

## US Rates Watch

## August refunding: off with a bang

## Auction sizes surprise to upside

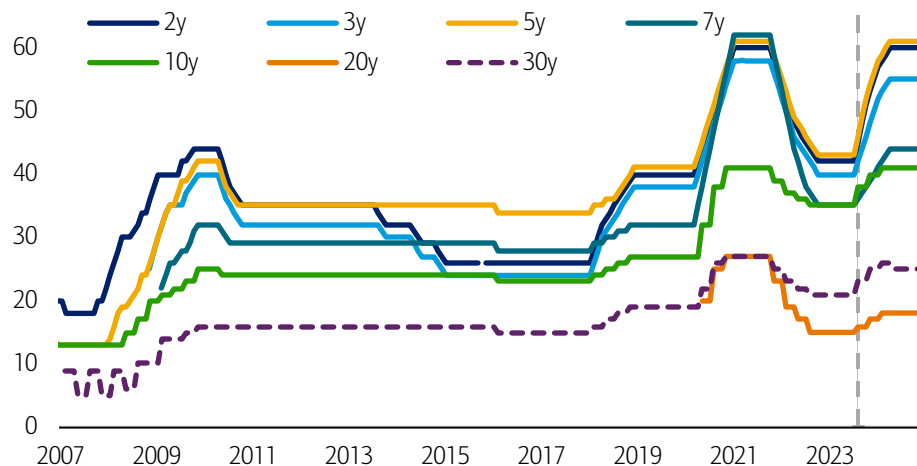
At the August Quarterly Refunding meeting, Treasury announced higher than expected auction sizes across the 2y, 5y, and 10y tenor vs our prior expectations (see the report: [Coupon increase kickoff](#)). Consistent with our thinking, Treasury signaled additional increases at upcoming refunding meetings noting: “further gradual increases will likely be necessary in future quarters.” In our forecasts we pencil in a gradual step down in auction size increases at the next two meetings. We see risks skewed to larger increases and/ or a longer trajectory of upward adjustments due to QT proceeding for longer and/ or deficits running larger. On net, we anticipate that some auction sizes (2y, 5y, 10y, FRN) will hit the prior peaks observed in mid 21 (Exhibit 1).

## Expect increases to continue but at slower pace

Our forecasts show continued increases in auction sizes through the February refunding quarter, but at slower pace (Exhibit 2, Exhibit 3). In November we anticipate \$2bn/mo increases across the 2y-5y tenor, \$1bn/mo increase in 7y, \$2bn across new issue and reopening for 10y and 30y point, \$1bn increase across new issue and reopening for 20y point. At the February refunding we pencil in an additional slowdown to auction size increase across the curve: \$1bn/mo increases in 2y -7y tenor and \$1bn increase in new issue and reopening across 10y-30y. For TIPS, consistent with TBAC’s guidance, we reflect \$1bn increases starting with the on the run issues through April.

## Exhibit 1: 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

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02 August 2023

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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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Timestamp: 02 August 2023 08:38PM EDT

## 20% is not a hard rule

Our coupon supply forecasts assume that UST is comfortable running bills above 20% of marketable debt (Exhibit 7). This is consistent with TBAC's August guidance that it is comfortable running bills around longer-term historical share (22.4%) for some time before returning to the 15-20%. By the end of FY 2025, bills will be back within TBAC's 15-20% range based on our economics team's forecasts for the deficit and for QT to end in July '24, after the Fed's first cut (see: [US outlook: Imagine no recession](#)).

## Risks skew to more coupon supply

In Exhibit 6, we show scenarios where the deficit diverges from our economists' expectations and QT ends because of reserve scarcity instead of rate cuts. Our economists' deficit forecasts are in the low end of the range that dealers expect in FY 24 & 25. Should deficits come in higher and QT continue for longer, our expected coupon supply calendar would result in bills modestly above 20% by the end of FY '25. This suggests more upside risk to our coupon forecasts.

## UST may consider additional TIPS adjustments

Consistent with our expectations, UST decided to begin increasing TIPS auction sizes alongside nominal coupons. We anticipate \$1bn increases in on the run and subsequent re-openings across the curve through the Feb refunding quarter. However, TIPS as a share of marketable debt is likely to continue to decline without more material increases.

We could see UST increasing 5y and 10y tenors by \$2bn going forward to help stabilize the proportion of TIPS outstanding, but outflows from inflation protected funds may be a headwind to the demand backdrop. TBAC also proposed UST consider changes to the TIPS auction schedule which are unlikely to be implemented without study and consideration from market participants.

## Challenged supply demand backdrop

As shown in Exhibit 11, we anticipate that net coupon supply to the public will exceed post pandemic highs in FY 25. A longer QT trajectory would result in even larger figures. Elevated coupon supply poses greater risk to Treasury market functioning, and cheapening vs OIS especially if the economy remains resilient & demand weak.

As discussed in [UST demand in 2H '23: higher supply, few buyers](#), the biggest headwind to easy absorption of supply is wavering confidence in the long duration view from asset managers and outflows from bond funds. While demand so far has been firm with global benchmark funds overweight US duration (see: [FX and Rates Sentiment Survey](#)) and inflows into UST bond funds strong (see: [US Rates Watch: Longs hang on](#)), reduced recession fears may support a reversal. In an environment where banks and foreign investors are likely sidelined, this raises concern about UST demand. Upward shocks to supply or very weak demand could benefit a short spread position out the curve (see: [Minimal impacts of Fitch US downgrade](#)). It also poses upside risks to our rates forecasts.

## Buybacks: significant implementation progress

Treasury stated it "has made significant progress on its plans to implement a regular buyback program in 2024". This process included a detailed presentation on operational design parameters. Treasury is also homing in on the last few key details before a program launch. We still think buybacks are likely to begin early in Q1 '24.

Treasury provided more detail on: buckets, purchase amounts, security exclusions, and purchase limits per CUSIP. Key takeaways:

**Buckets:** UST will use 9 buckets across nominal and TIPS tenors. UST plans to buy in maturities >2Y 1-2x per quarter for liquidity support. Cash management buying in <2Y tenors will be more ad hoc. Note: Treasury is unlikely to match their purchase bucket with equivalent supply increase in that tenor; UST WAM will not be changed by buybacks

but it is possible purchases in 20Y sector could be offset by higher issuance in 10s & 30s.

**Purchase amounts:** UST plans to announce a maximum purchase amount per quarter, with the max size set at \$30b/quarter. There will be no minimum set for liquidity supporting programs and it is possible Treasury will not purchase any securities in a given tenor. A Treasury purchase of zero could surprise the market and we encourage Treasury to only consider this if market functioning was very orderly.

**Security exclusions:** Treasury will exclude similar securities to Fed outright purchases. These include: CTDs, specials, very rich securities, and on the runs / near off the runs.

**Purchase limits per CUSIP:** Treasury will take into consideration several factors including STRIPS & Fed holdings. No specific thresholds were given.

**Outstanding items:** Treasury needs to finalize their pricing methodology, frequency of purchases each quarter for each bucket, and scheduling details. We continue to believe Treasury is near ready to implement and that buybacks will be launched in Q1 '24.

**Bottom line:** Treasury auction sizes surprised to the upside, but we still expect increases at the next two meetings. We anticipate increases will moderate but see upside risk should deficits come in larger and QT proceeded for longer. Incremental coupon supply digestion may be difficult if long duration view is challenged. Progress on buyback implementation endorses view for Q1 24 roll out.

#### Exhibit 2: Expected auction sizes through December 24

Expect increases in upcoming refunding meetings through February but at more moderate pace

	2y	3y	5y	7y	10y	20y	30y	5y II	10y II	30y II	2y FRN
8/31/2023	45	42	46	36	38	16	23			8	24
9/29/2023	48	44	49	37	35	13	20		15		24
10/31/2023	51	46	52	38	35	13	20	22			26
11/30/2023	53	48	54	39	40	17	25		15		26
12/29/2023	55	50	56	40	37	14	22	20			26
1/31/2024	57	52	58	41	37	14	22		18		28
2/29/2024	58	53	59	42	41	18	26			10	27
3/29/2024	59	54	60	43	38	15	23		16		27
4/30/2024	60	55	61	44	38	15	23	23			29
5/31/2024	60	55	61	44	41	18	25		16		27
6/28/2024	60	55	61	44	38	15	22	21			27
7/31/2024	60	55	61	44	38	15	22		19		29
8/30/2024	60	55	61	44	41	18	25			9	27
9/30/2024	60	55	61	44	38	15	22		17		27
10/31/2024	60	55	61	44	38	15	22	23			29
11/29/2024	60	55	61	44	41	18	25		19		27
12/31/2024	60	55	61	44	38	15	22	21			27

Source: BofA Global Research

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#### Exhibit 3: Expected change in auction sizes from August refunding quarter

Expect increases in upcoming refunding meetings through February but at more moderate pace

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

Source: BofA Global Research

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

Bills as a share of marketable debt will breach 20% in FY 24 but come back into range in FY 25

	2023	2024		2025	
		QT ends in July '25	QT ends July '24	QT ends in July '25	QT ends July '24
Baseline deficit	1,450	1,500	1,500	1,600	1,600
Other adjustment	423	(9)	(9)	-	-
Financing need (1 + 2)	1,873	1,491	1,491	1,600	1,600
Change in cash balance	14	100	100	-	-
Note: cash balance end period assumption	650	750	750	750	750
<b>Marketable borrowing need (3 + 4)</b>	<b>1,887</b>	<b>1,591</b>	<b>1,591</b>	<b>1,600</b>	<b>1,600</b>
Gross coupon auctioned	3,206	3,996	3,996	4,125	4,125
Total coupon maturing	3,057	3,081	3,081	2,254	2,254
Fed coupon rollover	249	57	203	208	559
Public coupon maturing (8 - 9)	2,809	3,024	2,878	2,046	1,695
Expected buybacks*	-	80	80	120	120
<b>Net coupon supply (7 - 10 - 11)</b>	<b>397</b>	<b>892</b>	<b>1,038</b>	<b>1,959</b>	<b>2,310</b>
Coupon runoff from Fed bal sheet	649	616	471	350	-
Net coupon supply to public (12 + 13)	1,046	1,508	1,508	2,310	2,310
<b>Net bill supply (6 - 12)</b>	<b>1,490</b>	<b>699</b>	<b>553</b>	<b>(359)</b>	<b>(710)</b>
Bill runoff from Fed bal sheet	71	104	69	32	-
Net bill supply to public (15 + 16)	1,561	803	623	(328)	(710)
<b>Net supply issued (12 + 15)</b>	<b>1,887</b>	<b>1,591</b>	<b>1,591</b>	<b>1,600</b>	<b>1,600</b>
Net supply to public (14 + 17)	2,607	2,311	2,131	1,982	1,600
Starting assumed coupons	20,050	20,447	20,447	21,340	21,485
Starting assumed bills	3,645	5,135	5,135	5,833	5,688
End assumed coupons (12 + 20)	20,447	21,340	21,485	23,299	23,795
End assumed bills (15 + 21)	5,135	5,833	5,688	5,474	4,978
<b>Bills as % of coupons + bills (23 / (22 + 23))</b>	<b>20.1%</b>	<b>21.5%</b>	<b>20.9%</b>	<b>19.0%</b>	<b>17.3%</b>

Source: BofA Global Research, US Treasury, Federal Reserve. \*Expected buybacks at a \$10bn pace per month based on recent Treasury guidance to start in Feb '24

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**Exhibit 5: Bill and coupon issuance estimates by month**

Marketable borrowing needs are growing to meet higher financing need and TGA projections

	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	148	502	100	248	0	-56	304	50	10	-6	314
Aug-23	403	500	-2	401	0	30	371	60	0	90	371
Sep-23	-30	650	150	121	0	98	22	39	21	137	43
Oct-23	200	650	0	200	0	33	167	52	8	85	175
Nov-23	257	700	50	307	0	49	258	60	0	109	258
Dec-23	30	750	50	80	0	125	-45	46	14	171	-31
Jan-24	-64	750	0	-64	0	4	-68	52	8	56	-60
Feb-24	446	750	0	446	10	61	385	60	0	121	385
Mar-24	301	750	0	301	10	132	169	45	15	176	185
Apr-24	-356	750	0	-356	10	35	-391	60	0	95	-391
May-24	252	750	0	252	10	82	170	60	0	142	170
Jun-24	51	750	0	51	10	145	-94	36	24	181	-70
Jul-24	218	750	0	218	10	77	141	0	0	77	141
Aug-24	301	750	0	301	10	120	181	0	0	120	181
Sep-24	-145	750	0	-145	10	176	-321	0	0	176	-321
Oct-24	223	750	0	223	10	190	33	0	0	190	33
Nov-24	287	750	0	287	10	171	116	0	0	171	116
Dec-24	37	750	0	37	10	223	-186	0	0	223	-186

Source: BofA Global Research, US Treasury, Federal Reserve

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**Exhibit 6: Bills as a share of marketable debt under various deficit and QT scenarios at end FY 25**

75<sup>th</sup> percentile dealer estimate for deficits suggest bills to remain in upper end of TBAC guided range by end of FY 25

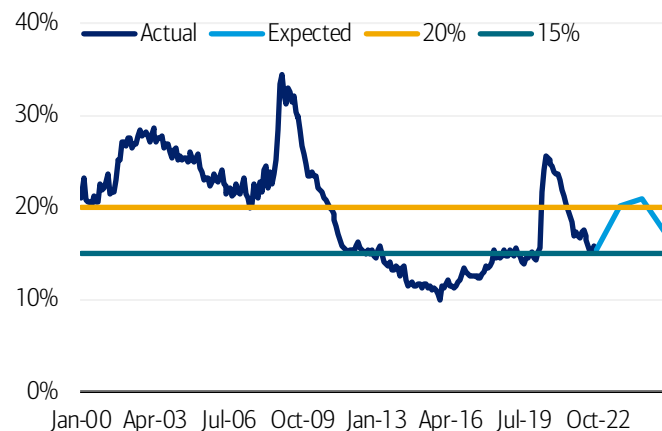
	BofA deficits	25th pct dealer	Median dealer	75th pct dealer
QT ends in July '25	19.0%	19.2%	19.6%	20.1%
QT ends July '24	17.3%	17.4%	17.8%	18.4%

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

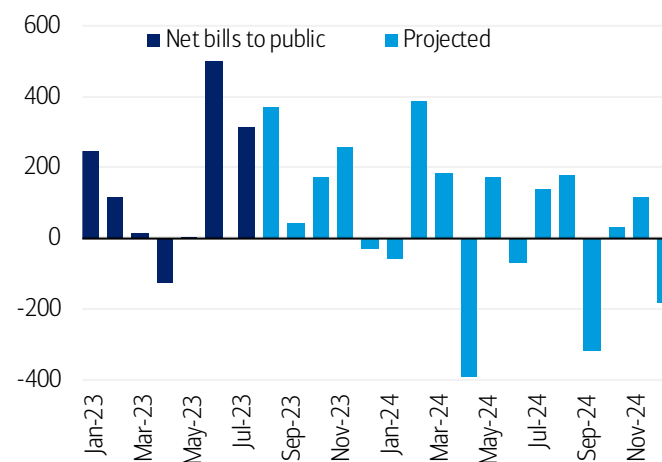


Source: BofA Global Research, US Treasury

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

We forecast \$728b in bill issuance in Q3 2023, \$402bn in Q4 2023



Source: BofA Global Research, US Treasury

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**Exhibit 9: BofA bill forecast vs TBAC recommended (\$bn)**

Our T-bill forecast is below TBAC recommended net bill issuance over the next 2 quarters

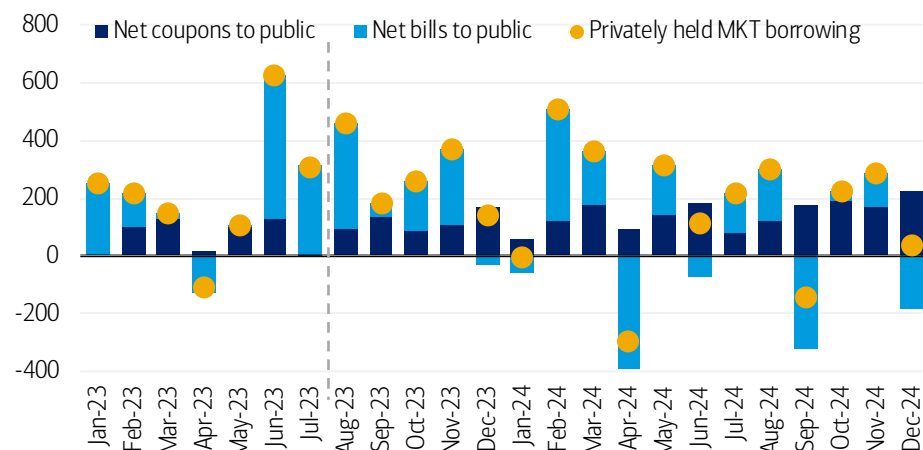
	Q3'23	Q4'23	Total
BofA Bill forecast	728	402	1129
TBAC recommended bill issuance	829	513	1342
Difference	-101	-112	-213

Source: BofA Global Research, US Treasury

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**Exhibit 10: Monthly change in coups, bills, marketable debt to public (\$bn)**

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



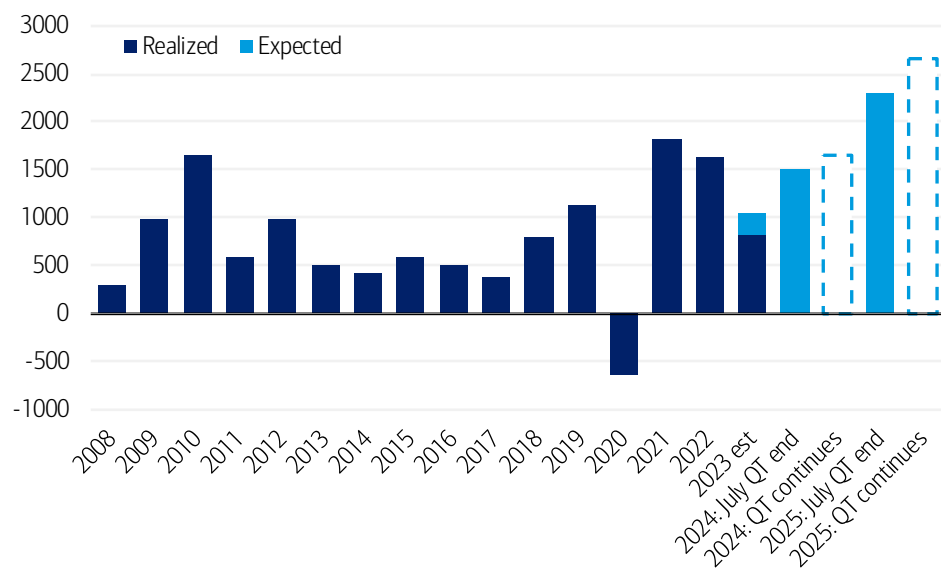
Source: BofA Global Research, US Treasury

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**Exhibit 11: Net coupon supply ex Fed purchases and including Fed QT impact by FY**

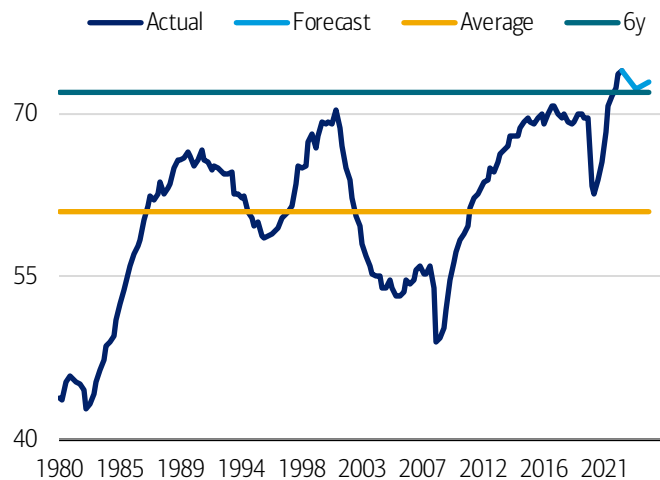
Net coupon supply to the public after accounting for Fed will increase in coming years with upside risk if QT continues for longer than expected



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 12: Actual and expected weighted average maturity (WAM) through FY '24 (months)**

WAM expected to stay elevated

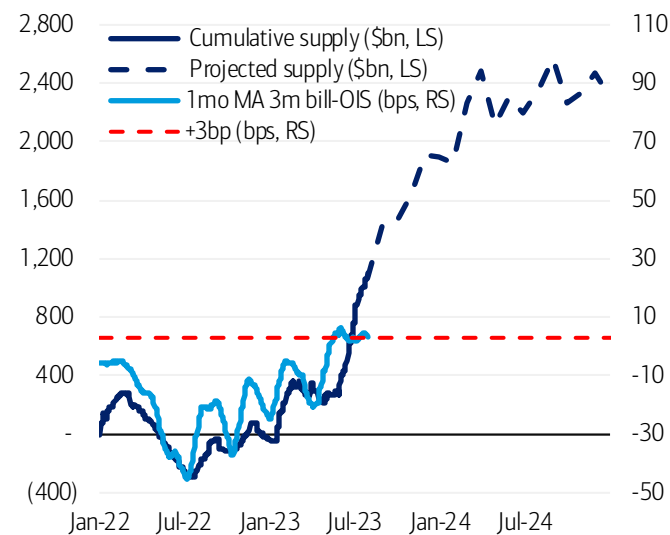


Source: BofA Global Research, US Treasury

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**Exhibit 13: 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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