

US Rates Viewpoint

SEC MMF final rule: better than feared

SEC MMF reform final rule: 4 large changes

Yesterday 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.

SEC rule interpretation: better than feared

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.

Liquidity fee impact: modest outflows & cheapening

We believe the mandatory liquidity fee will mean that (1) smaller funds will likely be disproportionally 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.

Timing of outflow & market impact: Sept or 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.

SEC rule does not address source of '20 market stress

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.

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Rates Research United States

US Rates Research BofAS

+1 646 855 8846

Mark Cabana, CFA Rates Strategist BofAS mark.cabana@bofa.com

Katie CraigRates Strategist
BofAS
katie.craig@bofa.com

MMF = money market mutual fund

Inst = institutional

WAM = weighted average maturity

CP = Commercial Paper

CD = Certificate of Deposit

MMF final rule detail: liquidity fee most complicated

The SEC final MMF rule is centered 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. We provide perspective on each aspect of the final rules below:

Rule change 1: increase in minimum daily & weekly liquidity

This rule change is a non-issue today but could limit MMF performance in the future.

The new rule will increase the minimum liquidity requirements as % of total AUM to 25% for daily liquid assets (DLA) and 50% for weekly liquid assets (WLA). Currently DLA = 10%, WLA = 30%. Recall, DLA = cash, USTs, securities that mature or can be put within 1 business day; WLA = DLA + agencies that mature in <60D & securities that mature or can be put within 5 business days.

MMF DLA & WLA are currently well above these thresholds, which should limit any immediate market impact (Exhibit 1). However, the new liquidity rules will be more of a constraint with a steeper money market curve. When the money market curve is flat or downward sloping, MMF will likely hold higher WLA (Exhibit 2). If the money market curve steepens, MMF will have incentive to extend WAM. Higher liquidity will limit MMF ability to extend WAM in a steeper curve & hurt performance. This could reduce attractiveness of prime funds vs other money market alternatives in the future.

Rule change 2: removal of gate & fee link to weekly liquid assets

This rule change is a clear positive for the MMF industry.

Currently, prime & muni MMF can impose liquidity fees or redemption gates if WLA <30%; prime & muni MMF are required to impose a 1% liquidity fee if WLA <10%. Investor fear of crossing the 30% WLA threshold & facing a redemption gate accelerated prime MMF outflows in March '20. The removal of the WLA & gate link should reduce this fear & improve attractiveness of MMF.

Some MMF contacts have stressed importance of gate removal. Gates were reportedly a large dis-incentive for some MMF investors due to inability to access funds. Gate removal could help bring some investors back into the MMF product.

Exhibit 1: Comparison of daily & weekly liquidity requirements (%)

MMF daily liquid assets (DLA) & weekly liquid assets (WLA) are far beyond SEC requirements

	Current		Prior		Future		Current - Future	
	DLA	WLA	DLA	WLA	DLA	WLA	DLA	WLA
Asset Total	70.5	80.9					45.5	30.9
MMF Average	72.4	80.8					47.4	30.8
100 Largest	72.6	81.4					47.6	31.4
Taxable Inst	74.4	81.8					49.4	31.8
Taxable Ret	69.1	79.3					44.1	29.3
Treas Inst	98.3	99.5	10	30	25	50	73.3	49.5
Govt Inst	71.9	81.0	10	30	23	30	46.9	31.0
Prime Inst	47.1	60.1					22.1	10.1
Treas Ret	97.1	99.3					72.1	49.3
Govt Ret	69.3	81.7					44.3	31.7
Prime Ret	40.9	54.9					15.9	4.9
Tax Exempt	28.3	81.4					3.3	31.4

Source: Crane Data, BofA Global Research

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Exhibit 2: Prime institutional MMF weekly liquid assets (WLA) & 3m5y curve (bps)

Prime institutional WLA increase as the 3m5y curve flattens & becomes more deeply inverted



Source: Crane Data, Bloomberg

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Rule change 3: liquidity fee requirement

This rule change is the most contentious part of the SEC package, which will likely trigger institutional prime outflows.

Institutional prime & institutional muni funds are now required to have a liquidity fee when daily net redemptions exceed 5% of net assets, unless the fund's liquidity costs are "de minimis". Fee calculation & "de minimis" exception key details:

Fee calculation: fee calculation is similar to swing pricing proposal. The fee will reflect a fund's good faith estimate of liquidity costs if a fund sold a pro rata amount of each security in its portfolio (i.e. vertical slice) to satisfy the amount of net redemption. These costs include dealer spread cost & market impact for each security. If a fund cannot make a good faith estimate of liquidity costs, it will apply a default fee of 1%.

"De minimis" exception: the liquidity fee is not required if the fund's liquidity costs are "de minimis". The exception can be applied if the liquidity fee would be <0.01% (i.e. 1bp) of the value of the shared redeemed.

The liquidity fee requirement & its calculation are substantially similar to swing pricing, with a few exceptions (Exhibit 3). These exceptions: (1) swing pricing proposal had a lower threshold for the liquidity fee, 4% instead of 5% (2) swing pricing threshold would divide the 4% threshold by the number of daily MMF NAV pricing periods, resulting in a lower threshold (3) swing pricing proposal did not have a "de minimis" liquidity exception.

On balance the liquidity fee is a modest improvement from swing pricing due to the exceptions above. However, the liquidity fee is likely to discourage some investors from prime & muni institutional funds & result in outflows. Industry impact detail below.

Rule change 3: mechanism for negative interest rate environment

Retail and gov't MMF may handle a negative rate environment either by converting from (1) a stable share price to a floating share price (2) reducing the number of shares outstanding to maintain a stable NAV.

The flexibility of choosing either stable to floating NAV or share reduction plan will likely be welcomed by the industry. Industry participants had raised concern that some investors valued the stable NAV attributes of certain MMF & would not want to put this at risk with floating NAV. Flexibility on how to handle negative rates should be welcomed.



Exhibit 3: Comparison of SEC swing pricing proposal & SEC final MMF rule

Swing pricing proposal & final rule liquidity fee are substantially similar, though liquidity fee has less onerous aspects

	Proposed Swing Pricing Requirement	Final Rule's Mandatory Liquidity Fee			
Description of mechanism	NAV is adjusted downward by a swing factor when the fund has net redemptions	A mandatory fee is charged to redeeming investors when net redemptions are above 5% of net assets, unless fund liquidity cost is "de minimis"			
Scope of affected investors	NAV is adjusted downward for both redeemers & investors	Redeeming investors charged liquidity fee			
Threshold for charge	If net redemptions for a pricing period exceed 4% of net assets	If total daily net redemptions exceed 5% of net assets or such smaller amount of net redemptions as the board determines			
	The price is adjusted for all shareholders transacting in the fund's shares during	Liquidity fee on redeemed shared when fund has daily net redemptions that exceed 5% of net assets, unless liquidity cost "de minimis"			
	the relevant pricing period	De-minimis threshold: if estimated liquidity costs are <1bp of value for shares redeemed, fee not required			
Size of the charge	Good faith estimate of spread, market impact, & other transaction costs fund incurs if selling pro rata amt of each security in portfolio to satisfy net	Good faith estimate of spread, market impact, & other transaction costs fund incurs if selling pro rata amt of each security in portfolio to satisfy the amount of net redemptions			
	redemptions	If fund cannot estimate costs of selling pro rata amount of each security, a default liquidity fee of 1% on shares redeemed applies			

Source: SEC, BofA Global Research

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Liquidity fee impact: industry consolidation & outflows

The liquidity fee is the most impactful part of the new MMF rules. The SEC estimates that "an average of 3.2% of institutional funds would cross a 5% net redemption threshold on a given day". The SEC also notes that under normal market conditions a fund's liquidity costs generally will be de minimis, which will not require a fee.

We analyzed recent history of prime institutional MMF for frequency of a 5% decline in AUM. We were only able to examine 24 prime institutional MMF daily AUM due to data limitations. In our more limited sample set we found over 600 instances with a 5% AUM decline since the start of 2020. We observed that larger prime institutional MMF had fewer instances of reaching the 5% AUM drop threshold, smaller funds were more impacted (Exhibit 4).

Exhibit 4: Prime institutional MMF instances of breaching 5% AUM decrease

Larger funds are less likely to breach 5% AUM decrease, smaller funds more likely to breach threshold

	# of	% of		# of	% of
Top 10 MMFs by AUM	<5%	observations	Bottom 10 MMFs by AUM	<5% observations	
JPMorgan Prime MM	4	0%	Goldman Sachs FS Prm Oblg	57	6%
Morgan Stanley Inst Liq Prime	12	1%	PMorgan Sec Lending MM	17	2%
Federated Hermes Inst Prime Obligs	3	0%	Goldman Sachs FS MM	35	4%
State Street Inst Liquid Res	49	6%	Invesco Liquid Assets	30	3%
UBS Select Prime Money Mkt	2	0%	First American Inst Prime Oblg	45	5%
BlackRock Lq TempCash	3	0%	BlackRock LEAF Fund	8	1%
Federated Hermes Inst Prime Value Obl	3	0%	Federated Hermes Inst MM Mgmt	: 5	1%
Western Asset Inst Liquid Res	145	17%	DWS ESG Liquidity	29	3%
Dreyfus Cash Mgmt	34	4%	Invesco STIC Prime	59	7%
BlackRock Lq TempFund	15	2%	PIF Money Market Portfolio	26	3%
Median	8	1%	Median	30	3%

Source: Bloomberg

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Our analysis draws 2 conclusions (1) smaller funds will likely be disproportionally impacted by the liquidity fee (2) all funds breached the threshold which may support investor concern about a potential liquidity fee. Thoughts on each.

Industry consolidation: we see prime institutional MMF industry consolidation as inevitable due to the SEC final rule. Smaller funds are likely to be dis-proportionally impacted by the 5% net redemption liquidity fee. We suspect several smaller funds will likely be consolidated into other funds or voluntarily closed. We are not certain of how many funds are likely to consolidate or close but the direction of travel seems clear.



<u>Investor concern over liquidity fee</u>: all prime institutional funds have been subject to the 5% net redemption in the past 3.5Y, which will likely raise some investor concern about remaining in prime institutional MMF. Concern around remaining in prime institutional MMF will likely drive some outflows that exceed any inflows driven by gate risk removal.

Preliminary outflow estimate: 20% for prime inst

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 is a very imprecise estimate that assumes outflows will be materially smaller than the 85% drop in prime institutional MMF AUM with '16 reforms. We assume an outflow number that is $\sim 1/4$ the size of '16 outflow because many prime institutional MMF investors will face similar liquidity fees if they moved into separately managed accounts. This would likely translate to \$130b of prime institutional outflows according to most recent OFR MMF AUM data.

We assume no outflow impact for prime retail MMF given they are exempt from the liquidity fee. However, we would not be surprised to see slower accumulation of prime retail assets due to higher DLA & WLA requirements. These requirements risk making prime retail MMF less competitive vs gov't MMF, especially in more upward sloping yield curve environments.

The \$130b of prime institutional outflows would likely translate to a 2-4bps cheapening of short-dated credit paper using a static prime outflow to 3m LIBOR-OIS relationship from '16. We might guess the impact could be even smaller after considering the slightly smaller share of prime CP & CD holdings today vs '16.

Timing of outflow & market impact: Sept or 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. We expect limited market reaction or outflows prior to fall '24. The impact will likely serve to be another factor that complicates year-end funding conditions at end '24.

SEC rule does not address source of '20 market stress

The SEC final rule seems designed to address 3 things: (1) reduce first mover advantage from large investors (2) prevent shareholder dilution (3) reduce money market stress episode similar to '20. The final rule effective 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.

The March '20 money market stress was driven by a "dash for cash" and insufficiently liquid secondary market for CP & CDs. Future investor behavior in an acute flight to quality episode could see prime MMF or other short-duration asset managers rapidly sell CP & CD again, even with the higher liquidity thresholds; limited dealer balance sheet capacity could then see another market freeze. The only way to thaw the market would be through official sector intervention.

The SEC final rule does not effectively address the underlying root causes 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.



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