

US Rates Watch

Follow the money: FHLBs, MMF, & Fed March 31 update

Money map: FHLBs, MMF, & Fed

We provide our real-time assessment of how funds are flowing in the system using daily & weekly data across FHLBs, MMF, & Fed.

We provide an in-depth description of how funding movements and borrowing from the Fed and FHLB impact the balance sheets of the banking sector and MMFs here: Funding map: T-tables for Fed, banks, MMF

Key takeaway: banking system stress remains high, but there are some signs of stabilization / tentative improvement. A decline in FHLB issuance may be a signal of slowing advance demand. A reduction in FHLB debt as well as typical quarter end dynamics are likely driving the increase in ON RRP take-up as MMFs shift holdings.

FHLB activity: FHLB debt issuance is the best barometer for bank advance / loan demand. Daily FHLB debt issuance data is from the BofA Securities trading desk. Trading desk data is the best real time data we are aware of; FHLB official numbers are monthly.

FHLB net issuance on Thursday, March 30th was \$3.4b after declining \$11b the prior day (Exhibit 2), which shows a significant slowdown from \$156b at the start of bank stress. This decline likely signals a slowdown in bank demand for FHLB advances. Since March 10th, FHLBs have net issued \$297b according to BofA Securities data (Exhibit 3).

Money market funds: MMF flows can represent cash moving around the system or cash leaving commercial banks. To track deposit outflows, we think the relevant statistic to watch is increase in Fed ON RRP or the Treasury cash balance.

MMF experienced inflows of \$42b on Tuesday, followed by \$16b of outflows on Wednesday, according to Crane data. This brings the two-week average to \$20b in inflows per day. In total, MMFs are up \$294b since March 10^{th} . As FHLB debt declines, MMFs will likely continue to shift into ON RRP, which represents cash leaving the banking system.

ON RRP: take-up increased \$7b on Thursday, a slowdown from the \$33b increase on Wednesday. Total use remains \$77bn above March 10th levels. We expect ON RRP take-up to continue to increase into quarter-end given typical quarter-end dynamics.

Fed bank data: Fed H.4.1 data from March 29th shows \$34bn w/w bank reserve increase likely from banks borrowing from the Fed, MMFs cutting ON RRP take-up, and payments from the TGA/Treasury paydowns (Exhibit 9). Fed H.4.1 also shows a reduction in borrowing from Fed liquidity programs (DW, BTFP; FIMA repo, CB swap lines, Exhibit 11).

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Abbreviations:

BTFP: bank term funding program
DW: discount window
FHLB: Federal Home Loan Banks
GSE: Government sponsored enterprises
MMF: Money market funds
ON RRP: Overnight reverse repo facility
P&I: principal & interest
TGA: Treasury General Account
FIMA: Foreign and international monetary
authorities
CB: Central bank

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Refer to important disclosures on page 5 to 7.

Timestamp: 31 March 2023 05:45AM EDT

Exhibit 1: Data on FHLB issuance + ON RRP / MMF flows (\$bn)

FHLB net issuance is offset by ON RRP decline & MMF inflows; funding markets are working

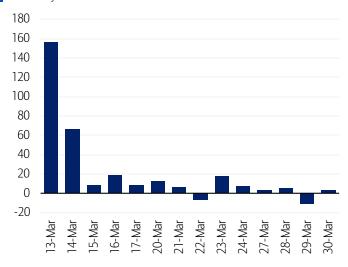
FHLBs	14-Mar	15-Mar	16-Mar	17-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	27-Mar	28-Mar	29-Mar	30-Mar
Total	66.34	8.19	19.18	8.62	12.57	6.49	-7.18	17.52	7.28	3.32	5.66	-10.66	3.38
Money Markets	14-Mar	15-Mar	16-Mar	17-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	27-Mar	28-Mar	29-Mar	30-Mar
ON RRP Total	2,042.58	2,055.82	2,066.32	2,106.17	2,098.39	2,194.63	2,279.61	2,233.96	2,218.46	2,220.13	2,231.75	2,264.86	2,271.53
ON RRP Change (d/d)	-84.10	13.24	10.50	39.85	-7.77	96.24	84.98	-45.65	-15.50	1.67	11.62	33.11	6.67
MMF Flows	47.83	11.63	37.28	-5.13	26.97	47.66	19.16	22.10	-13.20	26.55	41.85	-14.98	
MMF Inflow - RRP Change	131.93	-1.61	26.78	-44.98	34.74	-48.58	-65.82	67.75	2.30	24.87	30.23	-48.09	

Source: BofA Global Research, BofA Securities, Bloomberg, Crane Data

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Exhibit 2: Daily net FHLB debt issuance (\$bn)

FHLB daily debt issuance has slowed

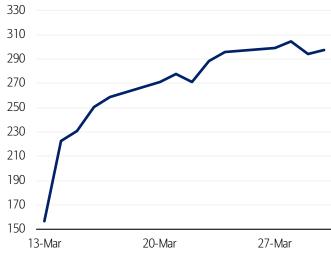


Source: BofA Securities

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Exhibit 3: Cumulative growth in FHLB debt since March 10 (\$bn)

FHLB debt is \$297bn higher since March 10

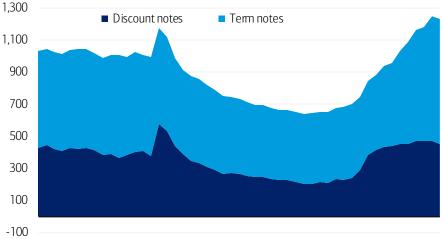


Source: BofA Securities

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Exhibit 4: Monthly FHLB debt issuance (\$bn)

Higher FHLB debt issuance leading to more MMF investment



Jan-19 Jun-19 Nov-19 Apr-20 Sep-20 Feb-21 Jul-21 Dec-21 May-22 Oct-22

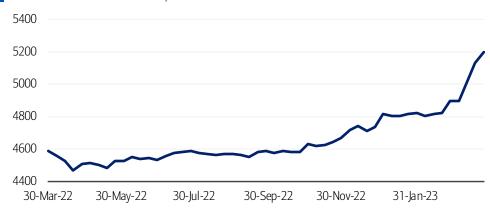
Source: FHLB Office of Finance, Haver Analytics

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Exhibit 5: MMF AUM (\$bn)

MMFs saw \$65.99bn in flows from prior week



Source: ICI, Bloomberg

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Exhibit 6: ICI Money Market Fund AUM (\$bn)

MMF AUM rose \$117bn from prior week

				Tax			Prime	Gov't	Tax-exempt	Prime	Gov't	Tax-exempt
Dates Total	al P	rime	Gov't	exempt	Retail	Institutional	Institutional	Institutional	Institutional	Retail	Retail	Retail
3/22/2023 5,13	32	765	4,260	107	1,862	3,270	259	3,001	11	507	1,259	96
3/29/2023 5,19	98	757	4,331	110	1,873	3,325	253	3,061	11	504	1,270	99
WoW Change 6	66	-8	71	3	12	54	-5	60	0	-3	11	3
MTD Change 30	04	-24	334	-5	60	244	-13	259	-2	-11	75	-3

Source: ICI, Bloomberg

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Exhibit 7: Daily Crane MMF AUM (\$bn)

MMF AUM dedined \$15bn from prior day, but still \$60bn higher WoW

D	ates	Total	Prime	Gov't	Tax exempt	Retail	Institutional	Prime Institutional	Gov't Institutional	Prime Retail	Gov't Retail
	3/22/2023	5,515	1,136	4,265	115	1,771	3,630	627	3,003	509	1,262
	3/23/2023	5,537	1,136	4,287	114	1,775	3,648	627	3,021	509	1,266
	3/24/2023	5,524	1,127	4,283	114	1,772	3,637	620	3,017	506	1,266
	3/27/2023	5,550	1,127	4,309	113	1,773	3,663	621	3,042	506	1,268
	3/28/2023	5,590	1,131	4,347	113	1,777	3,700	625	3,075	505	1,272
	3/29/2023	5,575	1,125	4,338	113	1,779	3,683	619	3,065	506	1,273
	DoD Change	-15	-6	-9	0	2	-17	-6	-10	1	1
	WoW Change	60	-12	73	-2	9	53	-9	62	-3	11

Source: Crane Data

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Exhibit 8: ON RRP take-up (\$bn)

ON RRP take-up change from prior day was \$6.67bn

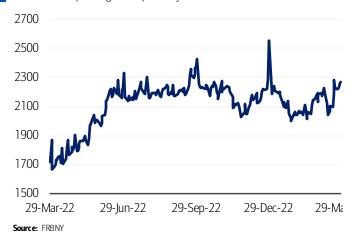
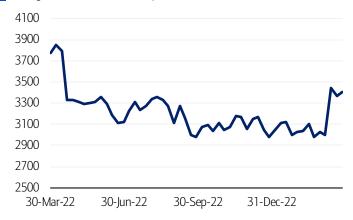


Exhibit 9: Fed reserve balances outstanding (\$bn)

Change in reserve balance from prior week was \$31.81bn



Source: Federal Reserve

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Exhibit 10: US Commercial Bank balance sheets, selected assets & liabilities (\$bn)

Domestic banks saw deposits shift from small banks to large banks. Bank borrowing saw the largest WoW increase on record

		Total	Assets						Liabilities			
			Cash	UST & Agy	MBS	Repo & FF	Loans & Leases	Other	Deposits	Borrowings	Net due to related foreign offices	Other
All	3/15/2023	23275	3443	1626	2732	604	12088	2783	17562	2414	363	2935
Banks	1w Chg	400	381	4	-3	2	54	-38	-53	436	40	-23
	1m Chg	256	280	-14	-22	0	36	-24	-90	439	-49	-44
	YTD Chg	299	347	-27	-41	3	-17	34	-383	560	93	29
Domestic	3/15/2023	20236	2144	1512	2705	268	11049	2559	16265	1524	-339	2786
Banks	1w Chg	482	456	1	-5	4	43	-18	12	470	5	-5
	1m Chg	398	404	-14	-25	-8	55	-12	-33	462	1	-32
	YTD Chg	235	275	-35	-32	-46	1	71	-366	540	0	61
Large	3/15/2023	13280	1621	1192	1957	223	6539	1747	10796	879	-371	1977
Banks	1w Chg	354	354	1	-5	3	22	-21	120	230	3	2
	1m Chg	285	306	-8	-12	-9	21	-11	60	232	4	-9
	YTD Chg	159	207	-24	-6	-41	-36	58	-210	304	4	61
Small	3/15/2023	6957	523	320	748	44	4510	812	5469	645	33	810
Banks	1w Chg	127	102	0	0	1	21	3	-108	241	2	-7
	1m Chg	113	98	-6	-13	1	34	-1	-92	230	-2	-23
	YTD Chg	76	68	-11	-26	-5	37	12	-156	236	-4	0
Foreign	3/15/2023	3038	1299	113	27	337	1039	223	1298	890	702	149
Banks	1w Chg	-82	-75	2	2	-2	11	-20	-65	-34	35	-18
	1m Chg	-142	-123	0	3	8	-18	-11	-58	-22	-50	-12
	YTD Chg	64	72	8	-9	49	-19	-37	-17	19	93	-31

Source: Federal Reserve H8

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Exhibit 11: Fed balance sheet, selected assets & liabilities (\$bn, Wednesday comparison data)

Reduction in Fed assets and liquidity programs came primarily out of ON RRP and TGA

	Assets						Liabilities					
Dates	Securities	Repo	Discount Window	BTFP	FDIC bank credit extension	CB Liquidity Swaps	Currency	Foreign RRP	ON RRP	TGA	Reserves	Total
3/29/2023	7,926	55	88	64	180	1	2,324	368	2,265	163	3,402	8,756
Change from 3/8-3/15	-8	0	148	12	143	0	3	0	-137	-34	441	298
Change from 3/15-3/22	-3	60	-43	42	37	0	8	3	224	-78	-74	94
Change from 3/22-3/29	-10	-5	-22	11	0	0	5	-3	-15	-37	32	-28
Net change from 3/8-3/29	-22	55	84	64	180	0	16	1	72	-149	398	364

Source: BofA Global Research, Federal Reserve

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