MOODY'S
INVESTORS SERVICE

SPECIAL COMMENT

Sponsor Support Key to Money Market Funds

Table of Contents:

Analyst Contacts:

NEW YORK 1.212.553.1653

Henry Shilling 1.212.553.1948
Senior Vice President
Henry.Shilling@moodys.com

Daniel Serrao 1.212.553.4352
Senior Vice President
Daniel.Serrao@moodys.com

PARIS 33.1.70.70.22.29

Yaron Ernst 33.1.53.30.10.27
Managing Director
Yaron.Ernst@moodys.com

LONDON 44.20.7772.5454

Kathryn Kerle 44.20.7772.5403
Senior Vice President
Kathryn.Kerle@moodys.com

Introduction

The analysis of historic stress events of money market funds, and in particular the events during the 2007-2009 financial crisis, have served to underscore the important role that sponsor support has historically played in enabling money funds to maintain a constant net asset value (CNAV) and meet their primary objectives of maintaining principal value and providing daily liquidity. Moody's analysis has shown that even well-managed money market funds investing in high quality short-dated securities may experience a material decline in their mark-to-market value and/or shortage of liquidity within their underlying securities. This was indeed observed during the crisis when a significant number of prime funds "broke the buck[1]" and/or suspended redemptions due to credit deterioration and/or the evaporation of market liquidity, along with rapid redemptions. In all but two cases, parental support mitigated the realization of losses on the part of fund shareholders[2].

Third-Party Support Since the Inception of Money Funds

As shown in the chart on the following page (Figure 1), third-party support has been provided throughout the history of money market funds, and not just during the 2007-2009 crisis. In total, Moody's has identified over 200 CNAV money market funds in the U.S. and Europe that were the beneficiaries of some form of sponsor support, including Moody's rated as well as non-rated funds[3]. Accordingly, the role of the sponsor, its financial condition, incentives and capacity for providing support are factors to consider when evaluating how well a CNAV money market fund is positioned to meet its objectives for investors. This is true, in our view, notwithstanding the absence of a regulatory or legal requirement on the part of sponsors to provide support.

[1] Under Rule 2a-7 of the Investment Company Act of 1940, in the event of a deviation between the money market fund's market value per share and its amortized cost value per share that exceeds ½ of 1%, a fund's board of directors should promptly consider what action should be taken.

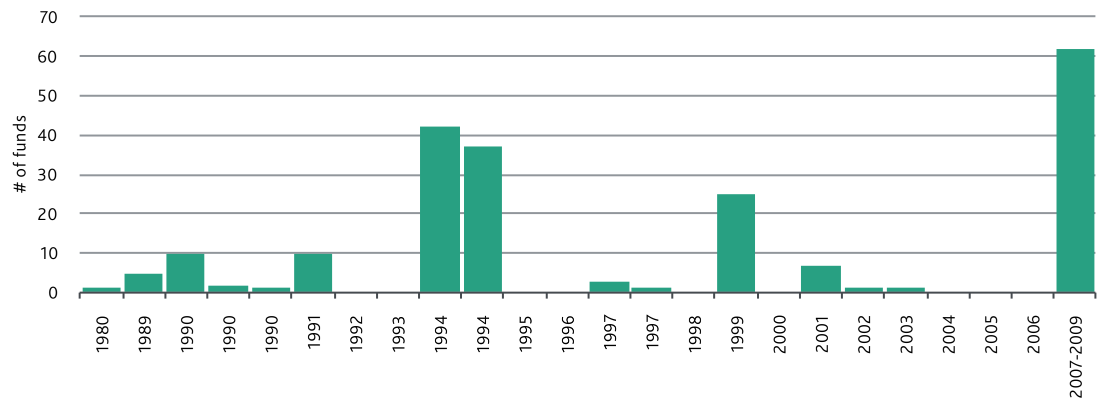
[2] Both funds were managed by Reserve Management, including one US based and one offshore fund. The Reserve Primary Fund, a U.S. based $64.5 billion fund "broke the buck" on 9/16/2008. It has since made seven distributions through July 2010 representing about $99.04% of the fund's assets as of the close on 9/15/2008 according to the firm's disclosures. The smaller British Virgin Islands organized International Liquidity Fund has to this –date distributed about $2.5 billion or 86% of the fund's assets. A number of funds suspended redemptions but ultimately paid shareholders in full.

[3] Reference to funds represents the number of portfolios rather than share classes, and includes government funds, non-government funds, tax-exempt funds, funds denominated in multiple currencies as well as accumulating and fluctuating CNAV share classes.

In fact, an investment in a money market fund is not insured or guaranteed. Any implicit or explicit expression of support would potentially create regulatory challenges, an undesirable legal obligation, and also have financial reporting ramifications for the sponsoring organization based on the magnitude as well as terms and conditions of any such support provisions. For regulated entities, regulatory impediments aside, including concerns about the possibility of extending the federal safety net to nonbank entities, the risk of extending any implicit or explicit guarantees to a money market fund could have significant consequences for the firm's balance sheet. This would be in the form of consolidation of structures that are typically off-balance sheet and the posting of additional capital to support the assumption of risk associated with such guarantees. Similar financial consequences may also extend to independent publicly traded management firms.

FIGURE 1

Number of Funds Receiving Support: 1980-2009, U.S. and Europe



Note of explanation: During this 30-year interval covered in Figure 1, the number of money market funds in the US and Europe ranged from 106 funds in 1980, the year of the first support event, to 834 funds at the end of 2009, including 705 funds in the U.S. and 129 funds in Europe. The number of funds reached a peak in the year 2000, when the combined number stood at 1,091 funds. Funds represent the number of portfolios rather than share classes, and include government funds, non-government funds, tax-exempt funds, funds denominated in multiple currencies as well as accumulating and fluctuating CNAV share classes.

Sources: Moody's Investors, based on various public sources. Sources for data as to the number of funds are iMoneyNet and Investment Company Institute Investment Company Factbooks.

Motivations for Sponsor Support

Historically, financial support actions have been motivated by business reasons. Notwithstanding legal and structural differences, money market funds are perceived by investors to be the functional equivalents of savings accounts. This has been the case for retail investors as well as institutional investors, some of which might have extensive business relationships with fund sponsors. Sponsor support can prevent a loss of shareholder confidence that could – in the extreme – precipitate a "run on the fund" in which a sufficiently large group of shareholders seek to redeem their investments in unison. By supporting the fund, the sponsor or management firm may avoid a forced liquidation of the fund as well as limit the reputation impact on the management firm as a whole. Ultimately, the decision whether to provide support, and the type and degree of support provided, assuming the capacity to do so, is subject to the sponsor's calculus as to the cost of support balanced against the direct (e.g., reduced fees) and indirect (e.g., bruised reputation) consequences of a crisis affecting the fund.

The forms of support by fund sponsors have varied. These included capital contributions, purchases of the affected securities at par, execution of Letters of Credit (LOCs), capital support agreements, letters of indemnity or performance guarantees. In the past, these actions were generally modest in size given the combination of smaller average fund sizes and low absolute issuer exposures. In addition, fund sponsors usually recovered all or most of their capital as a result of the very high recovery rates realized from the funds' defaulted or downgraded investments. Such recoveries tended to range between a low of 75% and a high of 100%, assuming some of the affected securities were held to maturity[4]. These conditions changed, however, during the 2007-2009 financial crisis.

Sponsor Support Prior to the Financial Crisis

Even prior to the recent financial crisis, Moody's identified no fewer than 146 funds[5] that would have 'broken the buck' but for the intervention of their fund sponsor/investment management firm[6]. This covered a period of almost thirty-six years since the introduction of money funds in the US in 1972 through mid-2007, and included taxable money market funds comprised of prime as well as government agency funds and tax-free funds. This out of a universe of 776 funds, on average, that have been offered in the US and Europe starting in 1980, the year of the first support event in the U.S. These range from 106 funds in 1980 to a high of 1,045 funds in 1999. In Europe, the first recorded support event occurred in 2002, at which time about 69 European money funds were tracked at the end of the same year.[7]

These number of interventions were linked to credit defaults or credit deterioration, interest rate spikes and liquidity events, in that order. In this context, breaking the buck refers to the 50 bps deviation between the fund's mark-to-market value per share and its amortized cost value that likely occurred as a consequence of a credit event or credit deterioration, interest rate or liquidity event without being cured other than by means of parental support. Refer to Figure 2 for a detailed list of support events.

During this interval, one U.S. government money market fund investing in US Government agency floaters and managed by a small investment management firm sustained losses and was liquidated beginning September 26, 1994. Investors received $0.961 for each US dollar invested.

4 Refer to Default and Recovery Rates of Corporate Commercial Paper Issuers, 1972-2009.

5 These include 145 funds in the US and one fund in Europe.

6 This number addresses cases of actual intervention and does not include instances where fund mark-to-market NAVs were cured through other means, such as maturity shortening, holding to maturity, WAM reduction, gaining assets, etc.

7 A limited number of offshore funds organized in other jurisdictions, such as Cayman Islands and British Virgin Islands. are excluded from these numbers.

FIGURE 2

Events Leading to Parental Support

YEAR	NUMBER OF FUNDS	CAUSALITY	NOTES OF EXPLANATION
1980	1	Liquidity	Fund managed by First National Bank of Chicago and distributed by Salomon Brothers
1989	5	Credit-default	Integrated Resources
1990	10	Credit deterioration	MNC Financial
1990	2	Credit-default	Mortgage & Realty Trust
1990	1	Credit-default	Drexel Burnham
1991	10	Credit-default*	Mutual Benefit Life
1994	42	Interest rates	US Government agency CMT Floaters, capped floaters, range floaters, COFI floaters, dual index floaters
1994	37	Credit-default*	Orange County
1997	3	Credit default	Mercury Finance
1997	1	Credit deterioration	Korea Development Bank
1999	25	Credit deterioration	General American Life Insurance. Firm placed under "administrative supervision"
2001	7	Credit deterioration	California utilities: Pacific Gas & Electric and Southern California Edison
2002	1	Credit deterioration	Allamerica Financial
2003	1	Credit deterioration	ABB Capital
2007-2009	62**	Credit deterioration and defaults/liquidity	(1) Exposure to various ABCP/MTN issued by SIVs and extendible ABCP, (2) Lehman Brothers Holding, Inc., (3) Reserve Primary Fund, and (4) Meet liquidity needs

Sources: Moody's Investors based on analysis of SEC financial filings and various other public disclosures. Includes events affecting money market funds in the U.S. and overseas.

Notes of Explanation:
*Tax-free funds.
**This information is based on data compiled for 100 largest prime money market funds in the US and rated European CNAV money market funds.

Sponsor Support During the Financial Crisis

According to our research, 62 funds, including at least 36 funds in the US and an estimated 26 funds in Europe, received financial and balance sheet support from their sponsor or parent company during the financial crisis between August 2007 and December 31, 2009.[8]

The effect of the financial crisis on CNAV money market funds was unlike any experienced during their previous almost 36 years of operation. This was due to the unprecedented number of rating downgrades, volatility, illiquidity and spread widening that affected highly rated short-term instruments, compounded in some instances by the financial stresses experienced by some money fund sponsors, which reached a pivotal two week period preceding and following the Chapter 11 bankruptcy filing of Lehman Brothers on September 15, 2008. These events contributed to the collapse of the Reserve's Primary Fund and the follow-on imposition of redemption restrictions on 31 money funds, including 25 funds managed by the Reserve, in the light of rapid and overwhelming redemptions principally initiated by institutional investors who lost confidence in prime money market funds both in the US and in Europe. This forced money funds to sell their short-dated securities, primarily issued by financial institutions, reallocate portfolio assets and shorten portfolio durations, thus exacerbating inter-bank funding pressures, increasing rollover risks and reducing the already diminished appetite for non-financial commercial paper. In response to this spiral, U.S.

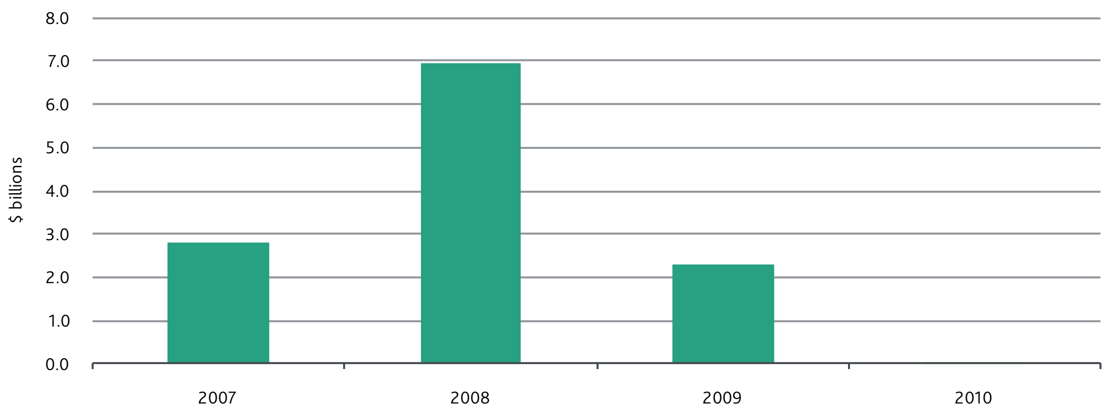
[8] This information is largely based on data compiled for the 100 largest prime money market funds only, out of 239 funds, and accounting for 92% of the assets in this segment. Some funds received parental support on more than one occasion, but are still reported as a single event in this report.

government authorities introduced in rapid succession three programs in particular that were specifically geared to stabilize money market funds. These programs served to stabilize the money markets and restore institutional investor confidence.

During this interval and continuing into 2010[9], at least 20 firms managing prime funds in the US as well as Europe expended a minimum of about $12.1 billion dollars (pre-tax) to preserve the net asset values of their CNAV funds due to credit losses, credit transitions or liquidity constraints[10]. See Figure 3. On average, this represents a staggering $607 million pre-tax, per firm on average, ranging from a low of $27 million to a high of $2.9 billion reported by one firm. What's more, at least two fund management firms relied on parent company balance sheets and access to the Federal Reserve window to provide liquidity to meet unexpectedly outsized redemptions and at least two firms consolidated money market fund assets onto their balance sheets. Not only did the number and magnitude of support events during this interval overshadow previous periods, but the recovery values of affected securities appear to be significantly lower, as exemplified by recent data showing that recovery on Lehman Brothers Holding, Inc. senior unsecured obligations has been around 22%. Taken as a whole, these developments reinforce the importance of balance sheet and financial strength for institutions offering money market funds in general and prime funds in particular.

FIGURE 3

Estimated Minimum Pre-Tax Dollar Value of Parental Support



Sources: Moody's Investors, based on financial filings by publicly traded firm, including Moody's analysis and estimates covering capital infusions through year-end 2010 due to impaired fund net asset values. Foreign currencies have been converted into U.S. dollars.

Sponsor Support in the Future

Notwithstanding the important historical role of sponsor support to the preservation of principal and liquidity, the continuing ability of fund sponsors to financially support their money market funds might be challenged in the intermediate to long-term. As noted in our money market funds 2010 outlook[11], this may be due to changing industry characteristics, including: (1) Fund sizes are larger with their higher levels of absolute exposure to individual issuer names, (2) Fund securities or counterparties and their industries, across prime as well as tax-free funds, tend to be highly correlated, (3) Funds are investing in shorter dated maturities that are subject to more frequent turnover, (4) There are fewer broker-dealers to buy securities and provide liquidity, and (5) Fund assets are largely

[9] Some losses incurred in prior years carry forward into 2010.

[10] This information is also largely based on data compiled for management firms of the 100 largest prime money market funds, using public disclosures.

[11] Money Market Funds: 2010 Industry Outlook, April 2010.

sourced to the more volatile institutional investor class. Moreover, management fees and profit margins are compressed due to historically low interest rates and recoveries on securities defaulted during the financial crisis are lower than historical experience for short-term securities. In turn, these factors serve to push up the financial burden of supporting funds due to adverse credit events. These factors increase substantially the cost to management companies of providing financial support to their funds. The combination of decreasing revenues, due to low interest rates at least in the near-term as well as evolving regulatory developments, and increasing costs of supporting funds due to credit and related losses means that management firms may be less likely to support their funds if they are exposed to significant losses in the future.

Based on the factors noted above and given the expectation of fewer but larger players due to continuing consolidation, there is a higher likelihood that management firms may in the future respond in unison to adverse credit, market, and/or liquidity events by withholding support for their funds. In doing so, the otherwise unfavorable business or reputational consequences for individual management companies would be limited. However, this would shake investors' confidence in the sector and may lead to fund "runs," such as in September 2008. In the absence of governmental intervention, fund runs have a destabilizing effect on financial markets.

Moody's Related Research

Industry Outlook:

» Money Market Funds: 2010 Outlook, April 2010 (123802)

Rating Methodologies:

» Moody's Managed Funds Credit Quality Ratings Methodology, July 2004 (81138)

» Moody's Money Market and Bond Fund Market Risk Ratings, July 2004 (81135)

Special Comments:

» Sovereign Risk: Review 2009 & Outlook 2010, December 2009 (121695)

» Default and Recovery Rates for Corporate Commercial Paper Issuers, 1972-2009, June 2010 (125704)

» Structured Finance Short-Term Rating Transitions and Defaults: 1983-2009, August 2010 (SF212518)

» Parental Support in Money Market Funds: Moody's Perspective, November 2008 (112003)

Rating List:

» Global Managed Investments: Managed Funds Ratings List, August 2010 (SF195869)

Website:

» Managed Investments on Moodys.com

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Report Number: 126231

Author
Henry Shilling

Senior Production Associate
Ginger Kipps

MOODY'S
INVESTORS SERVICE