REPORT OF THE
MONEY MARKET WORKING GROUP

SUBMITTED TO THE
BOARD OF GOVERNORS
OF THE
INVESTMENT COMPANY INSTITUTE

MARCH 17, 2009
The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of $9.88 trillion and serve over 93 million shareholders.
To: John V. Murphy  
Chairman, Board of Governors of the Investment Company Institute  

From: John J. Brennan  
Chairman, Money Market Working Group  

Date: March 17, 2009  

Re: Report of the Money Market Working Group  

I am pleased to submit the Report of the Money Market Working Group to the Investment Company Institute’s Board of Governors for its consideration and action. Since the formal establishment of the Working Group in November 2008, we have conducted a wide-ranging study of the money market, of money market funds and other participants in that market, and of recent market circumstances, the findings of which are set forth in detail in our Report. Drawing on the difficult experience of the last year and a half, we also have developed a series of recommendations designed, among other things, to make money market funds more resilient in the face of extreme market conditions such as those encountered in September 2008.

We believe our recommendations respond directly to weaknesses in current money market fund regulation, identify additional reforms that will improve the safety and oversight of money market funds, and will position responsible government agencies to oversee the orderly functioning of the money market more effectively.

Many of our recommendations are of a nature that money market funds can and should implement them immediately on a voluntary basis, pending appropriate rulemaking by the Securities and Exchange Commission. Fund complexes represented on the Working Group have signaled their readiness to implement these recommendations voluntarily, and we recommend that the Board approve them and urge their swift voluntary adoption by all of the Institute’s money market fund members. It should be the goal of all money market funds to substantially implement these recommendations by September 18, 2009, when authorization for the Treasury Temporary Guarantee Program for Money Market Funds expires. This will provide additional assurance to money market fund investors and help facilitate an orderly transition out of the Guarantee Program.
Our Report also discusses a variety of reforms proposed by others that would fundamentally alter the existing regulatory or business model of money market funds. We do not believe that such reforms are necessary or practicable. They also would, we believe, have significant adverse consequences for the money market at large and for investors in that market.

On a personal note, it has been a great pleasure for me to lead this effort. The Board should be aware of the remarkable dedication of all the members of and advisers to the Working Group, as well as of the ICI staff, that produced the Report.

cc: Board of Governors, Investment Company Institute
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The Growth of Money Market Funds

Money market funds,1 which date back to the early 1970s, are one of the most significant financial product innovations of the past half century. Today, retail and institutional investors alike rely on them as a low-cost, efficient cash management tool that provides a high degree of liquidity, stability in principal value, and a market-based yield.

Money market funds serve as an important source of direct financing for governments, businesses, and financial institutions, and of indirect financing for households. Without these funds, financing for all these institutions and individuals would be more expensive and less efficient.

As of year-end 2008, taxable money market funds provided $3 trillion in financing to the taxable money market—or about 25 percent of the total—through their holdings of U.S. Treasury securities, federal agency notes, commercial paper, certificates of deposit, Eurodollar deposits, and repurchase agreements. Money market funds continue to provide an important source of funding in the commercial paper market, holding nearly 40 percent of outstanding commercial paper. This market consists of short-term notes issued by a wide variety of institutions such as domestic and foreign nonfinancial corporations, banks, and finance companies that provide, among other things, automobile and credit card financing to U.S. households.

State and local governments also rely on tax-exempt money market funds as a significant source of funding for public projects such as roads, bridges, airports, water and sewage treatment facilities, hospitals, and low-income housing. As of December 2008, tax-exempt money market funds had $491 billion under management and held an estimated 65 percent of outstanding short-term state and local government debt.

Not only are money market funds a financial markets success story, they also are a regulatory success story. Since 1983, money market funds have been governed very effectively by the Securities and Exchange Commission (SEC), both as mutual funds generally and pursuant to a carefully crafted rule under the Investment Company Act of 1940 (Investment Company Act) that strictly limits the risks these funds can take. Since that rule was adopted, money market fund assets have grown from about $180 billion to $3.9 trillion as of January 2009.

One defining feature of money market funds is that they seek to maintain a stable net asset value (NAV), typically $1.00 per share.2 Retail and institutional investors both highly value the stable $1.00 NAV. The stable $1.00 NAV provides great convenience and simplicity in terms of its tax, accounting, and recordkeeping treatment. This simplicity and convenience is crucial to the viability of money market funds because, in contrast

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1 All references to “money market funds” in this Report refer to U.S. money market funds that are registered with the Securities and Exchange Commission (SEC) under the Investment Company Act of 1940 and that comply with applicable SEC rules, and, in particular, Rule 2a-7. A Glossary of certain terms used in this Report is included after the Appendices.

2 A few money market funds seek to maintain a stable NAV of $10.00 per share. For purposes of simplicity in this Report, we treat all stable NAV funds as funds seeking to maintain a $1.00 NAV per share.
with other mutual funds, they are used primarily as a cash management tool, which means that large numbers of transactions flow through them each day. Without a stable $1.00 NAV, many, if not most, investors would likely migrate to other available cash management products that offer a stable $1.00 NAV as investors seek to minimize tax, accounting, and recordkeeping burdens.

Money market funds, by law, must comply with stringent maturity, quality, and diversification standards (collectively, “risk-limiting provisions”) designed to minimize the deviation between a money market fund’s stabilized NAV and the market value of its portfolio. These provisions include the requirement that money market funds only invest in high-quality securities, which the fund’s board of directors (or its delegate) determines present minimal credit risks. The basic objective of money market fund regulation is to limit a fund’s exposure to credit risk (risks associated with the creditworthiness of the issuer) and interest rate risk (associated with changes in prevailing interest rates).

The risk-limiting provisions imposed by the SEC, combined with the other protections of the federal securities laws that apply to all mutual funds, have been successful in protecting investors’ interests and maintaining their confidence in money market funds. Indeed, until September 2008, only once had a money market fund failed to repay the full principal amount of its shareholders’ investments.

A range of other pooled investment products compete with money market funds but are not subject to the Investment Company Act. Some of these products generally are outside regulatory scrutiny, or may be subject to less stringent regulations than money market funds. Often these products take on more risk, in seeking higher yields, than do money market funds. These alternative products could serve as substitutes for money market funds if changes imposed on money market funds make them less desirable to investors.

**The Credit Crisis**

The financial markets are working through the deepest and most pervasive crisis since the Great Depression. The fundamental causes of this crisis have been attributed to numerous factors, none of which is due to any actions directly taken by money market funds. Indeed, the crisis kicked off in earnest more than a year before the freezing of the credit markets in September 2008, as house prices softened in response to tighter monetary policy and as default rates for subprime mortgage loans began to rise. The crisis spread to commercial banks that had originated these subprime loans and to investment banks that had sponsored or invested in instruments backed by subprime mortgages. It resulted in the failures of some unregistered, short-term investment pools and vehicles managed by state and local governments, prompting investors seeking safety of principal to move $800 billion to money market funds from the end of July 2007 through August 2008. It also caused some money market fund advisers or related persons either to purchase securities that had been issued by structured investment vehicles (SIVs) from, or to enter into credit support arrangements with, their affiliated funds to avoid any losses to fund shareholders. More dramatic effects of the crisis include the failures of Countrywide Financial Corporation; Indy Mac Bank, F.S.B.; and a range of other financial institutions, coupled with the government-orchestrated rescue

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EXECUTIVE SUMMARY

of The Bear Stearns Companies Inc. and the government takeover of Fannie Mae and Freddie Mac, all before the week of September 15, 2008.

Aside from sponsor support, money market funds largely avoided the financial debacle that struck banks and other financial services firms. That changed when, as the direct result of the failure of Lehman Brothers Holdings Inc. the day before, a large money market fund, Reserve Primary Fund (Primary Fund), saw its NAV drop below $1.00 per share. Primary Fund’s losses led investors in other prime money market funds to question whether their funds might also experience difficulties maintaining a stable NAV. Broader concerns arose about the stability of U.S. and European financial institutions, the creditworthiness of their debt, and the willingness and wherewithal of the United States and foreign governments to support those institutions. To protect themselves against the possibility of other money market funds’ NAVs dropping below $1.00 per share, investors—primarily institutional investors— withdrew about $210 billion from prime money market funds over the next two days. Fanned by a year of dire financial news, government bailouts, and spectacular business failures, a true, broad market panic ensued.

To meet outflows during this period, many money market funds were forced to sell commercial paper and other assets. By the end of that week, the Federal Reserve Board and the U.S. Department of the Treasury, seeking to cope with illiquid markets, stepped in, taking several actions to shore up the money market in general and to calm money market fund investors in particular. The Treasury Department’s Temporary Guarantee Program for Money Market Funds (Treasury Guarantee Program), although limited to investors’ account balances in participating money market funds as of September 19, 2008, worked well to stem investor concerns. Other programs offered by the Federal Reserve helped to provide necessary liquidity to the marketplace, which has contributed to increased investor confidence in the money market.

Recommendations

The recent market events, although painful, afford the money market fund industry the opportunity to assess the regulations that govern its operations, and the more stringent practices adopted by some money market funds that go beyond those regulations. In response to these events, the Executive Committee of the Board of Governors of the Investment Company Institute approved the formation of the Money Market Working Group (Working Group) to develop recommendations to improve the functioning of the money market and, in particular, the operation and regulation of money market funds. In the course of its analysis, the Working Group asked itself the question: Why did some money market funds survive the credit crisis relatively unscathed, while others had to enter into sponsor support or similar arrangements, find a buyer, or worse, in the case of Primary Fund, “break a dollar”?

Our recommendations, building from the answers to that question, are numerous, but are primarily designed to address two themes: (1) that money market funds should be better positioned to sustain prolonged and extreme redemption pressures; and (2) that if a “run” should strike a money market fund, it must be stopped immediately, and with all shareholders treated fairly.

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Based on ICI calculations of the change in end-of-day assets from September 16 to September 18, 2008, excluding the Primary Fund; data from iMoneyNet.
After much deliberation and many meetings with market participants, investors, and regulators, and taking into account the need to strengthen the safeguards of money market funds, the Working Group has made recommendations that generally would:

» Impose for the first time daily and weekly minimum liquidity requirements and require regular stress testing of a money market fund’s portfolio.

» Tighten the portfolio maturity limit currently applicable to money market funds and add a new portfolio maturity limit.

» Raise the credit quality standards under which money market funds operate. This would be accomplished by requiring a “new products” or similar committee; encouraging advisers5 to follow best practices for determining minimal credit risks; requiring advisers to designate the credit rating agencies their funds will follow to encourage competition among the rating agencies to achieve this designation; and prohibiting investments in “Second Tier Securities.”

» Address “client risk” by requiring money market fund advisers to adopt “know your client” procedures and requiring them for the first time to disclose client concentrations by type of client and the potential risks, if any, posed by a fund with a client base that is strongly concentrated.

» Enhance risk disclosure for investors and the market and require monthly website disclosure of a money market fund’s portfolio holdings.

» Assure that when a money market fund proves unable to maintain a stable $1.00 NAV, all of its shareholders are treated fairly. For this purpose, a money market fund’s board of directors, or a committee of the board, would be authorized to suspend redemptions and purchases of fund shares temporarily under certain situations, and permanently for funds preparing to liquidate, in order to ensure that all shareholders are treated fairly.

» Enhance government oversight of the money market by developing a nonpublic reporting regime for all institutional investors in the money market, including money market funds, and encouraging the SEC staff to monitor higher-than-peer performance of money market funds.

» Address market confusion about money market institutional investors that appear to be—but are not—money market funds.

Our recommendations seek to (1) respond directly to potential weaknesses in money market fund regulation that were revealed by the recent abnormal market climate; (2) identify potential areas for reform that, while not related to recent market events, are consistent with improving the safety and oversight of money market funds; and (3) provide the government detailed data to allow it to better discern trends and the role played by all institutional investors, including money market funds, in the overall money market, and invite greater surveillance of outlier performance of money market funds that may indicate riskier strategies. Our “lessons learned” and recommendations in response to those lessons are highlighted below and discussed in more detail in Section 7 of this Report.6

5 References in this Report to a money market fund’s “adviser” also include a fund’s subadviser, if appropriate to the context.
6 A complete list of our recommendations is included in Appendix A.
**Liquidity.** As money market funds sought to meet unusually high levels of redemption requests in September 2008, it became evident that prior assumptions about the requisite amount of liquidity needed by these funds were insufficient for extreme market conditions. SEC rules currently do not impose any explicit liquidity standards. We recommend two new liquidity requirements. The first would consist of a *minimum* daily liquidity standard for taxable money market funds such that 5 percent of the fund’s net assets would be held in securities accessible within one day. The second would be a *minimum* weekly liquidity standard for all money market funds such that 20 percent of the fund’s net assets would be held in securities accessible within seven days. These minimum thresholds would be supplemented by mandatory stress testing to assess a portfolio’s ability to meet hypothesized levels of credit risk, shareholder redemptions, and interest rate changes, and thus potentially to determine a need for a higher level of portfolio liquidity. These recommendations would bring an unprecedented level of regulation to money market fund liquidity.

**Portfolio maturity.** The maximum weighted average maturity (WAM) of fund portfolios currently permitted by SEC rule may have been too long at some times to accommodate extraordinary market conditions. In response to this observation, most money market funds voluntarily shortened their WAMs, which provided additional protection against interest rate risk. The Working Group believes that the WAM should be shortened from 90 days to 75 days for all such funds. The Working Group also recommends the adoption of a new WAM calculation (referred to in this Report as a “spread WAM”). Unlike the traditional WAM measure that allows funds to use the interest rate reset dates of variable- and floating-rate securities as a measure of their maturity, the new spread WAM requires funds also to calculate a WAM using only a security’s stated (or legal) final maturity date or the date on which the fund may demand payment of principal and interest. This new spread WAM could not exceed 120 days.

**Credit analysis.** The financial market crisis, with its roots in subprime mortgages, demonstrated that new and complex structures demand analysis that extends well beyond that of their issuers’ creditworthiness. To address the “SIV of tomorrow”—an investment product that technically may be eligible for purchase by money market funds under SEC rules, but may in hindsight appear to be too complex or otherwise imprudent for a money market fund—we recommend that all money market funds be required to establish a “new products” or similar committee. In order to assist fund boards (or fund advisers) in making important determinations that a security presents “minimal credit risks,” we recommend a set of best practices. We also believe that credit ratings, while far from perfect, provide an important floor that constrains money market funds from taking undue risks to increase yield. We therefore recommend that the SEC retain ratings as a starting point for credit analysis. Finally, we recommend that money market funds designate a minimum of three credit rating agencies that they will monitor for purposes of determining whether a portfolio security may be eligible for purchase. We anticipate that credit rating agencies will compete with one another to achieve this designation, and that this competition will enhance the quality of their analysis and ratings in this market.

**Client risk.** A money market fund’s ability to maintain sufficient liquidity is closely related to the composition and diversification of its shareholder base. Some money market funds were surprised by particularly severe redemption pressures because they may have lacked detailed knowledge of their client base. We seek to address this risk in two ways: (1) require that all advisers to money market funds adopt robust “know your client” procedures to better assess potential client risks before they manifest themselves; and (2) require that money

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7 As discussed in Section 7, the SEC has proposed to eliminate all references to credit ratings from Rule 2a-7.
market funds provide monthly website disclosure about their client concentration levels and the risks, if any, that such concentrations may pose. These recommendations relate closely to the Working Group’s recommendations about liquidity and stress testing: money market funds that have a better understanding of their clients’ needs will be better able to position their portfolios for redemption requests.

**Possibility of a “run.”** The Working Group believes that the recommendations it makes in this Report will significantly reduce the likelihood that a money market fund will be unable to satisfy shareholder redemptions as they arise. Nevertheless, these funds must be better equipped to avert the impact of a cascade of redemptions should that occur. We recommend that the SEC permit money market fund boards of directors, including independent directors, to suspend redemptions under two circumstances designed to ensure fair treatment of all money market fund shareholders: (1) under exigent circumstances, they may temporarily suspend redemptions for up to five business days in order to seek a “cure” for a fund that has either broken or reasonably believes it may be about to break a dollar; or (2) they may permanently suspend redemptions upon making a determination to liquidate the fund, and within five business days after making this determination, approve and announce to shareholders the fund’s plan of liquidation. We believe that making these determinations is consistent with the board’s important obligation to protect the interests of fund shareholders and is necessary in certain market circumstances to ensure that the actions of investors who exit a money market fund first do not harm remaining investors.

**Investor/market confusion.** Many investors, despite consistent disclosure to the contrary, believed that money market funds would always return principal in full. We recommend that all money market funds reassess their risk disclosures, including advertising and marketing materials, to evaluate whether they fully capture the risks that money market funds may present and the effects those risks may have on funds and their shareholders. We also believe that monthly website disclosure of money market portfolios, while not highly sought by investors, may allow third-party analysts and commentators to compare money market funds and flag certain aspects of money market fund portfolios that would be of interest to investors or the market—positive or negative. Portfolio disclosure and client concentration disclosure, as discussed above, together with other information available about these funds will, we hope, better inform the investing public about the risk characteristics of particular money market funds.

During the market crisis, a number of press reports incorrectly identified various types of cash management vehicles as money market funds. Advisers to funds that are not registered under the Investment Company Act may hold themselves out in a manner that implies that they manage the funds to provide the same safety and stability as a money market fund. To address this regulatory gap, we recommend that the SEC adopt a rule under the Investment Advisers Act of 1940, applicable to advisers to unregistered funds, designed to reduce investor and market confusion about funds that appear to be similar to money market funds, but that are not required to comply with the risk-limiting provisions applicable to money market funds.

**Government oversight.** The roughly $12 trillion in taxable money market instruments in which money market funds and other pooled investment vehicles primarily invest has systemic importance. We recognize that any regulatory body charged with monitoring and addressing risks to the financial system as a whole may require detailed and timely data about the money market and investors in that market—even from entities that individually pose no systemic concerns. We recommend that money market funds and other institutional investors in the money market provide the appropriate government body with nonpublic data designed to assist that body in fulfilling its important mission of overseeing the markets as a whole. We pledge to work with appropriate federal officials to implement such a regime for nonpublic reporting and monitoring.
Money market funds that significantly outperform their peers (when the effect of fees is excluded from the analysis) may do so by assuming more risk. We therefore recommend that each month, the SEC staff monitor the performance of all money market funds by category and take such action as it may deem appropriate to understand the reasons behind those funds having unusually high performance. We also suggest that this program include an element of random evaluation, with the staff tasked to monitor 10 randomly selected money market funds each month.

**Government resources.** During the credit crisis, many money market fund sponsors made requests to the SEC staff for permission to provide fairly standard forms of financial support to their funds. While the staff was responsive, processing the requests used staff resources better devoted to more pressing issues. We recommend that the rule permitting money market fund sponsor support be expanded, and that sponsors also provide nonpublic notice to the SEC staff when relying on that rule.

**Government programs.** We recommend that the Treasury Guarantee Program be extended until it expires by its terms on September 18, 2009. We believe that the measures outlined in the Working Group’s Report, if implemented promptly, will help position money market funds, their investors, and the market at large for an orderly transition out of the program when it expires in September. We also recommend that a no-action letter previously granted by the SEC staff relating to money market fund valuation during exigent circumstances remain available for the SEC staff to grant at a future date on its own motion or upon request by the industry.

**Second Tier Securities.** During our analysis of money market funds, we also considered whether other existing regulations could be strengthened, even if the provisions in question did not play a role in the recent market volatility. We identified the ability of a money market fund to invest in “Second Tier Securities”—generally those securities that have received the second-highest short-term rating, or securities of comparable quality—as one possible area of improvement, and therefore recommend that money market funds no longer be permitted to invest in these securities.

**Board oversight.** We recommend that the SEC modernize its money market fund regulation to reflect the appropriate oversight role for boards of these funds, and in particular to avoid involving money market fund boards of directors at an inappropriate level in the fund’s investment process.

The Working Group strongly believes that these recommendations, taken together, will make money market funds more resilient in extreme market conditions. They will provide significant protections for money market fund investors, without exacerbating or creating risks for the money market. As discussed below, we have concerns that certain other reforms that have been suggested by some commentators could have significant adverse consequences to the money market, would not decrease systemic risk, and, in some cases, could increase it.

**Others’ Suggestions for Money Market Reform**

Proposals for regulatory changes to money market funds are varied. Some commentators have said that money market funds should be required to float their NAVs. Others have suggested that money market funds be insured or that the funds or their advisers hold capital. Still others have combined these various proposals and recommended that money market funds be required to choose either to float their NAVs or to become special-purpose banks with capital requirements and deposit insurance. Other, less drastic, proposals include separating
institutional and retail investors into separate funds, or requiring investors making large withdrawals to take
them in kind by giving them an equal share of each security in a fund’s portfolio.

Our main concerns with these proposals, individually and collectively, are set forth in detail in Section 8 of this
Report. Briefly, these concerns include the following:

» Investors will reject money market funds that do not have a stable NAV, and a large portion of the
assets currently in money market funds will flow into other types of cash pools that are less regulated
or outside U.S. regulatory oversight.

» Imposing capital requirements on money market funds poses significant accounting and tax challenges
and would provide little protection against the market-wide credit and liquidity events that can lead to
widespread redemptions.

» Creating stable NAV money market funds that are federally insured likely will sweep in assets from
most existing money market funds, existing unregistered cash pools, and direct holdings of money
market securities, and possibly drain a significant portion of deposits from traditional banks as well.
This could create highly problematic market volatility and fundamentally change the workings of the
money market.

» A program of limited insurance for money market funds, such as insuring accounts up to $250,000,
would likely be insufficient to reassure institutional investors in the midst of another widespread
financial crisis. Such a proposal would therefore do little to enhance the stability of money market
funds.

» Private insurance for money market funds is infeasible, as insurance companies simply would not be
able to provide sufficient capital to support such a program.

» Requiring money market funds to separate their investors by retail or institutional categories is
unworkable and unenforceable, and could disadvantage both types of clients.

» Requiring money market funds to address high redemption requests through redemptions in kind risks
aggravating an illiquid or declining market as individual fund shareholders seek to sell these securities
into an unstable market.

Given the important role that money market funds serve in the money market and the economy at large,
reforms fundamentally altering or compromising the attractiveness of these funds to investors should be
avoided, particularly at a time when the financial markets are so fragile and stabilizing these markets is of
such importance to global economic recovery. In the Working Group’s view, the recommendations put forth
in Section 7 of this Report far better address the concerns that have been voiced during and since the financial
1.1 Introduction

Early warnings began to surface in the summer of 2007 that the mortgage lending crisis could have a detrimental effect on money market funds. At that time, the Investment Company Institute (Institute or ICI) began analyzing how the market climate could impair money market fund shareholders; this process continued over the next 12 months and intensified. Since September 2008, the Institute and senior executives of ICI member companies have worked intently with government officials to keep them apprised of market conditions and their impact on funds; to find mechanisms to restore liquidity and orderly functioning to the money market; and to help with the nature and details of the U.S. Department of the Treasury’s Temporary Guarantee Program for Money Market Funds. This work took on a more formal character with the announcement on November 4, 2008, of the formation by the Executive Committee of the Institute’s Board of Governors of the Money Market Working Group (Working Group), whose members as of January 2009 represented nearly 60 percent of the assets of money market funds. The Working Group was given a broad mandate “to develop recommendations to improve the functioning of the money market and the operation and regulation of funds investing in that market.”

1.2 Methodology

In developing this Report, Working Group members have sought to canvass a wide range of money market participants and to detail recent market experience. We sought the views of issuers of short-term instruments purchased by money market funds to understand the critical role money market funds play in their financing. We also discussed with the dealer community the current state of the financial markets, and the likely consequences if the money market fund product were altered in various ways. To get the views of offerors of somewhat similar products, we spoke with managers of securities lending pools about their experiences during the credit market crisis and studied reports of how they fared during this period.

We also asked investors of all kinds—organizations, sweep product providers, and financial advisers to individual investors—about their uses of money market funds and the funds’ key features. We explored with them some of the concepts voiced by government officials and commentators, such as floating a fund’s net asset value (NAV) or making money market funds a more bank-like product. We retained the services of Treasury Strategies, Inc., a consulting firm specializing in the cash management needs of corporations and financial institutions, to

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9 A copy of the press release announcing the Working Group is attached as Appendix B to this Report.

10 See Appendix B.
supplement our discussions. Treasury Strategies, Inc., conducted a survey of its constituencies to get their views on certain aspects of money market funds, which played an important role in supplementing our discussions with investors. We met with regulators and our counterpart trade associations in other jurisdictions. We also surveyed certain other jurisdictions to better understand “money market funds” offered in those jurisdictions, and to determine whether there were lessons to be learned from the structure of those funds and how they fared during the market turmoil.

Finally, we met with and reviewed the work of academics to get their views of the money market, money market funds, and ways to prevent future “runs” and related behavior. We gratefully acknowledge all those with whom we consulted for this Report in Appendix C. In Appendix C, we also acknowledge, with sincerest thanks, members of the staff of ICI, working under the leadership of Karrie McMillan, General Counsel, and Brian K. Reid, Chief Economist, and of ICI Mutual Insurance Company, led by Lawrence R. Maffia, without whose outstanding efforts this Report would not have been possible.

1.3 Structure of the Report

This Report consists of eight sections, plus appendices. As discussed above, Section 1 reviews the formation of the Working Group and describes our work methodology. Section 2 reviews the operation of the U.S. money market, in an effort to provide context for understanding the functioning of this key component of our financial system. This section discusses the structure of the money market broadly and, more specifically, the role of money market funds in that market. Section 3 discusses three primary features of money market funds—return of principal, liquidity, and a market-based rate of return—and the importance of these features to investors.

Section 4 provides an overview of the regulation to which money market funds are subject in the United States. They are in fact among the most heavily regulated products offered to investors. Like all mutual funds, they are subject to all the major federal securities laws generally, including the Investment Company Act. They also must comply with provisions of a highly detailed and prescriptive SEC rule designed solely for money market funds.

Section 5 describes various cash management alternatives to money market funds, both domestically and abroad, as well as overnight sweep arrangements. Section 6 provides a detailed look at the recent credit crisis, including the buyout of The Bear Stearns Companies Inc., the bankruptcy of Lehman Brothers Holdings Inc., the failure of Reserve Primary Fund, the various government actions in response to the crisis, and the effect the crisis had on money market funds, other stable NAV funds, and financial institutions in other jurisdictions.
The lessons learned from these and other events frame our recommendations. Section 7 describes these recommendations, which seek to (1) respond directly to weaknesses in money market fund regulation that were revealed by the recent abnormal market climate; (2) identify potential areas for reform that, while not related to recent market events, are consistent with improving the safety and oversight of money market funds; and (3) provide the government detailed data to allow it to better discern trends and the role played by all institutional investors, including money market funds, in the overall money market, and invite greater surveillance of outlier performance of money market funds that may indicate riskier strategies.

The Working Group believes that the reforms suggested by some are unnecessary, all the more so with implementation of the wide-ranging recommendations set forth within this Report. We describe proposed reforms in Section 8, including proposals that call for money market funds to float their NAVs; proposals for federal insurance of money market funds; and proposals for capital requirements for money market funds. The Report concludes by discussing those and other concepts that we strongly believe would be more detrimental to the money markets than helpful.
The money market is a huge, complex, and significant part of the nation’s financial system in which many different participants interact each business day. This Section provides essential context about the U.S. money market by describing its structure; the vehicles through which investors can access money market instruments, many of which compete directly with money market funds; and the role and growth of money market funds as financial intermediaries in the money market.

2.1 Structure of the U.S. Money Market

In the United States, the market for debt securities with a maturity of one year or less is generally referred to as “the money market.” The money market is an effective mechanism for helping borrowers finance short-term mismatches between payments and receipts. For example, a corporation might borrow in the money market if it needs to make its payroll in 10 days, but will not have sufficient cash on hand from its accounts receivables for 45 days.

The main borrowers in the U.S. money market are the U.S. Treasury, U.S. government agencies, state and local governments, financial institutions (primarily banks, finance companies, and broker-dealers), conduits, and nonfinancial corporations (Figure 2.1). Borrowers in the money market are known as “issuers” because they issue short-term debt securities.

Reasons for borrowing vary across the types of issuers. Governments may issue securities to temporarily finance expenditures in anticipation of tax receipts. Mortgage-related U.S. government agencies borrow in the money market to help manage interest-rate risk and rebalancing needs for their portfolios. Banks and finance companies often use the money market to finance their holdings of assets that are relatively short-term in nature, such as business loans, credit card receivables, auto loans, or other consumer loans. Conduits—typically sponsored by banks, finance companies, investment banks, and hedge funds—are bankruptcy-remote special-purpose vehicles or entities that issue short-term debt to fund purchases of a variety of longer-term loans and securities.

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11 Securities that have final maturities of more than one year but whose yields are reset weekly, monthly, or quarterly also are generally considered part of the money market.

12 The term “conduit” is used broadly here to include off-balance sheet programs set up by banks and finance companies to arrange short-term financing for corporate clients, as well as structured investment vehicles (SIVs) and other securities arbitrage vehicles that seek to earn a profit between short-term borrowing costs and returns on longer-term investments when the yield curve is upward sloping.
Corporations typically access the money market to meet short-term operating needs, such as accounts payable and payroll. At times, corporations may use the money market as a source of bridge financing for mergers or acquisitions until they can arrange or complete longer-term funding. In addition, all types of borrowers may seek to reduce interest costs by borrowing in the money market when short-term interest rates are below long-term interest rates.

**FIGURE 2.1**

**Structure of the U.S. Money Market**

<table>
<thead>
<tr>
<th>Borrowers</th>
<th>Money Market Instruments</th>
<th>Distribution Channels</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasury</td>
<td>Treasury bills</td>
<td>Direct sales</td>
<td>Businesses</td>
</tr>
<tr>
<td>U.S. agencies</td>
<td>Benchmark/Reference bills</td>
<td>Bank sweep accounts</td>
<td>Banks</td>
</tr>
<tr>
<td>State and local governments</td>
<td>Discount notes</td>
<td>2a-7 money market funds</td>
<td>Pension funds</td>
</tr>
<tr>
<td>Banks</td>
<td>Variable/Floating-rate notes</td>
<td>Non-2a-7 cash pools:</td>
<td>Insurance companies</td>
</tr>
<tr>
<td>Finance companies</td>
<td>Certificates of deposit</td>
<td>» Offshore funds</td>
<td>State and local governments</td>
</tr>
<tr>
<td>Broker-dealers</td>
<td>Eurodollar deposits</td>
<td>» Enhanced cash funds</td>
<td>Broker-dealers</td>
</tr>
<tr>
<td>Conduits</td>
<td>Repurchase agreements</td>
<td>» STIFs*</td>
<td>Households</td>
</tr>
<tr>
<td>Corporations</td>
<td>Commercial paper</td>
<td>» LGIPs*</td>
<td>Nonprofit organizations</td>
</tr>
</tbody>
</table>

*STIFs are short-term investment funds; LGIPs are local government investment pools.
Sources: Investment Company Institute and Treasury Strategies, Inc.

Borrowers use a range of money market securities to help meet their funding needs. The U.S. Treasury issues short-term debt known as Treasury bills. Government sponsored agencies such as Fannie Mae and Freddie Mac issue Benchmark and Reference bills, discount notes, and floating rate notes (agency securities). Municipalities issue variable rate demand notes.\(^\text{13}\) Banks and other depositories issue large certificates of deposit (CDs)\(^\text{14}\) and

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\(^\text{13}\) Another municipal money market security that had been popular with investors is the short-term floating rate security issued by Tender Option Bond (TOB) trusts. These short-term securities are not issued directly by municipalities, but are created synthetically by TOB trusts from long-term bonds that were issued by municipalities.

\(^\text{14}\) Certificates of deposit are generally classified as large (or jumbo) or small. Large or jumbo CDs are issued in amounts greater than $100,000. Small CDs are issued in amounts of $100,000 or less.
Eurodollars deposits to help fund their assets. Banks and broker-dealers also use repurchase agreements, a form of collateralized lending, as a source of short-term funding.

Corporations, banks, finance companies, broker-dealers, and conduits also can meet their funding needs by issuing commercial paper, which is usually sold at a discount from face value, and carries repayment dates that typically range from overnight to up to 270 days. Commercial paper can be sold as unsecured or asset backed. Unsecured commercial paper is a promissory note backed only by a borrower’s promise to pay the face amount on the maturity date specified on the note. Firms with high quality credit ratings are often able to issue unsecured commercial paper at interest rates that are typically less than bank loans. Asset-backed commercial paper (ABCP) is secured by a pool of underlying eligible assets. Examples of eligible assets include trade receivables, residential and commercial mortgage loans, mortgage-backed securities, auto loans, credit card receivables, and similar financial assets. Commercial paper has been referred to as “the grease that keeps the engine going. It really is the bloodline of corporations.”

Although the size of the U.S. money market is difficult to gauge precisely (because it depends on how “money market” instruments are defined and how they are measured), it is clear that a deep, well-functioning money market is important to the well-being of the macro-economy. We estimate that the outstanding values of the types of short-term instruments typically held by taxable money market funds and other pooled investment vehicles (as discussed below)—such as commercial paper, large CDs, Treasury and agency securities, repurchase agreements, and Eurodollar deposits—total roughly $12 trillion.

While these money market instruments fulfill a critical need of the issuers, they also are vitally important for investors seeking both liquidity and preservation of capital. Major investors in money market securities include money market funds, banks, businesses, public and private pension funds, insurance companies, state and local governments, broker-dealers, individual households, and nonprofit organizations.

Investors can purchase money market instruments either directly or indirectly through a variety of intermediaries. In addition to money market funds, as described below, these include bank sweep accounts, investment portals, and short-term investment pools, such as offshore money funds, enhanced cash funds, and ultra-short bond funds.

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15 In addition, U.S. banks (including branches of foreign banks in the United States) can lend to each other in the federal funds market. Banks keep reserves at Federal Reserve Banks to meet their reserve requirements and to clear financial transactions. Transactions in the federal funds market enable depository institutions with reserve balances in excess of reserve requirements to lend reserves to institutions with reserve deficiencies. These loans are usually made overnight at the prevailing federal funds rate. Also, banks worldwide can provide funding to each other via the interbank lending market for maturities ranging from overnight to one year at the prevailing London Interbank Offered Rate (LIBOR).


17 Id.

18 For complete data sources, see Figure 2.3.
Money market funds. Money market funds are registered investment companies that are regulated by the Securities and Exchange Commission (SEC) in accordance with Rule 2a-7 adopted pursuant to the Investment Company Act of 1940. That rule contains numerous risk-limiting provisions intended to help a fund achieve the objective of maintaining a stable net asset value (NAV). These provisions limit risk by governing the credit quality, diversification, and maturity of the money market securities invested in the portfolio. Money market fund shares are typically publicly offered to individual and institutional investors.

Bank or broker sweep accounts. These sweep accounts are passive investment vehicles that require no further action on the part of the customer once the account has been established. Sweeps usually occur at the end of the day, and affect whatever collected balances reside in the account after all other transactions have been posted. There may be a target balance above which all funds are swept or no target at all. Sweep accounts are invested in a variety of money market instruments including Eurodollar deposits, money market funds, repurchase agreements, and commercial paper.

Investment portals. Portals are online interfaces that provide clients the ability to invest easily and quickly in short-term securities or short-term investment pools. Although portals generally focus on a single investment option, such as time deposits or money market funds, many are multi-provider and offer clients an array of choices within the investment option. For example, one portal offers clients over 120 different institutional money market funds and other short-term investment pools in multiple currencies. Corporate treasurers and other institutional investors find portals to be a convenient way to compare money market funds in terms of their assets under management, ratings, yields, and average maturities. Some portals will provide transparency, by allowing a money market fund sponsor to “look through” the portal and see who the investors are; others are not transparent.19

Short-term investment pools. In addition to money market funds, there are several types of financial intermediaries that purchase large pools of short-term securities and sell shares in these pools to investors: offshore money funds, enhanced cash funds, ultra-short bond funds, short-term investment funds (STIFs), and local government investment pools (LGIPs). Each of these pools is described below and several are discussed in greater detail in Section 5. Although the basic structure is similar across these products, there are key differences among them and among the investors to whom they are offered.

Offshore money funds are investment pools domiciled and authorized outside the United States. These funds are usually denominated in U.S. dollars, euros, or pounds sterling. There is no global definition of a “money fund,” and most non-U.S. money funds do not maintain a stable NAV. Many accrue dividends, causing their NAV to steadily increase. These funds also are not typically bound by detailed restrictions similar to those governing U.S. money market funds, and, in some cases, may function more like enhanced cash funds (see below). Europe does have a burgeoning market of dollar-denominated money market–type funds that operate voluntarily in accordance

19 A number of money market fund investors with whom we spoke believe that some portals, particularly those that are not transparent, provide an easy means for investors to chase yield by allowing rapid and convenient access to an array of money market funds and other financial products.
with Rule 2a-7 and seek to maintain a stable NAV. These funds are typically triple-A rated by credit rating agencies and are used by multinational institutions seeking dollar-denominated investments.

» **Enhanced Cash Funds** are investment pools that typically are not registered with the SEC. These funds seek to provide a slightly higher yield than money market funds by investing in a wider array of securities that tend to have longer maturities and lower credit quality. In seeking those yields, however, enhanced cash funds can exceed the SEC rule restrictions imposed on money market funds governing the credit quality, diversification, and maturity of investments. Enhanced cash funds target a $1.00 NAV, but have much greater exposure to fluctuations in their portfolio valuations. Enhanced cash funds are privately offered to institutions, wealthy clients, and certain types of trusts. They also may be referred to as “money market plus funds,” “money market–like funds,” “enhanced yield funds,” or “3(c)(7) funds” (after the legal exception upon which they typically rely).

» **Ultra-Short Bond Funds** are comparable to enhanced cash funds in their portfolio holdings, but most of these funds are not operated to maintain a stable NAV. These funds generally are registered investment companies and are offered for sale to the public.

» **STIFs** are collective investment funds operated by bank trust departments in which the assets of different accounts in the trust department are pooled together to purchase short-term securities. STIFs are offered to accounts for personal trusts, estates, and employee benefit plans that are exempt from taxation under the Internal Revenue Code. STIFs sponsored by national banks are regulated by the Office of the Comptroller of the Currency (OCC). Under OCC regulations, STIFs, like money market funds, use amortized cost accounting to value their assets and operate under the principle of “dollar-in, dollar-out.”

» **LGIPs** typically refer to state- or county-operated funds offered to cities, counties, school districts, and other local and state agencies so they can invest money on a short-term basis. The agencies expect this money to be available for withdrawal when they need it to make payrolls or pay other operating costs. Most LGIPs currently available are not registered with the SEC, as states and local state agencies are excluded from regulation under the federal securities laws. Investment guidelines and oversight for LGIPs may vary from state to state.
Money market funds efficiently channel dollars from all types of investors to a wide variety of borrowers, and over the past 25 years they have become an important part of the U.S. money market. As of January 2009, 784 money market funds had a combined $3.9 trillion in total net assets under management, up from $180 billion as of year-end 1983 (Figure 2.2).

By investing across a spectrum of money market instruments, money market funds provide a vast pool of liquidity to the U.S. money market. As of December 2008, money market funds held $3 trillion of repurchase agreements, CDs, U.S. Treasury and agency securities, commercial paper, and Eurodollar deposits. Taxable money market funds invest primarily in these short-term instruments and their holdings represent about one-quarter of the total outstanding amount of such money market instruments, underscoring the current importance of money market funds as an intermediary of short-term credit (Figure 2.3). In comparison, we estimate that money market funds held less than 10 percent of these same instruments in 1983.

Money market funds also are major participants within individual categories of taxable money market instruments. As of December 2008, these funds held 44 percent of outstanding short-term U.S. agency securities, 39 percent of commercial paper, 24 percent of short-term Treasury securities, 23 percent of repurchase agreements, 16 percent of large CDs, and 9 percent of Eurodollar deposits.

Tax-exempt money market funds are a significant source of funding to state and local governments for public projects such as roads, bridges, airports, water and sewage treatment facilities, hospitals, and low-income housing.

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20 As of December 2008, approximately 90 percent of all taxable money market funds’ total net assets were invested in these instruments. The remaining 10 percent of assets were invested in bank and corporate notes, bankers’ acceptances, cash reserves less any liabilities, and other miscellaneous assets.
As of December 2008, tax-exempt money market funds had $491 billion under management and accounted for an estimated 65 percent of outstanding short-term municipal debt (Figure 2.3).

For nearly 40 years, financial intermediation has developed outside of banks, a phenomenon that for the most part has benefited the economy by providing households and businesses more access to financing at a lower cost. Growth in money market fund assets has helped to deepen the commercial paper market for financial and nonfinancial issuers. Many major nonfinancial corporations have come to rely heavily on the commercial paper market for short-term funding of their day-to-day operations at interest rates that are typically less than bank loans. Also, ABCP conduits are a mechanism for banks and finance companies to move loans off their balance sheets and to free up lending capacity. Without ABCP conduits, many of these financial institutions would face capital constraints and, as a result, would be unable to originate any more loans until other loans were either paid off or they increased their capital positions.

**FIGURE 2.3**

**Selected Money Market Instruments**

*December 2008*

<table>
<thead>
<tr>
<th>Total</th>
<th>Money market fund holdings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Billions of dollars</strong></td>
<td><strong>Billions of dollars</strong></td>
<td><strong>Percentage of total</strong></td>
</tr>
<tr>
<td><strong>Total taxable instruments</strong></td>
<td>$11,882</td>
<td>$3,031</td>
</tr>
<tr>
<td>Agency securities¹</td>
<td>1,748</td>
<td>774</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>1,599</td>
<td>629</td>
</tr>
<tr>
<td>Treasury securities²</td>
<td>2,473</td>
<td>591</td>
</tr>
<tr>
<td>Repurchase agreements³</td>
<td>2,381</td>
<td>552</td>
</tr>
<tr>
<td>Certificates of deposit⁴</td>
<td>2,192</td>
<td>353</td>
</tr>
<tr>
<td>Eurodollar deposits⁵</td>
<td>1,489</td>
<td>132</td>
</tr>
<tr>
<td><strong>Total tax-exempt instruments⁶</strong></td>
<td>750</td>
<td>491</td>
</tr>
</tbody>
</table>

¹ Debt issued by Fannie Mae, Freddie Mac, and the Federal Housing Finance Board due to mature by the end of December 2009; category excludes agency-backed mortgage pools.

² Marketable Treasury securities held by the public due to mature by the end of December 2009.

³ Repurchase agreements with primary dealers; category includes gross overnight, continuing, and term agreements on Treasury, agency, mortgage-backed, and corporate securities.

⁴ Certificates of deposit are large or jumbo CDs, which are issued in amounts greater than $100,000.

⁵ Category includes claims on foreigners for negotiable CDs and non-negotiable deposits payable in U.S. dollars, as reported by banks in the U.S. for those banks or those banks’ customers’ accounts. Values for customer accounts are for September 2008.

⁶ Category includes VRDNs, ARSs, TOBs, and other short-term debt. Category does not include long-term fixed-rate debt due to mature by the end of December 2009.

In 1983, the year the SEC adopted Rule 2a-7, the commercial paper market had only about $185 billion outstanding—about one-fifth of the $990 billion in non-mortgage loans then on the books of banks and finance companies. At its peak in mid-2007, prior to the start of the financial crisis, the commercial paper market provided a total of $2.1 trillion in financing—equivalent to over half of the $3.6 trillion in on-balance sheet non-mortgage bank and finance company loans. Over this time period, money market funds’ holdings of commercial paper grew from 25 percent ($47 billion) to 30 percent ($642 billion) of total commercial paper outstanding (Figure 2.4).

In August 2007, outstanding commercial paper, particularly ABCP, began to contract as reports of defaults in commercial paper issued by structured investment vehicles (SIVs) started to surface. While money market funds shied away from buying additional paper issued by SIVs, they continued to supply credit to other financial and nonfinancial corporations in the commercial paper market over the next few quarters. At the end of March 2008, money market funds held $676 billion in commercial paper, or 38 percent of the total market. As the financial crisis intensified over the next two quarters, increased uncertainty about firms’ credit quality and a severe lack of liquidity in the market prompted many money market funds to curtail their purchases of commercial paper. As a result, money market funds’ holdings of commercial paper fell to $505 billion by the end of September 2008, but still constituted 33 percent of the total market. In the fourth quarter of 2008, money market funds increased their holdings of commercial paper by about $125 billion to $629 billion (39 percent of the market), largely in response to government programs seeking to foster liquidity in the commercial paper market and the money market in general. These programs are discussed in Section 6. As of January 2009, money market funds held $604 billion (39 percent of the market) in outstanding commercial paper.

**FIGURE 2.4**

*Money Market Funds’ Holdings of Commercial Paper*

*Percentage of total commercial paper outstanding, quarterly*

*Data are through January.

*Sources: Investment Company Institute and Federal Reserve Board*
Money market funds seek to offer investors three primary features: return of principal, liquidity, and a market-based rate of return, all at a reasonable cost. The success with which money market funds have efficiently managed the trade-offs between these objectives has contributed to their rapid growth. Since the Securities and Exchange Commission’s (SEC) adoption of Rule 2a-7 under the Investment Company Act of 1940 in 1983 created the framework for the current money market fund industry, assets in money market funds have grown from $180 billion to $3.9 trillion as of January 2009.

Money market funds have become one of the primary vehicles that U.S. households and institutional investors such as corporations, nonprofit organizations, and state and local governments use to manage their cash balances. As of December 2008, money market funds accounted for about 20 percent of the liquid cash balances of households and more than 30 percent of the short-term assets of nonfinancial businesses. This Section discusses the early development of money market funds, the characteristics that have led to their growth, and the role that these funds now play for households and institutions in managing their cash balances.

3.1 Early Development of Money Market Funds

Money market funds were developed in the early 1970s as a way to allow retail and other investors with modest amounts of assets to participate in the money market. Money market instruments generally offered yields significantly higher than the rates banks were legally allowed to pay under Federal Reserve Regulation Q, which placed a ceiling on bank deposit rates (Figure 3.1). Money market funds provided penalty-free redemption with next-day settlement, and some also provided investors with free check-writing privileges. Previously, market rates of return had been available only to wealthy individuals and large institutions with sizeable amounts to invest. Retail investors with modest balances instead invested their cash in bank accounts subject to the rate caps imposed by Regulation Q—checking accounts, which paid no interest, or low-yielding passbook saving accounts. Even the certificates of deposits (CDs) available to most investors had restrictions on interest rates during the 1970s, and they imposed early withdrawal penalties.

21 Regulation Q is a United States government regulation that until 1986 put a limit on the interest rates that banks could pay, including a rate of zero on demand deposits (checking accounts). Section 11 of the Banking Act of 1933 prohibits member banks from paying interest on demand deposits, a stricture which is implemented by Regulation Q. The imposed zero rate on demand deposits encouraged the emergence of money market funds and the growth of substitutes for, and alternatives to, banks. Regulation Q ceilings for savings accounts were phased out by March 1986 by the Monetary Control Act of 1980. The key provision of Regulation Q that remains is that banks cannot pay interest on business checking accounts.
Demand from small businesses and other small institutions also fueled growth in money market funds. Like retail investors, small business owners had limited options to invest excess cash that for them often had a strong seasonal component. Higher-yielding U.S. Treasury bills and jumbo CDs had $10,000 and $100,000 minimum investments, respectively. Some business owners did not have enough cash to meet these minimums, while others needed more frequent access to their excess cash than offered by the fixed maturation of Treasury bills and jumbo CDs.

Assets in money market funds grew from less than $2 billion at the end of 1974 to $267 billion in March 1986, when ceilings on bank deposit rates were finally phased out. Although banks were no longer restricted on the rates they could pay on most kinds of deposits, many nevertheless continued to offer deposit rates well below market interest rates on accounts such as money market deposit accounts (MMDAs) that now had unregulated deposit rates. As a result, assets in money market funds continued to grow in size relative to bank deposits, even though bank deposits were insured.22

FIGURE 3.1
Annual Yields on Commercial Paper, Treasury Bills, and Passbook Savings
Percent, monthly

*Ceiling rates were phased out by March 1986.
Sources: Federal Reserve Bank of St. Louis and Federal Reserve Board

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22 Why MMDA rates continued to be low and unresponsive to market interest rates after the savings deposit rates were deregulated is an open question. Economists have suggested that this effect may arise either from banks’ market power or the ability of banks to price discriminate against their retail customers. Retail customers tend to be fairly static. Thus, when market interest rates rise, banks may experience little market pressure to raise deposit rates paid to retail customers. For variations on these themes, see, e.g., David Neumark and Steven S. Sharpe, “Market Structure and the Nature of Price Rigidity: Evidence from the Market for Consumer Deposits,” Quarterly Journal of Economics (May 1992) at 657-680; Timothy H. Hannan and J. Nellie Liang, “Inferring Market Power from Time-Series Data: The Case of the Banking Firm,” 11 International Journal of Industrial Organization (1993) at 205-218; David E. Hutchison, “Retail Bank Deposit Pricing: An Intertemporal Asset Pricing Approach,” 27 Journal of Money, Credit, and Banking (February 1995) at 217-231; Richard J. Rosen, “What Goes Up Must Come Down? Asymmetries and Persistence in Bank Deposit Rates,” 21 Journal of Financial Services Research (2002) at 173-193.
3.2 CHARACTERISTICS OF MONEY MARKET FUNDS

Even as market interest rates began to decline relative to bank deposit rates in the 1980s, money market funds had many characteristics that made them attractive to investors. Some of these features, such as liquidity, market-based returns, and the legal and regulatory protections afforded to all mutual fund investors, were initial characteristics of money market funds. Other features, many of which were based on existing practices of some money market funds, were set forth in 1983, when the SEC adopted a specific rule for money market funds. The SEC has since strengthened this rule on a number of occasions.

Key characteristics of money market funds include:

» **Return of principal.** Money market funds seek to offer investors return of principal. Although there is no guarantee of this (and investors are explicitly warned that this may not always be possible), money market funds manage their portfolios very conservatively.

» **Stable $1.00 net asset value (NAV).** Investors expect to purchase and redeem shares of money market funds at a stable NAV, typically $1.00 per share. Investors view a stable $1.00 NAV as a crucial feature of money market funds, because it provides great convenience and simplicity in terms of its tax, accounting, and recordkeeping treatment. Investment returns are paid out entirely as dividends, with no capital gains or losses to track. This simplicity and convenience is crucial to the viability of money market funds because, in contrast with other mutual funds, they are used primarily as a cash management tool, which means that huge numbers of transactions flow through money market funds. In money market funds that allow check-writing, the $1.00 NAV gives investors assurance that they know their balance before they draw funds. Without a stable $1.00 NAV, many, if not most, investors would likely migrate to other available cash management products that offer a stable $1.00 NAV as they seek to minimize tax, accounting, and recordkeeping burdens.

» **Liquidity.** Money market funds provide “same-day” liquidity, allowing investors to redeem their shares at a price per share of $1.00 and generally to receive the proceeds that day. Retail investors value this feature because it allows them to manage cash both for daily needs and to buy or sell securities through brokers. Corporate cash managers must have daily liquidity in order to manage accounts payable and payrolls.

» **Market-based rates of return.** Unlike competing bank deposit accounts such as MMDAs, money market funds offer investors market-based yields.

» **High-quality assets.** Money market funds may invest only in liquid, investment-grade securities. Money market funds often maintain their own credit departments to manage their credit risk exposures. Institutional investors value this independent credit analysis, either because they may not have sufficient expertise in credit analysis or because money market funds can provide it more cost effectively. Money market funds generally do not have leverage or off–balance sheet exposure.

» **Investment in a mutual fund.** Money market funds are mutual funds. Their investors receive all of the same protections that other mutual funds have under the Investment Company Act of 1940 (see Section 4 of this Report).
Diversification. Money market funds often invest in hundreds of different underlying securities, providing investors diversification that would otherwise be difficult, if not impossible, to replicate and manage through an individual portfolio or through a single bank.

Professional asset management. Like other mutual funds, the assets of money market funds are professionally managed so as to achieve the fund’s objectives, which are laid out in its prospectus.

Economies of scale. Money market funds provide a low-cost cash management vehicle for retail and institutional investors. In part, money market funds achieve low cost through economies of scale—pooling the investments of hundreds to thousands of retail investors, sometimes with the large balances of institutional investors.

FIGURE 3.2
Assets of Money Market Funds in Retail and Institutional Share Classes
Percentage of total net assets, January 2009

Source: Investment Company Institute

3.3 Retail Demand for Money Market Funds

Investors in money market funds fall into two broad categories, retail and institutional, although in many instances these categories will overlap and blend. As of January 2009, there were 784 money market funds with $3.9 trillion in assets. About 65 percent of those assets were held in institutional share classes and 35 percent in retail share classes (Figure 3.2).

Retail investors generally include individuals or households investing for and controlling their own accounts. They may keep thousands to hundreds of thousands of dollars in money market funds. Retail investors use money market funds for a variety of reasons. They often use money market funds as a cash management component of their brokerage accounts; as sweep accounts for surplus balances in their checking accounts; as a temporary holding place for cash balances they expect to invest in bond or equity mutual funds; or simply as savings vehicles for “rainy day funds" in case of job loss, illness, or major home repairs. Retail money market funds typically have low initial minimum investments (Figure 3.3) and offer a range of services, such as check writing, debit cards, electronic funds transfers with banks, free exchanges with equity or bond funds in the same

23 For example, retail investors may invest in institutional money market fund share classes through employer-sponsored retirement plans, such as 401(k) plans, or broker or bank sweep accounts.
mutual fund complex, automatic share purchases via bank accounts, and the ability to purchase or redeem shares through toll-free telephone numbers and fund websites.

At the retail level, money market funds compete primarily with bank products such as checking accounts, savings accounts, and MMDAs. “Posted” bank deposit rates are set by bank personnel and tend to be unresponsive to market interest rates. In contrast, money market funds are designed so that their yields track market interest rates. As a result, yields on money market funds are typically higher—sometimes substantially so—than rates banks typically offer on MMDAs (Figure 3.4). Investors have benefitted substantially from the opportunity that money market funds provide them to access higher yields in the money market. Over the 10 years ending in 2008, retail money market fund shareholders earned an estimated $200 billion more in dividend income than they would have earned in MMDA interest. This highlights the efficiency of management and the low cost of the services that money market funds provide.
Reflecting the advantages of money market funds over competing products, the importance to households of money market funds has grown significantly over time. The portion of households’ liquid balances held in money market funds grew from less than 10 percent in 1986 to a peak of 24 percent in 2001 (Figure 3.5). As of year-end 2008, roughly one-fifth of households’ liquid balances were held in money market funds.

**FIGURE 3.5**

**U.S. Households’ Holdings of Money Market Funds**

*Percentage of U.S. households’ liquid cash balances* [chart]

*Liquid cash balances consist of money market funds, checkable deposits, savings, MMDAs, and certificates of deposit.*

*Sources: Investment Company Institute and Federal Reserve Board*
3.4 Institutional Demand for Money Market Funds

Institutional investors are another group of investors that rely on money market funds. These investors include large corporations, securities lending operations, bank trust departments, sweep programs, securities brokers, investment managers, and state and local governments, among others. At the institutional level, money market funds compete with a range of investment options, including bank deposits, trust accounts, short-term offshore funds, local government investment pools, direct investments in money market instruments such as commercial paper and repurchase agreements, and bank sweep accounts (accounts through which banks move institutional depositors’ excess balances into Treasuries, repurchase agreements, or offshore deposit accounts in locations such as Bermuda and the Cayman Islands).

Institutions began to invest in money market funds during the 1970s, and their confidence in the product grew after the SEC adopted Rule 2a-7 in 1983. Federal and state regulators also helped to expand the acceptance of money market funds among institutional investors. For example, money market funds have been approved as investments for national banks by the Office of the Comptroller of the Currency; for state-chartered banks by the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation; and for federal credit unions by the National Credit Union Administration. They have been approved as an investment vehicle for customer funds held in custody by futures commission merchants and futures clearing organizations by the Commodity Futures Trading Commission and for margin collateral by the Clearing Corporation, the New York Mercantile Exchange, the Chicago Mercantile Exchange, and the Options Clearing Corporation. State and municipal entities also hold money market funds. In addition, the SEC has approved investment of the pre-funded portion of an asset-backed issuance in money market funds.²⁴

Accounting rules also have facilitated the use of money market funds for the investment of cash by institutional investors. Like other short-term instruments, such as Treasury bills and commercial paper, money market funds are characterized as cash equivalents for financial reporting purposes and, as a result, have a simple, clear-cut accounting treatment.²⁵ Cash investments are carried at either face value (e.g., bank deposits and money market fund shares) or amortized cost (e.g., Treasury bills and commercial paper) on a firm’s balance sheet, and as such are not marked to market. The reasoning is that the market value of a cash equivalent is not materially different from its face value or amortized cost. Under this accounting treatment, companies need not track realized or unrealized capital gains and losses on their cash-equivalent positions, and thus can avoid the detailed

²⁴ For a more complete discussion of the use of money market funds by federal and state financial regulators, self-regulatory organizations, and state legislatures, see Federated Amended Rule Petition and Exhibits, submitted to Jonathan G. Katz, Secretary, Securities and Exchange Commission, from Stuart J. Kaswell, Partner, and David J. Harris, Partner, Dechert LLP (April 4, 2005). See also Appendix D for a review of state regulations specifying that money market funds and other stable NAV vehicles are permissible investments.

²⁵ According to Statement of Financial Accounting Standards No. 95 (FAS 95) issued in 1987, “cash equivalents are short-term, highly liquid investments that are both: readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates....Examples of items commonly considered to be cash equivalents are Treasury bills, commercial paper, money market funds, and federal funds sold (for an enterprise with banking operations).” In March 2007, the Financial Accounting Standards Board recommended that the designation “cash equivalents” be eliminated in FAS 95 and submitted the matter to the International Accounting Standards Board (IASB) for review. To date, the IASB has not made a determination on the recommendation.
recordkeeping required when there are any changes in the balances of these investments. This treatment is especially important for the many firms that use money market funds for daily transactions.

Corporate investment policies also have contributed to the broad use of money market funds as a cash investment. Money market funds offer institutional investors a cost-effective way to manage and diversify credit risk, while providing same-day liquidity with market-based yields. For example, corporations typically have a cash pool variously called “operating cash,” “short-term cash,” or “overnight cash” that is used to support daily company operations. Cash is invested in accordance with corporate policies that usually are established by the company's senior management with approval of its board of directors. For most firms, permitted investments for operating cash pools consist only of those that do not fluctuate in value, such as bank deposits, money market funds, bank CDs, commercial paper, repurchase agreements, and Treasury securities. Operating cash is essential for day-to-day business purposes, and, as a result, there can be no principal risk in the investments. Other guidelines or requirements in corporate cash investment policies typically focus on diversification, same-day liquidity, minimum credit ratings, duration, and sector concentration limits.

Corporate sweep programs, which became popular in the early 1990s, are a particular type of cash management tool. Corporations use sweep accounts to move excess cash balances from their non-interest-bearing checking accounts into interest-bearing securities overnight. These programs originally invested a corporation's excess cash balances overnight in repurchase agreements of government securities that its bank already had available on its balance sheet. This allowed the bank to earn a small spread on its securities pool, in addition to a monthly fee it charged customers for the service. As sweep volume grew throughout the 1990s, many banks had more demand for sweep investments than their available supply of government securities. Banks encouraged customers to use money market funds as an overnight investment and, by the late 1990s, these funds were the dominant sweep investment vehicle.

Due to the many benefits of money market funds, institutional investors increasingly have made use of them for cash investment. In 1986, U.S. nonfinancial businesses held about 5 percent of their short-term assets in money market funds (Figure 3.6). This rose to 32 percent by year-end 2008. As of January 2008, an estimated 80 percent of U.S. companies used money market funds to help them manage their cash balances, making these funds the most popular cash management vehicle (Figure 3.7). Other types of cash management products include bank deposits, direct investments in commercial paper, and repurchase agreements. Until September 2007, money market funds also competed with auction rate securities and enhanced cash funds. The difficulties those vehicles experienced throughout the current financial crisis have, however, dampened the demand for such vehicles.

FIGURE 3.6

U.S. Nonfinancial Businesses’ Holdings of Money Market Funds

Percentage of U.S. nonfinancial businesses’ short-term assets*

*U.S. nonfinancial businesses’ short-term assets consist of foreign deposits, checkable deposits, MMDAs, savings, certificates of deposit, money market funds, repurchase agreements, and commercial paper.

Sources: Investment Company Institute and Federal Reserve Board

FIGURE 3.7

U.S. Companies’ Use of Various Cash Management Products

Percentage of respondents,* January 2008

*Multiple responses are included.

Source: Treasury Strategies, Inc.
Money market funds, like all mutual funds, are subject to a comprehensive regulatory scheme under the federal securities laws that has worked extremely well for nearly 70 years. Their operations are subject to all four of the major federal securities laws administered by the Securities and Exchange Commission (SEC), including the Securities Act of 1933, the Securities Exchange Act of 1934, the Investment Advisers Act of 1940, and, most importantly, the Investment Company Act of 1940 (Investment Company Act).27 This Section provides an overview of the regulatory framework governing money market funds.

Money market funds also are subject to Rule 2a-7 under the Investment Company Act, which addresses portfolio quality, diversification of issuers and guarantors of portfolio securities, and the maturity of those securities. We recommend a number of improvements to this rule as discussed in Section 7, but believe it important first to recognize the overall success of this regulatory framework in protecting investors.28

4.1 Investment Company Act Protections

The Investment Company Act goes far beyond the disclosure and anti-fraud requirements that are characteristic of the other federal securities laws by imposing substantive requirements and prohibitions on the structure and day-to-day operations of mutual funds. Among the core objectives of the Investment Company Act are to: (1) provide for a high degree of oversight and accountability; (2) ensure that investors receive sufficient information about the fund, including its fees and expenses, and that the information is accurate and not misleading; (3) protect the physical integrity of the fund’s assets by having explicit rules concerning the custody of portfolio securities; (4) prohibit or restrict affiliated transactions and other forms of self-dealing; (5) prohibit unfair and unsound capital structures (by, for example, placing constraints on the use of leverage); and (6) ensure the fairness of transactions in fund shares, by requiring mutual fund net asset values (NAVs) to be marked to market daily. Each of these core objectives is discussed in more detail below.

4.1.1 Oversight and Accountability

A mutual fund is subject to a strong system of oversight that comes through a variety of internal and external mechanisms. Internal mechanisms include independent boards of directors or trustees and written compliance programs overseen by chief compliance officers (CCOs), both at the fund and adviser levels. External

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27 Mutual funds also are subject to most of the requirements that apply to corporate issuers under the Sarbanes-Oxley Act of 2002.
28 A complete history of Rule 2a-7 is included in Appendix E.
mechanisms include the SEC, the Financial Industry Regulatory Association (FINRA), and external service providers, such as certified public accounting firms and custodians.

Like an operating company, a mutual fund is organized as a corporation with a board of directors or as a business trust with a board of trustees. At least 40 percent of directors or trustees on a mutual fund’s board are required under the Investment Company Act to be independent from fund management. In practice, most fund boards have far higher percentages of independent directors or trustees. According to a study of fund boards conducted by the Institute and the Independent Directors Council, as of year-end 2007, independent directors comprised three quarters of boards in almost 90 percent of fund complexes.

Independent fund directors play a critical role in overseeing fund operations and are entrusted with the primary responsibility for looking after the interests of fund shareholders. They provide an independent check on the management of funds and have significant statutory and regulatory responsibilities under the Investment Company Act, well beyond the duties of loyalty and care that all directors have under state law.

The board’s oversight function has been greatly enhanced in recent years through the implementation of written compliance programs and the work of CCOs. Rules adopted in 2003 require every fund and adviser to have a CCO who administers a written compliance program reasonably designed to prevent, detect, and correct violations of the federal securities laws. Compliance programs must be reviewed at least annually for their adequacy and effectiveness, and fund CCOs are required to report directly to the board.

Internal oversight is complemented by a number of forms of external oversight and accountability. Mutual funds are subject to inspections, examinations, and enforcement through their primary regulator, the SEC. Funds also are subject to oversight by state securities regulators. In addition, self-regulatory organizations such as FINRA play an important role.

Funds’ financial statement disclosure likewise is subject to a number of internal and external checks. Funds must make annual and semi-annual reports to shareholders. Annual reports include financial statements audited by a certified public accounting firm subject to oversight by the Public Company Accounting Oversight Board. In addition, fund officers must make certain certifications and disclosures required by the Sarbanes-Oxley Act.

4.1.2 Fund Disclosure

No financial product provides more extensive disclosure to investors and the marketplace than do mutual funds. The cornerstone of the mutual fund disclosure regime is the prospectus. Mutual funds must maintain a current prospectus, which provides investors with information about the fund and its operations, investment objectives, investment strategies, risks, fees and expenses, and performance, as well as how to purchase, redeem, and exchange fund shares. Importantly, the key parts of this disclosure with respect to performance information and fees and expenses are standardized to facilitate investor comparison.
Mutual funds provide still more detailed disclosure in their statements of additional information (SAIs), which are available to investors upon request and without charge. The SAI conveys information about the fund that is not necessarily needed by investors to make an informed investment decision, but that some investors find useful. For example, the SAI generally includes information about the history of the fund, detailed information about certain investment policies (such as borrowing and concentration policies), and lists of the officers, directors, and persons who control the fund.

The prospectus, SAI, and certain other required information are contained in the fund’s registration statement, which is filed electronically with the SEC and is publicly available via the SEC’s Electronic Data Gathering, Analysis, and Retrieval System (EDGAR). Registration statements are amended at least once each year to ensure that financial statements and other information have not become stale. Funds also amend registration statements throughout the year as necessary to reflect material changes to their disclosure.

Fund disclosure continues to evolve to better serve investors’ needs. Based on a variety of investor outreach efforts, the SEC recently adopted a rule allowing funds to provide investors with a more user-friendly “summary prospectus” containing key information about the fund, while making more information available on the Internet and in paper upon request.

In addition to registration statement disclosure, mutual funds provide shareholders with several other disclosure documents. Shareholders receive unaudited semi-annual and audited annual reports within 60 days after the mid-point and the end, respectively, of the fund’s fiscal year. These reports contain updated financial statements, a list of the fund’s portfolio securities, management’s discussion of financial performance (annual report only), and other information current as of the date of the particular report. Following the first and third quarter, funds file an additional form with the SEC, available on EDGAR, disclosing the complete schedule of their portfolio holdings.

The combination of prospectuses, SAIs, annual and semi-annual shareholder reports, and quarterly portfolio schedules provides the investing public, regulators, media, and other interested parties with far more information than is available for other types of investments. This information also is easily and readily available, from either the fund, the SEC, or any number of private sector vendors, such as Morningstar or iMoneyNet, that are in the business of compiling publicly available information on funds in ways that might benefit investors.

29 Section 10(a)(3) of the Securities Act of 1933 prohibits investment companies making a continuous offering of shares from using a registration statement with financial information that is more than sixteen months old. As a result, funds must amend their registration statements within four months after the end of their fiscal year.

30 Funds are permitted to include a summary portfolio schedule in semi-annual reports that are delivered to shareholders in lieu of the complete schedule, provided that the complete portfolio schedule is filed with the SEC and is available to shareholders upon request, free of charge. The summary portfolio schedule includes each of the fund’s 50 largest holdings in unaffiliated issuers and each investment that exceeds 1 percent of the fund’s NAV. Mutual funds also annually disclose proxy votes on Form N-PIX, which identifies specific proposals on which the fund has voted portfolio securities over the past year and discloses how the fund voted on each. This requirement is largely irrelevant to money market funds, however, as they rarely hold voting securities.
4.1.3 Custody of Fund Assets

To protect fund assets, the Investment Company Act requires all mutual funds to maintain strict custody of fund assets, separate from the assets of the adviser. Although the Investment Company Act permits other arrangements, nearly all funds use a bank custodian for domestic securities. A fund’s custody agreement with a bank is typically far more elaborate than that used for other bank clients. The custodian’s services generally include safekeeping and accounting for the fund’s assets, settling securities transactions, receiving dividends and interest, providing foreign exchange capabilities, paying fund expenses, reporting failed trades, reporting cash transactions, monitoring corporate actions, and tracing loaned securities. Foreign securities are required to be held in the custody of a foreign bank or securities depository. The strict rules on the custody of fund assets have served to protect mutual fund investors from the types of fraud-based losses that from time to time occur in less-regulated investment products.

4.1.4 Prohibitions on Affiliated Transactions

The Investment Company Act contains a number of strong and detailed prohibitions on transactions between a mutual fund and fund insiders or affiliated organizations (such as the corporate parent of the fund’s adviser). Many of these prohibitions were part of the original statutory text of the Investment Company Act, enacted in 1940 in response to instances of over-reaching and self-dealing by investment company insiders with respect to the purchase and sale of portfolio securities, loans by investment companies, and investments in related investment companies.

Although there are a number of affiliated transaction prohibitions in the Investment Company Act, three are particularly noteworthy:

- Section 17(a) generally makes transactions between a fund and an affiliate unlawful;
- Rule 17d-1 generally makes joint transactions unlawful, where the fund and affiliate are acting together vis-à-vis a third party; and
- Section 10(f) prevents investment banks from placing or “dumping” unmarketable securities with an affiliated fund by generally prohibiting the fund from buying securities in an offering syndicated by an affiliated investment bank.

In addition, funds are prohibited from doing indirectly what they cannot do directly.

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31 The Investment Company Act contains six separate custody rules for the different types of possible custody arrangements: Rule 17f-1 (broker-dealer custody); Rule 17f-2 (self custody); Rule 17f-4 (securities depositories); Rule 17f-5 (foreign banks); Rule 17f-6 (futures commission merchants); and Rule 17f-7 (foreign securities depositories).

32 See, e.g., Alex Berenson and Diana B. Henriques, “Wall Street Magic Morphs to Fraud,” New York Times (December 14, 2008) (noting that “because he had his own securities firm, [Bernard] Madoff kept custody over his clients’ accounts and processed all their stock trades himself”). The frequency of incidents of hedge fund fraud led the Federal Bureau of Investigation to issue an investor alert in March 2007, available at http://www.fbi.gov/page2/march07/hedge_fund.htm (describing, for example, the Daedalus Capital Partners case as “a classic advanced fee scheme…perpetrated by the hedge fund manager; investors received false financial statements claiming large profits, when in fact the money was being siphoned off and used to finance the manager’s lavish lifestyle”).
4.1.5 Limitations on the Fund’s Capital Structure and Its Use of Leverage

Section 18 of the Investment Company Act imposes various requirements on a fund’s capital structure, including limitations on the issuance of “senior securities” and borrowing. Section 18(f)(1) prohibits mutual funds from issuing any senior security. Generally speaking, a senior security is any debt that takes priority over the mutual fund’s shares, such as a loan or preferred stock. Section 18’s requirements, as interpreted by the SEC, operate to limit the amount of leverage employed by mutual funds and to ensure that mutual fund capital structures are relatively simple and straightforward.33

Section 18 also limits borrowing. With the exception of certain privately arranged loans and temporary loans, any promissory note or other indebtedness generally will constitute a senior security.34 Funds may, however, borrow from a bank provided that, immediately after the bank borrowing, the fund has at least 300 percent asset coverage (that is, total assets are at least three times total aggregate borrowings).

Many funds voluntarily go beyond the prohibitions in the Investment Company Act, adopting policies that further restrict their ability to issue senior securities or borrow. Funds often, for example, adopt a policy that they will borrow only as a temporary measure for extraordinary or emergency purposes and not for investment in securities. In addition, they may disclose that, in any event, borrowings will be limited to a small percentage of fund assets (such as 5 percent). These are meaningful voluntary measures, because under Section 13(a) of the Investment Company Act, a fund’s policies on borrowing money and issuing senior securities cannot be changed without the approval of fund shareholders.

4.1.6 Daily Valuation of Fund Shares

Investors may sell (redeem) mutual fund shares each business day, and, as a result, fund shares are highly liquid investments. Most mutual funds also continually offer new shares to investors and allow shareholders easily and conveniently to transfer money—or make “exchanges”—from one fund to another within the same fund family. The constant processing of investors’ sales, redemptions, and exchanges makes it imperative for funds to ensure that all transactions receive the appropriate price.

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33 The SEC historically has interpreted the definition of senior security in Section 18 broadly, taking the view that, among other things, selling securities short (the practice, essentially, of selling borrowed shares) and dealing in derivative instruments, such as financial futures contracts or currency forward contracts, raise senior security issues. In general, Section 18 is interpreted to prohibit a fund from creating a future obligation to pay unless it “covers” the obligation. A fund generally can cover an obligation or other leveraged investment by owning the instrument underlying the leveraged transaction. For example, a fund that wants to take a short position in a certain stock can avoid the prohibition on senior securities by owning an equivalent long position in that stock. The fund also can cover by segregating, on its custodian’s books, liquid securities equal in value to the fund’s potential exposure from the leveraged transaction. The assets set aside to cover the leveraged security transactions must be liquid, unencumbered, and marked to market daily.

34 Temporary loans cannot exceed 5 percent of the fund’s total assets and must be repaid within 60 days.
A mutual fund’s share price is known as its NAV. NAV is the current market value of all the fund’s assets, minus liabilities (e.g., fund expenses), divided by the total number of outstanding shares. The NAV must be marked to market daily. The value of the fund’s securities is determined either by a market quotation, if a market quotation is readily available, or at fair value as determined in good faith by the board.35

Section 22(c) of and Rule 22c-1 under the Investment Company Act require funds to effect transactions based upon “forward pricing,” meaning that shareholders receive the next computed share price following the fund’s receipt of their transaction order. Forward pricing is an important protection for all shareholders. It prevents speculative trading in a fund’s shares based on fluctuations in the price of the securities in the fund’s portfolio that occur after the fund calculates its NAV.

When a shareholder redeems shares in a mutual fund, the Investment Company Act ensures that he or she will be paid promptly. Section 22(e) of the Investment Company Act prohibits mutual funds from suspending redemptions of their shares (subject to certain extremely limited exceptions, as discussed in Section 7 of this Report) or delaying payments of redemption proceeds for more than seven days. In part to facilitate compliance with Section 22(e), SEC guidelines prohibit mutual funds from investing in illiquid securities if doing so would cause the fund to have more than 15 percent of its assets in illiquid securities. Money market funds are subject to a stricter 10 percent illiquid investment limit under these guidelines. A security generally is deemed to be liquid if it can be sold or disposed of in the ordinary course of business within seven days at approximately the price at which the mutual fund has valued it. Many funds adopt a specific policy with respect to investments in illiquid securities, sometimes more restrictive than the SEC requires.

4.2 Rule 2a-7 Protections

One defining feature of money market funds is that, in contrast to other mutual funds, they seek to maintain a stable NAV or share price, typically $1.00 per share. As noted above, the Investment Company Act and applicable rules generally require mutual funds to calculate current NAV per share by valuing their portfolio securities for which market quotations are readily available at market value and other securities and assets at fair value as determined in good faith by the board of directors. Rule 2a-7 exempts money market funds from these provisions but contains strict risk-limiting provisions designed to minimize the deviation between a money market fund’s stabilized share price and the market value of its portfolio.36

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35 See Section 2(a)(41) of the Investment Company Act and Rules 2a-4 and 22c-1 under that Act. The ICI has published several papers to assist funds and their boards in meeting their obligations with respect to the mutual fund valuation process. For more information, see the ICI’s two white papers entitled “Valuation and Liquidity Issues for Mutual Funds” (February 1997 and March 2002); see also two installments of the ICI’s Fair Value Series, “An Introduction to Fair Valuation” (2005) and “The Role of the Board” (2006) (jointly published with the Independent Directors Council and ICI Mutual Insurance Company).

36 Any fund registered under the Investment Company Act that holds itself out as a money market fund, even if it does not rely on the exemptions provided by Rule 2a-7 to maintain a stable share price, must comply with the rule’s risk-limiting provisions. The SEC adopted this approach to address the concern that investors would be misled if an investment company that holds itself out as a money market fund engages in investment strategies not consistent with the risk-limiting provisions of Rule 2a-7.
Rule 2a-7 is primarily an exemptive rule that permits money market funds to determine their NAV using two types of valuation methods that facilitate the maintenance of a stable share price. Prior to the adoption of the rule, money market funds individually had to obtain exemptive relief from the pricing and valuation provisions of the Investment Company Act. These orders resulted from a lengthy process that included an evidentiary hearing on the issues associated with permitting mutual funds to use the amortized cost method of valuation. The SEC and the applicants focused in particular on conditions relating to portfolio quality and the necessity for a rating requirement.

**4.2.1 Strong Risk-Limiting Provisions**

In 1983, the SEC adopted Rule 2a-7, which generally codified the terms and conditions contained in its prior exemptive orders. The basic objective of Rule 2a-7—then and now—is to limit a money market fund’s exposure to credit risk (the risk associated with the creditworthiness of the issuer) and market risk (the risk of significant changes in value due to changes in prevailing interest rates). Rule 2a-7 establishes basic criteria in three areas with respect to the composition of a money market fund’s portfolio: quality, diversification, and maturity.

- **Quality.** Money market funds may purchase only securities that are denominated in United States dollars, are Eligible Securities, and that pose “minimal credit risks” to the fund. Determining whether a security is an Eligible Security involves different considerations for Rated Securities, Unrated Securities, and securities that are subject to Guarantees and Demand Features. Eligible Securities are defined generally as securities that have received a rating in one of the two highest short-term rating categories from two NRSROs (unless only one NRSRO rates the security or issuer of debt), or securities of comparable quality. The minimal credit risk determination must be based on factors affecting the credit quality of the issuer in addition to any ratings assigned to the securities by an NRSRO.

- **Diversification.** Money market funds must maintain a diversified portfolio to limit a fund’s exposure to the credit risk of any single issuer. The applicability of the diversification requirements will depend on whether the fund is a taxable fund, a national Tax Exempt Fund, or a Single State Fund. Taxable

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37 To maintain a stable NAV or price per share, money market funds use the amortized cost method of valuation and/or the penny-rounding method of pricing. Under the amortized cost method of valuation, money market funds value their portfolio securities by reference to their acquisition cost as adjusted for amortization of premium or accretion of discount. Under the penny-rounding method of pricing, share price is determined by valuing securities either at market value, fair value, or amortized cost, and rounding the per share NAV to the nearest cent on a share price of $1.00.

38 See, e.g., In re Intercapital Liquid Asset Fund, Inc. et. al., SEC Release No. IC-10824 (August 8, 1979) (first exemptive order permitting the use of the amortized cost method of valuing shares).


41 Unless defined in this Section of this Report, definitions of capitalized terms are found in paragraph (a) of Rule 2a-7.

42 For a history of the minimal credit risk requirement, see Appendix F.

43 Government Securities, as defined in Section 2(a)(16) of the Investment Company Act, are excluded from the rule’s diversification provisions.
funds and national Tax Exempt Funds may not invest more than 5 percent of Total Assets in the securities of any single issuer.\(^{44}\) The requirements for Single State Funds are a bit more permissive because they face a limited choice of very high-quality issuers in which to invest. For these funds, the limit of 5 percent of Total Assets in any one issuer applies only with respect to 75 percent of Total Assets. Rule 2a-7 establishes additional diversification requirements for Second Tier Securities, Asset Backed Securities, and securities subject to Demand Features and Guarantees.

**Maturity.** Money market funds must maintain a dollar-weighted average portfolio maturity—the average of the maturities of all securities held in the portfolio, weighted by each security’s percentage of net assets—appropriate to the objective of maintaining a stable NAV, but in no event greater than 90 days. In addition, under Rule 2a-7, a money market fund cannot acquire a portfolio security with a remaining maturity of greater than 397 days (with certain exceptions, including those for Adjustable Rate Government Securities, Variable Rate Securities, or Floating Rate Securities).

Money market funds that use the amortized cost method of valuation also must periodically “shadow price,” or mark their portfolios to market, to ensure that the actual value of the fund does not deviate from $1.00 per share by more than one-half of 1 percent. In addition, all funds must dispose of a defaulted or distressed security (e.g., one that no longer presents minimal credit risks) “as soon as practicable,” unless the fund’s board of directors specifically finds that disposal would not be in the best interests of the fund.

Some money market funds also seek to obtain credit ratings for the shares they issue; to receive a triple-A rating from an NRSRO, a money market fund must meet standards that are even higher than those required by Rule 2a-7. For example, among those higher standards is the requirement that triple-A rated money market funds have a weighted average maturity that does not exceed 60 days.\(^{45}\)

### 4.3 Historical Success of Money Market Fund Regulation

The comprehensive protections of the Investment Company Act, combined with the exacting standards of Rule 2a-7, have contributed to the success of money market funds. Since the SEC adopted Rule 2a-7 in 1983, money market fund assets have grown from $180 billion to $3.9 trillion as of January 2009. Indeed, in the more than 25 years since Rule 2a-7 was adopted, $338 trillion have flowed in and out of money market funds. Other than the U.S. Department of the Treasury’s Temporary Guarantee Program for Money Market Funds (Treasury

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\(^{44}\) A taxable or national Tax Exempt Fund may invest up to 25 percent of Total Assets in First Tier Securities of a single issuer for up to three business days after acquisition.

\(^{45}\) Some rating agencies currently are reviewing their rating standards for money market funds. See, e.g., [Exposure Draft: Global Money Market Fund Rating Criteria](http://www.fitchratings.com), FitchRatings (January 26, 2009).
Guarantee Program), established as a temporary measure in response to unprecedented market conditions, no government entity insures money market funds, as the Federal Deposit Insurance Corporation does bank deposits. In fact, until the recent market events, only once had a money market fund failed to repay the full principal amount of its shareholders’ investments. In that case, a small institutional money market fund broke a dollar because it had a large percentage of its assets in adjustable-rate securities that did not return to par at the time of an interest rate readjustment.

The public’s faith in money market funds also has been evident during the recent crisis in the credit markets. As a result of overall market volatility, retail and institutional investors alike have kept a greater proportion of their short-term investments in safe and liquid vehicles. Indeed, investors have added over $1.2 trillion to money market funds from the end of June 2007 to January 2009. The SEC has modernized the rule from time to time (and can do so in the future), demonstrating further that the regulatory regime established by Rule 2a-7 has proven to be flexible and resilient.

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46 Under the Treasury Guarantee Program, the Treasury Department will guarantee the share price of participating money market funds subject to certain conditions and limitations. In particular, under the terms of the program, the Treasury Department guarantees that, upon the liquidation of a participating money market fund, the fund’s shareholders will receive the fund’s stable price for each fund share owned as of September 19, 2008. A participating money market fund that experiences a “Guarantee Event” (i.e., breaks a dollar) is required to commence liquidation immediately (absent invoking a five business day cure provision). The program further requires the fund board to promptly suspend the redemption of its outstanding shares “in accordance with applicable Commission rules, orders and no-action letters.” The fund then must be liquidated within 30 days after a Guarantee Event unless the Treasury Department consents to a later date. See the Treasury Guarantee Program’s website and related materials at http://www.treas.gov/offices/domestic-finance/key-initiatives/money-market-fund.shtml.

47 Community Bankers U.S. Government Money Market Fund broke a dollar in September 1994 and ultimately paid investors $0.96 per share. Reserve Primary Fund broke a dollar in September 2008.

48 Since that time, SEC amendments to Rule 2a-7 have greatly limited the ability of a money market fund to invest in Second Tier Securities and have prohibited a money market fund from investing in an adjustable-rate security if its interest rate readjustment formula does not ensure that the market value of the security will return to par once a readjustment occurs.

49 A chronology of significant money market fund events and regulatory responses is included in Appendix G.
This Section describes various cash management alternatives available to money market fund investors, both domestically and abroad, as well as overnight sweep arrangements. These other vehicles, such as enhanced cash vehicles, securities lending pools and local government pools, also experienced difficulties during the credit crisis, but nevertheless remain available for investors (primarily institutional investors) as an intermediary to access the short-term money market.

Retail and institutional investors have large ongoing needs for products and services in which to invest their cash holdings. As of December 2008, U.S. households had $7.7 trillion invested in cash instruments and products, and institutional investors—including businesses, state and local governments, insurance companies, funding corporations, and pension funds—held another $5.2 trillion. Households invest about 75 percent of their cash in time and savings deposits at banks and savings institutions, and most of the remainder in money market funds. Institutional investors, however, rely more heavily on nonbank products to manage their cash positions. Of the $5.2 trillion in cash products and services, about 40 percent is held in bank accounts and 40 percent in money market funds.

There are three broad types of cash products and services that are available to institutional investors that are alternatives to money market funds: domestic cash pools, offshore money funds, and overnight sweep arrangements. All of the alternative domestic cash arrangements typically are excepted from having to register as investment companies and so do not have the many protections of the Investment Company Act of 1940 (Investment Company Act) or the risk-limiting provisions to which money market funds are subject. These funds also provide very limited reporting to regulators, and the amount of data they provide to investors tends to be uneven and may be negotiated client-by-client. Offshore money funds are outside U.S. jurisdiction entirely, even though they can and do invest in dollar-denominated money market instruments.

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50 Funding corporations, as defined in the Flow of Funds Accounts of the United States published by the Federal Reserve Board, are funding subsidiaries, nonbank financial holding companies, and custodial accounts for reinvested collateral of securities lending operations.

51 Section 3(a) of the Investment Company Act broadly defines an “investment company” as, among other things, an issuer that is, or holds itself out as being, primarily engaged in the business of investing, reinvesting, or trading in securities. Section 3(c) of the Act provides a number of exceptions from that definition, including exceptions for private investment companies; bank common or collective trust funds; banks, insurance companies, savings and loans, and other similar financial institutions; religious or charitable organizations; employee stock pension and profit-sharing plans; or certain insurance company separate accounts. Section 2(b) of the Investment Company Act provides that no provisions of the Act shall apply to any governmental entities at either the federal or the state level.
5.1 Domestic Cash Pools

Numerous provisions in the Investment Company Act allow bank common and collective trusts, private funds, structured finance vehicles, state and local government funds, and other types of investment pools to operate outside the regulatory structure described in Section 4. Providers of cash products and services have long used these provisions to form cash pools that compete with money market funds. Some of these investment pools market themselves as following the investment guidelines of money market funds, while others do not, investing instead in a broader range of securities to provide “enhanced cash” products that purport to maintain a stable net asset value (NAV) with higher yields than those of money market funds.

5.1.1 Enhanced Cash Funds

Section 3(c)(7) of the Investment Company Act is one of the exceptions that permits sponsors to create a privately offered pooled investment vehicle without having to register as an investment company. While best known as the exception under which hedge funds operate, this provision also allows money managers to operate unregistered cash pools, frequently referred to as “enhanced cash funds.”

Historically, funds using this exception have sought to maintain a stable $1.00 NAV, but tend to boost yields by engaging in investment strategies that would not have been allowable for a money market fund. These funds, which are privately offered and may be sold to a large number of institutional and high-net-worth individual investors, have tended to hold securities with longer maturities and perhaps lower credit quality, and often restrict investors’ ability to access their accounts (e.g., only allowing monthly or quarterly redemptions). They also tend to provide limited transparency to their investors and the public. Such funds target a $1.00 NAV, but have suffered much greater portfolio value fluctuations since August 2007 than have money market funds. These funds peaked with an estimated $200 billion in total assets in 2007. When the asset-backed commercial paper market froze in late 2007, several of these funds were forced to halt redemptions. These funds are estimated to currently hold less than $50 billion in total assets.

5.1.2 Short-Term Investment Funds and Securities Lending Pools

Banks and trust departments are excluded from the definition of investment company under Section 3(c)(3), and thus do not have to register as investment companies. Operating outside the Investment Company Act, their products—while historically managed in a fairly conservative manner—generally operate under less comprehensive regulations than do money market funds. Bank trust departments offered a short-term investment product (STIF) several years before the first money market fund appeared. These cash pools utilize amortized cost to meet client and fiduciary demands for low-risk investments that function much like money

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52 Privately offered unregistered pools also may be created under Section 3(c)(1) of the Investment Company Act, but these pools are more limited in that they may not have more than 100 investors at any time.

53 Source: Treasury Strategies, Inc.

market funds. Over time, state trust laws were modified to permit money market funds to serve as eligible cash pools for trust accounts, and many STIFs have been converted into money market funds.

Another cash pool is a securities lending pool. Many banks serve as custodians for pension funds, mutual funds, and other investors. One of the services they may provide is a securities lending program that allows these funds to lend securities for cash, which is then invested on behalf of the fund. Banks and trust departments have relied on their exception from the Investment Company Act to create securities lending pools to invest cash collateral from their securities lending programs. In practice, the securities lending pools often invest in a broader range of securities with longer maturities than do money market funds, although most hold themselves out as seeking to maintain a $1.00 NAV. Like enhanced cash funds, these pools experienced significant stress during the credit crisis. These pools are not subject to the same regulatory constraints as money market funds, and they provide little transparency to their investors and the public.

5.1.3 Local Government Investment Pools

Local government investment pools (LGIPs) rely on an exemption from the Investment Company Act to create investment pools for state and local governments, and possess several features similar to those of enhanced cash funds. The first LGIPs were created in the early 1970s to help municipalities manage their cash more effectively. Until the early 1990s when changes to state law permitted municipal treasurers to invest their cash in money market funds, LGIPs were one of the few cash pools available to municipalities. Like other investment pools that need not register as investment companies, LGIPs are not subject to the credit quality standards, maturity limits, or diversification requirements of money market funds, but most seek to maintain a stable NAV. LGIPs in Florida and other states experienced significant losses in their assets during 2007 and 2008, causing them to deviate widely from a $1.00 NAV. More recently, Commonfund, which was a cash pool managed on behalf of colleges and universities, experienced a similar decline in value.

5.2 Overnight Sweep Arrangements

Corporate sweep accounts became popular in the early 1990s. At that time, most sweep programs invested in repurchase agreements for government securities that the banks already had available on their balance sheets. This allowed a bank to earn a small spread on its securities pool. These sweep programs provided the bank’s institutional clients with interest on their cash, and a way for the bank itself to reduce its reserve requirements and deposit insurance premiums. As sweep volume grew throughout the 1990s, many banks had more demand

55 See, e.g., State Street Corporation, Form 8-K (January 16, 2009) (“Throughout 2008 and currently, these unregistered cash collateral [securities lending] pools have continued to transact purchases and redemptions at a constant net asset value of $1.00 per unit even though the market value of the unregistered cash collateral pools’ portfolio holdings, determined using pricing from third party pricing sources, has been below $1.00 per unit. At December 31, 2008, the net asset value based upon market value of our unregistered cash collateral pools ranged from $0.908 to $1.00, with the average weighted net asset value on such date being $0.955.”).

56 The Florida LGIP experienced a run and eventually froze withdrawals from the fund on November 29, 2007.

for sweep investments than they could meet with their available supply of government securities, and banks began to use money market funds as an investment vehicle for these assets. These programs also expanded into offering direct investment in other types of money market instruments, such as commercial paper.

In the late 1990s, banks began to offer sweeps into deposits of their offshore affiliates (commonly used jurisdictions include Bermuda and the Cayman Islands). At the end of each day, banks sweep excess balances from transaction accounts into offshore interest-bearing accounts at their affiliates. The U.S. onshore bank pays lower deposit insurance premiums and reduces its required reserves. The bank customer receives a money market interest rate on the deposit overnight. Amounts swept into offshore accounts, however, do not benefit from the protections provided to U.S. onshore bank accounts, such as Federal Deposit Insurance Corporation (FDIC) insurance, and are not subject to U.S. jurisdiction. Sweeps into offshore accounts have become increasingly popular. A Treasury Strategies, Inc., survey in October 2007 found that 33 percent of assets were swept into offshore funds, somewhat more than that into domestic money market funds (Figure 5.1).

Another type of sweep vehicle available to institutional and retail clients sweeps balances into an interest-bearing account insured by the FDIC, such as a money market deposit account (MMDA). These savings accounts are restricted to six withdrawals per month, but banks and others are increasingly offering programs that link together MMDA accounts at multiple banks. Furthermore, when the MMDAs are at different banks, each bank’s deposit is currently insured up to $250,000 by the FDIC, thus increasing the attractiveness of these savings accounts for institutional investors, which often have large balances.

5.3 Offshore Money Funds

Although there is no global definition of a “money fund,” this category of fund is recognized in markets around the world. World money fund assets as of September 30, 2008 (the latest data available), totaled over $5.4 trillion, with U.S. money market fund assets at that time contributing $3.4 trillion, European money funds
about $1.5 trillion, and Asian funds close to $350 billion.58 In Asia, Australia has the largest market, with money fund assets totaling more than $176 billion as of December 31, 2008; less than 20 percent of those assets are so-called “cash management trusts,” which generally seek to maintain a stable NAV, but are not subject to a specific rule like Rule 2a-7.59

Europe has significant money fund assets, generally broken into two types: the smaller stable or so-called constant net asset value (CNAV) funds that are viewed as similar to U.S.-style Rule 2a-7 funds, and the much larger variable net asset value (VNAV) funds.60 France represents the largest European domicile for money funds; all French money funds are VNAV funds.61 According to Fitch Ratings,

[a] frequent feature of [VNAV money funds], and common in European markets, is that the shares or units in these funds accumulate dividends payable by purchasing new units or shares, rather than distributing these to investors as quoted yield. As a result, the NAV of such funds may be perceived as consistently rising, implying a high level of stability. By accumulating dividends, however, losses in principal value will be absorbed. Investors are led to believe, therefore, that their principal is protected and that the fund has merely shown a poor yield during that period.62

Although the European VNAV money funds are utilized by both retail and institutional investors, the European CNAV money funds are essentially all held by institutional investors.63 The CNAV money funds have been growing and have gained a high profile with global corporate treasurers and other institutional investors.

5.3.1 IMMFA Funds

Unlike other money funds around the world, the European CNAV money funds have important implications for the United States. European CNAV money funds offer Rule 2a-7–like dollar-denominated funds and, thus, are cash alternatives for U.S. institutional investors and other investors seeking dollar-denominated assets. European CNAV money funds, in turn, currently funnel an estimated $300 billion from offshore investors to the U.S. money market and borrowers.64

While Europe lacks a pan-European rule that is similar to Rule 2a-7, the European CNAV money fund industry has used rating agencies to provide a similar structure for their funds. Often, European CNAV funds are “clones” of U.S. money market funds managed by an adviser that is affiliated with a U.S. money management company.

58 Source: Investment Company Institute and International Investment Funds Association; Worldwide Assets, Flows, and Number of Investment Funds.
59 Source: Investment and Financial Services Association (Australia).
60 As of the end of 2005, CNAV funds held 25 percent of the market and VNAV funds held the remaining 75 percent. See Fitch Ratings-Fund and Asset Manager Ratings Criteria Report, European Money Market Fund Ratings (March 6, 2006) (“Fitch European Money Funds Ratings”).
61 See Appendix H.
62 Fitch European Money Funds Ratings, supra note 60.
63 Id.
The requirements applied by the ratings agencies for these funds to receive a triple-A rating are modeled broadly on Rule 2a-7, although in some instances the rating criteria are tighter than that rule. In addition, the principal providers of these European CNAV money funds have a trade association, the Institutional Money Market Funds Association (IMMFA), which has a code of practice that sets forth practices for the operation of triple-A rated CNAV money funds, including restrictions in areas such as weighted average maturity and valuation. IMMFA represents only triple-A rated money funds that value assets on an amortized cost basis (with shadow pricing), allowing these funds to maintain a CNAV of, for example, $1.00, £1.00 or €1.00. We refer to these European CNAV money funds as the “IMMFA funds.”

The total assets of the IMMFA funds have increased from $15 billion in 1997 to approximately $580 billion at the beginning of 2009. The dollar-denominated IMMFA funds have grown quickly, from approximately $80 billion in assets in January 2003 to more than $311 billion at the beginning of 2009.

5.3.2 IMMFA Funds’ Neutral Tax Treatment

The IMMFA funds, in particular, are an alternative to U.S. money market funds. They do not have the negative tax consequences for U.S. investors that often are associated with offshore funds. IMMFA funds have distributing share classes and a stable NAV, unlike typical offshore funds. These features remove the impediments that certain tax rules often impose on a U.S. institutional investor’s decision to invest in offshore money funds. Thus, U.S. institutional investors generally are not hampered by tax considerations when investing in IMMFA funds.

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66 Source: IMMFA

67 Id.

68 While U.S. mutual funds must annually distribute their income and capital gains, many offshore funds tend to roll-up their income and capital gains. Offshore funds with this “roll-up” treatment therefore provide two advantages over investments in comparable U.S. funds: (1) tax deferral, and (2) conversion of ordinary income into capital gains, which are taxed at a lower rate. The Internal Revenue Code, however, generally prevents this result by providing special tax rules for offshore funds, or so-called “passive foreign investment companies” (PFICs). Under the Internal Revenue Code, a PFIC is any foreign corporation that has passive income (including dividends and interest) equal to 75 percent or more of its gross income or passive assets (which produce passive income) equal to 50 percent or more of its total assets. The PFIC rules, due to the taxes that are ultimately imposed on distributions to a U.S. investor, generally make it uneconomic for U.S. persons to invest in offshore funds that retain their income. The PFIC rules eliminate both tax deferral and the conversion of income from ordinary into capital. For foreign funds that roll up their income and gains, the PFIC rules would apply to any distribution or gain upon the sale of shares in the fund, and a U.S. investor would therefore be required to treat any gain upon redemption as an “excess distribution” resulting in the more onerous PFIC tax consequences. As a result, these rules tend to discourage U.S. investment in these types of offshore funds.

69 Specifically, investors in the distributing classes of IMMFA funds cannot defer taxable income or convert ordinary income (taxable at high rates upon distribution) into capital gain (taxable at lower rates upon redemption). As a result, the negative tax consequences that are generally imposed by the PFIC rules when offshore funds roll-up their income would be of no consequence to investors in the IMMFA funds with distributing classes. Nevertheless, we note that in unusual circumstances, such as during rapidly rising interest rates, an IMMFA fund could make an excess distribution, although there are exceptions under the PFIC rules (e.g., the qualified electing fund and mark-to-market exceptions) that most likely would prevent U.S. investors from experiencing adverse PFIC tax consequences.
This Section discusses events during the financial crisis and focuses particularly on the rescue of The Bear Stearns Companies Inc. (Bear Stearns), the bankruptcy of Lehman Brothers Holdings Inc. (Lehman), the failure of the Reserve Primary Fund (Primary Fund), government actions taken to benefit the short-term markets generally and to calm money market fund investors, and the effect the crisis had on other types of cash management vehicles and in other nations.

6.1 Market Events Leading Up to September 15, 2008

The difficulties that the money market and money market funds have faced are but one chapter in the worst financial crisis the United States has experienced since the Great Depression. This crisis stemmed from exuberant borrowing and lending in the housing market, lax regulation and accounting standards, first easy and then tight credit conditions, excessive leverage, the so-called “originate to distribute” system used by banks and mortgage brokers to originate mortgages, and the packaging of mortgages into complex derivative securities. These broad factors took root several years ago, sparked the crisis, and set in motion the deterioration of financial markets in general.  

Over the period from 2004 to mid-2006, originations of subprime and other low-documentation mortgage loans soared. Many subprime borrowers had taken out deeply-discounted adjustable-rate mortgages (ARMs) or mortgages with negative amortization features, partly on the belief that house prices would continue to rise and allow them to refinance on more favorable terms in the future. Over the same period, however, short-term

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70 For a discussion of some of the issues leading to the financial crisis, see Statement by Timothy F. Geithner, President and Chief Executive Officer, Federal Reserve Bank of New York, before the U.S. Senate Committee on Banking, Housing, and Urban Affairs, “Actions by the Federal Reserve Bank of New York in Response to Liquidity Pressures in Financial Markets,” (April 3, 2008). See also Donald L. Kohn, Vice-Chairman of the Federal Reserve Board, “The Changing Business of Banking: Implications for Financial Stability and Lessons from Recent Market Turmoil,” Speech before Federal Reserve Bank of Richmond’s Credit Market Symposium (April 17, 2008); The President’s Working Group on Financial Markets, Progress Update on March Policy Statement on Financial Market Developments (October 2008) (citing as the “principal underlying causes of the turmoil in financial markets...: a breakdown in underwriting standards for subprime mortgages; a significant erosion of market discipline by those involved in the securitization process...; flaws in credit rating agencies’ assessments of subprime residential mortgage-backed securities and other complex structured credit products...; risk management weaknesses at some large U.S. and European financial institutions; and regulatory policies, including capital and disclosure requirements, that failed to mitigate risk management weaknesses.”).

71 The number of subprime and other low-documentation mortgage originations doubled from 1.4 million in 2003 to 3 million in 2005 and then leveled off in 2006. These mortgages represented more than 30 percent of the total dollar amount of mortgage lending in 2005, up from only 10 percent in 2003. See Chris Mayer, Karen Pence, and Shane Sherlund, “The Rise in Mortgage Defaults,” Finance and Economics Discussion Series, Federal Reserve Board (November 2008).

72 Generally, negative amortization occurs when a borrower’s payment for a period is less than the interest assessed during that period, resulting in an increase in the borrower’s loan balance.
interest rates rose sharply, owing to monetary policy that sought to dampen inflation. The rapid increase in short-term interest rates fostered a slowing of the economy, job losses, and a rise in the cost of new mortgage borrowing. Appreciation of house prices moderated and then faltered. In the face of these developments, subprime borrowers began to default on their mortgages.

Difficulties in the subprime mortgage market began to spill over into the money and credit markets by mid-2007. Increasingly over the past several years, lenders had financed subprime and other mortgages by packaging them into derivative products, which were then sold into the financial markets. In some cases, such mortgages were used to back asset-backed commercial paper (ABCP) or were channeled into structured investment vehicles (SIVs) that then issued commercial paper. In June and July 2007, credit rating agencies began to downgrade many of the assets (such as SIVs and ABCP) that were backed either directly or indirectly by subprime mortgages.

Investment pools that held subprime mortgages, or ABCP or SIVs backed by subprime mortgages, began to experience difficulties. For example, as a result of their investments in subprime mortgages, two Bear Stearns hedge funds failed on July 31, 2007. On August 9, 2007, BNP Paribas, France’s largest bank, froze three investment funds that operated in a manner similar to European variable net asset value (VNAV) money funds but were unable to sell mortgage-related assets to meet redemptions. On August 14, 2007, an unregistered commodity cash pool managed by Sentinel Management Group, Inc., erroneously described by CNBC as a money market fund, halted redemptions and failed within a week. In the coming weeks, other short-term unregistered cash-like pools, frequently but incorrectly described by the press as “money market funds,” also failed.

Over the next several months, a range of short-term investment pools also came under pressure. Exposure to SIVs hit unregistered enhanced cash funds in October and November 2007. As explained in Section 5, many enhanced cash funds seek to maintain a stable $1.00 net asset value (NAV) and market themselves to institutions as close equivalents to money market funds. Investor confidence in enhanced cash funds eroded when the value of SIVs held by some of these funds fell substantially, requiring these to drop their NAVs below $1.00 per

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73 From June 2004 to July 2006, the Federal Reserve, seeking to dampen inflation and return short-term interest rates to a more normal level, raised the federal funds rate by 425 basis points, from 1 percent to 5.25 percent, and kept the overnight rate at that level until August 2007.

74 Credit rating agencies have been heavily scrutinized for their role in the credit crisis. See, e.g., Opening Statement of Rep. Henry A. Waxman, Chairman, Committee on Oversight and Government Reform, Credit Rating Agencies and the Financial Crisis (October 22, 2008); Institute of International Finance, Final Report of the IIF Committee on Market Best Practices: Principles of Conduct and Best Practice Recommendations/Financial Services, Industry Response to the Market Turmoil of 2007-2008 (July 17, 2008); Financial Stability Forum, Report on Enhancing Market and Institutional Resilience (April 15, 2008); The International Organization of Securities Commissions, The Role of Credit Rating Agencies In Structured Finance Markets (March 26, 2008); and March PWG Statement, supra note 3. While beyond the scope of this Report, the Working Group generally endorses efforts to improve the functioning of these entities.

75 See definition in Section 5.

76 See, e.g., Mark Landler, “Credit Squeeze Puts Europe’s Bank in Spotlight,” New York Times (August 14, 2007) (reporting that for days Europe had been unnerved by disclosures that banks and funds faced losses due to mortgage related investments, and that BNP Paribas’ announcement that it would suspend operations of three funds that looked like normal euro money funds tipped the market into chaos.).
share. Enhanced cash funds then suffered a wave of redemptions, leading several to close. Assets of enhanced cash funds, which had totaled about $200 billion in August 2007, fell to an estimated $50 billion by December 2007.\(^{77}\)

Liquidity pools run by municipalities also were affected. In late 2007, the local government investment pools (LGIPs) run by King County, Washington, and the State of Florida experienced difficulties due to SIV and ABCP investments. The King County fund held about $4.5 billion in assets, some of which were backed by SIVs; King County intervened to buy the troubled securities.\(^{78}\) The Florida pool experienced a run, with its assets falling from $27 billion to $15 billion before it froze withdrawals in November. Six percent of its portfolio was held in ABCP and SIVs, and 4 percent was in CDs issued by Countrywide Financial Corporation (Countrywide).\(^{79}\)

This trend continued into 2008 with another wave of illiquidity: the seizing up of the auction rate securities market. Auction rate securities (ARS), which were first developed in 1984, are long-term, variable-rate instruments with interest rates set at periodic auctions. ARS were an attractive financing vehicle for issuers such as closed-end investment companies, municipalities, and student loan financing authorities because they are essentially long-term obligations that re-price frequently using short-term interest rates. The ARS market froze in mid-February 2008 as securities for sale exceeded demand, auction agents refused to take the excess supply on their balance sheets, and the auctions failed en masse.\(^{80}\)

In contrast to these products, money market funds received a strong vote of confidence. Over the 13 months from the end of July 2007 through August 2008, money market funds absorbed more than $800 billion in new cash, boosting the size of the money market fund industry by more than one-third. Eighty percent of this vast inflow (nearly $650 billion) was directed to institutional share classes, as institutional investors, such as corporate cash managers and state and local governments, sought a safer haven for their cash balances.

This vote of confidence reflected a number of factors. First, compared to other short-term investment pools, money market funds, under the strictures of Rule 2a-7 and with the overall protections of the Investment Company Act of 1940, had portfolios with shorter maturity, greater liquidity, higher quality, more diversification, and more transparency, with little to no leverage. Second, to the extent that money market funds were indirectly exposed to subprime mortgages through ABCP or SIVs, they had been rapidly divesting themselves of such holdings. Third, in cases where money market funds had not divested themselves of ABCP or SIVs and the

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\(^{77}\) Source: Treasury Strategies, Inc.


\(^{80}\) Several factors have been identified as contributing to the seizing of the ARS market, including that: the size of the market demanded increasingly more customers to bid in the auctions; the rating agencies’ downgrades of the monoline insurers, which provided insurance for many ARS (protecting against issuer default), resulted in the loss of customers willing to invest in ARS; and, ultimately, pressures on broker-dealers’ balance sheets (e.g., write downs due to the subprime mortgage crisis) led to broker-dealer firms ending their participation in the market.
market prices of those securities had the potential to put the $1.00 NAV of those money market funds at risk, their sponsors stepped in, providing significant amounts of capital to purchase or otherwise support the distressed assets.

From August 2007 to March 2008, the financial crisis continued to build. A number of major financial institutions such as American Home Mortgage Corp.,\(^1\) HomeBanc Corp.,\(^2\) Sachsen Landesbank,\(^3\) Northern Rock, plc,\(^4\) Financial Guaranty Insurance Company,\(^5\) and Countrywide\(^6\) failed, and others, such as Citigroup, Inc. (Citigroup) and the monoline insurers Ambac Financial Group, Inc. and MBIA, Inc. needed significant help (both government and private) to survive. The money market continued to exhibit considerable stress. For example, spreads between yields on one-month financial commercial paper and Treasury bills widened dramatically, reaching nearly 400 basis points at one time.

Despite the severe stresses in the financial markets, at this point no U.S. money market fund had suspended redemptions or “broken the dollar.” Indeed, until the week of September 15, 2008, money market funds dealt with such strains on their own terms and in an orderly fashion, a testament to the strength of the product, the commitment of fund advisers, and the effectiveness of Rule 2a-7. While a number of factors helped alter this state of affairs, two events stand out as key: the federal government’s rescue of Bear Stearns in March 2008 and its subsequent decision to let Lehman fail on September 15, 2008.

### 6.2 What Caused Bear Stearns to Fail?\(^8\)

In the early days of March 2008, rumors began to circulate that Bear Stearns was becoming illiquid and in danger of failing. Press reports indicate that in the first 15 days of March, first a large bank and several large hedge funds, then other banks, broker-dealers and market participants, became less willing to execute transactions with Bear Stearns as a counterparty.\(^8\) Furthermore, press reports, notably by CNBC on March 10,
suggested that Bear Stearns was rapidly becoming illiquid and was in danger of imminent failure. By mid-
afternoon on March 13, Bear Stearns was having difficulty rolling over short-term collateralized loans known as
repurchase agreements, which were a crucial means of funding its securities positions. By Friday, March 14, it
had become clear that absent some kind of bailout, Bear Stearns would fail before markets opened on Monday.

Over the weekend of March 15-16, the federal government orchestrated a rescue of Bear Stearns. The Federal
Reserve, the U.S. Department of the Treasury (Treasury Department), and JPMorgan Chase & Co. (JPMorgan)
pulled together a deal allowing JPMorgan to purchase Bear Stearns, with the federal government guaranteeing
up to $30 billion in potential losses. Under this transaction, Bear Stearns’s shareholders suffered very
significant losses but its debt holders were unharmed.

It has since been suggested that money market funds, by refusing to roll over repurchase agreements with Bear
Stearns, caused it to collapse. To be sure, until Bear Stearns’s final days, institutional investors, including
money market funds, did loan money to Bear Stearns through repurchase agreements and other arrangements.

And in the days before Bear Stearns’s collapse, institutional investors of all kinds—hedge funds, banks, stock
and bond traders, securities lenders, and investment banks—backed away from transacting with Bear Stearns.
Money market funds were no exception.

But it is highly misleading to suggest that money market funds were responsible for the collapse of Bear Stearns.
Financial market participants had been predicting the demise of Bear Stearns for many months. The root
problem was that Bear Stearns had heavy exposure to subprime mortgages and had borrowed heavily, often
through short-term repurchase agreements, to finance that exposure. For example, as of May 31, 2007, Bear
Stearns’s assets were 31 times its shareholder equity, causing commentators to ask: “The key question…is why
Bear Stearns had been allowed to take such risks.”

Bear Stearns’s strategy worked until the housing market deteriorated. In 2004, the Federal Reserve began
tightening monetary policy in order to forestall inflation. Short-term interest rates rose sharply, the economy
slowed, and house prices began to fall. Many subprime borrowers with ARMs now faced the prospect of
interest rate resets that would substantially boost their mortgage payments even as house prices fell. Predictably,

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89 Press Release, JPMorgan, JPMorgan to Acquire Bear Stearns (March 16, 2008), available at http://www.jpmorgan.com/cm/
cs?pagename=JPM_redesign/JPM_Content_C/Generic_Detail_Page_Template&cid=1159338557604&C=JPM_Content_C.
90 As fiduciaries, money market fund managers have well-developed credit procedures that generally call for ceasing to transact with
counterparties that are not creditworthy, whether the transactions are secured or unsecured. Even collateral made up solely of
Treasury securities could be troublesome for money market funds, as the tight maturity standards to which these funds are subject
would likely call for divesting these assets quickly into a troubled market.
91 See, e.g., Kate Kelly, Greg Ip, and Robin Sidel, “Fed Races to Rescue Bear Stearns in Bid to Steady Financial System,” Wall Street
Journal (March 15, 2008), available at http://online.wsj.com/article/SB120550108028136579.html; The Last Days of Bear Stearns,
supra note 88.
92 See, e.g., The Last Days of Bear Stearns, supra note 88.
93 See The Credit Crunch, supra note 3 (“The need to [bail out Bear Stearns] was also the result of risky management that adopted a
business model too heavily reliant on short-term rollover funding from markets. Bear Stearns stood to gain from the high returns that
the business models generated, but these returns also involved large risks…The risks taken by the managers…were much larger than
the shareholders or the investors would have accepted if they had been aware of them.”).
94 Id. at 559.
subprime borrowers began to default on their mortgages. As default rates rose, the value of securities backed by subprime mortgages, such as those held by Bear Stearns, declined.

For Bear Stearns, the first cracks appeared in June 2007, when two of its hedge funds suspended redemptions in the face of deteriorating investments in securities backed by subprime mortgages. With Bear Stearns’s earnings declining throughout 2007 (Figure 6.1), concerns about its viability were reflected in a falling stock price and the rising cost of insuring against its default. For example, from June 1, 2007 (immediately before its two hedge funds suspended redemptions), to February 29, 2008 (two weeks before Bear Stearns collapsed), Bear Stearns’s stock price fell by nearly half, and the cost of insuring against its default rose almost nine-fold (Figure 6.2). Thus, any suggestion that money market funds caused the collapse of Bear Stearns, which for years had followed a risky strategy, is little more than blame-shifting.

![FIGURE 6.1](image)

**Bear Stearns Earnings per Share**

*Fiscal quarters*

<table>
<thead>
<tr>
<th>Fiscal Quarter</th>
<th>Earnings per Share</th>
</tr>
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<tbody>
<tr>
<td>Nov 2005</td>
<td>$2.90</td>
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<tr>
<td>Feb 2006</td>
<td>$3.54</td>
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<tr>
<td>May 2006</td>
<td>$3.72</td>
</tr>
<tr>
<td>Aug 2006</td>
<td>$3.02</td>
</tr>
<tr>
<td>Nov 2006</td>
<td>$4.00</td>
</tr>
<tr>
<td>Feb 2007</td>
<td>$3.82</td>
</tr>
<tr>
<td>May 2007</td>
<td>$3.40</td>
</tr>
<tr>
<td>Aug 2007</td>
<td>$1.16</td>
</tr>
<tr>
<td>Nov 2007</td>
<td>$0.86</td>
</tr>
<tr>
<td>Feb 2008</td>
<td>-$6.90</td>
</tr>
</tbody>
</table>

*Earnings per share reported on a diluted basis.
Source: Bloomberg

The rescue of Bear Stearns almost certainly prevented a meltdown of the financial system in mid-March 2008. But it also seems to have fostered the belief among some market participants that no major investment bank would be allowed to fail. For these participants, debt such as commercial paper issued by Lehman, one of the few remaining large investment banks, might have been viewed as a reasonably favorable investment. News reports speculating on the fate of Lehman suggested that the government might have no choice but to bail out Lehman, and that the “Federal Reserve [had] set a…precedent in March when it helped engineer the takeover of Bear Stearns by JPMorgan Chase by agreeing to guarantee $29 billion in potential losses.”

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95 See Paul R. LaMonica, “Lehman: Too big to fail?” CNN Money (September 10, 2008) (“But the Fed has already opened Pandora’s box. It’s too late now to say that Lehman should be left to wither away to nothing while Bear was allowed to escape that fate.”), available at http://money.cnn.com/2008/09/10/markets/thebuzz/index.htm.
It is our understanding that many money market funds sought to divest themselves of Lehman commercial paper after Bear Stearns collapsed. Primary Fund, however, took the opposite approach, instead continuing to hold Lehman commercial paper. As the next Section indicates, Primary Fund, which broke a dollar on September 16, 2008, did so directly because it held Lehman commercial paper on September 15, 2008, the day Lehman was allowed to fail.

6.3 Primary Fund—Background and Changing Investment Strategy

Bruce Bent and his partner Henry Brown introduced The Reserve Fund, a predecessor to Primary Fund, billed as “America’s first money market fund,” on February 1, 1970. At that point, inflation was running high but the Federal Reserve’s Regulation Q capped bank deposit rates. As a result, yields on open-market instruments, such as commercial paper, were well above the yields that depositors could earn at banks. The founders of The Reserve Fund recognized that it would be possible to create a mutual fund investing in money market instruments that would pay investors a market yield on their liquid balances. In the ensuing years, the Reserve Funds complex adopted the investment philosophy of “[d]ollar in, dollar out plus a reasonable rate of return.”

Bruce Bent was also known to chastise managers and investors of other money market funds for reaching for yield.

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*Premium of five-year credit default swap at an annual rate.

Source: Bloomberg
Primary Fund, one of the money market funds in the Reserve Funds complex, retained the right by prospectus to invest in a broad range of money market instruments, including Treasury and agency securities, commercial paper, certificates of deposits (CDs), other similar high-quality, short-term instruments, and repurchase agreements collateralized by these types of securities. Until mid-2007, however, Primary Fund held an average of between 30 to 40 percent of its assets in repurchase agreements and little to no commercial paper (Figure 6.3).

This state of affairs changed dramatically beginning in mid-2007. Primary Fund began to reduce its holding of repurchase agreements and other securities (primarily bank CDs) in favor of commercial paper. The proportion of the fund’s assets in commercial paper grew from 1 percent in July 2007 to nearly 60 percent just one year later. Much of this increase was in ABCP.

Primary Fund’s yield rose in tandem with its increased holdings of commercial paper. Figure 6.4 shows the relative yield of Primary Fund compared to its peers from 2004 to September 9, 2007. Until mid-2007, there was little difference between the fund’s yield and that of its peers (resulting in a “yield advantage” of about zero in the figure). Subsequently, the fund’s yield jumped sharply compared to its peers, rising to an advantage of nearly 50 basis points by February 2008.  

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99 See The Reserve Fund-Primary Fund, Prospectus (Form N-1A) (September 28, 2007).

100 The yield advantage shown in Figure 6.4 is based on gross portfolio yields, which indicates that the jump in the fund’s relative yield was due to a change in its portfolio composition, rather than a decrease in the fund’s expense ratio relative to its peers.
The jump in Primary Fund’s yield boosted its growth markedly. The fund’s assets more than doubled, from $30 billion in July 2007 to $67 billion by July 2008 (Figure 6.4, blue bars), and hovered near that level until September 9, 2008, three business days before Lehman failed.

Some of this rapid growth likely reflected industry trends. Almost all of the new money invested in Primary Fund over this period (90 percent) came from institutional investors. Throughout much of this period, institutional cash managers moved vast sums out of direct investments in money market instruments and other pooled products, such as ARS and LGIPs that had experienced liquidity and other problems, and into money market funds as a safe haven. In addition, institutional share classes of money market funds typically see strong inflows when the Federal Reserve lowers short-term interest rates, as it did after July 2007.

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**FIGURE 6.4**

**Primary Fund’s Yield Advantage and Total Net Assets**

Yield advantage is the seven-day gross compound yield on Primary Fund’s institutional share class (ticker RPFXX) less the seven-day gross compound (simple) average yield on all prime institutional money market funds.

Total net assets includes both institutional and retail share classes.

Sources: Investment Company Institute and iMoneyNet

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101 This percentage was calculated from data from iMoneyNet on institutional share classes of Primary Fund.
Nevertheless, some of Primary Fund’s rapid growth appears to have been due to its competitive position relative to other institutional money market funds. Figure 6.5 ranks Primary Fund’s yield relative to its institutional competitors. Until mid-2007, Primary Fund’s yield was at the low end of the spectrum, ranking in the bottom 20 percent of institutional funds (green bars, left scale). Just two months later, however, its yield ranked in the top 10 percent of institutional funds, and its position continued to climb. The effect was dramatic. Among institutional funds, Primary Fund’s market share more than doubled, from 1.7 percent in July 2007 to about 3.5 percent by July 2008 (blue line, right scale), indicating that market trends alone cannot account for the fund’s rapid growth.

**FIGURE 6.5**

Primary Fund Institutional Share’s Yield Rank\(^1\) and Market Share\(^2\)

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\(^1\)Yield rank is the percentile of Primary Fund’s Institutional share class yield among all other prime institutional share class yields.

\(^2\)Market share is Primary Fund’s Institutional share class total net assets as a percentage of total net assets in prime institutional money market fund share classes.

Sources: Investment Company Institute and iMoneyNet
As Primary Fund continued its expansion into commercial paper, it purchased debt issued by Lehman. According to its public filings, Primary Fund held no Lehman debt before August 31, 2007 (Figure 6.6). By November 30, 2007, Primary Fund had purchased Lehman commercial paper with a par value of $375 million, which amounted to about 1 percent of the fund’s assets. By February 29, 2008, the fund had boosted its exposure to Lehman to $775 million, which consisted of $525 million in commercial paper and $250 million in medium term notes. Between February 29 and May 31, Primary Fund replaced $375 million in Lehman commercial paper that matured in April and May with new Lehman paper maturing in October 2008, which could well indicate that the fund rolled over its holdings of Lehman commercial paper after Bear Stearns was rescued by the federal government in March. When Lehman failed on September 15, Primary Fund held $785 million in Lehman commercial paper and medium term notes, which amounted to 1.2 percent of the fund’s assets.

![Primary Fund's Holdings of Lehman Brothers Debt](image)

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<tr>
<td>Commercial paper (maturing April 24, 2008)</td>
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<td>$175</td>
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<td>Commercial paper (maturing May 22, 2008)</td>
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<td>Commercial paper (maturing October 10, 2008)</td>
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<td>0</td>
<td>150</td>
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<td>150</td>
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<tr>
<td>Commercial paper (maturing October 27, 2008)</td>
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<td>0</td>
<td>0</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Commercial paper (maturing October 29, 2008)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>185</td>
<td>185</td>
</tr>
<tr>
<td>Medium term note (maturing March 20, 2009)</td>
<td>0</td>
<td>0</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>375</td>
<td>775</td>
<td>785</td>
<td>785</td>
</tr>
</tbody>
</table>

Source: Primary Fund regulatory filings with the SEC.

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102 The Reserve Fund-Primary Fund, Quarterly Report (Form N-Q) (August 31, 2007).
103 The Reserve Fund-Primary Fund, Semi-Annual Report (Form N-CSR), at 4 (November 30, 2007).
104 The Reserve Fund-Primary Fund, Quarterly Report (Form N-Q), at 4 and 6 (February 29, 2008).
105 The Reserve Fund-Primary Fund, Annual Report (Form N-CSR), at 3 and 5 (May 31, 2008).
6.4 Market Events—September 2008

September opened with the shocking news that the government had placed the nation’s two largest mortgage finance companies, Fannie Mae and Freddie Mac, in receivership on September 7, 2008. The plan guaranteed the debt of the institutions, but essentially wiped out the equity held by shareholders. The financial markets barely had time to absorb this news when rumors long-circulated about the stability of Merrill Lynch & Co., Inc. (Merrill Lynch), American International Group, Inc. (AIG), and Lehman gained traction. Over the weekend of September 13 and 14, Bank of America Corporation agreed to buy Merrill Lynch for $50 billion. The future of AIG, one of the largest underwriters of credit default swaps, remained highly uncertain, as credit rating agencies threatened to downgrade the company’s debt, a move that would have allowed counterparties to make margin calls on their contracts. By early Monday morning, September 15, Lehman, lacking a buyer and failing to obtain government assistance, declared bankruptcy.

As with Bear Stearns, the viability of Lehman had been questioned for several months. Nevertheless, the collapse of Lehman on September 15 triggered an unexpectedly severe credit freeze. Certainly the Federal Reserve seems to have been surprised by the severity of the market’s reaction. For example, in Congressional testimony on September 23, Federal Reserve Chairman Ben Bernanke noted that:

[t]he failure of Lehman posed risks. But the troubles at Lehman had been well known for some time, and investors clearly recognized—as evidenced, for example, by the high cost of insuring Lehman’s debt in the market for credit default swaps—that the failure of the firm was a significant possibility. Thus, we judged that investors and counterparties had had time to take precautionary measures. While perhaps manageable in itself, Lehman’s default was combined with the unexpectedly rapid collapse of AIG, which together contributed to the development last week of extraordinarily turbulent conditions in global financial markets.107

With investors running for cover and credit markets freezing, yields on Treasury securities fell, while those on commercial paper jumped (Figure 6.7). The U.S. stock market declined nearly 5 percent on September 15, reflecting broad losses to financial companies. The next day, September 16, the Federal Reserve agreed to lend AIG up to $85 billion and to take a nearly 80 percent stake in the company. Governments around the globe, attempting to calm panicked markets, injected billions of dollars of liquidity into their markets.108 In coming days, as discussed below, the federal government took a range of unprecedented actions to support the financial markets.

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108 See, e.g., Press Release, Federal Reserve (September 18, 2008) (announcing coordinated actions with foreign central banks designed to address the continued elevated pressures in U.S. dollar short-term funding markets).
6.5 **Primary Fund—Week of September 15, 2008**

Amid these traumatic events, the $62 billion Primary Fund succumbed, with its NAV falling below its $1.00 per share on September 16. The previous day, the fund held $785 million in Lehman short-term debt. Absent support from an affiliate, any loss greater than one-half percent of the fund’s assets would have been sufficient to cause it to break a dollar. As it was, the fund held about 1.2 percent of its assets in Lehman debt.

Primary Fund did not immediately write down the value of its Lehman holdings. As a result, the fund continued to quote a $1.00 NAV on September 15. Throughout the day, investors placed redemption requests at a NAV of $1.00 that totaled nearly $25 billion, a little less than half of which ($10.7 billion) was actually redeemed.\(^{109}\) The value of the fund’s Lehman holdings were marked down to $0.80 on the dollar at 4:00 p.m. on that day.\(^{110}\) The volume of redemptions, combined with the virtual freeze in the money market, compounded Primary Fund’s difficulty in selling sufficient assets to meet redemption requests.

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\(^{109}\) Previously, on November 30, 2007, Primary Fund had amended its Registration Statement to provide generally for hourly redemptions of its shares up to 5:00 p.m. Eastern time. As a result, the fund also was obligated to value its portfolio securities on an hourly basis. The fund amended its Registration Statement on September 17 to provide for once-daily redemptions and valuations at 5:00 p.m., and to notify shareholders that proceeds from redemption requests would be transmitted no later than seven calendar days after receipt of the request. As later discussed, the Securities and Exchange Commission ultimately granted Primary Fund an order to suspend redemptions, effective September 17.

\(^{110}\) According to a complaint filed by the Commonwealth of Massachusetts, indicative pricing in the market for Lehman paper appears to have been in the range of $0.45 to $0.80. See Massachusetts Administrative Complaint, supra note 106, at 8.
On the following day, September 16, the fund’s adviser, Reserve Management Company, Inc. (Reserve Management), sought to liquidate Primary Fund’s entire portfolio by broadly distributing its bid list. We believe this action may have worsened conditions in short-term credit markets, especially the commercial paper market, because some dealers viewed this bid list as setting a maximum price they were willing to consider for acquiring securities, such as commercial paper. The fund continued to accept redemptions at a NAV of $1.00 until, effective at 4:00 p.m., the fund valued its Lehman holdings at zero, reducing the fund’s NAV to $0.97 per share.\footnote{On Tuesday morning, September 16, Reserve Management’s in-house, spreadsheet-based fund accounting process incorrectly re-marked Lehman commercial paper to 100 percent value. This error was carried through until later in the day when the commercial paper was marked to zero. The error was not discovered until November 11. See Press Release, The Reserve, Important Notice Regarding Reserve Primary Fund’s Net Asset Value (November 26, 2008), available at http://www.reservefunds.com/pdfs/Press_Release_Primary_NAV_2008_FINAL_112608.pdf.} The press release announcing this action further stated that all redemption requests received prior to 3:00 p.m. that day would be redeemed at $1.00 per share, although the fund would exercise its right under the Investment Company Act to delay the payment of redemption proceeds for up to seven calendar days. Two days later, Reserve Management closed a number of its funds, including Primary Fund, to new investors, but continued to accept redemption requests from existing shareholders.

Four days after Lehman declared bankruptcy, Primary Fund filed with the Securities and Exchange Commission (SEC) an application for an order to suspend redemptions and to postpone the payment of redemption proceeds for more than seven days. By the time it filed its application, the fund had reportedly received redemption requests for approximately $60 billion.\footnote{See, e.g., Diana B. Henriques, “Professional Money Fund is Closed by Putnam,” New York Times (September 18, 2008), available at http://www.nytimes.com/2008/09/19/business/19money.html (“Putnam Closes”).} On September 22, the SEC granted the order, effective as of September 17.\footnote{In re The Reserve Fund, SEC Release No. IC-28386 (September 22, 2008), 73 FR 55572 (September 25, 2008). To our knowledge, this was only the second such order ever granted by the SEC, and the only such order granted to a money market fund.}

In our view, these developments highlight the need for mechanisms that allow money market funds to deal with severe stresses in a manner designed to treat all shareholders fairly and to help limit the impact that actions taken by one money market fund may have on others. Having the ability to promptly suspend redemptions would limit a run and allow a fund to ensure that all shareholders are treated fairly, regardless of who “gets to the door” first. Two of our recommendations in Section 7 address these concerns directly.

### 6.6 Events Following September 15-16, 2008

Following the events of September 15-16, the money market entered a deep freeze that would only begin to thaw after several weeks. Investors seeking liquidity and safety flocked to Treasury bills, resulting in a very sharp widening of credit spreads. Within the commercial paper market, borrowers generally were only able to issue, and buyers were only willing to lend, overnight. Longer-dated maturities simply did not trade.
The virtual freeze in the money markets reflected a number of factors. The government’s decision not to aid Lehman led market participants to reassess the notion of “too big to fail,” and thereby also to sharply reprice risk. Concerns rapidly surfaced that the debt of remaining large investment banks—The Goldman Sachs Group, Inc. (Goldman Sachs) and Morgan Stanley—and certain banks—Wachovia Corporation (Wachovia) and Citigroup—was a much greater risk than previously thought. Reflecting these concerns, the cost of insuring against defaults on these institutions rose dramatically.

Market participants also became extremely risk averse. Amidst the uncertainty of these rapid and dramatic developments, banks, seeking to preserve their liquidity, began refusing to lend to one another. Corporations, conscious that developments were unfolding rapidly and seeking to protect their operating cash balances, often directed their treasurers to withdraw from prime money market funds, irrespective of those funds’ portfolio holdings. Indeed, with many money market investors unwilling to buy anything other than Treasury securities and the commercial paper market at a virtual standstill, commercial paper became difficult to value.

Conditions deteriorated over the next few weeks and credit spreads widened to near-record levels. For example, the spread between the London Interbank Offered Rate (LIBOR) and the overnight index swap rate jumped from less than 100 basis points on September 12 to nearly 370 basis points one month later (Figure 6.8).

![Figure 6.8: Spread Between Three-Month LIBOR and Overnight Index Swap Rate](image)

**Spread Between Three-Month LIBOR and Overnight Index Swap Rate**

*90-day LIBOR less the 90-day Overnight Index Swap (OIS) rate. An OIS is an interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, two parties exchange, on the basis of the agreed notional amount, the difference between interest accrued at the fixed rate and interest accrued by averaging the floating, or index, rate.  
*Source: Bloomberg*
These developments put considerable pressure on money market funds and other pooled investment vehicles. During the week of September 15, investors redeemed from prime money market funds about $300 billion, much of which flowed to Treasury-only money market funds.\(^{114}\) Money market funds, anticipating large redemptions and having great difficulty finding reliable quotes for the prices of longer-date commercial paper, shortened their maturities toward overnight securities. Despite these difficulties, all money market funds other than Primary Fund were able to maintain a stable $1.00 NAV, although a number of sponsors of money market funds did take actions to protect their shareholders.

### 6.6.1 Difficulties Experienced by Pooled Investment Vehicles

During this time, other money market funds and unregistered pooled investment vehicles experienced difficulties, although all money market funds other than the Primary Fund maintained their $1.00 NAV.

- On September 18, Putnam Investments announced the closing of the Putnam Prime Money Market Fund and the distribution to investors of the fund’s assets.\(^{115}\) The fund had no exposure to Lehman or other troubled issuers, but had experienced significant redemption pressures from its concentrated institutional investor base. The fund determined to close rather than sell portfolio securities into a liquidity constrained market; this action allowed the fund to treat all shareholders fairly. On September 24, the fund merged with Federated Prime Obligations Fund at $1.00 per share and shareholders did not lose any principal.\(^{116}\)

- American Beacon Advisor, Inc.’s, Money Market Select Fund also experienced sizable redemption requests, despite having no exposure to Lehman or other troubled issuers. The fund satisfied those requests by providing that, effective September 19, proceeds exceeding $250,000 in a 90-day period would be paid by making pro-rata payments of cash and in-kind distributions of securities held by the fund.

- The Bank of New York Mellon Corporation entered into agreements with four of its Dreyfus money market funds to support those funds’ NAVs due to exposure to Lehman debt.\(^{117}\) Other fund families, including Wachovia’s Evergreen Funds, Northwestern Mutual’s Russell Funds, Riversource Investments, and Columbia Management, took similar actions due to holdings of Lehman debt.\(^{118}\)

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\(^{114}\) Based on ICI calculations from iMoneyNet of the change in end-of-day assets from September 12 to September 19, excluding Reserve Management’s funds.

\(^{115}\) See Putnam Closes, supra note 112.


\(^{118}\) See Putnam Closes, supra note 112.
Pooled investment vehicles other than money market funds closed or merged due to the unusual market conditions:

- On September 16, BNY Institutional Cash Reserves fell below $1.00 NAV per share ($0.991 per share). This $22 billion securities lending collateral pool was not a money market fund; Lehman debt represented 1.13 percent of the fund’s holdings.\(^\text{119}\)

- On September 17, the assets of an LGIP, Colorado Diversified Trust (CDT), were transferred to another LGIP for purposes of maintaining a triple-A rating. CDT served approximately 65 local government entities in Colorado and was not registered under the Investment Company Act. The pool held approximately 1.8 percent of its total assets in Lehman debt.\(^\text{120}\)

- Wachovia, trustee of the $40 billion Commonfund, a bank common trust fund offered solely to colleges, universities and private secondary schools, announced on September 30 that it had commenced a liquidation of the fund in response to the credit markets’ reaction to “the failure of Lehman and Washington Mutual Bank, the nationalization of American International Group and the failures of Congress to pass legislation.”\(^\text{121}\) As part of its liquidation plan, the fund restricted liquidity to 10 percent of a participant’s account value as of the close of business on September 26. The remaining assets would be distributed as they matured; 71 percent of the fund’s assets had been distributed as of December 31, 2008.

European money funds were not immune from the strain:

- Three triple-A rated Institutional Money Market Funds Association (IMMFA) money funds sponsored by Lehman suspended redemptions on September 18 at NAVs of €1.00 per share, £1.00 per share, or U.S. $1.00 per share.\(^\text{122}\) As of September 12, the Lehman U.S. Dollar Liquidity Fund had over $8 billion in assets and the Lehman Euro Liquidity Fund and the Lehman Sterling Liquidity Fund had, respectively, total assets of €1.495 billion and £251 million.\(^\text{123}\) The suspension of redemptions for the Lehman U.S. Dollar Liquidity Fund was temporarily lifted on September 23 and October 17 to permit “in specie” redemptions; on November 12 and December 3 for certain cash redemptions; and on January 26, 2009, for cash redemptions subject to the right to impose a limit on the aggregate number of shares redeemed.\(^\text{124}\)

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\(^{121}\) Commonfund Announcement, supra note 57.


\(^{123}\) Source: IMMFA.

In November, another fund manager in Europe, Aviva Investors (Aviva), converted a sterling-denominated money fund and a euro-denominated money fund with total assets close to £7 billion from CNAV funds to VNAV funds, although Aviva’s head of institutional distribution indicated that he expected the NAV to remain stable. We understand that as of the beginning of March 2009, these VNAV funds offered by Aviva continue to maintain a stable NAV.

6.6.2 Government Actions

As the money market seized up, the U.S. government intervened with a number of unprecedented actions designed to provide stability and liquidity to the markets generally, with some programs directed to money market funds. On September 16, the Federal Reserve announced that it would lend up to $85 billion to AIG, reversing an earlier indication that it would not participate in a rescue of the insurance giant.

On September 19, the Federal Reserve announced a series of broad initiatives designed to stabilize the market, which had ceased to function even for very short-term, high-credit securities. The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) provided non-recourse loans at the primary credit rate to U.S. depository institutions and bank holding companies to finance purchases of high-quality ABCP from money market funds. The Commercial Paper Funding Facility (CPFF) provided a backstop to U.S. issuers of commercial paper through a special purpose vehicle that would purchase three-month unsecured commercial paper and ABCP directly from eligible issuers.

Also on September 19, the Treasury Department announced its Temporary Guarantee Program for Money Market Funds (Treasury Guarantee Program), which temporarily guaranteed certain account balances in money market funds that qualified for and elected to participate in the Program. Under the terms of the Treasury Guarantee Program, if a participating fund’s NAV were to fall a specified amount below its $1.00 per share value, the fund would liquidate within 30 days (subject to extension) and the Treasury Department would make investors whole for the difference between their account balances on September 19 and the amount received upon liquidation. According to press reports, virtually all money market funds signed up for the initial three-month term of the Treasury Guarantee Program. At the time of this Report, money market funds or their advisers have paid an estimated $813 million in premiums, with no claims made under the program.

See definitions of CNAV funds and VNAV funds in Section 5.

See Joel Dimmock, “Aviva Moves to Calm Money Market Fund Investors,” International Herald Tribune (November 12, 2008) (noting that Aviva changed the terms of two money funds holding assets close to £7 billion from CNAV to variable or fluctuating according to mark-to-market valuations, meaning the price will vary while yield is untouched), available at http://www.iht.com/articles/reuters/2008/11/12/business/OUKBS-UK-AVIVA-LIQUIDITY.php.

On February 3, 2009, the Federal Reserve extended these and other programs for an additional six months, or until October 30, 2009. As of February 18, the AMLF had $13 billion in loans outstanding, down from a peak of $152 billion on October 1, 2008. As of February 18, the CPFF had $249 billion in net portfolio holdings, down from a peak of $350 billion on January 21. See Federal Reserve Statistical Release H.4.1, Factors Affecting Reserve Balances, available at http://www.federalreserve.gov/releases/h41/.

See, e.g., Mark Jewell, “Money-Market Funds Flock to Guarantee Program,” USA Today (October 10, 2008), available at http://www.usatoday.com/money/economy/2008-10-10-375494472_x.htm. The Treasury Guarantee Program had an original term of three months that expired on December 18, 2008, and was extended until April 30, 2009. The Secretary of the Treasury has the option to extend the Program again until the close of business on September 18, 2009.

ICI played a significant role in limiting the reach of the Treasury Guarantee Program. It urged from the outset that the guarantee not be open-ended, as originally contemplated, but instead restricted to account balances as of September 19—the date of the program’s original announcement. ICI was concerned about the prospect of further market disruption through significant flows of money into guaranteed prime money market funds from banks, Treasury funds, and other cash-like products. ICI likewise was concerned that massive dollar flows in the other direction would create yet another wave of volatility upon termination of the Treasury Guarantee Program.

The various government actions brought a comparative calm to the markets as they became available, but short-term markets continued to be highly illiquid in all but those market sectors directly supported by a government program. With few or no trades occurring in certain markets, pricing became a problem. Money market funds feared their shadow pricing procedures, often using evaluations by third-party pricing vendors that may not have reflected the unusual nature of the market, would lead them to break a dollar despite having short-term, fully performing portfolio investments. The SEC and the Financial Accounting Standards Board attempted to provide guidance for fair valuing securities during market turmoil, but in the face of so much uncertainty, the guidance did not relieve the pricing strain. Finally, on October 10, the SEC staff issued a no-action letter, discussed in more detail in Section 7 of this Report, that permitted money market funds to use amortized cost for certain short-term securities as part of their shadow pricing process.

Banks continued to experience severe strains and on September 21 the Federal Reserve Board approved the applications of Goldman Sachs and Morgan Stanley to become bank holding companies. After a credit downgrade on September 15 triggered a run on Washington Mutual, Inc. (Washington Mutual), the bank was officially placed in receivership by the Federal Deposit Insurance Corporation on September 25 and subsequently sold to JPMorgan.

We also note that there was similar financial market turmoil in other parts of the world, and especially in Europe, which forced authorities in other countries to take dramatic action. For example, at the end of September 2008, the governments of the Netherlands, Belgium, and Luxembourg rescued Fortis Bank. Shortly thereafter, Dexia SA, a major European banking group, was rescued by Belgium, France, and Luxembourg. The British government also had to rescue Bradford & Bingley plc, a mortgage lender. The banks in Iceland collapsed during this time. Ireland supported its financial system, issuing a state guarantee that exceeded 200 percent of Irish gross domestic product, to cover certain bank liabilities. Other European governments and authorities also acted to stabilize the markets, including actions by the European Central Bank to enhance liquidity as well

as declarations from certain countries to support money funds and banks.\textsuperscript{131} Beyond Europe, other countries, too, were confronted with acute challenges from the market turmoil that surfaced after Lehman declared bankruptcy.\textsuperscript{132}

### 6.7 Aftermath

The U.S. government’s programs were highly successful in shoring up confidence in the money market and money market funds. Immediately following the difficulties of Primary Fund, assets in institutional share classes of prime money market funds dropped sharply as institutional investors, seeking the safest, most liquid investments, moved into institutional share classes of Treasury and government-only money market funds (Figure 6.9) and bank deposits. Within a few days of the announcements on September 19 of the Treasury Guarantee Program and the Federal Reserve’s AMLF program, however, outflows from institutional share classes of prime money market funds slowed dramatically. Indeed, by mid-October, the assets of prime money market funds began to grow and continued to do so into 2009, indicating a return of confidence by institutional investors in these funds. During this same time period, assets of Treasury and government-only money market funds also continued to grow, although at a much reduced pace.

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Although by the end of February 2009 the assets of prime money market funds had not returned to the level seen at the beginning of September 2008, they had regained much ground. Perhaps more importantly, though, with the renewed confidence in money market funds among both retail and institutional investors, assets of money market funds had achieved an all-time high of just less than $3.9 trillion by February 2009 (Figure 6.10).
This Section of the Report lays out our recommendations. Many of these can be implemented voluntarily; some will require Securities and Exchange Commission (SEC) rulemaking. In developing these recommendations, the Working Group asked itself the question: Why did some money market funds survive the credit crisis relatively unscathed, while others had to enter into sponsor support or similar arrangements, find a buyer, or worse, in the case of Primary Fund, break a dollar?

The Working Group carefully examined the operations, practices, and decision-making of those money market funds that fared comparatively well during the credit crisis, in order to learn from those funds and to ensure that other money market funds will be held to those higher standards in the future. We also considered what could be improved—what lessons could be learned from the difficult experiences of the last 18 or so months.

Our recommendations seek to (1) respond directly to weaknesses in money market fund regulation that were revealed by the recent abnormal market climate; (2) identify potential areas for reform that, while not related to recent market events, are consistent with improving the safety and oversight of money market funds; and (3) provide the government detailed data to allow it to better discern trends and the role played by all institutional investors, including money market funds, in the overall money market, and invite greater surveillance of outlier performance of money market funds that may indicate riskier strategies. Our “lessons learned” and recommendations in response to those lessons are listed below:133

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<th>Lessons Learned</th>
<th>Recommendations</th>
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<td><strong>Liquidity:</strong></td>
<td>» Mandate liquidity by adding explicit minimum daily (5 percent) and weekly (20 percent) liquidity standards.</td>
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<td>» Mandate regular stress testing to assess a portfolio’s ability to meet hypothesized levels of credit risk, shareholder redemptions, and interest rate changes.</td>
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133 Unless defined in this Section of this Report, definitions of capitalized terms are found in paragraph (a) of Rule 2a-7.
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| **Portfolio maturity**: During extraordinary market conditions, some money market funds’ average weighted maturities may have been too long. | » Reduce the current weighted average maturity (WAM) limitation for money market funds from 90 days to 75 days.  
» Create a new “spread WAM” that does not exceed 120 days. |
| **Credit analysis**: Credit analysis, and analysis of new structures, may be improved. | » Require that all money market fund advisers establish a “new products” or similar committee.  
» Encourage money market funds and their advisers to follow best practices for determining minimal credit risks.  
» Retain references to credit ratings in Rule 2a-7 as an important “floor” on investments.  
» Require advisers to money market funds to designate and publicly disclose a minimum of three credit rating agencies that the adviser will monitor, to encourage credit rating agencies to compete for this designation by improving their ratings systems for short-term debt. |
| **Client risk**: Some clients, whether due to high levels of concentration, lack of transparency, or high frequency of trades in search of yields, may pose risks to money market funds. | » Require advisers to adopt robust “know your client” procedures.  
» Require advisers to provide monthly website disclosure about client concentration levels and the risks, if any, that such concentration may pose to the fund. |
| **Possibility of a “run”**: Money market funds must be better equipped to stop an incipient or ongoing run than the Investment Company Act of 1940 currently permits. | » Authorize a money market fund’s board of directors to temporarily suspend redemptions and purchases of the fund for up to five days if a fund has either broken or reasonably believes it may be about to break a dollar.  
» Authorize a money market fund’s board of directors to permanently suspend redemptions to allow all shareholders to be treated fairly after a fund determines to liquidate. |
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| **Investor/market confusion about money market funds:** Many investors, despite disclosure to the contrary, believed that money market funds would always return principal in full; some press reports heightened market concerns by confusing products that appeared similar to money market funds, but did not comply with the specific risk-limiting provisions governing those funds, with money market funds. | » Reassess risk disclosure in prospectuses and marketing materials concerning the risks potentially posed by money market funds.  
» Require money market funds to provide monthly website disclosure of portfolio holdings.  
» Adopt a rule under the Investment Advisers Act of 1940 designed to reduce investor and market confusion about funds that appear to be similar to money market funds, but do not comply with the same risk-limiting provisions. |
| **Government oversight:** In monitoring the money market, the government needs detailed and timely information about all money market institutional investors, including money market funds. | » Develop a nonpublic reporting regime for all institutional investors in the money market, including money market funds.  
» Formalize an SEC program to monitor money market funds that, by category and excluding fees, have performance that clearly exceeds that of their peers during any month, to determine the reasons for such performance. Task SEC staff to similarly monitor another 10 randomly selected money market funds each month. |
| **Government resources:** Under existing SEC regulations, the SEC staff was required to provide individualized relief that became fairly standard, using valuable resources. The SEC also did not have timely information about certain types of sponsor support. | » Amend Rule 17a-9 under the Investment Company Act to allow a money market fund affiliate to purchase an Eligible Security from a fund.  
» Require nonpublic notice to the SEC of any affiliated purchase in reliance on Rule 17a-9. |
| **Government programs:** During these exigent market circumstances, the government had to intervene on a temporary basis to restore liquidity to the market, and instituted programs to benefit money market funds directly, and the markets in general. | » Extend the Treasury Department’s Temporary Guarantee Program for Money Market Funds until it expires by its terms on September 18, 2009.  
» Delegate to SEC staff the ability to reinstate the amortized cost no-action letter if needed in the future. |
Lessons Learned | Recommendations
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**Forward-looking enhancements**: We identified two areas that many in the Working Group believe could be strengthened or modernized, even if the provisions in question did not play a role in the recent market volatility. | » Eliminate Second Tier Securities from the definition of an Eligible Security.  
» Amend Rule 2a-7 to modernize board responsibilities to reflect the appropriate oversight role of money market fund boards of directors.

The Working Group strongly believes that these recommendations, taken together, will make money market funds even more resilient in the worst market conditions. They will provide significant protections for money market fund investors, without exacerbating or creating risks for the money market.

### 7.1 Portfolio Liquidity Requirements

When the SEC first adopted Rule 2a-7, it observed that money market funds may “experience a greater and perhaps less predictable volume of redemption transactions than do other investment companies,” and warned that “[b]y purchasing or otherwise acquiring illiquid instruments, a money market fund exposes itself to a risk that it will be unable to satisfy redemption requests promptly…” The rule, however, has never included any express requirement to maintain a specified level of liquidity. Instead, money market funds have been subject to the same general restriction on investing in “illiquid securities” as other mutual fund companies, except that while other mutual funds may invest up to 15 percent of their assets in illiquid securities, money market funds may not invest more than 10 percent of their assets in illiquid securities.  

Notwithstanding the absence of a regulatory requirement, until last year, money market funds never experienced problems in meeting redemption requests. This is attributable, in part, to the extremely liquid and deep markets for the low risk Eligible Securities permitted by Rule 2a-7. It also is attributable to the weighted average maturity (WAM) limit of 90 days because money market funds that invest in securities with maturities in excess of 90 days also must invest in shorter-term securities (typically overnight investments or weekly variable- or floating-rate obligations) to maintain a WAM of less than 90 days. As a result, a fund operating in compliance with the

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134 See Rule 2a-7 Adopting Release, supra note 40.

135 For purposes of these limits, the SEC defines “illiquid” assets as those that “may not be sold or disposed of in the ordinary course of business within seven days at approximately the value at which the mutual fund has valued the investment.” Investment Company Institute, “Valuation and Liquidity Issues for Mutual Funds” (February 1997) at 41 (citing Guide 4 to Form N-1A). Last year, the SEC proposed amendments to Rule 2a-7 that would establish a generalized requirement for money market fund portfolio liquidity. Under the proposed amendments, a money market fund must hold securities that are sufficiently liquid to meet reasonably foreseeable redemptions in light of the fund’s obligations under Section 22(e) of the Investment Company Act and any commitments the fund has made to its shareholders. In addition, the proposed amendments would expressly limit a money market fund’s investments in illiquid securities to not more than 10 percent of its total assets. The proposing release states that the proposal is intended to codify the current standard established by the SEC in prior guidance regarding portfolio liquidity. See References to Ratings of Nationally Recognized Statistical Rating Organizations, SEC Release No. IC-28327 (July 1, 2008), 73 FR 40124 (July 11, 2008) (“Rule 2a-7 NRSRO Release”) at n.27, available on the SEC’s website at http://sec.gov/rules/proposed/2008/ic-28327.pdf. For a discussion concerning the Institute’s positions on this release, see Letter from Paul Schott Stevens, President & CEO, Investment Company Institute, to Florence Harmon, Acting Secretary, Securities and Exchange Commission (September 5, 2008) (“September 5 ICi Letter”).
rule has significant cash flows from maturing investments and has the bulk of its portfolio invested in liquid securities.

Recent events plainly demonstrate, however, that sufficiently large forced sales of securities can disrupt any market, even the market for securities that qualify as Eligible Securities. The aftermath of the bankruptcy of Lehman Brothers Holdings, Inc. and the resulting market panic show that even money market funds cannot rely on access to market liquidity during times of extreme market stress, and should therefore be affirmatively required to maintain a minimum ready supply of cash to fund redemptions. To address the risk that market disruptions pose to liquidity, we offer three new liquidity recommendations, which we believe will dramatically strengthen the ability of money market funds to weather future market turmoil:

**RECOMMENDATIONS:**

- The SEC should amend Rule 2a-7 to require taxable money market funds to meet a minimum daily liquidity standard such that 5 percent of the fund’s assets would be held in securities accessible within one day.
- The SEC should amend Rule 2a-7 to require all money market funds to meet a minimum weekly liquidity standard such that 20 percent of the fund’s assets would be held in securities accessible within seven days.
- The SEC should amend Rule 2a-7 to require all money market funds to regularly “stress test” their portfolios to assess a portfolio’s ability to meet hypothesized levels of credit risk, shareholder redemptions, and interest rate changes.

These requirements would bring an unprecedented level of regulation to money market fund liquidity in two respects. First, it would raise the standard for liquidity from market access (i.e., the ability to sell a security within seven days) to contractual obligation (i.e., the legal right to receive a security’s face value within one or seven days). The current market access standard presupposes a willing buyer, which may not be found during adverse market conditions. In contrast, a money market fund with a legal right to payment knows exactly who must make the payment, as well as how much will be paid and when.

Second, these requirements would specify the minimum amount of redemptions that a money market fund could make without having to sell portfolio securities. This should prevent money market funds from having to sell portfolio securities they otherwise may not seek to dispose of, perhaps realizing losses, as a result of significant redemptions. In addition, the requirements will give a money market fund’s adviser more time to raise liquidity through more measured sales of portfolio securities, or to determine what other actions might be appropriate in the event of sustained redemptions.

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136 Money market funds would be permitted to use U.S. Treasury securities of any duration to meet either of these new requirements. The Treasury market has proven itself the most resilient during times of economic crisis, and was not significantly disrupted by the sale of Bear Stearns or Lehman’s bankruptcy. Moreover, the Treasury market operates on a “cash settlement” basis, so trades settle the same day they are executed. We therefore recommend that all U.S. Treasury securities that are “Eligible Securities” under Rule 2a-7 be treated as a source of ready liquidity.
Imposing higher and more specific liquidity standards on money market funds will enhance investor confidence by assuring that the funds stand ready to meet significant redemptions without incurring losses that could affect the remaining shareholders.

### 7.1.1 Daily Liquidity Requirements

For taxable funds, we recommend that a minimum of 5 percent of the fund’s assets be held in cash, U.S. Treasury securities, or other securities and repurchase agreements that mature, or are subject to a Demand Feature exercisable in one business day. This requirement would be calculated only when a security is purchased; however, should the disposition of a portfolio security or a large redemption cause a fund to fall below 5 percent (or any higher threshold amount as determined by the fund’s adviser), the fund could only maintain cash or purchase U.S. Treasury securities and other securities or repurchase agreements that mature, or are subject to a Demand Feature exercisable, in one business day, until the 5 percent basket (or such higher threshold amount as determined by the fund’s adviser) was replenished. We stress that the 5 percent requirement is merely a “floor” that may not always be adequate, as determined by a particular fund’s liquidity needs, including its client base and portfolio holdings. Also, during periods of higher market volatility or limited liquidity, funds may find it prudent to hold a greater percentage of their assets in cash or securities that provide daily liquidity. As part of this requirement, we further recommend that a senior portfolio management person, as part of his or her responsibilities, monitor the adequacy of the liquidity thresholds set by the fund’s adviser and that the adviser’s or the fund’s chief compliance officer (CCO)\(^ {137}\) or chief risk management officer (or similar person), as part of his or her responsibilities, monitor compliance with those thresholds.

On the other hand, we do not recommend at this time that daily liquidity standards be applied to Tax Exempt Funds because the supply of daily liquidity tax-exempt securities is limited. Historically, municipalities have shown limited interest in issuing one-day demand obligations; daily tax-exempt securities consist entirely of variable rate demand notes or specifically structured products. The liquidity facilities required for these and other structured tax-exempt products have proven to be in short supply. As a result, Tax Exempt Funds maintain a large amount of their portfolios in seven-day demand instruments.

### 7.1.2 Weekly Liquidity Requirements

For all money market funds, we recommend that at least 20 percent of the fund’s assets be held in cash, U.S. Treasury securities, direct fixed-rate obligations of the U.S. government or its agencies originally issued with a maturity of 95 days or less, or securities that mature, or are subject to a Demand Feature exercisable, in seven business days. This requirement also only applies when a security is purchased and would not be violated if the liquidity position were used to meet a redemption that caused the fund to fall below the 20 percent threshold (or such higher threshold amount as determined by the fund’s adviser). Similar to the daily requirement for taxable

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\(^ {137}\) Rule 38a-1 under the Investment Company Act requires that boards of directors of registered investment companies, including money market funds, appoint a CCO with responsibility and authority to develop, administer, and enforce appropriate compliance policy and procedures for the fund.
funds, however, a fund could only maintain cash, purchase U.S. Treasury securities, direct fixed-rate obligations of the U.S. government or its agencies originally issued with a maturity of 95 days or less, or securities that mature, or are subject to a Demand Feature exercisable, in seven business days, until the 20 percent basket (or higher amount) was replenished. We stress again that the 20 percent requirement is merely a “floor” that may not always be adequate, as determined by a particular fund’s liquidity needs or the general market conditions. Similar to the daily liquidity threshold requirements, a senior portfolio management person, as part of his or her responsibilities, would monitor the adequacy of the weekly liquidity threshold, and the adviser’s or the fund’s CCO or chief risk management officer (or similar person) would monitor the thresholds for weekly liquidity set by the fund’s adviser.

7.1.3 Stress Testing

In addition to the minimum liquidity requirements discussed above, we recommend that Rule 2a-7 require money market funds to adopt and implement written procedures, approved by the fund’s board of directors, requiring a fund’s adviser to conduct regular portfolio analysis that incorporates stress testing. Stress testing is evidenced in other non-U.S. regulatory regimes. 138 This stress testing should evaluate various market scenarios as determined by the fund’s adviser to determine the portfolio’s ability to meet hypothesized levels of credit risk, shareholder redemptions, and interest rate risk. For example, a stress test could provide insight into the impact of market dislocations, compounded with shareholder redemptions, on the market value of a portfolio’s holdings. Non-U.S. guidance on stress testing suggests that there are other approaches that could be considered too. 139

We believe a formal stress test requirement is an imperative component of a money market fund’s overall risk management. Further, the trend evidenced in other jurisdictions to use stress testing adds additional support to the validity of incorporating such testing into U.S standards. Based upon the results of stress testing, a money market fund’s adviser may need to adjust the liquidity thresholds discussed above. As part of this requirement, the adviser’s or the fund’s CCO or chief risk management officer (or similar person), as part of his or her responsibilities, should monitor compliance with the written procedures.

138 For example, under the Irish regulations, certain money funds using amortized cost valuation are expected to engage in monthly portfolio analysis incorporating stress testing to examine returns under different market scenarios. See Appendix H.

139 In February 2009, the Institutional Money Market Funds Association (IMMFA) issued guidance on generic stress testing for its members, citing the trend of regulators to require, or rely on, such analysis. The guidance generally addresses stress testing for: (1) credit risk, including individual asset events, such as a downgrade, and systemic widening of credit spreads; (2) interest rate risk on assets as well as the overall fund, considering a variety of movements (e.g., parallel shifts, yield curve flattening, steepening, and twists); (3) liquidity risk, as affected by the volume of redemption requests; and (4) combined stresses, meaning the possibility of the positive correlation of risks, including a perfectly correlated risk event.
7.2 Portfolio Maturity

Money market funds currently must comply with a portfolio maturity test that is designed to limit a fund’s sensitivity to interest rate changes, and that provides that the portfolio’s WAM cannot exceed 90 days. We suggest that this period be shortened to 75 days to further protect against interest rate risk. We also suggest a new additional test of a fund’s “spread WAM,” which calculates a fund’s WAM using a more conservative measurement methodology. The Working Group believes these tests will be far more effective than the single, and longer, WAM test currently required.

RECOMMENDATIONS:

» The SEC should amend Rule 2a-7 to reduce the weighted average maturity limitation for money market funds from 90 days to 75 days.

» The SEC should amend Rule 2a-7 to require money market funds to maintain a new “spread WAM” that does not exceed 120 days.

7.2.1 Portfolio Maturity Limits That Address Interest Rate Risk

Weighted average maturity limits are designed to ensure that a money market fund’s overall sensitivity to changing interest rates does not jeopardize its ability to maintain a stable NAV. Rule 2a-7 currently requires all money market funds to maintain a WAM that does not exceed 90 days. Under the rule, the maturity of a portfolio security is deemed to be the period remaining until the date on which, in accordance with the terms of the security, the principal amount must unconditionally be paid, or, in the case of a security called for a redemption, the date on which the redemption payment must be made.

The rule includes exceptions to this general approach for specific types of securities, referred to as the “maturity shortening provisions.” First, a fund may treat a variable- or floating-rate obligation (collectively, “VROs”) with a stated maturity of 397 days or less as having a maturity equal to the time remaining until the next interest rate reset, rather than the time remaining before the principal value of the security must unconditionally be repaid. Second, a fund may treat a Government Agency VRO as having a maturity equal to the time remaining until the next interest rate reset, regardless of its stated maturity. Third, if a VRO with a stated maturity of 397 days or less is subject to a Demand Feature, a fund may treat the VRO as having a maturity equal to the time remaining until it could recover the principal by exercising the Demand Feature or the time remaining until the next interest rate reset, whichever is shorter. Finally, if a VRO with a stated maturity of more than 397 days is subject to a Demand Feature, a fund may treat the VRO as having a maturity equal to the time remaining until it could recover the principal by exercising the Demand Feature or the time remaining until the next interest rate reset, whichever is longer.
We believe it would be appropriate to further decrease the exposure of money market fund investors to interest rate risks. We therefore recommend that a fund’s WAM limitation under Rule 2a-7 be reduced from 90 days to 75 days. A shorter WAM should reduce the effect that interest rate movements could have on a fund’s NAV. We believe that 75 days is a prudent limit to reduce the interest rate risk without significantly impairing portfolio flexibility. We note that many funds already limit their maturities to an even greater extent than this new limit to receive a triple-A rating from an NRSRO, or when market conditions suggest a more conservative limit is appropriate.

7.2.2 Portfolio Maturity Limits That Address Spread Risks

Although not required by Rule 2a-7, many money market fund advisers also measure their fund’s WAM using a strict calculation that does not permit the use of interest rate reset dates and instead only uses a security’s stated (legal) final maturity date or Demand Feature to measure maturity. (We are calling this concept a “spread WAM”). This helps to limit the effect of changes in interest rate spreads (i.e., the additional yield paid on a security above the risk-free rate of return) on their funds’ portfolios. For example, the price of a VRO with a stated maturity of one year but whose interest rate adjusts every three months would be expected to fall more in response to a widening of credit spreads than a comparably rated instrument with a stated maturity of three months. The traditional WAM measure currently mandated by Rule 2a-7 would treat the two securities equally. In contrast, the spread WAM would treat the VRO as more price sensitive because of its longer maturity.

The difference between the WAM calculation currently required by Rule 2a-7 and the spread WAM is that VROs would not be treated as maturing on the date of their next interest rate adjustment. Although variable and floating interest rates provide a reasonable means of protecting a money market fund against changes in interest rates, they do not necessarily protect a fund against the need to liquidate securities in the face of redemptions. Securities that are generally subject to a Demand Feature would still be treated as having a shortened maturity (based on the Demand Feature) for purposes of calculating the spread WAM.

Based on the above rationale, for each instrument in a fund, a spread WAM would be calculated as follows:

- If the instrument is not subject to a Demand Feature, the credit maturity date is equal to the stated (final) maturity date. For example, a floating-rate instrument with a final maturity of one year has a maturity of one year, regardless of how frequently the floating rate is reset.

- If the instrument is subject to a Demand Feature, the credit maturity date is equal to the lesser of (a) the stated (final) maturity date or (b) the latest date on which principal and accrued interest would be due following exercise of a Demand Feature. For example, a one-year master note with a rolling seven-day Demand Feature has a credit maturity of seven days during most of its life in the fund.

140 Given that interest rate spreads may change based on market factors other than credit risks, the Working Group proposes that all money market funds comply with the 120-day spread WAM limitation, even if they invest primarily in Government Securities.
After maturities are established for all instruments in the fund, an asset-weighted average (using amortized cost as the asset weight based on net assets) is calculated to get the fund’s spread WAM.

The following example demonstrates how the two WAM measures differ:

**Portfolio Composition:**

- 50 percent of Portfolio: Overnight Government Agency discount notes.
- 50 Percent of Portfolio: Two Year Government Agency VROs that reset daily based on effective federal funds rate.

**WAM Calculation:**

If the WAM uses reset dates in its calculation as is currently provided by Rule 2a-7, the portfolio has a WAM of one day. In contrast, by applying a spread WAM calculation that does not recognize reset dates, the portfolio has a WAM of 365.5 days, far longer than the 120-day limit we are proposing. A fund subject to a 120-day spread WAM limit could not have invested more than 16 percent of its portfolio in two year Government Agency VROs (assuming the balance of the fund was invested in overnight obligations).

Advisers that utilize a spread WAM believe that this metric provides an additional layer of protection for their funds and shareholders in volatile markets. The Working Group therefore recommends that Rule 2a-7 be amended to require all money market funds maintain a spread WAM that does not exceed 120 days. We believe this new requirement will help provide money market fund shareholders with additional safeguards by ensuring that funds can maintain stability of principal with a high degree of confidence, even during periods of extreme market volatility. We further believe the 120-day limit is flexible enough during “normal” market conditions to continue to allow funds to differentiate themselves through yield and performance, as appropriate.

### 7.3 Enhance Credit Analysis

The financial market crisis, with its roots in subprime mortgages, demonstrated that new and complex structures demand analysis that extends well beyond that of their issuers’ creditworthiness. The success of money market funds depends upon thorough credit review processes, and our recommendations seek to institutionalize those industry best practices.

In the Working Group’s judgment, credit rating agencies, notwithstanding their obvious failings, do provide an important “floor” for Rule 2a-7, below which no money market fund may invest. We believe that retaining this requirement as part of a more thorough credit analysis will help ensure that money market funds do not take imprudent risks. Finally, we believe that credit rating agencies’ operations can be greatly improved. In addition to supporting those agencies’ and the SEC’s reform efforts, we recommend that money market funds be required to designate publicly a minimum of three credit rating agencies (i.e., NRSROs) that they will monitor; the
Working Group proposes this change to encourage rating agencies seeking to be chosen for this designation to improve their short-term ratings processes. These recommendations are discussed in more detail below.

RECOMMENDATIONS:

» The SEC should amend Rule 2a-7 to require money market fund advisers to establish a “new products” or similar committee that would review and approve new structures prior to investment by their funds.

» Money market fund advisers should consider and when appropriate, follow best practices in connection with minimal credit risk determinations.

» The SEC should retain references to NRSROs in Rule 2a-7 as an important “floor” on permissible investments.

» The SEC should amend Rule 2a-7 to require money market fund advisers to designate and publicly disclose, pursuant to procedures approved by the fund’s board of directors, a minimum of three NRSROs that the fund’s adviser will monitor for purposes of determining Eligibility of portfolio securities.

7.3.1 New Products Committee

Beginning in the summer of 2007, market-based liquidity for some money market fund assets proved to be unreliable. Complex, derivative securities that met the criteria to be Eligible Securities, such as collateralized debt obligations and structured investment vehicles (SIVs), were designed in low-volatility environments using assumptions regarding the value of the underlying assets that turned out to be wrong as the subprime market shifted. Indeed, despite being Eligible Securities under Rule 2a-7, some of these structures have since raised significant issues for money market funds or other investment vehicles that seek to preserve principal and provide shareholders with ready access to liquidity. In fact, many money market fund sponsors either purchased the structures from, or entered into credit support arrangements with, their affiliated funds in order to maintain the funds’ stable share price of $1.00.

As a result of money market funds’ experiences with SIVs and other complex structures, and in a further effort to improve the process by which money market funds select potential investments, the Working Group recommends that Rule 2a-7 be amended to require money market fund advisers to establish a “new products” committee or similar group that would review and approve novel securities, credit structures, or investment techniques prior to investment by their funds. The committee, which could be part of a broader group charged with maintaining a formal process for reviewing new or complex securities for all types of funds, or part of a risk management function, would meet periodically to evaluate each new product or structure from a market, counterparty, securities regulatory, disclosure, tax, accounting, and operational perspective. In particular, the committee would provide an assessment of whether a security that is otherwise Eligible under Rule 2a-7 is also
an appropriate investment for a money market fund and consistent with the fund’s objective of maintaining a stable NAV per share. In addition, the committee should periodically reevaluate new products and structures previously approved to ensure that they are operating in a manner consistent with the committee’s original consideration and approval. While the role and structure of the committee should be tailored for the adviser’s particular circumstances, risk profile, and client base, at a minimum, we believe the committee should include, in addition to senior investment professionals, the fund’s CCO and a senior executive of the adviser to ensure the appropriate, risk-limiting tone from the top.

7.3.2 Minimal Credit Risks

Rule 2a-7 requires a money market fund’s board (or its delegate, which is usually the fund’s investment adviser) to evaluate independently the credit quality of each portfolio investment and determine that each investment presents minimal credit risks. As the SEC stated when it adopted Rule 2a-7, an instrument must be evaluated for the credit risks that it presents to the particular fund at that time (i.e., time of acquisition) in light of the risks attendant to the use of amortized cost valuation or penny rounding. We continue to believe that this requirement is critical for a money market fund to meet its objective of maintaining a stable NAV per share and providing appropriate liquidity to shareholders.

Under the rule, any determination of minimal credit risks “must be based on factors pertaining to credit quality in addition to any rating assigned to such securities by an NRSRO.” Although the text of the rule does not identify what additional factors should be considered in determining minimal credit risks, the SEC in the past has provided some guidance in this regard. The money market, however, has changed significantly since this guidance was issued. Changes in the marketplace, along with the experience of money market funds through the recent market turmoil, suggest improved ways in which minimal credit risk determinations could be made. As a result, after considering a variety of practices successfully employed by various money market funds, we have provided in Appendix I industry best practices that we recommend for consideration by any money market fund board, or any adviser that has accepted responsibility for making such determinations under Rule 2a-7.

We stress that every recommendation may not be suitable for every adviser, depending on the details of the adviser’s organization or investment process. Rather, the guidance provides a process that advisers may consider when evaluating credit risks of issuers, types of securities, or credit enhancements.

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141 See Rule 2a-7 Adopting Release, supra note 40. See also Appendix F for a history of the minimal credit risk requirement.

7.3.3 Credit Ratings Requirement

The SEC has proposed to eliminate all references to NRSRO ratings from Rule 2a-7 and replace them with a new subjective standard for evaluating and monitoring securities under the rule. In our view, NRSRO ratings play a very important role under Rule 2a-7 by providing a “clear reference point” for money market funds. By acting as a floor, the rating requirement serves to keep all money market funds operating at or above the same level and constrains any money market fund from taking imprudent risks to increase yield. They also discourage funds from “stretching” the minimal credit risk concept to include investment opportunities that do not have a “high quality” rating and that could prove to be imprudent in light of the fund’s objective of maintaining a stable NAV.

As the rule’s regulatory history demonstrates, NRSRO ratings are only one factor to be considered. As discussed above, a money market fund’s board (or its delegate) also must affirmatively determine that each security purchased presents minimal credit risks. Indeed, members of the Working Group and other Institute members have confirmed that they use NRSRO ratings as a critical baseline from which to start their own internal credit review process. By eliminating the ratings’ floor, the SEC would remove an important investor protection from Rule 2a-7, introduce new uncertainties and risks, and abandon a regulatory framework that has proven to be highly successful.

We note that the SEC has adopted rules to improve the process by which rating agencies operate and has proposed others. Other countries are considering reforms as well. Reforms of this nature will increase the usefulness, credibility, and reliability of ratings. For its part, as noted above, the Working Group is recommending a set of best practices for making minimal credit risk determinations. Together with the SEC’s efforts to address weaknesses in the rating process and to improve regulatory oversight of NRSROs, these efforts should further improve the quality of credit analyses undertaken both by NRSROs and independently by money market funds.

143 See Rule 2a-7 NRSRO Release, supra note 135.
144 See Appendix E.
145 See Amendments to Rules for Nationally Recognized Statistical Rating Organizations, SEC Release No. 34-59342 (February 2, 2009), 74 FR 6456 (February 9, 2009) (adopting rule amendments that impose additional requirements on NRSROs in order to address concerns about the integrity of their credit rating procedures and methodologies); see also Re-Proposed Rules for Nationally Recognized Statistical Rating Organizations, SEC Release No. 34-59343 (February 2, 2009), 74 FR 6485 (February 9, 2009) (proposing rule amendments that would (1) require the public disclosure of credit rating histories for all outstanding issuer-paid credit ratings issued by an NRSRO and (2) prohibit an NRSRO from issuing an issuer-paid rating for a structured finance product unless the information about the product provided to the NRSRO to determine the rating and, thereafter, to monitor the rating, is made available to other NRSROs). For a discussion concerning the Institute’s positions on proposed rules to improve the operations of NRSROs, see Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Florence Harmon, Acting Secretary, Securities and Exchange Commission (July 25, 2008). The SEC also has announced that it will hold a Roundtable to examine the oversight of credit rating agencies, to be held on April 15, 2009. See Press Release, Securities and Exchange Commission, SEC Roundtable to Examine Oversight of Credit Rating Agencies (March 6, 2009), available at: http://www.sec.gov/news/press/2009/2009-46.htm.
7.3.4 Designated NRSROs

Rule 2a-7 requires money market funds to take certain actions if a security is downgraded by an NRSRO. Moreover, if a money market fund’s adviser becomes aware that any NRSRO has rated a security below its second-highest rating category, the fund’s board (or its delegate) must promptly reassess whether to continue to hold the security.

We recommend instead that Rule 2a-7 be amended to require that fund advisers designate and disclose to shareholders (e.g., via a fund’s prospectus or website), pursuant to procedures approved by the fund’s board, a minimum of three NRSROs that the fund’s adviser would monitor for purposes of determining eligibility of portfolio securities under the rule. We believe that requiring an adviser to monitor at least three NRSROs will encourage competition among the NRSROs to achieve this designation. We also believe that by committing themselves to particular rating agencies, money market funds will have consistency in the NRSROs that they look to for purposes of Rule 2a-7.146 As part of this recommendation, we also encourage members of the NRSRO community that wish to be among those commonly followed to expand their expertise in rating short-term instruments and to identify which short-term ratings correspond to the NRSRO’s “highest category.” This could help reduce the current uncertainty surrounding the short-term credit rating categories of various NRSROs.147

7.4 Assessment of Client Risk

A money market fund’s ability to maintain sufficient liquidity is closely related to the composition and diversification of its shareholder base. Unexpected large redemptions can have a direct influence on a fund’s NAV because during a declining or a frozen market, those redemptions could result in forced sales at prices that are less than what the fund would recover if it held the securities to maturity. In particular, funds with a concentrated shareholder base or a new shareholder base with uncertain liquidity requirements may need to take a more conservative approach with regard to the WAM test and liquidity than suggested by our recommendations. Such funds should be aware of the possible impact of a large redemption by one or more major shareholders and its potential risk to the fund’s ability to meet other redemption requests and maintain a stable NAV. On the other hand, funds with more stable or predictable cash flows, such as funds with large numbers of retail investors or funds with large numbers of diverse institutional shareholders, may be less exposed to such risk and need to manage their portfolio accordingly.

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146 The SEC had estimated that approximately 30 credit rating agencies will register as NRSROs under the regulatory structure established in 2007. Credit rating agencies that specialize in rating particular types of structured products or that utilize new methods of rating products also are expected to register as NRSROs. See Oversight of Credit Rating Agencies Registered as Nationally Recognized Statistical Rating Organization, SEC Release No. 34-55857 (June 5, 2007), 72 FR 33564 (June 18, 2007).

147 For instance, DBRS, Inc., defines securities with any level of an R-2 rating as having “adequate” credit quality, while securities with an R-1 (low) rating are defined as having “satisfactory” credit quality. In comparison, both Standard and Poor’s (S&P) and Fitch Ratings (Fitch) use “satisfactory” to define their second-highest short-term rating categories and “adequate” to define their third-highest short-term rating categories. Thus, securities that could only obtain the third-highest short-term rating from S&P and Fitch could nevertheless become an Eligible Security based on the DBRS rating.
RECOMMENDATIONS:

» The SEC should require that money market funds develop procedures for admitting shareholders to their funds to ensure, to the extent possible, that funds either (1) understand the expected redemption practices and liquidity needs of those investors or (2) when such information is not available, mitigate possible adverse effects that may result from such unpredictability.

» The SEC should require money market funds to post monthly website disclosures of client concentration levels by type of client and the risks that such concentration, if any, may pose to the fund.

7.4.1 Shareholder Due Diligence/Know Your Client Procedures

Although there is no “right” level of client concentration appropriate for every fund, a robust shareholder due diligence/know your client process can mitigate the risk to a fund that its liquidity levels are insufficient for its client base. Specifically, the process of developing a relationship with a client is an important step in controlling that risk to a fund. The Working Group therefore recommends that the SEC require money market funds to have procedures reasonably designed to evaluate new, and periodically re-evaluate existing, clients. The purpose of these procedures would be to seek to identify (and perhaps exclude) those shareholders with frequent investment activities in search of yield (sometimes referred to as “hot money”), or whose actions otherwise may pose a higher degree of risk to a particular money market fund, based on its structure and operations. This may be accomplished in a variety of ways, including:

» Understanding the client’s time horizon for investing in the money market fund;

» Setting a maximum target percentage that any one client or type of client can hold of a fund;

» Evaluating the level of transparency that a portal or similar trading platform may provide;

» Understanding the client’s business and liquidity needs (e.g., through a review of trading patterns or its practice of notifying and of adhering to schedules of redemptions [e.g., payroll deductions on the 15th and 30th of each month]);

» Seeking to determine whether there are identifiable economic, operational, or systemic trigger events that likely would cause a client to redeem shares;\footnote{For example, some institutional investors limit their holdings to a maximum percentage of a money market fund’s outstanding shares. If net redemptions of one fund cause these institutional investors’ holdings to exceed their internal maximum percentage, their policies may require them to redeem sufficient shares to bring their holdings under the limit. If a money market fund has a number of institutional investors subject to such limitations, significant redemptions by one institution could trigger redemptions by the other institutions, leading to a continuing cycle of redemptions.}

» Meeting the client, visiting its business locations, or conducting frequent contacts through telephone or email;

» Reviewing client documentation; and/or

» Performing ongoing monitoring of client activity.
In particular, funds should consider the various risk levels of shareholders that are omnibus accounts, external direct clients, or internal accounts or cash sweeps from other lines of business of the fund sponsor. Funds also should look closely at the shareholders’ use of portals (especially those portals that do not provide funds with the identities of the underlying users) or other third-party distribution methods, because the intentions of the shareholders using the portal may be unclear. In addition, a fund may wish to consider the proportion of retail versus institutional investors (to the extent distinguishable). Finally, the results of the stress testing previously recommended in this Report should be evaluated to determine whether the fund’s actual shareholder concentration levels match its portfolio’s liquidity under various tested scenarios. Our recommendation is designed to encourage money market fund advisers to take a more active role in their assessment of clients as a means of identifying (or excluding) those shareholders that could be detrimental to their funds, and adjusting their liquidity needs accordingly.

We further recommend that money market funds consider adopting maximum target percentage levels for individual clients, types of clients, or both. Funds also should have a mechanism in their procedures to address situations in which a client inadvertently exceeds a target because of developments outside the fund’s control—for example, if the fund experiences redemptions that cause remaining shareholder concentrations to rise beyond what would have been permitted under the procedures for new purchases. A fund should discuss with its board of directors on a periodic basis the risks that some members of the fund’s client base may pose to other shareholders.

7.4.2 Website Disclosure of Client Concentration

As previously discussed, under certain circumstances, high client concentrations can pose risks to a money market fund’s stability. Investors and their advisers may wish to assess these risks by evaluating a fund’s client profile. Just as there likely is no “right” level of client concentration appropriate for every fund, different investors may have different tolerances for the risks of other clients’ behaviors. Therefore, rather than mandating a particular maximum level of concentration, the Working Group believes that monthly website disclosure of client concentration, by categories of investor type, will alert investors and third-party commentators to the potential risks that particular types of investors may pose to the fund.

Some types of investors, such as street name accounts, omnibus accounts, and non-transparent portals, do not provide a fund manager with much (or any) transparency about the intentions of the various participants in that account. In those instances, we anticipate that the fund would disclose the percentage of its portfolio held...
by street name accounts, omnibus accounts, non-transparent portals or similar investors. We also expect that money market funds would include a discussion of the potential risks, if any, their client base may pose to the fund. This disclosure would alert the public to the size of potential clients with whom the fund sponsor would have little or no relationship. To assist with comparability among funds, we look forward to working with the SEC to develop the format that this disclosure should take, and the methodology to be used to determine how to categorize clients.

### 7.5 Addressing the Possibility of a ‘‘Run’’

In evaluating how to stem a run on a fund, we looked at other models, particularly those of offshore funds, to determine whether there are useful tools that could assist a money market fund adviser when faced with heavy redemptions. Certain foreign regulatory regimes offer fund advisers mechanisms that, provided that the actions are in the interest of fund shareholders, give them significant discretion and flexibility to address extraordinary circumstances, like an unexpected loss of liquidity in the markets, while also helping them stem any incipient run on a fund.

For example, in Europe, advisers have provided liquidity through actions such as purchases of assets and guarantees without the need for regulatory approval, as is generally the case in the United States. In addition, a manager of a UCITS fund generally has the ability, as provided in the fund’s governing documents, to temporarily suspend purchases and redemptions in exceptional cases and when the suspension is in the interests of shareholders. This action has in fact been recently utilized by European funds, including by European money funds. Similarly, in Australia, the governing documents of a registered investment fund set out the circumstances when redemptions may be limited or suspended or when the period of time for satisfying

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150 In master-feeder fund situations, for example, one feeder may only have information about that feeder’s investors, but not about the investors in other funds feeding into the master. A master-feeder fund is a two-tier structure—a “master fund” that invests in a specified range of portfolio securities consistent with its stated objectives, and one or more “feeder funds” that have investment objectives identical to the master, and that invest exclusively in shares of the master fund. The feeder funds offer their shares to investors and impose individualized administrative, distribution and/or other fees and services appropriate for the targeted shareholder base. In such instances, we would expect the feeder not only to disclose its own client concentrations, but also to disclose the percentage that it represents of the master fund, and that the actions of investors in the other feeders could have a detrimental effect on the master fund, and so also on the feeder. In time, in response to competitive pressures, some master funds may require all feeders to agree to share with each other client concentration data in order to provide investors with a clearer picture of the potential risks of the fund.

151 In addition, we recommend that this disclosure be designed to respect the privacy expectations of clients. If this disclosure requirement is adopted, we also recommend that the SEC eliminate the current requirement in Form N-1A that a money market fund must disclose all 5 percent shareholders in the fund’s Statement of Additional Information.

152 See Baptiste Aboulian, “Money Market Funds Under Watch,” Ignites Europe (October 6, 2008) (noting that fund sponsors have provided liquidity by buying assets at face value, providing guarantees on assets in trouble, and, in the case of massive redemptions, parents have provided liquidity in various forms such as redeeming the asset, providing cash, or investing in the fund themselves).

153 See Protecting Investors: A Half Century of Investment Company Regulation, Securities and Exchange Commission, Division of Investment Management (1992) at 203 (noting that most European Union (EU) member states do not prohibit transactions between a fund and an affiliate but instead rely on a fund’s depositary to prevent abuses that may arise from affiliated transactions).

154 A major category of mutual funds domiciled in the EU is composed of undertakings for collective investment in transferable securities (UCITS). UCITS are established under national regulations implementing the EU’s UCITS Directives. The UCITS regulations include general requirements in areas such as disclosure, diversification, concentration, and permissible investments. UCITS regulations are not specific to money market funds; rather, the regulations cover all types of open-end collective investment funds.

a redemption request may be extended.\footnote{See Appendix H.} In response to the recent market turmoil, France approved a measure in December 2008 that allows funds, under exceptional circumstances, to create a side pocket fund to spin off identified assets that would not be in the interest of investors to sell, \textit{e.g.}, for illiquidity reasons.\footnote{Id.} Examples of actions described in a UCITS prospectus that may be taken include the following:

\begin{itemize}
\item So-called “gating provisions” that limit redemptions—for example, in any one day, no more than 10 percent of the total value of a fund may be redeemed, and any redemption requests in excess of 10 percent would be deferred to the next business day and valued on that next business day;
\item Extending the payment of redemption proceeds to a time not to exceed, for example, 30 business days during exceptional circumstances, including when the liquidity of the fund is not sufficient to meet the redemption request; and/or
\item Temporarily suspending redemptions and deferring the calculation of the fund’s NAV, during exceptional circumstances and when such an action is in the interests of shareholders.
\end{itemize}

These actions typically do not require prior regulatory approval, although regulators may need to be notified of the action. The circumstances must be exceptional, and a dominant principle guiding a manager’s decision, or a board’s approval if necessary, to invoke such provisions is the responsibility to consider the interests of the fund’s shareholders, including weighing the interests of remaining shareholders against the actions of redeeming shareholders.\footnote{See, \textit{e.g.}, Autorité des marchés financiers Recommendations For Management Companies Managing French Funds that May Be Affected by the Madoff Affair (December 17, 2008) (noting actions to be considered by management companies and consideration of interests of remaining shareholders); September 2008 Lehman Brothers Press Release, \textit{supra} note 122 (noting suspension of redemptions as a protective action in the best interests of shareholders); January 2009 Lehman Brothers Press Release, \textit{supra} note 124 (lifting suspension with right to impose a gate limiting the aggregate amount of redemptions). See also Speech, “Current Regulatory Challenges: an Update from the FSA,” Dan Waters, UK Financial Services Authority (FSA) (January 24, 2008) (noting that with respect to redemption issues arising from liquidity difficulties in the property fund sector (non-UCITS funds), the FSA’s major consideration is to ensure customers are treated fairly; that is, that the interests of redeeming shareholders are balanced against those remaining in the fund).}

We believe, and discussions with investors confirm, that these types of provisions generally may be perceived as placing too much discretion with the adviser and would not be widely accepted by U.S. money market fund investors. Further, we believe that even if such provisions should become available, the decision to exercise these rights must be exercised by the fund’s board of directors, and particularly the fund’s independent board members.

Instead, we put forth two recommendations, discussed below, designed to allow a money market fund’s board of directors (or a committee thereof) to act quickly in response to unusually severe redemption requests to ensure fair treatment of all money market fund shareholders.
RECOMMENDATIONS:

> A money market fund’s board of directors, including the fund’s independent directors, or a committee thereof, under exigent circumstances should have the authority to suspend redemptions and purchases by the fund for a period of five business days in order to seek a “cure” for a fund that has either broken or reasonably believes it may be about to break a dollar. During that time, the fund could either seek credit support or otherwise address the NAV, or determine to permanently suspend redemptions and liquidate the fund. The fund should be required to provide prompt, nonpublic notice to the SEC staff when making this election.

> The SEC, prior to the expiration of Rule 22e-3T under the Investment Company Act of 1940, which permits a money market fund to suspend redemptions upon liquidation pursuant to the Treasury Department’s Temporary Guarantee Program for Money Market Funds, should adopt a similar rule that is available to all money market funds preparing to liquidate. Within five business days of announcing a suspension and liquidation, the fund’s board must approve and the fund must announce to shareholders its plan of liquidation.

7.5.1 Authority to Temporarily Suspend Redemptions

The requirement to treat all fund shareholders fairly is one of the most significant underpinnings of the Investment Company Act of 1940 (Investment Company Act), and has been paramount in retaining investors’ trust for almost 70 years. When drafting the Investment Company Act, David Schenker, who led the Investment Trust Study that was the foundation of the original Act, testified about past abuses when sponsors of mutual funds would suspend redemptions without clear disclosure to investors, in order to lock the investors in the fund to increase management fees. As Mr. Schenker noted, these were abusive practices clearly motivated by a conflict of interest. Mr. Schenker also stated, however, that “we are not prepared to say to this committee that you ought to prohibit the suspension [of redemptions]. You can never tell whether an emergency may arise. Suppose war is declared, with the result that the stock market ‘fell out of bed’ and you had a tremendous ‘run.’” When a run occurs, little time is available to obtain regulatory relief to suspend redemptions, and so the requirement to treat all investors fairly can be difficult to achieve.
Section 22(c) of the Investment Company Act and Rule 22c-1 thereunder impose certain requirements for the daily pricing of redeemable securities offered by funds. Section 22(e) of the Investment Company Act currently provides that a registered investment company may not suspend the right of redemption or postpone the date of repayment or satisfaction upon redemption of any redeemable securities for more than seven days, except:

- For any period (1) during which the New York Stock Exchange is closed other than customary weekend or holiday closings; or (2) during which trading on the NYSE is restricted;
- For any period during which an emergency exists as a result of which (1) disposal by the company of securities owned by it is not reasonably practicable or (2) it is not reasonably practicable for such company fairly to determine the value of its net assets; or
- For such other periods as the SEC may by order permit for the protection of security holders of the company.

The Section further states that the SEC shall “by rules and regulations determine the conditions under which (i) trading shall be deemed to be restricted and (ii) an emergency shall be deemed to exist within the meaning of this subsection.”

To date, the only rule adopted by the SEC under its authority to define an “emergency” is Rule 22e-3T, a temporary exclusion for liquidation of certain money market funds. This Rule, discussed in more detail below, was adopted in response to the Treasury Department’s Temporary Guarantee Program for Money Market Funds (Treasury Guarantee Program), and will expire once that program terminates.

On rare occasions, the SEC has granted relief, either under Rule 22c-1 or Section 22(e), to funds experiencing “emergency situations” that make it difficult to calculate their NAVs in order to meet purchase or redemption requests. Snowstorms, power outages and similar events fall into this category.

These provisions, originally designed to ensure that investors are treated fairly, can have the opposite effect when markets are so frozen that redeemability is severely impaired. As squarely demonstrated by shareholders’ experiences with Reserve Primary Fund (Primary Fund), when a fund breaks a dollar, it quickly may come under redemption pressures that the fund is unable to fulfill. Those shareholders that first submit redemption requests stand a better chance to be paid faster, and a greater amount, than those that delay. Further, selling portfolio securities en masse to meet unusually high redemption requests further depresses the market as a whole, causing any subsequent sales by the fund to occur at increasingly lower prices. Remaining shareholders bear the full brunt of these lower prices. This dynamic serves only to fuel the pace of redemptions and to undermine the confidence of money market fund shareholders generally.

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161 Section 2(a)(32) of the Investment Company Act defines a “redeemable security” as “any security, other than short-term paper, under the terms of which the holder, upon its presentation to the issuer...is entitled...to receive approximately his proportionate share of the issuer’s current net assets, or the cash equivalent thereof.”


163 As previously discussed, the once $62 billion Primary Fund received redemption requests for approximately $60 billion of the fund’s assets in just four days.
Addressing the possibility that a money market fund may be subject to a run should its NAV become, or likely soon would become, materially impaired is critical to the basic concepts of shareholder fairness upon which our industry has been built. Under such extreme circumstances, fairness dictates that other important principles, such as the ready redeemability of open-end fund shares, yield to the interest of ensuring that all shareholders are treated fairly. Protecting shareholders under these extreme circumstances requires ensuring that the actions of investors who exit a money market fund first do not harm those remaining behind.

We recognize that this possible impairment of liquidity may be unacceptable to some investors, and that money market funds may lose some clients and assets as a result of these recommendations. But we are convinced that a stronger and more protective regulatory environment is in investors’—and therefore the industry’s—best interests. From discussions with investors, we understand that many likely will diversify their portfolios among multiple money market fund sponsors to address this risk. Further, as discussed below in the disclosure section of this Report, this authority to suspend purchases and redemptions must be clearly disclosed.

We therefore recommend that the SEC adopt a rule under Section 22(e) providing, in essence, that an “emergency” would be deemed to exist at any time a majority of a money market fund’s directors, including a majority of the fund’s independent directors, or a committee thereof, determines the fund’s NAV is, or is reasonably believed about to become, materially impaired. Depending on the circumstances, “materially impaired” could mean when a money market fund is shadow priced at less than $0.995 per share. In the event an emergency occurred, the fund’s board, including the independent directors, would have the authority to suspend the fund’s redemptions, and not accept new purchases, for a period not to exceed five business days. This rule would only apply to money market funds, and may only be exercised by an adviser on behalf of a particular fund once every five years.

This internal “circuit breaker” is designed to provide a brief period of breathing room for a fund under stress, while seeking to restore its NAV. The sole purpose for taking this action would be, in the directors’ business judgment, to protect remaining shareholders from a possible run by those investors that may be faster to redeem, while the fund seeks credit support or otherwise restores its NAV to $0.995 or greater. In the event that the NAV cannot be restored within that time, the board would be required to permanently suspend redemptions and immediately begin liquidating the fund in an orderly manner, as discussed below.
7.5.2 Rule Permitting a Fund to Suspend Redemptions Upon Liquidation

The SEC’s new interim final temporary rule—Rule 22e-3T—permits money market funds that have elected to participate in the Treasury Guarantee Program to take advantage of the program and initiate the steps necessary to facilitate orderly liquidations that will protect the interests of all shareholders in the funds.\textsuperscript{164} Specifically, Rule 22e-3T will permit money market funds that commence liquidation under the Treasury Guarantee Program to temporarily suspend redemptions of their outstanding shares and postpone the payment of redemption proceeds. The release adopting the rule notes that the temporary rule is designed to “facilitate orderly liquidations and help prevent the sale of fund assets at ‘fire sale’ prices.”\textsuperscript{165} The release goes on to say that “[s]uch a result could lead to substantial losses for the liquidating fund and further depress prices for short-term securities that may be held in the portfolios of other money market funds.”\textsuperscript{166}

We agree with the SEC’s rationale for the temporary rule and also agree that the rule is consistent with the policy underlying Section 22(e). The purpose of Section 22(e) is to ensure that a redeemable security is, in fact, redeemable, and that funds do not institute barriers to redemption or suspend the right of redemption for improper purposes such as to preserve management fees by limiting redemptions.\textsuperscript{167} As the release recognizes, however, liquidation of a money market fund under the program eliminates a source of advisory fees for the adviser, removing the “ulterior motives” for suspending redemptions.

We believe the same logic applies to any money market fund that liquidates, regardless of the Treasury Guarantee Program. Furthermore, when the NAV of a money market fund falls below $1.00 per share and the fund’s board decides to liquidate the fund, redemption requests can outpace the fund’s ability to sell its portfolio instruments, to the detriment of the remaining shareholders. These requests also can outpace the SEC’s ability to grant a timely exemptive order. Under these circumstances, requiring individual applications for exemptive relief from Section 22(e) does not serve the public’s interest. Accordingly, we urge the SEC, prior to the expiration of Rule 22e-3T, to adopt a similar final exemptive rule available to all money market funds preparing to liquidate.\textsuperscript{168}

\textsuperscript{164} For a description of the Treasury Guarantee Program, see supra note 46.
\textsuperscript{165} See Rule 22e-3T Release, supra note 162.
\textsuperscript{166} Id.
\textsuperscript{167} See 1940 Hearings, supra note 159.
\textsuperscript{168} See Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth Murphy, Secretary, Securities and Exchange Commission (December 24, 2008) (commenting on Rule 22e-3T, and urging the SEC to make it permanent as described above). See also Letter from Stephen E. Roth and David S. Goldstein on behalf of the Committee of Annuity Insurers, to Elizabeth Murphy, Secretary, Securities and Exchange Commission (December 23, 2008) (urging the Commission to extend the Rule 22e-3T to permit life insurance company separate accounts registered as investment companies to similarly rely on the rule).
7.6 **Investor/Market Confusion About Money Market Funds**

Money market funds traditionally have been viewed as such low risk investments that their risk disclosures have become viewed by investors as somewhat boilerplate. In light of our recent experiences, we recommend that money market funds reassess their risk disclosures, and provide more transparency into the holdings of money market fund portfolios. The goal would be to provide the marketplace with a better understanding of how performance may be linked to risk. Recent experience also demonstrates that members of the press and public confused failing enhanced cash funds and local government investment pools with money market funds, perhaps adding to investor concern. We offer three recommendations to address these issues.

**Recommendations:**

- Money market funds should reassess and, if appropriate, revise the risk disclosures they provide to investors and the markets.
- The SEC should require money market funds to provide monthly website disclosure of portfolio holdings.
- The SEC should adopt a rule under the Investment Advisers Act of 1940 applicable to advisers to unregistered funds, designed to reduce investor and market confusion about funds that appear to be similar to money market funds, but do not comply with the risk-limiting provisions applicable to money market funds.

### 7.6.1 Enhanced Risk Disclosure

Form N-1A, the registration form used by mutual funds, requires that mutual funds provide narrative risk disclosure "summarizing the principal risks of investing in the [f]und, including the risks to which the [f]und’s portfolio as a whole is subject and the circumstances reasonably likely to affect adversely the [f]und’s NAV, yield and total return."  

Money market funds in particular must disclose that "an investment in the [f]und is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the [f]und seeks to preserve the value of your investment at $1.00 per share, it is possible to lose money by investing in the [f]und." Some money market funds have provided additional risk disclosures, but because the risk of such a fund’s breaking a dollar has largely been viewed as remote, much of this disclosure, while accurate and complete, may have come to be viewed by investors as boilerplate.

In light of recent events, many money market funds have provided additional disclosures as various market risks have unfolded. We recommend that all money market funds review and revise their disclosures, including advertising and marketing materials, and in particular their risk disclosures, to evaluate whether they fully capture the risks that money market funds may present and the effects those events may have on funds and their

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169 See Item 2 of Form N-1A.
170 [d.](#)
shareholders. To assist money market funds in developing this disclosure, we provide examples of the types of disclosure that funds may wish to consider; as with all risk disclosure, these disclosures should be tailored to the fund providing the disclosure:

» Disclosure that money market funds can break and have in the past broken a dollar, and may do so in the future;

» Disclosure that shareholders should not rely on or expect a fund’s affiliate to purchase distressed assets from a money market fund, make capital infusions, enter into capital support agreements, or take other actions to prevent the fund from breaking a dollar;

» Disclosure about how a money market fund’s portfolio securities’ credit quality can change rapidly in certain market environments, and that the default of a single holding could have the potential to cause significant NAV deterioration;

» Disclosure concerning how a money market fund’s NAV can be affected by forced selling during periods of high redemption pressures and/or illiquid markets;

» Disclosure that the actions of a few large investors in the fund may have a significant adverse effect on other shareholders;

» If the SEC adopts rules as recommended in this Report concerning the ability to suspend redemptions, disclosure that the fund’s board of directors, including a majority of the independent directors, has the ability to temporarily or permanently suspend redemptions in order to protect the interests of remaining shareholders;\(^\text{171}\) and

» For Treasury money market funds, disclosure about the effect a low-interest rate environment may have on a fund’s return, including that it may prevent the fund from providing a positive yield, paying expenses out of fund assets, or maintaining a stable $1.00 NAV.

7.6.2 Website Disclosure of Monthly Portfolio Holdings

Currently, mutual funds must publicly file with the SEC their complete portfolio holdings on a quarterly basis, no more than 60 days after the close of the quarter. Funds cannot “selectively disclose” portfolio information to certain individuals absent a confidentiality agreement that provides that the recipient will not trade on the data, but instead, must make this information available to all investors at the same time.\(^\text{172}\)

During the recent market volatility, some money market fund shareholders wanted to know, sometimes on a daily basis, the portfolio holdings of their funds. To avoid selectively disclosing this information, many money market funds began posting their holdings on their websites at periodic intervals, depending largely on what their clients desired.

\(^{171}\) Additionally, we would expect money market funds to prominently disclose their ability to suspend redemptions as recommended in this Report, the lack of liquidity that such an action would impose, and that in weighing whether to suspend redemptions, that the fund’s board would value treating all shareholders fairly as having greater importance than providing immediate liquidity.

\(^{172}\) See Item 4(d) of Form N-1A.
During our discussions with investors, we learned that while views varied, most investors, whether institutional, broker sweeps, or advisers to individuals, did not see great value in having daily access to money market fund portfolio holdings information. Some believed, however, that being able to assess this information periodically would be beneficial.

Mutual funds are very sensitive to frequent disclosure of portfolio holdings information. The confidentiality of this information is of critical importance to mutual funds. Any improper disclosure of this information can lead to frontrunning of a fund’s trades, adversely impacting the price of a security that a fund is buying or selling to the detriment of fund shareholders.

Because of the specific characteristics of money market funds and their holdings, however, the Working Group believes that the frontrunning concerns are far less significant for this type of fund. For example, money market funds' holdings are by definition very short-term in nature and therefore would not lend themselves to frontrunning by those who may want to profit by trading in a money market fund’s particular holdings. Rule 2a-7 also restricts the universe of Eligible Securities to such an extent that frontrunning, to the extent it exists at all, tends to be immaterial to money market fund performance.

As a result, the Working Group recommends that money market funds be required to post on their websites their entire portfolio holdings each month after a two-day lag. During times of market volatility, some funds may wish to post their holdings on a more frequent basis. This requirement also would only apply to money market funds.

We recognize that most investors will not, under normal market conditions, monitor their funds’ holdings; the disclosure, however, may allow third-party analysts and commentators to compare money market funds and flag certain aspects of money market fund portfolios—positive or negative—that would be of interests to investors or the market. It is hoped that these third-parties will use this, and the other disclosure recommendation discussed in this Report, to help guide the investing public about the risk characteristics of particular money market funds.

173 See Letters from Paul Schott Stevens, President, Investment Company Institute, to Christopher Cox, Chairman, Securities and Exchange Commission (September 14, 2005, August 29, 2006, and September 19, 2008); see also Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Florence Harmon, Acting Secretary, Securities and Exchange Commission (December 16, 2008).
7.6.3 Anti-Fraud Rule to Address Investor and Market Confusion

Cash management vehicles that are not required to register under the Investment Company Act currently are not held to any specific standard concerning how their sponsors hold them out to investors.

Section 206 of the Investment Advisers Act of 1940 contains general antifraud provisions that reach any investment adviser, whether or not registered with the SEC.\(^{174}\) In relevant part, Section 206 makes it unlawful for an investment adviser, directly or indirectly:

1. To employ any device, scheme, or artifice to defraud any client or prospective client;

2. To engage in any transaction, practice, or course of business that operates as a fraud or deceit upon any client or prospective client;

3. To engage in any act, practice, or course of business that is fraudulent, deceptive, or manipulative.

In addition to the provisions of the Advisers Act, the Supreme Court, in \textit{SEC v. Capital Gains Research Bureau},\(^{175}\) held that the purpose of Section 206 is to eliminate conflicts of interest, and to prevent an adviser from overreaching or taking unfair advantage of a client's trust. The Court characterized this as a fiduciary duty of the adviser to its client.

The SEC has adopted a number of rules under that section, providing detail on particular practices that it would deem to be false or misleading. The Working Group recommends that the SEC adopt another rule, providing that it would be a fraudulent or deceptive practice to advise a fund that is not registered under the Investment Company Act that either (1) uses the word “cash” (or any variant of the word, such as “money,” “liquid,” etc.) in its name; or (2) holds itself out as seeking to maintain a non-fluctuating NAV of $1.00 per share, unless the fund also complies with the risk-limiting provisions of Rule 2a-7.

The Investment Company Act contains two provisions that preclude registered investment companies from using names that could mislead investors into thinking that a fund is a money market fund when in fact it does not comply with the risk-limiting provisions that govern such funds. Rule 2a-7(b) provides generally that it is an untrue statement of material fact for a registered investment company to hold itself out as a money market fund or the equivalent of a money market fund, unless it meets the risk-limiting provisions of the rule. Rule 35d-1 under the Investment Company Act (often referred to as the “names rule”) also provides that a fund’s name would be deemed to be materially deceptive and misleading if the name suggests that the fund focuses its investments in a particular type of investment or investments, unless the fund has a policy to invest, under


\(^{175}\) 375 U.S. 180 (1963).
normal circumstances, at least 80 percent of the value of its assets in that type of investment. Subsection (d)(1) of the rule provides that the term “fund,” as used in the rule, means a registered investment company.

There is no corresponding prohibition on an unregistered fund, such as an enhanced cash fund, a bank collective fund, or other type of fund that holds itself out as maintaining a non-fluctuating NAV of $1.00 per share, from using a name that could lead an investor to believe that it was investing in a money market fund, or something that was designed to provide the same safety and stability as a money market fund. We believe that this gap could cause investors to be misled about the exact nature of their investments. As discussed in Section 6 of this Report, a number of enhanced cash funds dissolved, even before the events of September 2008. Securities lending pools similarly have experienced difficulties maintaining a market value of $0.995 per share or better, as money market funds are required to do under shadow pricing provisions.\textsuperscript{176} Our recommendation is designed to bridge the gap, to the extent possible under current law,\textsuperscript{177} between the protections afforded investors in money market funds under the Investment Company Act, which has clear limitations on how registered funds can represent themselves to the public, on the one hand, and the ways advisers to unregistered pools can represent their activities on behalf of the pool, on the other.

### 7.7 Government Oversight

The roughly $12 trillion in money market instruments in which money market funds and other pooled investment vehicles primarily invest is of tremendous importance to all participants in that market—indeed, to the economy as a whole. The Working Group realizes that any entity charged with overseeing the financial markets may require detailed and timely data about the money market and institutional investors in that market, including money market funds, and offers recommendations to that end. We also believe that government oversight of money market funds could be enhanced if the SEC were to formalize a program to monitor money market funds that have performance (after adjusting for fees) that clearly exceeds that of their peers.

**Recommendations:**

- The money market industry should work with the appropriate government entity to develop a nonpublic reporting regime for all institutional investors in the money market.
- The SEC should formalize a program such that agency staff would monitor any money market funds that, by category and excluding fees, have performance that clearly exceeds that of their peers during any month, to determine the reasons for such performance, and monitor an additional 10 randomly selected funds each month.

\textsuperscript{176} See, e.g., State Street Corporation, Form 8-K (January 16, 2009), supra note 55.

\textsuperscript{177} We recognize that even this proposed rule would not completely mitigate investor confusion, as banks and bank holding companies are excluded by statute from the definition of investment adviser (see Section 202(a)(11)(A) of the Advisers Act), and the SEC has no authority over state employees managing state funds (see Section 202(b) of the Advisers Act). Congress may wish to consider whether managers of these pools similarly should be subject to this antifraud standard.
7.7.1 Nonpublic Reporting

There have been many hearings and even more reports and suggestions for regulatory reform, most having as a key component some type of “systemic risk regulator” or similar body. We do not view any one money market fund to be systemically significant. Undoubtedly, however, the orderly operation of the money market does have systemic importance. The Working Group strongly believes that the recommendations advanced in this Report, when fully implemented, will make money market funds even more resilient than they have proved to be for nearly 40 years. Because of the importance of the money market, however, we realize that any entity charged with managing systemic risks to the financial system as a whole may require detailed and timely data about the money market and institutional investors in the money market—even from entities that on their own may not trigger systemic concerns.

We recommend that money market funds and other institutional investors provide the appropriate government body with nonpublic data designed to assist that entity in fulfilling its important mission of overseeing the markets as a whole. For many years, the Institute has provided the Federal Reserve Board and the SEC with a variety of data on the mutual fund industry on an aggregated basis. Our proposal would enhance the government’s access to money market fund data by having these funds provide data directly (e.g., on a non-aggregated basis). Possibilities for these data feeds include portfolio holdings information, client concentration levels, and notification when a money market fund’s mark-to-market price decreases to less than $0.9975.178 We also recommend that other cash management vehicles that are not required to register under the Investment Company Act be required to provide similar types of data. This would ensure that the appropriate government entity receives data about a substantial portion of the money market. We pledge to work with appropriate federal officials to implement such a regime for nonpublic reporting and monitoring.

7.7.2 SEC Staff Surveillance of Certain Money Market Fund Performance

Funds that materially outperform their peers (when the effect of fees are excluded from the analysis) may do so by assuming more risk. Primary Fund’s yield, in the weeks before it broke a dollar, was in the 99th percentile of all prime money market funds. Had Reserve Management Company, Inc., Primary Fund’s investment adviser, been on notice that it might have had to explain the rapid change in its portfolio strategy to the SEC, it may have adopted a more conservative approach to its investing. We therefore recommend that each month, the SEC staff monitor the performance of all money market funds by category (e.g., Treasury funds, prime funds) and take such action as it may deem appropriate to understand the reasons for unusually high performance, including contacting fund groups. We also suggest that this program include an element of random evaluation, and that the SEC staff also monitor 10 money market funds randomly selected each month.

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178 This proposal is modeled on the provision of the Treasury Guarantee Program that requires a participating money market fund to notify the Treasury and the SEC when its NAV declines to less than $0.9975.
7.8 **Government Resources**

As previously noted in this Report, some money market funds advisers (or their affiliates), in an effort to protect their shareholders from potential losses of principal, elected to provide support for their funds. This support took a number of forms, including purchasing Eligible Securities from a fund. This action, however, required prior SEC staff approval, and while the staff was extremely prompt and helpful in providing the relief, the requests became fairly standard and used valuable staff resources. Further, the SEC staff currently does not have to be notified of purchases by an affiliate of securities that no longer qualify as Eligible Securities, because these purchases can occur without prior approval under Rule 17a-9 under the Investment Company Act. We recommend that this rule be expanded, and that the staff receive nonpublic notification whenever the rule is used.

**RECOMMENDATIONS:**

» The SEC should amend Rule 17a-9 to allow a money market fund affiliate to purchase an Eligible Security from a fund.

» The SEC should amend Rule 2a-7 to require nonpublic notice to the SEC of any affiliated purchase in reliance on Rule 17a-9.

7.8.1 **Rule 17a-9 Transactions**

In its comment letter discussing Rule 2a-7, the Institute recommended that the SEC propose an amendment to Rule 17a-9 under the Investment Company Act to expand its availability.\(^{179}\) Currently, the rule only permits a fund’s affiliate to purchase a security that is no longer an Eligible Security.\(^ {180}\) Our experience during the recent credit market turmoil has taught us that fund shareholders may be better protected if an affiliate could exercise its ability to purchase a portfolio security at other times (e.g., when market conditions have caused the security to be illiquid but still an Eligible Security) and SEC staff resources could be allocated to other important tasks if not required to assess requests for these transactions. Expanding Rule 17a-9 in this manner also may enable affiliates to better provide money market funds with needed liquidity to meet redemptions during times of market stress.\(^ {181}\) We therefore recommend that the SEC amend Rule 17a-9 to expand the securities eligible to be purchased by an affiliate under the rule (e.g., to include situations in which a portfolio security has defaulted, has been determined to no longer present minimal credit risks, or when the issuer of the security experiences an insolvency event).

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179 See September 5 ICI Letter, supra note 135.

180 Absent an SEC exemption, Section 17(a)(2) of the Investment Company Act prohibits an affiliated person of a fund from knowingly purchasing a security from the fund.

181 Any such expansion, however, should in no way suggest that affiliated persons of funds have any legal obligation to enter into such transactions.
Last summer, the SEC proposed an amendment to Rule 2a-7 that would require that money market funds provide the SEC with prompt notice via electronic mail when an affiliate of a money market fund (or its promoter or principal underwriter) purchases from the fund a security that is no longer an Eligible Security, pursuant to Rule 17a-9. The release states the SEC’s belief that the current notice provision in Rule 2a-7, which is triggered only when a portfolio security defaults, provides the SEC with incomplete information about money market funds holding distressed securities, particularly those funds that have engaged in a transaction with an affiliated person under Rule 17a-9. We support this proposal (provided the electronic notice is nonpublic) and believe that it would enhance the SEC’s oversight of money market funds, especially during times of market stress.

7.9 Government Programs

During the credit market crisis, the federal government undertook several extraordinary measures to provide needed liquidity to the money market and one program designed to calm the fears of money market fund investors in the aftermath of Lehman Brother Holdings Inc. bankruptcy. Our recommendations regarding one of those actions, the Treasury Guarantee Program, as well as certain guidance provided by the SEC staff, are described below.

RECOMMENDATIONS:

» The Treasury Department should extend the Treasury Guarantee Program until the program expires by its terms on September 18, 2009.

» The SEC should delegate to its staff the authority to reinstate the no-action letter permitting money market funds to use amortized cost for shadow pricing certain securities, under specified market conditions, at the staff’s own motion or upon request by the industry.

7.9.1 Extension of Treasury Guarantee Program

The Treasury Guarantee Program, which applies to publicly offered money market funds, has worked as intended to bolster confidence among money market fund investors and to contribute to greater stability for the U.S. money market industry overall. The Treasury Guarantee Program is scheduled to expire on April 30, 2009, after which the Treasury Secretary has the option to extend the program up to the close of business on September 18, 2009. There has been—and we are hopeful that there will be—no occasion for the Treasury Guarantee Program to pay a claim. We nonetheless believe that it could compromise progress achieved in stabilizing the money market if the program is not extended at this time. Financial markets continue to experience substantial strains. Indeed, citing similar concerns, on February 3 the Federal Reserve announced

182 See Rule 2a-7 NRSRO Release, supra note 135.
183 See also September 5 ICI Letter, supra note 135.
the extension through October 30, 2009, of its existing liquidity programs that were scheduled to expire on April 30, 2009.\textsuperscript{185}

We do not believe that all funds will elect to renew under the program. Indeed, during the last renewal period, several large money market funds that invested only in U.S. Treasury securities declined to renew, with virtually no shareholder concern. Because of the uncertain state of the markets, however, we believe it best for each fund’s board of directors to make the determination whether to renew. We also look forward to working with Treasury Department and other government officials to develop an exit strategy from the program, so that the termination of the program itself does not cause market volatility.

We believe that the measures outlined in this Report, if implemented promptly, will strengthen money market funds such that when the Treasury Guarantee Program expires by its terms in September, money market funds will be well positioned for an orderly transition out of the program.

\subsection*{7.9.2 Amortized Cost No-Action Letter}

In times of extraordinary illiquidity in the markets, it may be helpful for the SEC staff to be able to reissue the no-action letter it issued to the Institute last fall. That letter stated that the staff would not recommend enforcement action to the Commission if a money market fund complies with Rule 2a-7 by shadow pricing certain of its portfolio securities by reference to their amortized cost value (unless the particular circumstances suggest that amortized cost is no longer appropriate), rather than using available market quotations.\textsuperscript{186} While the directors of mutual funds other than money market funds may determine that the value of debt securities with remaining maturities of 60 days or less is their amortized cost,\textsuperscript{187} money market funds generally are not permitted to rely on this position.

The staff granted the relief in reliance on the Institute’s representations that under the market conditions existing at the time the letter was granted, the shadow pricing provisions of Rule 2a-7 were not working as intended. In particular, the market for short-term securities, including commercial paper, in many instances were not resulting in the discovery of prices that reflected the fair value of securities, even of issuers that were reasonably likely to pay upon maturity. The pricing vendors customarily used by money market funds at times were not able to provide meaningful prices because inputs used to derive those prices had become less reliable indicators of price. The relief was limited to portfolio securities that (1) had a remaining maturity of 60 days or less, (2) were First Tier Securities, and (3) the fund reasonably expected to hold to maturity. The letter expired by its terms on January 12, 2009, as the market turmoil that preceded its issuance had abated.


\textsuperscript{186} Investment Company Institute, SEC No-Action Letter (pub. avail. October 10, 2008).

The amortized cost no-action letter was extremely successful in removing many of the valuation difficulties experienced by money market funds that accompanied the disrupted and illiquid market for very short-term instruments. We understand that obtaining this letter, however, required the staff of the Division of Investment Management, the division within the SEC primarily responsible for regulating mutual funds, including money market funds, to notify each of the Commissioners prior to issuance. The Working Group recommends that the SEC now delegate to the staff, under specified market conditions, the ability to reinstate the letter at the staff’s own motion or upon request by the industry. Having this authority in advance will save valuable time, and will allow the staff to use its limited resources during a time of crisis to deal with matters that do not have such precedent.

Much of the valuation strain that necessitated the amortized cost letter stemmed from a breakdown in the reliability of vendor pricing models during periods of severe market dislocations. Recognizing this, the Institute has begun discussions with several pricing vendors to consider ways to improve and enhance the transparency of their evaluation of short-term commercial paper in challenging markets. We are focusing our efforts on improving the so-called “challenge process,” through which funds can provide real-time feedback and additional market color to vendors that may improve the quality of evaluations.

7.10 Forward-Looking Enhancements

During our analysis of money market funds, we identified two aspects of their regulation that many in the Working Group believe could be strengthened or modernized, even if the provisions in question did not play a role in the recent market volatility. One, to prevent future possible problems, would be to eliminate Second Tier Securities from the definition of an Eligible Security. The other, to modernize money market regulation, would be to update the responsibilities of money market fund boards of directors to better reflect the appropriate oversight role of fund boards.

RECOMMENDATIONS:

» The SEC should amend Rule 2a-7 to eliminate Second Tier Securities from the definition of an Eligible Security.

» The SEC should modernize Rule 2a-7 to reflect the appropriate oversight role for money market fund boards of directors.

7.10.1 Second Tier Securities

Currently, Rule 2a-7 permits taxable funds to invest up to 5 percent of their assets in Second Tier Securities (e.g., securities that have been rated A-2 or P-2). For Tax Exempt Funds, this 5 percent test applies only to Second Tier Conduit Securities (municipal securities whose payment is ultimately backed by a non-municipal issuer). If a Tax Exempt Fund purchases a non-Conduit Security, that security is not subject to the 5 percent limit on aggregate exposure to Second Tier Securities. In today’s fast-moving financial markets, however, rapid quality deterioration or default risk is a possibility for all securities, and especially those that have not been
rated by an NRSRO in the highest short-term rating category. Compared to First Tier Securities, Second Tier Securities tend to have weaker fundamental credit profiles. In addition, Second Tier Securities represent only 6 percent of the $1.2 trillion U.S. Rule 2a-7 commercial paper market (or $63 billion).\textsuperscript{188} As a result of their weaker credit profiles, smaller overall market share, and smaller issuer program sizes, Second Tier Securities tend to be less liquid than First Tier Securities.

In determining the quality standards for money market fund portfolio securities, the exclusive focus must be on the protection of money market fund shareholders, who seek safety by investing in funds whose objective is the maintenance of a stable NAV. The Working Group believes that Second Tier Securities may involve future risks imprudent for funds seeking to maintain a stable NAV. We therefore believe that money market funds should be limited to holding only First Tier Securities. Similar to the liquidity requirements discussed above, however, this would be a time-of-purchase test. Specifically, if a First Tier Security is downgraded to Second Tier after an adviser has purchased the security for the fund, the fund may still hold the security.

### 7.10.2 Board Oversight

Rule 2a-7 recognizes that money market fund boards should not be involved in management-level determinations and permits fund boards to delegate some of the specific responsibilities imposed on them. As the SEC stated when adopting Rule 2a-7, “the rule does not require that the board personally become involved in the day-to-day operations of the fund, nor does the rule require the board to be an insurer of the fund or the fund’s investment adviser.”\textsuperscript{189} The SEC also acknowledged in Rule 2a-7’s proposing release that fund boards “typically rely on the fund’s adviser” through the delegation provisions of the rule.\textsuperscript{190}

Even if a board can delegate the responsibility for making specific determinations, however, it still is ultimately responsible for the determinations that are made. The Working Group recommends that, rather than impose responsibilities on fund boards that are expected to be delegated, Rule 2a-7 be revised to reflect the appropriate oversight role of fund boards.\textsuperscript{191}

Specifically, we recommend updating Rule 2a-7 by revising provisions of the rule that involve boards at an inappropriate level in the investment process. For example, rather than limit investments to securities that the “fund’s board of directors determines present minimal credit risks,” the rule should be revised to simply limit investments in securities “that present minimal credit risks.”\textsuperscript{192} The adviser, who has the technical expertise in this area, would make the credit quality determination (as it does currently), subject to fund board oversight.


\textsuperscript{189} See Rule 2a-7 Adopting Release, supra note 40.

\textsuperscript{190} See Rule 2a-7 Proposing Release, supra note 39.

\textsuperscript{191} The Working Group’s recommendations are consistent with those made by the Independent Directors Council. See Letter from Robert W. Uek, Chair, Independent Directors Council Governing Council, to Florence E. Harmon, Acting Secretary, Securities and Exchange Commission (August 29, 2008).

\textsuperscript{192} See Rule 2a-7(c)(3)(i).
Similarly, the provision relating to ratings downgrades should be revised to eliminate the specific responsibilities imposed on fund boards and to permit fund boards to exercise oversight over the responses to ratings downgrades through, for example, the adoption and oversight of policies and procedures.193

On the other hand, the Working Group believes that boards should retain the following responsibilities, which appropriately involve fund boards in determinations essential to the operation of a money market fund:

- the initial determination that it is in the best interests of the fund and its shareholders to maintain a stable NAV by virtue of either the amortized cost method or the penny-rounding method (Rule 2a-7(c)(1));
- the establishment of required procedures under the amortized cost or penny-rounding method (Rule 2a-7(c)(7)(i), (c)(8) and (c)(9));
- determinations made in response to defaults of portfolio securities (Rule 2a-7(c)(6)(ii)); and
- establishment and review of shadow pricing procedures (Rule 2a-7(c)(7)(ii)(A-C)).

193 See Rule 2a-7(c)(6)(i). Other provisions that inappropriately involve boards in the investment process include, but are not limited to, paragraphs (c)(3)(iv) (determination that there is minimal risk that the circumstances that would result in a Conditional Demand Feature not being exercisable will occur); (c)(4) (certain determinations with respect to money market funds in which the fund invests); (c)(5) (determination that certain Demand Features will not be relied upon); and (c)(6)(i)(C) (determination that disposal of certain securities subject to Demand Features that are downgraded would not be in the best interest of the fund).
The Working Group studied and considered a wide range of reform proposals for the money market and money market funds. We believe that the recommendations set forth in Section 7 seek to: respond to weaknesses in money market fund regulation that were revealed by the recent abnormal market climate; identify potential areas for reform; and provide the government detailed data to better discern trends and the role played by institutional investors in the overall money market. This section discusses various proposals for reform that the Working Group does not endorse.

Proposals for regulatory changes to money market funds are varied. Some commentators have indicated that money market funds should be required to float their net asset values (NAVs). Others have suggested that money market funds be insured and that the funds or their advisers hold capital. Still others have combined these various proposals and recommended that money market funds be required to choose either to float their NAVs or to become special-purpose banks with capital requirements and deposit insurance. Other, less drastic, proposals include separating institutional and retail investors into separate funds, or requiring investors making large withdrawals to take them in kind by giving them an equal share of each security in a fund’s portfolio.

Many of these recommendations appear to be based on the premise that money market funds are unregulated, and this lack of regulation caused the problems that money market funds experienced during the credit market crisis. As discussed in Section 4 and throughout this Report, however, money market funds are subject to far-reaching federal regulation, both explicitly through Rule 2a-7 under the Investment Company Act of 1940 (Investment Company Act) and more generally as mutual funds through the whole of the Investment Company Act and other federal securities laws. It is incorrect to claim that these funds are not regulated.

There also seems to be a belief that money market funds and their investors reacted uniquely to the events in 2008. For example, the actions of money market funds to pull back from The Bear Stearns Companies Inc. (Bear Stearns) before and during March 2008 was part of a much broader contraction of Bear Stearns’s credit lines by all types of investors. Money market funds acted in a manner consistent with their fiduciary responsibility to protect fund shareholders. Further, while money market funds did experience difficulties during September 2008, these challenges were part of a sudden and wholesale shift by investors globally to reduce their exposure to debt instruments that were much riskier than had been thought. This reevaluation of risk followed the U.S. government takeovers of Fannie Mae and Freddie Mac, the buyout of Merrill Lynch Co., Inc. (Merrill Lynch), the collapse of Lehman Brothers Holdings Inc. (Lehman), the rescue of American International Group,

194 See Group of Thirty Report, supra note 8.
Inc. (AIG), and the building financial crisis both in the U.S. and abroad. These events revealed problems at financial firms that were far deeper and more widespread than many market participants had expected. As new concerns mounted about the stability of a growing number of financial institutions, investors questioned whether and how the U.S. and foreign governments would or could protect creditors. These uncertainties and changed expectations about the health of financial institutions fanned market participants’ fears. Concerns of money market fund investors about the risk exposure of their money market funds and the ability of sponsors of these funds to support them in the midst of a far-reaching financial crisis led some large institutional investors in money market funds to join the much broader run to Treasury securities, further overwhelming the financial system’s ability to accommodate this sudden and broad-based change in the market outlook.

Proposals that seek to restructure regulations to insulate money market funds from future market disturbances pose the risk that money managers will be less responsive to the deterioration of a firm’s credit quality, thus reducing overall market discipline to allocate capital efficiently. Furthermore, if regulatory changes reduce the sensitivity of money market fund investors to the credit quality of their funds’ investments, market discipline will be further eroded. Finally, if new rules cause assets to flow into other less regulated vehicles, then the government’s ability to react to future credit market events will itself be impaired.

The proposals, and our concerns with each of them, are discussed below. The first section explores the proposition that money market funds should let their share prices fluctuate, or be subject to regulation like banks. We believe that neither of these reforms will decrease systemic risk; indeed, they could actually increase it. The second section discusses proposals to preclude funds from commingling assets of retail and institutional investors and to require funds to redeem investors in kind as a means of addressing illiquidity concerns. We do not believe that either of these proposals are practical.

8.1 Floating NAVs and Bank-Like Regulation

Some commentators have suggested that money market funds be required to “float their NAVs” by letting their share price fluctuate. Others have argued that money market funds should be subject to capital requirements. Still others have combined these various proposals and recommended that money market funds be required to choose either to float their NAVs or to become special-purpose banks with capital requirements and deposit insurance.195

Our main concerns with these recommendations are as follows. First, investors will reject floating NAV money market funds and a large portion of the assets will flow into other less regulated alternatives. Second, imposing capital requirements on existing money market funds faces significant accounting and tax challenges and provides limited protection against the kinds of broad market events that are most likely to cause widespread redemptions. Third, fully insuring money market funds will likely attract assets from direct holdings of securities, existing unregistered cash pools, and possibly drain a significant portion of deposits from traditional 195 See Group of Thirty Report, supra note 8.
banks. And finally, a partial insurance program would do little to alter the behavior of large institutional shareholders of money market funds in periods of stress in the money market.

### 8.1.1 Floating NAV

A hallmark feature of a money market fund is its stable NAV. Recently, some commentators have recommended that money market funds only be allowed to carry a fluctuating NAV. These commentators suggest that this would reduce systemic risk by addressing some of the difficulties that money market funds encountered in 2008, as they tried to provide both liquidity and a stable NAV.

The Working Group strongly disagrees. Fundamentally changing the nature of money market funds (and in the process eviscerating a product that has been so successful for both investors and the U.S. money market) goes too far and will create new risks. As discussed below, there are substantial legal, operational, and practical hurdles to redirecting retail and institutional demand from a fixed to a floating NAV product. Indeed, because of the very real and well-ingrained institutional and legal motivations driving the demand for a stable NAV product, investors will continue to seek such a product.

#### 8.1.1.1 Reducing Systemic Risk

One of the supposed attractions of a floating NAV product is the belief that investors would be less likely to quickly redeem shares, thereby reducing the risk of large, rapid outflows from money market funds. Commentators point to long-term mutual funds, which at times have suffered significant losses but typically experienced only modest outflows. For instance, during the sharp market sell-off during the fall of 2008, stock fund returns suffered losses amounting to 30 percent of fund assets and bond funds declined 10 percent. Net outflows from these funds, however, totaled only 3 percent of their assets during the last three months of the year.

Evidence for specific types of mutual funds, particularly those designed for investors seeking a lower risk investment, however, show a less compelling case. For example, ultra-short bond funds are similar to money market funds in that they generally invest in fixed-income securities with short maturities. The NAV of ultra-short bond funds, however, fluctuates, as shown in Figure 8.1. During 2004 and 2005, the average NAV on these funds rose about 7 percent and then moved in a fairly tight range until mid-2007. Beginning in the summer of 2007, the average NAV on these funds began to fall modestly, and fund flows turned negative. Then in February and March 2008, several ultra-short bond funds posted significant NAV declines, and the average NAV on all these funds fell about 2 percent. During the four weeks ending in early April, ultra-short bond funds experienced a cumulative outflow of 15 percent of assets. Thereafter, even though NAVs stabilized for much of the remainder of the year, moderate outflows continued, and by the end of 2008 assets of these funds were 50 percent below their levels at the beginning of the year and down more than 60 percent from their peak in mid-2007.

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\[196\] Ultra-short bond funds tend to have higher risks than money market funds because they are not subject to Rule 2a-7.
The experience in Europe of certain money and bond funds likewise demonstrates that floating NAV funds can also face strong investor outflows during periods of market turmoil. For example, in the summer of 2007, French floating NAV dynamic money funds (or trésorerie dynamique funds) began to suffer significant investor outflows when problems in the credit markets from exposure to U.S. subprime mortgages surfaced (Figure 8.2).\textsuperscript{197} A year later, European bond funds similarly suffered heavy outflows as market turmoil led investors to seek safer havens for their savings. For example, in the fourth quarter of 2008, bond funds authorized in Luxembourg experienced outflows of €48 billion, or 12 percent of their assets, even though the funds had valuation declines of about 3 percent.\textsuperscript{198} As in the United States, the last quarter of 2008 in Europe was a remarkable period, as some European countries guaranteed deposits, and countries such as Luxemburg and Germany pledged to support the liquidity of money funds domiciled in their respective countries.\textsuperscript{199}

\textsuperscript{197} See, e.g., Press Release, Société Générale, Activities and Results 2007 (February 21, 2008) (noting that the liquidity crisis prevailing since the summer of 2007 has led to substantial outflows from dynamic money funds in France and that Société Générale Asset Management had decided to ensure liquidity for some funds).

\textsuperscript{198} EFAMA, Quarterly Statistical Release, No. 36 (February 2009).

\textsuperscript{199} See Heather Dale, “Bond Funds Take Battering,” \textit{Ignites Europe} (December 22, 2008) (reporting that bond fund outflows year to date are €157.24 billion); Baptiste Aboulian, “October: Mutual Funds’ Worst Nightmare,” \textit{Ignites Europe} (November 26, 2008) (noting that investors were taking money from equity and bond funds in part due to panic selling); Luxembourg Government Press Release, \textit{supra} note 131; Standard & Poor’s Equity Research, \textit{supra} note 131.
These examples demonstrate that despite having floating NAVs, fixed-income funds can experience significant outflows if their investors are highly risk-adverse. The reason is that during periods of financial distress, markets for fixed income securities can become illiquid while the risk-averse investors in these funds are seeking to redeem their shares. As a result, investors' demands for redemptions can outstrip the ability of fixed income funds—even those with floating NAVs—to meet such redemptions because assets cannot be quickly sold in an illiquid market. Consequently, in our judgment, and as supported by the situations described above, money market funds with floating NAVs would not significantly reduce the risk of large movements of investor assets.

8.1.1.2 Implications for Investors

The benefits to investors of a stable $1.00 NAV are many. The $1.00 NAV provides convenience and simplicity in terms of tax, accounting, and recordkeeping. In addition, many institutional investors are permitted to use money market funds only if such funds maintain a stable NAV. Asking or requiring money market funds to replace a stable $1.00 NAV with a floating NAV would undermine their convenience and simplicity and would raise new accounting, legal, and tax hurdles whose resolution is uncertain, threatening the continued use of money market funds.

Tax convenience: With a stable $1.00 NAV, all of a money market fund’s returns are distributed to shareholders as income. This treatment greatly reduces tax and accounting burdens for both retail and institutional investors. It also relieves investors of having to consider the timing of purchases and sales of shares of money market

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**FIGURE 8.2**

**Growth of IMMFA and French Money Market Fund Assets**

*Index=100, July 2007*

1 IMMFA and French money fund assets converted to USD using month-end exchange rates as of January 2009.

2 IMMFA data excludes all government money fund assets.

3 All French money funds have a variable NAV and typically are accumulating shares, meaning dividends are accumulated rather than distributed as yield. The trésorerie dynamique funds generally may seek to outperform traditional money market indices and therefore invest in a broader range of instruments than the trésorerie régulière funds.

Sources: iMoneyNet and Europerformance
funds, as they must with variable NAV funds, to comply with the so-called “wash sale rule.” With a floating NAV, investors could be required to track the amount and timing of all money market fund purchases and sales, capital gains and losses, and share cost basis. To be sure, investors already face these burdens in connection with investments in long-term mutual funds. But most investors do not trade in and out of long-term mutual funds on a frequent basis, as many do with money market funds. Thus, if money market funds had a floating NAV, all share sales become tax-reportable events, potentially greatly magnifying investors’ tax and recordkeeping burdens.

Accounting simplicity: With a stable $1.00 NAV, money market funds qualify as “cash equivalents” under accounting standards. Because the NAV is fixed at $1.00 per share, there is no need for investors to recognize gains or losses for financial accounting purposes. With a floating NAV, different accounting standards would apply. Companies would likely have to reclassify their holdings of money market funds as short-term investments falling into one of three categories:

- **Held-to-maturity securities.** These are debt securities that the enterprise has the positive intent and ability to hold to maturity. Securities are reported at amortized cost, thus unrealized gains and losses are not recognized.

- **Trading securities.** These are debt and equity securities that are bought and held principally for the purpose of selling them in the near term. Securities are reported at fair value, with changes in value over the reporting period included in earnings.

- **Available-for-sale securities.** These are debt and equity securities not classified as either held-to-maturity securities or trading securities. Securities are reported at fair value, with changes in value over the reporting period included in shareholder equity.

A security is classified at time of purchase, which determines the accounting treatment of gains and losses. Our sense is that money market funds with a floating NAV would have to be categorized as “available-for-sale.”

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200 Under IRS rules, the so-called “wash sale rule” prevents investors from using losses on the sale of a security to offset gains if the sold security had been purchased within the previous 30 days or is repurchased within the next 30 days. Instead, losses on sales must be added to the basis of the replaced securities. The rule does not come into play with money market funds in their present form because money market funds have a stable NAV.

201 See Peter Crane, “MoneyVoices: Don’t Mess with $1 NAV,” Ignites (February 5, 2009).

202 For a description of cash equivalents as defined in FAS 95, see supra note 25.

203 Under this treatment, Financial Accounting Standards No. 115 (FAS 115) comes into play. FAS 115 is the governing standard for accounting for equity securities with readily determinable fair values and debt securities. It requires companies to classify their securities into one of three categories. The classification determines the accounting treatment of gains and losses. See FAS 115, Accounting for Certain Investments in Debt and Equity Securities (May, 1993).

204 The establishment of fair value is governed by Financial Accounting Standards No. 157 (FAS 157). The holder of the security must assign the security to one of three levels: (1) Level 1 is a security with a readily determinable market price, (2) Level 2 is a security without a readily determinable market price but is similar to other securities that do have determinable market prices, and (3) Level 3 is a security for which no determinable or comparable market prices exist. The holder of a Level 3 security normally uses modeling techniques to estimate fair value based on factors such as credit quality, likely maturity, and cash flows. A money market fund with a floating NAV likely would be deemed a Level 1 security because presumably its NAV would be posted at the end of the trading day as is currently the requirement. See FAS 157, Fair Value Measurements (September 2006).

205 Money market funds with floating NAVs may be ineligible for the held-to-maturity category because they are not debt securities and do not have a stated maturity. Such funds also would not appear to fit well in the trading category, as trading generally reflects active and frequent buying and selling, and with the objective of generating profits on short-term differences in price.
As a result, companies would face the additional burden of having to mark to market the value of their money market fund shares. Corporate treasurers would also have to track the costs of their shares and determine how to match purchases and redemptions for purposes of calculating gains and losses for accounting and tax purposes. Moreover, under the new treatment, companies could not enter and reconcile cash transactions nor calculate the precise amount of operating cash on hand until the money market fund’s NAV became known at the end of the day, creating additional disincentives for corporations to use money market funds for cash management purposes.

**Operational convenience:** For corporations, a stable share price for money market funds simplifies operations: the stable $1.00 NAV is known in advance, and often is hard-coded into companies’ accounting and cash-tracking systems. The same is true for bank sweep account systems that have an option to invest in money market funds. Also, corporations sometimes have internal guidelines or cash management policies specifying that no more than a certain percentage of operating cash may be invested with a particular money market fund or that the company may invest in a given money market fund only if it exceeds a given size; these kinds of restrictions are easier to adhere to with a stable $1.00 NAV. In addition, broker-dealers typically offer retail investors a range of features tied to their money market funds, including ATM access, checkwriting, and ACH and fedwire transfers. These features are generally provided only for accounts with a stable NAV. For example, money market funds typically offer retail investors same-day settlement on shares redeemed via “wire transfers” (where redemption proceeds are wired to an investor’s bank account via fedwire), whereas bond funds typically offer next day settlement for wire transfers.

**Legal and other constraints:** Institutional investors often face legal or other constraints that allow them to invest their cash balances in money market funds only if such funds maintain a stable NAV. For example, most corporations have board-approved policies permitting them to invest operating cash balances (balances used to meet short-term needs) only in cash pools that do not fluctuate in value. Many indentures and other trust documents authorize investments in money market funds on the assumption that they seek to maintain a stable NAV. Many state laws and regulations also authorize municipalities, insurance companies and other state regulated entities to invest in stable NAV funds, sometimes explicitly including funds operating in compliance with Rule 2a-7. Thus, under a floating NAV, most state and local governments would no longer be able to use money market funds to help manage their cash.

In sum, there are substantial legal, tax, recordkeeping and other hurdles that would prevent the easy utilization of money market funds with a floating NAV. Some state and local governments and trust accounts would be precluded by law or regulations from using such a security. Internal policies would prevent certain corporations from using such a security. Presumably, some investors might be able to adapt over time to the additional tax, accounting, and recordkeeping burdens associated with floating NAV money market funds. The institutional cash managers with whom we spoke, however, indicated that they would most likely migrate to other, readily available cash-management products that are still able to offer “dollar-in, dollar-out.” Such cash managers told us

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206 See Appendix D for a summary of state specific money market fund permissible investments.
that the pecuniary and “headache” costs of adjusting to a floating NAV would outweigh the potential benefits of continuing to invest in money market funds.

Survey evidence supports this view. In January 2009, Treasury Strategies, Inc., conducted a survey of institutional cash managers, asking how they would respond to money market funds with a floating NAV. Fifty-five percent of the cash managers surveyed indicated that they would substantially decrease their investment in money market funds, and another 5 percent indicated that they would decrease their holdings somewhat (Figure 8.3). Less than one-fifth of the respondents indicated that they would continue to use money market funds to the same degree.

FIGURE 8.3
Institutional Cash Managers’ Expected Usage of Floating-NAV Money Market Funds
Percentage of respondents, January 2009

The survey also invited respondents to comment on the usefulness of money market funds with a floating NAV. The individual responses underscore the new accounting and valuation complexities that would accompany the change. Many anticipated that they would divest largely or even completely from their money market fund holdings. As one respondent stated, “if this investment is used for your daily operating needs, what a nightmare.”207 Another stated that he “would expect to see a level of chaos as investors struggle to revalue their liquidity positions each day. Transfers would be subject to pricing whims and possibly intraday volatility.”208 When specifically asked whether there would be any accounting ramifications or systems issues associated with a fluctuating NAV money market fund, a respondent expressed the views of many by declaring, “ABSOLUTELY. This is a terrible idea and will not work in practice. It would create accounting and tracking nightmares with

208 Id.
the daily data feeds necessary to pull in and apply.” Another said that in addition to accounting issues, “there would also be system implications, because the value adjusting would take time and could be complex given investments that are usually increased or decreased daily. Add that to changing the value and frankly that is too much complexity for a standard Treasury group.”

8.1.1.3 Alternative Investments and Implications for Markets

Prohibiting money market funds from having a stable NAV would likely lead many, if not most, institutional investors to migrate from money market funds to other financial products. There are three possible scenarios if money market funds were required to float their NAVs.

First, asset managers would find other means to offer a stable NAV cash pool, leading to rapid disintermediation from money market funds into pools outside the protections of the Investment Company Act. Prohibiting mutual funds from offering a stable NAV product thus would impose a regulatory barrier that disadvantages one form of pooled investment from another. As discussed in Section 5, there are a range of products and services that could readily provide access to the money market at a stable share price. Inflows into these alternative investments likely would create large pools of assets either domestically or offshore that would fall outside the careful regulatory framework in place for money market funds, and potentially increase the systemic risk to the financial system.

In the unlikely event that there were no clear means of creating alternative stable NAV investment pools, the cash held in money market funds would presumably flow to traditional banks. This would result in a significant reduction in the supply of short-term credit to corporate America unless banks raised significant amounts of capital to be able to support their expanded balance sheets. Even if they could raise the capital to support this expansion, the market would be less efficient and the cost of short-term credit would rise. Furthermore, municipalities would lose an important source of financing in the short-term markets because banks cannot pass through tax-exempt income and simply could not replace tax-exempt money market funds. Institutional and retail investors likely would place their cash in demand deposits, negotiable order of withdrawal accounts, and money market demand accounts to maintain the liquidity that they had with money market funds. Banks would then need to hold more liquid and higher quality assets in order to meet the requirements of this funding source, especially if institutional investors became concerned about counterparty risk and sought to withdraw their deposits during periods of financial stress. To the extent that banks did not increase their liquidity, systemic risk could increase.

209 Id.
210 Id.
211 Retail investors have fewer alternatives available to them; over time, they would likely migrate to bank products despite the lower yield paid by those products.
Finally, if stable NAV funds were required to register as special purpose banks with deposit insurance and capital requirements, the cost of such a structure would certainly be greater than currently for money market funds. The risk levels of such banks holding highly rated, short-term securities, however, would be so low that properly priced insurance premiums and capital costs would allow these banks to offer yields above those on bank deposits. Insured special purpose banks offering superior yields would cause significant market dislocations, as discussed below.

8.1.2 Insurance Programs for Money Market Funds

This section considers and rejects the possibility of establishing a permanent insurance program for money market funds. We examine some possible scenarios of permanently extending insurance to money market funds or a special purpose bank, and discuss our concerns with how such insurance would affect the financial markets as a whole. Finally, we examine three possible structures for such an insurance program: pure federal insurance; pure private insurance; and a hybrid federal/private program.

8.1.2.1 Pure Federal Insurance

On September 19, 2008, to help stem the unusual outflows from money market funds, the Treasury Department instituted the Temporary Guarantee Program for Money Market Funds (Treasury Guarantee Program), a temporary money market fund guarantee program. For a quarterly fee of 1 to 1.5 basis point of assets under management, a fund could purchase from the Treasury Department a guarantee that would cover any losses for any assets in accounts in the money market fund as of September 19.

There is no industry consensus that a permanent federal insurance program is desirable for investors or financial markets. There is strong agreement that the Working Group’s recommendations will enhance the existing risk-limiting provisions of money market funds. To the extent that concerns remain about the effects of significant redemptions on a fund, the best solution is to modify Rule 2a-7.

A permanent federal insurance program raises deep concerns about market distortions. For example, if there were an unlimited federal guarantee on investments in money market funds, the insured product would still likely offer a higher return than bank deposits in many market environments. Indeed, the historical yield differential on Treasury-only money market funds and bank deposits indicates that yields on the insured funds with no credit risk would be typically well above those offered on bank deposits. Insured funds would draw large sums of money from traditional banks, and possibly even other cash pools and direct investments in the money markets, causing significant disruption to the banking system and the money market. Finally, full insurance would reduce the sensitivity of investors to the credit, interest rate, liquidity, and client risks of their funds and erode an important role investors play in monitoring their funds’ activities.

If the insurance program were partial (for example, cap at $250,000 per account), many institutional investors would invest in this partially insured product rather than directly in the market or in other cash pools because the insured funds would offer liquidity, a portfolio that was somewhat less risky than other pools, and a yield only slightly lower than alternative cash pools. Based on recent experience, however, institutional investors pose more of a flight risk than retail investors, and without insurance covering the full value of their accounts, they would have strong incentives to withdraw assets from these funds during periods of severe market distress.

Finally, moral hazard is always a problem with insurance programs. This hazard could be reduced—but not eliminated—through the pricing of premiums, insurance deductibles, and specific provisions in insurance contracts. Even so, the program would require extensive ongoing monitoring and supervision to implement. This external monitoring is imprecise and cannot replace the market discipline that a fund’s own investors impose in the absence of insurance.

### 8.1.2.2 Pure Private Insurance

There is a precedent for private insurance for money market funds. As recently as 2003, ICI Mutual offered insurance to money market funds. The insurance typically had a deductible of the first 10 basis points of any loss and carried a premium of 1 to 3 basis points depending on the quality of the money market fund’s portfolio. Total coverage, however, was limited to $50 million per fund and covered only defaults on securities. The program covered neither securities that were downgraded nor impaired, and did not cover losses due to interest rate risk. Thus, the ICI Mutual coverage, which is no longer available, was far more limited than the Treasury Guarantee Program.

Extensive discussions with insurance industry experts indicate that private, unlimited “break a dollar” insurance is not feasible. Underwriters would be concerned about the risk, even if highly unlikely, that problems encountered by a single fund could spread to others. Insurers, therefore, would require very high levels of capital to support insurance, probably at least 10 times expected losses. Losses on securities that advisers either purchased from or supported on behalf of their money market funds since August 2007 could total at least $4 billion. By that measure, a private insurer would require at least $40 billion in capital to support an unlimited insurance program. We understand that the insurance industry (including reinsurers) does not have such a large amount of free capital currently available. In addition, given the difficulties the insurance industry has had (e.g., the Federal Reserve Board’s loans to AIG and the difficulties of the monoline insurers that supported municipal securities), financial market participants reasonably could question the credibility of any private insurance scheme. Our discussions with a number of investors strongly confirmed this point.

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213 ICI Mutual is the predominant provider of Directors and Officers/Errors and Omissions liability insurance and fidelity bonding for the U.S. mutual fund industry. Its insureds represent more than 60 percent of the industry’s managed assets. As the mutual fund industry’s captive insurance company, ICI Mutual is owned and operated by and for its insureds.

214 Losses are the difference between the par value of the impaired debt and any amounts recovered through payment of principal and interest. The $4 billion estimate is based on conversations with industry representatives and analysts.
8.1.2.3 Hybrid Insurance Programs

An alternative to either pure federal or pure private insurance would be to combine the two in a hybrid plan. For example, a three tier system might require money market fund advisers to purchase private insurance with a deductible on any loss of the first 0.5 percent of fund assets, private insurance covering losses in the next 2.5 percent of fund assets, and the federal government backstopping losses amounting to more than 3 percent of fund assets.

A hybrid insurance program would limit the federal government’s exposure by placing it last in line for losses. A federal backstop would boost confidence in the program. We understand, however, that attracting capital for the private insurance portion, even when that insurance is limited to 2.5 percent of assets after an initial deductible, would be extremely difficult. Furthermore, the problems identified above with an insured fund offering superior yields to bank deposits would remain. Depending on the extent of the federal backstop, institutional investors might still withdraw assets in a period of severe market distress.

8.1.3 Capital Reserves for Funds and Capital Requirements for Advisers

The idea that money market funds or their advisers should maintain capital against money market fund assets stems from likening money market funds to banks. Money market funds have certain features in common with banks (e.g., both invest in money market instruments), just as banks have certain features in common with hedge funds (e.g., both use leverage). Banks are required to hold capital; therefore, the logic goes, money market funds (or their advisers) should be required to hold capital.

But money market funds are not banks, just as banks are not hedge funds. Banks use leverage; hold long-term, often highly non-transparent investments; may have substantial off–balance sheet commitments; and have deposit insurance. For these reasons, banks are required to hold capital to protect the Federal Deposit Insurance Corporation (FDIC), depositors, and other creditors from losses. Money market funds, on the other hand, are highly restricted by Rule 2a-7 on the maturity and credit quality of their securities, and do not have insurance. Investors in money market funds are shareholders, not creditors. Even though fund sponsors at times purchased securities from their money market funds to protect their investors from losses and to protect the franchise value of their businesses, they are not required to do so. And while capital requirements can protect against idiosyncratic events that impair the value of individual securities, they provide little protection against broad market events of the sort experienced recently—these are precisely the types of events that are most likely to cause widespread redemptions. Furthermore, fund-level capital requirements will increase moral hazard by shielding the adviser and existing shareholders from the adviser’s investment errors. Finally, capital requirements for money market funds pose significant tax and accounting hurdles.
8.1.3.1 Capital Reserve for Money Market Funds

In theory, permitting a money market fund to create a capital reserve by retaining part of its income could provide a backstop against possible fund losses. Retained income would be offset by a liability or valuation allowance that reflects possible losses on the fund’s portfolio securities.\(^{215}\) The reserve could be drawn upon if losses on securities were sufficient to cause the fund to deviate from a dollar. This idea, while appealing in concept, poses significant tax and accounting hurdles.

From an accounting perspective, amounts added to the reserve would be treated as an investment expense. This would prevent the fund’s NAV from increasing by the amount retained. Losses incurred would be charged against the reserve, and so long as the loss amount is less than the reserve, the fund’s net assets would not decline, allowing the fund to maintain a stable $1.00 NAV. Generally accepted accounting principles (GAAP) might need modification to permit establishing a reserve for possible losses. Under GAAP, an estimated loss may be accrued through a charge to income only if both (1) it is \textit{probable} that an asset has been impaired or a liability has been incurred, and (2) the amount of the loss can be \textit{reasonably estimated}. To date, we are not aware that establishing loss reserves in a money market fund has been seriously considered.\(^{216}\)

For tax purposes, a capital reserve could be treated in either of two ways. Contributions to the reserve could be treated as a fund expense, reducing the taxable income distributed to investors. This treatment, however, would require an amendment to Subchapter M of the Internal Revenue Code and could result in lost revenue to the federal government. Alternatively, contributions to the reserve could be treated as if they were distributed to shareholders (who would report such amounts as taxable income), followed by a deemed capital contribution to the fund for which investors receive no shares. Shareholders would likely view such treatment as highly unfavorable; they would have taxable income for which they received neither a cash distribution nor additional shares. Moreover, such an approach would pose significant recordkeeping challenges: with each deemed capital contribution, the cost basis of an investor’s shares would have to be adjusted upward.

There are other difficult issues, such as how quickly the reserve could be built. A reserve built over 10 years might be of little value for some time. But a reserve built over one year might cause some investors to delay share purchases until the capital reserve was fully built. Investors who delay their share purchases would receive all the benefits of the reserve but incur none of its costs. The size of the reserve would also have to be considered. A relatively small reserve, say 0.5 percent of fund assets, could be built more quickly, but would not necessarily provide substantial protection against a run. A larger reserve might provide somewhat greater assurance, but could take considerable time to build. Forcing fund advisers to commit the capital to build a reserve would be cost-prohibitive and would lead many firms to leave the business. Such a rapid decline in money market fund assets would cause severe disruptions to the financial markets.

\(^{215}\) For accounting purposes, the amount reserved would be treated as an investment expense, reducing investment income and SEC yield.

\(^{216}\) It seems unlikely that funds could establish that credit losses on portfolio securities are probable as required by GAAP.
8.1.3.2 Capital Requirements for Advisers of Money Market Funds

Another alternative that some have suggested is requiring advisers of money market funds to either hold capital or enter into “capital support agreements” with the funds they manage as a means of limiting money market fund investors’ risk of loss. Under a capital standard, the adviser would be required to maintain a specified amount of liquid assets that would be used to reimburse fund losses that would cause the fund to break the $1.00 NAV. Under a capital support agreement, shareholders’ losses would be mitigated by requiring the adviser to purchase a standby letter of credit or similar facility that the fund could draw upon in the event that its NAV dropped below its stabilized price of $1.00; the adviser would be obligated to repay amounts drawn on the facility.

The cost of requiring advisers to hold capital to any meaningful degree ultimately would be borne by fund shareholders or their advisers. To the extent that shareholders bear the costs, they would incur higher fund fees and lower returns. If advisers bear the costs, they may elect to exit the money market fund business and use their expertise to manage large private pools of capital that could serve as money market fund substitutes, or even create offshore subsidiaries to manage U.S. investors’ money, potentially increasing systemic risk.

Requiring advisers to hold capital or provide capital support agreements also could raise potentially unexplored accounting issues. For example, GAAP requires entities to consolidate their balance sheets for financial reporting purposes.\(^\text{217}\) If an adviser were deemed to have a “controlling financial interest” in its money market funds, it might be forced to consolidate those money market funds into its financial statements for financial reporting purposes.\(^\text{218}\) Arrangements that obligate the adviser to bear the risk of loss may cause the money market fund to be deemed a “variable risk entity” and would require the adviser to perform an analysis of the economic risks and rewards attributable to the arrangements to determine if it must consolidate the fund.

\(^{217}\) FASB Interpretation No. 46R, Consolidation of Variable Interest Entities (January 2003).

\(^{218}\) In a consolidation, the assets, liabilities, and equity of the money market fund, as well as its income and expenses, would be combined with those of the adviser in the adviser’s financial statements.
8.2 Other Proposals

During the Working Group’s discussions with outside parties, two other ideas surfaced for money market fund reform to address client risks arising from retail and institutional investors being in the same fund, particularly since some institutional investors reacted more quickly to market events in 2008 than did many retail investors. One proposal was to segment the market by forcing institutional and retail investors into separate funds. The other was to require investors making large withdrawals to take them in kind by giving them an equal share of each security in a fund’s portfolio.

8.2.1 Separation of Retail and Institutional Investors

Some commentators suggested that to address what they view as the two diverging goals of investors—preserving capital and same day liquidity—funds be required to categorize their clients as retail or institutional and make separate types of money market funds available to them. Under this scenario, retail investors, who tend to move their assets fairly slowly during market volatility, could be in funds with longer-dated maturities than institutional investors, which as a group tend to move their money more quickly. While this concept had some initial appeal, the Working Group ultimately decided that it was simplistic, unworkable, and could disadvantage both types of investors.

As discussed in Section 3, there are important areas of overlap between retail and institutional investors. For example, although retail investors typically invest in money market funds through retail share classes, they also invest through institutional share classes, such as 401(k) plans or broker or bank sweep accounts, where there is one institutional decision maker acting on behalf of underlying retail customers. Moreover, just as not all retail investors are easily identifiable, not all institutional investors act the same way. Working Group members have many institutional shareholders that move assets on a pre-set schedule (payroll dates, etc.) and take great pains to not disrupt prudent portfolio management with large, unexpected redemptions. Forcing these investors into a money market fund with a shorter-dated maturity, simply because they are “big,” would unfairly reduce their returns.

We also are skeptical about the enforceability of any such a requirement. The new, longer maturity “retail money market fund” likely would have higher yields than their institutional counterparts; intermediaries would have incentives to parcel out investments into many smaller accounts to access the retail space. While Securities and Exchange Commission rules developed for other purposes provide some transparency into underlying equity,
bond, and hybrid mutual fund accounts, their application to money market funds is not straightforward and would come at considerable cost.\(^{219}\)

Finally, while some sponsors do offer money market funds primarily to retail or to institutional investors, requiring funds to segregate their retail and institutional clientele into separate funds could disadvantage both types of clients. Money market funds provide a low-cost cash management vehicle for both retail and institutional investors. In part, money market funds provide low-cost management through economies of scale through the pooling of investments of hundreds to thousands of retail investors with the large balances of institutional investors. Splitting investors into two different funds could reduce the benefits both receive through economies of scale.

We recognize, however, that the actions of a large shareholder can be detrimental to a fund and its other shareholders. In particular, institutional investors that unexpectedly move large blocks of shares can have a direct influence on a fund’s ability to meet other redemption requests and maintain a stable NAV. As a result, and as discussed above, we offer recommendations addressing liquidity, stress testing, shareholder due diligence, and disclosure that we believe more directly address these concerns. For example, to reduce the risk that a money market fund’s liquidity levels are insufficient to meet redemptions, we are recommending daily and weekly liquidity standards. We also recommend that money market funds be required to stress test their portfolios against their shareholder base to ensure that those liquidity levels are appropriate. To help a money market fund identify those shareholders that are deemed to pose an unacceptable risk to the fund, we are recommending that the fund have a robust shareholder due diligence/know your client process. Finally, to alert investors and others to the potential risks that particular types of investors may pose to a money market fund, we are recommending that the fund provide monthly website disclosure of client concentration levels. We believe that these measures, working together, will provide greater protections to all shareholders, without the unintended consequences and potentially unfair treatment that creating different regulatory requirements for two investor groups would likely entail.

\(^{219}\) There would be little overlap in the structure that has been built to monitor frequent trading in long-term mutual funds with the structure necessary to police the separation of retail and institutional money market fund shareholders. A completely new set of programs would need to be developed for funds and their intermediary partners to clearly identify and monitor institutional investors versus retail investors in money market funds. New agreements would need to be developed for execution between funds and intermediaries to clearly identify and monitor underlying institutional customers in non-transparent accounts. New systems, processes and procedures would need to be developed for funds to request and monitor (periodic and daily) account level data (registration, position, and trading activity) for money market fund investors. These programs also would need to include follow-up and resolution of potential offenders. It would be extremely costly, labor intensive, and burdensome for both funds and intermediaries to execute such agreements and develop the procedures and systems necessary to identify and monitor institutional versus retail investors in money market funds on an ongoing basis.
8.2.2 Redemptions In Kind

As money market funds experienced redemption pressures following the bankruptcy of Lehman, some suggested that they use the authority often reserved in prospectuses to redeem shareholders in kind by giving them an equal share of each security in a fund’s portfolio. At least one fund, American Beacon Money Market Select Fund, used this method during the worst of the credit crisis for redemption requests exceeding $250,000 in a 90-day period.

Redemptions in kind, however, are very unpopular with investors and pose the potential for aggravating an illiquid or declining market. This method places the burden for valuing and liquidating the portfolio securities, with all the attendant costs, directly on the investor. Many corporate investors are not prepared, as a practical matter, for the valuation obligations imposed on them if they directly hold these instruments. Moreover, some instruments may not be susceptible to being divided among many investors; some may be privately offered, and distributing them broadly could compromise the issuer's private offering exemption. Further, giving money market fund investors responsibility for liquidating their own portfolios into troubled markets could cause further dislocations. As these investors seek to sell quickly these assets, prices for these and other securities would certainly fall. The decline in securities prices would then lead money market funds to mark down securities in their portfolios, placing additional pressure on the value of these funds’ shares, further destabilizing the market. For these reasons, we believe that the option to redeem in kind should continue to be available and employed on a case-by-case basis as funds deem appropriate. Redemption in kind does not, however, represent a viable remedy for all funds during widespread market disruptions.
The Working Group’s recommendations, made after a careful study of the money market and the role money market funds play in that market, have been designed to further strengthen an already resilient product. Our proposals for explicit liquidity standards, shorter portfolio maturities, improved credit analysis, a better understanding of a fund’s client base and more disclosure should better enable money market funds to withstand the next period of severe market instability. We also recognize the important role that the government plays in overseeing the marketplace as a whole, and pledge to work with appropriate federal officials to implement a regime for nonpublic reporting and monitoring by institutional investors in the money market. Finally, in the event that a money market fund’s net asset value does decline materially, notwithstanding the strong protections we suggest today, we believe that authorizing a money market fund’s board of directors to suspend redemptions under two narrow circumstances will ensure that all investors—regardless of who is first to the door—are treated fairly.

9. Conclusion
# Appendix A: Recommendations of the Money Market Working Group*

<table>
<thead>
<tr>
<th></th>
<th>Portfolio Liquidity Requirements</th>
<th>New or existing?</th>
<th>Can money market funds implement immediately?</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Portfolio Liquidity Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>The Securities and Exchange Commission (SEC) should amend Rule 2a-7 to require taxable money market funds to meet a minimum daily liquidity standard such that 5 percent of the fund’s assets would be held in securities accessible within one day.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>1.2</td>
<td>The SEC should amend Rule 2a-7 to require all money market funds to meet a minimum weekly liquidity standard such that 20 percent of the fund’s assets would be held in securities accessible within seven days.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>1.3</td>
<td>The SEC should amend Rule 2a-7 to require all money market funds to regularly “stress test” their portfolios to assess a portfolio’s ability to meet hypothesized levels of credit risk, shareholder redemptions, and interest rate changes.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td><strong>Portfolio Maturity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>The SEC should amend Rule 2a-7 to reduce the weighted average maturity limitation for money market funds from 90 days to 75 days.</td>
<td>Enhancement of existing requirement</td>
<td>Yes</td>
</tr>
<tr>
<td>2.2</td>
<td>The SEC should amend Rule 2a-7 to require money market funds to maintain a new “spread WAM” that does not exceed 120 days.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td><strong>Enhance Credit Analysis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>The SEC should amend Rule 2a-7 to require money market fund advisers to establish a “new products” or similar committee that would review and approve new structures prior to investment by their funds.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>3.2</td>
<td>Money market fund advisers should consider and, when appropriate, follow best practices in connection with minimal credit risk determination.</td>
<td>Enhancement of existing requirement</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* Unless defined in this Appendix, capitalized terms are defined in paragraph (a) of Rule 2a-7 under the Investment Company Act of 1940.
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<th></th>
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</thead>
<tbody>
<tr>
<td>3.3</td>
<td>The SEC should retain references to NRSROs in Rule 2a-7 as an important “floor” on permissible investments.</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>The SEC should amend Rule 2a-7 to require money market fund advisers to designate and publicly disclose, pursuant to procedures approved by the fund’s board of directors, a minimum of three NRSROs that the fund’s adviser will monitor for purposes of determining Eligibility of portfolio securities.</td>
<td>New</td>
<td>Requires SEC action before implementation</td>
</tr>
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<tr>
<td><strong>4</strong></td>
<td><strong>Assessment of Client Risk</strong></td>
<td></td>
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<tr>
<td>4.1</td>
<td>The SEC should require that money market funds develop procedures for admitting shareholders to their funds to ensure, to the extent possible, that funds either (1) understand the expected redemption practices and liquidity needs of those investors or (2) when such information is not available, mitigate possible adverse effects that may result from such unpredictability.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>4.2</td>
<td>The SEC should require money market funds to post monthly website disclosures of client concentration levels by type of client and the risks that such concentration, if any, may pose to the fund.</td>
<td>New</td>
<td>Yes</td>
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<td><strong>5</strong></td>
<td><strong>Addressing the Possibility of a Run</strong></td>
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<tr>
<td>5.1</td>
<td>A money market fund’s board of directors, including the fund’s independent directors, or a committee thereof, under exigent circumstances should have the authority to suspend redemptions and purchases by the fund for a period of five business days in order to seek a “cure” for a fund that has either broken or reasonably believes it may be about to break a dollar. During that time, the fund could either seek credit support or otherwise address the NAV, or determine to permanently suspend redemptions and liquidate the fund. The fund should be required to provide prompt, nonpublic notice to the SEC staff when making this election.</td>
<td>Revision of existing authority</td>
<td>Requires SEC action before implementation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New or existing?</td>
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<tr>
<td>5.2</td>
<td>The SEC, prior to the expiration of Rule 22e-3T under the Investment Company Act, which permits a money market fund to suspend redemptions upon liquidation pursuant to the Treasury Department’s Temporary Guarantee Program for Money Market Funds, should adopt a similar rule that is available to all money market funds preparing to liquidate. Within five business days of announcing a suspension and liquidation, the fund’s board must approve and the fund must announce to shareholders its plan of liquidation.</td>
<td>Makes existing temporary rule permanent</td>
<td>No Requires SEC action before implementation</td>
</tr>
<tr>
<td>6</td>
<td><strong>Investor/Market Confusion About Money Market Funds</strong></td>
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<tr>
<td></td>
<td></td>
<td>Enhancement to existing practices</td>
<td>Yes</td>
</tr>
<tr>
<td>6.1</td>
<td>Money market funds should reassess and, if appropriate, revise the risk disclosures they provide to investors and the markets.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>6.2</td>
<td>The SEC should require money market funds to provide monthly website disclosure of portfolio holdings.</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>6.3</td>
<td>The SEC should adopt a rule under the Investment Advisers Act of 1940 applicable to advisers to unregistered funds, designed to reduce investor and market confusion about funds that appear to be similar to money market funds, but do not comply with the risk-limiting provisions applicable to money market funds.</td>
<td>New</td>
<td>N/A Applies to cash pools other than money market funds</td>
</tr>
<tr>
<td>7</td>
<td><strong>Government Oversight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>The money market industry should work with the appropriate government entity to develop a nonpublic reporting regime for all institutional investors in the money market.</td>
<td>New</td>
<td>No Requires government action before implementation</td>
</tr>
<tr>
<td>7.2</td>
<td>The SEC should formalize a program such that agency staff would monitor any money market funds that, by category and excluding fees, have performance that clearly exceeds that of their peers during any month, to determine the reasons for such performance, and monitor an additional 10 randomly selected funds each month.</td>
<td>Enhancement of existing SEC staff practices</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Government Resources</td>
<td>New or existing?</td>
<td>Can money market funds implement immediately?</td>
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<tr>
<td>8.1</td>
<td>The SEC should amend Rule 17a-9 under the Investment Company Act to allow a money market fund affiliate to purchase an Eligible Security from a fund.</td>
<td>Enhancement of existing regulation</td>
<td>No Requirements for SEC action before implementation</td>
</tr>
<tr>
<td>8.2</td>
<td>The SEC should amend Rule 2a-7 to require nonpublic notice to the SEC of any affiliated purchase in reliance on Rule 17a-9.</td>
<td>Amendment to existing rule</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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<tr>
<th>9</th>
<th>Government Programs</th>
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<tbody>
<tr>
<td>9.1</td>
<td>The Treasury Department should extend the Treasury Guarantee Program until the program expires by its terms on September 18, 2009.</td>
<td>Extension of existing program</td>
<td>N/A</td>
</tr>
<tr>
<td>9.2</td>
<td>The SEC should delegate to its staff the authority to reinstate the no-action letter permitting money market funds to use amortized cost for shadow pricing certain securities, under specified market conditions, at the staff’s own motion or upon request by the industry.</td>
<td>Formalization of SEC staff authority</td>
<td>N/A</td>
</tr>
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<tr>
<th>10</th>
<th>Forward-Looking Enhancements</th>
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</thead>
<tbody>
<tr>
<td>10.1</td>
<td>The SEC should amend Rule 2a-7 to eliminate Second Tier Securities from the definition of an Eligible Security.</td>
<td>Change to existing fund standards</td>
<td>Yes</td>
</tr>
<tr>
<td>10.2</td>
<td>The SEC should modernize Rule 2a-7 to reflect the appropriate oversight role for money market fund boards of directors.</td>
<td>Amendment to existing rule</td>
<td>No Requirements for SEC action before implementation</td>
</tr>
</tbody>
</table>
ICI Establishes Money Market Working Group

Senior Executives Will Recommend Improvements in Practices, Regulation, and Law

WASHINGTON, DC, NOVEMBER 4, 2008—The Investment Company Institute today announced the formation of a panel of fund industry leaders with a broad mandate to develop recommendations to improve the functioning of the money market and the operation and regulation of funds investing in that market.

The Money Market Working Group will make recommendations to minimize risks and help assure the orderly functioning of this vitally important market. The group will identify needed improvements in market and industry practices; regulatory reforms, including improvements to SEC rules governing money market mutual funds; and possibly legislative proposals. The Working Group expects to report its recommendations in the first quarter of 2009.

The Working Group will be chaired by John J. Brennan, Chairman of the Vanguard Group. In the course of its review, the Working Group intends to consult with a wide range of constituencies, including issuers of and dealers in money market instruments; sponsors of pooled funds that invest in the money market, including managers and independent directors of money market mutual funds regulated by the Securities and Exchange Commission under the Investment Company Act; institutional investors in money funds, as well as financial advisers to individuals who rely on them for cash management; current and former federal regulators; and other experts.

“Events in September and October underscore the vital role that the money market plays in the nation’s economy as a source of financing for U.S. businesses, financial institutions, consumers, and municipalities,” said Brennan. “Unprecedented actions by the Federal Reserve and the Department of the Treasury have been required to keep this market liquid and functioning. It is important that we learn from our recent
experience. We hope to offer concrete, positive suggestions to improve the way the money market functions and the way money market funds operate.”

In recent months, Brennan has headed an informal group of fund industry executives that has worked with the Federal Reserve, Treasury, and SEC to address conditions in the money market affecting money market mutual funds and their shareholders. With approximately $3.4 trillion in assets, money market mutual funds finance more than 40 percent of commercial paper, one-fifth of marketable Treasury bills, and almost one-fifth of municipal securities.

“I am grateful to Jack Brennan for leading this effort,” said John V. Murphy, Chairman of ICI and Chairman and CEO of Oppenheimer Funds, Inc. “Money market mutual funds have served investors successfully for thirty years. I look forward to the Working Group’s recommendations about what steps should be taken, in light of recent events, to assure that they continue to do so.”

Members of the Money Market Working Group include, in addition to Brennan: James H. Bodurtha, Independent Director, BlackRock Funds; Richard S. Davis, Managing Director, BlackRock, Inc.; Mark R. Fetting, CEO & President, Legg Mason, Inc.; Martin L. Flanagan, President & CEO, Invesco PLC; George C.W. Gatch, President & CEO, J.P. Morgan Funds; John W. McGonigle, Vice Chairman and Chief Legal Officer, Federated Investors, Inc.; James A. McNamara, President & CEO, Goldman Sachs Mutual Funds; Randall W. Merk, Executive Vice President, Charles Schwab & Co., Inc. and President of Schwab Funds; Paul Schott Stevens, President & CEO, Investment Company Institute; and Michael Wilens, Head of Asset Management, Fidelity Investments.

Advisers to the Money Market Working Group include: Deborah Cunningham, CFA, Senior Vice President, Senior Portfolio Manager, Federated Investors; John T. Donohue, Managing Director and Chief Investment Officer for Global Liquidity, J.P. Morgan Asset Management; Karen Dunn Kelley, CEO, Invesco Worldwide Fixed Income; Kevin Kennedy, Portfolio Manager, Western Asset Management; Mary J. Miller, Managing Director, T. Rowe Price Associates, Inc.; and Charles Morrison, Head of Fixed Income Money Markets, Fidelity Investments.

– ICI –

ICI 08-122
APPENDIX C: PERSONS CONSULTED BY THE MONEY MARKET WORKING GROUP

The Money Market Working Group was formally announced on November 4, 2008, and convened a number of meetings through March 2009. The work of the Working Group was assisted by the staff of the Investment Company Institute, in particular, Karrie McMillan, General Counsel; Brian Reid, Chief Economist; Sean Collins, Senior Director of Industry and Financial Analysis; Rochelle Antoniewicz, Senior Economist; Susan Olson, Senior Counsel; Jane Heinrichs, Associate Counsel; Chris Roth, Senior Research Assistant; and Kimberly Lunde, Research Assistant. The Working Group also consulted with Lawrence R. Maffia, President of ICI Mutual Insurance Company. Preparation of this Report was assisted by Janet Zavistovich and Mike McNamee, Senior Directors of Public Communications, and Miriam Moore, Senior Editor. The Working Group also was assisted by the law firm of Reed Smith LLP.

In developing its findings and recommendations, the Working Group consulted with a variety of experts, both within and outside the money market. In addition to the persons listed below, the working group consulted with several Institute committees, including the Institutional Money Market Funds Advisory Committee, the Money Market Funds Advisory Committee, and the Municipal Securities Advisory Committee. While the findings and recommendations contained in the Report are solely those of the Working Group, the valuable time and assistance provided by each of these persons is gratefully acknowledged.

Donald Aiken, *Chairman (2005–2008)*, Institutional Money Market Funds Association, and *Director*, Fintry Consulting LLP (London)

Barry P. Barbash, *Partner*, Willkie Farr & Gallagher LLP

Mark Barber, *Deputy Treasurer*, General Electric Company

Travis Barker, *Chairman*, Institutional Money Market Funds Association, and *Technical Business Development Director*, HSBC Global Asset Management

John E. Baumgardner, Jr., *Partner*, Sullivan & Cromwell LLP

Daniel Baird Bergstresser, *Assistant Professor of Business Administration*, Harvard Business School

Elizabeth E. Beshel, *Global Treasurer*, Goldman Sachs

Pierre Bollon, *Chief Executive*, L’Association Française de la Gestion Financière

Edna Boschat, *Managing Director*, General Electric Company

Bill Bowman, *Risk Manager*, Weyerhaeuser

Richard W. Boyd, *Senior Vice President*, Federated Securities Corporation

Laurie Brignac, *Managing Director, Senior Portfolio Manager*, Invesco


Daniel Caruso, *Senior Policy Manager, Economics, Savings, Tax*, Investment and Financial Services Association (Australia)

Declan Casey, *Director—Legal and Technical*, Irish Funds Industry Association

Ken Cella, *Principal, Managed Investments & Packaged Solutions*, Edward Jones

Mike Champion, *Head of Product Development*, Schroders

Esther Chance, *Managing Director, Senior Portfolio Manager*, Invesco

H. Rodgin Cohen, *Partner*, Sullivan & Cromwell LLP

Joanna Cound, *Chair of Distribution Committee*, Institutional Money Market Funds Association and *Managing Director*, BlackRock Investment Management (UK) Limited

Peter G. Crane, *President & Publisher*, Crane Data LLC

Jonathan Curry, *Chair of Technical Committee*, Institutional Money Market Funds Association and *Managing Director, Head of European Cash Management*, Barclays Global Investors Limited (London)

Mia Dassas, *Associate, Avocat à la Cour, Docteur en Droit, Investment Management Group*, Linklaters (Paris, France)

Peter De Proft, *Director General*, European Fund and Asset Management Association

Frank Del Lago, *Executive Director*, Morgan Stanley

Bernard Delbecque, *Director of Economics and Research*, European Fund and Asset Management Association


Richard A. Dobbs, *Vice President New Business*, Wilmington Trust

Jamie Dorrien-Smith, *Chief Executive Officer*, Schroders Americas

Nathan Douglas, *Secretary General*, Institutional Money Market Funds Association

Joe Fahey, *Vice President*, Wilmington Trust Company

Melanie L. Fein, *Principal*, Fein Law Offices

Richard Ferguson, *Managing Director and Treasurer of the Americas*, Deutsche Bank

Marc Fisher, *Managing Director*, Morgan Stanley

Frank M. Fletcher, *Managing Director*, Natixis Capital Markets


Christopher S. Forno, *President and Chief Executive Officer*, American Express Credit Corporation

Kenneth A. Froot, *André R. Jakurski Professor of Business Administration*, Harvard Business School

David Germany, *Chief Investment Officer*, Evergreen Investments

Richard Gilbert, *Chief Executive Officer*, Investment and Financial Services Association (Australia)

Alan D. Greene, *Executive Vice President*, State Street Global Advisors
Cathryn R. Gregg, Partner and Director, Treasury Strategies, Inc.
Anthony A. Guthrie, President and Managing Principal, Reliance Trust Company
Nick Harrison, Senior Associate, Mallesons Stephen Jaques (Melbourne, Australia)
Kathleen Hughes, Chair of Communications, Institutional Money Market Funds Association and Head of Global Liquidity EMEA, J.P. Morgan Asset Management (London)
Lu Ann Katz, Managing Director, Head of Global Investment Grade Research, Invesco
Stephen A. Keen, Partner, Reed Smith LLP
John S. Kodweis, Managing Director, Investment Bank Global Credit Trading and Syndication, J.P. Morgan
Michael H. Koonce, Senior Vice President, Evergreen Investments
Monie Lindsey, Managing Director, Treasury Strategies, Inc.
Andrew Linton, Vice President, Head of Global Liquidity Product Development, J.P. Morgan
Mary Logan, Director of Conduit, Barclays Capital
John Malon, Partner, Mallesons Stephen Jaques (Melbourne, Australia)
Michael Marek, Managing Director, Senior Portfolio Manager, Invesco
Steffen Matthias, Senior Advisor, European Fund and Asset Management Association
Steven R. Meier, Executive Vice President and Global Cash Management CIO, State Street Global Advisors
Laura J. Merianos, Senior Counsel, The Vanguard Group, Inc.
Lyman Missimer, Managing Director, Head of Global Cash Management & Municipal Bonds, Invesco
Steve Monroe, Managing Director, Global Cash Equity, Barclays Global
Jacob Nygren, Senior Consultant, Treasury Strategies, Inc.
David O’Reilly, Director—Policy and Regulations, Investment and Financial Services Association (Australia)
Carl O’Sullivan, Partner, Head of Finance, Arthur Cox (Dublin, Ireland)
Gary Palmer, Chief Executive, Irish Funds Industry Association
John Parkhouse, Partner, PricewaterhouseCoopers (Luxembourg)
Andre F. Perold, George Gund Professor of Finance and Banking, Harvard Business School
Marc Perrone, Associate, Investment Management Group, Linklaters (Paris, France)
Judith Polzer, Managing Director, Product Executive, Treasury and Security Services, J.P. Morgan
Nancy D. Prior, Managing Director of Research, Fidelity Management & Research Company
Diann Puls, Assistant Treasurer, Weyerhaeuser
Manzur Qureshi, Senior Consultant, Treasury Strategies, Inc.
Andy Richman, Managing Director, Personal Asset Management, SunTrust Bank
Michael W. Roberge, Executive Vice President and Chief Investment Officer, MFS Investment Management
Colin Robertson, Senior Vice President, The Northern Trust Company
Robert R. Rupp, Executive Vice President and Head of Enterprise-Wide Market Risk, The Bank of New York Mellon
Henry Sandlass, Managing Director, Natixis Capital Markets
Victor Smith, Senior Vice President, SunTrust Banks, Inc.
Adam Spilka, General Counsel, Artio Global Management LLC
Jonathan Spirgel, Managing Director, The Bank of New York Mellon
Nick Stoumpas, Treasurer, Interactive Corp.
Jason Straker, Client Portfolio Manager, J.P. Morgan Asset Management (London)
Peter Tufano, Sylvan C. Coleman Professor of Financial Management, Senior Associate Dean for Planning and University Affairs, Harvard Business School
Simon Vernon, Head of Fund Regulatory Strategy, Schroders
Luis M. Viceira, George E. Bates Professor, Harvard Business School
Robert Wall, Managing Director, Co-Head Global Money Markets, Goldman, Sachs & Co.
Chris Walsh, Head of Product Sales, Bank of America
Kevin Weeks, Managing Director, Deutsche Bank Trust Company Americas
Lucy White, Associate Professor of Business Administration, Harvard Business School
Christopher Wilson, Former President (Columbia Funds), Bank of America
Tony Wong, Managing Director, Head of Short-Term Investment Grade & Municipal Research, Invesco
## Appendix D: Review of States Specifying That Money Market Funds Are Permissible Investments

<table>
<thead>
<tr>
<th>Permissible investor type</th>
<th>State</th>
<th>Citation</th>
<th>Summary of statute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipalities</td>
<td>Colorado</td>
<td>C.R.S.A. § 24-75-601.1</td>
<td>Municipalities may invest surplus monies in any no-load, open-end money market mutual fund, provided such funds are in compliance with the following: (1) the investment policies of the fund include seeking to maintain a constant share price; (2) no sales or load fee is added to the purchase price or deducted from the redemption price of the investments in the fund and no fee may be charged unless the governing body of the public entity authorizes such a fee at the time of the initial purchase; (3) the investments of the fund consist only of securities with a maximum remaining maturity as specified in Rule 2a-7 under the Investment Company Act of 1940; and (4) the dollar-weighted average portfolio maturity of the fund meets the requirements specified in Rule 2a-7. Municipalities may not invest in fluctuating NAV mutual funds.</td>
</tr>
<tr>
<td>Municipalities</td>
<td>New Jersey</td>
<td>N.J.S.A. 40A:5-15.1</td>
<td>Municipalities may invest in government money market mutual funds provided that any investments not purchased and redeemed directly from the issuer, government money market mutual fund, local government investment pool, or the State of New Jersey Cash Management Fund, shall be purchased and redeemed through the use of a national or state bank located within New Jersey or through a broker-dealer which, at the time of purchase or redemption, has been registered continuously for a period of at least two years and has at least $25 million in capital stock, or through a securities dealer who makes primary markets in U.S. government securities and reports daily to the Federal Reserve Bank of New York its position in and borrowing on such U.S. government securities. A “government money market mutual fund” is defined as an investment company or investment trust the portfolio of which is limited to U.S. government securities that meet the definition of an eligible security pursuant to Rule 2a-7.</td>
</tr>
<tr>
<td>Permissible investor type</td>
<td>State</td>
<td>Citation</td>
<td>Stable NAV or Rule 2a-7 requirements</td>
</tr>
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<tr>
<td>Municipalities</td>
<td>Texas</td>
<td>V.T.C.A., Government Code § 2256.014</td>
<td>Stable NAV required (statute prescribes acceptable investments)</td>
</tr>
<tr>
<td>Municipalities</td>
<td>Utah</td>
<td>U.C.A. 1953 §51-7-11; § 51-7-3</td>
<td>2a-7 compliance required</td>
</tr>
<tr>
<td>Municipalities</td>
<td>Wyoming</td>
<td>W.S.1977 § 9-4-831</td>
<td>Stable NAV required</td>
</tr>
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<td>Permissible investor type</td>
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</tr>
<tr>
<td>Banks</td>
<td>Arkansas</td>
<td>A.C.A. § 23-47-401</td>
<td>2a-7 compliance required</td>
</tr>
<tr>
<td>School districts</td>
<td>Colorado</td>
<td>C.R.S.A. § 24-75-601.1</td>
<td>Stable NAV required, Pertinent 2a-7 requirements (i.e., maturity) referenced in statute</td>
</tr>
<tr>
<td>School districts</td>
<td>Massachusetts</td>
<td>M.G.L.A. 44 § 55</td>
<td>2a-7 compliance required</td>
</tr>
<tr>
<td>School districts</td>
<td>Minnesota</td>
<td>M.S.A. § 118A.05 Subdivision 4(3);(4)</td>
<td>2a-7 compliance required</td>
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<tr>
<td>School districts</td>
<td>Pennsylvania</td>
<td>24 P.S. § 4-440.1</td>
<td>Stable NAV required 2a-7 compliance</td>
</tr>
<tr>
<td>School districts</td>
<td>Vermont</td>
<td>32 V.S.A. § 433</td>
<td>Stable NAV or 2a-7 compliance</td>
</tr>
<tr>
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<td>School districts</td>
<td>Wyoming</td>
<td>W.S.1977 § 9-4-831</td>
<td>Stable NAV required</td>
</tr>
<tr>
<td>Sinking funds*</td>
<td>Colorado</td>
<td>C.R.S.A. § 24-75-601.1</td>
<td>Stable NAV required 2a-7 maturity compliance required</td>
</tr>
<tr>
<td>Sinking funds*</td>
<td>Utah</td>
<td>U.C.A. 1953 §51-7-11; §51-7-3</td>
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*A sinking fund is a means of repaying funds that were borrowed through a bond issue. The issuer makes periodic payments to a trustee who retires part of the issue by purchasing the bonds in the open market. See http://www.investopedia.com/terms/s/sinkingfund.asp.*
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<tr>
<td>Sinking funds*</td>
<td>Wyoming</td>
<td>W.S.1977 § 9-4-831</td>
<td>Stable NAV required</td>
<td>Sinking funds may invest surplus monies in open-end money market mutual funds; except that no entity of the Wyoming government shall at any time own more than 10 percent of the fund’s net assets or shares outstanding. Investments are limited to a diversified money market fund which seeks to maintain a stable share value of $1.00, is registered under the Securities Act of 1933 and Investment Company Act of 1940 and has qualified under state registration requirements, if any, to sell shares in the state and which invests its assets: (1) solely in securities or instruments that have a remaining maturity of 397 days or less at the time of purchase of shares; (2) solely in securities issued by the United States Treasury, obligations or securities issued by or guaranteed by any federal government agency or instrumentality, and repurchase agreements collateralized by such instruments at not less than the repurchase price including accrued interest; (3) so that an average dollar weighted maturity of 90 days or less is maintained at all times; and (4) under limitations such that the fund may borrow funds for temporary purposes only by entering into repurchase agreements and only to the extent permitted by federal law.</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>Colorado</td>
<td>C.R.S. A. § 10-3-242</td>
<td>Stable NAV required</td>
<td>Insurance companies may invest in certain money market mutual funds subject to the following limitations: (1) The money market fund must be either listed or meet the eligibility conditions for listing on the U.S. direct obligations exempt list, U.S. direct obligations/full faith and credit exempt list, or class one list, in the “Purpose and Procedures Manual” of the Securities Valuation Office of the National Association of Insurance Commissioners (NAIC). Investments in the shares of any one money market fund qualifying under this paragraph must not exceed 10 percent of the domestic insurance company’s total admitted assets; (2) investments in shares of any one money market fund not qualified under (1) must not exceed 5 percent of the insurance company’s total admitted assets; and (3) at the time of an investment in a money market fund the aggregate value of an insurer’s investment in such money market fund shall not exceed 5 percent of the shares of such money market fund. Insurance companies may not invest in fluctuating NAV mutual funds.</td>
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*A sinking fund is a means of repaying funds that were borrowed through a bond issue. The issuer makes periodic payments to a trustee who retires part of the issue by purchasing the bonds in the open market. See http://www.investopedia.com/terms/s/sinkingfund.asp.
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<tr>
<td>Insurance companies</td>
<td>Tennessee</td>
<td>T. C. A. § 56-3-303</td>
<td>2a-7 compliance required</td>
<td>Insurance companies may invest surplus monies in money market mutual funds as defined by Rule 2a-7; provided such fund is: (1) a government money market mutual fund that: (a) invests only in obligations issued, guaranteed or insured by the federal government of the United States or collateralized repurchase agreements composed of these obligations; and (b) qualifies for investment without a reserve under the Purposes and Procedures Manual of the Securities Valuation Office of the NAIC; or (2) a class one money market mutual fund that qualifies for investment using the bond class one reserve factor under the Purposes and Procedures Manual of the Securities Valuation Office of the NAIC.</td>
</tr>
</tbody>
</table>
I. Introduction

Some have suggested that the regulation of money market funds is the single greatest success story in the history of financial services regulation.¹ Money market funds serve as an important source of direct financing for governments, businesses, and financial institutions, and of indirect financing for households. Without these funds, financing for all these institutions and individuals would be more expensive and less efficient. Yet this product would never have achieved its full potential without the flexible and resilient regulatory structure created by the Investment Company Act of 1940 (Investment Company Act).

Many fundamental features of today’s investment companies—including some of the features essential to the success of money market funds—are prohibited by the Investment Company Act and owe their existence to the exercise of exemptive authority by the Securities and Exchange Commission (SEC or Commission). For example, the Investment Company Act and applicable rules generally require mutual funds to calculate current net asset value (NAV) per share by valuing their portfolio securities for which market quotations are readily available at market value and other securities and assets at fair value as determined in good faith by the board of directors.² Rule 2a-7 under the Investment Company Act exempts money market funds from these provisions and permits the valuation of their shares at par. As detailed below, the history of Rule 2a-7 could be characterized as a periodic rebalancing of the demand for a liquid, low-fee, stable-value investment against the credit and market risks that could result in a fund breaking a dollar. The trend has been a continual reduction in the risks permitted in the face of an increasing demand for the funds.

The first money market fund was offered to investors in 1971. By the end of 1974, “[t]otal assets under management [in money market funds]…amouted to $2.434 billion constituting approximately 7.2 percent of the assets managed by the industry generally (compared to 0.2 percent as of December 31, 1973).”³ Figure E.1 illustrates the principal reason for the early popularity of money market funds. From the introduction of money market funds through the mid-1980s, the Federal Reserve’s Regulation Q limited the maximum rate that could be paid on passbook savings accounts and prohibited the payment of interest on demand accounts.⁴ In contrast, the yield on short-term

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² See Section 2(a)(41) of the Investment Company Act and Rules 2a-4 and 22c-1 under that Act.
⁴ As shown in Figure E.1, the maximum permitted rate on thrift passbook accounts increased slowly during the period, from 5 percent to 5.25 percent and eventually 5.5 percent. The maximum rate for bank passbook accounts was 0.25 percent lower.
U.S. Treasury securities during most of this period was well above the maximum passbook rate. As shown in Figure E.1, the yield on Treasury Bills (T-Bills) exceeded the maximum passbook rate throughout 1973 and 1974. Moreover, from late 1979 through 1982, T-Bills had double-digit yields, often more than twice the maximum passbook rate.

**FIGURE E.1**

*Annual Yields on Commercial Paper, Treasury Bills, and Passbook Savings*

*Percent, monthly*

Other low-risk short-term instruments, such as commercial paper and jumbo certificates of deposit, offered even higher yields. All of these instruments, however, had minimum denominations beyond the reach of the average investor (e.g., $10,000 for T-Bills or $25,000 for commercial paper). Their short terms also required frequent reinvestment. Money market funds provided a conduit through which smaller investors could gain access to these higher-yielding investments. For institutional investors, money market funds provided better liquidity than direct investments in these instruments, creating a more efficient means of cash management. In addition, money market funds served an important role for the economy that other financial products did not fulfill. By investing across a spectrum of money market instruments, money market funds provided a vast pool of liquidity to the U.S. money market.

Thus, the first decade following the introduction of money market funds provided almost ideal conditions for their growth. Although banks and thrifts eventually developed higher-yielding products to compete with money market funds, none of their offerings could match the combination of yield, stability, and daily liquidity that these funds offered.
II. METHODS FOR MAINTAINING STABLE NET ASSET VALUE

The first money market fund initially offered its shares for a price of $1.00 and then calculated its NAV each day, rounding the price to the nearest cent. This is known as the “penny-rounding” method of maintaining a stable NAV per share. The penny-rounding method helps maintain a stable NAV by making the share price less sensitive to changes in the market value of the fund’s portfolio.  

A second type of registered money market fund, which used the amortized cost value of its portfolio securities to calculate its NAV, was introduced in 1974. Money market funds use “amortized cost” to account for the difference between the cost of a security (i.e., its purchase price) and the amount payable at maturity. Under the amortized cost method, an investment is valued initially at its cost. The fund then adjusts the amount of interest income accrued each day over the term of the investment to account for any difference between the initial cost of the investment and the amount payable at its maturity. If the amount payable at maturity exceeds the initial cost (a discount), then the daily accrual is increased; if the initial cost exceeds the amount payable at maturity (a premium), then the daily accrual is decreased. The fund adds the amount of the increase to (in the case of a discount), or subtracts the amount of the decrease from (in the case of a premium) the investment’s cost each day, so that, when the instrument matures, its adjusted cost will equal the amount payable at maturity. The fund uses this adjusted cost to value the investment each day.

Although rarely noted, another important practice of both penny rounding and amortized cost money market funds is the daily declaration of dividends equal to the funds’ net accrued income. Accrual of income increases the assets of any investment company; without an offsetting increase in liabilities, this necessarily results in an increase in the company’s net assets and an increase in NAV. Dividends, once declared, however, represent liabilities that the company owes to its shareholders. Thus, by declaring dividends to offset each day’s accrued income, a money market fund prevents a buildup in undistributed income that could eventually affect its stable NAV.

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5 Traditionally, mutual funds offered their shares at an initial price of $10.00 and calculated their daily NAV to the nearest cent per share. Under these circumstances, a change of 0.05 percent or more in the value of the portfolio will result in a change in the NAV. If the initial share price is $1.00, however, the value of the portfolio must change by at least 0.50 percent to change a NAV calculated to the nearest cent. In other words, a fund with a $1.00 NAV using the penny-rounding method is one-tenth as sensitive to changes in the value of its portfolio as a fund with a standard $10.00 NAV. There was precedent for using an initial offering price of less than $10.00 a share prior to the introduction of money market funds, with some funds starting as low as $2.00 per share.

6 This type of money market fund relied on a determination by the fund’s board of directors that amortized cost represented the “fair value” of its portfolio securities. Section 2(a)(41) of the Investment Company Act requires that the board determine in good faith the “fair value” of a fund’s securities and assets unless “market quotations are readily available...” As the Commission has noted, “[m]arket quotations are not readily available for many money market instruments...because they are generally held to maturity, thereby eliminating a meaningful secondary market.” Release No. 8757, supra note 3, at text preceding n.4. Given the short maturity and high quality of these instruments, many boards concluded in good faith that amortized cost provided the best measure of their fair value.

7 These adjustments to accrued income also prevent money market funds from over- or under-distributing their income. By amortizing premiums to reduce income, the fund retains sufficient cash to compensate for the shortfall between the premium paid for the instrument and the amount received at maturity. By accreting discounts to increase income, the fund distributes sufficient cash to avoid realizing an apparent gain when the discount is paid at maturity.

8 Daily dividends also play an important role in preventing dilution to money market fund shareholders through systematic arbitrage. If a money market fund allowed undistributed income to accrue while maintaining a stable NAV, shareholders who bought shares of the fund just before a dividend was declared would receive a share of the income previously earned without paying for it, at the expense of shareholders who had held shares throughout the entire period.
III. Regulation of Money Market Funds Before Adoption of Rule 2a-7

When money market funds were first introduced, their regulation was limited to the SEC registration process. Technically, a fund could employ the penny-rounding method simply by offering its shares at an initial price of $1.00 rather than the traditional $10.00. A fund using the amortized cost method also might disclose that its board of directors could employ this method to determine the fair value of the fund’s securities. In addition, both types of funds generally made reference to the conservation of principal or the maintenance of a stable value in their investment objectives, and disclosed investment strategies and limitations consistent with this objective. In fact, until the SEC announced in 1977 a new interpretation of the valuation requirements of the Investment Company Act, none of the money market funds sought exemptions as a condition of offering their shares to the public.

A. Accounting Series Release No. 219 and the Early Exemptive Orders

The SEC first raised questions regarding the use of the amortized cost method in a 1975 proposal to issue an interpretive release. Citing various deficiencies of amortized cost valuation, including the SEC’s belief that it is “undesirable to determine value by a mechanical or automatic formula with no reference to market value and no judgmental input on the part of the directors,” the SEC asked for comments on an interpretation of the Investment Company Act that would discontinue the use of amortized cost as a method of fair valuing securities. At the time, “[t]hirty-six money market funds had effective registration statements…with 12 more in the process of registration.”

After reviewing the comments, the SEC issued an interpretive release regarding money market funds in May 1977. The release interpreted the Investment Company Act’s definition of “value” and Rule 2a-4 so as to effectively preclude money market funds from using the amortized cost or the penny-rounding method of calculating their NAVs. Three statements were particularly detrimental to money market funds:

1. “The Commission…concluded that it shall prospectively consider it inconsistent with the provisions of Rule 2a-4 for a money market fund to determine the fair value of debt securities which mature at a date more than 60 days subsequent to the valuation date on an amortized cost basis.”

2. “The Commission believes that money market funds…should value debt securities with greater than 60 days remaining to maturity based upon current market quotations if readily available or, if such quotations are not readily available, in such a manner as to take into account any unrealized appreciation or depreciation due to changes in interest rates and other factors which would influence the current fair values of such securities.”

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9 Release No. 8757, supra note 3, at text preceding n.6.
10 Id. at n.1.
3. “The Commission believes that any money market fund which reflects capital changes in its net asset value per share should calculate, and utilize for purposes of sales and redemptions, a current net asset value per share with an accuracy of one-tenth of one percent (equivalent to the nearest one cent on a net asset value of $10.00).”

The first two conclusions effectively prevented a money market fund from continuing to use the amortized cost method to value its entire portfolio. The third conclusion prevented a money market fund from continuing to use the penny-rounding method to calculate its NAV.

Many money market funds responded to ASR 219 by filing applications for exemptive orders that would permit the funds to continue to utilize either the penny rounding or amortized cost method. In November 1977, the SEC issued a temporary order granting exemptions while the SEC determined whether to hold hearings on the applications. In April 1978, the SEC issued an order for a consolidated hearing on the money market fund applications. Prior to the commencement of the evidentiary portion of the hearings, however, the funds seeking to use the penny-rounding method reached an agreement with the Division of Investment Management (Division), the division within the SEC primarily responsible for regulating mutual funds, including money market funds. After these funds amended their applications to address the SEC’s concerns regarding the manner of valuing assets and pricing shares, the SEC granted exemptive orders permitting these funds to continue to maintain a stable NAV using the penny-rounding method.

The basic conditions to the penny-rounding exemptive orders made a money market fund’s board of directors (Board) responsible for ensuring that the fund’s price per share, as rounded, would be $1.00, and provided the first risk-limiting restrictions on the management of a money market fund’s portfolio:

4. The Board undertook—as a particular responsibility within the overall duty of care owed to its shareholders—to assure to the extent reasonably practicable, taking into account current market conditions, that the fund’s price per share as computed for the purpose of distribution, redemption and repurchase, rounded to the nearest one cent, would not deviate from $1.00;

5. The fund would maintain a dollar-weighted average portfolio maturity appropriate to its objective of maintaining a stable price per share, and would not (a) purchase an instrument with a remaining

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12 Notwithstanding ASR 219, the SEC has continued to permit mutual funds with fluctuating NAVs to offer shares at NAVs substantially below $10.00, while still calculating their NAV to the nearest cent per share.

13 Some money market funds, notably those managed by Merrill Lynch Asset Management, used a hybrid approach to operate in compliance with ASR 219 without obtaining an exemptive order. These funds would use the amortized cost method to value securities maturing in 60 days or less, which would compose the bulk of their portfolio. Longer term securities were valued at their estimated market value and the NAV was rounded to the nearest tenth of a cent. To assure that a fund maintained a rounded $1.00 NAV, the fund would adjust its daily dividend to compensate for changes in the portfolio’s value. For example, if a fund had accrued income of 2 basis points, and its NAV fell to $0.9994, the fund would declare a dividend of 1 basis point and retain 1 basis point of accrued income. This would increase the NAV to $0.9995, which would round to $1.00. If the fund did not have sufficient income to compensate for a change in its NAV, it would split or reverse split its shares to maintain a $1.00 NAV.


maturity of greater than one year, or (b) maintain a dollar-weighted average portfolio maturity in excess of 120 days; and

6. The fund would limit its investments to U.S. Government issues, U.S. Government agency issues, and bank and corporate issues subject to rating and/or size of issuer requirements.

The SEC conducted hearings on the amortized cost applications from November 1978 through March 1979. After the hearings were completed, but before a decision was announced, the funds submitted offers of settlement to amend their applications to provide for the use of the amortized cost method of valuation subject to certain conditions, which the SEC agreed to grant.17 The conditions to the amortized cost exemptive orders were somewhat lengthier than the original penny-rounding orders.

1. The Board undertook—as a particular responsibility within the overall duty of care owed to its shareholders—to establish procedures reasonably designed, taking into account current market conditions, to stabilize the fund’s NAV per share, as computed for the purpose of distribution, redemption, and repurchase, at $1.00 per share.

2. The procedures adopted by the Board would include:

   (a) Review by the Board, at such intervals as are reasonable in light of current market conditions, to determine the extent of deviation, if any, of the NAV per share as determined by using available market quotations from the $1.00 amortized cost price per share.

   (b) In the event such deviation from the $1.00 amortized cost price per share exceeded one-half of 1 percent, the Board would promptly consider what action, if any, should be initiated.

   (c) Where the Board believed the extent of any deviation from the $1.00 amortized cost price per share may result in material dilution or other unfair results to investors or existing shareholders, the Board would take such action as it deems appropriate to eliminate or to reduce to the extent reasonably practicable such dilution or unfair results.

3. The fund would maintain a dollar-weighted average portfolio maturity appropriate to its objective of maintaining a stable NAV per share; provided, however, that the fund would not (a) purchase any instrument with a remaining maturity of greater than one year, or (b) maintain a dollar-weighted average portfolio maturity in excess of 120 days.

4. The fund would limit its portfolio investments, including repurchase agreements, to those instruments which the Board determined presented minimal credit risks, and which would be of high quality

as determined by any major rating service or, in the case of any instrument that is not so rated, of comparable quality as determined by the Board.

5. The fund would record, maintain and preserve permanently in an easily accessible place a written copy of the procedures (and any modifications thereto) described in condition 1, and the fund would record, maintain and preserve for a period of not less than six years (the first two years in an easily accessible place) a written record of the Board’s considerations and actions taken in connection with the discharge of its responsibilities, to be included in the Board’s minutes. The documents preserved pursuant to this condition would be subject to inspection by the Commission.

6. The fund would include as an attachment to Form N-1Q (a quarterly report filed with the SEC and made public) a statement as to whether any action pursuant to condition 2(c) was taken during the preceding fiscal quarter, and, if any action was taken, would describe the nature and circumstances of such action.

This release provided the template for nearly 100 subsequent exemptive orders, mostly permitting use of the amortized cost method to calculate a money market fund’s NAV.\(^\text{18}\)

B. Trust Banking Circular No. 4 and Reserve Requirements

The market conditions that fostered the development of money market funds also created difficulties for many banks and thrifts. As noted above, Regulation Q limited the interest that could be paid on savings accounts and prohibited interest on demand deposits. The higher rates available from money market funds attracted money that would normally have been deposited with a bank or thrift.

For example, trust accounts provided a regular source of deposits for many banks. Due to the conservative interpretation of the “prudent man rule” during the period, many trustees maintained large cash deposits for their clients or invested in short-term Treasury securities and certificates of deposits. Starting in 1974, however, more and more trustees started to invest cash balances in money market funds in order to achieve a higher return than available from banks. This led the Comptroller of the Currency to publish Trust Banking Circular No. 4 (Circular No. 4), reminding national banks that:

It has been and remains the position of this Office that the investment of trust assets in shares of mutual funds constitutes an improper delegation of the trustee’s investment authority under the common law. This delegation may be authorized and the practice therefore appropriate.

\(^{18}\) After the first amortized cost exemptive order, “more than 90 money market funds ... requested, and the Division ... granted, exemptive relief to permit the use of amortized cost valuation, subject to substantially the same conditions as those contained in the original order settling the hearing. Certain minor changes were made in subsequent orders to reflect technical corrections. In addition, subsequent orders permitting amortized cost valuation as well as penny rounding were issued based upon applications that reflected a broader range of permissible portfolio investments.” Valuation of Debt Instruments and Computation of Current Price Per Share by Certain Open-End Investment Companies (Money Market Funds), SEC Release No. IC-12206 (February 1, 1982), 47 FR 5428 (February 5, 1982) at text preceding n.4.
only if there exists: (A) specific authority in state statutes or decisions, (B) specific authority in the appropriate governing instrument for a given account; or (C) binding consents from all beneficiaries. In addition, such investments must be appropriate for the accounts being so invested.

Various “money market funds” are currently being offered for the short term investment of small amounts of trust cash. These funds are mutual funds and as such are subject to the above stated rules.19

The mutual fund industry responded to Circular No. 4 in two ways. First, industry representatives met with the Comptroller and argued that Circular No. 4 was an incorrect interpretation of the “prudent man rule.” Ultimately, the Comptroller agreed with this view and amended Circular No. 4 to state:

the conclusion of this Office is that the little available precedent in this area is insufficient to permit continued adherence to this statement as a correct version of the state of the “common law” of trusts throughout the country. Rather, the courts of many states having either no statute stating fiduciary responsibilities or a statute merely restating the general “prudent man” standard could conclude that the applicable standard in that state would not preclude a trustee from making a responsible, prudent investment in mutual fund shares. Trust Banking Circular Number 4, accordingly, has been revised to permit national bank trust officers to obtain the advice of local counsel as to the state of the law on this question in their state.20

Additionally, the industry sought unambiguous authorization under state laws permitting trustees to invest in mutual funds, including money market funds. In some cases, funds obtained opinions from the state attorney general finding that money market funds were permitted investments under existing state trust laws. In many other cases, state laws were amended to specifically authorize investment in money market funds. A list of current state laws authorizing investments in money market funds is attached as Appendix D.

Another threat to money market funds developed in 1980, when the Federal Reserve Board imposed reserve requirements on the funds. On March 14, 1980, President Jimmy Carter signed an executive order “designed to moderate and reduce inflationary forces in the United States economy.”21 As part of its implementation of the executive order, the Federal Reserve imposed a special deposit requirement on mutual funds investing in obligations with maturities of 13 months or less. Such funds were required to deposit with a Federal Reserve Bank 15 percent of the amount by which their “covered credit” exceeded the amount of covered credit held as of March 14, 1980 (base...
Contemporaneously with the Federal Reserve’s action, the SEC issued a release identifying various legal issues raised by the special deposit requirement. Chief among these issues was the concern that continued sales of money market fund shares would dilute a fund’s yield to the detriment of the fund’s existing shareholders, as any growth beyond the March 14 base amount would require substantial non-income-producing deposits with the Federal Reserve Banks. The SEC therefore urged:

the investment adviser… and directors, particularly the directors who are not interested persons of the company, of each “money market” fund, consistent with their fiduciary duties under the [Investment Company] Act, [to] consider immediately: (1) the appropriateness of new sales of fund shares which would increase covered credit above the base, and (2) the appropriateness of implementing various arrangements designed to protect the interests of shareholders.24

The industry responded to this new reserve requirement by creating new funds or new classes of shares for investments made after March 14. In April, the SEC adopted temporary regulations designed to facilitate the creation of such new funds and classes without obtaining an exemptive order or amending an existing order.25 The Federal Reserve reduced the deposit requirement from 15 percent to 7.5 percent in June, and eliminated the requirement entirely on July 3, 1980.26

IV. Adoption of and Amendments to Rule 2a-7

A. Codification of the Exemptive Orders in Rule 2a-7

The growing popularity of money market funds led to an onslaught of exemptive orders seeking to create more funds. The SEC responded in 1982 by proposing an exemptive rule permitting money market funds to use either the amortized cost or penny-rounding method to maintain a stable $1.00 NAV.27 In proposing the rule, the SEC noted its belief that such a rule would benefit shareholders by facilitating the ability of certain investment companies to fulfill their shareholders’ investment objectives.28 The SEC adopted the exemptive rule, designated as Rule 2a-7,
on July 11, 1983.\textsuperscript{29} The original rule was just over 1,800 words. In explaining the conditions established by the new rule, the release identified:

basically two types of risk which cause fluctuations in the value of money market fund portfolio instruments: the market risk, which primarily results from fluctuations in the prevailing interest rate, and the credit risk. In general, instruments with shorter periods remaining until maturity and which are of higher quality have reduced market and credit risks and thus tend to fluctuate less in value over time than instruments with longer remaining maturities or of lesser quality.\textsuperscript{30}

Therefore, Rule 2a-7, like the exemptive orders that preceded it, focused largely on limiting the maturity and examining the credit quality of the portfolio securities held by money market funds.

In fact, Rule 2a-7 largely codified the conditions of the previous exemptive orders with few substantive changes. For example, a money market fund was required to “maintain a dollar-weighted average portfolio maturity appropriate to its objective of maintaining a stable net asset value per share,” which could not exceed 120 days. The maximum maturity of individual portfolio securities was one year. All portfolio securities were required to be U.S. dollar–denominated and determined by the Board to present minimal credit risks. In addition, unless a major rating service determined that a portfolio security was “high quality,” the Board was required to determine that the security was of “comparable quality.”

In explaining the need for \textit{both} a high quality rating and a minimal credit risk determination, the Commission observed the following:

The requirement that a security have a high quality rating provides protection by ensuring input into the quality determination by an outside source. However, the mere fact that an instrument has or would receive a high quality rating may not be sufficient to ensure stability. The Commission believes that the instrument must be evaluated for the credit risk that it presents to the particular fund at that time in light of the risks attendant to the use of amortized cost valuation or penny-rounding. Moreover, the board may look at some aspects when evaluating the risk of an investment that would not be considered by the rating services.\textsuperscript{31}

Rule 2a-7 also required Boards of money market funds to establish procedures for maintaining a stable NAV using either the penny-rounding or amortized cost method. The Board of a fund using the amortized cost method was required to monitor the deviation between the fund’s NAV “calculated using available market quotations (or an appropriate substitute which reflects current market conditions)” and its amortized cost value per share, a process commonly referred to as “shadow pricing.” The Board was required to determine whether to take action if the deviation exceeded one-half cent per share or to prevent dilution or other unfair results. Amortized cost funds were


\textsuperscript{30} Id. at n.7.

\textsuperscript{31} See Release 13380, supra note 29, at text preceding n.32.
required to maintain records of the Board’s determinations and report any actions taken by the Board. This reporting requirement was eventually moved to Form N-SAR.

The new rule and adopting release also provided additional guidance. For example, the rule included a lengthy definition of how to calculate a security’s maturity. Generally, the maturity was “the date noted on the face of the instrument as the date on which the principal amount owed must be paid.” There were exceptions, however, for variable and floating rate securities that the Board determined would approximate their amortized cost values whenever the interest rate was adjusted (adjustable-rate securities). Adjustable-Rate Government Securities could be treated as maturing on the date of the next interest rate adjustment, regardless of their final maturity. Other adjustable-rate securities were required to either (a) mature in one year or less, or (b) have “Demand Features” that entitled the holder to receive the principal amount of the security on not more than seven days' notice. Such adjustable-rate securities were deemed to mature on the later of the next interest rate adjustment or the date on which principal would be received following exercise of the Demand Feature. Boards were required to determine at least quarterly that securities with Demand Features remained of high quality.

Repurchase agreements and securities lending agreements were treated as maturing on the date that securities were scheduled to be repurchased or returned. Interestingly, the rule originally defined “one year” as 365 days, “except, in the case of an instrument that was originally issued as a one year instrument, but had up to 375 days until maturity, one year shall mean 375 days.” The SEC explained that, “[t]his part of the definition has been extended beyond the usual definition of one year (365 days) to encompass securities, particularly government securities such as project notes, which are denominated as and intended to be “one year” notes, but which occasionally are issued with maturities slightly longer than 365 days.”

In the adopting release, the SEC provided the following explanation of “high quality”:

Moody’s defines “high quality” for bonds to be those instruments which receive an Aaa or Aa rating. Similarly, the Commission would consider bonds rated AAA or AA by Standard & Poor’s or by Fitch to be high quality. Therefore, a money market fund seeking to rely on this rule could invest only in bonds which were rated AA (Aa) or better. Commercial paper receiving one of the two top ratings (Prime-1 or 2, A-1 or 2, or Fitch-1 or 2) also would be considered high quality. The rule requires only that an instrument receive a “high quality” rating from one major financial rating service. In a case where an instrument received different ratings from different services, the instrument would be an acceptable investment so long as at least

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32 Rule 2a-7(b)(5) (1983). The adopting release also explained that “[t]he date of purchase is regarded as the date on which the fund’s interest in the instrument is subject to market action. Thus, for securities purchased under normal settlement procedures, the length of maturity would be calculated starting on the trade date.” Release 13380, supra note 29, at n.11.

33 Rule 2a-7(b)(5)(i)(A) (1983).

34 Rule 2a-7(b)(5)(i)(B)-(C) and (ii) (1983).

35 Rule 2a-7(b)(5)(iii)-(iv) (1983).

one rating was a high quality rating and provided that the Board found that the instrument presented minimal credit risks.\textsuperscript{37}

The release went on to state that “[i]f the instrument were ever deemed to be of less than high quality, the fund either would have to sell the instrument or exercise the Demand Feature, whichever were more beneficial to the fund.”\textsuperscript{38}

With respect to shadow pricing procedures, the SEC made it clear that amortized costs funds were required to obtain market quotations (or an appropriate substitute that reflects current market conditions) for all of their portfolio securities, regardless of whether they had maturities of 60 days or less.\textsuperscript{39} The SEC permitted funds, however, to round their amortized cost NAVs to the nearest cent in the same manner as penny-rounding funds. As the adopting release explained:

Funds using the amortized cost valuation method may need to use penny-rounding in computing their price per share when a gain or a loss in the value of their portfolio, which was not offset against earnings, is recognized. Where the gain or loss has been recognized, there is no longer merely a potential for a deviation between the value assigned by the fund for the securities sold and that actually realized by the fund. The Commission does not wish to define the permissible amount of deviation. However, to the extent a fund has realized gains or losses that cause the fund’s price per share to deviate from the amortized cost net asset value per share, the Board must be particularly careful to ensure that the fund can maintain a stable price per share.\textsuperscript{40}

Although nothing in the prior exemptive orders or Rule 2a-7 dealt directly with liquidity, the SEC took the opportunity to remind funds that purchases of illiquid securities should not exceed 10 percent of a fund’s net assets. The SEC observed that money market funds may “experience a greater and perhaps less predictable volume of redemption transactions than do other investment companies,” due to the fact that they were commonly used for short-term investments and provided same day redemptions. This raised concerns that: By purchasing or otherwise acquiring illiquid instruments, a money market fund exposes itself to a risk that it will be unable to satisfy redemption requests promptly… In addition,… management of the investment company’s portfolio could also be affected by the purchase of illiquid instruments…. Finally, the purchase of illiquid instruments can seriously complicate the valuation of a money market fund’s shares and can result in the dilution of shareholder’s interests.

\textsuperscript{37} Id. at n.34.
\textsuperscript{38} Id. at n.22.
\textsuperscript{39} Id. at n.44 (“Thus, while it may be appropriate for the board to value certain portfolio securities at amortized cost without adherence to the conditions contained in the rule, [ASR 219] does not affect the monitoring procedures under this rule. Where the fund is using amortized cost valuation to such an extent that exemptive relief is necessary, i.e., its portfolio contains any security with a maturity in excess of 60 days, the monitoring procedures contained in the rule are designed to place a limitation on the total deviation between the fund’s amortized cost value and its market-based value. In order to calculate precisely that total deviation, all instruments must be valued at market value.”)
\textsuperscript{40} Id. at text preceding n.6.
“Therefore,” the SEC concluded, “when a fund purchases illiquid instruments, the board of directors has a fiduciary duty to ascertain that the fund is operated in such a manner that the purchase of such instruments does not materially affect the valuation of the fund’s shares.”

The final noteworthy feature of the original rule was its permissive nature. A mutual fund could use the penny-rounding or amortized cost method or both to maintain a stable NAV by complying with Rule 2a-7. Money market funds that already had exemptive orders, however, had the option of continuing to rely upon their orders, rather than complying with Rule 2a-7. Moreover, money market funds that operated without using the amortized cost or penny-rounding method (see, supra, note 13) also could disregard the rule’s conditions.

**B. The 1986 Amendments to Rule 2a-7**

The reference to a “Demand Feature” in the original version of Rule 2a-7 referred to an obligation of the issuer of the security to pay principal within seven days of a demand by the holder. The adopting release specifically noted “that the rule does not speak to the acquisition or valuation of [third-party] puts or stand-by commitments by a money market fund…. Accordingly, a fund requiring exemptive relief in order to acquire [third-party] puts or standby commitments must still seek an individual exemptive order.” Tax-exempt money market funds relied on puts and standby commitments to provide liquidity for long-term variable rate bonds, which comprised the bulk of their portfolios.

In 1985, in response to a number of market changes since Rule 2a-7 was adopted, the SEC issued a release proposing to amend Rule 2a-7 and Rule 12d3-1 to permit money market funds to acquire new types of Demand Features, such as third-party puts and standby commitments. These new Demand Features were developed to avoid “reissuance” problems under the Internal Revenue Code that otherwise may have forced municipal issuers to requalify their

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41 Id. at text preceding n.40.
42 Id. at text preceding n.10.
43 The requirements for federal tax-exemption make the frequent reissuance of securities prohibitively expensive for states and municipalities. Generally, the principal short-term financing used by state and municipal issuers are tax and revenue anticipation notes, which are issued near the beginning and mature at the end of each fiscal year. The fact that these securities are typically issued around the same period (from July through September) with one year maturities makes it practically impossible for a tax-exempt money market fund to maintain a weighted-average maturity of less than 120 (now 90) days without also making substantial investments in long-term variable rate demand obligations (VRDOs).
44 Acquisition and Valuation of Certain Portfolio Instruments by Registered Investment Companies, SEC No. IC-14607 (July 1, 1985), 50 FR 27982 (July 9, 1985). Relief from Section 12(d)(3) of the Investment Company Act was required because most puts and standby commitments were provided by banks, brokers and other companies engaged in securities related activities. The current version of Rule 2a-7 no longer differentiates between standby commitments and other forms of Demand Features, so this discussion does not cover provisions relating solely to standby commitments.
securities as tax-exempt prior to remarketing. The SEC adopted the amendments in March 1986. Although the amended rule moved the provisions governing the calculation of a security’s maturity to a separate paragraph, the wording of the paragraph was close to that of the original rule. The substantive change was the introduction of a new definition of a “Demand Feature” as:

a put that entitles the holder to receive the principal amount of the underlying security or securities and which may be exercised either (A) at any time on no more than 30 days’ notice; or (B) at specified intervals not exceeding one year and upon no more than 30 days’ notice.

“Put” was defined as “a right to sell a specified underlying security or securities within a specified period of time and at a specified exercise price, that may be sold, transferred or assigned only with the underlying security or securities.” A Put or Demand Feature would be “unconditional” only if it “would be readily exercisable in the event of a default in payment of principal or interest on the underlying security or securities.”

Under the amended rule, adjustable-rate securities continued to be treated as maturing on the later of the date of the next adjustment to the interest rate or the date on which principal would be paid following exercise of the Demand Feature. The amended rule imposed additional requirements on the quality and diversification of Demand Features. First, the rule required Demand Features to receive both short- and long-term “high quality” ratings, or be determined to be comparable to securities having such ratings. An exception was made for Unconditional Demand Features, which could qualify as high quality based solely on short-term ratings (or their comparability to securities receiving short-term ratings).

Second, a money market fund could not invest more than 5 percent of the market value of its assets in securities underlying Puts from the same institution. This new diversification requirement applied, however, to only 75 percent of the market-based value of the fund’s assets. In addition, an Unconditional Demand Feature would not be treated as a Put from an institution unless securities issued or guaranteed by the institution comprised more than 10 percent of the market value of the fund’s assets. An Unconditional Demand Feature was treated as a Guarantee for purposes of this limit. In other words, apart from a 25 percent “basket” for undiversified Puts, a money market fund could...
not invest more than 5 percent of its assets in securities underlying Conditional Demand Features from the same institution, or more than 10 percent of its assets in securities issued or underlying Unconditional Demand Features (or other Guarantees) from the same institution.\textsuperscript{51}

This second change is noteworthy because it represents the first diversification requirement imposed on money market funds. Neither the original rule nor the earlier exemptive orders required money market funds to adopt fundamental diversification policies under Section 5(b) of the Investment Company Act. In fact, many single state tax-exempt funds were non-diversified, due to the limited number of state tax-exempt issuers.

The 1986 amendments also introduced the concept of a “nationally recognized statistical rating organization” (later defined as an NRSRO) to Rule 2a-7. Under the amended rule, a Board must determine whether a security was comparable to other high quality securities, unless it was rated “by any nationally recognized statistical rating organization that is not an affiliated person, …of the issuer of, or any insurer, guarantor or provider of credit support for the instrument.”\textsuperscript{52} This provision applied to the high quality determination for any investment, not just investments subject to Demand Features.

The revised maturity provisions eliminated the requirement that the Board make quarterly determinations as to the high quality of securities subject to Demand Features. In addition, the new definition of “Demand Feature” increased the permitted notice period for exercising a Demand Feature from seven to 30 days. Finally, renewed concern regarding the liquidity of money market funds prompted the SEC to add a note to the end of the amended rule, reiterating the language from the 1983 release, as discussed above.

\textbf{C. The 1991 Revision of Rule 2a-7}

The SEC proposed the next amendments to Rule 2a-7 in response to adverse credit conditions that developed during the savings and loan crisis and worsened during the 1990 recession. At the time of the proposal, there were “649 money market funds with over $450 billion in assets in approximately 21.3 million shareholder accounts,” representing more than one-third of all mutual fund assets and accounts.\textsuperscript{53}

The proposing release noted two particular developments that had the potential to disrupt money market funds. First were recent commercial paper defaults.

\begin{quote}
[T]he commercial paper had a ‘high quality’ rating from a NRSRO until shortly before the default and was held by several money market funds at the time of the default. The shareholders of these money market funds were not adversely affected, however, because each fund’s
\end{quote}

\textsuperscript{51} Rule 2a-7(a)(2)(v) and (a)(3)(iv) (1986). “[T]hese requirements track the diversification requirements of section 5(b)(1) of the [Investment Company] Act and rule 5b-2 thereunder.” Release No. 14983, supra note 46, at text preceding n.13 [citations omitted].

\textsuperscript{52} Rule 2a-7(a)(2)(iv) and (a)(3)(iii) (1986) [citation omitted].

investment adviser purchased the defaulted commercial paper from the funds at its amortized cost or principal amount.\textsuperscript{54}

Second, the SEC noted that “[t]he credit ratings of some large money center banks also have declined recently,” which threaten to curtail the supply of high-quality securities available to money market funds.\textsuperscript{55}

These developments led the SEC to propose further restrictions on money market fund operations and investments. After receiving substantial comments, the SEC adopted the amended rule on February 20, 1991.\textsuperscript{56} The amendments completely reorganized and substantially rewrote Rule 2a-7, expanding the text to nearly 4,400 words. Every aspect of the rule was changed in some respect, but the principal changes related to the risk-limiting provisions (quality, diversification, and maturity of portfolio securities) and required that all mutual funds that hold themselves out as money market funds meet those conditions.

1. Changes to the Portfolio Quality Requirements

The amendments changed the credit quality requirements of Rule 2a-7 by limiting money market fund portfolios to Eligible Securities. To qualify as an “Eligible Security,” a portfolio security had to satisfy the following requirements:

- It must have a remaining maturity of 397 days or less.
- If the security had received short-term credit ratings from an NRSRO, or if its issuer had received short-term credit ratings for securities of comparable priority and security, then the Requisite NRSROs must have provided ratings in the two highest short-term categories.
- Securities not meeting the previous requirement were defined as “Unrated Securities” and were required to be of comparable quality to securities meeting the requirement. An Unrated Security, however, could not be considered of comparable quality if it had been originally issued with a maturity in excess of 366 days and received a rating from any NRSRO below the second highest long-term rating category.\textsuperscript{57}

The provisions essentially codified the SEC’s previous guidance that “high quality” referred to securities rated in the two highest long-term or short-term rating categories. It clarified further that short-term securities could qualify as Eligible Securities even if the issuer had received long-term ratings below the second-highest category. The SEC explained that the “correct yardstick” of quality is the rating given to the issuer’s short-term securities, since at the time a money market fund invests in a long-term security, its remaining maturity will be less than 13 months.\textsuperscript{58} This was an important point, as most issuers who received the second-highest short-term rating category also received ratings in the third-highest, and sometimes the upper range of the fourth-highest, long-term categories.

\textsuperscript{54} Id. at text preceding n.18.

\textsuperscript{55} Id. at text preceding n.19 and n.20.

\textsuperscript{56} Revisions to Rules Regulating Money Market Funds, SEC Release No. IC-18005 (February 20, 1991), 56 FR 8113 (February 27, 1991). The SEC received 289 comment letters on the proposed amendments.

\textsuperscript{57} Rule 2a-7(a)(5) (1991).

\textsuperscript{58} See Release No. 18005, supra note 56, at text preceding n.65.
The 1991 amendments also introduced the concept of “Requisite NRSROs,” defined as “(a) any two NRSROs that have issued a rating with respect to a security or class of debt obligations of an issuer, or (b) if only one NRSRO has issued a rating with respect to such security or issuer… that NRSRO.” The definition represented a compromise proposed by the Investment Company Institute, some of whose members objected to the “any NRSRO” standard of the 1986 amendments because it allowed funds to pick the highest rating regardless of what the other NRSROs did, while other members objected to a “majority of NRSROs rule” proposal because it raised the possibility that funds would have to disregard the ratings of the two most highly regarded NRSROs, namely Moody’s and Standard & Poor’s. The definition of Requisite NRSRO allowed funds to rely on the highest ratings given by any two NRSROs, regardless of what ratings the other NRSROs provided.

The 1991 amendments also provided that a security could qualify as an Eligible Security based solely on whether its Unconditional Demand Feature was an Eligible Security. Securities subject to other types of Demand Features, however, had to have long-term ratings in the two highest long-term rating categories from the Requisite NRSROs, or if they did not have such ratings, be determined to be comparable to securities having such long-term ratings.

The 1991 amendments included the only substantive change ever made to the wording of the minimal credit risk requirement. The SEC added the parenthetical “(which determination must be based on factors pertaining to credit quality in addition to the rating assigned to such instruments by a NRSRO)” at the end of the requirement. The SEC explained that this language was intended to underscore that:

Possession of a certain rating by a NRSRO is not a ‘safe harbor.’ Where the security is rated, having the requisite NRSRO rating is a necessary but not sufficient condition for investing in the security and cannot be the sole factor considered in determining whether a security has minimal credit risks.

Finally, the 1991 amendments clarified the consequences of changes in a portfolio security’s credit quality. First, the amended rule provided that the Eligible Security requirement applied only “at the time of acquisition.” Second, the amended rule required a “money market fund [to] dispose of [a] security as soon as practicable consistent with achieving an orderly disposition of the security,” after the security defaulted, ceased to be an Eligible Security, or was determined to no longer present minimal credit risks. The amended rule authorized the Board to override the disposition if it found “that disposal of the portfolio security would not be in the best interests of the money market fund (which determination may take into account, among other factors, market conditions that could affect the orderly disposition of the security) ….”

60 The ratings of the Unconditional Demand Feature also could be used to classify the security as a First or Second Tier Security. See subsection I.C.2 below.
63 Release No. 18005, supra note 56, at text preceding n.18.
64 Rule 2a-7(c)(3) (1991).
Eligible Security would not result in a violation of Rule 2a-7 so long as the fund either disposed of the security or obtained the necessary finding from its Board. The amended rule also added a requirement to report any default affecting more than 0.5 percent of a fund’s “Total Assets” to the Division.  

2. Imposition of Diversification Requirements

As already noted, the 1986 version of Rule 2a-7 regulated the diversification of only Demand Features. The 1991 amendments expanded on the earlier amendments by requiring diversification with respect to the issuers of securities as well. The 1991 amendments also imposed stricter limits on securities of issuers who received (or were comparable to issuers receiving) ratings from the Requisite NRSROs in the second-highest short-term rating categories, defined as “Second Tier Securities,” as compared to securities of issuers who received (or were comparable to issuers receiving) such ratings in the highest short-term rating categories, defined as “First Tier Securities.”

The new requirements limited the amount that a money market fund could invest in First Tier Securities of the same issuer to 5 percent of its Total Assets, and the amount that it could invest in Second Tier Securities of the same issuer to 1 percent of its Total Assets (or $1 million, if greater). Total Assets were calculated based on amortized cost for amortized cost funds and on market value for penny-rounding funds. Unlike the diversification requirements of Section 5(b) of the Investment Company Act, which apply only to 75 percent of a “diversified” company’s assets, these requirements applied to 100 percent of a money market fund’s Total Assets. The amendments further restricted a fund’s total investments in Second Tier Securities to 5 percent of Total Assets.

Investments in Government Securities were not limited, however, so a fund could invest any amount of its assets in securities issued by the U.S. Treasury or a federal agency or instrumentality. In addition, the amended rule permitted money market funds to treat repurchase agreements as investments in the underlying securities for purposes of diversification, provided the repurchase agreement was “collateralized fully.” A repurchase agreement was “collateralized fully” if it met the following four conditions:

- the value of the underlying securities is at all times at least equal to the resale price provided in the agreement;
- the money market fund or its custodian either has physical possession of the underlying securities or they are held in a securities account in the name of the money market fund or its custodian;
- the money market fund retains an unqualified right to possess and sell the underlying securities in the event of a default by the seller; and
- the underlying securities consist entirely of Government securities or securities rated in the highest rating category by the Requisite NRSROs.

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This last condition codified for money market funds an interpretive position previously taken by the Division,69 and extended it beyond Government Securities to the highest rated securities generally.

The amended rule also established a safe harbor permitting investment of up to 25 percent of a fund’s Total Assets in a single First Tier issuer for not more than three days.70 The SEC added the safe harbor:

in response to commenters who asserted that the twenty-five percent basket often is useful in managing portfolio liquidity and large cash inflows; they urged that the ability to invest a large percentage of fund assets in a single high quality issuer on a temporary basis is an efficient way to assure liquidity in the event of unexpected redemptions by shareholders or to invest unanticipated cash inflows. The Commission believes that a three day limit will permit a fund to realize these efficiencies without being exposed to the risks associated with investing more than five percent of fund assets in a single issuer for an indefinite period of time.71

The new issuer diversification requirements were not applied to “Tax Exempt Funds,”72 however, due to concerns that those “funds often would have difficulties meeting the tests due to the limited number of tax exempt issuers in certain markets.”73 On the other hand, the Demand Feature diversification requirements, which were clarified but not changed in any substantive manner, continued to apply to all types of money market funds. Thus, the 1991 amendments created two independent diversification requirements: one for issuers (applicable only to taxable funds) and another for Demand Feature providers (applicable to all funds).

3. Changes to the Maturity Requirements

The definition of Eligible Security extended the maximum maturity of individual portfolio securities from one year (defined as 375 days) to 397 days (which is the maximum number of days in any thirteen month period that includes a leap day). The SEC provided the following explanation for the extension:

This change has been made in order to accommodate funds purchasing annual tender bonds, and securities on a when-issued or delayed delivery basis. These securities often are not delivered for a period of up to one month after the purchaser has made a commitment to purchase them. Since the purchaser must ‘book’ the security on the day it agrees to purchase it, the maturity period begins on that day.74

The original proposal was to extend the maximum permitted maturity to two years. The SEC decided against this, except in the case of Government Securities held by penny-rounding funds, which were permitted to acquire

71 Release No. 18005, supra note 56, at text preceding n.25.
73 Release No. 18005, supra note 56, at n.35.
74 Id. at text preceding n.56.
Government Securities with maturities of up to 762 days. The SEC decided that the greater potential market volatility of these securities created too much risk unless the fund was marking its portfolio to market on a daily basis.

The SEC was willing to extend the maturity limits on individual securities because the amendments reduced the maximum average weighted portfolio maturity from 120 to 90 days. In explaining this change, the SEC noted that:

As of February 5, 1991 the average portfolio maturity of taxable money market funds was 53 days and the average maturity of tax exempt funds was 50 days. [Citation omitted.] In 1987, municipal money market instruments fluctuated by 240 basis points over a sixty day period, a fluctuation large enough to cause a fund with a ninety-day dollar weighted average maturity to break a dollar. However, the Commission believes that a ninety day period should provide money market fund investors with additional safeguards without unduly limiting the flexibility of money market funds to adjust fund maturities to levels that are appropriate in view of market conditions.

4. Changes to the Scope of Rule 2a-7: Holding Out

The 1991 amendments also changed Rule 2a-7 from a permissive to a mandatory rule for any registered investment company holding itself out as a money market fund. New paragraph (b) of Rule 2a-7 made it:

an untrue statement of material fact within the meaning of section 34(b) of the [Investment Company] Act [citation omitted] for a registered investment company to:

(1) adopt the term ‘money market’ as part of its name or title…, or

(2) hold itself out to investors as, or adopt a name which suggests that it is, a money market fund or the equivalent of a money market fund, unless such registered investment company meets the conditions of paragraphs (c)(2), (c)(3), and (c)(4) of this section….

This provision extended the portfolio maturity, quality, and diversification requirements of Rule 2a-7 to all money market funds, regardless of whether they had previously obtained an exemptive order or had operated in accordance with ASR 219.

After the 1991 version of Rule 2a-7 superseded their original exemptive orders, many money market funds switched from the penny-rounding method to the amortized cost method. Under the 1991 (and current) version of Rule 2a-7, the only advantage of using the penny-rounding method is the ability to acquire Government Securities with remaining maturities of up to 762 days, as compared to the normal 397-day limitation. The penny-rounding method is more labor intensive to implement, however, as it requires the daily calculation of the fund’s NAV, which is then rounded to $1.00. In addition, if the fund’s calculated NAV ever falls below $0.995, the penny-rounding method

77 Release No. 18005, supra note 56, at n.50.
requires the fund to reduce its NAV below a dollar (i.e., break a dollar). In contrast, funds using the amortized cost method are only required to call a board meeting to decide “what actions, if any” should be taken.

**D. The 1996 Amendments and 1997 Technical Amendments**

After adoption of the 1991 amendments, the Division continued to assess whether Tax Exempt Funds could operate in compliance with the new diversification requirements that had been established for taxable funds. The failure of Mutual Benefit Insurance, which provided Puts for several VRDOs held by Tax Exempt Funds, and the deterioration in the credit of many Japanese banks, which provided letters of credit supporting VRDOs, reinforced concerns regarding Tax Exempt Funds. These concerns led the SEC to propose further amendments to Rule 2a-7 at the end of 1993.78

The proposed amendments also addressed, for the first time, the application of Rule 2a-7 to “Asset Backed Securities,” as discussed below. This was due, in part, to the use of “tender option bonds” by Tax Exempt Funds. Tender option bonds are long-term municipal bonds restructured through a trust to add a Demand Feature to effectively shorten the maturity of the bond and provide for a variable interest rate. The proposal also sought to address the widespread use of asset-backed commercial paper and structured products by taxable funds.

During the comment period, the Orange County bankruptcy and problems with derivative securities led to widespread sponsor support of money market funds. The SEC adopted sweeping amendments to Rule 2a-7 in March 1996.79 Many in the industry, however, expressed concerns over whether they could operate funds under the more complicated amended rule. This led the SEC to postpone the effective date of the 1996 amendments and propose further technical amendments.80 The SEC adopted these technical amendments at the end of 1997, giving us what remains, in all substantive respects, the current version of Rule 2a-7.81

These amendments added considerably to the length (nearly 8,400 words) and complexity of the rule. At the same time, money market funds had continued to grow in number and size. At the time of the 1996 amendments, “[m]ore than $775 billion in assets [was] invested in approximately 25 million money fund shareholder accounts.”82 Of this amount, approximately $127 billion was invested in Tax Exempt Funds.

Like the 1991 amendments, the 1996 and 1997 amendments touched all three of the risk-limiting provisions of Rule 2a-7: portfolio quality, diversification, and maturity. The technical amendments also made an effort to eliminate redundant definitions and apply defined terms in a consistent manner. For example, references to Puts and standby commitments were eliminated in favor of a revised definition of “Demand Feature,” and a new definition of

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82 Release No. 21837, supra note 79, at text preceding n.2.
“ Guarantee” was added to cover forms of credit substitution (such as bond insurance, surety agreements, or guarantees) in addition to Unconditional Demand Features.

1. Changes to Portfolio Quality Requirements

The 1997 version of Rule 2a-7 retained the basic elements of the definition of Eligible Security, including the definition of Requisite NRSROs. The SEC added explicit ratings requirements, however, to the definition of Eligible Security for specific types of securities. Thus, an NRSRO must rate an Asset Backed Security before it qualifies as an Eligible Security.\(^{83}\) The SEC imposed this requirement based on a belief that:

> in view of the role NRSROs have played in the development of the structured finance markets, a rating requirement should not be burdensome. Because both short- and long-term debt ratings from NRSROs reflect the NRSROs’ legal, structural, and credit analyses, the rule requires that an [Asset Backed Security] be rated in order to be eligible for fund investment, but does not specify whether the rating received must be short- or long-term.\(^{84}\)

A security whose eligibility is based on a third-party Guarantee must satisfy a similar rating requirement. In this case, either the Guarantee must have received a rating from an NRSRO, the provider of the Guarantee must have received ratings for obligations of comparable priority and security. The SEC explained that this requirement was intended to “provide additional protection by ensuring input into the minimal credit risk determination by an outside source.”\(^{85}\) Guarantees of affiliated persons, Guarantees that are Government Securities, and Guarantees of repurchase agreements that are Collateralized Fully are not subject to the requirement.

The amendments also added a requirement that, for a security subject to a Guarantee or a Demand Feature to be an Eligible Security, the issuer of the security must undertake to notify the holder in the event that there is a substitution of the Guarantee or Demand Feature. This requirement was added in response to “several instances in which a money fund had invested in a security backed by a [letter of credit] or other credit or liquidity enhancement that was replaced during the life of the underlying security without notice to the fund.” The SEC observed that: “A fund must know the identity of the put provider for a number of reasons, which include a determination of whether the fund is in compliance with the rule’s put diversification and credit quality provisions.”\(^{86}\)

The amendments also clarified the requirements for Conditional Demand Features (i.e., Demand Features other than Unconditional Demand Features). In addition to satisfying the general requirements for an Eligible Security, a Conditional Demand Feature must also satisfy the following conditions:

» the Board must determine that there is minimal risk that the circumstances that would result in the Conditional Demand Feature not being exercisable will occur;

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84 Release No. 21837, supra note 79, at Section II.E.4.
85 Id. at text preceding n.89.
86 Release No. 21837, supra note 79, at text preceding n.105.
» the conditions limiting exercise (a) either can be monitored readily by the fund, or relate to the tax-
exempt status of the security or (b) the Conditional Demand Feature requires that the fund will receive
notice of the occurrence of the condition and the opportunity to exercise the Demand Feature; and

» the Underlying Security or any Guarantee of such security (or the debt securities of the issuer of the
Underlying Security or Guarantee that are comparable in priority and security with the Underlying
Security or Guarantee) must receive either a short-term rating or a long-term rating, as the case may be,
from the Requisite NRSROs within the NRSROs’ two highest short-term or long-term rating
categories or, if unrated, is determined to be of comparable quality.87

2. Changes to the Diversification Requirements
The 1996 and 1997 amendments made two primary changes to the diversification requirements of Rule 2a-7. First,
they established issuer diversification requirements for Tax Exempt Funds. Second, they clarified the application of
the diversification requirements to Asset Backed Securities. The amendments continued to apply the Demand Feature
diversification requirements to all money market funds, but extended these requirements to all types of Guarantees.

With regard to Tax Exempt Funds (i.e., funds investing primarily in securities exempt from regular federal income
tax), the amendments drew distinctions between “Conduit Securities” and other municipal obligations, and between
national Tax Exempt Funds and Single State Funds (i.e., Tax Exempt Funds that restrict their investments to securities
exempt from a particular state’s income taxes). Basically, a Conduit Security is a security in which the municipal
issuer serves as a conduit for tax-exempt financing to a non-governmental entity. Under limited circumstances,
municipalities can provide the benefits of tax-exempt financing to a non-governmental entity. Recourse on these bonds
is limited to the non-governmental entity’s obligation to repay the municipality receiving the proceeds, and the municipality has no obligation to repay the bonds from other
resources. Conduit Securities are very common because federal law only exempts interest paid by municipal issuers.

Given that Conduit Securities are obligations of entities that also may issue taxable securities, the amendments subject
Conduit Securities held by Tax Exempt Funds to the same diversification limitations as taxable funds. Thus, a Tax
Exempt Fund cannot invest more than 5 percent of its Total Assets in First Tier Conduit Securities of the same issuer,
or more than 1 percent (or $1 million if greater) in Second Tier Conduit Securities of the same issuer. Tax Exempt
Funds also are limited to investing not more than 5 percent of their Total Assets in Second Tier Conduit Securities.88
The amendments also limit investments in non-Conduit Securities of a single issuer to not more than 5 percent of
a Tax Exempt Fund’s Total Assets. This limit applies regardless of whether the non-Conduit Securities are First or
Second Tier Securities.89

As with the taxable diversification requirements, these requirements apply to 100 percent of a Tax Exempt Fund’s
Total Assets, except for the three-day safe harbor for investments in a single issuer. The requirements were relaxed,

87 Rule 2a-7(c)(3)(iv)(B)-(C) (1997).
88 Rule 2a-7(c)(4)(i) (1997).
89 Id.
however, for Single State Funds, which only need to satisfy the diversification requirement for First Tier Securities with respect to 75 percent of their Total Assets, regardless of whether the First Tier Securities are Conduit or Non-Conduit Securities. The 25 percent “basket” for First Tier Securities was a recognition by the SEC of the supply constraints faced by Single State Funds, which might be forced to invest in lower-quality investments if they were subject to a strict 5 percent limit. Given this general 25 percent basket, there was no need to extend the three-day safe harbor to Single State Funds.

With regard to Asset Backed Securities, the amended rule basically requires money market funds to treat the Special Purpose Entity issuing the securities as the issuer for diversification purposes. The definition of Asset Backed Security turns on the security being payable primarily from cash flows from Qualifying Assets held by a Special Purpose Entity. Qualifying Assets are defined as “financial assets, either fixed or revolving, that by their terms convert into cash within a finite time period, plus any rights or other assets designed to assure the servicing or timely distribution of proceeds to security holders.”90

The SEC had originally proposed to base diversification on the originator of the Qualifying Assets or sponsor of the Special Purpose Entity. This ignored, however, one of the principal objects of structured finance, which was to insulate the Asset Backed Securities from the financial condition of other companies that have dealt with the Qualifying Assets. The SEC ultimately agreed to treat the Special Purpose Entity as the issuer, but remained concerned that some of the Qualifying Assets could be issued by companies that also issued obligations directly to the money market funds. The amended rule therefore treats any issuer of 10 percent or more of the Qualifying Assets (a Ten Percent Obligor) as the issuer of a proportionate share of the Asset Backed Security. Moreover, if some of the Qualifying Assets are Asset Backed Securities, money market funds are required to “look through” to any Ten Percent Obligors of the secondary Asset Backed Securities. The amended rule also provides an exception to the Ten Percent Obligor “look through” requirements for certain restricted Special Purpose Entities that were formed to issue Asset Backed Securities to only one other Special Purpose Entity.91

As previously noted, the rule continues to impose uniform Demand Feature diversification requirements on all types of money market funds. The requirements were made more uniform by applying the same limitations on Demand Features regardless of whether they were Conditional or Unconditional. The limitations also were extended to all forms of Guarantees, not just Unconditional Demand Features. Only First Tier Demand Features and Guarantees, however, are permitted to exceed 5 percent of Total Assets, or qualify for the “25 percent basket.”92

In addition, the amendments provided an exception from the issuer diversification requirements for securities subject to third-party Guarantees, in recognition of the fund’s complete reliance on the credit of the provider of the Guarantee rather than on the issuer of the security. The amendments also clarified the treatment of fractional Guarantees (which are treated as Guarantees of only a portion of the security) and layered Guarantees (each of which is treated as a

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90 Rule 2a-7(a)(3) (1997).
91 Rule 2a-7(c)(4)(ii)(D) (1997).
Finally, the amended rule explicitly acknowledged that a fund could elect not to rely on a Demand Feature or Guarantee if a security independently qualified as an Eligible Security.94

The amendments added a requirement to the definition of Collateralized Fully, namely that “Upon an Event of Insolvency with respect to the seller, the repurchase agreement would qualify under a provision of applicable insolvency law providing an exclusion from any automatic stay of creditors’ rights against the seller.” The SEC added this provision to ensure that a bankruptcy or receivership proceeding would not prevent a fund from selling the underlying securities immediately following a default. The amendments also permitted funds to treat “Refunded Securities” as investments in the underlying Government Securities. Refunded Securities are bonds that have been defeased by a deposit of Government Securities (most typically U.S. Treasury obligations) that, upon maturity, will provide sufficient funds to pay all principal and interest on the bond when due. This codified an earlier no-action position taken by the Division.95

### 3. Changes to the Maturity Requirements

The 1996 and 1997 amendments left intact the 397 day and 90 day maturity limits. In response to problems presented by certain interest rate derivatives, however, the rule was amended to clarify that a determination that an adjustable-rate security would approximate its amortized cost value must be made for all interest rate adjustments until the final maturity, not just the next scheduled adjustment.96 This was intended to prevent funds from assuming that they could dispose of an adjustable-rate security before foreseeable market conditions might cause the security to deviate significantly from its amortized cost value. The amended rule also imposed new procedural and recordkeeping requirements intended to help the SEC review these determinations during examinations.97

In addition, the amendments made a slight change to the deemed maturity of adjustable rate securities subject to Demand Features. Although adjustable-rate securities with final maturities of more than 397 days continue to be treated as maturing on the later of the next interest rate adjustment or the date on which principal must be paid following exercise of the Demand Feature, adjustable-rate securities with final maturities of less than 397 days are now treated as maturing on the earlier of those two dates.98 This was the SEC’s limited concession to an industry request to adopt an “earlier of” rule for all adjustable-rate securities subject to Demand Features.

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94 Rule 2a-7(a)(5) (1997).
95 See T. Rowe Price Tax Free Funds, SEC No-Action Letter (pub. avail. June 24, 1993). The provisions governing repurchase agreements that are Collateralized Fully and Refunded Securities have been moved to Rule 5b-3.
96 Rule 2a-7(a)(13) and (a)(29) (1997).
97 Rule 2a-7(c)(9)(iii) and (c)(10)(iv) (1997).
98 Compare Rule 2a-7(d)(2) to (d)(3) and (d)(4) to (d)(5).
V. Conclusion

Just as banks have continued to thrive for centuries notwithstanding periodic failures, so money market funds will continue to survive the failure of any particular funds, no matter how venerable. The resilience of money market funds is in no small measure attributable to Rule 2a-7, under which the SEC imposes more substantive regulations on money market funds than on any other type of investment company.
The requirement that a money market fund “limit its portfolio investments, including repurchase agreements, to those instruments which the Board of Directors determines present minimal credit risks” dates back to the first exemptive order permitting use of the amortized cost method of valuing shares. All subsequent exemptive orders permitting use of the amortized cost or penny-rounding methods included the minimal credit risk requirement as a condition, and the requirement was codified verbatim into Rule 2a-7 under the Investment Company Act of 1940 as originally adopted. In the release proposing Rule 2a-7, the Securities and Exchange Commission (Commission) provided the following examples of ways a board could fulfill its obligations to determine minimal credit risk:

[T]he board could set forth a list of “approved instruments” in which the fund could invest, such list including only those instruments which the board had evaluated and determined presented minimal credit risks. [Footnote omitted.] The board could also approve guidelines for the investment adviser regarding what factors would be necessary in order to deem a particular instrument as presenting minimal credit risks. The investment adviser would then evaluate the particular instruments proposed for investment and make only conforming investments. In either case, on a periodic basis the board should secure from the investment adviser and review both a listing of all instruments acquired and a representation that the fund had invested in only those approved instruments. The board, of course, could revise the list of approved instruments or the investment factors to be used by the investment adviser.2

The release adopting Rule 2a-7 provided some additional insights into the minimal credit risk requirement. First, in explaining the need for both a high quality rating and minimal credit risk requirement, the Commission observed that:

[T]he mere fact that an instrument has or would receive a high quality rating may not be sufficient to ensure stability. The Commission believes that the instrument must be evaluated for the credit risk that it presents to the particular fund at that time in light of the risks attendant to the use of amortized cost valuation or penny-rounding. Moreover, the board may look at some aspects when evaluating the risk of an investment that would not be considered by the rating services.3

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Second, in response to a “substantial number” of comments “that the board should not be involved in the [credit] quality determination at all, and that the determination should be made by the investment adviser,” the Commission acknowledged that it would “not object to the delegation of the day-to-day function of determining quality, provided that the board retains sufficient oversight.”4 The Commission reiterated the use of “approved instruments” lists or investment adviser guidelines as “example[s] of acceptable delegation” by the board.5

In 1986, the Commission amended Rule 2a-7 to regulate investments in securities subject to Demand Features (or “puts”) and standby commitments. The amendments added a reference to puts in the minimal credit risk requirement, but did not provide any further guidance regarding minimal credit risk determinations.

The next official discussion of the minimal credit risk requirement occurred in an exchange of letters between the Investment Company Institute (ICI) and the Director of the Division of Investment Management (Division), the division within the Commission primarily responsible for regulating mutual funds, including money market funds. ICI initiated the discussion at the end of 1989, after certain advisers purchased defaulted commercial paper from their money market funds. In its letter, ICI urged the Commission to issue an interpretive release that, among other things, “included a list of factors which might be considered in determining whether a particular instrument presents minimal credit risk….”7 ICI’s letter provided illustrative factors “that might be considered in assessing credit risk of the issuer or guarantor of money market securities.”8 Appendix I to the Money Market Working Group Report sets forth these illustrative factors.

Initially, the Division responded by agreeing that “the board should take into account, as appropriate, the kinds of factors listed in your letter,” but declined to issue an interpretive release.9 Continued concerns about defaults, however, persuaded the Division to issue a second letter.10 In this letter, the Division observed that a board must determine credit risk “based upon an analysis of the issuer’s capacity to repay its short-term debt,” and provided “[e]xamples of elements of such an analysis includ[ing]:”

(i) a cash flow analysis; (ii) an assessment of the issuer’s ability to react to future events, including a review of the issuer’s competitive position, cost structure and capital intensiveness; (iii) an assessment of the issuer’s liquidity, including bank lines of credit and alternative sources of liquidity to support its commercial paper; and (iv) a “worst case scenario” evaluation of the issuer’s ability to repay its short-term debt from cash sources or asset liquidations in the event that the issuer’s backup credit facilities are unavailable.11

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4 Id.
5 Id.
6 Unless otherwise defined in this Appendix, definitions of capitalized terms are found in paragraph (a) of Rule 2a-7.
8 Id. at 6.
9 Id. at 2-3.
11 Id. at 2.
Later in 1990, the Commission proposed major revisions to Rule 2a-7. Although the Commission proposed significantly higher rating standards for Rule 2a-7, it did not propose “to change Rule 2a-7’s condition that a money market fund limit its investment to securities that are determined to present ‘minimal credit risks.’” The Commission provided, however, some additional guidance on the delegation of responsibility for determining minimal credit risks, noting that:

The…fund’s board of directors…may delegate the day-to-day function of determining credit quality to the fund’s investment adviser (its ‘delegate’), provided that the board retains sufficient oversight. That is, the board must, at a minimum, establish and approve procedures that the adviser will follow, and thus have knowledge in advance how the adviser will perform its functions. In addition, the board should assure itself that the adviser’s methods are reasonable and must review periodically the adviser’s performance.

The Commission also proposed two changes relating to minimal credit risk determinations. First, the Commission proposed to require a board to “reassess promptly whether [a] security presents minimal credit risks” following any decision by a nationally recognized statistical rating organization (NRSRO) downgrading the security to its second highest short-term rating category, or following a determination that an unrated security was no longer comparable to securities rated in the highest short-term rating categories. Second, the Commission proposed that, if a board “determines that a security no longer presents minimal credit risks, the board…, absent a finding by the board of directors that such action would not be in the best interests of the money market fund, shall cause the money market fund to dispose of such security as soon as practicable.”

The amendments to Rule 2a-7 adopted in 1991 included both of these changes. The first change was revised to incorporate the defined terms “First Tier Security” and “Second Tier Security” that were included in the final amendments. Thus, a board was required to reassess a security’s minimal credit risk whenever it ceased to qualify as a First Tier Security, or whenever a Second Tier Security or Unrated Security was rated by any NRSRO below its second highest short-term rating category. The second change was adopted substantially as proposed, except for the addition of a parenthetical statement that a board, when determining whether disposal of a security was in the fund’s best interest, “may take into account, among other factors, market conditions that could affect the orderly disposition of the security.”

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13 Id. at text preceding n.48.
14 Id.
15 Id. at Section II.1.b.
16 Id. at Section VIII.
The 1991 amendments also included the only substantive change ever made to the wording of the minimal credit risk requirement. The Commission added the parenthetical “(which determination must be based on factors pertaining to credit quality in addition to the rating assigned to such instruments by a NRSRO)” at the end of the requirement. The Commission explained that this language was intended to underscore that:

Possession of a certain rating by a NRSRO is not a ‘safe harbor.’ Where the security is rated, having the requisite NRSRO rating is a necessary but not sufficient condition for investing in the security and cannot be the sole factor considered in determining whether a security has minimal credit risks.18

The Commission also emphasized that:

The extensiveness of the evaluation will vary with the type and maturity of the security involved and the board’s (or its delegate’s) familiarity with the issuer of the security. For example, little credit analysis of a Government [S]ecurity19 would be expected. A different analysis may be appropriate for a security with a remaining maturity of seven days than for one of the same issuer with a remaining maturity of one year. In a letter dated May 8, 1990, the Division of Investment Management provided guidance on elements of a minimal risk analysis. [Footnote omitted] … [T]hese elements are only examples. The focus of any minimal credit risk analysis must be on those elements that indicate the capacity of the issuer to meet its short-term debt obligations.20

Finally, the 1991 amendments added paragraph (e) to Rule 2a-7, which expressly authorized a money market fund’s board to “delegate to the fund’s investment adviser or officers the responsibility to make any determination required to be made by the board…..” Although several determinations (such as the determination not to dispose of a security that no longer presents minimal credit risks) were excluded from delegation, the determination of minimal credit risk was not. Thus, a board could delegate this responsibility subject to two conditions. First, the board must establish and periodically review “written guidelines (including guidelines for determining whether instruments present minimal credit risks…) and procedures under which the delegate makes such determinations.” Second, the board must exercise “adequate oversight (through periodic reviews of fund investments and the delegate’s procedures in connection with investment decisions…) to assure that the guidelines and procedures are being followed.” The Commission observed that these requirements were “substantially consistent with previously stated Commission positions concerning the circumstances under which the board may delegate its responsibilities.”21

The Commission’s next proposal to amend Rule 2a-7 in 1993 focused primarily on Tax Exempt Funds and Asset Backed Securities.22 The release is noteworthy for containing the Commission’s only formal acknowledgement

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18 Id. at Section II.A.
19 See Section 2(a)(16) of the Investment Company Act for the definition of a “Government Security.”
20 Release No. 18005, supra note 17.
21 Id. at Section II.F.
that “[f]unds have a continuing duty under Rule 2a-7 to ensure that all securities in their portfolios continue to present minimal credit risks.” This confirmed a long-held view of the Division and of most money market fund managers that funds must continue to monitor the credit risks of their portfolio securities after acquisition.

The Commission’s statement was made in the context of a proposal to require written procedures for an “ongoing review of the…continued minimal credit risks” of a security subject to a Demand Feature. Tax Exempt Funds are highly dependent on Demand Features to shorten the effective maturity of long-term municipal bonds and provide liquidity to meet redemptions. This dependency led the Commission to find that “[p]eriodic reviews of instruments subject to demand features may be particularly important due to the length of time the instruments are in the fund’s portfolio.” The Commission also proposed to require “a written record of the determination that a portfolio security presents minimal credit risks.” This proposal was prompted by the failure of some funds to provide adequate records of minimal credit risk determinations during examinations.

The Commission also used the 1993 proposing release to discuss the credit analysis of Asset Backed and Government Securities. With respect to Asset Backed Securities, the Commission noted that:

Determining that an [Asset Backed Security] presents minimal credit risks requires an examination of the criteria used to select the underlying assets, the credit quality of the put providers, and the conditions of the contractual relationships among the parties to the arrangement. When an [Asset Backed Security] consists of a large pool of financial assets, such as credit card receivables or mortgages, it may not be susceptible to conventional means of credit risk analysis because credit quality is based not on a single issuer but on an actuarial analysis of a pool of financial assets. [Footnotes omitted]

With respect to Government Securities, the Commission reiterated that they were subject to the minimal credit risk requirement. According to the release:

A practical application of this requirement to Government [S]ecurities requires different levels of analyses depending upon the government entity issuing the security and the terms of the security. The depth of the analysis required—and the adequacy of a fund’s records of the analysis—will depend on: (i) whether the securities are backed by the full faith and credit of the U.S. Government; and (ii) whether the instrument has any special features or a guarantee structure that might increase the riskiness of the instrument or the fund’s potential failure to comply with some aspect of Rule 2a-7.

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23 Id. at Section II. D.1.a. See also n.126. (“The provision of Rule 2a-7 that limits fund investments to securities that present minimal credit risk requires that funds monitor their existing investments to assure that they continue to present minimal credit risks.”)

24 Id. at Section II. D.1.a.

25 Id. at Section II. D.7. (“During 1991, the Commission staff conducted special inspections of almost all money market funds to examine, among other things, whether they were performing the credit analysis required to determine that portfolio securities present minimal credit risks. [Footnote omitted] Some funds lacked adequate records to document their analysis and, thus, the Commission could not confirm that these funds had complied with the rule.”)

26 Id. at Section II.C.4.b.

27 Id. at n.155.
The final amendments, adopted in 1996,\(^{28}\) included both the proposed procedures for credit reviews of securities subject to Demand Features and the recordkeeping requirement for minimal credit risk determinations. The final amendments modified the required procedures, however, to limit the credit review to the provider of the Demand Feature, rather than also requiring a credit review of the issuer of the underlying security as originally proposed. The final amendments also added a specific minimal risk determination for a security subject to a Conditional Demand Feature, which would be:

an eligible security only if the fund’s board of directors (or its delegate) determines that there is “minimal risk” of occurrence of the conditions that would result in the demand feature not being exercisable.\(^{29}\)

In this case, a credit review of the issuer of the security subject to the Conditional Demand Feature was required as part of the Demand Feature credit review procedures.

While the amendments proposed in 1993 were pending, the Division provided additional guidance regarding the basis for minimal credit risk determinations in a no-action letter to Red Flag Research Inc.\(^{30}\) Red Flag offered a research service “consist[ing] of detailed analytical research concerning the creditworthiness of an issuer of eligible securities...,” but did not provide “a conclusion regarding whether a security presents minimal credit risks for a money market fund.” The Division advised Red Flag that:

Rule 2a-7 does not specify the sources of information which a money market fund or its adviser may consult when evaluating securities’ creditworthiness, and we believe the use of reports prepared by credit information services is consistent with the rule.\(^{31}\)

The Division cautioned, however, that responsibility for minimal credit risk determinations “remains at all times with the fund’s adviser and may not be delegated to a credit information service,” and emphasized that “a report by a credit information service is not a substitute for the [adviser’s] minimal credit risk analysis.”\(^{32}\) Accordingly:

During an inspection of a money market fund, the Commission staff will not accept a fund’s possession of a report...from a credit information service as demonstrating that the fund’s adviser has performed a minimal credit risk analysis..... The fund should present documentation to substantiate that it has performed a minimal credit risk analysis and reached its own conclusion about whether the security presents such risks.\(^{33}\)


\(^{29}\) Id. at text preceding n.100.


\(^{31}\) Id.

\(^{32}\) Id.

\(^{33}\) Id.
The most recent changes to the wording of the minimal credit risk requirement were made in the “technical revisions” to Rule 2a-7 adopted at the end of 1997. Unlike some other revisions made in this release, omitting “including puts and repurchase agreements” from the minimal credit risk requirement was truly “technical.” The change did not merit any explanation in the proposing or adopting releases, but was probably considered consistent with the Commission’s emphasis on the need to make a minimal credit risk determination as to every investment made by a money market fund. The only additional guidance provided by the Commission was the observation that “overcollateralization would be relevant in determining whether the Asset Backed Security presents minimal credit risks.”


35 Id. at Section I.B.3.b.v., n.68.
APPENDIX G: CHRONOLOGY OF SIGNIFICANT MONEY MARKET FUND EVENTS AND REGULATORY RESPONSES

1971
The first money market fund, The Reserve Fund, opens to investors.

July 1983
Rule 2a-7 is adopted. Rule 2a-7 under the Investment Company Act of 1940 (Investment Company Act) is an exemptive rule that permits money market funds to determine their net asset value (NAV) using two types of valuation methods—the amortized cost method of valuation and/or the penny-rounding method of pricing. The rule includes several risk-limiting provisions—designed to facilitate maintenance of a stable NAV—governing the credit quality, diversification, and maturity of money market fund investments. SEC Release No. IC-13380 (July 11, 1983).

1985–1986
Amendments to Rule 2a-7 are proposed and adopted. The amendments permit money market funds to acquire third party puts and standby commitments. The amendments also impose additional requirements on the quality and diversification of demand features and introduce the concept of a “nationally recognized statistical rating organization” (NRSRO) to the definition of an “eligible security.” SEC Release No. IC-14607 (July 1, 1985) (proposing release) and SEC Release No. IC-14983 (March 21, 1986) (adopting release).

1989–1990
Several taxable money market funds hold approximately $125 million in defaulted commercial paper issued by Mortgage and Realty Trust or Integrated Resources, Inc. The commercial paper had the second highest rating from one NRSRO and thus was considered an eligible security for investment under Rule 2a-7, as then in effect. Shareholders of the funds that held these commercial paper issues were not adversely affected because each fund’s investment adviser purchased the paper from the respective fund at amortized cost or principal amount, or otherwise agreed to indemnify its fund.

December 6, 1989
Securities and Exchange Commission (SEC) staff sends an interpretive letter to the Investment Company Institute (ICI) regarding factors that might be considered in determining whether a particular instrument presents minimal credit risks.
May 8, 1990  Continued concerns about defaults of commercial paper lead SEC staff to issue a letter to investment company registrants. The letter reminds money market funds that they cannot buy securities based upon NRSRO ratings alone and reiterates that Rule 2a-7 requires a two-part test (i.e., a security must be both high quality and present minimal credit risks). It also lists some elements of a minimal credit risk analysis.

July 1990  The SEC proposes amendments to Rule 2a-7 to reflect significant changes in the financial markets since the rule’s adoption, including the expansion of the commercial paper market and the contemporaneous decline of the credit ratings of certain money center banks. SEC Release No. IC-17589 (July 17, 1990).

Fall 1990  Several funds hold commercial paper, issued by MNC Financial Corp., that was downgraded to below high quality, resulting in a significant decline in its market price. The commercial paper had the second highest rating from one NRSRO when purchased by the funds and thus was considered an eligible security for investment under Rule 2a-7, as then in effect. Shareholders of the funds that held these commercial paper issues were not adversely affected because each fund’s investment adviser purchased the paper from the respective fund at amortized cost or principal amount, or otherwise agreed to indemnify the fund.

February 1991  Amendments to Rule 2a-7 are adopted. The amendments, which focus primarily on taxable money market funds, tighten the credit standards for eligible investments by breaking them into two categories (First Tier Securities and Second Tier Securities), limiting the amount of Second Tier Securities that can be purchased by taxable funds, and adding a diversification requirement for taxable funds. The amendments also prohibit mutual funds from calling themselves money market funds unless they comply with the risk-limiting provisions of Rule 2a-7.¹ SEC Release No. IC-18005 (February 20, 1991).

July 1991  New Jersey insurance regulators seize Mutual Benefit Life Insurance Company (MBLI), which provided puts for several variable rate demand obligations (VRDOs) held by tax-exempt money market funds. After its seizure, MBLI could no longer honor its obligations under the terms of the demand features it provided. Advisers to funds holding MBLI-backed securities took various actions to prevent shareholder losses that would have occurred had the funds broken a dollar. The advisers either repurchased the MBLI-backed instruments from the funds at their amortized cost or obtained a replacement guarantor.

¹ The 1991 amendments also require money market fund prospectuses and sales material to disclose prominently that the shares of the money market fund are neither insured nor guaranteed by the U.S. government and there is no assurance the fund will be able to maintain a stable NAV of $1.00 per share.
December 6, 1991  SEC staff sends a letter to ICI stating its belief that inverse floaters (instruments that have floating or variable interest rates that move in the opposite direction of short-term interest rates) are not an appropriate investment for money market funds.

July 24, 1992  SEC staff sends a letter to Morgan, Keegan & Co., Inc., explaining that a floating or variable rate instrument subject to an interest rate cap is not eligible to use the maturity shortening provisions of Rule 2a-7. Note 7 of the letter interprets the rule to require adjustable rate government securities to approximate par.

June 16, 1993  SEC staff sends a letter to ICI explaining that money market funds may not purchase long-term capped floaters without demand features (unless the cap is set to conform to state usury laws and the maximum rate is in excess of 20 percent). The letter also states that funds must measure the maturities of short-term capped floaters (those with final maturities of 397 days or less) with reference to their final maturities rather than their next interest rate reset.

June 25, 1993  SEC staff sends a letter to ICI giving funds until September 1, 1993, to correctly measure the weighted average maturity of their funds in accordance with the SEC’s June 16, 1993, letter (i.e., funds must measure the maturities of short-term capped floaters by reference to their final maturities rather than their next interest rate reset).

December 1993  Amendments to Rule 2a-7 are proposed. The failure of MBLI and the deterioration in the credit of many Japanese banks, which provided letters of credit supporting VRDOs, reinforces concerns regarding tax-exempt money market funds. The proposed amendments also address, for the first time, the application of the rule to asset-backed securities to address the use of tender option bonds by tax-exempt funds and the widespread use of asset-backed commercial paper and structured products by taxable funds. In addition, the release identifies five types of adjustable rate instruments that the SEC believes may be inappropriate for a money market fund: “inverse floaters,” “capped floaters,” “CMT floaters,” “leveraged floaters,” and instruments linked to an interest rate that significantly lags prevailing short-term rates, such as “COFI floaters.” SEC Release No. IC-19959 (December 17, 1993).

1994  Increases in interest rates cause the value of many adjustable rate securities to fall below par. As a result, 25 advisers or related persons purchased adjustable rate securities from their funds at the securities’ amortized cost values to avoid any fund shareholder losses.
June 30, 1994  SEC staff sends a letter to ICI restating and amplifying guidance provided in the December 1993 release regarding the types of adjustable rate securities that the SEC staff views as inappropriate for money market funds. The letter also informs advisers to money market funds that had investments in these securities to “plan to dispose of the securities in an orderly manner.”

September 1994  The U.S. Government Money Market Fund, a series of Community Bankers Mutual Fund, Inc., which had invested a large percentage of its assets in adjustable rate securities, announces that it will liquidate and distribute less than $1.00 per share. This is the first time a money market fund “broke the dollar,” paying investors $0.96 per share. The fund was an institutional money fund, not a retail money fund, thus individuals were not directly affected.

December 6, 1994  Orange County, California, declares bankruptcy. In response to the bankruptcy, 38 advisers or related persons either purchase Orange County notes from, or enter into credit support arrangements with, their affiliated funds in order to maintain the funds’ stable share price of $1.00.

March 1996  Amendments to Rule 2a-7 are adopted. The primary purpose of the last major amendments to the rule (proposed in 1993) is to tighten the investment restrictions on tax-exempt money market funds to more closely parallel those conditions imposed on taxable money market funds under the 1991 amendments. The amendments also clarify the credit quality, diversification, and maturity determination standards applicable to synthetic tax-exempt securities and asset-backed securities. In addition, the amendments impose a number of new procedural and recordkeeping requirements on all money market funds and adopt a new rule (Rule 17a-9 under the Investment Company Act) exempting certain transactions from the Investment Company Act’s limitations on affiliated transactions. SEC Release No. IC-21837 (March 21, 1996).

2007–2008  As a result of the credit crisis that began in the summer of 2007 and concerns regarding the underlying assets in structured investment vehicles (SIVs), over 25 advisers or related persons either purchase SIVs from, or enter into credit support arrangements with, their affiliated funds in order to maintain the funds’ stable share price of $1.00.

March 16, 2008  JPMorgan Chase & Co. announces that it will acquire The Bear Stearns Companies Inc. for $2.00 a share, with the federal government guaranteeing up to $30 billion in potential losses.
September 7, 2008  The U.S. Treasury Department guarantees outstanding debt of Fannie Mae and Freddie Mac when both agencies are placed in conservatorship by the Federal Housing Finance Agency.

September 15, 2008  Lehman Brothers Holdings Inc. (Lehman) files for Chapter 11 bankruptcy protection. Shortly thereafter, approximately five advisers enter into agreements with their affiliated funds in order to maintain the funds’ stable share price of $1.00 due to holdings of Lehman debt.

September 16, 2008  The Primary Fund, a series of The Reserve Fund, which held $785 million of Lehman securities that had been valued at zero by the fund’s board, announces that the fund’s NAV had fallen to $0.97 per share, becoming the second money market fund ever to “break a dollar.”

September 18, 2008  Putnam Investments announces closure and liquidation of its $12.3 billion Prime Money Market Fund, which serves only institutional investors.

September 19, 2008  The U.S. Treasury Department announces a temporary guarantee program for publicly offered Rule 2a-7 money market funds that elect to participate in the program. The Temporary Guarantee Program for Money Market Funds (Treasury Guarantee Program) will guarantee that if a covered fund breaks a dollar, it will be restored to a $1.00 NAV. The guarantee applies to shares held by any shareholder of record on September 19, and would be triggered if a fund’s NAV fell below a certain level. Upon the fund’s liquidation, the Treasury Guarantee Program would make up the difference between the value per share and the fund’s normal stable NAV of $1.00 or more. The program is authorized until April 30, 2009, although it can be extended by the Secretary of the Treasury until September 18, 2009.

September 19, 2008  The Federal Reserve’s Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) provides nonrecourse loans at the primary credit rate to U.S. depository institutions and bank holding companies to finance purchases of high-quality asset-backed commercial paper from money market mutual funds. The AMLF is authorized until October 30, 2009.

October 10, 2008  SEC staff sends a letter to ICI temporarily allowing money market funds to value certain securities at amortized cost for shadow pricing under Rule 2a-7. The relief was limited to First Tier Securities with maturities of 60 days or less that the fund reasonably expected to hold to maturity. The relief expired on January 12, 2009.
October 27, 2008  The Federal Reserve begins funding the Commercial Paper Funding Facility (CPFF). The CPFF is a liquidity backstop to U.S. issuers of commercial paper through a special purpose vehicle that purchases three-month unsecured and asset-backed commercial paper directly from eligible issuers. The CPFF is authorized until October 30, 2009.

November 20, 2008  The SEC issues Rule 22e-3T under the Investment Company Act as an interim final temporary rule. The rule permits certain money market funds that have elected to participate in the Treasury Guarantee Program to suspend redemptions upon liquidation pursuant to the Program. The rule is intended to facilitate orderly liquidations and help prevent the sale of fund assets at “fire sale” prices. The rule will expire on October 18, 2009, unless the SEC announces an earlier expiration date. SEC Release No. IC-28487.

November 24, 2008  The Federal Reserve’s Money Market Investor Funding Facility (MMIFF) provides senior secured funding to a series of special purpose vehicles (SPVs) that purchase high-quality money market instruments maturing in 90 days or less from U.S. money market funds. On January 7, 2009, the MMIFF is extended to U.S.-based securities lending pools and other U.S.-based investment funds that operate in a manner similar to money market funds, such as certain local government investment pools, common trust funds, and collective investment funds. The program is authorized until October 30, 2009.

January 14, 2009  Money market fund assets hit $3.92 trillion, their highest level ever.
Appendix H: Survey of Select Offshore Jurisdictions’ Regulation of Money Market Funds

In the United States the name “money market fund” is restricted to the specific and narrow group of funds that are registered under the Investment Company Act and comply with Rule 2a-7. In this Appendix, we will use the term “money market fund” more generally to refer to a category of funds that lacks a single or common definition across jurisdictions, but is a recognized fund category around the globe. Because of the differences in approaches to money market funds around the world, we considered the regulation of money market funds in other jurisdictions to further inform our review of U.S. money market fund regulation. We have specifically considered money market fund regulation in Ireland, France, and Australia.

We examined the Irish regulations for several reasons, including the size of Ireland’s total money market fund assets as well as the fact that many of the triple-A rated constant net asset value (CNAV) money market funds (or IMMFA funds) are domiciled in Ireland. Since the IMMFA funds operate in a style similar to U.S. money market funds, we felt that it was important to consider the regulatory regime applicable to these funds. In addition, it appeared that the recent market events had impacted certain IMMFA funds domiciled in Ireland. For example, a large dollar-denominated money market fund sponsored by Lehman Brothers suspended redemptions in September 2008, and another fund converted from CNAV to variable net asset value (VNAV) in November 2008. In addition, in October, the Irish regulator issued temporary relief relating to valuation and shadow pricing for Irish money market funds that was similar to guidance provided by the staff of the U.S. Securities and Exchange Commission.

We considered France because it is one of the largest markets for money market funds, yet in contrast to U.S. money market funds, French money market funds issue shares with a VNAV. Last, we concluded that it was important to consider a large market outside of North America and Europe. Australia has the largest market for money market funds outside of these regions.

We note that the size of participation by both retail and institutional investors in U.S. money market funds appears unique. The detailed regulatory regime under Rule 2a-7 for a stable net asset value (NAV) fund also is a special feature of the U.S. system. Triple-A rated, stable NAV funds, such as the IMMFA funds, are highly similar to U.S. money market funds, yet the IMMFA funds are limited to institutional investors. The large majority of investors in the French money market funds are also institutional. The Australian market is

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1 The principal providers of European CNAV money market funds have a trade association, the Institutional Money Market Funds Association (IMMFA). We refer to the European CNAV money market funds, including certain Irish-domiciled money market funds, as the “IMMFA funds.”
primarily a retail market and its stable NAV funds represent a small proportion of their total money market fund asset class. Despite the differences among the jurisdictions, it appears that investors in these countries seek money market funds for reasons common to U.S. investors, *i.e.*, stability of principal, liquidity, and competitive yields. Like U.S. money market fund investors, investors in these authorized funds also benefit from regulatory oversight, a regulatory regime for authorized funds (*e.g.*, disclosure standards), asset diversification, professional money management and economies of scale.

The following provides a brief overview of the regulation of money market funds in these three non-U.S. jurisdictions.

**IRELAND**

Ireland has a regulatory regime, especially for UCITS money market funds,² that is detailed in character like U.S. rules for money market funds. In Ireland, money market funds are not specifically defined in primary legislation; however, when applying to the Irish Financial Services Regulatory Authority (Financial Regulator) for authorization as a UCITS or non-UCITS fund, the fund promoter must indicate whether the fund is a money market fund within the European Central Bank’s definition.³ In addition, the Financial Regulator will not allow the term “money market fund” to be used unless the fund meets the European Central Bank’s definition as well as the other requirements described below. Rated money market funds also have specific rating criteria to satisfy, which may impose additional or stricter requirements.

Resembling the U.S. money market fund industry, most Irish-domiciled money market funds seek to maintain a constant net asset value, *e.g.*, U.S.$1.00, £1.00, or €1.00. Many IMMFA funds are domiciled in Ireland. As of December 2008, the total net assets of Irish-domiciled money market funds was over US$444 billion, which represents nearly half of the total net assets of Irish registered collective investment schemes.⁴

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² In Europe, there are provisions for establishing funds under the European Communities Regulations 2003 (Undertaking for Collective Investment in Transferable Securities) (UCITS) and funds also can be established under the local law of the fund’s domicile (non-UCITS).

³ The European Central Bank defines a “money market fund” as a collective investment undertaking of which the units are, in terms of liquidity, close substitutes for deposits and that primarily invest: in money market instruments; and/or in money market fund shares/units; and/or in other transferable debt instruments with a residual maturity up to and including one year; and/or in bank deposits; and which pursue a rate of return that approaches the interest rates of money market instruments. Annex 1, Part I Section 1, paragraphs 6 and 7 of the European Union Council Regulation (EC) 2423/2001 of the European Central Bank issued on 20 November 2001.

⁴ Source: Irish Funds Industry Association.
**Regulation of Non-UCITS Money Market Funds**

Generally, a non-UCITS money market fund, the sole object of which is investment in money market instruments, must adhere to the following:

- At least 80 percent of the assets of the fund must consist of securities or deposits which have a maturity date at the time of acquisition of not greater than one year.
- Not more than 5 percent of the net asset value of the fund may be invested in the debt securities of companies, other than banks, with a credit rating of less than A1.
- The prospectus must contain a risk warning that draws attention to the difference between the nature of a deposit and the nature of an investment in a money market fund with particular reference to the risk that the principal invested in a money market fund is capable of fluctuation.

**Regulation of UCITS Money Market Funds**

For a UCITS money market fund, there are more specific rules that, in many respects, resemble the U.S. Rule 2a-7 regime, although in some cases the rules are different (e.g., weighted average maturity, shadow pricing triggers, stress testing). There also is no explicit direction in the Irish rules on the use of credit ratings when evaluating a security for investment. Under Irish rules, a UCITS money market fund must meet the following criteria: It must invest in “instruments normally dealt in on the money market” that are “liquid,” and have a “value which can be accurately determined at any time.” Each of these criteria is discussed in more detail below.

- “Money market instruments normally dealt in on the money market.” Money market instruments normally dealt in on the money market are financial instruments which fulfill one of the following:
  - they have a maturity at issuance of up to and including 397 days;
  - they have a residual maturity of up to and including 397 days;
  - they undergo regular yield adjustments in line with money market conditions at least every 397 days;
  - their risk profile, including credit and interest rate risks, corresponds to that of financial instruments which have a maturity as referred to in the first two subbullets above, or are subject to a yield adjustment as referred to in the above subparagraph.
- “Liquidity.” Liquidity means that the instrument can be sold at limited cost in an adequately short time frame, taking into account the obligation of the fund to repurchase its units at the request of any unit holder on a dealing day. In addition, when assessing the liquidity of a money market instrument, the following must be considered:
  - At the instrument level: (1) frequency of trades and quotes for the instrument in question; (2) number of dealers willing to purchase and sell the instrument, willingness of the dealers to make a market in the instrument in question, nature of market place trades (times needed to sell the instrument, method for soliciting offers and mechanics of transfer); (3) size of issuance/program; (4) possibility
to repurchase, redeem, or sell the money market instrument in a short period (e.g., seven business days), at limited cost, in terms of low fees and bid/offer prices and with very short settlement delay.

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At the fund level: (1) unit holder structure and concentration of unit holders of the UCITS; (2) purpose of funding of unit holders; (3) quality of information on the fund’s cash flow patterns; (4) prospectuses’ guidelines on limiting withdrawals.

The fact that some conditions are not met does not mean that a financial instrument is nonliquid. The factors are intended to ensure that a fund is considering the structure of its portfolio, appropriately anticipating cash flows and is able, as needed, to correlate the sale of assets with redemption demands.

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“Value which can be accurately determined at any time.” Money market instruments will be deemed to have a value which can be accurately determined at any time if accurate and reliable valuation systems, meeting the following, are available:

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they enable the fund to calculate a net asset value in accordance with the value at which the financial instrument held in the portfolio could be exchanged between knowledgeable willing parties in an arm’s length transaction;

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they are based either on market data or on valuation models, including systems based on amortized cost.

UCITS Money Market Funds Using Amortized Cost

If the Irish-domiciled UCITS money market fund utilizes amortized cost valuation, the following additional conditions apply:

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Eligible assets: The assets of the money market fund are restricted to securities that comply with one of the following:

» 

have a maturity at issuance of up to and including 397 days;

» 

have a residual maturity of up to and including 397 days;

» 

undergo regular yield adjustments in line with money market conditions at least every 397 days; and/or

» 

the risk profile, including credit and interest rate risks, corresponds to that of financial instruments that have a maturity of up to and including 397 days or are subject to a yield adjustment at least every 397 days.

» 

Weighted average maturity: The weighted average maturity (WAM) of the portfolio must not exceed 60 days.

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Shadow Pricing and Mark to Market: Like Rule 2a-7, there are shadow pricing conditions under the Irish regime but the details differ from the U.S. requirements. A money market fund must carry out a weekly review of discrepancies between the market value and the amortized cost value of money market instruments. Escalation procedures also must be in place to ensure that material discrepancies between
the market value and the amortized cost value of a money market instrument are brought to the attention of personnel charged with the investment management of the money market fund. Weekly reviews and any engagement of escalation procedures must be documented. Further, the following actions are required for discrepancies:

» Discrepancies in excess of 0.1 percent between market value and amortized cost value of the portfolio should be brought to the attention of the management company or the investment manager.

» Discrepancies in excess of 0.2 percent between market value and amortized cost value of the portfolio should be brought to the attention of senior management/directors of the management company, the board of directors or general partner, as appropriate, and the trustee.

» If discrepancies in excess of 0.3 percent between market value and amortized cost value of the portfolio occur, a daily review must take place. The management company, board of directors or general partner must notify the Financial Regulator with an indication of the action, if any, which will be taken.

» Stress testing: An Irish money market fund is expected to engage in monthly portfolio analysis incorporating stress testing to examine portfolio returns under various market scenarios. The analysis should be designed to determine if the fund’s portfolio holdings are appropriate to meet predetermined levels of credit risk, interest rate risk, market risk, and investor redemptions.

Effect of Market Events

For the interests of shareholders, Irish funds, including money market funds, have mechanisms to manage exceptional events, such as the imposition of redemption gates (e.g., on redemptions greater than 10 percent) or the temporary suspension of redemptions. Funds may temporarily suspend purchases and redemptions when the NAV cannot be calculated or there are difficulties in disposing of assets. The payment of proceeds also may be delayed. There were some Irish-domiciled Lehman money market funds that suspended redemptions in September 2008. Also during this time, an Irish domiciled money market fund converted from a CNAV to VNAV. Lastly, the Irish regulator provided, on a temporary basis, valuation relief for Irish money market funds. Under the temporary relief, the regulator stated that money market funds would be able to deviate from the shadow pricing requirements discussed above for certain money market instruments that had a residual maturity of three months or less, meaning such instruments could be valued at amortized cost subject to
specific conditions.9 The staff of the Division of Investment Management of the U.S. Securities and Exchange Commission issued similar temporary relief for U.S. money market funds.10

**France**

In significant contrast to the stable net asset value of U.S. money market funds, all money market funds in France are VNAV. In France, money market funds (the FMMFs) are *organismes de placement collectifs en valeurs mobilières* (OPCVMs or collective investment funds) that are authorized by the regulator, the Autorité des marchés financiers (the AMF), and fall within one of the following categories:

- *Fonds Monétaire Euro* (Eurozone money market funds); or
- *Fonds Monétaire à vocation internationale* (International money market funds).11

A collective investment fund can only be referred to, in its constitutive and contractual documents, as a money market fund when it has been approved under that classification by the AMF.12

As of the end of December 2008, FMMF assets under management totalled nearly US$679 billion.13 As of March 2008, FMMFs represented 50 percent of the European market and approximately one-third of the total assets of the collective investment funds being managed in France.14 Consequently, money market funds are an important category of funds in France, with institutional investors making up more than 90 percent of their investor base.15

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9 This temporary relief was provided in October and withdrawn effective March 2, 2009. See Letter from Michael Deasy, Head of Financial Institutions and Funds Authorization, Financial Regulator, to Mr. Gary Palmer, Chief Executive, Irish Funds Industry Association (October 16, 2008); Letter from Patricia Moloney, Head of Financial Institutions and Funds Authorization, Financial Regulator, to Mr. Declan Casey, Irish Funds Industry Association (February 26, 2009).


11 In France, there are also so-called dynamic money market funds or enhanced cash funds; however, these funds are not authorized by the AMF as money market funds. Such funds invest in a broader range of instruments.

12 For purposes of recording French money and banking statistics, the Banque de France defines FMMFs as resident OPCVMs on the list of Monetary Financial Institutions of the European Central Bank that issue securities that are liquid enough to be close substitutes for bank deposits. The Banque de France therefore recognizes as FMMFs both the Eurozone money market funds and the International money market funds.

13 Source: International Investment Funds Association and L’Association Française de la Gestion Financière (AFG).


15 As of March 2008, investors in FMMFs were categorized as follows: 32 percent companies, 27 percent funds, 15 percent insurance, 7 percent individuals, 5 percent credit institutions and 15 percent others. See AFG June 2008 article, supra note 14.
French Money Market Fund Regulatory Framework

As a specific category of fund, FMMFs, like U.S. money market funds, are subject to special requirements, although the criteria are not as comprehensive or detailed as Rule 2a-7. Collective investment funds that fall within one of the FMMF categories must comply with the following conditions:16

- The FMMF must be managed with limited interest rate risk;17
- The FMMF may not be exposed to equity; and
- To the extent that the FMMF will be exposed to any risk other than interest/exchange rate risk, in particular credit and liquidity risks, its simplified and full prospectuses must clearly disclose such risks.

In addition, it is expected that the FMMF’s investment policy refer to (i) one or several benchmark(s) of the money market of the Eurozone (for Eurozone money market funds), or (ii) one or several benchmark(s) of non-Eurozone money markets, or a composite benchmark of various money markets (for International money market funds). Under current practices, FMMFs generally invest in instruments with a maturity of less than three months and not exceeding one year. These holdings include debt instruments, negotiable debt instruments, treasury bills, deposit certificates, commercial paper, and bonds.

Valuation

In contrast to the special valuation provisions available to U.S. money market funds, the valuation rules for FMMFs are the same as for all collective investment funds and therefore the net asset value of a FMMF is not calculated to maintain a constant net asset. Under the French rules, funds must value their assets accurately at all times on an independent basis.18 A fund’s portfolio holdings must be valued in accordance with the fund’s prospectus on each day that its NAV is calculated. The management company may value holdings when no prices have been observed or quoted on the day the NAV is calculated.19 In practice, mark-to-market valuation is commonly used among FMMFs; however, amortized cost valuation may be used to value certain debt, i.e., negotiable debt instruments that are eligible assets, with a maturity of less than three months. In addition, a “mark-to-model” valuation method may be used when mark-to-market valuation is not available and in accordance with recent AMF guidance, emphasizing the importance of accurate and independent valuation as well as adequate resources and procedures.20

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16 See Articles 27 (Eurozone money market funds) and 28 (“International money market funds”) of the AMF Instruction No. 2005-02 dated January 25, 2005 (the “Instruction”).

17 Generally, the sensitivity of the portfolio must be between 0 and 0.5, meaning that for a movement of “delta” in interest rates, the value of the fund cannot fall by more than 0.5 times delta. This also means that the average term-to-maturity of the portfolio (cash flows weighted) must be less than 6 months.


19 See Articles 411-27 et. seq. of the RG of the AMF.

20 See “O.P.C.V.M. Monétaires—Typologie des accidents” by the Association pour l’information et la défense des épargnants et des actionnaires (November 24, 2008); Instruction of the AMF n°2008-06 (December 9, 2008).
Effect of Market Events

After the financial market events in 2007, the AMF established a working group to consider the regulation of FMMFs. As a result of this work, on February 24, 2009, the AMF issued a consultation on money market funds proposing a more stringent classification for FMMFs, including restricting the holdings of such funds, changes to disclosure so investors can better distinguish among funds, and stricter conditions for marketing. The proposals to tighten the restrictions on the holdings for FMMFs include requiring that: the average maturity of the portfolio not exceed one year; no securities may have a maturity exceeding two years; and credit risk must remain compatible with a low level of risk. The consultation also proposes measures for improved disclosure, such as a summary table listing maximum rate sensitivity, maximum maturity of securities, and the maximum average maturity of the portfolio. With respect to marketing of money market funds, the AMF proposal cautions against the use of names or terms that may confuse investors and recommends that the term “money market” be reserved for funds meeting the AMF’s criteria for that class of funds.21

In addition to the specific working group that considered FMMFs, the French authorities have made other recent regulatory changes that provide funds generally with additional measures for responding to exceptional circumstances, including redemption gates (e.g., limiting redemptions to a certain amount) and the ability to establish a “side pocket” fund through a spin-off of assets, i.e., a separate fund with identified assets that would not be in the interest of the fund’s investors to sell, for example due to illiquidity. Redemption gates, however, are not permitted in the case of a FMMF. FMMFs, subject to conditions, may instead temporarily suspend redemptions in exceptional circumstances, provided that the suspension is in the interest of investors. While it does not appear that any FMMFs suspended redemptions during the recent market events, other collective investment funds, including so-called enhanced or dynamic money market funds, did suspend redemptions and some funds liquidated following the suspension of redemptions.22

Australia

In Australia, the category of funds that are most similar to U.S. money market funds are generally called “Cash Management Trusts” or “Cash Management Funds” (CMTs). Like U.S. money markets funds, these funds have a stable net asset value but are not subject to a detailed and comprehensive regime like Rule 2a-7. The term cash management trust is not a regulatory description for a category of funds. Rather, it is a marketing term that is used to describe a managed investment scheme with certain characteristics, although not all CMTs have the same characteristics. CMTs are primarily utilized by retail investors in Australia. The yields of CMTs have tended to exceed the yields of traditional bank accounts, although the yields are similar to some internet bank accounts.

21 Autorité des marchés financiers, Consultation relative à la régulation des OPCVM classés “Fonds Monétaires” (February 24, 2009) (“AMF MMF Consultation”).
Within the Australian money market fund industry, there are also funds available to Australian investors referred to as “enhanced cash” funds. Although enhanced cash funds are similar to CMTs, such funds generally invest in a broader range of investments that may be less liquid and have a higher yield than the investments typically held by a CMT. In contrast to the CNAV CMTs, the issue and redemption price of units in an enhanced cash fund fluctuates like the unit price of other managed investment schemes.

As of December 30, 2008, the total net assets of CMTs were approximately US$31 billion. Total assets of the broader category of Australian money market funds, including CMTs, were over US$176 billion, falling from approximately US$199 billion at the end of September 2008.23

**CMT Characteristics**

Typical CMT characteristics include:

- underlying assets of a highly liquid nature, which can include government securities, securities issued by a bank with a high rating, and bank deposits;
- a fixed entry and exit price (we refer to this as CNAV);
- a variable rate of return that reflects the income of the CMT;
- services such as access to funds through a checkbook or debit card or access to a bill paying facility;
- a rating (although not all CMTs are rated); and
- access to money within a short period of time.

There are no explicit restrictions on the use of the term “cash management trust,” although under Australian law, a trustee would seek to ensure that, in using the term “cash management trust,” it was not engaging in conduct that is misleading or deceptive or likely to mislead or deceive.

**CMT Regulatory Framework**

In Australia, a CMT is established as a unitized trust and is a “managed investment scheme” under the Australian Corporations Act 2001 (Cth) (Corporations Act). A CMT is required to be registered under the Corporations Act if interests in the CMT are issued to retail investors. The primary regulator of CMTs is the Australian Securities and Investments Commission (ASIC).

There is no Australian rule that identifies the permissible investments of a CMT. There are, however, general requirements relating to the liquidity of a CMT that must be satisfied if an investor is to have the ability to

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23 Source: International Investment Funds Association and Investment and International Financial Services Association (IFSA).
withdraw money on a timely ongoing basis. In addition, in the case of a rated CMT, to obtain a triple-A rating from a rating agency, a CMT would have to comply with specific rating criteria, including criteria with respect to maturity and credit quality of the portfolio. In addition, a trustee who called a fund a CMT but did not invest predominantly in cash or cash type investments may be engaging in misleading or deceptive conduct, which is prohibited under the Corporations Act. Despite the lack of formal investment rules for CMTs, the portfolio of a CMT may typically include:

- government securities;
- securities of, and deposits with, banks with a rating of A1 or A1+ from certain agencies;
- assets that generally adhere to criteria for a triple-A rated CMT;
- asset-backed or mortgage-backed securities;
- corporate securities;
- discount securities;
- bank bills;
- bills of exchange;
- promissory notes;
- units in another CMT; and
- floating or fixed rate notes.

Although the portfolio of a CMT may include corporate securities and asset-backed or mortgage-backed securities, these types of assets are more likely to be held by an “enhanced cash” fund.

There are no government-issued valuation rules for managed investment schemes, including CMTs or other money market funds. However, the fund industry association has issued guidance. The Investment and Financial Services Association (IFSA) has in place a standard (Standard 9) for the valuation of fund assets and liabilities.

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24 The assets of a CMT generally will be deemed to be liquid assets unless it is proved that the trustee cannot reasonably expect to realize their value within the period identified in the constitution of the CMT for satisfying withdrawal requests while the CMT is liquid. For example, if the constitution of the CMT provides for withdrawal requests to be satisfied within seven days while the CMT is liquid, but it is proved that the trustee cannot reasonably expect to realize an asset which is a marketable security within this period, then that marketable security will not be a liquid asset. A CMT will not be liquid unless liquid assets account for at least 80 percent of the value of the property of the CMT. When a CMT is not liquid, investors can only redeem their units when the trustee makes a withdrawal offer under the Corporations Act.

25 IFSA is the primary body for the wealth management industry in Australia. Although IFSA membership is voluntary, members of IFSA are required to comply with IFSA's standards.
This standard provides that fund assets should generally be valued at market value, although money market instruments are permitted to be valued using another valuation methodology (unless not appropriate).  

To maintain a stable issue and redemption price either the constitution of the CMT may provide for units to only be issued and redeemed at a particular value (for example, $1.00); or the trustee will seek to maintain a constant net asset value (where accrued income of the CMT is deducted from the net asset value of the CMT in determining the unit price). In both situations, an investor’s entitlement to income for a distribution period is based on the number of units which the investor held during the distribution period and the number of days for which the investor held each of these units. Where the constitution provides for a fixed issue and redemption price, the trustee would need to ensure that there are sufficient assets to satisfy redemption requests from all investors. A trustee also may distribute capital to maintain a stable redemption price or to manage the value of the underlying assets of the CMT where there is a fixed redemption price specified in the constitution of the CMT.

**Effect of Market Events**

With respect to mechanisms that would facilitate the management of exceptional market circumstances, the constitution of a CMT typically sets out the circumstances in which the trustee can:

- limit the number of units that an investor can redeem at one time;
- suspend redemptions; or
- extend the period of time during which the responsible entity must satisfy a redemption request.

For example, it is common for a fund’s constitution to provide for a longer time period to satisfy redemption requests if the trustee is unable to dispose of assets in a timely manner due to market disruption. There has not been any publicity indicating that any CMT needed to utilize exceptional measures during the market events in 2008. We understand, however, that there have been outflows from CMTs as a result of the Australian government’s guarantee of deposits with authorized deposit-taking institutions (such as banks).  

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26 For other valuation methodologies, the Australian accounting standards set out the methodology to be applied to value financial assets. Initially, a financial asset is measured at fair value plus, in certain circumstances, transaction costs directly attributable to the acquisition or issue of the financial asset. After initial recognition, a financial asset is measured at its fair value, without any deduction for transactions costs that may be incurred on the sale or other disposal of the asset except for loans and receivables (as defined in the standard) which are measured at amortized cost using the effective interest method, held-to-maturity investments (as defined in the standard) which are measured at amortized cost using the effective interest method and certain equity instruments and related derivatives that are measured at cost.
APPENDIX I: BEST PRACTICES FOR DETERMINING MINIMAL CREDIT RISKS UNDER RULE 2a-7

Changes in the marketplace, along with the experience of money market funds through the recent market turmoil, suggest ways in which minimal credit risk determinations could be made. As a result, after considering a variety of practices successfully employed by various money market funds, the Money Market Working Group (Working Group) is recommending industry best practices for determining minimal credit risks as required by Rule 2a-7 under the Investment Company Act of 1940 (Investment Company Act). This Appendix to the Working Group’s Report spells out those best practices.

Rule 2a-7 under the Investment Company Act permits the board of directors of a money market fund (the Board) to delegate certain of its responsibilities to either the fund’s investment adviser or to the fund’s officers. To delegate any responsibility pursuant to Rule 2a-7, the Board is required by paragraph (e)(1) of the rule to “establish and periodically review written guidelines (including guidelines for determining whether securities present minimal credit risks…) and procedures under which the delegate makes such determinations” (Procedures). In our experience, Boards uniformly delegate the determination of minimal credit risks to their fund’s adviser (broadly defined, consistent with Section 2(a)(20) of the Act, to include any subadviser (the Adviser)).

Rule 2a-7(c)(3)(i) requires that any determination of minimal credit risks “must be based on factors pertaining to credit quality in addition to any rating assigned to such securities by an NRSRO [nationally recognized statistical rating organization].” Rule 2a-7 is clear that reliance on a rating is not a sufficient basis upon which to evaluate a security. The rule requires an independent determination of minimal credit risk, and if such determination cannot be made, the fund may not acquire the security.

Although the text of the rule does not elaborate on what additional factors should be considered in determining minimal credit risks, as noted below, the Securities and Exchange Commission (SEC) and the Investment Company Institute have provided some guidance regarding these factors. The money market, however, has

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1 Unless defined in this Appendix, definitions of capitalized terms will be found in paragraph (a) of Rule 2a-7. We have used the term “issuer” to refer to the provider of any Guarantee or Demand Feature on which the fund relies, as well as a security’s primary obligor. Any reference to an “issuer” is intended to refer to any entity that would be subject to the diversification requirements of paragraph (c)(4). In the case of a Government Security, “issuer” refers to the United States or to the entity controlled or supervised by and acting as an instrumentality of the United States that issued or guaranteed the obligation. In the case of an Asset Backed Security, “issuer” refers to the Special Purpose Entity and any Ten Percent Obligors.

2 Paragraph (e)(2) of Rule 2a-7 further requires a Board to “take any measures reasonably necessary (through periodic reviews of fund investments and the delegate’s procedures in connection with investment decisions…) to assure that the guidelines and procedures are being followed.” If a Board delegates responsibility for determining minimal credit risk to a subadviser, the Board should monitor the subadviser’s compliance with the Procedures directly.
changed significantly since this guidance was issued. Indeed, the experience of money market funds through the recent market turmoil suggests ways in which minimal credit risk determinations could be made. Set forth below are those practices that we recommend for consideration by any Adviser who has accepted responsibility for making such determinations under Rule 2a-7. In light of the different range and degrees of risks taken by non–money markets funds, however, we are not making any recommendations regarding other types of investment companies, funds, or accounts, even if they invest primarily in debt obligations.

We recognize that these practices may not be suitable for every Adviser. Depending on individual circumstances, practices other than those discussed below may be equally or more effective in making a minimal credit risk determination. In addition, we recognize that some of the recommendations involve details of the Adviser’s organization or investment process beyond those normally addressed in the Procedures. We have therefore indicated when the Board should consider including a recommended practice in the Procedures, depending on the Adviser’s particular situation.

**Recommendations Regarding Minimal Credit Risks**

1. **Credit Risk Criteria:** We recommend that the Procedures establish standards for minimal credit risks consistent with the fund’s objective of maintaining a stable net asset value per share and providing appropriate liquidity to shareholders. The SEC has stated that minimal credit risk should be based on the issuer’s capacity to repay its short-term debt. Similarly, NRSROs generally characterize the capacity of First Tier issuers to repay short-term debt as “strong,” and the capacity of issuers with Second Tier ratings as “satisfactory.” A security cannot present minimal credit risk if there is a realistic concern as to whether it will be paid when due.

Assessments of credit risks should not be based solely on the issuer’s ability to refinance obligations by issuing new securities for which the issuer does not already have firm commitments (e.g., “rolling” commercial paper), or assume that securities will be successfully remarketed following exercise of a Demand Feature. Generally, an issuer presenting minimal credit risks will have alternative sources of funding for repayment of obligations in the event that the issuer loses access to the originally anticipated source of such funding. Highly rated operating companies typically have a range of funding alternatives, such as using cash from other lines of business, arranging new credit facilities, or raising capital through the issuance of new debt or equity securities. Funding alternatives for issuers of Asset Backed Securities, in contrast, are limited to those included in the original credit structure. Advisers should consider whether these funding alternatives will be adequate in the event that the underlying Qualifying Assets do not perform as anticipated.
2. **General Criteria:** We recommend including general criteria for assessing the credit risks of issuers and securities in the Procedures.

(a) These criteria include, where applicable to the issuer or security and based upon the information reasonably available to investors, the following elements noted in the SEC staff’s interpretive letter of May 8, 1990:

(i) a cash flow analysis;

(ii) an assessment of the issuer’s ability to react to future events, including a review of the issuer’s competitive position, cost structure, and capital intensiveness;

(iii) an assessment of the issuer’s liquidity, including bank lines of credit and alternative sources of liquidity to support its commercial paper; and

(iv) a “worst case scenario” evaluation of the issuer’s ability to repay its short-term debt from cash sources or asset liquidations in the event that the issuer’s backup credit facilities are unavailable.

Annex A to this Appendix sets forth other criteria that the SEC staff has articulated may be considered for assessing credit risks.

(b) The foregoing list of factors from the 1990 letter or Annex A may not be as appropriate for some types of investments as for others. In addition, Procedures should address credit risk criteria at a general level and not with the specificity of the credit reports discussed below. Therefore, those to whom the Procedures delegate responsibility for determining minimal credit risk will need to make an independent determination whether these factors, or other factors, are sufficient for purposes of their credit analysis. For example, the minimal credit risk of Refunded Securities should be based entirely on the cash flows from the securities pledged and the escrow arrangement.

(c) When recommending the criteria for evaluating credit risks for the Board to consider including in the Procedures, the Adviser should consider whether different criteria are appropriate for different categories of issuers (e.g., banks, securities firms, corporations, or municipalities), or different types of securities (e.g., repurchase agreements, commercial paper, asset backed securities, or revenue anticipation notes) or credit enhancements (e.g., overcollateralization, letters of credit, or bond insurance). Ultimately, the Board must determine the degree of specificity in the Procedures in light of its overall process for overseeing minimal credit risk determinations.

(d) Generally, credit analysis should include reviewing financial and other information provided by the issuer. For example, if the issuer publicly reports its financial results, analysis of the issuer’s credit risks should include a review of the issuer’s published financial reports. Although secondary sources, such as reports from independent analysts or rating agencies, may be considered in the analysis,
the credit analysis should not be based entirely on such sources. Advisers may consider having credit analysts communicate with issuers directly, whether through analysts’ calls, conferences, or meetings with the issuer’s officers.

(e) When repayment of an obligation (such as a repurchase agreement) may depend on the liquidation of securities or other assets (Collateral), the credit analysis should include an assessment of the volatility and liquidity of the market for the Collateral, especially in times of market stress. The analysis also should consider the process for liquidating the Collateral, who would be likely buyers of the Collateral, and how long it might take to complete the liquidation. These factors should be included in the analysis of the Collateral’s potential volatility and liquidity.

3. **Internal Scale:** An Adviser may establish a scale or other mechanism for communicating internally and to the Board the relative creditworthiness of issuers or securities meeting the standard for minimal credit risks.

4. **Investment Guidelines:** An Adviser may develop a process for monitoring the overall credit exposure to an issuer and the maturity profile of that exposure.

5. **Credit Analysts:** We recommend an Adviser assign each issuer to a credit analyst (or specific members of a team of analysts—for example, one analyst is responsible for all insurance-related issuers or specific types of municipal securities issued in a given state) who will be responsible for evaluating and monitoring the issuer’s short-term credit risk. If the Adviser has credit analysts who assess securities that receive credit or liquidity support from other issuers (such as Asset Backed Securities or securities subject to Guarantees or Demand Features), the analysts reviewing these securities may focus their analysis on the terms of the credit or liquidity support (e.g., is the documentation for a letter of credit sufficient or are there “carve outs” limiting its reliability), as well as other aspects of the security subject to the support, and need not reevaluate the creditworthiness of a support provider that has already been the subject of an analysis by another member of the credit review staff. Specific recommendations regarding credit analysts include:

(a) Credit analysts should have the qualifications appropriate for their responsibilities. Credit analysts should stay current on relevant new developments in the credit markets.

(b) Credit analysts should engage primarily in the analysis and monitoring of the credit risk of issuers and structures, preferably focused on particular sectors of the credit market (e.g., consumer finance, manufacturing, structured products). The same analyst also may be responsible for assessing an issuer’s long-term credit risks. Credit analysts should not trade securities or serve as portfolio managers.
(c) The Adviser should not assign more issuers and securities to a credit analyst than the analyst can reasonably be expected to analyze and monitor in accordance with the Procedures. In determining the number of credits assigned, the Adviser should consider the complexity and diversity of the issuers and securities to be covered by a credit analyst in light of the analyst’s experience.

(d) The Adviser should ensure that there is coverage of the issuers and securities assigned to a credit analyst during his or her absence. If a credit analyst leaves, the Adviser should promptly reassign his or her issuers and securities until a replacement is hired.

6. Written Credit Report: We recommend that the assigned credit analyst prepare a written credit report documenting the analyst’s determination of whether an issuer's short-term obligations present minimal credit risks and the factors considered.

(a) A credit report may cover all obligations of an issuer. If certain securities are supported by a liquidity facility, the analyst should indicate that the minimal credit risk determination for such securities is based, in part, on such facility. For those securities not covered by such facility, the analyst should note another basis for the minimal credit risk determination. If a credit report contains a general analysis of an issuer's credit risks, this analysis may be incorporated by reference into other credit reports.

(b) The credit reports or other records of the minimal credit risk determinations for issuers or securities subject to Demand Features or Guarantees should reference the credit reports covering the providers of a Demand Features or Guarantees. Such credit reports or other documentation may focus on the credit structure and risks of the security subject to the Demand Feature or Guarantee.

(c) Key information referred to in the credit report should be maintained in a credit file for the security or issuer (which may be an electronic file or reference to a data source). The credit file for an approved security also should include information as to its legal terms and information regarding where the Adviser can obtain additional information or a copy of the documents setting forth the security’s terms. The Adviser may need to obtain these additional documents if the security defaults.

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3 This Appendix refers to a “written credit report,” but the data discussed as being captured in that report may be reflected in different places.
7. **Oversight of Minimal Credit Risk Determinations:** Although not required by Rule 2a-7, an Adviser may wish to institute an oversight process of the minimal credit risk determination. The goal of the oversight process would be to ensure robustness and consistency in the credit analysis performed by the Adviser’s money market credit analysts. There are several ways the Adviser could implement such a process. Listed below are ways in which the oversight function could work:

(a) *Regular credit analyst meetings:* Advisers may find that the best way to institute an oversight function is to have regular meetings during which the credit analysts could discuss issues that impact their minimal credit risk determinations for the securities they follow. These meetings would provide analysts with a forum in which they can solicit peer feedback on the issues that concern them the most.

(b) *Credit committees:* Some Advisers may require that credit analysts distribute their reports for review and feedback to either: (i) a senior or supervisory credit analyst, or (ii) a credit committee established by the Adviser, consisting primarily of members experienced in the analysis of the credit risks of short-term obligations.

8. **Monitoring of Market Developments:** As credit analysts monitor publicly available information (such as financial statements or material reports) regarding the business and financial condition of their assigned issuers, they should update as appropriate the credit reports for their assigned issuers in response to business developments that would significantly affect the issuer’s ability to repay its short-term obligations at defined intervals. If, after reviewing new information, the credit analyst no longer concludes that an issuer’s short-term obligations present minimal credit risks, the Procedures should indicate the appropriate course of action. Rule 2a-7(c)(6)(ii) requires that a fund promptly dispose of a security after a security is determined to no longer present minimal credit risks, unless the Board determines that it is in the best interest of the fund to continue to hold the security.

9. **Documentation of Approved Issuers and Securities:** An Adviser may maintain a list or database of all issuers and securities determined to present minimal credit risks in accordance with its Procedures. Approved securities of approved issuers may be acquired by the fund without additional credit analysis or risk determinations.
10. **Conflicts of Interests:** An Adviser should organize and manage credit analysts and other members of the credit research department so as to foster their independence and reduce, when practical, the potential for conflicts of interest.

(a) An Adviser should take reasonable steps to prevent any business relationships that the Adviser or its affiliates have with an issuer from influencing the assessment of that issuer’s credit risks by credit analysts and, if applicable, a credit committee.

(b) In designing compensation for credit analysts, an Adviser should consider the potential effects of the compensation structure on the analysts’ determinations of minimal credit risks.

11. **Board Meetings:** The Board may meet periodically with an appropriate member of the Adviser’s credit research department to discuss in general terms any changes in the process for determining minimal credit risks. It may be informative for Boards to meet with the people in charge of the credit approval process. This could give the Board the opportunity to question the most knowledgeable people directly and to confirm that the Adviser is dedicating sufficient resources to credit analysis.

(a) Most Boards appear better suited to oversee the general process for determining credit risks, rather than reviewing all securities on the approved list or even the criteria for specific types of securities.

(b) As noted above, Rule 2a-7(e) requires “periodic reviews of the fund investments” by the Board. The Board may find it helpful if the information submitted for review highlights investments that have been subject to ratings changes or other reassessments of their credit risks.
### ANNEX A

#### Factors for Determining Minimal Credit Risk

| General factors | » Macroeconomic factors which might affect the issuer’s or guarantor’s current and future credit quality; and  
|                 | » The strength of the issuer’s or guarantor’s industry within the economy and relative to economic trends. |

| Specific factors | » The issuer’s or guarantor’s market position within its industry;  
|                 | » Cash flow adequacy;  
|                 | » The level and nature of earnings;  
|                 | » Financial leverage;  
|                 | » Asset protection;  
|                 | » The quality of the issuer’s or guarantor’s accounting practices and management;  
|                 | » The effect of any significant ownership positions;  
|                 | » The degree of financial flexibility of the issuer or guarantor to cope with unexpected challenges and to take advantage of opportunities, as well as an assessment of the degree and nature of event risks; and  
|                 | » The likelihood of a sudden change of credit quality from external (e.g., hostile takeovers, litigation) and internal (e.g., financial restructuring, acquisitions) sources. |

| Additional factors with respect to tax-exempt securities | » Sources of repayment;  
|                                                        | » Autonomy in raising taxes and revenue;  
|                                                        | » Reliance on outside revenue sources; and  
|                                                        | » Strength and stability of the supporting economy. |

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*Investment Company Institute, SEC No-Action Letter (December 6, 1989).*
APPENDIX J: CHECKLIST FOR SUSPENDING REDEMPTIONS
AND LIQUIDATING A MONEY MARKET FUND

This checklist is designed primarily for situations in which a fund’s amortized cost price per share deviates from its market-based net asset value (NAV) per share by more than 0.50 percent as a result of:

» Events of the type identified in Rule 2a-7(c)(6)(ii) under the Investment Company Act of 1940 affecting one or more portfolio securities (Defaulted Securities), and

» Reduced market liquidity for the remaining portfolio securities, such that shareholders would be expected to receive a greater return if the securities were held to maturity than they would if the securities were sold under current market conditions.

1. PRELIMINARY STEPS

☐ Review the fund’s organizational documents for limitations on the fund’s ability to suspend redemptions. Determine that the board of directors has the power to authorize the winding up and liquidation of the fund and to make liquidating distributions.

☐ Consider adding a risk factor to the fund’s prospectus regarding suspension of redemptions.

☐ Develop and maintain a contact list of people who must be notified if redemptions are suspended.

2. AUTHORIZATION TO SUSPEND REDEMPTIONS

☐ Draft form of application pursuant to Section 22(e)(3) of the Investment Company Act for an order permitting:

» Suspension of the right of redemption of the fund’s outstanding shares, and

» Suspension of the payment for the fund’s shares that have been submitted for redemption for which payment has not been made as of the date of the requested order.

The application will request issuance of a temporary order at the time the notice of the application is published, pending the issuance of a final order in response to the application (Section 22(e)(3)). The order should be effective retroactively to the date the board of directors first authorized the suspension of redemptions and redemption payments.
Determine procedures for suspending purchases and redemptions and for the payment of redemption proceeds. Activities that the procedures could address might include:

» Notifying shareholders of the suspension of purchases and redemptions and payment of redemption proceeds;

» Determining whether to honor checks that have been endorsed by a financial institution prior to the suspension of redemptions;

» Providing instructions to the transfer agent, clearing corporations, securities intermediaries, and sweep accounts regarding (a) implementation of the suspension, (b) disbursement of liquidating distributions, and (c) communications with their clients;

» Providing marketing, sales force and customer services with communications materials and FAQs;

» Providing additional notifications of the suspension of redemption payments to financial institutions that are likely to make advances in anticipation of receipt of redemption proceeds; and

» Providing any formal notifications required under the fund’s distribution, transfer agency, or other applicable agreements.

Prepare submissions to the board of directors regarding:

» Rescission of any resolutions requiring the fund to calculate its NAV before the end of each business day;

» Adoption of procedures for suspending redemptions;

» Authorization of the exemptive application;

» Development of a Plan of Liquidation; and

» Implementation of other actions required by procedures or organizational documents.

3. DRAFT REVISED DISCLOSURE

Prepare a supplement to the fund’s prospectus.

Prepare and test modified webpages for the fund’s website.

Prepare a press release and responses to FAQs.

Contact the Investment Company Institute so they can prepare a press release or other response to requests from the press.
4. BOARD ACTIONS

☐ Call and give notice of a board meeting in accordance with organizational documents.

☐ Confirm that the deviation of the fund’s amortized cost price per share from its market-based NAV per share exceeds 0.50 percent (Rule 2a-7(c)(7)(ii)(B)).

☐ Determine that the board of directors should initiate the following actions to address the deviation and wind down the fund:
  » Discontinue the offering of shares and the acceptance of any purchase orders by the fund;
  » Discontinue the daily declaration of dividends;
  » Exercise all “Demand Features,” as defined under Rule 2a-7, for portfolio securities as soon as practicable;
  » Discontinue the acquisition of additional portfolio securities, except that the adviser may invest cash balances held at the end of the day in overnight investments; and
  » Determine whether to continue making payments under any Rule 12b-1 plan.

☐ Authorize the filing of the application pursuant to Section 22(e)(3).

☐ Develop a Plan of Liquidation that considers:
  » The amount that can be paid, on a pro rata basis, to shareholders within seven days after suspending redemptions;
  » The immediate sale of portfolio securities to increase the fund’s current cash balances;
  » Creation of a reserve for expenses incurred for collecting on Defaulted Securities; and
  » Development of a communications plan to advise shareholders of the Plan of Liquidation and provide periodic updates concerning its implementation.

☐ Authorize filing of the prospectus supplement.
5. IMPLEMENT SUSPENSION OF REDEMPTION PROCEDURES

☐ Contact the Securities and Exchange Commission and file an application for an exemptive order under Section 22(e)(3).

☐ Instruct transfer agent to reject all pending and subsequent purchase orders and to return all the funds received.

☐ File prospectus supplement in accordance with Rule 497(e) under the Securities Act of 1933. Release supplement for mailing to shareholders.

☐ Initiate the internal and external communications and notifications called for in the procedures.

☐ Update the fund’s website. Pull, and direct dealers not to use, any sales literature for the fund.

☐ Notify anyone on the contact list who has not been otherwise notified.

☐ Issue the press release.

6. FOLLOW UP ITEMS

☐ Continue to generate cash from maturing portfolio securities and from sales when appropriate.

☐ Monitor cash inflows and have the board of directors periodically authorize liquidating distributions to shareholders on a pro rata basis as contemplated by the Plan of Liquidation.

☐ Defend application for an exemptive order if a hearing is requested.
January 30, 2009

The following represents verbatim responses from 78 survey participant (43 corporate or other commercial enterprises; 13 education-related institutions; four financial institutions; four government institutions; and 14 unclassified institutions).

**Question: If pricing of money market mutual funds changed to a variable net asset value method, how would that change the way you manage your portfolio?**

» It would not change.

» I would not use them (MMMFs [money market mutual funds]) under any circumstance.

» It really depends on the bigger picture. If this simply means that the interest accrues throughout the month and I slowly see the NAV rise over time then perhaps not a big deal. That single factor wouldn’t necessarily change how I look at money funds. If the change triggers accounting treatment that is cumbersome this could move me away from funds. I would have to run it by the accountants to get a better handle on that. Hard to say how I would reallocate, especially given current market conditions and the state of the Treasury market right now.

» Minimize use of MMMFs and move to very short term AAAs and Bank Sweeps.

» What an awful idea. This would destroy an important investment instrument for us. We can only invest on a very short-term basis. We are highly seasonal so we have investments only three-to-five months of the year and not necessarily in a row. We are looking for liquidity and count on the $1.00 NAV. Leaving money in banks means having bank risk higher than we want unless we manually manage numerous accounts (what can be done easily at present with MM portals). It also means taking the FDIC insurance haircut. I like the Money Market Investor Funding Facility but haven’t heard much about it—sort of a discount window for money market funds.

» Would most likely discontinue using the funds.

» We invest in Money Market Funds based on security of principal. We would not invest in such a fund. However, we have seen a constantly accreting structure as used in France with SICAVs [Société d’Investissement à Capital Variable] where the price increases daily to reflect accrual of interest on a fixed number of shares. That structure might be acceptable. We actually use very little in the way
of money markets. We run an in-house money market fund that invests/divests daily which buys individual securities. Any change in the NAV would result in us using the balances as compensating balances or choosing a fund that does not vary.

» A floating NAV means write-downs on cash. Not something that we would welcome, so our use of money market funds would decline. We would invest in stable NAV products.

» Would not invest.

» No, at the present time we do not invest in money market funds. I have been expecting this to change but it has not happened yet.

» I don’t like the idea of “breaking the $1.00” net asset value model. This will require more work and more explaining to Investment Committee members, especially during times with higher volatility. Yes, this would definitely change our investment strategies. We have several smaller portfolios that utilize money market funds, and we rely on them to be near a $1.00 net asset value. Our larger, long-term portfolios would probably not be affected significantly.

» We would invest more in direct securities.

» Our investment policy would not allow us to invest in Money Market Mutual Funds if they changed to a variable net asset value method.

» I like stable value funds and would be less inclined to deal with funds that fluctuate.

» It would require much more due diligence on my part and I would likely look to other short fixed-income (CDs [certificates of deposit] and CP [commercial paper]) alternatives.

» More consideration would be given to duration/maturity and less to yield.

» If there were a change to the $1.00 NAV standard, we would need to assess the desirability of this investment class given investment objective Number One—preservation of capital. I would think those funds maintaining the buck would be more desirable than those that don’t.

» Would reduce MMF to a very small amount.

» I would not want to invest in them.

» We would not invest in money market funds.

» If there are no alternative stable value offerings, we would continue to utilize money market funds.

» We would reallocate our portfolio to minimize funds held for liquidity purposes, and would shift to other stable-value investments.

» I would move away from using MMF as an investment vehicle.
We would be less inclined to use money market funds depending on the accounting implications and the amount, which the NAV may change.

I agree with the proposal, feeling that it would be more reflective of the real world.

It would become worth my while to use other instruments.

It would be more challenging, as clients would be agitated by the constant fluctuation. They want to feel as though they are getting static interest rate not daily rates that change moment-by-moment like the way a stock market runs. Clients believe that this is the safest thing they can do with their money. Fluctuation below $1.00 would undermine consumer confidence.

We would probably change our short-term strategy, and use money market funds less, especially as a short-term “safe” investment, where we are more concerned with liquidity and asset preservation relative to income.

I do not manage my own savings; at the moment everything is under the management of a financial planner, who uses whatever money market fund s/he finds worthwhile. Therefore I cannot add much to your survey. However, may I suggest a further line of thinking. Under the pre-2008 paradigm, money market funds were fully competitive with bank deposits, at least up to the then insured limit of $100,000. The new temporary limit of $250,000 now adds a new dimension to your issue. If the industry were uncommitted to the $1.00 book value, then the investor base would have a new risk dimension to consider, up to $250,000 at no credit risk, but most likely a lower coupon, vs. a money market fund with a coupon, presumably higher, and potentially some principal at risk. I am a former banking and corporate treasury executive who after 40 years in the private sector is working as a bank examiner trainee for one of the major bank regulators.

We probably would change the way we manage our short-term portfolio if NAV was allowed to fluctuate, but I guess it would depend on the degree of fluctuation. I can’t really answer your specific questions but I can say I wouldn’t like the added complexity to what has traditionally been plain vanilla short-term interest-only opportunity.

My answer(s) is not as direct as your questions. In January 2008 [redacted] moved the bulk majority of its overnight sweep balances into funds that were based on U.S. Treasuries. Cash balances in excess of 90 days need were moved to the [redacted] Fund. As you are well aware, the return on Treasuries based funds is now virtually zero and many institutions are looking at closing these types of funds because there is no profit opportunity. Recently [redacted] followed the lead of [redacted] and decided to suspend its [redacted] overnight sweep option, as there was no comfort level with the non-Treasuries [redacted] fund offerings. Sometime in the next two-to-three weeks a decision will have to be made on the balances in the [redacted] fund as yields continue to erode. [redacted] is a Commercial and Residential real estate company and operates with a heavy debt load while it completes projects for sale to large investors. Liquidity and preservation of principal are always driving factors, but even more so in economic times such as we are experiencing right now. Money market mutual fund pricing means
basically nothing to me at this time as I am mandated to insure that all operational needs are met. Recently the Commercial CFO said that he would forego interest income for the year in order to be certain that he had the level of liquidity and preservation of principal necessary.

» I would not put cash-management funds into mutual funds.

» I would not use MMF. I would be concerned of principal preservation and swinging NAV.

» We have an investment allocation strategy that was established by our Board of Trustees, and documented in our investment policy. Changing to a floating NAV would most probably not alter our strategy. Having worked in higher education for 20 years, my responsibilities as the Manager of Accounting, Assistant Controller, and Director of Cash Management give me a perspective on this kind of change. From an accounting perspective, every time you sell money market with a NAV not equal to $1.00, you incur a realized gain or loss. If this investment is used for your daily operating needs, what a nightmare. Additionally, you would also need to record unrealized gains and losses, and budget for the fluctuations and changes in market value when addressing investment income revenues. In short, investments in money market funds with a NAV not equal to $1.00 would have to be treated as investments instead of cash. That makes life a lot more complicated for your accounting, treasury, and budget staff. I hope this has been helpful.

» While we have not made specific plans for this proposed change, we would view this change negatively as money funds are administratively simple and efficient as currently structured. We would not increase our investment in money funds, whether we would decrease or remain the same will depend on the investment alternatives at the time.

» I would not invest in money market funds if the NAV were floated, as it should be considered a stable unit to the currency.

» Allocations could become more dynamic.

» If below $1.00—I would definitely change funds, if above $1.00—I would not change anything until it stayed there for a long time or got very high. In that case I would ask the investment manager for a higher yield or inquire about a capital gain distribution.

» Our investment policy would change drastically. Our Risk would naturally be greater, with the potential break of the $1.00.

» The portion of the portfolio requiring safety/principal protection would then be limited to a smaller set of alternatives and investment guidelines would be adjusted accordingly. Use of deposit and treasury/repo would also increase.

» Sorry, I will stay in cash. No MM Funds. Have seen how “re-evaluate liquidity fund” by modern pricing (DCF) [discounted cash flow] methodology. In reality was junk bond hedge fund with monthly pricing.
» My vote is for floating NAV, as this will reflect the MtM [mark-to-market] of the portfolio.

» It would not change it. We would still manage it conservatively.

» Allocations could become more dynamic.

» We’d reluctantly continue to use MMFs.

» I would not use MMF accounts but go to CDs.

» Would not consider MMFs that allowed less than $1.00 NAV.

» We would look to substitute MMMFs with more principal-protected investment vehicles. Much of the cash invested in MMMFs is corporate operating funds and as such principal protection is paramount.

» If I understand the question, the underlying assets in the fund would need to be marked to market. We have always treated our money market funds as cash equivalents because of the daily liquidity feature and practice of maintaining a $1.00 NAV. We would probably avoid investing in money market funds with duration risk for our daily liquidity needs; so many of the funds we currently invest in we wouldn’t if this passed.

» Treasury manages the operating (vs. investment) funds of our group; investment in a variable NAV would not be tolerated.

» If the pricing method changed we would no longer use MM funds.

» Depends on the accounting treatment, but it would probably drive our company towards bank deposits.

**Question: Would there be any accounting ramifications or systems issues created by the introduction of variable net asset value pricing? What other issues would need to be considered?**

» ABSOLUTELY. This is a terrible idea and will not work in practice. It would create accounting and tracking nightmares with the daily data feeds necessary to pull in and apply etc.

» Depending on any GAAP [Generally Accepted Accounting Principles] changes, I would suspect that we would need to also track the “change in market value” for the fund price in our income statements. Given their short-term nature, I don’t see us breaking out unrealized and realized gains or losses for money market funds.

» The investments would have to be marked to market each month or quarter. More emphasis would probably be placed on reaching the valuations. Volatility would increase due to fluctuation in rates paid. May be a rate war to secure more deposits. If rates can’t be maintained, some crashes could be expected.
I don’t think there would be any major accounting issues for us. I would need to explore this, but the Calif[ornia] Government Code prohibits muni investors to buy any investment that MAY have a zero return. Depending on how this is interpreted, we may be prohibited from investing in a variable NAV.

Short-term assets would need to be recorded at market value rather than book, no systems issues.

My guess is that the accounting firms would not allow us to count the funds as cash/cash equivalents and [they] would have to be marked to market.

I basically run a money market fund for the university. I would have to adjust income with the change in net asset value each monthly dividend cycle. Being government we use Fund Accounting with about 10,000 funds on our books would require this since Federal Funds are on our books that require interest. Having a TWS (Treasury Workstation System) we would have to create a new investment code that could be adjusted monthly with the change in NAV. This may require enhancements to the TWS by the vendor. Not the same as amortization premiums or discounts on securities. I would not embrace this proposal as being positive, the whole theory behind MMF was the NAV being $1.00.

Yes, there would be accounting ramifications. We would constantly have to adjust the value of the security rather than just book interest. There would also be system implications, because the value adjusting would take time and could be complex given investments are usually increased or decreased daily. Add that to changing the value and frankly that is too much complexity for a standard Treasury group, especially in these days of ultra-conservative investing.

Not unless legislative action resulted in issues. Unknown to me.

The accounting issues, if any, are what I would be concerned about. Since I do not know if there would be any, it would help to get more information about that.

I would assume there would be some sort of adjustment to market value for accounting purposes.

Yes. The funds are currently tracked at NAV with the accrued interest accounted for by the rate factor. The whole accounting system would have to change to reflect MTM accounting for MM funds. Also systems issues would arise as the current set up requires that the NAV be constant at $1.00.

Accounting would be variable so accounting would then occur over the life of that fund or partial fund for the bank. It would work like mutual fund accounting, which is possibly doing what some clients disliked so much that they left mutual funds into ETFs [exchange-traded funds] where they did not recognize capital gains when the client himself did not recognize such gains for the year. What other issues would need to be considered? If you create this condition again, there will be more room for ETFs to eat away at this type of business. Because of perception of accounting, clients will get away from mutual funds all together.

None for us that I can think of, we would just have to add reporting of unrealized gains and losses on these funds, based on the NAV fluctuations.
Sure; companies would have to do FAS [Financial Accounting Standards] accounting for investments (impairments, for example); MMMFs that “break the buck” become investments that have to be recorded on the balance sheet (and in the income statement) according to FAS’s classifications and according to potential impairments/losses/gains. I would see little reason to invest in MMMFs if the primary purpose for the investment (the safety-of-principal—the prime directive in a cash-management world) was in jeopardy.

Our investment policy does not permit MMFs unless they have a stable NAV. Unless rates were significantly above the Public Deposit Protection Act Protected bank deposits, I would not recommend a change in policy to the board.

Accounting ramifications would be related to the switch of an accrual basis to a “fair value basis” accounting. Systems, in particular front office systems, would need to be adjusted to provide fair value results to accounting systems.

Third-party valuation of money market funds may be required by auditors.

Portal providers would face considerable systems and operational issues. It’s possible that some might decide to drop funds from their portals as their uptake would now be so much more limited from the customer base supported by the portal.

None would change. I personally believe this would be a great change. I would use a $10 NAV and let it float. It should almost always end up at $10, but it would reduce the risk that a manager has in managing a MM Fund. As a matter of fact, my firm created a sector fund that can be used by other separate accounts and funds that we manage. It is a private fund with [Rule] 2a-7 guidelines, but we call it the xxxxxxxxxxxxxxxxxxxxxx fund. That way it is clear that it is possible for the NAV to float and that it can break the buck.

Potential headaches in additional capital gain/loss calculations for the IRS.

We are in a net debt position so this does not impact our company at this time.

We would need to recognize the NAV changes in the financials. It would likely drive more comparative performance reporting to senior leadership.

This response reflects my own views and not those of xxxxxxxxxxxxxxxxxxxxxxxx.

The auditors would have a field day.

We would need to satisfy the FAS 157 valuation requirements and this fair value assessment is not at present known. As well we’d need to capture the daily gain and loss and reflect this in the financials along with any daily interest income. A more time-intensive process.

This proposal might greatly reduce the demand for money market funds, when used for short-term corporate investing. Not sure how to measure the impact, but it has the potential to hurt liquidity in short-term money market instruments.
Yes, there would be accounting ramifications. The major issue would be our board of directors' aversion to risk.

I'm sure there would be accounting ramifications, but the accountants would need to weigh in on this.

We already use the fair market value for the accounting treatment of our investments in our money market mutual fund; price not fixed at $1.00 will not give extra issues.

I would be concerned about an increase in arbitrage risk. As MMMFs enter the realm of re-pricing, this would create intraday arbitrage opportunities that may adversely affect the portfolios and the larger shareholder base. Many mutual funds (non-MMMFs) have timing restrictions to prevent this practice, but, by definition, MMMFs cannot since they maintain and support liquidity management practices. As portfolio holdings are disclosed and share positions can be taken (or shorted), large volume could influence the variable share prices by trading individual MMMF holdings, then book gains against the fall in MMMF share prices. This would be very disruptive and drastically increase the risk and reduce the desirability of MMMFs.

If mark to market became part of a daily routine, not only of money flowing in and out but your position, it seems it would require more administration and potential footnotes to financial reports. Would there be requirements to shore up a fund if it fell to a certain level? Kind of a margin call? It would seem to have a number of implications at first glance.
amortized cost. A money market fund method of valuation where the fund values its portfolio securities by reference to their acquisition cost as adjusted for amortization of premium or accretion of discount.

asset-backed commercial paper (ABCP). A short-term investment vehicle with a maturity that is usually between 90 and 180 days. The security itself is typically issued by a bank or other financial institution. The notes are backed by assets such as trade receivables—home equity loans, automobile loans, and other commercial assets—and are generally used for short-term financing needs.

Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF). A lending program created by the Federal Reserve Board on September 19, 2008, that provides funding to U.S. depository institutions and bank holding companies to finance their purchases of high quality asset-backed commercial paper (ABCP) from money market funds under certain conditions.

auction rate security (ARS). A debt security in which the interest rate is reset through a Dutch auction. The ARS is sold at an interest rate that will clear the market at the lowest yield possible. This ensures that all bidders on an ARS receive the same yield on the debt issue.

Benchmark Bill. A short-term note issued by Fannie Mae via a Dutch auction process using web-based technology. This unsecured general obligation is issued in three-month, six-month, and one-year maturities.

break a dollar. A phrase used to describe when the net asset value (NAV) of a money market fund deviates from its stable NAV of $1.00 by one-half of 1 percent or more.

certificate of deposit (CD). A savings certificate entitling the bearer to receive interest. A CD bears a maturity date, has a specified fixed interest rate, and can be issued in any denomination. CDs are generally issued by commercial banks and are currently insured by the FDIC up to a maximum of $250,000. The term of a CD generally ranges from one month to five years.

commercial paper (CP). An unsecured, short-term debt instrument issued by a corporation, typically for the financing of accounts payable, inventories, and meeting short-term liabilities. Maturities on commercial paper typically range from overnight to up to 270 days. The debt is usually issued at a discount, reflecting prevailing market interest rates.

Commercial Paper Funding Facility (CPFF). An institution created by the Federal Reserve in October 2008 as a result of illiquidity in the commercial paper market. The CPFF finances purchases of highly rated unsecured and asset-backed commercial paper from eligible issuers through a special purpose vehicle (SPV) that is funded by the Federal Reserve Bank of New York.

conduit. A bankruptcy remote special purpose vehicle (SPV) or entity that issues short-term debt to fund purchases of a variety of loans and securities. Conduits include off-balance programs sponsored by banks and finance companies to arrange short-term financing for corporate clients as well as structured investment vehicles and other securities arbitrage vehicles.
constant net asset value fund (CNAV). A type of money market fund that seeks to maintain a stable NAV (such as $1.00 per share). Income in the fund is accrued daily and can either be paid out to the investor or used to purchase more units in the fund at the end of the month. As used in this Report, CNAV fund refers to certain types of non-U.S. money funds.

discount note. A short-term debt obligation issued at a discount to par. Discount notes are similar to zero-coupon bonds and Treasury bills and are typically issued by government-sponsored agencies or highly rated corporate borrowers. Discount notes do not make interest payments; instead the bond is matured at a par value above the purchase price, and the price appreciation is used to calculate the investment’s yield.

enhanced cash fund. A privately offered fund with an objective to generate higher total returns than a money market fund by introducing modest interest-rate risk, credit risk, and liquidity risk. These funds seek to maintain a stable $1.00 NAV, but are not registered under the Investment Company Act of 1940.

eurodollar deposit. U.S.-dollar denominated deposits at foreign banks or foreign branches of U.S. banks. Eurodollar deposits are not regulated by the Federal Reserve Board.

floating rate note (FRN). A note with a variable interest rate. The adjustments to the interest rate are usually made every six months and are tied to a certain money market index. Also referred to as a floater.

government money market fund. A fund invested principally in U.S. Treasury obligations and other financial instruments issued or guaranteed by the U.S. government, its agencies, or its instrumentalities.

Institutional Money Market Funds Association (IMMFA). The trade body representing providers of triple-A rated CNAV money funds in Europe.

Institutional Money Market Funds Association (IMMFA) fund. A money fund that is triple-A rated by one or more of the rating agencies (such as Standard & Poor’s and Moody’s) and that complies with IMMFA’s code of practice, which sets forth the operation of triple-A rated CNAV money funds. IMMFA funds also operate under the regulatory requirements of each fund’s domicile.

local government investment pool (LGIP). A state or local government pool offered to public entities for the investment of public funds. These funds are not subject to the same Securities and Exchange Commission rules applicable to money market funds.

money market. The global financial market for short-term borrowing and lending where short-term instruments such as Treasury bills, commercial paper, and repurchase agreements are bought and sold.

money market deposit account (MMDA). A deposit account that is considered a savings account for some purposes, but upon which checks can typically be written, subject to certain restrictions.

net asset value (NAV). A mutual fund’s price per share, calculated by dividing the total market value of all the securities in its portfolio, less any liabilities, by the number of fund shares outstanding.

offshore fund. A collective investment scheme domiciled in an offshore financial center (e.g., British Virgin Islands, Luxembourg, the Cayman Islands, Dublin).

overnight index swap (OIS). An interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, two parties exchange, on the basis of the agreed notional amount, the difference between interest accrued at the fixed rate and interest accrued by averaging the floating or index rate.
**portal.** An online interface that provide clients the ability to invest easily and quickly in short-term securities or short-term investment pools. Although portals generally focus on a single investment option, such as time deposits or money market funds, many are multi-provider and offer clients an array of choices within the investment option.

**prime money market fund.** A fund that may invest in high-quality, short-term money market instruments including Treasury and government obligations, certificates of deposit, repurchase agreements, commercial paper, and other money market securities.

**Reference Bill.** An unsecured general obligation of the Federal Home Loan Mortgage Corporation (Freddie Mac) designated by Freddie Mac as “Reference Bills Securities” and having original durations to maturity most comparable to the term of the Reference Bill Index, and issued by Freddie Mac at regularly scheduled auctions.

**Regulation Q.** Regulation Q is a United States government regulation that until 1986 put a limit on the interest rates that banks could pay, including a rate of zero on demand deposits (checking accounts). Section 11 of the Banking Act of 1933 (12 U.S.C. §371a) prohibits member banks from paying interest on demand deposits, a stricture which is implemented by Regulation Q (12 C.F.R. §217). The imposed zero rate on demand deposits encouraged the emergence of money market funds and the growth of substitutes for, and alternatives to, banks. Regulation Q ceilings for savings accounts were phased out by March 1986 by the Monetary Control Act of 1980. The key provision of Regulation Q that remains is that banks cannot pay interest on business checking accounts.

**repurchase agreements.** A form of short-term borrowing for dealers. The dealer sells the securities to investors, usually on an overnight basis, and buys them back the following day.

**short-term investment fund (STIF).** A type of fund that invests in short-term investments of high quality and low risk. The goal of this type of fund is to protect capital with low-risk investments while achieving a return that beats a relevant benchmark such as a Treasury bill index.

**structured investment vehicle (SIV).** A pool of investment assets that attempts to profit from credit spreads between short-term debt and long-term debt. Funding for SIVs comes from the issuance of commercial paper that is continuously renewed or rolled over; the proceeds are then invested in longer maturity assets that have less liquidity but pay higher yields. The SIV earns profits on the spread between incoming cash flows (principal and interest payments) and the high-rated commercial paper that it issues. SIVs often employ large amounts of leverage to generate returns.

**sweep account.** A bank or brokerage account that, at the close of each business day, automatically transfers amounts that exceed a certain level into a higher interest earning investment option. Commonly, the excess cash is swept into offshore deposits or money market funds.

**taxable money market fund.** A fund that seeks to maintain a stable NAV, by investing in short-term, high-grade securities sold in the money market.

**tax-exempt money market fund.** A fund that seeks to maintain a stable NAV while producing income that is not taxed by the federal government, and in some cases states and municipalities, by investing in municipal securities with relatively short maturities.

**time deposit.** An interest-bearing deposit, at a savings institution, that has a specific maturity.

**total net assets (TNA).** The amount of assets in a fund remaining after meeting all the liability obligations of the fund.
Treasury bill (T-bill). A short-term debt obligation backed by the U.S. government with a maturity of less than one year. T-bills are sold in denominations of $1,000 up to a maximum purchase of $5 million and commonly have maturities of one month (four weeks), three months (13 weeks), or six months (26 weeks).

Treasury money market fund. A fund that invests solely in direct government obligations, such as U.S. Treasury bills and other short-term securities backed by the full faith and credit of the U.S. government.

Ultra-short bond fund. A type of bond fund that invests only in fixed-income instruments with short-term maturities. An ultra-short bond fund will ideally invest in instruments with maturities of approximately one year. This investing strategy tends to offer higher yields than money market funds, but with more price fluctuation than a typical money market fund.

Variable net asset value (VNAV). A method of valuation that uses the daily mark-to-market price to value the individual assets within a fund portfolio. As used in this Report, VNAV fund refers to certain types of non-U.S. money funds.

Variable rate demand note (VRDN). A debt instrument that represents borrowed funds that are payable on demand and accrue interest based on a prevailing money market rate, such as the prime rate. The interest rate applicable to the borrowed funds is specified from the outset of the debt and is typically equal to the specified money market rate plus an extra margin. Also referred to as variable rate demand obligation (VRDO).

Variable rate obligation (VRO). A note the interest rate of which is tied to an index, such as the prime rate in the United States or the London Interbank Offering Rate (LIBOR) in the United Kingdom.