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Money Market Mutual Funds: A Financial Stability Case Study

A money market mutual fund (MMF) is a mutual fund that under Securities and Exchange Commission (SEC) Rule 2a-7 can invest only in high-quality, short-term debt securities, such as U.S. Treasury bills or commercial paper (a type of corporate debt). MMFs are commonly considered as safe alternatives to bank deposits, although they are not federally insured like bank deposits. However, this perceived-to-be-safe financial instrument triggered major market disruptions in 2008 that accelerated the 2007-2009 financial crisis. This case study explains the incident, the post-crisis reforms, and the ongoing policy debate.

MMFs and the 2007-2009 Financial Crisis

On September 15, 2008, Lehman Brothers Holdings Inc., an investment bank, filed for bankruptcy. The next day, one prominent MMF—the Reserve Primary Fund—saw its per share price fall from \$1.00 to \$0.97 after writing off its Lehman debt. This event triggered an array of market reactions, including investors' redemptions of more than \$250 billion throughout the MMF industry within a few days of the bankruptcy. The consequences of these actions were potentially so dire to U.S. financial stability that the government ultimately intervened:

- The Treasury Department provided explicit temporary deposit insurance to all MMF investors. Over its life, the program guaranteed more than \$3 trillion in deposits and earned \$1.2 billion in insurance coverage fees, but no guaranteed funds failed. Treasury announced this program without seeking specific congressional authorization, justifying the program on the grounds that guaranteeing MMFs would protect the value of the dollar. After the fact, Congress addressed the guarantee in the Emergency Economic Stabilization Act (P.L. 110-343), reimbursing the exchange stability fund (ESF) that backed the guarantee, but also forbidding the future use of the ESF to provide such a guarantee.
- The Federal Reserve System also established multiple emergency liquidity facilities under its statutory authority invoked by “unusual and exigent circumstances” in September and October of 2008 to provide a backstop to MMFs and commercial paper as part of a broader crisis response. These programs expired without loss between late 2009 and early 2010.

(See CRS Report R43413, *Costs of Government Interventions in Response to the Financial Crisis: A Retrospective*, by Baird Webel and Marc Labonte.)

Financial Stability Considerations

Threats to financial stability, or systemic risk, can be viewed in different ways (e.g., spillover, contagion, and negative feedback loops). They largely relate to the

transmission of risks from one event to broadly affect the confidence and functioning of the financial system as a whole.

MMFs pose financial stability concerns because they demonstrated during the 2008 market events that they were susceptible to sudden large redemptions (runs), causing dislocation in short-term funding markets. Share redemption is the MMF feature that is often discussed under the context of runs.

Redemptions at Per Share Net Asset Value

Share redemption allows MMF investors to exit their investment positions by selling their shares back to the fund on demand. Investors redeem MMF shares at per share net asset value (NAV), meaning the value of a fund's assets minus liabilities. Prior to the 2007-2009 crisis, MMFs generally maintained a *stable* NAV at \$1.00 per share, paying dividends as their value rises, thus closely mimicking the features of a bank deposit. If its stable NAV drops below \$1.00, which rarely occurs, although it occurred in 2008, it is said that the MMF “broke the buck.”

MMFs are susceptible to runs because investors have an incentive to redeem shares before others do when there is a perception that the fund could suffer a loss. Thus when the Reserve Primary Fund broke the buck, MMF investors elsewhere also rushed to exit their positions, spreading fear that MMFs, and even the broader financial system, were vulnerable, regardless of whether actual losses occurred.

Post-Crisis Reforms

MMFs are regulated primarily under the Investment Company Act of 1940 (P.L. 76-768) and Rule 2a-7 pursuant to the act. To mitigate MMFs' systemic risk, the SEC reformed Rule 2a-7 in a multi-year process:

February 2010—SEC adopted certain Rule 2a-7 amendments to strengthen MMF liquidity.

March 2011—SEC proposed rules to eliminate certain references to credit ratings in MMF reforms. The rules were re-proposed in July 2014 and adopted in September 2015.

June 2013—SEC proposed rules to convert institutional prime and institutional municipal MMFs to floating NAV.

March 2014—SEC issued multiple MMF economic studies to solicit public comments.

July 2014—SEC finalized the 2014 MMF reform.

October 2016—SEC MMF reform became effective.

The main types of MMFs are (1) municipal, also referred to as tax-exempt, which invest in national or state municipal securities that are free of national or state income tax; (2)

government, which invest in securities backed by the creditworthiness of the U.S. government; and (3) prime, which include investments in corporate debt, certificates of deposit, and repurchase agreements. The main types of MMFs are then further divided into those held by individual investors (retail) or those held by organizations (institutional). The 2014 MMF regulation affects different MMF types in different ways:

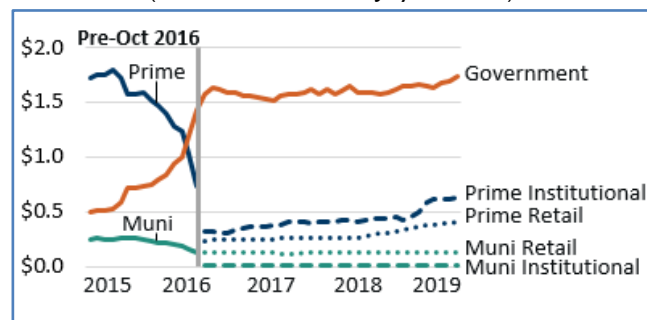
- Institutional prime and institutional municipal MMFs are required to *float* their NAV from stable value to reflect the actual market value of the fund more closely. All government and retail MMFs may continue to use *stable* NAV.
- MMFs' boards now may impose redemption fees (up to 2%) and redemption gates (up to 10 business days) for all nongovernment MMFs. These barriers to withdrawal are expected to discourage runs.

In addition, the SEC reform required new macro-prudential stress tests similar to those more commonly used in banking. Stress testing as a systemic risk mitigation tool generally refers to a forward-looking quantitative evaluation of the impact of stressful economic and financial market conditions. As part of the SEC's 2014 MMF reform, MMFs are required to stress test their ability to maintain weekly liquid assets of at least 10% and to minimize principal volatility in response to several SEC-defined hypothetical stress scenarios including (1) increases in the level of short-term interest rates, (2) the downgrade or default of particular portfolio security positions, and (3) the widening of spreads in various sectors.

This SEC stress testing is separate from the stress testing required for certain asset management firms as part of the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act (P.L. 111-203, Dodd-Frank). The Dodd-Frank stress tests are to include baseline and severely adverse scenarios, and testing results must be reported to the SEC and the Federal Reserve Board. The SEC has not yet implemented the Dodd-Frank stress testing requirements for asset managers.

Since the 2014 reform, certain MMFs that converted to floating NAV—institutional municipal and institutional prime MMFs—appear to have seen overall net assets decline. However, because MMFs began to identify themselves as institutional or retail only in October 2016, the data are not definitive (see **Figure 1**).

Figure 1. Net Assets of Money Market Funds
(\$Trillions, Data as of July 31, 2019)



Source: CRS based on SEC MMF Statistics.

Between July 2015 and July 2019, government MMFs, which were not affected by the NAV reform, increased from \$0.5 trillion to \$1.7 trillion. Municipal retail and institutional MMFs combined fell to \$141 billion (a 45% decline) and prime retail and institutional MMFs combined fell from \$1.7 trillion to \$1.0 trillion (a 40% decline). But there are also signs of gradual volume recovery. Short-term funding markets are complex and sensitive to interest rate movements. Other factors could also influence this trend irrespective of the MMF reforms.

Policy Debates

Policy discussions continued after the 2014 reform, especially about whether the MMFs' NAV should be floating or stable. For example, the Consumer Financial Choice and Capital Markets Protection Act of 2019 (S. 733) would require the SEC to reverse the floating NAV back to a stable NAV for the affected MMFs.

Many proponents of floating NAV believe the floating NAV could (1) reduce the investors' incentive to runs in distressed markets because of the difference between the stable value and the actual market value; (2) allow investors to better understand a fund's price movements and market fluctuations; and (3) remove the implicit guarantee of zero investor losses through the stable value that could lead to unrealistic expectations of safety. Opponents believe that floating NAV does not solve the issue of investors' incentive to run. For example, one academic research article concludes that European MMFs that offer similar structures to floating NAV did not experience significant reduction in run propensity during market distress compared with stable NAV. In addition, providing floating NAV requires calculation time and business model changes that could raise costs and slow market operations. The opponents also point to the volume decline of the affected MMFs since the reform as an example of a shrinking MMF market that may raise working capital costs for certain business operations and municipalities. Others argue that because the MMF reform has been fully implemented since 2016, it makes sense to thoroughly study the effectiveness and impact of the reform before considering changes.

Regarding stress testing, a 2017 Treasury report rejected the use of prudential stress testing on investment companies, contending that the MMF reform stress testing requirements already "satisfy the spirit of" the Dodd-Frank's stress testing requirements. In the 116th Congress, the Alleviating

Stress Test Burden to Help Investors Act (H.R. 3987) would exempt nonbanks from certain Dodd-Frank stress test requirements. There are also others who support stress tests as important for mitigating systemic risk.

As illustrated by this case study, unexpected market events and seemingly safe financial instruments could, at times, trigger widespread financial instability. Such instability

could originate from widespread market fears instead of the size of the actual losses alone, thus making the exact place and condition of the next financial crisis unpredictable.

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