

## US Rates Watch

# MMF portfolio update: gov't funds shift from ON RRP to T-bills

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

According to Crane Data, money market funds have seen \$563bn in inflows since bank stress began on March 10th, most of which came in the weeks immediately following (Exhibit 1). Gov't MMFs have drawn inflows of \$514b following contagion fears around uninsured bank deposits but flows have reversed slightly in the past few weeks. Since the debt limit resolution on June 3, Gov't MMFs have seen \$12b of outflows.

Conversely, prime funds have only seen \$49b of inflows since Mar 10, but half has come since the debt limit resolution.

Most of these MMF inflows were initially into institutional MMF. Inst'l MMF AUM has grown roughly \$336bn since March 10 vs \$226bn into retail funds. More recently however inst'l MMFs have experienced outflows and are now \$37b lower since the DL resolution (Exhibit 2). Outflows may be due to some investors buying bills directly

Retail MMFs have continued the trend of inflows that began last year as Fed hikes made retail MMF yields more competitive vs retail deposit rates.

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).

### Gov't vs Prime simple yield spread narrows

The average 7-day simple yield on MMFs have increased 4.5bps for both gov't and prime MMFs since June 3, roughly 54bps higher since March 10 (Exhibit 4). Gov't fund yields are currently 4.77% vs prime funds 4.92%, a 15bp spread.

The spread between gov't and prime MMFs has come down 17bps 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.

With the Fed nearing terminal, MMFs are expected to extend out the curve, which could continue the upward pressure on MMF yield.

### MMF WAM extension has slowed

Gov't funds have extended WAM 6.5 days since the start of bank stress to 22.8 days, which is 5.6 days longer on the year. Prime MMFs have extended WAMs 3.5 days since Mar 10, totaling 11.5 days longer YTD (Exhibit 5). However, both gov't and prime WAMs have come down MTD, especially for prime funds. This has likely been driven by growing uncertainty regarding Fed hikes & market pricing of rate cuts in late '23 / early '24.

Gov't and prime fund WALs are 2 days longer since bank stress events but have recently declined 2 and 3 days, respectively (Exhibit 6).

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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

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## ON RRP take-up has declined due to bill issuance

According to the latest data available from the NY Fed, MMFs made up 96% of ON RRP take-up as of May month-end, in line with recent averages. Month-end snapshots from Crane Data show that MMF take-up at the ON RRP declined \$136b in June vs May (Exhibit 7).

ON RRP take-up has since declined another \$317b since June month-end to the lowest level since April '22 at \$1.7tn. Assuming MMFs are still roughly 96% of take-up, that's potentially another \$256b decline in MMF ON RRP take-up.

The decline in ON RRP take-up is likely in part due to gov't MMF outflows, but 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.

## Gov't MMFs shift holdings into UST debt wave

According to data from iMoneyNet, gov't funds allocated holdings out of Treasury repo, agency debt, and agency repo and into Treasury debt (Exhibit 9). MMF holdings of bills increased \$313b in June, implying MMFs took down 66% of the \$473b in net new bill issuance in June (Exhibit 13). At the same time, MMF holdings of UST notes and FRNs also increased in June (Exhibit 12).

MMF extension into bills has surprised us given the limited cheapening of bills vs OIS despite the significant amount of issuance since the debt limit resolution (Exhibit 15). We expect gov't MMFs to continue shifting into Treasuries and out of ON RRP as bill issuance continues (see: [US liquidity drain: RRP drop defers scarcity 19 July 2023](#)).

Conversely, Prime MMFs have actually increased their allocation into UST repo, in addition to other repo and CDs but out of non-negotiable TD. (Exhibit 8, Exhibit 10).

## MMF reform: better than feared

Last week, the SEC released its final rule on money market mutual fund (MMF) reform. The reforms are across 4 key areas: (1) increase in minimum daily & weekly liquidity (2) removal of gate & fee link to weekly liquidity assets (3) mandatory liquidity fee for large redemptions on institutional prime & muni funds (4) mechanisms for negative interest rate environment. Importantly, swing pricing is not included in the final rule.

On balance, the SEC final rule is better than feared for the MMF industry. For the industry the final rule has helpful aspects (removal of gate & fee link to weekly liquid assets) but challenges as well (liquidity fee for inst prime & muni + high weekly liquid asset threshold). On net, the final rule will likely be less onerous vs the proposed amendments. We still expect modest prime inst outflows due to the new rules.

We believe the mandatory liquidity fee will mean that (1) smaller funds will likely be disproportionately impacted by the liquidity fee (2) some investors will leave prime inst funds. It is difficult to estimate the extent of prime institutional MMF outflows due to the liquidity fee but we might guess the industry could see a 20% drop in AUM. This would likely translate to \$130b of prime institutional outflows according to most recent OFR MMF AUM data. Prime outflows could see credit cheapening but less than in '16 or with swing pricing; we estimate a 2-4bps credit cheapening impact near implementation in Sept / Oct '24.

The final rule implementation deadline is tiered based on the requirements. The SEC requires a 6m transition period for funds to comply with higher liquidity requirements. There is a 12m transition period for the new liquidity fee. All new rule requirements become effective 60D after the final rule is published in the Federal Register. We assume a ~30D period before Federal Register publication. The final rule liquidity fee timing will likely be effective in September or October '24.

The SEC final rule seems designed to address 3 things: (1) reduce first mover advantage from large investors (2) prevent shareholder dilution (3) reduce future money market

stress episode as seen in '20. The final rule effectively address the first 2 objective via the mandatory liquidity fee; large shareholders will have to bear cost of sizeable redemptions. However, the final rule does not fix the underlying source of money market stress in '20. A more effective solution would be to improve dealer balance sheet intermediation capacity, deepen underlying CP / CD market liquidity, or formalize a set of conditions where official sector intervention would be more acceptable.

**Bottom line:** the SEC final rule is better than feared for the MMF industry. For the industry the final rule has helpful aspects (removal of gate & fee link to weekly liquid assets) but challenges as well (liquidity fee for institutional prime & muni + high weekly liquid asset threshold). On net, the final rule will likely be less onerous vs the proposed amendments. We still expect modest prime institutional outflows due to the new rules.

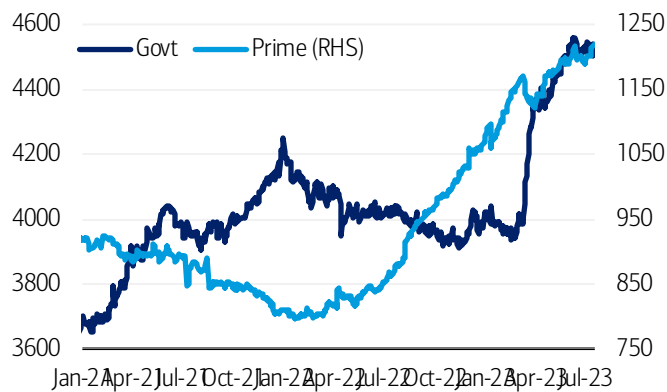
Prime outflows could see credit cheapening but less than in '16 or with swing pricing; we estimate a 2-4bps credit cheapening impact near implementation in Sept / Oct '24.

The final rule will also see further prime institutional industry consolidation. The SEC rules do not adequately address the underlying conditions that drove March '20 money market stress.

For more detail, see [SEC MMF final rule: better than feared 13 July 2023](#).

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

Govt funds saw large inflows, prime fund inflows were smaller

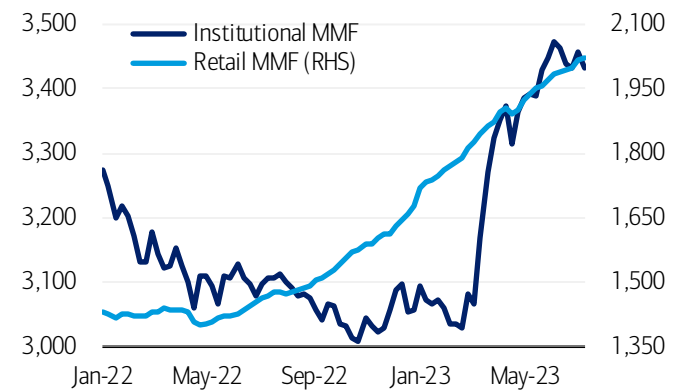


Source: BofA Global Research, Crane Data

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

Higher institutional deposit rates likely pulling \$ out of instl MMFs

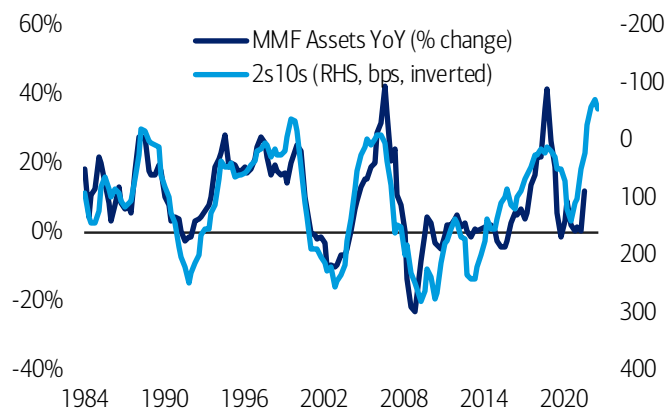


Source: Bloomberg, ICI

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

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

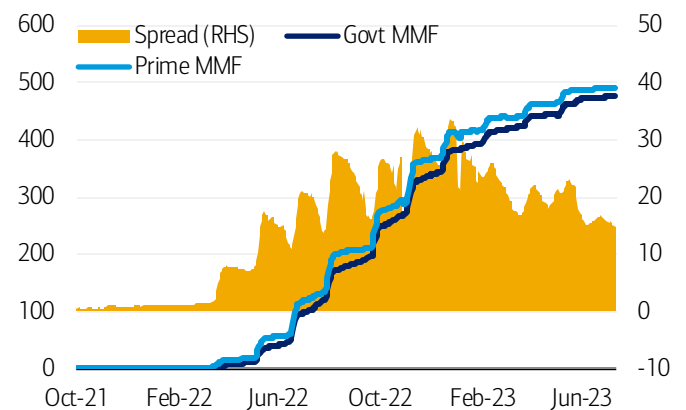


Source: BofA Global Research, Federal Reserve, Haver

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

MMF yields continue to rise with Fed hikes



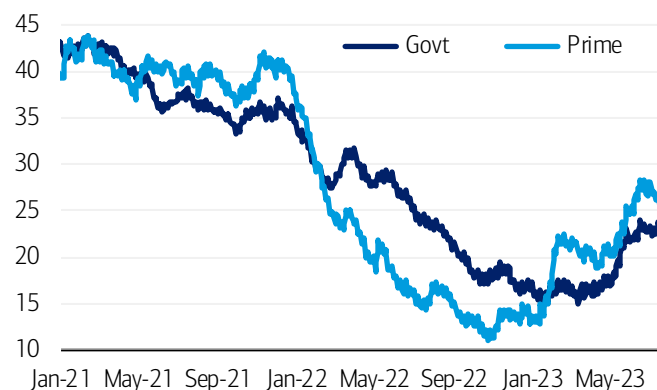
Source: BofA Global Research, iMoneyNet

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

MMF WAMs have restarted their extension

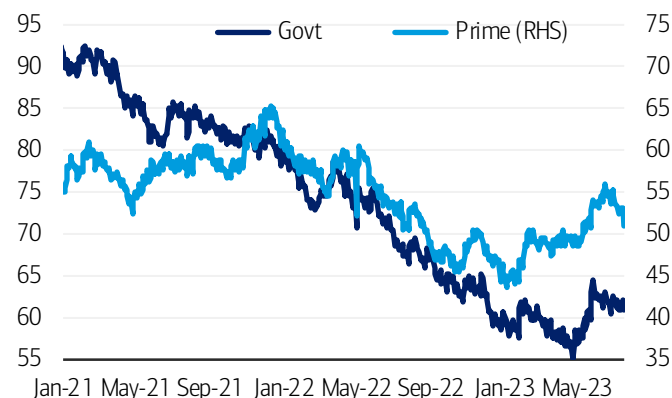


Source: BofA Global Research, iMoneyNet

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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	Jun Assets	Jun ON RRP	May ON RRP	Apr ON RRP	Mar ON RRP
Goldman Sachs FS Govt	268	124	144	143	138
Vanguard Federal Money Mkt Fund	259	124	117	130	122
JPMorgan US Govt MM	255	112	133	105	109
Fidelity Govt Money Market	274	111	106	120	123
Fidelity Inv MM: Govt Port	180	89	95	91	102
Fidelity Govt Cash Reserves	219	88	89	N/A	102
Morgan Stanley Inst Liq Govt	168	62	56	75	61
Northern Instit Treasury MMkt	75	60	59	58	52
Vanguard Cash Reserves Federal MM	109	53	54	64	51
BlackRock Lq FedFund	138	52	60	62	71

Source: BofA Global Research, Crane Data

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

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

	Prime			Prime Institutional			Prime Retail		
	Jun-23	MoM Δ	YoY Δ	Jun-23	MoM Δ	YoY Δ	Jun-23	MoM Δ	YoY Δ
Cash	13.3	0	11	4.8	0	3	8.5	0	8
Treasury Debt	4.6	0	2	3.0	0	1	1.6	0	1
Treasury Repo	216.8	30	134	36.5	19	9	180.3	11	125
Govt Agency Debt	2.9	(1)	3	1.4	(0)	1	1.5	(0)	1
Govt Agency Repo	79.0	8	65	17.7	2	11	61.3	6	55
Other Repo	60.7	6	17	33.2	2	6	27.5	4	11
CD	170.7	12	66	65.4	2	7	105.3	9	59
Financial Co CP	126.6	(1)	42	43.6	(0)	4	83.0	(0)	38
ABCP	51.2	6	26	19.8	4	6	31.4	3	19
Other CP	9.3	(0)	0	2.4	(1)	(0)	7.0	1	1
Non-Negotiable TD	75.8	(33)	24	35.1	(19)	5	40.7	(14)	18
VRDN	6.1	0	1	1.6	(0)	(0)	4.6	0	1
Other	11.2	(2)	4	0.0	0	0	0.0	(37)	0
Total	833	27	394	271	10	52	562	16	342

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

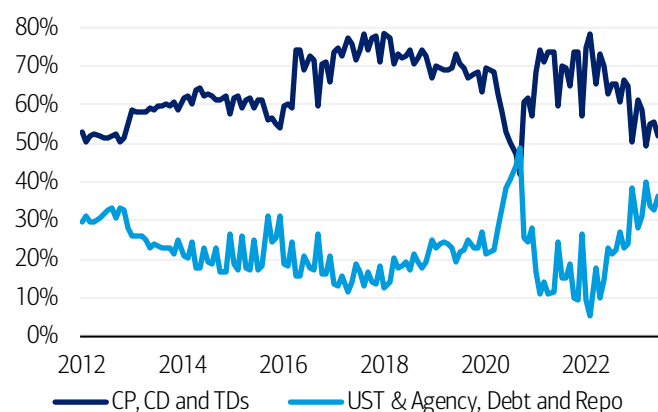
	Government			Government Institutional			Government Retail		
	Jun-23	MoM Δ	YoY Δ	Jun-23	MoM Δ	YoY Δ	Jun-23	MoM Δ	YoY Δ
Cash	89.7	(9)	39	68.5	(13)	32	21.2	3	6
Treasury Debt	1177.2	324	(202)	867.5	188	(81)	309.6	135	(120)
Treasury Repo	2179.5	(156)	153	985.6	(103)	(50)	1193.9	(53)	202
Govt Agency Debt	645.6	(107)	309	343.2	(41)	140	302.4	(66)	168
Govt Agency Repo	453.4	(24)	250	340.8	(17)	199	112.5	(6)	52
Other Repo	4.5	1	4	4.5	1	4	0.0	0	0
Investment Co Funding Agrmnt	9.7	(1)	(1)	4.6	(1)	(1)	5.1	(0)	0
VRDN	0.6	(0)	0	0.1	(0)	0	0.5	(0)	(0)
Other Instrument	0.6	(11)	0	0.5	(3)	0	0.1	(8)	0
Total	4561	17	552	2615	12	244	1945	5	308

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

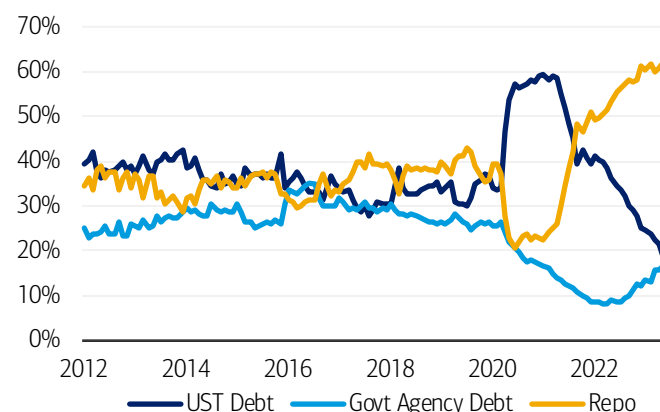


Source: BofA Global Research, iMoneyNet

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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

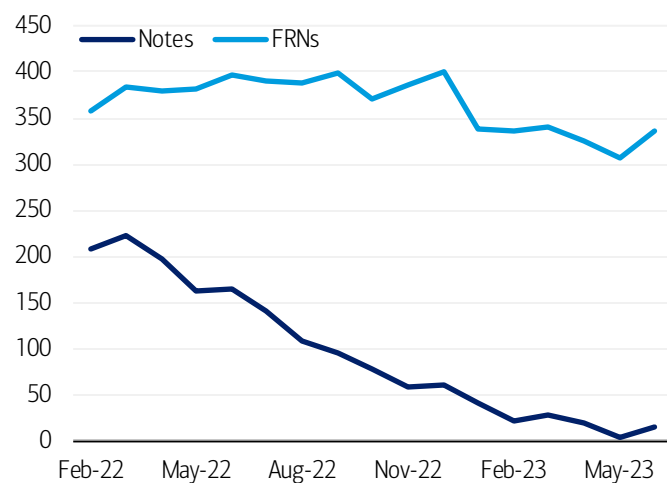


Source: BofA Global Research, iMoneyNet

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**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 Outstanding	MMF Holdings	MMF as % Total
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%
May-23	3992	576	14%
Jun-23	4466	888	20%

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

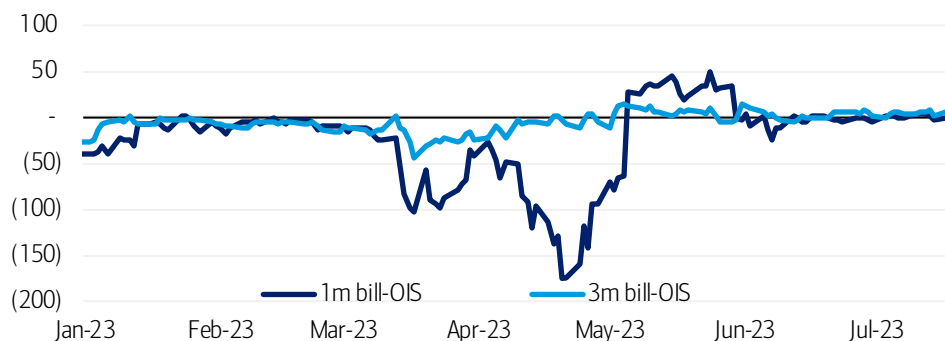
	CD			Financial Co CP			Non-Negotiable TD		
	Jun-23	MoM Δ	YoY Δ	Jun-23	MoM Δ	YoY Δ	Jun-23	MoM Δ	YoY Δ
US	20.4	2	14	7.2	3	2	0.5	0	0
Canada	33.3	4	8	36.2	1	14	10.5	1	5
Euro Bloc	33.4	(4)	15	22.6	(10)	12	35.2	(18)	18
Germany	5.5	(1)	0	5.5	(6)	2	6.0	(5)	5
France	22.2	(3)	13	10.1	(1)	5	4.3	(6)	2
Other	5.7	(0)	1	6.9	(3)	6	24.9	(6)	11
Europe (non-Euro Bloc)	24.6	3	6	35.4	0	17	11.6	(5)	(3)
UK	11.9	3	4	11.4	(1)	6	0.1	0	(4)
Sweden	11.7	1	4	14.7	(1)	7	10.8	(5)	1
Other	1.0	(0)	(2)	9.3	2	4	0.7	0	1
Australia	1.1	0	0	13.3	2	(4)	6.9	0	2
China	1.7	0	2	0.6	1	0	3.0	(2)	2
Japan	52.7	7	20	7.8	2	2	3.2	(5)	(4)
Total	170.7	12	105	126.6	(1)	42	75.8	(33)	24

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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