

### **US Rates Watch**

# MMF portfolio update: MMFs shift out of Tsy debt ahead of debt limit X-date

#### Gov't funds inflows continue, but slowing

According to Crane Data, money market funds have seen \$461bn in inflows since bank stress began on March 10th, most of which came in the weeks immediately following (Exhibit 1). Government MMFs drew inflows of \$449b following contagion concerns around uninsured bank deposits, but flows have been more volatile in the past few weeks. At the same time, prime funds saw only \$12bn in inflows as investors likely wanted to park cash in safer funds and limit exposure to banks.

Most of these MMF inflows were into institutional MMF. Inst'l MMF AUM grew roughly \$307bn since March 10 vs \$77bn into retail funds. The recent institutional MMF inflows are likely to be from uninsured bank depositors (Exhibit 2). The flow into government institutional funds is a reversal of the theme we saw in '22 and earlier this year. Prime retail had drawn most of the inflows with Fed hikes & low bank deposit betas.

Overall, we expect MMF AUM to continue to increase as yields remain attractive relative to bank deposit rates. Historically, we have seen MMF AUM grow as 2s10s becomes more inverted (Exhibit 3).

#### Yields have increased with Fed hikes

The average 7-day simple yield on government MMFs has risen 40bps since March 10 vs 45bps for prime MMFs over the same period, which includes a 25bp Fed hike (Exhibit 4). Gov't fund yields are currently 4.62% vs prime funds 4.85%, a 23bp spread. Since the start of '23, yields have risen 80 and 70bps for gov't and prime funds, respectively.

With the Fed likely at terminal, MMFs are expected to extend out the curve. Current debt limit dynamics may be hindering MMF extension.

#### MMFs restart WAM extension

Gov't funds have extended WAM 3.4 days since the start of bank stress to 19.7 days, which is 2.5 days longer on the year. Prime MMFs have extended WAMs only 0.7 days since Mar 10, but 8.8 days longer YTD (Exhibit 5). Gov't fund WALs are roughly flat since the start of bank stress and YTD. Conversely, Prime WALs have lengthened 2.3 days since Mar 10 and 6 days YTD (Exhibit 6).

Though uncertainty around the Fed's hiking path has declined, debt limit dynamics are keeping MMFs risk averse. The recent extension has largely come since late April, likely due to MMFs moving out of 1m bills and extending further out the curve to nonimpacted securities. ON RRP take-up has been trending lower but MMFs are likely to shift into ON RRP as we approach June 1 X-date. This should reverse post DL resolution when we'll likely see significant net issuance in T-bills. T-bill supply should cheapen front-end rates relative to ON RRP, leading to less take-up and more WAM extension.

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AUM: Assets under management

MMF: Money market fund

YTD: Year to date

WAMs: Weighted average maturity

WAL: Weighted average life

ON RRP: Overnight reverse repo

facility

QT: Quantitative tightening

FHLB: Federal home loan banks

CD: Certificate of deposit

CP: Commercial paper

TD: Time deposit

**UST: US Treasuries** 

Inst'l: institutional

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Timestamp: 18 May 2023 06:00AM EDT

### ON RRP take-up likely to increase into X-date

MMF take-up at the Fed's ON RRP was \$121b lower on April month-end vs March month-end (Exhibit 7). Take-up likely declined in part due to moderating bank stress and removal of quarter end dynamics. The recent pick up in FHLB issuance has also reduced some of the allocation into ON RRP in May.

ON RRP take-up is likely to increase as MMFs want to avoid holding impacted bills. Repo with the Fed is considered safe as the Fed is unlikely to lend out impacted collateral.

#### Gov't MMFs shift holdings out of debt and into repo

According to data from iMoneyNet, prime funds allocated holdings out Treasury repo and back into CP, CD, and TD (Exhibit 8, Exhibit 10). Gov't funds, which saw \$40b in inflows in April, shifted holdings from Treasury debt to Treasury repo and from agency debt to agency repo (Exhibit 7, Exhibit 9).

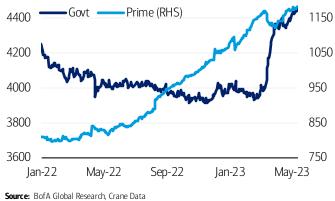
The decline in Treasury debt holdings in April came from bills, notes and FRNs, however MMF holdings of bills as a % of bills outstanding still increased on the month due to bill cuts heading into the X-date (Exhibit 12, Exhibit 11).

MMFs spent most of April pouring into 1m bills to avoid bills maturing after June 1 X-date. This led to a significant richening in 1m bill vs OIS (Exhibit 15). Since the start of May however, 1m bills have cheapened significantly as June bill maturities rolled into the 1m window. We will likely see MMFs continue to move out of potentially impacted bills as the debt limit approaches.

Bill supply cuts will likely continue as we approach the debt limit X-date. MMFs will likely continue to move into ON RRP and agency repo as a result until the debt limit is resolved. At that point we expect significant bill issuance to refill the TGA, which will drain ON RRP (see <a href="May refunding: buybacks & higher coupons on the way">May refunding: buybacks & higher coupons on the way</a> & <a href="Fed balance">Fed balance</a> sheet forecast: <a href="May update">May update</a>).

#### Exhibit 1: MMF AUM (\$bn)

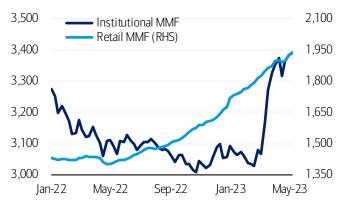
Govt funds saw large inflows, prime fund inflows were smaller



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### Exhibit 2: Institutional MMF AUM vs Retail MMF AUM (\$tn\$)

Bank stress drove inflows into institutional MMFs

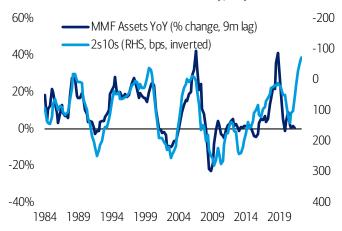


Source: Bloomberg, ICI



#### Exhibit 3: MMF assets and 2s10s curve

As 2s10s curve becomes more inverted, MMFs typically see inflows

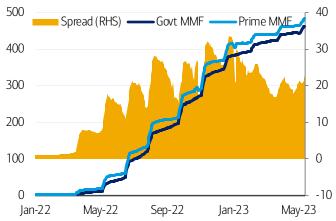


Source: BofA Global Research, Bloomberg, Haver

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Exhibit 4: Domestic MMF 7 day simple yield (bps)

MMF yields continue to rise with Fed hikes

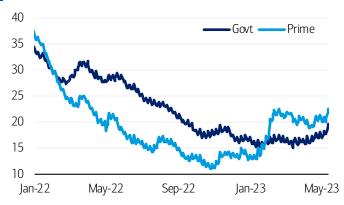


Source: BofA Global Research, iMoneyNet

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#### Exhibit 5: MMF WAM (Days)

MMF WAMs have restarted their extension

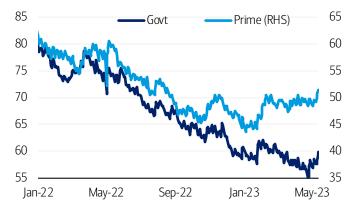


Source: BofA Global Research, iMoneyNet

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#### Exhibit 6: MMF WAL (Days)

MMF WALs have extended for both gov't and prime funds



Source: BofA Global Research, iMoneyNet

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#### Exhibit 7: Top 10 MMFs' ON RRP use (\$bn)

MMF ON RRP declined slightly from July month-end

Fund	Apr Assets	Apr ON RRP	Mar ON RRP	Feb ON RRP	Ian ON RRP
Goldman Sachs FS Govt	262	143	138	138	136
Vanguard Federal Money Mkt Fund	248	130	122	118	119
Fidelity Govt Money Market	259	120	123	136	139
JPMorgan US Govt MM	225	105	109	84	88
Fidelity Inv MM: Govt Port	165	91	102	0	81
Morgan Stanley Inst Liq Govt	161	75	61	43	39
Vanguard Cash Reserves Federal MM	106	64	51	54	49
BlackRock Lq FedFund	134	62	71	58	42
American Funds Central Cash	162	61	56	50	44
BlackRock Lq T-Fund	92	60	64	60	41

Source: BofA Global Research, Crane Data



#### Exhibit 8: Domestic MMF holdings, prime funds (\$bn)

Prime funds shifted holdings from CP/CD/TD into UST & agency repo

	Prime			Prime I	nstitutio	nal	Prime Retail			
	Apr-23	MoM	YoY	Apr-23	MoM	YoY	Apr-23	MoM	YoY	
Cash	12.7	1	11	4.6	0	3	8.0	1	8	
Treasury Debt	3.4	1	(1)	2.4	1	(0)	1.0	(0)	(1)	
Treasury Repo	193.1	(45)	170	37.2	(11)	35	155.8	(34)	135	
Govt Agency Debt	4.0	1	4	1.6	1	1	2.4	0	2	
Govt Agency Repo	62.9	(0)	49	14.0	(4)	11	48.9	4	38	
Other Repo	51.4	2	4	28.9	0	(1)	22.5	1	6	
CD	158.0	15	59	62.9	4	6	95.1	10	53	
Financial Co CP	122.1	6	36	41.9	(1)	(3)	80.2	7	39	
ABCP	42.2	(0)	13	15.1	(0)	(1)	27.1	(0)	14	
Other CP	10.5	0	(1)	2.8	(0)	(0)	7.7	0	(1)	
Non-Negotiable TD	97.7	29	21	42.5	10	(8)	55.2	19	29	
VRDN	6.1	1	(2)	1.6	0	(2)	4.5	0	(1)	
Other	10.8	1	3	0.0	0	0	0.0	(32)	0	
Total	779	10	364	262	0	37	517	10	327	

Source: BofA Global Research, iMoneyNet

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#### Exhibit 9: Domestic MMF holdings, government funds (\$bn)

Gov't MMF inflows bought UST and Agency debt and repo

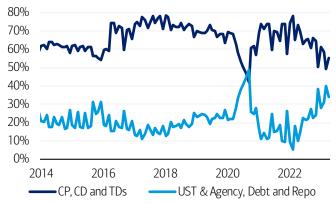
				Government					
	Government			Inst	itution	al	Government Retail		
	Apr-23	MoM	YoY	Apr-23	MoM	YoY	Apr-23	MoM	YoY
Cash	72.5	16	12	53.2	11	11	19.3	5	1
Treasury Debt	929.2	(32)	(584)	767.5	(21)	(282)	161.6	(11)	(302)
Treasury Repo	2240.7	31	435	1019.3	(1)	88	1221.4	31	347
Govt Agency Debt	690.8	(9)	361	375.9	(2)	168	315.0	(7)	193
Govt Agency Repo	427.8	38	153	320.2	34	116	107.7	4	37
Other Repo	1.2	(2)	1	1.2	(2)	1	0.0	(O)	(0)
Investment Co Funding Agrmnt	8.4	(1)	(1)	3.3	(1)	(2)	5.2	0	0
VRDN	0.7	0	(5)	0.1	(0)	(4)	0.5	0	(1)
Other Instrument	0.4	(1)	(0)	0.4	(0)	0	0.0	(1)	(0)
Total	4372	40	371	2541	19	96	1831	21	275

**Source:** BofA Global Research, iMoneyNet

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#### Exhibit 10: Prime MMF holdings as % of total

Prime fund holding of repo increased while CP, CD, and TD declined

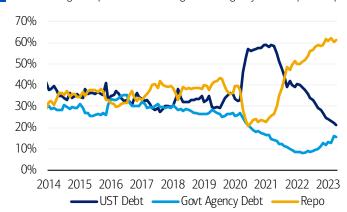


Source: BofA Global Research, iMoneyNet

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#### Exhibit 11: Govt MMF holdings as % total

Gov't holdings of repo dominates but growth in agency debt has picked up

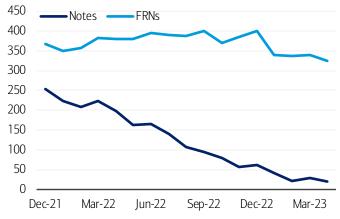


Source: BofA Global Research, iMoneyNet



#### **Exhibit 12: MMF holdings of Treasury notes and FRNs**

MMF holdings increased for notes and FRNs



Source: BofA Global Research, Crane Data

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#### Exhibit 13: Bills outstanding versus total MMF holdings (\$bn)

MMF holdings as % of outstanding unchanged in March

	Bills	MMF	MMF as %
	Outstanding	Holdings	Total
Jan-22	3959	1274	32%
Feb-22	4053	1261	31%
Mar-22	3927	1144	29%
Apr-22	3826	1093	29%
May-22	3671	984	27%
Jun-22	3523	896	25%
Jul-22	3514	892	25%
Aug-22	3724	846	23%
Sep-22	3644	761	21%
Oct-22	3665	765	21%
Nov-22	3811	706	19%
Dec-22	3696	598	16%
Jan-23	3937	662	17%
Feb-23	4056	644	16%
Mar-23	4068	663	16%
Apr-23	3941	656	17%

Source: BofA Global Research, Crane Data

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#### Exhibit 14: Prime MMF holdings, by country of issuer (\$bn)

Prime MMF reduced holdings of CP, CD, and TD primarily with exposure to non Euro-bloc issuers

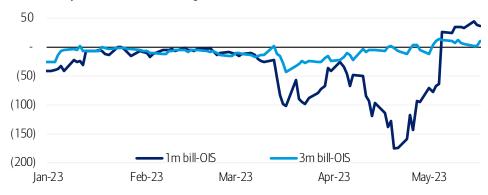
		CD			Fina	ncial Co	CP	Non-Negotiable TD		
		Apr-23	MoM Δ	ΥοΥ Δ	Apr-23	MoM Δ	ΥοΥ Δ	Apr-23	MoM ∆	ΥοΥ Δ
US		15.6	(1)	12	7.2	(1)	4	0.5	0	0
Canada		30.1	2	7	35.5	1	14	8.5	2	3
Euro Bloc		35.3	8	16	25.5	12	8	46.7	16	13
Ge	rmany	7.0	2	1	7.8	4	2	10.3	6	3
Fra	ance	22.6	5	15	9.6	5	4	8.6	5	1
Ot	her	5.7	1	1	8.1	2	1	27.8	5	9
Europe (non-Euro Bloc)		21.2	0	0	30.8	0	12	16.8	11	(6)
UK	(	9.4	0	(0)	10.7	4	7	0.2	(0)	(1)
Sw	veden	11.5	0	4	13.4	(2)	6	12.9	9	(8)
Ot	her	0.3	(0)	(3)	6.7	(1)	(1)	3.7	3	3
Australia		0.5	0	(0)	12.3	(5)	(4)	8.9	(3)	4
China		1.3	1	1	0.0	0	(O)	1.8	0	0
Japan		50.5	3	21	7.4	0	3	6.7	2	1
Total		158.0	15	99	122.1	6	36	97.7	29	21

Source: BofA Global Research, iMoneyNet

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#### Exhibit 15: 1m and 3m bills vs OIS (bps)

1m bills initially richened vs OIS until rolling into the 1m to the June 1 X-date window



Source: BofA Global Research, Bloomberg



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