

US Rates Watch

MMF portfolio update: WAMs & WALs extend

Gov't funds saw large outflow in mid-October

Money market funds have seen record inflows in 2023 driven by Fed hikes, an inverted yield curve, and bank deposit outflows. According to Crane Data, money market funds have seen roughly \$914b in inflows YTD. Inflows have primarily been into gov't MMFs, which are \$600b higher on the year (Exhibit 1). However, in the last week, Gov't MMFs saw a \$100b drop in just two days. This drop was likely in part due to a recent large M&A acquisition but can also be partially explained by the delayed California tax payment date, which aligns with a large increase in the TGA & drop in ON RRP. We expect this drop in AUM to be temporary but do see risks of MMF AUM declining in the future as the 2s10s curve becomes less inverted (Exhibit 3).

Mid-October outflows came entirely out of inst'l funds

Retail MMF AUM is up \$500b YTD while institutional funds have grown \$478b (Exhibit 2). The decline in government fund AUM MTD has come entirely out of institutional funds, likely reflecting the M&A activity & Cali taxes. 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 widen.

MMF yields little changed since shortly after last Fed hike

The average 7-day simple yield on MMFs have increased 22bps for gov't MMFs and 23bp for prime since the Fed's last hike on Jul 26 (Exhibit 4). The increase in MMF yields is most acute shortly after a Fed hike, but further increases are limited despite MMFs moving further out the curve. Gov't fund yields are currently 5.01% vs prime funds 5.17%, 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 WAMs & WALs extension spurred by cuts priced out

Gov't and prime fund WAMs have extended 13 and 20 days from their respective troughs but are still roughly 10 days shorter than their '20-'21 average levels. WAMs picked up relatively quickly in the past several weeks with both prime and gov't funds extending 4 days since Aug month-end (Exhibit 5). MMF WALs have also been extending, most significantly for gov't funds. Since August month-end, gov't fund WALs have extended 6.3 days vs 1.6 days for prime fund WALs. (Exhibit 6). MMF extension of WAM and WALs have picked up as the risk of cuts have been priced out and MMFs have become more comfortable with extending out the curve.

20 October 2023

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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

TGA: Treasury General Account

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Timestamp: 20 October 2023 06:30AM EDT

MMFs continue to reduce ON RRP take-up

As of September month-end, MMFs made up 95% 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 \$82b in September vs August (Exhibit 7).

ON RRP take-up began to decline more significantly around the debt limit resolution when US Treasury ramped up bill issuance. This helps to explain why despite large inflows into gov't MMFs, ON RRP take-up is now at a 2-year low. We expect MMFs to continue drawing cash out of the RRP as front-end rates cheapen relative to the rate on RRP and invest further out the curve.

MMFs allocating more to Treasury debt

According to data from iMoneyNet, gov't funds allocated holdings primarily out of Treasury repo and into Treasury debt in Sept (Exhibit 9, Exhibit 11). Conversely, prime funds invested more into Treasury repo and Treasury debt and less in TDs (Exhibit 8, Exhibit 10).

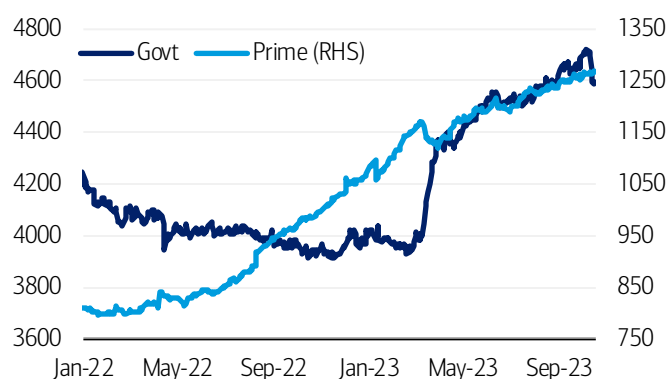
Over the last year, gov't funds have significantly increased their holdings of Treasury and agency debt and invested more into agency repo while reducing their Treasury repo investments. As we have approached the expected peak in Fed funds and front-end rates have cheapened, MMFs have been more willing to invest outside of the Fed's overnight reverse repo facility.

MMF holdings of bills increased \$139b in Sept, implying MMFs took down 75% of the \$186b in net new bill issuance in Sept (Exhibit 12). At the same time, MMF holdings of UST notes increased \$10b off historical lows and FRNs increased \$16b (Exhibit 13).

Over the last two years, prime MMFs have consistently been reducing their holdings of CP, CD, and TDs and have largely been moving into Treasury and Agency repo. This trend troughed earlier this year around bank stress events which prompted banks to issue more CP, CD, and TDs to offset other deposit outflows. Most of the largest issuers that MMFs are holding are banks issuing CDs and financial CP.

Exhibit 1: MMF AUM (\$bn)

Govt funds saw \$100b in outflows in two days in Oct

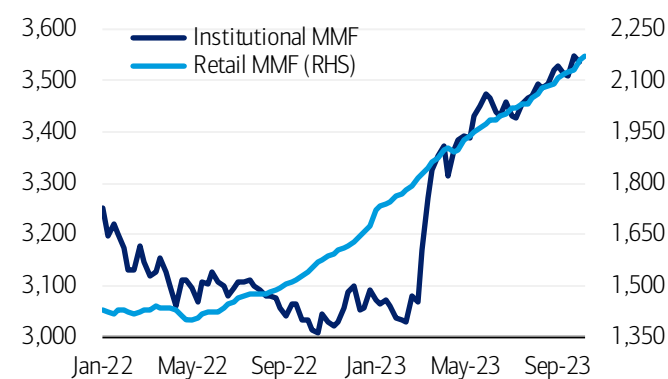


Source: BofA Global Research, Crane Data

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

Gov't fund outflows in Oct were primarily in institutional funds

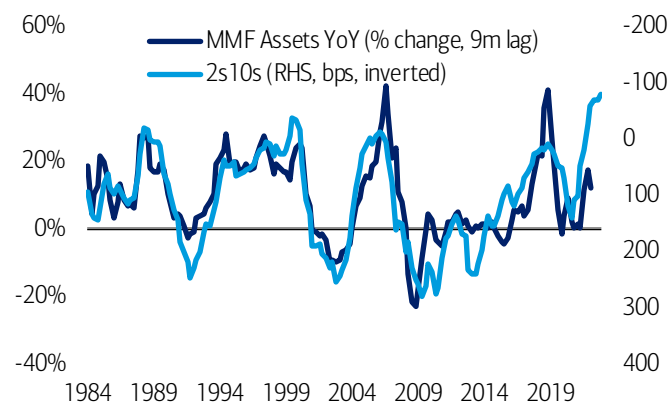


Source: Bloomberg, ICI

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Exhibit 3: MMF assets and 2s10s curve

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

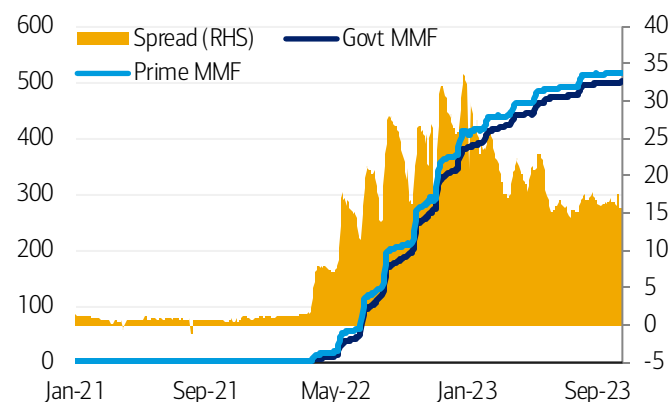


Source: BofA Global Research, Federal Reserve, Haver

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

MMF yields have risen in line with Fed hikes

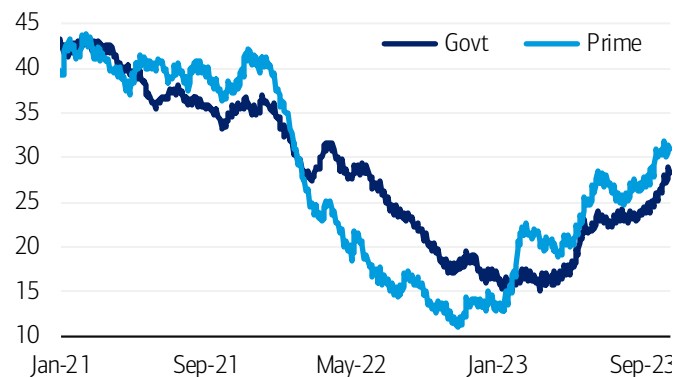


Source: BofA Global Research, iMoneyNet

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Exhibit 5: MMF WAM (Days)

MMF WAM extension continues to pickup

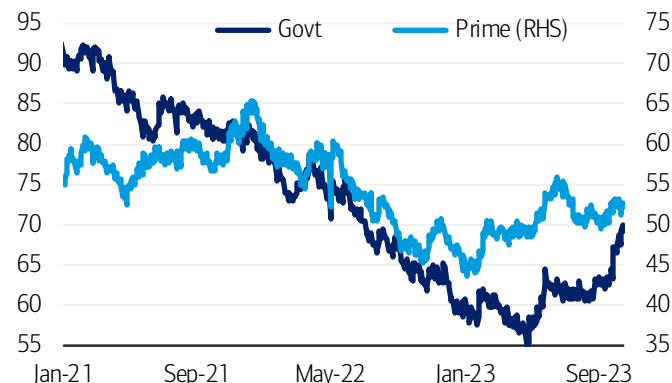


Source: BofA Global Research, iMoneyNet

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Exhibit 6: MMF WAL (Days)

Gov't MMF WALs extending quickly as the curve became less inverted



Source: BofA Global Research, iMoneyNet

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

MMFs made up 95% of the take-up of the Fed's ON RRP on Sept month-end

Fund	Sep Assets	Sep ON RRP	Aug ON RRP	Jul ON RRP	Jun ON RRP
Goldman Sachs FS Govt	266	101	86	110	124
JPMorgan US Govt MM	266	90	100	99	112
Vanguard Federal Money Mkt Fund	267	88	87	101	124
BlackRock Lq T-Fund	105	61	51	45	50
Fidelity Govt Money Market	287	52	74	108	111
Schwab Treasury Oblig MF	68	49	49	49	52
Morgan Stanley Inst Liq Govt	164	48	54	50	62
BlackRock Lq FedFund	138	48	50	42	52
Northern Instit Treasury MMkt	80	47	46	50	60
Fidelity Inv MM: Govt Port	186	45	61	79	89
Total of all MMFs	5056	1478	1560	1748	1900

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 UST repo and UST debt, but out of TD

	Prime			Prime Institutional			Prime Retail		
	Sep-23	MoM Δ	YoY Δ	Sep-23	MoM Δ	YoY Δ	Sep-23	MoM Δ	YoY Δ
Cash	17.9	4	16	5.5	1	4	12.4	3	12
Treasury Debt	28.2	10	25	4.0	1	2	24.2	9	23
Treasury Repo	192.5	21	70	39.3	16	0	153.2	4	70
Govt Agency Debt	2.2	(0)	2	1.1	0	1	1.0	(0)	1
Govt Agency Repo	85.4	1	65	9.0	(4)	2	76.5	5	63
Other Repo	68.4	4	23	36.2	2	9	32.2	2	14
CD	185.0	(1)	66	65.0	(1)	9	120.0	(0)	57
Financial Co CP	144.8	2	44	46.7	(0)	4	98.0	2	39
ABCP	57.4	1	22	20.7	(2)	6	36.8	3	16
Other CP	12.6	(3)	2	2.5	(1)	(1)	10.0	(1)	3
Non-Negotiable TD	88.9	(23)	27	34.6	(18)	4	54.2	(5)	23
VRDN	6.9	0	1	1.8	0	(0)	5.1	0	1
Other	10.5	(0)	3	0.0	0	0	0.0	(55)	0
Total	905	15	365	272	(6)	39	633	21	326

Source: BofA Global Research, iMoneyNet

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

Gov't fund AUM increased in September, primarily allocating to UST debt and out of UST repo

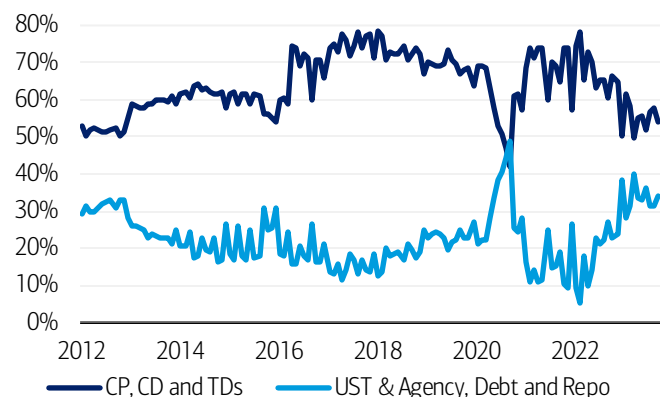
	Government			Government Institutional			Government Retail		
	Sep-23	MoM Δ	YoY Δ	Sep-23	MoM Δ	YoY Δ	Sep-23	MoM Δ	YoY Δ
Cash	85.8	11	34	62.9	6	27	22.9	5	7
Treasury Debt	1630.8	156	437	1006.7	61	155	624.1	95	282
Treasury Repo	1877.0	(110)	(196)	887.3	(62)	(179)	989.8	(48)	(17)
Govt Agency Debt	607.2	(10)	207	326.4	2	126	280.9	(11)	81
Govt Agency Repo	532.9	17	310	402.7	9	243	130.3	8	66
Other Repo	7.0	1	7	6.5	1	6	0.5	1	1
Investment Co Funding Agrmnt	10.2	2	1	4.9	2	0	5.3	0	0
VRDN	0.6	0	(0)	0.1	(0)	(0)	0.5	0	0
Other Instrument	0.4	(0)	(1)	0.4	(0)	(0)	0.0	0	(1)
Total	4752	67	797	2698	18	379	2054	49	418

Source: BofA Global Research, iMoneyNet Analyzer

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Exhibit 10: Prime MMF holdings as % of total

Prime funds allocated more into UST and Agy debt / repo

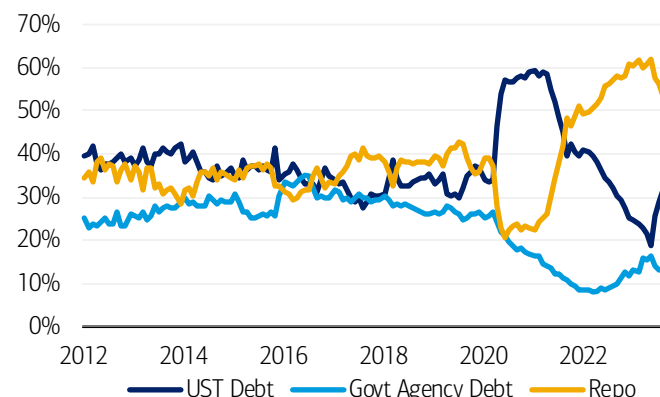


Source: BofA Global Research, iMoneyNet

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Exhibit 11: Govt MMF holdings as % total

Gov't funds are swapping their holdings of repo for UST debt



Source: BofA Global Research, iMoneyNet

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

MMFs took down 75% of net new bill supply in Sept

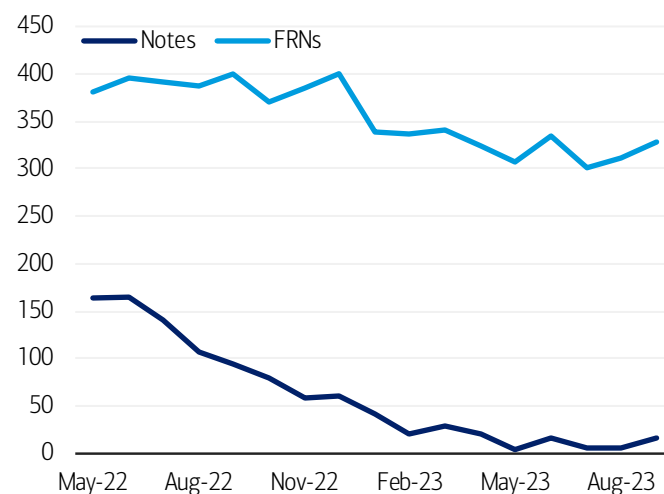
	Bills Outstanding	MMF Holdings	MMF as % Total
May-22	3671	984	27%
Jun-22	3523	896	25%
Jul-22	3514	892	25%
Aug-22	3724	846	23%
Sep-22	3644	761	21%
Oct-22	3665	765	21%
Nov-22	3811	706	19%
Dec-22	3696	598	16%
Jan-23	3937	662	17%
Feb-23	4056	644	16%
Mar-23	4068	663	16%
Apr-23	3941	656	17%
May-23	3992	576	14%
Jun-23	4466	888	20%
Jul-23	4769	1124	24%
Aug-23	5073	1277	25%
Sep-23	5259	1417	27%

Source: BofA Global Research, Crane Data

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Exhibit 13: MMF holdings of Treasury notes and FRNs

MMF holdings of UST notes increased \$10b off of historical lows



Source: BofA Global Research, Crane Data

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