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"Money Market Mutual Funds and Stable Funding"

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President & Chief Executive Officer
Federal Reserve Bank of Boston

Conference on Stable Funding
sponsored by
The Federal Reserve Bank of New York
and the
Office of Financial Research

New York, New York
September 27, 2013

FEDERAL RESERVE BANK OF BOSTON™

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I would like to thank the New York Federal Reserve Bank and the Office of Financial Research for organizing this conference, and for inviting me to speak today. As you all know, we recently passed the five-year anniversary of the failure of Lehman Brothers. This conference is particularly appropriate because many of the issues surrounding stable funding, so relevant in the crisis, sadly remain with us today.

Indeed, one of the hallmarks of the 2008 financial crisis was the severity of runs on financial intermediaries that were not traditional depository institutions. During these runs, the inability to obtain short-term funding meant that broker-dealers could not finance their securities portfolios. Similarly, Structured Investment Vehicles (SIVs) and other structured financial entities could not obtain rollover financing. And as you well know, in the wake of the Lehman failure, the Reserve Primary Fund was unable to maintain a fixed net asset value (NAV). Investors who were concerned that other funds with exposure to Lehman might not be able to maintain their NAVs ran from prime money market mutual funds (MMMFs).

Many of the structural weaknesses that lie beneath these run episodes have yet to be fully addressed by market participants and policymakers. It is good that they will be discussed in various sessions at today's conference.

Given that our time is limited, I will focus my remarks on MMMFs and, given the conference themes, the critical role that MMMFs play in short-term credit markets, providing funding to financial intermediaries. I will first describe how prime MMMFs contributed critically to the financial instability experienced in the fall of 2008 – instability that necessitated substantial government intervention, including providing insurance for MMMFs, tailoring an emergency lending facility to provide liquidity for MMMFs, and providing a variety of other emergency liquidity facilities – in part as a result of the "collateral damage" throughout the financial infrastructure stemming from the run on MMMFs. I would stress that these actions were taken not to prop up the financial infrastructure per se, but rather to ensure funding flows that are crucial to real economic activity.

Second, I will describe some of the challenges posed by the structure of MMMFs, which necessitated the Securities and Exchange Commission's (SEC's) 2010 reforms to Rule 2-a7 as well as the Commission's current proposal on money market mutual fund reform. In this, I will draw heavily from the joint letter sent by all 12 of the Federal Reserve Bank presidents in response to the SEC's request for comment. I would like, however, to stress that while many of my comments will draw from that comment letter, my remarks today are my own and do not necessarily reflect the views of my colleagues at the Board of Governors, or the other Reserve Bank presidents who signed the letter.[1]

Third, I will discuss what I see as some needed enhancements to the SEC proposal. I will conclude that the floating NAV proposal, properly implemented, would enhance financial stability; but the proposal to allow discretionary liquidity fees and redemption gates would not enhance financial stability – and would likely be worse than the status quo.

Money Market Mutual Funds during the Crisis

Figure 1 shows total MMMF assets under management, which currently total approximately $2.6 trillion. These assets are distributed across funds that buy short-term, tax-free municipal securities (approximately $265 billion in assets), funds that buy short-term government and agency securities[2] (approximately $890 billion in assets), and funds that purchase short-term corporate and financial debt instruments as well as government and agency securities. The latter, the so-called "prime" money market mutual funds, represent about 56 percent of total MMMF assets (about $1.5 trillion).[3]

All three types of MMMFs hold short-term securities, as required by rule 2a-7 under the Investment Company Act. Specifically, the Act constrains MMMFs to hold securities with no more than 397 days to maturity and to maintain a weighted average maturity of 60 days or less.[4] The MMMFs, regulated by the SEC, are to have very limited interest rate risk, a high degree of liquidity, and – ideally – relatively limited credit risk.

Figure 2 shows the assets under management for all MMMFs, and separately for just the prime money market funds. As you can see, MMMFs grew rapidly during the period leading up to the financial crisis, but experienced a significant outflow when the failure of Lehman Brothers led the Reserve Primary Fund to "break the buck" (becoming unable to maintain a fixed $1 per share net asset value).

As it became apparent that some prime funds were exposed to non-trivial amounts of credit risk, and with investors in the Reserve Primary Fund unable to access their money and facing uncertain losses, investors in other prime MMMFs began to quickly redeem their funds. In the week after the Reserve Primary Fund announcement, more than $300 billion dollars "ran" from prime funds. At least some of the funds redeemed from prime MMMFs were reinvested into government MMMFs, as investors sought funds that did not take credit risk. Of course, others transferred deposits to insured depository institutions.

The run on prime MMMFs would likely have been much more severe and disruptive had the Treasury not announced a temporary guarantee program, which provided insurance to money fund investors, and had the Federal Reserve not set up an emergency lending facility that provided needed liquidity to MMMFs experiencing (or concerned that they might soon experience) significant withdrawals.[5] These unprecedented government actions were designed to provide confidence to investors to stem the outflows from prime funds. But they were also intended to stabilize the short-term funding markets, because the dramatic reduction in money fund assets meant that money market funds withdrew from their role as significant purchasers of short-term debt instruments – an activity critical to the functioning of short-term credit markets and the provision of stable funding within the financial system.

Figure 3, which shows the current composition of prime money market mutual funds, highlights why these entities are so critical to the provision of stable funding. MMMFs continue to provide important liquidity for short-term debt instruments, such as commercial paper, asset-backed commercial paper, and short-term debt obligations. As I have suggested, one reason that short-term credit froze up in the wake of Lehman's failure was that money market funds were not able to continue purchasing such debt, which slowed the flow of critical stable funding within the "financial ecosystem."

The result was that the Federal Reserve needed to provide liquidity not only to MMMFs directly, but also to markets where MMMFs were usually an important source of financing.[6] By the way, it is worth noting that both the temporary guarantees provided by the Treasury and the type of liquidity facility run by the Federal Reserve are now essentially ruled out (by the Emergency Economic Stabilization Act, and by Dodd-Frank provisions). Thus, if MMMFs were to again experience a significant run, short-term credit markets could not rely on the same degree of government support, and might find the shock to stable funding to be even more disruptive.

So where are we now? Currently we have new limitations on public-sector safety nets for MMMFs. We have the still-remaining risk of a significant disruption to short-term credit markets, were MMMFs to again experience runs. As a result, there are reasons to remain concerned about credit risk some MMMFs may be taking.

One possible source of risk is highlighted in Figure 4, which shows the European exposure of MMMFs. Roughly one-third of the assets held by prime MMMFs are related to European firms. Of course, there are many European firms with low credit risk, but if some MMMFs get more comfortable with riskier European exposures, the financial system becomes more susceptible to a financial shock emanating from Europe.

Figure 5 shows the reduction in MMMFs' exposure to commercial paper and asset-backed commercial paper since the financial crisis. The decline, in part, reflects the low-interest-rate environment, which has led many firms to issue longer-term debt. It also reflects the fact that many markets that relied on asset-backed financing still have not recovered. However, money markets remain an important source of financing for these instruments.

In summary, I would say that prime MMMFs remain a very important source of financing for short-term debt instruments – and thus any disruption in the MMMF sector could again impede the provision of stable funding to financial intermediaries. Many of the tools used to offset the 2008 run by MMMF investors have been ruled out by legislation. And once again, some MMMFs are beginning to take riskier positions. Thus, the financial stability concerns surrounding MMMFs remain real, five years after the financial crisis.

Money Market Mutual Fund Reform

Reform remains critical because MMMFs implicitly promise to return a fixed net asset value, even as they take credit risks against which they hold no capital. A failure to keep this implicit promise during a future period of financial turmoil could risk once again freezing short-term credit markets. The Financial Stability Oversight Council (FSOC) has proposed three potential reforms,[7] with the one requiring MMMFs to hold capital quite similar to proposals currently being considered in Europe.[8] However, at this time the SEC has advanced only two proposals, only one of which was included in the FSOC proposals.

The first SEC proposal, which was suggested by the FSOC, would treat institutional prime MMMFs like other mutual funds and allow the value of a share of the fund to float with the value of its underlying assets. But unlike the FSOC's proposal, the SEC's proposal limits this reform option to institutional prime MMMFs (funds serving institutional investors).

The incentive to run on a MMMF stems from the concern that a fund could suffer credit or other losses and would be unable to redeem shares at its "fixed" net asset value. In that case, the first investors to ask for their funds back will get them, while later investors may not.

The floating NAV, which removes the implicit promise to redeem shares at a fixed net asset value, short-circuits this dynamic. Investors recognize that the market value of the fund's assets can fluctuate modestly, even though they are of high quality and short maturity. As a consequence, the value of their shares in the fund will fluctuate – as they do with most other mutual funds – and what they receive upon redemption will depend on the market prices of the fund's assets at the time of redemption. Thus, with a floating NAV, if the assets properly reflect market values, the incentive to run that stems from the possibility of "breaking the buck" under the current rules should be significantly reduced.

The second SEC proposal, which was not suggested by the FSOC, would require the fund's directors to impose a fee of not more than 2 percent on all redemptions in the event that the fund's weekly liquid assets fell below a specified threshold. The proposal, however, gives the fund's directors discretion to impose a lower fee or no fee if they determine that such action is not in the best interest of the fund.[9] This liquidity fee is intended to discourage investors from redeeming funds at a time when the MMMF is experiencing significant withdrawals. Additionally, under the proposal the fund's directors could, at their discretion, impose temporary "gates" to prevent redemptions for a time. These temporary redemption gates would, the proposal envisions, prevent investors from redeeming funds – thus ending an investor run.

Allow me to address the two proposals in reverse order. The reason for my strong opposition to the second proposal is that liquidity fees and gates fundamentally change the investor's decision-making process during a financial crisis in a way that *increases* the potential for financial instability, and could be worse than no reform at all. The liquidity fee imposes a haircut on investors who are redeeming funds – a haircut that may not be associated with the underlying value of the assets. Since MMMFs are often used as transaction accounts, this haircut would impose significant fees on investors that had viewed the account as a means of paying for transactions (and most MMMFs are currently paying less than 5 basis points a year to investors).

In addition, the temporary redemption gates would restrict investors' access to their funds. During a crisis, investors may find that they temporarily have no access to their funds – and financial crises are exactly the time that many investors most need access to their liquid funds. And when some entities do not have access (or fear that their counterparty will not have access), it can have domino effects throughout the financial system.

In short, liquidity fees and redemption gates fundamentally change the MMMF product during a crisis. As discussed above, these alterations would likely *increase* the incentive to run from a MMMF. But in addition, they increase the risk of "contagious" runs. Assume, for example, that a fund has no credit risk problems, but another fund in the midst of a crisis announces that it is imposing fees and gates. Now the investor must consider how other co-investors in the same fund will behave: If other investors run, the investor could be faced with gates and fees even though the underlying assets have experienced no change in value.

The probability of a run is increased due to the high degree of concentration at many prime funds. Of the five largest institutional prime MMMFs as of the end of June 2013, three had at least two shareholders each with a 5 percent or greater stake in the fund. If redemptions by one or more of these large shareholders caused a fund to breach the weekly liquid assets threshold, other investors in the fund might run for fear that a fee or gate may be forthcoming.

Under this proposal, prime MMMFs would still take credit risk, promise a fixed net asset value, and hold no capital. What would change is that the MMMF itself could fundamentally change during a crisis, by possibly imposing redemption gates and liquidity fees. So this proposed alternative might actually increase run risk, and pose greater financial stability concerns than the status quo.[10]

The other SEC proposal treats prime institutional MMMFs like all other mutual funds. As with other funds, investors redeem funds at the net value of the underlying assets at the time of redemption. With this reform, MMMFs would be very similar to short-term bond mutual funds, but have more restrictions on liquidity and credit risk than the typical short-term bond mutual fund.

Some might worry about continuing to use MMMFs for their current purposes (institutional transactions accounts, short-term savings) with a floating NAV. But the actual movement in the values of the underlying assets during most periods is likely to be quite modest.

I would note that a potential problem with this proposal is that the fund must determine appropriate values for money market instruments that often see little secondary market trading. In practice, funds would continue to employ a variety of models and "matrix pricing" techniques to value their assets, and could also hold certain securities at amortized cost so long as the result reflects the securities' fair value. Any model problems – or any inappropriate application of amortized cost accounting – would degrade the effectiveness of this proposal. My preferred response would be for the SEC to continue its efforts to increase the transparency of fixed income markets, to further enhance price discovery, and to periodically examine MMMF assets – especially those experiencing significant credit risk deterioration – to confirm that funds' valuation processes are appropriate.

In short, in my view moving to a floating NAV and treating MMMFs like all other mutual funds – if valuation is appropriately addressed – would reduce the financial stability concerns around MMMFs.

Additional Considerations

The SEC proposal on a floating NAV only applies to *institutional* prime funds. This raises two concerns. First, Figure 6 shows the support that MMMFs received during the 2007 to 2010 period, by fund type. More than 30 of the *retail* prime money market funds needed support during the crisis, only somewhat less than the number of non-retail prime funds that needed support.[11]

Also, more than 40 retail funds took advantage of the emergency liquidity facility administered for the Federal Reserve System by the Boston Reserve Bank to support liquidity for MMMFs. So, while institutional prime funds experienced significant investor runs, in the absence of extensive support and a liquidity facility provided by the Federal Reserve, *retail* funds may have experienced more significant investor runs as well.

A second concern is that the retail exemption applies to funds with a daily shareholder redemption limit of $1 million or less. An institutional investor may choose to spread funds across retail MMMFs so as to get the fixed NAV while still maintaining the ability to quickly redeem. This would not only thwart the intent of the exemption, but also result in retail funds being much more susceptible to runs in the next crisis.

While the severe runs occurred at institutional prime funds during the last financial crisis, there is no assurance that the next crisis will avoid retail funds. With no government support and with some institutional investors in retail funds, retail funds may be much more prone to runs than the SEC proposal presumes.

Another concern is that government funds are exempt from the floating NAV requirement as long as at least 80 percent of their total assets are in cash or government-related securities. As Figure 7 shows, the largest government funds hold nearly 100 percent of their asset in cash or government-related securities.[12] Government funds should be government funds. Using an 80 percent threshold allows funds to create a prime/government fund hybrid that would receive fixed NAV treatment. In my view, it should be clear that investors are investing in government funds, and I would recommend setting a much higher threshold – consistent with current practices at many of the largest funds.

Concluding Observations

In summary and conclusion, I would stress that MMMF reform is overdue. However, it is important that the reforms actually reduce the financial stability issues that remain under the current structure. Promising a fixed NAV with no capital while taking credit risk is not sustainable – especially in potential future crises where the response of the public sector will be substantially limited, compared to 2008. MMMF runs should not be allowed to once again impede the flow of stable funding within our financial system.

The SEC proposal to allow funds to impose liquidity fees and redemption gates should be dropped. This particular proposal is, in my view, worse than the status quo. It would only increase the risk of financial instability.

However, I strongly support requiring a floating NAV for all prime funds, both institutional and retail, which would treat these funds like other mutual funds. Investors who want a fixed NAV can keep their funds in government-only funds – and those should have the vast majority of their portfolios invested in cash and government securities.

Thank you for inviting me to speak with you on this key topic.

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[1] The letter from all 12 Reserve Bank Presidents was sent on September 12 and can be found on the Federal Reserve Bank of Boston web site (http://www.bostonfed.org/news/press/2013/pr091213.htm) or on the SEC web site.

[2] Including repurchase agreements collateralized by such instruments.

[3] These are iMoneyNet figures – weekly, as of September 3, 2013.

[4] This reflects the 2010 amendment to Rule 2a-7 that tightened the weighted average maturity limits and enacted liquidity requirements. See "Money Market Reform Final Rules", Investment Company Act Release No. IC-29132, May 2010.

[5] The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) was designed to provide a market for asset-backed commercial paper to be sold by MMMFs. This facility was administered by the Federal Reserve Bank of Boston. For a full description and analysis of the program see Burcu Duygan-Bump, Patrick Parkinson, Eric Rosengren, Gustavo A. Suarez, and Paul Willen, 2013, "How Effective Were the Federal Reserve Emergency Liquidity Facilities? Evidence from the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility" in the *Journal of Finance*, vol. 68(2), pages 715-737. The Temporary Guarantee Program (TGP) directly benefitted MMMFs by extending insurance provided by the U.S. Department of Treasury. For details, see U.S. Department of Treasury, "Treasury Announces Temporary Guarantees Program for Money Market Funds," September 2008.

[6] For example, the Commercial Paper Funding Facility (CPFF) was needed because of the inability of firms to roll over their commercial paper. The desire of MMMFs to shrink their assets was one reason why this program was needed.

[7] The FSOC proposed three reform alternatives: a floating NAV proposal, a risk-based capital buffer of 3 percent, and a 1 percent minimum balance-at-risk proposal. See FSOC, "Proposed Recommendations Regarding Money Market Mutual Fund Reform," November 2012.

[8] On September 4, 2013, the European Commission released a proposed rule that would impose a 3 percent buffer on money market funds that are fixed NAV funds.

[9] Two percent is referred to as the "default option." However, the proposal notes that fund directors might choose a lower fee if it is in the interest of the fund.

[10] Others have expressed concerns with fees and gates. For examples, see SEC comment letters from Goldman Sachs, T. Rowe Price, and Thrivent Financial.

[11] Steffanie Brady, Ken Anadu, and Nathaniel Cooper provide a working paper that documents how extensive sponsor support for prime funds was during the crisis. See "The Stability of Prime Money Market Mutual Funds Sponsor Support from 2007 to 2011," Federal Reserve Bank of Boston, August 2012.

[12] Under the SEC's Investment Company Names rule, an MMMF may classify itself as a "government" fund if no less than 80 percent of its assets are in cash or government-related securities, including repurchase agreements collateralized by such securities. See SEC, Investment Company Names; Final Rule, Investment Company Act Release No. IC-24828, March 2001.