

US Rates Watch

August refunding: coupon increase kickoff

August refunding to kick off series of coupon increases

Treasury is set to increase coupon sizes at the August refunding. This will be the first of several quarterly increases to UST's coupon calendar (Exhibit 1). As shown in Exhibit 2, we anticipate that coupon increases will continue through the February refunding quarter and be more concentrated at the front-end and belly of the curve, consistent with previous adjustments. Coupon sizes will test but remain below the peak observed in mid '21 (Exhibit 3). WAM of debt outstanding though will remain stable (Exhibit 11).

Higher coupon supply than previously expected

We have increased our coupon supply expectations vs the May refunding (see: May refunding: buybacks & higher coupons on the way) due to three important factors: 1) higher financing need both this fiscal year and anticipated going forward, 2) longer Fed balance sheet runoff / QT, 3) UST starting coupon buyback operations in calendar year '24. We discuss each of these components in greater detail below.

Higher '23 spending need creates upside for '24

Deficits throughout the fiscal year have trended above our economists earlier expectations due to higher spending and lower than realized revenues. Accounting for the year-to-date deficit & incorporating what UST is expecting for Q3 suggests that financing needs will total around \$1.8tn in FY '23 (Exhibit 4). This creates greater urgency for UST to front-load coupon adjustments in August. Higher financing need this year has resulted in higher deficit forecasts for FY '25 and skews risks to the upside as we anticipate that spending may increase next year alongside a more muted growth backdrop.

QT for longer means historically high supply to the public

Our supply base case assumes that Fed QT ends in June '24 after the Fed's first cut is delivered. However, there are material risks that QT continues for longer. Dallas Fed President Lorie Logan's recent comments highlight that Fed QT may continue even alongside rate cuts.

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UST = Treasury

QT= quantitative tightening

TBAC= Treasury Borrowing Advisory Committee

FY= fiscal year

WAM= weighted average maturity

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We think the Fed's QT decisions will hinge on the nature of rate cuts. If cuts are to ease policy alongside a recession, we expect QT will stop sooner. If cuts are to bring policy rates closer to "neutral" in the context of moderating inflation, then QT may continue for longer. As shown in Exhibit 10, a longer QT trajectory could see net coupon supply to the public (accounting for Fed purchases and QT) increase well above post-pandemic levels. Our economist's base case is that QT stops with the first Fed rate cut & mild recession.

Buybacks don't change net supply

While UST buybacks do not change net supply, they do require larger gross Treasury issuance. In our financing tables (Exhibit 4 and Exhibit 5), we have accounted for buybacks so that: Net supply = Gross Issuance – Maturing securities – Buybacks. For a required net coupon supply to cover financing need, the presence of buybacks results in a larger gross issuance amount. We anticipate the distribution of this gross issuance between bills and coupons ultimately will likely be managed holistically as the share of bills as % of marketable debt that UST wants to target.

Bill supply so far has been easily absorbed

The coupon supply schedule that we forecast suggests that bills will modestly exceed the 20% upper bound on bills as a share of marketable debt that TBAC has recommended (Exhibit 7). The increase above this level creates more scope for UST to adjust auction sizes higher near term. However, bills dip below 20% again by the end of FY '25, making us comfortable penciling in this temporary breach. The material increase in bill supply has been relatively easily absorbed by MMFs (money market mutual funds) and may limit scope for material cheapening even as incremental bill supply continues (Exhibit 12). This may also make UST comfortable with this temporary bill supply overshoot.

Expect buybacks to start in Q1 24

We assume that buybacks will start after the February '24 refunding and total around \$15bn/ month based on TBAC's recent communication (Exhibit 4 and Exhibit 5). Buybacks though could start earlier in January. We assume that UST will use the August refunding to take stock of dealer feedback on specific points (discussed below), announce a more formal plan in November, and could then wait until February to begin or state that they will start in January.

Treasury buybacks: finalizing details

Treasury appears close to finalizing details of their buyback plan, which we expect to launch in early '24. Treasury asked dealers for input on key buyback operational details in the August refunding survey; we share our views below. Treasury's questions indicate advanced buyback planning & more detail likely at the November refunding. We do not expect much buyback detail at the August refunding.

Treasury has said they expect "to begin a regular buyback program in calendar year 2024". The Treasury dealer survey questions lead us to believe the program will be launched at the February refunding. We can't rule the possibility they could start even earlier in January given their existing operational capacity & implementation questions.

Treasury buybacks to largely mirror Fed asset purchases

We expect Treasury will largely follow the approach taken by Fed outright purchases when conducting buybacks. This is generally true across securities inclusion & selection for purchase. We flag some areas of potential difference.

<u>Buyback CUSIP inclusion</u>: We expect Treasury buybacks will exclude similar securities to Fed outright purchases. This includes CTDs, securities trading very special, & on-the-run or near-on-the-run securities. Clients expect this as well.



Near on-the-run securities have few liquidity issues, so we suggest Treasury exclude both single and double off-the-run securities across tenors. Fed purchases worsened dislocations in some 10yr off the runs; we encourage Treasury to avoid these securities.

<u>Fed ownership limitations</u>: Treasury asked dealers if they believe buybacks should include issues with high Fed ownership. Recall, the Fed excluded CUSIPs from purchase if their holdings were >=70% of total outstanding.

We do not believe Treasury needs to exclude certain CUSIPs that have high Fed holdings. We expect these securities will generally not trade very cheap if limited float. Securities that trade cheap should be considered for buybacks even if high Fed holdings.

Clients have more mixed views on this detail. Some suggest the Fed should exclude securities with high Fed holdings while others disagree. Those who think Treasury should include these securities argue that the paper is likely trading cheap for a reason.

Treasury could start by including these bonds & adjust based on market feedback.

<u>Buyback evaluation metrics</u>: We expect Treasury will use a similar approach to Fed outright purchases for securities selection. Treasury will likely assess security attractiveness as a spread to market & spread to spline. We think this is a sensible approach & should flag which securities are in most need of liquidity support.

Some clients have suggested Treasury consider a "Z-spread" or measure of where certain securities trade in relation to surrounding tenors. We are sympathetic to this approach but acknowledge this should be captured by the Fed's spline. We suggest some combination of valuation to prevailing market prices and spline model, with the latter having the larger weight.

We encourage Treasury to use broad enough purchase buckets to avoid only a handful of CUSIPS being eligible, but small enough to ensure the cheapest & most dislocated securities are available for purchase. Treasury should consider adjusting their purchase buckets based on dealer feedback & if there is widespread sentiment that certain securities in need of liquidity support are not being purchased.

Overall, Treasury buyback refunding questions signal that the program is close to being launched. We expect buyback operation detail at the November refunding & a likely buyback launch at the February '24 refunding. We can't rule out a January '24 start.

Bottom line: Treasury auction sizes are headed higher at the August refunding. We expect Treasury will continue coupon size increases at the Nov '23 & Feb '24 refundings, but at a slower pace. Coupon size increases will near but remain below post COVID coupon auction highs. Buybacks are likely to begin in Q1 '24.



Exhibit 1: Expected auction calendar through Dec '24 (\$bn)

Expect auction size increases across the curve through April '24

	2 y	3у	5у	7 y	10y	20y	30y	5y II	10y II	30y II	2y FRN
8/31/2023	44	42	45	36	37	16	23			8	22
9/29/2023	46	44	47	37	34	13	20		15		22
10/31/2023	48	46	49	38	34	13	20	22			26
11/30/2023	49	47	50	39	38	17	24		15		24
12/29/2023	50	48	51	40	35	14	21	20			24
1/31/2024	51	49	52	41	35	14	21		18		27
2/29/2024	52	50	53	42	39	18	25			10	25
3/29/2024	53	51	54	43	36	15	22		16		25
4/30/2024	54	52	55	44	36	15	22	23			28
5/31/2024	54	52	55	44	39	18	25		16		26
6/28/2024	54	52	55	44	36	15	22	21			26
7/31/2024	54	52	55	44	36	15	22		19		28
8/30/2024	54	52	55	44	39	18	25			9	26
9/30/2024	54	52	55	44	36	15	22		17		26
10/31/2024	54	52	55	44	36	15	22	23			28
11/29/2024	54	52	55	44	39	18	25	•	19	•	26
12/31/2024	54	52	55	44	36	15	22	21			26

Source: BofA Global Research

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Exhibit 2: Expected change in auction sizes from May refunding quarter

Expect increases in upcoming refunding meetings through February

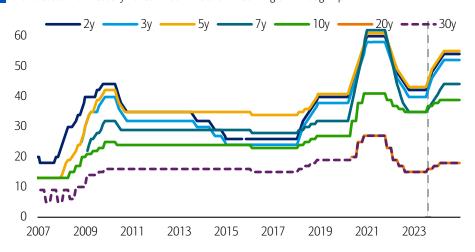
2y	, Зу	5у	7у	10y	20y	30y	5y II	10y II	30y II	2y FRN
8/31/2023	2	2	2	1	2	1	2		-	-
9/29/2023	4	4	4	2	2	1	2	-		-
10/31/2023	6	6	6	3	2	1	2	1		2
11/30/2023	7	7	7	4	3	2	3	-		2
12/29/2023	8	8	8	5	3	2	3	1		2
1/31/2024	9	9	9	6	3	2	3		1	3
2/29/2024	10	10	10	7	4	3	4			1 3
3/29/2024	11	11	11	8	4	3	4		1	3
4/30/2024	12	12	12	9	4	3	4	2		4

Source: BofA Global Research

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Exhibit 3: Treasury auction sizes by tenor with projections through YE '24 (\$bn)

We forecast that Treasury note and bond auction sizes will grow through April '24



Source: BofA Global Research, US Treasury

Exhibit 4: Financing estimates by fiscal year (\$bn)

Bills as a share of marketable debt will be 19.7% by end of FY '23 and increase further in FY '24 even with coupon supply increases

	2023	2	024	202	25
		QT ends in July '25	QT ends June '24	QT ends in July '25	QT ends June '24
Baseline deficit	1,450	1,500	1,500	1,600	1,600
Other adjustment	340	-		-	-
Financing need (1 + 2)	1,790	1,500	1,500	1,600	1,600
Change in cash balance	(36)	100	100	-	-
Note: cash balance end period assumption	600	700	700	700	700
Marketable borrowing need (3 +4)	1,754	1,600	1,600	1,600	1,600
Gross coupon auctioned	3,194	3,790	3,790	3,909	3,909
Total coupon maturing	3,057	3,081	3,081	2,254	2,254
Fed coupon rollover	249	57	238	208	559
Public coupon maturing (8 - 9)	2,809	3,024	2,842	2,046	1,695
Expected buybacks*	-	120	120	180	180
Net coupon supply (7 - 10 - 11)	385	646	828	1,683	2,034
Coupon runoff from Fed bal sheet	649	616	435	350	-
Net coupon supply to public (12 + 13)	1,034	1,262	1,262	2,034	2,034
Net bill supply (6 - 12)	1,369	954	772	(83)	(434)
Bill runoff from Fed bal sheet	71	104	45	32	-
Net bill supply to public (15 +16)	1,440	1,058	818	(52)	(434)
Net supply issued (12 + 15)	1,754	1,600	1,600	1,600	1,600
Net supply to public (14 + 17)	2,474	2,320	2,080	1,982	1,600
Starting assumed coupons	20,050	20,435	20,435	21,082	21,263
Starting assumed bills	3,645	5,014	5,014	5,967	5,786
End assumed coupons (12 + 20)	20,435	21,082	21,263	22,765	23,297
End assumed bills (15 + 21)	5,014	5,967	5,786	5,884	5,352
Bills as % of coupons + bills (23 / (22 + 23))	19.7%	22.1%	21.4%	20.5%	18.7%

Source: BofA Global Research, US Treasury, Federal Reserve ., *Expected buybacks at a \$15bn pace per month based on recent TBAC guidance to start in Feb '24

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Exhibit 5: Bill and coupon issuance estimates by month We expect bills to the public to increase over the quarter

	Financing Need	TGA EOP	TGA Change	Marketable Borrowing	Buybacks	Net Coupon	Net Bills	Fed Coupon maturities	Fed Bill maturities	Net Coupons to the Public	Net Bills to the Public
	1		2	3 = 1 +2	4	5	6	7	8	9 = 5 - 7	10 = 6 + 8
Jan-23	71	568	121	192	0	-49	241	55	5	6	246
Feb-23	314	415	-153	161	0	42	119	60	0	102	119
Mar-23	322	178	-237	85	0	74	11	56	4	130	15
Apr-23	-305	316	138	-167	0	-41	-126	60	0	19	-126
May-23	316	49	-267	49	0	43	6	60	0	103	6
Jun-23	212	402	353	565	0	77	488	48	12	125	500
Jul-23	36	550	148	184	0	-56	240	50	10	-6	250
Aug-23	417	500	-50	367	0	25	342	60	0	85	342
Sep-23	-15	600	100	85	0	91	-6	39	21	130	15
Oct-23	203	600	0	203	0	26	177	52	8	78	185
Nov-23	260	650	50	310	0	35	275	60	0	95	275
Dec-23	33	700	50	83	0	108	-25	46	14	154	-11
Jan-24	-64	700	0	-64	0	-15	-49	52	8	37	-41
Feb-24	446	700	0	446	15	36	410	60	0	96	410
Mar-24	301	700	0	301	15	107	194	45	15	151	210
Apr-24	-356	700	0	-356	15	11	-367	60	0	71	-367
May-24	252	700	0	252	15	59	193	60	0	119	193
Jun-24	51	700	0	51	15	158	-107	0	0	158	-107
Jul-24	218	700	0	218	15	54	164	0	0	54	164
Aug-24	301	700	0	301	15	97	204	0	0	97	204
Sep-24	-145	700	0	-145	15	153	-298	0	0	153	-298
Oct-24	223	700	0	223	15	167	56	0	0	167	56
Nov-24	287	700	0	287	15	148	139	0	0	148	139
Dec-24	37	700	0	37	15	200	-163	0	0	200	-163

Source: BofA Global Research, US Treasury, Federal Reserve



Exhibit 6: Sources and uses reconciliation table: BofA forecast vs prior guidance from Treasury

The reason for the difference in our forecasts is largely due to the exclusion of debt limit assumptions from Treasury's estimates

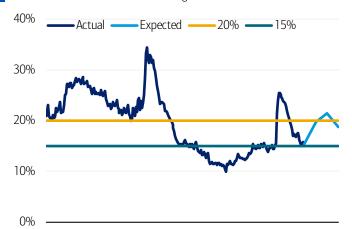
		Financing Need	Marketable Borrowing	All Other Sources	Total	Change in Cash Balance	End of Quarter Cash Balance	SOMA Redemptions
		1	2	3	4 = 2 + 3	5 = 4 -1	6	7
Tr	easury forecast 5/1/23	438	733	-244	488	50	600	-158
Jul - Sep '23	BofA forecast	438	636	-180	456	18	600	-180
Sep-Dec '23	BofA forecast	496	596	-180	416	-80	700	-180

Source: BofA Global Research, US Treasury

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Exhibit 7: Bills as a % of marketable debt

Given our expectations for deficit and QT ending in Apr '24, bills as a share of marketable debt should increase through FY '24



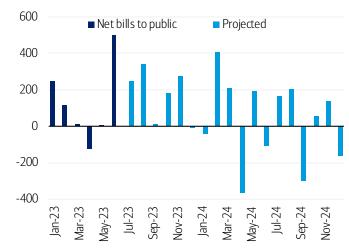
Jan-00 Apr-03 Jul-06 Oct-09 Jan-13 Apr-16 Jul-19 Oct-22

Source: BofA Global Research, US Treasury

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Exhibit 8: Monthly net bill issuance and projections (\$bn)

We forecast \$606b in bill issuance in Q3 2023, \$449bn in Q4 2023

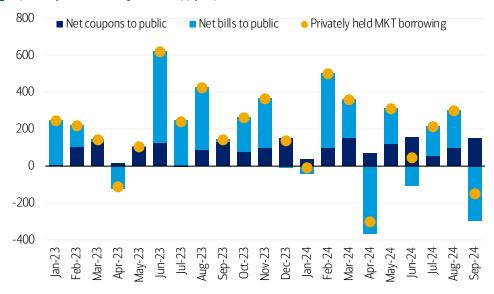


Source: BofA Global Research, US Treasury

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Exhibit 9: Monthly change in coups, bills, marketable debt to public (\$bn)

Expect only 1 month of negative bill supply to public in FY '23



Source: BofA Global Research, US Treasury



Exhibit 10: Net coupon supply ex Fed purchases and including Fed QT impact by FY

Net coupon supply to the public after accounting for Fed will increase in coming years with upside risk if QT continues for longer than expected

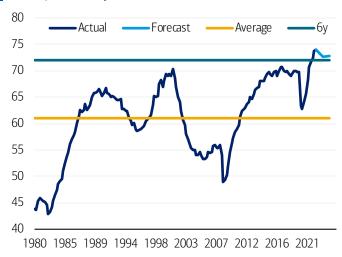


Source: BofA Global Research, US Treasury, FRBNY, alternate assumption for longer QT period assumes that it continues through mid '25

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Exhibit 11: Actual and expected weighted average maturity (WAM) through FY '25 (months)

WAM expected to stay elevated

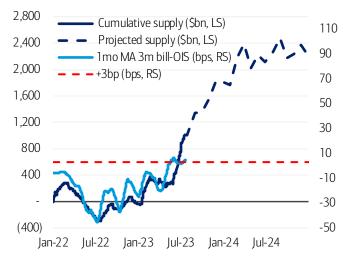


Source: BofA Global Research, US Treasury

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Exhibit 12: Projected bill supply vs 1mo moving avg of 3m bill-OIS

investors have been buying up 3m bills at just 3bps cheap to OIS



Source: BofA Global Research, Treasury



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