Darius Dale Macro Voices Interview

Thursday, February 20, 2025

Updated and redacted 2/18/25. Originally prepared 2/7/25 for 42 Macro clients.

Disclaimer

Please do not redistribute this email or any information or communications (our "Content") provided by 42 Macro, LLC ("42 Macro") to any other person, including forwarding, posting, framing or publishing any of our content on any third-party website or social media platform without express written permission from 42 Macro.

42 Macro does not provide, and no portion of our Content purports to be, individualized or specific investment or tax advice and 42 Macro does not provide investment advice to individuals. All information provided by 42 Macro is general in nature and is made without regard to individual levels of sophistication or investment experience, product availability, investment preferences, investment objectives, risk parameters, or tax consequences and without regard to the suitability of the Content for individuals or entities who may access it. You must be an accredited or registered investor to participate in the 42 Macro Pro-to-Pro service.

No information provided by 42 Macro should be construed as an offer to sell, or a solicitation of an offer to buy any security or investment vehicle, nor should it be construed as tailored or specific to you, or any reader or consumer thereof. You understand and agree that our content does not constitute specific recommendations of any particular investment, security, portfolio, transaction or strategy, nor does it recommend any specific course of action that is suitable for any specific person or entity or group of persons or entities. At any point in time, the employees of 42 Macro may own a portion of or all the ETF securities discussed in 42 Macro research Content.

42 Macro research Content is based upon information from sources believed to be reliable. 42 Macro is not responsible for errors, inaccuracies or omissions of information; nor is it responsible for the accuracy or authenticity of the information upon which it relies.

New to 42 Macro research?

Take advantage of the following resources to speed up your learning journey:

The Macro Class:

https://app.42macro.com/macroclass

42 Macro Glossary:

https://app.42macro.com/glossary

KISS Portfolio Construction Process FAQ:

https://app.42macro.com/kiss

Dr. Mo FAQ:

https://app.42macro.com/drmo

Table Of Contents

The 42 Macro Risk Management Process

Identify And Position For The Market Regime

Global Macro Risk Matrix, KISS, and Dr. Mo

Prepare For Regime Change Using Quantitative Signals

GRID Model, Macro Weather Model, Positioning Model, and Global Liquidity Monitor

(visibility 3-12mos)

Prepare For Regime Change Using Qualitative Signals

Fundamental Research Themes

(visibility: 3-12mos; 3-10yrs)

42 Macro Factor Long-Short Preferences	Risk-On Market Regimes: GOLDILOCKS	Risk-On Market Regimes: REFLATION	Risk-Off Market Regimes: INFLATION	Risk-Off Market Regimes: DEFLATION
General Bias	Risk Assets Defensive Assets	Risk Assets Defensive Assets	Defensive Assets Risk Assets	Defensive Assets Risk Assets
Beta	High Beta Low Beta	High Beta Low Beta	Low Beta High Beta	Low Beta High Beta
Cyclicality	Cyclicals Defensives	Cyclicals Defensives	Defensives Cyclicals	Defensives Cyclicals
Style	Growth Value	Growth Value	Value Growth	Growth Value
Market Cap	SMID Caps Large Caps	SMID Caps Large Caps	Large Caps SMID Caps	Large Caps SMID Caps
Regional	US International	International US	US International	US International
Geographic	Emerging Markets Developed Markets	Emerging Markets Developed Markets	Developed Markets Emerging Markets	Developed Markets Emerging Markets
Fixed Income	Spread Products Treasurys	Spread Products Treasurys	Treasurys Spread Products	Treasurys Spread Products
Treasury Curve	Short Rates Belly Long Rates	Short Rates Belly Long Rates	Short Rates Belly Long Rates	Long Rates Belly Short Rates
Credit	High Yield Investment Grade	High Yield Investment Grade	Investment Grade High Yield	Investment Grade High Yield
Commodities	Industrial Commodities Energy Commodities Agricultural Commodities	Industrial Commodities Energy Commodities Agricultural Commodities	Agricultural Commodities Energy Commodities Industrial Commodities	Agricultural Commodities Energy Commodities Industrial Commodities
Currencies	Gold Foreign Currencies US Dollar	Gold Foreign Currencies US Dollar	US Dollar Gold Foreign Currencies	US Dollar Gold Foreign Currencies

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.

Executive Summary: Tuesday, February 18, 2025

Modal Outcome Themes (conviction level):

- Resilient US Economy (high)

Right Tail Risk Themes (conviction level):

- Jay Wants A Soft Landing (low)

Left Tail Risk Themes (conviction level):

- Sticky Inflation (high)
- Triple S's (medium)

Fundamental Research Summary: Tuesday, February 18, 2025

Sticky Inflation (Jan-22): high conviction

- US inflation is unlikely to durably return to the Fed's stated 2% and de facto 2.5% targets in the absence of a recession. Headline CPI is likely to trend higher over the next year, generally surprising consensus estimates to the upside throughout. Upside surprises in Headline CPI are likely to be shrugged off by asset markets.
- Core PCE, however, is likely to reaccelerate and surprise consensus estimates to the upside starting in late-Q2. That development may catalyze a trending risk-off INFLATION Market Regime this summer.

Resilient US Economy (Sep-22): high conviction

- The U.S. economy remains resilient due to historically strong private sector balance sheets, the "West Village-Montauk Effect", limited exposure to the policy rate, limited exposure to the more-cyclical manufacturing sector, labor hoarding, and easy financial conditions.
- Growth is, however, likely to slow over the medium term due to elevated policy uncertainty, steepening base effects, slowing labor supply growth, and a likely reduction in federal expenditures. Moreover, the multiyear trend of positive economic surprises has likely concluded. In isolation, slowing growth is unlikely to catalyze a trending risk-off Market Regime because consensus expects growth to slow, and a moderating economy may contribute to lower bond yields.

Jay Wants A Soft Landing (Nov-23): low conviction

- The Fed has a modestly dovish reaction function that is geared towards engineering a soft landing in the U.S. economy. We expect the Fed to end the Treasury portion of balance sheet runoff this summer—if not sooner.
- The Fed is implementing its typical Fourth Turning playbook, which is to support fiscal dominance by artificially engineering demand for U.S. Treasurys amid above-target inflation and explosive growth in federal debt. Fiscal dominance demands accelerated monetary debasement and financial repression over the long term.

Triple S's (Nov-24): medium conviction

- Asset markets may struggle amid uncertainty regarding the SIZE, SEQUENCE, and SCOPE of potentially dramatic changes to fiscal, regulatory, and trade policy – especially from this asymmetric point in the positioning cycle. To start, the SIZE of President Trump's tax cut proposals may get haircut by deficit hawks in Congress. Moreover, the SEQUENCE of policy implementation may cause problems due to negative supply shocks from tariffs and securing the border occurring BEFORE the positive supply shocks from tax cuts, deregulation, and DOGE budget cuts.
- The Q1 QRA confirmed the SCOPE of Treasury net financing policy is unlikely to evolve in a hawkish manner for "at least the next several quarters". That outcome is positive for U.S. liquidity. The Debt Limit breach is also positive for U.S. liquidity because it is likely to perpetuate a potential $500bn reduction in the Treasury General Account (TGA) balance and reduces net financing to zero, which frees up investor balance sheet capacity to further capitalize risk assets. Additionally, President Trump's reciprocal tariffs strategy reduces the risk of a too-strong U.S. dollar that reduces global liquidity because the U.S.'s trading partners will likely be less willing to offset fresh tariffs with currency devaluation.

Highlighted callouts include material changes from the preceding 42 Macro research report.

Red = bearish for risk assets. Green is bullish for risk assets. Orange = neutral for risk assets.

Active Themes sourced from our monthly Macro Scouting Reports and daily Leadoff Morning Notes. In chronological order.

Quantitative Risk Management Summary: Tuesday, February 18, 2025

Short-Term Signals (<1 month):

- **Crowding Model:** Currently generating bearish signals for **China Internet Stocks $KWEB** and **Eurozone Stocks $EZU**.
- **Probable Range Model:** No key macro market indicator is currently overbought or oversold.

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

- **Dispersion Model:** Rotational flows have been generally balanced on a trending basis.
- **Positioning Model:** Short-to-medium-term positioning indicators indicate retail traders are underweight stocks, and active managers are neutral stocks. Speculators are neutral stocks, underweight Treasurys, overweight the US dollar, and neutral commodities. Our Positioning Model indicates moderate risk of a rally in risk assets over the short-to-medium term. The floor Fed Funds Rate is currently the dominant driver of Global Liquidity. Long-term nominal interest rate differentials are currently the dominant driver of the U.S. Dollar. Inflation expectations are currently the dominant driver of the RRP. Structural growth expectations are currently the dominant driver of the S&P 500. Cyclical inflation expectations are currently the dominant driver of Gold. Structural inflation expectations are currently the dominant driver of Bitcoin.
- **Volatility-Adjusted Momentum Signal (VAMS):** Among the Four Horsemen of Market Risk, the High Beta/Low Beta Ratio is bullish, the Cyclicals/Defensives Ratio is bullish, the Value/Growth Ratio is bearish, and the Small Cap/Mega Cap Ratio is bearish. Risk assets are mixed. Stocks are bullish. Crypto is mixed. Commodities are mixed. Defensive assets are mixed. Treasury Bonds are bearish. The CVIX, MOVE Index, and VIX are neutral. The U.S. Dollar Index and Gold are bullish.

Medium-to-Long-Term Signals (3-12+ months):

- **Global Macro Risk Matrix:** REFLATION is the current Market Regime. REFLATION is a risk-on regime in which investors are generally rewarded for increasing risk because policymakers are supporting or unlikely to restrain nominal economic growth that is perceived to be accelerating or persistently better than expectations. *The key portfolio construction considerations in REFLATION are: Risk Assets > Defensive Assets, High Beta > Low Beta, Cyclicals > Defensives, Growth > Value, SMID Caps > Large Caps, International > US, EM > DM, Spread Products > Treasurys, Short Rates > Belly > Long Rates, High Yield > Investment Grade, Industrial Commodities > Energy Commodities > Agricultural Commodities, and Gold > FX > USD.*
- **Global Liquidity Monitor:** Global liquidity is currently trending lower and key leading indicators of global liquidity currently signal a modest increase over the medium term.
- **GRID Model:** DEFLATION (growth ↓ and inflation ↓) is the modal outcome from a Bottom-Up Macro Regime perspective in the US economy over the next 3-6mos. INFLATION (growth ↓ and inflation ↑) is the modal outcome from a Bottom-Up Macro Regime perspective in the US economy over the next 6-12mos.
- **Macro Weather Model:** Currently generating a bullish three-month outlook for Bonds and Commodities, a neutral three-month outlook for Bitcoin, and a bearish three-month outlook for Stocks and the U.S. Dollar. The composite signals currently indicate a moderate probability of sustaining a risk-on Market Regime over the next three months.
- **Positioning Model:** Medium-to-long-term positioning indicators indicate investment advisors are overweight stocks, underweight bonds, and underweight cash. Systematic funds are neutral stocks. Market-neutral hedge funds are overweight risk assets from a gross exposure perspective. Risk asset valuations are currently consistent with major bull market peaks. Our Positioning Model indicates high risk of a crash in risk assets over the medium-to-long term.

Highlighted callouts include material changes from the preceding 42 Macro research report.

Positioning Model correction/crash risk thresholds: < 25% = low, 25-50% moderate, 50-75% reasonable, and > 75% high.

Macro Weather Model RORO phase transition risk thresholds: < 25% = low, 25-50% moderate, 50-75% reasonable, and > 75% high.

KISS Portfolio Construction Process: Keep It Simple & Systematic

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

- The 42 Macro KISS Portfolio Construction Process offers a thoughtful alternative to the traditional 60/40 portfolio framework, particularly during a Fourth Turning regime. Our 60/30/10 trend-following strategy is designed to simplify investing, maximize upside capture during bull markets, and minimize downside capture during bear markets.
- **60% Equities:** Our default exposure is the S&P 500 $SPLG. Investors may allocate that 60% to an alternative equity ETF or basket of equity ETFs that better aligns with their individual investment preferences, risk tolerance, and/or product availability. Consult our Discretionary Risk Management Overlay aka “Dr. Mo” for ideas.
- **30% Gold:** Our default exposure is Gold $GLDM. Investors may allocate that 30% to a diversified fixed income ETF or basket of fixed income ETFs that better aligns with their individual investment preferences, risk tolerance, and/or product availability. Consult our Discretionary Risk Management Overlay aka “Dr. Mo” for ideas.
- **10% Bitcoin:** Our default exposure is Bitcoin $FBTC. Investors may allocate that 10% to the Bitcoin token directly, a basket of cryptocurrencies, a diversified physical commodities ETF, or a basket of physical commodities that better aligns with their individual investment preferences, risk tolerance, and/or product availability. Consult our Discretionary Risk Management Overlay aka “Dr. Mo” for ideas.

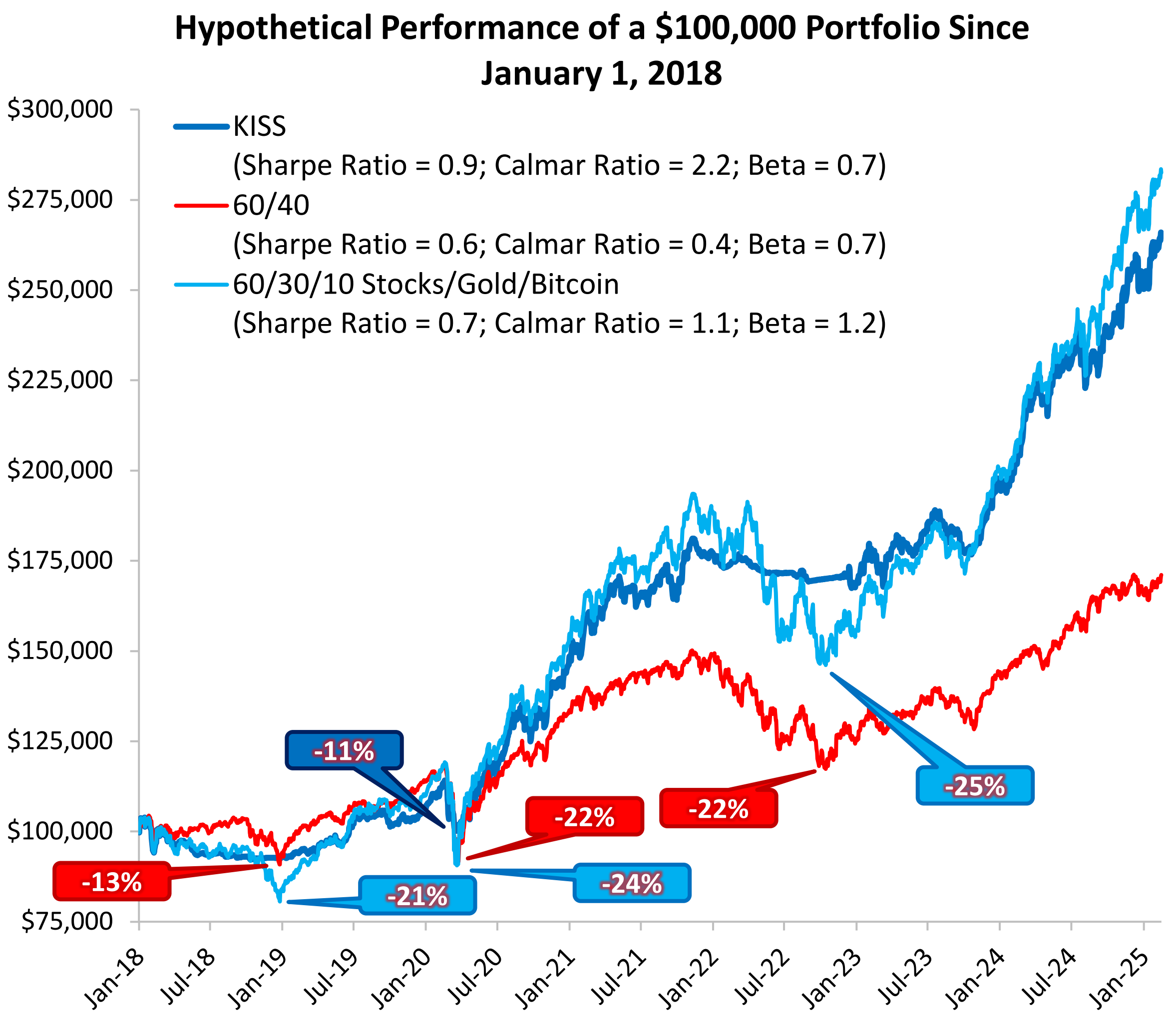
II. Top-Down Risk Management Overlay: We use our Global Macro Risk Matrix to incorporate volatility targeting into our 60/30/10 trend-following strategy.

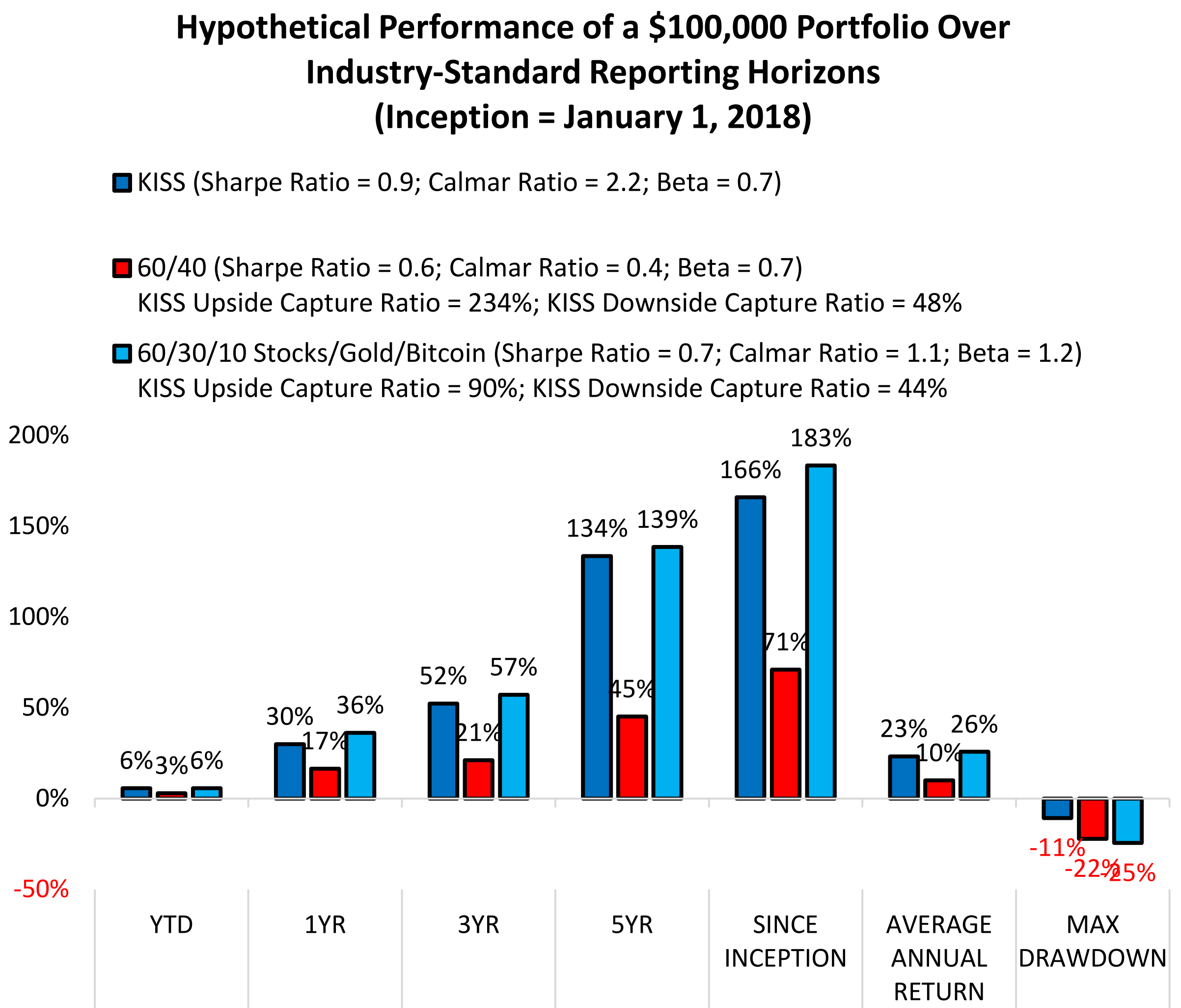
- **Equities:** If the Market Regime is in a risk-on condition (i.e., GOLDILOCKS or REFLATION), then the Target Allocation for the SPLG ETF is maxed out at 60%. If the Market Regime is in a risk-off condition (i.e., DEFLATION or INFLATION), then the Target Allocation for the SPLG ETF is cut in half to 30%.
- **Gold:** If the Market Regime is GOLDILOCKS, REFLATION, or DEFLATION, then the Target Allocation for the GLDM ETF is maxed out at 30%. If the Market Regime is INFLATION, then the Target Allocation for the GLDM ETF is cut in half to 15%.
- **Bitcoin:** If the Market Regime is in a risk-on condition (i.e., GOLDILOCKS or REFLATION), then the Target Allocation for the FBTC ETF is maxed out at 10%. If the Market Regime is in a risk-off condition (i.e., DEFLATION or INFLATION), then the Target Allocation for the FBTC ETF is cut in half to 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



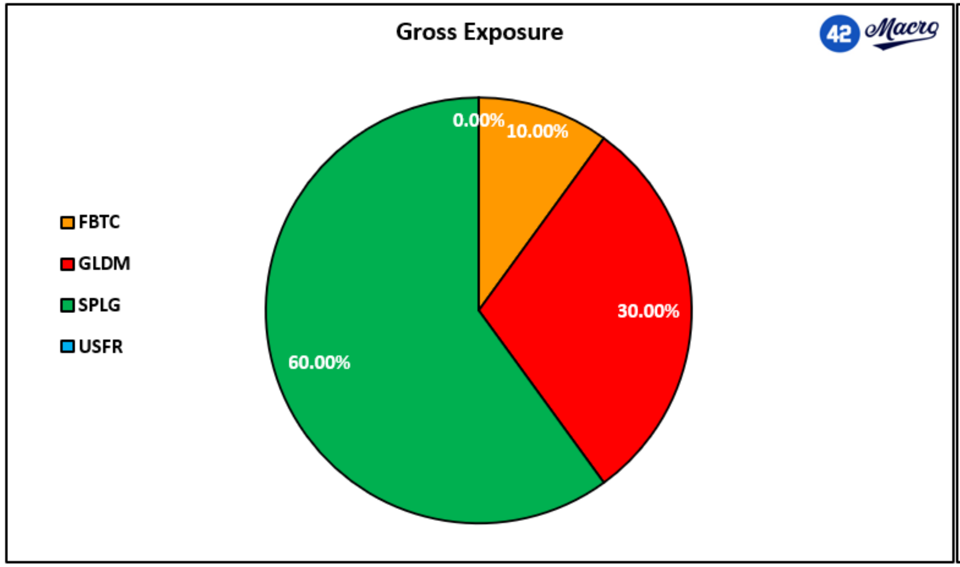


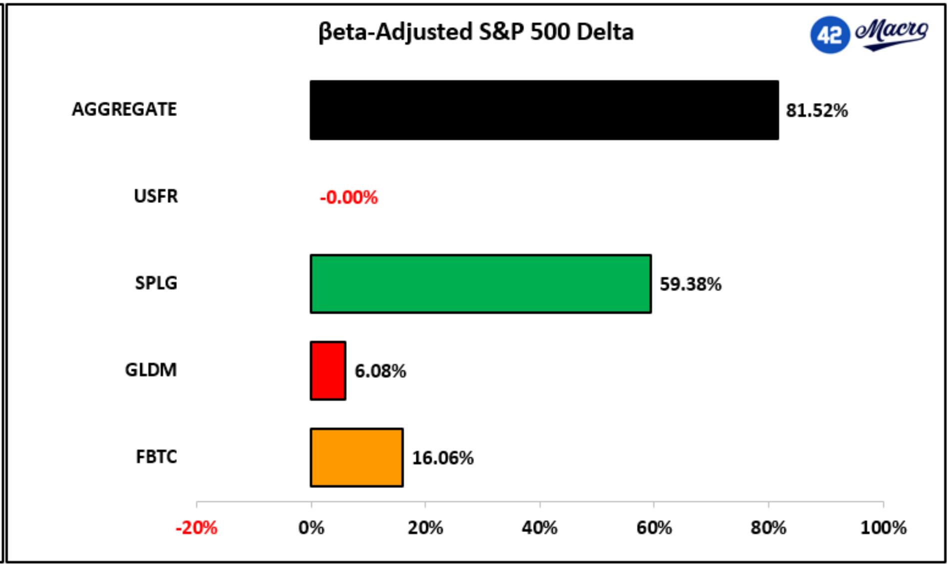
Out-of-sample backtest. KISS' Top-Down and Bottom-Up Risk Management Overlay pivots are lagged by a full day to simulate real-world trading conditions. KISS averages three trades per month since inception.

Current KISS Portfolio Construction (Implement The Pie Chart): Tuesday, February 18, 2025

42 Macro KISS Portfolio Construction

Liquidity (Percent of MAX Exposure of 100%): 0%	Market Regime Determines Target Allocation	VAMS Determines Actual Exposure	Δ Since Prior Update	6mo βeta to S&P 500
USFR	n/a	0.00%		-0.0
Equities (Percent of MAX Exposure of 60%): 100%	**Top-Down Risk Management Overlay (G&R=60%; I&D=30%)**	**Bottom-Up Risk Management Overlay (100%/50%/0%)**	**Δ Since Prior Update**	**6mo βeta to S&P 500**
SPLG	60.00%	60.00%		1.0
Gold (Percent of MAX Exposure of 30%): 100%	**Top-Down Risk Management Overlay (GRID = 30%)**	**Bottom-Up Risk Management Overlay (100%/50%/0%)**	**Δ Since Prior Update**	**6mo βeta to S&P 500**
GLDM	30.00%	30.00%		0.2
Bitcoin (Percent of MAX Exposure of 10%): 100%	**Top-Down Risk Management Overlay (G&R=10%; I&D=5%)**	**Bottom-Up Risk Management Overlay (100%/50%/0%)**	**Δ Since Prior Update**	**6mo βeta to S&P 500**
FBTC	10.00%	10.00%		1.6





Investors Should Use Our Discretionary Risk Management Overlay aka "Dr. Mo" As A Market Timing And Position Sizing Guide For Factor Long-Short Bets OR To Implement A Customized Version Of KISS: Tuesday, February 18, 2025

MARKET REGIME: REFLATION

US EQUITY SECTORS	VAMS	RSI	PROPER TRADE
USA (SPY)	✔	59	LONG: Max Position
Communication Services (XLC)	✔	75	LONG: Max Position
Consumer Discretionary (XLY)	✔	49	LONG: Max Position
Consumer Staples (XLP)	✔	59	LONG: Max Position
Energy (XLE)	!	51	LONG: Half Position
Financials (XLF)	✔	62	LONG: Max Position
Health Care (XLV)	!	50	LONG: Half Position
Industrials (XLI)	✔	50	LONG: Max Position
Information Technology (XLK)	✔	58	LONG: Max Position
Materials (XLB)	!	58	LONG: Half Position
Real Estate (XLRE)	!	55	LONG: Half Position
Utilities (XLU)	✔	56	LONG: Max Position

US EQUITY FACTORS	VAMS	RSI	PROPER TRADE
Dividend Compounders (SPHD)	!	55	LONG: Half Position
Growth (IWF)	✔	58	LONG: Max Position
High Beta (SPHB)	✔	57	LONG: Max Position
Large Caps (IWB)	✔	59	LONG: Max Position
Low Beta (SPLV)	✔	57	LONG: Max Position
Mega Cap Growth (QQQ)	✔	62	LONG: Max Position
Mid Caps (IWR)	✔	54	LONG: Max Position
Momentum (MTUM)	✔	66	LONG: Max Position
Quality (QUAL)	✔	58	LONG: Max Position
Small Caps (IWM)	✔	49	LONG: Max Position
Value (IWD)	✔	58	LONG: Max Position

GLOBAL EQUITIES	VAMS	RSI	PROPER TRADE
Australia (EWA)	✔	61	LONG: Max Position
Brazil (EWZ)	✔	67	LONG: Max Position
Canada (EWC)	✔	58	LONG: Max Position
China (FXI)	✔	74	LONG: Max Position
Commodity Producers (GNR)	!	61	LONG: Half Position
Emerging Markets (EEM)	✔	67	LONG: Max Position
Eurozone (EZU)	✔	74	LONG: Max Position
Global Equities (ACWX)	✔	70	LONG: Max Position
India (INDA)	!	35	LONG: Half Position
Japan (EWJ)	✔	58	LONG: Max Position
United Kingdom (EWU)	✔	68	LONG: Max Position

FIXED INCOME SECTORS	VAMS	RSI	PROPER TRADE
0-5yr TIPS (STIP)	✔	67	LONG: Max Position
1-3yr Treasurys (SHY)	!	53	LONG: Half Position
3-12mo Treasury Bills (BILS)	n/a	52	SHORT: Max Position
5-10yr TIPS (TIP)	✖	61	SHORT: Max Position
5-10yr Treasurys (IEF)	✖	55	SHORT: Max Position
25+ Year Treasurys (TLT)	✖	55	SHORT: Max Position
US Aggregate (AGG)	✖	56	No Position
BDCs (BIZD)	✔	69	LONG: Max Position
Convertibles (CWB)	✔	63	LONG: Max Position
EM Local Currency Bonds (EMLC)	!	62	LONG: Half Position
EM USD Bonds (EMB)	!	58	LONG: Half Position
High Yield Credit (HYG)	✔	57	LONG: Max Position
International Aggregate (BNDX)	✖	49	No Position
International Bonds (BWX)	✖	59	No Position
Investment Grade Credit (LQD)	!	56	LONG: Half Position
Leveraged Loans (BKLN)	!	53	LONG: Half Position
MBS (MBB)	✖	56	SHORT: Max Position
Preferreds (PFF)	!	51	LONG: Half Position

MACRO EXPOSURES	VAMS	RSI	PROPER TRADE
Agriculture (DBA)	✔	69	LONG: Max Position
Australian Dollar (FXA)	✖	63	No Position
Base Metals (DBB)	!	55	LONG: Half Position
Bitcoin	✔	45	LONG: Max Position
British Pound (FXB)	✖	60	No Position
Canadian Dollar (FXC)	✖	63	No Position
Commodities (PDBC)	✔	59	LONG: Max Position
Crude Oil (USO)	!	43	LONG: Half Position
Ethereum	!	42	LONG: Half Position
Euro (FXE)	✖	59	No Position
Gold (GLD)	✔	66	LONG: Max Position
Gold Miners (GDX)	✔	62	No Position
Japanese Yen (FXY)	✖	59	SHORT: Max Position
Silver (SLV)	✔	61	LONG: Max Position
Silver Miners (SIL)	✔	57	No Position
Uranium (SRUUF)	✖	34	No Position
US Dollar (UUP)	✔	41	No 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. The PROPER TRADE signals do NOT correspond to KISS.

The key portfolio construction considerations in REFLATION are: Risk Assets > Defensive Assets, High Beta > Low Beta, Cyclicals > Defensives, Growth > Value, SMID Caps > Large Caps, International > US, EM > DM, Spread Products > Treasurys, Short Rates > Belly > Long Rates, High Yield > Investment Grade, Industrial Commodities > Energy Commodities > Agricultural Commodities, and Gold > FX > USD.

 Data Source: Bloomberg. Color coding corresponds to each exposure, for each backtest. Cumulative performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. If an ETF is bullish (or bearish) VAMS and that is in line with how the underlying asset should trade in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Max Position". If an ETF is neutral VAMS and it should be bullish (or bearish) in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Half Position". There are no SHORT: Half Positions for Equity and Crypto exposures. Dr. Mo will prescribe a "No Position" if the VAMS is the opposite of what it should be in the current Market Regime.

Volatility-Adjusted Momentum Signal (VAMS) And Global Macro Risk Matrix Market Regime Backtests

42 Macro Market Regime & VAMS Backtests		% of Cumulative Performance by VAMS Condition			% of Cumulative Performance by Market Regime						Sharpe Ratio by Market Regime					
		BULLISH	NEUTRAL	BEARISH	GOLDILOCKS	REFLATION	INFLATION	DEFLATION	RISK ON	RISK OFF	GOLDILOCKS	REFLATION	INFLATION	DEFLATION	RISK ON	RISK OFF
SPY	S&P 500	80%	34%	-14%	49%	43%	-1%	8%	92%	8%	0.8	0.9	0.0	0.1	0.8	0.1
XLC	Communication Services	98%	62%	-60%	57%	60%	-44%	26%	117%	-17%	0.3	0.4	-0.5	0.1	0.3	-0.1
XLY	Consumer Discretionary	72%	47%	-19%	48%	42%	-8%	19%	89%	11%	0.8	0.8	-0.3	0.3	0.8	0.1
XLP	Consumer Staples	51%	42%	7%	46%	29%	17%	8%	76%	24%	0.7	0.4	0.5	0.1	0.5	0.2
XLE	Energy	50%	90%	-40%	59%	39%	15%	-14%	98%	2%	0.7	0.5	0.4	-0.1	0.6	0.0
XLF	Financials	78%	66%	-45%	50%	43%	1%	5%	93%	7%	0.6	0.6	0.0	0.0	0.6	0.0
XLV	Health Care	62%	21%	17%	36%	25%	14%	25%	61%	39%	0.6	0.4	0.5	0.3	0.5	0.3
XLI	Industrials	84%	51%	-35%	49%	46%	0%	5%	95%	5%	0.7	0.8	0.0	0.1	0.8	0.0
XLK	Information Technology	67%	62%	-29%	37%	40%	0%	23%	77%	23%	0.7	0.9	0.0	0.3	0.8	0.3
XLB	Materials	61%	63%	-24%	64%	31%	1%	4%	95%	5%	0.8	0.4	0.0	0.0	0.6	0.0
XLRE	Real Estate	59%	103%	-62%	53%	25%	14%	9%	77%	23%	0.5	0.3	0.3	0.0	0.4	0.1
XLU	Utilities	50%	92%	-42%	41%	22%	23%	14%	63%	37%	0.4	0.3	0.6	0.1	0.4	0.2
SPHD	Dividend Compounders	68%	34%	-1%	47%	33%	5%	15%	80%	20%	0.9	0.7	0.2	0.2	0.8	0.2
IWF	Growth	85%	45%	-31%	48%	46%	-4%	11%	94%	6%	0.9	0.9	-0.2	0.1	0.9	0.1
SPHB	High Beta	73%	90%	-64%	63%	32%	-9%	14%	95%	5%	0.7	0.5	-0.3	0.1	0.6	0.0
IWB	Large Caps	55%	47%	-2%	40%	34%	17%	9%	74%	26%	0.7	0.7	0.7	0.1	0.7	0.2
SPLV	Low Beta	81%	34%	-15%	52%	44%	-2%	5%	97%	3%	0.9	0.9	-0.1	0.1	0.9	0.0
QQQ	Mega Cap Growth	68%	50%	-17%	39%	41%	0%	20%	80%	20%	0.8	0.9	0.0	0.3	0.9	0.2
IWR	Mid Caps	70%	46%	-16%	63%	39%	0%	-1%	102%	-2%	1.2	0.9	0.0	0.0	1.1	0.0
MTUM	Momentum	88%	26%	-13%	54%	36%	-1%	11%	90%	10%	1.2	0.8	0.0	0.2	1.1	0.1
QUAL	Quality	76%	25%	-2%	43%	40%	-4%	20%	83%	17%	1.0	1.0	-0.2	0.3	1.0	0.2
IWM	Small Caps	73%	49%	-22%	72%	40%	0%	-13%	113%	-13%	1.0	0.7	0.0	-0.1	0.9	-0.1
IWD	Value	72%	51%	-24%	63%	40%	4%	-7%	103%	-3%	0.9	0.7	0.1	-0.1	0.8	0.0
EWA	Australia	79%	29%	-8%	71%	29%	-2%	2%	99%	1%	0.9	0.4	0.0	0.0	0.7	0.0
EWZ	Brazil	96%	70%	-65%	125%	11%	2%	-38%	136%	-36%	1.0	0.1	0.0	-0.2	0.6	-0.2
EWC	Canada	87%	44%	-31%	68%	50%	-6%	-12%	118%	-18%	1.1	0.8	-0.2	-0.1	1.0	-0.1
FXI	China	110%	76%	-86%	121%	33%	-25%	-29%	153%	-53%	0.8	0.2	-0.3	-0.1	0.5	-0.2
GNR	Commodity Producers	66%	71%	-37%	55%	39%	6%	0%	94%	6%	0.6	0.5	0.1	0.0	0.6	0.0
EEM	Emerging Markets	102%	47%	-50%	137%	51%	-36%	-52%	188%	-88%	1.6	0.6	-0.8	-0.4	1.1	-0.5
EZU	Eurozone	145%	66%	-111%	68%	65%	-19%	-14%	133%	-33%	0.5	0.6	-0.3	-0.1	0.5	-0.1
ACWX	Global Equities	120%	56%	-76%	107%	62%	-26%	-43%	169%	-69%	1.0	0.7	-0.6	-0.3	0.8	-0.4
INDA	India	91%	27%	-18%	60%	57%	-3%	-15%	118%	-18%	1.2	1.1	-0.1	-0.2	1.2	-0.2
EWJ	Japan	106%	21%	-27%	57%	67%	16%	-40%	124%	-24%	0.4	0.5	0.3	-0.3	0.5	-0.1
EWU	United Kingdom	58%	32%	10%	78%	27%	-6%	1%	105%	-5%	0.4	0.2	-0.1	0.0	0.3	0.0

42 Macro Market Regime & VAMS Backtests		% of Cumulative Performance by VAMS Condition			% of Cumulative Performance by Market Regime						Sharpe Ratio by Market Regime					
		BULLISH	NEUTRAL	BEARISH	GOLDILOCKS	REFLATION	INFLATION	DEFLATION	RISK ON	RISK OFF	GOLDILOCKS	REFLATION	INFLATION	DEFLATION	RISK ON	RISK OFF
STIP	0-5yr TIPS	73%	36%	-10%	57%	43%	-9%	8%	100%	0%	1.2	0.8	-0.3	0.2	1.0	0.0
SHY	1-3yr Treasury	66%	35%	-1%	29%	26%	5%	41%	54%	46%	1.8	1.5	0.6	2.5	1.6	1.8
TIP	5-10yr TIPS	77%	12%	10%	60%	29%	-11%	22%	89%	11%	1.3	0.6	-0.4	0.4	0.9	0.1
IEF	5-10yr Treasury	74%	22%	4%	30%	16%	1%	53%	46%	54%	0.7	0.4	0.1	1.3	0.5	0.9
TLT	Long Bond	133%	38%	-71%	39%	-5%	-58%	124%	34%	66%	0.1	0.0	-0.5	0.4	0.1	0.2
AGG	US Aggregate	67%	25%	8%	42%	23%	-2%	37%	64%	36%	1.4	0.7	-0.1	1.4	1.0	0.8
BIZD	BDCs	95%	100%	-95%	70%	55%	-3%	-22%	125%	-25%	0.8	0.8	-0.1	-0.1	0.8	-0.1
CWB	Convertibles	105%	23%	-28%	101%	34%	-22%	-14%	136%	-36%	1.7	0.6	-0.8	-0.2	1.2	-0.3
EMLC	EM Local Currency Bonds	120%	56%	-76%	163%	12%	-49%	-26%	175%	-75%	1.3	0.1	-0.9	-0.1	0.7	-0.3
EMB	EM USD Bonds	69%	47%	-17%	78%	19%	2%	0%	98%	2%	3.2	0.9	0.2	0.0	2.2	0.0
HYG	High Yield Credit	94%	36%	-30%	88%	34%	-6%	-16%	122%	-22%	4.3	2.0	-0.6	-0.5	3.2	-0.5
BNDX	International Aggregate	71%	28%	1%	80%	21%	-14%	13%	101%	-1%	1.4	0.3	-0.5	0.2	0.9	0.0
BWX	International Bonds	99%	10%	-9%	78%	23%	-23%	22%	101%	-1%	1.0	0.3	-0.7	0.3	0.6	0.0
LQD	Investment Grade Credit	74%	33%	-7%	63%	26%	-6%	16%	90%	10%	1.9	0.7	-0.3	0.4	1.3	0.2
BKLN	Leveraged Loans	104%	28%	-32%	71%	48%	-3%	-17%	119%	-19%	4.4	3.9	-0.3	-0.3	4.1	-0.3
MBB	MBS	60%	31%	9%	32%	24%	1%	43%	56%	44%	1.3	0.7	0.1	2.1	0.9	1.1
PFF	Preferreds	128%	26%	-54%	110%	46%	-22%	-34%	155%	-55%	1.5	0.7	-0.7	-0.2	1.1	-0.3
DBA	Agriculture	193%	-47%	-46%	92%	84%	2%	-78%	176%	-76%	0.7	0.7	0.0	-0.7	0.7	-0.5
FXA	Australian Dollar	168%	84%	-153%	329%	47%	-163%	-113%	376%	-276%	0.6	0.1	-0.7	-0.2	0.4	-0.3
DBB	Base Metals	281%	16%	-196%	139%	136%	-30%	-145%	275%	-175%	1.4	1.3	-0.8	-1.5	1.4	-1.3
Bitcoin	Bitcoin	108%	1%	-9%	46%	60%	-6%	-1%	106%	-6%	1.1	1.5	-0.6	0.0	1.3	-0.2
FXB	British Pound	648%	-183%	-565%	59%	180%	-51%	-288%	240%	-340%	0.1	0.4	-0.3	-0.7	0.3	-0.6
FXC	Canadian Dollar	223%	51%	-174%	546%	39%	-201%	-284%	585%	-485%	0.7	0.1	-0.7	-0.4	0.4	-0.5
PDBC	Commodities	200%	39%	-138%	123%	113%	-16%	-120%	236%	-136%	1.3	1.3	-0.5	-1.4	1.3	-1.1
USO	Crude Oil	106%	68%	-73%	71%	79%	9%	-59%	150%	-50%	0.6	0.9	0.2	-0.5	0.7	-0.3
Ethereum	Ethereum	143%	-20%	-23%	99%	39%	-45%	7%	138%	-38%	0.5	0.2	-0.6	0.0	0.4	-0.2
FXE	Euro	224%	-7%	-116%	630%	255%	-221%	-564%	885%	-785%	0.5	0.2	-0.4	-0.4	0.4	-0.4
IAU	Gold	87%	4%	9%	51%	24%	-3%	28%	76%	24%	1.0	0.4	-0.2	0.6	0.7	0.3
GDX	Gold Miners	78%	42%	-21%	76%	-21%	-56%	101%	55%	45%	0.3	-0.1	-0.6	0.3	0.1	0.1
FXY	Japanese Yen	28%	39%	-167%	358%	-1026%	259%	309%	-668%	568%	0.1	-0.4	0.2	0.1	-0.1	0.1
SLV	Silver	85%	9%	6%	77%	33%	-17%	7%	110%	-10%	0.9	0.4	-0.5	0.1	0.6	-0.1
SIL	Silver Miners	78%	96%	-74%	159%	-97%	-63%	101%	62%	38%	0.4	-0.3	-0.4	0.2	0.1	0.1
SRUUF	Uranium	117%	-17%	0%	-73%	21%	-12%	-36%	-52%	-48%	-0.3	0.1	-0.1	-0.1	-0.1	-0.1
UUP	US Dollar	712%	97%	-709%	-123%	-28%	71%	180%	-151%	251%	-0.4	-0.1	0.6	0.6	-0.3	0.6

Intellectual Property of 42 Macro LLC. Data Source: Bloomberg. Cumulative Performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. All color coding corresponds to each asset and each set of backtests. Cumulative Performance since Jan-98 is negative for certain assets (mainly foreign currencies), which creates sign distortions in the % of Cumulative Performance figures.

Cumulative performance is determined by summing daily log price changes for each asset. Backtests begin 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.

42 Macro

Discretionary Risk Management Overlay aka “Dr. Mo” Backtests

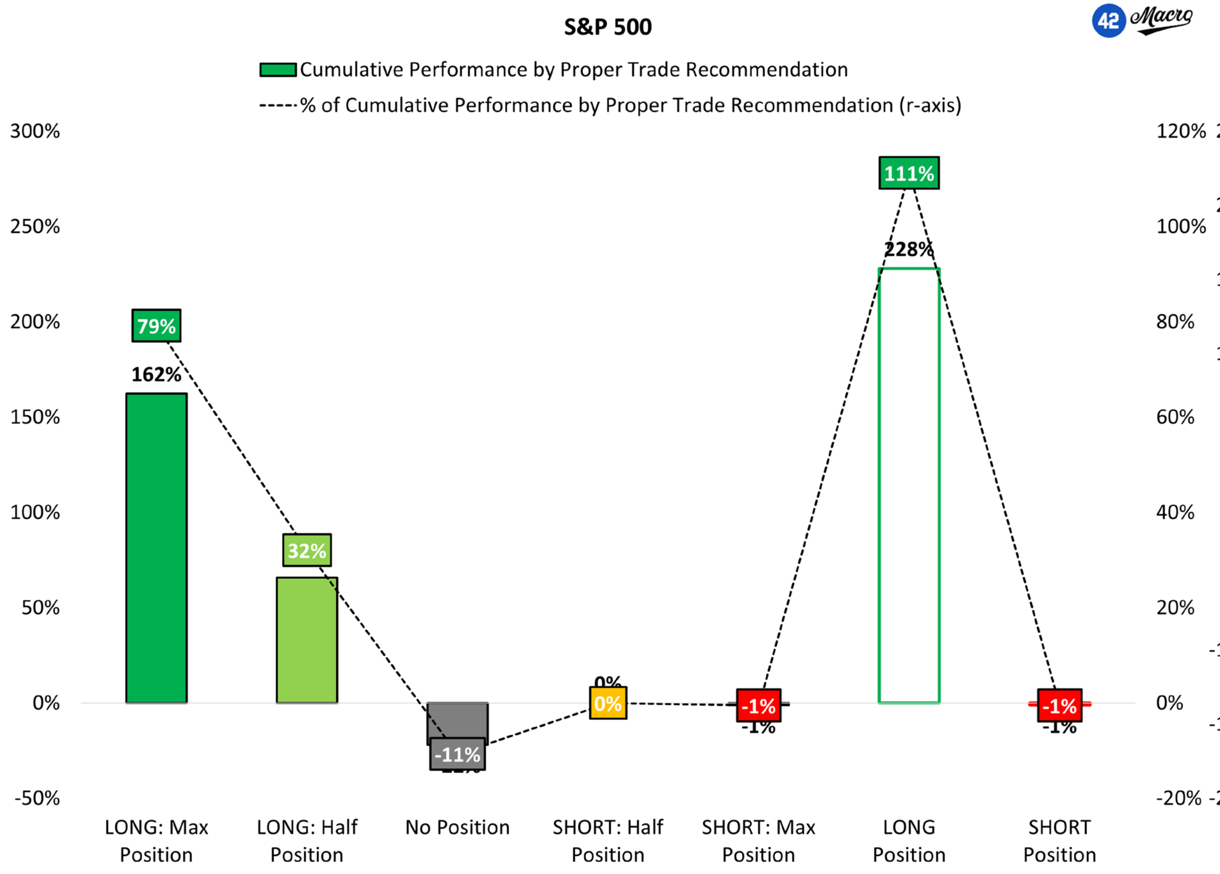
42 Macro Discretionary Risk Management Overlay Backtest		Cumulative Performance by Proper Trade Recommendation							% of Cumulative Performance by Proper Trade Recommendation						
		LONG Max Position	LONG Half Position	No Position	SHORT Half Position	SHORT Max Position	LONG Position	SHORT Position	LONG Max Position	LONG Half Position	No Position	SHORT Half Position	SHORT Max Position	LONG Position	SHORT Position
SPY	S&P 500	162%	66%	-22%	0%	-1%	228%	-1%	79%	32%	-11%	0%	-1%	111%	-1%
XLC	Communication Services	87%	76%	-58%	0%	-14%	163%	-14%	96%	84%	-64%	0%	-16%	180%	-16%
XLY	Consumer Discretionary	181%	114%	-20%	0%	-20%	295%	-20%	71%	45%	-8%	0%	-8%	116%	-8%
XLP	Consumer Staples	82%	53%	26%	0%	-6%	135%	-6%	53%	34%	17%	0%	-4%	87%	-4%
XLE	Energy	122%	93%	133%	0%	-125%	215%	-125%	55%	42%	60%	0%	-56%	96%	-56%
XLF	Financials	173%	27%	132%	0%	-113%	200%	-113%	79%	12%	60%	0%	-51%	91%	-51%
XLV	Health Care	113%	38%	32%	0%	0%	151%	0%	62%	21%	17%	0%	0%	83%	0%
XLI	Industrials	194%	24%	92%	0%	-88%	219%	-88%	87%	11%	41%	0%	-40%	98%	-40%
XLK	Information Technology	195%	173%	-56%	0%	-14%	368%	-14%	65%	58%	-19%	0%	-5%	123%	-5%
XLB	Materials	158%	69%	100%	0%	-70%	227%	-70%	61%	27%	39%	0%	-27%	88%	-27%
XLRE	Real Estate	108%	188%	-114%	0%	0%	296%	0%	60%	103%	-63%	0%	0%	163%	0%
XLU	Utilities	70%	130%	-59%	0%	0%	200%	0%	50%	93%	-42%	0%	0%	142%	0%
SPHD	Dividend Compounders	155%	72%	-1%	0%	8%	228%	8%	66%	31%	0%	0%	3%	97%	3%
IWF	Growth	192%	100%	-51%	0%	-10%	291%	-10%	83%	43%	-22%	0%	-4%	127%	-4%
SPHB	High Beta	221%	48%	202%	0%	-190%	269%	-190%	79%	17%	72%	0%	-68%	96%	-68%
IWB	Large Caps	105%	90%	-4%	0%	0%	195%	0%	55%	47%	-2%	0%	0%	102%	0%
SPLV	Low Beta	166%	71%	-30%	0%	1%	237%	1%	80%	34%	-15%	0%	0%	114%	0%
QQQ	Mega Cap Growth	194%	127%	-11%	0%	-17%	321%	-17%	66%	43%	-4%	0%	-6%	110%	-6%
IWR	Mid Caps	202%	47%	91%	0%	-64%	249%	-64%	73%	17%	33%	0%	-23%	90%	-23%
MTUM	Momentum	222%	56%	-13%	0%	-10%	277%	-10%	87%	22%	-5%	0%	-4%	109%	-4%
QUAL	Quality	179%	65%	-7%	0%	-1%	244%	-1%	76%	27%	-3%	0%	0%	103%	0%
IWM	Small Caps	208%	38%	114%	0%	-86%	246%	-86%	76%	14%	42%	0%	-31%	90%	-31%
IWD	Value	148%	38%	64%	0%	-55%	186%	-55%	75%	20%	33%	0%	-28%	95%	-28%
EWA	Australia	109%	12%	50%	0%	-33%	121%	-33%	79%	8%	36%	0%	-24%	87%	-24%
EWZ	Brazil	226%	-25%	226%	0%	-196%	202%	-196%	97%	-11%	97%	0%	-84%	87%	-84%
EWC	Canada	131%	40%	34%	0%	-62%	171%	-62%	92%	28%	24%	0%	-44%	120%	-44%
FXI	China	230%	9%	126%	0%	-175%	239%	-175%	121%	5%	66%	0%	-92%	126%	-92%
GNR	Commodity Producers	145%	54%	121%	0%	-95%	199%	-95%	65%	24%	54%	0%	-42%	89%	-42%
EEM	Emerging Markets	178%	66%	33%	0%	-106%	244%	-106%	104%	39%	19%	0%	-62%	143%	-62%
EZU	Eurozone	116%	-1%	60%	0%	-98%	114%	-98%	152%	-2%	79%	0%	-130%	151%	-130%
ACWX	Global Equities	127%	27%	57%	0%	-106%	154%	-106%	121%	26%	54%	0%	-102%	147%	-102%
INDA	India	279%	56%	46%	0%	-72%	335%	-72%	90%	18%	15%	0%	-23%	109%	-23%
EWJ	Japan	97%	23%	36%	0%	-51%	120%	-51%	92%	22%	35%	0%	-49%	114%	-49%
EWU	United Kingdom	52%	10%	26%	0%	-13%	62%	-13%	70%	13%	35%	0%	-18%	83%	-18%

42 Macro Discretionary Risk Management Overlay Backtest		Cumulative Performance by Proper Trade Recommendation							% of Cumulative Performance by Proper Trade Recommendation						
		LONG Max Position	LONG Half Position	No Position	SHORT Half Position	SHORT Max Position	LONG Position	SHORT Position	LONG Max Position	LONG Half Position	No Position	SHORT Half Position	SHORT Max Position	LONG Position	SHORT Position
STIP	0-5yr TIPS	23%	11%	-1%	0%	-2%	34%	-2%	75%	36%	-3%	0%	-8%	110%	-7%
SHY	1-3yr Treasurys	44%	19%	3%	5%	-3%	63%	2%	65%	28%	4%	7%	-4%	93%	4%
TIP	5-10yr TIPS	67%	10%	0%	2%	12%	76%	13%	74%	11%	0%	2%	13%	85%	15%
IEF	5-10yr Treasurys	84%	8%	-4%	15%	6%	93%	22%	77%	8%	-4%	14%	6%	84%	20%
TLT	Long Bond	57%	-1%	7%	19%	-35%	56%	-16%	122%	-3%	15%	41%	-75%	120%	-34%
AGG	US Aggregate	71%	26%	9%	1%	-2%	97%	-1%	68%	25%	8%	1%	-1%	93%	-1%
BIZD	BDCs	191%	59%	135%	0%	-187%	250%	-187%	96%	30%	68%	0%	-94%	126%	-94%
CWB	Convertibles	170%	31%	-6%	4%	-47%	201%	-43%	112%	20%	-4%	3%	-31%	132%	-28%
EMLC	EM Local Currency Bonds	52%	22%	2%	2%	-35%	74%	-33%	119%	51%	6%	4%	-81%	171%	-76%
EMB	EM USD Bonds	119%	34%	8%	48%	-36%	153%	12%	69%	20%	5%	28%	-21%	88%	7%
HYG	High Yield Credit	145%	36%	0%	19%	-49%	180%	-30%	96%	24%	0%	13%	-33%	119%	-20%
BNDX	International Aggregate	52%	26%	7%	-5%	-6%	78%	-11%	71%	35%	10%	-7%	-8%	105%	-15%
BWX	International Bonds	66%	13%	5%	-7%	-10%	79%	-17%	98%	20%	7%	-10%	-15%	117%	-25%
LQD	Investment Grade Credit	90%	36%	4%	3%	-13%	126%	-9%	74%	30%	3%	3%	-10%	105%	-8%
BKLN	Leveraged Loans	117%	16%	-2%	15%	-34%	133%	-20%	105%	15%	-2%	13%	-31%	120%	-18%
MBB	MBS	64%	13%	-2%	19%	9%	77%	28%	62%	12%	-2%	19%	8%	74%	27%
PFF	Preferreds	161%	21%	10%	12%	-79%	181%	-67%	129%	17%	8%	10%	-63%	146%	-54%
DBA	Agriculture	131%	-3%	30%	-35%	-46%	128%	-81%	169%	-3%	39%	-45%	-59%	166%	-104%
FXA	Australian Dollar	57%	34%	-18%	-4%	-34%	91%	-38%	162%	96%	-50%	-12%	-96%	258%	-108%
DBB	Base Metals	151%	12%	11%	-3%	-113%	163%	-116%	258%	20%	19%	-5%	-193%	279%	-198%
Bitcoin	Bitcoin	2133%	45%	-7%	0%	-148%	2179%	-148%	105%	2%	0%	0%	-7%	108%	-7%
FXB	British Pound	39%	4%	-2%	-14%	-33%	44%	-47%	-703%	-73%	30%	250%	596%	-776%	846%
FXC	Canadian Dollar	32%	23%	1%	-14%	-24%	54%	-38%	193%	138%	3%	-87%	-147%	331%	-235%
PDBC	Commodities	107%	43%	19%	-18%	-87%	150%	-106%	170%	68%	30%	-29%	-138%	237%	-167%
USO	Crude Oil	240%	182%	47%	-1%	-200%	421%	-201%	89%	68%	18%	0%	-75%	157%	-75%
Ethereum	Ethereum	540%	-33%	-39%	0%	-95%	507%	-95%	145%	-9%	-10%	0%	-26%	136%	-26%
FXE	Euro	58%	4%	-7%	-6%	-24%	62%	-30%	232%	17%	-28%	-24%	-97%	249%	-121%
IAU	Gold	214%	26%	31%	-16%	0%	241%	-16%	84%	10%	12%	-6%	0%	94%	-6%
GDX	Gold Miners	201%	58%	-120%	0%	-5%	258%	-5%	151%	43%	-90%	0%	-4%	194%	-4%
FXY	Japanese Yen	5%	16%	0%	-12%	-22%	21%	-34%	-41%	-135%	-4%	99%	181%	-176%	280%
SLV	Silver	211%	84%	19%	-59%	15%	295%	-44%	78%	31%	7%	-22%	5%	109%	-16%
SIL	Silver Miners	161%	82%	-124%	0%	-37%	243%	-37%	196%	99%	-151%	0%	-45%	296%	-45%
SRUUF	Uranium	46%	-15%	13%	5%	0%	31%	5%	94%	-31%	27%	9%	0%	63%	9%
UUP	US Dollar	35%	6%	7%	-1%	-41%	41%	-43%	614%	113%	126%	-18%	-735%	727%	-753%

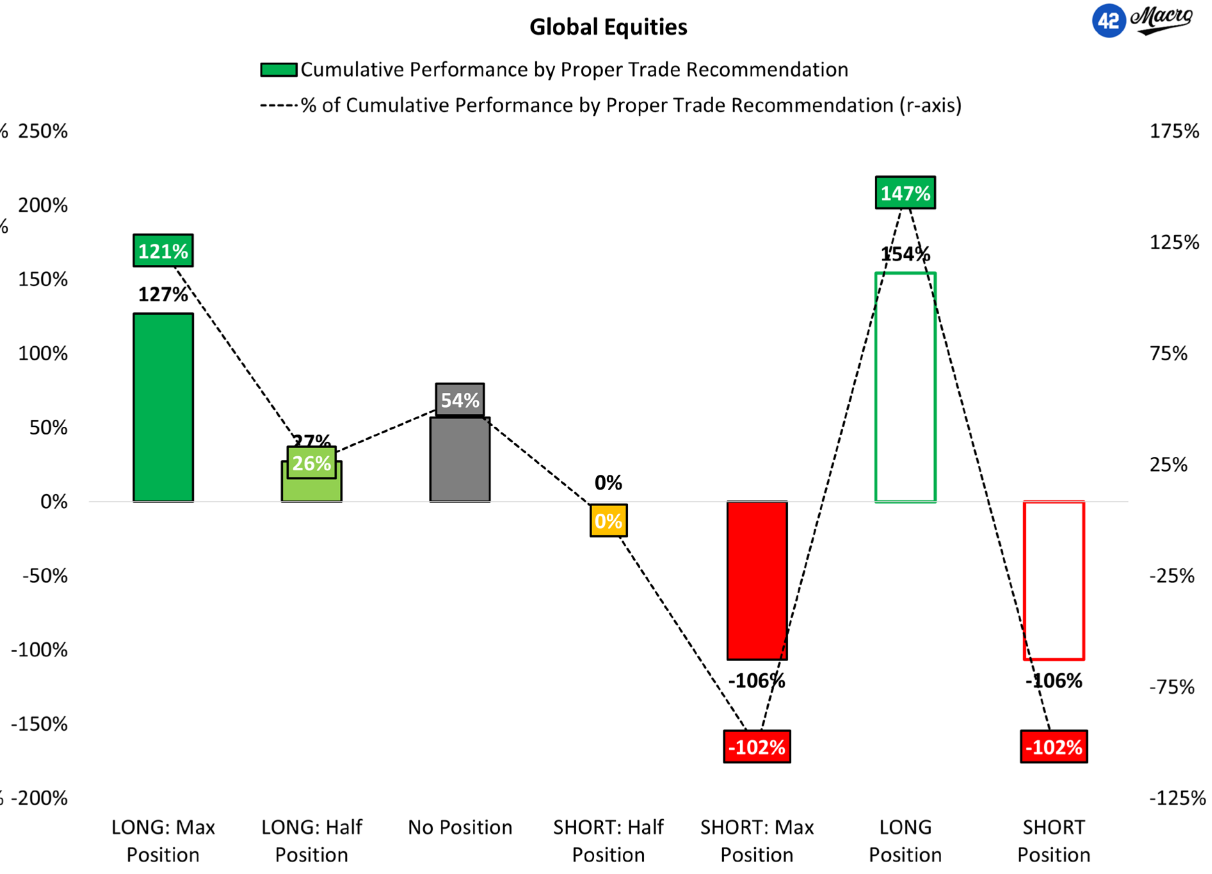
Intellectual Property of 42 Macro LLC. Data Source: Bloomberg. Cumulative Performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. All color coding corresponds to each asset and each set of backtests. Cumulative Performance since Jan-98 is negative for certain assets (mainly foreign currencies), which creates sign distortions in the % of Cumulative Performance figures.

 Data Source: Bloomberg. Color coding corresponds to each exposure, for each backtest. Cumulative performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. If an ETF is bullish (or bearish) VAMS and that is in line with how the underlying asset should trade in the current Market Regime, then Dr. Mo will prescribe a “LONG (SHORT): Max Position”. If an ETF is neutral VAMS and it should be bullish (or bearish) in the current Market Regime, then Dr. Mo will prescribe a “LONG (SHORT): Half Position”. There are no SHORT: Half Positions for Equity and Crypto exposures. Dr. Mo will prescribe a “No Position” if the VAMS is the opposite of what it should be in the current Market Regime.

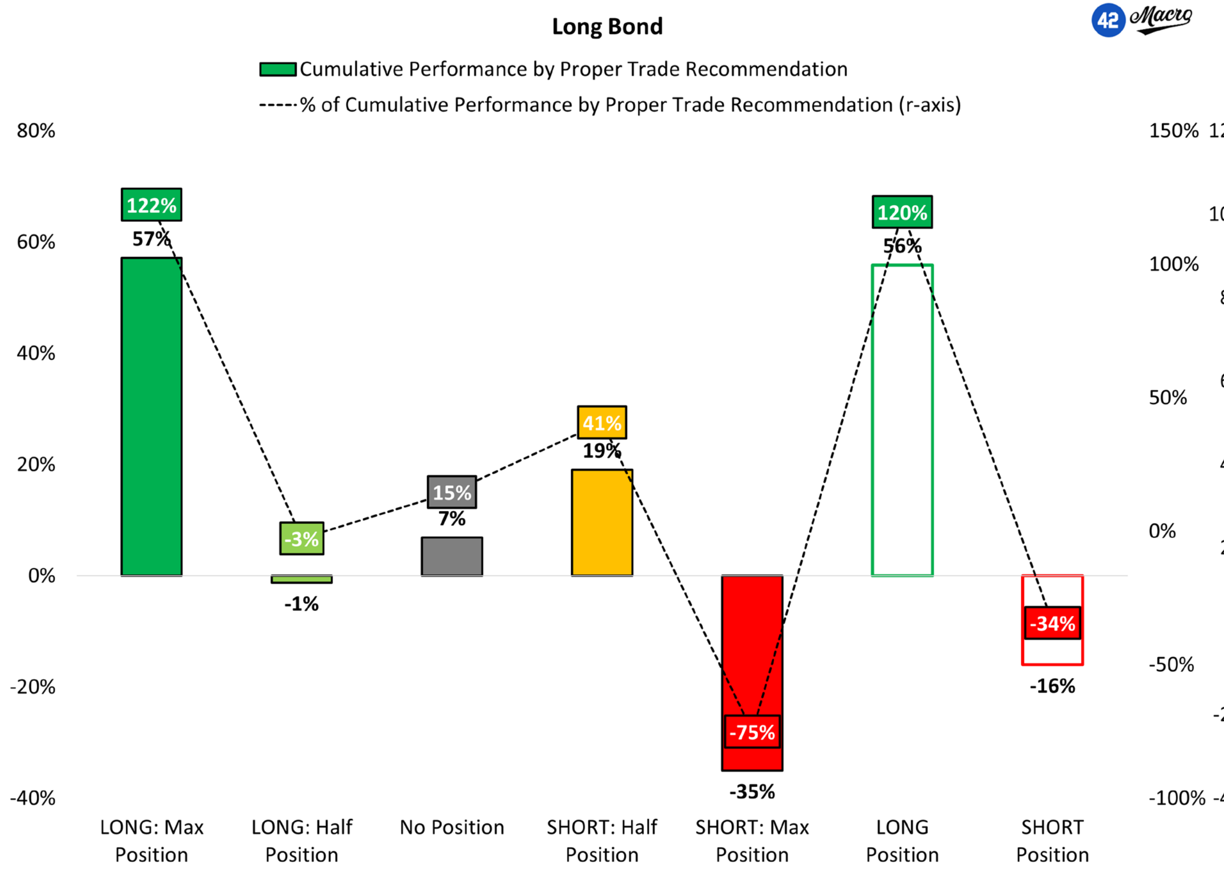
Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: US Equities



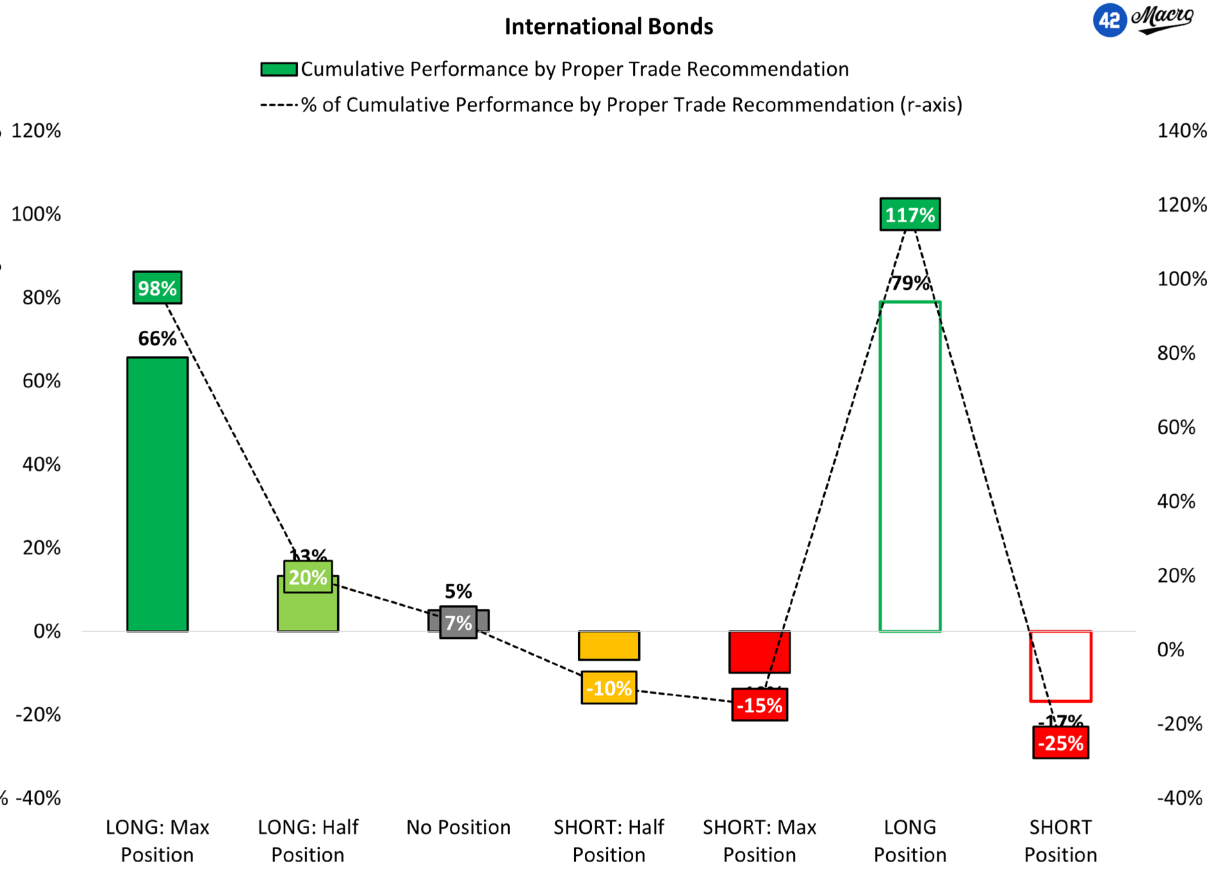
Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: Global Equities



Discretionary Risk Management Overlay aka “Dr. Mo” Backtest: US Bonds

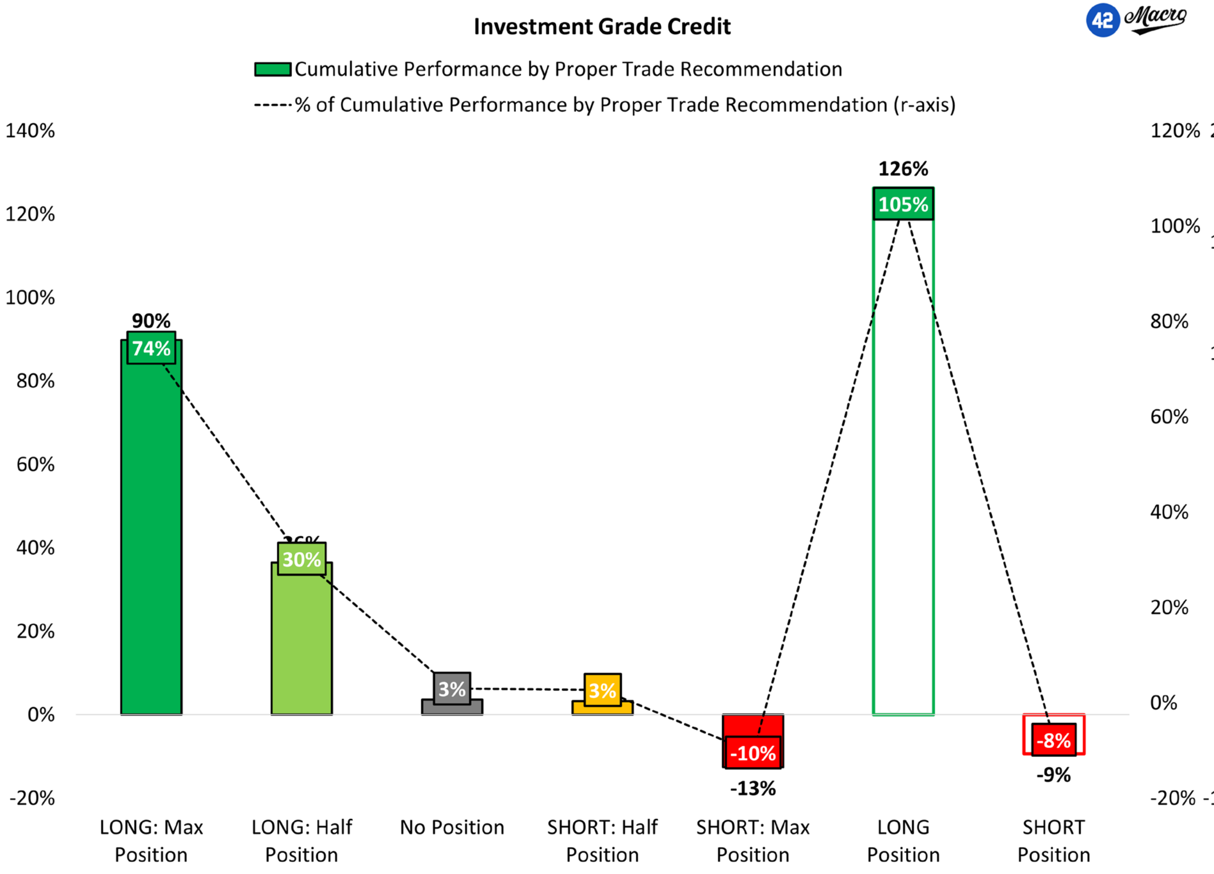


Discretionary Risk Management Overlay aka “Dr. Mo” Backtest: Global Bonds

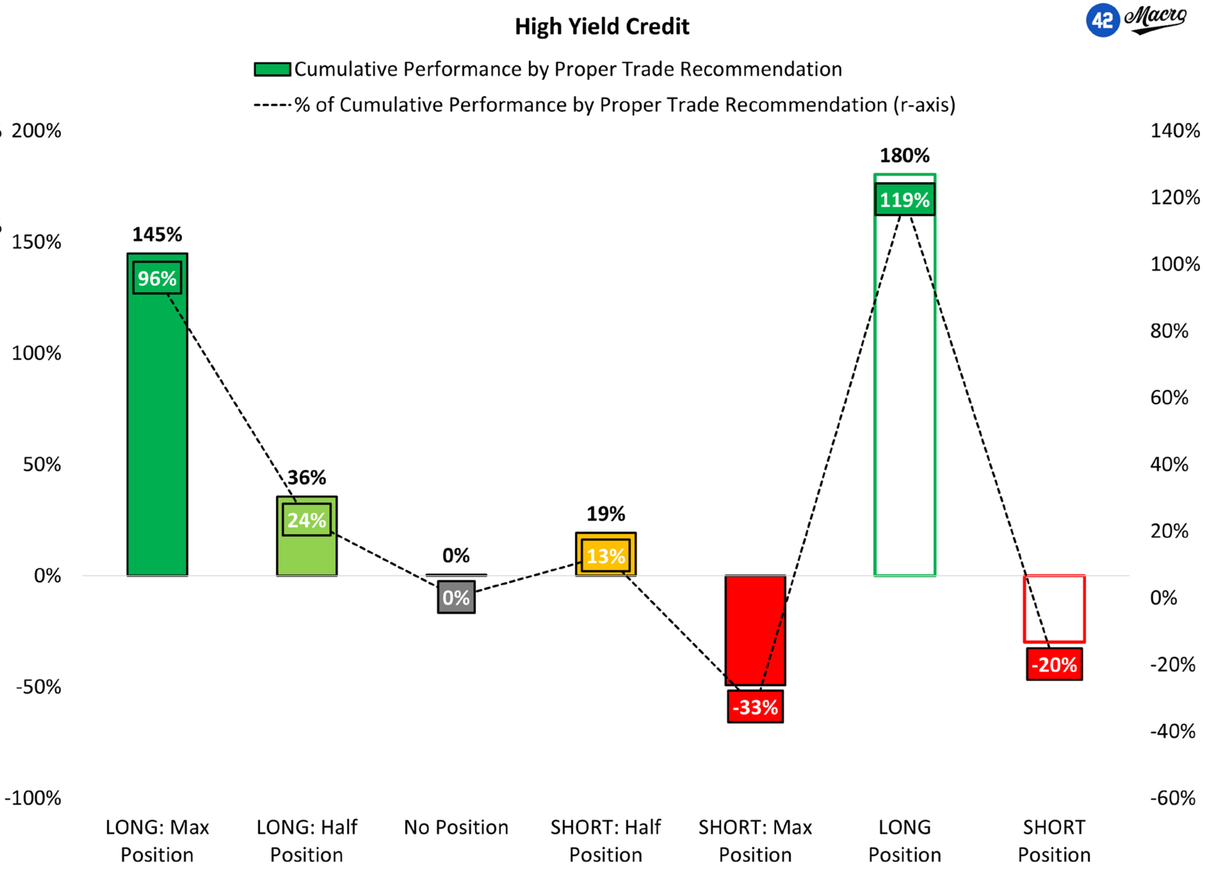


 Data Source: Bloomberg. Color coding corresponds to each exposure, for each backtest. Cumulative performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. If an ETF is bullish (or bearish) VAMS and that is in line with how the underlying asset should trade in the current Market Regime, then Dr. Mo will prescribe a “LONG (SHORT): Max Position”. If an ETF is neutral VAMS and it should be bullish (or bearish) in the current Market Regime, then Dr. Mo will prescribe a “LONG (SHORT): Half Position”. There are no SHORT: Half Positions for Equity and Crypto exposures. Dr. Mo will prescribe a “No Position” if the VAMS is the opposite of what it should be in the current Market Regime.

Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: IG Credit

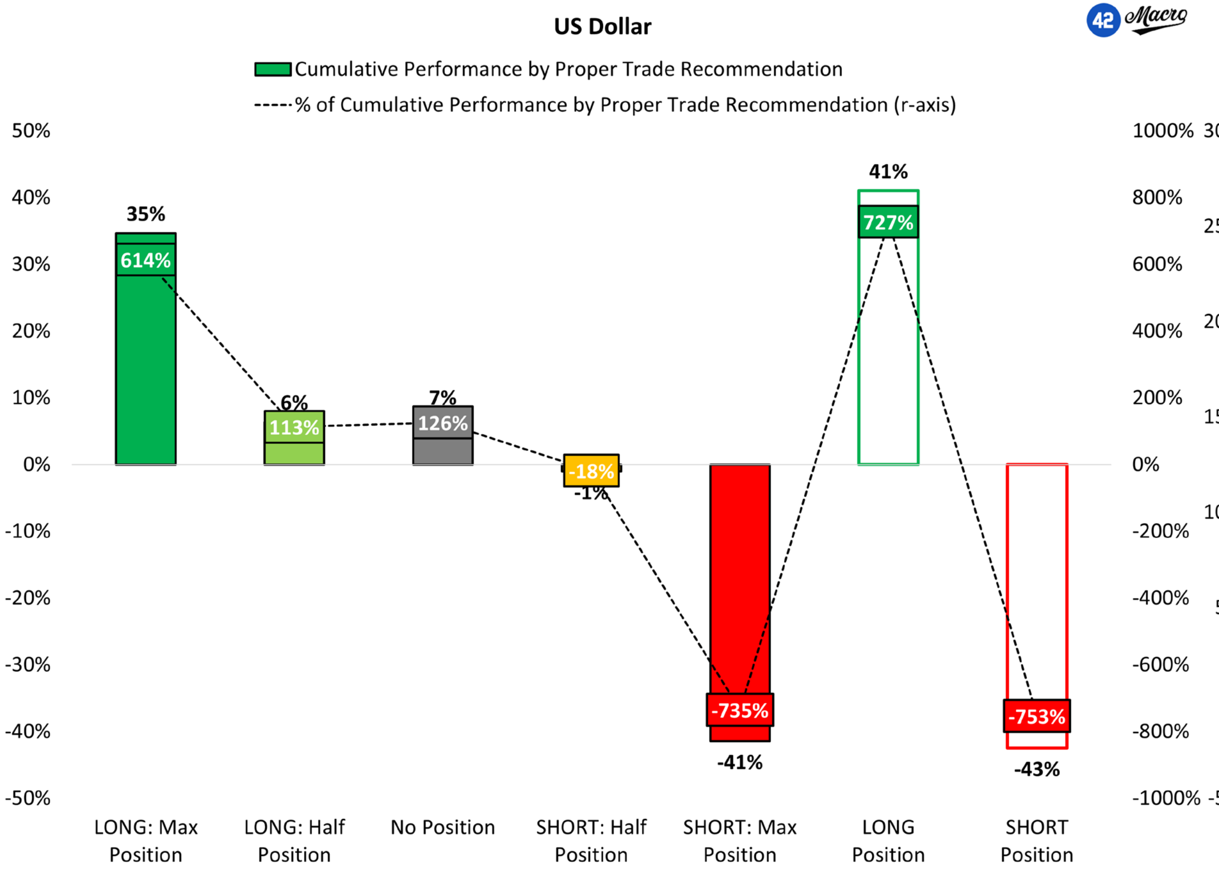


Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: High Yield Credit

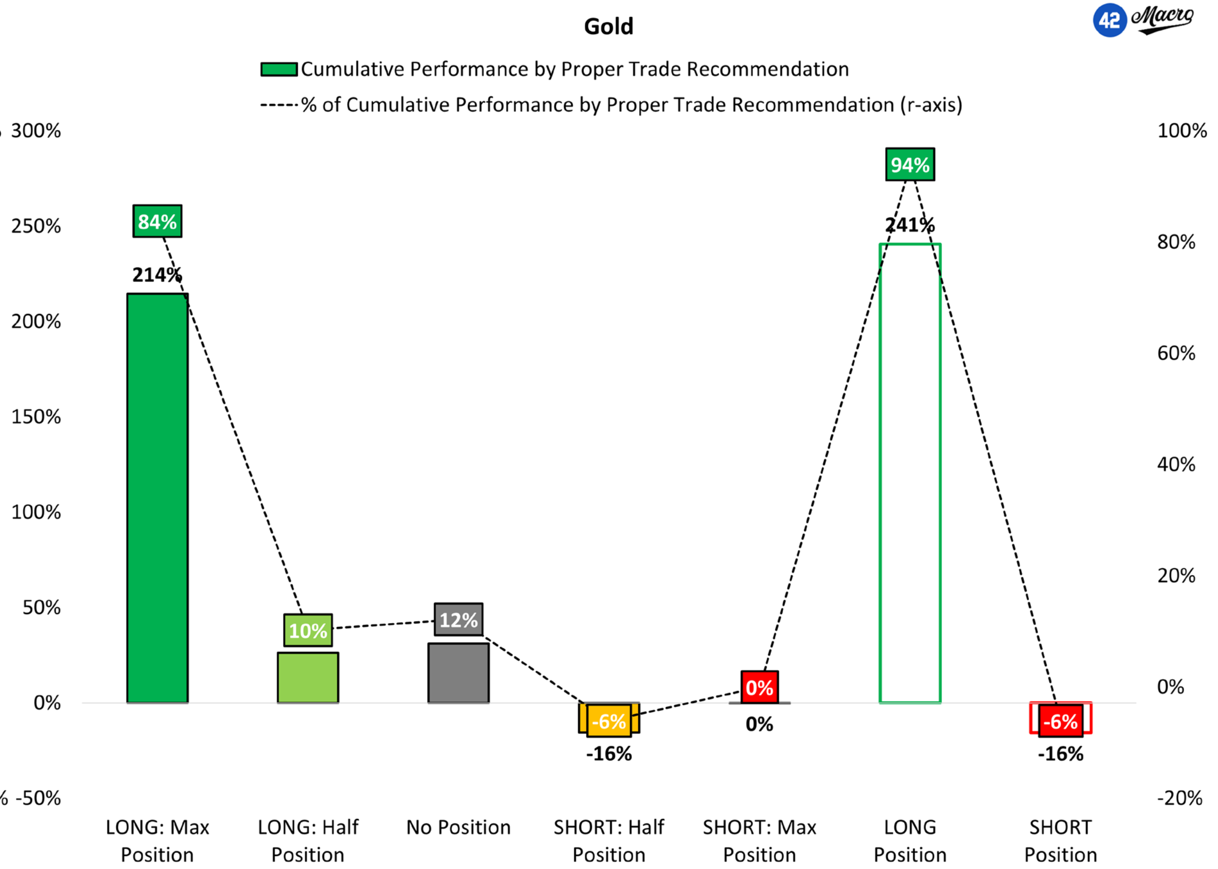


 Data Source: Bloomberg. Color coding corresponds to each exposure, for each backtest. Cumulative performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. If an ETF is bullish (or bearish) VAMS and that is in line with how the underlying asset should trade in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Max Position". If an ETF is neutral VAMS and it should be bullish (or bearish) in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Half Position". There are no SHORT: Half Positions for Equity and Crypto exposures. Dr. Mo will prescribe a "No Position" if the VAMS is the opposite of what it should be in the current Market Regime.

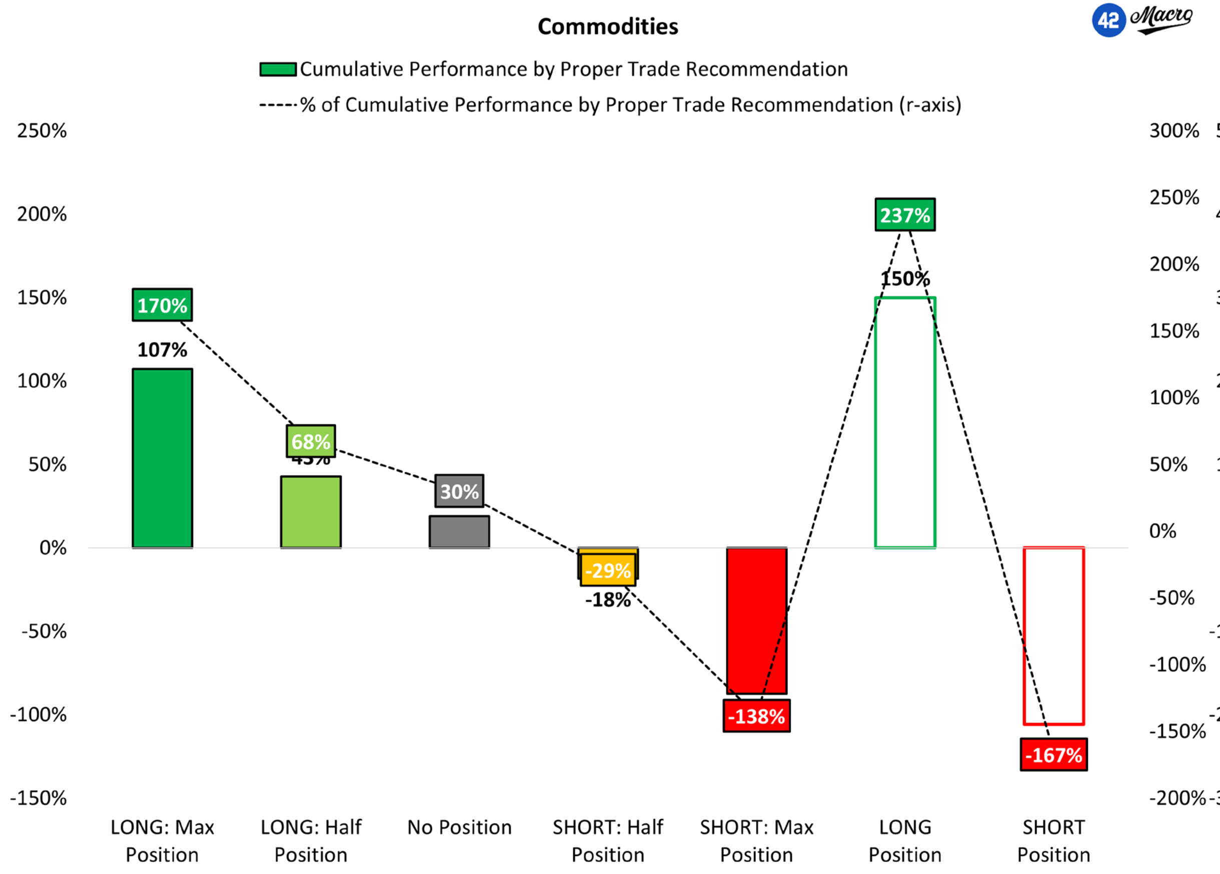
Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: US Dollar



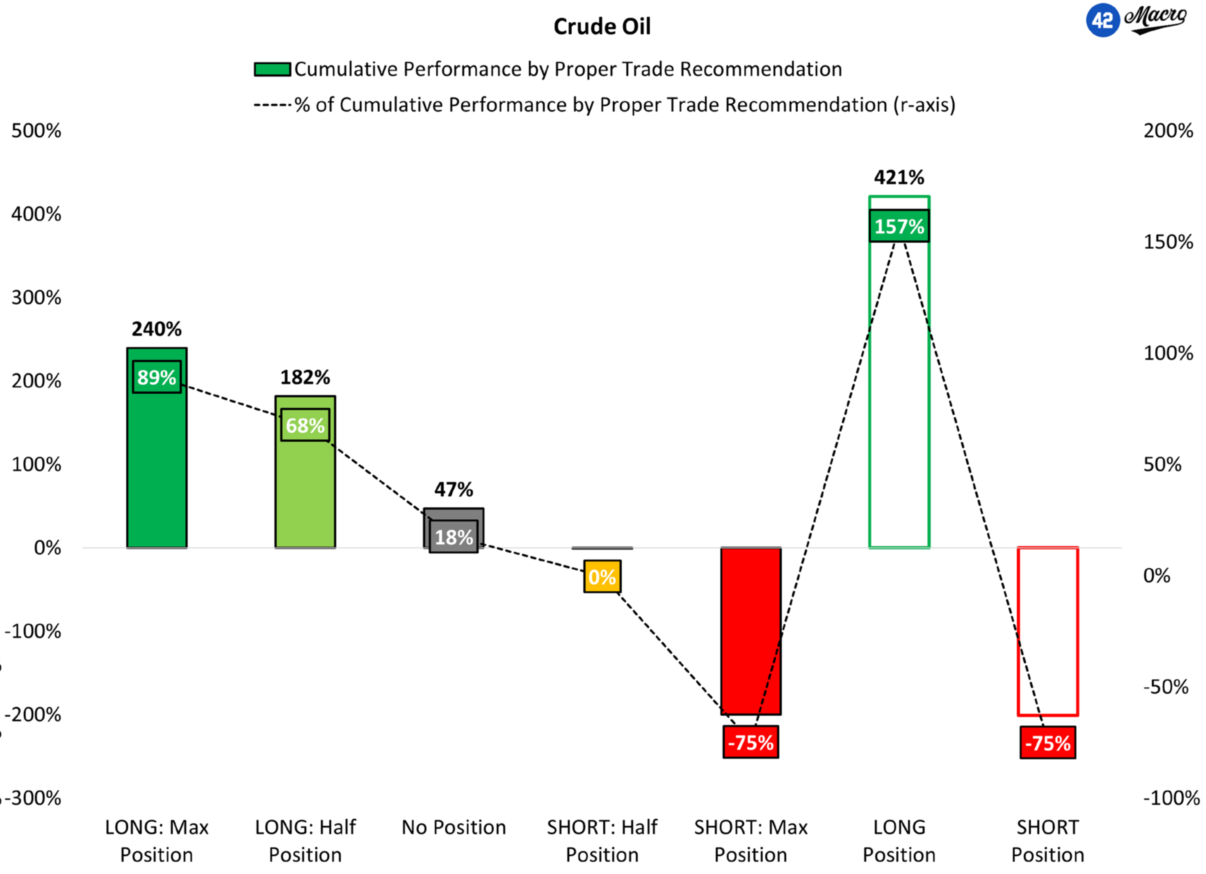
Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: Gold



Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: Commodities



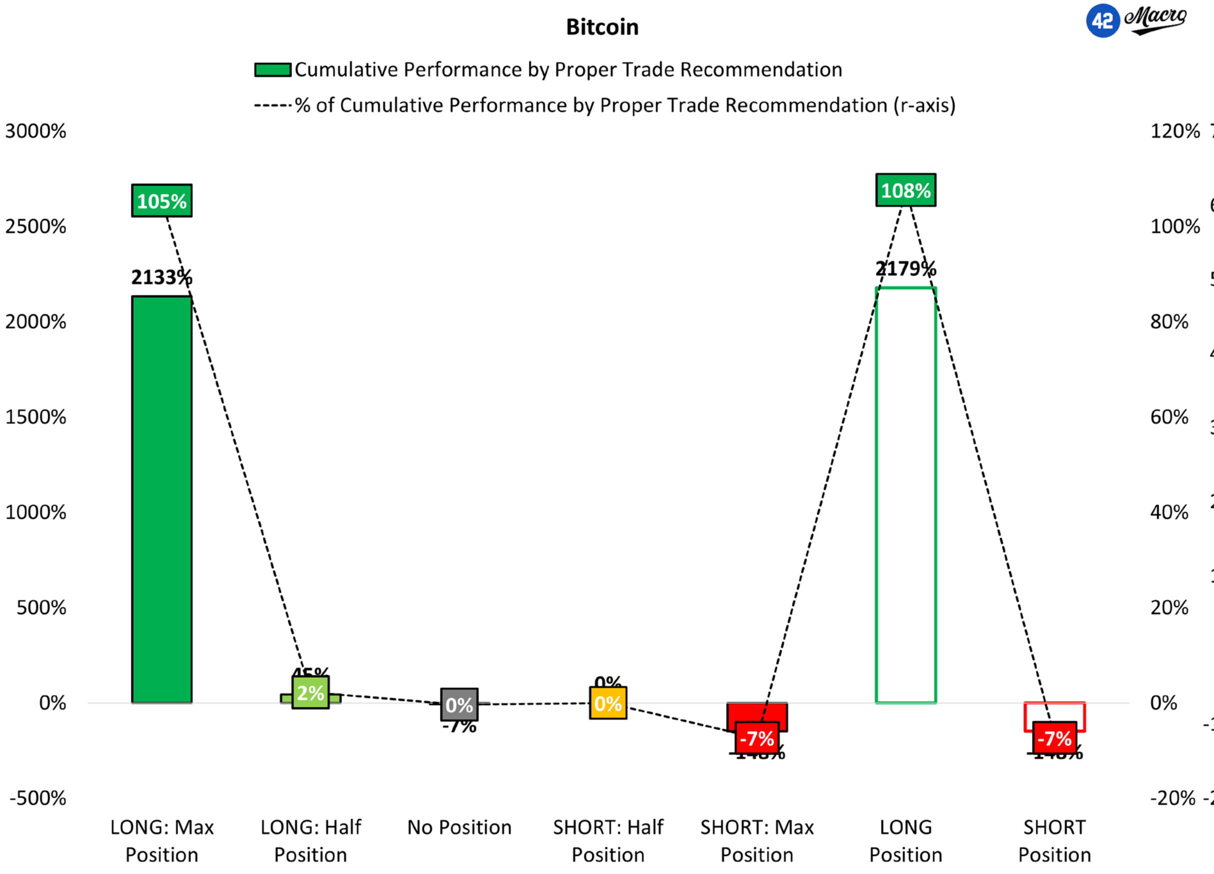
Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: Crude Oil

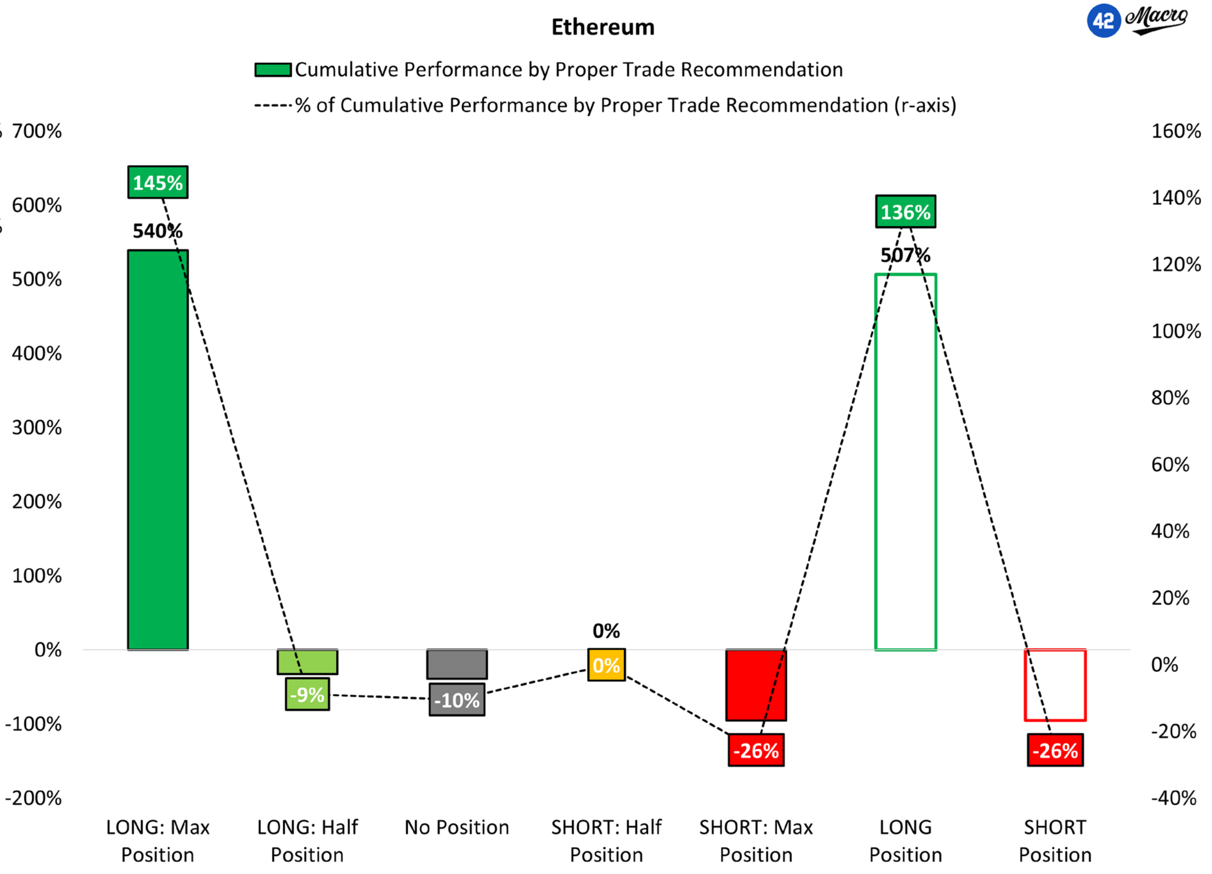


 Data Source: Bloomberg. Color coding corresponds to each exposure, for each backtest. Cumulative performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. If an ETF is bullish (or bearish) VAMS and that is in line with how the underlying asset should trade in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Max Position". If an ETF is neutral VAMS and it should be bullish (or bearish) in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Half Position". There are no SHORT: Half Positions for Equity and Crypto exposures. Dr. Mo will prescribe a "No Position" if the VAMS is the opposite of what it should be in the current Market Regime.

Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: Bitcoin

Discretionary Risk Management Overlay aka "Dr. Mo" Backtest: Ethereum

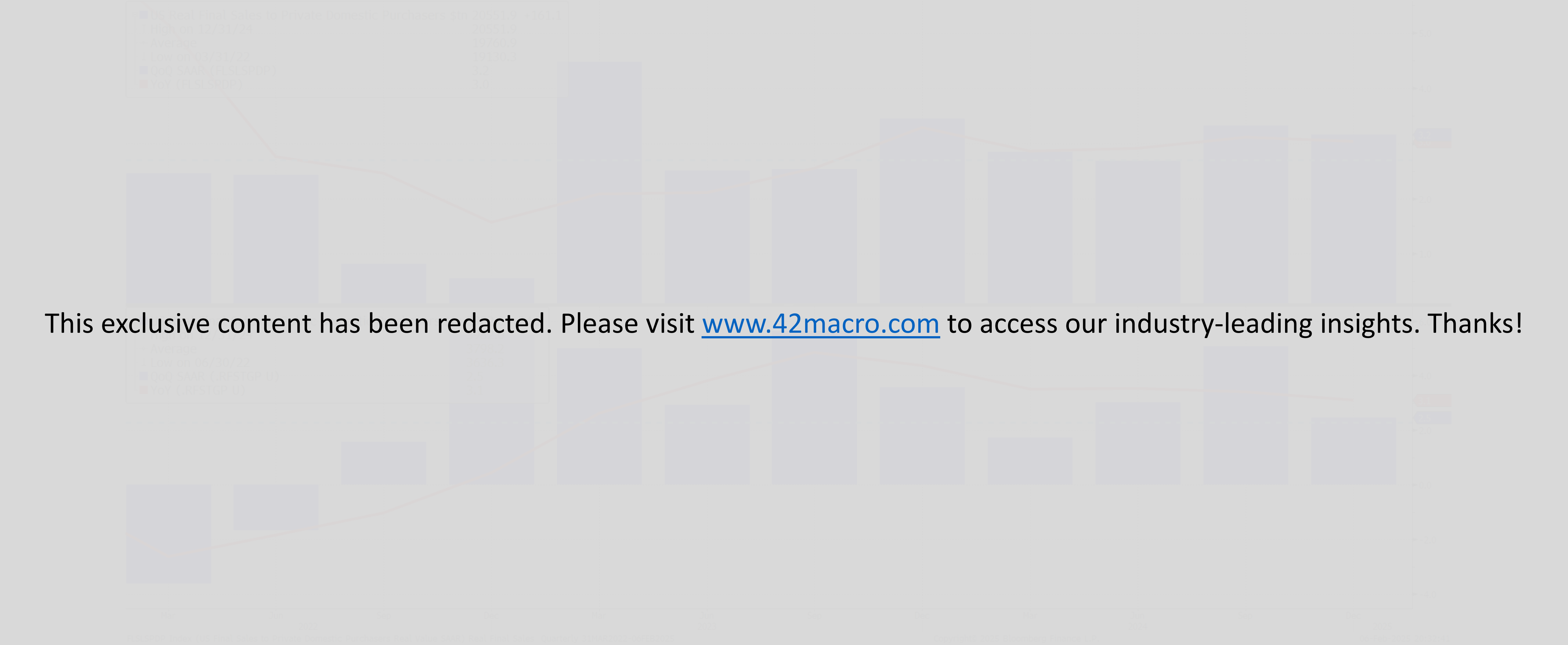




© 42 Macro LLC. Data Source: Bloomberg. Color coding corresponds to each exposure, for each backtest. Cumulative performance is determined by summing daily log price changes for each asset. Backtests begin in Jan-98. If an ETF is bullish (or bearish) VAMS and that is in line with how the underlying asset should trade in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Max Position". If an ETF is neutral VAMS and it should be bullish (or bearish) in the current Market Regime, then Dr. Mo will prescribe a "LONG (SHORT): Half Position". There are no SHORT: Half Positions for Equity and Crypto exposures. Dr. Mo will prescribe a "No Position" if the VAMS is the opposite of what it should be in the current Market Regime.

Modal Outcome

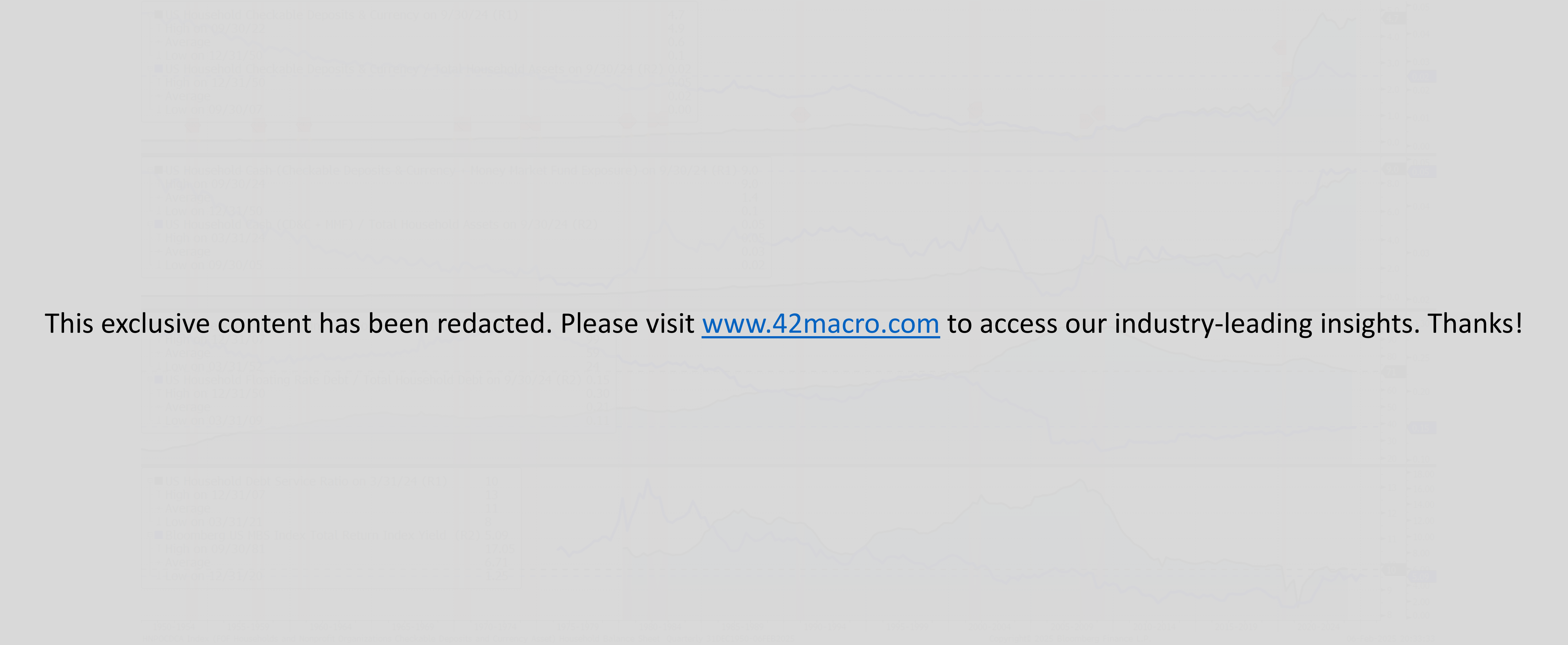
Our “Resilient US Economy” Theme Persists



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: Bloomberg. Light blue dotted lines = 2015-19 trend.

There Are Six Pillars Upholding Our "Resilient US Economy" Theme: 1) A Historically Strong Household Sector Balance Sheet

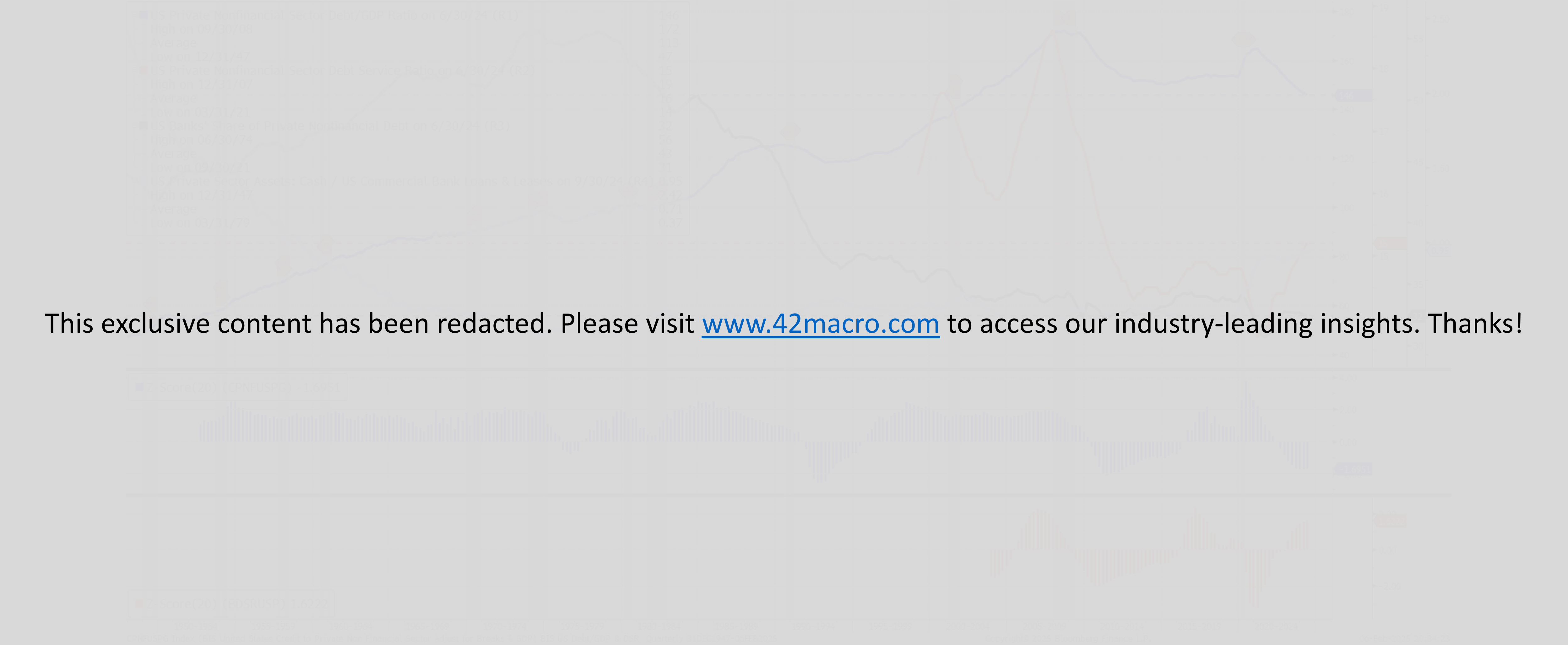


This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

There Are Six Pillars Upholding Our "Resilient US Economy" Theme: 2) A Historically Strong Corporate Sector Balance Sheet

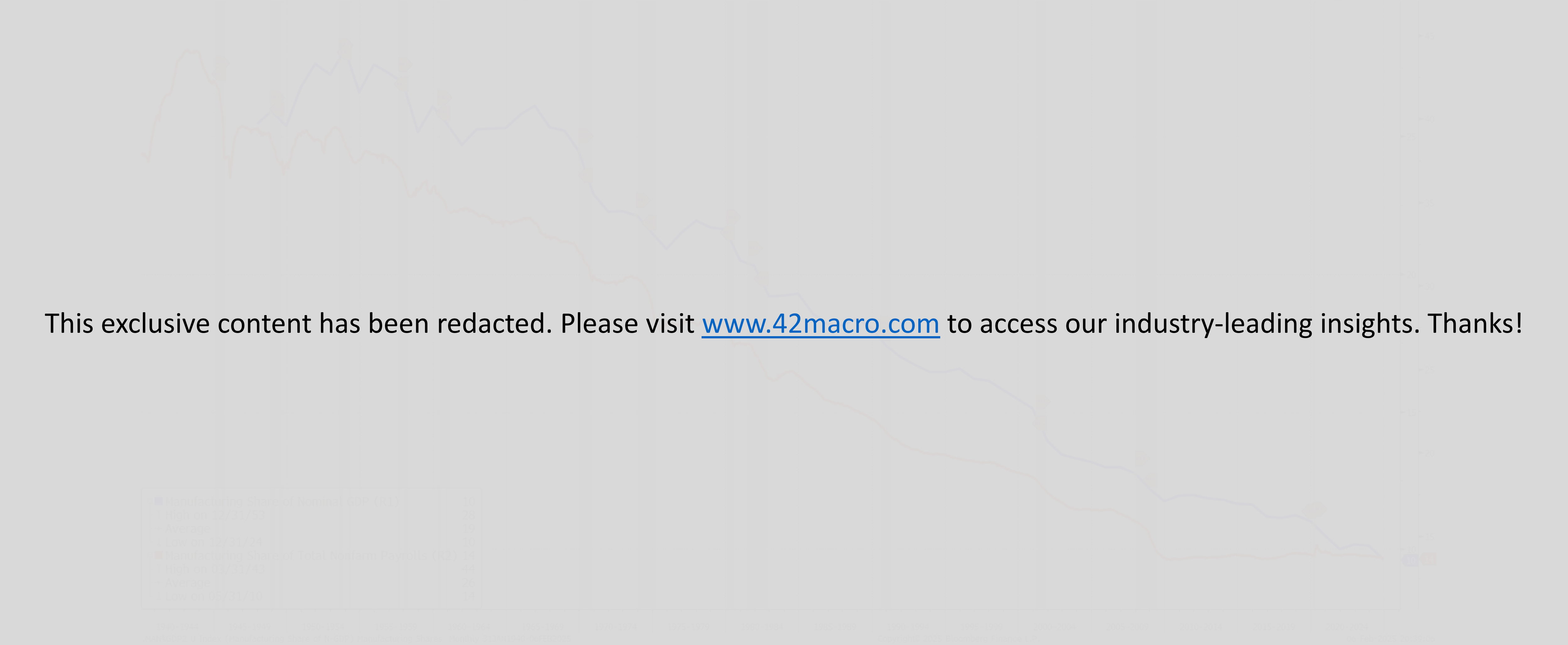
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

There Are Six Pillars Upholding Our "Resilient US Economy" Theme:
3) An Income-Driven Business Cycle = Limited Exposure To The Policy Rate



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

There Are Six Pillars Upholding Our "Resilient US Economy" Theme: 4) Limited Exposure To The Volatile Manufacturing Sector



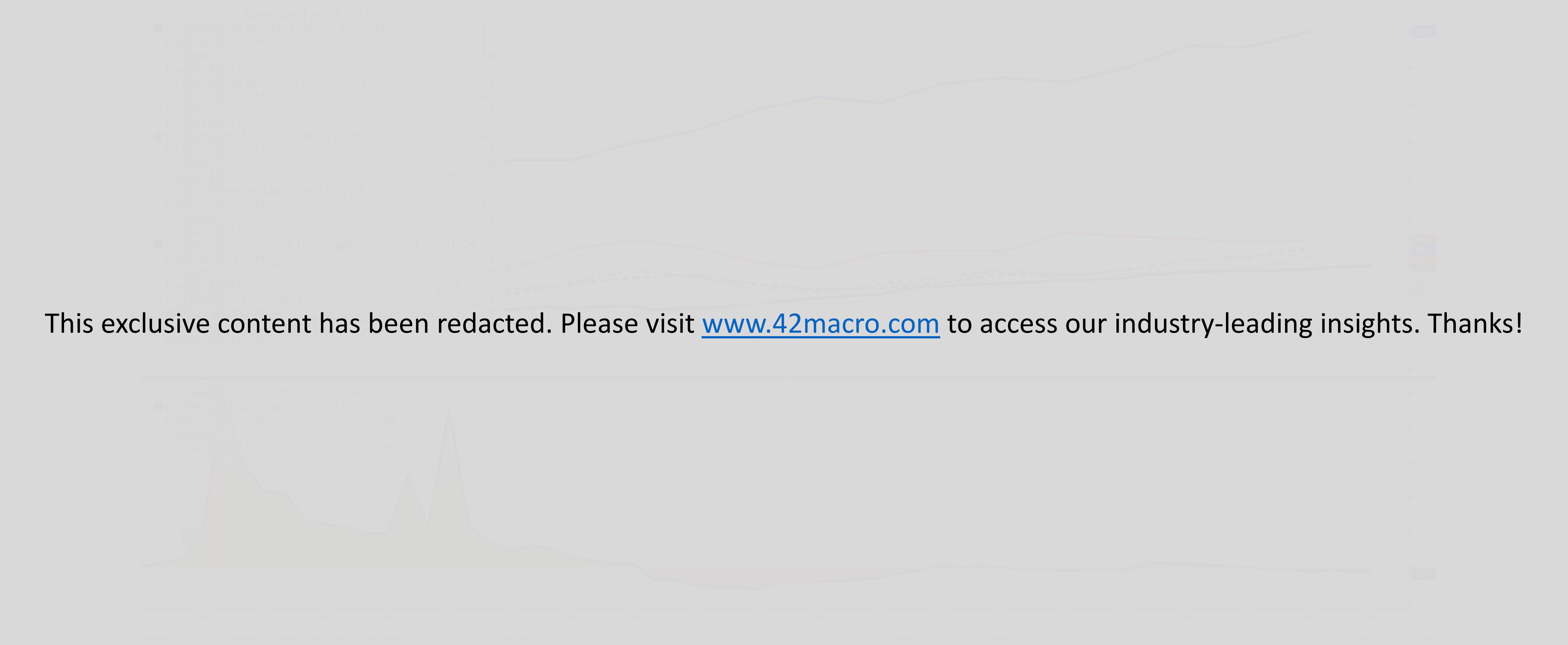
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The manufacturing sector has accounted for a median 98% of net job losses in postwar US recessions.

There Are Six Pillars Upholding Our "Resilient US Economy" Theme: 5) "Jay Wants A Soft Landing"

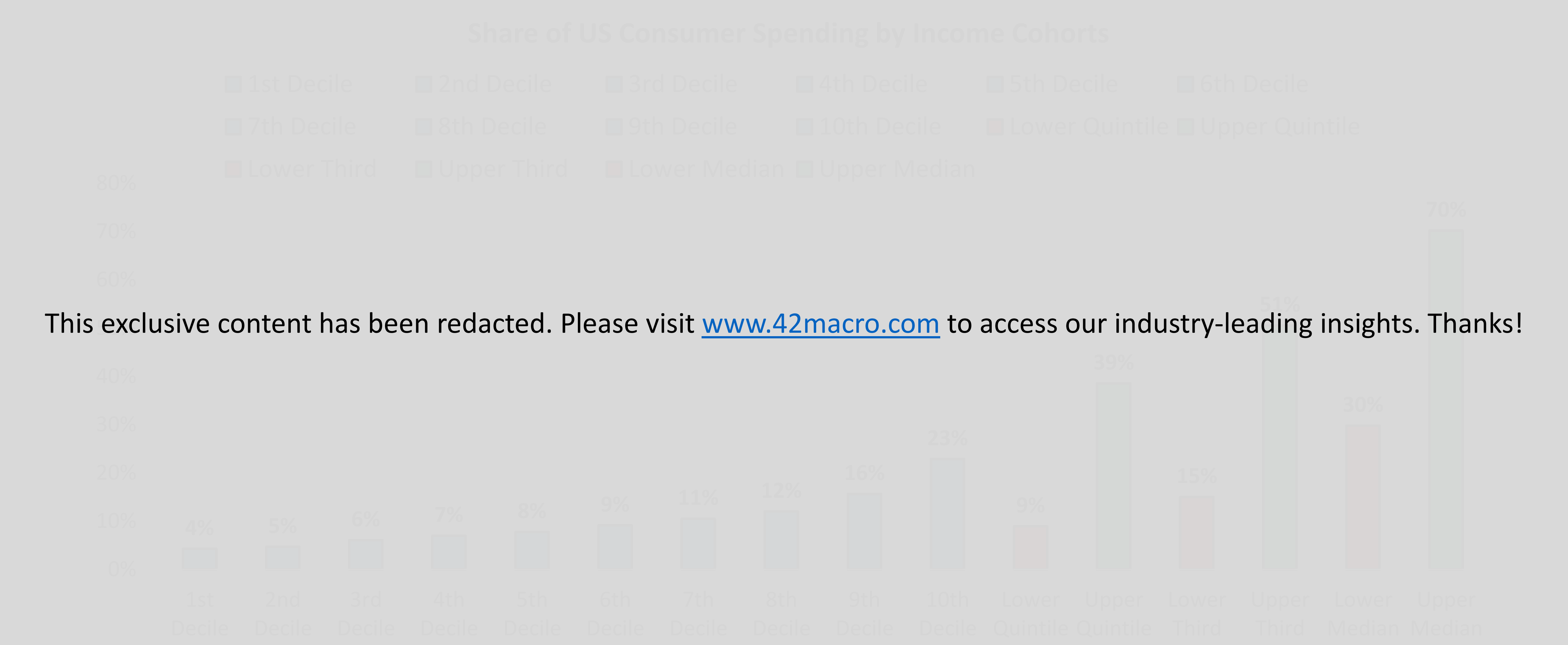
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

There Are Six Pillars Upholding Our "Resilient US Economy" Theme: 6) The "West Village-Montauk Effect"



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Reminder: Rich People Have An Outsized Influence On US Economic Activity After Decades Of Globalization And Supply-Side Economics

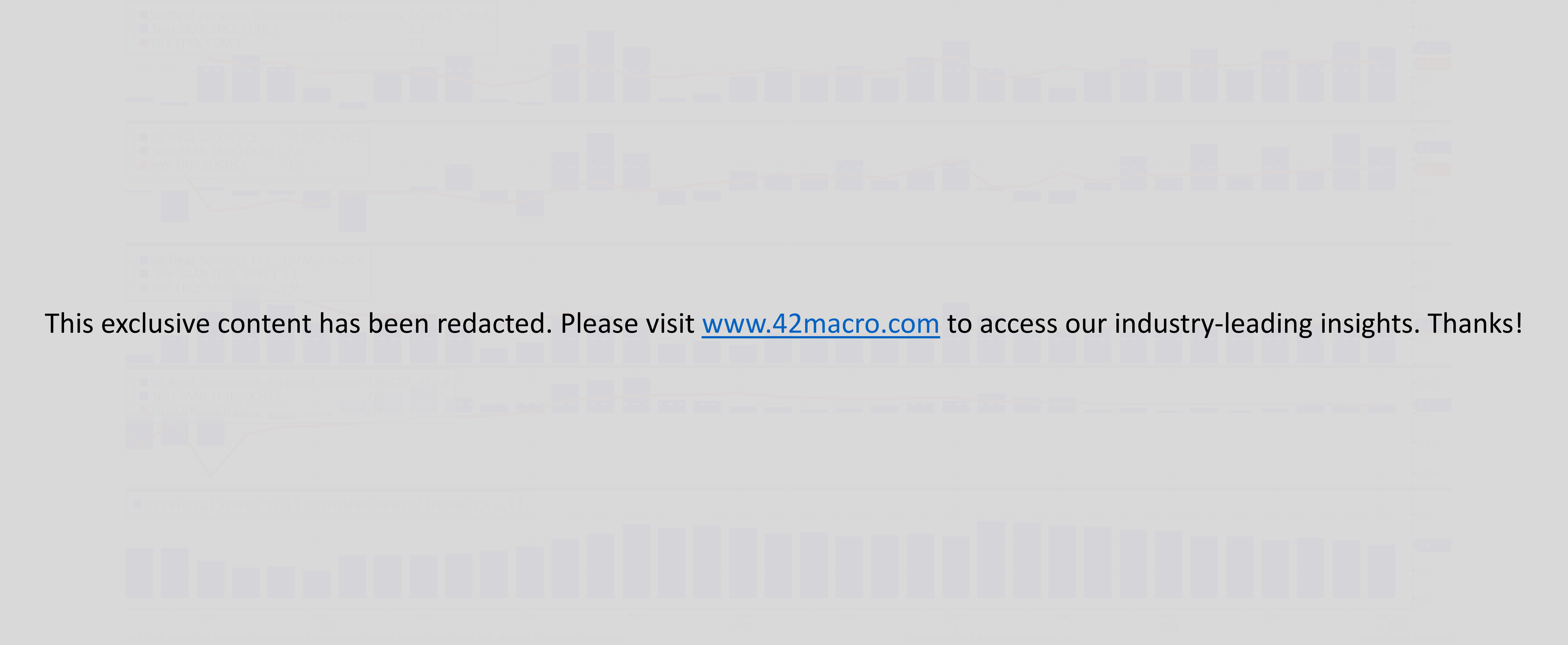


This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Reminder: There Has Not Likely Been A Better Time To Be Rich In America Than During The Post-COVID Economic Expansion

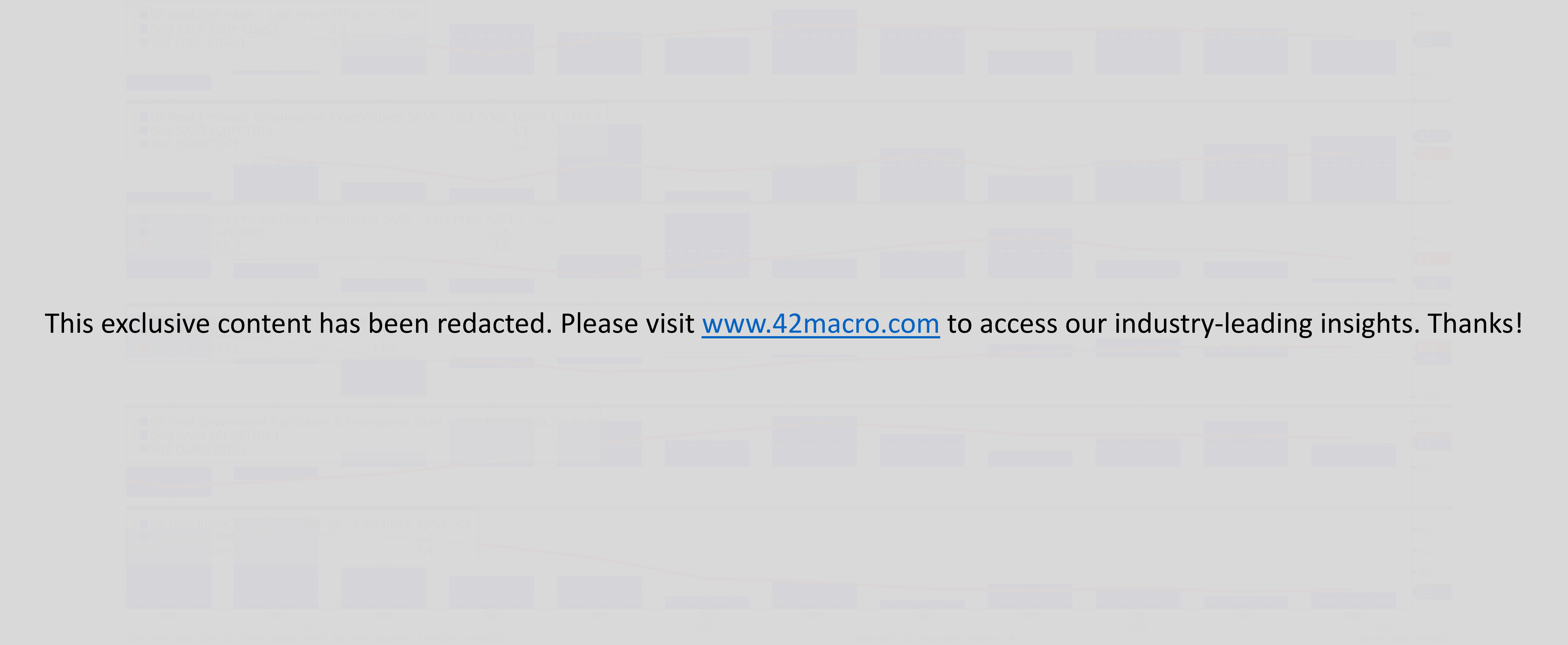
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

As A Result, Consumer Spending Remains Robust



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

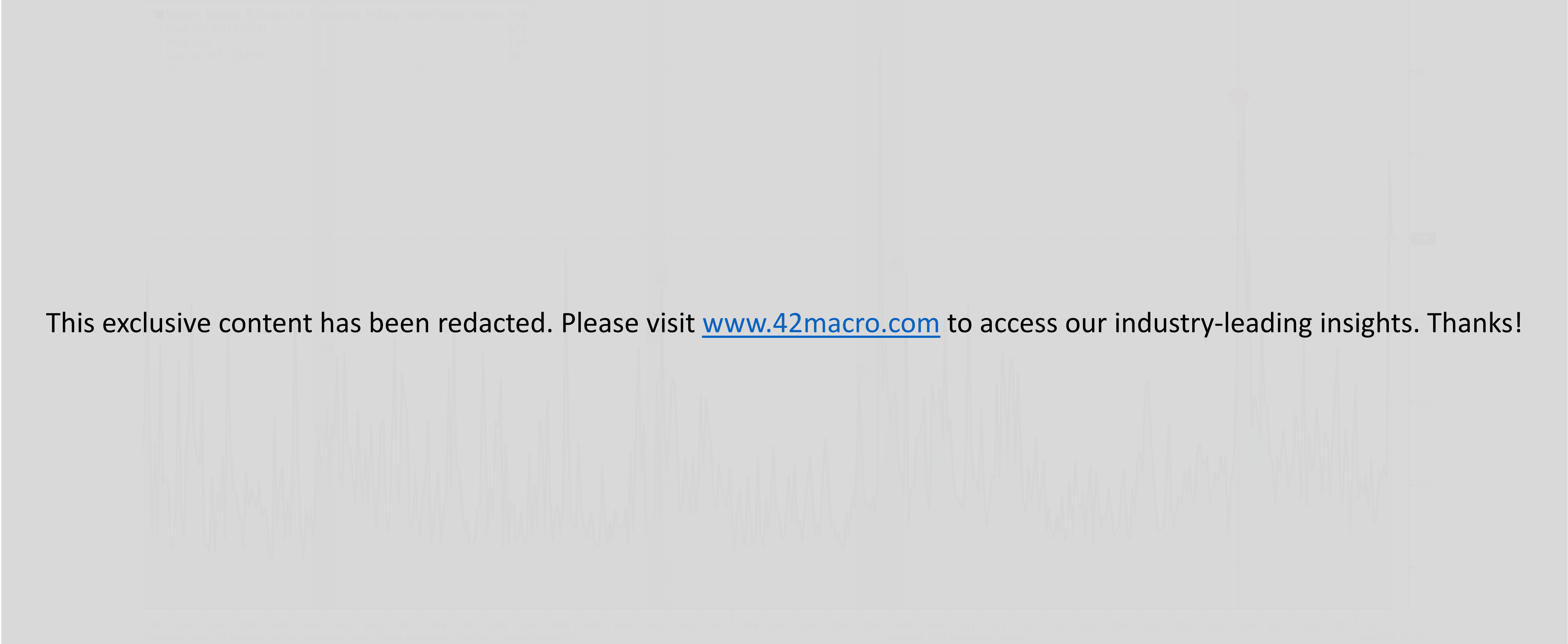
Although Rich Consumers Continue To Power The “Resilient US Economy”, The Pullback In Investment Is Dampening “American Exceptionalism”



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

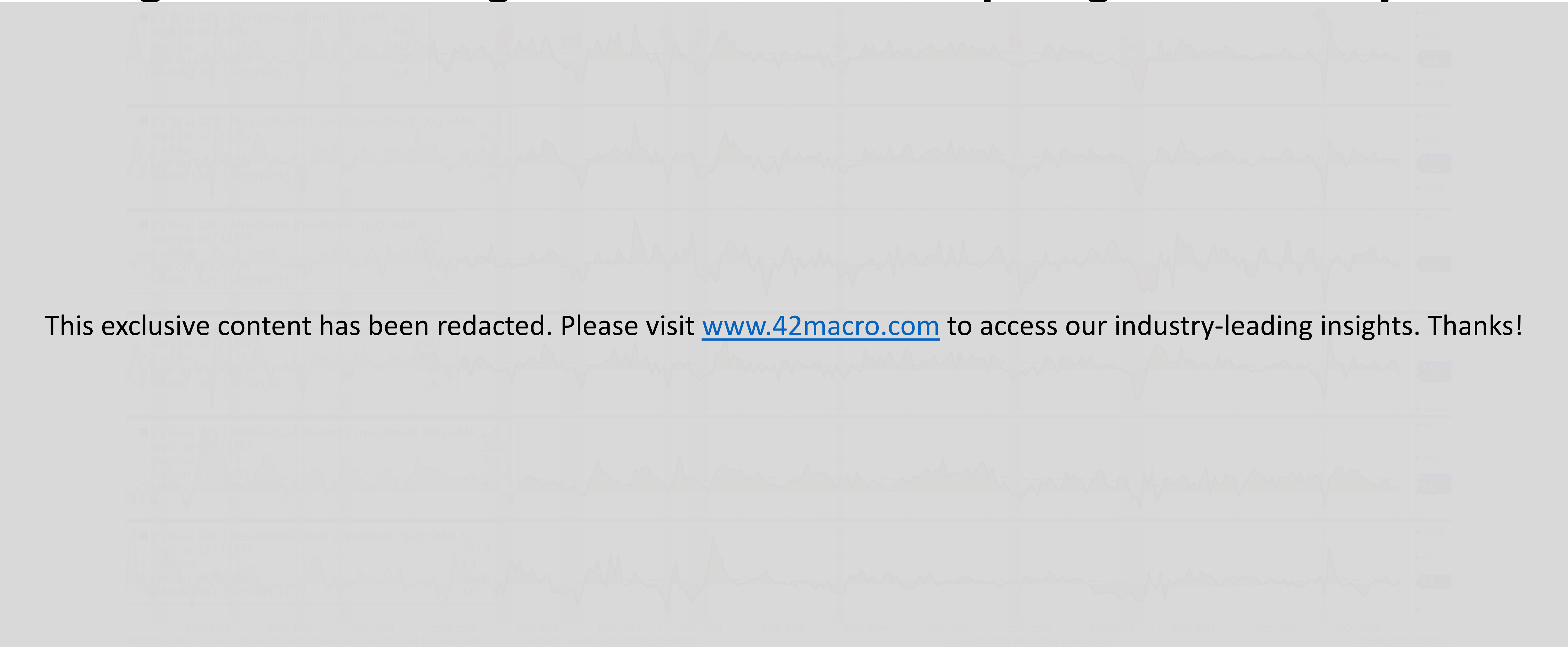
 Data Source: Bloomberg. Light blue dotted lines = 2015-19 trend.

Historically Elevated Policy Uncertainty Is Largely To Blame For The Pullback In Investment



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

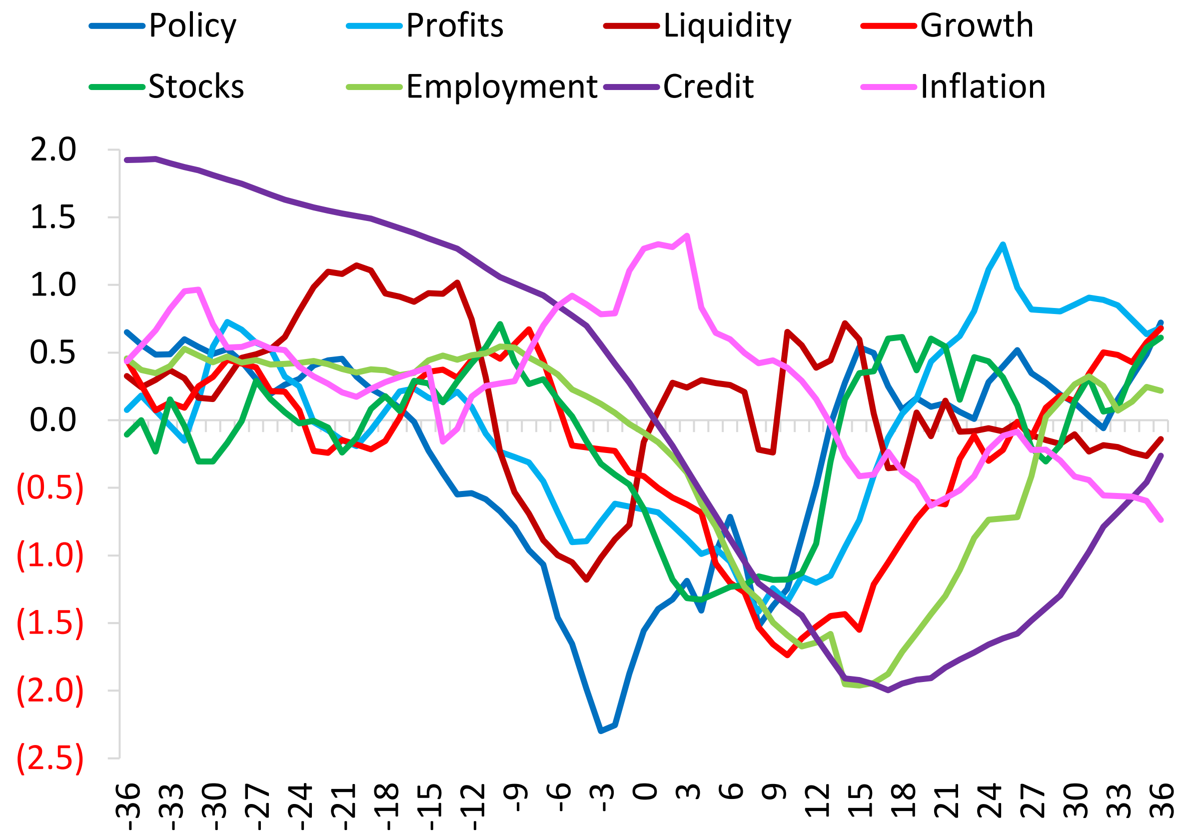
A Multi-Quarter Contraction In Business Investment Is Likely If Congress Fails To Legislate President Trump’s Agenda Quickly



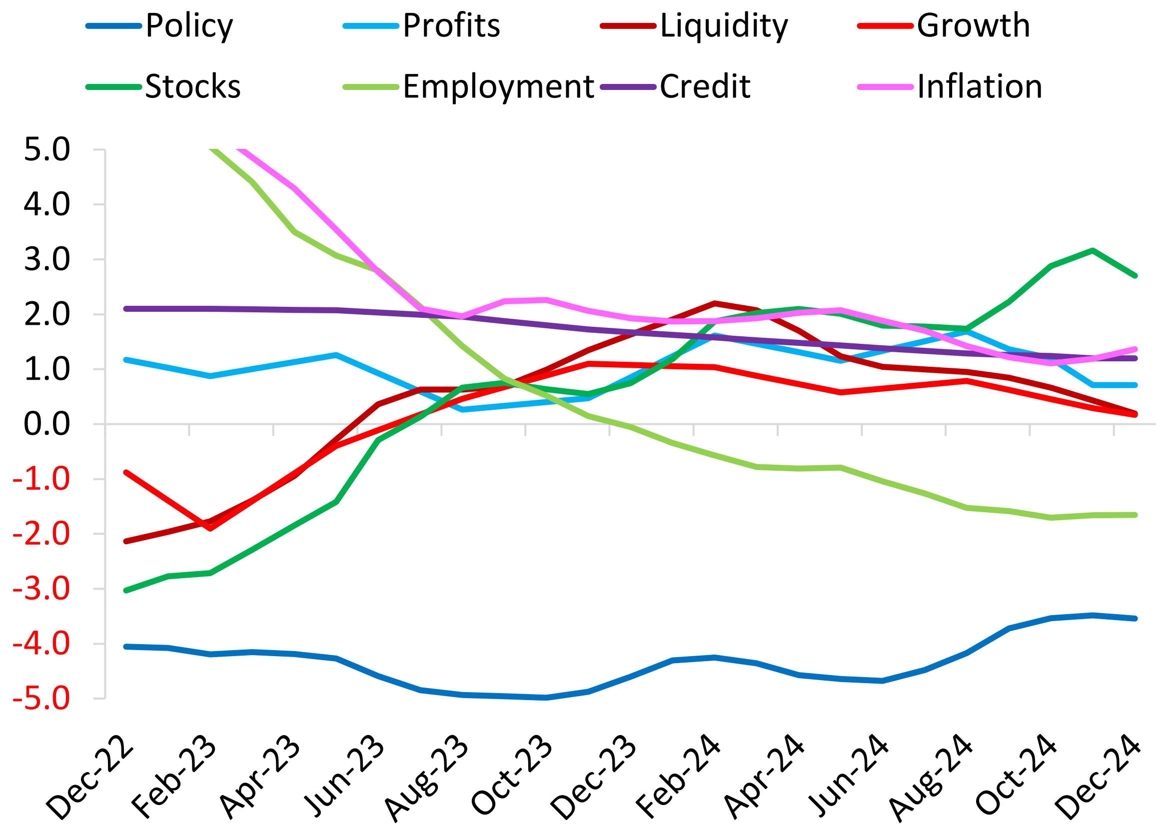
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Despite The Contraction In Capex, Persistent Leading Indicators Of The Business Cycle Signal Limited Risk Of A Recession Over The Medium Term

Median Trailing 10yr Delta-Adjusted Z-Score n-Months Before/After A Recession Begins



Delta-Adjusted Z-Score Of Select Real And Financial Economy Cycles



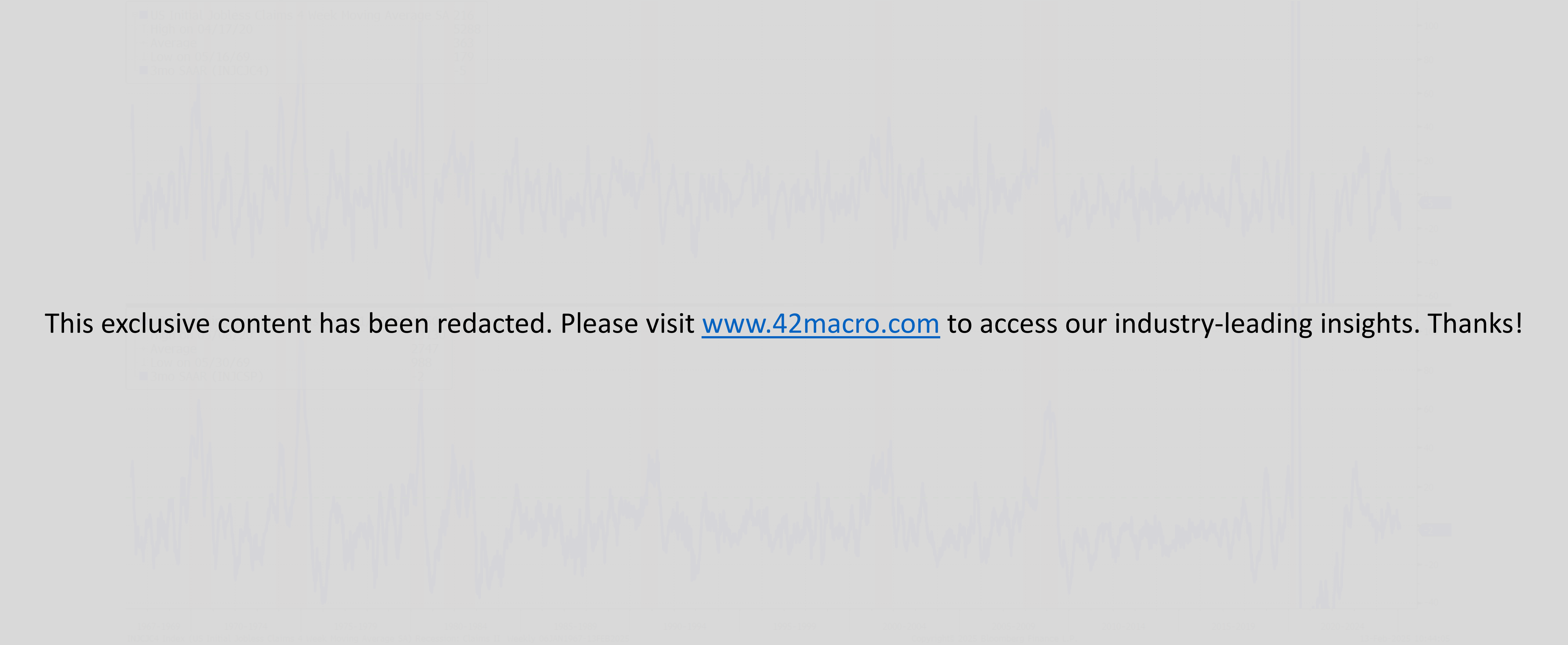
 Data Source: Bloomberg. Data since Jan-48 or as far back as the time series allows.

Accelerating/Moderating Upturn: above-trend and increasing/decreasing. Accelerating/Moderating Downturn: below-trend and decreasing/increasing.

All underlying time series = 3MMA of YoY % change unless otherwise denoted. Z-Scores from 2020 onward are derived from 2015-19 trends.

“Delta-Adjusted” = the signs of countercyclical indicators (e.g., Fed Funds Rate, SLOS, Jobless Claims, Unemployment, Personal Savings Rate, Credit Delinquencies, etc.) are inverted to align them with the direction of the business cycle.

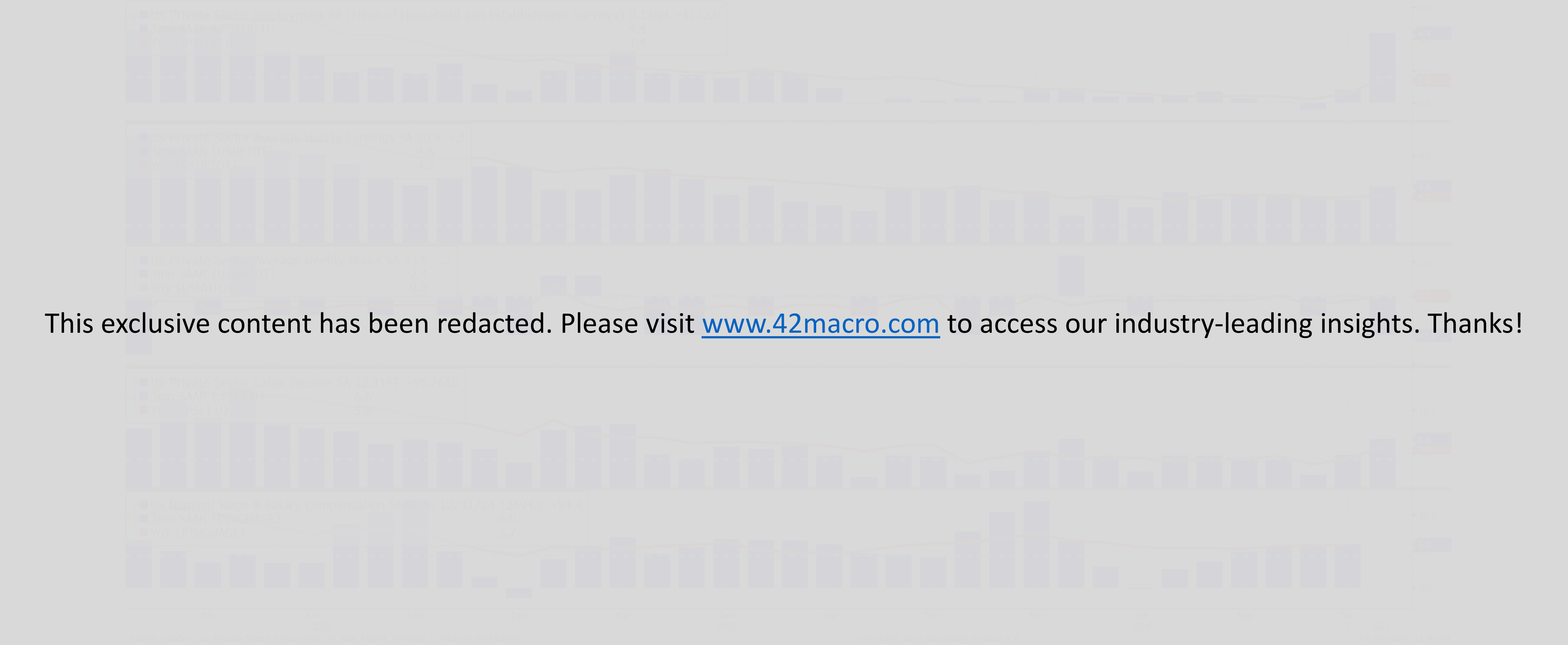
The US Labor Market Remains Resilient According To Initial And Continuing Jobless Claims



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

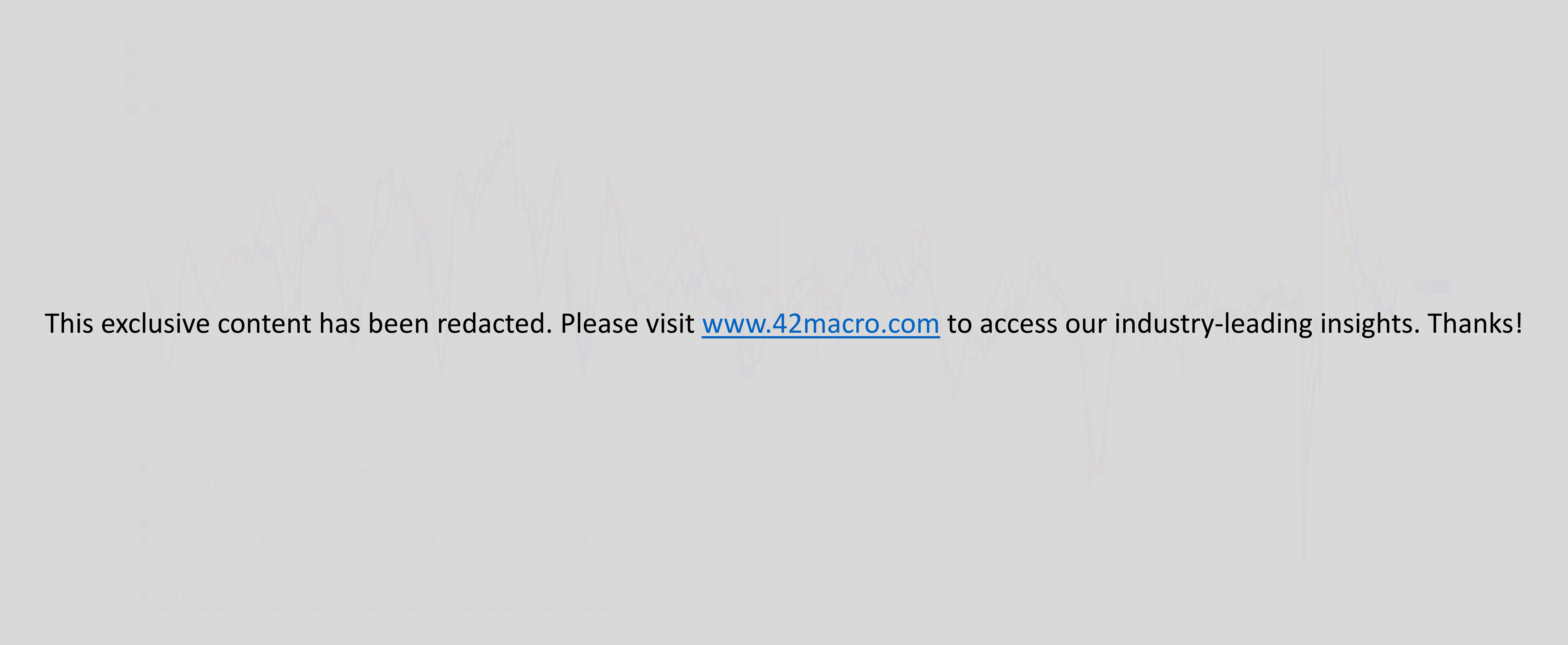
The dotted lines indicate the median value observed at the start of recessions.
Red = breached recession-signaling threshold. Orange = close to breaching recession-signaling threshold.
Green = not signaling a developing recession.

The US Labor Market Remains Resilient According To The Jobs Report And Confirming Evidence From The PCE Report



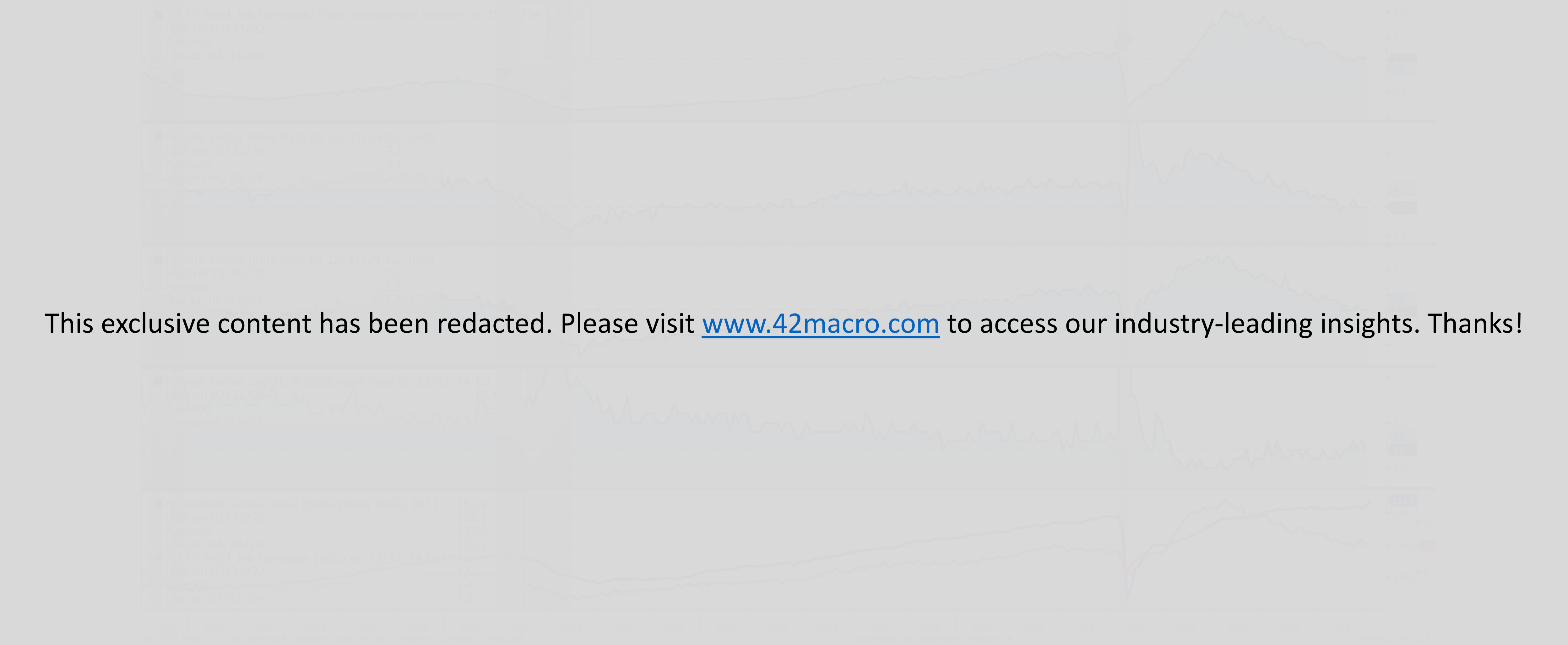
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Bear Porn Newsletter Writers Refuse To Show You This Chart Because Then They Can't Swindle You Out Of Subscription Fees



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

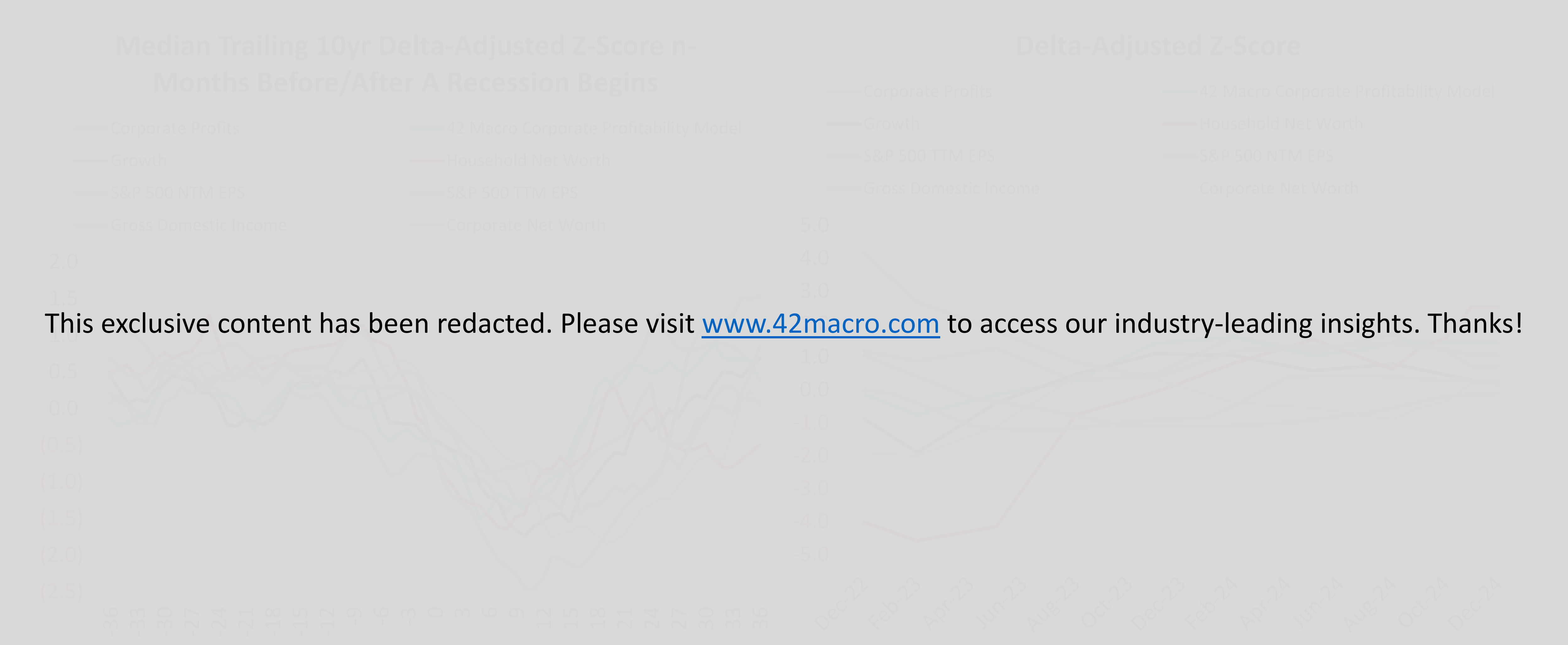
The "Labor Hoarding" Phenomenon Is Still Contributing To The Resiliency Of The US Labor Market



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: Bloomberg. Light blue dotted lines = 2015-19 trend.

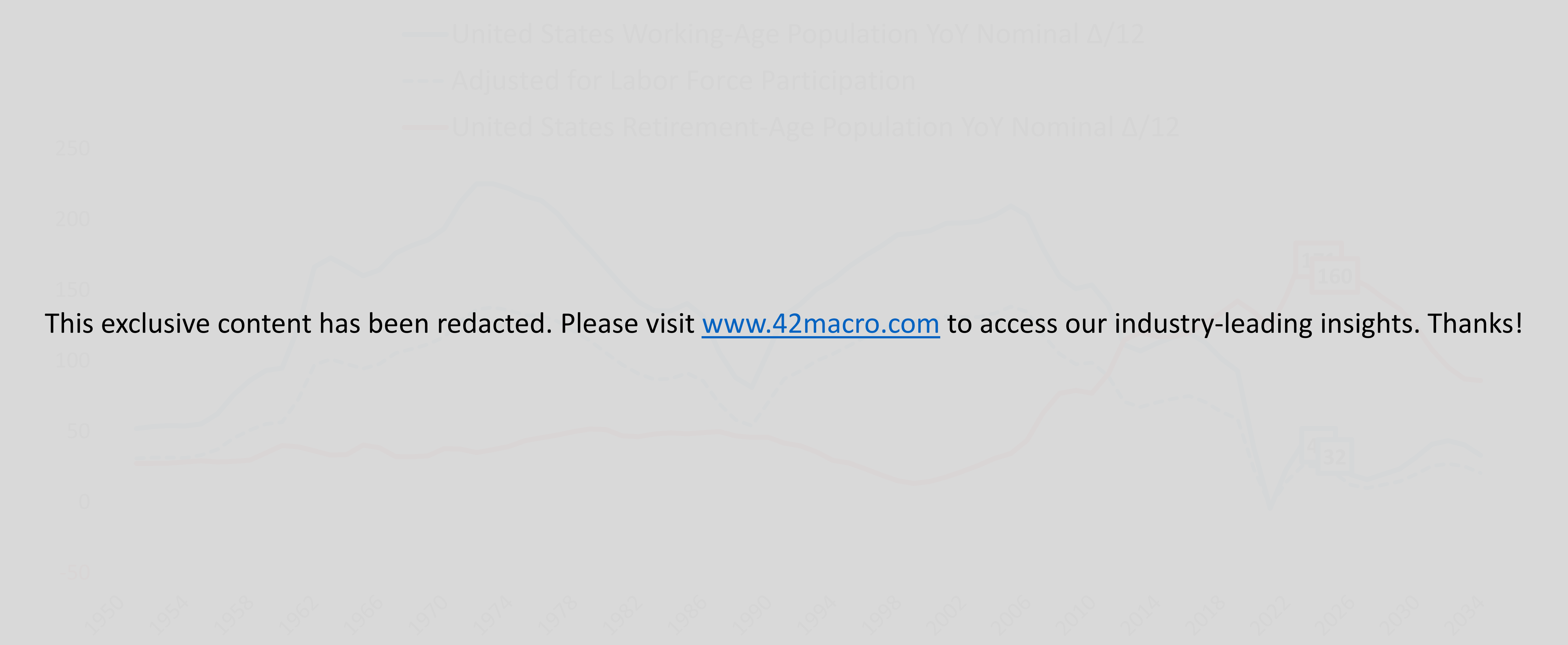
Corporate Profits Are A Persistent Leading Indicator Of The Business Cycle And Signal "Labor Hoarding" Is Likely To Persist Through 2025—Perhaps Longer



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: Bloomberg. Data since Jan-48 or as far back as the time series allows.
Accelerating/Moderating Upturn: above-trend and increasing/decreasing. Accelerating/Moderating Downturn: below-trend and decreasing/increasing.
All underlying time series = 3MMA of YoY % change unless otherwise denoted. Z-Scores from 2020 onward are derived from 2015-19 trends.
"Delta-Adjusted" = the signs of countercyclical indicators (e.g., Fed Funds Rate, SLOS, Jobless Claims, Unemployment, Personal Savings Rate, Credit Delinquencies, etc.) are inverted to align them with the direction of the business cycle.

Despite The Persistence Of “Labor Hoarding”, The Labor Market Is Likely To Moderate Over The Medium Term Due To The Dramatic Change In Border Policy



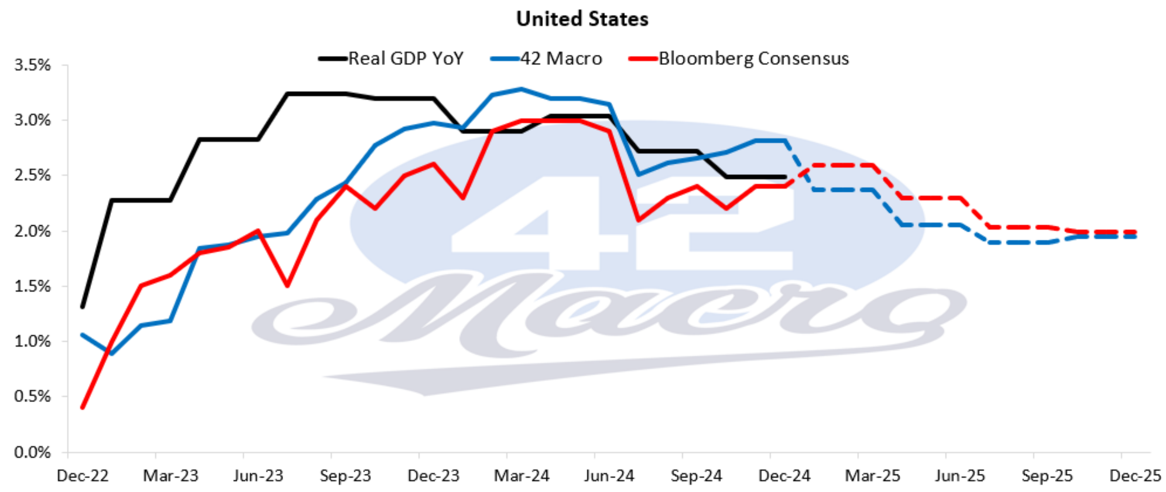
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

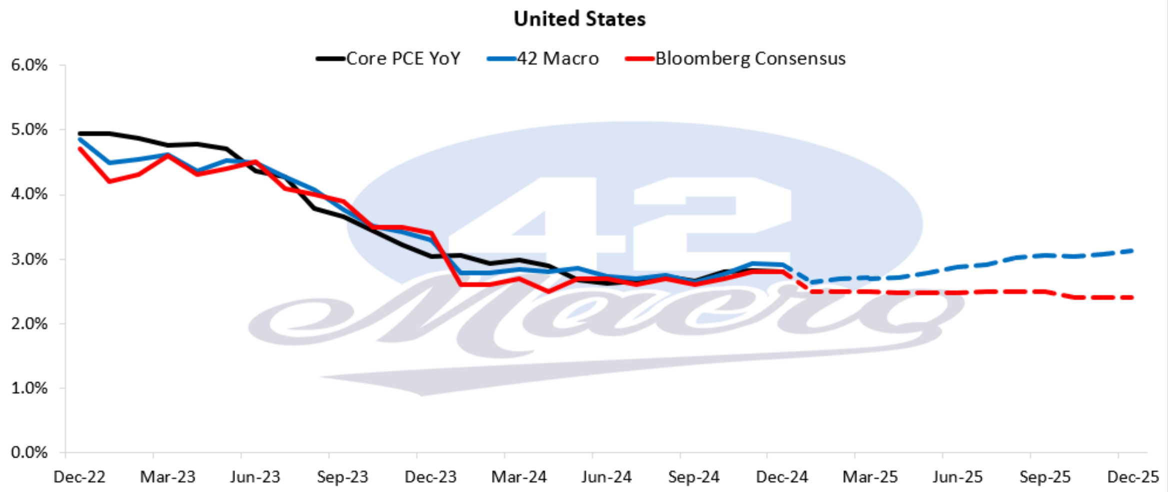
 Data Source: United Nations World Population Prospects 2024. 2024-25 figures in boxes.
Per BBC, US border officials reported more than 10 million encounters with illegal migrants since Jan-21, with the US-Mexico border accounting for 8 million.

Key Takeaway: While The US Economy Remains Resilient, Growth Is Likely To Moderate And The Multiyear Trend Of Positive Economic Surprises Has Likely Concluded

United States	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Bottom-Up Macro Regime	D	G	G	G	G	G	G	G	G	G	D	D	D	D	D	D	G	G	G	D	I	I	I	I	I
42 Macro	D	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	R	I	D	D	D	D	R	R	R
Hit Rate (t10yrs; Luck = 25%)	46%	47%	48%	48%	49%	50%	51%	52%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%
Bloomberg Consensus	I	G	G	G	R	R	G	D	G	G	G	G	G	G	G	G	G	R	R	I	I	D	R	R	R
Hit Rate (t10yrs; Luck = 25%)	33%	34%	35%	36%	36%	36%	37%	37%	38%	38%	38%	38%	38%	38%	38%	38%	39%	39%	39%	38%	39%	39%	39%	39%	39%
Real GDP YoY	1.3%	2.3%	2.3%	2.3%	2.8%	2.8%	2.8%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	2.9%	2.9%	2.9%	3.0%	3.0%	3.0%	2.7%	2.7%	2.7%	2.5%	2.5%	2.5%
Z-Score (vs. 2015-19 Trend)	-1.9	-0.4	-0.4	-0.4	0.4	0.4	0.4	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.7	0.7	0.7	0.2	0.2	0.2	-0.1	-0.1	-0.1
42 Macro	1.1%	0.9%	1.1%	1.2%	1.8%	1.9%	1.9%	2.0%	2.3%	2.4%	2.8%	2.9%	3.0%	2.9%	3.2%	3.3%	3.2%	3.2%	3.1%	2.5%	2.6%	2.7%	2.7%	2.8%	2.8%
Z-Score (vs. 2015-19 Trend)	-2.9	-3.2	-2.7	-2.6	-1.3	-1.2	-1.1	-1.0	-0.4	-0.1	0.6	0.9	1.0	0.9	1.6	1.7	1.5	1.5	1.4	0.1	0.3	0.4	0.5	0.7	0.7
Directional Accuracy (t10yrs; Luck = 50%)	65%	65%	65%	65%	68%	68%	68%	70%	70%	70%	68%	68%	68%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Average Absolute Forecast Error (t10yrs)	69bps	70bps	71bps	72bps	72bps	73bps	73bps	74bps	74bps	75bps	75bps	74bps	74bps	73bps	72bps	72bps	71bps	71bps	71bps	71bps	71bps	70bps	70bps	70bps	69bps
Bloomberg Consensus	0.4%	1.0%	1.5%	1.6%	1.8%	1.9%	2.0%	1.5%	2.1%	2.4%	2.2%	2.5%	2.6%	2.3%	2.9%	3.0%	3.0%	3.0%	2.9%	2.1%	2.3%	2.4%	2.2%	2.4%	2.4%
Z-Score (vs. 2015-19 Trend)	-3.9	-2.8	-1.8	-1.6	-1.2	-1.1	-0.8	-1.8	-0.6	-0.1	-0.4	0.1	0.3	-0.3	0.9	1.1	1.1	1.1	0.9	-0.6	-0.3	-0.1	-0.4	-0.1	-0.1
Directional Accuracy (t10yrs; Luck = 50%)	60%	63%	63%	63%	65%	65%	65%	65%	65%	65%	65%	65%	65%	68%	68%	68%	68%	68%	68%	68%	68%	68%	70%	70%	70%
Average Absolute Forecast Error (t10yrs)	73bps	74bps	74bps	75bps	75bps	75bps	76bps	77bps	78bps	78bps	79bps	79bps	79bps	78bps	77bps	75bps	75bps	75bps	75bps	75bps	75bps	75bps	74bps	74bps	73bps
Core PCE YoY	5.0%	4.9%	4.9%	4.8%	4.8%	4.7%	4.4%	4.3%	3.8%	3.7%	3.4%	3.2%	3.0%	3.1%	2.9%	3.0%	2.9%	2.7%	2.6%	2.7%	2.7%	2.7%	2.8%	2.8%	2.8%
Z-Score (vs. 2015-19 Trend)	13.9	13.9	13.6	13.2	13.2	12.9	11.5	11.1	9.1	8.5	7.7	6.7	6.0	6.1	5.5	5.7	5.3	4.4	4.3	4.4	4.7	4.4	5.0	5.1	5.0
42 Macro	4.9%	4.5%	4.6%	4.6%	4.4%	4.5%	4.5%	4.3%	4.1%	3.8%	3.5%	3.4%	3.3%	2.8%	2.8%	2.8%	2.8%	2.9%	2.7%	2.7%	2.7%	2.6%	2.8%	2.9%	2.9%
Z-Score (vs. 2015-19 Trend)	14.5	12.9	13.2	13.4	12.3	13.0	12.9	11.9	11.0	9.6	8.5	8.1	7.5	5.2	5.3	5.5	5.4	5.5	5.0	4.8	5.1	4.6	5.2	5.9	5.8
Directional Accuracy (t10yrs; Luck = 50%)	63%	63%	62%	61%	60%	60%	61%	61%	61%	61%	62%	63%	63%	63%	63%	63%	63%	63%	63%	62%	63%	63%	64%	64%	64%
Average Absolute Forecast Error (t10yrs)	16bps	16bps	16bps	16bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps
Bloomberg Consensus	4.7%	4.2%	4.3%	4.6%	4.3%	4.4%	4.5%	4.1%	4.0%	3.9%	3.5%	3.5%	3.4%	2.6%	2.6%	2.7%	2.5%	2.7%	2.7%	2.6%	2.7%	2.6%	2.7%	2.8%	2.8%
Z-Score (vs. 2015-19 Trend)	13.8	11.5	12.0	13.3	12.0	12.4	12.9	11.1	10.6	10.2	8.4	8.4	7.9	4.3	4.3	4.8	3.9	4.8	4.8	4.3	4.8	4.3	4.8	5.2	5.2
Directional Accuracy (t10yrs; Luck = 50%)	38%	38%	37%	37%	37%	37%	37%	37%	38%	38%	39%	39%	40%	40%	39%	40%	40%	39%	39%	38%	39%	40%	41%	41%	41%
Average Absolute Forecast Error (t10yrs)	24bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	26bps	26bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps

United States	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
Bottom-Up Macro Regime												
42 Macro	D	D	D	I	I	I	I	I	I	R	R	R
Hit Rate (t10yrs; Luck = 25%)												
Bloomberg Consensus	G	G	G	D	D	D	I	I	I	D	D	D
Hit Rate (t10yrs; Luck = 25%)												
Real GDP YoY												
Z-Score (vs. 2015-19 Trend)												
42 Macro	2.4%	2.4%	2.4%	2.1%	2.1%	2.1%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Z-Score (vs. 2015-19 Trend)	-0.2	-0.2	-0.2	-0.9	-0.9	-0.9	-1.2	-1.2	-1.2	-1.1	-1.1	-1.1
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												
Bloomberg Consensus	2.6%	2.6%	2.6%	2.3%	2.3%	2.3%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Z-Score (vs. 2015-19 Trend)	0.3	0.3	0.3	-0.3	-0.3	-0.3	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												
Core PCE YoY												
Z-Score (vs. 2015-19 Trend)												
42 Macro	2.6%	2.7%	2.7%	2.7%	2.8%	2.9%	2.9%	3.0%	3.1%	3.0%	3.1%	3.1%
Z-Score (vs. 2015-19 Trend)	4.6	4.8	4.9	4.9	5.2	5.7	5.8	6.3	6.5	6.4	6.6	6.8
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												
Bloomberg Consensus	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.4%	2.4%	2.4%
Z-Score (vs. 2015-19 Trend)	3.9	3.9	3.9	3.7	3.7	3.7	3.9	3.9	3.9	3.4	3.4	3.4
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												

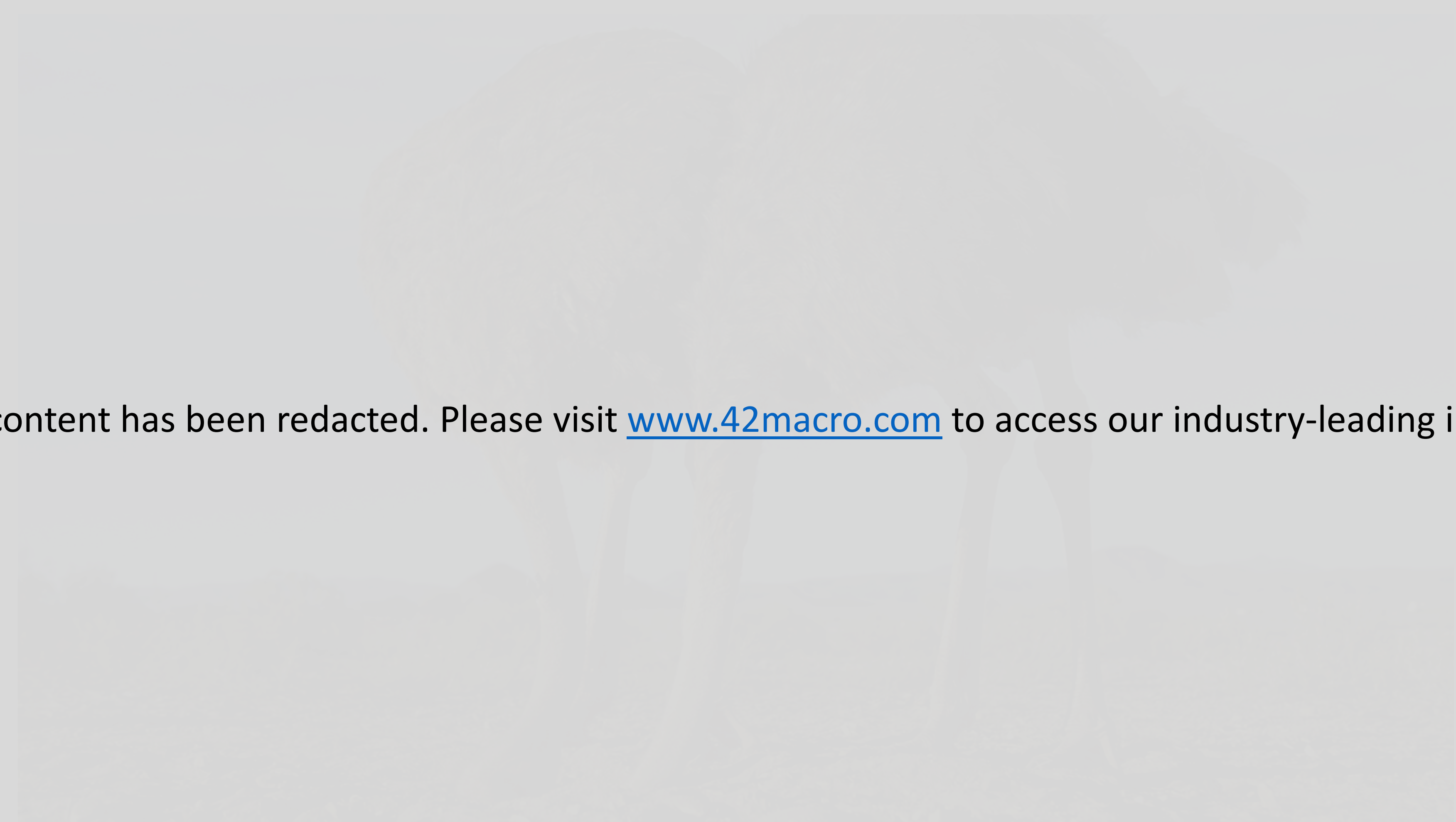




 Bottom-Up Macro Regime characteristics:
G = GOLDILOCKS = growth ↑ and inflation ↓; R = REFLATION = growth ↑ and inflation ↑;
I = INFLATION = growth ↓ and inflation ↑; and D = DEFLATION = growth ↓ and inflation ↓.
The 42 Macro GRID Model applies a proprietary methodology to smooth and nowcast quarterly GDP data on a monthly frequency.

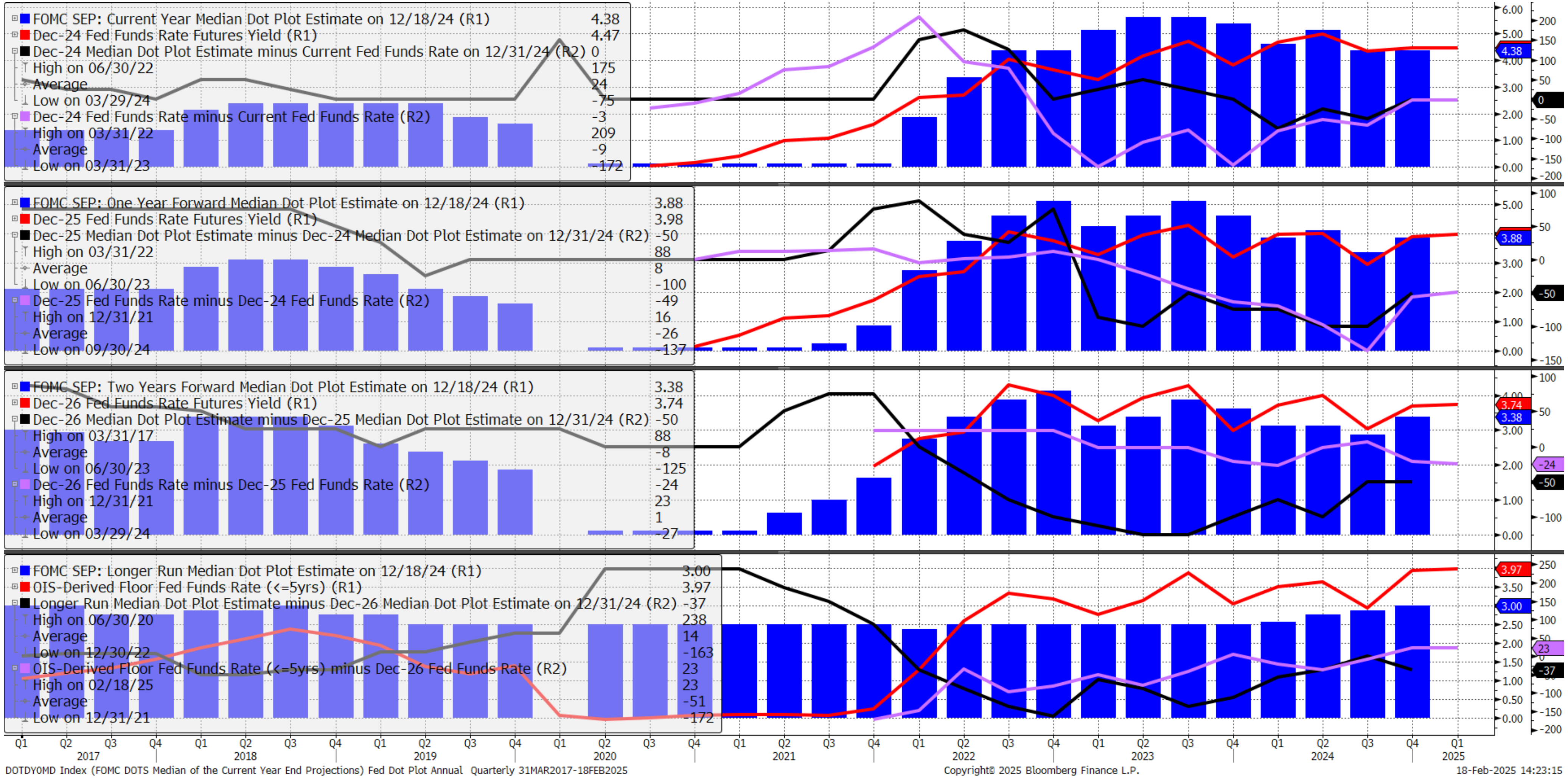
Right Tail Risks

Despite Ample Disconfirming Evidence From The Economy And Asset Markets, The Fed Still Believes Its Policy Is "Restrictive"

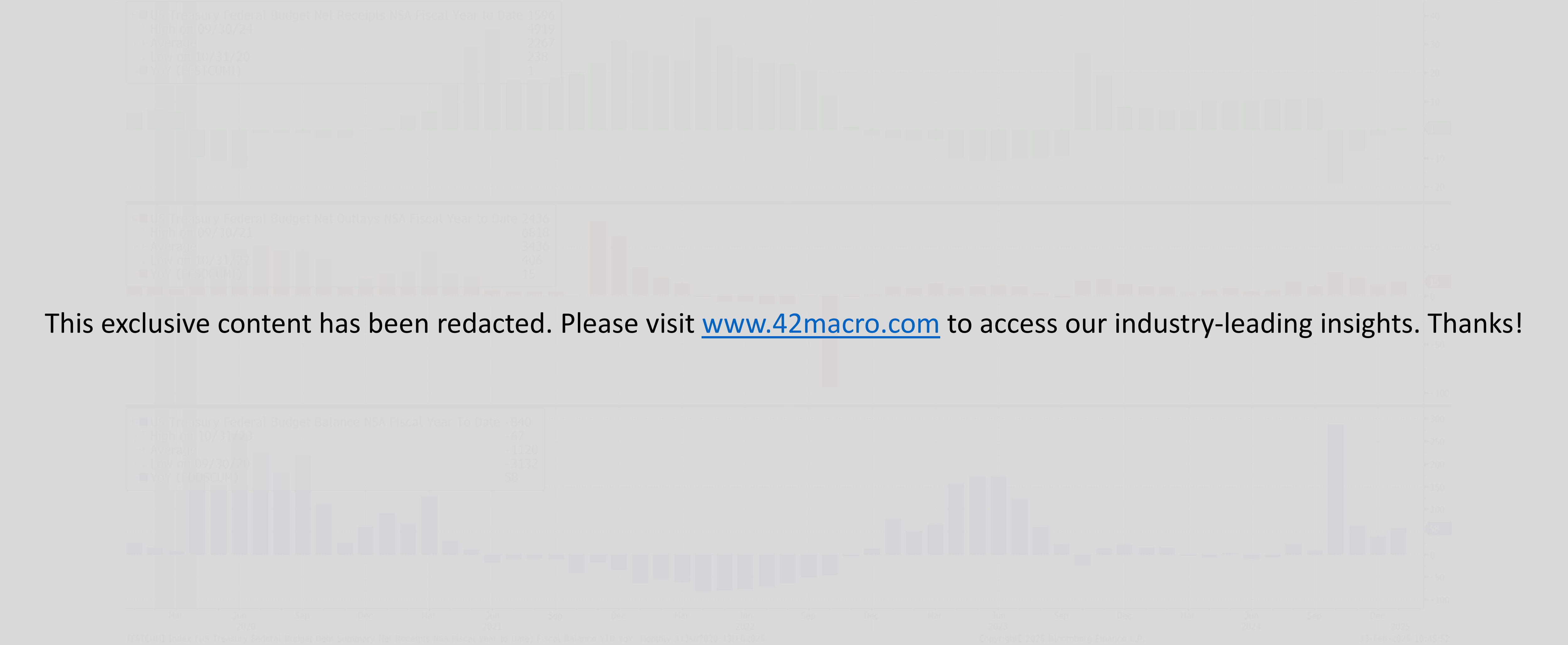


This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The Median FOMC Member Believes The Current Fed Funds Rate Is 150bps Above Neutral And Will Likely Have A Bias To Ease As The Labor Market Moderates

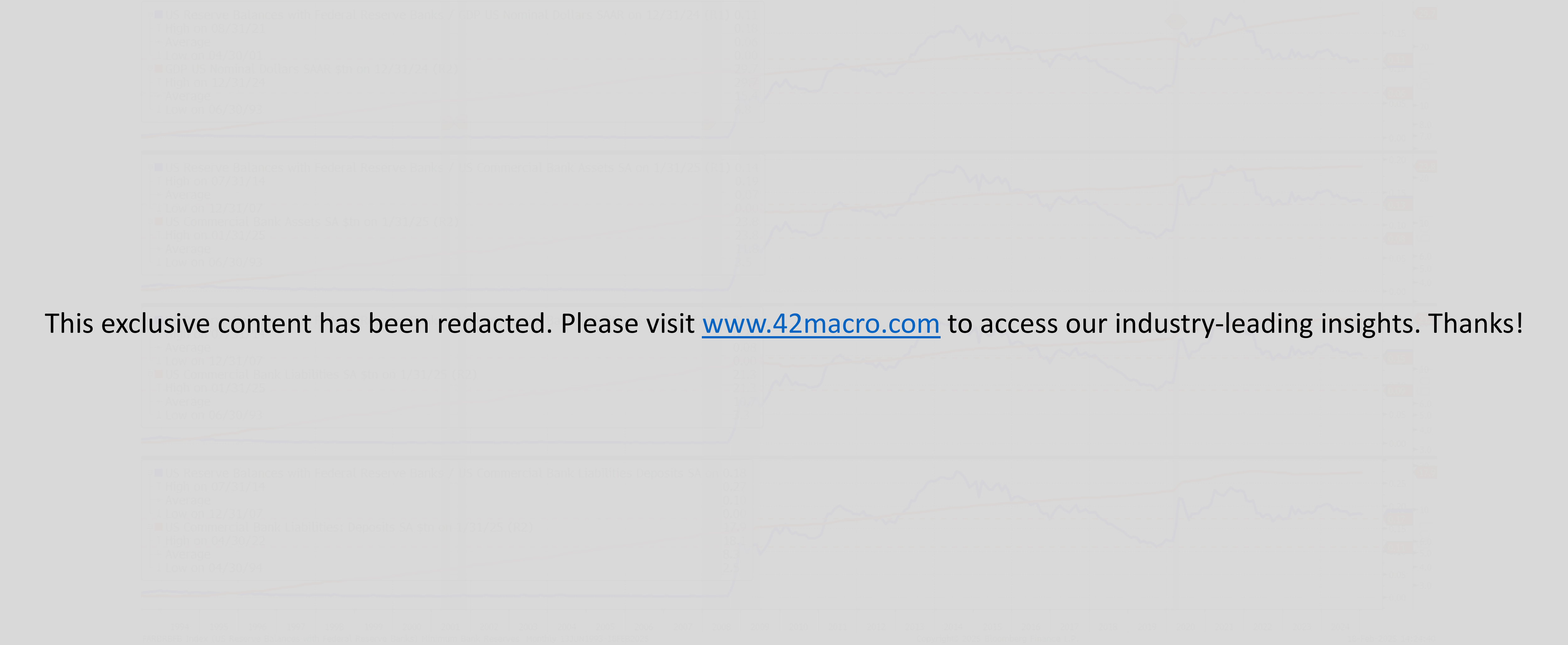


DOGE Budget Cuts Are Likely To Catalyze A Negative Fiscal Impulse, Which Creates Additional Scope To Ease Monetary Policy



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

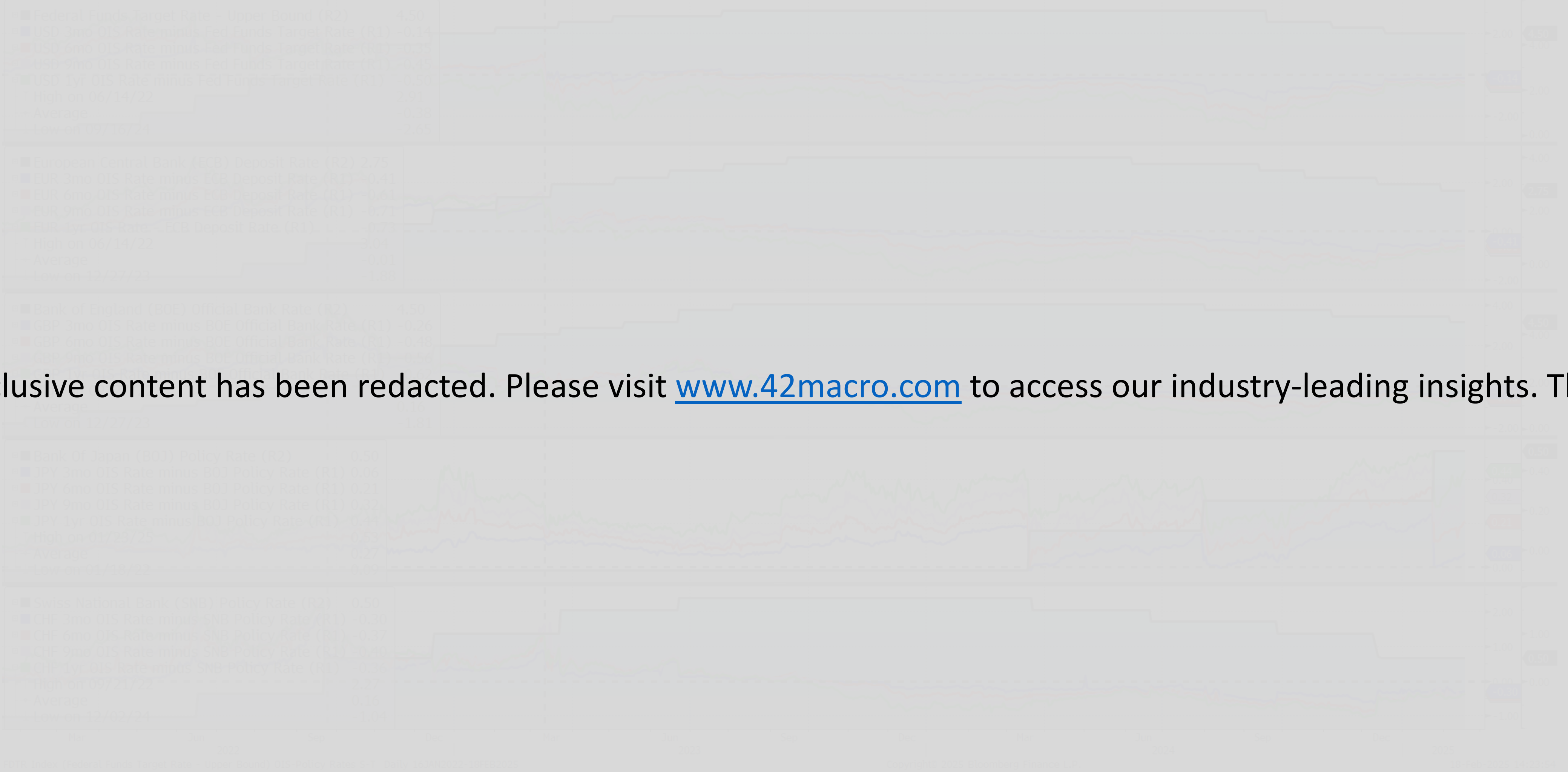
Approaching “Ample” Reserves, We Expect The Fed To End The Treasury Portion Of Balance Sheet Runoff This Summer—If Not Sooner



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Red dotted lines = regional banking crisis trough and 2019 repo rate spike trough.

The Fed’s Modestly Dovish Reaction Function Is Contributing To Globally Coordinated Easing



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Eurozone GRID Model: Forward Guidance Suggests The ECB Is Likely To Disregard Accelerating Inflation And Continue Easing

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

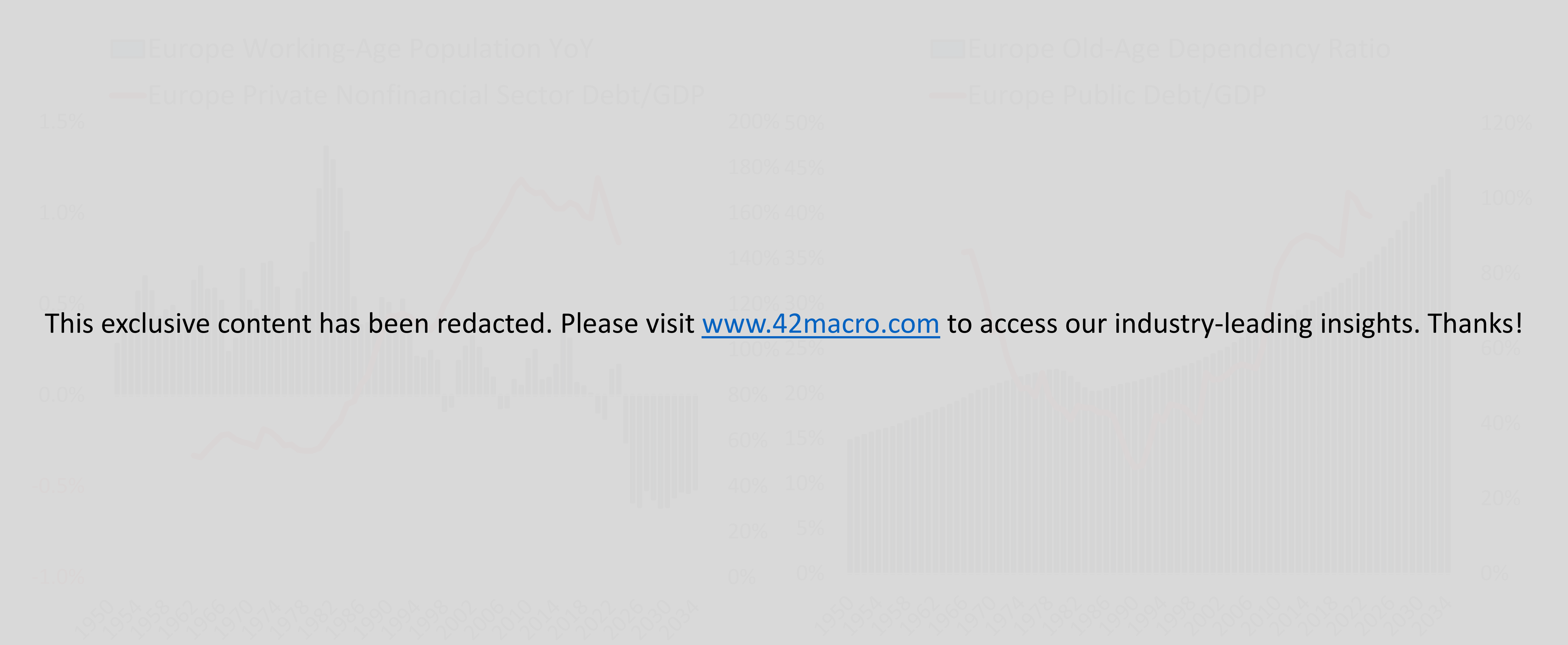
 Data Source: Bloomberg. Bottom-Up Macro Regime characteristics:
G = GOLDILOCKS = growth ↑ and inflation ↓; R = REFLATION = growth ↑ and inflation ↑;
I = INFLATION = growth ↓ and inflation ↑; and D = DEFLATION = growth ↓ and inflation ↓.
The 42 Macro GRID Model applies a proprietary methodology to smooth and nowcast quarterly GDP data on a monthly frequency.

UK GRID Model: Forward Guidance Suggests The BOE Is Likely To Disregard Accelerating Inflation And Continue Easing As Well

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Bottom-Up Macro Regime characteristics:
G = GOLDILOCKS = growth ↑ and inflation ↓; R = REFLATION = growth ↑ and inflation ↑;
I = INFLATION = growth ↓ and inflation ↑; and D = DEFLATION = growth ↓ and inflation ↓.
The 42 Macro GRID Model applies a proprietary methodology to smooth and nowcast quarterly GDP data on a monthly frequency.

Western Europe's Deepening Demographic Headwinds Suggest It Would Be Wise For The ECB And BOE To Disregard Second-Round Inflation Pressures



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: Bloomberg, United Nations.
Working-Age Population = 15-64 year-olds.
Old-Age Dependency Ratio = 65+ year-olds as a % of the Working-Age Population.

Switzerland GRID Model: Persistent Below-Target Inflation Suggests The SNB Is Likely To Continue Easing As Well

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: Bloomberg. Bottom-Up Macro Regime characteristics:
G = GOLDILOCKS = growth ↑ and inflation ↓; R = REFLATION = growth ↑ and inflation ↑;
I = INFLATION = growth ↓ and inflation ↑; and D = DEFLATION = growth ↓ and inflation ↓.
The 42 Macro GRID Model applies a proprietary methodology to smooth and nowcast quarterly GDP data on a monthly frequency.

China GRID Model: Persistent Below-Target Inflation And Property Price Deflation Are Supportive Of Accelerated Easing By The PBOC

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

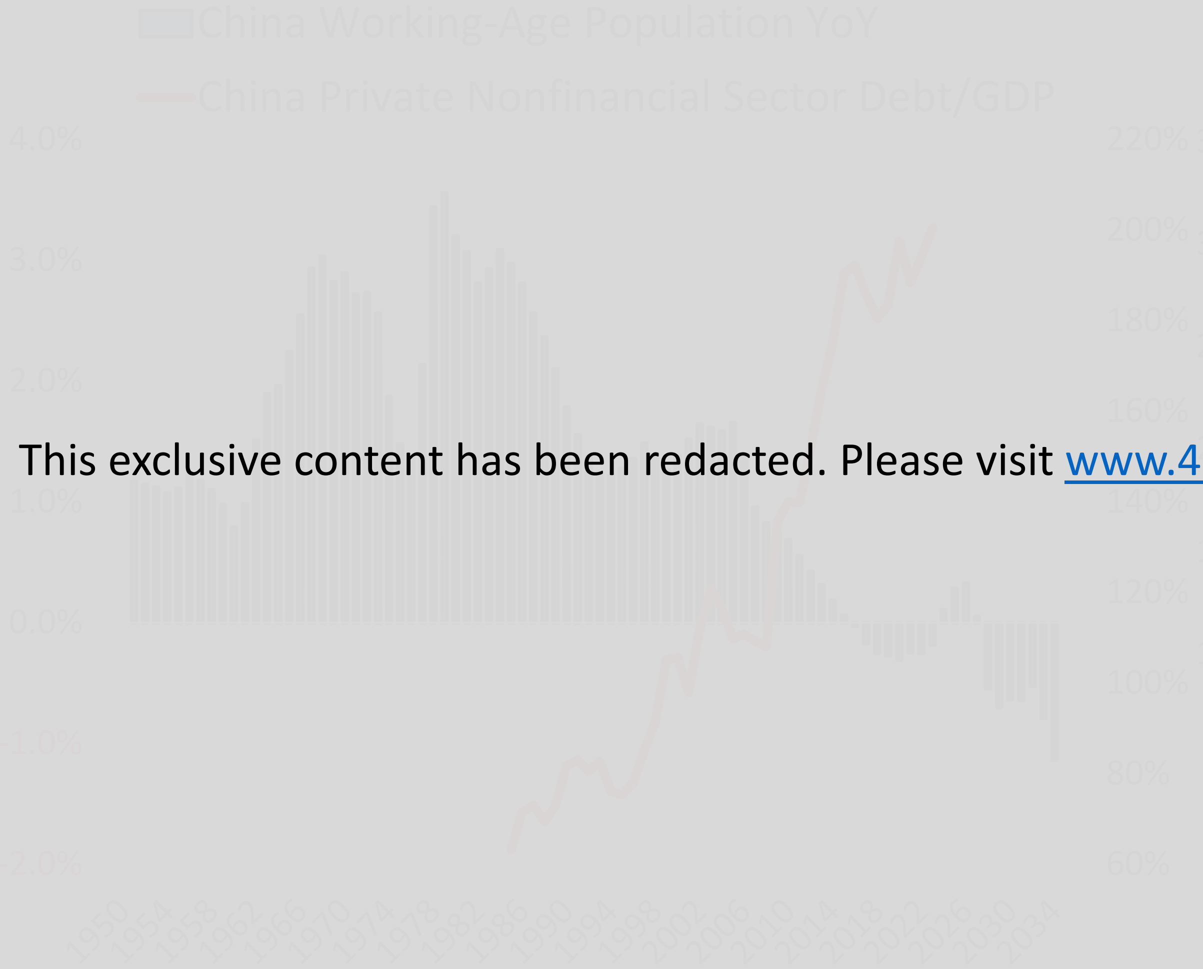
 Data Source: Bloomberg. Bottom-Up Macro Regime characteristics:

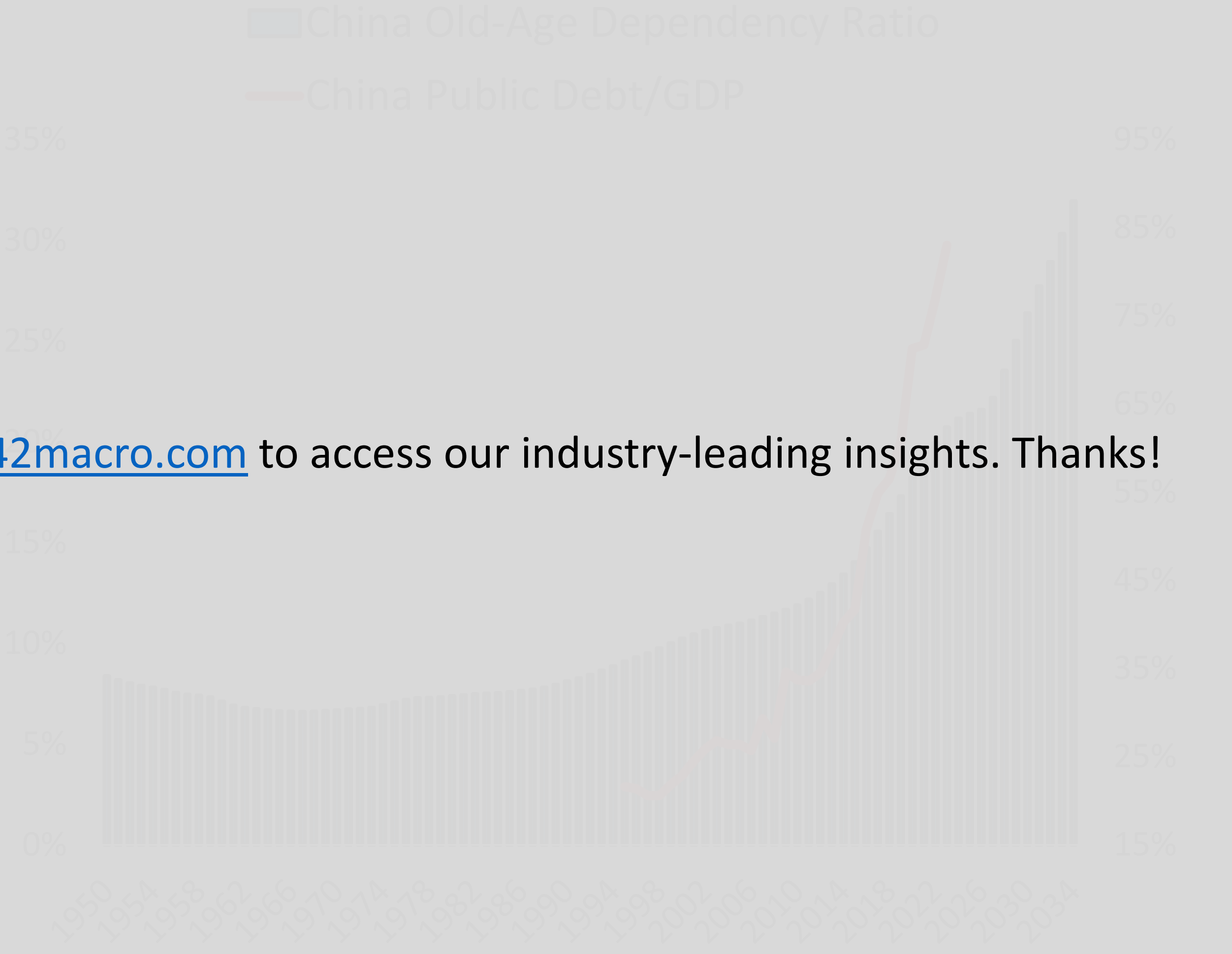
G = GOLDILOCKS = growth ↑ and inflation ↓; R = REFLATION = growth ↑ and inflation ↑;

I = INFLATION = growth ↓ and inflation ↑; and D = DEFLATION = growth ↓ and inflation ↓.

The 42 Macro GRID Model applies a proprietary methodology to smooth and nowcast quarterly GDP data on a monthly frequency.

China's Deepening Demographic Headwinds Demand Structurally Loose Monetary Policy… Will Sufficient Fiscal Stimulus Follow?

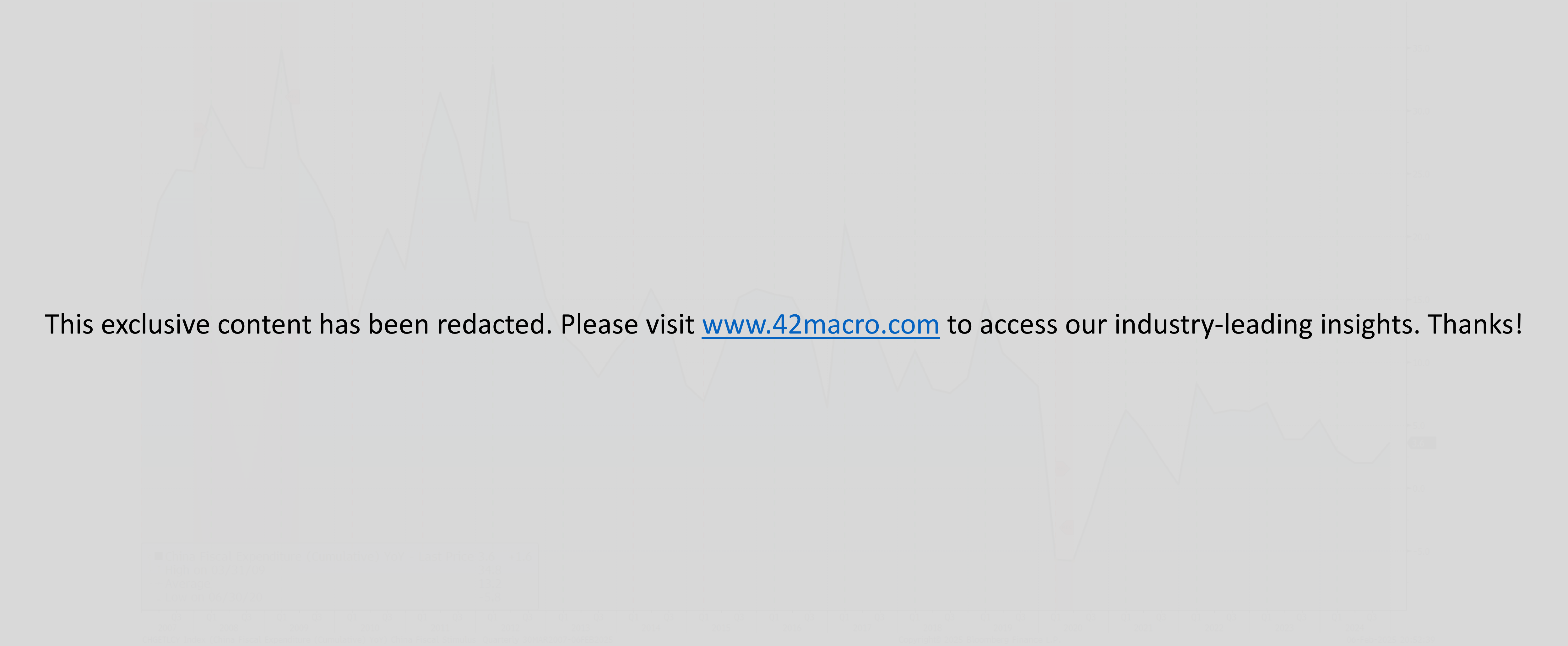




This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Working-Age Population = 15-64 year-olds.
Old-Age Dependency Ratio = 65+ year-olds as a % of the Working-Age Population.

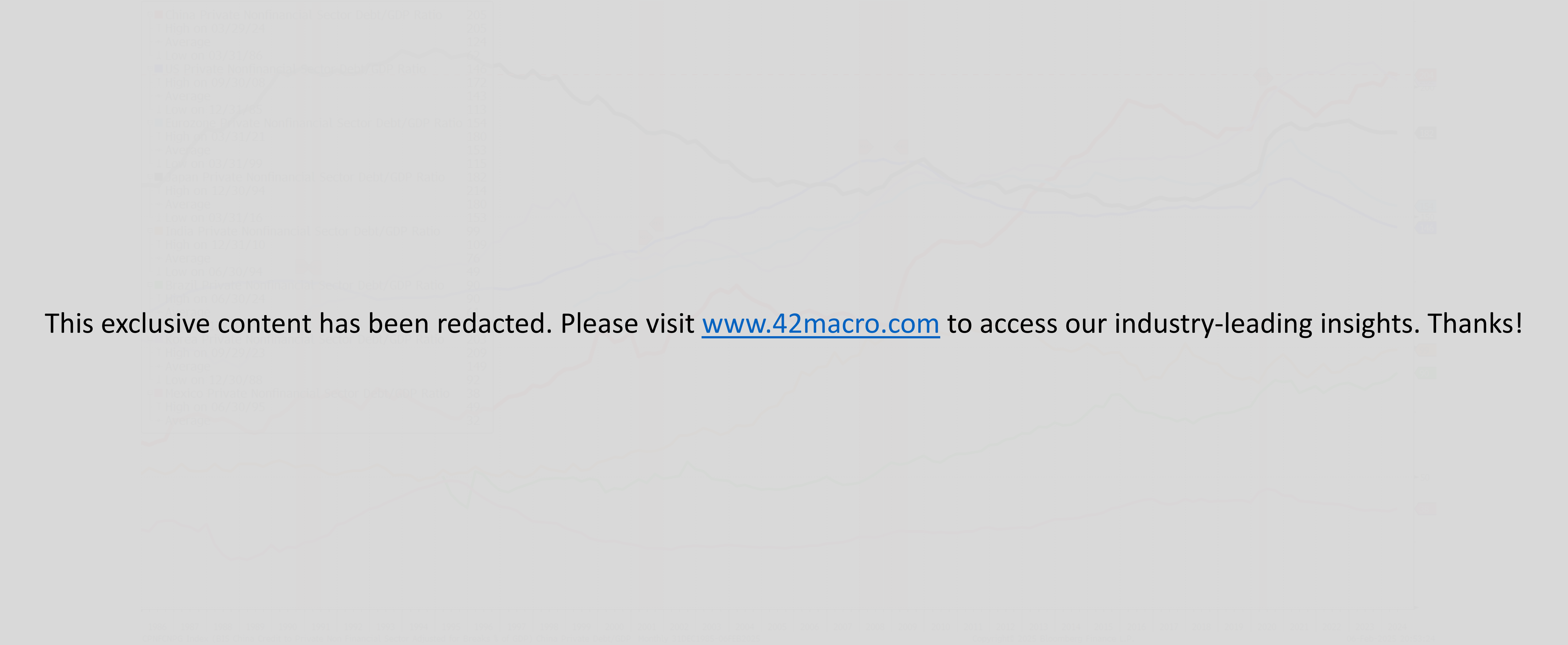
Investors Should Monitor YTD YoY Growth In Fiscal Expenditures To Gauge The Size Of China's Pending Fiscal Impulse—Or Lack Thereof



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

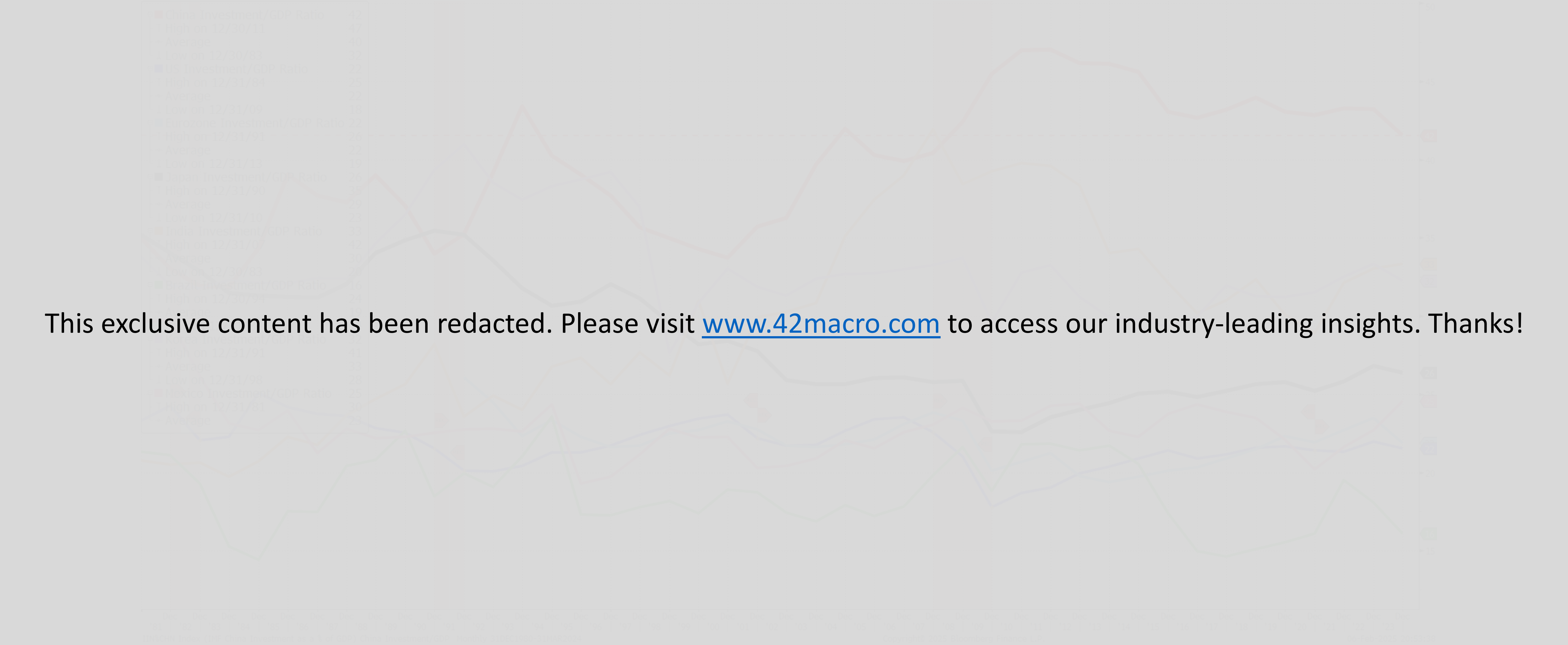
 Data Source: Bloomberg.
Green dotted lines = the fiscal impulse peaks in Q1.
Red dotted lines = the fiscal impulse peaks in Q2, Q3, or Q4.

Excessive Debt And Capital Misallocation Means Beijing Is Pushing On A String—Which Is Not Good For The Chinese Economy, But It Is Great For Chinese Liquidity



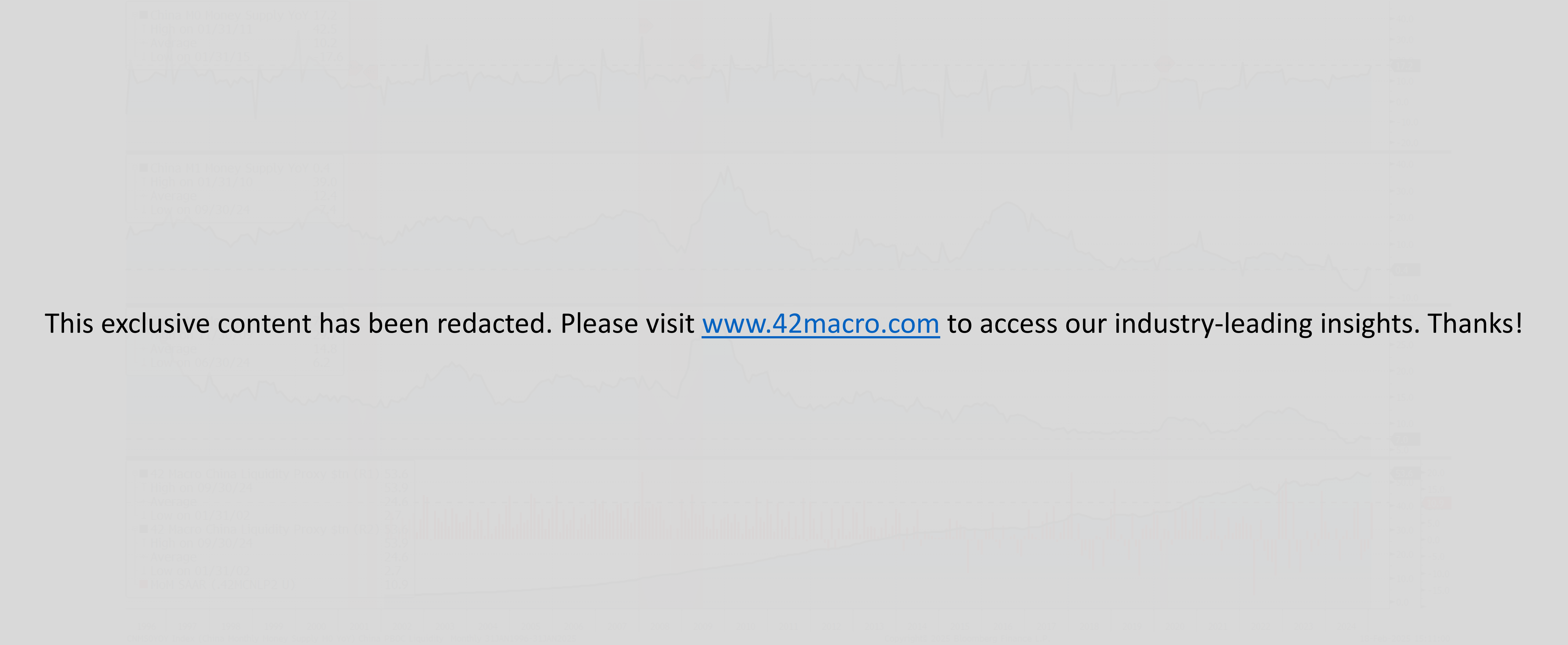
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Excessive Debt And Capital Misallocation Means Beijing Is Pushing On A String—Which Is Not Good For The Chinese Economy, But It Is Great For Chinese Liquidity



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

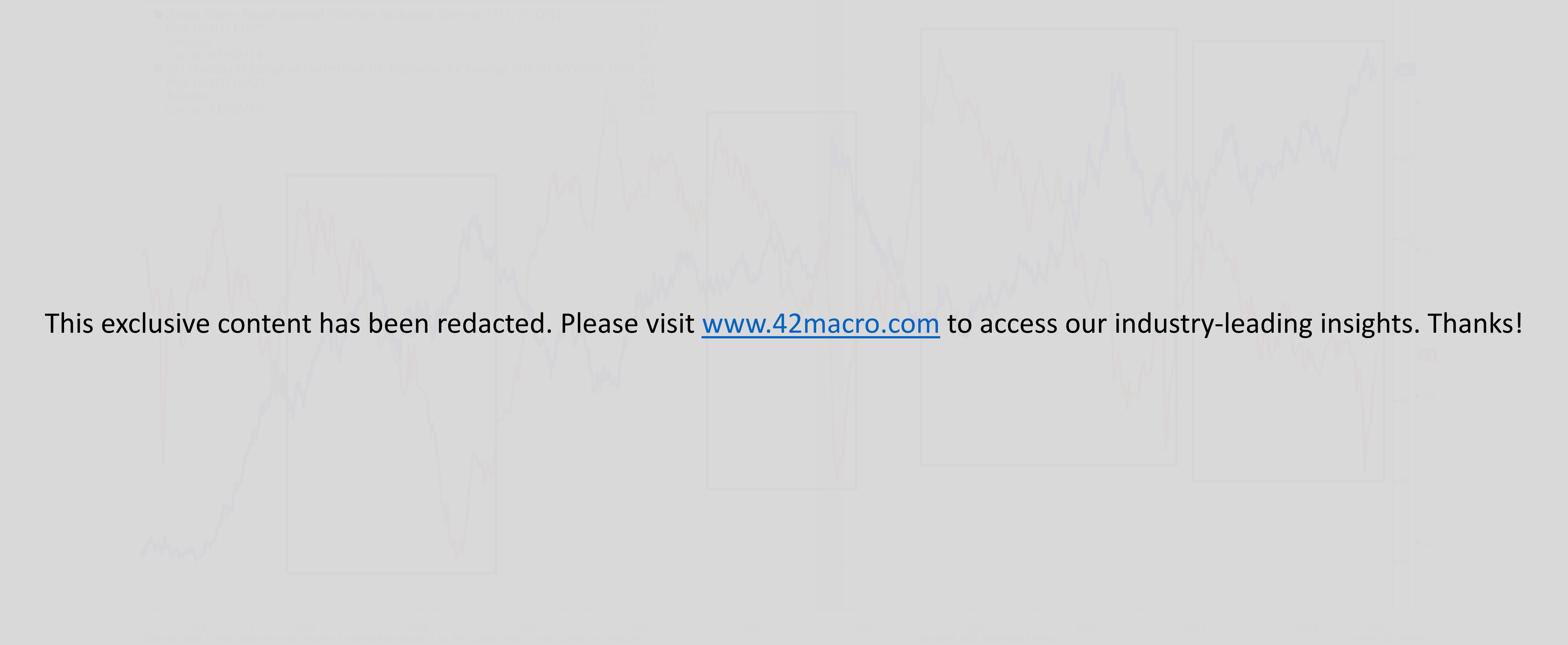
The PBOC Dramatically Accelerated Its Liquidity Provision In January



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

42 Macro China Liquidity Proxy = PBOC Balance Sheet + China Broad Money Supply + China FX Reserves Minus Gold.

Did A Back Channel Mar-a-Lago Accord Give The PBOC Confidence To Bet On A Weaker U.S. Dollar And Ease More Aggressively?



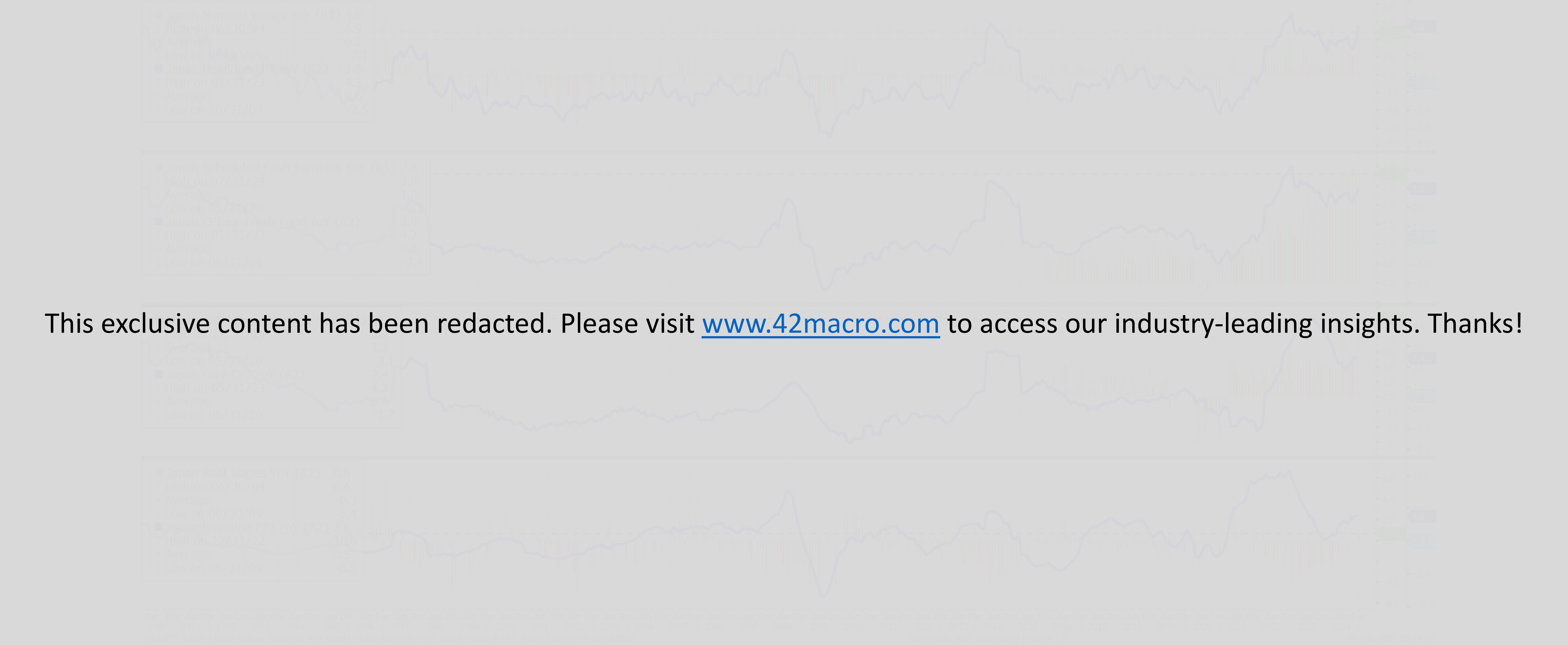
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Japan GRID Model: Hawkish Policy Normalization Makes The BOJ A Lone Wolf Among Major Central Banks

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

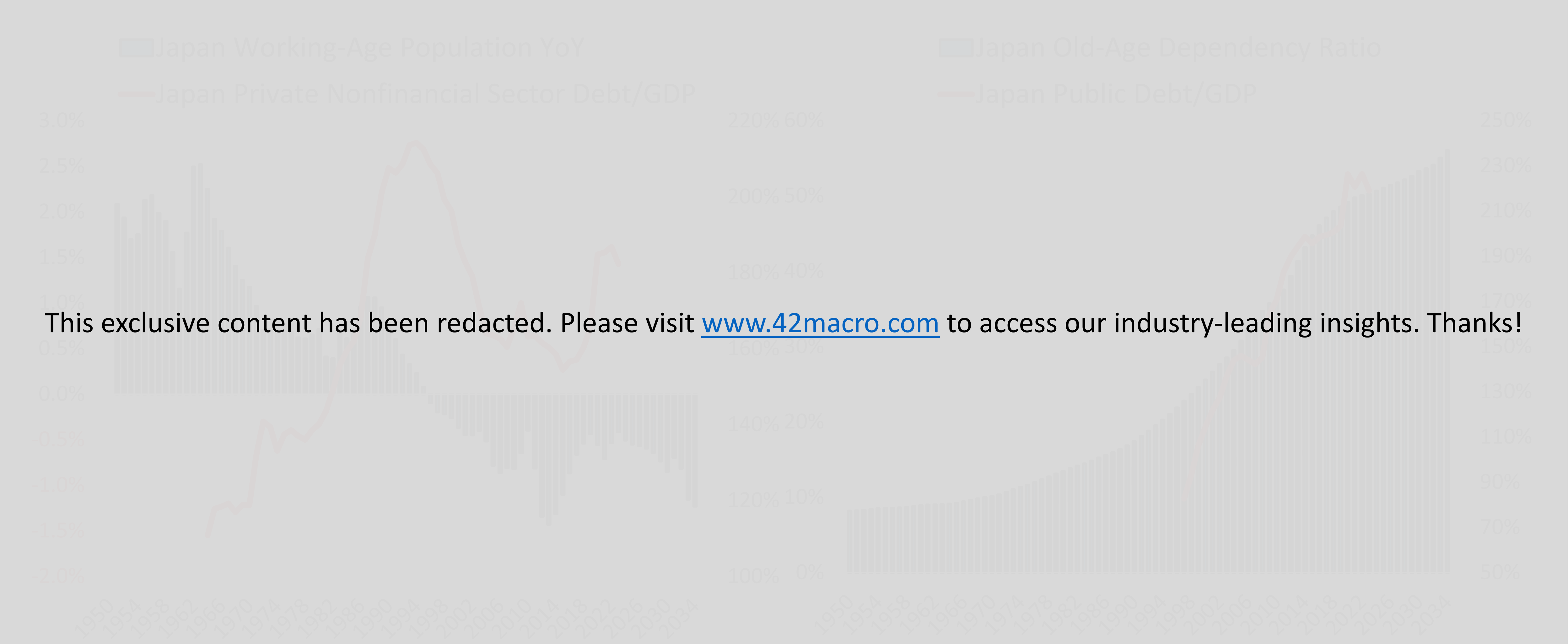
 Data Source: Bloomberg. Bottom-Up Macro Regime characteristics:
G = GOLDILOCKS = growth ↑ and inflation ↓; R = REFLATION = growth ↑ and inflation ↑;
I = INFLATION = growth ↓ and inflation ↑; and D = DEFLATION = growth ↓ and inflation ↓.
The 42 Macro GRID Model applies a proprietary methodology to smooth and nowcast quarterly GDP data on a monthly frequency.

Hawkish Trends In Japanese Wage And Inflation Data Suggest The BOJ May Surprise To The Upside Regarding The Pace And Magnitude Of Rate Hikes



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

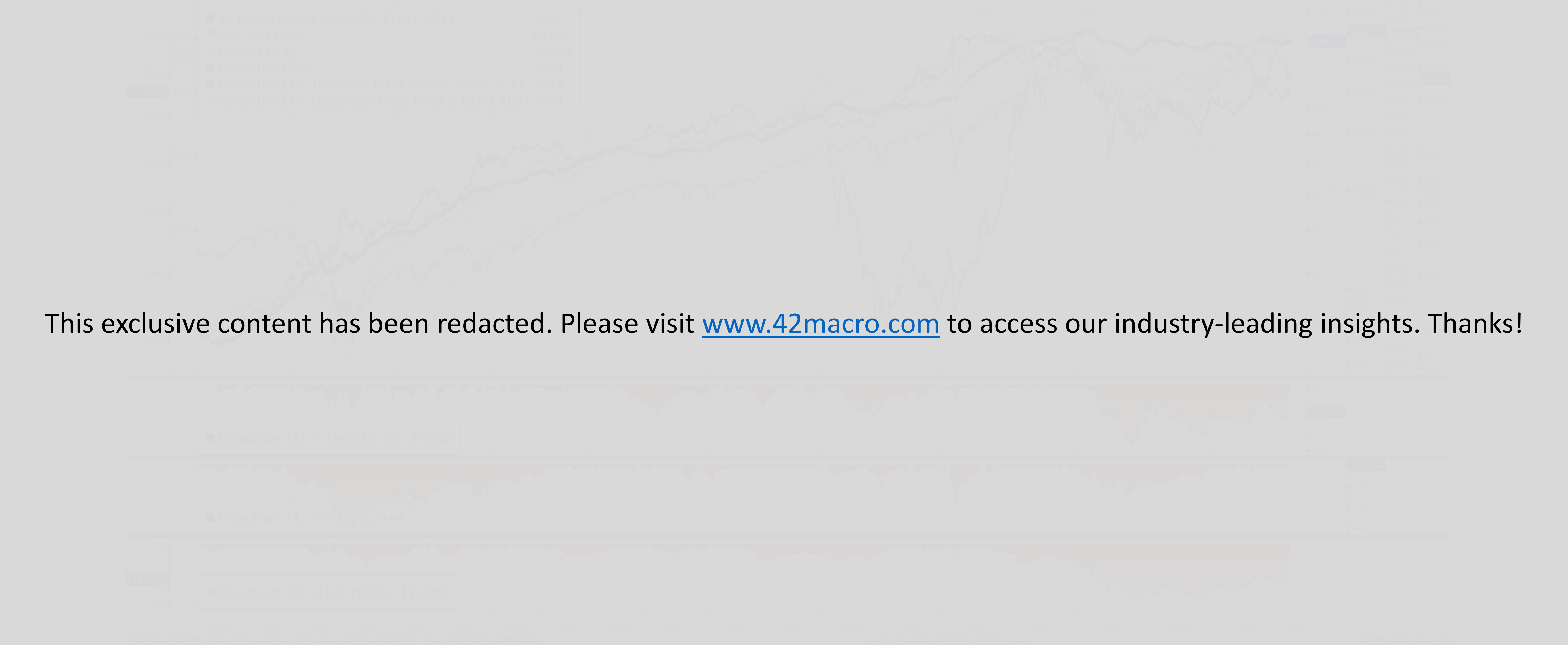
Japan's Deepening Demographic Headwinds All But Guarantee The BOJ Will Wind Up Back Where It Started If It Overtightens—i.e., ZIRP



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Working-Age Population = 15-64 year-olds.
Old-Age Dependency Ratio = 65+ year-olds as a % of the Working-Age Population.

Key Takeaway: Asset Markets Are Cointegrated With Global Liquidity And Globally Coordinated Easing Is Positive For Global Liquidity

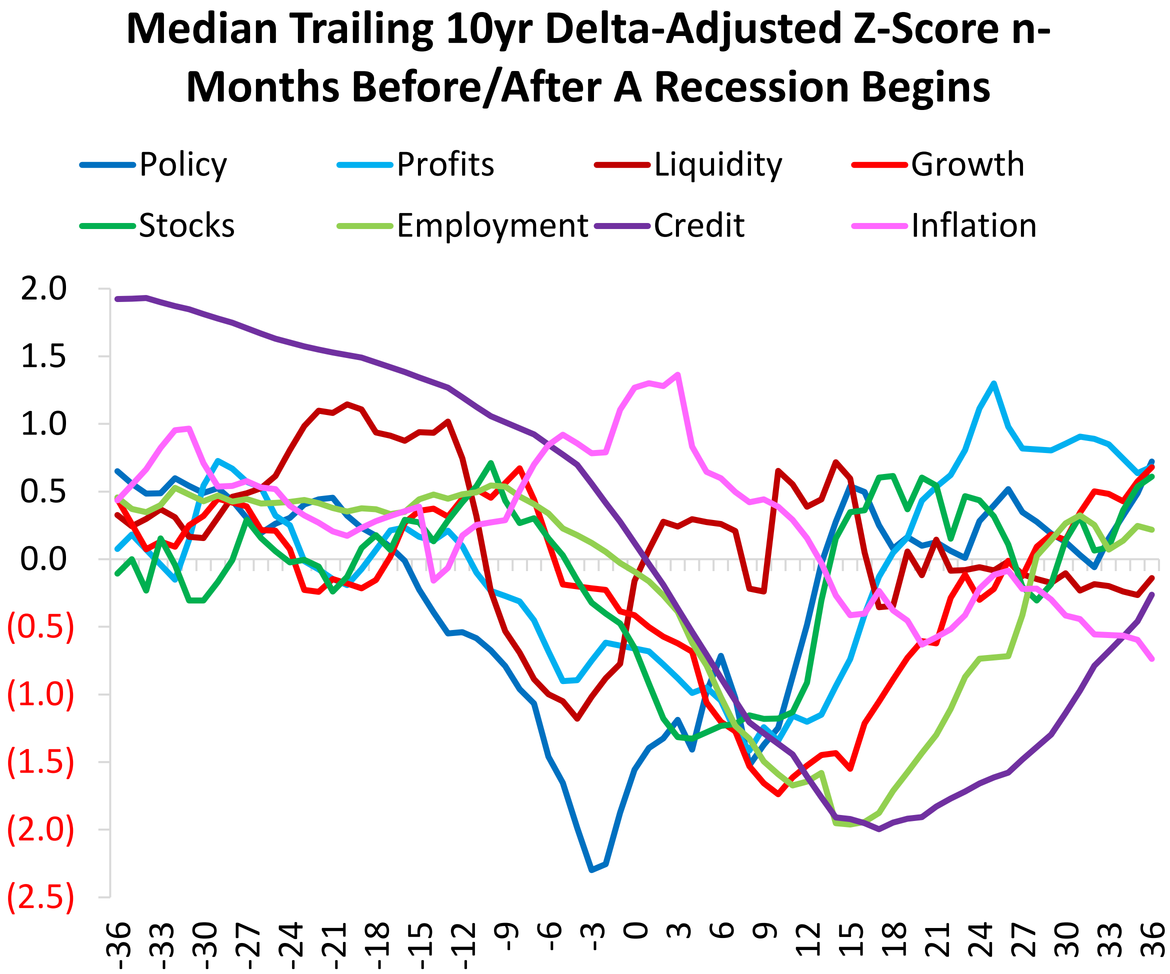


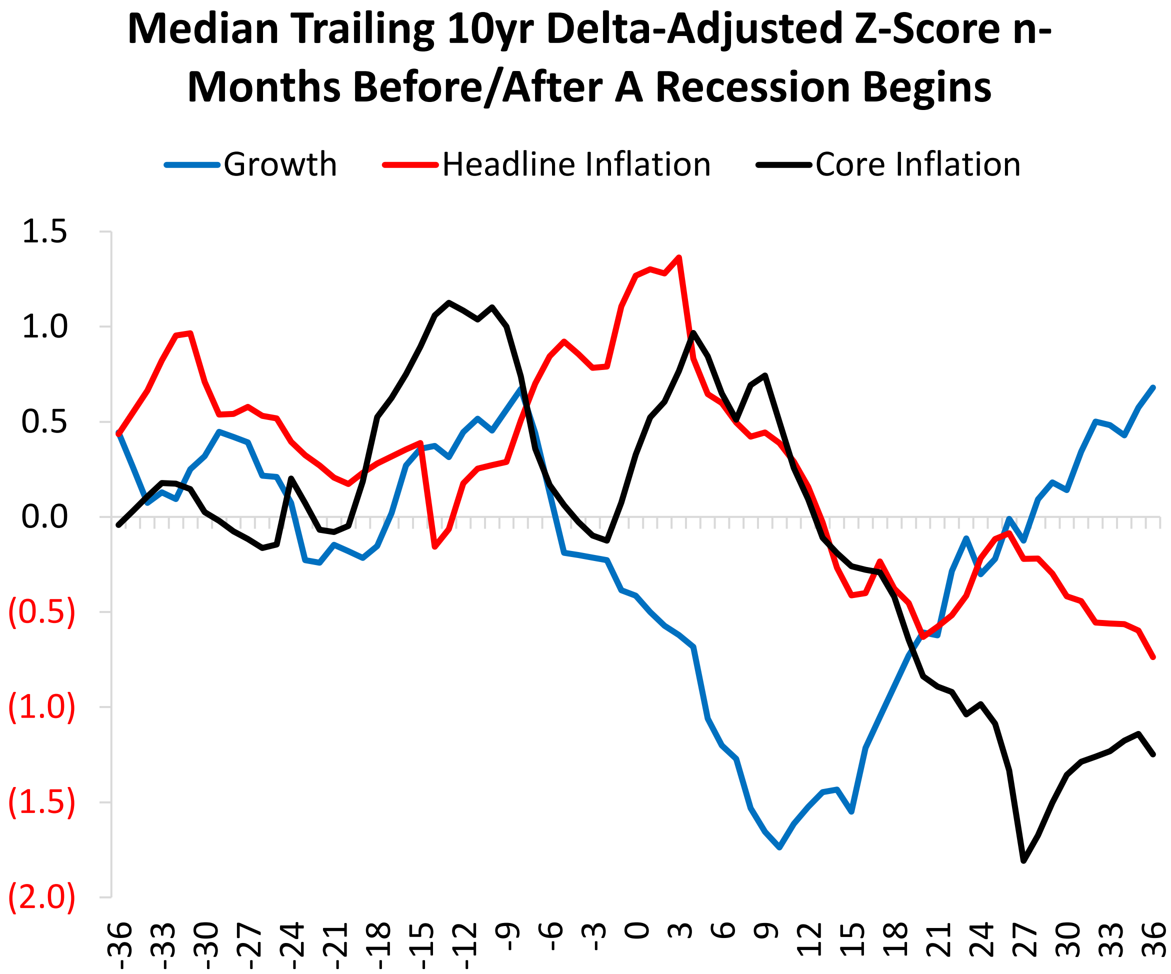
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

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

Left Tail Risks

Reminder: Inflation Is The Most Lagging Indicator Of The Business Cycle And Is Unlikely To Return Durably To Trend Without A Recession



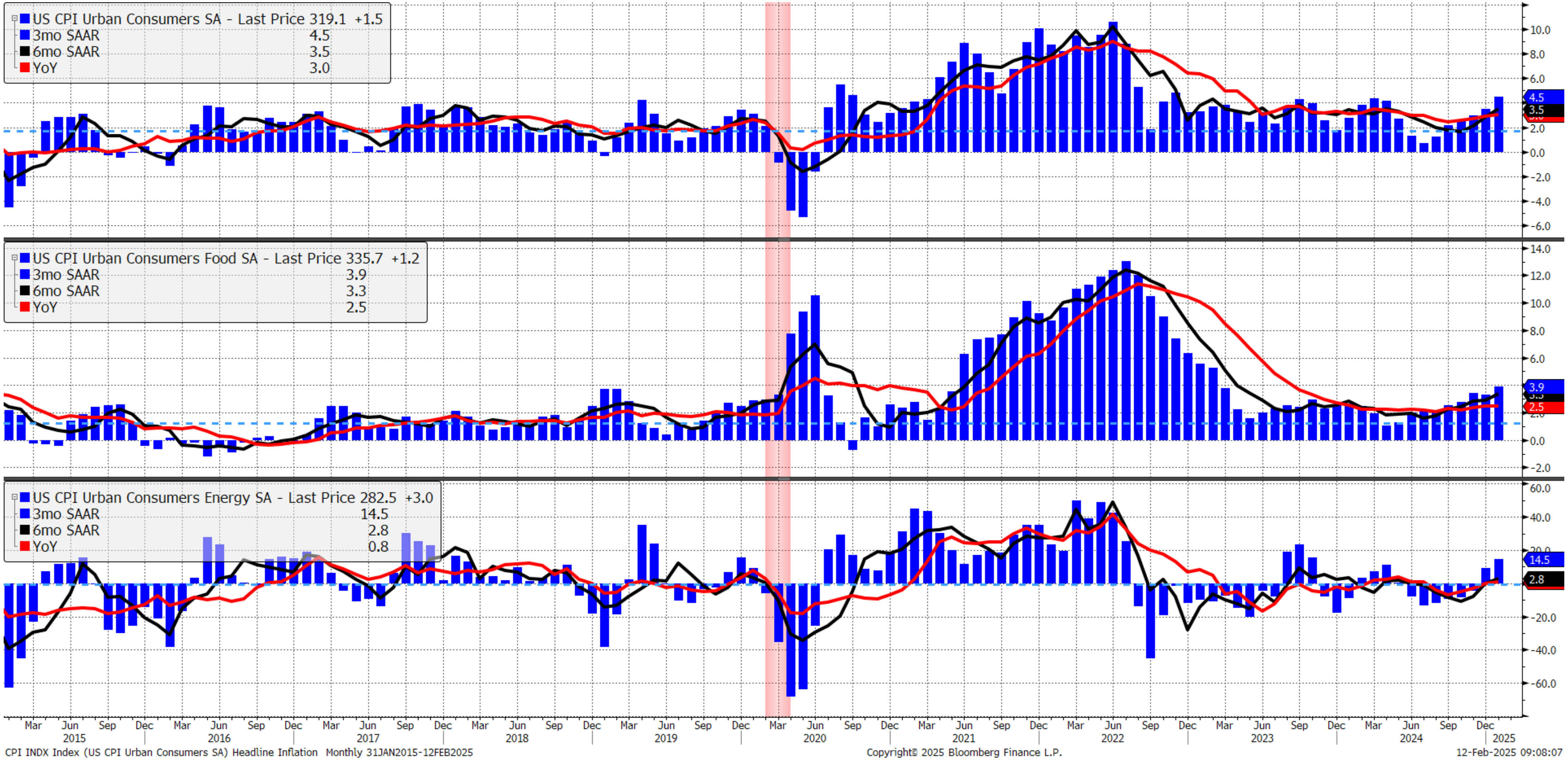


Accelerating/Moderating Upturn: above-trend and increasing/decreasing. Accelerating/Moderating Downturn: below-trend and decreasing/increasing.

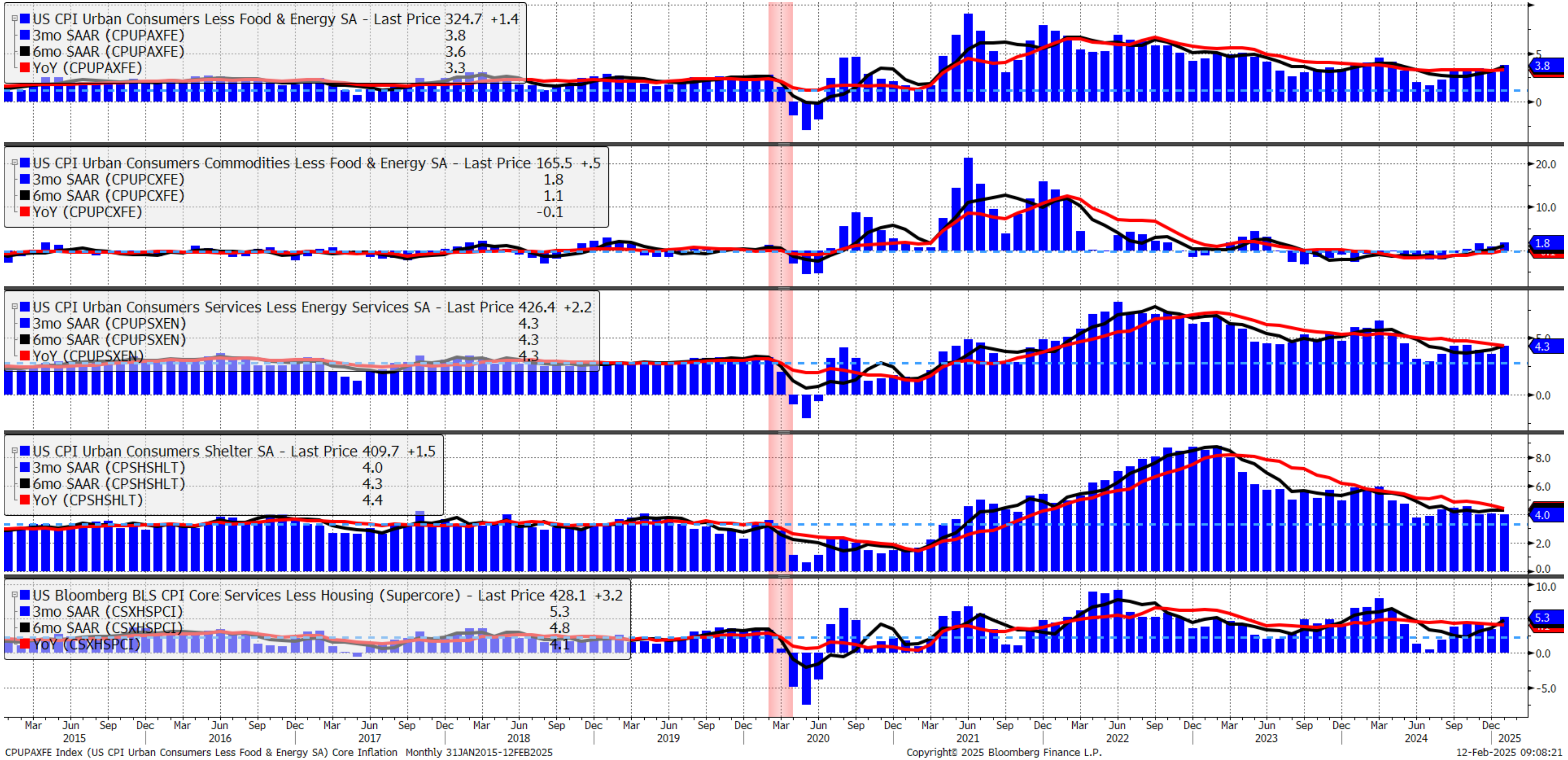
All underlying time series = 3MMA of YoY % change unless otherwise denoted. Z-Scores from 2020 onward are derived from 2015-19 trends.

"Delta-Adjusted" = the signs of countercyclical indicators (e.g., Fed Funds Rate, SLOS, Jobless Claims, Unemployment, Personal Savings Rate, Credit Delinquencies, etc.) are inverted to align them with the direction of the business cycle.

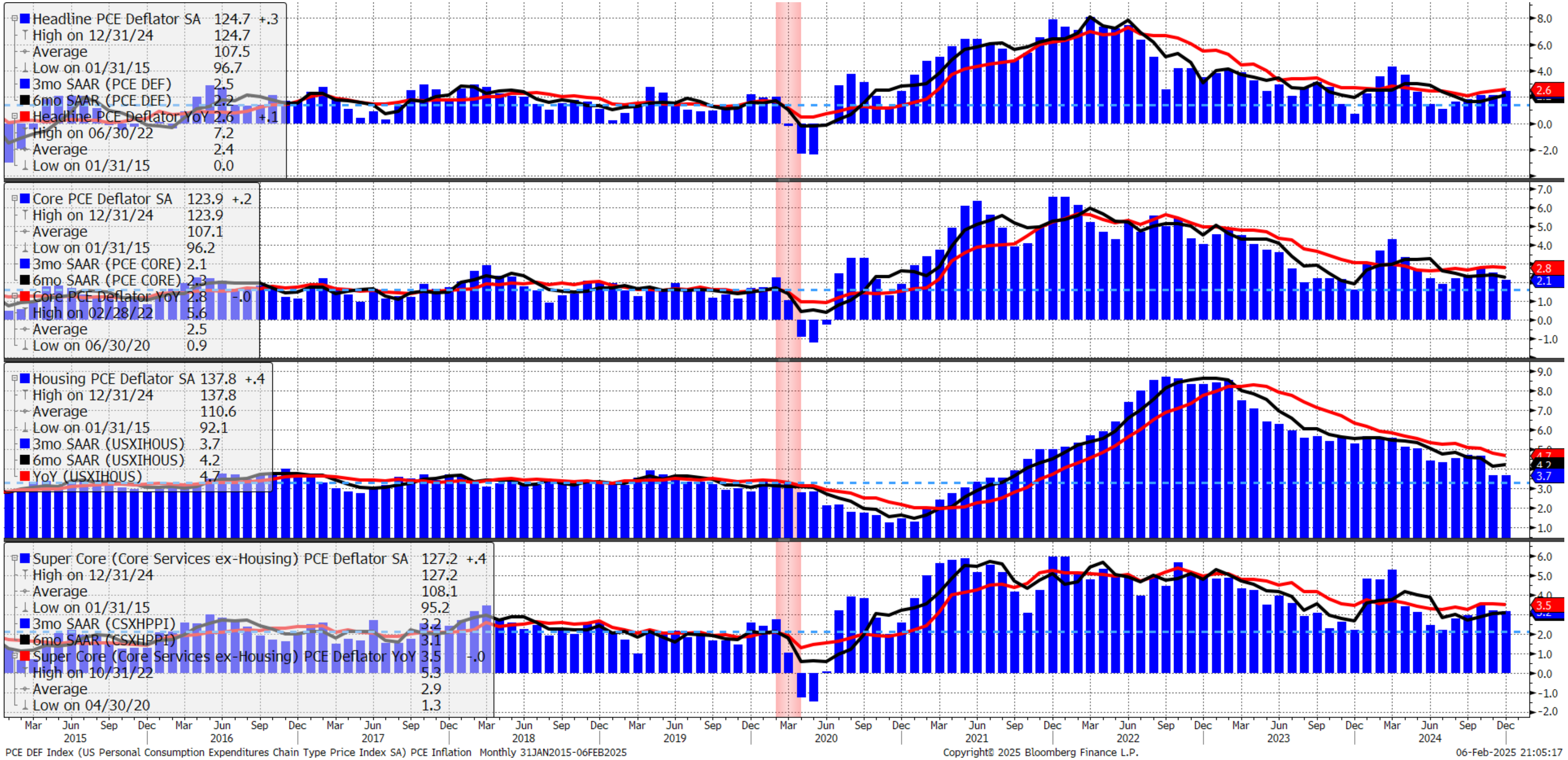
Headline CPI Is Unlikely To Return Durably To Trend Without A Recession



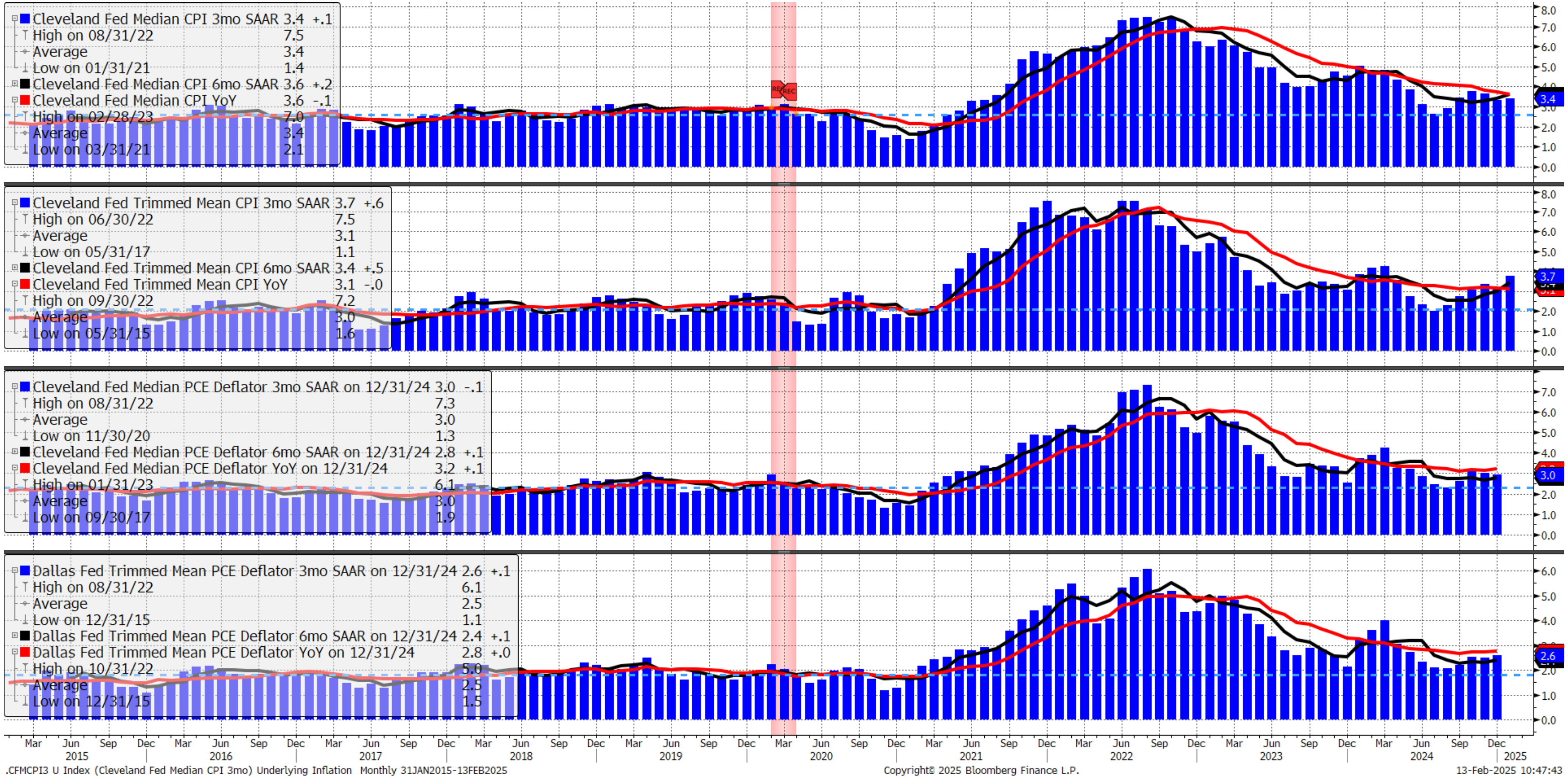
Core CPI Is Unlikely To Return Durably To Trend Without A Recession



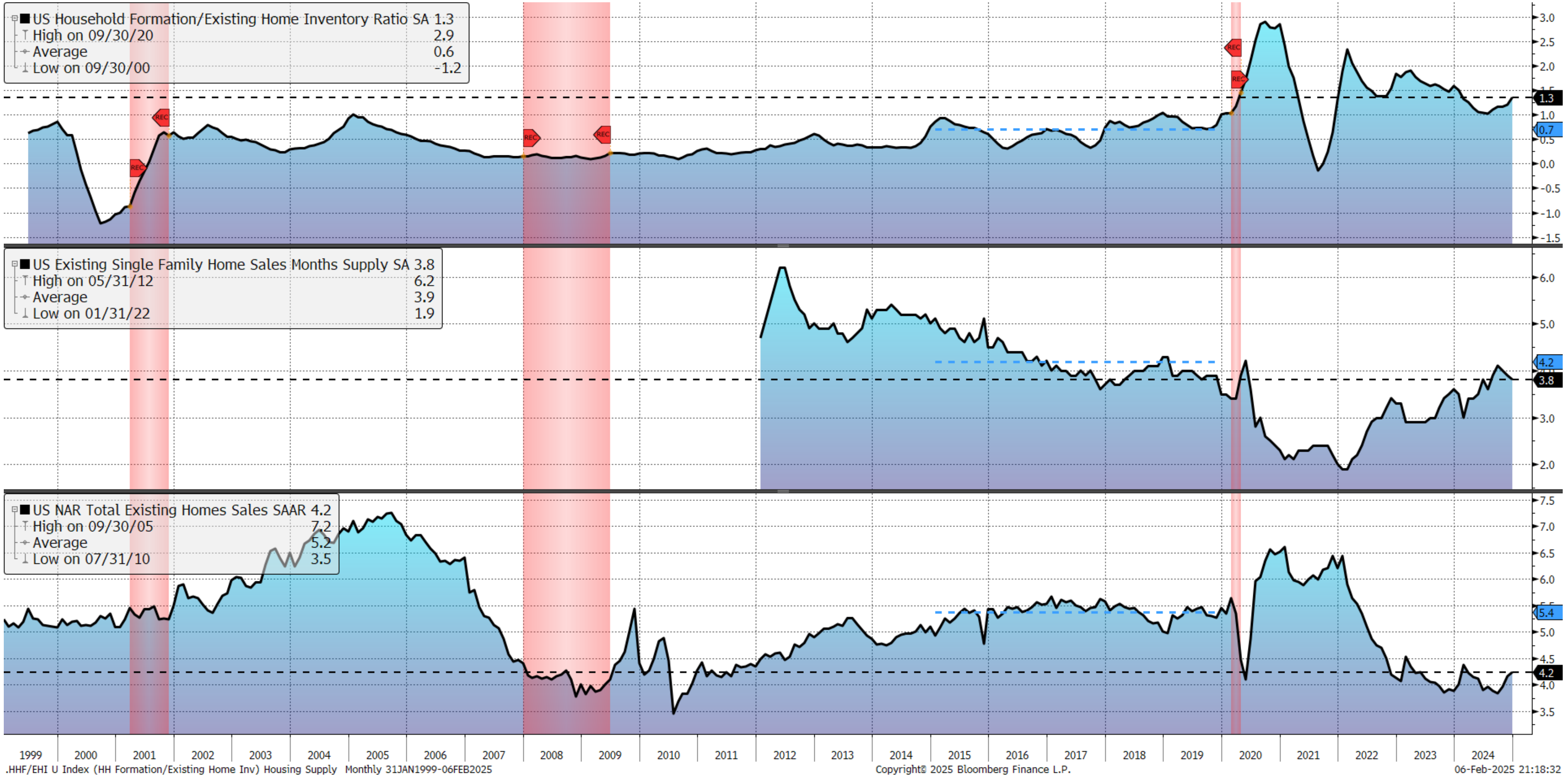
PCE Inflation Is Unlikely To Return Durably To Trend Without A Recession



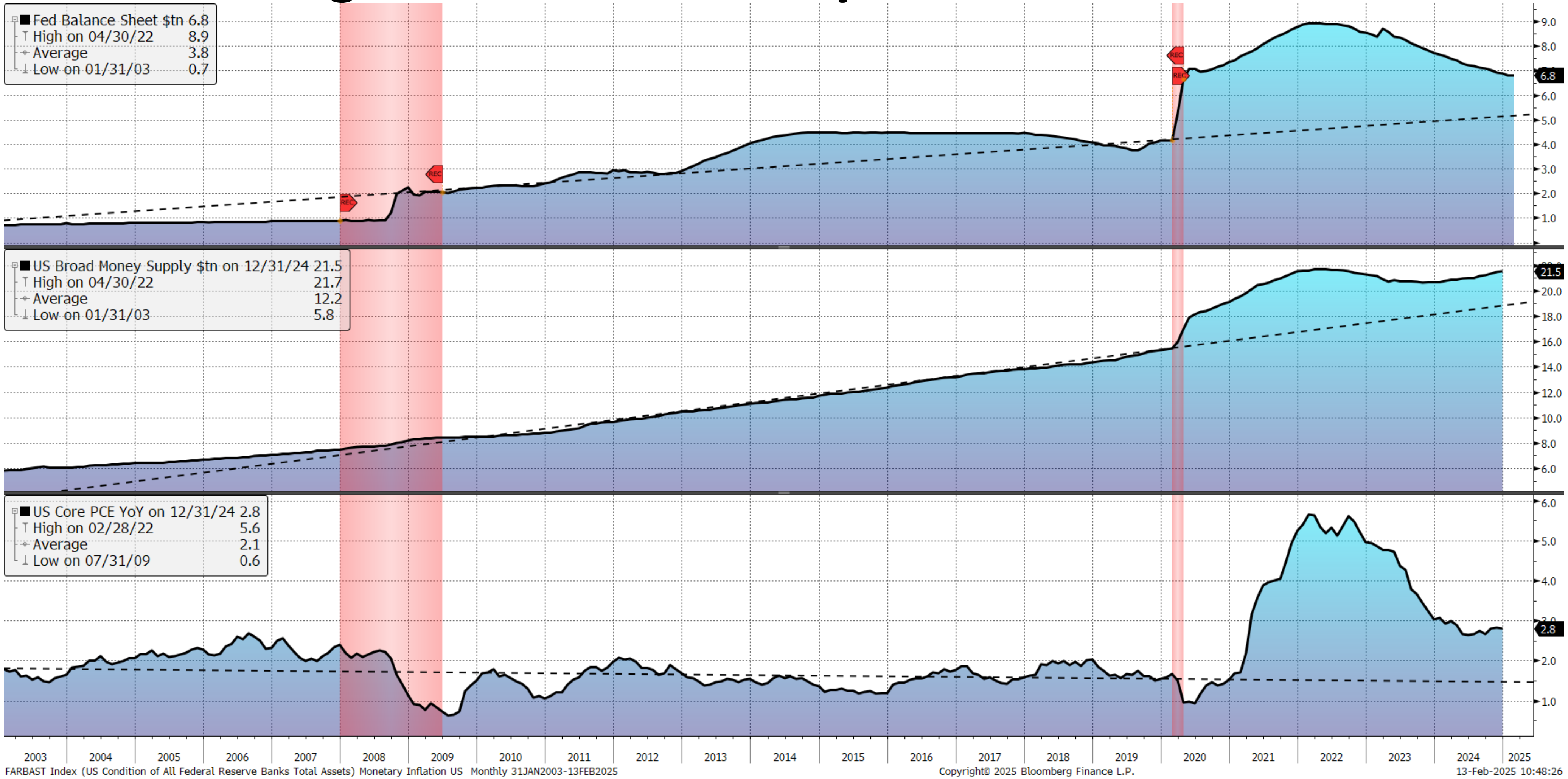
Underlying Inflation Is Unlikely To Return Durably To Trend Without A Recession



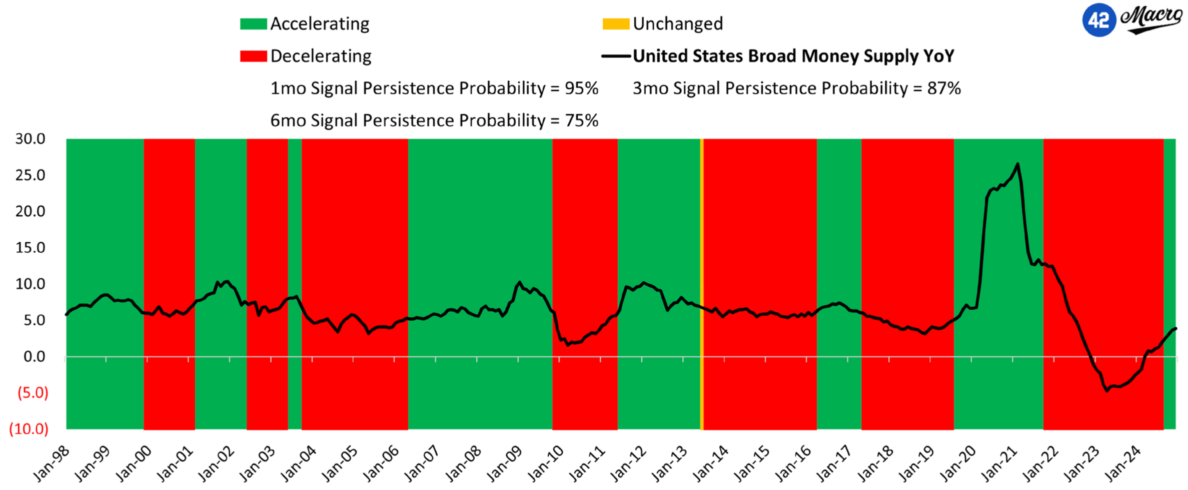
Why? 1) The Housing Market Is Structurally Tight, So Investors Must Be Careful Not To Straight Line The Improvement In Housing PCE Inflation

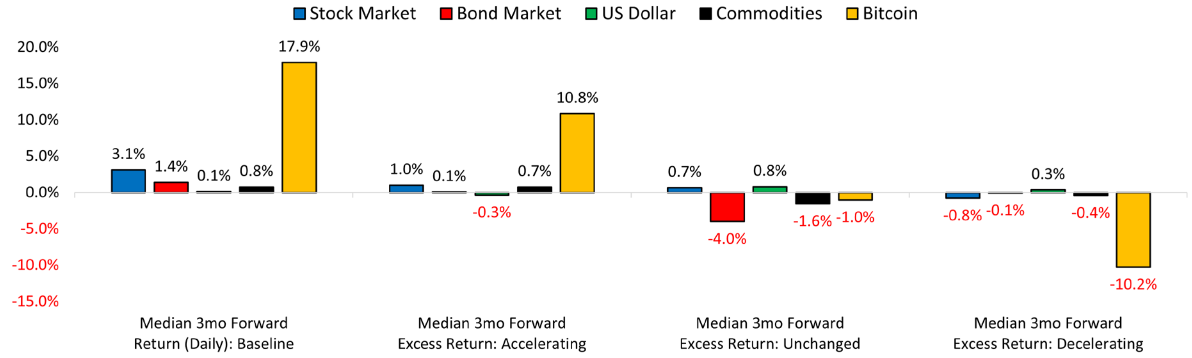


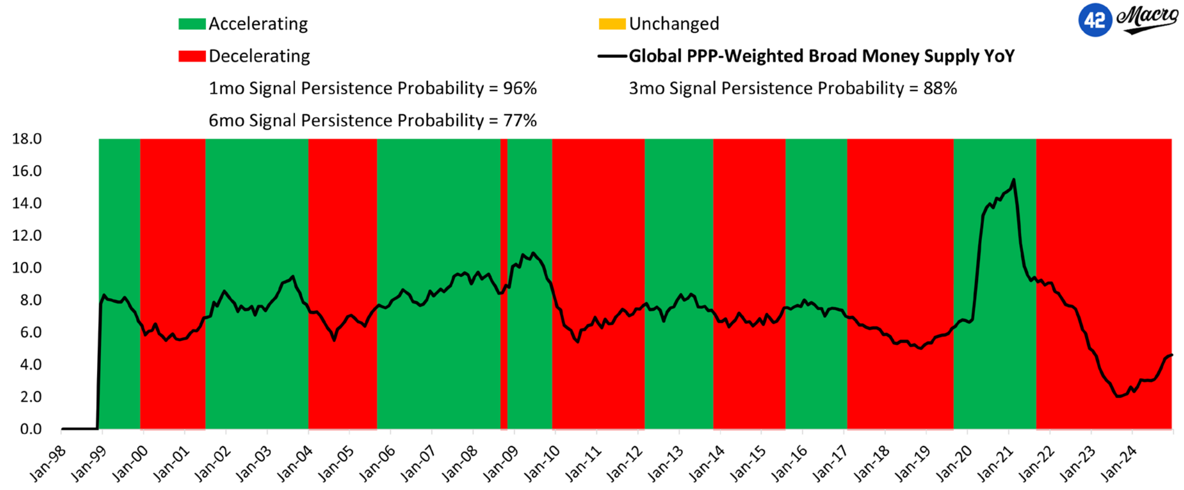
2) The Fed Has Done A Poor Job Of Reining In Liquidity Since The Regional Banking Crisis—But Perhaps That Was The Plan All Along

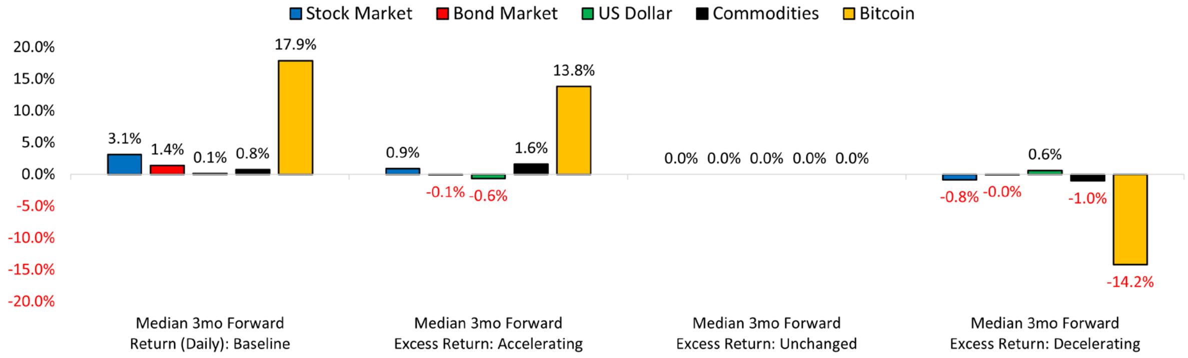


3) Domestic Credit Growth Is Now Trending Higher And Global Credit Growth Is On The Precipice Of An Uptrend As Well

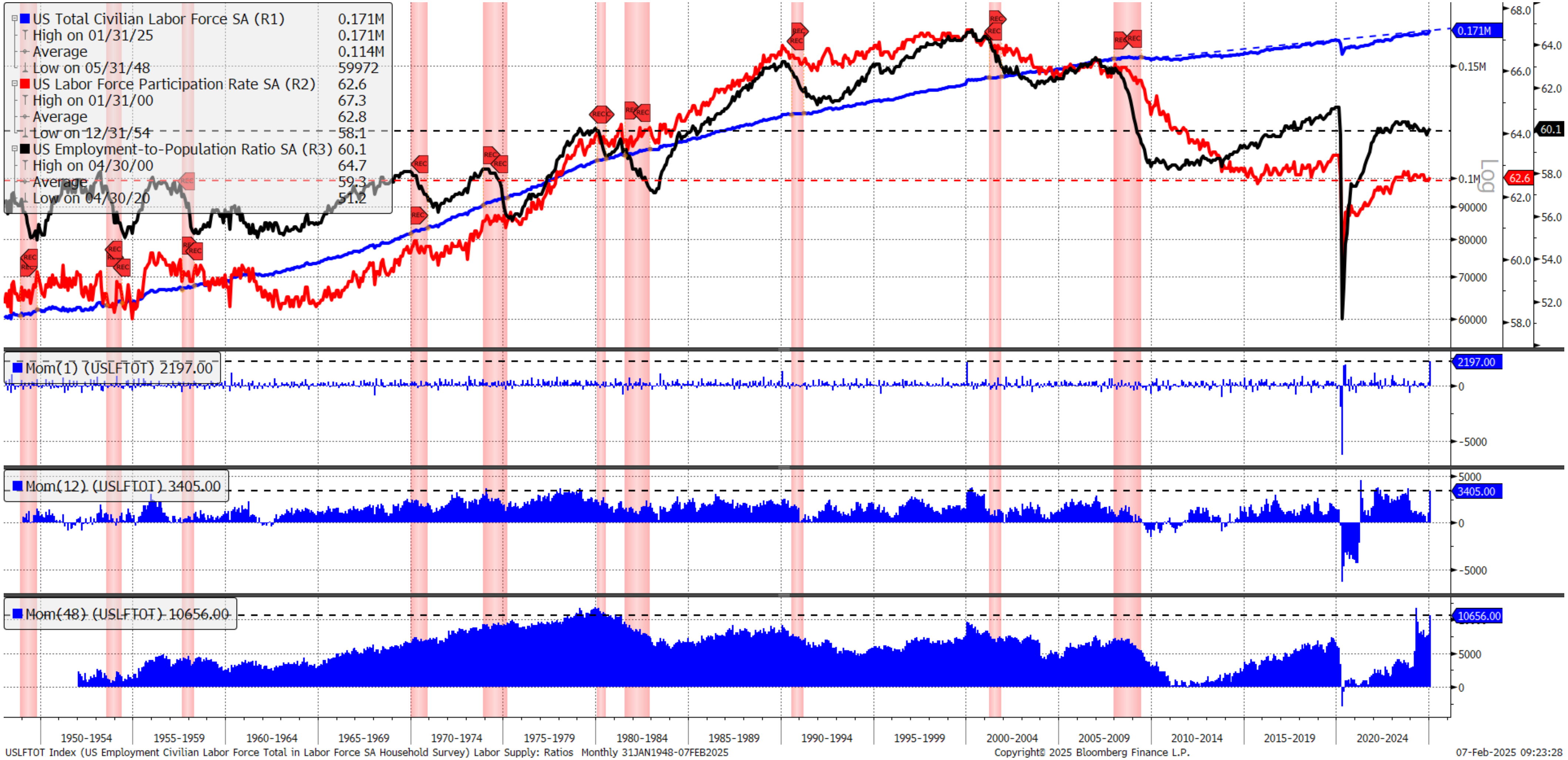






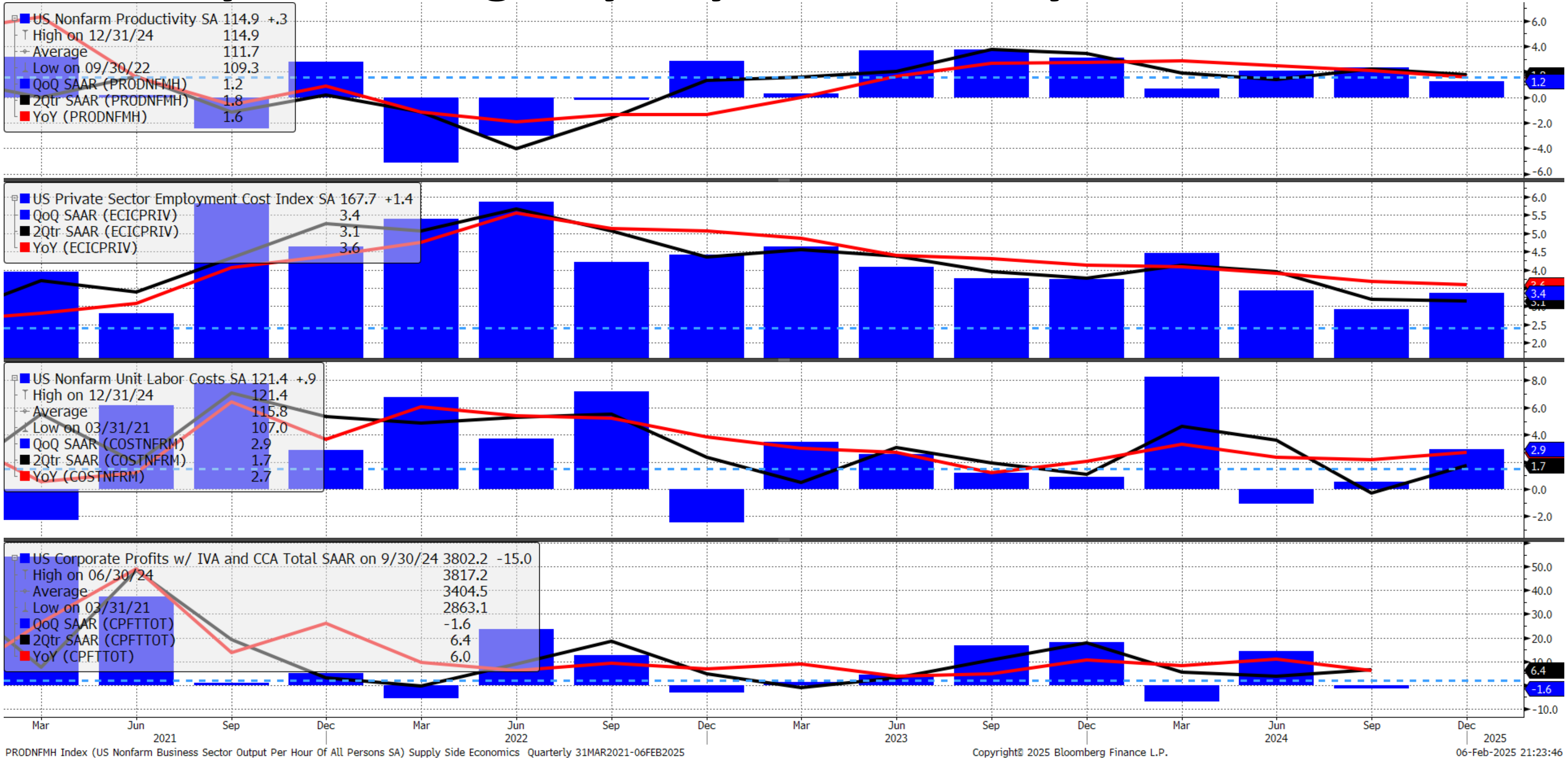


4a) The Positive Labor Supply Shock From Millions Of Illegal Migrants Ended With President Trump's Executive Orders For The Border



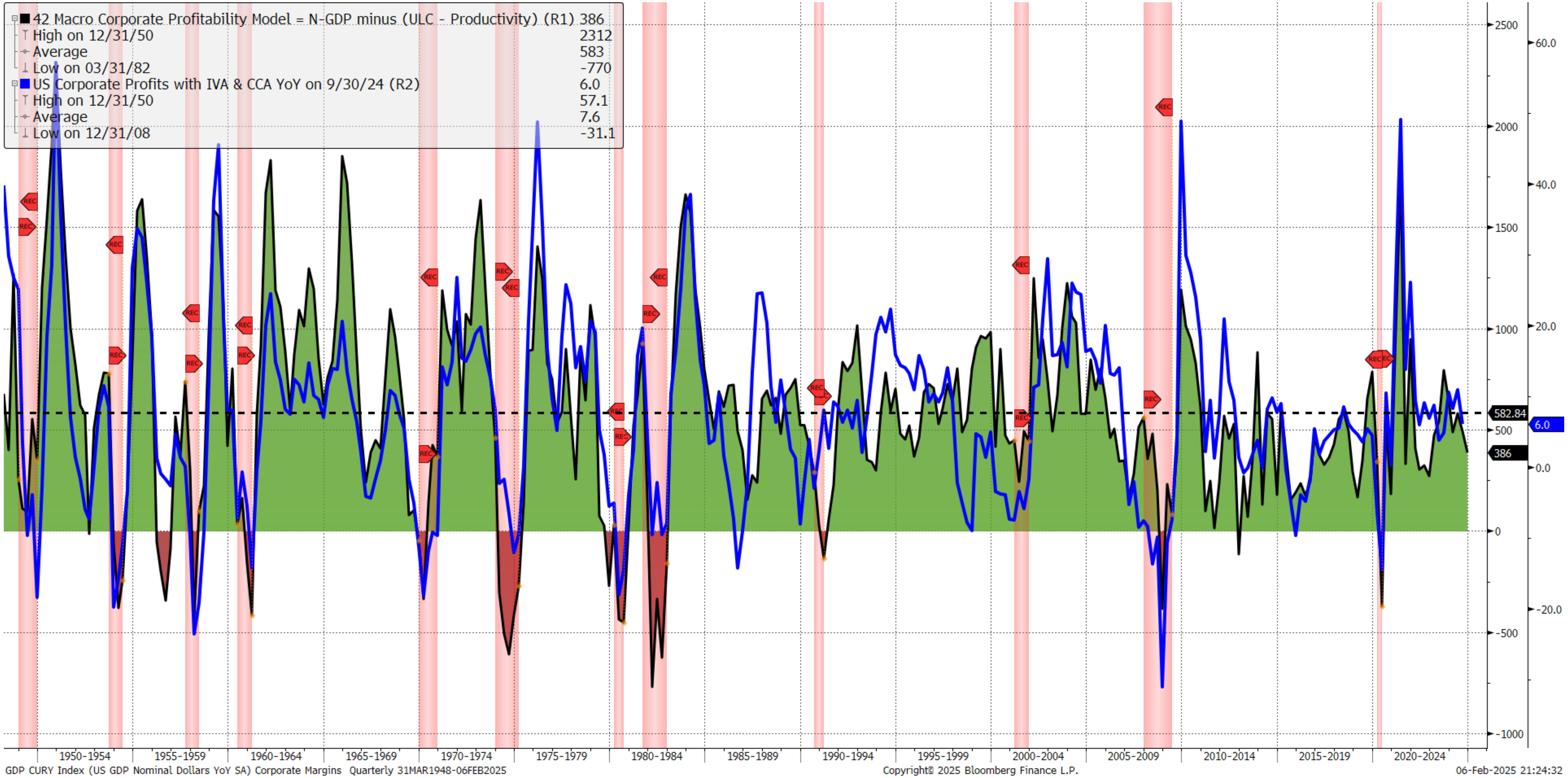
© 42 Macro LLC. Data Source: Bloomberg. Labor supply increased by +11mil since President Biden took office.
The latest Labor Force Participation Rate is on par with the structurally depressed levels of the mid-1970s.
The latest Employment-to-Population Ratio is on par with the structurally depressed levels of the mid-1980s.

4b) The Disinflationary Impact Of The Positive Labor Supply Shock Was Already Reversing Anyway And Is Likely To Unwind Further



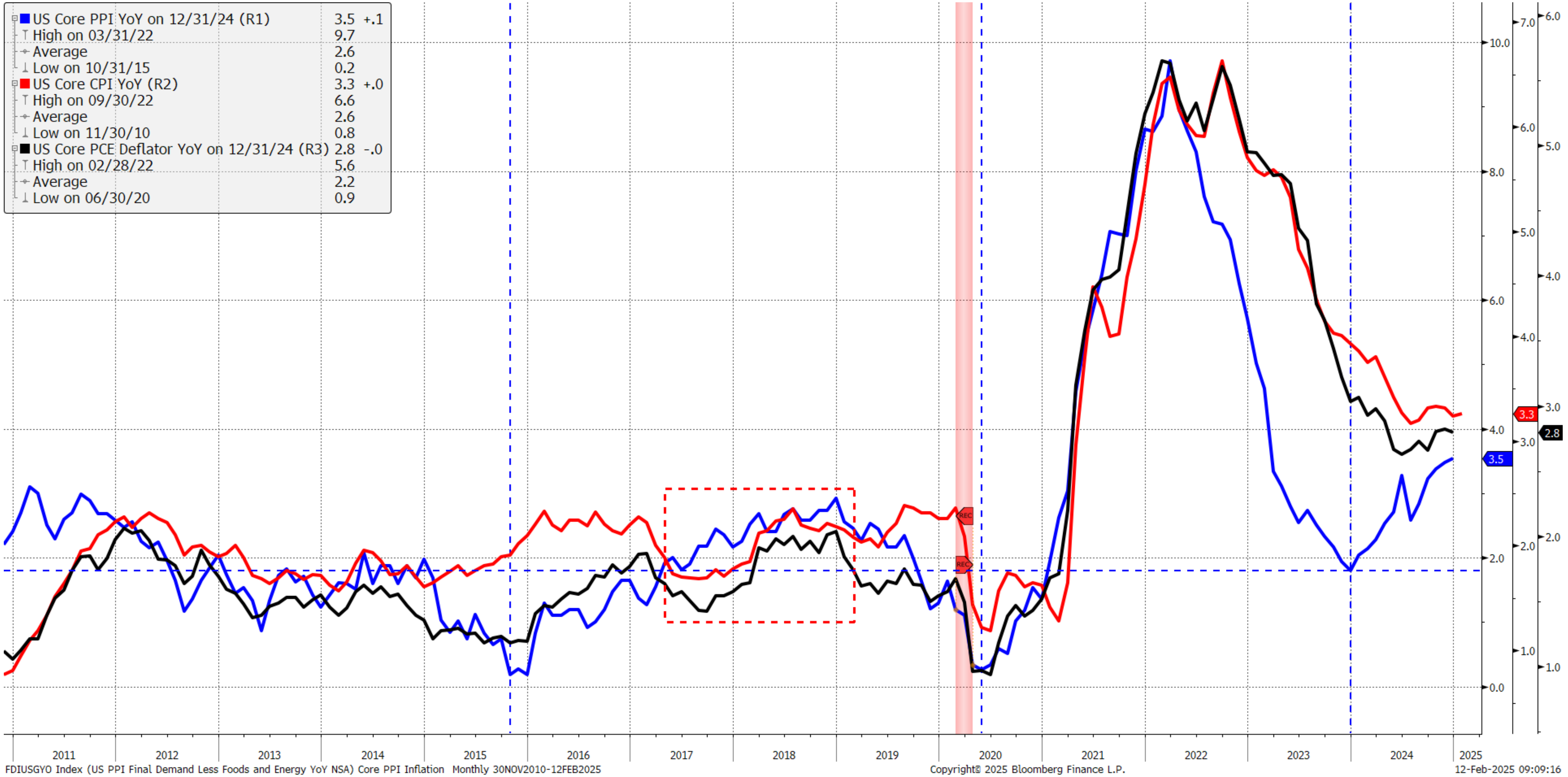
 Data Source: Bloomberg. Light blue dotted lines = 2015-19 trend.
The Private Sector Employment Cost Index peaked at 5.9% QoQ SAAR in 2Q22.
Unit Labor Cost Inflation peaked at 7.8% QoQ SAAR in 3Q21.

4c) Slowing Topline And Productivity Growth + Accelerating Unit Labor Cost Inflation = Margin Compression That Pressures Companies To Raise Prices



Black dotted line = historical mean of the 42 Macro Corporate Profitability Model.

5) Leading Indicators Support Our Hawkish NTM Outlook For Inflation



 Blue dotted lines represent cycle troughs.
Core PCE inflation accelerated +60bps from late-2017 through Dec-18 amid the advent of Trump's tariff implementation.

The 42 Macro Secular Inflation Model Suggests The Equilibrium Rate Of Core PCE Inflation Is Currently In The High 2s/Low 3s

US SECULAR INFLATION MODEL FEATURES	Δ-ADJUSTED Z-SCORE (Latest Value vs. 2010-19 Sample)
Automation: Capex/Employee Compensation (Latest Value = 27%)	(1.6)
Commodities: CRB Index (Latest Value = 553)	2.5
Deglobalization: Imports of Goods and Services as a % of GDP (Latest Value = 14%)	**1.8**
Demographics: Share of Population ≥ 65 Years Old (Latest Value = 17%)	**(2.0)**
Fed Reaction Function: Fed Balance Sheet as a % of GDP (Latest Value = 23%)	0.7
Fiscal Policy: Sovereign Fiscal Balance as a % of GDP (Latest Value = -7.2%)	**1.2**
House Prices: FHFA House Price Index YoY (Latest Value = 4.4%)	(0.2)
Housing Supply: Household Formation/Existing Home Inventory (Latest Value = 1.3)	**4.5**
Income Inequality: Gini Coefficient (Latest Value = 0.49)	(1.3)
Labor Supply: Labor Force Participation Rate (Latest Value = 62.6%)	1.0
Money Supply: M2 YoY (Latest Value = 3.9%)	(1.1)
Money Velocity: M2/Nominal GDP (Latest Value = 1.4)	(1.5)
Monopsony Power: S&P 100 Market Cap/S&P 500 Market Cap (Latest Value = 70%)	7.6
Populism: 25-54 Employment-to-Population Ratio (Latest Value = 80%)	(1.5)
Productivity: Output Per Hour of Nonfarm Labor YoY (Latest Value = 1.6%)	**(0.4)**
Public Debt: Federal Debt Held by the Public as a % of GDP (Latest Value = 106%)	6.0
Technology: NASDAQ 100 Market Cap/Russell 3000 Market Cap (Latest Value = 44%)	**(5.4)**
Wages: Employment Cost Index YoY (Latest Value = 3.8%)	**4.4**
West Village-Montauk Effect: Checkable Deposits & Currency as a % of Total Household Assets (Latest Value = 2%)	**9.8**
Mean Z-Score	1.3
Weighted Z-Score	1.6
2010-19 Trend of Core PCE YoY	1.6%
2020-29 Trend Projection: Mean Z-Score Model	2.9%
2020-29 Trend Projection: Weighted Z-Score Model	3.0%
2020-to-date Trend of Core PCE YoY	3.4%

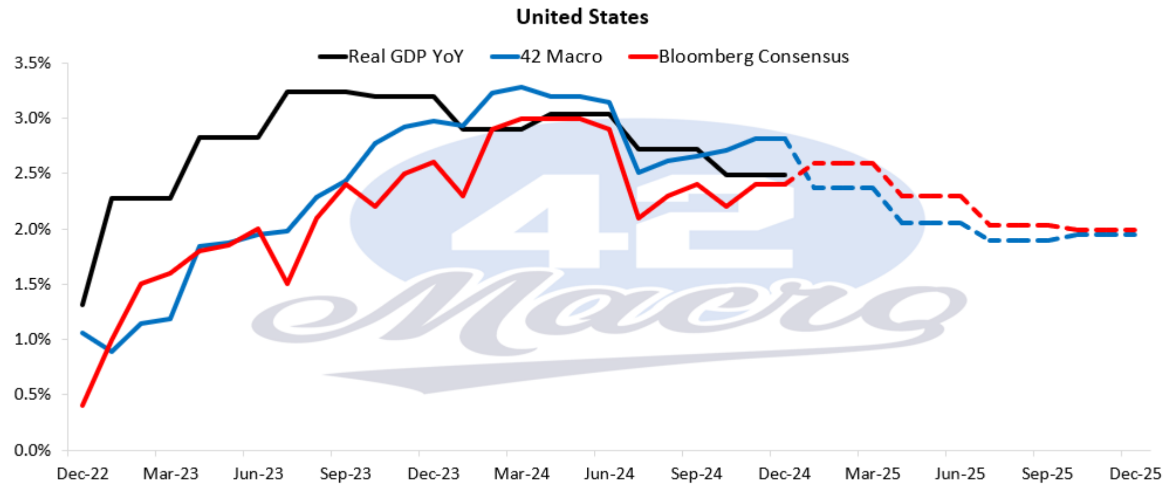
A ≤ [3σ] Δ = modest inflationary or disinflationary pressure. A ≥ [3σ] Δ = meaningful inflationary or disinflationary pressure.
The 42 Macro Secular Inflation Model interpolates the normalized change of key indicators upon the underlying trend of Core PCE inflation on a raw and weighted basis. **Bold** = highest weighted features.

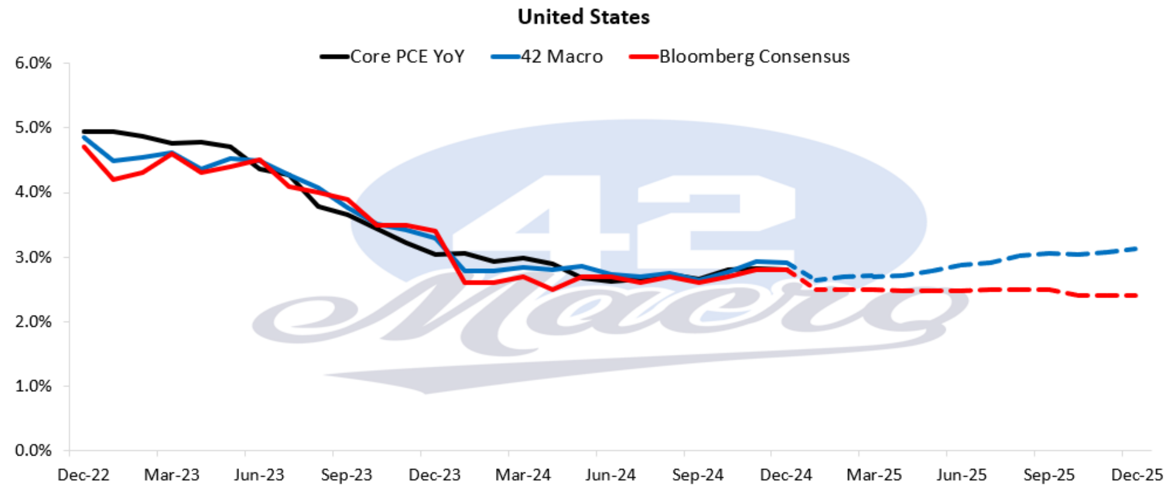
Key Takeaway: Core PCE Inflation Is Likely To Bottom In Q1 In The Low-To-Mid 2s And Trend Higher Throughout The Balance Of 2025

United States	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Bottom-Up Macro Regime	D	G	G	G	G	G	G	G	G	G	D	D	D
42 Macro	D	G	G	G	G	G	G	G	G	G	G	G	G
Hit Rate (t10yrs; Luck = 25%)	46%	47%	48%	48%	49%	50%	51%	52%	53%	53%	53%	53%	53%
Bloomberg Consensus	I	G	G	G	R	R	G	D	G	G	G	G	G
Hit Rate (t10yrs; Luck = 25%)	33%	34%	35%	36%	36%	36%	37%	37%	38%	38%	38%	38%	38%
Real GDP YoY	1.3%	2.3%	2.3%	2.3%	2.8%	2.8%	2.8%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
Z-Score (vs. 2015-19 Trend)	-1.9	-0.4	-0.4	-0.4	0.4	0.4	0.4	1.0	1.0	1.0	1.0	1.0	1.0
42 Macro	1.1%	0.9%	1.1%	1.2%	1.8%	1.9%	1.9%	2.0%	2.3%	2.4%	2.8%	2.9%	3.0%
Z-Score (vs. 2015-19 Trend)	-2.9	-3.2	-2.7	-2.6	-1.3	-1.2	-1.1	-1.0	-0.4	-0.1	0.6	0.9	1.0
Directional Accuracy (t10yrs; Luck = 50%)	65%	65%	65%	65%	68%	68%	68%	70%	70%	70%	68%	68%	68%
Average Absolute Forecast Error (t10yrs)	69bps	70bps	71bps	72bps	72bps	73bps	73bps	74bps	74bps	75bps	75bps	74bps	74bps
Bloomberg Consensus	0.4%	1.0%	1.5%	1.6%	1.8%	1.9%	2.0%	1.5%	2.1%	2.4%	2.2%	2.5%	2.6%
Z-Score (vs. 2015-19 Trend)	-3.9	-2.8	-1.8	-1.6	-1.2	-1.1	-0.8	-1.8	-0.6	-0.1	-0.4	0.1	0.3
Directional Accuracy (t10yrs; Luck = 50%)	60%	63%	63%	63%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Average Absolute Forecast Error (t10yrs)	73bps	74bps	74bps	75bps	75bps	75bps	76bps	77bps	78bps	78bps	79bps	79bps	79bps
Core PCE YoY	5.0%	4.9%	4.9%	4.8%	4.8%	4.7%	4.4%	4.3%	3.8%	3.7%	3.4%	3.2%	3.0%
Z-Score (vs. 2015-19 Trend)	13.9	13.9	13.6	13.2	13.2	12.9	11.5	11.1	9.1	8.5	7.7	6.7	6.0
42 Macro	4.9%	4.5%	4.6%	4.6%	4.4%	4.5%	4.5%	4.3%	4.1%	3.8%	3.5%	3.4%	3.3%
Z-Score (vs. 2015-19 Trend)	14.5	12.9	13.2	13.4	12.3	13.0	12.9	11.9	11.0	9.6	8.5	8.1	7.5
Directional Accuracy (t10yrs; Luck = 50%)	63%	63%	62%	61%	60%	60%	61%	61%	61%	61%	62%	63%	63%
Average Absolute Forecast Error (t10yrs)	16bps	16bps	16bps	16bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps
Bloomberg Consensus	4.7%	4.2%	4.3%	4.6%	4.3%	4.4%	4.5%	4.1%	4.0%	3.9%	3.5%	3.5%	3.4%
Z-Score (vs. 2015-19 Trend)	13.8	11.5	12.0	13.3	12.0	12.4	12.9	11.1	10.6	10.2	8.4	8.4	7.9
Directional Accuracy (t10yrs; Luck = 50%)	38%	38%	37%	37%	37%	37%	37%	37%	38%	38%	39%	39%	40%
Average Absolute Forecast Error (t10yrs)	24bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps

United States	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Bottom-Up Macro Regime	D	D	D	G	G	G	D	I	I	I	I	I
42 Macro	G	G	G	R	I	D	D	D	D	R	R	R
Hit Rate (t10yrs; Luck = 25%)	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%
Bloomberg Consensus	G	G	G	G	R	R	I	I	D	R	R	R
Hit Rate (t10yrs; Luck = 25%)	38%	38%	38%	39%	39%	39%	38%	39%	39%	39%	39%	39%
Real GDP YoY	2.9%	2.9%	2.9%	3.0%	3.0%	3.0%	2.7%	2.7%	2.7%	2.5%	2.5%	2.5%
Z-Score (vs. 2015-19 Trend)	0.5	0.5	0.5	0.7	0.7	0.7	0.2	0.2	0.2	-0.1	-0.1	-0.1
42 Macro	2.9%	3.2%	3.3%	3.2%	3.2%	3.1%	2.5%	2.6%	2.7%	2.7%	2.8%	2.8%
Z-Score (vs. 2015-19 Trend)	0.9	1.6	1.7	1.5	1.5	1.4	0.1	0.3	0.4	0.5	0.7	0.7
Directional Accuracy (t10yrs; Luck = 50%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Average Absolute Forecast Error (t10yrs)	73bps	72bps	72bps	71bps	71bps	71bps	71bps	71bps	70bps	70bps	70bps	69bps
Bloomberg Consensus	2.3%	2.9%	3.0%	3.0%	3.0%	2.9%	2.1%	2.3%	2.4%	2.2%	2.4%	2.4%
Z-Score (vs. 2015-19 Trend)	-0.3	0.9	1.1	1.1	1.1	0.9	-0.6	-0.3	-0.1	-0.4	-0.1	-0.1
Directional Accuracy (t10yrs; Luck = 50%)	68%	68%	68%	68%	68%	68%	68%	68%	68%	70%	70%	70%
Average Absolute Forecast Error (t10yrs)	78bps	77bps	75bps	75bps	75bps	75bps	75bps	75bps	75bps	74bps	74bps	73bps
Core PCE YoY	3.1%	2.9%	3.0%	2.9%	2.7%	2.6%	2.7%	2.7%	2.7%	2.8%	2.8%	2.8%
Z-Score (vs. 2015-19 Trend)	6.1	5.5	5.7	5.3	4.4	4.3	4.4	4.7	4.4	5.0	5.1	5.0
42 Macro	2.8%	2.8%	2.8%	2.8%	2.9%	2.7%	2.7%	2.7%	2.6%	2.8%	2.9%	2.9%
Z-Score (vs. 2015-19 Trend)	5.2	5.3	5.5	5.4	5.5	5.0	4.8	5.1	4.6	5.2	5.9	5.8
Directional Accuracy (t10yrs; Luck = 50%)	63%	63%	63%	63%	63%	63%	62%	63%	63%	64%	64%	64%
Average Absolute Forecast Error (t10yrs)	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps	17bps
Bloomberg Consensus	2.6%	2.6%	2.7%	2.5%	2.7%	2.7%	2.6%	2.7%	2.6%	2.7%	2.8%	2.8%
Z-Score (vs. 2015-19 Trend)	4.3	4.3	4.8	3.9	4.8	4.8	4.3	4.8	4.3	4.8	5.2	5.2
Directional Accuracy (t10yrs; Luck = 50%)	40%	39%	40%	40%	39%	39%	38%	39%	40%	41%	41%	41%
Average Absolute Forecast Error (t10yrs)	25bps	25bps	26bps	26bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps	25bps

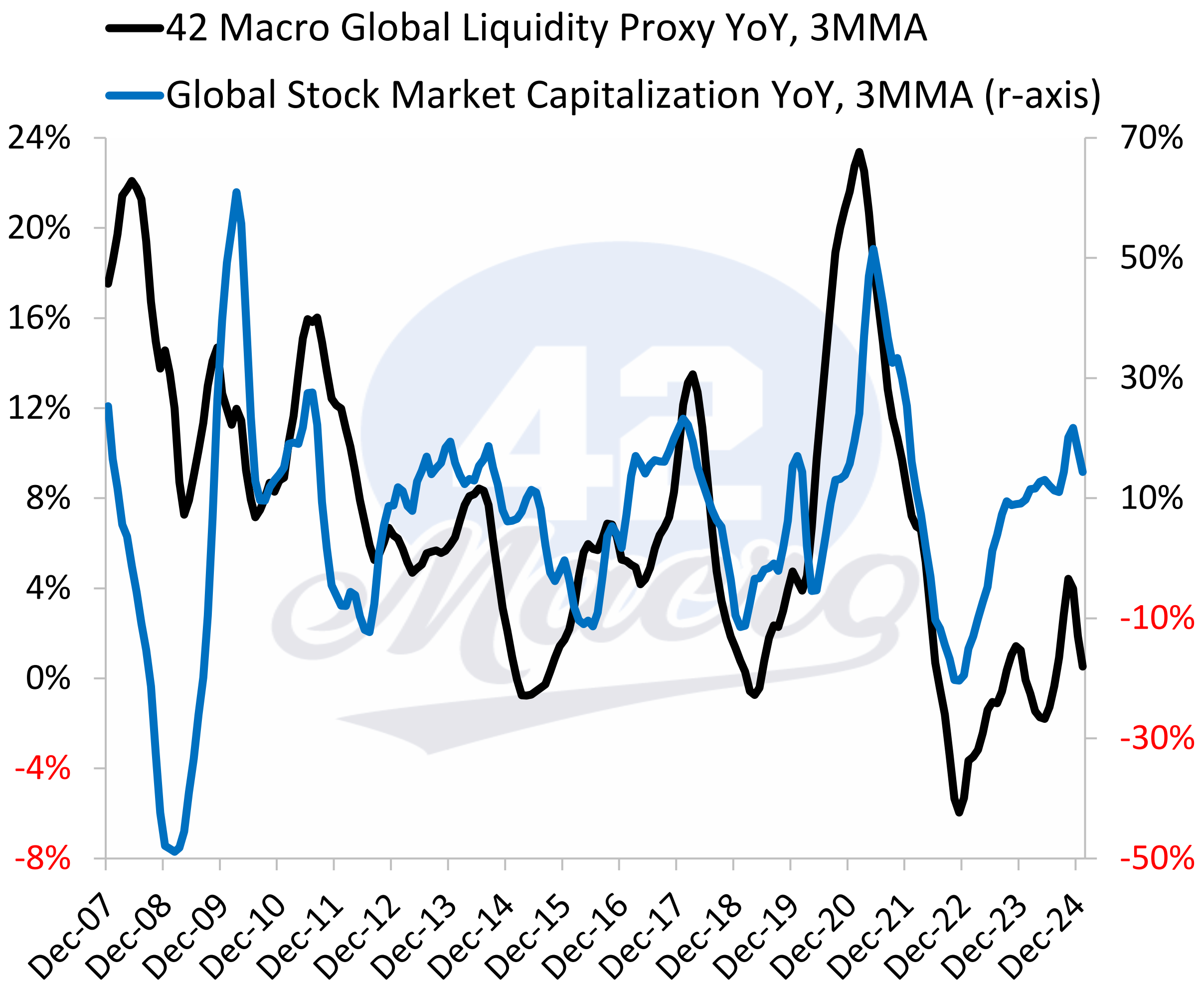
United States	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
Bottom-Up Macro Regime												
42 Macro	D	D	D	I	I	I	I	I	I	R	R	R
Hit Rate (t10yrs; Luck = 25%)												
Bloomberg Consensus	G	G	G	D	D	D	I	I	I	D	D	D
Hit Rate (t10yrs; Luck = 25%)												
Real GDP YoY												
Z-Score (vs. 2015-19 Trend)												
42 Macro	2.4%	2.4%	2.4%	2.1%	2.1%	2.1%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Z-Score (vs. 2015-19 Trend)	-0.2	-0.2	-0.2	-0.9	-0.9	-0.9	-1.2	-1.2	-1.2	-1.1	-1.1	-1.1
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												
Bloomberg Consensus	2.6%	2.6%	2.6%	2.3%	2.3%	2.3%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Z-Score (vs. 2015-19 Trend)	0.3	0.3	0.3	-0.3	-0.3	-0.3	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												
Core PCE YoY												
Z-Score (vs. 2015-19 Trend)												
42 Macro	2.6%	2.7%	2.7%	2.7%	2.8%	2.9%	2.9%	3.0%	3.1%	3.0%	3.1%	3.1%
Z-Score (vs. 2015-19 Trend)	4.6	4.8	4.9	4.9	5.2	5.7	5.8	6.3	6.5	6.4	6.6	6.8
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												
Bloomberg Consensus	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.4%	2.4%	2.4%
Z-Score (vs. 2015-19 Trend)	3.9	3.9	3.9	3.7	3.7	3.7	3.9	3.9	3.9	3.4	3.4	3.4
Directional Accuracy (t10yrs; Luck = 50%)												
Average Absolute Forecast Error (t10yrs)												

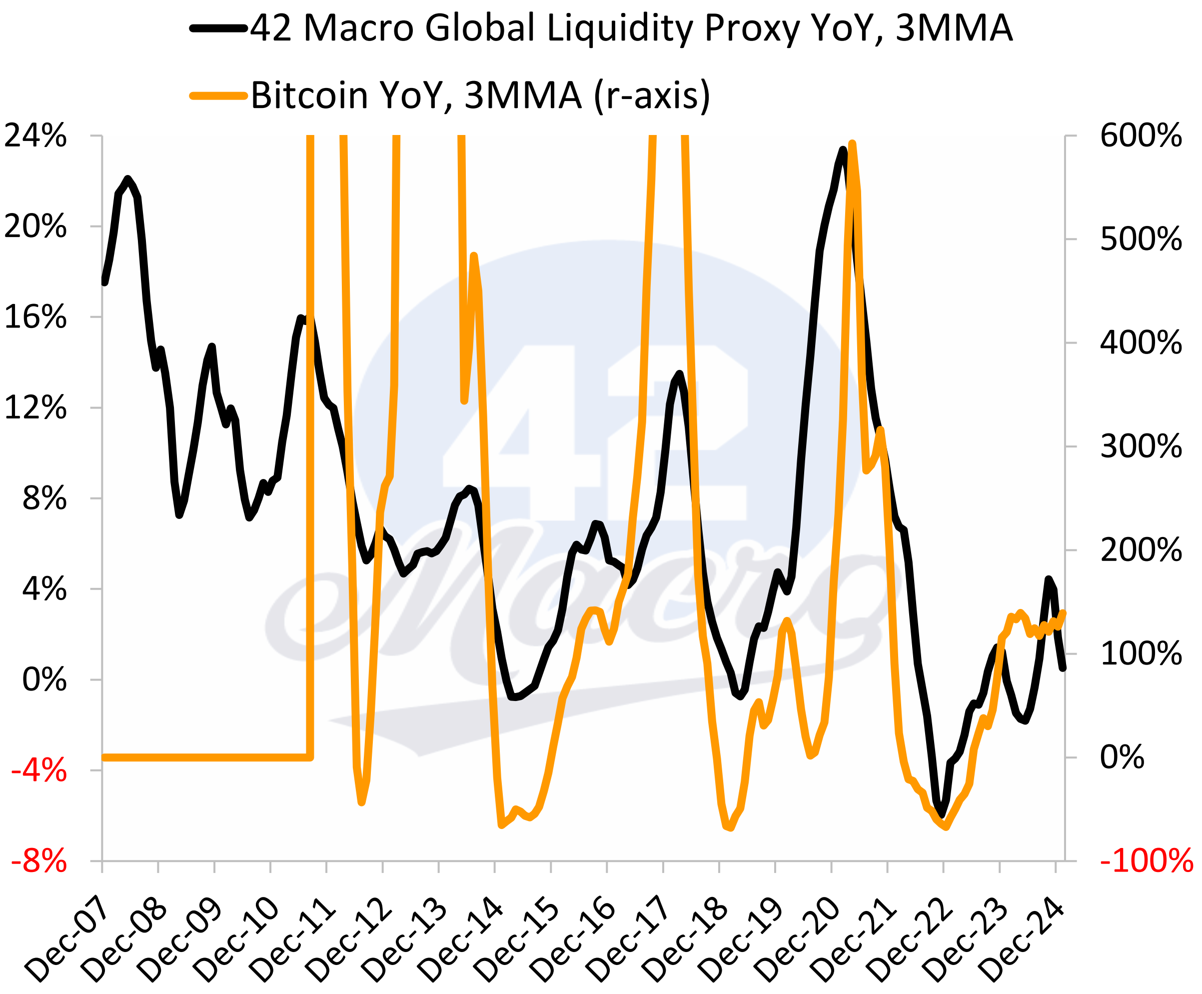




 Bottom-Up Macro Regime characteristics:
G = GOLDILOCKS = growth ↑ and inflation ↓; R = REFLATION = growth ↑ and inflation ↑;
I = INFLATION = growth ↓ and inflation ↑; and D = DEFLATION = growth ↓ and inflation ↓.
The 42 Macro GRID Model applies a proprietary methodology to smooth and nowcast quarterly GDP data on a monthly frequency.

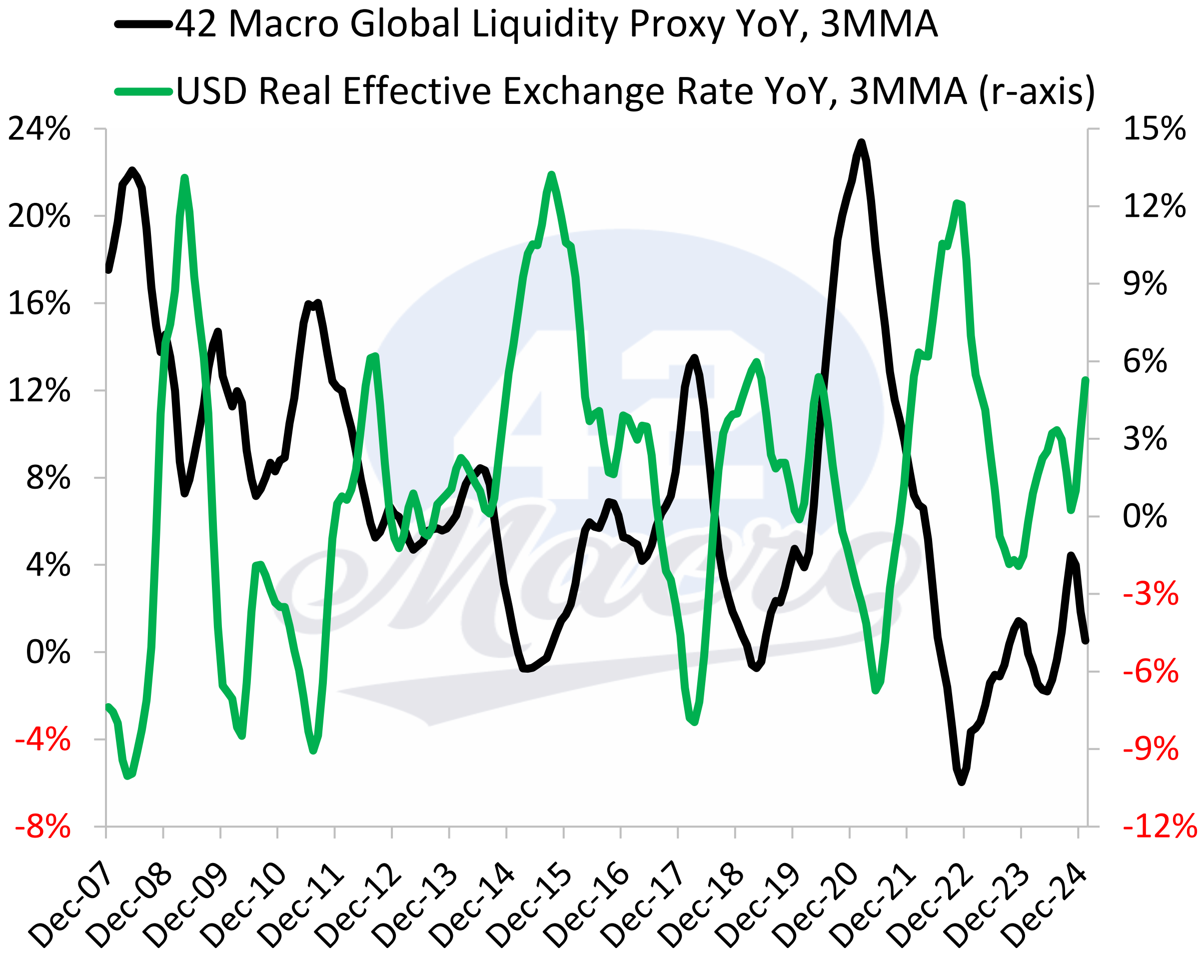
Reminder: Global Liquidity Is A Key Driver Of Asset Markets

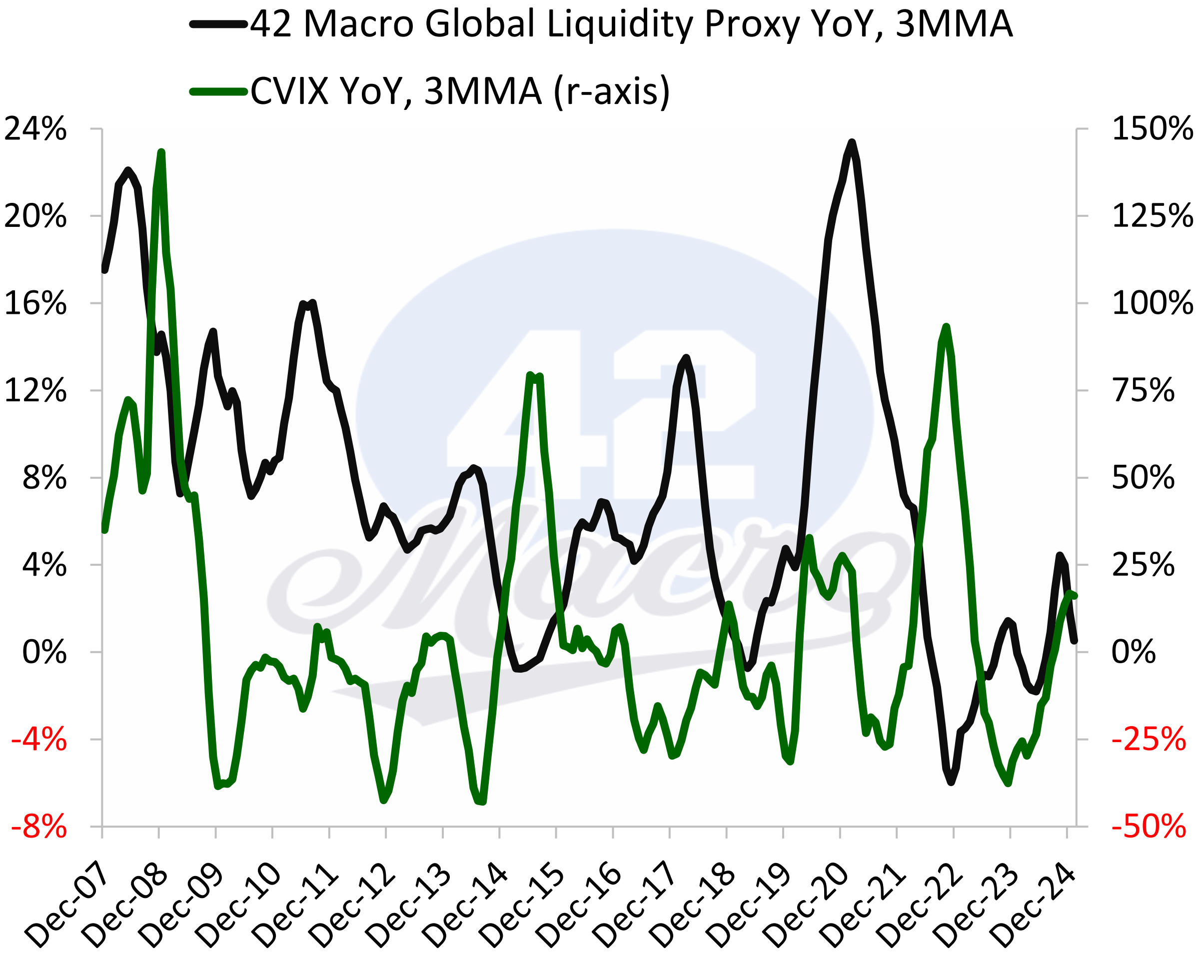




42 Macro Global Liquidity Proxy = Global Central Bank Balance Sheet + Global Broad Money Supply + Global FX Reserves Minus Gold.

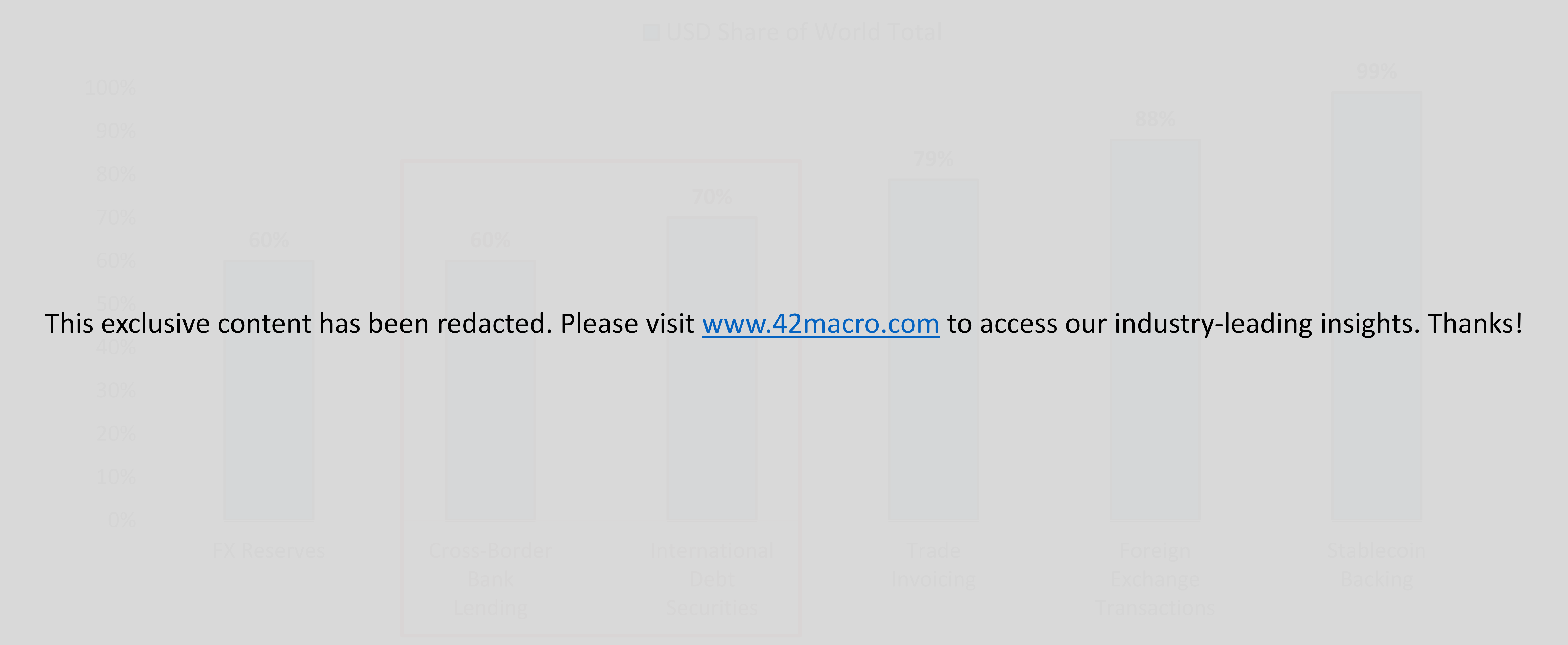
Reminder: The US Dollar And Currency Volatility Are Countercyclical Leading Indicators Of Global Liquidity





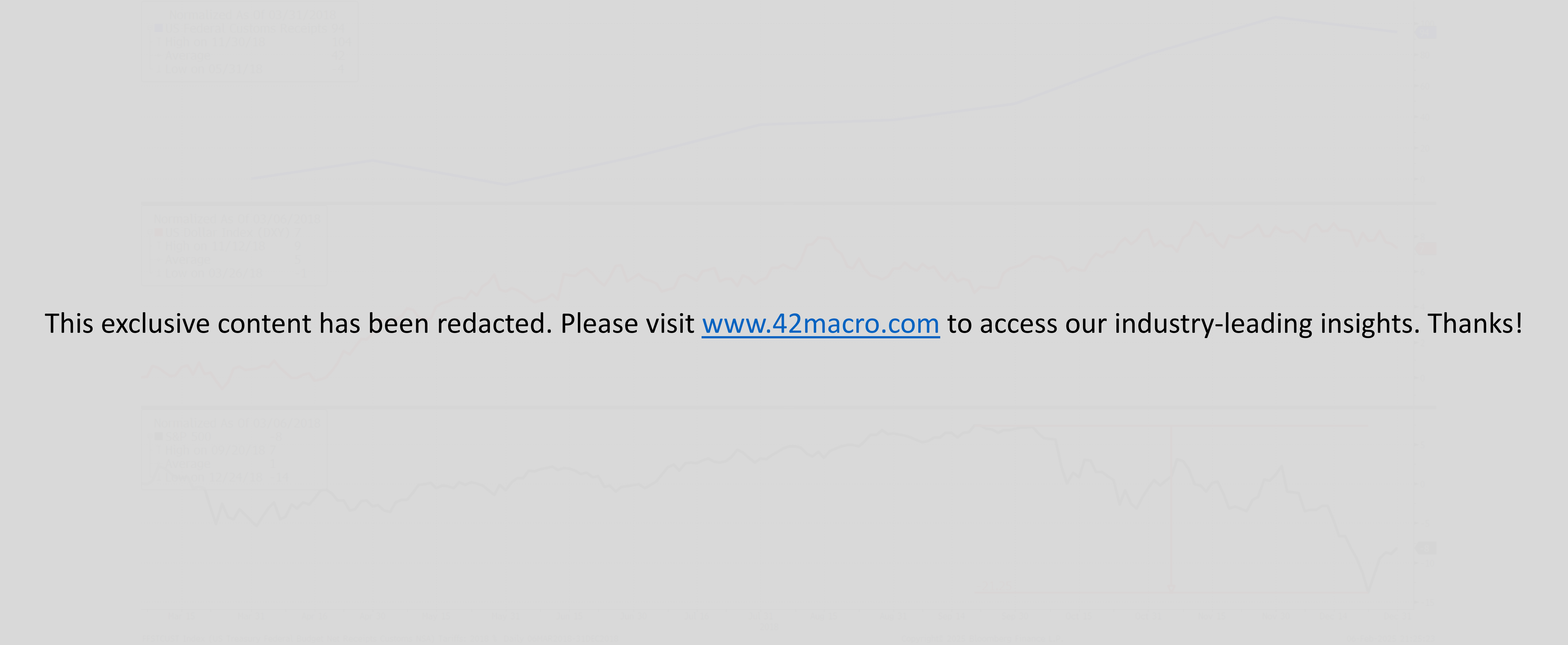
42 Macro Global Liquidity Proxy = Global Central Bank Balance Sheet + Global Broad Money Supply + Global FX Reserves Minus Gold.

US Dollar Strength Is A Headwind To Global Liquidity Because It Reduces Both The Supply And Demand Of Dollar-Denominated Debt



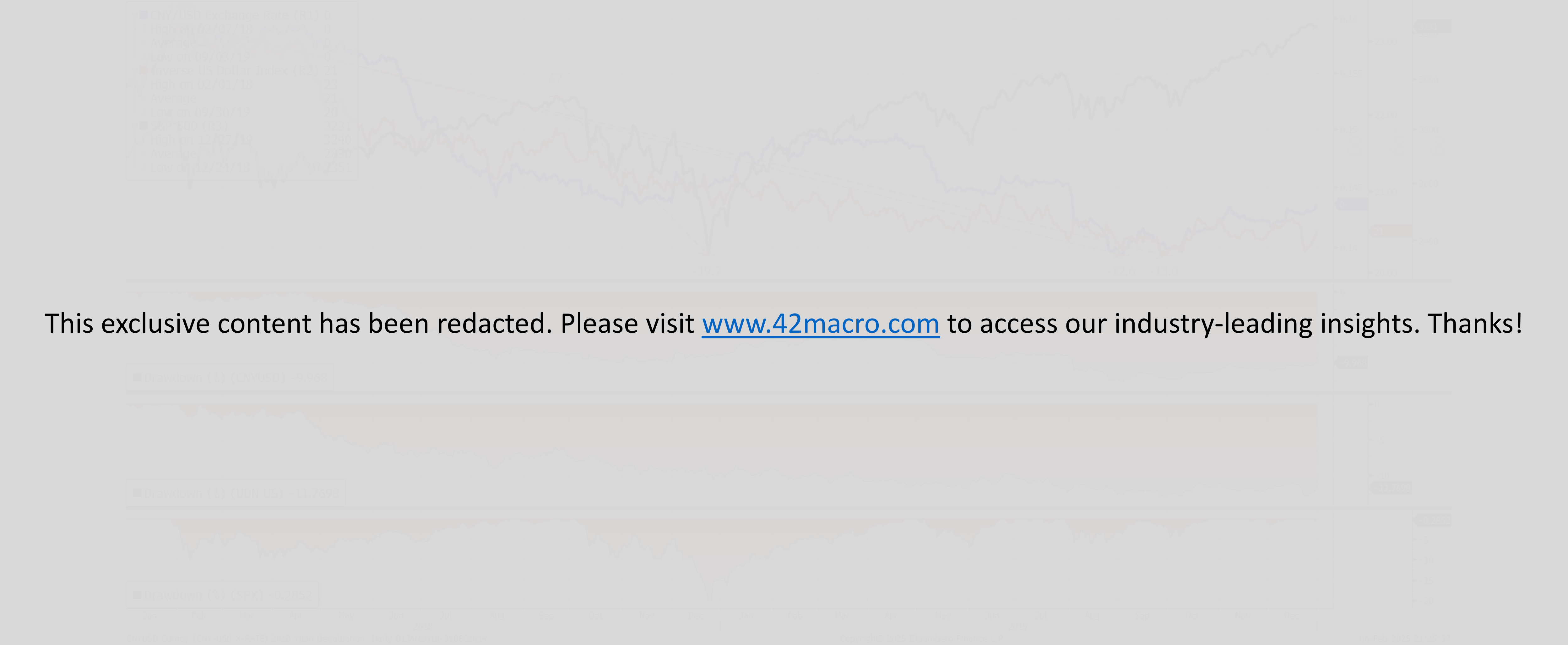
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Incremental Tariffs Would Likely Result In A Stronger US Dollar



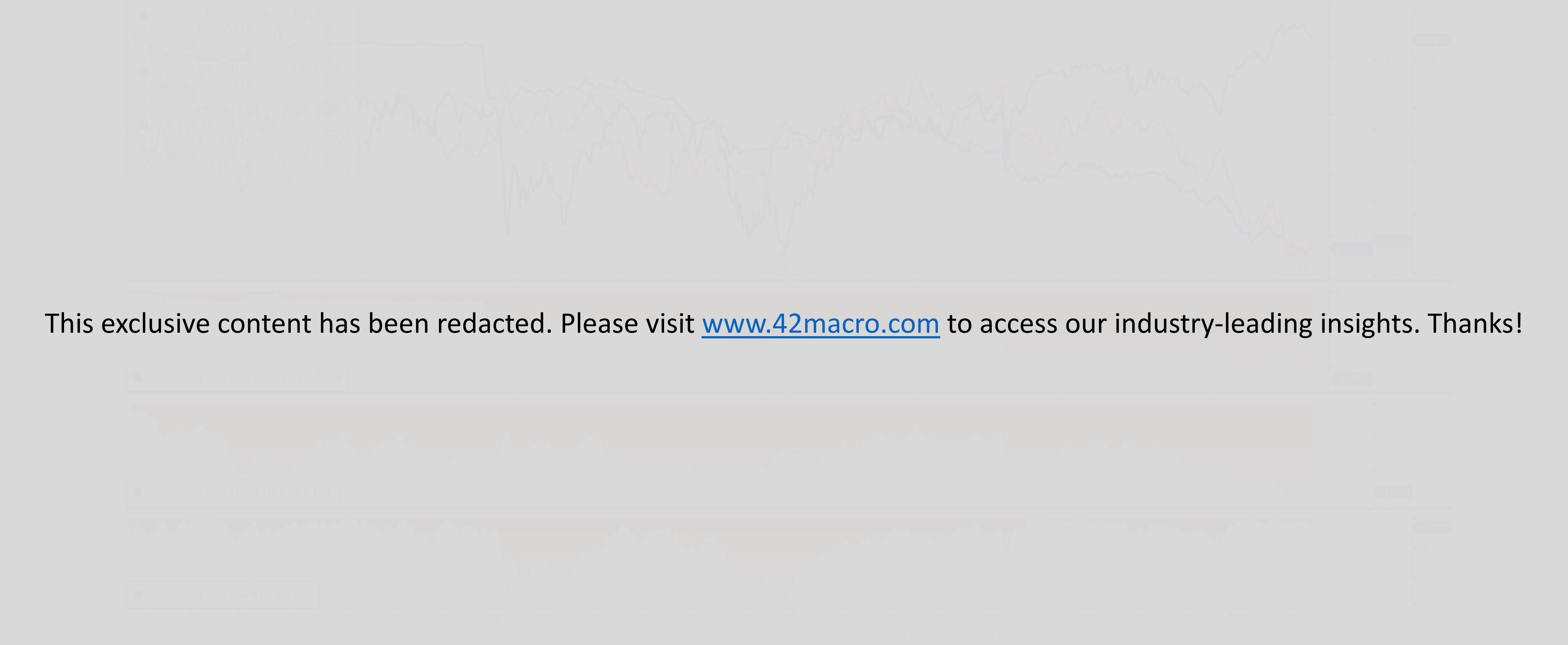
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The 2018-19 Yuan Devaluation Resulted In A -13% Decline In The CNY/USD Cross, A -13% Sympathy Devaluation Of Major Currencies vs. The USD, And A Max Drawdown Of -20% In The S&P 500



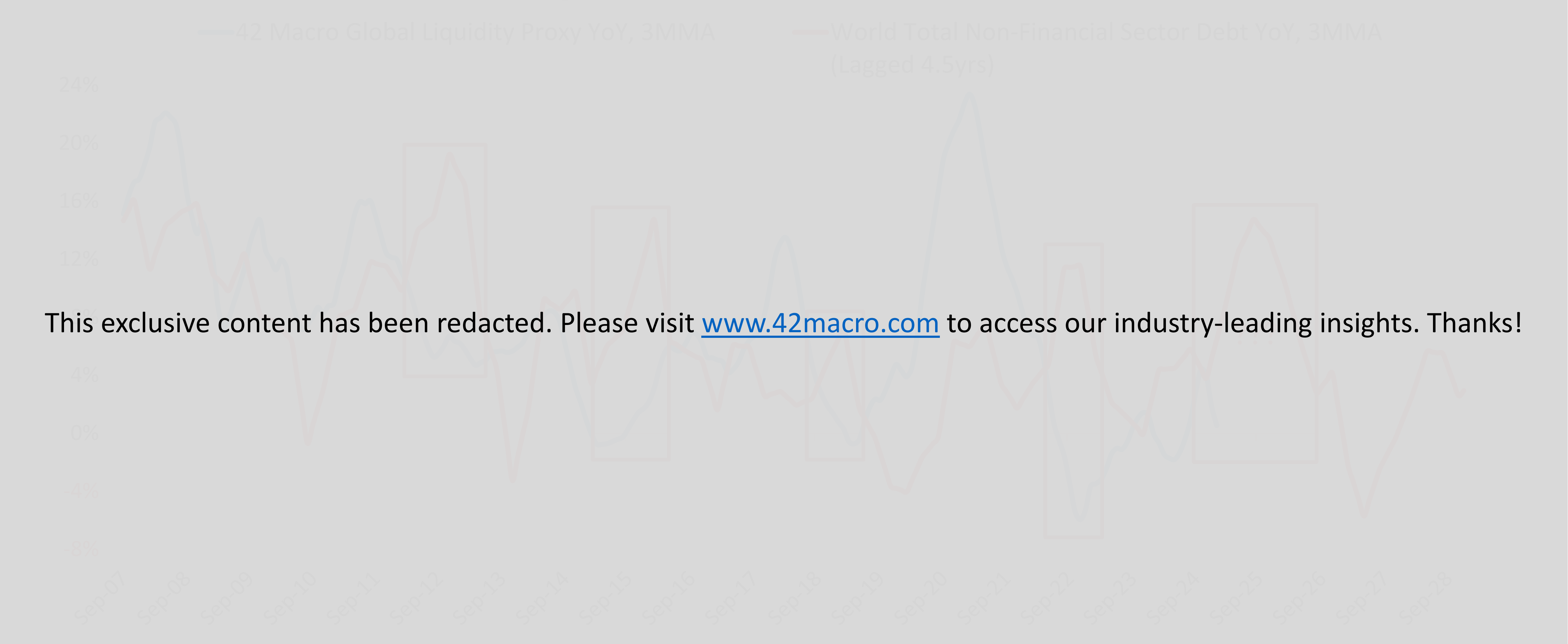
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The 2015-16 Yuan Devaluation Resulted In A -12% Decline In The CNY/USD Cross, A -13% Sympathy Devaluation Of Major Currencies vs. The USD, And A Max Drawdown Of -14% In The S&P 500



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

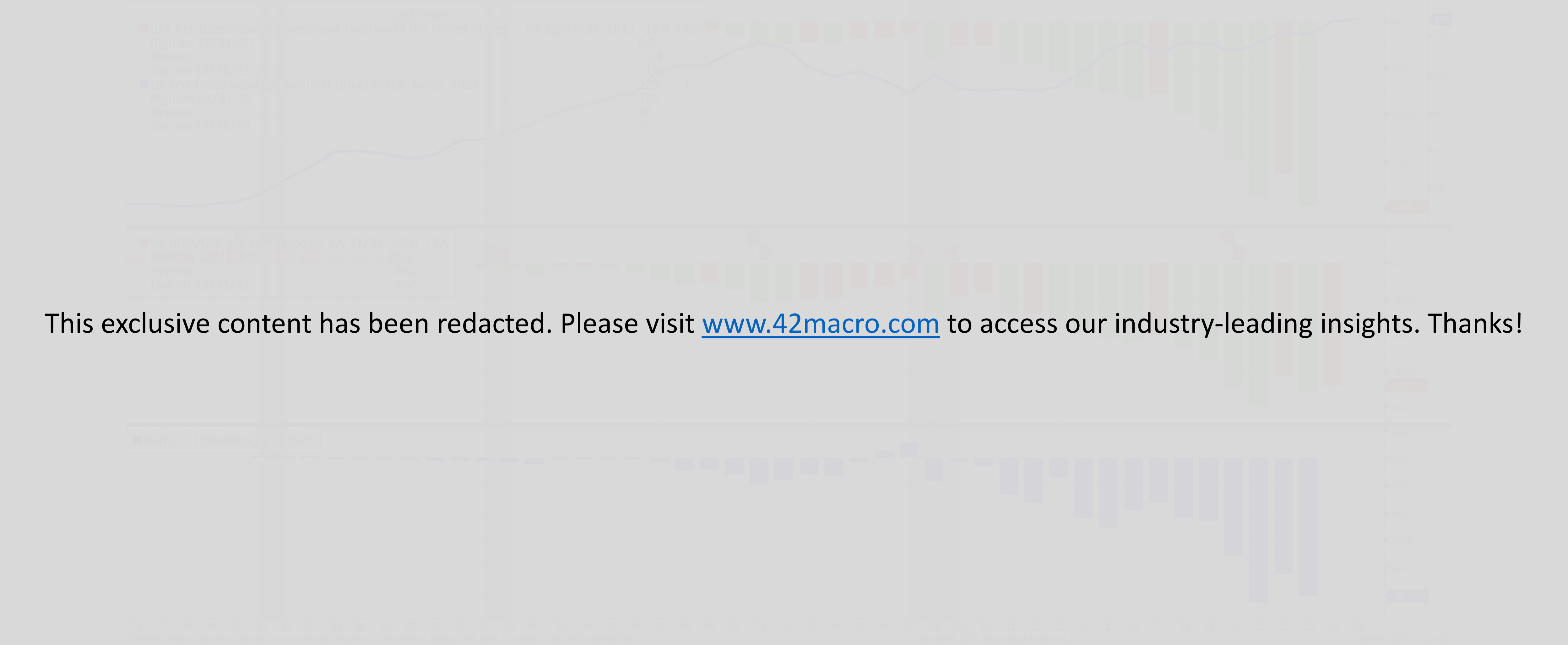
Continued US Dollar Strength Would Contribute To Elevated Risk Of A Global Refinancing Air Pocket In 2025



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

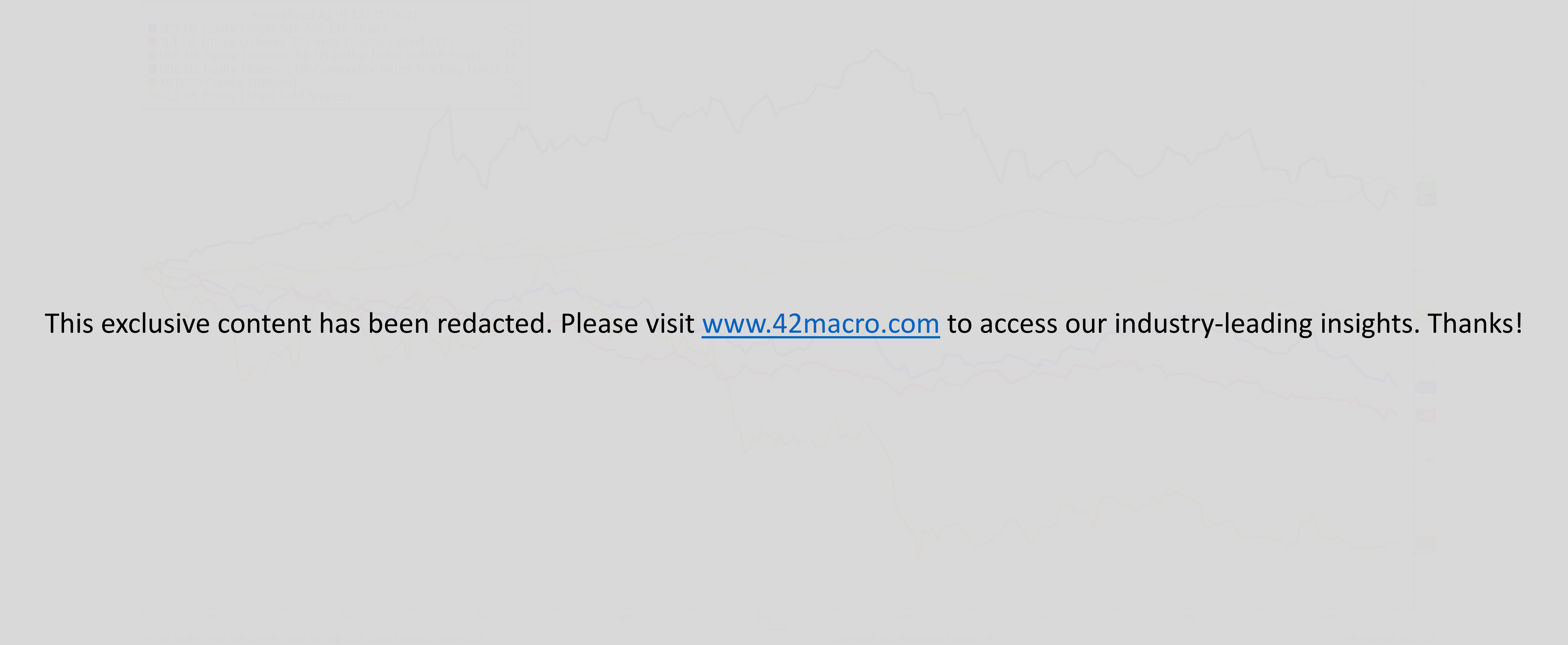
 Data Source: Bloomberg. 42 Macro Global Liquidity Proxy =
Global Central Bank Balance Sheet + Global Broad Money Supply + Global FX Reserves Minus Gold.
S&P 500 maximum drawdowns: -10% in 2012, -14% in 2015-16, -20% in 2018, and -25% in 2022.
Bitcoin maximum drawdowns: -39% in 2012, -42% in 2015-16, -83% in 2018, and -77% in 2022.

Reminder: The US’ Net International Investment Deficit DOUBLED To $20 Trillion In The Five Years Through Dec-23



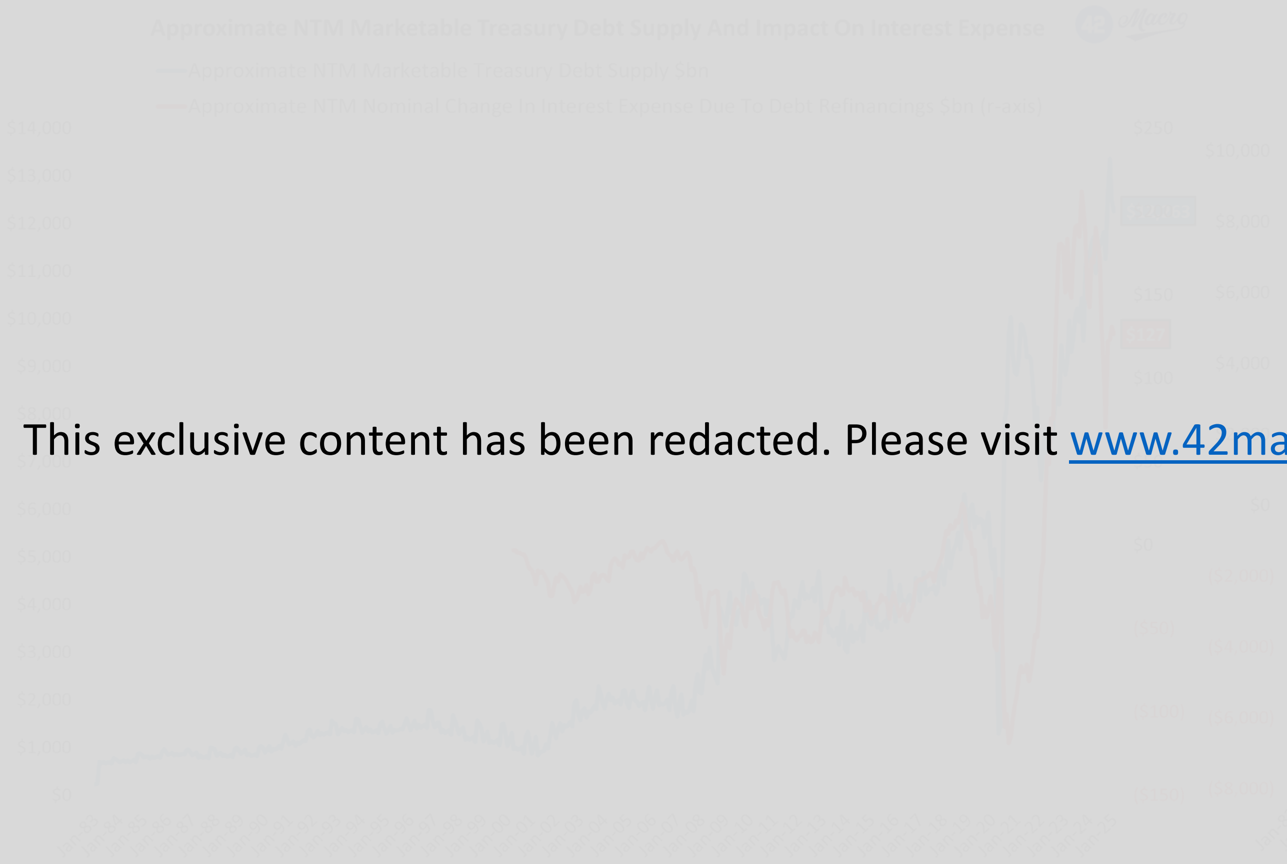
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

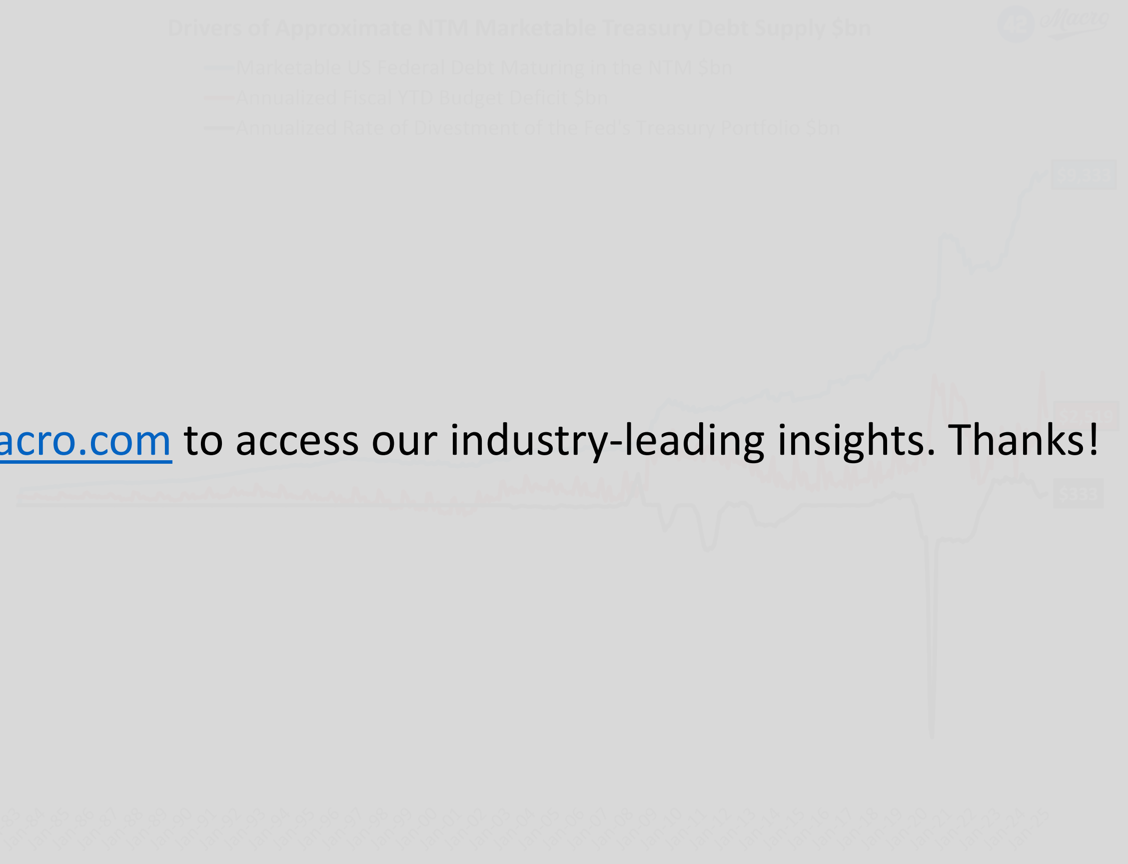
Foreign Investors Will Liquidate US Assets And Other Stores Of Value If A Too-Strong US Dollar Threatens Their Ability To Service Debt (e.g., 2022)



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Meanwhile, The US Government's Gross Borrowing Needs Continue To Skyrocket





This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

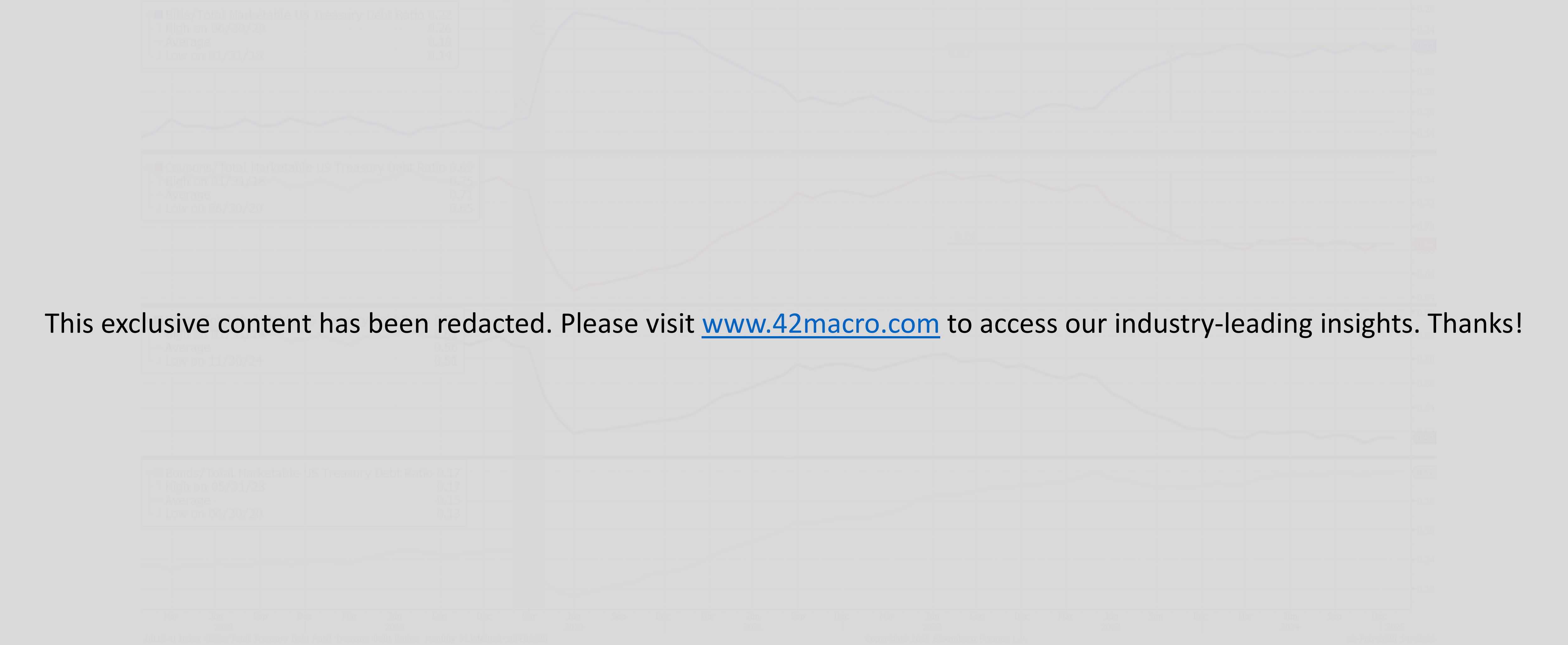
Approximate NTM Marketable Treasury Debt Supply is calculated as the sum of Debt Maturing in the Next Year, the Annualized Fiscal YTD Budget Deficit, and the Annualized Rate of Divestment of the Federal Reserve's Treasury Portfolio.

Thankfully, The Treasury's Decision To Maintain—And Reduce In Some Cases—Coupon Auction Sizes "For At Least The Next Several Quarters" Is Positive For US Liquidity

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

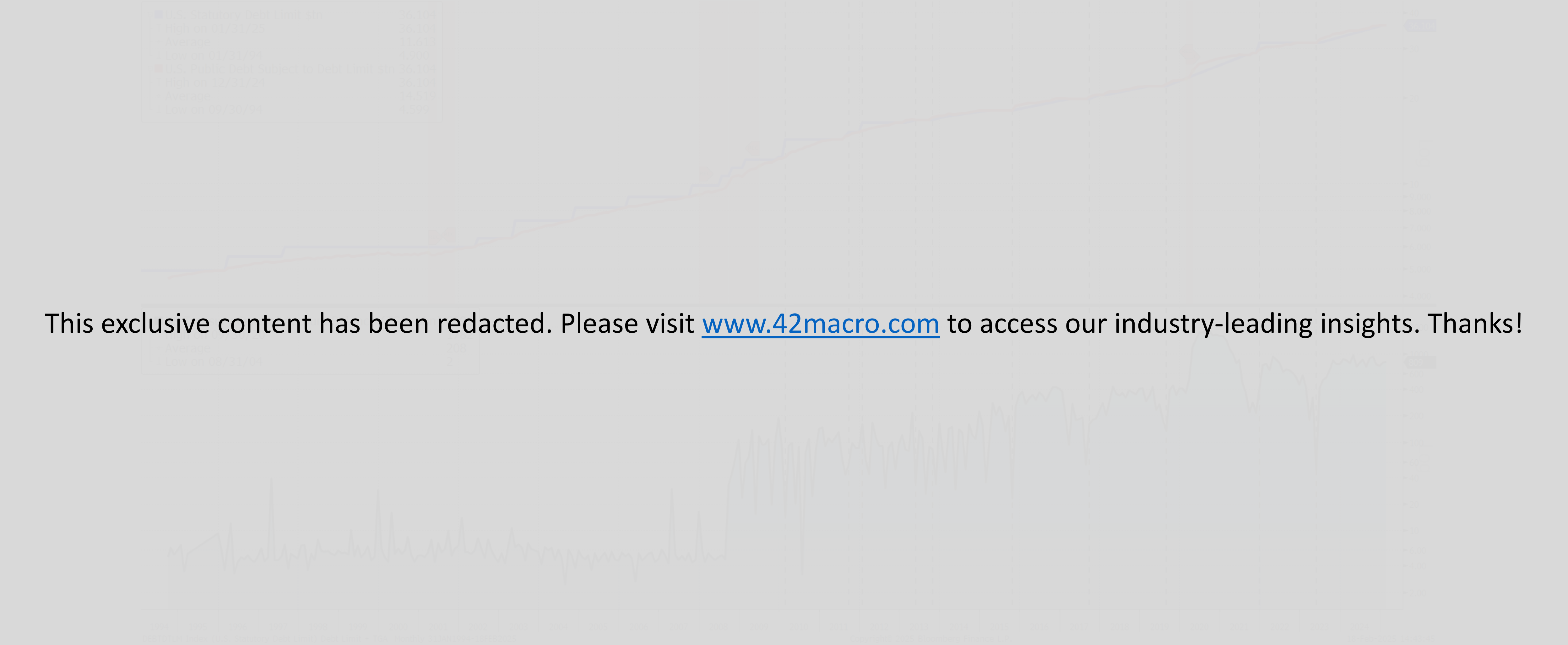
 Data Source: US Treasury Department.
Estimates assume enactment of a Debt Limit suspension or increase.

Secretary Bessent's Pivot From Criticizing Yellen To Adopting Her Dovish Net Financing Policy Removes A Left Tail Risk For Now



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

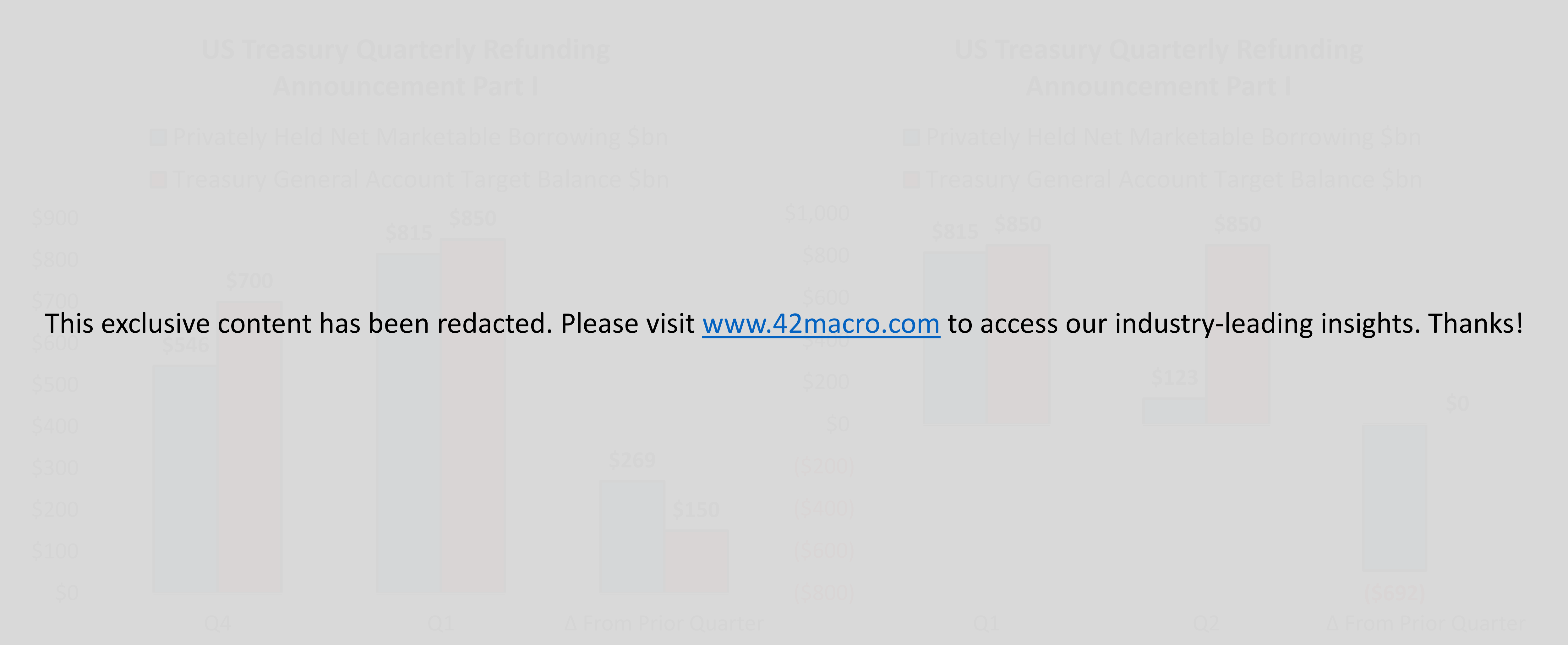
Moreover, The Debt Limit Breach Reduces Net Financing To Zero And Frees Up Investor Balance Sheet Capacity To Further Capitalize Risk Assets



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Black dotted lines = post-GFC legislated increases in the Debt Limit.

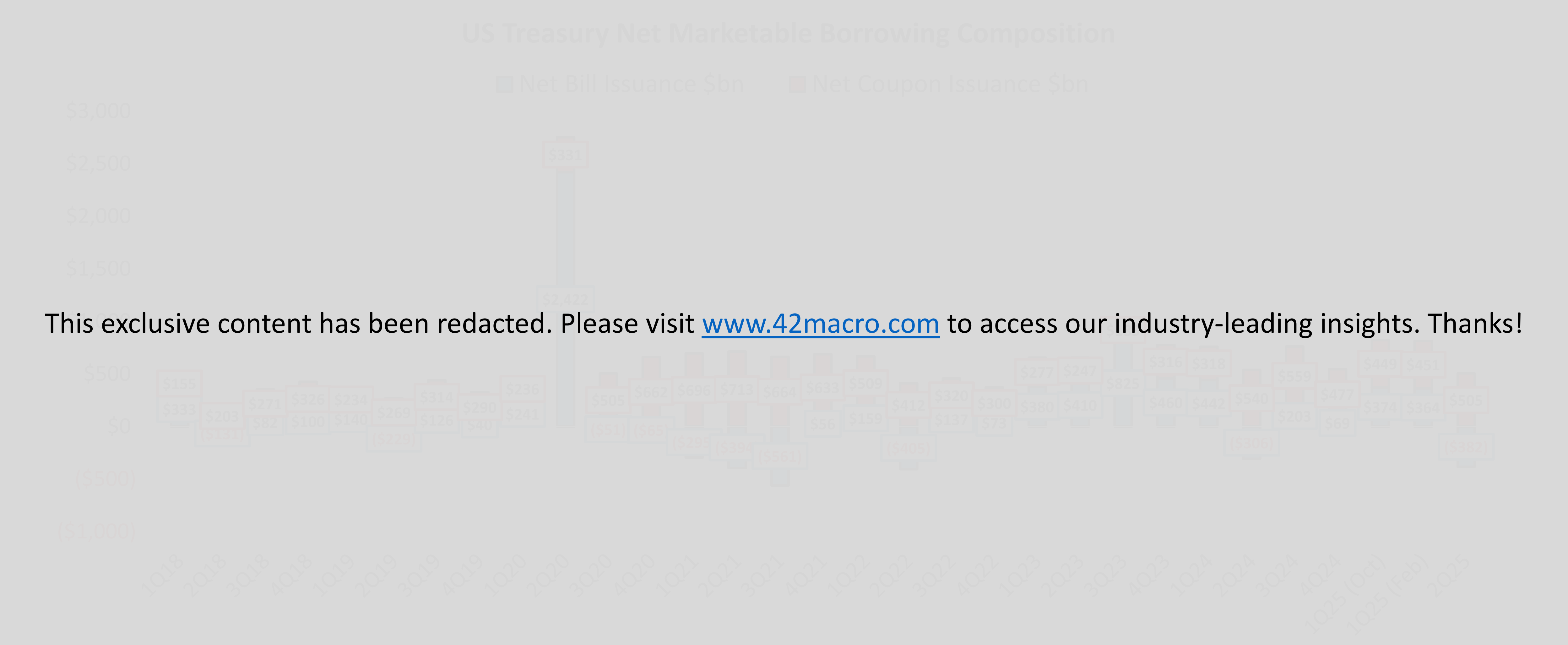
In Fact, 1Q25 Was Supposed To See Significant Net Marketable Treasury Supply, But The Debt Limit Removes That Liquidity Headwind For Now



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

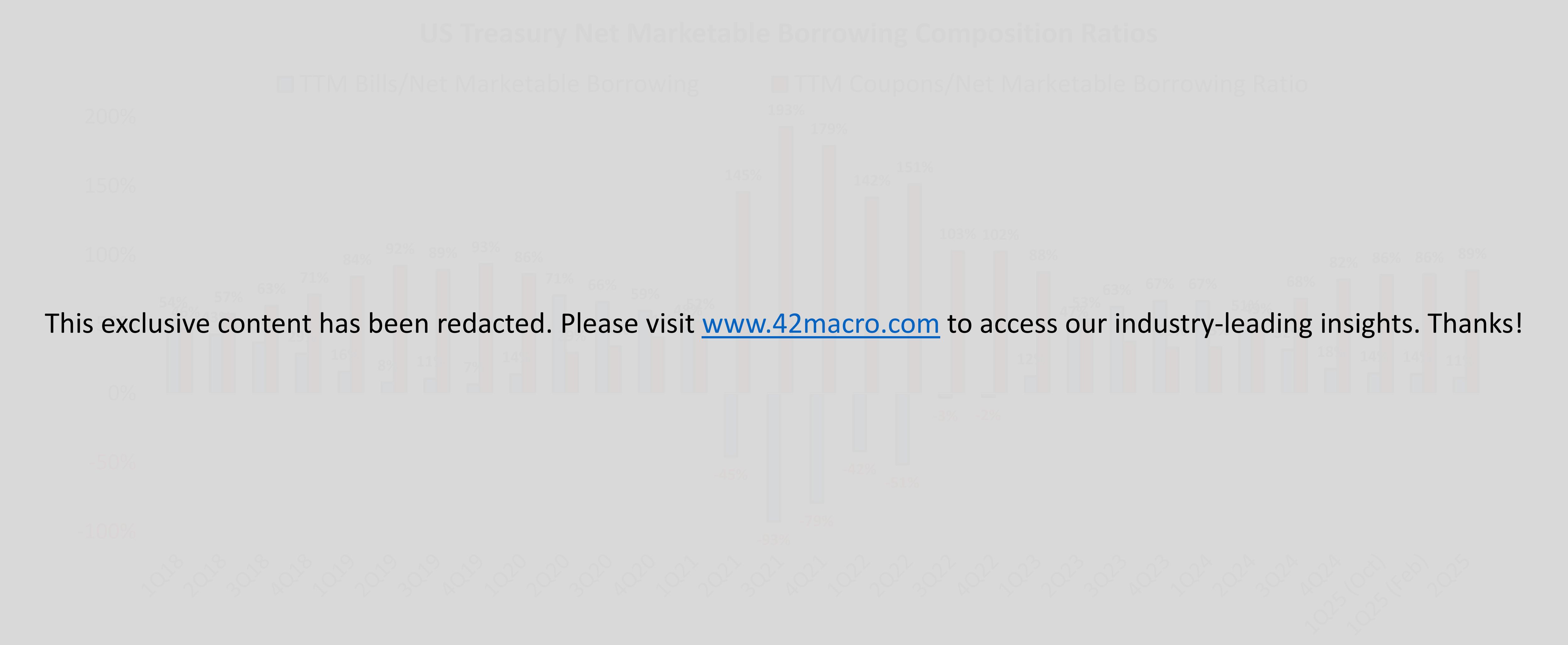
Estimates assume enactment of a Debt Limit suspension or increase.

Projected Net Coupon Issuance Continues To Trend Higher, From Roughly $200-300bn In 2022-23 To Roughly $400-500bn In Recent Quarters



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

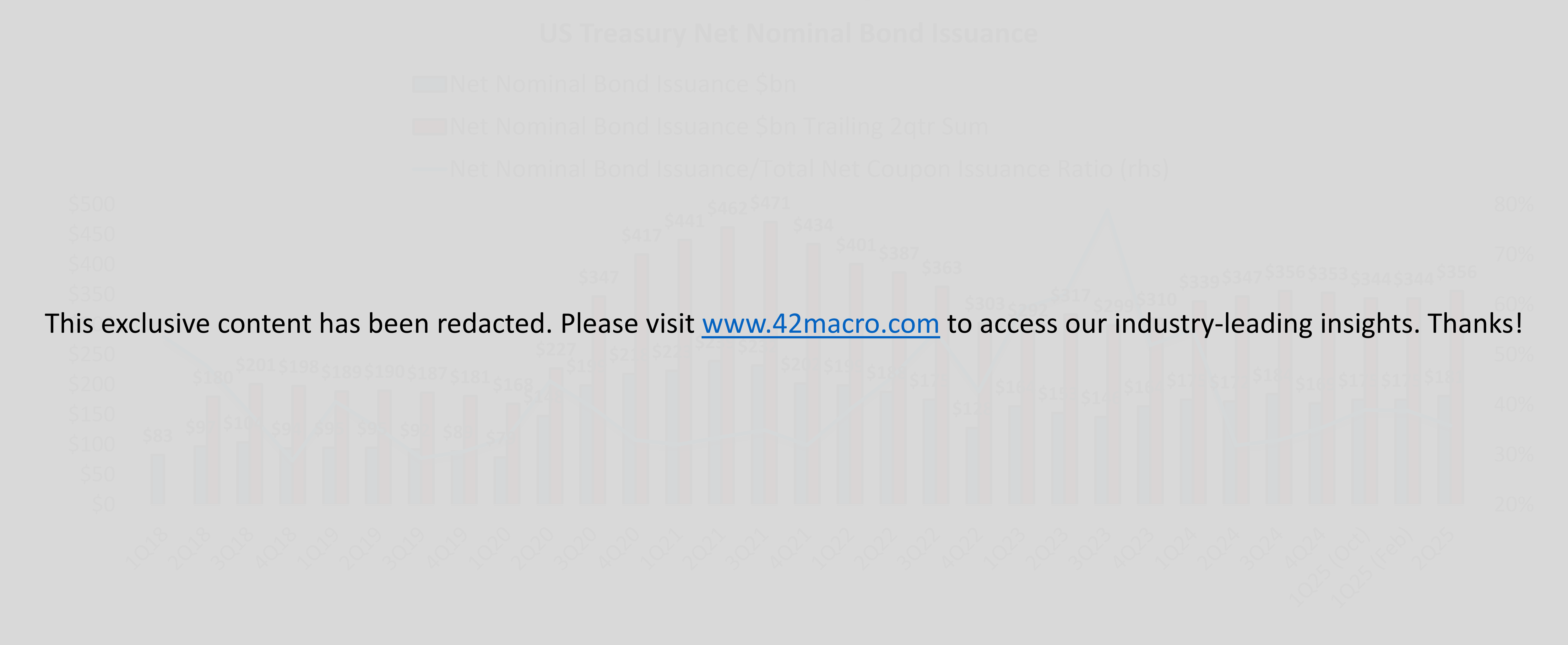
In Fact, The Projected 89% TTM Share Of Coupons Through 2Q25 Represents The Highest Ratio Since The Four Quarters Ended 4Q22



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: US Treasury Department.
Estimates assume enactment of a Debt Limit suspension or increase.

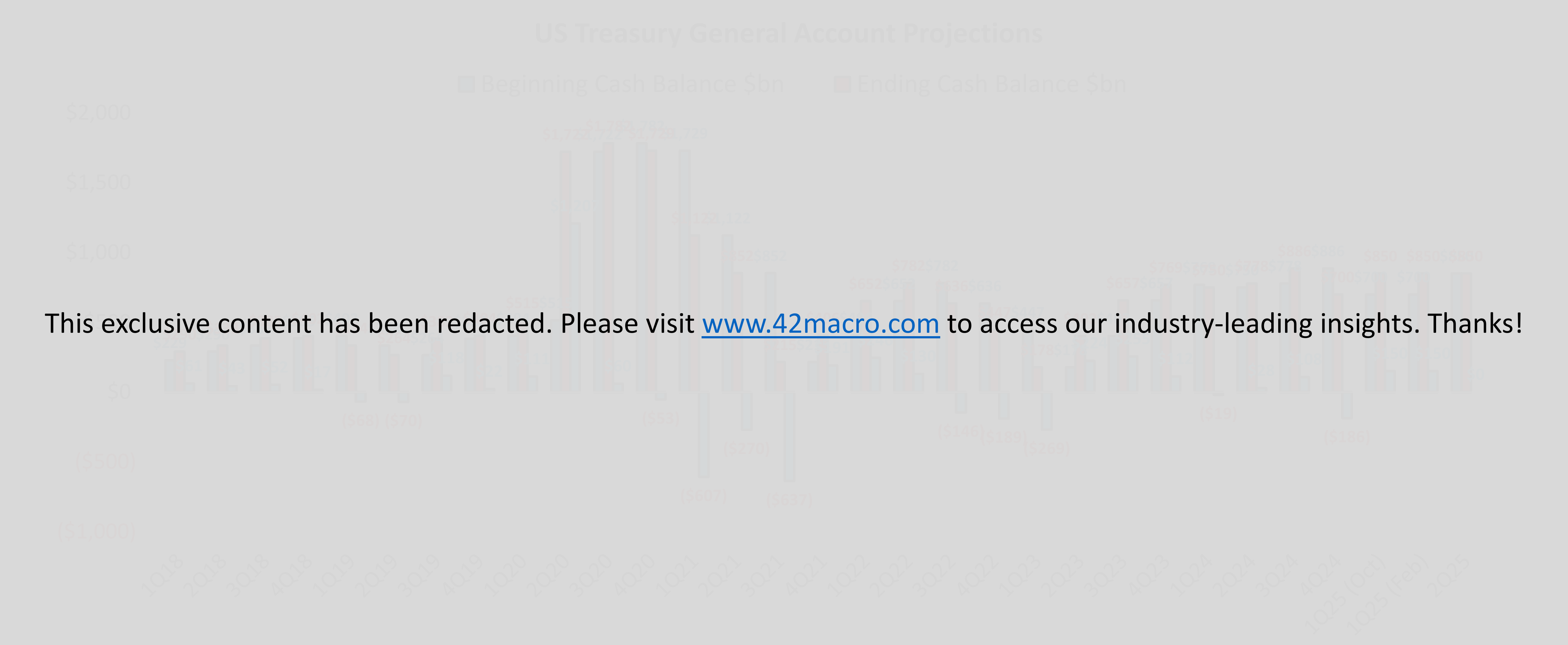
Projected Net Nominal Bond Issuance Continues To Inch Higher, But Remains In The $175-185bn Range Observed Since 1Q24



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: US Treasury Department.
Estimates assume enactment of a Debt Limit suspension or increase.

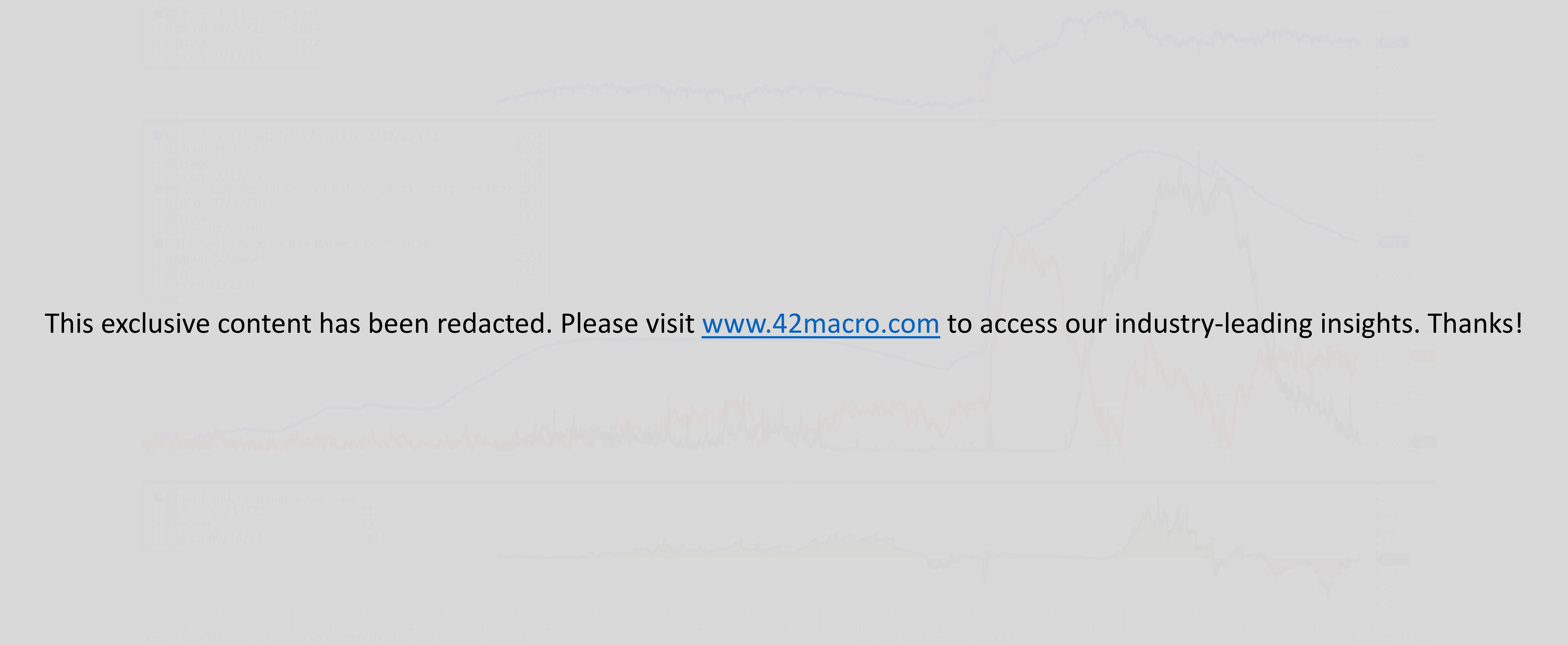
Projected Stability In The Treasury General Account Balance Does Not Factor In The Debt Limit



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Estimates assume enactment of a Debt Limit suspension or increase.

We Are Currently Projecting ~$500 Of TGA Spenddown Between Now And When The Debt Limit Is Lifted This Spring

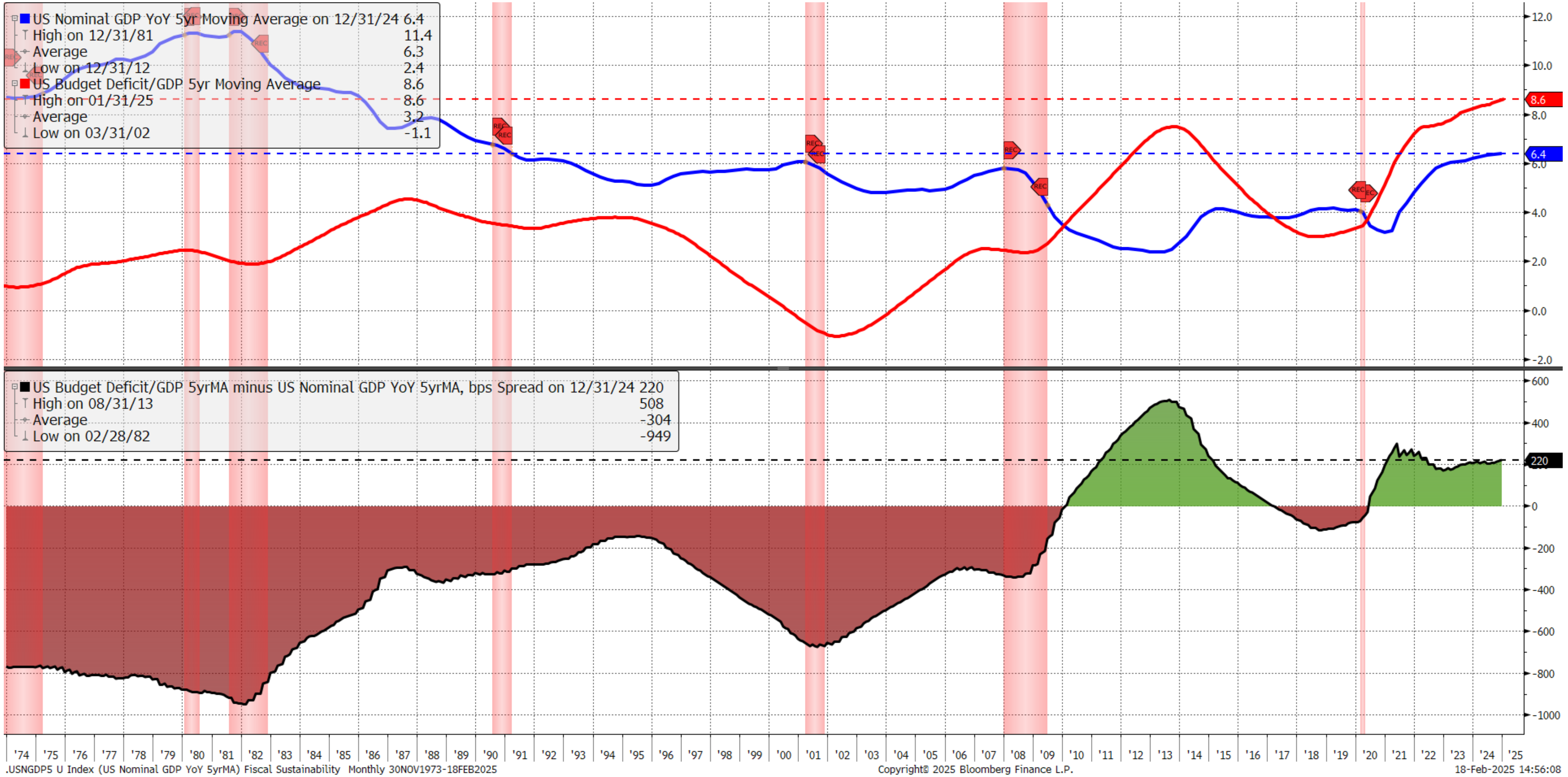


This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Green arrows = Debt Limit-driven TGA spenddown cycles (4mos each).

Red dotted lines = spikes in TGA due to the April federal tax deadline.

The US Remains On An Unsustainable Fiscal Path



We Still Have Our Doubts Regarding DOGE's Ability To Achieve Significant <u>Deficit</u> Reduction—Especially Once Tax Cuts Are Factored In

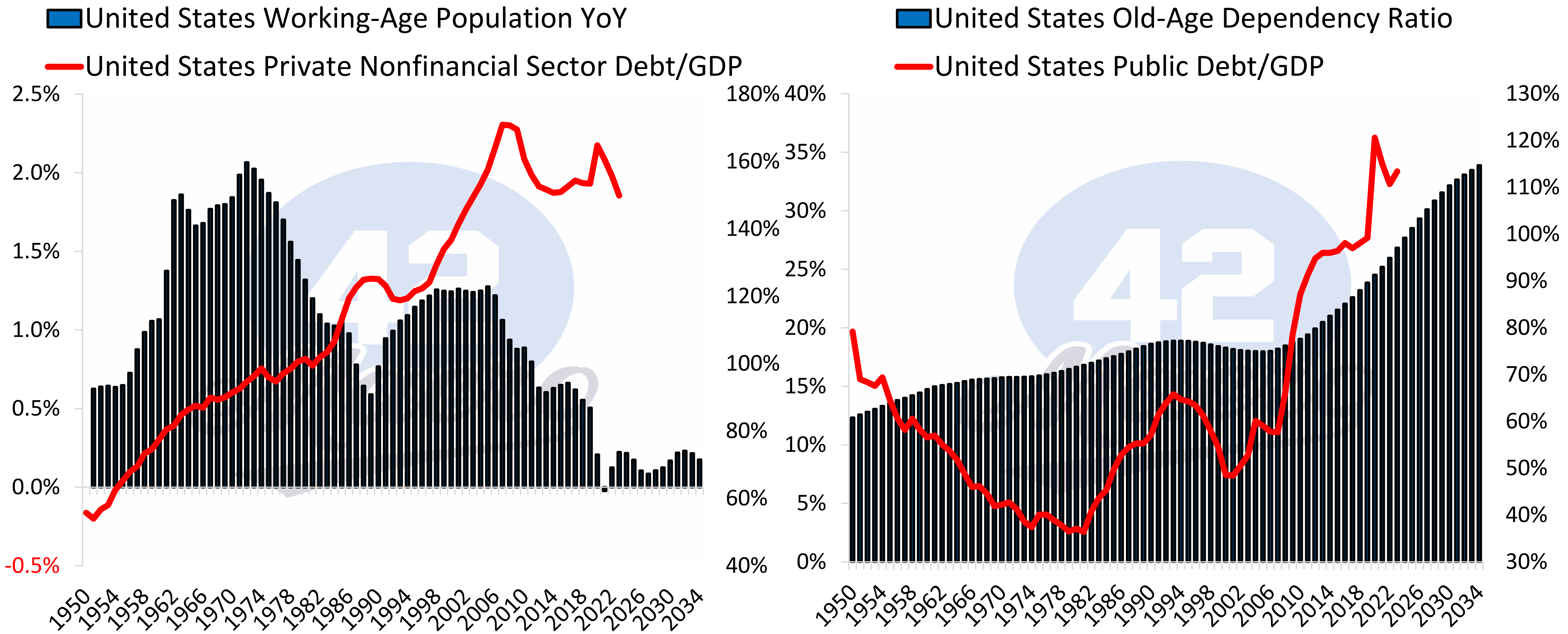
42 Macro	Annualized Nominal Calendar YTD Sum $bn					Share of Total, by Category					Percent of Nominal GDP					YoY $ Change					YoY % Change				
US Fiscal Policy Monitor	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025
Federal Revenue	$4294	$4870	$4521	$4893	$6160	100%	100%	100%	100%	100%	17%	18%	16%	16%	-	$878	$575	($349)	$372	$1266	26%	13%	-7%	8%	26%
Corporate Income Taxes	$402	$432	$464	$489	$293	9%	9%	10%	10%	5%	2%	2%	2%	2%	-	$186	$30	$33	$25	($196)	87%	7%	8%	5%	-40%
Customs Duties	$86	$98	$77	$79	$88	2%	2%	2%	2%	1%	0%	0%	0%	0%	-	$20	$12	($21)	$2	$9	31%	15%	-21%	2%	12%
Estate Taxes	$28	$33	$35	$30	$29	1%	1%	1%	1%	0%	0%	0%	0%	0%	-	$8	$5	$2	($5)	($1)	44%	20%	6%	-15%	-2%
Excise Taxes	$80	$88	$77	$106	$102	2%	2%	2%	2%	2%	0%	0%	0%	0%	-	($2)	$8	($11)	$29	($4)	-2%	10%	-13%	38%	-4%
Federal Reserve Transfers	$104	$80	$1	$4	$4	2%	2%	0%	0%	0%	0%	0%	0%	0%	-	$14	($23)	($80)	$3	$0	15%	-22%	-99%	426%	10%
Individual Income Taxes	$2233	$2601	$2197	$2419	$3662	52%	53%	49%	49%	59%	9%	10%	8%	8%	-	$662	$369	($404)	$222	$1242	42%	17%	-16%	10%	51%
Miscellaneous Receipts	$134	$113	$36	$47	$30	3%	2%	1%	1%	0%	1%	0%	0%	0%	-	$8	($21)	($78)	$12	($18)	6%	-16%	-69%	33%	-37%
Other Retirement Taxes	$6	$6	$7	$8	$10	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	$0	$0	$1	$1	$2	8%	9%	14%	14%	24%
Social Security Taxes	$1264	$1440	$1580	$1667	$1886	29%	30%	35%	34%	31%	5%	5%	6%	6%	-	($21)	$176	$140	$87	$219	-2%	14%	10%	6%	13%
Unemployment Insurance Premiums	$63	$58	$49	$48	$60	1%	1%	1%	1%	1%	0%	0%	0%	0%	-	$16	($5)	($10)	($0)	$11	34%	-7%	-16%	-1%	24%
Federal Expenditures	$6875	$6289	$6305	$6927	$7703	100%	100%	100%	100%	100%	28%	24%	22%	23%	-	$110	($586)	$16	$622	$777	2%	-9%	0%	10%	11%
Administration of Justice	$72	$74	$83	$84	$93	1%	1%	1%	1%	1%	0%	0%	0%	0%	-	($1)	$2	$9	$1	$9	-1%	3%	12%	1%	11%
Agriculture	$32	$38	$36	$38	$44	0%	1%	1%	1%	1%	0%	0%	0%	0%	-	($26)	$6	($2)	$2	$6	-45%	19%	-6%	6%	16%
Commerce and Housing Credits	$302	($21)	$161	($33)	$20	4%	-0%	3%	-0%	0%	1%	-0%	1%	-0%	-	($270)	($323)	$182	($193)	$53	-47%	-107%	856%	-121%	160%
Community and Regional Development	$47	$68	$87	$98	$96	1%	1%	1%	1%	1%	0%	0%	0%	0%	-	($49)	$21	$19	$11	($1)	-51%	46%	27%	12%	-1%
Education, Training, Employment, and Social Services	$315	$693	($17)	$307	$280	5%	11%	-0%	4%	4%	1%	3%	-0%	1%	-	$74	$378	($710)	$324	($27)	31%	120%	-102%	1925%	-9%
Energy	$5	($12)	$5	$17	$23	0%	-0%	0%	0%	0%	0%	-0%	0%	0%	-	($3)	($17)	$17	$12	$6	-34%	-340%	144%	220%	34%
General Budget	$266	$132	$30	$31	$33	4%	2%	0%	0%	0%	1%	0%	0%	0%	-	$82	($134)	($103)	$1	$3	45%	-50%	-77%	3%	9%
General Science, Space, and Technology	$36	$38	$42	$42	$36	1%	1%	1%	1%	0%	0%	0%	0%	0%	-	$1	$2	$3	$0	($6)	4%	7%	9%	0%	-15%
Health	$836	$909	$889	$933	$906	12%	14%	14%	13%	12%	3%	3%	3%	3%	-	$46	$73	($20)	$44	($27)	6%	9%	-2%	5%	-3%
Income Security	$1670	$813	$742	$690	$667	24%	13%	12%	10%	9%	7%	3%	3%	2%	-	$317	($857)	($71)	($51)	($24)	23%	-51%	-9%	-7%	-3%
International Affairs	$46	$77	$68	$67	$35	1%	1%	1%	1%	0%	0%	0%	0%	0%	-	($24)	$31	($9)	($1)	($32)	-34%	67%	-12%	-2%	-48%
Medicare	$694	$737	$866	$939	$1620	10%	12%	14%	14%	21%	3%	3%	3%	3%	-	($88)	$43	$129	$73	$681	-11%	6%	17%	8%	73%
National Defense	$757	$775	$844	$898	$865	11%	12%	13%	13%	11%	3%	3%	3%	3%	-	$23	$17	$70	$54	($33)	3%	2%	9%	6%	-4%
Natural Resource and Environment	$42	$40	$49	$81	$77	1%	1%	1%	1%	1%	0%	0%	0%	0%	-	($0)	($2)	$9	$32	($4)	-1%	-5%	24%	65%	-5%
Net Interest	$367	$518	$730	$908	$969	5%	8%	12%	13%	13%	1%	2%	3%	3%	-	$34	$151	$213	$177	$62	10%	41%	41%	24%	7%
Social Security	$1120	$1244	$1392	$1484	$1537	16%	20%	22%	21%	20%	5%	5%	5%	5%	-	($12)	$124	$148	$92	$53	-1%	11%	12%	7%	4%
Transportation	$154	$133	$129	$141	$126	2%	2%	2%	2%	2%	1%	0%	0%	0%	-	$3	($21)	($4)	$12	($15)	2%	-14%	-3%	9%	-11%
Undistributed Offsetting Receipts	($128)	($236)	($143)	($150)	($125)	-2%	-4%	-2%	-2%	-2%	-1%	-1%	-1%	-1%	-	($17)	($108)	$93	($7)	$25	-16%	-84%	39%	-5%	17%
Veterans Benefits and Services	$240	$271	$313	$350	$402	3%	4%	5%	5%	5%	1%	1%	1%	1%	-	$17	$30	$43	$37	$53	7%	13%	16%	12%	15%
Federal Budget Balance (t3yr CAGR = 3%)	($2580)	($1419)	($1784)	($2033)	($1544)	100%	100%	100%	100%	100%	-10%	-5%	-6%	-7%	-	$768	$1161	($365)	($250)	$490	23%	45%	-26%	-14%	24%
FFTT True Interest Expense (t3yr CAGR = 15%)	$2938	$3273	$3832	$4228	$4991	43%	52%	61%	61%	65%	12%	12%	14%	14%	-	($43)	$335	$559	$396	$763	-1%	11%	17%	10%	18%
Everything Else (t3yr CAGR = -3%)	$3937	$3016	$2473	$2698	$2712	57%	48%	39%	39%	35%	16%	11%	9%	9%	-	$153	($921)	($543)	$225	$14	4%	-23%	-18%	9%	1%

Intellectual Property of 42 Macro LLC. Data Source: Bloomberg. "True Interest Expense" = Medicare + National Defense + Net Interest + Social Security. "Aggregate Untouchables" = "True Interest Expense" + Medicaid (Health) + Welfare (Income Security) + Veterans Benefits and Services.

The highlighted categories account for 90% of Federal Revenue and 90% of Federal Expenditures.

FFTT "True Interest Expense" = Medicare + National Defense + Net Interest + Social Security.

The US's Demographic Challenges Imply The "True Interest Expense" Burden Is Likely To Compound At Double-Digit Rates For The Foreseeable Future

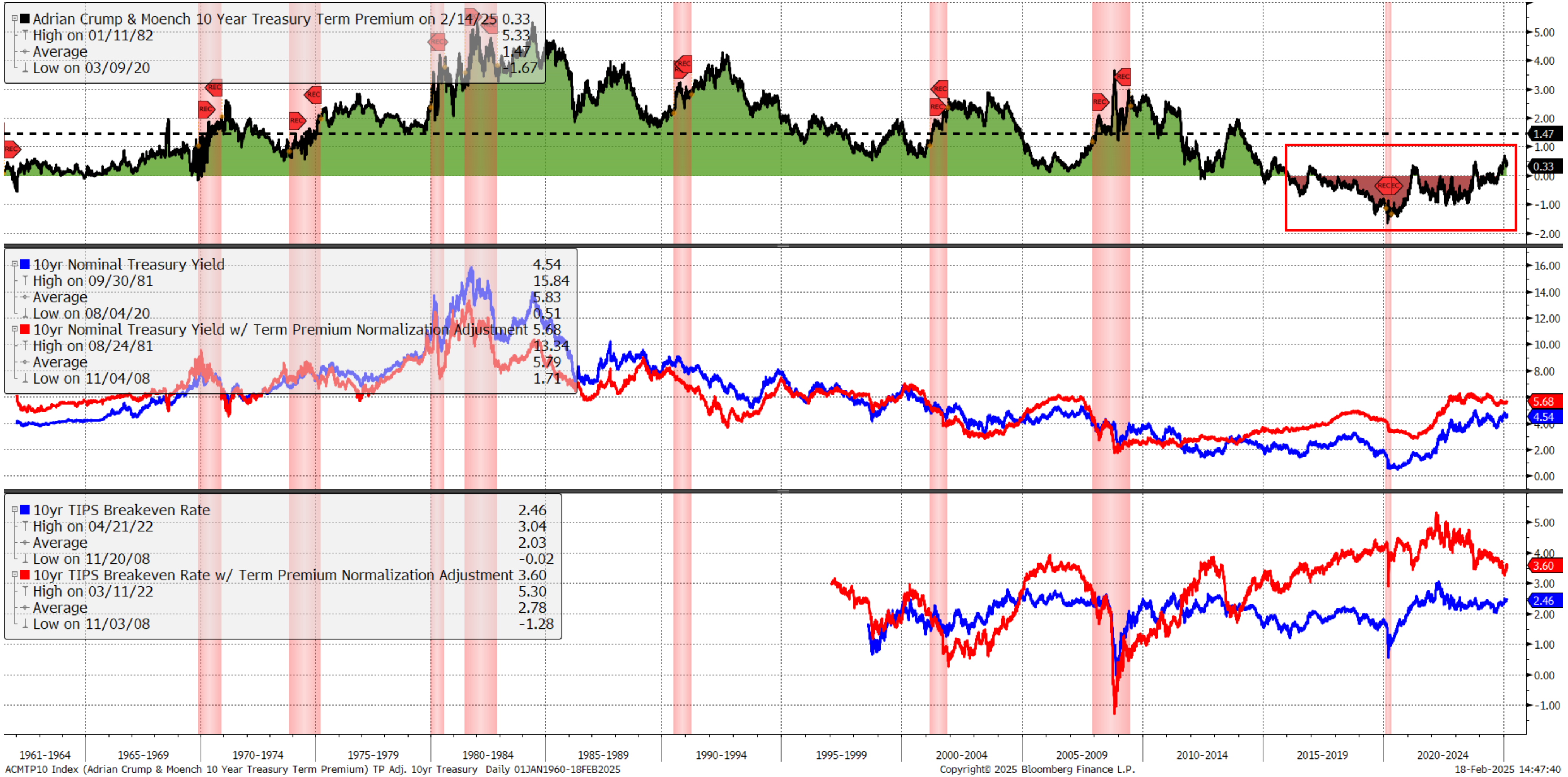


 Data Source: Bloomberg, United Nations.
Working-Age Population = 15-64 year-olds.
Old-Age Dependency Ratio = 65+ year-olds as a % of the Working-Age Population.

Private Sector Debt Outgrew Public Sector Debt By Over 20% During The Secular Decline In Bond Yields; Since The Bottom In Yields, Public Debt Has Outgrown Private Debt By Over 30%

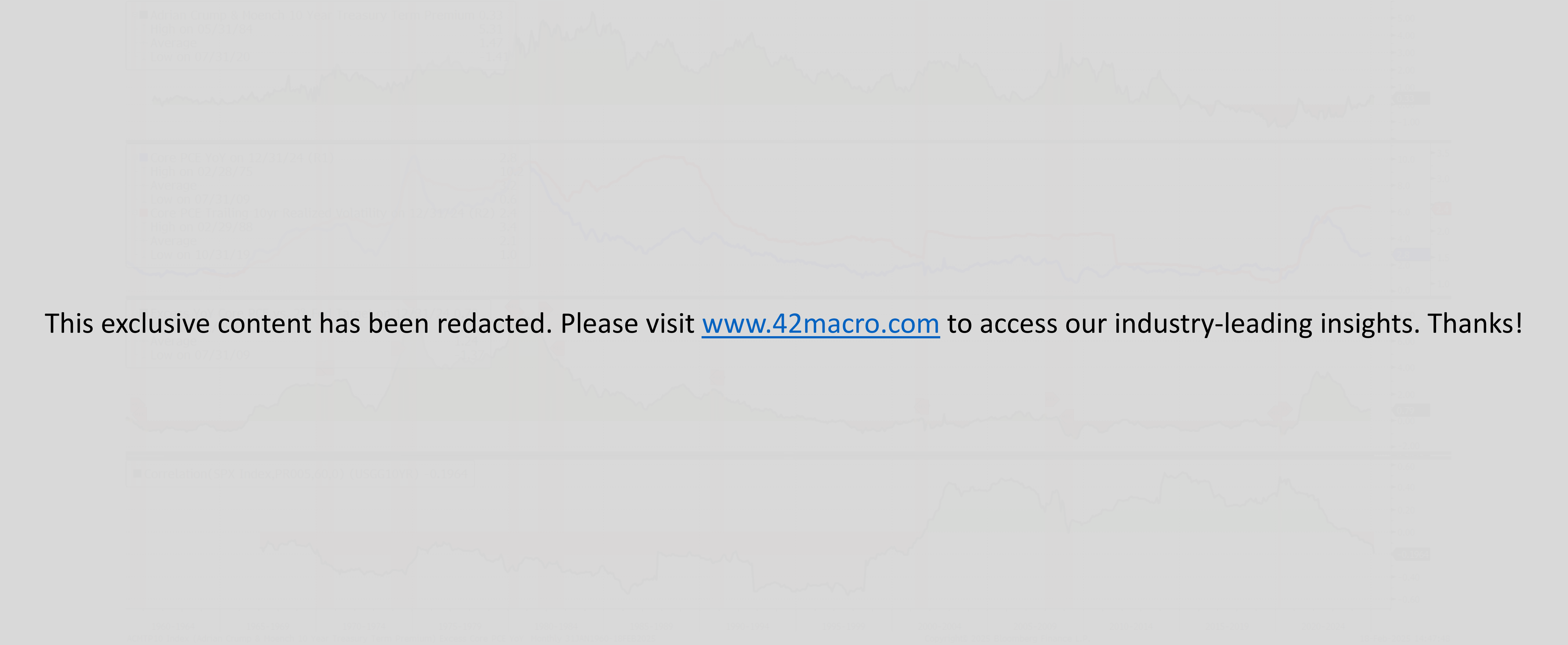
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The Treasury Bond Market Is Likely Underpricing Structural Tailwinds For Supply, Which Means It Is Likely Mispricing Inflation Too



 Data Source: Bloomberg. Black dotted line = historical mean.
Nominal Interest Rate = Expected Nominal Rate (trend Real GDP + trend Headline CPI) + Nominal Term Premium (Real Term Premium + Inflation Risk Premium).

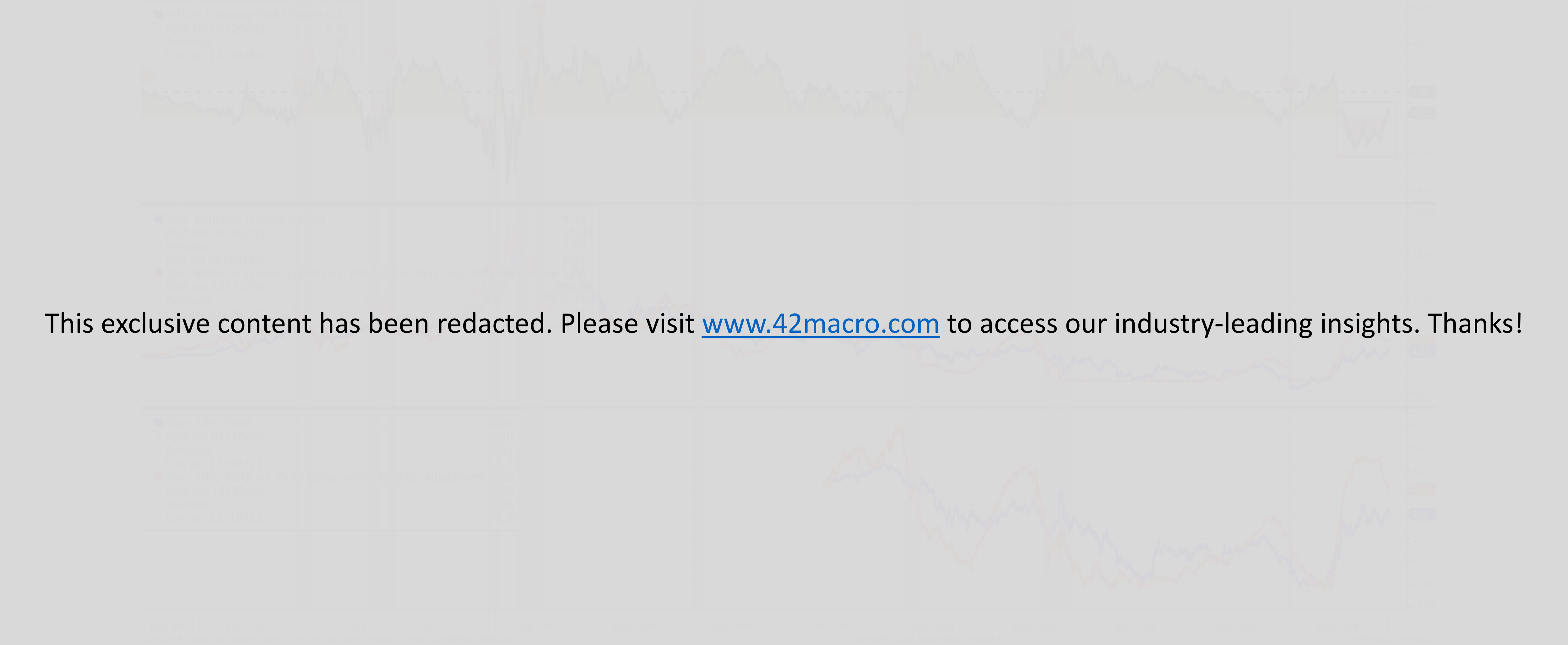
Term Premia Should Be Normalizing Because Elevated Inflation = More Inflation Volatility And Structurally Lower Demand From The Fed



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: Bloomberg. Black dotted line = historical mean.
Nominal Interest Rate = Expected Nominal Rate (trend Real GDP + trend Headline CPI) + Nominal Term Premium (Real Term Premium + Inflation Risk Premium).

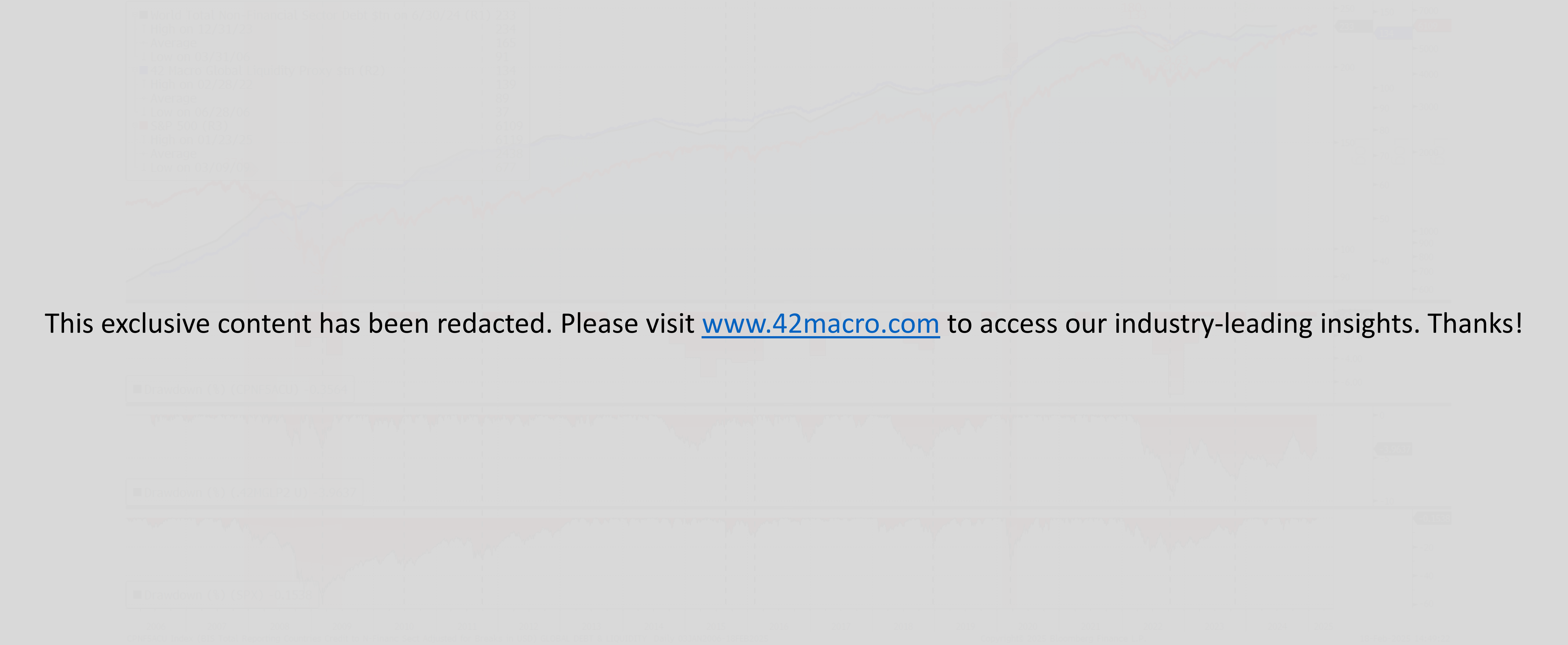
If The Treasury Market Is Correctly Pricing Inflation, Then It Is Underpricing Structural Tailwinds To Growth From Rising Productivity



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

 Data Source: Bloomberg. Black dotted line = historical mean.
Nominal Interest Rate = Expected Nominal Rate (trend Real GDP + trend Headline CPI) + Nominal Term Premium (Real Term Premium + Inflation Risk Premium).

Key Takeaway: While The US Government's Net Impact On Liquidity Is Positive For Now, It Is Likely To Deteriorate Sharply When Tariffs Are Fully Implemented And The Stickiness Of The Deficit Becomes Clear



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

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

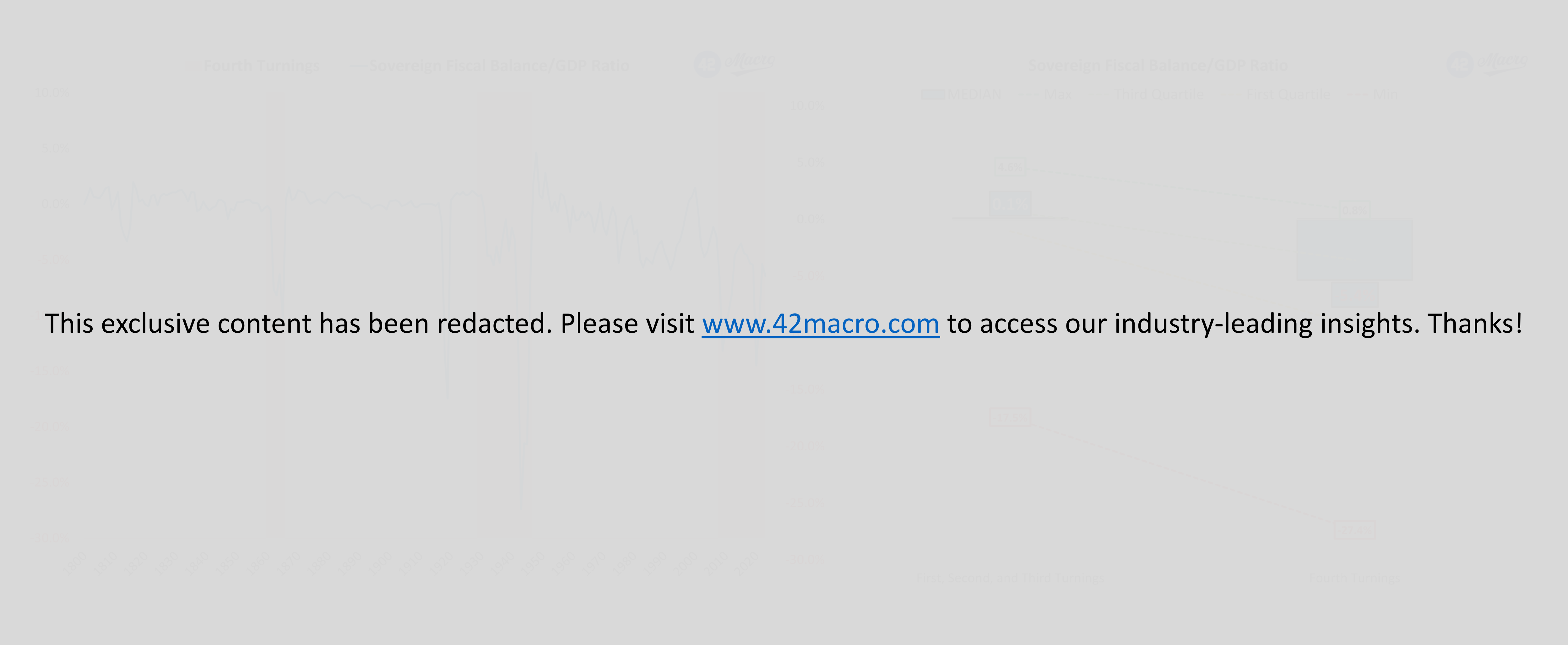
Black dotted lines = S&P 500 corrections and crashes since 2007.

Appendix: Investing During A Fourth Turning Regime

Key Fourth Turning Fiscal Policy Risks: Explosive Growth In Sovereign Deficits, Debt, The Size Of Government, And The Cost To Finance The Government

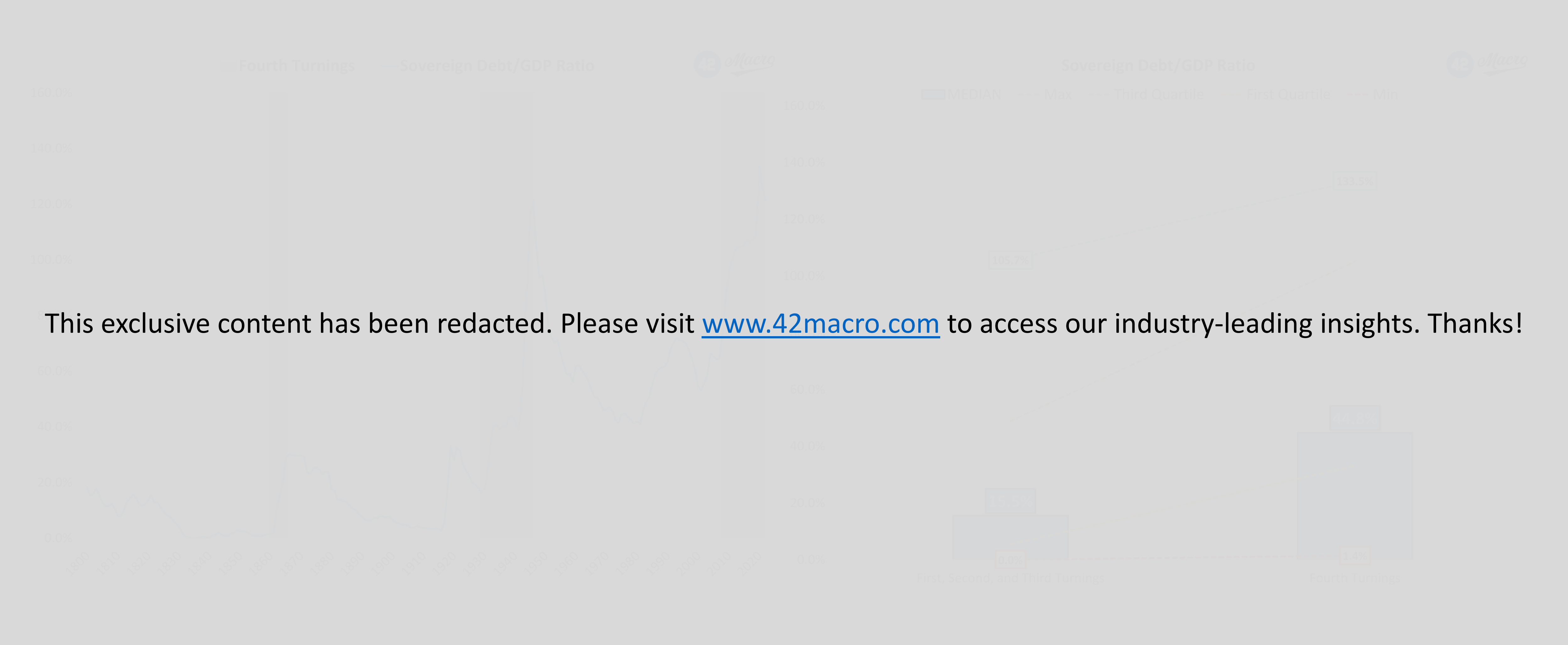
Fiscal Policy		
Metric	**Fourth Turning Median vs. Baseline**	**Consistent Fourth Turning Delta?**
Sovereign Fiscal Balance/GDP Ratio	↓	↓
Sovereign Debt/GDP Ratio	↑	↑
Government Revenues/GDP Ratio	↑	↑
Government Expenditures/GDP Ratio	↑	↑
Government Interest Expense/GDP Ratio	↑	↑

The Sovereign Fiscal Balance Tends To Deteriorate Sharply During Fourth Turnings



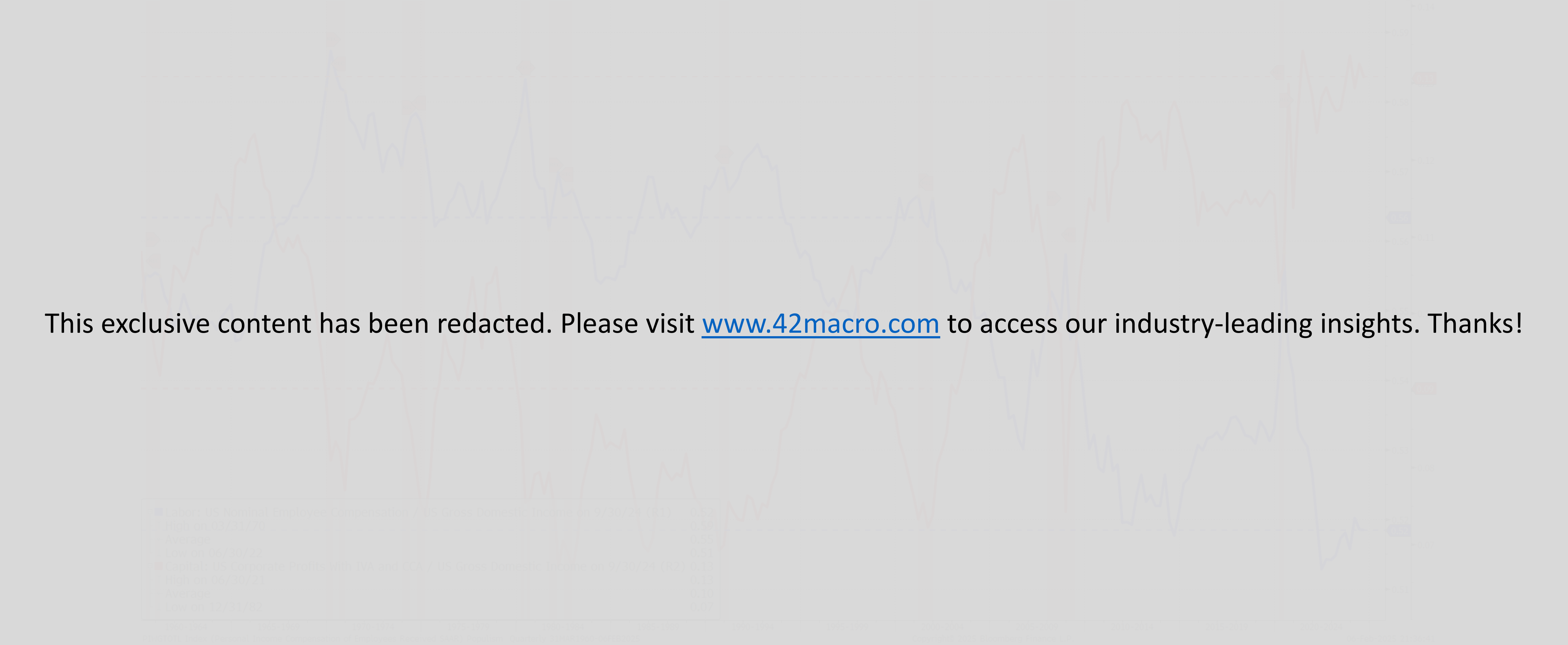
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Sovereign Debt Tends To Increase Sharply During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

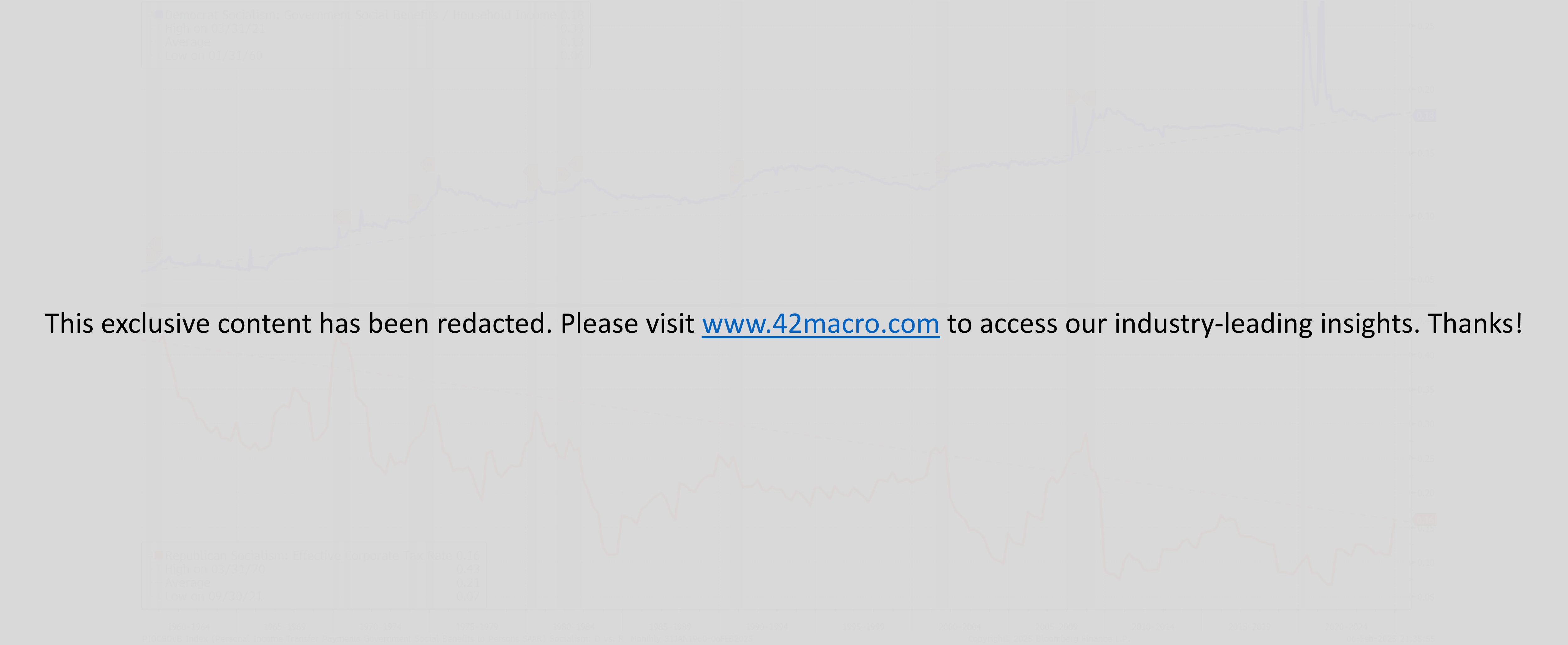
More Populism Is The Highest Probability Outcome No Matter Who Controls The White House Or Which Party Controls Congress



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The 400bps swing in the share of Gross Domestic Income going to Capital from Labor = $1.2 trillion per the latest data.
$1.2tn the equivalent of ~$8,500 in annualized lost income per private sector employee, or 11% of the Median Household Income.

Both Democrats And Republicans Love Piling On Debt To Socialize The Incomes Of Their Constituents

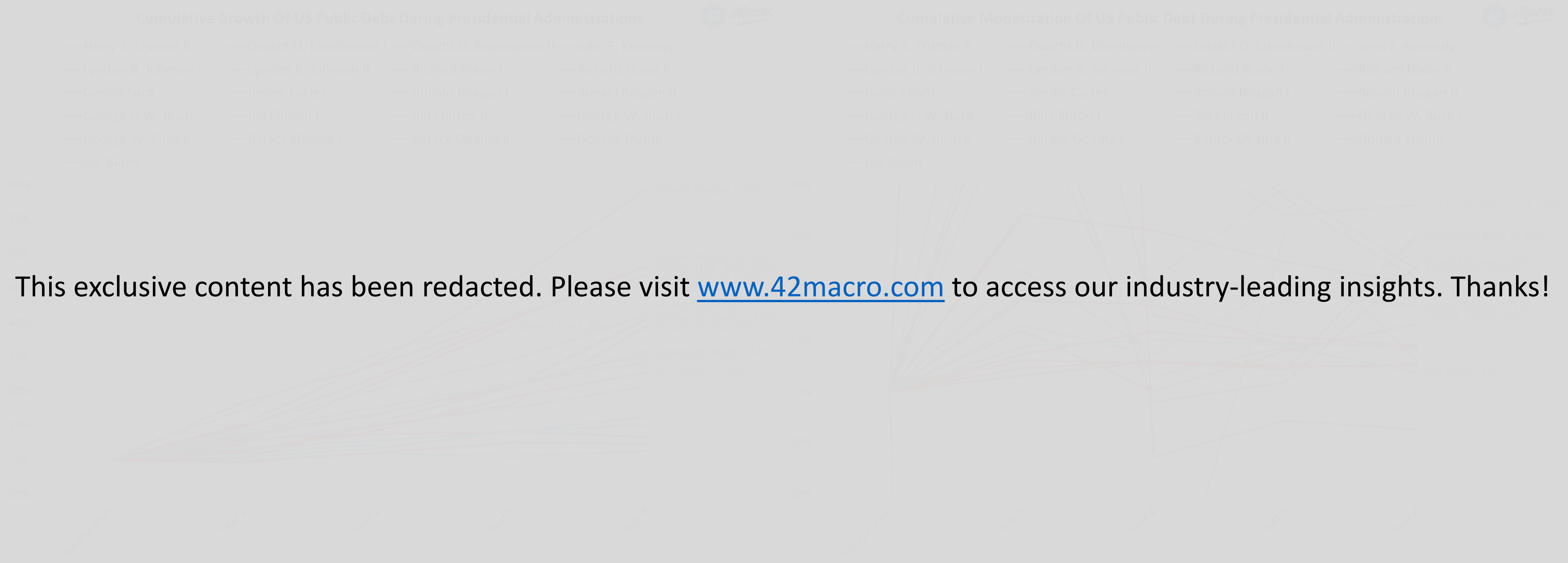


This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

In The Postwar Era, Republican Administrations Have Outpaced Democrat Administrations When It Comes To Burdening The Country With Debt

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Obviously, Democrats Spend Way Too Much, But More Light Needs To Be Shed On How Republican Tax Cuts Are Also Contributing To The Risk Of A Fiscal Crisis

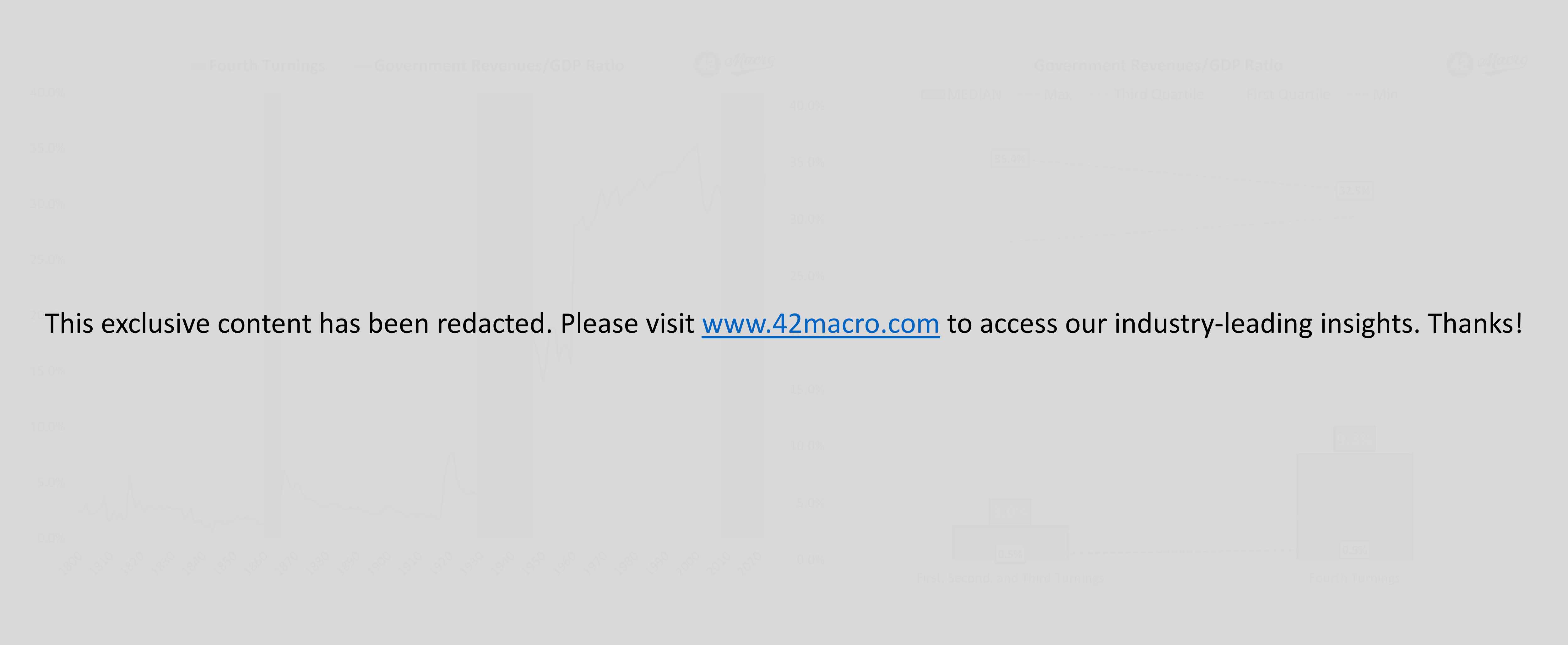


This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The US' Debt-To-GDP Ratio Was Set To Accelerate Dramatically No Matter Who Won The Election Or Which Party Controlled Congress

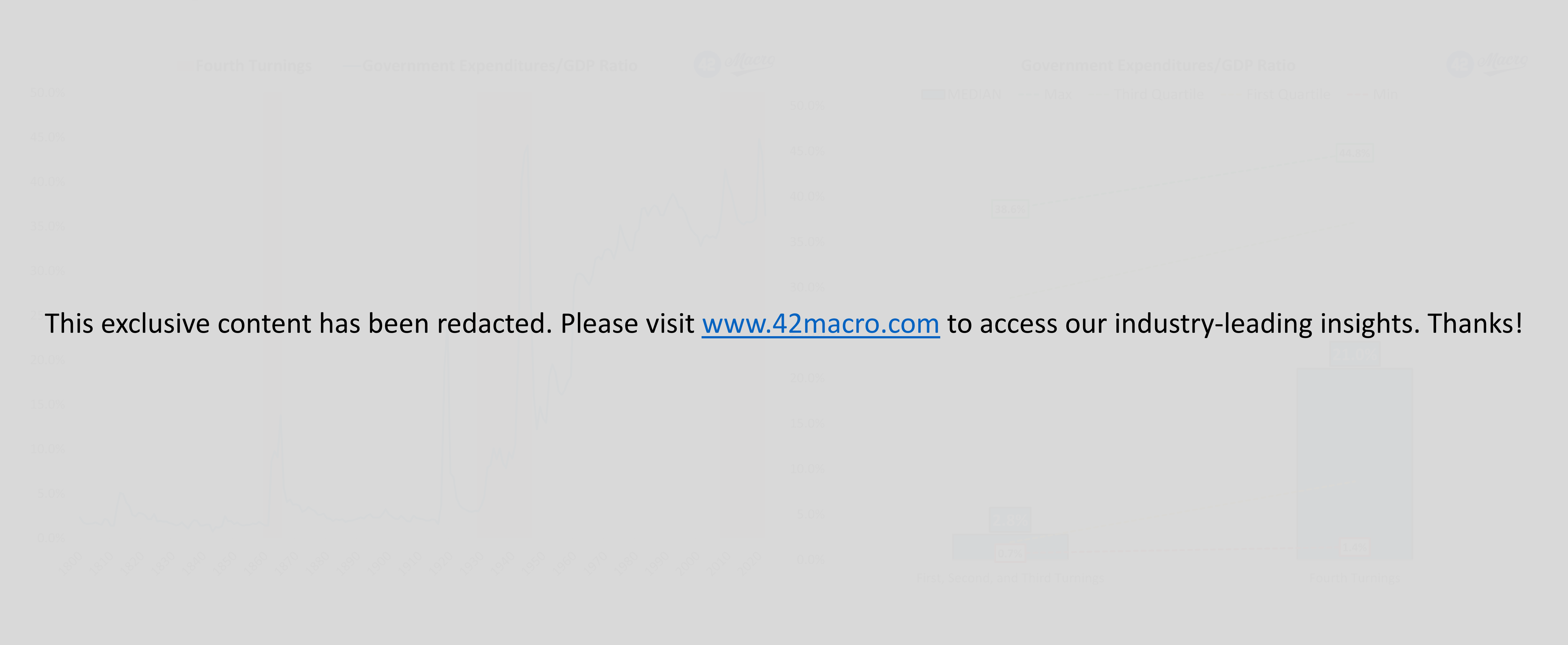
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Government Revenues Tend To Increase Sharply During Fourth Turnings



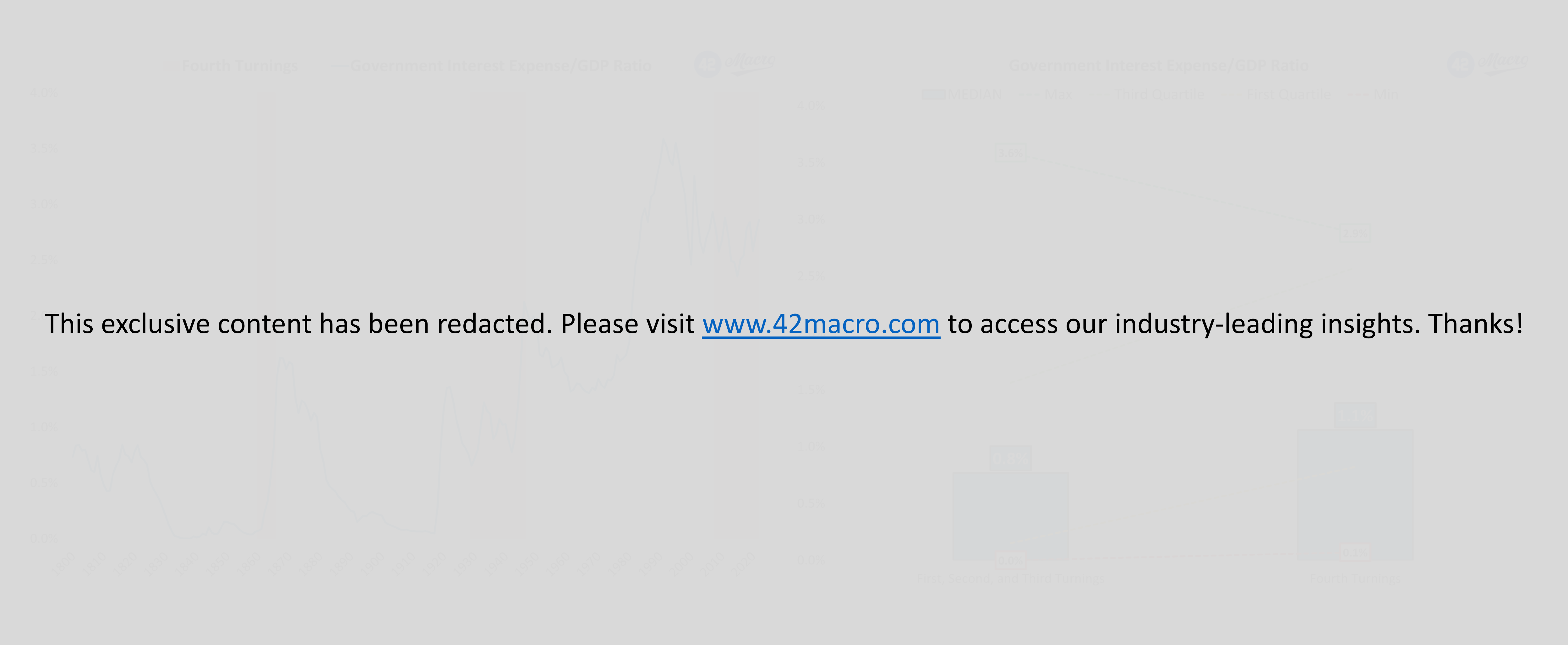
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Government Expenditures Tend To Increase Sharply During Fourth Turnings



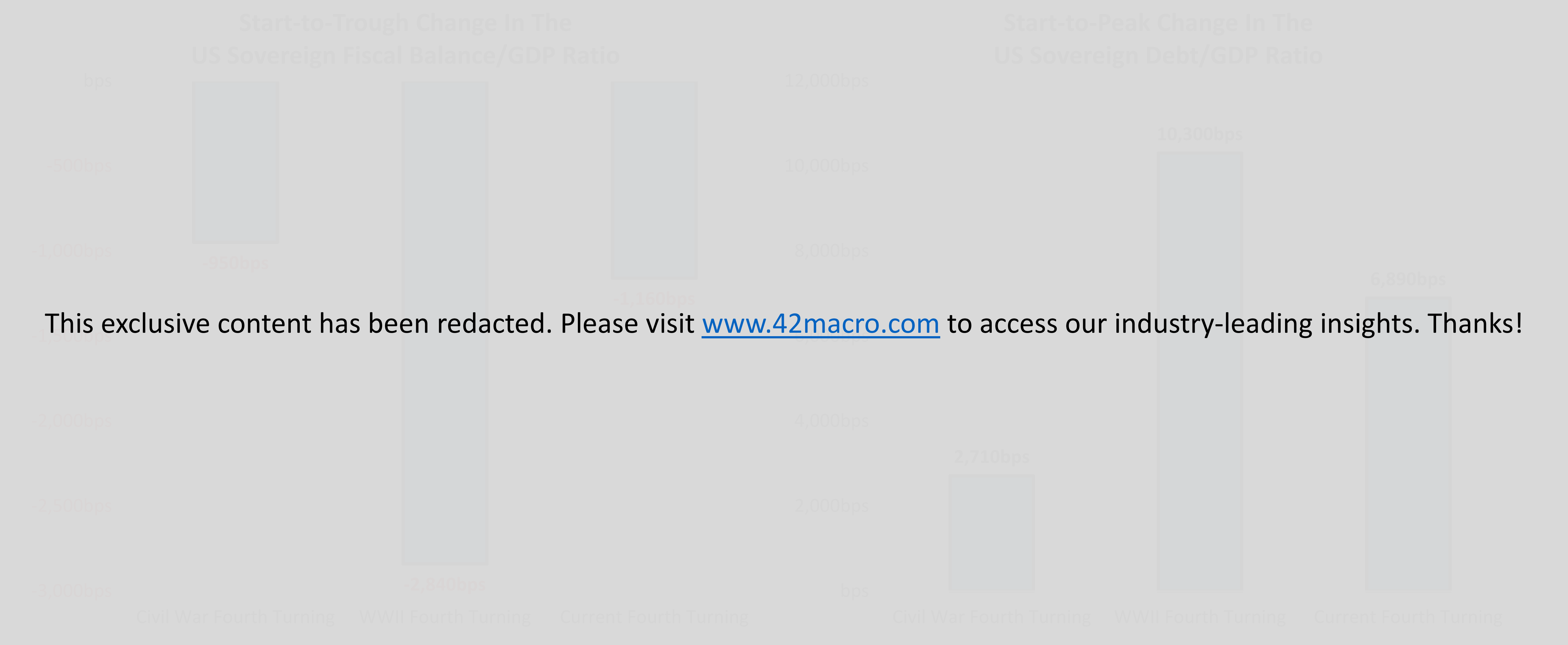
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The Public Interest Burden Tends To Increase Sharply During Fourth Turnings



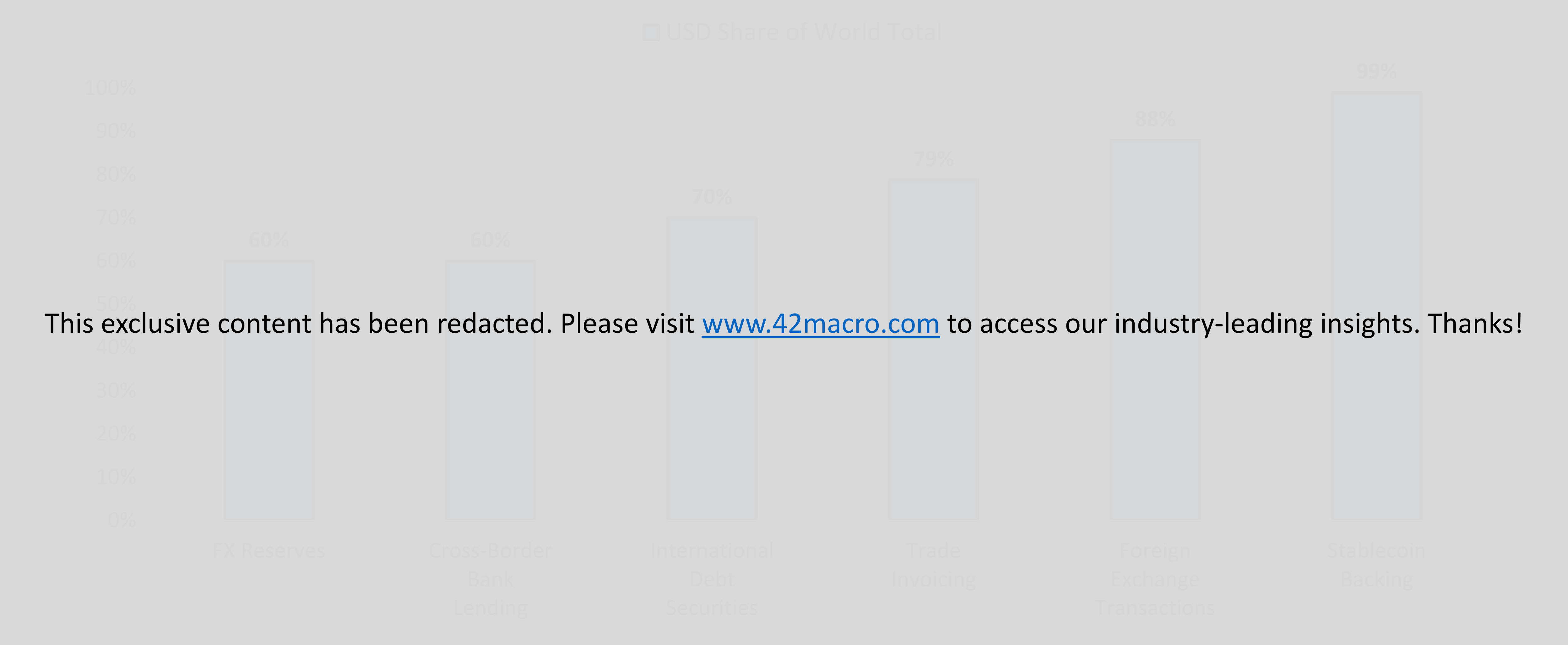
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

From A Fiscal Policy Perspective, The US Is Already Experiencing A Fourth Turning Crisis… BEFORE THE ACTUAL FOURTH TURNING CRISIS OCCURS



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Investors Should Expect De-Dollarization To Accelerate In The Coming Years Alongside The Rapid Deterioration Of The US Public Sector Balance Sheet



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Key Fourth Turning Monetary Policy Risks: Financial Repression And Monetary Debasement

Monetary Policy		
Metric	**Fourth Turning Median vs. Baseline**	**Consistent Fourth Turning Delta?**
Nominal 12mo T-Bill Yield	↓	n/a
Real 12mo T-Bill Yield	↓	↓
Nominal 10yr Yield	↓	n/a
Real 10yr Yield	↓	↓
USD/Gold YoY	→	↓
Broad Money Supply YoY	↑	↑

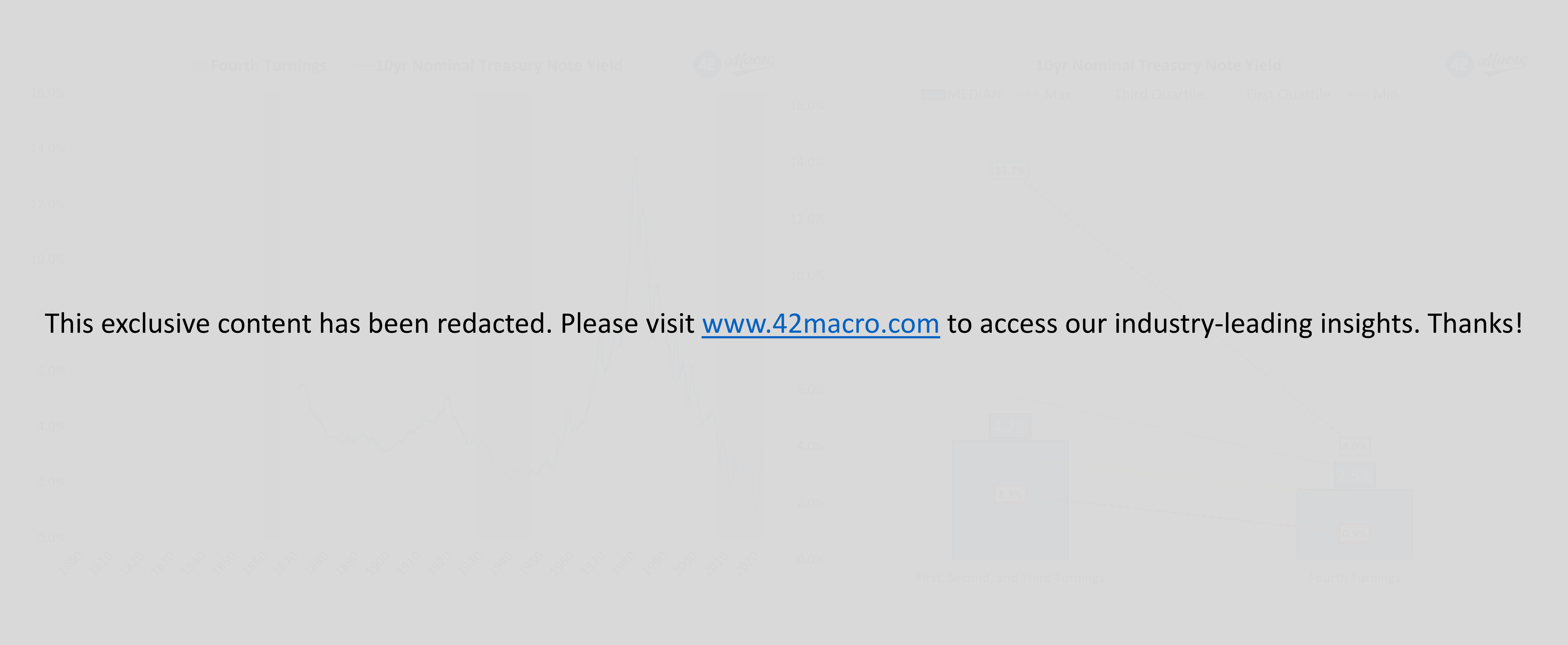
The 12mo Nominal T-Bill Yield Tends To Be Relatively Weak During Fourth Turnings

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The 12mo Real T-Bill Yield Tends To Decline Substantially During Fourth Turnings

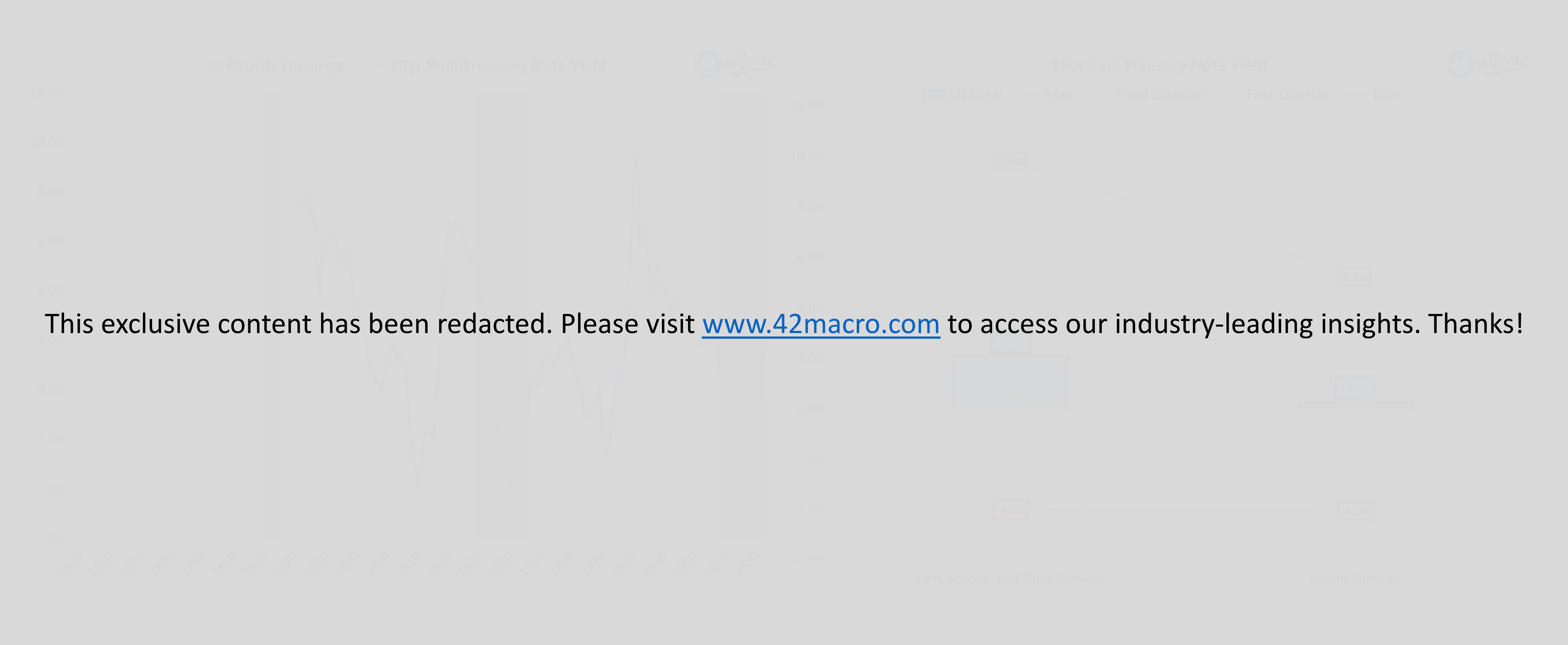
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The 10yr Nominal Treasury Yield Tends To Be Relatively Weak During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The 10yr Real Treasury Yield Tends To Decline Substantially During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

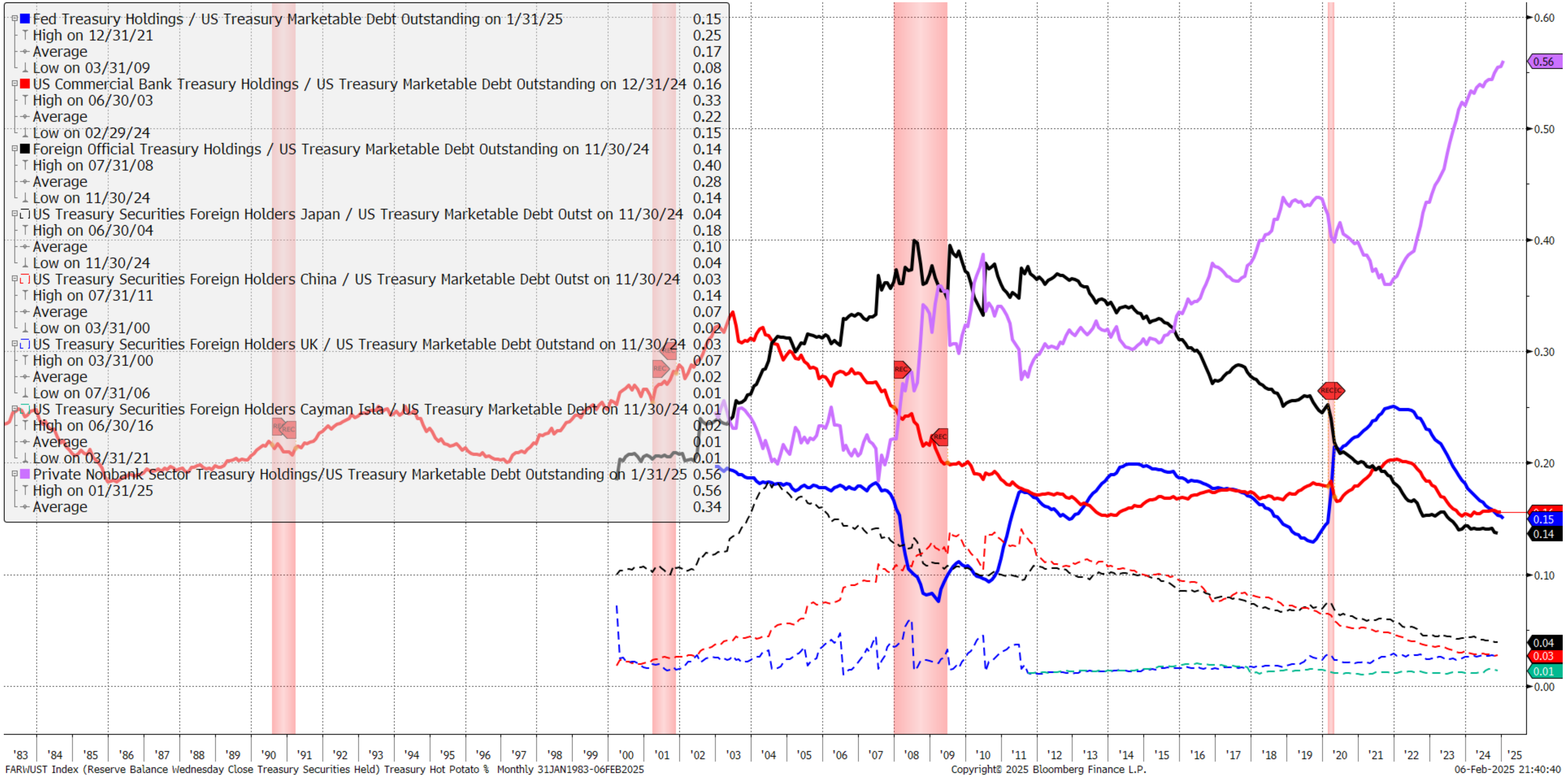
The US Dollar Tends To Be Debased Substantially During Fourth Turnings

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

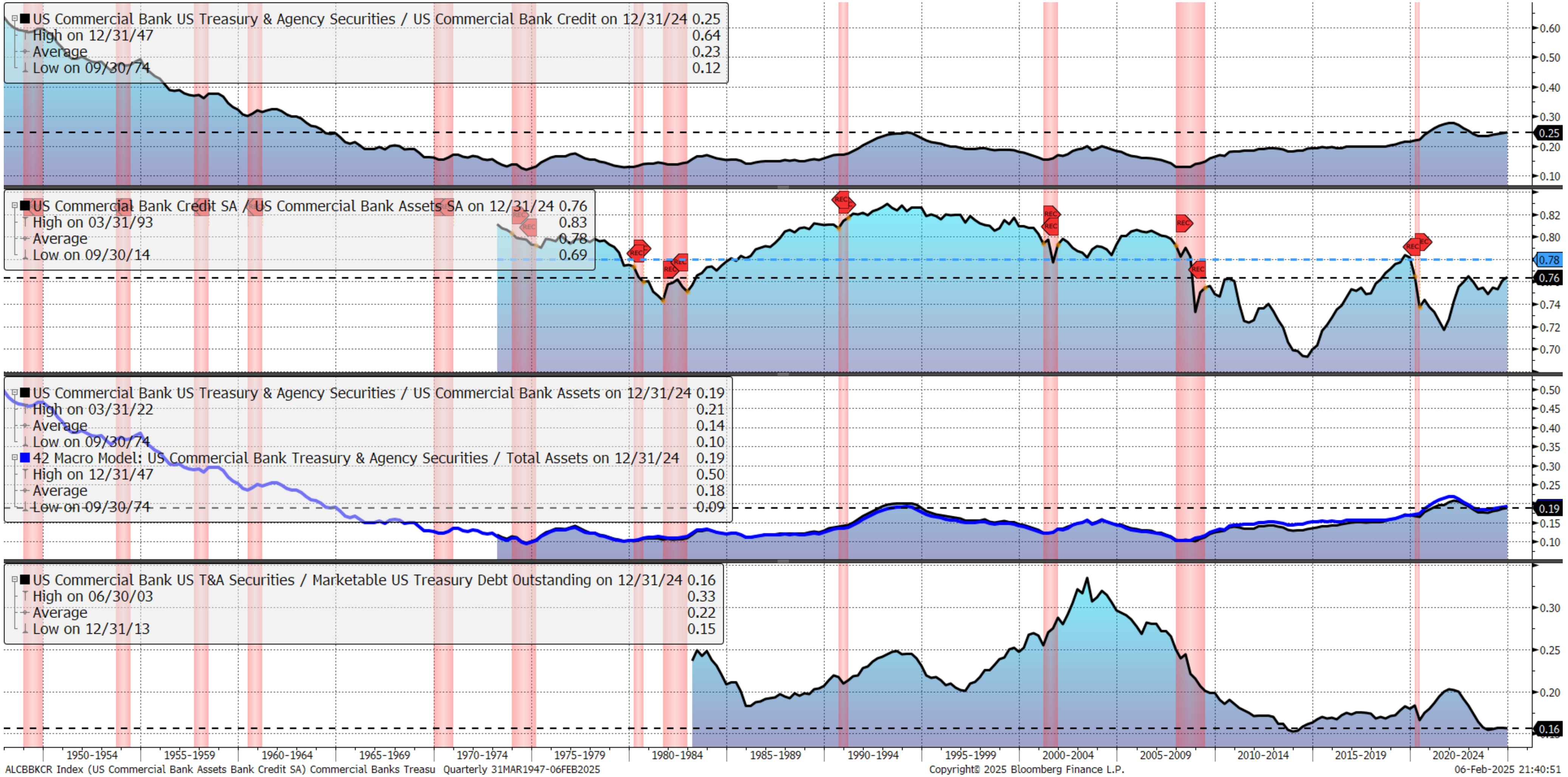
Money Supply Growth Tends To Accelerate Sharply During Fourth Turnings

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Investors Should Expect Incremental Monetary Debasement Because The Private Sector Will Demand Unsustainably High Yields To Capitalize Uncle Sam



Investors Should Expect Incremental Financial Repression Because Commercial Banks Have Ample Capacity To Lend To The Treasury Market

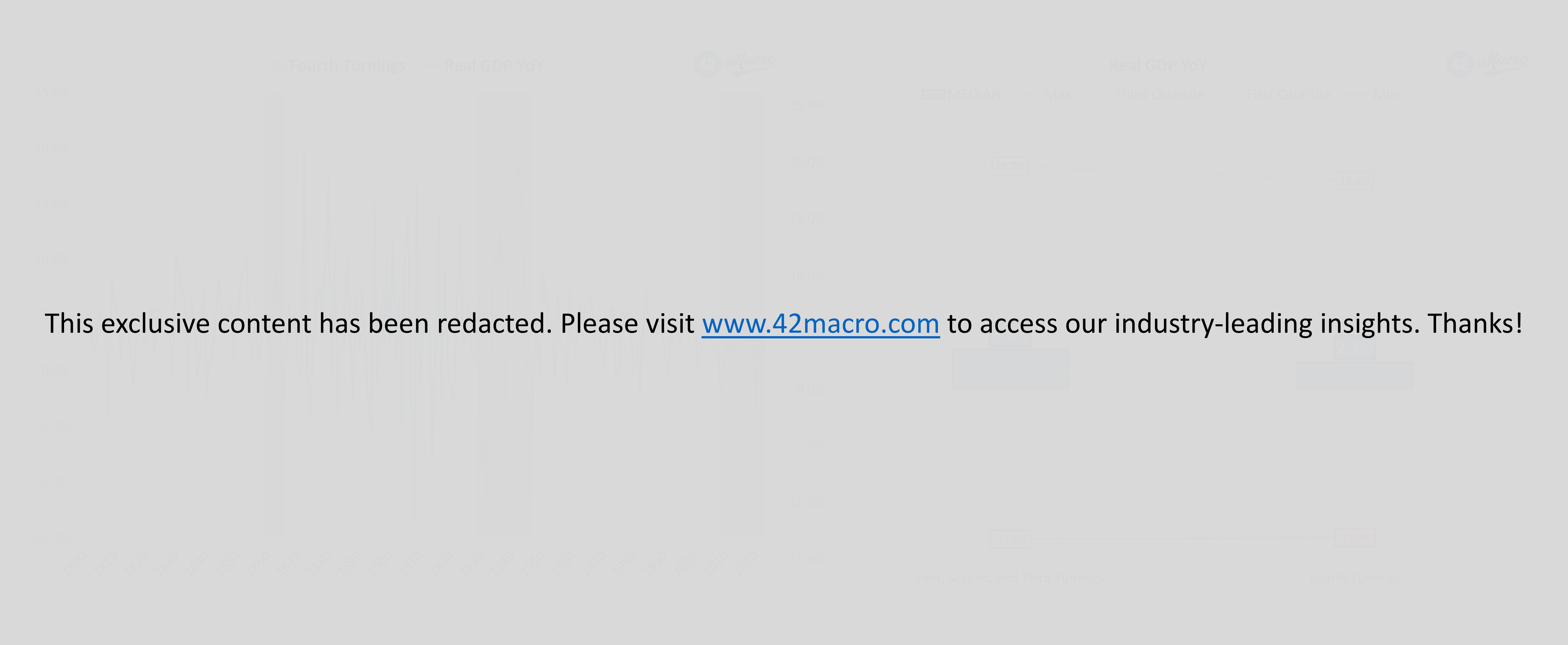


We Are All Frogs Being Boiled Alive In A Pot Of Monetary Debasement And Financial Repression; KISS And Dr. Mo Will Make Your #FrogLife Better

Key Fourth Turning Economic Risks: Structural Uptrends In Nominal GDP, Inflation, Wage Growth, And Asset Price Inflation

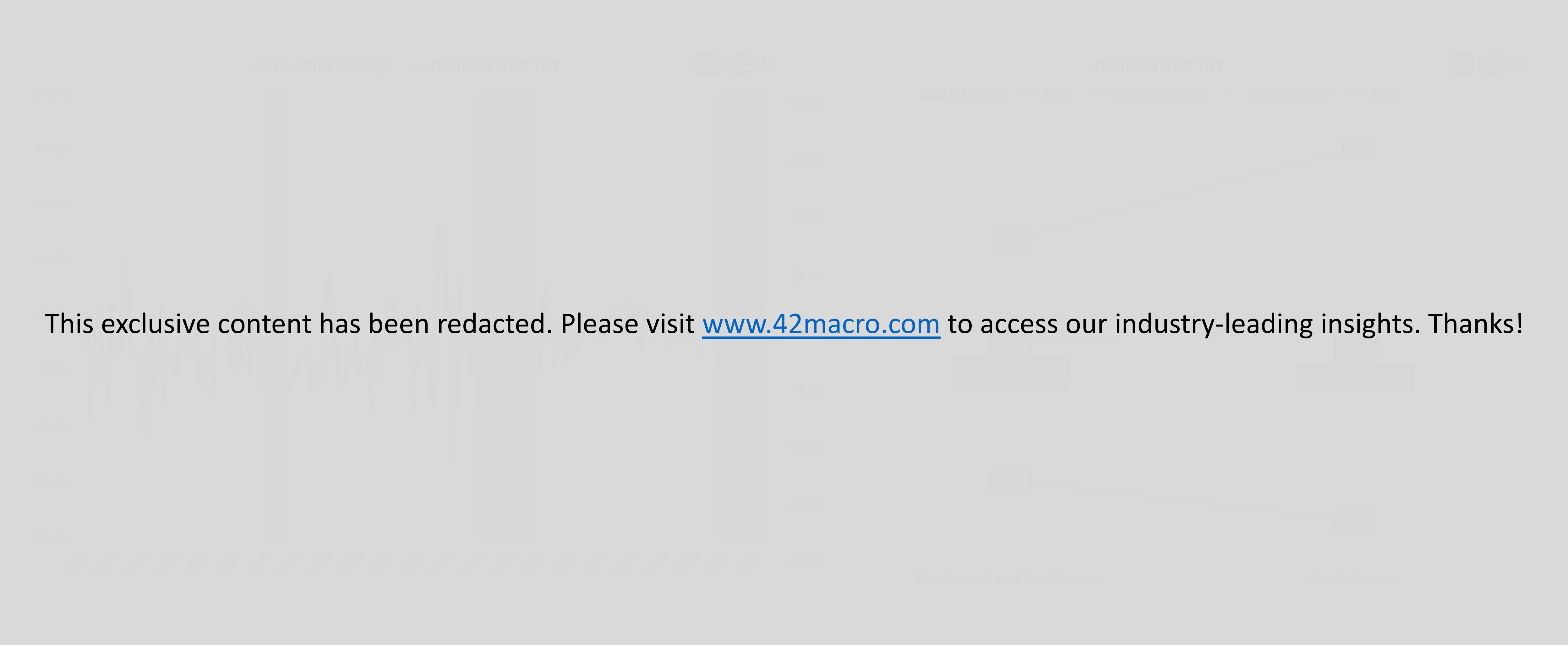
Economy		
Metric	**Fourth Turning Median vs. Baseline**	**Consistent Fourth Turning Delta?**
Real GDP YoY	↓	n/a
Nominal GDP YoY	↓	↑
Headline CPI YoY	↑	↑
Employee Compensation/GDI Ratio	↓	↑
Nonfarm Productivity YoY	↓	n/a
Corporate Profits/GDI Ratio	↑	n/a
S&P 500 EPS YoY	↑	n/a
S&P 500 YoY	↑	n/a
S&P 500 CAPE Ratio	↑	n/a
Nominal Home Prices YoY	→	↑

Real GDP Growth Tends To Be Relatively Weak During Fourth Turnings



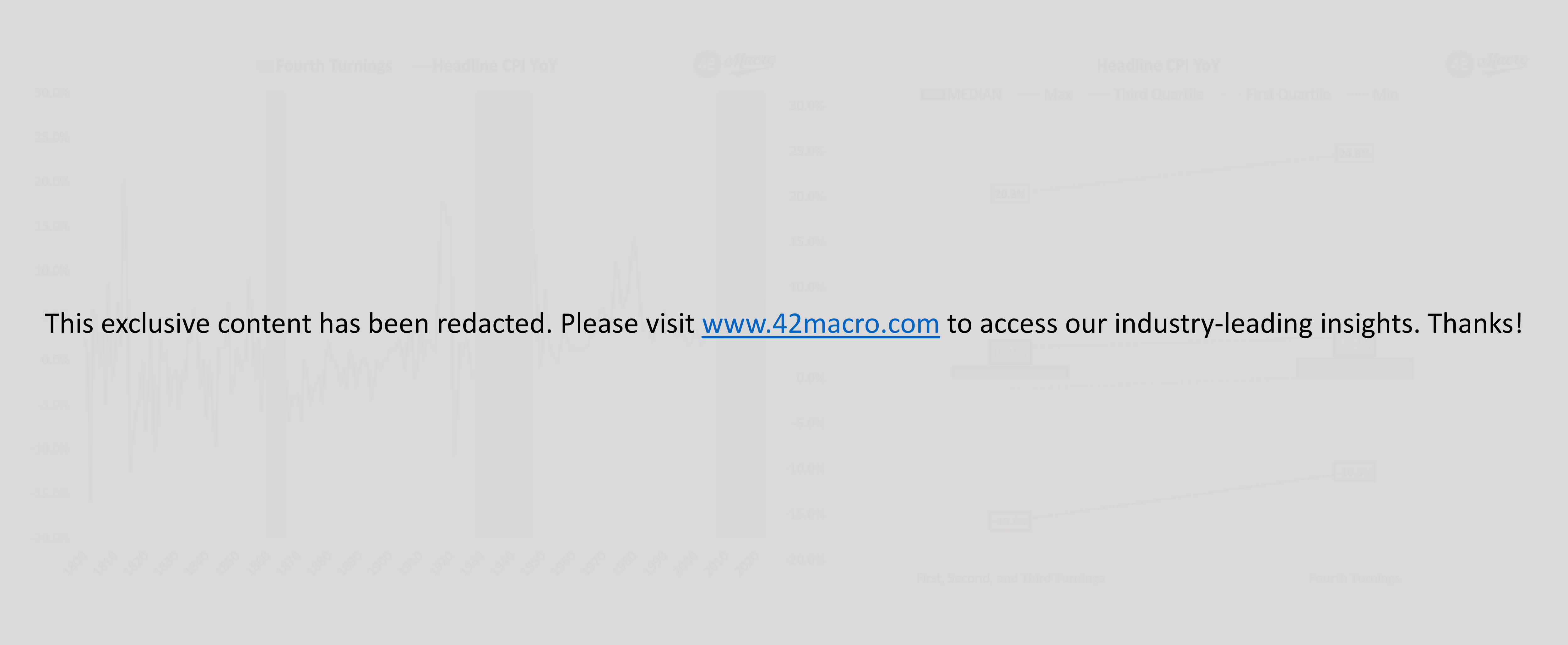
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Nominal GDP Growth Tends To Accelerate Sharply During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Headline CPI Tends To Accelerate Sharply During Fourth Turnings



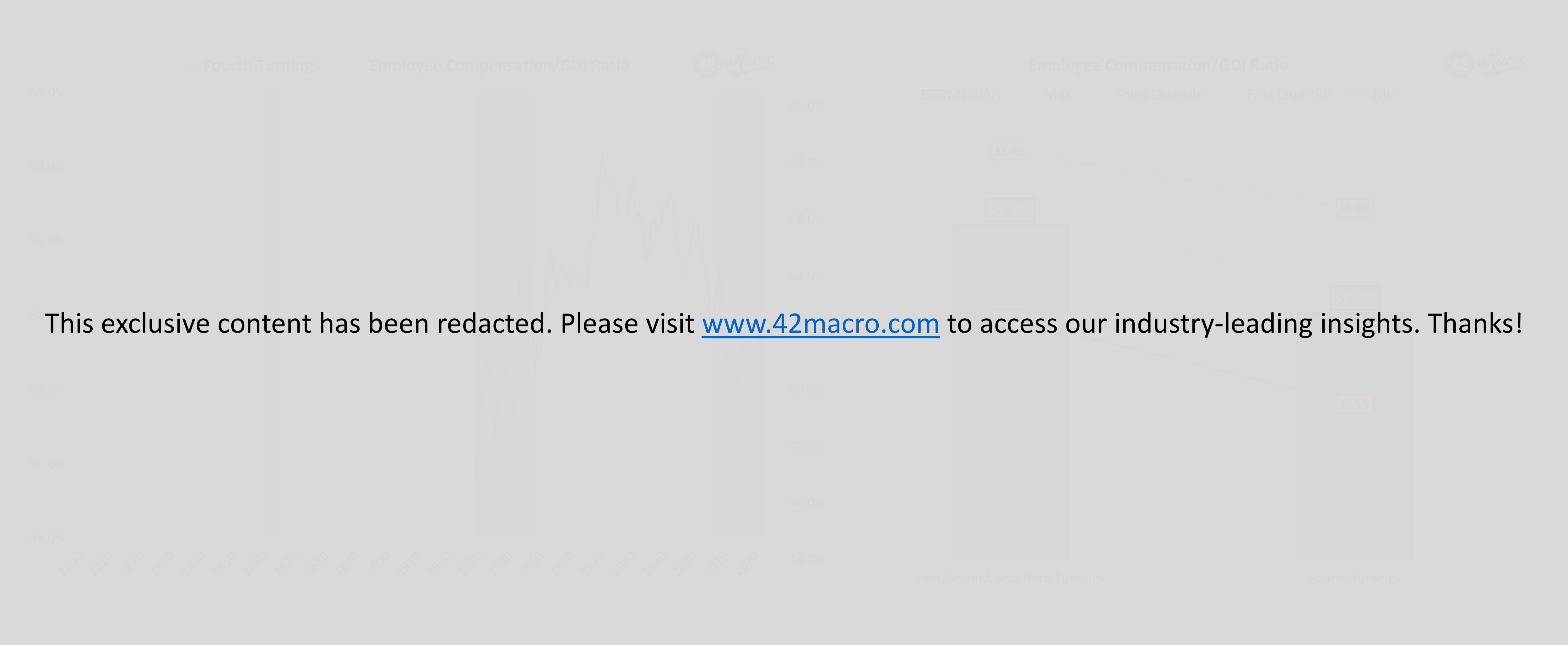
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

The Level Of Inflation Has Important Implications For The Stock-Bond Correlation And, By Extension, Portfolio Construction

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

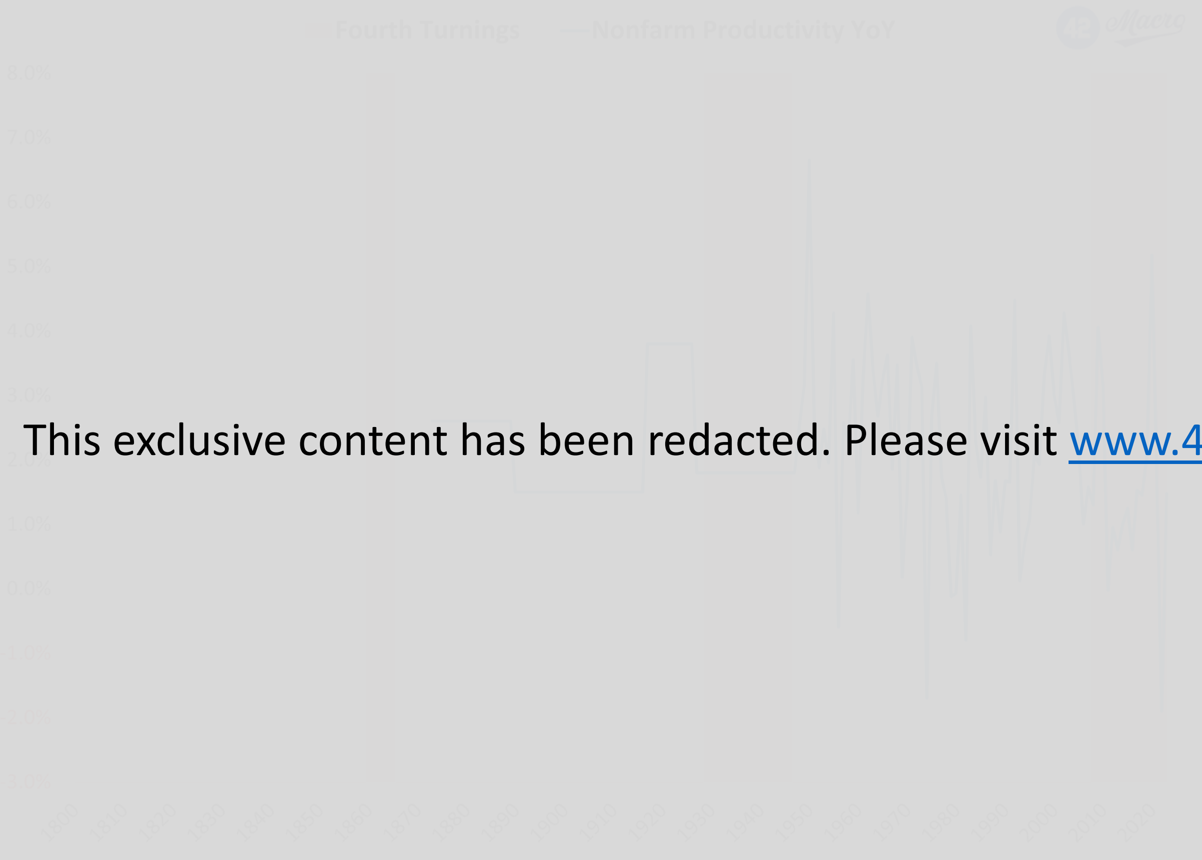
Correlations of monthly log price returns since January 1871.

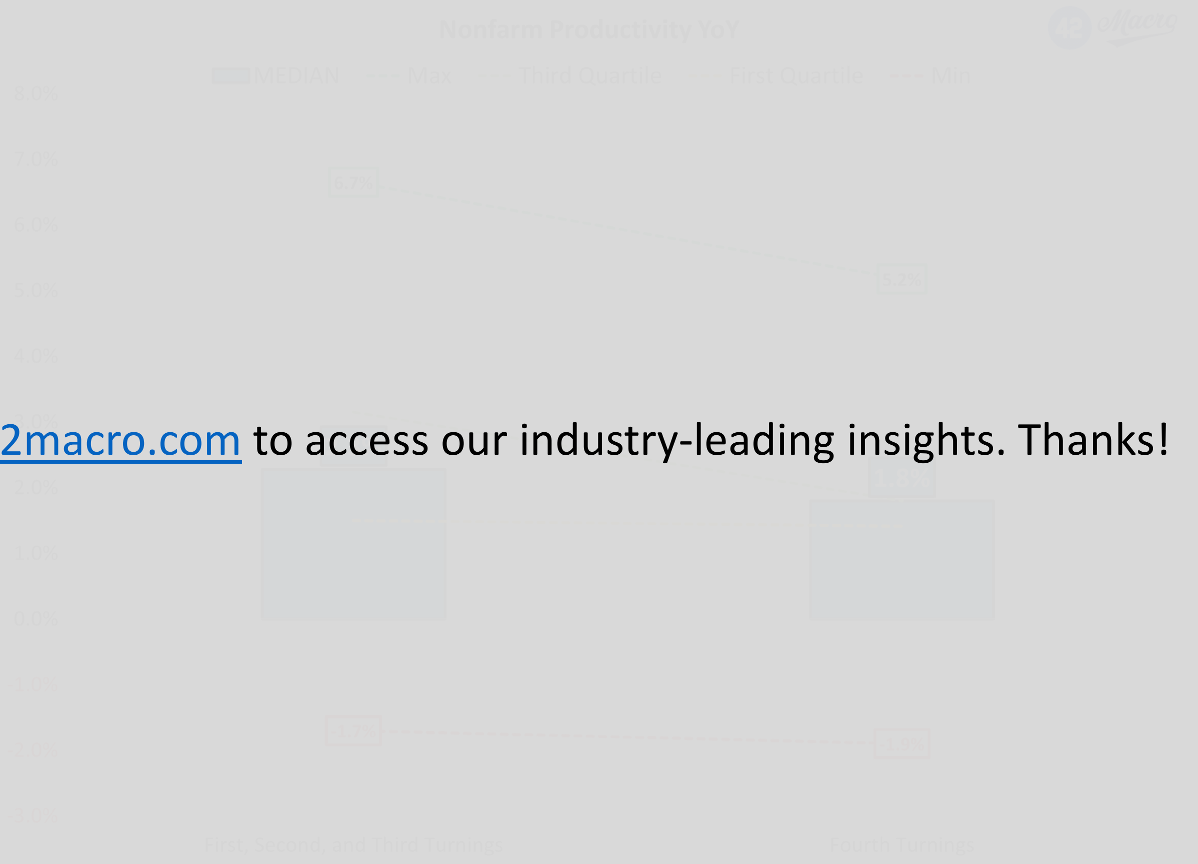
Employee Compensation Tends To Accelerate Significantly During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

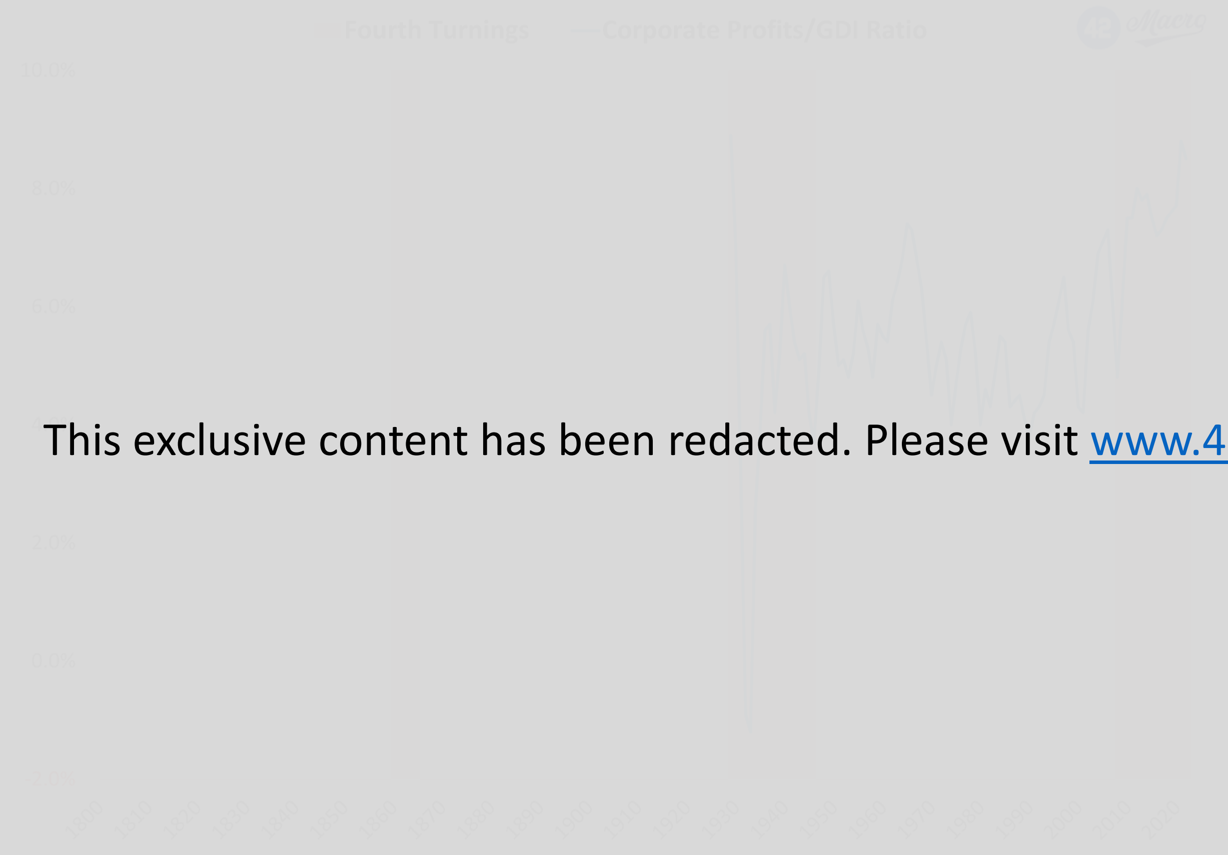
Productivity Growth Tends To Be Relatively Weak During Fourth Turnings

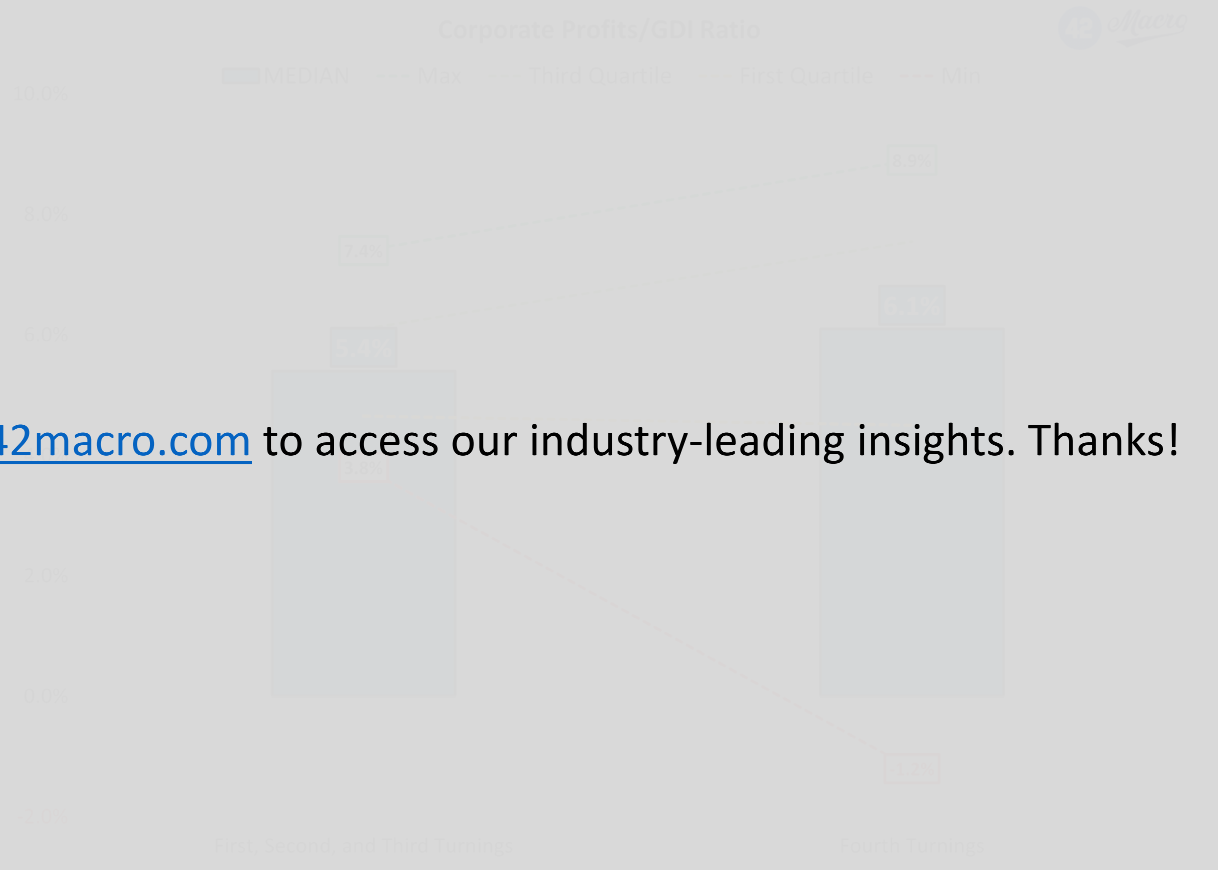




This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Corporate Profitability Tends To Be Relatively Strong During Fourth Turnings With More Volatility



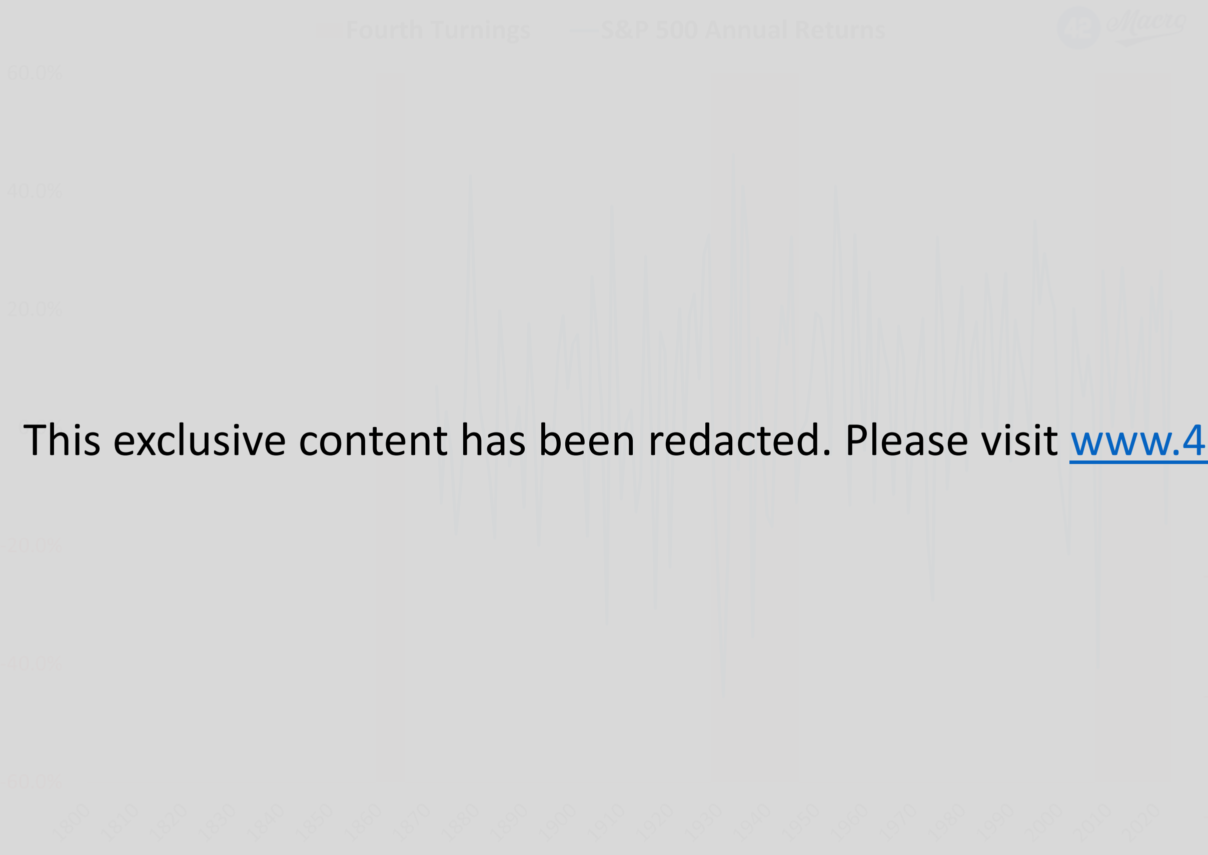


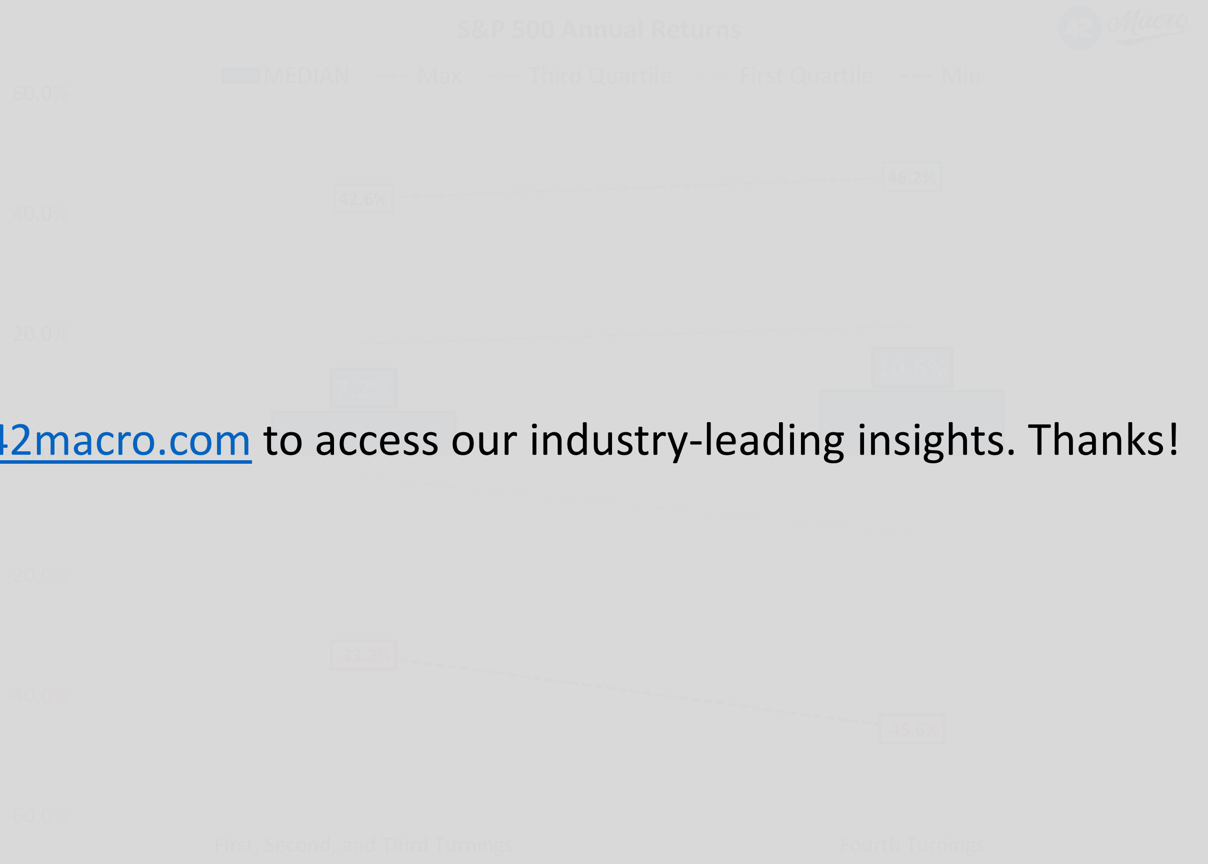
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

S&P 500 Earnings Growth Tends To Be Relatively Strong During Fourth Turnings With More Volatility

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

S&P 500 Returns Tend To Be Relatively Strong During Fourth Turnings With More Volatility

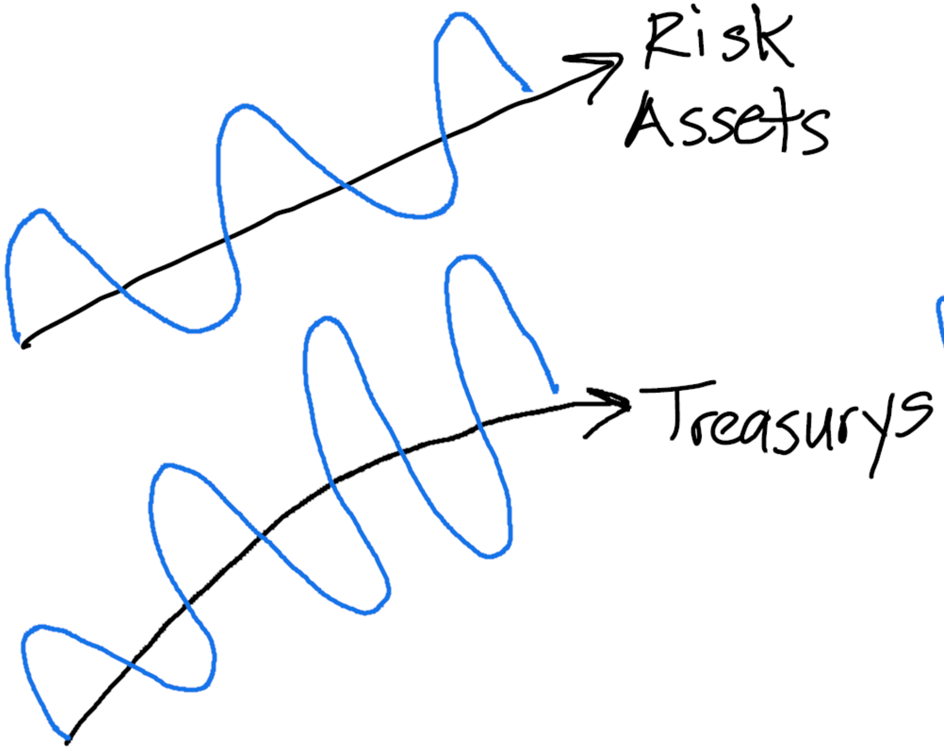




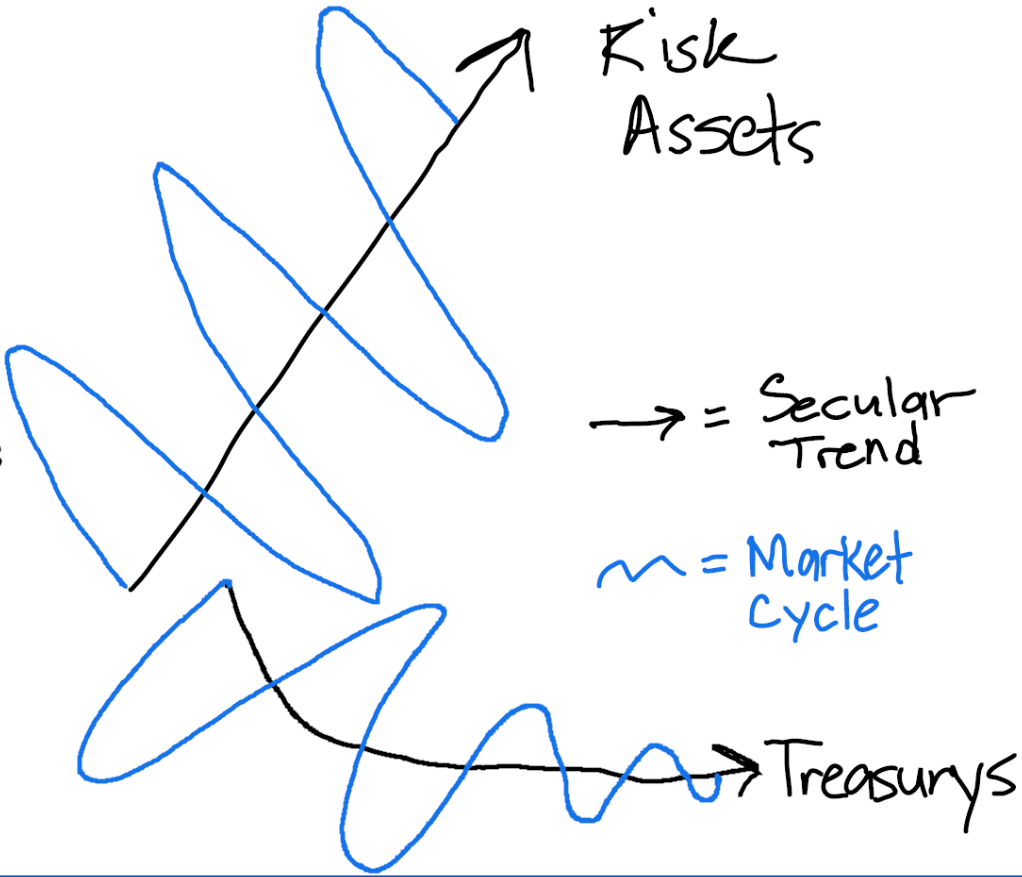
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Risk Asset Returns Will Likely Be Greater, But The Drawdowns Will Also Be Deeper When The Fed And Regulated Financial Institutions Are Not Monetizing Fast Enough

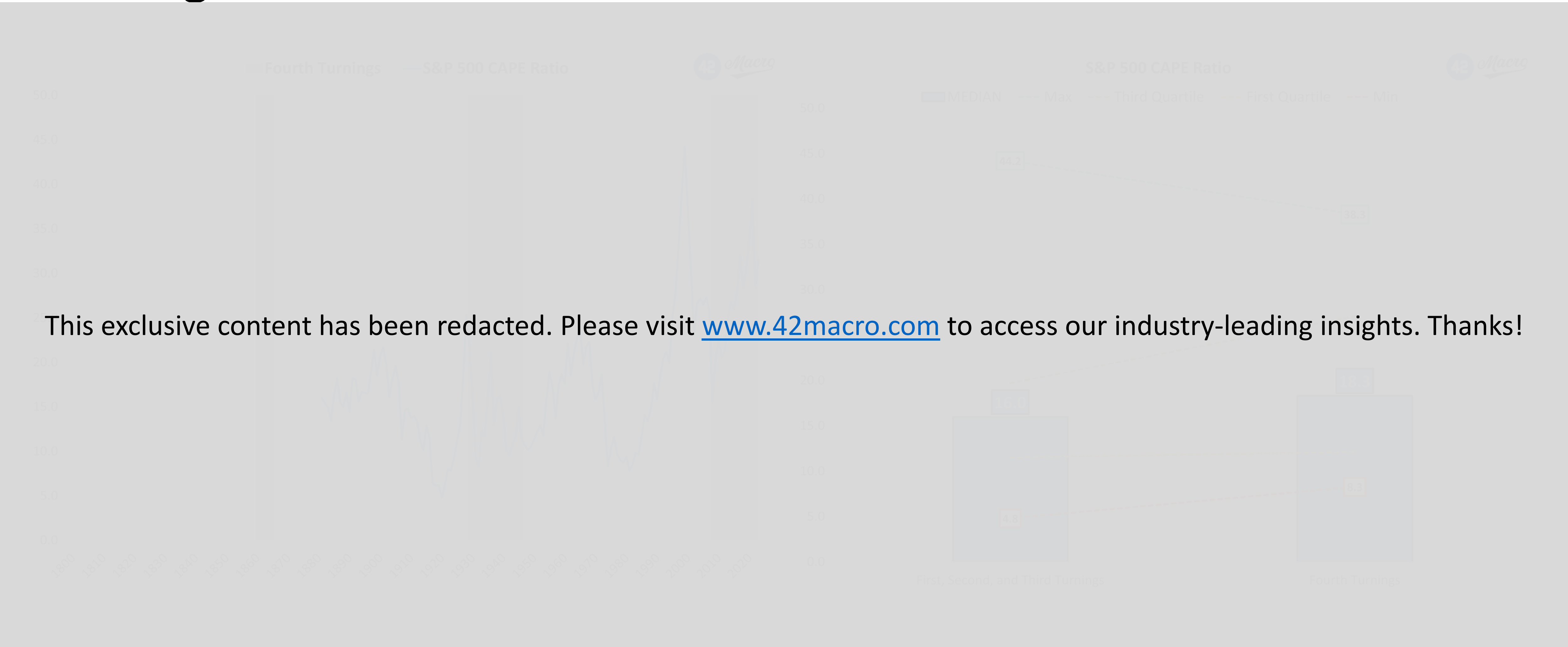
Asset Markets In A "Normal" Regime



Asset Markets In A Fourth Turning Regime

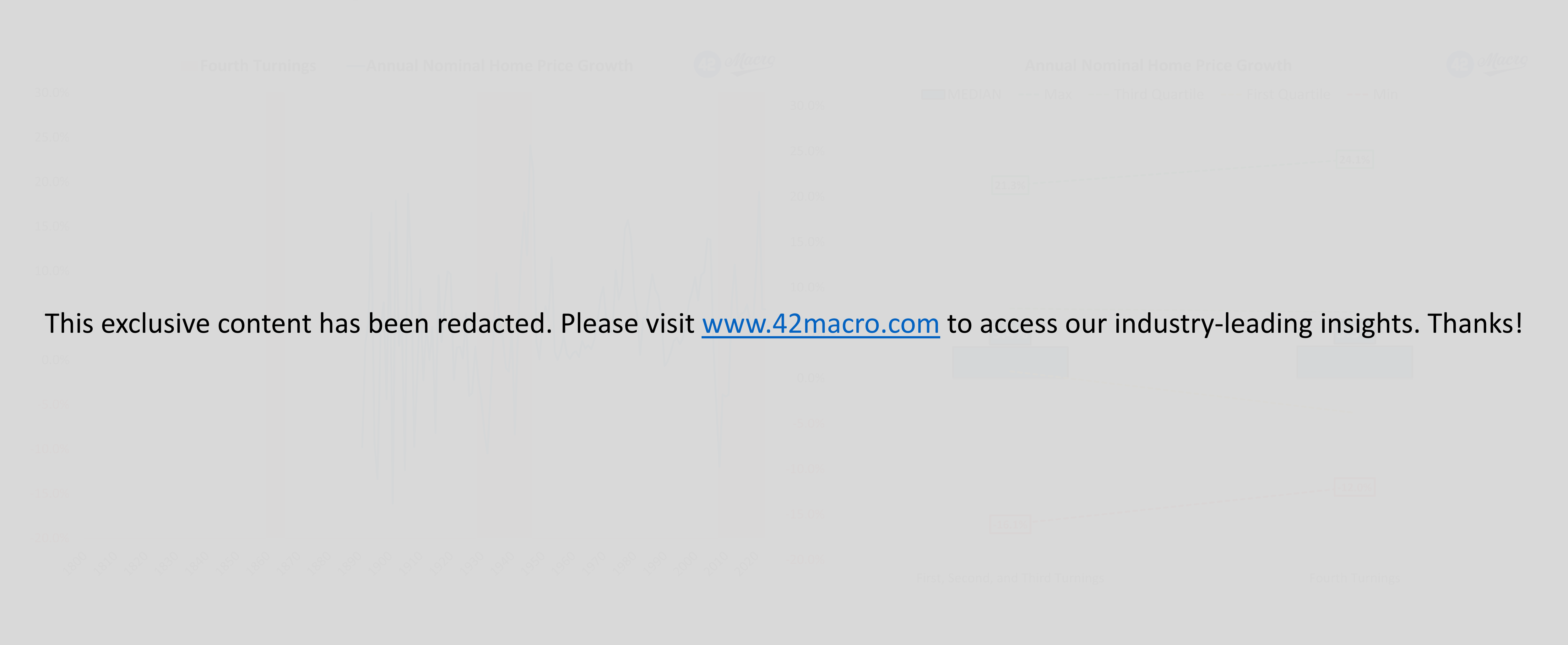


S&P 500 Valuations Tend To Be Relatively Strong During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Nominal Home Price Growth Tends To Accelerate Sharply During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Key Fourth Turning Geopolitical Risks: A Structural Downtrend In Income Inequality, Declining Birth Rates, Increased Trade Protectionism, And Total War

Geopolitics		
Metric	**Fourth Turning Median vs. Baseline**	**Consistent Fourth Turning Delta?**
Top-10% Share of National Income	↑	↓
Real Crude Oil Price YoY	→	n/a
Real Food Prices YoY	→	n/a
Fertility Rate	↓	↓
Immigration YoY	↓	n/a
Trade/GDP Ratio	↓	↓
Global War Deaths	↑	↑

42 Macro

 Data Sources: Bloomberg, BEA, BLS, Census Bureau, Cleveland Fed, DHS Office of Immigration, econdataus.com, Federal Reserve, IMF, NASDAQ, officialdata.org, onlygold.com, Statista, University of California Berkeley Department of Economics, University of Missouri, US Treasury, Yale University Department of Economics.

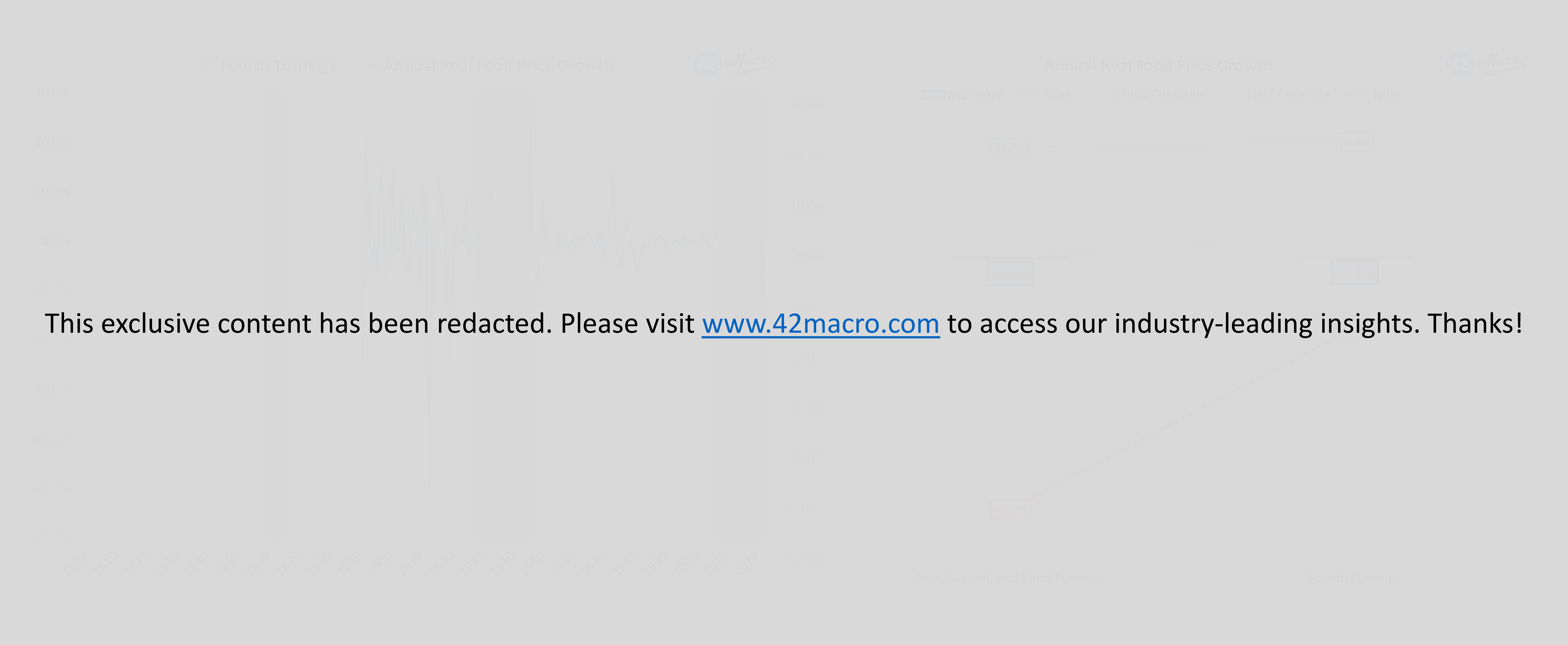
Income Inequality Tends To Decline Sharply From Extremely Elevated Levels During Fourth Turnings

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Real Crude Oil Price Growth Tends To Be Relatively Stable During Fourth Turnings

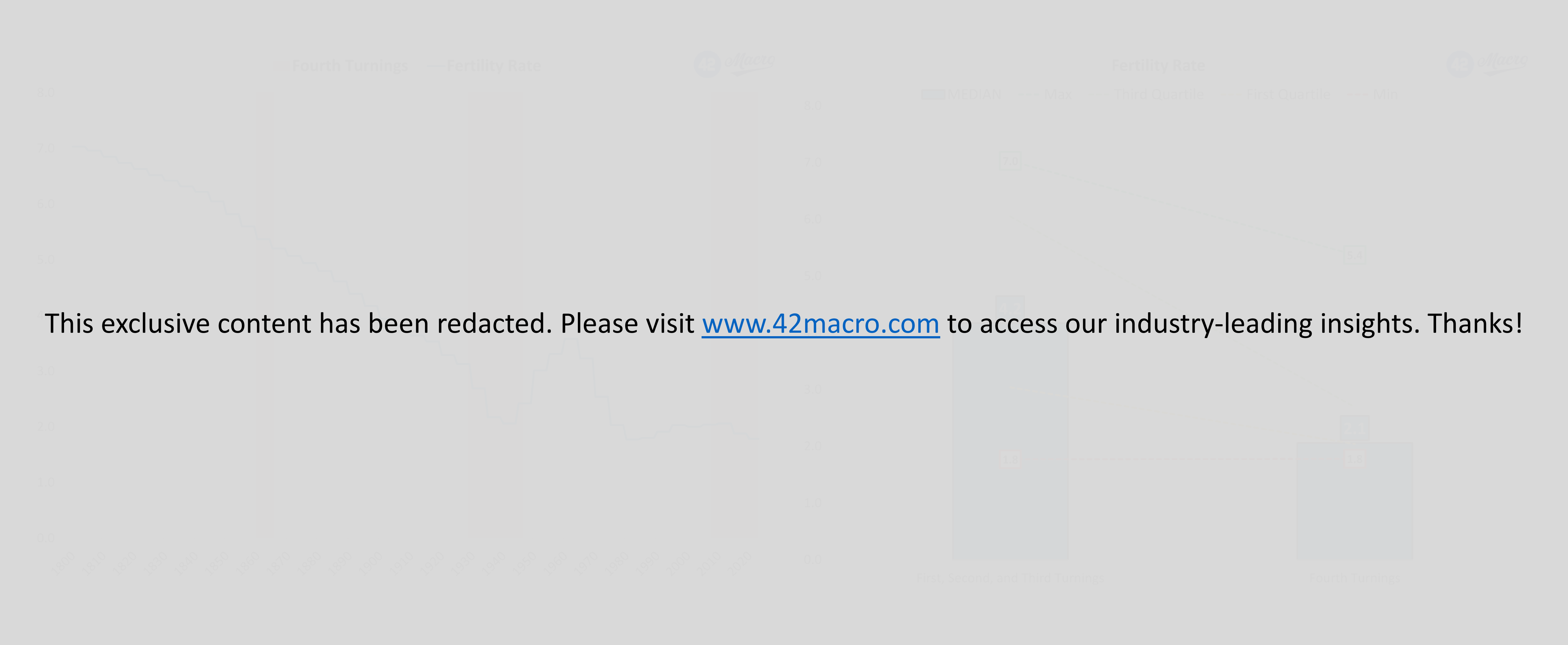
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Real Food Prices Growth Tends To Be Relatively Stable During Fourth Turnings



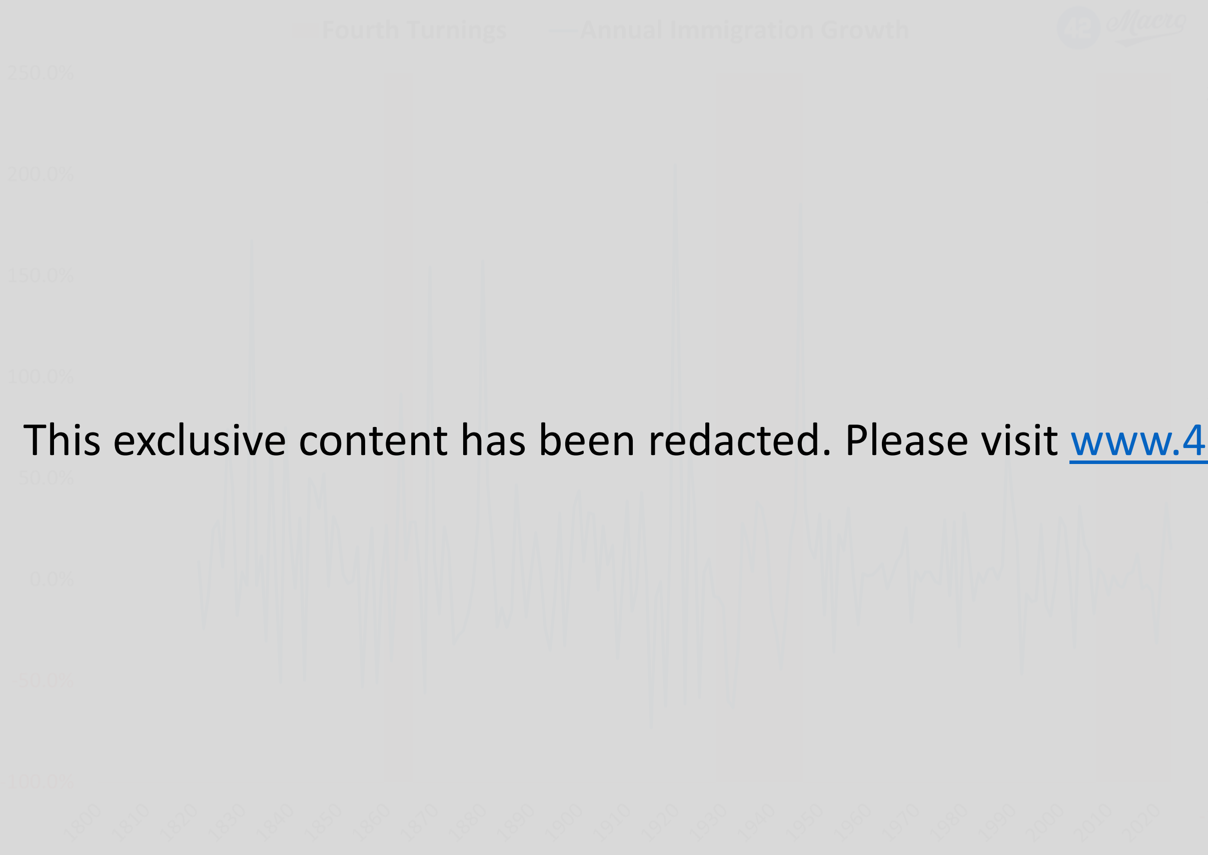
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

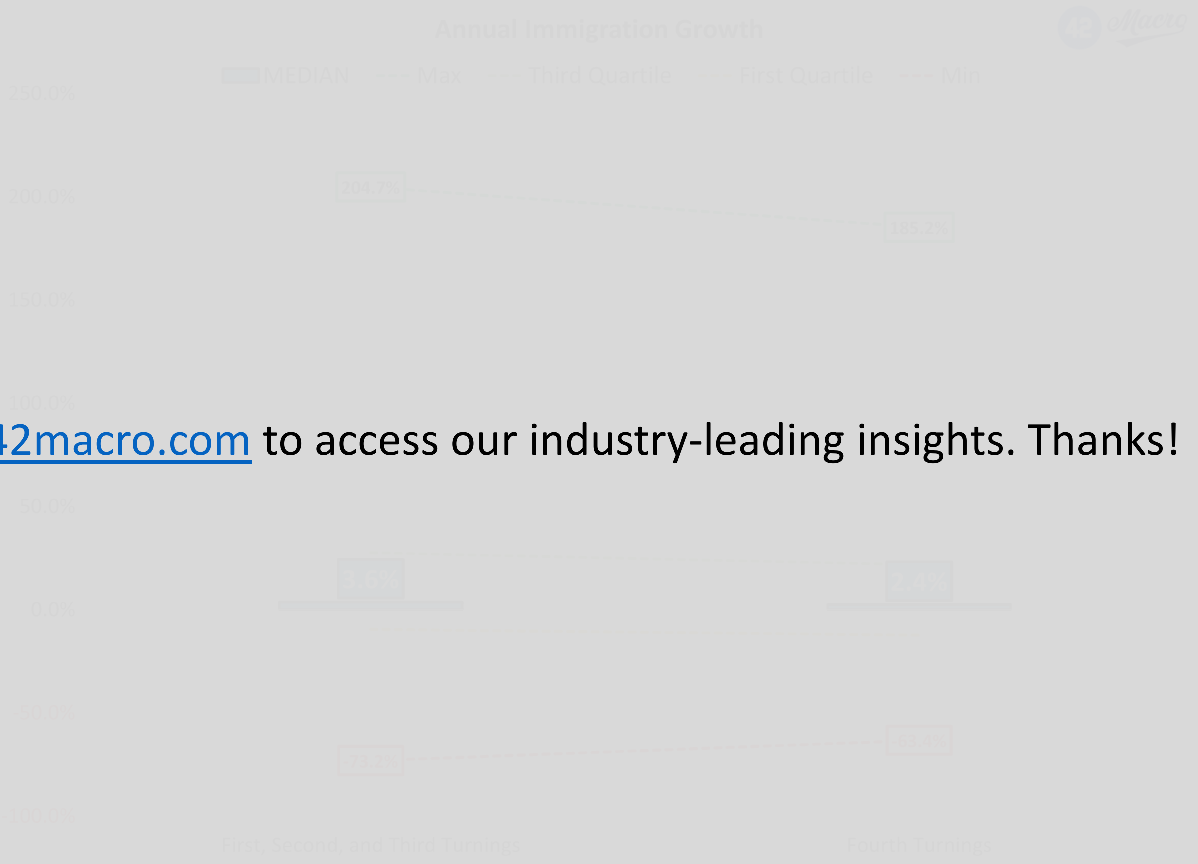
Fertility Rates Tend To Decline Sharply During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Immigration Tends To Be Relatively Weak During Fourth Turnings



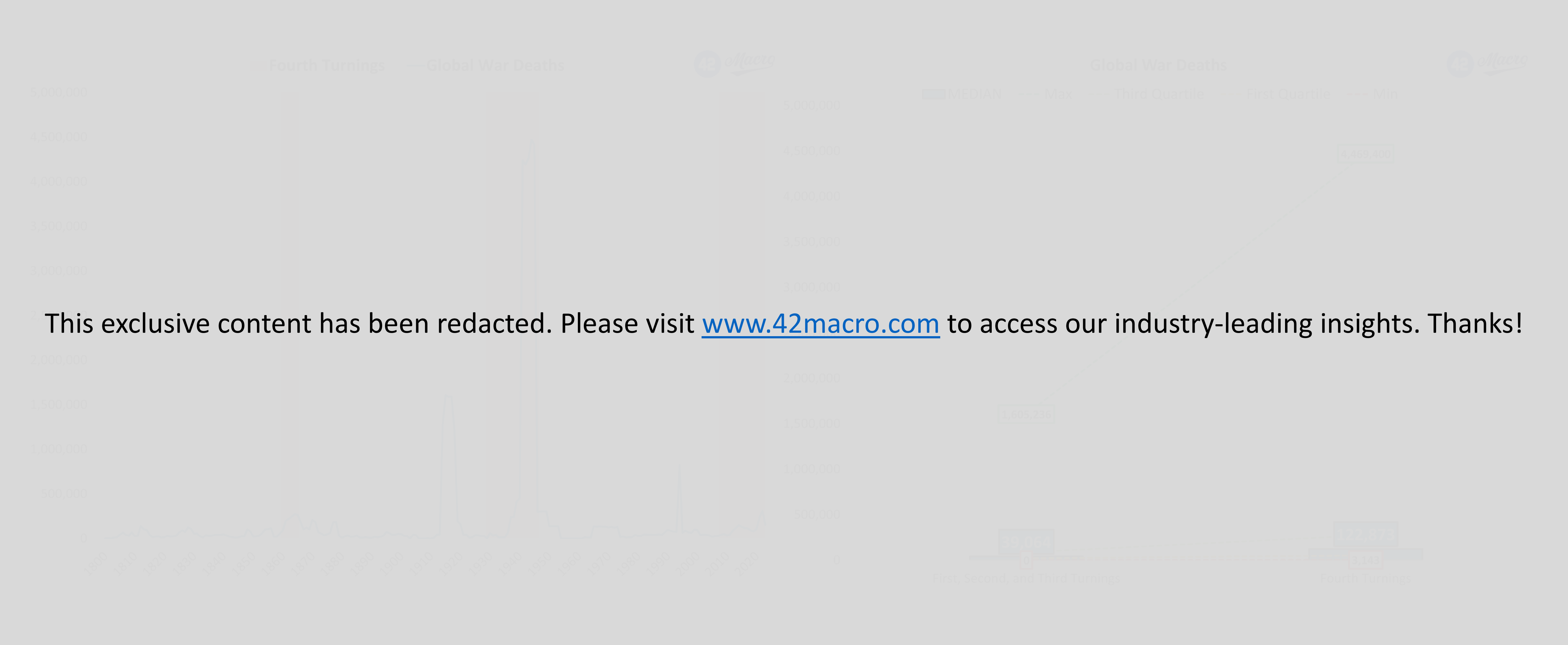


This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Trade Tends To Decline Sharply During Fourth Turnings

This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Wars Tend To Accelerate Globally During Fourth Turnings



This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Every Fourth Turning In Modern Anglo-American History Has Featured Total War

[redacted]

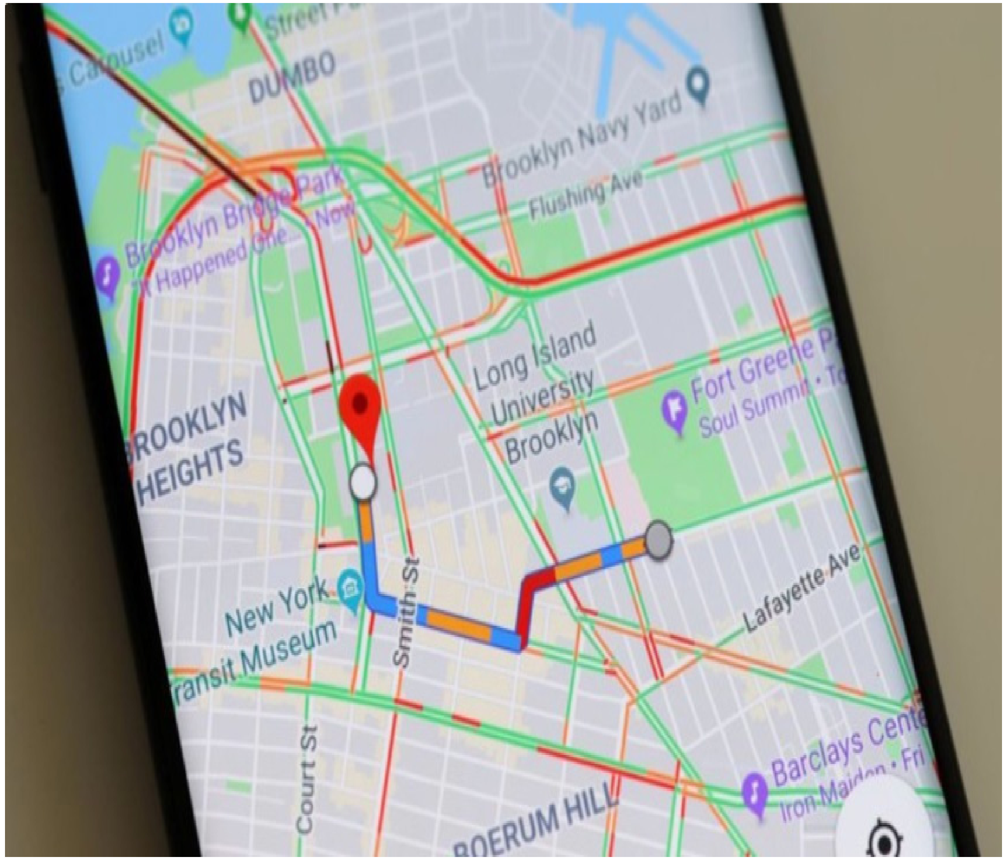
This exclusive content has been redacted. Please visit www.42macro.com to access our industry-leading insights. Thanks!

Appendix: Overcoming Behavioral Heuristics

The 42 Macro Risk Management Process Is Orthogonal And Likely Additive To What You Already Do

How Investors Generally Manage Risk:
Responding To Failed Predictions

How 42 Macro Manages Risk:
Responding To Bayesian Observations



 Investors broadly failed to predict the most important catalyst of each of the past five years:
2019: COVID-19 in 2020; **2020:** vaccine-and-stimulus-fueled jump condition from COVID to a booming economy in 2021;
2021: jump condition to a ~40yr high in inflation in 2022; **2022:** jump condition from a technical recession to a booming US economy in 2023; and
2023: jump condition from a deflationary regional banking crisis and a ~40yr high in the Fed Funds Rate to a boom in asset markets in 2024.

Why The 42 Macro Risk Management Process 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

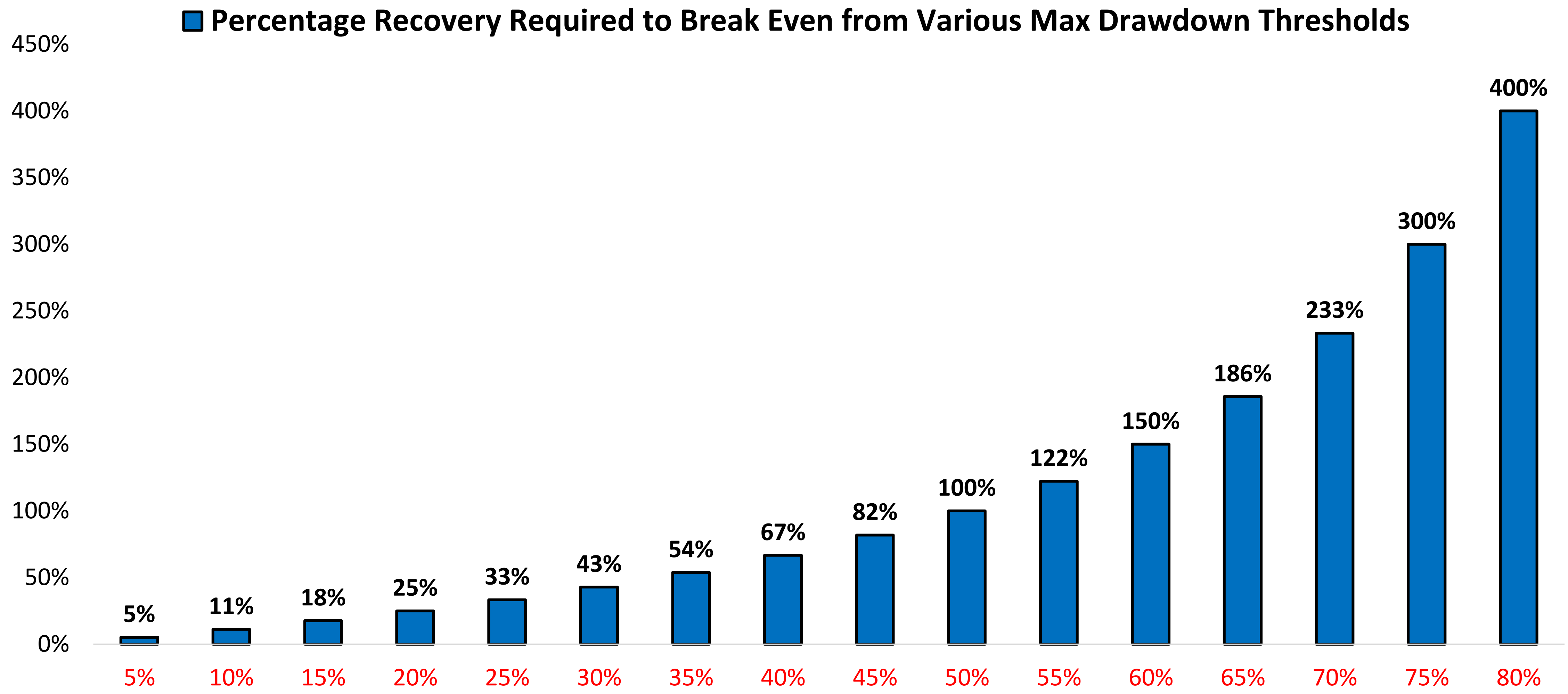
Common Behavioral Heuristics That Prevent Investors From Achieving Their Strategic Investment Objectives, Part I

- **Action Bias:** The action bias describes our tendency to favor action over inaction. Source: https://thedecisionlab.com/biases/action-bias
- **42 Macro Solution:** Clear risk management signals that communicate DO NOTHING when there is no change in signal and TAKE ACTION only when the signal changes.
- **Availability Heuristic:** The availability heuristic describes our tendency to use information that comes to mind quickly and easily when making decisions about the future. Source: https://thedecisionlab.com/biases/availability-heuristic
- **42 Macro Solution:** Our Quantitative Risk Management Summary and Fundamental Research Summary, each refreshed daily.
- **Confirmation Bias:** The confirmation bias describes our underlying tendency to notice, focus on, and give greater credence to evidence that fits with our existing beliefs. Source: https://thedecisionlab.com/biases/confirmation-bias
- **42 Macro Solution:** Consistently performing research on the full distribution of probable economic outcomes, as evidenced by the Modal Outcome, Left Tail Risk, and Right Tail Risk sections of our monthly Macro Scouting Reports, and reviewing every meaningful economic release in our daily Leadoff Morning Note – bullish or bearish.
- **Disposition Effect:** The disposition effect refers to our tendency to prematurely sell assets that have made financial gains, while holding on to assets that are losing money. Source: https://thedecisionlab.com/biases/disposition-effect
- **42 Macro Solution:** The Top-Down and Bottom-Up Risk Management Overlays featured in our KISS Portfolio Construction Process help investors block out countercyclical noise to maximize upside capture in bull markets and minimize downside capture in bear markets.
- **Hindsight Bias:** The hindsight bias describes our tendency to look back at an unpredictable event and think it was easily predictable. Source: https://thedecisionlab.com/biases/hindsight-bias
- **42 Macro Solution:** Consistent and thorough discussions regarding the then-consensus narratives and positioning dynamics of past market cycles, as well as backtesting each of our quantitative risk management signals and econometric models on a rolling out-of-sample basis.
- **Hyperbolic Discounting:** Hyperbolic discounting is our inclination to choose immediate rewards over rewards that come later in the future, even when these immediate rewards are smaller. Source: https://thedecisionlab.com/biases/hyperbolic-discounting
- **42 Macro Solution:** Avoiding frameworks that [often erroneously] attempt to predict every wiggle in the stock market like dealer flows, CTA positioning, etc.
- **Illusion of Explanatory Depth:** The illusion of explanatory depth describes our belief that we understand more about the world than we actually do. Source: https://thedecisionlab.com/biases/the-illusion-of-explanatory-depth
- **42 Macro Solution:** The 10 principal component features in our Macro Weather Model, refreshed daily, remind investors that the narrow scope of oft-esoteric topics being discussed on Twitter/X, TikTok, and other social media platforms are not the only drivers of asset markets.

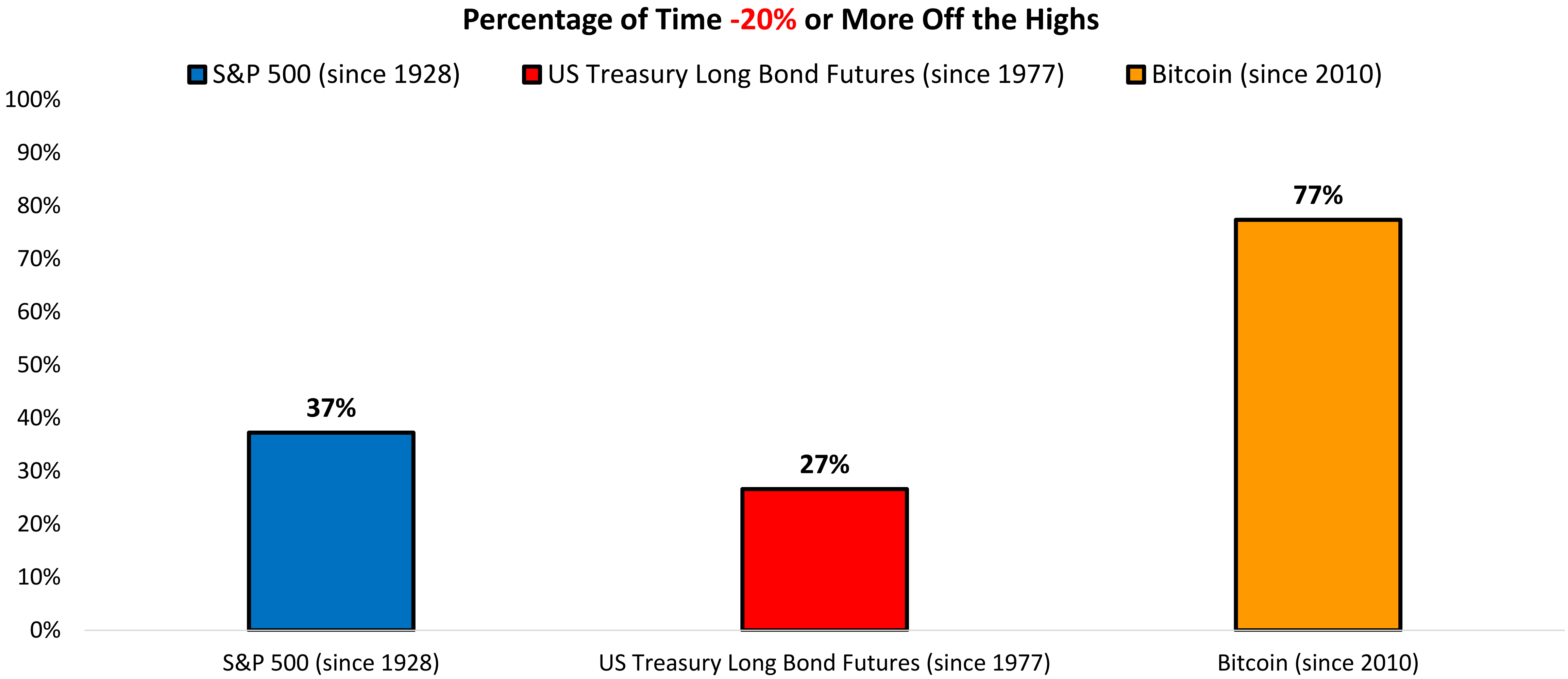
Common Behavioral Heuristics That Prevent Investors From Achieving Their Strategic Investment Objectives, Part II

- **Illusion of Validity:** The illusion of validity is a cognitive bias that describes our tendency to be overconfident in the accuracy of our predictions. Source: https://thedecisionlab.com/biases/illusion-of-validity
- **42 Macro Solution:** An institutional research process that is heavy on observation and light on predictions. When we do make predictions, they are generated by models that apply proven quantitative techniques to time series that span multiple economic and market cycles, while also quantifying and proudly publishing the error rate of each of our econometric models.
- **Negativity Bias:** The negativity bias is a cognitive bias that results in adverse events having a more significant impact on our psychological state than positive events. Source: https://thedecisionlab.com/biases/negativity-bias
- **42 Macro Solution:** Avoiding bear porn at all costs – even to the point of ridiculing it publicly. Asset markets tend to appreciate over time, so our general disposition towards them is "long, until a risk management signal(s) instructs us to book gains".
- **Optimism Bias:** The optimism bias refers to our tendency to overestimate our likelihood of experiencing positive events and underestimate our likelihood of experiencing negative events. Source: https://thedecisionlab.com/biases/optimism-bias
- **42 Macro Solution:** An institutional risk management process that values being the second investor in a confirmed trade more than being first in a trade that may or may not come to fruition.
- **Recency Bias:** The recency bias refers to our tendency to better remember and recall information presented to us most recently, compared to information we encountered earlier. Source: https://thedecisionlab.com/biases/recency-effect
- **42 Macro Solution:** Only making marginal changes to our Fundamental Research Summary when new data builds or erodes our conviction in a theme, rather than making wholesale changes.
- **Salience Bias:** The salience bias describes our tendency to focus on items or information that are more noteworthy while ignoring those that do not grab our attention. Source: https://thedecisionlab.com/biases/salience-bias
- **42 Macro Solution:** Consistently performing research on the full distribution of probable economic outcomes, as evidenced by the Modal Outcome, Left Tail Risk, and Right Tail Risk sections of our monthly Macro Scouting Reports, and reviewing every meaningful economic release in our daily Leadoff Morning Note – bullish or bearish.
- **Sunk Cost Fallacy:** The sunk cost fallacy is our tendency to follow through on something that we've already invested heavily in (be it time, money, effort, emotional energy, etc.), even when giving up is clearly a better idea. Source: https://thedecisionlab.com/dailybiases/the-sunk-cost-fallacy
- **42 Macro Solution:** Proven risk management signals that help investors dispassionately book small losses before they turn into big losses.
- **Zero Risk Bias:** Zero risk bias relates to our preference for absolute certainty. Source: https://thedecisionlab.com/biases/zero-risk-bias
- **42 Macro Solution:** Having enough humility to avoid declarations of certainty and/or extreme confidence regarding our predictions at all cost. No reputable institutional investor speaks with certainty about the future, and you shouldn't either.

The Three Most Important Concepts In Investing: Rule #1 = Don't Lose Money

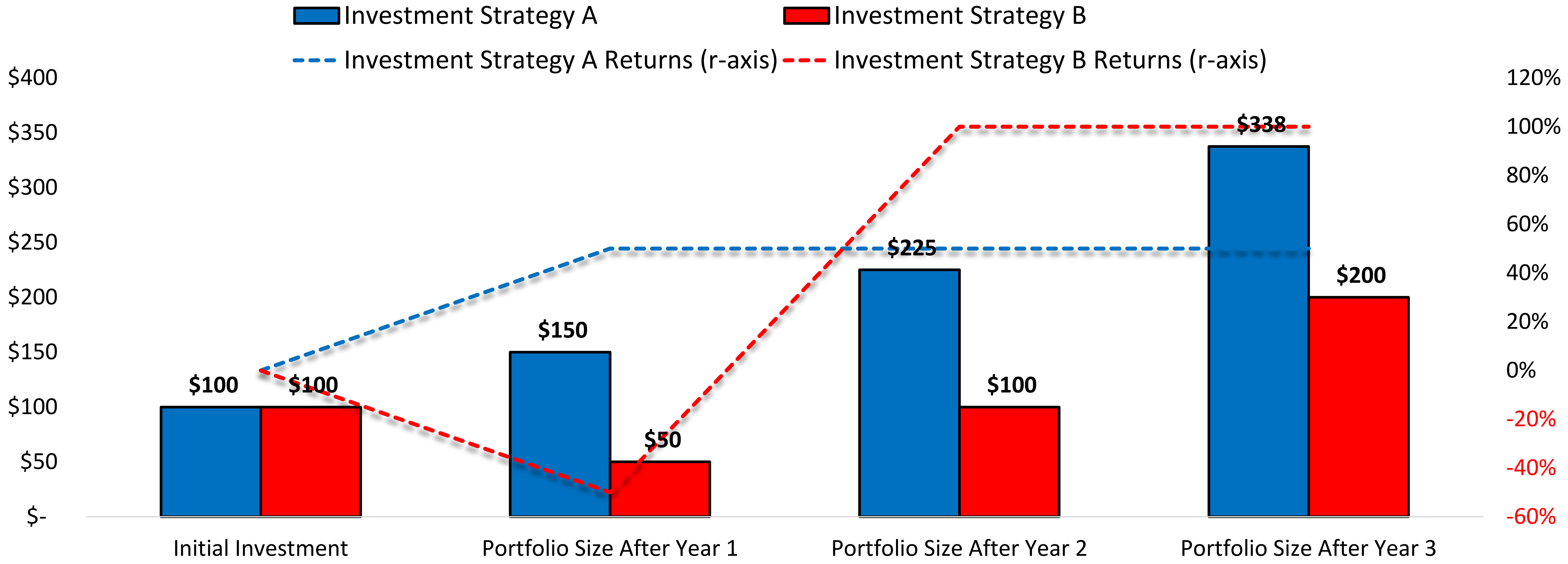


The Three Most Important Concepts In Investing: Rule #2 = Do Not Invest Money You Cannot Afford To Lose



The Three Most Important Concepts In Investing: Rule #3 = The Journey Matters More To Your Financial (And Physical) Health Than The Destination

Both Investment Strategies Feature Identical +50% Average Annual Returns.
Which One Would You Choose?



Thanks for reviewing.
See you next month!

New to 42 Macro research?

Take advantage of the following resources to speed up your learning journey:

The Macro Class:

https://app.42macro.com/macroclass

42 Macro Glossary:

https://app.42macro.com/glossary

KISS Portfolio Construction Process FAQ:

https://app.42macro.com/kiss

Dr. Mo FAQ:

https://app.42macro.com/drmo