

# US Rates Watch

## Bill surge: strong demand thus far

Post debt limit resolution, Treasury has quickly begun to ramp up bill issuance to rebuild its cash balance. Issuance this week has been well received with limited bill cheapening. Since last Friday TGA increased \$54b with ON RRP unchanged, implying a reserve drain.

In this note, we (1) update our TGA & bill supply projections, (2) discuss where TGA drained from so far, and (3) reiterate our expectations for where it will drain from going forward. **Bottom line:** bill cheapening & ON RRP drop still expected but may take time.

### Bill supply front-loaded in June, total increase stable

Treasury updated TGA guidance in an unexpected communication this week; UST guidance = \$425b at June month-end, further TGA build in July, decline in August, & end Sept at \$600b. We have adjusted our TGA projections to align with this guidance (Exhibit 1). This adjustment front-loaded our bill projections slightly with higher issuance in June & less in August. We still expect \$1tn+ from Jun-Aug & \$1.4tn from Jun-Dec.

Treasury has already increased bill auction sizes for the 1-6m tenors, totaling almost \$60b in higher auction sizes, as well as adding a regularly issued 6-week CMB with a starting offering size of \$45b (Exhibit 2). The CMB targets money fund demand.

Initial UST bill auctions have been well received with higher-than-average direct bidder take-down for 4- and 8- week bills and higher-than-average indirect take-down for 13-, 17-, and 26-week bills (Exhibit 3). For context, direct bidders include hedge funds, pension funds, mutual funds, insurers, banks, governments, & individuals. Indirect bidders include foreign entities, such as central banks, & domestic money managers.

### Reserves likely drove most of TGA increase thus far

Since passage of the debt limit resolution, ON RRP take-up has been flat and TGA is \$54b higher, implying that nearly all of drain has so far come out of reserves (Exhibit 4).

Fed H.4.1 shows a \$100b increase in reserves between May 31 and June 7, but this captures month-end distortions (Exhibit 5). Our intra-week implied reserves data shows reserves likely reversed month-end outflows relatively quickly at the start of the month before draining since the passage of the debt limit resolution.

Since June 2, MMFs have seen \$25bn in inflows, primarily into gov't institutional funds (Exhibit 6). MMF WAMs are unchanged for gov't funds since Jun 2 but have declined 3 and 4 days for Prime institutional and retail, respectively.

We still expect MMFs will shift from ON RRP to bills, but bills are likely not yet cheap to justify meaningful extension. 1m and 3m bills have richened 2 & 12bps, respectively, since June 2, likely due to passage of debt limit default concerns + indirect bidder interest at auctions. June FOMC uncertainty may also be keeping MMF short.

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TGA = Treasury General Account

ON RRP = overnight reverse repo

UST = US Treasury

CMB = cash management bill

MMF = money market fund

WAM = weighted average maturity

QT = quantitative tightening

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## Drain still likely to shift from reserves to ON RRP

In the last bill supply wave earlier this year, Treasury issued \$253b in bill supply between Jan 12 and Jan 31, while ON RRP take-up declined \$240b and reserves grew. We still expect bills to cheapen in line with the wave of bill supply to a point that attracts MMFs to move out the curve. Initial demand for bills has been strong from non-ON RRP cash.

Our model estimates that 3m bills should be 76bps cheap to OIS by year-end (Exhibit 7) but we believe that once bills have cheapened enough to compensate MMFs to move out of ON RRP, bill cheapening should be capped. We expect it will take a few more weeks of elevated bill supply to cheapen bills to a point where MMFs will extend out of ON RRP. Passage of the June FOMC may also contribute to MMF willingness to extend.

Once bills are sufficiently cheap, we project a Fed liquidity drain that draws 90% from ON RRP & 10% from reserves. These numbers imply a false sense of precision but they reflect our assumption that the marginal bill buyer will be a cash re-allocation out of ON RRP. Our numbers suggest that QT + the \$650b in TGA rebuild from May month-end to year-end will drain \$1.26tn from the Fed's ON RRP and only \$140b from reserves (Exhibit 8). The initial bill surge post debt limit has come from non-ON RRP cash but we still expect ON RRP money will eventually take down most of the liquidity drain.

**Bottom line:** the initial bill supply surge has been met with strong demand. The post debt limit TGA rebuild thus far has occurred with stable ON RRP & likely lower reserves. We expect bill cheapening to come after a couple more weeks of elevated bill supply. At that point MMFs will shift from ON RRP into holding bills, capping the cheapening of bills vs OIS and shifting the Fed balance sheet drain from reserves to ON RRP. Passage of the June FOMC meeting may also help MMF more confidently extend out the curve.

### Exhibit 1: Bill and coupon issuance estimates by month

We expect bills to the public to increase \$1.4tn by year-end

	Financing Need	TGA EOP	TGA Change	Marketable Borrowing	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	4+6	5+7
Jan-23	71	568	121	192	-49	241	55	5	6	246
Feb-23	313	415	-153	160	41	119	60	0	101	119
Mar-23	322	178	-237	85	74	11	56	4	130	15
Apr-23	-305	316	138	-167	-41	-126	60	0	19	-126
May-23	316	49	-267	49	43	6	60	0	103	6
Jun-23	101	425	376	477	77	400	48	12	125	412
Jul-23	230	550	125	355	-56	410	50	10	-6	421
Aug-23	305	500	-50	255	25	230	60	0	85	230
Sep-23	-96	600	100	4	91	-87	39	21	130	-67
Oct-23	196	600	0	196	26	170	52	8	78	178
Nov-23	252	650	50	302	35	267	60	0	95	267
Dec-23	32	700	50	82	108	-26	46	14	154	-12

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### Exhibit 2: Bill auction sizes by tenor (\$bn)

Bill auction sizes have grown \$45bn across tenors

	1M	2m	3M	4M	6M
6/1/2023	35	35	63	44	56
6/8/2023	60	50	65	46	58
Change	25	15	8	7	4

Source: BofA Global Research, TreasuryDirect

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### Exhibit 3: Most recent Tsy auction results by bidder as % of total accepted & Z-score vs last year

Indirect bidders have increased takedown of 13-, 17-, and -26-week bills

	Direct bidder	Z	Indirect Bidder	Z	Primary Dealer	Z
4-week	6%	2.0	39%	-2.2	55%	1.9
8-week	3%	0.6	54%	-0.1	44%	0.0
13-week	5%	0.1	67%	1.8	28%	-1.8
17-week	4%	-0.2	63%	1.1	33%	-1.1
26-week	3%	-0.4	62%	1.0	35%	-1.0

Source: BofA Global Research, TreasuryDirect

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**Exhibit 4: Realized TGA & ON RRP change and implied change in reserves (\$bn)**

TGA has increased \$54bn since June 2, while ON RRP has increased \$20bn, implying \$74bn drain from reserves

	TGA Level	TGA Change	ON RRP Level	ON RRP Change	Implied Reserve Change	Bill issue	Bill maturing	Net bills
5/26/2023	54.5	15.7	2189.7	-8.0	-7.7	0	0	0
5/30/2023	37.4	-17.1	2200.5	10.8	6.3	112	136	-24
5/31/2023	48.5	11.2	2254.9	54.4	-65.5	0	0	0
6/1/2023	22.9	-25.6	2160.1	-94.8	120.4	169	105	64
6/2/2023	23.4	0.5	2142.1	-18.0	17.5	25	0	25
6/5/2023	71.2	47.9	2131.4	-10.7	-37.2	65	25	40
6/6/2023	71.6	0.4	2134.6	3.2	-3.6	164	136	28
6/7/2023	77.5	5.9	2161.6	26.9	-32.8	0	0	0

Source: BofA Global Research, Haver Analytics, Bloomberg. Note: gray rows indicate pre-debt limit resolution period

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**Exhibit 5: Fed balance sheet, selected assets & liabilities (\$bn, Wednesday comparison data)**

Cash in banking system exceeded Fed balance sheet growth due to lower ON RRP

Dates	Assets						Liabilities					
	Securities	Repo	Discount Window	BTFF	FDIC bank credit extension	CB Liquidity Swaps	Currency	Foreign RRP	ON RRP	TGA Reserves	Total	
5/31/2023	7,725	0		4 94	188	0	2,344	361	2,255	49	3,206	8,436
6/7/2023	7,722	0		3 100	185	0	2,344	347	2,162	78	3,306	8,439
Change from 5/31-6/7	-2	0		-1 7	-3	0	0	-14	-93	29	101	4

Source: BofA Global Research, Federal Reserve

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**Exhibit 6: Daily Crane MMF AUM (\$bn)**

MMF aum rose \$25bn from prior day, \$16bn higher WoW

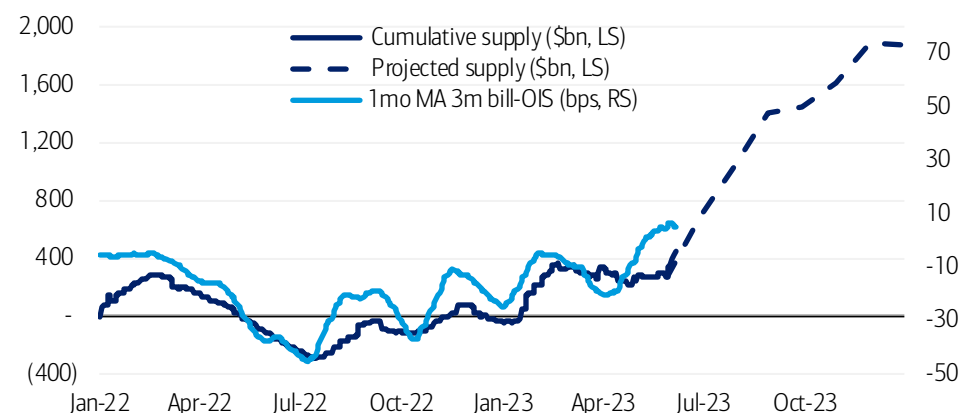
Dates	Total	Assets			Institutional		Gov't Institutional		Retail	
		Prime	Gov't	Tax exempt	Prime	Gov't	Prime	Gov't	Prime	Gov't
6/2/2023	5,839	1,195	4,524	121	1,913	3,806	649	3,157	546	1,367
6/5/2023	5,848	1,199	4,528	121	1,912	3,815	652	3,163	547	1,365
6/6/2023	5,858	1,200	4,537	122	1,915	3,822	652	3,170	548	1,367
6/7/2023	5,865	1,204	4,539	122	1,915	3,828	655	3,173	549	1,367
Change since 6/2	25	9	15	1	3	21	6	15	3	0

Source: Crane Data

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**Exhibit 7: Cumulative and projected bill supply vs 1mo moving avg of 3m bill-OIS**

Our model suggests 3m bills 76bps cheap to OIS by year-end



Source: BofA Global Research, US Treasury, Bloomberg

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**Exhibit 8: Fed balance sheet projection (\$bn)**

We forecast a \$1.2tn decline in ON RRP, \$140b decline in reserves and a \$650b increase in TGA between May month-end and year-end '23

		Asset								Liabilities						
		UST	MBS	CMBS	Repo	Discount Window & PDCF	Fed Facilities	FX Swap Lines	Other	Currency	TGA	Foreign RRP	ON RRP	Other	Reserves	Total
10% reserve / 90% ON RRP drain from QT & TGA rebuild	May-23	5164	2558	8	0	4	283	0	418	2344	49	361	2255	222	3206	8436
	Jun-23	5104	2532	8	0	5	273	0	419	2357	425	362	1818	223	3157	8341
	Jul-23	5044	2509	8	0	5	263	0	420	2370	550	363	1608	224	3134	8249
	Aug-23	4984	2481	8	0	5	253	0	421	2382	500	364	1553	225	3128	8152
	Sep-23	4924	2460	8	0	5	243	0	422	2395	600	366	1368	226	3107	8062
	Oct-23	4864	2438	8	0	5	233	0	423	2408	600	367	1273	227	3096	7971
	Nov-23	4804	2419	8	0	5	223	0	424	2421	650	368	1135	228	3081	7883
	Dec-23	4744	2399	8	0	5	213	0	425	2435	700	369	996	229	3066	7794

Source: BofA Global Research, Bloomberg

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