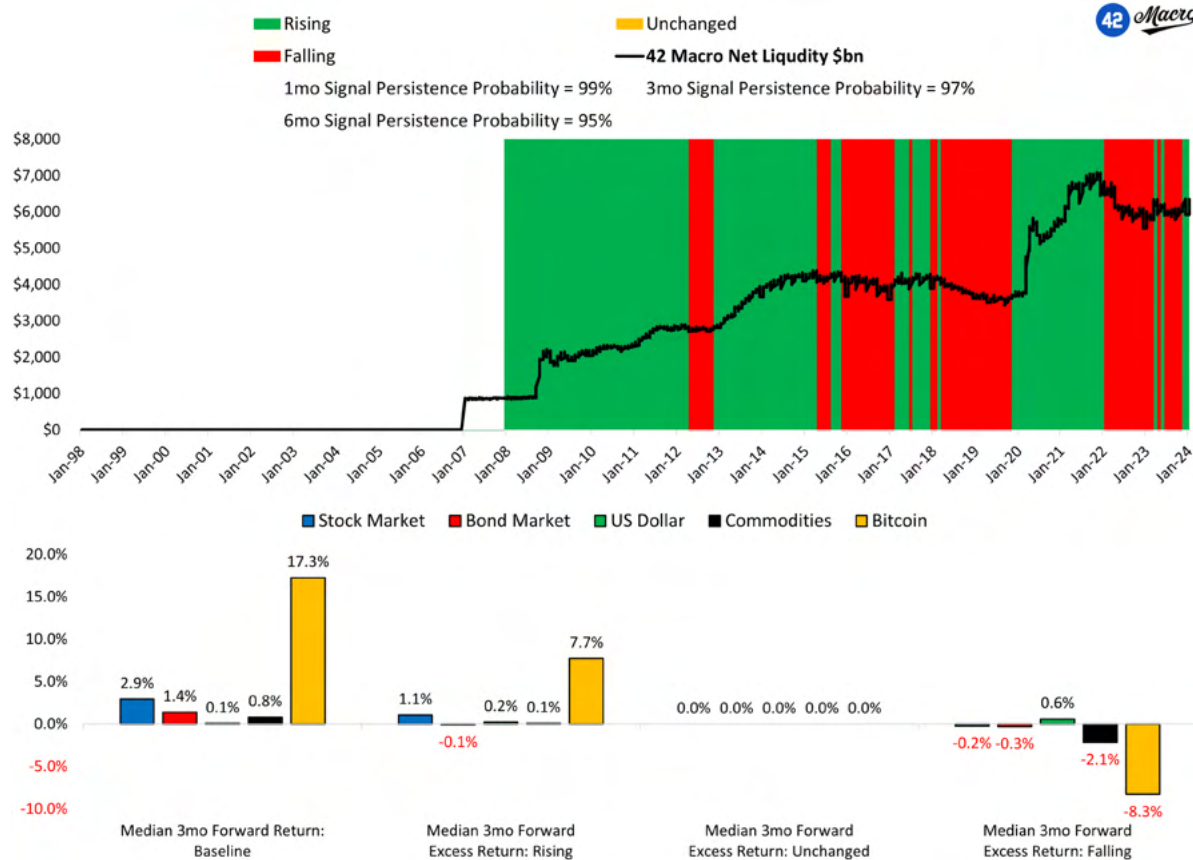
Liquidity: 42 Macro Global Liquidity Proxy
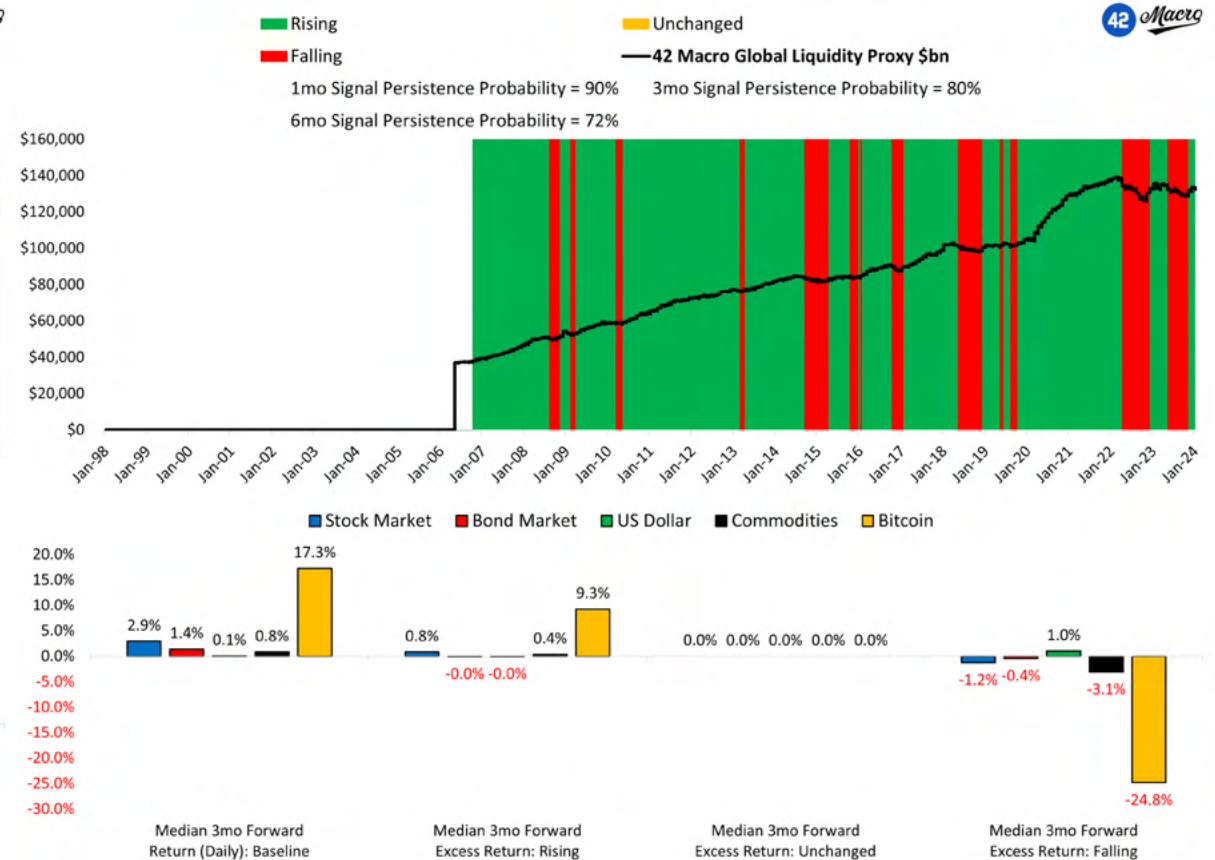
Money: Domestic Broad Money Supply YoY

Money: Global PPP-Weighted Broad Money Supply YoY

Interest Rates: Benchmark Policy Rate
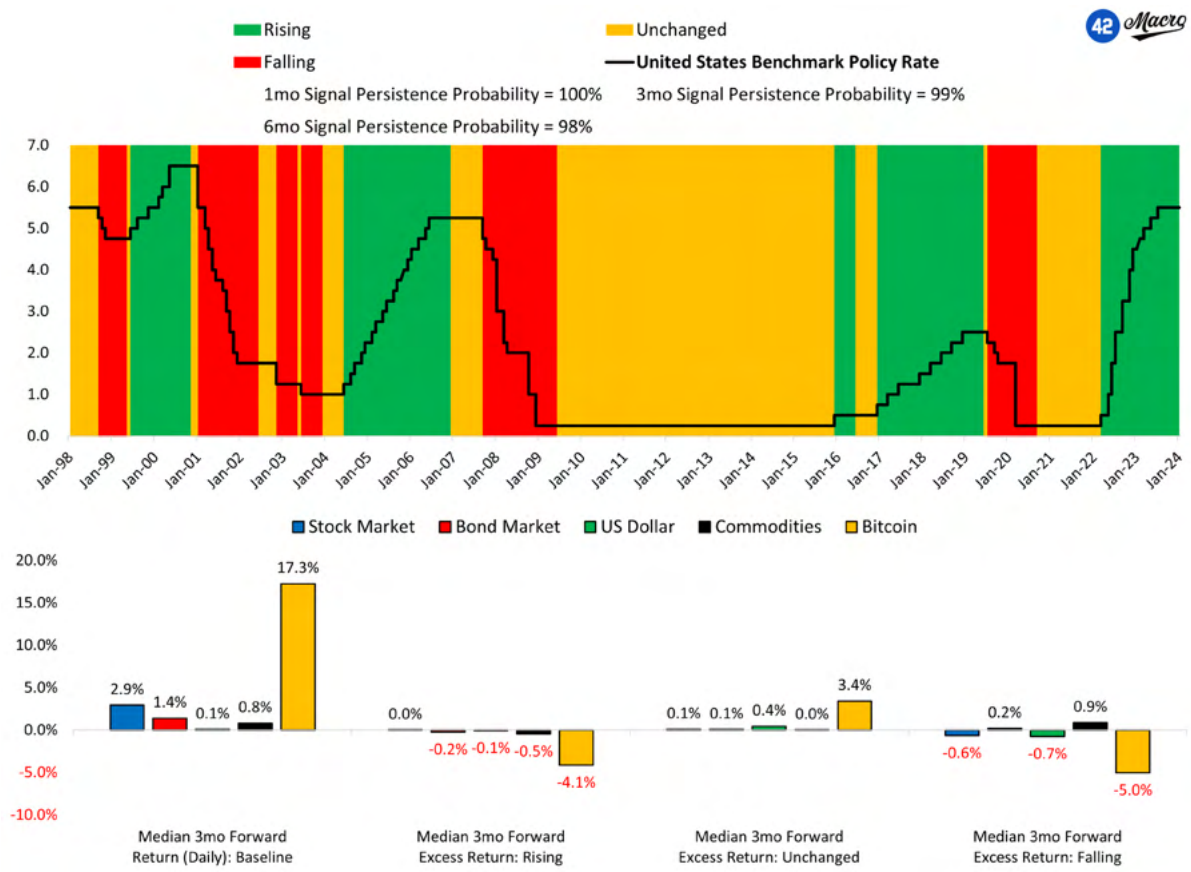
Interest Rates: 2yr Nominal Yield - Benchmark Policy Rate Spread

Fear: Aggregated US Dollar Positioning

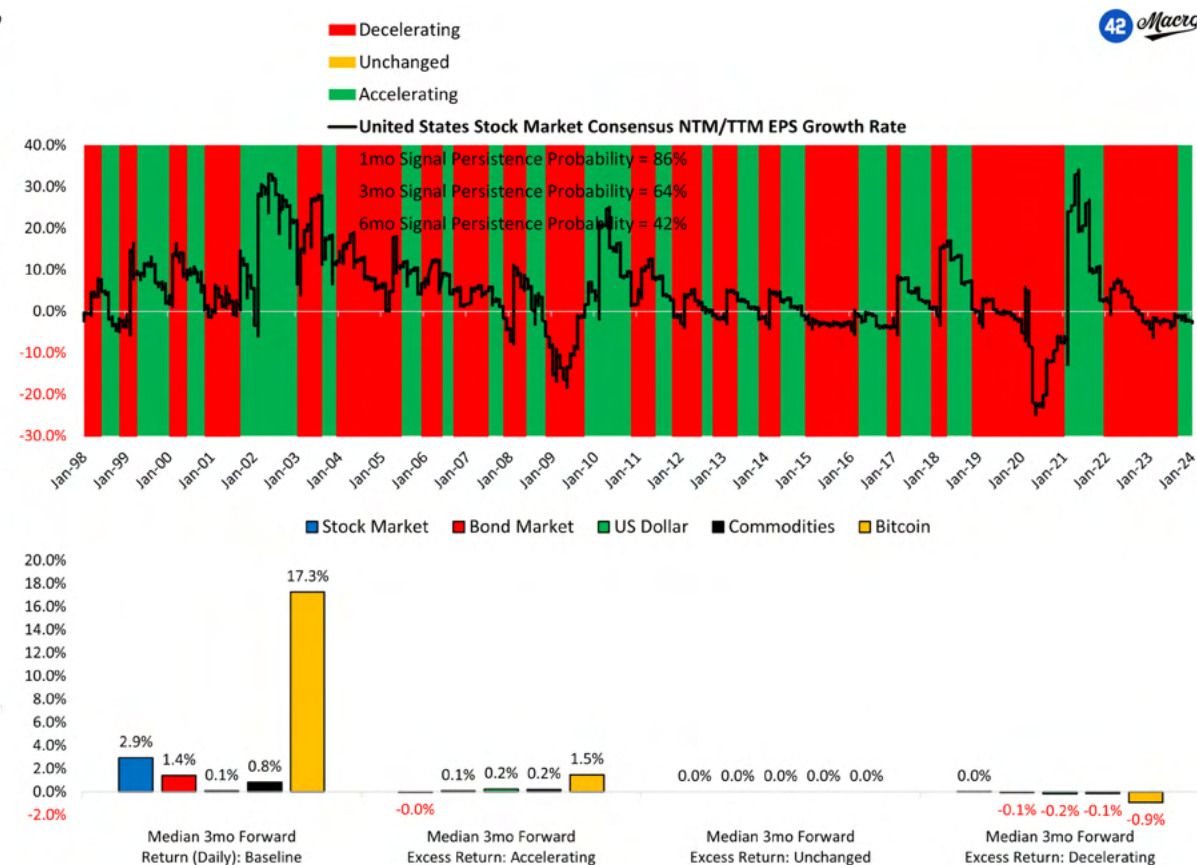# Fear: Aggregated US Treasurys Positioning

© 42 Macro LLC. Data Source: Bloomberg. The 42 Macro Weather Model works by segmenting each feature into distinct regimes and conducting rolling out-of-sample backtests on indiscrete periods to quantify dispersion across regimes, for each liquid asset class. The excess return dispersion projected by these independent out-of-sample backtests contribute independently to each independent Composite Signal.

Greed: Aggregated Commodities Positioning
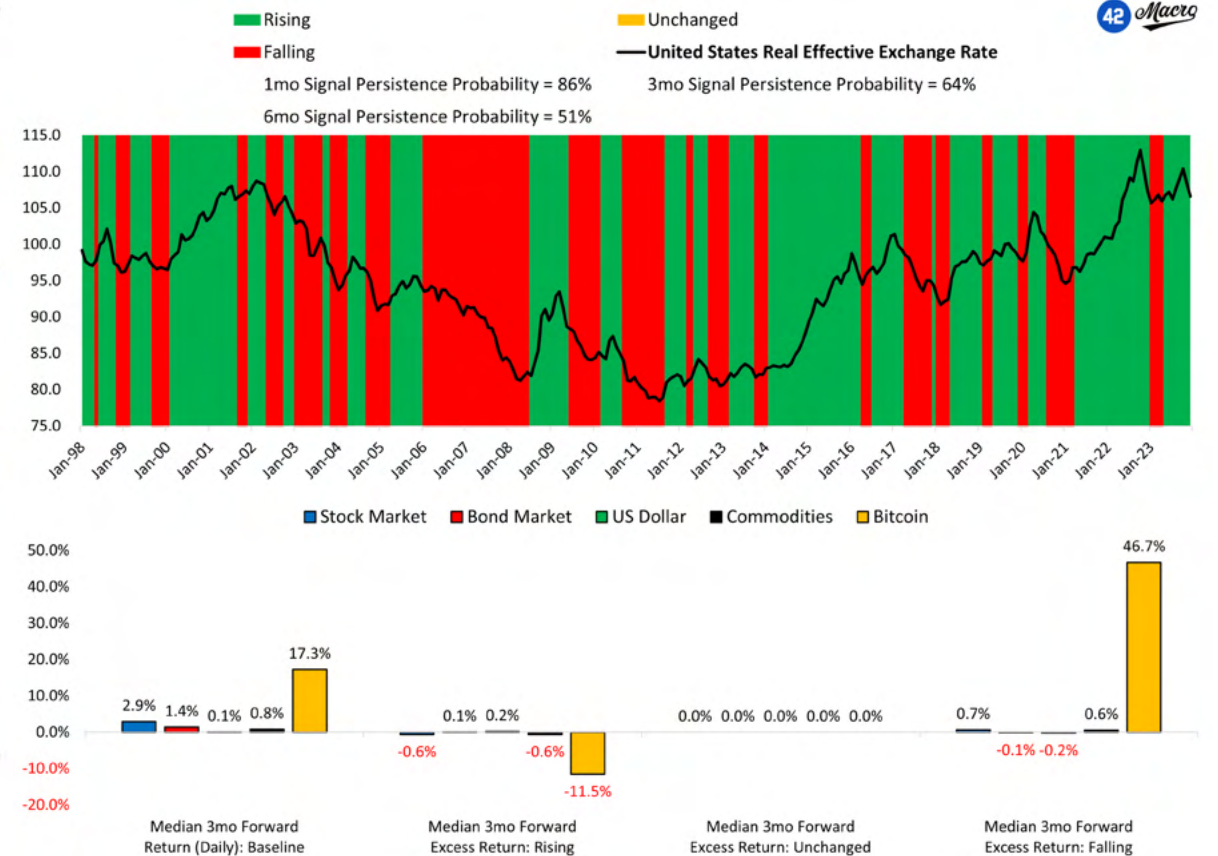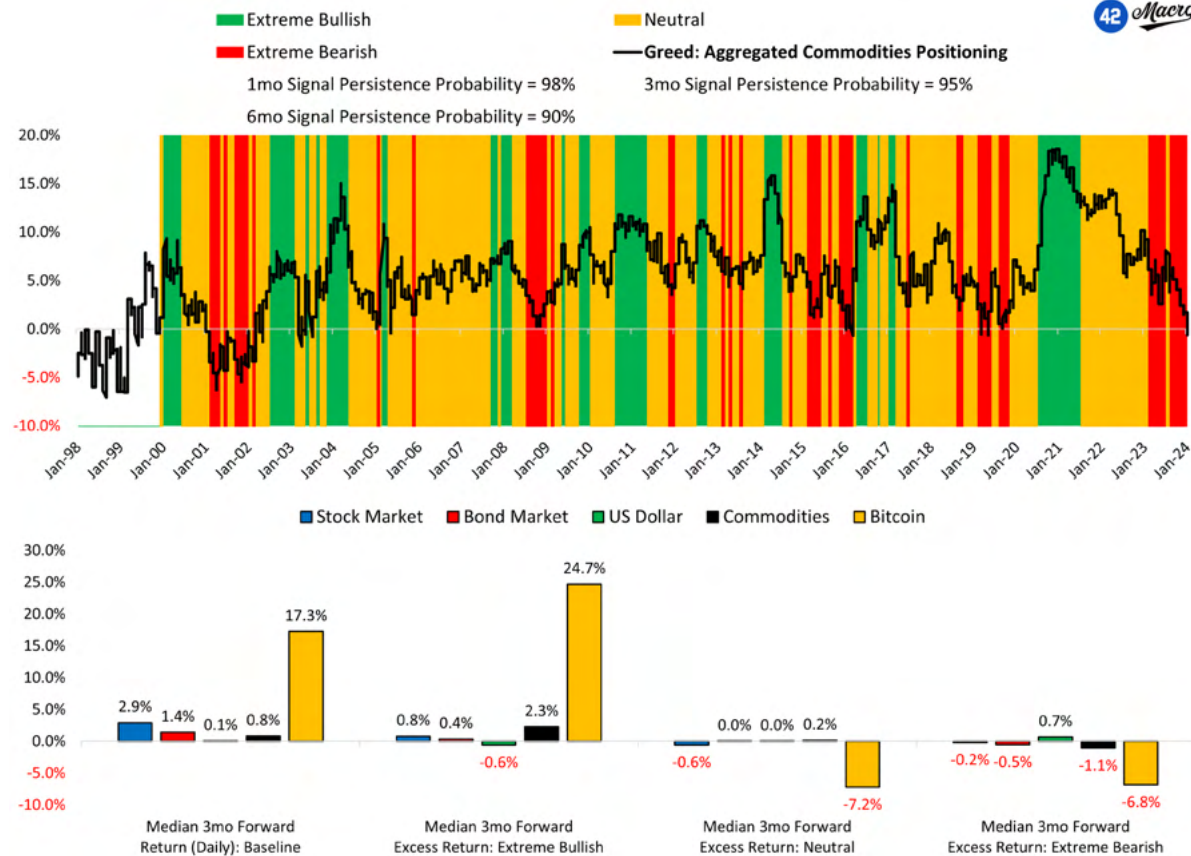
Greed: Aggregated US Equities Positioning
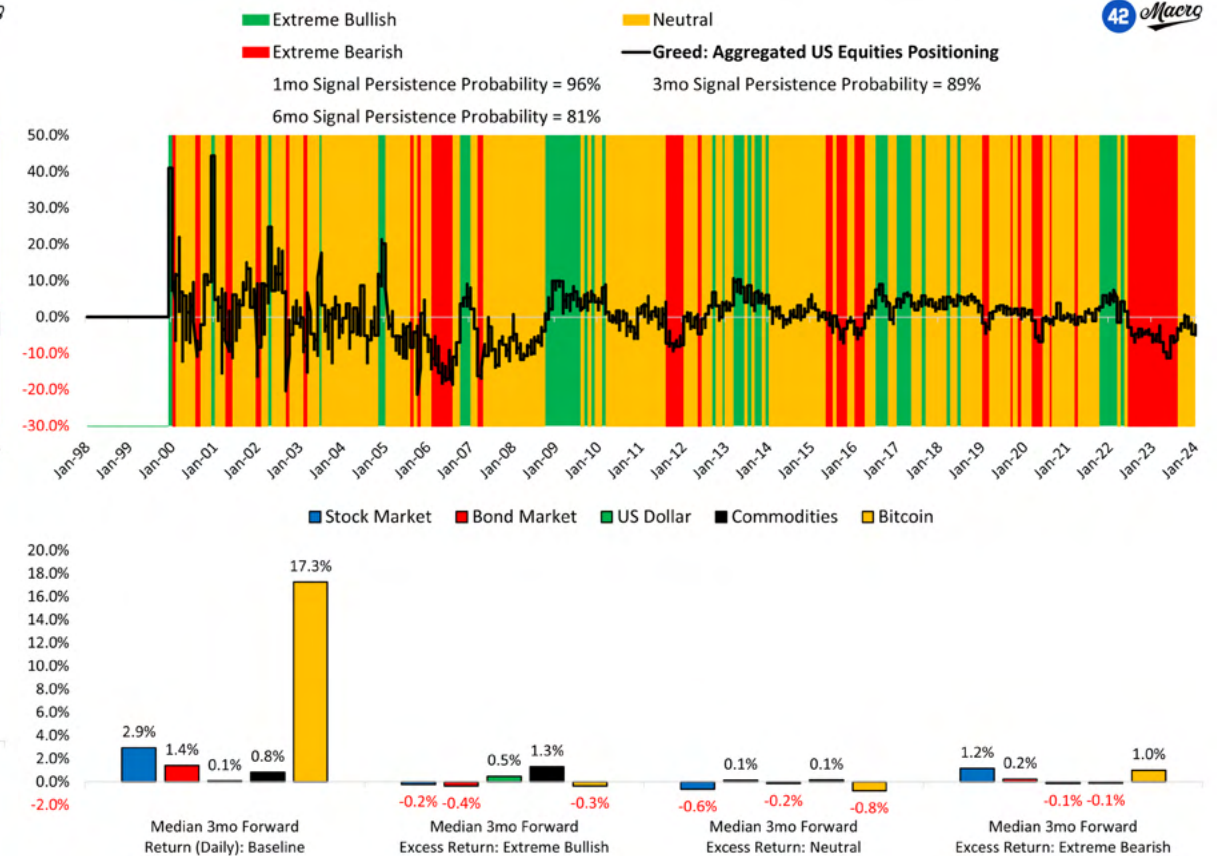
© 42 Macro LLC. Data Source: Bloomberg. The 42 Macro Weather Model works by segmenting each feature into distinct regimes and conducting rolling out-of-sample backtests on indiscrete periods to quantify dispersion across regimes, for each liquid asset class. The excess return dispersion projected by these independent out-of-sample backtests contribute independently to each independent Composite Signal.

Appendix: US & Global GRID Model Projections

Why GRID Works

- **Regime Segmentation:** *"I knew which shifts in the environment caused asset classes to move around, and I knew that those relationships had remained essentially the same for hundreds of years. There were only two big forces to worry about: growth and inflation. Each could be rising or falling, so I saw that by finding four different investment strategies – each one of which would do well in a particular environment (rising growth with rising inflation, rising growth with falling inflation, and so on) – I could construct an asset allocation mix that was balanced to do well over time while being protected against unacceptable losses."*
–Ray Dalio, Principles pg. 70

- **Bayesian Inference:** *"Subjective confidence in a judgment is not a reasoned evaluation of the probability that this judgment is correct. Confidence is a feeling, which reflects the coherence of the information and the cognitive ease of processing it. It is wise to take admissions of uncertainty serious, but declarations of high confidence mainly tell you that an individual has constructed a coherent story in his mind, not necessarily that the story is true."*
–Danny Kahneman & Amos Tversky, Thinking, Fast and Slow pg. 212

- **Volatility as a Leading Indicator for Price:** *"You cannot beat the market, says the standard market doctrine. Granted. But you can sidestep its worst punches."*
–Benoit Mandelbrot, The (Mis)Behavior of Markets pg. 249

US GRID Model
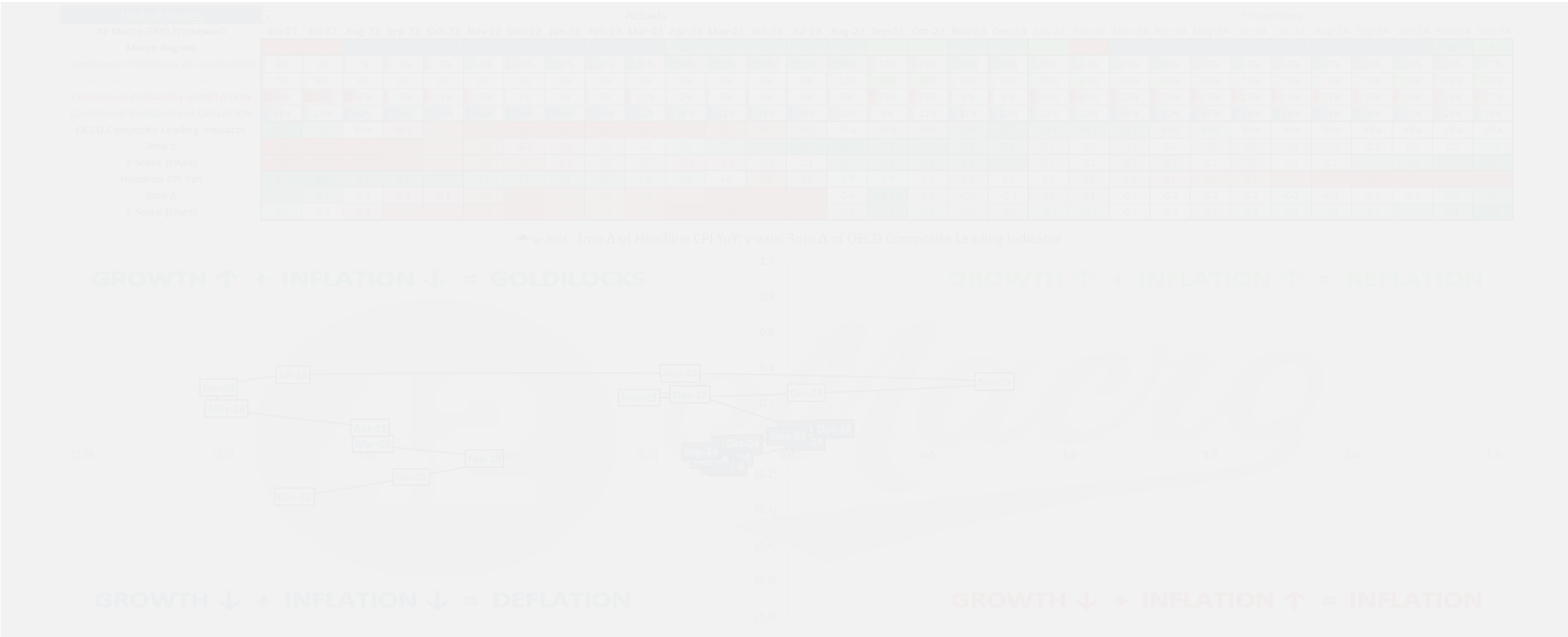
US Growth: Secular View

US Growth: Cyclical View

US Inflation: Secular View

US Inflation: Cyclical View

Global GRID Model Projections

We Use Our Global Liquidity Monitor To Nowcast Trends In Key Macro Indicators And Their Likely Influence Upon Geographic Dispersion

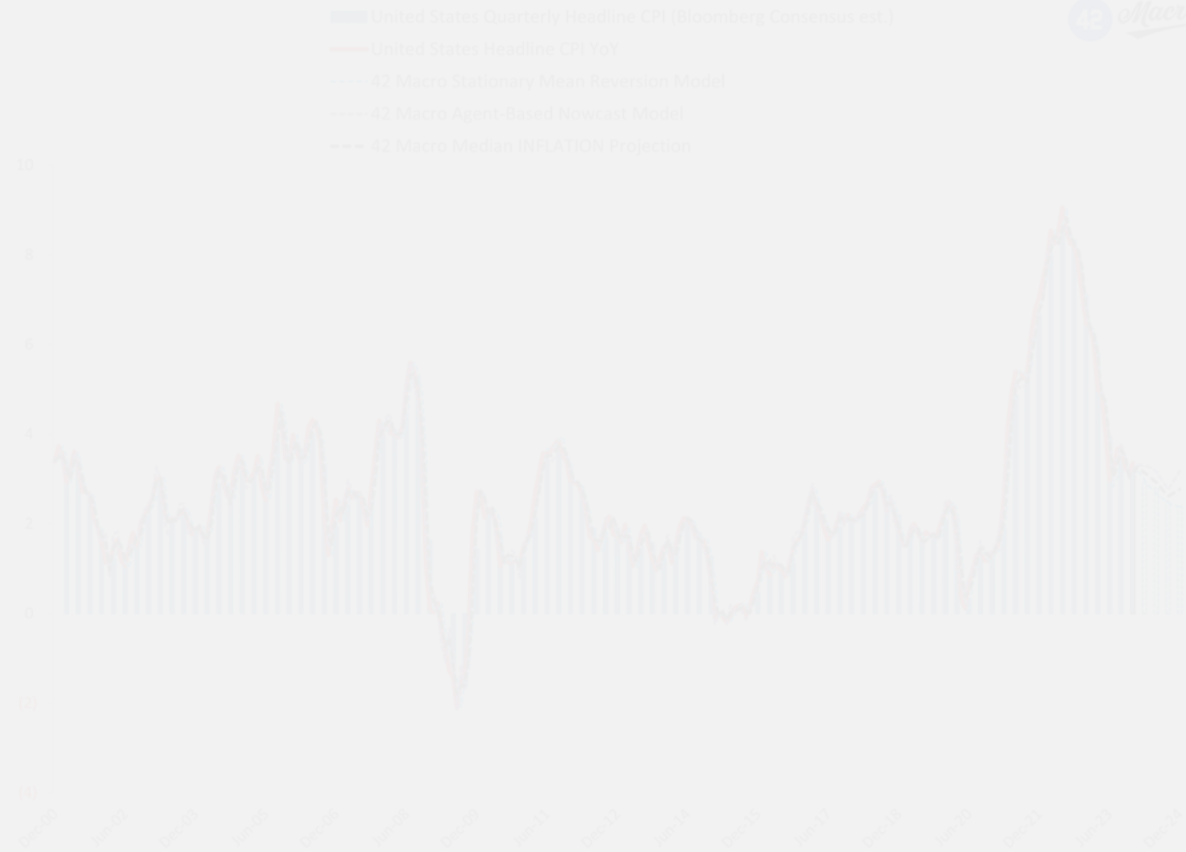| 42 Macro Global Liquidity Monitor (1/29/24)	GROWTH												INFLATION												POLICY												SYSTEMATIC TRADE IDEAS		
	Real GDP QoQ SAAR*			Composite PMI			Unemployment			Econ Surprises			Headline CPI YoY			Core CPI YoY*			Inflation Surprises			Liquidity Proxy			Policy Rate			Fiscal Balance*			Current Account			REER*					
	Delta	Level	Trend	Delta	Level	Trend*	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Delta	Level	Trend	Stocks	Bonds	FX
Global	↓	1.7%	(0.0)	↑	51.0	(0.6)	↑	4.8%	(1.3)	↓	5	(0.1)	↓	5.4%	0.8	↓	6.3%	1.8	↓	(14)	(0.7)	↑	$132.7	1.3	↓	4.14%	2.7	↑	-4.7%	(0.3)	↑	-0.3%	(0.8)	↑	93	(1.3)	↑	↑	n/a
Australia	↓	0.8%	(0.3)	↑	48.1	(0.7)	↑	3.9%	(1.5)	↑	11	(0.3)	↓	4.3%	0.4	↓	5.2%	1.7	↑	(11)	(0.1)	↑	$2.3	1.4	↑	4.32%	2.4	↑	1.6%	1.1	↑	1.2%	0.9	↑	110	0.6	↑	↑	↑
Brazil	↓	0.4%	(0.0)	↑	50.0	(0.6)	↓	7.5%	(1.3)	-	-	-	↓	4.6%	(0.5)	↓	5.4%	(0.1)	-	-	-	↑	$2.4	0.1	↓	11.75%	0.6	↓	-7.8%	(0.2)	↑	-1.9%	0.9	↑	119	(0.2)	↑	n/a	n/a
Canada	↓	-1.1%	(0.3)	↑	56.3	0.0	↑	5.8%	(0.6)	↓	(4)	(0.6)	↓	3.4%	0.5	↑	3.4%	0.9	↑	(11)	(0.1)	↑	$2.2	1.3	⇒	5.00%	2.6	↑	-1.2%	0.2	↑	-0.9%	1.1	↓	101	(0.7)	n/a	n/a	n/a
China	↓	4.0%	(0.2)	↓	50.3	(0.6)	↑	5.1%	(0.5)	↓	(14)	(0.2)	↓	-0.3%	(1.9)	↑	0.6%	(1.4)	↑	(58)	(1.8)	↑	$50.3	1.5	⇒	3.45%	(1.3)	↑	-4.5%	(0.5)	↓	1.8%	0.2	↓	92	(1.9)	n/a	n/a	n/a
Eurozone	↓	-0.4%	(0.2)	↑	47.9	(1.0)	↓	6.4%	(1.3)	↑	(10)	(0.2)	↓	2.9%	0.3	↓	3.4%	1.2	↓	(18)	(0.6)	↑	$24.0	0.7	⇒	4.00%	3.2	↓	-3.5%	(0.4)	↑	1.3%	(1.0)	↓	101	0.7	n/a	n/a	n/a
India	↓	7.6%	0.3	↑	61.0	1.1	↑	8.0%	0.2	-	-	-	↑	5.7%	0.3	↓	3.9%	(1.3)	-	-	-	↑	$3.2	1.4	⇒	6.50%	0.6	↑	-6.4%	(1.0)	↑	-1.0%	0.2	↓	100	0.4	↑	n/a	n/a
Japan	↓	-2.9%	(0.6)	↑	51.1	0.3	↓	2.5%	(0.9)	↑	27	0.6	↓	2.6%	1.1	↓	2.3%	1.0	↓	(16)	(1.1)	↑	$14.6	0.3	⇒	-0.10%	(0.5)	↓	-5.2%	(0.1)	↑	2.9%	0.0	↑	74	(2.1)	↑	n/a	n/a
Switzerland	↑	1.2%	(0.1)	↓	43.0	(1.6)	↑	2.1%	(1.4)	↓	(64)	(1.2)	⇒	1.7%	1.0	↑	1.5%	1.4	↓	(46)	(1.5)	↑	$2.7	0.2	⇒	-0.75%	(0.6)	↑	1.4%	1.0	↑	8.3%	0.8	↓	103	1.9	n/a	n/a	n/a
United Kingdom	↓	-0.4%	(0.1)	↑	52.5	(0.2)	↑	4.3%	(0.4)	↓	(32)	(1.0)	↓	4.0%	0.4	↓	5.1%	1.4	↑	24	0.2	↑	$6.0	0.9	⇒	5.25%	3.1	↓	-5.6%	(0.1)	↓	-2.0%	1.2	↓	108	0.7	n/a	n/a	n/a
United States	↓	3.3%	0.1	↓	50.3	(1.7)	↓	3.7%	(0.7)	↓	27	0.3	↓	3.4%	0.3	↓	2.9%	0.4	↓	(6)	(0.2)	↑	$28.7	1.2	⇒	5.50%	2.5	↓	-6.5%	(0.2)	↑	-3.1%	(1.0)	↓	107	1.3	n/a	↑	n/a

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Highlighted systematic trade ideas include changes from the prior publication.
@42Macro Global Liquidity Proxy = Global Central Bank Balance Sheet + Global Broad Money Supply + Global FX Reserves ex-Gold.

GRID Asset Market Backtests

GOLDILOCKS: Equity Sector (Left) And Equity Factor (Right) Annualized Expected Return Rankings

Equity Sector	
Consumer Discretionary (XLY)	36%
Information Technology (XLK)	36%
Financials (XLF)	34%
Materials (XLB)	32%
Industrials (XLI)	31%
Energy (XLE)	26%
Real Estate (XLRE)	25%
Health Care (XLV)	18%
Consumer Staples (XLP)	16%
Communication Services (XLC)	16%
Utilities (XLU)	7%

0%   5% 10% 15% 20% 25% 30% 35% 40%

Equity Factor	
High Beta (SPHB)	50%
Small Caps (IWM)	42%
Emerging Markets (EEM)	40%
Mega Cap Growth (QQQ)	38%
Mid Caps (VO)	34%
Momentum (MTUM)	29%
Growth (IWF)	28%
Quality (QUAL)	28%
Mega Caps (OEF)	26%
Value (IWD)	26%
Dividend Compounders (SPHD)	25%
Beta (SPY)	25%
Low Beta (SPLV)	18%

0%   10%   20%   30%   40%   50%   60%

GOLDILOCKS: Fixed Income (Left) And Macro (Right) Expected Sharpe Ratio Rankings

Fixed Income	Sharpe
Convertibles (CWB)	3.4
Leveraged Loans (BKLN)	2.9
High Yield Credit (HYG)	2.9
EM USD Bonds (EMB)	2.3
BDCs (BIZD)	2.2
1-3yr Treasurys (SHY)	1.9
Preferreds (PFF)	1.9
Investment Grade Credit (LQD)	1.6
Barclays Agg (AGG)	1.4
MBS (MBB)	1.3
EM Local Currency Bonds (EMLC)	1.3
0-5yr TIPS (STIP)	1.2
5-10yr TIPS (TIP)	1.0
5-10yr Treasurys (IEF)	0.4
25+ Year Treasurys (TLT)	0.1

Macro	Sharpe
Base Metals (DBB)	1.9
Bitcoin (BITO)	1.9
Energy (USO)	1.0
Commodities (DBC)	0.9
Gold (GLD)	0.7
US Dollar (UUP)	-0.1
Agriculture (DBA)	-0.5

REFLATION: Equity Sector (Left) And Equity Factor (Right) Annualized Expected Return Rankings

Equity Sector	Return
Information Technology (XLK)	22%
Industrials (XLI)	13%
Consumer Discretionary (XLY)	13%
Financials (XLF)	10%
Materials (XLB)	10%
Energy (XLE)	7%
Health Care (XLV)	6%
Communication Services (XLC)	5%
Utilities (XLU)	3%
Consumer Staples (XLP)	-0%
Real Estate (XLRE)	-1%

Equity Factor	Return
Mega Cap Growth (QQQ)	23%
High Beta (SPHB)	17%
Momentum (MTUM)	16%
Growth (IWF)	14%
Emerging Markets (EEM)	14%
Mid Caps (VO)	13%
Mega Caps (OEF)	11%
Small Caps (IWM)	11%
Quality (QUAL)	10%
Beta (SPY)	10%
Value (IWD)	7%
Low Beta (SPLV)	5%
Dividend Compounders (SPHD)	5%

REFLATION: Fixed Income (Left) And Macro (Right) Expected Sharpe Ratio Rankings

Fixed Income	Sharpe
Leveraged Loans (BKLN)	3.2
Convertibles (CWB)	2.2
0-5yr TIPS (STIP)	2.0
High Yield Credit (HYG)	1.8
Preferreds (PFF)	1.5
BDCs (BIZD)	1.4
1-3yr Treasurys (SHY)	1.3
EM USD Bonds (EMB)	1.1
EM Local Currency Bonds (EMLC)	0.7
5-10yr TIPS (TIP)	0.6
MBS (MBB)	0.5
Investment Grade Credit (LQD)	0.5
Barclays Agg (AGG)	0.4
5-10yr Treasurys (IEF)	-0.4
25+ Year Treasurys (TLT)	-0.7

Macro	Sharpe
Base Metals (DBB)	1.6
Commodities (DBC)	1.6
Energy (USO)	1.2
Agriculture (DBA)	1.2
Bitcoin (BITO)	1.0
Gold (GLD)	0.6
US Dollar (UUP)	0.1

INFLATION: Equity Sector (Left) And Equity Factor (Right) Annualized Expected Return Rankings

Equity Sector (Left):

Sector	Return
Utilities (XLU)	10%
Real Estate (XLRE)	7%
Health Care (XLV)	3%
Consumer Staples (XLP)	2%
Energy (XLE)	-2%
Information Technology (XLK)	-3%
Consumer Discretionary (XLY)	-5%
Communication Services (XLC)	-5%
Industrials (XLI)	-5%
Financials (XLF)	-8%
Materials (XLB)	-10%

Equity Factor (Right):

Factor	Return
Dividend Compounders (SPHD)	1%
Mega Cap Growth (QQQ)	-2%
Low Beta (SPLV)	-2%
Momentum (MTUM)	-3%
Quality (QUAL)	-3%
Mid Caps (VO)	-4%
Mega Caps (OEF)	-4%
Value (IWD)	-4%
Small Caps (IWM)	-5%
Growth (IWF)	-6%
Beta (SPY)	-7%
High Beta (SPHB)	-13%
Emerging Markets (EEM)	-19%

© 42 Macro LLC. Data Source: Bloomberg.
GRID Asset Markets Backtest sample = [Jan-68 through Dec-82] + [Jan-98 through present].

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INFLATION: Fixed Income (Left) And Macro (Right) Expected Sharpe Ratio Rankings

Fixed Income (Left):

Asset	Sharpe Ratio
1-3yr Treasurys (SHY)	2.1
0-5yr TIPS (STIP)	2.0
5-10yr TIPS (TIP)	1.8
5-10yr Treasurys (IEF)	1.7
25+ Year Treasurys (TLT)	1.4
EM USD Bonds (EMB)	1.2
Barclays Agg (AGG)	0.8
Leveraged Loans (BKLN)	0.7
MBS (MBB)	0.5
High Yield Credit (HYG)	0.4
Investment Grade Credit (LQD)	0.3
Preferreds (PFF)	-0.2
EM Local Currency Bonds (EMLC)	-0.2
BDCs (BIZD)	-0.3
Convertibles (CWB)	0.8

Macro (Right):

Asset	Sharpe Ratio
Gold (GLD)	1.1
Agriculture (DBA)	0.6
Bitcoin (BITO)	0.4
US Dollar (UUP)	0.0
Energy (USO)	-0.0
Commodities (DBC)	-0.2
Base Metals (DBB)	-0.9

DEFLATION: Equity Sector (Left) And Equity Factor (Right) Annualized Expected Return Rankings

Equity Sector	Return		Equity Factor	Return
Health Care (XLV)	7%		Low Beta (SPLV)	4%
Consumer Staples (XLP)	6%		Dividend Compounders (SPHD)	3%
Energy (XLE)	2%		Growth (IWF)	1%
Materials (XLB)	0%		Quality (QUAL)	1%
Information Technology (XLK)	-0%		Mega Cap Growth (QQQ)	-1%
Consumer Discretionary (XLY)	-1%		Mid Caps (VO)	-1%
Utilities (XLU)	-3%		Momentum (MTUM)	-1%
Real Estate (XLRE)	-3%		Beta (SPY)	-2%
Communication Services (XLC)	-4%		Small Caps (IWM)	-3%
Industrials (XLI)	-5%		Value (IWD)	-4%
Financials (XLF)	-10%		Mega Caps (OEF)	-4%
			Emerging Markets (EEM)	-7%
			High Beta (SPHB)	-9%

Fixed Income	Sharpe Ratio
1-3yr Treasurys (SHY)	2.7
5-10yr Treasurys (IEF)	1.8
Barclays Agg (AGG)	1.6
Investment Grade Credit (LQD)	1.3
MBS (MBB)	1.2
25+ Year Treasurys (TLT)	1.1
5-10yr TIPS (TIP)	0.6
Convertibles (CWB)	0.3
0-5yr TIPS (STIP)	0.3
EM USD Bonds (EMB)	0.2
EM Local Currency Bonds (EMLC)	0.2
Leveraged Loans (BKLN)	0.2
High Yield Credit (HYG)	0.1
BDCs (BIZD)	-0.1
Preferreds (PFF)	-0.3

Macro	Sharpe Ratio
Gold (GLD)	0.5
US Dollar (UUP)	0.1
Bitcoin (BITO)	0.1
Energy (USO)	-0.0
Agriculture (DBA)	-0.4
Commodities (DBC)	-0.7
Base Metals (DBB)	-1.1

Appendix: Is China Investable?

Beijing Has Confirmed Our Expectation For Front-Loaded Policy Support This Year
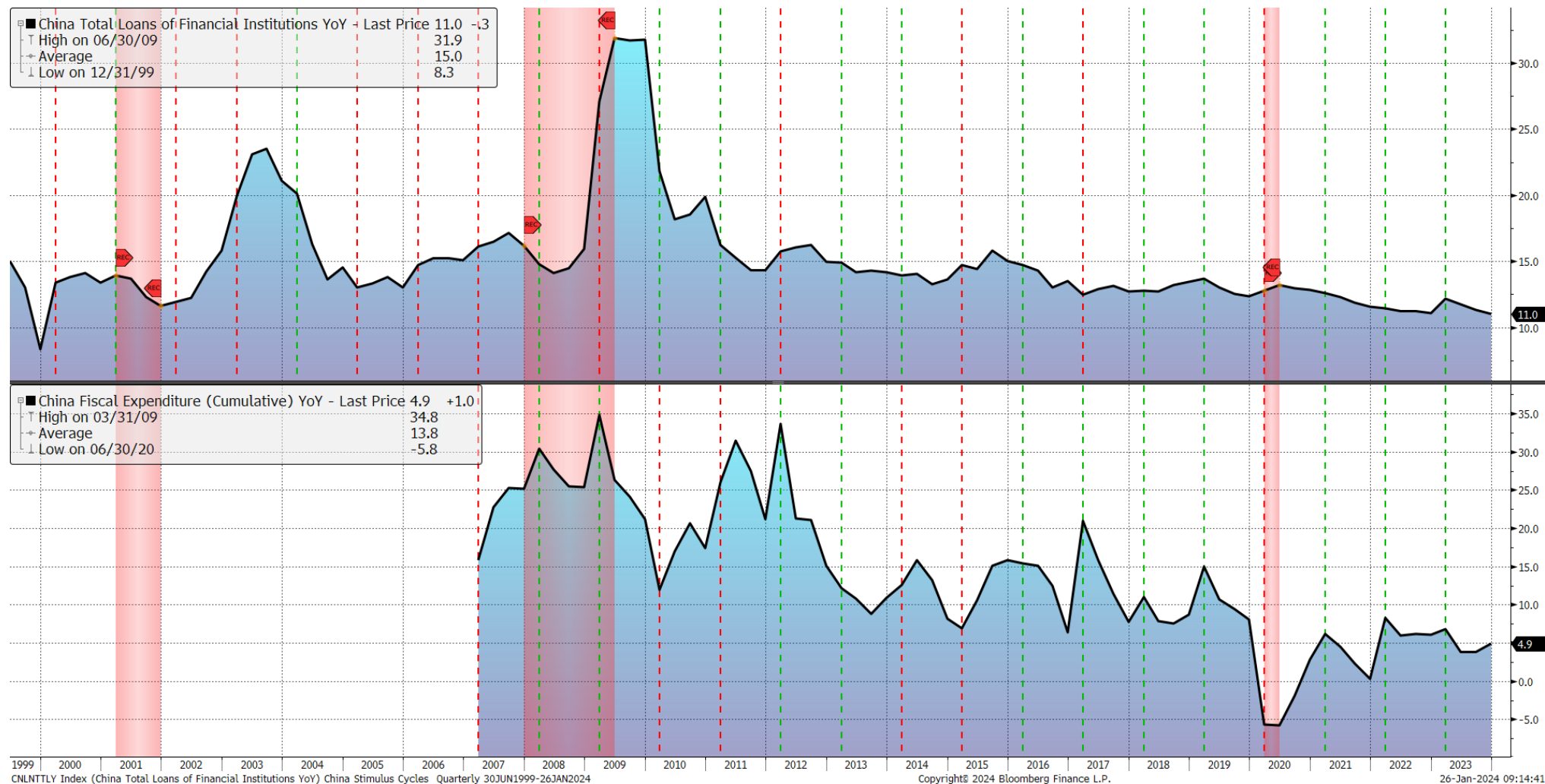
China Total Loans of Financial Institutions YoY - Last Price 11.0 -.3
High on 06/30/09 31.9
Average 15.0
Low on 12/31/99 8.3

China Fiscal Expenditure (Cumulative) YoY - Last Price 4.9 +1.0
High on 03/31/09 34.8
Average 13.8
Low on 06/30/20 -5.8

CNLNTTLY Index (China Total Loans of Financial Institutions YoY) China Stimulus Cycles Quarterly 30JUN1999-26JAN2024   Copyright© 2024 Bloomberg Finance L.P.   26-Jan-2024 09:14:41

China's Liquidity Impulse Has Been Appreciably Positive For Three Months Per The 42 Macro China Liquidity Proxy

© 42 Macro LLC. Data Source: Bloomberg.
42 Macro China Liquidity Proxy = PBOC Balance Sheet
+ China Broad Money Supply + China FX Reserves ex-Gold.
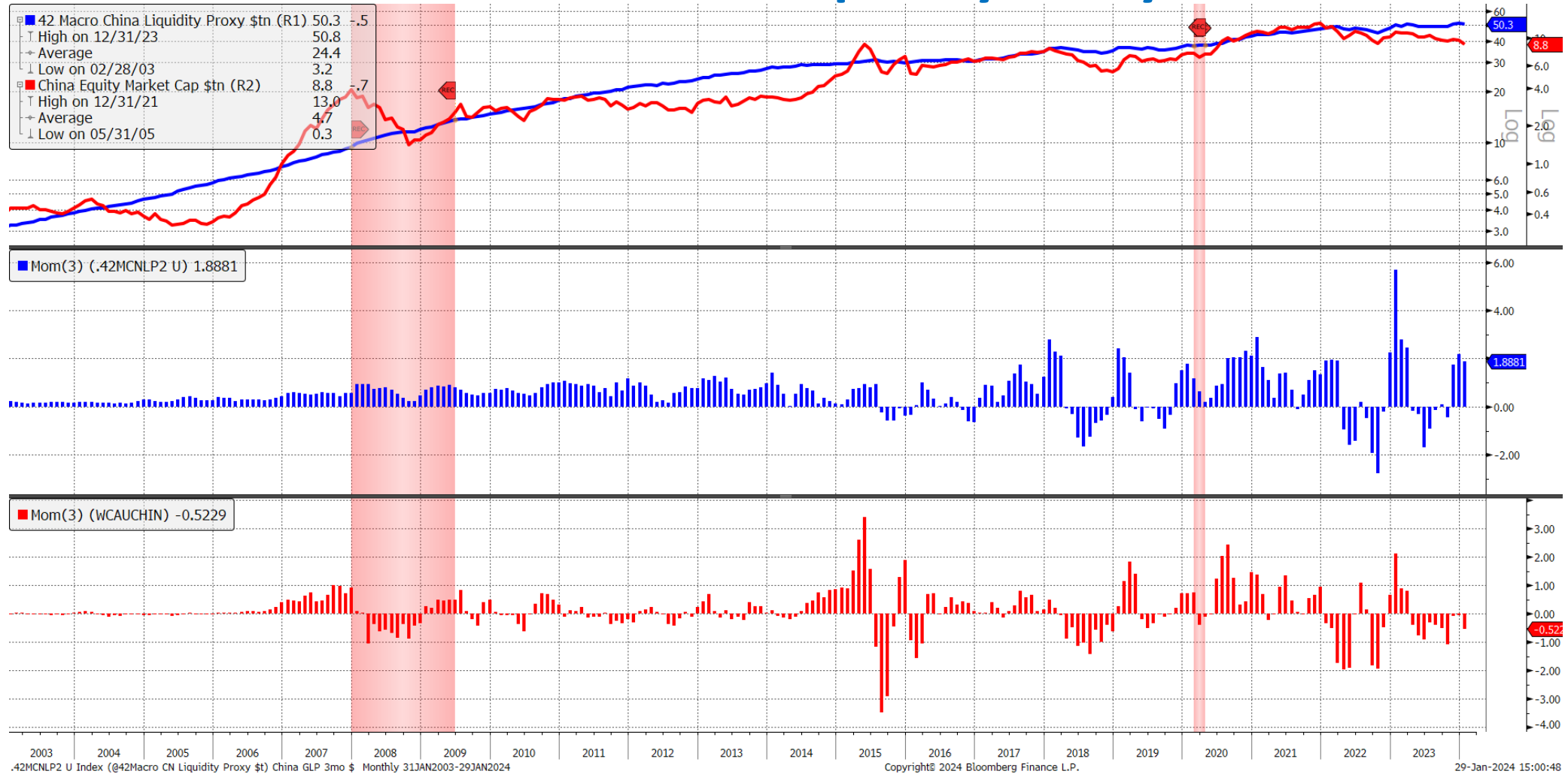
The PBOC Continues To Flex Its Balance Sheet To Push Both Broad And Targeted Stimulus Into The Real Economy

PBOC7P Index (People's Bank of China Reverse Repurchase Notes 7 Day Rate) China PBOC Policy Tools Daily 27JAN2019-29JAN2024   Copyright© 2024 Bloomberg Finance L.P.   29-Jan-2024 15:02:27

Accelerated Monetary Easing Signals The PBOC Is More Willing To Allow Renminbi Depreciation Amid Outright CPI, PPI, And HPI Deflation

PBOC Balance Sheet: Foreign Exchange Reserves $bn (R1) 3104
High on 10/31/14 4449
Average 2576
Low on 01/31/02 218
PBOC Balance Sheet: Total Assets $bn (R1) 6435
High on 02/28/22 6439
Average 3862
Low on 01/31/02 547
PBOC Balance Sheet: Foreign Exchange Reserves/PBOC Balance Sheet: Total Assets (R2) 0.48
High on 03/31/14 0.83
Average 0.65
Low on 03/31/02 0.40

China Estimated Capital Flow $bn on 11/30/23 -48
High on 01/31/14 91
Average -22
Low on 12/31/15 -170

China Real Effective Exchange Rate (REER) 92
High on 03/31/22 106
Average 87
Low on 12/31/04 66

CNBMFORX Index (China Central Bank Balance Sheet Assets - Funds Outstanding for Foreign Exchange) China FX Reserves PBOC Monthly 31JAN2002-31DEC2023   Copyright© 2024 Bloomberg Finance L.P.   29-Jan-2024 15:08:02

42 Macro Cyclical View: Chinese Growth Has Stabilized

S&P Global US Composite PMI SA 52.3
- High on 05/31/21 — 68.7
- Average — 53.8
- Low on 08/31/22 — 44.6

S&P Global Eurozone Composite PMI SA 47.9
- High on 07/31/21 — 60.2
- Average — 51.9
- Low on 10/31/23 — 46.5

S&P Global/CIPS UK Composite PMI SA 52.5
- High on 05/31/21 — 62.9
- Average — 53.4
- Low on 01/31/21 — 41.2

Jibun Bank Japan Composite PMI SA 51.1
- High on 05/31/23 — 54.3
- Average — 50.6
- Low on 08/31/21 — 45.5

Caixin China Composite PMI SA on 12/31/23 52.6
- High on 05/31/23 — 55.6
- Average — 50.9
- Low on 04/30/22 — 37.2

JPMorgan Global Composite PMI SA on 12/31/23 51.0
- High on 05/31/21 — 58.3
- Average — 52.4
- Low on 11/30/22 — 48.0

MPMIUSCA Index (US Composite PMI SA) Global Composite PMIs Monthly 31JAN2021-26JAN2024   Copyright© 2024 Bloomberg Finance L.P.   26-Jan-2024 09:20:35

42 Macro Cyclical View: Consensus Estimates For Chinese Growth Appear Low Relative To The Official Target Of Around 5% And Accelerated Policy Support

China Real GDP YoY on 12/31/23 5.2
High on 06/30/23 6.3
Average 4.1
Low on 06/30/22 0.4

Bloomberg Consensus China Real GDP Forecast Q+1 4.2
High on 02/24/23 5.5
Average 4.6
Low on 11/01/23 3.9

Bloomberg Consensus China Real GDP Forecast Q+2 4.8
High on 01/23/23 5.1
Average 4.8
Low on 09/26/23 4.5

Bloomberg Consensus China Real GDP Forecast Q+3 4.7
High on 04/26/23 5.0
Average 4.7
Low on 01/25/24 4.4

Bloomberg Consensus China Real GDP Forecast Q+4 4.7
High on 04/21/23 5.3
Average 4.7
Low on 02/22/23 4.2

EHGDCN Index (China Real Quarterly GDP (Annual YoY %)) China R-GDP Estimates Daily 05DEC2021-29JAN2024   Copyright© 2024 Bloomberg Finance L.P.   29-Jan-2024 15:09:00

42 Macro Structural View: China's Poor Demographics Sets It Apart From Most Emerging Market Economies

x-axis: 5yr Forward Old-Age Dependency Ratio
y-axis: Working Age Population 5yr Forward CAGR

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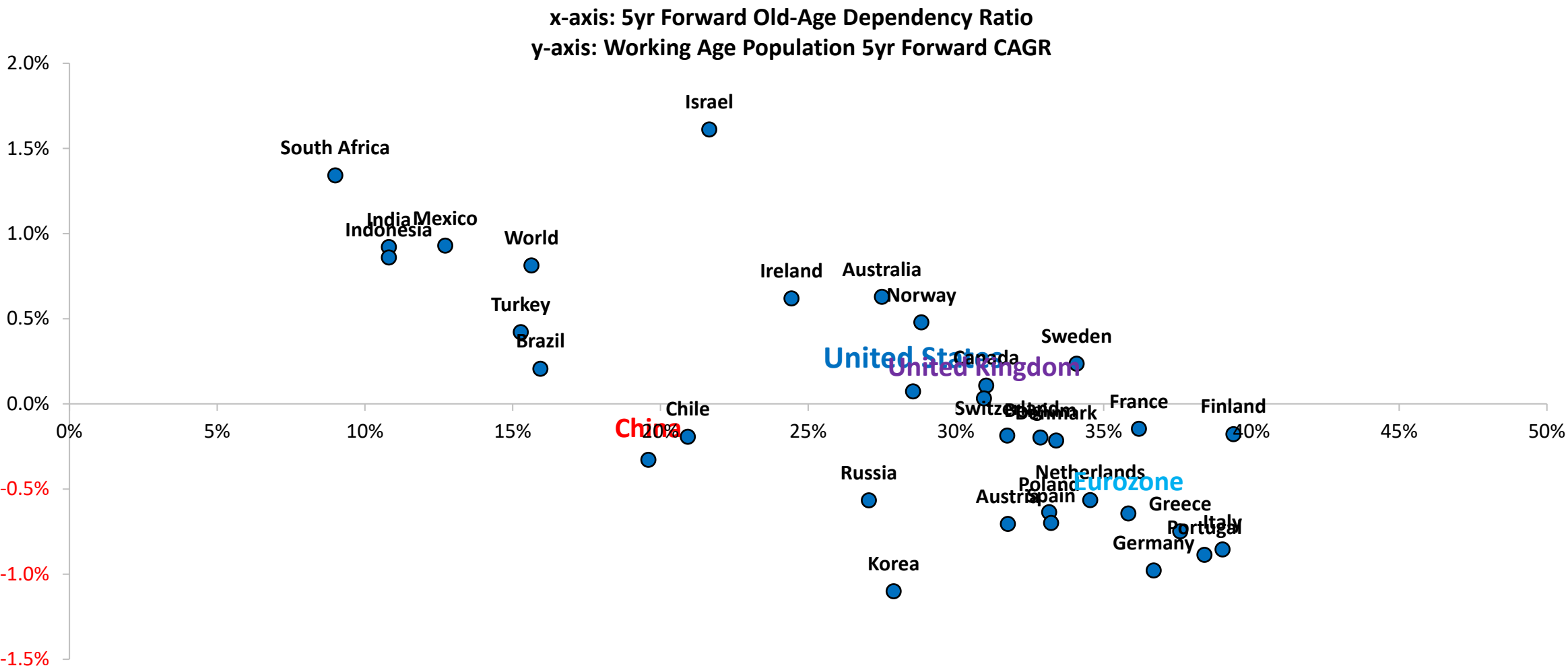
42 Macro Structural View: China Has Among The Worst Credit Cycel Dynamics Of Any Major Economy

x-axis: Private Nonfinancial Sector Credit/GDP Ratio 5yr Z-Score
y-axis: Private Nonfinancial Sector Debt Service Ratio 5yr Z-Score

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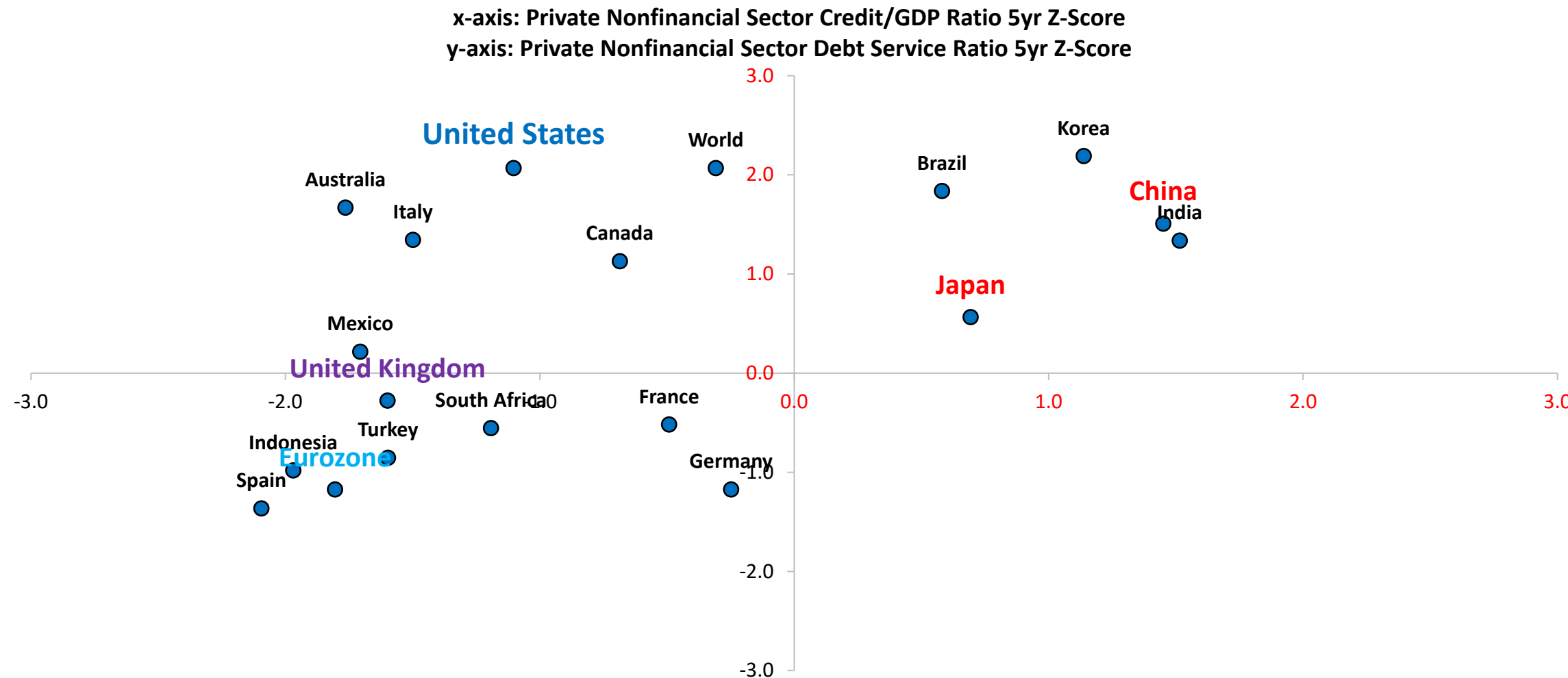
42 Macro Structural View: China's World-Beating Private Sector Debt Burden Is Likely To Weigh On Economic Activity Until Significant Structural Reforms Are Implemented

■ China Private Nonfinancial Sector Credit/GDP Ratio	228	
⊤ High on 06/30/23	228	
→ Average	129	
⊥ Low on 03/31/86	64	
■ US Private Nonfinancial Sector Credit/GDP Ratio	150	
⊤ High on 09/30/08	170	
→ Average	141	
⊥ Low on 12/31/85	113	
■ Eurozone Private Nonfinancial Sector Credit/GDP Ratio	152	
⊤ High on 03/31/21	173	
→ Average	153	
⊥ Low on 03/31/99	115	
■ Japan Private Nonfinancial Sector Credit/GDP Ratio	184	
⊤ High on 12/30/94	214	
→ Average	179	
⊥ Low on 03/31/16	153	
■ India Private Nonfinancial Sector Credit/GDP Ratio	100	
⊤ High on 12/31/10	114	
→ Average	78	
⊥ Low on 06/30/94	51	
■ Brazil Private Nonfinancial Sector Credit/GDP Ratio	85	
⊤ High on 12/30/22	88	
→ Average	61	
⊥ Low on 12/29/95	38	

CPNFCNPG Index (BIS China Credit to Private Non Financial Sector Adjusted for Breaks % of GDP) China Private Debt/GDP Monthly 31DEC1985-15DEC2023   Copyright© 2023 Bloomberg Finance L.P.   15-Dec-2023 09:58:53

BDSRCNP Index (BIS Debt Service Ratio China Private Non-financial Sector) China Debt Service Rati Quarterly 31MAR2000-31MAR2023   Copyright© 2023 Bloomberg Finance L.P.   15-Dec-2023 10:00:32
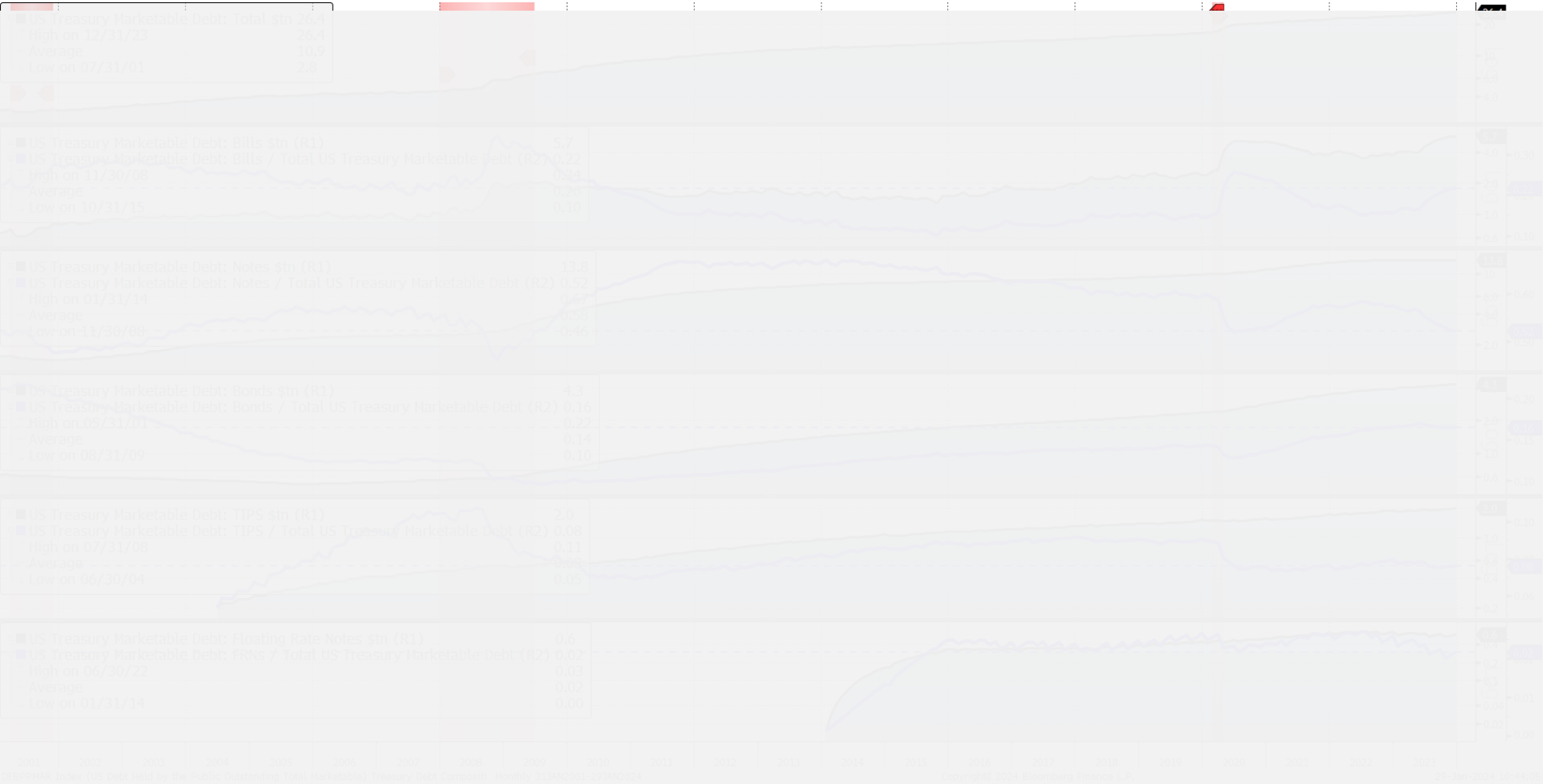
42 Macro Structural View: China's Muted Credit Impulse Is Hard Evidence Of The Structural Liquidity Trap We Called For China To Reopen Back Into In Feb-23
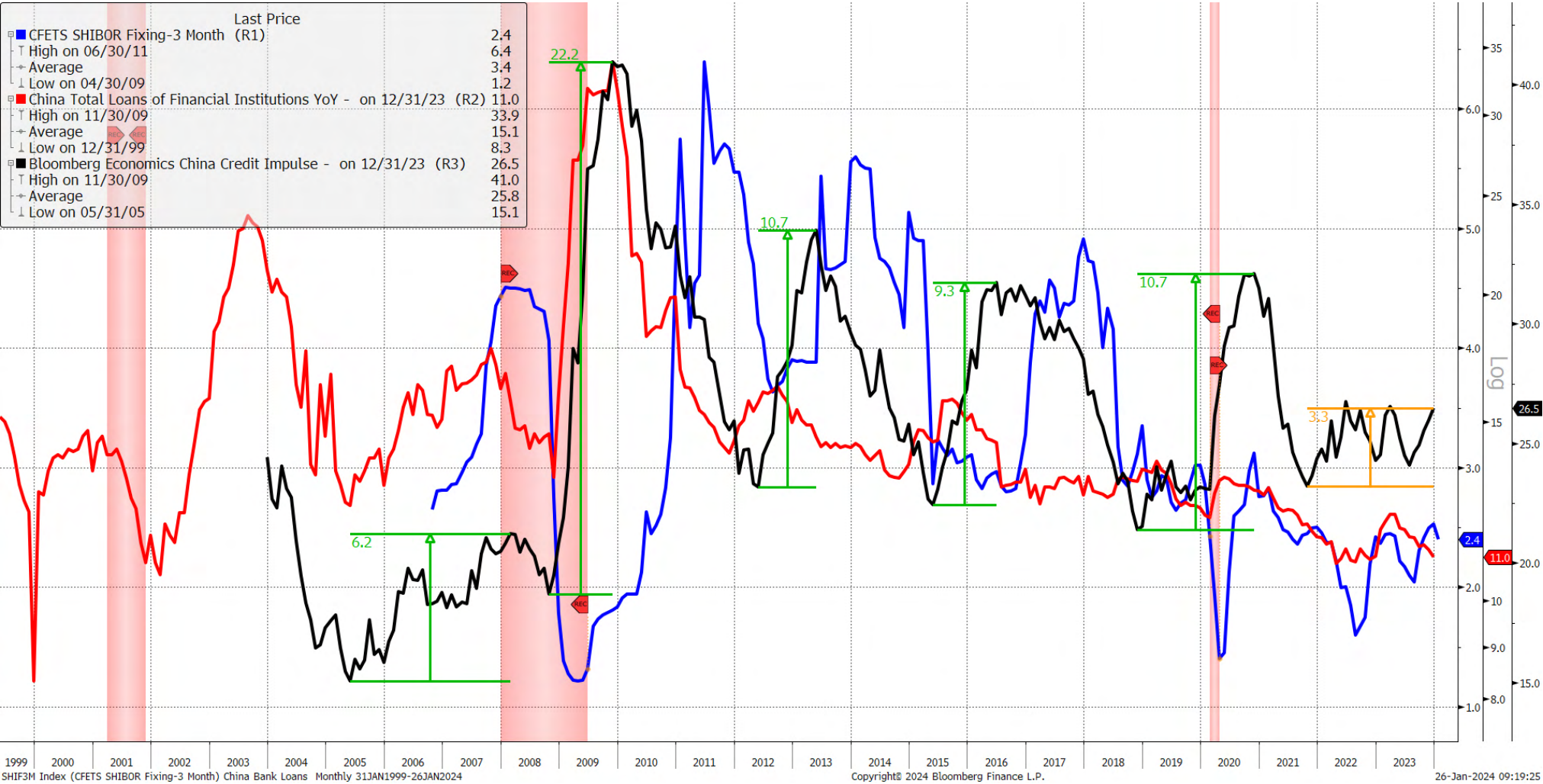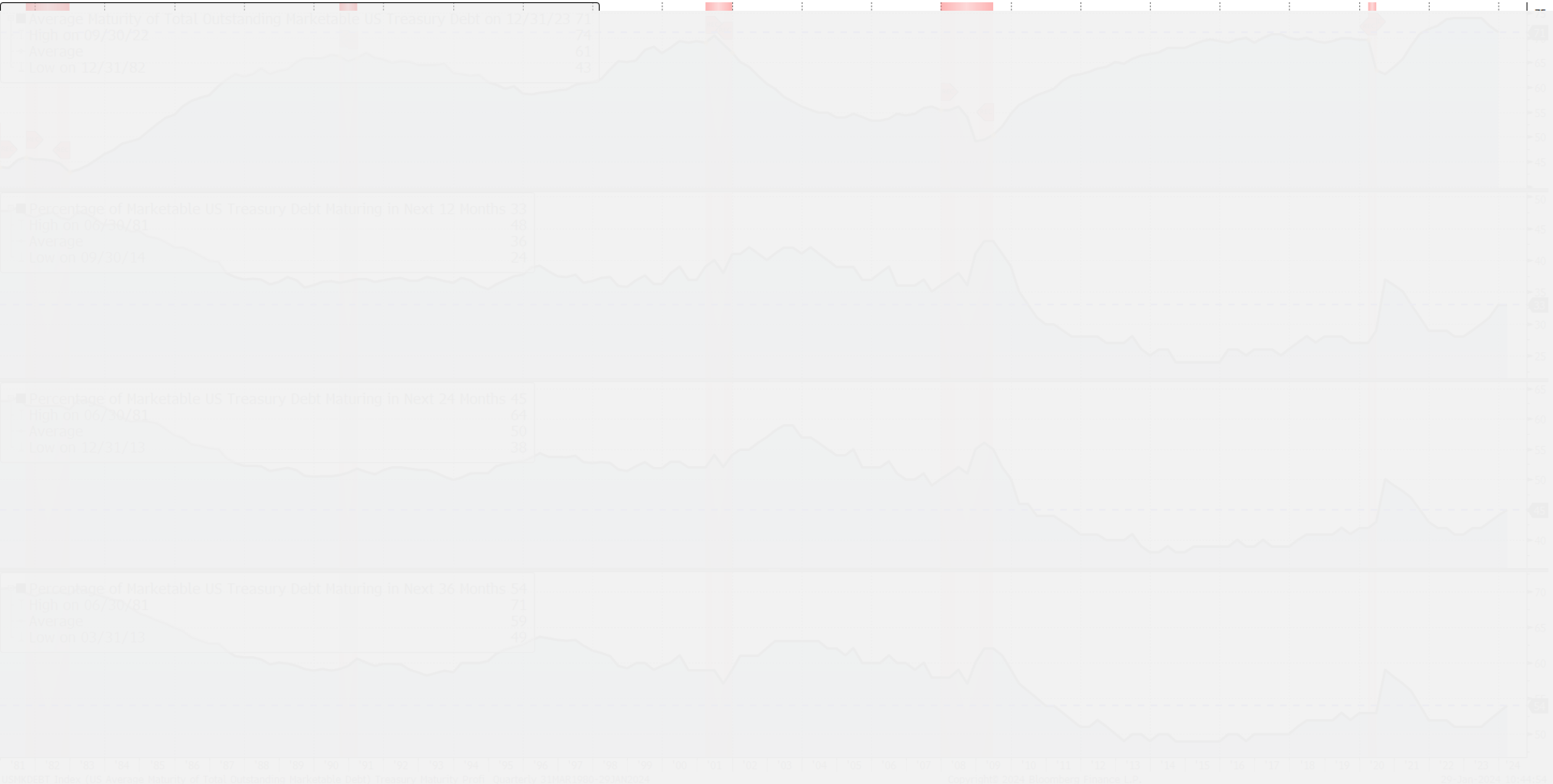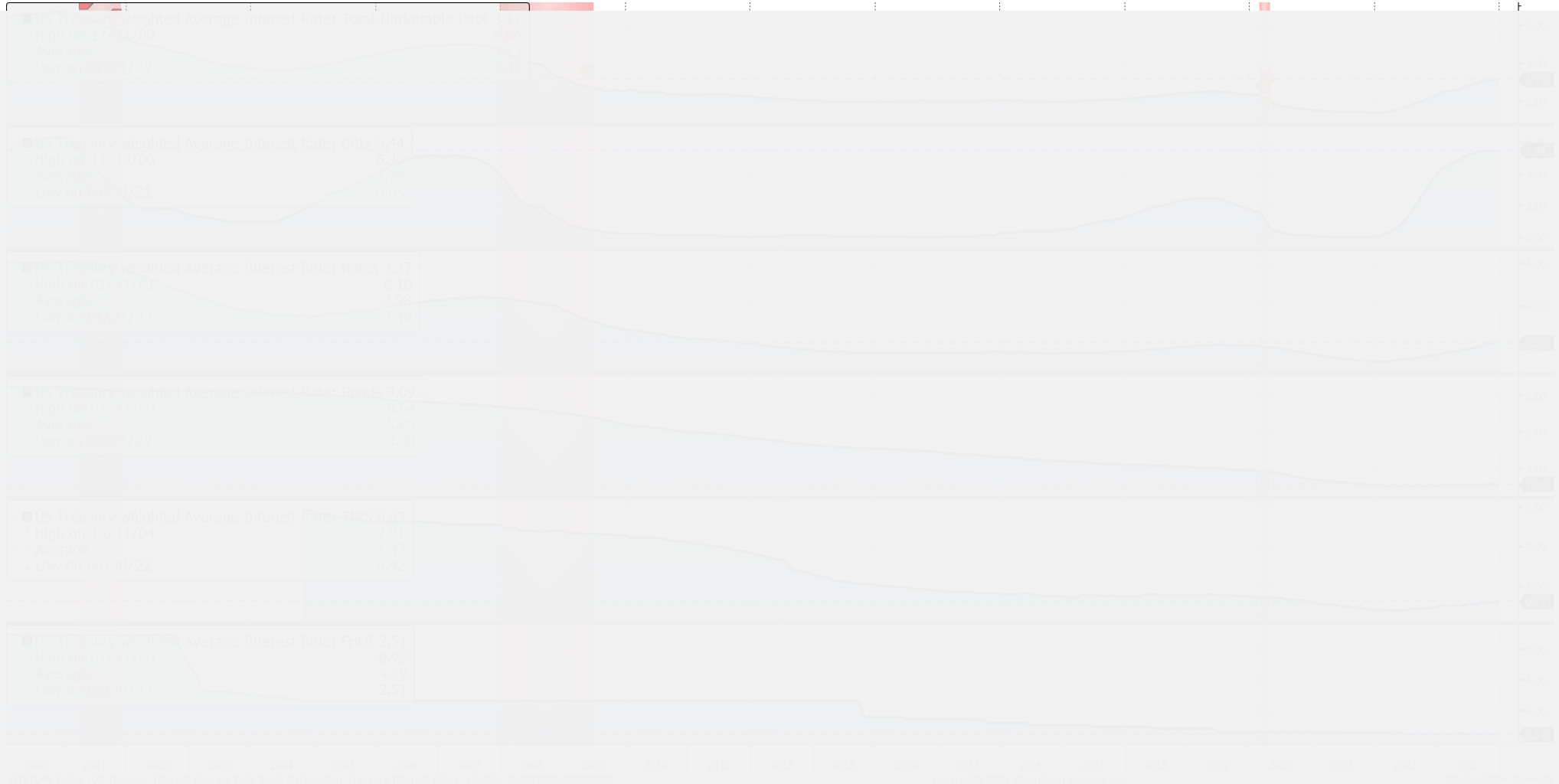
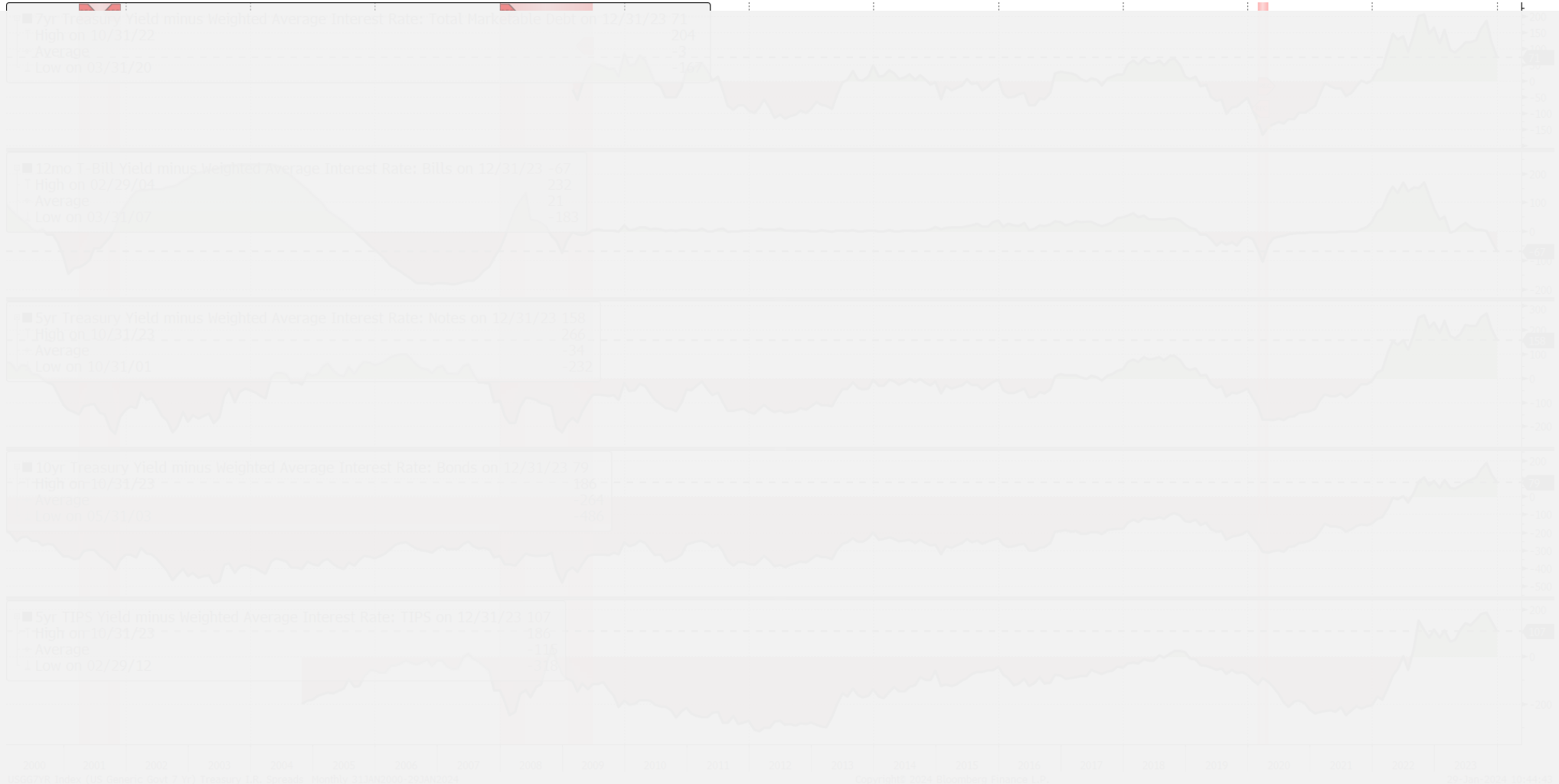# Appendix: US Treasury Debt Dynamics

US Treasury Debt Composition

US Treasury Debt Maturity Profile

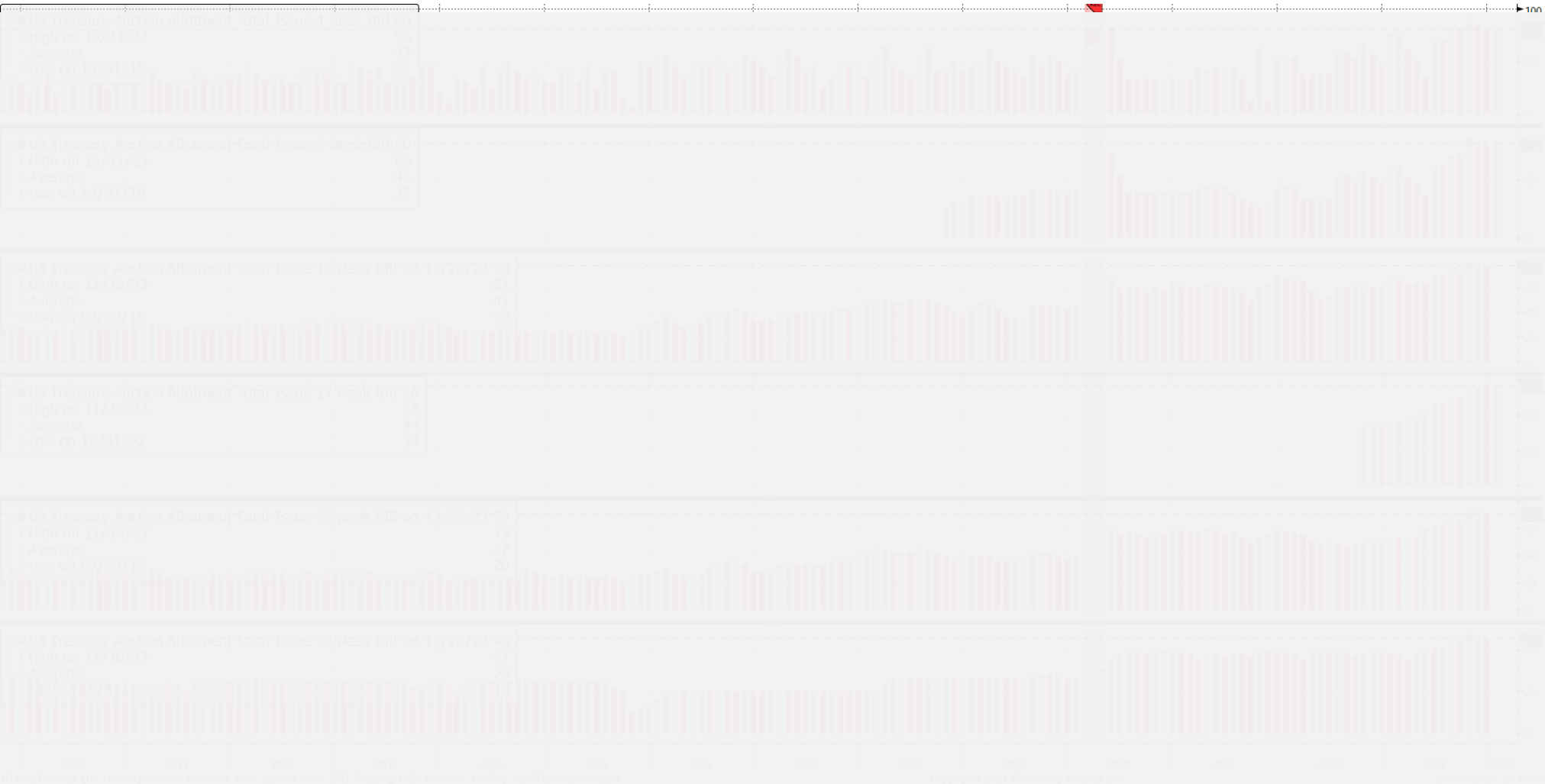# US Treasury Weighted Average Interest Rates By Segment

US Treasury Weighted Average Interest Rate Spreads By Segment

US Treasury Gross Issuance By Segment

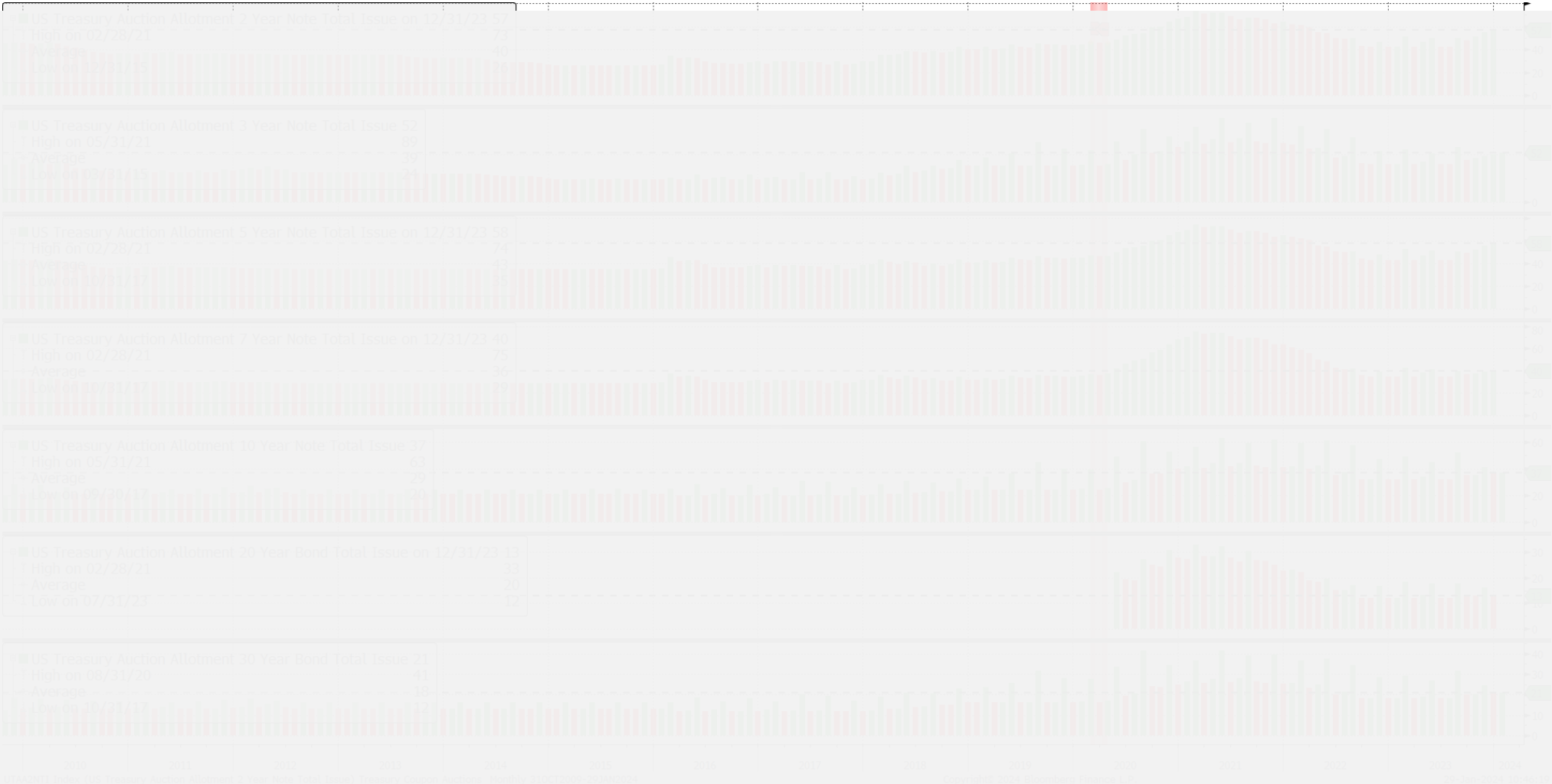# US Treasury Monthly Bill Auction Sizes By Tenor

US Treasury Monthly Coupon Auction Sizes By Tenor

US Treasury TIPS & FRN Auction Sizes By Tenor
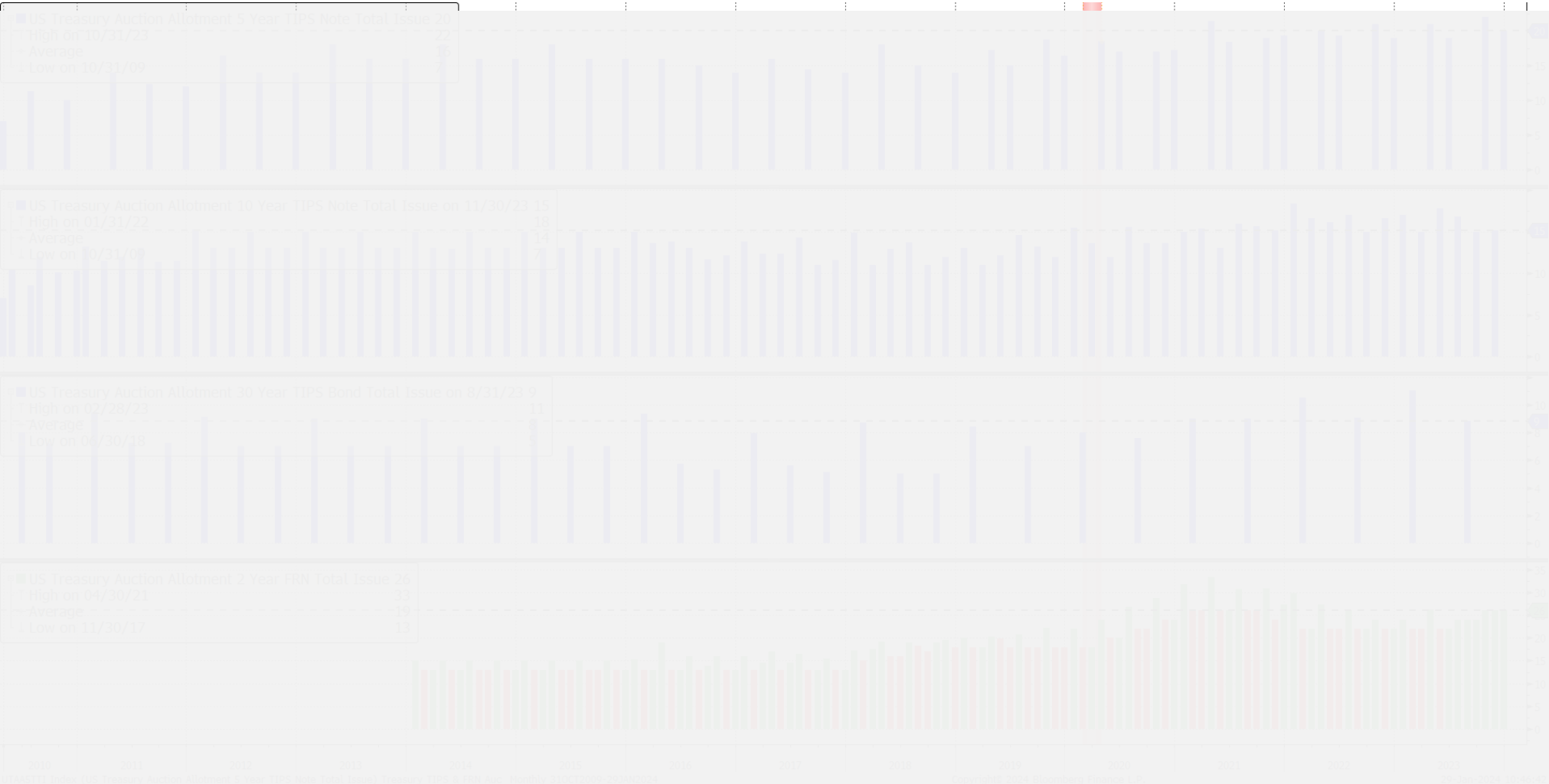
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Thanks for reviewing.
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