
The broken buck stops here: embracing sponsor support in money market fund reform¹



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Abstract

Since the 2008 financial crisis, money market funds (MMFs) have been the subject of ongoing policy debate and targeted for regulatory reform. The US Securities and Exchange Commission (SEC) eventually adopted reforms that have the potential to increase MMF fragility, while, at the same time, reducing MMF utility for many investors.

The shape of the SEC's reforms was substantially influenced by bank regulators who framed the narrative of MMF fragility in terms of nefarious "shadow banking." This rhetoric failed to acknowledge a critical difference between the asset segregation in MMFs and in banks. Unlike banks, MMF sponsors have assets and operations that are separate from the assets of the MMF itself. This difference caused the SEC to mistake sponsor support as a weakness and to adopt reforms that burden sponsor support instead of encouraging it.

As this article explains, required sponsor support offers a novel and simple regulatory solution to MMF fragility. Accordingly, this article proposes that the SEC requires MMF sponsors explicitly to guarantee the US\$1 share price. Taking sponsor support out of the shadows, embraces, rather than ignores, the advantage that MMFs offer over banks through asset partitioning. At the same time, sponsor support harnesses market discipline as a constraint against MMF risk taking and moral hazard.

1. Introduction

On 16 September 2008, the Reserve Fund “broke the buck,” reducing its net asset value (NAV) to 97 cents per share after the announcement of the Lehman Brothers bankruptcy filing. The filing caused the board to write down the value of the fund’s US\$785m in Lehman Brothers debt to zero.

By September 16, 2008, the financial markets had already experienced substantial turbulence. Contributing to this turbulence were the bailout of Bear Stearns, the federal government’s decision to put Fannie Mae and Freddie Mac into conservatorship, the Federal Reserve Board’s announcement of its decision to support AIG financially and the Lehman bankruptcy. Many money market fund (MMF) sponsors provided support to their MMFs to maintain the stable US\$1 share price by taking actions such as buying debt holdings that had declined in market value. Nonetheless, over the next several days, investors redeemed substantial amounts of money from MMFs. According to the SEC: “During the week of September 15, 2008 [Lehman week], investors withdrew approximately US\$300b from prime [MMFs].”²

Widespread redemptions put more MMFs at risk of breaking the buck, but they also had a broader effect on the economy. Fund manager efforts to conserve cash reduced the availability of short-term credit. Tightening credit conditions caused businesses to reduce capital expenditures and lay off workers. These effects led policymakers to view the fragility of MMFs as a substantial cause of the financial crisis and to target them for regulatory reform.³ The central goal of reform proposals was to prevent MMFs from breaking the buck in the future because of the concern that doing so would generate “runs,” which would, in turn, generate a contagion effect across MMFs and destabilize the economy. As Treasury Secretary Timothy Geithner explained:

“[T]he financial crisis of 2007–08 demonstrated that MMFs are susceptible to runs and can be a source of financial instability with serious implications for broader financial markets and the economy.”⁴

After a contentious six-year debate among policymakers about the appropriate shape of MMF reform, on July 23, 2014, the SEC adopted a rule requiring a floating NAV for institutional prime MMFs and implementing a variety of additional regulatory requirements for other MMFs, including a complex structure of gates and fees for retail MMFs.⁵ As this article will explain, neither aspect of the reform responds in a meaningful manner to the problem of large redemptions in a time of financial distress. The structure of the reform was heavily influenced by political pressure, pressure that led the SEC to take a flawed approach, and to overlook a simple and superior regulatory solution.

The rhetoric that describes MMFs as shadow banks and analogizes MMF redemptions to bank runs has obscured a critical structural difference between MMFs and bank accounts: the separation of MMF assets from the finances and operations of the MMF’s sponsor.⁶ The MMF sponsor is not a parent or affiliate of the fund, but a separate legal entity that provides services to the MMF pursuant to an advisory contract. Unlike banks, MMF sponsors are legally independent from MMFs and their assets are separate from the securities in the MMF’s portfolio.

This separation between the MMF and its sponsor allows sponsor support to mitigate fluctuations in the value of an MMF’s holdings and reduce the demand for redemption. Historically, sponsors have regularly provided financial support to prevent MMFs from breaking the buck despite the fact that they have no legal obligation to do so. Ironically, although regulators have viewed sponsor support with suspicion, a suspicion that is reflected in elements of the SEC’s 2014 rule, it is an unexplored mechanism for enhancing MMF stability.

² Money Market Fund Reform; Amendments to Form PF, 78 Fed. Reg. 36,834, 36,843–44 (proposed June 19, 2013) [hereinafter 2013 Rule Proposal]. During the “Crisis Month,” which ran from September 2, 2008 until October 7, 2008, “prime fund assets fell by US\$498b (24%),” Div. of Risk, Strategy, & Fin. Innovation, Response to Questions Posed by Commissioners Aguilar, Paredes, and Gallagher, US Sec & Exch. Comm’n 7 (Nov. 30, 2012), <http://www.sec.gov/news/studies/2012/money-market-funds-memo-2012.pdf> [hereinafter SEC Staff Report].

³ E.g., Arthur Levitt, former Chair of the SEC, SEC Missed Chance on Money Funds, Should Step Aside Now, Bloomberg (Feb. 25, 2013), <http://www.bloomberg.com/news/print/2013-02-25/sec-missed-chance-on-money-funds-should-step-aside-now.html>; Sheila Bair [former Chair of FDIC], Beware of Money Market Funds, Time Money (May 23, 2013), <http://money.cnn.com/2013/06/01/pf/money-market-funds.moneymag/index.html>

⁴ Letter from Timothy F. Geithner, Sec’y, US Dept of the Treasury, to members of the Financial Stability Oversight Council 1 (Sept. 27, 2012) [hereinafter Geithner Letter], available at <http://www.treasury.gov/connect/blog/Documents/Sec.Geithner.Letter.To.FSOC.pdf>.

⁵ Money Market Fund Reform; Amendments to Form PF, 79 Fed. Reg. 47,736, 47,736 (Aug. 4, 2014) [hereinafter 2014 Final Rule]. The rule became effective on October 14, 2016. US Sec. & Exch. Comm’n, Money Market Funds, <https://www.sec.gov/spotlight/money-market.shtml>.

⁶ John Morley, The Separation of Funds and Managers: A Theory of Investment Fund Structure and Regulation, 123 Yale L.J. 1228, 1232 (2014).

This article argues for a dramatic shift in the regulation of MMFs. Rather than trying to make them operate more like banks by requiring capital buffers or sacrificing their viability by mandating a floating NAV, reform should formalize the role of sponsor support. Specifically, this article proposes that regulators require MMF sponsors to stand behind their MMFs by committing to maintain the stable US\$1 NAV. In a time of crisis, sponsors could provide such support by buying distressed assets from the fund, reducing management fees or subsidizing the fund with other business revenues. Sponsors could also privately insure their obligation.

Mandatory sponsor support offers several advantages over the 2014 rule and other reform proposals. It would both prevent MMFs from breaking the buck and harness market discipline to provide fund sponsors with appropriate incentives to limit risk-taking. Required sponsor support would eliminate market uncertainty about the extent to which a sponsor would voluntarily support its fund in a time of crisis – uncertainty that contributed to the turmoil surrounding the events at the Reserve Primary Fund. Sponsor support would substitute sponsor financial stability for the need for investors to monitor the quality of MMF assets directly, a task that the SEC has highlighted with its new and unworkable disclosure requirements. Most importantly, sponsor support would address MMF fragility, while allowing MMFs to continue to meet investor demand for a liquid, stable-value, cash-management option.

The article continues in section 2 by briefly describing the background to MMF reform. Section 3 evaluates the SEC's 2014 rule. In section 4, the article introduces its proposed alternative: mandatory sponsor support for a US\$1 NAV.

2. Background

2.1 MMFs and the financial crisis

MMFs are a type of mutual fund regulated by the SEC under the Investment Company Act of 1940. MMFs offer investors access to a pool of short-term debt securities. The critical feature that distinguishes MMFs from other short-term investment funds is that, while the price of most mutual funds fluctuates on a daily basis in accordance with the funds' NAV, MMF shares are bought and sold at a stable US\$1 share price.⁷ The US\$1 share price

facilitates the role of MMFs as a cash-management tool because the frequent investment and redemption of MMF shares does not result in a gain or loss for tax or accounting purposes. As a result, MMFs offer investors both liquidity and stability. MMFs have traditionally offered investors higher returns and greater diversification than traditional bank accounts, as well as features like check writing and debit card access, although, unlike bank deposits, they are not protected by government insurance.

The investments of MMFs, unlike most mutual funds, are conservative securities that are typically held to maturity. MMFs rarely sell their portfolio holdings unless compelled to do so by redemption requests. As a result, while the value of the MMF's portfolio may fluctuate on a daily basis, the value of any particular asset will approach its face amount as the instrument nears maturity. Since 1982, SEC rules have reflected this fact by allowing MMFs to value their portfolio assets using amortized cost accounting rather than market price. If, however, an MMF's share price drops below US\$0.995, it is required to price its shares at 99 cents (or less). This is described as "breaking the buck." Only two MMFs have broken the buck: the Reserve Primary Fund in 2008 and the Community Bankers US Government Fund, a small institutional fund, in 1994.

MMFs rarely break the buck because MMF sponsors have traditionally been willing to support the US\$1 share price. Sponsor support may take the form of capital support agreements, letters of credit, waiving management fees or purchasing distressed assets from the MMF at amortized cost.

On the supply side, MMFs provide a major part of the market for short-term debt securities, including commercial paper. MMFs are also an important source of financing for state and local governments, and government entities.

In the early morning of September 15, 2008, Lehman Brothers filed for bankruptcy. The Reserve Primary Fund held approximately 1.2% of its portfolio, US\$785m, in short-term Lehman debt. On September 15, 2008, the Reserve Fund received redemption requests of US\$25b, reflecting more than 40% of the fund's value. The next day the fund broke the buck

SEC Rule 2a-7, which imposes a variety of constraints on the safety and liquidity of the assets in which MMFs are permitted to invest. See Jill E. Fisch, *Rethinking the Regulation of Securities Intermediaries*, 158 U. PA. L. REV. 1961, 1975 (2010).

7 The price that MMFs pay for authorization to trade at US\$1 per share is in compliance with

and, following the announcement, suspended redemptions.

Other MMFs also received substantial redemption requests during Lehman week, leading fund managers to increase their cash holdings and, in turn, reducing the supply of short-term credit. In addition, the prospect that additional financial firms might fail increased the pressure on MMFs. As the then Executive Vice President of the Markets Group at the New York office of the Federal Reserve, William Dudley, observed in the meeting of the Federal Reserve Board on September 16, 2008: "The risk here, of course, is that, if AIG were to fail, money funds have even a broader exposure to them than to Lehman and so, breaking the buck on the money market funds is a real risk."⁸

The US Government responded to concerns about MMFs by establishing two programs. The Treasury Department Temporary Guarantee Program for MMFs was designed to reduce redemption requests by assuring investors that they would not lose the value of money invested in MMFs. The program provided for a federal government guarantee – federal insurance – of MMF assets, which the government provided in exchange for a premium paid by fund sponsors. The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility provided a market for asset-backed commercial paper. In so doing, it provided a source of liquidity for MMFs that were subject to redemption requests. In addition, it supported the price of commercial paper. Reducing the need for distressed sales would depress the value of short-term credit instruments. The two programs were, together, quite effective in reducing the volume of outflows from MMFs and supporting the price of commercial paper.

In January 2010, the SEC initially responded to the Reserve Primary Fund situation and the broader turmoil in the MMF industry by amending Rule 2a-7 to add requirements that MMF portfolios have higher investment quality, shorter maturities, and greater liquidity.⁹ MMFs were also required by the rule to engage in periodic stress testing so as to determine how likely the fund was to break the buck in the event of adverse economic developments or heavy redemption requests, and were subjected

to increased disclosure requirements.

When it adopted the 2010 rule changes, the SEC noted that more fundamental changes to MMFs might be needed. Chair Mary Schapiro identified several possible regulatory alternatives, including, most prominently, a requirement that MMFs shift to a floating NAV rather than trading at a stable US\$1 share price.¹⁰ At the same time, bank regulators were advocating additional reforms to MMF regulation. The Treasury Department identified specific reforms that it believed the SEC should adopt.¹¹ The President's Working Group on Financial Markets (PWG)¹² published a report indicating that, despite the SEC's rule changes, MMFs remained vulnerable to runs and highlighting the destabilizing effect of runs on the economy.¹³ The report identified a series of additional reform alternatives.¹⁴

The SEC then began to develop an additional rulemaking proposal, but that proposal did not command the support of a majority of the commissioners.¹⁵

When Schapiro announced that the SEC would not move forward with additional reforms, the Treasury Secretary Timothy Geithner wrote a letter urging the Financial Stability Oversight Council (FSOC), which he chaired, to become involved.¹⁶ At his prompting, the FSOC took the unprecedented step of releasing its own MMF reform recommendations for public comment.¹⁷

8 William Dudley, Manager, System Open Market Account, remarks at the Federal Open Market Committee. Meeting 4-5 (Sept. 16, 2008), available at <http://www.federalreserve.gov/monetarypolicy/files/FOMC20080916meeting.pdf>.

9 Jill Fisch and Eric Roiter, A Floating NAV for Money Market Funds: Fix or Fantasy?, 2012 U. Ill. L. Rev. 1003, 1022.

10 Mary Schapiro, Chairman, US Sec. & Exch. Comm'n, Statement on Money Market Funds Before the Open Commission Meeting (Jan. 27, 2010), <https://www.sec.gov/news/speech/2010/spch012710mls-mmfm.htm>.

11 US Dept of the Treasury, Financial Regulatory Reform: A new foundation rebuilding financial supervision and regulation 38 (2009), available at http://www.treasury.gov/initiatives/wsr/Documents/FinalReport_web.pdf.

12 The members of the PWG included the Secretary of the Treasury Department (as Chairman of the PWG), the Chairman of the Board of Governors of the Federal Reserve System, the Chairman of the SEC and the Chairman of the CFTC. Id. at 1 n.1.

13 President's Working Grp on Fin. Mkts, Money Marketing Fund Reform Options 8-11 (October 2010), available at <http://www.treasury.gov/press-center/press-releases/Documents/10.21%20PWG%20Report%20Final.pdf>.

14 Id. at 4-6.

15 Mary L. Schapiro, Chair, US Sec. & Exch. Comm'n, Statement on Money Market Fund Reform (Aug. 22, 2012), http://www.sec.gov/News/PressRelease/Detail/PressRelease/1365171484078#.V5gRafnF_mc. See also Daniel M. Gallagher and Troy A. Paredes, Comm'rs, US Sec. & Exch. Comm'n, Statement on the Regulation of Money Market Funds (Aug. 28, 2012), <http://www.sec.gov/news/speech/2012/spch082812dmgtagp.htm>; Luis A. Aguilar, Comm'r, US Sec. & Exch. Comm'n, Statement Regarding Money Market Funds (Aug. 23, 2012), <http://www.sec.gov/News/PublicStmnt/Detail/PublicStmnt/1365171491044>.

16 Letter from Timothy F. Geithner, Sec'y of the Treasury, to Members of the Fin. Stability Oversight Council (Sept. 27, 2012), available at <http://link.coremotivesmarketing.com/c/306/c9c08c9c7eb64ed07c9d05c3c47da44ef8d1713cb48f31b665172e5bd3d9dbe6>.

17 Proposed recommendations regarding money market mutual fund reform, 77 Fed. Reg. 69,455, 69,457 (proposed Nov. 19, 2012) [hereinafter FSOC Proposal].

The FSOC described its proposal as pursuant to its authority under section 120 of Dodd-Frank¹⁸ to “provide for more stringent regulation of such financial activity or practice by issuing recommendations to a primary financial regulatory agency to apply new or heightened standards or safeguards.”¹⁹ Significantly, the FSOC’s involvement created political pressure for the SEC to implement additional reforms.²⁰

2.2 The case for MMF vulnerability

The case for MMF reform was based on the argument that the structural characteristics of MMFs made them vulnerable to runs, which have a destabilizing effect on the economy.²¹ Reform is, therefore, deemed necessary to reduce or eliminate the risk of future runs.

The structure of this argument is questionable because the term “run” is typically associated with banks, not mutual funds.²² Banks hold money that depositors are entitled to withdraw on demand. Banks, in turn, lend that depositor money to borrowers.

If too many depositors demand their money at the same time, the bank will not be able to meet those demands and will experience a run.²³ In the classic bank run, those depositors who withdraw their funds the fastest are typically able to receive payment in full, while those who run the slowest will likely not receive full payment.²⁴ This is known as the first-mover advantage.

It is somewhat misleading to characterize heavy investor withdrawals from MMFs as a “run.” It is common for the financial markets to experience large and rapid movement of assets

without the claim that such movements warrant regulatory intervention.²⁵ Rather, it seems that two attributes distinguish a run from normal movement of assets: panic trading and a first-mover advantage. As Schapiro put it, the redemptions from the Reserve Fund and other MMFs during Lehman week were made by “panicked investors.”²⁶ Panic trading implies a degree of irrationality – redemptions that are motivated by fear rather than genuine financial weakness. Moreover, panic selling is not enough. Runs are also characterized by a first-mover advantage, meaning that investor behavior itself causes a shortage or diminution in value of the remainder. This leads investors, who would not otherwise have traded to take action in order to avoid losing out entirely.²⁷ As a result, a run can induce scarcity by creating an abnormal level of investor demand.²⁸

The mechanics of a run operate differently for an MMF than for a bank. A bank holds long-term illiquid assets that cannot readily be converted to cash. As a result, if many of a bank’s depositors demand their money at the same time, the bank cannot repay them all. By contrast, MMFs hold high-quality short-term assets that typically can be liquidated at, or near, par value.

As a result, under normal market conditions, heavy redemption requests do not create a first-mover problem for an MMF because the MMF can satisfy those requests by liquidating assets.²⁹

The situation in 2008 was distinctive for three reasons. First, the bankruptcy of Lehman generated substantial losses in the value of MMF assets. A loss of this size in money market assets was highly unusual.³⁰ Second, the economic climate during the fall of 2008 put many MMF investors under economic pressure and, in particular, liquidity pressure because of the freeze in the short-term credit markets.³¹ This led MMF investors to withdraw

18 Id. at 69,455; Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111-203, § 120(a), (c)(2), 124 Stat. 1376, 1408-09 (2010).

19 FSOC Proposal, Fed. Reg. 69,456.

20 Sarah N. Lynch, Schapiro: US Risk Council Gave Life to Money Fund Reforms, Reuters (June 4, 2013, 10:21 a.m.), <http://www.reuters.com/article/2013/06/04/us-sec-moneyfunds-schapiro-idUSBRE9530PY20130604>; Daniel M. Gallagher, Comm’r, US Sec. & Exch. Comm’r, Remarks at “The SEC Speaks in 2013” (Feb. 22, 2013), <http://www.sec.gov/News/Speech/Detail/Speech/1365171492342#.U4Ypi6PDB-U>.

21 For example, Douglas W. Diamond and Philip H. Dybvig, *Banking Theory, Deposit Insurance, and Bank Regulation*, 59 J. Bus. 55, 63-64 (1986).

22 Scholars generally agree that a key component of banks’ susceptibility to runs is the maturity mismatch: the bank’s assets are tied up in long-term investments, but it offers immediate liquidity to depositors. See, e.g., Diamond and Dybvig 1986, at 63; Zachary J. Gubler, *Regulating in the Shadows: Systemic Moral Hazard and the Problem of the Twenty-First Century Bank Run*, 63 Ala. L. Rev. 221, 232 (2014). Although MMFs technically present a maturity mismatch, it is far more limited because of the liquidity requirements imposed on MMF assets.

23 George Kaufman, *Bank Runs: Causes, Benefits, and Costs*, 7 Cato J. 559, 561-62 (1988), available at www.cato.org/pubs/journal/cj7n3/cj7n3-2.pdf.

24 Id.

25 For example, E.S. Browning, *Despite Gains, Many Flee Stock Market*, Wall St. J. (Oct. 23, 2012), <http://online.wsj.com/news/articles/SB10000872396390443890304578010500821461868>; Katy Burne, *High-Yield Bond Funds See US\$1.9 Billion Outflow in Latest Week*, Wall St. J. (Dec. 11, 2014), <http://www.wsj.com/articles/high-yield-bond-funds-see-1-9-billion-outflow-in-latest-week-1418336091>

26 Schapiro Statement

27 For example, BD. of the Int’l Org. of Sec. Comm’ns, *Final Report, Policy Recommendations for Money Market Funds 7* (2012), available at www.iosco.org/library/pubdocs/pdf/IOSCOPD392.pdf.

28 Diamond and Dybvig, at 63.

29 See Kirsten Grind, Gregory Zuckerman and Min Zeng, *Billions Fly Out the Door at Pimco*, WALL ST. J. (Sept. 28, 2014), <http://www.wsj.com/articles/bs-fly-out-the-door-at-pimco-1411948188>

30 Inv. Co. Inst., *Money Market Funds In 2012*, *Money Market Funds: What really happened in the 2008 financial crisis 3* (2012), available at www.ici.org/pdf/12_mmf_2008.pdf

31 The loss would have been greater if, as was possible, other financial institutions had been

funds to meet their cash flow needs. Third, non-Lehman events, including the bailout of Bear Stearns and the trouble at a number of other financial institutions, including AIG, Wachovia and Citigroup, created widespread concern about the quality (and possible default) of money market debt from other issuers.³² As a result, the MMFs that experienced a high volume of redemptions could not readily find buyers for their assets.

Both attributes of a run – panic trading and the first-mover advantage – are relevant to the causal relationship between breaking the buck and a run on MMFs. First, the act of breaking the buck may increase the salience to the market of the fact that MMFs do not guarantee the US\$1 share price.³³ Once the risk of losing money becomes salient, investors may panic and withdraw their funds even from financially stable MMFs. These withdrawals tax the MMF's liquidity so that those who run slowly may be unable to withdraw their money.

In the case of an MMF, a stable US\$1 NAV aggravates the situation. So long as the MMF's NAV is sufficiently high, investors can redeem at the US\$1 share price.

But, as the MMF's NAV falls below US\$1 per share, investors can continue to redeem at US\$1, even if their share of the fund's assets is somewhat less, as long as the NAV is above US\$0.995. These redemptions deplete the fund's assets because redeeming investors are receiving more than their entitlement – the difference between the fund's actual NAV and US\$1 – and leaving even less for subsequent investors. These redemptions reflect the “arbitrage opportunity” created by the US\$1 share price.³⁴ Importantly, absent heavy redemption pressure, these small deviations between US\$1 and the fund's actual NAV do not deplete fund assets because the effect is offset by simultaneous purchases that also take place at US\$1 per share. As a result, the gap has a meaningful effect on fund value only in situations in which redemption demand significantly outpaces purchases.

The Reserve case exemplified this effect; early redeemers got out at US\$1 per share and other investors received only 99 cents.³⁵

The third problem with MMFs is contagion effect. According to one view, the fact that a single MMF breaks the buck alerts the market to the fact that MMFs do not guarantee the US\$1 share price and may lead investors in other MMFs to redeem their shares, even if the MMFs are independent financially.³⁶ In reality, the situation is more complex. All MMFs hold similar assets – a collection of short-term debt instruments that include repurchase agreements, government securities, certificates of deposit (often from non-US banks) and commercial paper.³⁷ If one MMF experiences financial distress, that distress may signal to the market a weakness in the assets held by many other MMFs. This correlation among portfolios, with a likely correlation in portfolio losses as well, produces a contagion effect.³⁸

Because an investor has the right to redeem their MMF shares on demand, a heavy volume of redemptions places liquidity demands on MMFs that must be met by a sale of assets. The assets that are sold may present little or no default risk, but the need to generate cash may generate fire-sale prices – meaning prices less than par value – even for non-distressed assets, because active secondary markets do not exist for money market securities. Correlated distress among many MMFs may also lead to market imbalances because the redemption requests create a large number of sellers amid a limited supply of buyers.

Once MMFs begin to sell assets at fire-sale prices, the prices themselves generate a feedback effect, in that they reduce the market price of the assets. When an MMF calculates its shadow NAV,³⁹ it is required to mark its assets to market and therefore to incorporate the fire-sale prices into its own NAV, even if it is not itself experiencing heavy redemptions. This decline in the shadow NAV may, once disclosed to investors, generate further redemptions.

allowed to fail.

32 Inv. Co. Inst., Money Market Funds In 2012, Money Market Funds: What really happened in the 2008 financial crisis 3 (2012), available at www.ici.org/pdf/12_mmf_2008.pdf

33 For example, Patrick E. McCabe, The Cross Section of Money Market Fund Risks and Financial Crises 1-2 (Fed. Reserve Bd. Working Paper No. 2010-51, 2010), available at <http://www.federalreserve.gov/pubs/feds/2010/201051/201051pap.pdf>.

34 For example, Jeffrey N. Gordon and Christopher M. Gandia, Money Market Funds Run Risk: Will Floating Net Asset Value Fix the Problem?, 2014 Colum. Bus. L. Rev. 313, 324-25 (2014)

35 Christopher Condon, Reserve Primary Money Fund Falls Below US\$1 a Share, Bloomberg (Sept. 16, 2008), <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a502y1go1GRU>

36 For example, Gordon and Gandia at 328 n.35.

37 See id. at 326.

38 Gordon and Gandia at 328 n.35.

39 A shadow NAV reflects the value of the MMF's portfolio using a market-based valuation rather than amortized cost. SEC Investment Company Act of 1940, 17 C.F.R. § 270.2a-7(c)(8)(ii)(A) (2014).

3. The 2014 reform

3.1 The SEC's 2014 MMF rule

On July 23, 2014, the SEC approved a final rule reforming MMF regulation by a divided 3-2 vote.⁴⁰ Chair Mary Jo White explained that the reforms would “significantly [mitigate] the risks of a run in money markets funds and limit further contagion should a run occur.”⁴¹ The other commissioners were less sanguine.⁴² Commissioner Aguilar, who voted in favor of the reform, described the rulemaking process as “one of [the] most flawed and controversial” ever undertaken by the SEC.⁴³

The new rule requires prime institutional MMFs to implement a floating NAV, but it exempts retail and government funds from this requirement.⁴⁴ The rule authorizes boards of retail funds to implement gates and fees to discourage redemptions, and provides that the power to use these tools is triggered by declines in fund liquidity.⁴⁵ Finally, the rule adopts a new and narrow definition of government MMFs⁴⁶ and exempts such MMFs from both the floating NAV, and gates and fees provisions.⁴⁷

40 Sarah Lynch, Split US SEC Adopts Long-Awaited Money Market Fund Reforms, Reuters (July 23, 2014), <http://www.reuters.com/article/2014/07/23/sec-moneyfunds-vote-idUSL2N0PY1HP20140723>. See 2014 Final Rule.

41 Mary Jo White, Chairman, US Sec. & Exch. Comm'n, Statement at SEC Open Meeting on Money Market Fund Reform (2014), <http://www.sec.gov/News/Speech/Detail/Speech/1370542343041> [hereinafter White Statement].

42 Kara M. Stein, Comm'r, US Sec. & Exch. Comm'n, Statement of Commissioner Kara M. Stein (2014), <http://www.sec.gov/News/Speech/Detail/Speech/1370542347012> [hereinafter Stein Statement]; Michael S. Piwowar, Comm'r, US Sec. & Exch. Comm'n, Statement at Open Meeting Regarding Money Market Fund Reform (2014), <http://www.sec.gov/News/Speech/Detail/Speech/1370542346300#U9Zf4sJ0yiN> [hereinafter Piwowar Statement].

43 Jayne O'Donnell, SEC Ends US\$1 A Share for Some Money Funds, USA Today (July 23, 2014), <http://www.usatoday.com/story/money/markets/2014/07/23/sec-money-funds-rules/13033749/>.

44 Retail funds are defined as funds that have “policies and procedures reasonably designed to limit all beneficial owners of the fund to natural persons.” 2014 Final Rule at 47,794. This was a change from the proposed rule, which would have defined retail funds as those that did not allow shareholders to redeem more than US\$1m in a single business day; 2013 Rule Proposal at 36,856.

45 In the final rule, the fee and gate provisions are explicitly discretionary. A fund may impose such provisions, however, only when a fund's weekly liquid assets drop below 30% of its total assets. See 2014 Final Rule at 47,747. The 2010 amendments already required MMFs to maintain 30% of their portfolios in weekly liquid assets. 17 C.F.R. § 270.2a-7(c)(5)(iii) (2012); see 2014 Final Rule at 47,738; 2010 Final Rule at 10,113-14.

46 2014 Final Rule at 47,794 (“We therefore are revising the definition of a government fund to require that such a fund invest at least 99.5% (up from 80% in the proposal) of its assets in cash, government securities, and/or repurchase agreements that are collateralized by cash or government securities.”).

47 Id. at 47,791-94. The exemption for government MMFs preserves such funds as a cash-management option for institutional investors. At the same time, it expands the number of funds that remain potentially vulnerable. As the SEC noted in the adopting release, government MMFs experienced substantial outflows in connection with the 2013 debt ceiling impasse. See 2014 Final Rule at 47,746. In addition, the capacity of government MMFs to absorb the quantity of assets that will potentially migrate from institutional prime funds is unclear. See letter from Wells Fargo Funds Mgmt., L.L.C., to Elizabeth Murphy, Sec'y, US Sec. & Exch. Comm'n 5 (Apr. 23, 2014), available at <http://www.sec.gov/comments/s7-03-13/s70313-340.pdf>.

In addition to these structural changes,⁴⁸ the new rule includes important new disclosure requirements. MMFs are required to provide extensive additional information on their websites.⁴⁹ These requirements are supplemented by additional disclosures in the MMF prospectus and marketing materials, in Form N-CR, and in the statement of additional information (SAI).⁵⁰ The requirements include disclosure of the fund's current and historical market-based NAV, calculated on a daily basis and rounded to four decimal points – the nearest ten thousandth of a cent.⁵¹ Funds are required to disclose any past use of gates and fees and historical sponsor support.⁵²

Funds must also disclose current and historical information about the percentage of daily and weekly liquid assets in their portfolios, as well as current and historical information about net shareholder inflows and outflows.⁵³

Because of the potentially substantial effects of the new rules, the SEC provided that compliance dates for both the gates and fees provision, and the floating NAV would not occur until two years after the effective date of the rule.⁵⁴ According to Chair White, the new rule “will fundamentally change the way that most MMFs operate.”⁵⁵

3.2 Evaluating the reforms

The 2014 rule became effective in November 2016. To date, its adoption of a combination of liquidity gates and fees, and a floating NAV – two regulatory approaches that had been the subject of many prior reform proposals – has not been tested by a liquidity crisis. Initial market reactions to the rule have been significant, however. Specifically, the rule has led to a substantial outflow of funds from Prime MMFs into government MMFs and banks.⁵⁶

48 The rule contains several additional features, including heightened diversification requirements and stress testing. See 2014 Final Rule at 47,736.

49 2014 Final Rule at 47,827-34.

50 Id. at 47,815 [prospectus and marketing materials]; Id. at 47,838 [for N-CR, statement of additional information (SAI)].

51 Id. at 47,829. The requirement that funds calculate and disclose a current market-based NAV is not limited to floating NAV funds: Id. at 47,830.

52 Id. at 47,832 [past use of gates and fees]; Id. at 47,833 [historical sponsor support].

53 Id. at 47,827-29.

54 The SEC itself acknowledged the concern that the regulatory change could itself trigger a run on MMFs. See 2014 Final Rule at 47,790-91.

55 White Statement.

56 For example, Bernice Napach, New Money Market Fund Rules Working as Planned: NY Fed, ThinkAdvisor, Mar. 23, 2017, <http://www.thinkadvisor.com/2017/03/23/new-money-market-fund-rules-working-as-planned-ny> (describing loss from prime and municipal MMFs of “US\$1.12t in assets” and gain to government MMFs of “US\$1.032 between January and

Numerous commentators have weighed in on the feasibility and effectiveness of the 2014 rule, and this article will not reexamine those comments in detail. Instead, it will highlight several reasons why the rule is likely to be ineffective in addressing the SEC's identified concerns about MMF fragility. In addition, it will identify key problems with the new disclosure requirements that commentators have largely overlooked.

3.2.1 The floating NAV

A floating NAV has been a central component of proposals for MMF reform since the financial crisis.⁵⁷ Under the new rule, the floating NAV requirement will only apply to a portion of existing MMFs: MMFs estimated by the SEC to hold almost US\$1.3t in assets.⁵⁸ The costs of moving to a floating NAV are substantial.⁵⁹

The SEC's rule was predicated on accounting and tax concessions to simplify compliance issues created by a floating NAV,⁶⁰ but it is nonetheless likely that many, if not most, institutional investors will be unwilling or unable to use a floating NAV product.⁶¹ Because each purchase and redemption in a floating fund will occur at a different price, investors will face the prospect of negative yields on a regular basis, making funds unsuitable for many types of investor.⁶² The SEC itself observes that it is impossible to estimate the extent to which the new rule will cause redemptions from institutional prime MMFs.^{63,64} These redemptions may reduce the availability of short-term credit.

In addition, institutional investors may shift their money into unregistered and potentially less stable investment alternatives.⁶⁵

Thus, the floating NAV requirement is likely to impose substantial costs. The question for regulators is whether it generates corresponding benefits in terms of improving MMF stability.⁶⁶ Advocates of a floating NAV argue that a stable NAV creates an incentive for early redemption.⁶⁷ They argue that a floating NAV addresses this problem because redemptions always take place at the fund's true NAV.⁶⁸

Even defenders of a floating NAV recognize, however, that it reduces the first-mover problem only to a limited degree. The SEC itself has noted the questionable efficacy of a floating NAV in reducing redemptions ("a floating NAV is a targeted reform that may not ameliorate all [the factors leading to heavy redemptions]").⁶⁹

First, on a theoretical level, it is important to recognize that the arbitrage opportunity created by a fixed NAV only exists during the period in which the fund's NAV has fallen below US\$1, but remains above US\$0.995. Once the fund must, by virtue of penny rounding, reduce its trading price to 99 cents, the arbitrage opportunity is reversed because purchasing shareholders can obtain, at a cost of 99 cents per share, assets valued at more than that. Of course, this effect is purely theoretical because only two MMFs in history have ever broken the buck, and no MMF has done so, but continued to operate as a going concern.

Second, existing empirical evidence does not support the claim that a floating NAV reduces redemption pressure in a time of crisis. In 2008, ultrashort bond funds – the floating NAV alternative to MMFs – experienced comparable levels of redemptions to MMFs.⁷⁰ Indeed, the total assets invested in ultrashort bond funds declined by more than 60% from their

November 2016."); Poonkulali Thangavelu, AFP: Prime Money Funds Hurt by SEC's Money-Market Fund Reform, Chief Investment Officer, July 25, 2017, <https://www.ai-cio.com/news/afp-institutional-investors-hurt-secs-money-market-fund-reform/> (describing shift of short-term business holdings from Prime MMFs to government funds).

57 For example, letter from Sheila Bair, Chair, Systemic Risk Council, to Elizabeth Murphy, Sec'y, US Sec. & Exch. Comm'n 1 (Sept. 16, 2013) (stating that "[t]he Stable NAV is the Cause of Money Market Funds' Structural Weakness").

58 2014 Final Rule at 47,900.

59 For example, Inst. Cash Distributions, ICD commentary: operational and accounting issues with the floating NAV and the Impact on Money Market Funds 3-9 (July 2013), available at <http://www.sec.gov/comments/s7-03-13/s70313-40.pdf>; letter from Ass'n for Fin. Prof'ls et al., to Mary Jo White, Chairman, US Sec. & Exch. Comm'n 1-2 (July 2, 2013), available at <http://www.sec.gov/comments/s7-03-13/s70313.shtml>; letter from F. William McNabb III, Chairman and CEO, Vanguard, to the Fin. Stability Oversight Council 4 n.12 (Jan. 15, 2013), available at https://institutional.vanguard.com/iam/pdf/FSOCmoneyMKT_VG_comment.pdf.

60 2014 Final Rule at 47,781-882.

61 Letter from Paul Schott Stevens, President & Chief Exec. Officer, Inv. Co. Inst., to Elizabeth Murphy, Sec'y, US Sec. & Exch. Comm'n 5 (Jan. 10, 2011), available at http://www.ici.org/pdf/11_sec_pwg_com.pdf.

62 Id. at 35.

63 2014 Final Rule at 47,896.

64 There is some evidence that the rule is having this effect, at least in the short term. See Thangavelu, *supra* note (quoting Jim Kaiz, ATP President and CEO as saying that "[t]he flight from prime funds is also starving the economy of a critical source of short-term capital for large businesses").

65 Letter from James A. McNamara and David Fishman, Managing Dirs., Goldman Sachs Asset Mgmt., to Kevin O'Neill, Deputy Sec'y, US Sec. & Exch. Comm'n 3-4 (July 21, 2014), available at <http://www.sec.gov/comments/s7-03-13/s70313-383.pdf> [hereinafter Goldman Letter].

66 For example, Bus. Roundtable v. Sec. & Exch. Comm'n, 647 F.3d 1144, 1155-56 (D.C. Cir. 2011).

67 2013 Rule Proposal at 36,849.

68 FSOC Proposal at 69,467.

69 2013 Rule Proposal at 36,850.

70 Letter from Samuel Hanson, Assistant Professor of Finance, Harvard Bus. Sch. et al., to Elizabeth Murphy, Sec'y, US Sec. & Exch. Comm'n 2 (16 September 2013); Fisch and Roiter at 1036.

peak in 2007 to the end of 2008.⁷¹ Similarly, Gordon and Gandia studied the difference in run rates in European MMFs during the financial crisis and found that none of the difference is explained by whether the NAV is fixed or floating.⁷² A likely explanation for these findings is that the same economic factors that cause investors to redeem from an MMF cause them to redeem from a floating NAV fund. Critically, redemption requests create an analogous first-mover advantage for floating rate funds, as early redemptions can be satisfied through sales of the funds' most liquid assets.

The key factor contributing to redemption pressure is the stale pricing of mutual fund assets. When an investor redeems mutual fund shares, that redemption request must be honored on the basis of the current value of the MMF's portfolio, calculated as of the 4 p.m. close.⁷³ As noted, however, the very fact of redemption may require a fund to sell assets at distressed prices, prices that will reduce the fund's NAV.

Because the typical fund will maintain a certain liquidity level in order to meet redemption requests, the sale of those assets will generally not take place until after the redemption and will therefore not be reflected in the price at which the redemption occurs.⁷⁴ Thus, the claim that the investor in a floating rate fund exits at the fund's true value is misstated; in times of heavy redemption, all funds face a first-mover advantage.

Floating the NAV is likely to increase this redemption pressure because investors will then, on a regular basis, expect share prices to decline in response to various economic factors.⁷⁵ In a stable-value fund, MMF managers face pressure to maintain the US\$1 NAV, and, anticipating that, investors do not expect an arbitrage opportunity to materialize. The empirical evidence indicates that this pressure is effective because the NAVs of MMFs fluctuated very little, even in periods of substantial economic

turmoil.⁷⁶ The historical stability of MMFs' NAVs belies the claim that a stable NAV is misleading or the result of a regulatory dispensation.⁷⁷ MMFs trade at a US\$1 share price because their sponsors manage the portfolios in a way that minimizes any discrepancy between the underlying share value and a dollar.

To eliminate the first-mover advantage, MMFs must do more than float their NAVs: they must satisfy redemption requests at fair value. For reasons described in further detail below (section 4), it is difficult to price MMF assets accurately. As a result, the floating NAV will require MMFs to sell and redeem shares on the basis of "noisy guesstimates of true value."⁷⁸ These transactions have the potential to generate far greater unfairness between shareholders than the arbitrage opportunity to which the floating NAV is addressed.

3.2.2 Gates and fees

As with the floating NAV, the SEC's "gates and fees" alternative appears poorly suited to addressing the central problem identified by regulators as justifying further reform, i.e., run risk. Indeed, gates and fees potentially present a greater threat to MMF investors than a loss in principal, because they jeopardize the investors' immediate access to their funds. Immediate access is a key factor motivating investor use of MMFs.⁷⁹

One problem with the gates and fees alternative is its complexity. The final rule empowers fund boards to impose liquidity fees of up to 2% or suspend redemptions (impose gates) for up to 10 business days if a fund's weekly liquid assets fall below 30% of its total assets.⁸⁰ At the same time, boards are required to impose a 1% liquidity fee if the fund's weekly liquid assets fall below 10% of its total assets *unless the fund board decides that such a fee is not in the best interests of the fund*.⁸¹ Thus, the rule provides an opt in for 2% gates and fees and an opt out for 1% fees. The SEC failed to provide meaningful guidance on the "best interests" standard,⁸² leaving it difficult for investors to estimate or price the

71 Perspectives on Money Market Mutual Fund Reforms: Hearing Before the S. Comm. on Banking, Hous., and Urban Affairs, 112th Cong. 75 (2012) (statement of Paul Schott Stevens, President and CEO, Inv. Co, Inst.).

72 Gordon and Gandia at 350.

73 17 C.F.R. § 270.22c-1 (2014).

74 Moreover, in a time of crisis, the inability to value distressed assets makes the fund's calculation of NAV inherently unreliable. The court observed as much in the case of the Reserve Fund, finding that the Fund's calculation of NAV on September 15 and 16 2008, was unreliable, even after the Fund broke the buck. See SEC v. Reserve Mgmt. Co. (In re The Reserve Fund Sec. & Derivative Litig.), 673 F. Supp. 2d182, 198 (S.D.N.Y. 2009).

75 Piwowar Statement at 4.

76 Frequently Asked Questions About the Pricing of US Money Market Funds, Investment Company Inst. (Jan. 25, 2011), http://www.ici.org/mmfs/basics/faqs_pricing_mmfs.

77 See William A. Birdthistle, Breaking Bucks in Money Market Funds, 2010 Wis. L. Rev. 1155, 1161.

78 Letter from James J. Angel, Assoc. Professor of Fin., Georgetown Univ., to US Sec. & Exch. Comm'n 4 (Sept. 17, 2013), available at <http://www.sec.gov/comments/s7-03-13/s70313-228.pdf>.

79 Goldman Letter at 1-3.

80 2014 Final Rule at 47,747.

81 Id. (emphasis added).

82 Id. at 47,761.

risk that boards will impose a gate or fee.

In addition, as Commissioner Kara Stein noted, gates and fees are likely to be counterproductive in addressing run risk and the greater problem of systemic contagion.⁸³ Superficially, of course, gates and fees increase the cost of redemptions. If investors must pay a 1% or 2% fee to redeem their shares, they will be less willing to redeem. Similarly, while a gate is in effect, it completely prevents redemptions. Nonetheless, both gates and fees exacerbate run risk near the point of the trigger. Specifically, if investors are aware of the prospect of a draconian fee or complete bar on withdrawals, they may seek to redeem as the fund approaches the trigger point for the imposition of the gate or fee.⁸⁴ The result would be precisely the type of first-mover advantage that this article has identified as a critical component of a run.⁸⁵

The incentive to run under a system with gates and fees would be more powerful than the arbitrage opportunity associated with penny-rounding, because the liquidity fees authorized under the rule are far greater than the 0.5% differential that the SEC identified as a concern under the status quo. Importantly as well, the fund board's discretion as to whether to impose a gate or fee would generate uncertainty about any particular board's willingness to do so.⁸⁶ Under the final rule, the board's power to impose gates and fees is triggered if a fund's liquidity drops to twice the limit legally required by Rule 2a-7,⁸⁷ suggesting that boards will potentially be able to exercise this power with some frequency. This uncertainty could lead investors to redeem well in advance of any fund distress, in which case, the investor redemptions, rather than economic developments, could cause the fund to fail.⁸⁸

Moreover, a single fund's imposition of a gate or fee could scare investors in other funds into redeeming to avoid facing a similar restriction. This would cause one MMF to generate a spillover effect on the industry.⁸⁹ Given that the risk of panic may be highest among individual investors – who would also be least able to evaluate the fund's disclosures in an effort to ascertain the likelihood that a gate or fee will actually be imposed – the use of gates and fees for retail MMFs is particularly problematic. As Eric Rosengren, President of the Federal Reserve Bank of Boston, warns, "As this represents a new run mechanism that does not exist under the status quo, the fees and gates alternative may actually increase run risk relative to not enacting further reform."⁹⁰ Put differently, Sheila Bair, former FDIC Chair, observed that gates and fees create a new source of uncertainty – the type of uncertainty that generates a run – uncertainty by investors about their ability to withdraw their money.⁹¹

The biggest problem with gates and fees, however, is that mutual fund boards face powerful disincentives to use them. Although the circumstances under which the imposition of a gate or fee is warranted are likely to be extremely rare, imposing a gate or fee would irreparably damage the reputation not just of the MMF itself, but of its sponsor too. Investors who have been subjected to a gate or fee are unlikely to continue to invest with that fund family in the future. Prospective investors will be wary of investing in a fund that has implemented such restrictions in the past and, under the new rule, MMFs will have to disclose any use of a gate or fee for the next 10 years.⁹² In a highly competitive industry, there are reasons to believe that the use of gates or fees will limit a fund sponsor's ability to attract investments to a degree that makes the survival of the sponsor questionable. This will be a major concern for a board considering the exercise of these powers. Although gates and fees may facilitate the liquidation of an irreparably damaged MMF,⁹³ they are unlikely to be implemented for funds that are not terminal. As such, their value in enhancing MMF stability is questionable.

83 Stein Statement at 3.

84 Goldman Letter at 2.

85 E.g., Letter from Eric Rosengren, President, Fed. Reserve Bank of Bos. et al., to Elizabeth Murphy, Sec'y, US Sec. & Exch. Comm'n 7 (Sept. 12, 2013) [hereinafter Rosengren Letter], available at www.bostonfed.org/news/press/2013/pr091213-letter.pdf.

86 For example, Gordon and Gandia at 367.

87 2014 Final Rule at 47,747.

88 In addition, an abrupt decline in liquidity could be triggered by events that have nothing to do with the soundness of the fund or the quality of its assets, such as redemptions by a few large investors at the same time. See Rosengren Letter at 7. Although, to be fair, rapid redemptions should not be a triggering event in the context of a strong market for money market assets because the MMF could restore its liquidity through sales. Such sales would, of course, be constrained by the limited trading that occurs in some money market assets, such as repurchase agreements.

89 Goldman Letter at 3.

90 Rosengren Letter at 7.

91 Examining the SEC's Money Mkt. Fund Rule Proposal: Hearing Before the Subcomm. on Capital Mkts. & Gov't Sponsored Enters. of the H. Comm. on Fin. Servs., 113th Cong. 54-55 (2013) (statement of Sheila C. Bair, Chair, Systemic Risk Council).

92 2014 Final Rule at 47,820.

93 I have argued elsewhere that a partial gate would be a useful tool for boards to use in circumstances, in which they must break the buck. See Fisch & Roiter at 1046-48. Our proposal differs from the rule because it would only impose a gate as a last resort and would limit the size of the gate to allow investors to redeem the majority of their funds without delay.

3.2.3 The new disclosure requirements

True to the disclosure orientation of the federal securities laws, the new rule adopts an extensive menu of additional required disclosures that offer independent reasons for concern.⁹⁴ First, voluminous disclosure requirements may overwhelm investors and limit their ability to ascertain useful information about their investments.⁹⁵ The problem of information overload is particularly apparent in mutual fund disclosure; commentators have observed for years that mutual fund regulation mandates too many disclosures that are of questionable value to investors.⁹⁶

Second, and perhaps more problematically, the disclosure is designed to make MMF portfolios, redemption requests and liquidity levels more transparent, ostensibly to enable more effective investor monitoring. Yet, active investor monitoring of MMFs is of uncertain value. Apart from the question of whether MMF investors have the necessary skill set to evaluate MMF risk on the basis of the required disclosures, the private money aspect of MMF is in tension with a high level of information sensitivity. As Tri Vi Dang and others have argued in the context of bank secrecy, it may be desirable to maintain a level of information opacity for financial institutions that produce private money or money equivalents.⁹⁷

Of the new disclosure requirements, two are of particular concern. The first is the requirement that all MMFs calculate and disclose a market-based NAV on a daily basis.⁹⁸ For floating-value MMFs, this is the price at which the fund issues and redeems shares; for stable-value MMFs, it is a shadow NAV.⁹⁹ Importantly, the rule requires that, in both cases, the calculation be made to four decimal places or to the nearest ten thousandth of a cent.¹⁰⁰ This high level of precision is explicitly designed to create an artificial appearance of volatility in a fund's NAV. The SEC rejected imposing a precision requirement analogous to that used by other mutual funds, a NAV rounded to three

decimal places, on the basis of empirical data showing that only with the more stringent disclosure requirement would MMF prices appear to fluctuate.¹⁰¹

As a result, the disclosure conveys a false degree of price fluctuation. The Investment Company Institute (ICI) describes the SEC's proposal as "an artificially sensitive pricing scheme to force 'movement' in the NAVs of the funds."¹⁰² More troubling is the fact that the use of four decimal places suggests a scientific degree of accuracy to the valuation process that simply is not present.¹⁰³

As noted in section 2.1, many of the assets held by MMFs rarely trade; they are held to maturity and rolled over, which means that when a fund calculates its NAV, current market prices for the securities may not be readily available.¹⁰⁴

In the absence of an available market price, funds are required to determine the "fair value" of the assets that they hold.¹⁰⁵ Fair value determinations are required for all investment funds, but the valuation methodology has a greater impact on funds that hold a large proportion of assets for which market prices are not readily available.¹⁰⁶ Fair valuation methodology incorporates models, predictions and multifactor tests.¹⁰⁷ As a result, although MMF prices will be calculated to four decimal places, they will incorporate valuations that are not scientific, but subjective and imprecise.¹⁰⁸

94 The new disclosure and reporting requirements take up almost 200 pages of the adopting release, from page 288 to 485. Money Market Fund Reform; Amendments to Form PF, Securities Act Release No. 33-9616, 288-485 (Oct. 14, 2014), available at <http://www.sec.gov/rules/final/2014/33-9616.pdf>.

95 For example, Troy A. Paredes, *Blinded by the Light: Information Overload and Its Consequences for Securities Regulation*, 81 WASH. U. L.Q. 417, 419 (2003).

96 Barbara Black, *Are Retail Investors Better Off Today?*, 2 Brook. J. Corp. Fin. & Com. L. 303, 337 (2008).

97 Tri Vi Dang et al., *Banks as Secret Keepers 1* (Nat'l Bureau of Econ. Research, Working Paper No. 20255, 2014).

98 2014 Final Rule at 47,829-30.

99 Id. at 47,830 & n.1094.

100 Id. at 47,829.

101 Id. at 47,779-80 (reporting that, according to staff data, less than 5% of MMFs would have fluctuated in price during the three years between November 2010 and November 2013 under the standard applicable to other mutual funds).

102 Comment letter from ICI to US Sec. & Exch. Comm'n 41 (Sept. 17, 2013), available at http://www.ici.org/pdf/13_ici_mmf_ltr.pdf.

103 Comment letter from Presidents of the Fed. Reserve Banks to the Fin. Stability Oversight Council 1 (Feb. 12, 2013), available at <http://www.bostonfed.org/news/press/2013/pr021213-letter.pdf>.

104 Comment letter from Catherine T. Dixon, Chair ABA Fed. Regulation of Sec. Comm., to Elizabeth M. Murphy, Sec'y, US Sec. & Exch. Comm'n 26 (Sept. 30, 2013) [hereinafter Dixon Letter], available at <http://www.sec.gov/comments/s7-03-13/s70313-249.pdf>.

105 Compliance Programs of Investment Companies and Investment Advisers, Inv. Co. Rel. No. 26299, 68 Fed. Reg. 74,714, 74,718 n.21 (Dec. 24, 2003).

106 For example, Disclosure Regarding Market Timing and Selective Disclosure of Portfolio Holdings, Investment Company Act Release No. 26418, 69 Fed. Reg. 22,300, 22,304-05 (Apr. 23, 2004), available at <http://www.sec.gov/rules/final/33-8408.htm>. The release noted that MMFs were then subject to different pricing requirements under Rule 2a-7. Id. at 22,305.

107 Dixon Letter at 26. These techniques provide relatively imprecise "estimates" of value, rather than true market value.

108 For example, Ian McDonald and Tom Lauricella, *Mutual Funds' Pricing Flaw*, Wall St. J. (Mar. 24, 2004), <http://online.wsj.com/news/articles/SB108007959483063307>

The SEC's new rule also imposes troubling requirements with respect to the disclosure of sponsor support, reflecting the SEC's view that sponsor support contributes to the fragility of MMFs.¹⁰⁹ The provisions seek to reduce investor reliance on the possibility of sponsor support and to increase the disincentive for sponsors to provide such support. These objectives are troubling, because sponsor support has historically been a key factor enhancing MMF stability.

To achieve the first objective, the rule requires MMFs to inform prospective investors that "[t]he Fund's sponsor has no legal obligation to provide financial support to the fund and you should not expect that the sponsor will provide financial support to the fund at any time."¹¹⁰

The SEC explains that this language is designed to "emphasize to investors that they should not expect a fund sponsor to provide financial support."¹¹¹ Although, under current law, the statement is certainly factually accurate, given the historical willingness of sponsors to provide such support, it is not clear what message investors are to take from this emphasis.

The message is particularly confusing in the context of the additional new requirement that sponsors disclose all prior instances in which they have provided support over the past 10 years.¹¹² One possible reading of the disclosures is that investors should ignore the statement about legal obligation because this sponsor has historically gone beyond its obligations and voluntarily provided support. Another possible implication is that, despite the sponsor's past practice of providing support when necessary, the support is not to be trusted.

Beyond these mixed messages is the question of how investors should interpret a sponsor's prior practice of providing support. On the one hand, the disclosure might mean that the sponsor has stood behind its fund and has the financial wherewithal to do so. Alternatively, the fact that a fund required prior sponsor support

might signal that it is poorly managed or takes excessive risks. Absent some meaningful indication of what sponsor support means, it is difficult to understand how investors can use this information to make informed investment choices.¹¹³

Regardless of the effect of the signal, requiring sponsors to disclaim financial responsibility for a fund's NAV may reduce their willingness to assume such responsibility. Once a sponsor is forced to tell investors that it need not provide support, it may be unwilling to provide such support voluntarily. Similarly, in the face of a detailed disclosure requirement that will extend for the next 10 years, sponsors may be less willing to provide support in the face of weakness or may delay providing support in hopes that it will prove unnecessary, rather than acting promptly before investors become concerned. Either way, MMF stability is reduced.

4. Mandatory sponsor support: a new approach to MMF reform

4.1 A proposal for mandatory sponsor support

As noted, the SEC's long-awaited reforms were unlikely to increase MMF stability and, in fact, are counterproductive. This article offers a new approach to MMF reform, i.e., mandated sponsor support of the US\$1 share price: the SEC should amend Rule 2a-7 to require sponsors of stable-value MMFs to support the US\$1 share price. Sponsors would be required to commit their support as a condition of offering a stable-value NAV MMF. Put differently, the proposal would provide MMF sponsors with a choice. Sponsors could continue to offer a stable NAV MMF, but if they did so, they would be required to commit to maintain the US\$1 share price. Alternatively, sponsors could offer a floating NAV MMF, which could be regulated in accordance with the 2014 rule.¹¹⁴

The article's rationale for embracing sponsor support is the critical structural difference between MMFs and banks. MMFs, like other investment funds, consist of a pool of assets that are segregated from the assets of their sponsors. Redemptions from an MMF are made from the MMF's assets, not from the sponsor's

109 For example, Perspectives on Money Market Mutual Fund Reforms: Hearing Before the S. Comm. on Banking, House., & Urban Affairs, 112th Cong. 29 (2012) (statement of Mary L. Schapiro, Chairman, US Sec. & Exch. Comm'n); Sean Collins, Is SEC Data Misleading the Public on Sponsor Support of Money Market Funds?, ICI Viewpoints Blog (June 21, 2012), http://www.ici.org/viewpoints/view_12_mmfs_fund_support.

110 2014 Final Rule at 47,816. The statement also adds language warning investors of the possibility that the fund will impose gates and fees. *Id.*

111 *Id.* at 47,817.

112 *Id.* at 47,824.

113 The SEC itself indicated some confusion about this point. See *id.* at 47,825 ("[t]he disclosure of affiliate sponsor support could have additional effects on capital formation, depending on whether investors interpret financial support as a sign of money market fund strength or weakness").

114 Although this article does not favor a floating NAV, it retains it to broaden the pool of potential MMF sponsors beyond those who could commit credibly to provide adequate support.

assets. Although the MMF sponsor manages the fund, its financial structure is linked to the MMF only to the extent that it receives fees for the services provided to the MMF.

As John Morley explained, this separation of investments and management is an important and efficient feature of mutual funds because it critically changes the risk exposure of mutual fund investors, who are not exposed to the general operational risks of the mutual fund sponsor.¹¹⁵ The separation also means that, as a general rule, sponsor assets are not available to MMF investors.

Sponsor support is an exception to this traditional separation because it makes sponsor assets available to MMF investors in the event of MMF distress. Critically, sponsor support is conceptually possible only because the assets of the sponsor are an independent resource rather than part of the MMF's portfolio value.

Banks, by contrast, lack this separation of investments and management. Bank deposits are a loan from the depositor to the bank and depositors look to the general assets of the bank to satisfy this obligation. The bank's financial fragility therefore poses a risk to depositors and this risk is the source of bank runs. Banks lack an analogous option of sponsor support because the bank's resources already stand behind its obligations and there is no additional pool of assets to supplement those resources.

Experience has demonstrated the effectiveness of sponsor support for MMFs that faced substantial redemptions or other forms of financial distress, and prior instances of sponsor support have been frequent, allowing the vast majority of funds to avoid breaking the buck.¹¹⁶ Importantly, sponsor support increases price stability.¹¹⁷ As McCabe demonstrates, for example, sponsor support was highly effective in stabilizing MMFs during the asset-backed commercial paper crisis of 2007 and no MMF broke the buck.¹¹⁸ McCabe also demonstrates that, after the Reserve Fund

broke the buck, MMFs with weaker sponsors experienced higher levels of redemptions.¹¹⁹

Sponsors have provided support to their MMFs in multiple ways. One of the most common, and the most frequently overlooked, is through discretionary fee waivers.¹²⁰

Although MMF advisory fees are set by contract, fund managers have the discretion to waive the fees in whole or in part, and fund managers regularly do so.¹²¹ Fee waivers do not require approval from the fund's board or the SEC.¹²² These waivers have the effect of shifting capital from the investment advisor to the fund itself. Fee waivers have been common for many years; the practice long predates the financial crisis.¹²³

Susan Christoffersen found that, for example, between 1991 and 1995, over half of retail MMFs and nearly 80% of institutional MMFs waived all or part of their fees.¹²⁴

MMFs dramatically increased their use of fee waivers in the wake of the financial crisis. Since 2008, MMFs waived a total of US\$24b in fees.¹²⁵ In 2013 alone, MMF fee waivers totaled US\$5.8b.¹²⁶ A key reason for the fee waivers was the low interest rates that were available on money market assets: absent fee waivers, the funds would generate negative returns.¹²⁷

The widespread use of fee waivers demonstrated the willingness of fund sponsors to forgo profits and to absorb virtually all the expenses of operating the funds.¹²⁸ By waiving their fees, managers were transferring the waived amount to the funds to support their NAVs and absorbing the funds' losses on behalf

¹¹⁹ Id. at 35.

¹²⁰ The fact that even the SEC has overlooked the importance of fee waivers is demonstrated by the fact that its new disclosure requirement for sponsor support does not include fee waivers. 2014 Final Rule at 47,822 n.990. Technically the exclusion is for "routine" fee waivers, but the release does not define the term "routine". Id.

¹²¹ For example, Susan Christoffersen, *Why Do Money Fund Managers Voluntarily Waive Their Fees?*, 56 J. Fin. 1117, 1119-25 (2001).

¹²² Id. at 1119.

¹²³ Id.

¹²⁴ Id. at 1139.

¹²⁵ Tim McLaughlin, *US Stock Fund Costs Fall; Money Market Fee Waivers Hit US\$5.8b*, Reuters (May 14, 2014), <http://www.reuters.com/article/2014/05/14/funds-stocks-fees-idUSL1N0NZ13320140514>.

¹²⁶ Id. By way of comparison, total fee waivers in 1995 were US\$348m. See Christoffersen at 1120.

¹²⁷ McLaughlin; see also Brett Philbin, *Schwab's Profit Falls 20% on Lower Fees*, Marketwatch (Apr. 16, 2012), <http://www.marketwatch.com/story/schwabs-profit-falls-20-on-lower-fees-2012-04-16>.

¹²⁸ McLaughlin.

¹¹⁵ Morley at 1228, 1258-59.

¹¹⁶ 2013 Rule Proposal at 36,840 n.45; Steffanie A. Brady, Ken E. Anadu and Nathaniel R. Cooper, *The Stability of Prime Money Market Mutual Funds: Sponsor Support from 2007 to 2011*, at 4 (Federal Reserve Bank of Boston, Working Paper 2012), available at <http://www.bostonfed.org/bankinfo/qau/wp/>; Steffanie A. Brady, Ken E. Anadu and Nathaniel R. Cooper, *The Stability of Prime Money Market Mutual Funds: Sponsor Support from 2007 to 2011*, at 4 (Federal Reserve Bank of Boston, Working Paper 2012), available at <http://www.bostonfed.org/bankinfo/qau/wp/>.

¹¹⁷ McCabe at 1-2.

¹¹⁸ Id. at 8.

of the investors.¹²⁹ Importantly, by structuring sponsor support as a fee waiver, in which the fund manager has a contractual entitlement to a payment, and then voluntarily and discretionarily waives that payment, MMFs avoided the accounting and regulatory complications that would accompany an explicit guarantee or ex-ante commitment. Although recent fee waivers were informal, discretionary and largely clandestine, they demonstrated the viability of sponsor support in enhancing MMF stability. It should be noted that many MMF sponsors reduced or eliminated fee waivers in the US and across Europe in 2016-17.¹³⁰

In addition to fee waivers, sponsors provide support by purchasing distressed assets from a fund at amortized cost, providing direct injections of capital or liquidity, or providing letters of indemnity or other types of guarantee.¹³¹ As history demonstrates, sponsors have a strong incentive to support their MMFs.

Breaking the buck could irreparably damage a sponsor's reputation and make it unable to continue to operate.¹³² Importantly, for the vast majority of sponsors, MMFs represent only a small proportion of their overall business and the spillover effect could destroy the sponsors' other operations as well.¹³³ Sponsor support is not costly in the context of most sponsors' overall operations. MMFs generally constitute a small percentage of the sponsor's assets under management¹³⁴ and the potential cost of furnishing support to the funds is a tiny portion of the sponsor's independent value. BlackRock, for example, manages approximately US\$300b in MMF products, out of a total of more

than US\$4t in assets under management.¹³⁵

BlackRock has an independent value of US\$51b, meaning that US\$51b of value from the sponsor's shareholders is available to meet the potential demands of its MMFs.¹³⁶ In essence, BlackRock's market capitalization provides a capital buffer of 17%.

In addition, MMF sponsors receive a percentage of the total assets under management in the form of regular and highly liquid advisory fees.¹³⁷ These fees provide a ready source of liquidity upon which the sponsor can draw to meet its support obligations.¹³⁸ Indeed, even in an era in which MMF yields have plummeted, MMF sponsors continue to receive substantial fee income.¹³⁹

In addition, sponsor support is flexible, in that sponsors have multiple options as to the form of support provided.

Under current law, sponsor support is always discretionary.¹⁴⁰ This is widely characterized as a weakness of MMFs because of the fear that the sponsor may fail to provide support in time of crisis and allow the MMF to fail.¹⁴¹

129 Sam Mamudi, Schwab Results Highlight Money-Market Fund Hit, Marketwatch (Apr. 15, 2010), <http://www.marketwatch.com/story/money-market-fee-waivers-hit-schwab-top-line-2010-04-15>; Philbin.

130 For example, Aliya Ram, Fees for money market funds reinstated, Fin. Times, Oct. 9, 2016, <https://www.ft.com/content/3cb02528-8ada-11e6-8cb7-e7ada1d123b1> (describing reduction in availability of fee waivers). It is notable that institutional investors, at least in Europe, appear willing to use cash management vehicles that provide negative returns, perhaps because of the fees associated with bank deposits. See id. (noting that MMFs with negative returns offer improved diversification over bank deposits).

131 Shilling at 3.

132 For example, Kacperczyk and Schnabl at 3; McCabe at 6.

133 Comment letter from James J. Angel, Assoc. Professor of Fin., Georgetown Univ., to US Sec. & Exch. Comm'n 7 (Feb. 6, 2013), available at <http://www.sec.gov/comments/s7-02-10/s70210-410.pdf>.

134 For the Reserve Primary Fund, of course, the proportion was much higher, as it is for sponsors like Federated. See Sam Mamudi and Jonathan Burton, Money Market Breaks the Buck, Freezes Redemptions, Marketwatch (Sept. 17, 2008, 9:11 a.m.), www.marketwatch.com/story/money-market-fund-breaks-the-buck-freezes-redemptions; Federated Investors, Inc., 2013 Annual Report 10 (2014), available at http://corp.federatedinvestors.com/Fil/daf/pdf/annual_report/2013_Annual_Report.pdf.

135 The Monolith and the Markets, Economist, Dec. 7, 2013, at 25, 25-26, available at <http://www.economist.com/news/briefing/21591164-getting-15-trillion-assets-single-risk-management-system-huge-achievement>.

136 Id.

137 Tim McLaughlin, Big US Money Funds' Fees Outpace Investor Returns, Reuters (Mar. 29, 2012, 3:36 p.m.), <http://www.reuters.com/article/2012/03/29/funds-money-market-idUSL2E8ESW1820120329>.

138 For example, the US\$116b Fidelity Cash Reserves Fund generated US\$200m in income for its sponsor in each of the three years from 2010 to 2012. Thus, the fund's annual income greatly exceeded the degree of fluctuation in value targeted by the SEC's rules as a cause for concern. See id.

139 McLaughlin (2012).

140 Various legal rules prevent sponsors from guaranteeing fund value in advance, including limitations on affiliate transactions, requirements for reporting contingent liabilities, consolidation requirements and, for regulated entities, a concern about extending the federal safety net to a nonbank entity. See SEC Staff Issues Clarification on Consolidation Issues Relating to Bank Support for Money Market Funds, Ernst & Young (Sept. 19, 2008), <http://goo.gl/QvfMWG>. In September 2008, the SEC staff issued guidance to clarify that banks were not required to consolidate the fund on their balance sheet if they provided discretionary support in connection with the financial crisis. US Sec. & Exch. Comm'n, Sec Issues Clarification on Accounting Issues Relating to Bank Support for Money Market Mutual Funds, Sec. & Exch. Comm'n (Sept. 17, 2008), <http://www.sec.gov/news/press/2008/2008-205.htm>. Similarly, accounting rules limit the ability to segregate assets to cover potential losses in the form of a reserve because the sponsor has no obligation to cover those losses. Although accounting rules would allow reserves if the sponsor guaranteed its MMF losses in advance, such a guarantee would subject the sponsor to disclosure obligations and possible consolidation. See PWG report at 10. In addition, an explicit guarantee could arguably be treated as an asset of the fund, with the resulting requirement that it be reflected in the fund's NAV.

141 Duygan-Bump et al. at 735; Cecilia Parlatore Siritto, Fragility in Money Market Funds: Sponsor Support and Regulation 1 (July 12, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2295145 Brady, Anand and Cooper at 2.

This article's proposal would modify Rule 17a-9 to require sponsor support rather than making such support voluntary.¹⁴²

Mandating sponsor support would address former Chair Schapiro's concern about the unreliability of sponsor support in a time of crisis.¹⁴³ To address the related concern about transparency, this article proposes several complementary disclosure requirements. MMFs would be required, on a real-time basis, to disclose the extent and form of support provided.¹⁴⁴ MMFs would also be required to disclose any conditional forms of support, including insurance coverage, contingent purchases and third-party guarantees.

Importantly, these disclosures would not have the potentially adverse consequences of the requirements included in the 2014 rule because, in a regulatory environment in which sponsor support is mandated, disclosure that the sponsor has provided such support would not be a confusing signal about the need for support or the sponsor's willingness to provide support in the future.

In addition to this disclosure, MMF sponsors would have to provide disclosures about their financial condition. For sponsors that regularly provide current financial information to the public, either through capital markets disclosures or through publicly available filings with regulators, such information would be sufficient. Private sponsors that are not otherwise subject to mandated financial disclosure, such as the Reserve Management Company or Fidelity, would be required to provide analogous periodic disclosures to allow investors to evaluate their capacity to meet the support requirement.

4.2 Advantages of mandatory sponsor support over current law

Mandatory sponsor support is a better approach than the 2014 rule for three reasons. First, sponsor support is effective. As the SEC and others have documented, sponsors supported

the NAVs of their MMFs for years.

Sponsor support has enabled hundreds of MMFs to weather the turmoil of the financial crisis of 2008, the European debt crisis, uncertainty about the US debt ceiling, the structured investment vehicle issue and more without breaking the buck. Notably, a commitment to sponsor support reduces run risk because it eliminates the pressure for investors to redeem. As a result, in most circumstances, the guarantee alone will be sufficient to provide stability without requiring the sponsor to incur substantial cost.

Second, sponsor support provides appropriate incentives for sponsors to minimize portfolio risk.¹⁴⁵ One of the ongoing concerns about MMFs is the potential that sponsors will take excessive risk to increase yield and obtain a competitive advantage.¹⁴⁶ Although the SEC's 2010 MMF reforms reduce the degree of permissible risk taking, so long as the sponsor does not bear the full costs of its risk taking, it will have an incentive to take excessive risk.

This appetite for risk is likely to be concentrated in those MMF sponsors that are financially fragile or those that lack independent business reasons for maintaining a sound MMF. Sponsor weaknesses that create excessive risk-taking incentives are, however, highly transparent to MMF investors. Thus, to the extent that sponsor support reduces the independence of an MMF's portfolio from the financial stability of its sponsor, market forces should lead investors to prefer MMFs offered by those sponsors that most credibly can stand behind the MMF's share price.¹⁴⁷

Third, sponsor support does not create the moral hazard problem associated with external financial support, such

142 17 C.F.R. § 270.17a-9 (2014). Critically, in order to allow a sponsor to commit to these forms of support up front, the SEC would need to modify the rules on affiliate transactions, calculation of NAV and consolidation, where necessary.

143 Mary Schapiro, Chair, Sec. & Exch. Comm'n, Remarks at SIFMA's 2011 Annual Meeting (Nov. 7, 2011), <http://www.sec.gov/news/speech/2011/spch110711mls.htm>

144 MMFs would be required to disclose all forms of support, including fee waivers. Unlike the current rule, the proposal would not require sponsors to disclose the reason for providing support, as the reasons – supporting the fund's NAV and supplying liquidity – are implicit in the regulatory mandate.

145 Importantly, unlike capital buffers, sponsor guarantees would not provide a discontinuity with respect to sponsor incentives. With required capital buffers, a sponsor's incentive to take risk increases as potential losses approach the size of the buffer, because the sponsor will not bear the cost of losses beyond the amount of the buffer. Thus, capital buffers create a distortion analogous to that created by low capital requirements for banks.

146 For example, commentators described the Reserve Fund's risk taking as excessive, noting that, in September 2008, the Reserve Fund's 12-month yield was "the highest among more than 2,100 money funds tracked, according to Morningstar." Steve Stecklow and Diya Gullapalli, A Money-Fund Manager's Fateful Shift, *Wall St. J.* (Dec. 8, 2008), <http://online.wsj.com/news/articles/SB122869788400386907>. This yield made the Fund an attractive investment—"the fund's assets tripled in two years to US\$62.6b." *Id.*

147 Indeed, Patrick McCabe (at 34) finds that investors are capable of distinguishing among MMF sponsors and that the MMFs associated with risky sponsors experienced a higher level of institutional redemptions during recent economic crises.

as a private liquidity facility or an industry-wide insurance or guarantee system, because each sponsor is individually responsible for the stability of its own funds.¹⁴⁸ Sponsors that take excessive risk with their MMF portfolios cannot draw upon resources contributed by more conservative sponsors. Similarly, because MMFs look to their individual sponsors for support, rather than to a common pool, the contagion effect of individual MMF fragility would be contained. Even if a particular sponsor experienced financial distress, that distress would have a limited effect on investors' expectations about the stability of other funds.

4.3 Possible objections and responses

The most likely objection to this article's proposal might be: if mandatory sponsor support is such a good idea, why hasn't someone proposed it?¹⁴⁹ The answer to this question is that the viability of sponsor guarantees has been masked by the political dynamic in which MMF reform has been debated. Commentators have described MMFs as shadow banks, termed the 2008 redemptions a run akin to bank runs, and proposed reforms, such as capital buffers, designed to make MMFs more like banks.¹⁵⁰

As noted above, mandatory sponsor support is only possible because of the unique separation of management and investments in MMFs, a separation that does not exist in a traditional bank.

Politically, sponsor guarantees are also an unattractive option for both key interest groups: banks and mutual fund sponsors. From the perspective of banks, sponsor guarantees highlight the difference between banks and MMFs by tapping a source of financial stability that banks cannot replicate.

To the extent that MMFs offer an attractive, competitive product, explicit sponsor guarantees would allow them to continue to offer that product without facing the regulatory burdens of banks. Mutual fund companies, which sponsor roughly half of MMFs, would likely also oppose explicit sponsor guarantees because of

their potential cost. In light of the ability of several of the most powerful mutual funds to avoid a substantial regulatory burden through the exemption for retail funds, a support commitment would obviously be a less attractive option.

A second objection might be that explicit sponsor guarantees are too costly.¹⁵¹ As noted, one advantage of this article's proposal is that, because it offers sponsors a variety of mechanisms for meeting their obligations and does not mandate an explicit set-aside of capital, it will be less expensive to implement than an alternative such as a capital buffer.¹⁵²

Nonetheless, the contingent liability associated with a guarantee, a standby letter of credit or the purchase of illiquid assets (even if those assets will trade at par on maturity) becomes more costly as the size of an MMF grows. As a result, sponsor support may require a sponsor to limit the size of its MMFs to reduce its liability exposure.

The possibility that requiring sponsor support might lead sponsors to limit MMF size may well be an additional advantage of the proposal. Such an effect would reduce the systemic importance of any single MMF.¹⁵³ If it is problematic for banks and other financial institutions to get too big, regulation that indirectly places a practical limit on MMF size seems, at worst, benign. Admittedly, MMFs, like other mutual funds, do enjoy economies of size and scale, and funds would sacrifice those economies if they were limited in size.¹⁵⁴

In addition, although financially sound sponsors with other substantial business operations, such as large mutual fund companies, could likely fund any support obligation through operating capital or other assets, sponsor support may be particularly burdensome for smaller sponsors or those that lack other businesses. Thus, explicit guarantees might have the effect of precluding certain types of sponsor from offering MMFs, either because they lack the assets to guarantee fund value or because the market would be skeptical of their ability to meet the support obligation. In retrospect, investors

148 For example, Shah Gilani, Money Market Funds Are in the Fight of Their Lives, Money Morning (Feb. 9, 2012), <http://moneymorning.com/2012/02/09/money-market-funds-are-in-the-fight-of-their-lives/>.

149 Twenty years ago, Howell Jackson proposed a conceptually similar alternative to increased regulation of financial holding companies. Howell E. Jackson, The Expanding Obligations of Financial Holding Companies, 107 Harv. L. Rev. 507, 583 (1994). Much of Jackson's reasoning can be applied to the context of MMFs.

150 FSOC Proposal at 69, 456.

151 Notably, the cost of fees and gates would be borne by MMF investors, not by fund sponsors. 2013 Rule Proposal at 36, 907.

152 Part of the contagion effect generated by the Reserve Fund's failure was due to its size: US\$62.6b in assets. See Stecklow and Gullapalli.

153 In particular, some administrative expenses are more or less fixed, regardless of fund size. See Inv. Co. Inst., 2014 Investment Company Fact Book ch. 5 (2014), available at http://www.icifactbook.org/fb_ch5.html.

might be skeptical that the Reserve Management Company, “a stand-alone fund company with almost no other funds under management,”¹⁵⁵ would provide support to its MMFs. By contrast, investors might be more confident in relying on support from a company, such as Fidelity, which, in 2006, “sponsored 252 non-money market mutual funds with US\$814b in assets under management.”¹⁵⁶

Sponsors with other businesses face the most spillover risk if their MMF is fragile and, accordingly, are likely to take steps to prevent that by reducing the riskiness of their MMF assets.¹⁵⁷ Similarly, funds with substantial non-MMF assets are in a better position to provide support.

Again, to the extent that this reform has the effect of reducing the ability of financially compromised sponsors to offer MMFs, this article views that effect as an advantage, not a weakness. Notably, explicit sponsor support changes the focus of market discipline by properly focusing investors on sponsor financial stability in evaluating MMFs rather than on the MMF portfolio. As discussed above, the structure of MMFs makes direct investor monitoring of portfolio assets problematic. The portfolio’s assets are extremely short term, meaning that the quality of the portfolio can change rapidly. Portfolio assets are, in many cases, thinly traded and difficult to price. Finally, the MMF’s shadow prices tend to be stale, incorporating future economic developments incompletely. By contrast, investors can readily monitor the financial condition of MMF sponsors and identify the business practices that provide economic incentives for sponsors to meet their support obligations. This more efficient investor monitoring is a distinctive advantage of this article’s proposal.

At the same time, this article’s proposal would not preclude smaller and less stable sponsors from offering MMFs. Sponsors could address investors’ concerns about incentives and solvency through a variety of mechanisms, including explicit guarantees, standby letters of credit or purchasing insurance, to cover their support obligations.¹⁵⁸ In particular, insurance offers another

mechanism for monitoring MMF risk, as insurance providers have an economic incentive to understand an MMF sponsor’s risk profile, and tailor the cost and scope of coverage accordingly.¹⁵⁹

Importantly, insurance for an individual sponsor’s MMF obligations would be quite different from industry-wide mandated insurance, and would not create the same concerns about cost and moral hazard.¹⁶⁰

On the other hand, the sponsor support requirement could operate as a barrier to entry for smaller potential sponsors, reducing competition in the industry. Critics may also question whether sponsor support is sufficiently reliable. What happens, under this approach, if a sponsor defaults, as the Bents did?¹⁶¹ While mandatory sponsor support cannot eliminate the possibility, such a default would be no different from the failure of any financial institution to meet its obligations. Unlike the current system, however, investors would not face unpredictability about whether a sponsor would provide support because such support would be required rather than voluntary. In addition, an MMF sponsor that failed to meet its obligations would face the prospect of an enforcement action, not just the uncertain penalty of market discipline.

As a result, solvent and financially responsible sponsors are unlikely to default, and, as noted, investors should have adequate information to identify and avoid sponsors that cannot credibly commit to support their funds.

Finally, this article’s proposal may be criticized on the basis that it would undermine the efficient asset partitioning that is a key component of the MMF structure.¹⁶² Sponsor support would make sponsor assets available to meet MMF shortfalls. Importantly, the

and currently used to ensure the stability of a comparable product: stable-value funds. See Robert Steyer, *Wrap Market Returns—But with Changes, Pensions & Investments* (Dec. 13, 2010), <http://www.pionline.com/article/20101213/PRINT/101219979/wrap-market-returns-8212-but-with-changes#>.

159 See *Insurance in the US Market for Investment Companies and Related Entities*, ICI, http://www.ici.org/pubs/white_papers/03_eu_insurance_paper.

160 2013 Rule Proposal, at 36,911-12.

161 It is unclear whether the Reserve Management Company was unable or unwilling to provide support for the Reserve Fund, but, as detailed in the SEC’s enforcement action, the defendants issued a number of public statements indicating that they intended to provide sponsor support; support that never materialized. See *Complaint at 2-3, SEC v. Reserve Management Co. Inc.*, 732 F. Supp. 2d 310 (S.D.N.Y. May 5, 2009) (No. 09 CV 4346). The SEC’s fraud case was based on the claim that, at the time the Bents made these promises, they had no intention of providing such support. *Id.*

162 Morley, at 1240-41.

155 Kacperczyk and Schnabl at 11.

156 *Id.*

157 *Id.* at 3.

158 Some MMFs purchased insurance from the ICI Mutual Insurance Company from 1993 to 2003. See 2013 Rule Proposal, at 36,905. The ICI has expressed concern that, in today’s market, such insurance either would not be available or would be prohibitively expensive. See *Inv. Co. Inst., Report of The Money Market Working Group 113* (2009), available at http://www.ici.org/pdf/ppr_09_mmwg.pdf. It should be noted that insurance is available

interference with asset partitioning would be both limited and operating only in one direction.

Sponsor assets would only be available to the extent necessary for the MMF to maintain a stable US\$1 NAV. The added liability exposure of fund sponsors could, of course, be viewed as another justification for classifying investment managers as systemically important financial institutions (SIFIs).¹⁶³

Whether it is appropriate for the FSOC to designate asset managers as SIFIs¹⁶⁴ is a controversial topic and beyond the scope of this article,¹⁶⁵ although it is worth noting that for the vast majority of asset managers, MMFs constitute a small percentage of their total assets under management.¹⁶⁶

In addition, MMF assets would not be available to meet the needs of a financially distressed sponsor. This segregation of MMF assets from sponsor assets provides the key value of asset partitioning in the mutual fund structure.¹⁶⁷

The segregation is illustrated by the failure of Lehman. Notably, although Lehman's bankruptcy brought down the Reserve Fund, it did not bankrupt Lehman's own mutual funds. The assets of those funds were segregated by law and out of the reach of Lehman's creditors.¹⁶⁸

5. Conclusion

Since 2008, MMFs have been targeted for broad-based regulatory reform. In 2014, the SEC adopted a rule that may have draconian consequences for some types of MMF, while failing to address core concerns about MMF stability.

The limitations of the rule can largely be attributed to the flawed process by which it was produced and, in particular, the politics of MMF reform. In particular, by analogizing MMF redemptions to bank runs and debating proposed reforms on the basis of whether they will reduce a run risk to zero, policymakers have set an unrealistic objective for MMF reform and imposed a risk-reduction requirement far beyond that applicable to the banking industry.

In addition, by painting MMFs as part of the shadow banking system, critics have overlooked the critical attribute that distinguishes MMFs from bank deposits – the structural separation of MMFs from their sponsors. This attribute provides the key to increased MMF stability. The solution for reducing MMF fragility lies within MMFs themselves, in the form of explicit sponsor support. Although existing law prevents sponsors from committing to maintain a US\$1 share price, this article argues that such a commitment is desirable. It therefore proposes that MMF sponsors should be required to support the US\$1 share price of their fixed NAV MMFs.

Importantly, however, sponsor support should not be mandated through a rigid and costly vehicle such as capital buffers or mandatory insurance. MMF sponsors come in a variety of different shapes and sizes, and this variety offers a range of possible support mechanisms that take advantage of the sponsors' reputation, outside assets, and overall business plans.

As a result, sponsor support should be permitted through the range of mechanisms that have been used successfully throughout the history of the MMF, including fee waivers, guarantees, capital infusions and the purchase of MMF securities at par. By mandating sponsor support, regulators can formalize existing support practices that have proved valuable in maintaining MMF stability, while increasing the transparency of sponsor support to the market.

¹⁶³ In September 2013, the Office of Financial Research released a report produced at the request of the FSOC to enable the FSOC to consider whether asset managers should be considered for enhanced regulation as SIFIs. Office of Fin. Research, Asset Management and Financial Stability 1 (2013), <http://www.treasury.gov/initiatives/ofr/research/Pages/AssetManagementFinancialStability.aspx> [hereinafter OFR report]. The OFR concluded that asset managers can "introduce vulnerabilities that could pose, amplify, or transmit threats to financial stability." Id.

¹⁶⁴ It is also conceivable that the FSOC could designate MMFs themselves as SIFIs. For a detailed analysis of why such a designation would not be appropriate, see Eric D. Roiter, Should Money Market Funds Be Designated as "SIFIs"?, 31 Rev. Banking & Fin. L. 749, 760 (2012).

¹⁶⁵ Both the report and the prospect that the FSOC could designate certain asset managers as SIFIs have generated considerable controversy. See, e.g., Emily Stephenson and Sarah N. Lynch, US Senators Slam Study on Systemic Risks Posed by Asset Managers, Reuters (Jan. 24, 2014), <http://www.reuters.com/article/2014/01/24/us-financial-regulation-asset-idUSBREA0N1LG20140124>.

¹⁶⁶ OFR report, *supra* note 172, at 20. Federated Investors is an exception; its business consists primarily of institutional money market funds. Id.

¹⁶⁷ Id. at 1.

¹⁶⁸ Anne Kates Smith, What Happens to Lehman's Customers?, Kiplinger (Sept. 15, 2008), <http://www.kiplinger.com/article/investing/T023-C000-S001-what-happens-to-lehman-s-customers.html>.

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