Capital Markets Strategy

Essential inCights for the C-Suite

MUFG

The Bear Steepening

Expectations for US Rates in the 2H 2023

AUG 2023

“Blessed are the young, for they shall inherit the national debt.”

Herbert Hoover, 31st President of the United States (1929 – 1933)

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Converging Forces Drive Bear Steepening

10 year UST yields have risen ~50 bps since the July 26 FOMC meeting. This recent bear steepening of the US yield curve, with long end yields breaking above the 4% threshold and the 2s-10s inversion tightening from ~100 bps to ~75 bps, has been driven by a confluence of converging forces.

1. Quarterly Treasury supply increase from $733bn to > $1 trillion
2. Record net long positioning in Treasury futures in late June (became vulnerable to technical weakness as yields rose >4%)
3. Resilient US economic and labor market data (loose fiscal policy delaying impact of monetary policy)
4. Repricing of US inflation expectations

Converging Forces Drive Bear Steepening

10 year UST yields have risen ~50 bps since the July 26 FOMC meeting. This recent bear steepening of the US yield curve, with long end yields breaking above the 4% threshold and the 2s-10s inversion tightening from ~100 bps to ~75 bps, has been driven by a confluence of converging forces.

5. Rising energy prices complicating inflation outlook

6. Hawkish "double" Fed tightening cycle (with QT possibly extending beyond rate cuts)

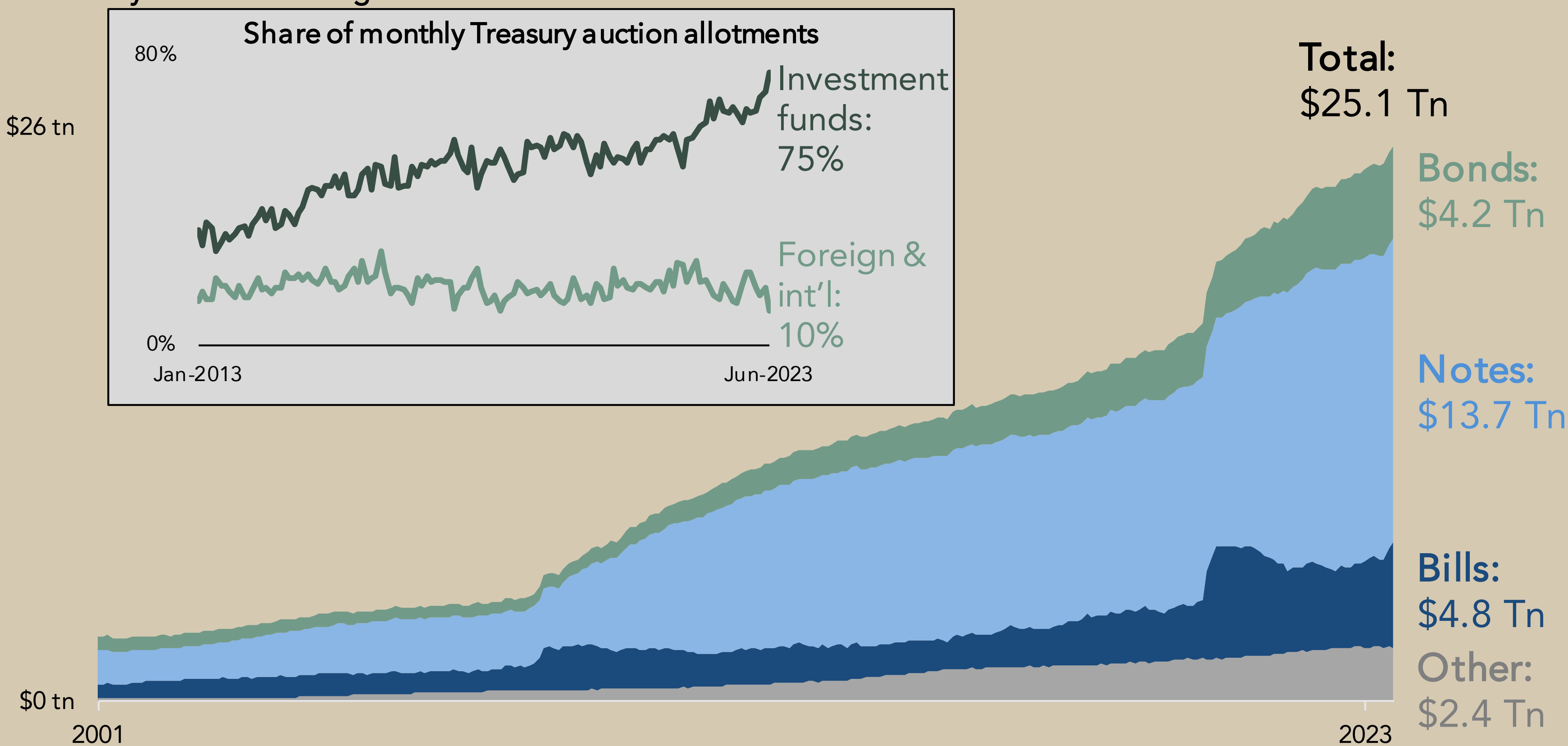
7. Less overseas demand (BoJ YCC policy pivot, China slowdown, US deficits)

8. Unexpected Fitch Ratings downgrade of US debt

Shifts in US Treasury Supply

Following the US debt ceiling resolution in June, US Treasury Secretary Yellen sharply increased near-term forecasts for US debt issuance from $733 bn to $1 trillion. With T-Bills rising since COVID to nearly 20% of the UST market, Treasury is shifting toward increased Notes supply to term out more of its short-dated obligations. As noted by MUFG's George Goncalves, the level of term premium typically increases, and / or the curve steepens, when such supply shifts have occurred historically.

US Treasury debt outstanding



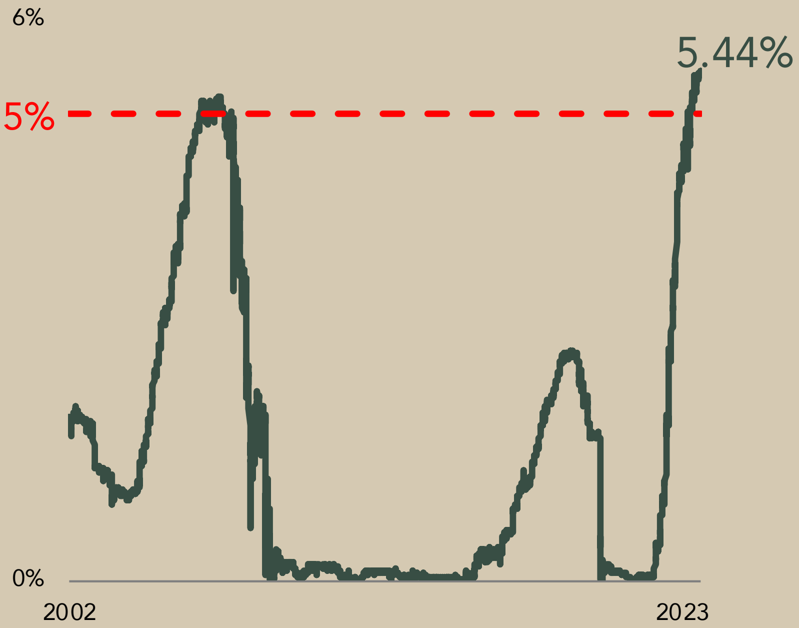
Source: (1) US Treasury. Total marketable debt outstanding. Data available through July 31, 2023. (2) Oxford Economics, "Treasury Auction Size Increases Come with Risks" (August 4, 2023).

Record Net Long Positioning

By the end of June, asset managers had built record net long positioning in US Treasury futures. As resilient US data and heavy supply drove yields above key thresholds (i.e., 10 yr > 4%), the wrong-footed positioning added fuel to the technical weakness magnifying the selloff.

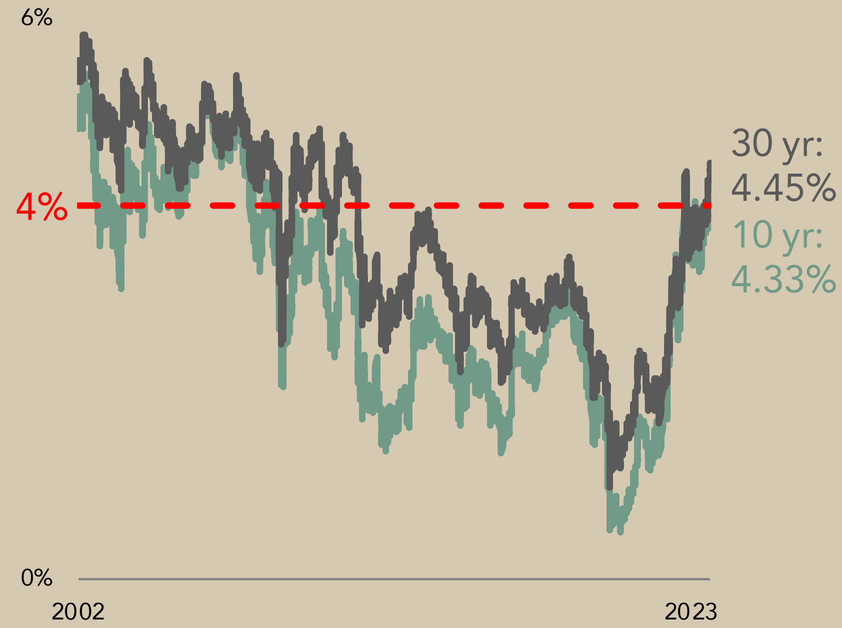
US Front End Yields Highest in 2 Decades

3 month T-bill yield



US Longer End Yields Back Above 4%

10 and 30 year UST yields



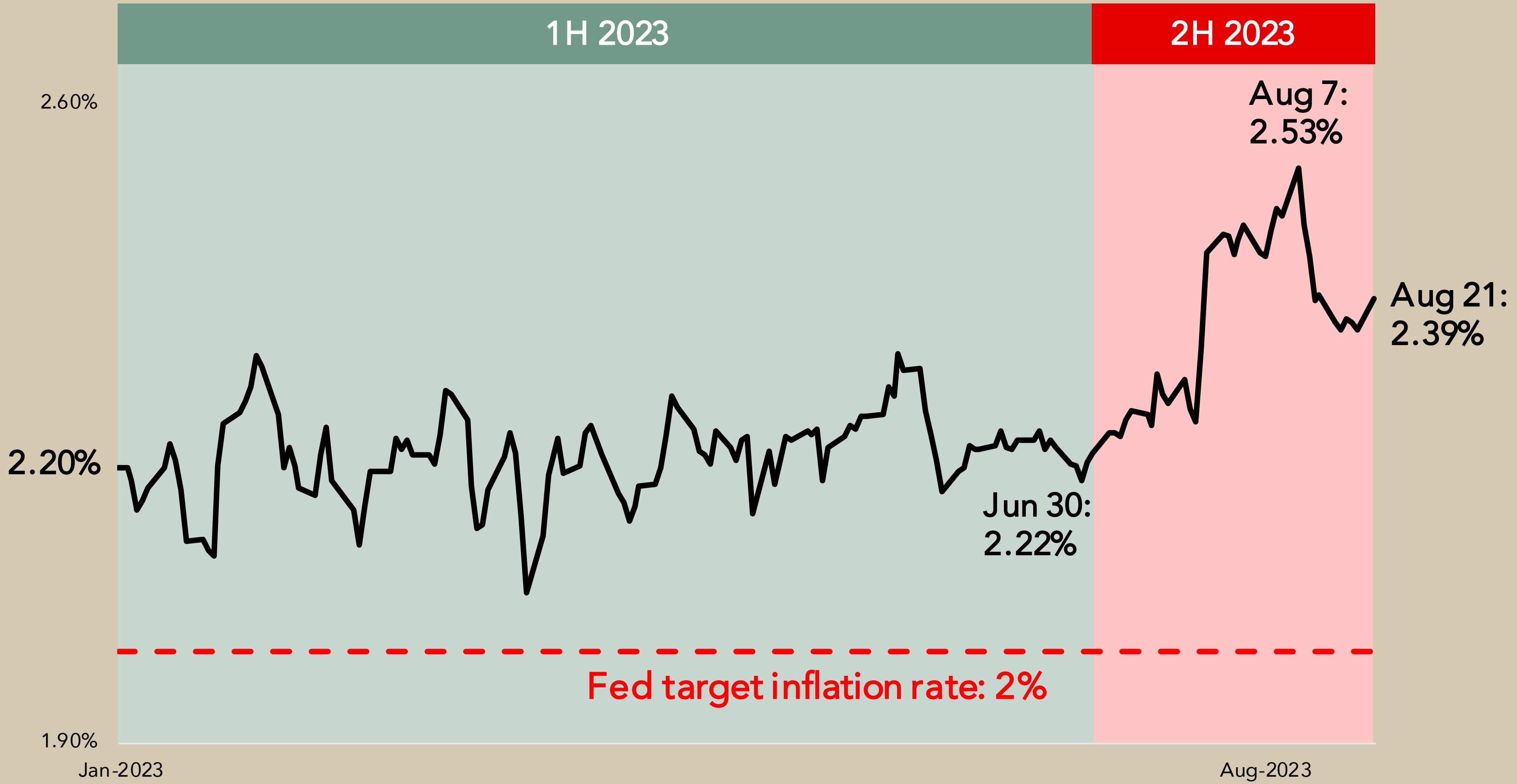
US Treasury yields at both the front and long end of the curve are at post GFC highs.

Source: (1-2) Bloomberg. Data as of August 21, 2023.

Market Repricing US Inflation Expectations

Resilient US economic and labor market data have led to a re-pricing of the market's long-term US inflation expectations over recent weeks

US 5 year, 5 year forward breakeven rate

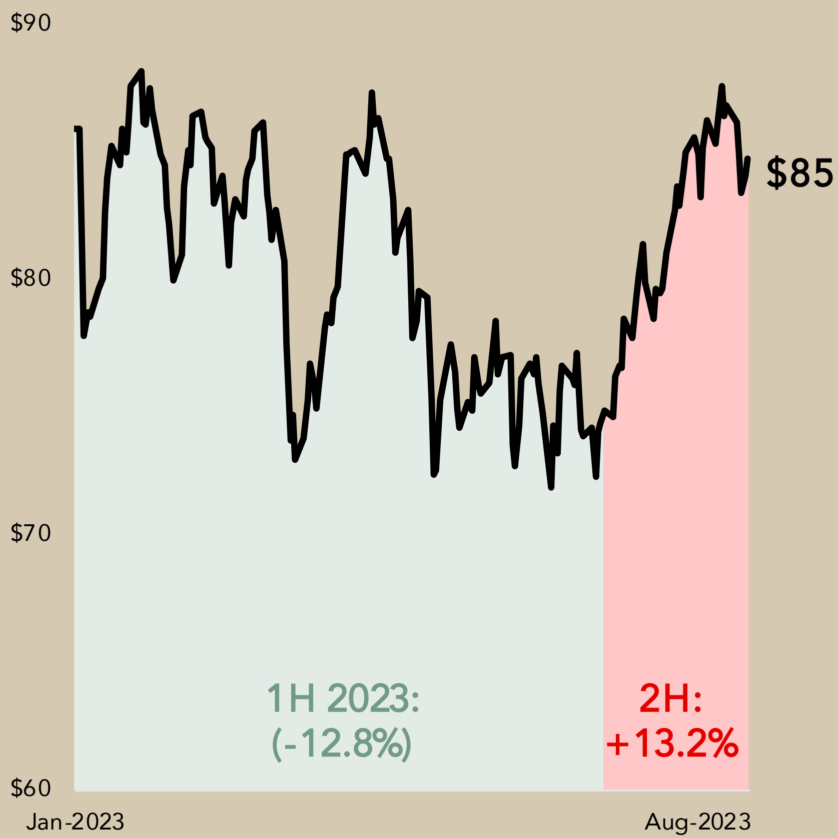


Source: (1) Bloomberg. Data as of August 21, 2023.

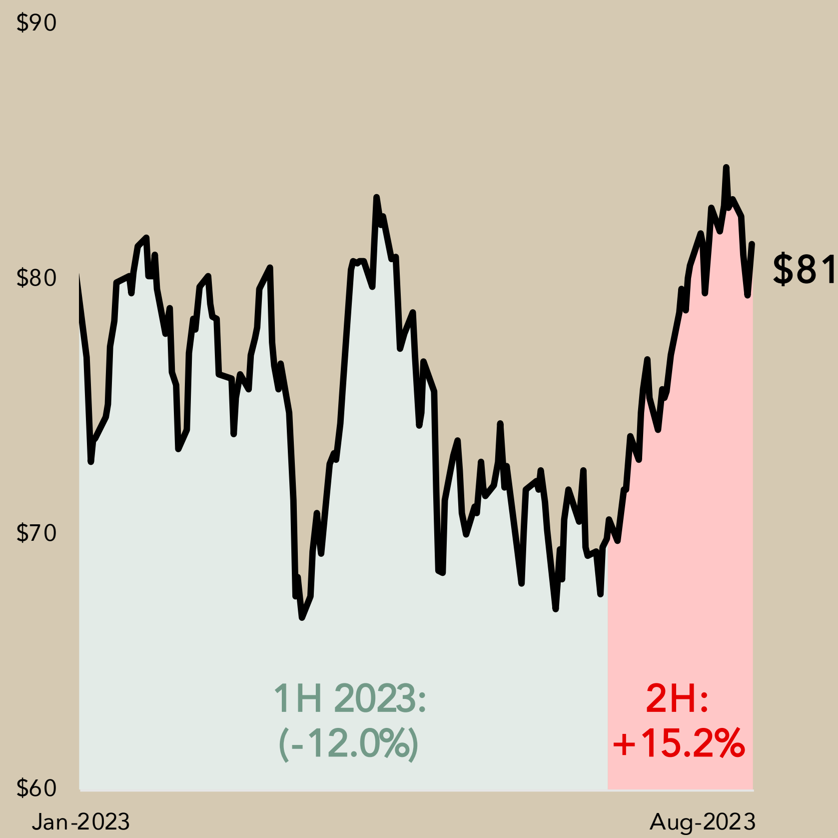
Rising Energy Prices Complicate Inflation Outlook

The sharp rise in oil prices since late June, which accelerated during the record global demand of July, has provided additional weight on the long end of the US Treasury curve by virtue of complicating the outlook for inflation and Fed policy

Brent



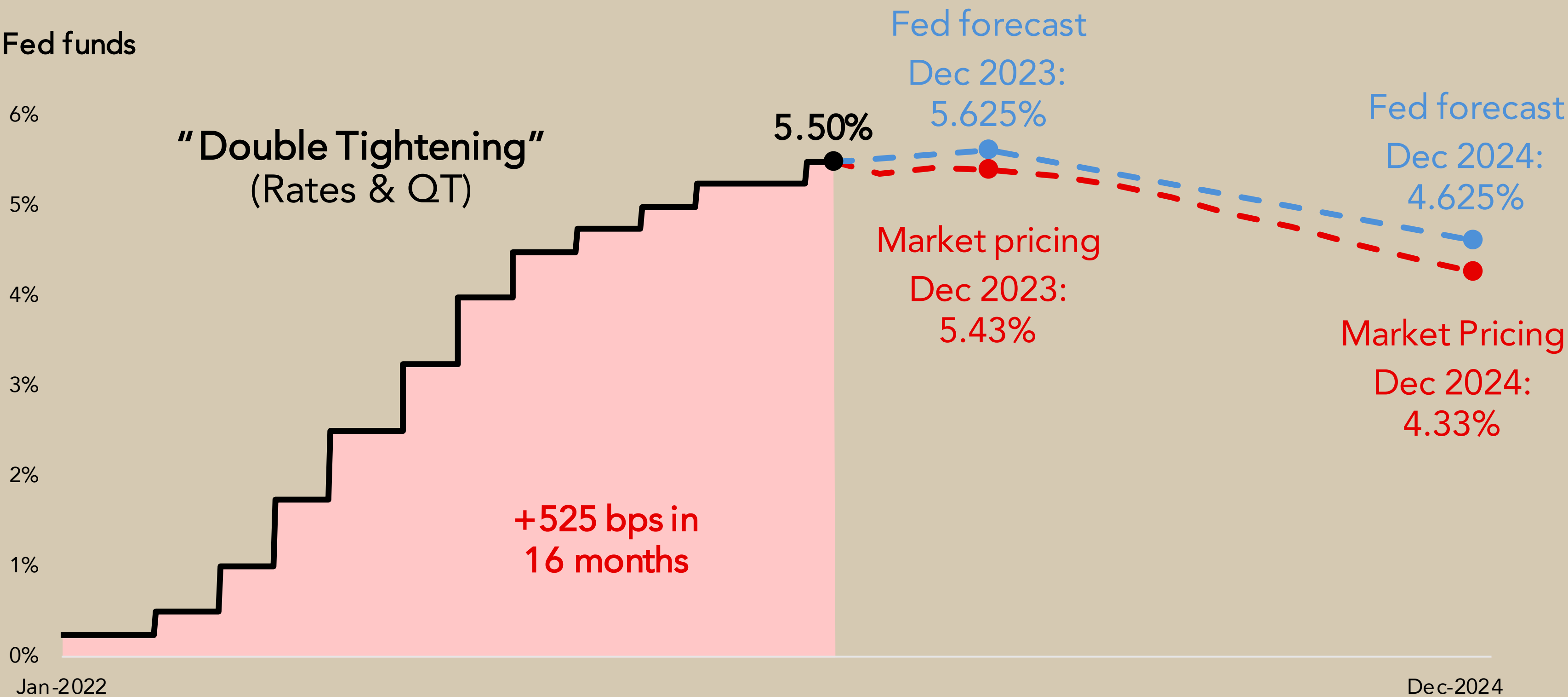
WTI



Source: (1-2) Bloomberg. Data as of August 18, 2023.

Historic & Hawkish Fed Policy Tightening

Hawkish minutes from the July 26 FOMC meeting contributed to "fresh highs" in US Treasury yields. Overall, the Fed has consistently signaled that it will prioritize reducing inflation back to target, even if doing so comes at the expense of the broader economy.



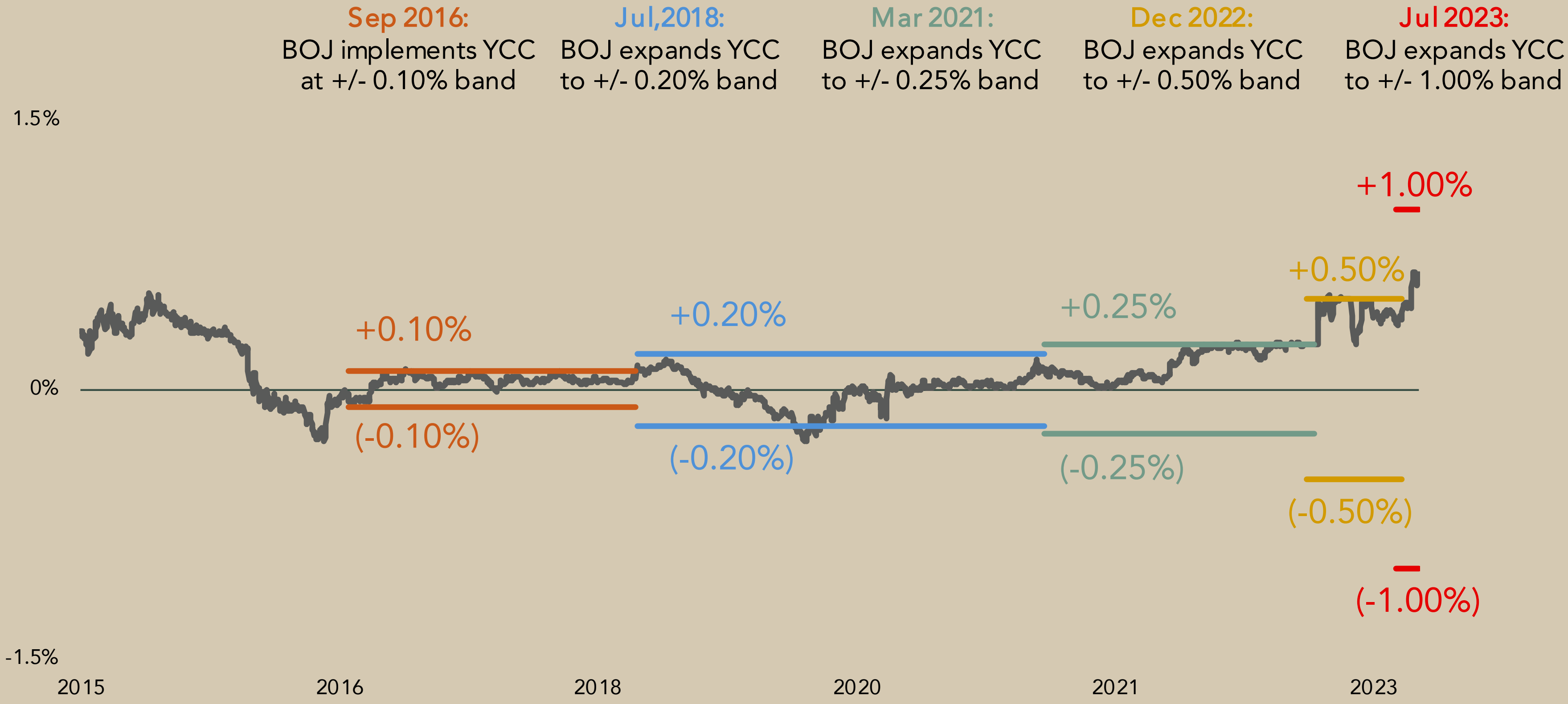
Interestingly, the hawkish July meeting minutes noted that several FOMC participants thought the Fed could continue to reduce the size of its balance sheet even after it begins rate cuts in 2024

Source: (1) Bloomberg. Data as of August 21, 2023. Fed funds is upper bound.

Paradigm Shift in BOJ Policy

In December 2022, the Bank of Japan surprised the market by expanding its YCC operations range from +/- 25 bps to +/- 50 bps. On July 28, 2023, the BoJ again surprised markets by maintaining the official target for the 10yr JGB at 0.50% but allowing "flexibility" up to 1% (the yield at which the BoJ will offer to buy 10-yr JGBs at its consecutive fixed-rate purchase operations). Japan has $3 trillion invested in overseas assets and is the largest holder of US Treasuries ($1.1 trillion in holdings).

Japan 10 year government bond yield



Source: (1) Bloomberg. Data as of August 18, 2023.

Notable Considerations in the BOJ Policy Pivot

According to MUFG's George Goncalves, the belly-to-intermediate part of both Japan's and the US' yield curve are most vulnerable to the BoJ's YCC policy shift.

1. Aimed at addressing the unsustainability of the YCC policy, JGB liquidity concerns, persistent Yen weakness and rising inflation
2. Japan has > $3 trillion invested in overseas global financial markets
3. Japan is the largest holder of US Treasury securities ($1.1 trillion)
4. Even modestly higher Japanese yields encourage repatriation flows back into Japan
5. The BOJ owns ~50% of all JGBs outstanding, the world's 3rd largest government bond market

Implications of Fitch Ratings Downgrade

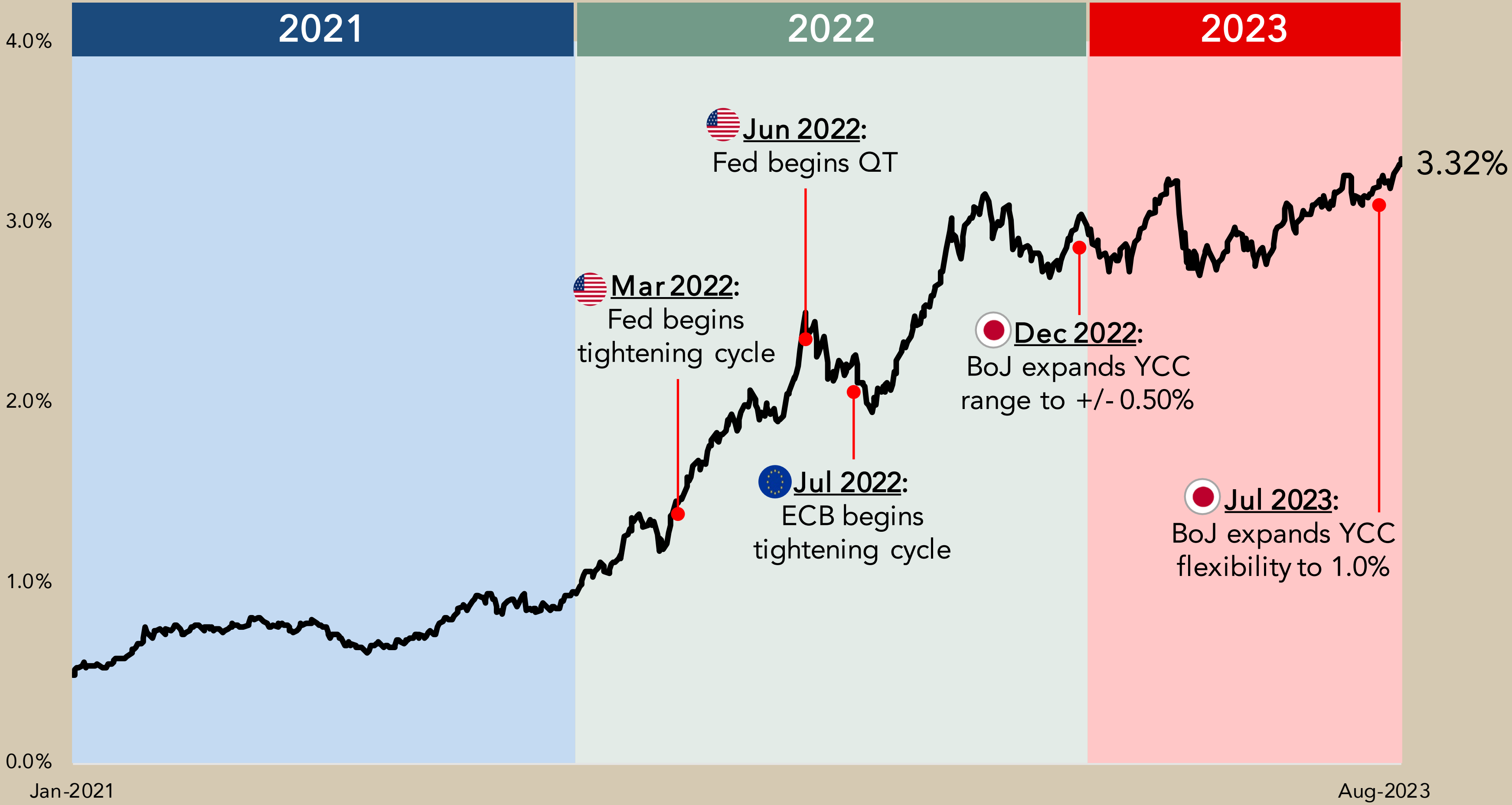
1	Implications of the Fitch downgrade are likely to reverberate more politically than in markets or the economy. Politically, and counter-intuitively, the downgrade may actually increase the probability of a US Gov't shutdown in October as Republicans are now more likely to demand spending cuts in exchange for agreement.
2	The US Dollar's role as "the" global reserve currency is still very much intact following the Fitch downgrade (TINA - there is no alternative). Further, we do not expect a substantive change in global central bank holdings of USTs over the near term.
3	Most asset managers have rewritten their guidelines over the last 12 years, since the S&P downgrade in 2011, and now refer specifically to Treasuries, or US Government debt, and NOT their AAA ratings. We therefore do not anticipate any forced selling of USTs by government-focused mutual funds or money market funds.
4	Regulatory regimes have also been rewritten over the last 12 years to not reference AAA ratings. As such, USTs will continue to have a 0% risk-weighting following the Fitch downgrade for bank capital and liquidity considerations.
5	USTs also play a critical role as collateral in tens of trillions of global derivative contracts. Given that CFTC and CME guidelines only reference Treasuries, and not their ratings, we do not expect any material forced unwinds of repos or derivative contracts, nor margin calls on futures exchanges and clearinghouses.

2
Expectations for US Rates

Global Government Bond Yields at Multi-Year Highs

With rates rising globally, sovereign bonds have returned (-1.2%) YTD, making the asset class the worst performer across Bloomberg's major debt indices in 2023.

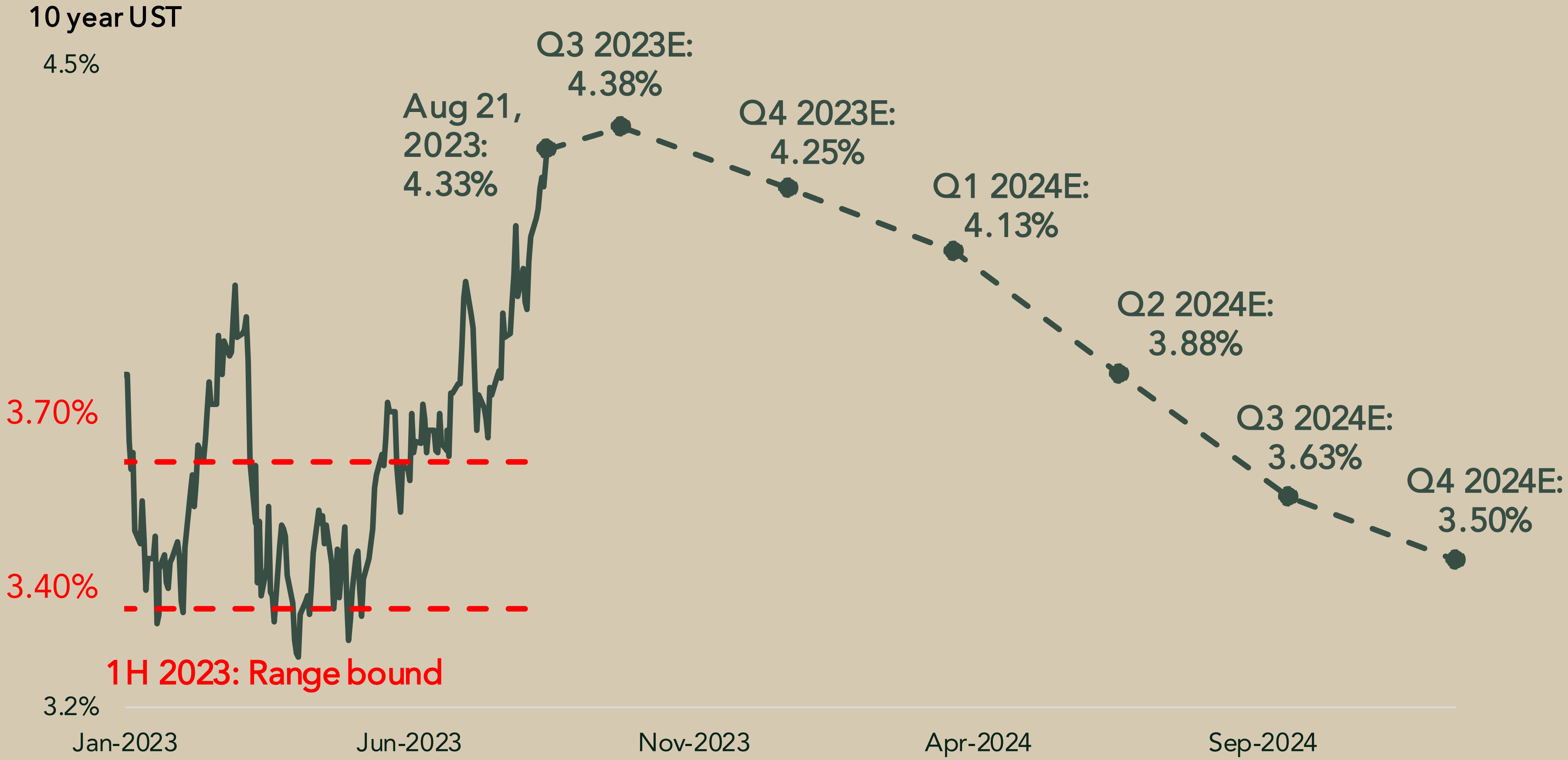
Global government bond index yield



Source: (1) Bloomberg. Data as of August 18, 2023.

MUFG 10 Year UST Yield Outlook

Historically, US Treasury yields typically rally when the Fed tightening cycle is complete. Not this time. MUFG's Head of Macro Strategy, George Goncalves, expects rates to move higher in Q3 before moving progressively lower over the next year.

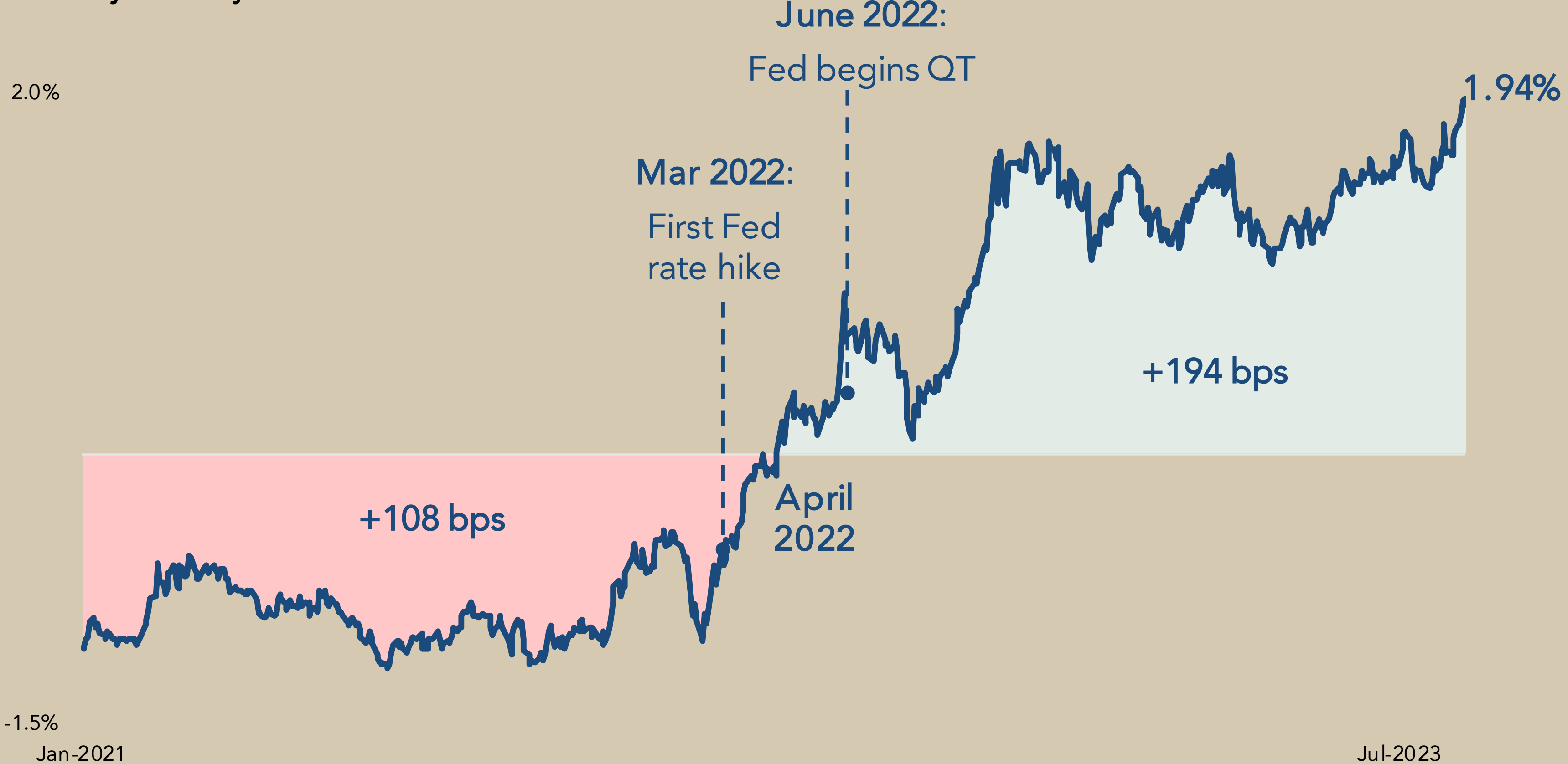


Source: (1) Bloomberg. Data as of August 21, 2023. MUFG Rate Strategy (George Goncalves).

Real Rates Also Marching Higher

Real yields, as measured by TIPS, have also moved considerably higher over recent weeks. Even after the Fed pause, US real rates may remain elevated. With "real" rates likely to remain elevated during a "higher for longer" Fed pause, assessing the impact of "sufficiently restrictive" becomes more challenging.

Real 10 year UST yields

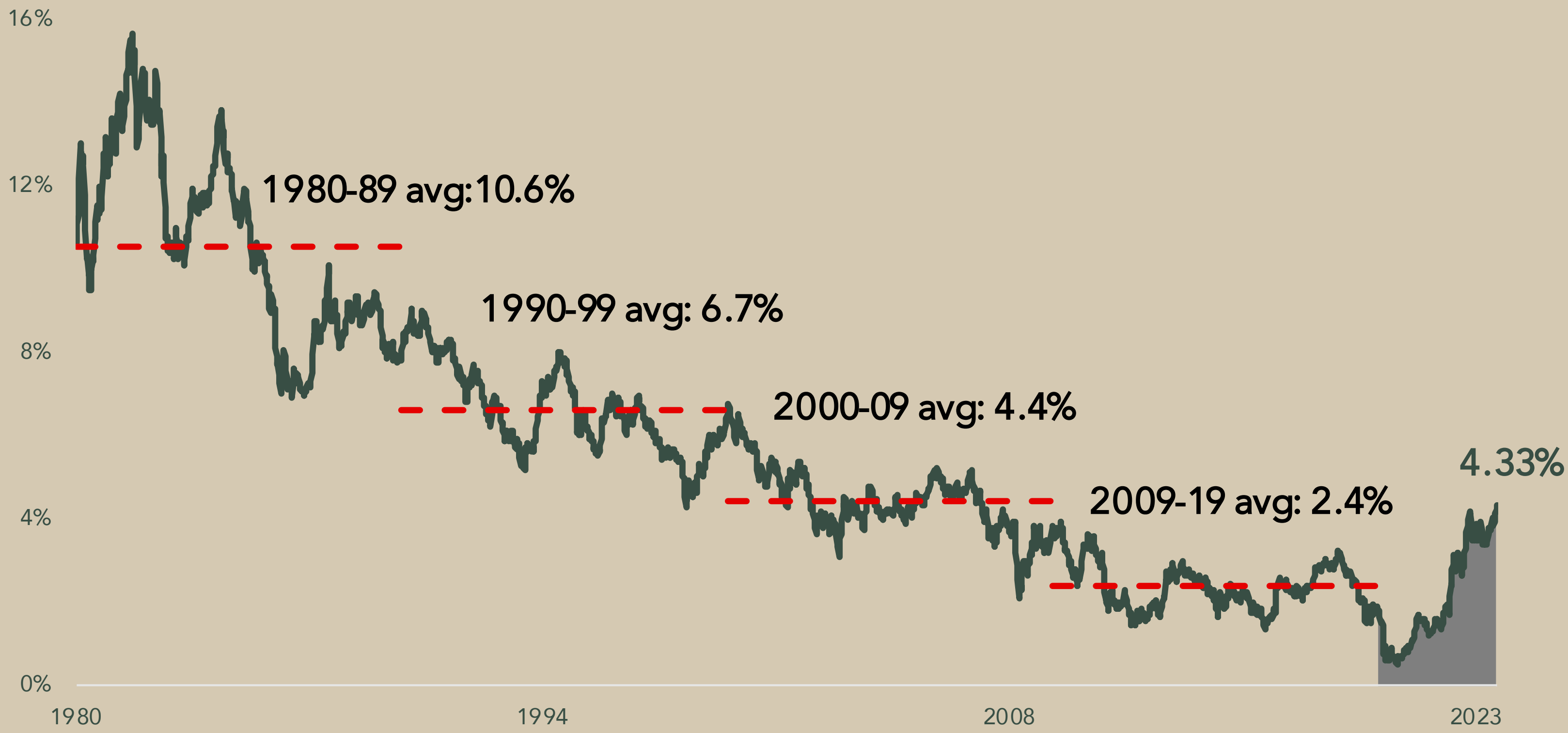


Source: (1) Bloomberg. Data as of August 18, 2023.

Regime Change for Rates?

The 40 year bull market for bonds has ended. So too has the post GFC extraordinary period of Fed zero interest rate policy, or ZIRP (2008-2015, 2020-22), and Europe's negative rates policy regime (2012-2022). Looking ahead, US rates may trade in a modestly higher regime as the neutral rate moves higher on post-COVID inflationary pressures (i.e., restructured supply chains, energy transition, labor shortages), elevated US deficits and marginally lower overseas demand for USTs.

10 year UST

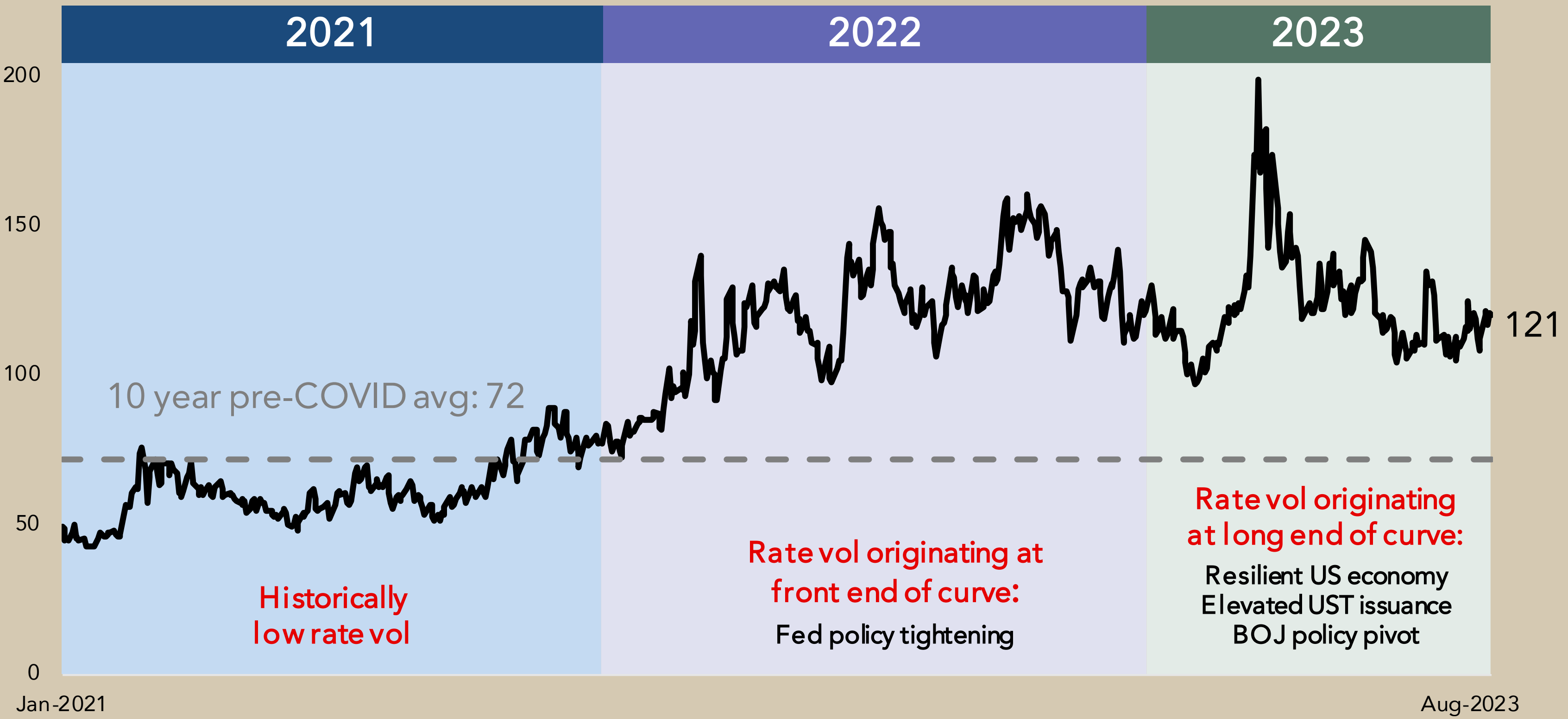


Source: (1) Bloomberg. Data as of August 21, 2023.

Paradigm Shift in Source of US Rate Volatility

US rate volatility remains high; but interestingly, the source of that volatility has shifted. For much of the Fed's tightening cycle, elevated rate vol has originated at the front end of the curve as the Fed increased interest rates at 11 meetings in less than 18 months. Today, however, the prevailing drivers of rate vol are coming from the longer end of the curve as the US Treasury has sharply increased supply, the Fed continues to scale back its balance sheet (QT), and as the BOJ policy shift encourages more repatriation flows back to Japan.

Rate volatility (MOVE index)



Source: (1) Bloomberg. Data as of August 18, 2023.

US Treasury Liquidity Tight vs. Post-GFC Averages

Liquidity in the world's largest bond market has tightened sharply since 2022 as a result of: (i) elevated rate volatility on policy tightening; (ii) Fed QT; (iii) expiry of the temporary exemption for banks on supplemental reserve ratio requirements; and (iv) underperformance of the asset class as rates rise. While liquidity has comparatively eased in the 2H 2023, it remains tight vis-à-vis post GFC averages.

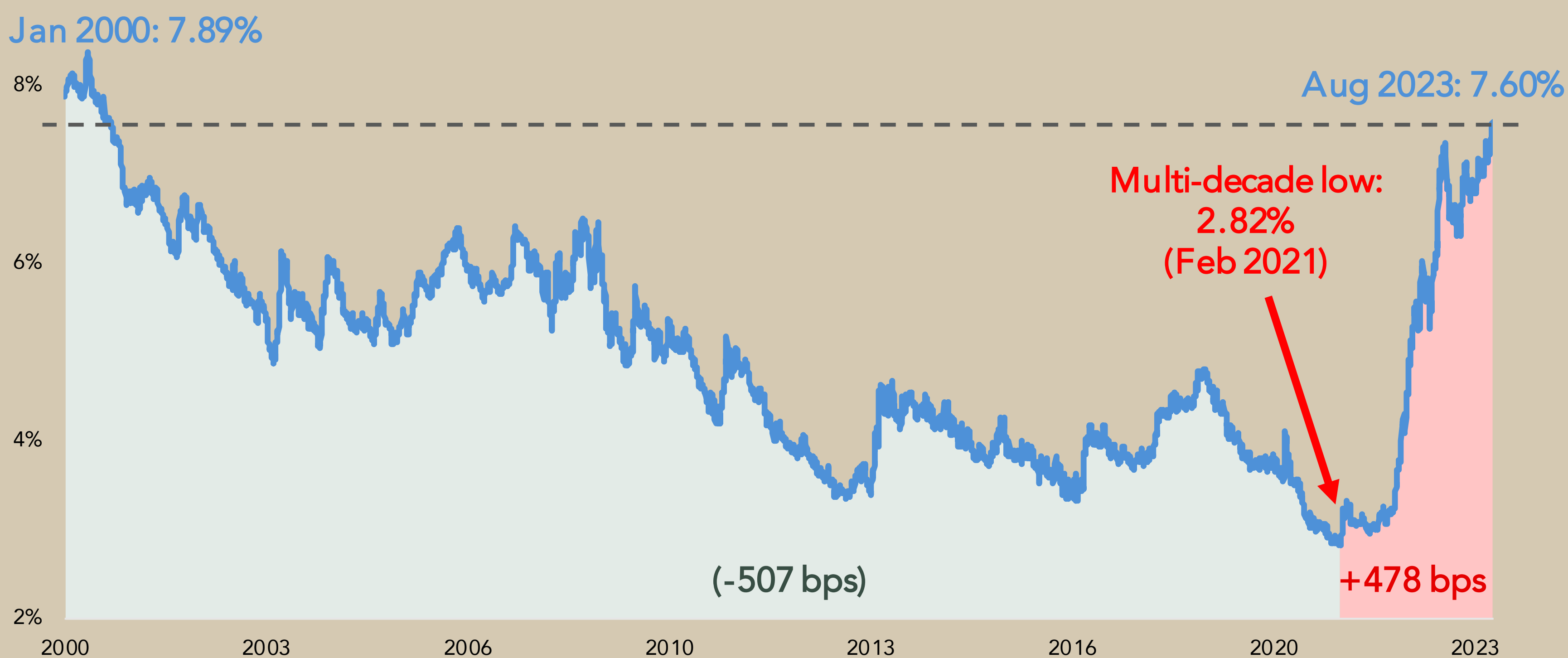
US government securities liquidity index

Source: (1) Bloomberg. Data as of August 18, 2023.

US Mortgage Rates at 23 Year Highs

Historically, US mortgage rates have tended to move more in tandem with the 10 year US Treasury rate than the Fed Funds policy rate. Over the last month, US 30 year fixed mortgage rates surged above 7%, more than 2.5x the level of two years ago, and their highest level in 23 years. Key drivers of the continued increase include a mature Fed tightening cycle, upward pressure on 10 year rates from heavy US Treasury supply, a resilient US economy and a structurally under-supplied US housing market.

US 30 year fixed rate mortgage



Source: (1) Bloomberg. Data as of August 18, 2023. Bankrate.com US home mortgage 30 year fixed national average.

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Role

Tom Joyce is a Managing Director and Capital Markets Strategist within MUFG's global capital markets and investment banking business. Based in New York, Tom heads a team that creates customized analytical content for multi-national S&P 500 companies. His team provides in depth analysis on the impact of economic, political, public policy and regulatory dynamics on the US credit, foreign exchange, rates and commodities markets.

Experience

Tom has over 25 years of Investment Banking experience in New York, London, Hong Kong, and San Francisco. Over the last 15 years, Tom created and built the Capital Markets Strategy role, advising corporate C-Suite executives (Boards, CEOs, CFOs, and Treasurers) on the pervasive macro forces driving markets. Tom also presents at dozens of corporate events each year including Board meetings, CEO ExCo sessions, CFO and Treasury off-sites, corporate leadership events and conferences.

Education

Tom's educational background includes a year of study at Oxford University from 1991 - 1992, a Bachelor of Arts in Political Science from Holy Cross College in 1993, and a MBA from Kellogg Business School, Northwestern University in 2000.

Personal

Tom resides in New Canaan, CT with his wife and four sons, where he serves on the Board of Trustees of the New Canaan Library as well as the Holy Cross College President's Council.

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Role

Hailey Orr is a Managing Director in MUFG's Capital Markets Strategy group within the global capital markets and investment banking business. The team provides market based content for corporate clients to assist in strategic decision making. Focus areas include the impact of economic, political, public policy and regulatory dynamics on the US credit, foreign exchange, rates and commodities markets.

Experience

Hailey has a decade of Wall Street experience, including three years as a Consumer Sector Specialist in Equity Sales and seven years as a Capital Markets Strategist. Hailey is also a member of MUFG's Inclusion & Diversity Council and has devoted years to participating in and developing Wall Street recruiting programs.

Education

Hailey graduated with honors from the University of Michigan's Ross School of Business with a BBA and a minor in International Studies.

Personal

In March 2020, Crain's New York Business Magazine named Hailey one of the "Rising Stars in Banking and Finance".

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Experience

Stephanie has spent over five years as a Capital Markets Strategist. She is an active member of the University of Michigan recruiting team and is focused on the diversity recruiting effort at MUFG. Stephanie is also a part of MUFG's DEI, Culture & Philanthropy (DCP) Council.

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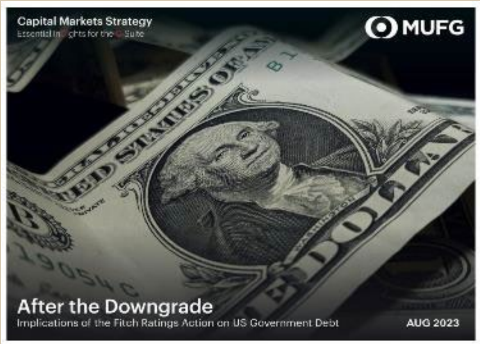
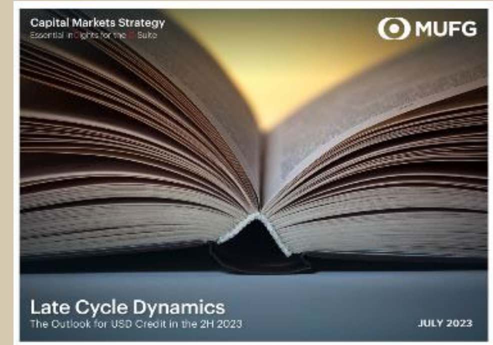
Stephanie graduated with honors from the University of Michigan's Ross School of Business with a BBA .

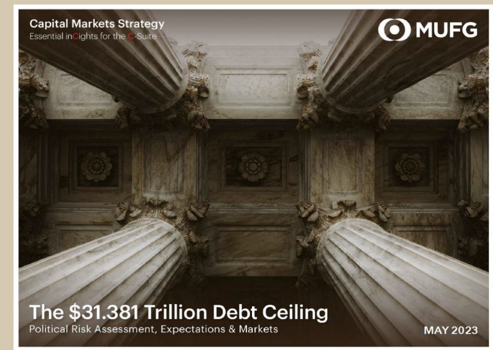
Personal

Stephanie is actively involved in NYC's iMentor program, mentoring high school students with their journey to college graduation.

MUFG's Capital Markets Strategy Team







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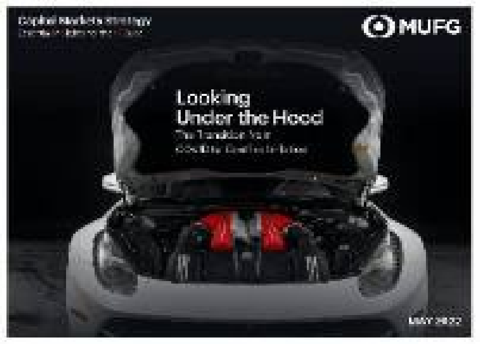

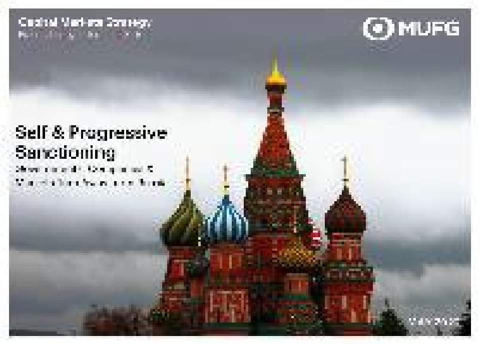

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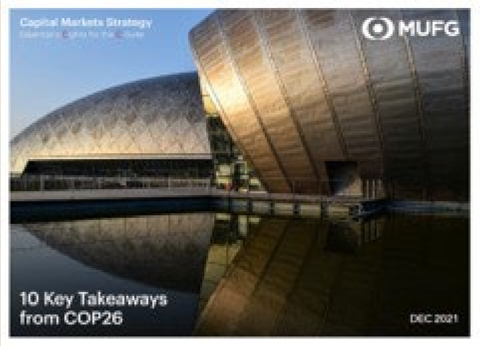

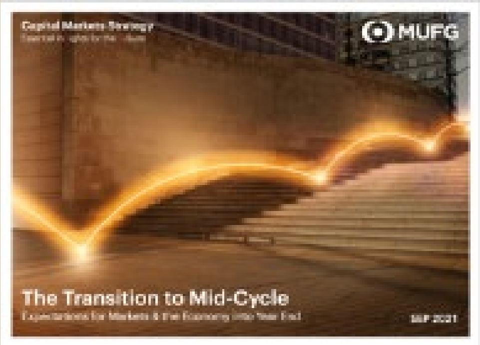

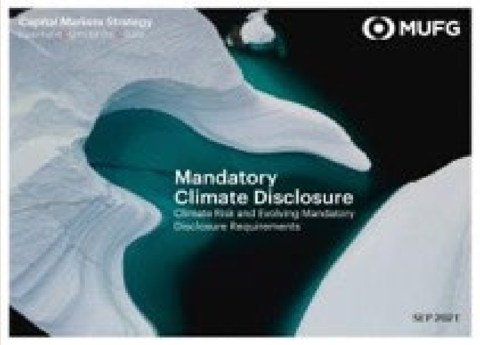

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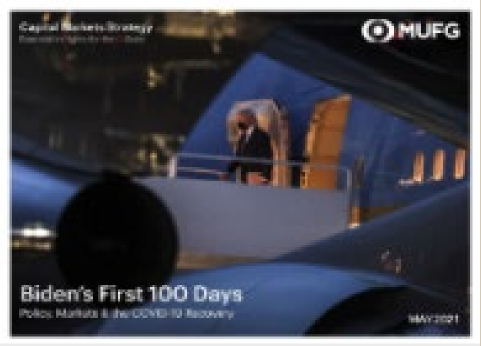

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