February 12, 2013

Financial Stability Oversight Council
Attention: Amias Gerety
1500 Pennsylvania Avenue, NW
Washington, DC 20220


To: Financial Stability Oversight Council:

I am writing on behalf of the Presidents of the 12 Federal Reserve Banks, all of whom are signatories to this letter.1 We appreciate the opportunity to respond to the request for comment on the Proposed Recommendations Regarding Money Market Mutual Fund (“MMF”) Reform (the “Proposal”) issued by the Financial Stability Oversight Council (the “Council”) on November 19, 2012.2

We agree with the Council’s proposed determination that the conduct, nature, size, scale, concentration, and interconnectedness of MMFs’ activities and practices could create or increase the risk of significant liquidity and credit problems spreading among bank holding companies, nonbank financial companies, and the financial markets of the United States.3 For this reason, we support the Council’s efforts to address the structural vulnerabilities of MMFs by releasing the Proposal.

Our comments in this letter will focus primarily on prime MMFs4 where the greatest credit risk5 can be taken and where financial stability risks consequently appear to be the greatest. Once reforms are instituted to address the structural vulnerabilities of prime MMFs, we would encourage consideration of what reforms, if any, are worth pursuing for other categories of MMFs.

As support for the Council’s proposed determination and to set the context for identifying the essential elements of reform, we briefly discuss some of the risks associated with MMFs’ activities and practices in Section I. Section II focuses on issues that should be addressed as part of any prime MMF reform proposal – most notably, suggestions for the enhancement of the accuracy of market-based net asset values (“NAVs” and each, a “NAV”), particularly in the context of Alternative 1, the Floating NAV. Section III then presents observations concerning each of the three reform alternatives included in the

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1 The views expressed in this letter are ours and do not necessarily reflect those of the Board of Governors of the Federal Reserve System.
3 In page 17 of the Proposal, the Council noted that the “conduct and nature of MMFs’ activities and practices make MMFs vulnerable to destabilizing runs, which may spread quickly among funds, impairing liquidity broadly and curtailing the availability of short-term credit.”
4 Prime MMFs invest substantially in private debt instruments such as commercial paper and certificates of deposit.
Proposal. Section IV briefly discusses standby liquidity fees and redemption gates and explains why these mechanisms, as proposed by some industry participants, do not meet reform requirements. Finally, we conclude by concurring with the Council’s view that more than one MMF reform alternative could address the financial stability concerns posed by MMFs, in which case fund complexes could be permitted to choose from among multiple alternatives. For example, a complex could offer both a floating NAV fund and separately a stable NAV fund with a capital buffer (and possibly coupled with a Minimum Balance at Risk (“MBR”)), from which investors could choose.

Section I  Risks Associated with MMF Activities and Practices

As currently structured, MMFs provide a stable price at which an investor may purchase or sell an interest in the MMF (i.e., the transaction NAV), but MMFs have no explicit capacity to absorb losses in the event of a decrease in the value of assets held within the fund’s portfolio. This structure gives rise to a risk of destabilizing MMF runs by creating a first mover advantage. By allowing redemptions at a stable price of $1.00 per share rather than at a share price reflecting the current market value of underlying portfolio assets, MMFs give investors a financial incentive to redeem quickly before others during times of stress, as losses are borne by the investors remaining in the fund.

In September of 2008, after the Reserve Primary Fund broke the buck, investors redeemed en masse from prime MMFs, reinvesting a majority of those proceeds into government MMFs. This sudden redemption and concerns about the NAVs per share of MMFs falling below $1.00 resulted in a further disruption to short-term credit markets, affecting even those issuers with the highest credit quality and potentially resulting in reduced supply of credit to institutions and households. Unprecedented government action was taken in response to the run on MMFs and to address temporary dislocations in credit markets. Furthermore, as the Council notes, “MMFs may also transmit risk to the broader economy through the payment system because MMFs are used as cash management vehicles by individual investors, businesses and governments. In addition, MMFs offer services such as check writing and other bank-like functions, particularly for retail investors”. As such, a run on MMFs, one that results in suspensions of redemptions, could create liquidity problems for these funds’ investors and may disrupt the payments system more broadly.

To date, the only backstop available to prevent destabilizing runs (aside from the government intervention described above) has been discretionary support provided by fund sponsors. A recent study by Federal

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6 In the week after the Reserve Primary Fund broke the buck on September 16, 2008, investors redeemed over $320 billion from prime funds (15% of prime fund assets), while investing over $209 billion into government funds (22% of assets). Based on data from iMoneyNet.


October, 21, 2008: The Federal Reserve announced the Money Market Investor Funding Facility (MMIFF). The MMIFF was a complement to the AMLF. No loans were made under this program. http://www.federalreserve.gov/newsevents/press/monetary/20081021a.htm.

9 Refer to page 23 of the Proposal.
Reserve Bank of Boston Staff found that this practice occurred frequently from 2007 to 2011 as sponsors provided over $4.4 billion in support to 78 MMFs. Though this practice creates a perception of stability, it may not truly provide stability in times of stress. Indeed, events of 2008 showed that sponsor support cannot always be relied upon.

We believe that fundamental change to the current MMF structure is necessary and that each of the reforms contained in the Proposal has the potential to increase the resiliency of MMFs and reduce their susceptibility to runs, as discussed in more detail below.

Section II Issues to be Addressed as Part of Any MMF Reform

Accurate Market-based NAVs are Important Now and Under Any Reform Option

Under any reform alternative, it is critical that market-based NAVs, now known as the “shadow NAV”, be computed accurately. By accurate, we mean that a market-based NAV needs to reflect the market value of all fund assets at the time fund shareholders transact, and not some other value such as amortized cost or a value that is not available in the market. This requirement is in effect today for MMFs in calculating their shadow NAV and should continue to be applied to the market-based NAV requirements under all the reform alternatives. Currently, an accurate shadow NAV provides investors with some protection from share value dilution, even though penny rounding reduces this protection. That is, there can be share value dilution under current MMF rules of up to $0.005 if the NAV is reported as $1.00 and the shadow NAV is marginally above $0.995. Shadow NAVs that are inaccurate allow for even larger dilution and increase the size of any first mover advantage and consequent run risk.

Under Alternative 1, Floating NAV, the shadow NAV becomes the price at which share transactions are conducted. If transactions are conducted at inaccurate NAVs, then shareholders may not receive fair market value for their shares. In addition, first mover advantage would remain because fund shareholders would have an incentive to redeem if a fund’s reported NAV is perceived to exceed the market value of the fund’s assets. Failure to use accurate market-based NAVs may also pose risks to the success of the two other alternatives. An inaccurate market-based NAV could result in an incorrect calculation of the size of the NAV buffer established to absorb day-to-day fluctuations in the value of the fund’s assets and an inequitable distribution of assets between stable NAV share owners and the NAV buffer.

Because accurate market-based NAVs are important in all reform alternatives, we agree with the elimination of amortized cost provisions of rule 2a-7 under all Council alternatives. In addition, given the importance of an accurate market-based NAV, we believe MMFs should value all fund assets at market value rather than at amortized cost. Accordingly, we find it appropriate that current shadow pricing requirements do not allow the use of amortized cost for establishing the values of portfolio assets with a remaining maturity of 60 days or less and believe this requirement should remain in place under


11 Given the perception of stability that discretionary support creates, this practice may attract investors that are not willing to accept the underlying risks in MMFs and who therefore are more prone to run in times of potential stress.

12 We note that rule 2a-7(c)(8)(ii)(C) requires that when the board of directors believes the deviation between a MMF’s amortized cost and market value NAV may result in a material dilution or unfair results to investors, the board of directors shall cause the fund to take appropriate action to eliminate or reduce the dilution or unfair results, to the extent reasonably practicable.

13 Refer to pages 30 and 39 of the Proposal.

14 Although Investment Company Act Release No. 9786, 42 Fed. Reg. 28999 (June 7, 1977) allows mutual funds under certain conditions to value portfolio assets maturing in 60 days or less at amortized cost (as noted in Footnote 69 of the Proposal), this practice is not allowed for establishing a shadow price for MMFs in accordance with Investment Company Act Release No. 13380, 48 Fed. Reg. 32555 (July 18, 1983).

3 of 8
all reform options. Among other concerns\textsuperscript{15}, omitting portfolio assets that mature in 60 days or less from a market value requirement could significantly reduce the extent to which the floating NAV share price actually “floats,” reducing the effectiveness of this alternative.\textsuperscript{16} As of month ended October 2012, approximately 70% of total MMF holdings had remaining or final maturities of 60 days or less.\textsuperscript{17}

**Suggestions to Enhance Market-Based NAV Computations**

We agree with commenters who have pointed out that many money market instruments do not trade actively in secondary markets.\textsuperscript{18} We also understand that in normal times, fair valuations of many money market instruments may be quite similar to amortized cost valuations. Neither of these observations should be an obstacle to MMFs’ market-based NAV computations. As mentioned in the previous section, market valuations are already required for shadow NAV computation for all MMF assets, and these shadow NAV computations present a natural starting point for future market-based NAV calculations that would be required under any reform alternative.

There are also steps that can be undertaken to enhance the accuracy of market-based NAVs. For example, while it is true that many secondary markets are thin for assets purchased by funds, primary markets may provide useful additional price discovery information, to the extent this information is not already being used by pricing vendors or by the fund itself. MMFs often hold multiple maturities of a single issuer or issuer-linked credit. Each time such an asset is purchased, price discovery occurs and an issuer yield curve could be updated and used for revaluing all holdings of that particular credit. If SEC Form N-MFP reporting were more frequent and timely, and if new issue yields could be determined accurately from the submitted data,\textsuperscript{19} then price discovery might be greatly increased because market yields determined by primary market transactions of each MMF would be available to all funds. The MMF industry might explore ways to improve secondary market price transparency as well.\textsuperscript{20}

**Benefits from Increased Disclosure**

Even more frequent and timely disclosure may be warranted to increase the transparency of MMFs. The SEC’s 2010 Rule 2a-7 amendments require funds to disclose portfolio information no more than 5 business days after the end of each month. As of month end November 2012, prime funds turned over on average 44% of portfolio assets every week.\textsuperscript{21} Given this high turnover rate, investors are unlikely to be fully apprised of the fund’s portfolio composition from the first day of the month through the twenty-ninth day. During times of stress, this uncertainty regarding portfolio composition could heighten investors’ incentives to redeem in between reporting periods, as they will not be able to determine if their fund is exposed to certain stressed assets. A daily or weekly reporting requirement would ensure that investors are well informed as to what assets are in the fund, and may reduce contagion effects from one

\textsuperscript{15} During the recent financial crisis, some French floating NAV funds experienced runs (See European Fund and Asset Management Association PWG Comment Letter, SEC File No. 4-619, January 10, 2011. [http://www.sec.gov/comments/4-619/4619-16.pdf](http://www.sec.gov/comments/4-619/4619-16.pdf)). This could be because they are permitted to value portfolio assets with remaining or final maturity less than or equal to 90 days at amortized cost and not at market value, potentially creating a first mover advantage or potentially interfering with investors’ perceptions of risk in the funds.

\textsuperscript{16} Likewise, reform options involving buffers should not use amortized cost to value assets, regardless of maturity, in any market-based NAV calculations.

\textsuperscript{17} Excluding Treasury and Agency securities from the numerator, this percentage is approximately 54% of total MMF assets under management (“AUM”). For prime funds, approximately 66% of portfolio assets have remaining or final maturities of 60 days or less. Excluding Treasury and Agency securities from the numerator, that percentage is 60% of prime funds’ AUM. Based on data from Crane Data.


\textsuperscript{19} Additional information, such as the purchase date of the security by the fund, may also be helpful in increasing the utility of the filings for this purpose.

\textsuperscript{20} Such as by publishing pre-maturity transaction data including prices or by publishing bids at which issuers would buy back securities.

\textsuperscript{21} As measured by Weekly Liquid Assets. This percentage includes debt instruments rolled over and new issue purchases. Based on data from iMoneyNet.
fund breaking the buck. A daily or weekly reporting requirement would also enable better use of primary market data for pricing purposes, as discussed above.

Section III Observations Concerning Each Reform Alternative Contained in the Proposal

The Floating NAV Alternative

The floating NAV alternative addresses run risk by eliminating the “cliff effect” associated with breaking the buck, and by reducing the first mover advantage.

If a floating NAV alternative is properly implemented, shareholders of the fund should be more likely to understand that their share prices can fluctuate and to consider this fact before investing in the fund. Investors who may now invest in MMFs believing that they can shift losses onto other shareholders through early redemptions, or to sponsors willing to provide discretionary support, may learn through experience that all valuation changes are borne by fund shareholders. Over time, investors selecting and remaining in floating NAV MMFs may be more willing to bear losses from their MMF investments than investors in alternative forms of MMFs.

In addition, a floating NAV MMF could draw new investors during times of broad market or idiosyncratic stress, if these investors are attracted by the higher yields. Floating NAV MMFs also avoid redemptions by holders who would want to keep their shares only under the condition that they are paid the yields appropriate for the assets held at that time. Other reform alternatives would likely be unable to offer a similar advantage, and thus, only the floating NAV alternative would seem to allow all shareholders an opportunity (indirectly through share transactions) to buy and sell underlying asset portfolios at prevailing market clearing yields.

Floating NAV MMFs may be expected to offer shareholders full liquidity at the market-based NAV. Liquidity, even over value, may be critically important to avoid contagion during periods of financial turmoil.

The 3% NAV Buffer Alternative

Like the floating NAV alternative, the 3% NAV buffer alternative addresses run risk by reducing first mover advantage. But unlike floating NAV, the 3% NAV buffer alternative seeks to maintain the traditional fixed NAV attribute of MMFs by establishing a NAV buffer to absorb both day-to-day fluctuations in the value of fund assets and minor credit losses as well. The 3% NAV buffer alternative does not eliminate the possibility of a “cliff effect” associated with fixed NAV shares suddenly converting to floating NAV shares, but it does make this effect less likely to occur by protecting fixed NAV shareholders with a loss absorbing buffer. In exchange for the stability provided by an explicit loss absorption mechanism, a NAV buffer will likely reduce the yields paid to MMF shareholders that continue to transact at a stable NAV.

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22 We note that some fund complexes disclose portfolio assets more frequently than required. For example, Goldman Sachs Asset Management and Federated Investors disclose portfolio holdings weekly. In addition, on January 9, 2013, Goldman Sachs began disclosing daily market-based NAVs per share for its U.S. domiciled funds (Federated, Fidelity, BlackRock, Schwab, BNY Mellon, State Street and others subsequently announced similar initiatives). This does not impact investors’ transaction NAV (which will remain constant), but enables them to see daily fluctuation in their fund’s market-based NAV per share.

23 Refer to page 30 of the Proposal.

24 A proper implementation would include sufficiently accurate and precise transaction NAVs.

25 This may change investors’ ex ante investment decision making as those that are more risk averse (and more prone to run) may opt to invest in other products, while those that are less risk averse may continue to invest in a floating NAV fund.
The reduction in first mover advantage provided by this alternative depends on investors’ confidence that the size of the buffer is adequate to absorb likely losses. Accordingly, the size of an appropriate NAV buffer should depend, in part, on the level of risk in a fund and the level of diversification in the portfolio.\(^\text{26}\) For a poorly diversified fund with portfolio assets that carry relatively more credit risk,\(^\text{27}\) a 3% (maximum) NAV buffer may not be sufficient.\(^\text{28}\)

Some consideration should be given to the possibility that a fund depletes its NAV buffer. The Proposal notes that a fund depleting its NAV buffer would be required to suspend redemptions and liquidate under Rule 22e-3\(^\text{29}\) or continue operating as a floating NAV fund. However, this sequence of events could be destabilizing. Investors in 3% NAV buffer funds may be quite risk averse, even more so than floating NAV MMF investors might be, given their revealed preference for stable NAV shares. If they foresee a possible conversion to floating NAV once the buffer is depleted, these risk-averse investors would have an incentive to redeem prior to conversion. If, on the other hand, investors foresee a suspension of redemptions, they would presumably have an even stronger incentive to redeem before facing a liquidity freeze when the NAV buffer is completely depleted.

**The NAV Buffer and MBR Alternative**

Like the 3% NAV buffer alternative, this alternative addresses run risk and reduces risk of a cliff effect by providing MMFs some explicit loss absorption capacity, while at the same time maintaining fund shareholders’ ability to transact at a constant NAV under ordinary circumstances.\(^\text{30}\) A well-calibrated NAV buffer and MBR requirement addresses run risk by creating a disincentive to redeem quickly during times of stress, as a fully redeeming shareholder’s MBR is held back and may be used to offset portfolio losses. If this alternative is implemented, investors in the product would have to weigh the costs of a temporary loss of liquidity on a portion of their investments (i.e., the MBR) against the benefits of investing in a fund with this alternative’s loss absorption mechanism.

A MBR coupled with a well calibrated NAV buffer should also effectively communicate the risks inherent in the MMF product,\(^\text{31}\) because investors should be aware at initial purchase that they could lose their full MBR and may be reminded of this whenever they consider making a full redemption (as their MBR is held back for 30 days). As discussed previously, ensuring that investors have a proper understanding of the risks they are undertaking is an important consideration when evaluating reform alternatives, and one of the deficiencies of the status quo is the mismatch between investors’ risk perceptions and the actual risk profile of MMFs.

Finally, it is important to recognize that a MBR and NAV buffer, whatever its combined size, may not be sufficient to eliminate run risk in a severe market disruption. If investors anticipate losses exceeding this combined size, it may be optimal for them to liquidate their portfolio and sacrifice their MBR in order to avoid perceived losses greater than their MBR and the NAV buffer.

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26 In the Proposal, the NAV buffers are calibrated based on the riskiness of the fund’s assets, but not by portfolio concentration. Refer to pages 39 and 52 of the Proposal.

27 Refer to Footnote 5.

28 Samuel G. Hanson, David S. Scharfstein, and Adi Sunderam, “An Evaluation of Money Market Fund Reform Proposals.” Harvard University, December 2012. Hanson et. al suggest a 3% to 4% capital buffer for a well-diversified portfolio, and higher for a more concentrated portfolio.

29 Rule 22e-3 under the Investment Company Act permits a MMF that has broken the buck or is at imminent risk of doing so to suspend redemptions to allow for an orderly liquidation of the fund’s assets – after notifying the SEC. As noted in page 39 of the Proposal, the SEC would have to amend Rule 22e-3 to permit liquidation after depletion of the buffer.

30 The MBR can be thought of as similar to a redemption fee intended to defray the risk that certain investors arbitrage a mispricing and exit at the expense of others. We observe that similar redemption fees were put in place to deter market timing (a practice that created similar first-mover advantage), except that the MBR redemption fee is ordinarily refundable and contingent on NAV, whereas the market timing fees are not.

31 MMFs’ prospectuses, along with other marketing materials, disclose that they are not insured and may lose value.
Section IV Observations Concerning Standby Liquidity Fees and Temporary Redemption Gates

The Council also solicited comments on other possible reforms. Specifically, the Council noted that some market participants have proposed standby liquidity fees and temporary redemption gates as a way of reducing run risk. Upon entering a period of market stress, a fund would halt all redemptions for a brief period of time (the “gate”), and would then impose a flat percentage liquidity fee on all subsequent redemptions. Proceeds from the liquidity fee would be used to compensate MMFs and the remaining MMF investors for the potential cost of withdrawing liquidity from the fund. The liquidity fees and temporary gates would not be in place during times of normal market conditions.

We share the Council’s concern that standby liquidity fees and temporary redemption gates may increase the likelihood of a run – as investors may be incented to redeem if they fear that a redemption gate and subsequent liquidity fee will soon be imposed. We also share the Council’s concern that such fees and gates may increase the risk of contagion. Because many MMFs hold similar assets, one fund’s imposition of fees and gates could encourage runs on other non-gated funds. Furthermore, the liquidity fee – once imposed – may not actually deter a run if investors anticipate that losses will exceed the amount of the fee.

As proposed, this alternative bears many similarities to the status quo. In our view, for this alternative to be successful in addressing the risks identified by the Council, the liquidity fee would have to be in place at all times (perhaps in the form of a refundable fee such as the MBR) in order to avoid the “anticipatory run” problem discussed above. The liquidity fee would also need to be coupled with an explicit NAV buffer in order to offer the fund explicit loss absorption capacity, which the fee itself does not provide. Given the lack of these attributes, we do not believe this reform proposal contains the fundamental elements needed to address the financial stability risks posed by MMFs.

Concluding Remarks

We support the Council’s efforts to address the structural vulnerabilities of MMFs by releasing the Proposal. We agree with the Council’s proposed determination that the structural vulnerabilities of MMFs could create or increase the risk of financial instability. As currently structured, MMFs provide a stable price at which an investor may purchase or sell an interest in the MMF, but MMFs have no explicit loss absorption capacity. By allowing redemptions at a constant share price rather than at a share price reflecting the current market value of the underlying portfolio assets, MMFs give investors a financial incentive to redeem before others during times of stress. As such, reforms are necessary to address fundamental instabilities in MMFs.

As discussed above, we believe that reforms should initially focus on prime MMFs as this is where the greatest credit risk can be taken. We also believe that under any reform alternative it is critical that market-based NAVs accurately reflect the value of a fund’s underlying portfolio and that disclosures of funds’ asset composition be made daily or weekly. In addition, appropriately sizing any NAV buffer will be critical as investors may run if a fund’s buffer becomes depleted.

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32 Refer to page 62 of the Proposal.
34 Some industry participants have suggested imposing temporary gates and liquidity fees if a fund’s Weekly Liquid Assets falls below 15%. Some have suggested a period of one business day for the temporary gates. See, e.g., BlackRock’s Comment Letter referenced in Footnote 33.
We share the Council’s concerns that standby liquidity fees and temporary redemption gates may increase the potential for industry-wide runs in times of stress, and therefore do not meet the Council’s reform requirements.

Once reforms are instituted to address the structural vulnerabilities of prime MMFs, we would encourage consideration of what reforms, if any, are worth pursuing for other categories of MMFs. In conjunction with prime MMF reform, we also urge the Council and relevant regulators to use their authorities, where appropriate and within their jurisdictions, to address any potential financial stability concerns associated with the broader cash management industry, where certain products have structural instabilities similar to those found in MMFs.

We concur with the Council that more than one MMF reform alternative could address the financial stability concerns posed by MMFs, in which case fund sponsors may offer both a floating NAV fund and, separately, a stable NAV fund with a capital buffer (or a capital buffer coupled with a MBR). It is also worth noting that if initial reforms apply only to prime MMFs, investors will have the ability to continue investing in a traditional stable NAV fund by investing in a non-prime MMF.

We thank the Council for the opportunity to comment on the Proposal and for their initiative in pursuing additional MMF reform. We welcome the opportunity to further discuss any aspect of this submission with the Council.

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