Goldman Sachs | Economics Research

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Global Rates Trader

Duration Dynamics Still Daunting

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While the sigh of relief following the bout of global long-end volatility is ongoing, we continue to think it will be challenging for long-dated USTs to richen substantially without clearer growth weakness. Still, the late week price action aligned with our view that the vulnerability on abrupt moves sits more towards the belly of the curve, with the post-NFP response more indicative of positioning and valuations into the print than a shift justified by the incremental news. A muddle-along growth environment can remain a supportive one for carry, and though the removal of Wells Fargo's asset cap and confirmation of Fed Governor Bowman as Vice Chair for Supervision are not a big bang moment for swap spreads, they nonetheless represent incrementally supportive developments. While tariffs and spot developments will continue to dictate the very front-end of the inflation curve, forwards closer to the belly look attractive following recent compression; we recommend switching from long 30y TIPS to long 5y TIPS on a beta-weighted basis to nominals. A somewhat more hawkish ECB cast a little more doubt on the need for further easing, but we continue to think one more cut is yet to come (in September rather than July). Given the ongoing risks to the near-term outlook through upcoming trade negotiations, we think Z5Z7 steepeners paired with HICP longs offer good risk reward. We continue to like front-end longs in the UK given ongoing further signs of inflation progress, and expect that progress also to compress long-end risk premium in Gilts vs UST. Risks to CHF rates over the next two SNB meetings are also skewed to the downside given weak inflation and relentless CHF currency strength.

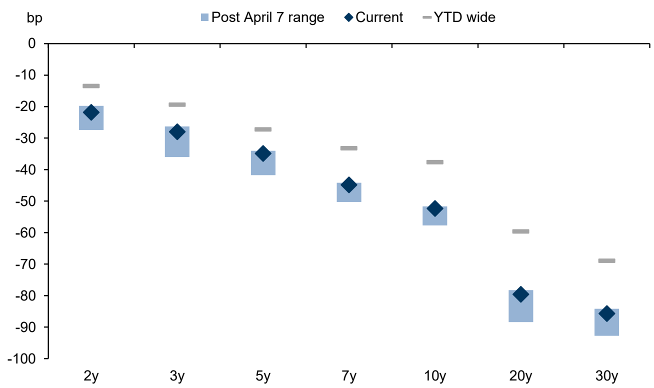
United States and Canada

- **Some chop, but in a similar spot.** The drivers of the long-end rally in the lead-up to Friday's payrolls release reinforced our view that while positive signals around global duration demand can offer some relief, meaningfully lower long-end yields in the US hinge on clear growth weakness in the absence of fiscal restraint. To that end, the mixed bag of a jobs report was not the sort of clearly weak reading needed to pull Fed cuts in, but the magnitude of the resulting US rates selloff seems to be more a function of starting point and market positioning than a shift justified by the incremental news. We would still sooner receive the front-end on any pullback towards our economists' three cut baseline, while fundamentals remain broadly consistent with the sort of muddle along growth picture that can sustain the broader curve shape and be a supportive one for carry for now. But against that, the noted vulnerability of the belly of the curve to any clear shift in sentiment is something we continue to like hedging via belly-cheapening payer expressions.

- **No big bang, but incremental positives for spreads.** The combination of the Wells Fargo asset cap removal and Fed Governor Bowman's confirmation as Vice Chair for Supervision have been in focus as potential tailwinds for US swap spreads, which sit at the wider end of their post-Liberation Day range (Exhibit 1). The Wells Fargo news in theory creates additional room for securities demand—our banks analysts estimate it opens up $325bn in balance sheet capacity. However, any demand tailwind to Treasuries is likely to be somewhat slow moving if it comes via organic deposit growth, while it is not clear that faster growth due to competing for deposits that currently sit with other banks would be beneficial for USTs. Importantly, relative to the universe of large commercial banks, Wells Fargo's holdings of Treasury and agency securities tilts far more heavily towards MBS than average; to the extent that persists, it could imply a negative substitution effect if deposit growth at Wells Fargo comes at the expense of deposits elsewhere in the system. Instead, we think the clearer channel of support for the rates market is the scope for additional repo and intermediation capacity; while it may not necessarily equate to lower funding costs immediately, the additional capacity should help to reduce funding tails as system-wide liquidity approaches less abundant levels and/or demand for leverage increases.

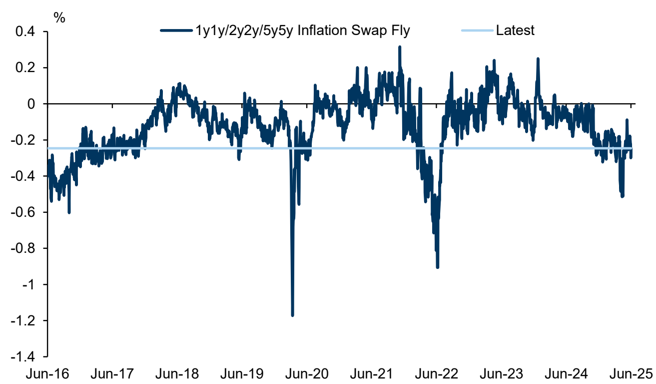
  Meanwhile, Governor Bowman's confirmation represents a step towards getting some clarity on the path ahead for potential changes to the SLR calculation and other bank capital rules, which could sustain a broader reduction in frictions and tail risks facing Treasury funding and market function, supporting spreads in the process. A potential drag is Section 899, which looms as a source of uncertainty that could pose an additional cost for foreign banks' US operations, though we continue to think the more direct effects onto Treasuries should be limited. On balance we think the developments this week are favorable for spreads, if not impulses to a sharp widening; we continue to like longs from a carry perspective and maintain our 3y spread widening recommendation.

Exhibit 1: Spreads have bounced off the April lows, but remain tighter than seen earlier in the year when deregulation expectations were more elevated
Matched maturity SOFR-UST swap spreads



Source: Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Exhibit 2: Belly inflation forwards have led the compression in recent weeks, and now trade on the lower end of the range in recent years outside of periods of recessionary fears



Source: Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

- **Compression in belly inflation appears overdone.** Inflation pricing has broadly compressed over the past couple of weeks, with front-end and belly forwards leading the decline. While diminished tariff risks may explain part of the move, the compression in belly forwards has been notable in the context of improving risk sentiment and relatively stable long-end inflation pricing. One interpretation is that the market has become more relaxed about the underlying trend in inflation. But even so, we note that belly forwards have underperformed their typical beta to both oil prices and risk assets despite starting on the cheap side of fair value. We think that leaves relatively little room for further compression, especially if softer underlying inflation provides an easier path towards Fed cuts. With upcoming inflation prints likely to be clouded by tariff impacts, we think the recent compression in belly inflation could take a breather. We switch our recommendation of long 30y TIPS on a beta-weighted basis to nominals into the belly of the curve (for a potential profit of 4bp), and recommend going long 5y TIPS on a beta-weighted basis to nominals (long 1x 5y TIPS vs short 0.7x 5y nominals; entry: -1.13; target: -1.3; stop: -1.05). One risk to this view would be supply-driven oil price shocks, although we would expect such an outcome to have a greater bearing on the front-end of the inflation curve, with belly forwards more insulated given the offset from easier Fed policy.
- **Data to dictate the BoC's next step.** A more hawkish than expected BoC hold suggested a higher bar to additional rate cuts, indicating a more clearly data-dependent stance. Our receive July BoC meeting OIS recommendation hit its stop ahead of Friday's jobs report, which was just firm enough to prompt our economists to remove a cut from their baseline. They now expect one more rate cut to a 2.5% terminal rate in October, though timing is uncertain insofar as the data dependent approach leaves timing at the whim of volatile spot data. Given the relatively flat forward curve beyond the first year and a high bar to a genuinely hawkish shift that would warrant further flattening pressure, we still see some appeal in steepeners (e.g. 2s5s). However, giving timing uncertainty and the risk of a sustained hold we think there is value to overlaying steepening exposure with paid

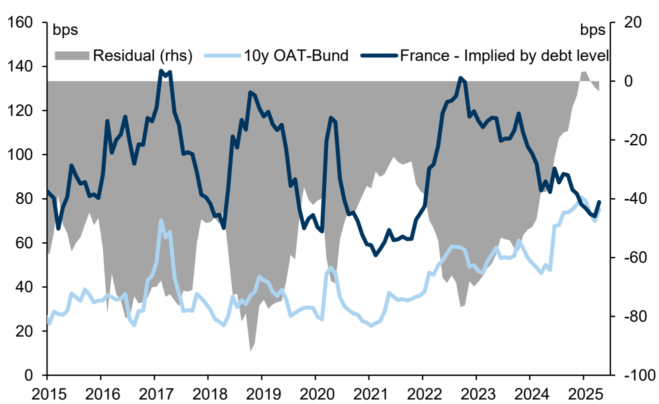
positions in the front-end of the curve (e.g. September meeting OIS, which prices about 75% of a cut).

Europe

- **ECB in a good place, core rates less so.** At last week's ECB meeting, President Lagarde reiterated that policy was well-positioned to deal with risks to both sides of the inflation mandate, suggesting little urgency to cut further and catalysing a hawkish repricing across the curve. Our economists continue to think that further inflation declines and downside risks to growth resulting from tariffs and trade uncertainty will lead the ECB to cut once more, but we now expect that to be in September rather than July. As a result we continue to like Z5Z7 steepeners as near-term risks still point towards cuts, whereas the skew of risks further into 2026-2027 will be towards better growth and higher inflation vs current pricing. This deserves an upward sloping money market curve, and this bearish view on the rates expectation curve should limit the declines in core yields other than the very front-end.
- **No news is good news for sovereign credit.** Sovereign spreads continue to trade well in Europe. We argue that while the recent tightening makes sense under a supportive policy backdrop, tight valuations and a smaller carry cushion make further sovereign spread compression more difficult. That being said, taken together with our economists' upgraded assessment of debt dynamics in Italy we have tightened our end-25 target for 10y BTP-Bund to 100bp (from 120bp before). Given tight spreads, client interest has picked up on what could disrupt pricing, including in France where PM Bayrou is raising awareness on debt levels ahead of budget negotiations – which should be in full swing from October on. We show that the last couple of years have seen OATs catch-up against the fair value prescribed by the cross-country beta of sovereign spreads to government debt expressed (as a share of GDP – Exhibit 3). Given our economists' forecast for an increase in French debt over time, this likely precludes OAT outperformance vs peers. However, we see scope for OATs to continue to trade on broader Euro area risk, and have maintained our 70bps OAT-Bund target for end-25.
- **HICP too low vs front-end rates in Europe.** The HICP curve prices European inflation to be below target over the next ten years, with front-end pricing notably below the ECB's 2% target. In contrast, front-end pricing has begun to incorporate hike risk through 2027, and this week's ECB meeting (see above) gave a more balanced assessment of inflation risks. We think front-end steepness is justified given the hard data has held up better than expected, and our forecast for a notable boost to growth from the incoming fiscal expansion. But that growth pickup should also limit the degree of decline in inflation – so while we agree that near-term risks from trade and energy prices justify sub-2% pricing of inflation over 2026, we think the risk reward in 2y or 5y HICP longs is attractive. Near-term risks center around a further drop in commodity prices (our breakeven fair value model suggests a beta of ~1bps of 5y HICP per 1€ of Brent) and a larger downward impulse from tariffs and trade uncertainty, for which we like nominal front-end steepeners (Z5Z7) to insulate against near term risks.

- **The EURUSD cross-currency basis in crosscurrents.** In a report this week, we have taken stock of domestic and global drivers of currency bases. Our analysis suggests foreign asset exposures – captured by the Net International Investment Position (NIIP) – combined with frictions in FX markets can help make sense of relative currency bases pricing across the G10. Within this framework, an increasing NIIP and/or increased FX hedging vis-à-vis the US would *all else equal* lead to a lower currency basis. We note that the strength of this relationship can vary through time however, and does not explain the simultaneous rise of the EMU-10 NIIP and shrinking premium to borrow in USD through basis swap markets over the last decade. Instead, we think the unwind of ECB policy measures (namely QE and negative rates) that followed the Euro area crisis is material here, with higher bond yields and bond availability supporting foreign inflows into the Euro area, especially when combined with declining sovereign risk. Going forward, our FX strategists think an erratic US trade policy strengthens the case for FX hedging of US exposures. Likewise, saving-investment dynamics are consistent with increasing Euro area NIIP, though possibly at a lower rate given increased fiscal spending in Germany. We see scope for a higher EURUSD cross-currency basis nonetheless, given our expectation for ECB QT, building portfolio flows to the Euro area and the possibility of lower allocation to the US.

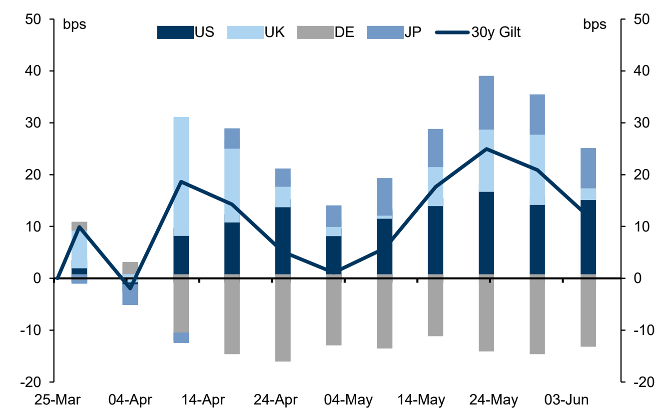
Exhibit 3: OATs have caught up with fair value over recent years



Source: Goldman Sachs Global Investment Research, Goldman Sachs FICC and Equities

Exhibit 4: US spillovers source of higher Gilt yields since tariff concerns increased

30y Gilt decomposition, G4 spillovers



Source: Goldman Sachs Global Investment Research, Goldman Sachs FICC and Equities

- **Beware the spillovers; stay long the front end.** This week saw additional evidence that the UK inflation picture is moderating, with wage growth expectations pointing to a 1pp decline over the next year in the BoE's Decision Maker Panel's survey, and the ONS revising the April inflation print lower following a statistical error. This eases the trade-off for the BoE and increases our confidence in our baseline forecast that the MPC can accelerate the pace of easing in 2H25. We continue to recommend receive Dec MPC into next week's labour market data, given upside surprises are unlikely to see cut risk priced much further out, while evidence of labour market weakness – already visible in alternative data – should pull front-end yields lower. The reduction in inflation risk and increasing policy space should also continue to relieve pressure on yields, and country-specific risk premia specifically. By our G4 yield decomposition framework, we estimate that the excess volatility identified in

UK rates from early April has faded, and that most of the rise in yields since then has been from US and Japanese spillovers (Exhibit 4), but we continue to favour long 10y10y Gilt vs UST, albeit with a tighter stop.

- **SNB rates in the negative place.** CHF 5y rates dipped below 0% last week, as Swiss inflation itself turned negative in May. Governor Tschudin quickly dismissed it as "just one data point", however the strength of the CHF, which has appreciated by 4ppt on a trade-weighted basis since early April, is weighing on manufacturing activity and tradables inflation and strengthens the case for the SNB to cut. Our economists currently expect two more 25bps cuts at the June and September meetings to bring the policy rate to -0.25%, with the risk skewed to faster cuts. Given the potentially stronger FX-effect of negative interest rates, we think that the pricing of 42bp of cuts by September offers reasonable risk reward to receive. Further out the curve, we think faster cuts would help stabilize forward inflation and rate expectations steepen the CHF front-end, akin to the risks we see for the EUR OIS curve.

Australia and New Zealand

- **Soft spot growth raises the risk of RBA front-loading and higher AUD back-end yields.** Australian GDP growth was softer than expected, strengthening our economists' conviction that the RBA will continue to ease rates towards a 3.1% terminal rate over the coming months. While the AUD front-end is well priced for this baseline outcome, the RBA's recent dovish pivot and a more explicit "path of least regret" approach—given trade uncertainty and the absence of any pickup in the leading indicators—suggest some downside risk to terminal rate pricing, potentially towards the RBA's revised guidance on neutral (~2.7%). A stronger dovish pivot—especially if the RBA adopts a view that rates need to move to accommodative territory—has the potential to steepen the back-end of the AUD curve in our view. Although the AUD curve is already somewhat steep vs the US, we think this is justified by the relatively softer growth picture in Australia. That said, the recent richening in 5y5y AUD forwards has taken levels vs the US towards post-pandemic tights, and we note the scope for AUD 5y5y to cheapen on a relative basis either on a dovish pivot by the RBA that supports forward-looking growth outcomes and steepens the AUD curve further, or some temporary relief about term premium risks in the US either from fiscal news or less growth worries. A risk to this view would be a more gradual RBA easing cycle towards current terminal rate pricing that fails to invigorate growth expectations in a more meaningful way.

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Drivers of and Risks to Foreign Demand for USTs — 25 April 2025

Making Sense of the Moves in Treasury Yields — 09 April 2025

The authors would like to thank Loïc Mathys for his contribution to this report. Loïc is an intern in the Markets team.

Summary of Views

	Core Views	Recommendation	Entry Date
Duration	The move lower in US yields has not yet taken the market into clear overshoot territory in our view. We think near-term risks are asymmetric to downside surprises in activity data, with the case for a yield reversal likely a function of time and accrued benign news.	--	--
	The reduced urgency to cut from the ECB has curtailed one path to lower core yields in Europe, but the possibility of a severe tariff outcome on Europe specifically (i.e. 20-50%) means markets are unlikely to fully price out the left tail for now. Beyond the immediate near term we continue to think fiscal policy led by Germany will support a gradually higher level of yields, above 3% in 2026.	--	--
	The improved macro outlook should over time compress risk premia throughout the Gilt curve, and see 10y Gilts rally towards our YE forecast of 4.25%. US spillovers and lower global duration demand present upside risks to yields, but accelerated BoE cuts on the back of inflation normalisation counterbalance them.	*Long 10y10y Gilts vs USTs* *Receive Dec25 BoE Meeting OIS*	16-May-25 30-May-25
	We expect the BOJ normalization cycle to be prolonged, with a medium-term neutral rate of 1.25-1.5%. This should lift yields across the curve, although in the near-term rising US recession risk presents a headwind to this view. Reduction in BOJ's JGB holdings should put most upward pressure on belly yields.	--	--
	Reemerging tariff - and thus, growth - concerns bias yields lower in the near term, as Riksbank is likely to ease further to contain labour market risks. Higher defence spending and hence, issuance, however biases duration higher further out and points to continuing steepening in the SEK curve.	--	--
Curve	While we see a path to steeper curves if growth disappoints more meaningfully, tariff risks will likely constrain the Fed's ability to fully front-load cuts and exert a flattening bias in the near-term. Exposure towards steepeners in a tail scenario makes sense, but in the baseline we think belly richening has greater value, providing insulation against tariffs while maintaining exposure to a lower terminal rate out the curve.	*Buy SFRZ5 96.25 put vs sell 0QZ5 96.25 put*	7-Mar-25
	As the easing cycle is nearing its end, markets have begun pricing in hike risk into the front-end, incorporating a constructive growth outlook, partially based on the expected fiscal expansion, and thus justifying a steeper front-end. We think the likely improvement in growth also justifies a steep curve further out, especially when combined with increasing bond supply.	--	--
	Downside risks to the market-implied path for Bank Rate, which remains 60bps below our economist's baseline, implies steepening risks in 2s10s. However, the improved macro outlook should over time allow investors to price out excessive risk premia at the long end, and we expect the 10s30s Gilt curve to flatten.	--	--
	We see less room for the SEK front-end to outperform in the near-term, as much easing is already priced. As long as the Norges Bank is holding onto their hawkish guidance the NOK curve has no room to steepen much, so we would await the eventual pivot towards growth before engaging again.	--	--
	Growth emphasis by the BoC and persistent slack in the Canadian economy remain consistent with some runway for further cuts, with the option of moving aggressively on softer data. We see scope for the implementation of tariffs to catalyze deeper cuts.	--	--
	The recent global bond selloff has seen 30y JGBs clearly underperforming both its beta to USTs as well as on a relative basis to other curve points. We think there is room for 10s30s JPY curve to unwind some of the recent steepening as liquidity conditions normalize, while any discussion of continued BOJ QT could put further pressure on the belly of the JGB curve.	--	--
Spreads	The dramatic tightening in US swap spreads since April 2nd has taken spreads to levels that generally screen cheap relative to fair value. The combined picture in funding and spread behavior suggests unwinds of levered longs played a role. We see risks as two sided. On the one hand, a more pronounced shift in the buyer mix from price-insensitive investors towards the levered community could drive significant further tightening. On the other hand, a material improvement in the risk picture, or greater visibility into the contours of potential regulatory reform, could provide further support for spreads from here.	*Long 3y SOFR-UST swap spreads*	2-May-25
	We continue to be positive on sovereign credit going into the summer, given the resilience of the asset class in recent months and the possibility of portfolio flows into EGBs, but tight valuations and a smaller carry cushion make further sovereign spread compression more difficult. But in light of the relative political calm and improved debt dynamics in Italy we have upgraded our view on BTPs, and in the absence of political turmoil think OATs can continue to trade on broader Euro Area risk.	--	--
	We expect continued Bund spreads tightening as ECB QT increases the Bund free-float and repo costs drift higher. Though constrained German issuance is a risk, we think it is manageable and unlikely to derail the tightening trend, especially as France and the EU continue to issue heavily.	--	--
	Though Gilt spread tightening has run some way, we think the trend can extend as the BoE remains intent on shrinking its balance sheet, and fiscal policy remains accommodative.	--	--
Vol	A relatively benign macro environment should be conducive for implied vols to reset lower, but trade uncertainty and tariff risks may act as an impediment to how far this reset can go, with increases in trade policy uncertainty generally corresponding to higher vol levels. Implied vols on 10y tails have lagged the rest of the tail curve in the April vol spike, driven by push-pull factors from deeper Fed cuts vs term premium reset.	*Long 3m10y USD payer on 3m 5s10s30s payer fly*	2-May-25
	Curtailed tail-risks have narrowed the range of outcomes for the EUR front end, and gamma has fallen substantially. Given the ongoing risks of tariff related growth scares, and the recent repricing, we view the outlook for gamma as more balanced. News about the German fiscal expansion, which we expect over summer, create near term event risks.	--	--
Money Market	We expect elevated coupon issuance to be absorbed in large part by levered investors, with the resulting leverage demand likely to pressure financing spreads wider. We expect repo rates to continue drifting higher relative to OIS and bill yields.	--	--
	While high frequency measures still point to relatively abundant liquidity, we see the upward trend in overnight repo spreads to IOR as indicative of the system moving from abundant to ample. We expect the Fed to taper QT again in May and end QT in September; the debt limit presents a source of volatility through this process.	--	--
Inflation	Inflation forwards have compressed by more than justified by growth and policy reassessments. Relaxation about growth concerns could see belly forwards reprice higher, from already low valuation levels.	*Long 5y TIPS vs short 0.7x 5y nominal USTs*	6-Jun-25
	With pricing in Europe already below the ECB's target out to the belly of the HICP curve, we see limited scope for a sell-off in inflation swap, although the recent stabilisation in energy prices may pose some modest pressure on breakevens. Instead, we think nominal rates will be pushed lower by the real component of rates, as markets price more ECB support to the economy through rate cuts.	--	--

Source: Goldman Sachs Global Investment Research

Forecasts

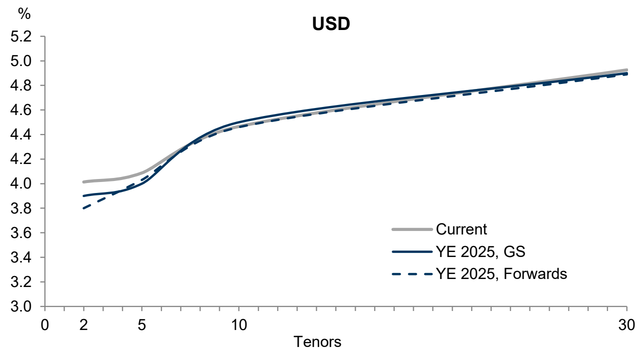
G10 10y yield forecast

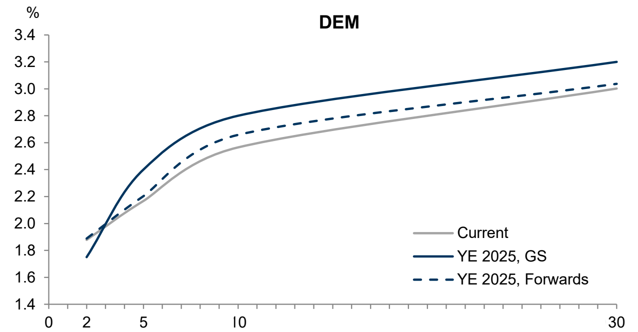
G10 10-Year Yield Forecasts										
	USD	DEM	GBP	JPY	CAD	CHF	SEK	NOK	AUD	NZD
Spot	**4.47**	**2.57**	**4.65**	**1.46**	**3.32**	**0.30**	**2.31**	**4.09**	**4.27**	**4.62**
2Q25	4.50	2.80	4.40	1.60	3.25	0.50	2.75	3.85	4.50	4.70
3Q25	4.50	2.80	4.30	1.70	3.40	0.50	2.75	3.75	4.50	4.70
4Q25	**4.50**	**2.80**	**4.25**	**1.80**	**3.50**	**0.50**	**2.80**	**3.75**	**4.50**	**4.70**
1Q26	4.50	2.90	4.25	1.80	3.50	0.50	2.90	3.75	4.50	4.70
2Q26	4.50	3.00	4.25	1.85	3.50	0.55	3.15	3.75	4.50	4.70
3Q26	4.55	3.15	4.25	1.90	3.60	0.70	3.20	3.75	4.55	4.75
4Q26	**4.55**	**3.25**	**4.25**	**1.90**	**3.70**	**0.75**	**3.25**	**3.75**	**4.55**	**4.75**
1Q27	4.60	3.20	4.25	2.00	3.80	0.80	3.25	3.75	4.60	4.80

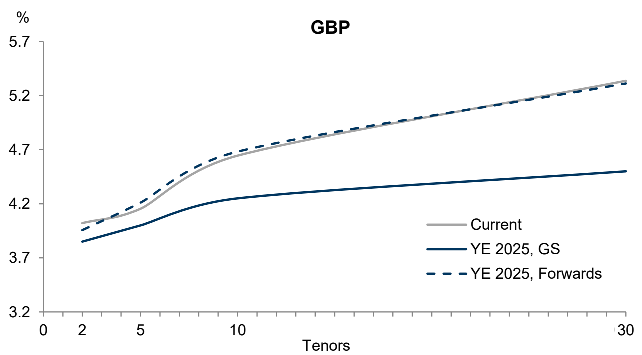
Deviation from Forwards										
	USD	DEM	GBP	JPY	CAD	CHF	SEK	NOK	AUD	NZD
2Q25	0.05	0.22	-0.24	0.12	-0.06	0.25	0.47	-0.22	0.23	0.06
3Q25	0.08	0.18	-0.35	0.14	0.10	0.22	0.44	-0.27	0.21	-0.01
4Q25	0.04	0.14	-0.43	0.18	0.17	0.19	0.46	-0.27	0.16	-0.08
1Q26	0.00	0.20	-0.48	0.13	0.14	0.16	0.53	-0.28	0.11	-0.15
2Q26	-0.05	0.25	-0.52	0.12	0.11	0.19	0.75	-0.29	0.06	-0.22

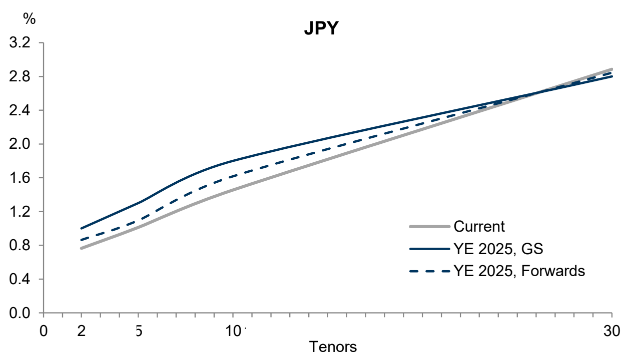
Source: Goldman Sachs Global Investment Research

G4 Curve Forecast





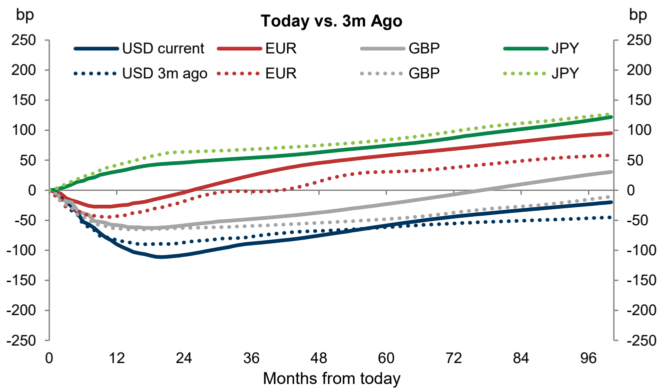




Source: Bloomberg, Goldman Sachs Global Investment Research

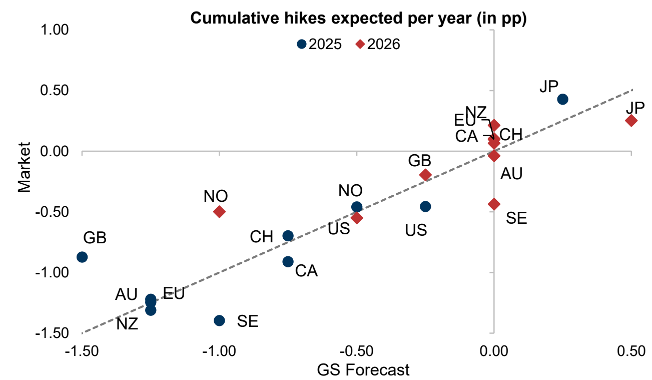
Central Bank Dashboard

Cumulative amount of hikes/cuts priced from today



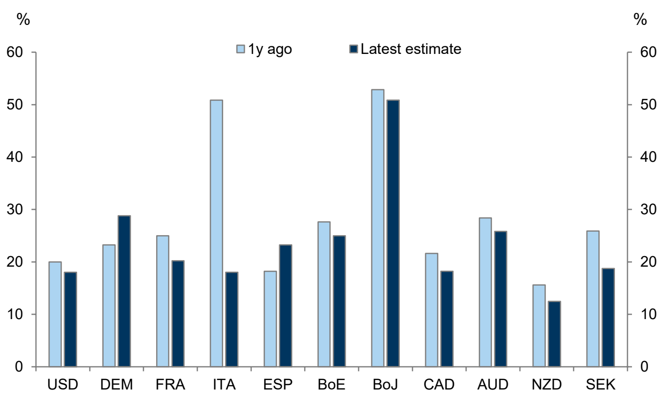
Source: Goldman Sachs Global Investment Research

Expected hikes by year, GS vs. Market



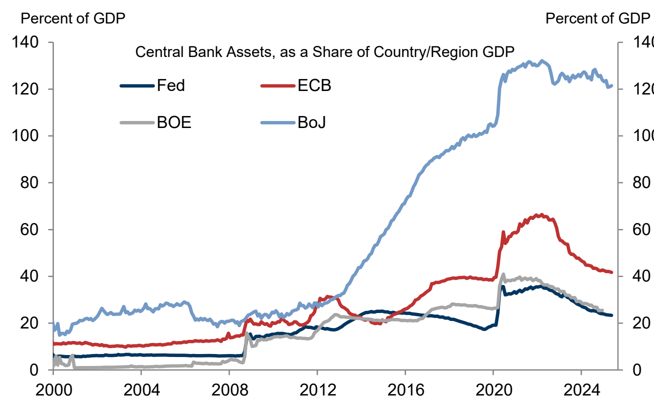
Source: Goldman Sachs Global Investment Research

Central bank ownership of sovereign bonds, current vs. 1y ago



Source: Haver Analytics

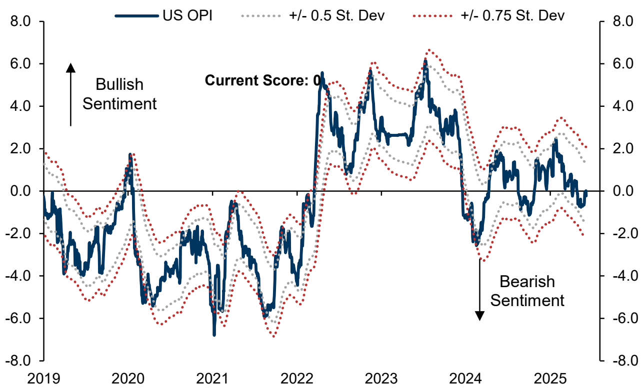
Central bank assets as a share of GDP



Source: Haver Analytics

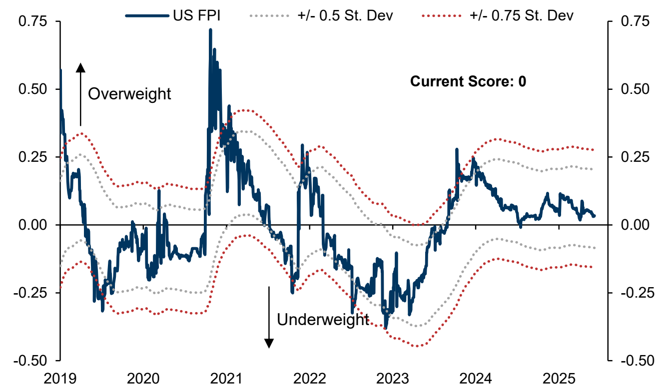
Positioning and Flows Monitor

Option implied position indicator



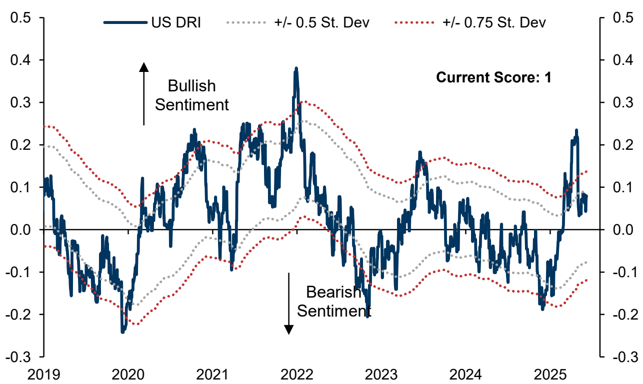
Source: Goldman Sachs Global Investment Research

GS Fund Positioning Indicator



Source: Goldman Sachs Global Investment Research

US Data Response Indicator (DRI)



Source: Goldman Sachs Global Investment Research

CFTC Commitment of Traders and Traders in Financial Futures

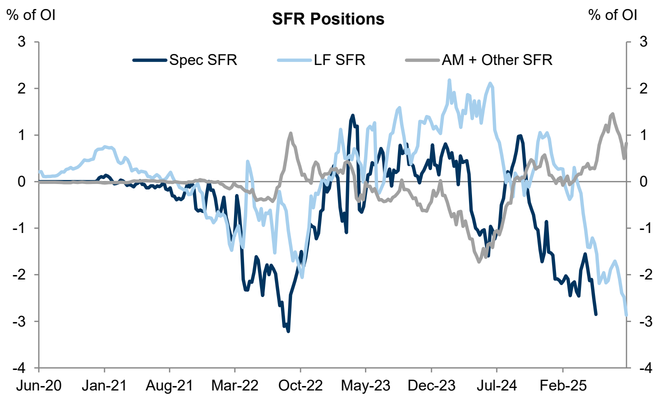
Duration-weighted net position by investor type

Duration-Weighted Positioning, by Contract

$mm/bp	SFR	TU	FV	TY	TN	US	WN
Spec Current	-36.5	-37.7	-96.8	-45.5	-25.7	-7.5	-42.1
Spec 1w Change	-1.6	4.8	-0.4	7.7	2.4	3.3	2.2
LF Current	-42.1	-59.0	-142.8	-118.4	-27.8	-60.9	-97.6
LF 1w Change	-3.3	2.5	2.9	3.8	5.8	8.4	10.9
AM + Other Current	16.5	59.4	162.9	135.5	46.7	69.9	95.4
AM + Other 1w Change	6.5	-5.9	-4.6	-6.4	-4.2	-5.0	-25.0
Dealer Current	25.5	-8.1	-30.0	-28.5	-13.6	-22.5	-12.6
Dealer 1w Change	-3.1	0.0	-0.5	-3.4	0.3	-5.2	1.4

Source: CFTC, Goldman Sachs Global Investment Research

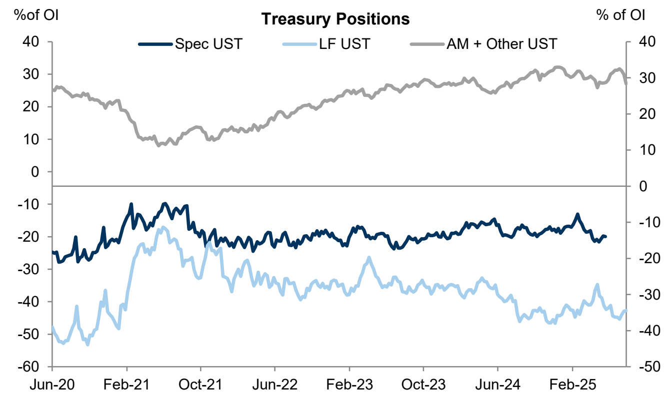
Net positions in Eurodollars



Note: Duration-weighted net position (long - short) as a % of duration-weighted gross exposure (long + short + spreading)

Source: CFTC, Goldman Sachs Global Investment Research

Net positions in UST futures

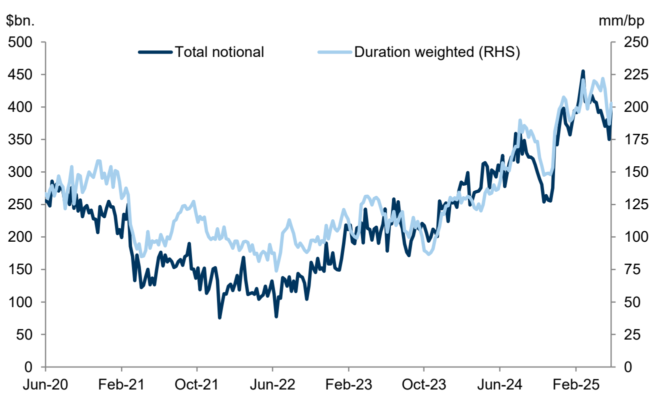


Note: Duration-weighted net position (long - short) as a % of duration-weighted gross exposure (long + short + spreading)

Source: CFTC, Goldman Sachs Global Investment Research

Primary dealer transactions

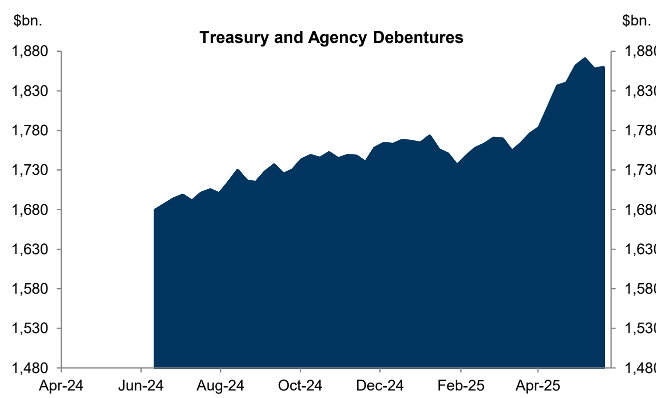
Net dealer position in US Treasuries



Source: Federal Reserve Bank of New York, Goldman Sachs Global Investment Research

US Commercial Banks' Holdings of Treasury and Agency Securities

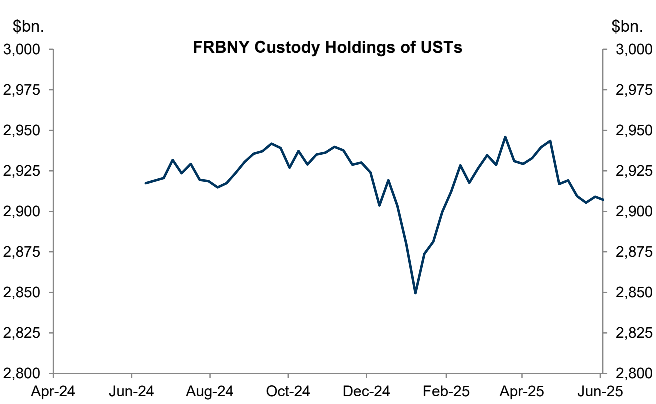
Total domestic and foreign holdings, all commercial banks



Source: Federal Reserve Board

NY Fed Custody Holdings

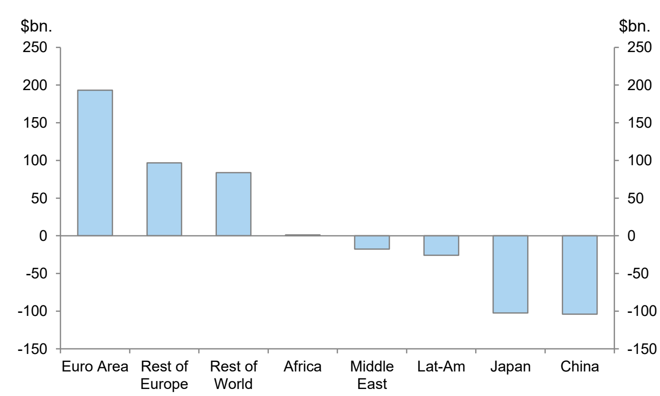
Marketable US Treasuries



Source: Federal Reserve Bank of New York

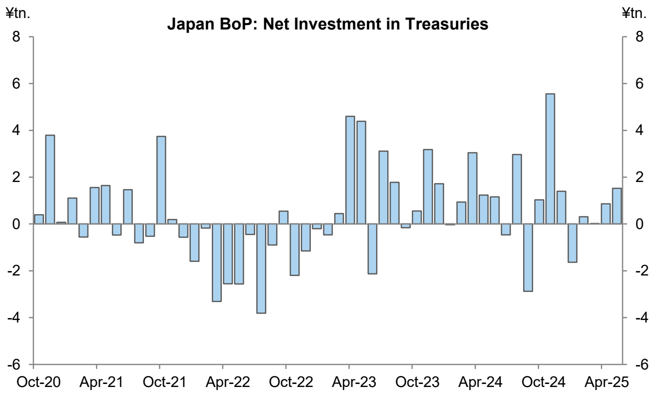
US TIC Treasury Flows

12m change in valuation-adjusted holdings of USTs, by holder of debt



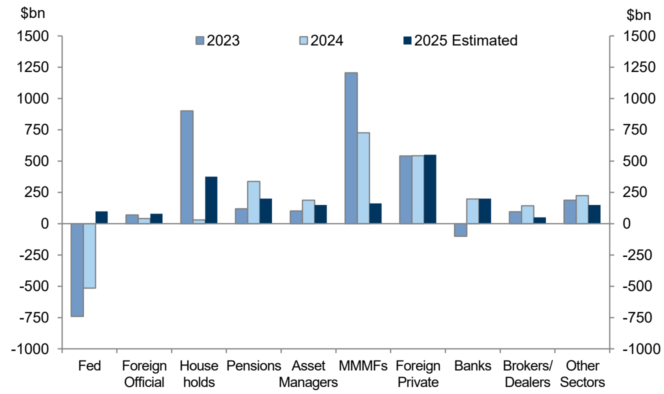
Source: US Treasury, Goldman Sachs Global Investment Research

Net monthly purchases of short and long term US Treasuries by Japanese investors



Source: Bank of Japan, Haver Analytics

Flow of Funds annual net purchases of US Treasuries, by sector

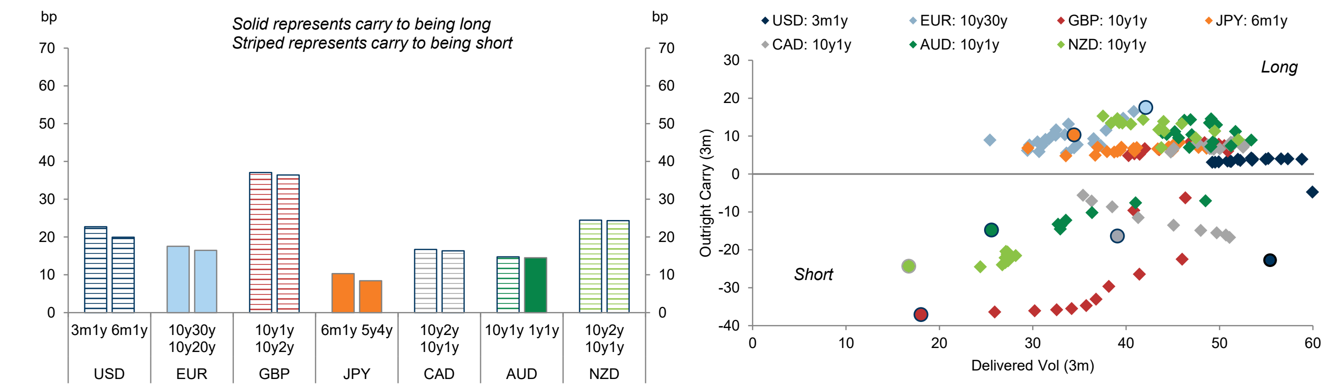


Source: Federal Reserve Board, Goldman Sachs Global Investment Research

Carry/Rolldown Monitor

Outright Carry

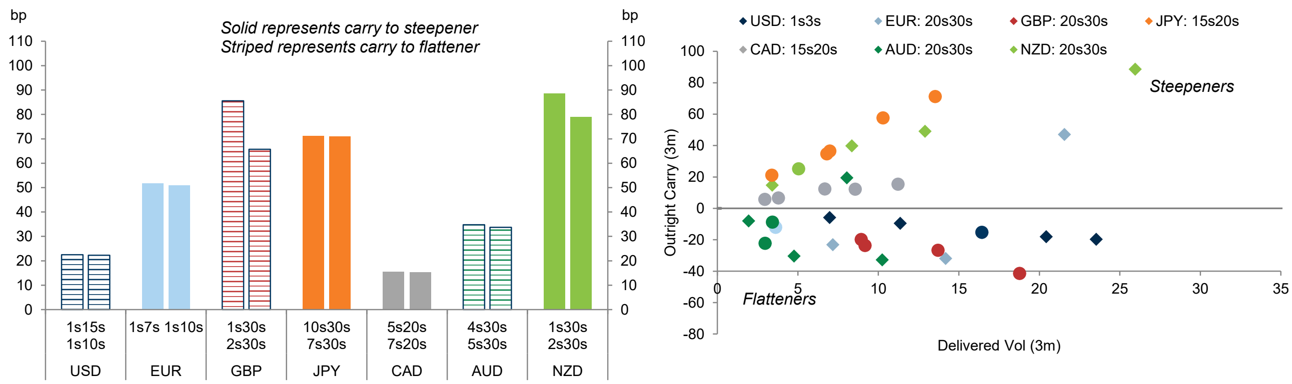
Bar chart shows top two carry points by currency, with solid reflecting carry to a long position and striped carry to a short position. Scatter illustrates top 25 carry/vol points by currency, with top point by currency noted



Source: Goldman Sachs Global Investment Research

Curve Carry

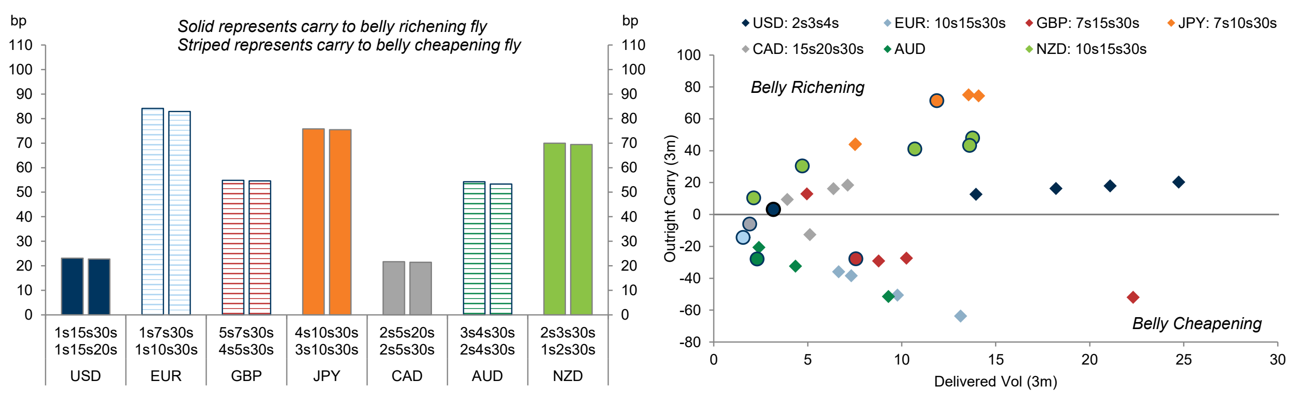
Bar chart shows top two carry curves by currency, with solid reflecting carry to a steepening position and striped carry to a flattening position. Scatter illustrates top 5 carry/vol curves by currency, with top curve by currency noted



Source: Goldman Sachs Global Investment Research

Fly Carry

Bar chart shows top two carry flies by currency, with solid reflecting carry to a belly-richening fly and striped carry to a belly-cheapening fly. Scatter illustrates top 5 carry/vol flies by currency, with top fly by currency noted.



Source: Goldman Sachs Global Investment Research

Treasury Supply Monitor

Gross Treasury auction size estimates by year end, with GS projections

Monthly Auction Amounts at End of Calendar Year ($ billions)	2y FRNs	2y	3y	5y	7y	10y	20y	30y	5y TIPS	10y TIPS	30y TIPS
YE-21 (CY)	26 / 24 (r)	56	54	57	56	39 / 36 (r)	23 / 20 (r)	25 / 22 (r)	19 / 17 (r)	16 / 14 (r)	9 / 8 (r)
YE-22 (CY)	24 / 22 (r)	42	40	43	35	35 / 32 (r)	15 / 12 (r)	21 / 18 (r)	21 / 19 (r)	17 / 15 (r)	9 / 8 (r)
YE-23 (CY)	28 / 26 (r)	57	50	58	40	40 / 37 (r)	16 / 13 (r)	24 / 21 (r)	22 / 20 (r)	17 / 15 (r)	9 / 8 (r)
YE-24 (CY)	30 / 28 (r)	69	58	70	44	42 / 39 (r)	16 / 13 (r)	25 / 22 (r)	24 / 22 (r)	19 / 17 (r)	9 / 8 (r)
YE-25 (CY, GS)	30 / 28 (r)	69	58	70	44	42 / 39 (r)	16 / 13 (r)	25 / 22 (r)	26 / 24 (r)	21 / 19 (r)	9 / 8 (r)
YE-26 (CY, GS)	32 / 30 (r)	79	68	80	54	46 / 43 (r)	18 / 15 (r)	27 / 24 (r)	27 / 25 (r)	23 / 21 (r)	10 / 9 (r)

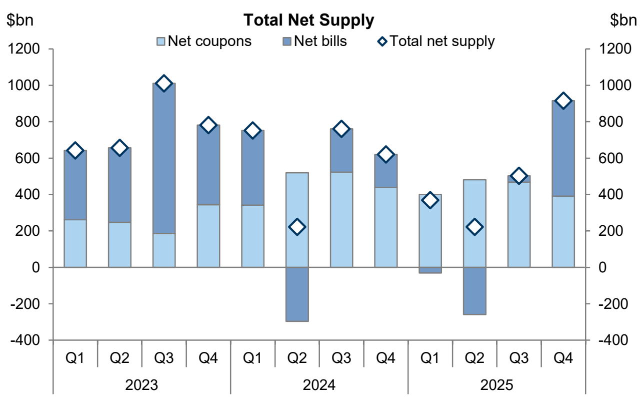
* Original Issue / Reopening listed for FRNs, 10s, 20s, 30s, and TIPS.

US Treasury Net Issuance by Calendar Year ($ billions)	Net Coupons	Fed	Net of Fed	Net Bills	Fed	Net of Fed
CY 2023	391	-648	1039	1978	-74	2053
CY 2024	1346	-475	1821	511	-23	534
CY 2025, GS	1672	-78	1751	271	12	260
CY 2026, GS	1584	198	1386	687	354	333

Duration supply ($bn 10y equiv)		
Gross supply	Fed	Net of Fed
2284	0	2284
2765	0	2765
2801	49	2752
2914	208	2707

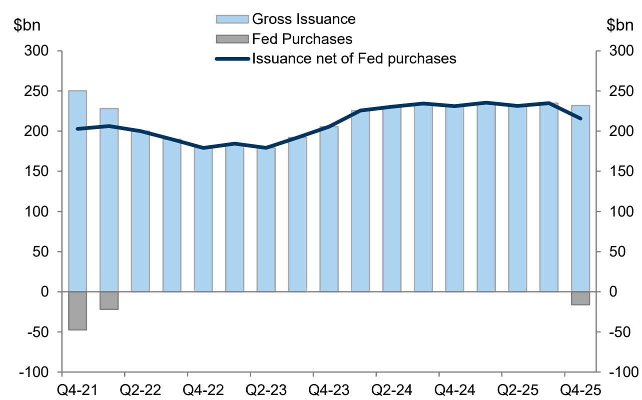
Source: Goldman Sachs Global Investment Research, US Department of the Treasury

Net issuance per quarter



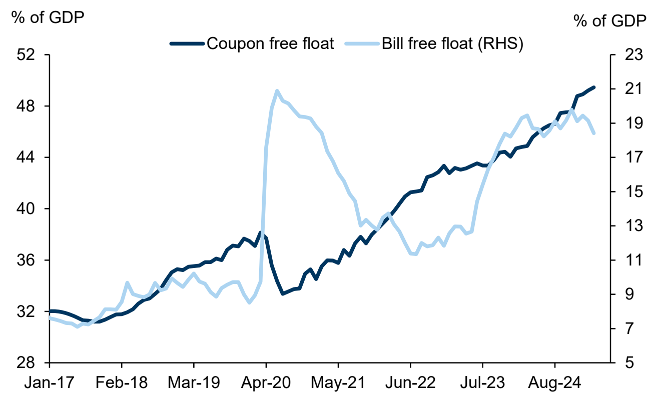
Source: Goldman Sachs Global Investment Research, US Department of the Treasury

Average monthly UST issuance, gross and net of Fed purchases; $bn 10y equivalents



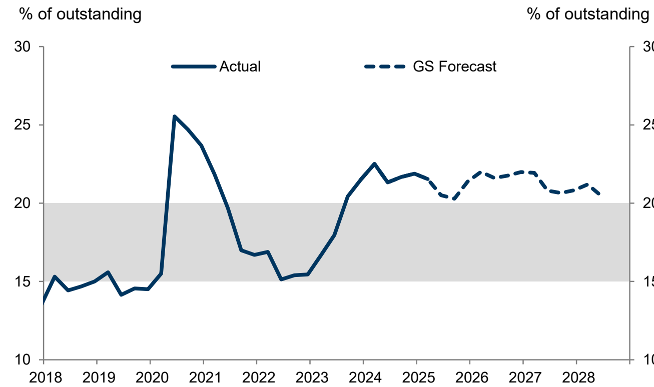
Source: Goldman Sachs Global Investment Research, US Department of the Treasury

Free float (Treasuries outstanding less Fed and foreign official holdings) as % of GDP



Source: Haver Analytics, US Treasury, Goldman Sachs Global Investment Research

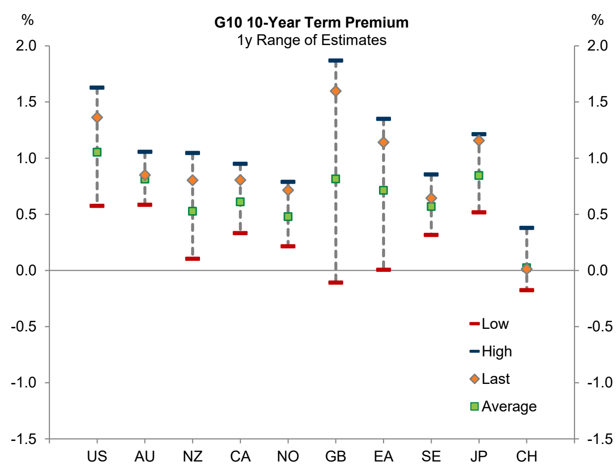
Bills as a share of Treasuries outstanding and GS forecast
Gray shading denotes TBAC recommended 15-20% range

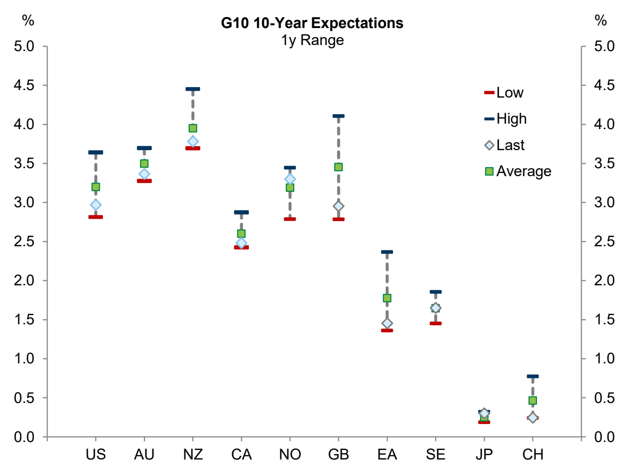


Source: US Treasury, Goldman Sachs Global Investment Research

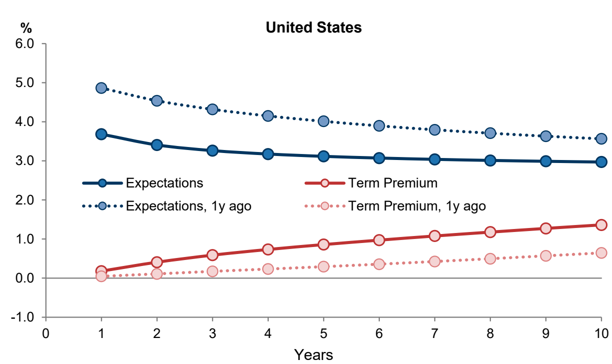
GS Term Premium Decomposition

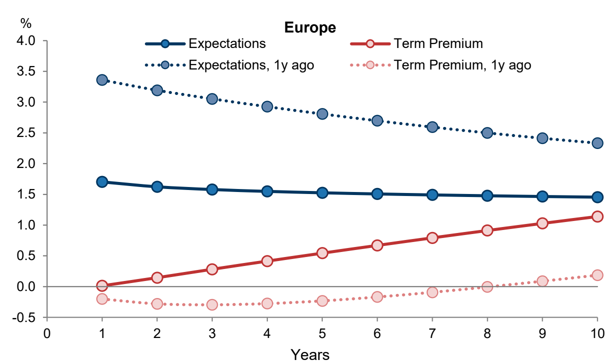
1y Range of G10 10y Yields, by Term Premium and Expectations Components

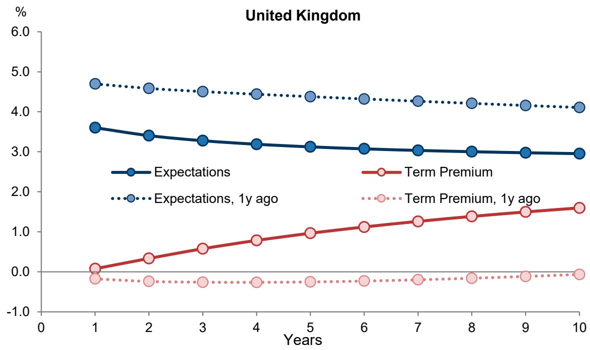


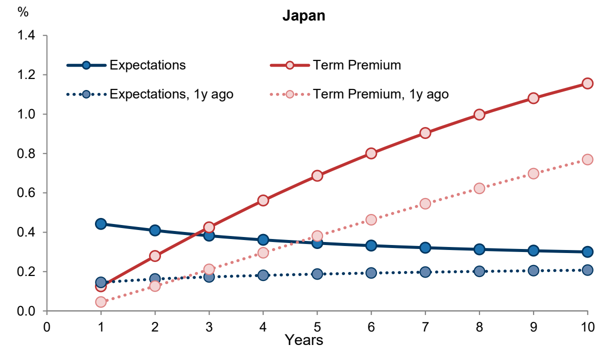


Term Structure of Fitted Yields, by Component









Source: Goldman Sachs Global Investment Research

2025 Trade Recommendations

GS Rates Trades						
Active	**Entry Date**	**Opened**	**Latest**	**Stop**	**Target**	**Performance**
1. Buy SFRZ5 96.25 put vs sell 0QZ5 96.25 put (in net premium)	7-Mar-25	-0.03	0.14	0.13	0.25	+17 bps
2. Long 3m10y USD payer on 3m 5s10s30s payer fly (return in bp running)	2-May-25	0.00	0.00	-0.05	0.10	+0 bps
3. Long 3y SOFR-UST swap spreads	2-May-25	-0.30	-0.28	-0.30	-0.23	+2 bps
4. Long 10y10y Gilts vs USTs	16-May-25	0.51	0.37	0.51	0.10	+14 bps
5. Receive December 2025 BoE meeting OIS	30-May-25	3.85	3.81	4.12	3.50	+4 bps
6. Long 5y TIPS vs short 0.7x 5y nominal UST	6-Jun-25	-1.13		-1.05	-1.30	
Closed	**Entry Date**	**Closed**	**Performance**			
1. Own 3y USTs vs SOFR	18-Nov-24	2-Jan-25	+5 bps			
2. Buy JPY 6m5y payer on 6m 2s5s10s payer fly	9-Aug-24	8-Jan-25	+7bps			
3. Sell USD 3m 2s10s curve cap	3-Jan-25	10-Jan-25	-6 bps			
4. Own 2y3y USTs vs SOFR	2-Jan-25	24-Jan-25	+4bps			
5. Own CORU5	17-Jan-25	31-Jan-25	+13bps			
6. Long 2y SEK IRS	17-Jan-25	31-Jan-25	+9bps			
7. Receive 5y5y AUD IRS vs pay CAD 5y5y	18-Nov-24	31-Jan-25	+1bp			
8. ERM5/Z5 flatteners	17-Jan-25	7-Feb-25	+5bps			
9. Buy USD 3m2y A-5/A-35bp receiver spreads (return in bp running)	19-Dec-24	13-Feb-25	-5 bps			
10. Pay 10s on weighted JPY 5s10s30s swap fly (weights 1.1x : 2x: 0.9x)	10-Jan-25	13-Feb-25	+10bps			
11. SFRZ5/Z6 flatteners	17-Jan-25	13-Feb-25	+7bps			
12. Receive June 2025 ECB OIS	7-Feb-25	18-Feb-25	-7 bps			
13. 2s5s CORRA steepeners vs 2s5s SOFR flatteners	31-Jan-25	28-Feb-25	+5bps			
14. Receive 2y1y on 1y1y/2y1y/5y5y SOFR fly	21-Feb-25	5-Mar-25	+7bps			
15. Long USD 5y5y ZC inflation swap and long 0.2x USD 5y5y OIS	6-Dec-24	6-Mar-25	-10 bps			
16. 10s30s TIPS breakeven steepeners	28-Feb-25	7-Mar-25	+2 bps			
17. UST-SOFR 3s5s30s belly cheapening flies	7-Mar-25	21-Mar-25	+2 bps			
18. Buy USD 6m5y A/A+30/A+60 payer fly	20-Sep-24	25-Mar-25	-5 bps			
19. Buy USD 6m5y straddle on 6m 2s5s10s straddle fly	8-Nov-24	28-Mar-25	0 bps			
20. 10s30s Gilt flatteners	31-Jan-25	28-Mar-25	-5 bps			
21. Long JPY 3m10y A/A+25bp payer spread (return in bp running)	14-Feb-25	1-Apr-25	+1 bps			
22. Pay 20s on 10s20s30s SOFR fly	18-Nov-24	4-Apr-25	+6 bps			
23. CORZ5/Z6 steepeners	7-Mar-25	4-Apr-25	+0 bps			
24. Buy 5y TIPS on a beta weighted basis versus nominals (1:0.75x)	21-Mar-25	4-Apr-25	+4 bps			
25. JPY 1y1y/2y1y swap steepener	21-Feb-25	4-Apr-25	-6 bps			
26. JGB 10s30s flattener	25-Apr-25	2-May-25	-14 bps			
27. Receive 5y AUD IRS vs pay 5y NZD	21-Feb-25	2-May-25	+1bp			
28. Pay 2y2y CORRA vs receive 2y2y SOFR	4-Apr-25	9-May-25	+8bps			
29. Sell 1x2 A/A+17 3m 2s10s curve cap spread	21-Mar-25	13-May-25	+2bps			
30. Receive July BoC meeting OIS	23-May-25	6-Jun-25	-5 bps			
31. Long 30y TIPS vs short 0.75x 30y nominal UST	17-Apr-25	6-Jun-25	+4 bps			

Note: Potential profit/loss estimates are given as per unit of duration risk, through yesterday's close.

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, George Cole, William Marshall, Bill Zu, Simon Freycenet and Friedrich Schaper, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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