January 17, 2013

Financial Stability Oversight Council
Attention: Amias Gerety
1500 Pennsylvania Avenue, N.W.
Washington, DC 20220

RE: Financial Stability Oversight Council Proposed Recommendations Regarding Money
Market Mutual Fund Reform (FSOC-2012-0003)

Dear Members of the Financial Stability Oversight Council:

We thank you for the opportunity to respond to the Council’s Proposed Recommendations Regarding Money Market Mutual Fund Reform. The Squam Lake Group is a non-partisan group of 13 academic economists that was formed in the fall of 2008 to offer guidance on the reform of financial regulation.

The members of the group include:

Martin N. Baily  Brookings Institution
John Y. Campbell  Harvard University
John H. Cochrane  University of Chicago
Douglas W. Diamond  University of Chicago
Darrell Duffie  Stanford University
Kenneth R. French*  Dartmouth College
Anil K Kashyap  University of Chicago
Frederic S. Mishkin  Columbia University
David S. Scharfstein  Harvard University
Robert J. Shiller  Yale University
Matthew J. Slaughter  Dartmouth College
Hyun Song Shin  Princeton University
René M. Stulz  Ohio State University

Our letter reflects the views of the Squam Lake Group; we are not representing any other organizations with which we are affiliated. The homepages of the members of the group provide disclosures on their outside activities either in a disclosure page or as part of their curriculum vitae.

*Ken French recuses himself from this comment because of a financial interest in a firm that offers a money market fund.
Overview

In its *Proposed Recommendations on Money Market Mutual Fund Reform*, the Council states that “Reforms to address the structural vulnerabilities of money market mutual funds (‘MMFs’ or ‘funds’) are essential to safeguard financial stability.” We concur. The structure of MMFs makes them vulnerable to rapid large-scale redemptions (“runs”). Our main concern is with prime MMFs because they are a key source of short-term financing to large global financial institutions. A run on prime MMFs can become part of a run on these financial institutions, or could instigate such a run. This, in turn, threatens the ability of these financial institutions to process payments and to extend credit to other market participants, businesses and households. Indeed, this threat led the U.S. Treasury to provide a temporary guarantee of all outstanding MMF balances after the failure of Lehman Brothers in September 2008 precipitated a run on prime MMFs.

The Council has asked for comments on three reform proposals: floating net asset value (NAV), a 3% capital buffer, and the combination of a 1% capital buffer with a “minimum balance at risk.” We focus on the first two proposals. We conclude that a floating NAV would not achieve the goal of materially decreasing the systemic risk posed by MMFs because their assets do not have a liquid secondary market. We believe, as we have written previously, that an appropriately sized capital buffer for prime money market funds would achieve the Council’s financial stability goals.¹

Floating NAV

While a floating NAV structure prevents runs for most types of mutual funds, the mere floating of net asset value would not be effective at preventing runs on money market mutual funds for two reasons. First, mutual funds have the option to account for assets at amortized cost if they have a maturity of 60 days or less. With that option, the “floating NAV” is not a true reflection of the fair market value of fund assets. Whenever investors can redeem at a NAV that is higher than the fair value of the assets, investors have incentives to run. Second, and more fundamentally, prime MMFs invest substantially in assets without a liquid secondary market. This creates an incentive for fund investors to run during a period of financial stress, because investors who ask for redemption first receive the NAV before the fund is forced to engage in fire sales. Currently, the majority of the assets of prime MMFs consist of commercial paper (CP) and certificates of deposits (CDs).² These assets have extremely limited secondary markets³ and


² See, for example, Exhibit 10 of “U.S. Fixed Income Markets Weekly, Short-Term Fixed Income,” January 11, 2013, by Alex Roever. Of his sample of $1,069 billion of prime MMF assets, $487 billion are invested in CDs, $144 billion in CP, $95 billion in time deposits, and $72 billion in Asset Backed Commercial Paper (ABCP).

an average maturity\textsuperscript{4} well in excess of the period over which a run would occur.\textsuperscript{5} Although MMFs have recently increased their liquidity profiles above those required by regulation, this may be a temporary response to current market uncertainty.\textsuperscript{6}

Thus, even with a floating net asset value, the first MMF investors to redeem their shares during a crisis are likely to receive a higher price for their shares than those who follow once the fund is forced to meet redemption demands by selling assets that have not yet matured. As noted by the Council, for many MMFs, fund redemptions experienced during the run on prime MMFs following the collapse of Lehman would have significantly exceeded the liquidity requirements currently imposed on MMFs. This first-to-redeem advantage, which is exacerbated by amortized cost accounting, creates an incentive for MMF shareholders to run. Thus, given current accounting rules and the absence of a liquid secondary market for many money fund assets, floating NAV is unlikely to materially increase the stability of the financial system.

**Capital Buffer**

A suitably sized capital buffer for a fixed NAV MMF would mitigate the risk and impact of runs on prime MMFs. A capital buffer that takes losses before ordinary MMF shareholders gives these shareholders an extra layer of protection that reduces their incentives to run. Moreover, providers of capital buffers would have incentives to evaluate and control the risk of the MMFs they back, as they would be effectively responsible for the first losses on the assets of these funds.

The capital buffers need not be as large as those required of banks, given that MMFs are required to have portfolios with shorter maturities and lower levels of credit risk than banks. Based on existing evidence, including joint research by one of the authors of this letter, a suitably sized

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\textsuperscript{4} Currently, the weighted average maturity (WAM) of MMF assets is approximately 43 days, as reported by Alex Roever, who indicated an increase in WAM of 3 days from his previous report. In the “Fitch Money Market Fund Report” of December 21, 2012, Fitch reported a sample-average WAM for prime MMFs of 41 days.

\textsuperscript{5} FSOC, *Proposed Recommendations on Money Market Mutual Fund Reform*, page 61: “At the height of the run in 2008, 40 institutional prime MMFs (excluding the Reserve Primary Fund) had one-day outflows in excess of the new 10 percent daily liquidity requirement, and 13 of those funds’ one-day outflows exceeded 20 percent of assets. In addition, 10 institutional prime funds had five-day outflows exceeding the new 30 percent weekly liquidity requirement, including eight funds with five-day outflows greater than 40 percent of assets. Notably, outflows in 2008 probably would have been considerably larger in the absence of the unprecedented government interventions to support MMFs and short-term funding markets.”

\textsuperscript{6} See Fitch, Macro Credit Research, “Money Fund Liquidity, Regulation versus Risk Aversion,” November 14, 2012. Fitch reports, for their sample of 10 large prime MMFs in September 2012, average liquid assets of 45%, in excess of the 30% requirement of Rule 2a7 for the minimum fraction of assets which must be liquid within one week. An asset (meeting other 2a7 requirements) is defined to be liquid within one week if it matures within one week, or is a government security that matures within 60 days. Fitch considers any government security, including floating-rate notes, to be liquid, irrespective of maturity. The “Fitch Money Market Fund Report” of December 21, 2012, reports a sample average daily liquidity of 29.6% of assets. The fund showing the lowest the daily liquidity, as reported by Fitch, was the Federated Prime Cash Obligations Fund, with 17.9% daily liquidity.
buffer should be in the range of 3 to 4% of risk-weighted assets. Given the modest size of an MMF capital buffer and the relative safety of MMF assets, an appropriately sized capital buffer is unlikely to have a significant impact on the returns earned by ordinary MMF shareholders. The research cited above suggests that a 3% capital buffer would reduce the yields of ordinary shareholders by approximately 5 basis points.

There has been much concern in the industry about the cost of such a capital buffer, but the statements made by some representatives of the industry are contradictory. On the one hand, they argue that there is no need for a capital buffer because money market funds are extremely safe. On the other hand, they claim that the cost of the buffer would be very high. We note, however, that the cost of the buffer depends on the likelihood that it will be used. If the buffer will almost never be used, buffer investors would not need to be compensated at a rate substantially higher than that of ordinary fund shareholders because they would bear a risk similar to that borne by these shareholders. The more likely it is that the capital buffer will be used to pay for losses on assets, the higher would be the required compensation to the provider of the capital buffer. That is, a high compensation to buffer providers means that there will be a significant chance that the fund will “break the buck,” posing risks to the financial system.

In short, it simply cannot be the case that the buffer will be expensive if it is not going to be used.

Conclusion

Capital buffers of 3% of risk-weighted assets for fixed-NAV funds, as described in the Council’s Proposed Recommendations, would reduce the risks posed to the financial system by money market funds without a significant impact on the returns earned by money market fund investors. The mere floating of NAV is unlikely to significantly reduce the risk of a run in a crisis situation given the illiquidity or absence of secondary markets for the majority of prime money fund assets.

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8 See Samuel Hanson, David Scharfstein, and Adi Sunderam, 2012, “An Evaluation of Money Market Fund Reform Proposals,” Harvard Business School working paper, which uses a standard methodology in bank capital regulation to determine the size of the capital buffer. Consistent with this approach, they conclude that a capital buffer of 3%-4% of risk-weighted assets would reduce the probability of “breaking the buck” to 0.1%, the threshold insolvency probability used in bank capital regulation. In addition, research reported in Steffanie Brady, Ken Anadu and Nathaniel Cooper, 2012, “The Stability of Prime Money Market Mutual Funds: Sponsor Support from 2007-2011,” Federal Reserve Bank of Boston working paper, shows that there was some form of sponsor support in over 20% of the funds they studied, with some support in excess of 3% of assets.

9 Hanson, Scharfstein and Sunderam, op. cit.