

## US Rates Watch

# MMF portfolio update: inflows, WAM extension, repo to UST themes ongoing

### MMF inflows continue, primarily into gov't funds

According to Crane Data, money market funds have seen roughly \$960b in inflows YTD. Inflows have primarily been into gov't MMFs, which are \$662b higher on the year (Exhibit 1). Since July, gov't fund AUM has increased \$126b and prime fund AUM has increased \$24b. Historically, we have seen MMF AUM grow as 2s10s becomes more inverted and short-tenor yields eclipse longer-tenor ones (Exhibit 3).

### Retail funds lead inflows but institutional growth strong

Retail MMF AUM is up \$469b YTD while institutional funds have grown \$370b (Exhibit 2). Gov't institutional funds saw most of the inflows after bank stress but prime and gov't retail funds continue to see inflows as the spread between MMF yields and retail deposit rates widens.

### MMF yields higher, reflective of July Fed hike

The average 7-day simple yield on MMFs have increased 20bps for gov't MMFs and 21bp for prime since the Fed's last hike on Jul 26 (Exhibit 4). Gov't fund yields are currently 4.98% vs prime funds 5.15%, a 16bp spread. The spread between gov't and prime MMFs has come down 16bps since the start of the year. The narrowing of the spread in prime vs gov't appears reflective of prime funds shifting more into UST & agency debt & repo and away from CP, CD, and TDs.

### MMF WAM near YTD highs, WALs beginning to extend

Gov't and prime fund WAMs have slowly been extending over the year and are currently near their respective YTD highs. WAMs picked up relatively quickly in the weeks following the debt limit resolution, likely due to MMFs extending out of overnight repo and into Treasury bills. In recent weeks, WAMs have continued to extend but at a slower pace. Gov't fund WAMs have extended 7.4 days YTD to 24.7 days vs prime fund WAMs which have extended 14.2 days YTD and are now at 28 days (Exhibit 5). Gov't fund WALs are up 2.2 days on the year, 1.5 days since end of July. Prime fund WALs are up 5.7 days since year end but only 1.1 days since July (Exhibit 6).

### ON RRP take-up drops on month-end, decline continues

As of August month-end, MMFs made up 94% of ON RRP take-up, in line with recent averages. A month-end snapshot from Crane Data shows that MMF take-up at the ON RRP declined \$189b in August vs July (Exhibit 7). August month-end was also the largest drop in the history of the series and unusual for month-ends. We believe the drop in ON RRP was driven by dealers being long collateral on month-end & in need MMF funding

ON RRP take-up has since dropped to an 18-month low and is now another \$159b lower since August month-end. The decline in ON RRP take-up over recent months is largely a result of MMFs shifting holdings from Treasury repo to Treasury bills due to the large wave of bill supply since the debt limit resolution.

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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

Gov't: Government

DL: Debt limit

## MMFs continue to shift holdings into UST debt wave

According to data from iMoneyNet, gov't funds allocated holdings out of Treasury repo, and into Treasury & agency debt (Exhibit 9, Exhibit 11). Prime funds also moved out of Treasury repo and into Treasury debt, CP, CD, and TDs (Exhibit 8, Exhibit 10).

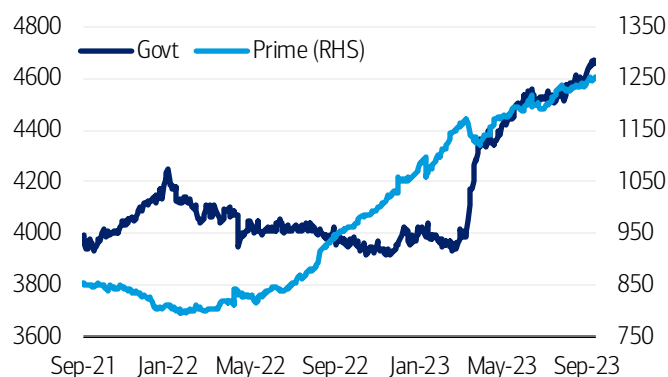
MMF holdings of bills increased \$153b in August, implying MMFs took down 50% of the \$303b in net new bill issuance in August, a drop from the 78% implied by the July data (Exhibit 12). At the same time, MMF holdings of UST notes were flat but increased \$10b for FRNs in August.

MMF extension into bills appears to be slowing, which is also reflected in dealer holdings (Exhibit 14). We expect gov't MMFs to continue shifting into Treasuries and out of ON RRP as bill issuance continues but likely at a lower pace. We expect a more gradual bill cheapening amidst the steady increase in bill supply over coming months. This Treasury cheapening may increase as MMF reach their desired portfolio WAMs and become less willing to extend out the curve.

Prime MMF also continue to increase holdings of bank CDs. CD growth has occurred as MMF have seen institutional inflows. Banks may be competing more directly for wholesale deposits through the CD market and finding a key buyer base in prime MMF.

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

Govt funds saw large inflows, prime fund inflows were smaller

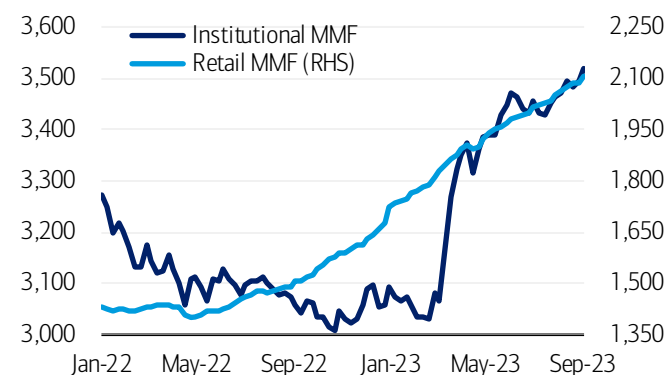


Source: BofA Global Research, Crane Data

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

Higher institutional deposit rates likely pulling \$ out of inst'l MMFs

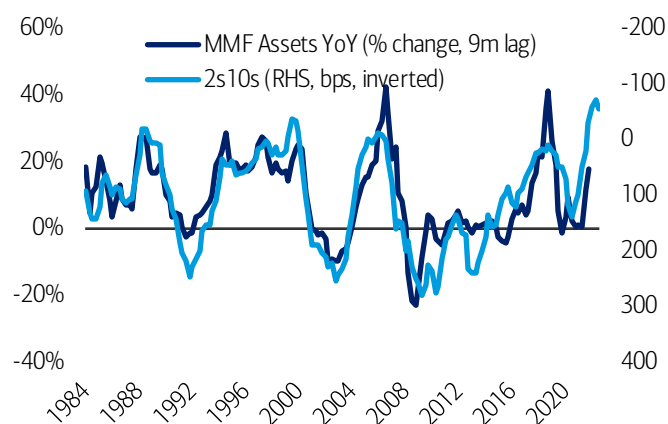


Source: Bloomberg, ICI

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

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

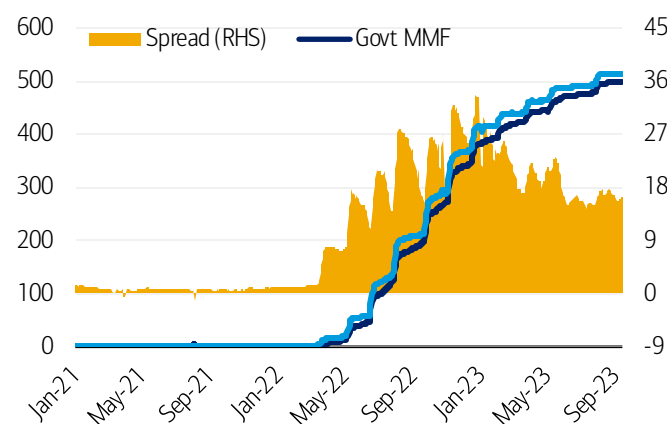


Source: BofA Global Research, Federal Reserve, Haver

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

MMF yields continue to rise with Fed hikes

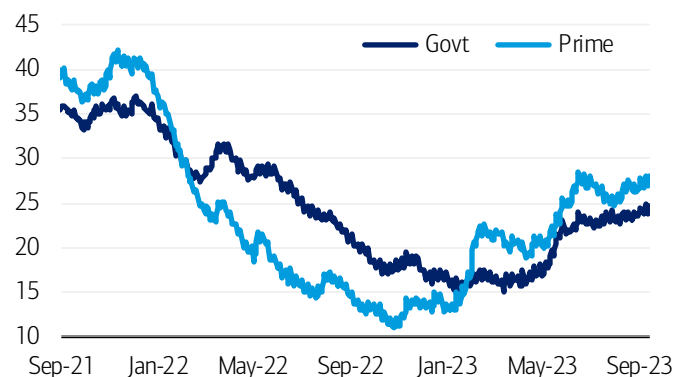


Source: BofA Global Research, iMoneyNet

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

MMF WAM extension has slowed

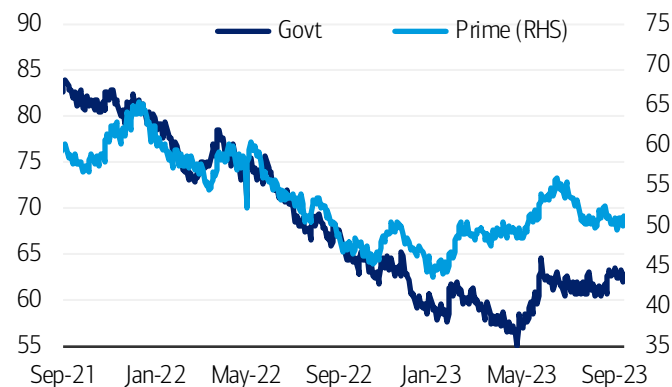


Source: BofA Global Research, iMoneyNet

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

MMF WALs have declined recently



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	Aug Assets	Aug ON RRP	Jul ON RRP	Jun ON RRP	May ON RRP
JPMorgan US Govt MM	263	100	99	112	133
Vanguard Federal Money Mkt Fund	273	87	101	124	117
Goldman Sachs FS Govt	261	86	110	124	144
Fidelity Govt Money Market	287	74	108	111	106
Fidelity Inv MM: Govt Port	181	61	79	89	95
Fidelity Govt Cash Reserves	223	59	85	88	89
Morgan Stanley Inst Liq Govt	160	54	50	62	56
BlackRock Lq T-Fund	92	51	45	50	53
BlackRock Lq FedFund	141	50	42	52	60
Schwab Treasury Oblig MF	68	49	49	52	55

Source: BofA Global Research, Crane Data

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

Prime funds shifted holdings and inflows into CP/CD/TD from UST repo

	Prime			Prime Institutional			Prime Retail		
	Aug-23	MoM Δ	YoY Δ	Aug-23	MoM Δ	YoY Δ	Aug-23	MoM Δ	YoY Δ
Cash	14.0	1	12	5.0	0	3	9.0	0	8
Treasury Debt	18.4	13	15	3.0	0	1	15.4	13	14
Treasury Repo	171.9	(13)	77	22.9	(6)	(1)	149.0	(7)	78
Govt Agency Debt	2.5	(0)	2	1.1	(0)	1	1.3	(0)	1
Govt Agency Repo	84.6	4	68	13.0	1	6	71.7	3	62
Other Repo	64.2	(2)	19	33.9	(1)	6	30.3	(1)	13
CD	186.0	11	67	65.6	(0)	2	120.4	11	65
Financial Co CP	143.0	5	43	46.7	0	1	96.2	5	42
ABCP	56.0	(2)	22	22.4	(1)	7	33.6	(1)	14
Other CP	15.3	2	3	4.0	0	(0)	11.3	2	3
Non-Negotiable TD	112.3	6	38	53.1	5	10	59.2	1	27
VRDN	6.6	0	1	1.7	0	(0)	4.9	0	1
Other	10.7	0	4	0.0	0	0	0.0	(53)	0
Total	890	26	370	278	(1)	34	611	27	335

Source: BofA Global Research, iMoneyNet

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

Gov't fund AUM increased in August, primarily allocating to repo

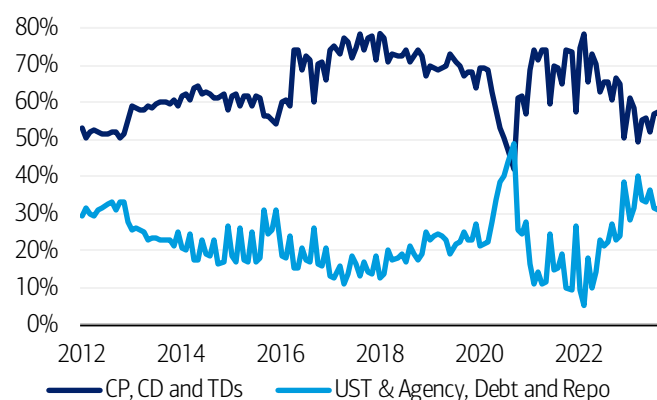
	Government			Government Institutional			Government Retail		
	Aug-23	MoM Δ	YoY Δ	Aug-23	MoM Δ	YoY Δ	Aug-23	MoM Δ	YoY Δ
Cash	74.8	2	38	56.5	1	31	18.3	1	7
Treasury Debt	1475.0	150	207	945.5	38	63	529.5	112	144
Treasury Repo	1987.4	(90)	(33)	949.1	(6)	(80)	1038.3	(85)	48
Govt Agency Debt	616.8	19	249	324.9	2	128	291.9	17	122
Govt Agency Repo	515.8	15	273	393.8	11	215	122.0	4	58
Other Repo	5.8	1	6	5.8	1	6	0.0	0	0
Investment Co Funding Agrmnt	8.3	0	0	3.1	0	(0)	5.2	0	0
VRDN	0.6	0	0	0.1	(0)	0	0.5	0	0
Other Instrument	0.4	(3)	0	0.4	(1)	0	0.0	(2)	0
Total	4685	94	741	2679	46	362	2006	48	379

Source: BofA Global Research, iMoneyNet Analyzer

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

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

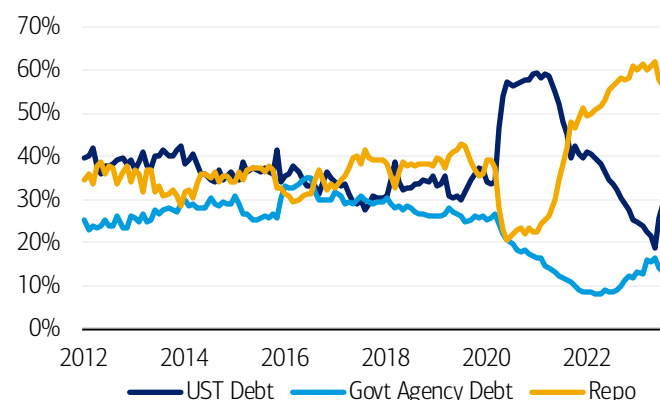


Source: BofA Global Research, iMoneyNet

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

UST debt holdings is coming back from hitting a low earlier this year



Source: BofA Global Research, iMoneyNet

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**Exhibit 12: Bills outstanding versus total MMF holdings (\$bn)**

MMF holdings as % of outstanding up 10ppts since the debt limit resolution

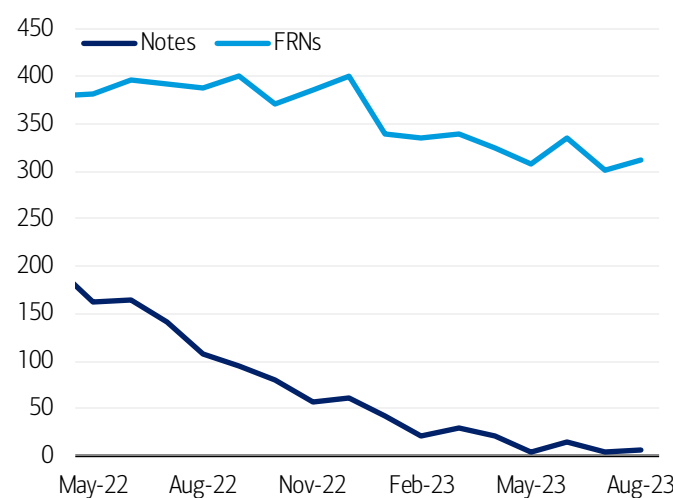
	Bills Outstanding	MMF Holdings	MMF as % Total
Apr-22	3826	1093	29%
May-22	3671	984	27%
Jun-22	3523	896	25%
Jul-22	3514	892	25%
Aug-22	3724	846	23%
Sep-22	3644	761	21%
Oct-22	3665	765	21%
Nov-22	3811	706	19%
Dec-22	3696	598	16%
Jan-23	3937	662	17%
Feb-23	4056	644	16%
Mar-23	4068	663	16%
Apr-23	3941	656	17%
May-23	3992	576	14%
Jun-23	4466	888	20%
Jul-23	4769	1124	24%
Aug-23	5073	1277	25%

Source: BofA Global Research, Crane Data

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**Exhibit 13: MMF holdings of Treasury notes and FRNs**

MMF holdings of FRNs and notes declined in July



Source: BofA Global Research, Crane Data

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**Exhibit 14: Primary dealer holdings (\$mn)**

PD holdings of T-bills have been increasing over the last month

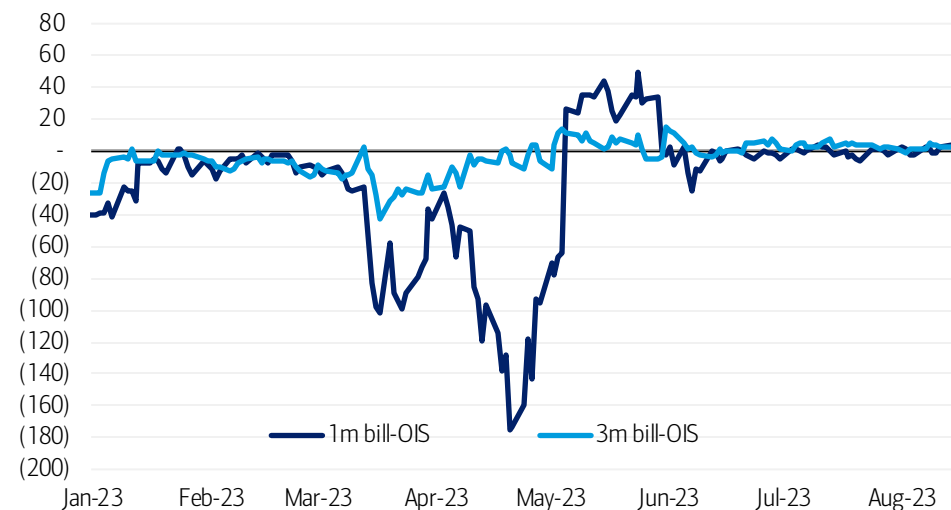
	Total	US Treasuries					Agency ex MBS	MBS	Corporates		State & Munis	ABS	Variable Rate Notes
			Bills	Coupons	FRNs	TIPS				Commercial Paper			
9/6/2023	359,940	216,992	69,613	129,304	5,394	12,681	15,613	89,706	17,959	8,312	10,137	8,470	1,063
1w Chg	15,681	15,020	14,006	2,600	-577	-1,009	-736	921	4,583	-76	-2,351	93	-1,849
1m Chg	47,302	40,561	24,937	14,181	3,145	-1,702	2,329	5,386	66	355	-998	466	-508
YTD Chg	101,383	67,183	40,983	31,451	-1,508	-3,743	2,362	17,419	12,524	4,772	-1,073	2,650	318

Source: BofA Global Research, Bloomberg

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

1m and 3m bills are flat to offering a small pickup over ON RRP



Source: BofA Global Research, Bloomberg

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