Prime money market fund holdings update

December 2014

Short Duration Strategy

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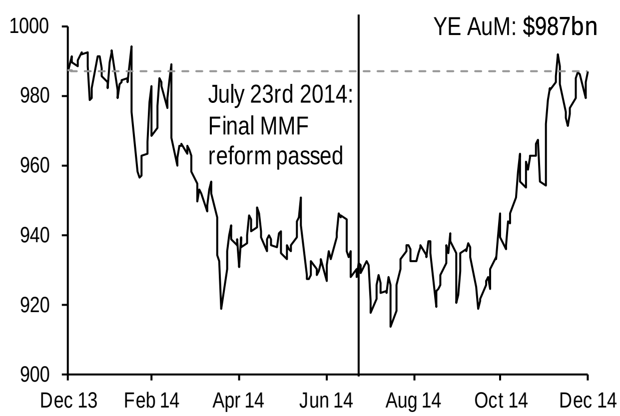
- **Prime MMF assets grew during December.** During the month of December, prime money market fund assets increased by $21bn (+1.5%), finishing the month at $1,459bn according to iMoneyNet. Prime retail fund AuM decreased by $10bn (-2.1%) to $473bn, while prime institutional fund AuM increased by $31bn (+3.3%) to $987bn. Government fund AuM increased by $41bn (+4.4%) month-over-month to $982bn.

- **Despite the passing of SEC MMF reform during the middle of the year, prime institutional fund AuM finished 2014 flat.** Although we expect cash to eventually flow out of prime institutional funds and into liquidity alternatives such as government funds, there has been little evidence of any regulatory driven flows since the reform rules were passed late last July (Exhibit 1). In fact, from July to the end of the year, we actually witnessed net inflows into prime institutional funds. Although it is difficult to gauge, with the reform rules' implementation date still about two years away, we don't anticipate any sizable outflows to occur until at least later this year.

- **Sector allocations show that exposures to high credit quality asset classes increased.** As banks managed down their balance sheets over year-end, prime funds sought investible supply in high quality alternatives such as US Treasuries and agencies, foreign SSAs, and Fed RRP. Prime allocations to US Treasury and agency securities rose by 45% and 20% respectively, while foreign SSA holdings rose by 12% and Fed RRP by 258% (Exhibit 2).

Exhibit 1: Prime institutional MMF AuM finished 2014 flat despite the passing of final MMF reform rules in July
Prime Institutional MMF AuM; $bn



Source: iMoneyNet

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- **Prime MMF exposures to banks declined sharply by $119bn at December month-end, due to large pullbacks in time deposit and CP/CD balances (Exhibit 3).** Total time deposit balances contracted by $95bn, while CP and CD balances dropped by a combined $26bn. By jurisdiction, the reduction in time deposits was driven by French banks (-$21bn), Norwegian banks (-$15bn) and Swedish banks (-$37bn). Furthermore, reductions in CP and CD balances were mostly scattered across several European banks. A prominent trend during 2014, many international banks and their securities dealing affiliates have tended to temporarily shed short-term wholesale funding sources such as repo and time deposits from their balances sheets at quarter-ends as they prepare to comply with and disclose their Basel III leverage ratio and LCR this year. This phenomenon certainly continued to play out during 4Q14.

- As we have highlighted in previous holdings notes, the bank balance-sheet management mentioned above has caused temporary crunches in money market liquidity, which in turn has prompted large surges in Fed RRP usage on quarter-end dates. In fact, looking at money funds that voluntarily report their holdings on a daily basis illustrates how strong this relationship has been throughout the duration of 2014. **As Exhibit 4 and 5 show, there has been a very strong negative correlation between MMF usage of the RRP and the amount of dealer repo and time deposits outstanding on quarter-end dates.**

Exhibit 2: Prime holdings of high credit quality asset classes increased during December

Prime MMF exposures by sector ($bn)

Issuer Type	Dec-14	% of total	m/m chg	chg since Dec-13	m/m % chg	% chg since Dec-13
Banks (US)	168	11%	(13)	(7)	-7%	-4%
Banks (Eurozone)	168	11%	(45)	(37)	-21%	-18%
Banks (Other Yankee)	627	42%	(64)	9	-9%	2%
ABCP/CCP (Banks)	68	5%	3	(5)	4%	-7%
ABCP (Non-banks)	16	1%	(1)	(5)	-4%	-24%
ABS issuers	1	0%	(0)	(0)	-6%	-29%
Corporates (Financial)	14	1%	(0)	(3)	-2%	-20%
Corporates (Non-financial)	36	2%	(5)	5	-12%	15%
US Treasuries	78	5%	24	(24)	45%	-24%
US Agencies	97	6%	16	(17)	20%	-15%
US S&L Govt/Munis	12	1%	(0)	(16)	0%	-57%
Foreign SSA	34	2%	4	(4)	12%	-10%
Central Banks (Fed RRP)	179	12%	129	108	258%	150%
Other	4	0%	0	(1)	9%	-20%
Total	1,500	100%	49	3	0	0%

*Includes bank sponsored, non-bank sponsored, and government/agency sponsored conduits.
Source: J.P. Morgan estimates, fund holdings reports, iMoneyNet
Note: J.P. Morgan estimates of exposures in prime money market funds are based on a sample of large funds including funds managed by Fidelity, BlackRock, JPMorgan, Vanguard, Federated, Dreyfus, Wells Fargo, Goldman Sachs, Morgan Stanley, UBS, Schwab, SSgA, American Funds, BofA, First American, Northern, Prudential, RBC, Western Asset Management. Sample represents 86% of US prime MMF in terms of AUMs. Allocation %s are calculated from the sample and then applied to the period's total prime fund AUMs. Banks include unsecured CP, ABCP, CD, time deposits, repo, and other notes. Corporates include CP and other notes. US Treasuries include T-bills and coupons. US Agencies include discount notes and fixed/floating notes. US S&L Govt/Muni include muni CP, notes, and VRDNs. Foreign SSA includes CP, CDs, ad other notes. Central banks include repo. Other includes investments in funds including other MMFs and tax-exempt preferreds.
**Actual total amount used for "Central Banks (Fed RRP)", causing difference between iMoneyNet total AUM of $1,459bn for 12/31 vs. total AUM of $1,500bn in table.

Exhibit 3: Large quarter-end pullbacks in time deposits and reductions in CP/CD outstanding drove the $119bn decrease in bank exposures

J.P. Morgan estimate of prime MMF exposures to banks ($bn)

		Dec-14										m/m change										Change since Dec-13									
	Issuer # / Top 3	CP	CD	TD	ABCP	CCP	Agy RP	Tsy RP	Oth RP	Other	Total	CP	CD	TD	ABCP	CCP	Agy RP	Tsy RP	Oth RP	Other	Total	CP	CD	TD	ABCP	CCP	Agy RP	Tsy RP	Oth RP	Other	Total
Total	74 / 14%	165	522	85	54	14	39	13	93	46	1,030	(15)	(11)	(95)	3	(1)	(6)	4	0	2	(119)	5	(20)	(3)	(5)	(1)	(36)	(3)	12	11	(39)
Eurozone	15 / 53%	25	92	17	17	2	14	6	12	2	187	(0)	(13)	(31)	1	0	(1)	2	(2)	(0)	(43)	(1)	(1)	(26)	(2)	(1)	(6)	3	(5)	0	(39)
Belgium	1 / 100%	-	1	-	-	-	-	-	-	-	1	-	(6)	(4)	-	-	-	-	-	-	(10)	-	1	-	-	-	-	-	-	-	1
France	5 / 81%	14	49	13	13	2	11	6	8	0	116	(0)	(9)	(21)	1	0	(1)	2	(1)	(0)	(29)	(3)	8	(23)	1	1	(0)	3	(4)	(0)	(17)
Germany	5 / 89%	3	9	3	2	-	1	1	1	0	20	0	0	(1)	(1)	-	1	0	(1)	(0)	(1)	2	(12)	2	(2)	(2)	(3)	0	(1)	0	(15)
Luxembourg	1 / 100%	0	-	-	-	-	-	-	-	-	0	(0)	-	-	-	-	-	-	-	-	(0)	(0)	-	-	-	-	-	-	-	-	(0)
Netherlands	3 / 100%	8	32	1	2	-	2	0	3	2	50	(0)	2	(5)	0	-	(1)	0	1	(0)	(3)	(0)	1	(5)	(1)	-	(2)	(0)	(0)	0	(7)
Other Europe	13 / 46%	38	69	43	9	0	-	2	20	8	190	(17)	(6)	(52)	(1)	(1)	(5)	(1)	(1)	3	(80)	(14)	(14)	23	1	(1)	(5)	(1)	3	1	(7)
Norway	1 / 100%	9	3	3	-	-	-	-	-	-	15	0	(4)	(15)	-	-	-	-	-	-	(19)	2	(4)	3	-	-	-	-	-	-	1
Sweden	4 / 83%	19	28	23	-	-	-	-	-	6	77	(4)	1	(37)	-	-	-	-	-	3	(37)	(11)	2	5	-	-	-	-	-	0	(4)
Switzerland	2 / 100%	2	22	-	4	-	-	0	18	1	47	(0)	(1)	-	(1)	-	(0)	(0)	(0)	1	(2)	(1)	(10)	-	3	-	(2)	0	4	1	(5)
UK	6 / 82%	8	16	17	5	0	-	2	2	1	51	(13)	(3)	(0)	(0)	(1)	(5)	(0)	(1)	0	(22)	(4)	(1)	16	(3)	(1)	(3)	(1)	(1)	(0)	1
Other Regions	46 / 22%	101	361	25	28	11	25	5	61	36	653	2	8	(12)	3	(0)	(0)	2	3	(1)	5	20	(5)	0	(3)	1	(25)	(5)	14	10	7
Australia	6 / 77%	57	21	8	0	-	-	-	-	6	94	4	(1)	(0)	0	-	-	-	-	0	2	10	(11)	0	(0)	-	-	-	-	2	(0)
Canada	7 / 69%	8	131	6	9	4	5	0	8	6	178	0	10	(3)	1	(0)	1	0	2	0	11	2	5	2	(0)	1	2	(1)	4	4	18
Chile	4 / 91%	1	2	-	-	-	-	-	-	0	3	0	0	-	-	-	-	-	-	0	0	0	0	-	-	-	-	-	-	0	1
China	3 / 100%	1	5	1	-	-	-	-	-	0	6	0	(0)	0	-	-	-	-	-	(0)	(0)	1	(1)	0	-	-	-	-	-	0	0
Japan	8 / 72%	8	137	4	9	-	2	-	5	1	165	(1)	2	2	1	-	(1)	(0)	1	(0)	4	1	(6)	(1)	1	-	(4)	(0)	1	0	(9)
Kuwait	1 / 100%	-	0	1	-	-	-	-	-	-	1	-	0	(0)	-	-	-	-	-	-	(0)	-	0	0	-	-	-	-	-	-	0
Singapore	3 / 100%	13	4	3	-	-	-	-	-	1	21	0	(0)	0	-	-	-	-	-	0	0	7	(1)	2	-	-	-	(2)	-	1	7
US	14 / 69%	13	61	2	11	7	18	4	48	21	186	(1)	(2)	(11)	1	(0)	0	2	(1)	(1)	(13)	(0)	9	(3)	(4)	(0)	(22)	(2)	9	2	(11)

Source: J.P. Morgan estimates, fund holdings reports, iMoneyNet. * Top 3 issuer concentrations by country. Note: Other category includes money market eligible notes/bonds. Table does not include exposures to VRDN credit/liquidity providers.

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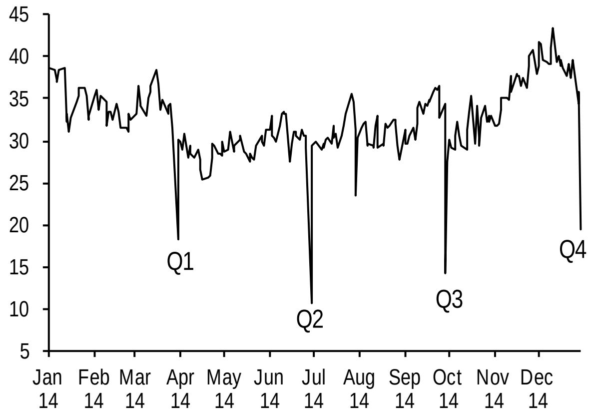
Exhibit 4: Throughout 2014, some banks and dealers temporarily pulled back repo and TD balances at quarter-end dates…

Dealer repo and TD balances of daily reporting funds*; $bn



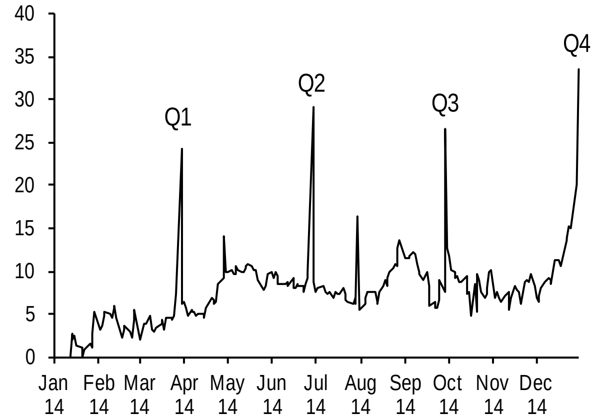
*Sample consists of 7 MMFs (5 prime and 2 government) totaling $118bn in AuM as of 12/31
Source: Fund holdings reports

- **Money market funds accounted for $201bn or 89% of the $226bn in usage at the term RRP facility, and took down $159bn or 93% of the $171bn in overnight RRP used on December 31st (Exhibit 6).** Government MMFs were the largest users of the first two term RRP operations, representing 52% of awarded bids during the December 8th operation and 67% of awarded bids during the December 15th operation. Prime fund participation picked up over the last two term RRP offerings, amounting to 51% of usage. Furthermore, usage of the ON RRP on 12/31 was mostly split evenly between prime and government funds. While we had initially expected prime funds to be the primary users of the first two term RRP operations, this did not turn out to be the case. We believe that prime funds may have not bid aggressively for the facility early on, due to higher yielding market rates and a perceived ample amount of backstop RRP supply available toward month-end ($200bn in available term RRP and $300bn of ON RRP).

- **As of the end of the year, MMFs held $35.4bn in Treasury floaters,** an increase of $9.8bn since November, and the largest monthly increase in holdings since the FRN was first auctioned last January. With the on-the-run issue averaging an attractive discount margin of 8.5bp through December and the continuing lack of investible assets in the front end, this uptick in holdings is not much of a surprise. On balance, treasury funds continue to be the largest holders of floaters at $21.8bn, followed by prime MMFs with $11.8bn and government MMFs at $1.8bn. **Money market funds now hold 22% of all Treasury FRNs outstanding (Exhibit 7).**

Exhibit 5: …causing a corresponding surge in RRP demand as funds seek an alternative source of supply

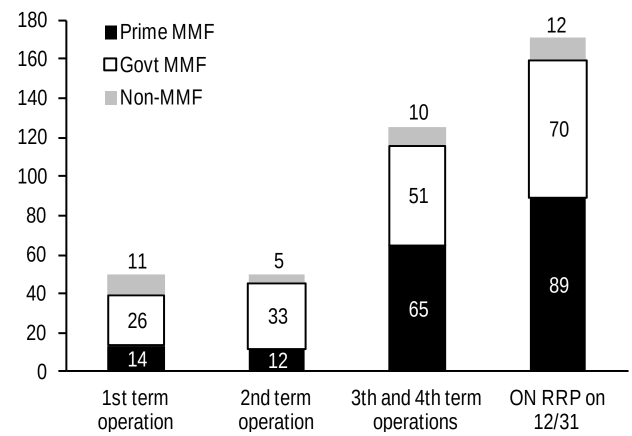
Fed RRP balances of daily reporting funds*; $bn



*Sample consists of 7 MMFs (5 prime and 2 government) totaling $118bn in AuM as of 12/31
Source: Fund holdings reports

Exhibit 6: MMFs were the primary users of both the term and ON RRP at year-end

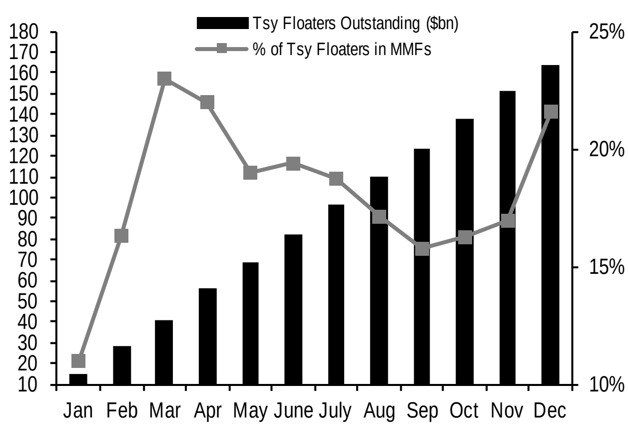
Term and ON RRP usage breakout; $bn



Source: Federal Reserve, fund holdings reports

Exhibit 7: Holdings of 2y Treasury FRNs rose in response to tight supply conditions and its relatively cheap discount margin

Treasury Floater Outstanding versus % of Treasury Floaters in MMFs



Source: J.P. Morgan, Fund Holdings Reports, Crane Data

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