

## Chapter 11\*

### Money Market Funds: How to Avoid “Breaking the Buck”

#### Overview

A money market fund is a financial intermediary in which investors pool funds to get exposure to a diversified portfolio of securities. Money market funds finance themselves by selling shares priced at one dollar per share to investors. The primary objective of a money market fund is to maintain the value of the principal of its assets. Thus, money market funds only invest in low-risk, short-term securities, such as commercial paper, certificate of deposits, and Treasuries. From the investors’ perspective, holding shares of money market funds is similar to holding cash, because investors can withdraw money from a fund anytime without a penalty. The benefit relative to holding cash is that money market funds earn a small yield relative to what cash yields in bank deposit accounts. Money market funds emerged in the 1970s as an alternative to bank deposits. By 2007, the size of the money market fund sector had grown to about \$2.4 trillion.

#### The Crisis

During the early phase of the financial crisis of 2007-09, money market funds provided a safe haven for risk-averse investors. From January 2007 to early September 2008, the money market sector grew from \$2.4 trillion to \$3.45 trillion. However, on September 16, 2008, the Reserve Primary Fund -- a large money market fund with \$65 billion of assets under management -- announced that it had suffered significant losses on its \$785 million holdings of Lehman Brothers’s commercial paper and that its shares were worth only 97 cents. In other words, the fund “broke the buck” – an occurrence that had happened only once before in the history of money market funds.<sup>†</sup> This news triggered the modern-day equivalent of a bank run, leading to about \$172 billion worth of redemptions on money market funds within a few days. The run only stopped on September 19, 2008 – three days later – when the U.S. Government announced that it would provide deposit insurance to money market fund investors.

#### Current Proposals

Money market funds are open-end management investment companies that are registered under the Investment Company Act of 1940 and regulated under rule 2a-7 of the Act. The regulation imposed under rule 2a-7 requires money market funds to invest in a restricted set of high-quality, short-term debt instruments.

The Securities and Exchange Commission (SEC) has proposed several amendments to the regulation. The amendments aim to reduce risk-taking by restricting investments to the highest-quality securities, reducing the average maturity of money market fund holdings, requiring funds

---

\* Working group: Viral Acharya, Marcin Kacperczyk, Stanley Kon, Anthony Lynch, Antti Petajisto, Matthew Richardson, Philipp Schnabl, Kermit L. Schoenholtz and Robert Whitelaw

<sup>†</sup> In 1994, the Community Bankers US Government Fund broke the buck, paying investors 96 cents per share.

to maintain a portion of their portfolios in instruments that can easily be converted into cash, and providing monthly holdings reports. Regarding the liquidation of funds, the amendments would allow money market funds that have broken the buck to suspend redemptions to allow for an orderly unwinding of the fund. The SEC is also seeking comments on whether money market funds, like other mutual funds, should be priced at a floating net asset value, rather than a fixed net asset value, of one dollar.

## **Evaluation of Current Proposals**

Money market funds perform two important functions. First, they are effectively part of the payment system, because money market fund investors can redeem their shares on demand. Second, money market funds primarily invest in short-term securities issued by the financial sector. Hence, they are an important source of short-term financing for other financial intermediaries.

Why should the government regulate money market funds? During a financial crisis, there are usually concerns about the viability of the payment system and access to short-term financing for financial intermediaries. If either the payment system fails or financial intermediaries cannot refinance themselves, there can be large negative effects on the rest of the economy. Given that money market funds provide both payment services to investors and refinancing to financial intermediaries, there is a strong case for the government to support money market funds during a financial crisis by guaranteeing the value of money market fund investments. Money market funds therefore may have an incentive to take on excessive risk, as do other financial institutions with explicit or implicit government guarantees.

Prior to Lehman's bankruptcy, guarantees to money market funds may have been perceived as unlikely. However, after the guarantees were provided in September 2008, most investors will expect similar guarantees during future financial crises, independent of whether the guarantees are made explicit or not. Hence, we evaluate the current proposals in terms of their suitability to address the prospect of government support during future financial crises.

The SEC has proposed the following changes (the examples in brackets refer to money market funds geared toward institutional investors):

- Minimum portfolio liquidity (e.g., 30% of money market funds holdings must be liquid within one week);
- Maximum portfolio maturity (e.g., the weighted average maturity of money market fund holdings cannot exceed 120 days);
- Restrict money market fund holdings to first-tier securities;
- Periodic stress tests to evaluate fund's ability to withstand shocks;
- Monthly disclosure of money market fund holdings; and
- Authorize the fund's board of directors to suspend redemptions if a fund breaks the buck.

In addition, the SEC seeks comments on introducing a fluctuating net asset value for money market funds. The reasoning behind introducing a fluctuating net asset value is that investors

would focus less on whether a fund breaks the buck if net asset values also fluctuated under normal circumstances, and this might make money market funds more resilient during a crisis.

We believe that these amendments are sensible and would increase the safety of the money market fund sector. However, we emphasize that the changes proposed by the SEC cannot entirely eliminate runs on money market funds. Like other financial intermediaries, money market funds transform illiquid securities (e.g., commercial paper) into liquid demand deposits. As long as the regulator does not impose liquidity requirements of 100% – and thereby effectively outlaw money market funds – there will be the possibility of a run. In fact, many money market funds already satisfied the new criteria proposed by the SEC and were still subject to runs after Lehman’s bankruptcy. Hence, even though the new amendments would make the money market fund sector more secure (and also less profitable), they would not eliminate the issue of government support during systemic crises.

Regarding the question of stable versus fluctuating net asset values, we point out that money market funds would lose their special status of being almost equivalent to cash or bank deposits if they convert to fluctuating net asset values. To the extent that such services (that is, marked-to-market fluctuating net asset values) are valued by investors, we would expect the emergence of money market funds that have (nominally) fluctuating net asset values but that effectively provide a stable net asset value, most of the time. Such funds would only break the buck during a systemic crisis.

Our key departure from the current proposals is in observing that they do not sufficiently address the issue of likely government guarantees during future financial crises. We therefore recommend considering the following alternative proposals:

#### *Glass-Steagall for Money Market Funds*

Our first solution is based on the principle that money market funds inherently look just like banks and are engaged in maturity mismatch. Under this alternative, we envision that the government explicitly recognizes its commitment to support money market funds during a systemic crisis. The provision of guarantees should be restricted to large systemic crises and can be at the discretion of a financial regulator. In exchange for the expected cost of the guarantee, the government should charge a fee to money market funds. The fee should be charged in normal times and not after the crisis has arisen. To avoid risk-taking at the expense of the guarantee, the SEC should require investment restrictions on portfolio maturity and eligibility. In addition, we recommend restrictions on exposure to a single issuer by aggregating exposure across securities. The fee charged against the guarantee would thus typically be lower than the cost of the guarantee provided on bank deposits, because investments by money market funds would be more restrictive than those of banks availing deposit insurance.

#### *Discount Window for Money Market Funds*

Our second solution is based on the principle that even though money market funds can in principle be treated differently from banks - that is without explicit guarantees to deposits, in a systemic crisis when several financial institutions are in trouble, there will invariably be a collective run on money market funds since they primarily invest in short-term commercial paper and a large part of the market for this paper consists of issuance by banks and financial institutions. Recognizing this possibility, some resolution of such collective runs must be planned in advance. Individual runs on funds may be easy to resolve through requiring that funds in trouble simply liquidate their assets and pass on the losses to investors. However, such a resolution may be difficult when several funds are in trouble at the same time as it would require large-scale liquidations of commercial paper all at once.

Hence, under this second alternative, we propose that the government announces not to provide guarantees to money market funds during a systemic crisis. To make such an announcement credible, the government needs to outline a clear procedure for stopping runs on money market funds. First, the government allows money market funds to place a “stay” on redemptions in the case of a run -- that is, a temporary suspension of the right of investors to redeem their invested funds. The primary purpose of the stay is to allow for an orderly liquidation of the fund. This measure recognizes that putting a stay on a single fund’s redemptions can trigger a run on the rest of the money market fund sector, leading to a stay on the entire industry. Second, the government establishes a liquidity window (similar to the discount window for banks), which lends to money market funds freely against liquid collateral (such as bonds of governments of the highest credit quality). On illiquid assets, either the central bank could lend through the liquidity window against a fee and a sizable haircut (depending on current market conditions), or preferably, the illiquid assets should be liquidated in an orderly manner during the period of the stay. These three features -- a stay, the liquidity facility, and the orderly liquidation of illiquid assets -- should allow investors to withdraw money during the liquidation process, but only after first paying for losses on liquidations and fees to the central bank.

In addition, the regulator can require money market funds to purchase guarantees from affiliated financial intermediaries. Before Lehman’s bankruptcy, several fund families supported their funds to avoid breaking the buck. The regulator could require fund families explicitly to recognize -- and suitably capitalize -- such guarantees. Funds outside of fund families would be required to purchase guarantees from financial institutions of comparable financial strength as fund families.

## **Recommendation**

We believe that either of the two approaches is needed to address the issue of government guarantees to the money market fund sector during a systemic crisis. On balance, most of us prefer the second approach of imposing a stay on redemptions on money market funds during a systemic crisis, with the central bank lending freely to funds against their liquid assets, but requiring that fund investors bear losses on illiquid assets – either through their orderly liquidation during the stay or through sizable haircuts paid to the central bank for borrowing against these assets.