

March 8, 2007

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Regulation Comments  
Chief Counsel's Office  
Office of Thrift Supervision  
Attention: No. 2006-33  
1700 G Street, N.W.  
Washington, DC 20552

Re: *OCC Docket Number 06-09 (RIN 1557-AC91)*  
*Federal Reserve Board Docket No. R-1261*  
*FDIC RIN 3064-AC73*  
*OTS Docket No. 2006-33 (RIN 1550-AB56)*

*Risk-Based Capital Standards:*  
*Advanced Capital Adequacy Framework*

To the Agencies Addressed (the "Agencies"):

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The following comments are submitted on behalf of Federated Investors, Inc. ("Federated") with respect to the Joint Notice of Proposed Rulemaking ("NPR") published by the Agencies in the Federal Register on September 25, 2006<sup>1</sup> relating to the implementation of the Basel Committee on Banking Supervision's Revised Framework for International Capital Measurement and Capital Standards ("Basel II").

Federated's comments relate solely to the impact of the NPR on the highest quality money market mutual funds ("MMFs").<sup>2</sup> Federated, a major issuer of MMFs, respectfully submits that the NPR would assign unreasonably high risk weights to top-rated MMFs, and would therefore create a needless and undesirable disincentive for institutions subject to Basel II to use these MMFs as a safe and efficient medium for managing cash and holding temporary liquidity.

Top-rated MMFs have characteristics that distinguish them from all other types of investment funds, including MMFs rated in lower categories. First, all MMFs are subject to special rules of the Securities and Exchange Commission ("SEC") intended to assure the quality and liquidity of MMF portfolios. Second, MMFs, rated in the highest rating category by the nationally recognized statistical rating organizations ("NRSROs"), must satisfy additional demanding requirements of the rating agencies relating to the liquidity, quality, maturity and diversification of the portfolio, as well as to the adequacy of management and internal controls. For these reasons, Federated requests that the final version of the Agencies rules implementing Basel II (the "Final Basel II Rules") recognize these special characteristics in the assignment of risk weights by affording top-rated MMFs the same treatment as top-rated tranches of securitizations.

## **I. The Background of MMFs.**

### **A. General.**

MMFs are open-end management investment companies registered under the Investment Company Act of 1940 (the "1940 Act") that have as their investment

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<sup>1</sup> *Risk-Based Capital Standards: Advanced Capital Adequacy Framework and Market Risk; Proposed Rules and Notices*, 71 Fed. Reg. 55829 (Sept. 25, 2006) ("Basel II NPR").

<sup>2</sup> These comments may be considered as responsive to Question 59 in the NPR, *Basel II NPR*, *supra* note 1, 71 Fed. Reg. at 55899.

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objective the generation of income and preservation of capital and liquidity through investment in short-term, high quality securities. First introduced in 1972, MMFs today hold total assets of more than \$2.3 trillion. MMFs offered by Federated hold total assets in excess of \$160 billion.

MMFs seek to maintain a stable share price, typically \$1.00 per share, which has encouraged investors to view MMFs as an alternative to bank deposits or checking accounts, even though MMFs do not have federal deposit insurance. The SEC has observed that “investors generally treat money market funds as cash investments.”<sup>3</sup>

MMFs have been widely accepted by institutional investors. As the Investment Company Institute has noted, corporations have shown a preference to outsource cash management to MMFs rather than holding liquid securities directly.<sup>4</sup> By using MMFs institutions are able to obtain daily liquidity at par, together with true daily choice, flexibility and economies of scale that are unavailable through internal management of their liquid assets.<sup>5</sup> As of year-end 2005, U.S. businesses held about 19 percent of their short-term assets in MMFs.<sup>6</sup>

“Prime” MMFs typically invest in a variety of high-quality, short-duration assets, such as commercial paper, medium-term notes, bankers’ acceptances, corporate debt, and certificates of deposit, as well as obligations of the U.S. government and government-sponsored agencies, and are highly rated by the NRSROs. Other funds may invest predominantly in U.S. Treasuries and obligations of government-sponsored enterprises, or solely in Treasuries (“government” funds), or in a variety of municipal securities (“municipal” funds). Government and municipal funds may also be rated by the NRSROs. **These comments address solely the NPR’s impact on those prime, government and municipal funds that receive the highest ratings, typically Triple-A, from the NRSROs**

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<sup>3</sup> *Revisions to Rules Regulating Money Market Funds*, Investment Company Act Rel. No. 21837 (Mar. 21, 1996, 61 Fed. Reg. 13955, 13957 (Mar. 28, 1996) (“*Money Market Rule Revisions*”).

<sup>4</sup> Investment Company Institute, *Mutual Fund Fact Book* at 30 (42d ed. 2002).

<sup>5</sup> *See id.*

<sup>6</sup> Investment Company Institute, *2006 Investment Company Fact Book* at 25 (46<sup>th</sup> ed. 2006).

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**B. SEC Regulations Governing MMFs.**

Under the 1940 Act and its implementing rules, mutual funds generally are required to value portfolio investments at market value (or if market values are not readily available, at fair value) and to calculate current net asset value per share as the basis for issuing or redeeming shares. However, the SEC has exempted MMFs alone from this requirement in order to enable MMFs to maintain a stable share price by using the “amortized cost” method of valuation or the “penny-rounding” method of pricing. The SEC’s Rule 2a-7 under the 1940 Act<sup>7</sup> effectively prohibits a registered investment company from holding itself out to investors “as a money market fund or the equivalent of a money market fund” (and thus from taking advantage of the exception that allows MMFs to maintain a stable net asset value per share) unless it meets specified conditions relating to portfolio maturity, portfolio quality, portfolio diversification, and portfolio liquidity. These conditions may be summarized as follows<sup>8</sup>:

*Portfolio Maturity.* MMFs must maintain a dollar-weighted average portfolio maturity appropriate to the objective of maintaining a stable net asset value per share. They may not acquire any instrument having a remaining maturity of greater than 397 calendar days, and may not maintain a dollar-weighted average portfolio maturity of more than 90 days.

*Portfolio Quality.* MMFs may purchase only securities that are denominated in United States dollars, that pose minimal risk to the fund, and that qualify as “Eligible Securities” under the rule. “Eligible Securities” are defined generally as (1) securities that are rated in one of the highest two short-term rating categories by a nationally recognized statistical rating organization, or (2) comparable unrated securities. Such securities must be determined by the fund’s board of directors to present minimal credit risks. MMFs other than government and municipal MMFs may not have more than 5

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<sup>7</sup> Securities and Exchange Comm., Rules and Regulations Under the Investment Company Act of 1940 §2a-7, 17 C.F.R. §270.2a-7.

<sup>8</sup> A more detailed discussion of SEC Rule 2a-7, including a description of the amortized cost and penny-rounding methodologies, is attached as Appendix A, together with the full text of the rule.

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percent of their assets invested in Eligible Securities that are not in the highest rating category.

*Portfolio Diversification.* Rule 2a-7 subjects MMFs to a variety of requirements designed to limit the fund's exposure to the credit risk of any single issuer.

*Portfolio Liquidity.* SEC rules also subject MMFs to stringent portfolio liquidity standards. MMFs are limited to investing no more than 10 percent of their assets in illiquid securities. The SEC considers a security to be illiquid if it cannot be disposed of within seven days in the ordinary course of business at approximately the price at which the fund has valued it.<sup>9</sup>

As a result of these SEC rules, an MMF is effectively precluded from investing in securities having an equity risk, and as a consequence MMFs do not invest in equities.

### **C. The Rating of MMF Shares**

Major NRSROs in the United States regularly rate MMFs, and their ratings criteria build significantly on the requirements of SEC Rule 2a-7. Indeed, an important aspect of the regular monitoring of MMFs by the rating agencies is to corroborate that the requirements of Rule 2a-7 relating to credit quality, diversification, maturity and liquidity are actually being observed. For an MMF to obtain a top rating, however, the NRSROs will apply even more stringent requirements than Rule 2a-7. For example, while Rule 2a-7 requires that an MMF maintain a weighted average maturity of 90 days or less in its portfolios, both Standard & Poor's and Fitch require a weighted average maturity of not more than 60 days in order to obtain a triple-A rating. S&P states explicitly that

“there are significant differences between the minimum standards required by Rule 2a-7 and Standard & Poor's rating criteria for the highest rating categories. In fact, a fund that meets the minimum regulatory requirement would at best qualify for a 'BBB<sub>m</sub>' rating from Standard & Poor's.”<sup>10</sup>

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<sup>9</sup> *Money Market Rule Revisions*, *supra* note 3, 61 Fed. Reg. at 13966.

<sup>10</sup> Standard & Poor's, *Fund Ratings Criteria* at 9-10 (2005).

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The NRSROs also go beyond the requirements of Rule 2a-7 by making their own assessments of a fund's policies, procedures, management and oversight.<sup>11</sup> As Fitch states, "an assessment of management's qualifications and specific track record in managing the fund under review. . . is an integral part of the fund rating process."<sup>12</sup> Similarly, Moody's will assess fund management, as well as the professional skills and track record of the fund's investment advisor, in addition to the fund's operational procedures and controls.<sup>13</sup>

While all MMFs must satisfy the requirements of Rule 2a-7, only those that also meet the most rigorous standards of the NRSROs are awarded the highest rating. As of January 16, 2007:

- 41 percent of all MMFs, representing 45 percent of total MMF assets, have at least one AAA rating;
- 19 percent of all MMFs, holding 21 percent of all MMF assets, are rated AAA by S&P and Moody's; and
- 7 percent of all MMFs, holding 14 percent of all MMF assets, are rated AAA by all three major rating agencies.<sup>14</sup>

#### **D. The Safety Record of MMFs.**

MMFs that may invest in the full range of securities permitted by Rule 2a-7 have had an impressive record of safety for over 34 years. The vast majority of such funds have never invested in any money market instrument that did not pay off at maturity. While there have been relatively isolated circumstances in which an MMF has experienced the potential for deviations between its stabilized share price and its market based per share net asset value by virtue of its investments in all but one of such instances

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<sup>11</sup> We have attached at Appendix B excerpts from publications of Fitch, Moody's and Standard & Poor's describing their processes and requirements for rating MMFs.

<sup>12</sup> Fitch Ratings, *U.S. Money Market Fund Ratings*, p. 5 (March 3, 2006).

<sup>13</sup> Moody's Investor Services, *Moody's Managed Funds Credit Quality Ratings Methodology*, p.4 (June 2004)

<sup>14</sup> See Appendix C

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the funds' investment advisers have purchased the distressed or defaulted securities from their funds at their amortized cost value, plus accrued interest, or have contributed capital to the fund to maintain the constant share price.<sup>15</sup> Despite these incidents, "no individual investor has ever lost money in a modern money market fund."<sup>16</sup>

Most important for the purposes of the Basel II NPR, **no investor, individual or institutional, has ever lost money in a top-rated prime, government or municipal MMF.**

## **II. The NPR's Treatment of MMFs.**

### **A. The Look-Through Approach**

The NPR defines four categories of asset exposures: wholesale credit, retail credit, securitizations, and equities.<sup>17</sup> Shares in an "investment fund"<sup>18</sup> are treated as equities.<sup>19</sup> While equities are generally risk-weighted at 300 percent, if they are publicly traded, or 400 percent, if they are not publicly traded, the NPR has proposed, in Section 54, special rules for equity exposures to investment funds.<sup>20</sup> Specifically, the NPR proposes to adopt a "look-through" approach with respect to shares in an investment

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<sup>15</sup> *Money Market Rule Revisions*, *supra*, 61 Fed Reg. at 13972 n.162. While MMF sponsors do not provide credit backing for their funds, Federated maintains uncommitted backup liquidity lines for various of its mutual funds with two different high quality banks.

<sup>16</sup> iMoneyNet, "Money Fund Basics," (available at <http://www.imoney.net/mfBasics.htm>) (accessed January 4, 2006).

<sup>17</sup> *Basel II NPR*, *supra*, 71 Fed. Reg. at 55858-60.

<sup>18</sup> An "investment fund" is defined as a company "(1) all or substantially all of the assets of which are financial assets; and (2) that has no material liabilities." *Basel II NPR*, *supra*, 71 Fed. Reg. at 55917.

<sup>19</sup> Although the NPR treats shares in investment funds as equities, it should be noted that the NPR definition of an "equity exposure" excludes ownership interests that are "redeemable." *Basel NPR*, *supra*, 71 Fed. Reg. at 55915. All MMF shares are fully redeemable.

<sup>20</sup> *Basel II NPR*, *supra*, 71 Fed. Reg. at 55945.

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fund, so that the actual risk weighting for such shares would be based on the risk weightings for the exposures held or potentially held in the fund's portfolio. The NPR sets out three available methodologies:

***The "Full Look-Through" Approach.*** This is essentially a weighted-average approach based on the fund's actual holdings. A bank may risk-weight its holding of fund shares as the greater of (1) the product of (i) the risk weights for each of the securities held by the fund (calculated as if they were held directly by the bank), and (ii) the bank's proportional ownership share of the fund, or (2) 7 percent of the carrying value of the bank's interest in the fund.

***The Simple Modified Look-Through Approach.*** Where the bank cannot determine the composition of the fund, the risk weight for the bank's holding of fund shares would be the greater of the carrying value of the bank's interest times (1) the highest risk weight<sup>21</sup> applicable to any exposure the fund is permitted to hold, or (2) 7 percent.

***The Alternative Modified Look-Through Approach.*** Under this approach the bank may risk-weight its fund shares on a pro rata assignment of risk weights applicable to the fund's holdings based on the investment limits in the fund's prospectus. If the sum of the investment limits exceeds 100 percent, the bank must assume that the fund invests to the maximum extent permitted in the assets with the highest risk weights, and then continues to make investments in assets with the next highest weight, and so on. However, the aggregate risk weight for the fund shares may not be less than 7 percent.

While these approaches may serve well for investment funds holding equities, or for MMFs that do not enjoy the highest ratings of the NRSROs, they significantly penalize top-rated, prime MMFs, as well as MMFs holding only governments.

First, the "look-through" approaches would impose unduly high risk weights on the shares of top-rated prime or municipal MMFs in any case where these approaches would result in an overall weighted average risk weighting in excess of 7 percent. This would be the case under the "full look-through" approach, for example, where more than

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<sup>21</sup> As determined by reference to Table 10 in the NPR, "Modified Look-Through Approaches for Equity Exposures to Investment Funds," *Basel II NPR, supra*, 71 Fed. Reg. at 55946.

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35 percent of the fund's portfolio consisted of investments in securities having a risk weight of 20 percent. It would also be the case under the other two approaches where the fund's prospectus permitted unlimited investments in securities having a 20 percent risk weight.

The results with regard to government funds are even more onerous, since such funds invest predominantly, if not entirely,<sup>22</sup> in assets having a zero percent risk weighting, such as obligations of the U.S. government. In such cases, a "look-through" risk weighting of the fund shares would likely be less than 7 percent. Federated knows of no empirical basis for imposing a 7 percent minimum risk weighting on such shares, thus treating them as having a risk characteristic greater than the risks in the fund's portfolio.

### **III. A Proposed Alternative Treatment for MMFs.**

Federated proposes and requests that the Final Basel II Rule exclude from the treatment otherwise provided for exposures to investment funds MMFs that comply with the SEC's Rule 2a-7<sup>23</sup> and that are rated in the highest category by the NRSROs.<sup>24</sup>

Specifically, Federated requests:

- That shares in prime MMFs rated in the highest rating grade by an NRSRO be assigned a risk weighting of 7 percent -- equivalent to that applicable to comparably rated securitization exposures; and
- That shares in government and municipal funds rated in the highest rating grade by an NRSRO be assigned a risk weighting calculated under one of the "look-through" approaches, but not more than 7 percent.

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<sup>22</sup> Federated's U.S. Treasury Cash Reserves and Government Obligations Tax-Managed Funds, for example, invest only in short-term U.S. Treasury or agency securities.

<sup>23</sup> As indicated above, an investment fund subject to the SEC's jurisdiction cannot hold itself out as a money market mutual fund unless it is in compliance with Rule 2a-7.

<sup>24</sup> It should be emphasized that Federated is not urging this treatment for investment funds generally or for MMFs that do not enjoy the highest rating of the NRSROs.

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We have set forth in Appendix D suggested amendments to Section 54 that would accomplish this alteration.

Federated believes that there are a number of compelling reasons for the Agencies to adopt the approach we have suggested:

- Most important, by using compliance with the SEC rule governing MMFs, as well as the attainment of the highest rating category of an NRSRO, as criteria for eligibility for special treatment for these MMFs, the Agencies would have an extremely strong basis for distinguishing the highest quality, least risky MMFs from other types of investment funds that may present greater risk characteristics or equity-like exposures. Moreover, by conditioning such special treatment on the requirements that an MMF both comply with Rule 2a-7 and maintain the highest rating grade, the Agencies can be comfortable that an investment in the shares of such an MMF does not present any market, credit, liquidity, or operational risk greater than that implied by a 7 percent risk weighting.
- Moreover, the treatment we propose would put qualifying MMFs on a par with the most highly rated senior securitization tranches, which the NPR affords a 7 percent risk weighting. This treatment of securitizations reflects the fact that the risks involved in holding senior tranches are mitigated by the existence of subordinate tranches, notwithstanding the risk characteristics of the underlying securities. It also recognizes the inherent difficulty of risk-weighting a security that represents an interest in an underlying pool. While prime MMFs do not have the protection of subordinated interests, they must meet stringent standards of quality, maturity, diversification and liquidity both under the SEC rule and in order to obtain an NRSRO rating comparable to that of the highest-rated securitizations.
- Highly-rated MMFs can serve an extremely important role for banks by providing them with a safe, proven and efficient cash management tool. The diversification that can be achieved through the use of an MMF diminishes, and does not increase, risk.

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- While banks can hold directly the same investments that are permissible for MMFs, there are likely to be greater transaction costs involved, and thus greater inefficiencies, for a bank to attempt to achieve the same diversification as is available through an MMF. The Agencies should not create a needless disincentive for banks to forego the efficiencies and diversification that can be realized through MMFs.
- Finally, by assigning a flat 7 percent risk weight based on the top rating of an NRSRO, the rule would eliminate the cost and burden of having to risk-weight separately each of the hundreds of securities held in an MMF's portfolio. We understand that a similar concern was one of the considerations that led to the flat 7 percent charge on top-rated securitizations, and it is equally applicable with respect to MMFs.<sup>25</sup>

Respectfully submitted,

Arnold & Porter LLP

By:   
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Attorneys for Federated Investors, Inc.

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<sup>25</sup> Federated provides institutional investors in its MMFs with month-end reports on the makeup of the funds' portfolios. An example of such a report is attached as Appendix E.

## **APPENDIX A**

### **The SEC's Rule 2a-7**

The essence of MMFs is their ability to maintain a constant share price -- generally \$1.00 -- notwithstanding the requirements in section 2(a)(41) of the 1940 Act, 15 U.S.C. §80a-2(a)(41) and the SEC rules implementing that section, 17 C.F.R. §§270.2a-4 and 270.22c-1, that mutual funds generally value portfolio investments at market value (or if market values are not readily available, at fair value) and that sales, redemptions or repurchases of mutual fund shares be effected at net asset value per share.

Under the SEC's Rule 2a-7, MMFs may use either of two alternative methodologies for establishing the price or redemption value of their shares -- the Amortized Cost Method or the Penny-Rounding Method. Under the Amortized Cost Method, portfolio securities are valued at the fund's acquisition cost as adjusted for amortization of premium or accretion of discount, rather than at their value based on current market factors. 17 C.F.R. §2a-7(a)(2). Under the Penny-Rounding Method shares are priced for purposes of distribution, redemption and repurchase at net asset value or amortized cost rounded to the nearest one percent, or one cent on a share value of a dollar. 17 C.F.R. §270.2a-7(a)(18).

While Rule 2a-7 does not expressly define MMFs, it provides a comprehensive legal framework for MMFs, both by conditioning a fund's ability to hold itself out as an MMF and by conditioning the fund's ability to use one of the methodologies described above in order to maintain a constant price per share.

**Holding Out as an MMF.** Rule 2a-7(b)(1) makes it an untrue statement of material fact for a fund to be held out "as a money market fund or the equivalent" unless specified conditions relating to portfolio maturity, quality and diversification (the "2a-7 Conditions") are satisfied, and Rule 2a-7(b)(2) and (3) state that it shall constitute "the use of a materially deceptive or misleading name or title" for a fund to use the term "money market" as part of its name, or to suggest that it is a money market fund by using such terms as "cash," "liquid," "money," "ready assets," or the like unless the 2a-7 Conditions are satisfied.

**Share Price Calculations.** Rule 2a-7(c) provides an exemption from the standard requirement that fund shares be priced at net asset value so long as the 2a-7 Conditions are satisfied; and provided further that the fund's board "determine, in good faith, that it is in the best interests of the fund and its shareholders to maintain a stable net asset value per share" by using one of the methodologies described above, and that the fund "will continue to use such method only so long as the board of directors believes that it fairly reflects the market-based net asset value per share."

#### **The 2a-7 Conditions.**

*Portfolio Maturity.* MMFs must maintain a dollar-weighted average portfolio maturity appropriate to their objective of maintaining a stable net asset value per share. However, they

may not (i) acquire an instrument with a remaining maturity greater than 397 days, or (ii) maintain a dollar-weighted average portfolio maturity greater than 90 days.

*Portfolio Quality.* Rule 2a7's conditions relating to portfolio quality are complex and extensive. Generally speaking, however, MMFs must limit their portfolios to U.S. dollar-denominated securities that their boards have determined to present minimal credit risks, and that:

- Are rated in one of the two highest short-term rating categories by a nationally recognized statistical rating organization (provided that not more of 5 percent of the assets of a taxable fund may be invested in securities not in the highest rating category);
- If unrated, are of comparable quality to a security meeting the requirements for a rating in one of the two highest categories;
- Are rated asset-backed securities;
- Are subject to a rated guarantee or are guaranteed by a rated guarantor; or
- Are fully-collateralized repurchase agreements.

*Portfolio Diversification.* Rule 2a-7's conditions on diversification are also complex and extensive. Generally speaking, however, MMFs may not invest more than 5 percent of their total assets in the securities of a single issuer. In the case of securities not in the highest rating category, MMFs are further limited to investing not more than the greater of one percent of their total assets or \$1 million in the securities of a single issuer.

**Downgrades and Defaults.** If the rating of a portfolio security held by an MMF is downgraded (or if the fund's board determines that an unrated security is no longer of comparable quality), the fund's board must, unless the security is disposed of with five business days, promptly reassess whether the security continues to present minimal credit risks and take such action as it determines to be in the best interest of the fund and its shareholders.

If there is a default with respect to a portfolio security, or if a security ceases to be eligible for investment by an MMF or no longer presents minimal credit risks, or if there is an event of insolvency on the part of the issuer or guarantor, the MMF must generally dispose of the security as soon as practicable. If such default or event account for more than one-half of one percent of the fund's assets, the fund must promptly notify the SEC and describe the actions it intends to take.

**The Text of Rule 2a-7.** The full text of Rule 2a-7 follows:

§ 270.2a-7 Money market funds.

(a) *Definitions.* (1) *Acquisition (or Acquire)* means any purchase or subsequent rollover (but does not include the failure to exercise a Demand Feature).

(2) *Amortized Cost Method* of valuation means the method of calculating an investment company's net asset value whereby portfolio securities are valued at the fund's Acquisition cost as adjusted or amortization of premium or accretion of discount rather than at their value based on current market factors.

(3) *Asset Backed Security* means a fixed income security (other than a Government security) issued by a Special Purpose Entity (as defined in this paragraph), substantially all of the assets which consist of Qualifying Assets (as defined in this paragraph). *Special Purpose Entity* means a trust, corporation, partnership or other entity organized for the sole purpose of issuing securities that entitle their holders to receive payments that depend primarily on the cash flow from Qualifying Assets, but does not include a registered investment company. *Qualifying Assets* means 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.

(4) *Business Day* means any day, other than Saturday, Sunday, or any customary business holiday.

(5) *Collateralized Fully* means "Collateralized Fully" as defined in § 270.5b-3(c)(1).

(6) *Conditional Demand Feature* means a Demand Feature that is not an Unconditional Demand Feature. A Conditional Demand Feature is not a Guarantee.

(7) *Conduit Security* means a security issued by a Municipal Issuer (as defined in this paragraph) involving an arrangement or agreement entered into, directly or indirectly, with a person other than a Municipal Issuer, which arrangement or agreement provides for or secures repayment of the security. *Municipal Issuer* means a state or territory of the United States (including the District of Columbia), or any political subdivision or public instrumentality

of a state or territory of the United States. A Conduit Security *does not* include a security that is:

(i) Fully and unconditionally guaranteed by a Municipal Issuer; or

(ii) Payable from the general revenues of the Municipal Issuer or other Municipal Issuers (other than those revenues derived from an agreement or arrangement with a person who is not a Municipal Issuer that provides for or secures repayment of the security issued by the Municipal Issuer); or

(iii) Related to a project owned and operated by a Municipal Issuer; or

(iv) Related to a facility leased to and under the control of an industrial or commercial enterprise that is part of a public project which, as a whole, is owned and under the control of a Municipal Issuer.

(8) *Demand Feature* means:

(i) A feature permitting the holder of a security to sell the security at an exercise price equal to the approximate amortized cost of the security plus accrued interest, if any, at the time of exercise. A Demand Feature must be exercisable either:

(A) At any time on no more than 30 calendar days' notice; or

(B) At specified intervals not exceeding 397 calendar days and upon no more than 30 calendar days' notice; or

(ii) A feature permitting the holder of an Asset Backed Security unconditionally to receive principal and interest within 397 calendar days of making demand.

(9) *Demand Feature Issued By A Non-Controlled Person* means a Demand Feature issued by:

(i) A person that, directly or indirectly, does not control, and is not controlled by or under common control with the issuer of the security subject to the Demand Feature (*control* means "control" as defined in section 2(a)(9) of the Act (15 U.S.C. 80a-2(a)(9)); or

(ii) A sponsor of a Special Purpose Entity with respect to an Asset Backed Security.

(10) *Eligible Security* means:

(i) A Rated Security with a remaining maturity of 397 calendar days or less that has received a rating from the Requisite NRSROs in one of the two

highest short-term rating categories (within which there may be sub-categories or gradations indicating relative standing); or

(ii) An Unrated Security that is of comparable quality to a security meeting the requirements for a Rated Security in paragraph (a)(10)(i) of this section, as determined by the money market fund's board of directors; *Provided, however, that:*

(A) A security that at the time of issuance had a remaining maturity of more than 397 calendar days but that has a remaining maturity of 397 calendar days or less and that is an Unrated Security is not an Eligible Security if the security has received a long-term rating from any NRSRO that is not within the NRSRO's three highest long-term ratings categories (within which there may be sub-categories or gradations indicating relative standing), unless the security has received a long-term rating from the Requisite NRSROs in one of the three highest rating categories;

(B) An Asset Backed Security (other than an Asset Backed Security substantially all of whose Qualifying Assets consist of obligations of one or more Municipal Issuers, as that term is defined in paragraph (a)(7) of this section) shall not be an Eligible Security unless it has received a rating from an NRSRO.

(iii) In addition, in the case of a security that is subject to a Demand Feature or Guarantee:

(A) The Guarantee has received a rating from an NRSRO or the Guarantee is issued by a guarantor that has received a rating from an NRSRO with respect to a class of debt obligations (or any debt obligation within that class) that is comparable in priority and security to the Guarantee, *unless:*

(1) The Guarantee is issued by a person that, directly or indirectly, controls, is controlled by or is under common control with the issuer of the security subject to the Guarantee (other than a sponsor of a Special Purpose Entity with respect to an Asset Backed Security);

(2) The security subject to the Guarantee

is a repurchase agreement that is Collateralized Fully; or

(3) The Guarantee is itself a Government Security; and

(B) The issuer of the Demand Feature or Guarantee, or another institution, has undertaken promptly to notify the holder of the security in the event the Demand Feature or Guarantee is substituted with another Demand Feature or Guarantee (if such substitution is permissible under the terms of the Demand Feature or Guarantee).

(11) *Event of Insolvency* means "Event of Insolvency" as defined in § 270.5b-3(c)(2).

(12) *First Tier Security* means any Eligible Security that:

(i) Is a Rated Security that has received a short-term rating from the Requisite NRSROs in the highest short-term rating category for debt obligations (within which there may be sub-categories or gradations indicating relative standing); or

(ii) Is an Unrated Security that is of comparable quality to a security meeting the requirements for a Rated Security in paragraph (a)(12)(i) of this section, as determined by the fund's board of directors; or

(iii) Is a security issued by a registered investment company that is a money market fund; or

(iv) Is a Government Security.

(13) *Floating Rate Security* means a security the terms of which provide for the adjustment of its interest rate whenever a specified interest rate changes and that, at any time until the final maturity of the instrument or the period remaining until the principal amount can be recovered through demand, can reasonably be expected to have a market value that approximates its amortized cost.

(14) *Government Security* means any "Government security" as defined in section 2(a)(16) of the Act (15 U.S.C. 80a-2(a)(16)).

(15) *Guarantee* means an unconditional obligation of a person other than the issuer of the security to undertake to pay, upon presentment by the holder of the Guarantee (if required), the principal amount of the underlying security

plus accrued interest when due or upon default, or, in the case of an Unconditional Demand Feature, an obligation that entitles the holder to receive upon exercise the approximate amortized cost of the underlying security or securities, plus accrued interest, if any. A Guarantee includes a letter of credit, financial guaranty (bond) insurance, and an Unconditional Demand Feature (other than an Unconditional Demand Feature provided by the issuer of the security).

(16) *Guarantee Issued By A Non-Controlled Person* means a Guarantee issued by:

(i) A person that, directly or indirectly, does *not* control, and is not controlled by or under common control with the issuer of the security subject to the Guarantee (*control* means "control" as defined in section 2(a)(9) of the Act (15 U.S.C. 80a-2(a)(9)); or

(ii) A sponsor of a Special Purpose Entity with respect to an Asset Backed Security.

(17) *NRSRO* means any nationally recognized statistical rating organization, as that term is used in paragraphs (c)(2)(vi)(E), (F) and (H) of § 240.15c3-1 of this Chapter, that is not an "affiliated person," as defined in section 2(a)(3)(C) of the Act (15 U.S.C. 80a-2(a)(3)(C)), of the issuer of, or any insurer or provider of credit support for, the security.

(18) *Penny-Rounding Method of pricing* means the method of computing an investment company's price per share for purposes of distribution, redemption and repurchase whereby the current net asset value per share is rounded to the nearest one percent.

(19) *Rated Security* means a security that meets the requirements of paragraphs (a)(19)(i) or (ii) of this section, in each case subject to paragraph (a)(19)(iii) of this section:

(i) The security has received a short-term rating from an NRSRO, or has been issued by an issuer that has received a short-term rating from an NRSRO with respect to a class of debt obligations (or any debt obligation within that class) that is comparable in priority and security with the security; or

(ii) The security is subject to a Guarantee that has received a short-term rating from an NRSRO, or a Guarantee issued by a guarantor that has received a short-term rating from an NRSRO with respect to a class of debt obligations (or any debt obligation within that class) that is comparable in priority and security with the Guarantee; but

(iii) A security is not a Rated Security if it is subject to an external credit support agreement (including an arrangement by which the security has become a Refunded Security) that was not in effect when the security was assigned its rating, unless the security has received a short-term rating reflecting the existence of the credit support agreement as provided in paragraph (a)(19)(i) of this section, or the credit support agreement with respect to the security has received a short-term rating as provided in paragraph (a)(19)(ii) of this section.

(20) *Refunded Security* means "Refunded Security" as defined in § 270.5b-3(c)(4).

(21) *Requisite NRSROs* means:

(i) Any two NRSROs that have issued a rating with respect to a security or class of debt obligations of an issuer; or

(ii) If only one NRSRO has issued a rating with respect to such security or class of debt obligations of an issuer at the time the fund acquires the security, that NRSRO.

(22) *Second Tier Security* means any Eligible Security that is not a First Tier Security. *Second Tier Conduit Security* means any Conduit Security that is an Eligible Security that is not a First Tier Security.

(23) *Single State Fund* means a Tax Exempt Fund that holds itself out as seeking to maximize the amount of its distributed income that is exempt from the income taxes or other taxes on investments of a particular state and, where applicable, subdivisions thereof.

(24) *Tax Exempt Fund* means any money market fund that holds itself out as distributing income exempt from regular federal income tax.

(25) *Total Assets* means, with respect to a money market fund using the Amortized

Cost Method, the total amortized cost of its assets and, with respect to any other money market fund, the total market-based value of its assets.

(26) *Unconditional Demand Feature* means a Demand Feature that by its terms would be readily exercisable in the event of a default in payment of principal or interest on the underlying security or securities.

(27) *United States Dollar-Denominated* means, with reference to a security, that all principal and interest payments on such security are payable to security holders in United States dollars under all circumstances and that the interest rate of, the principal amount to be repaid, and the timing of payments related to such security do not vary or float with the value of a foreign currency, the rate of interest payable on foreign currency borrowings, or with any other interest rate or index expressed in a currency other than United States dollars.

(28) *Unrated Security* means a security that is not a Rated Security.

(29) *Variable Rate Security* means a security the terms of which provide for the adjustment of its interest rate on set dates (such as the last day of a month or calendar quarter) and that, upon each adjustment until the final maturity of the instrument or the period remaining until the principal amount can be recovered through demand, can reasonably be expected to have a market value that approximates its amortized cost.

(b) *Holding Out and Use of Names and Titles.* (1) It shall be an untrue statement of material fact within the meaning of section 34(b) of the Act (15 U.S.C. 80a-33(b)) for a registered investment company, in any registration statement, application, report, account, record, or other document filed or transmitted pursuant to the Act, including any advertisement, pamphlet, circular, form letter, or other sales literature addressed to or intended for distribution to prospective investors that is required to be filed with the Commission by section 24(b) of the Act (15 U.S.C. 80a-24(b)), to hold itself out to investors as 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.

(2) It shall constitute the use of a materially deceptive or misleading name or title within the meaning of section 35(d) of the Act (15 U.S.C. 80a-34(d)) for a registered investment company to adopt the term "money market" as part of its name or title or the name or title of any redeemable securities of which it is the issuer, or to adopt a name that 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.

(3) For purposes of this paragraph, a name that suggests that a registered investment company is a money market fund or the equivalent thereof shall include one that uses such terms as "cash," "liquid," "money," "ready assets" or similar terms.

(c) *Share Price Calculations.* The current price per share, for purposes of distribution, redemption and repurchase, of any redeemable security issued by any registered investment company ("money market fund" or "fund"), notwithstanding the requirements of section 2(a)(41) of the Act (15 U.S.C. 80a-2(a)(41)) and of §§ 270.2a-4 and 270.22c-1 thereunder, may be computed by use of the Amortized Cost Method or the Penny-Rounding Method; *Provided, however, that:*

(1) *Board Findings.* The board of directors of the money market fund shall determine, in good faith, that it is in the best interests of the fund and its shareholders to maintain a stable net asset value per share or stable price per share, by virtue of either the Amortized Cost Method or the Penny-Rounding Method, and that the money market fund will continue to use such method only so long as the board of directors believes that it fairly reflects the market-based net asset value per share.

(2) *Portfolio Maturity.* The money market fund shall maintain a dollar-weighted

average portfolio maturity appropriate to its objective of maintaining a stable net asset value per share or price per share; *Provided, however,* that the money market fund will not:

(i) Except as provided in paragraph (c)(2)(ii) of this section, Acquire any instrument with a remaining maturity of greater than 397 calendar days; or

(ii) In the case of a money market fund not using the Amortized Cost Method, Acquire a Government Security with a remaining maturity of greater than 762 calendar days; or

(iii) Maintain a dollar-weighted average portfolio maturity that exceeds ninety days.

(3) *Portfolio Quality*—i) *General.* The money market fund shall limit its portfolio investments to those United States Dollar-Denominated securities that the fund's board of directors determines present minimal credit risks (which determination must be based on factors pertaining to credit quality in addition to any rating assigned to such securities by an NRSRO) and that are at the time of Acquisition Eligible Securities.

(ii) *Second Tier Securities.* Immediately after the Acquisition of any Second Tier Security:

(A) *Taxable Funds.* A money market fund that is not a Tax Exempt Fund shall not have invested more than five percent of its Total Assets in securities that are Second Tier Securities; and

(B) *Tax Exempt Funds.* A money market fund that is a Tax Exempt Fund shall not have invested more than five percent of its Total Assets in Conduit Securities that are Second Tier Conduit Securities.

(iii) *Securities Subject to Guarantees.* A security that is subject to a Guarantee may be determined to be an Eligible Security or a First Tier Security based solely on whether the Guarantee is an Eligible Security or First Tier Security, as the case may be.

(iv) *Securities Subject to Conditional Demand Features.* A security that is subject to a Conditional Demand Feature ("Underlying Security") may be determined to be an Eligible Security or a First Tier Security only if:

(A) The Conditional Demand Feature is an Eligible Security or First Tier Security, as the case may be;

(B) At the time of the Acquisition of the Underlying Security, the money market fund's board of directors has determined that there is minimal risk that the circumstances that would result in the Conditional Demand Feature not being exercisable will occur; and

(1) The conditions limiting exercise either can be monitored readily by the fund, or relate to the taxability, under federal, state or local law, of the interest payments on the security; or

(2) The terms of the Conditional Demand Feature require that the fund will receive notice of the occurrence of the condition and the opportunity to exercise the Demand Feature in accordance with its terms; and

(C) 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) has received 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 (within which there may be sub-categories or gradations indicating relative standing) or, if unrated, is determined to be of comparable quality by the money market fund's board of directors to a security that has received a rating from the Requisite NRSROs within the NRSROs' two highest short-term or long-term rating categories, as the case may be.

(4) *Portfolio Diversification*—(i) *Issuer Diversification.* The money market fund shall be diversified with respect to issuers of securities Acquired by the fund as provided in paragraphs (c)(4)(i) and (c)(4)(ii) of this section, other than with respect to Government Securities and securities subject to a Guarantee Issued By A Non-Controlled Person.

(A) *Taxable and National Funds.* Immediately after the Acquisition of any security, a money market fund other than a Single State Fund shall not

have invested more than five percent of its Total Assets in securities issued by the issuer of the security; *Provided, however,* that such a fund may invest up to twenty-five percent of its Total Assets in the First Tier Securities of a single issuer for a period of up to three Business Days after the Acquisition thereof; *Provided, further,* that the fund may not invest in the securities of more than one issuer in accordance with the foregoing proviso in this paragraph at any time.

(B) *Single State Funds.* With respect to seventy-five percent of its Total Assets, immediately after the Acquisition of any security, a Single State Fund shall not have invested more than five percent of its Total Assets in securities issued by the issuer of the security; *Provided, however,* that a Single State Fund shall not invest more than five percent of its Total Assets in securities issued by the issuer of the security unless the securities are First Tier Securities.

(C) *Second Tier Securities—(1) Taxable Funds.* Immediately after the Acquisition of any Second Tier Security, a money market fund that is not a Tax Exempt Fund shall not have invested more than the greater of one percent of its Total Assets or one million dollars in securities issued by that issuer that are Second Tier Securities.

(2) *Tax Exempt Funds.* Immediately after the Acquisition of any Second Tier Conduit Security, a money market fund that is a Tax Exempt Fund shall not have invested more than the greater of one percent of its Total Assets or one million dollars in securities issued by that issuer that are Second Tier Conduit Securities.

(ii) *Issuer Diversification Calculations.* For purposes of making calculations under paragraph (c)(4)(i) of this section:

(A) *Repurchase Agreements.* The Acquisition of a repurchase agreement may be deemed to be an Acquisition of the underlying securities, provided the obligation of the seller to repurchase the securities from the money market fund is Collateralized Fully.

(B) *Refunded Securities.* The Acquisition of a Refunded Security shall be deemed to be an Acquisition of the

escrowed Government Securities.

(C) *Conduit Securities.* A Conduit Security shall be deemed to be issued by the person (other than the Municipal Issuer) ultimately responsible for payments of interest and principal on the security.

(D) *Asset Backed Securities—(1) General.* An Asset Backed Security Acquired by a fund ("Primary ABS") shall be deemed to be issued by the Special Purpose Entity that issued the Asset Backed Security, *Provided, however:*

(i) *Holdings of Primary ABS.* Any person whose obligations constitute ten percent or more of the principal amount of the Qualifying Assets of the Primary ABS ("Ten Percent Obligor") shall be deemed to be an issuer of the portion of the Primary ABS such obligations represent; and

(ii) *Holdings of Secondary ABS.* If a Ten Percent Obligor of a Primary ABS is itself a Special Purpose Entity issuing Asset Backed Securities ("Secondary ABS"), any Ten Percent Obligor of such Secondary ABS also shall be deemed to be an issuer of the portion of the Primary ABS that such Ten Percent Obligor represents.

(2) *Restricted Special Purpose Entities.* A Ten Percent Obligor with respect to a Primary or Secondary ABS shall not be deemed to have issued any portion of the assets of a Primary ABS as provided in paragraph (c)(4)(ii)(D)(1) of this section if that Ten Percent Obligor is itself a Special Purpose Entity issuing Asset Backed Securities ("Restricted Special Purpose Entity"), and the securities that it issues (other than securities issued to a company that controls, or is controlled by or under common control with, the Restricted Special Purpose Entity and which is not itself a Special Purpose Entity issuing Asset Backed Securities) are held by only one other Special Purpose Entity.

(3) *Demand Features and Guarantees.* In the case of a Ten Percent Obligor deemed to be an issuer, the fund shall satisfy the diversification requirements of paragraph (c)(4)(iii) of this section with respect to any Demand Feature or Guarantee to which the Ten

Percent Obligor's obligations are subject.

(E) *Shares of Other Money Market Funds.* A money market fund that Acquires shares issued by another money market fund in an amount that would otherwise be prohibited by paragraph (c)(4)(i) of this section shall nonetheless be deemed in compliance with this section if the board of directors of the Acquiring money market fund reasonably believes that the fund in which it has invested is in compliance with this section.

(iii) *Diversification Rules for Demand Features and Guarantees.* The money market fund shall be diversified with respect to Demand Features and Guarantees Acquired by the fund as provided in paragraphs (c)(4)(iii) and (c)(4)(iv) of this section, *other than* with respect to a Demand Feature issued by the same institution that issued the underlying security, or with respect to a Guarantee or Demand Feature that is itself a Government Security.

(A) *General.* Immediately after the Acquisition of any Demand Feature or Guarantee or security subject to a Demand Feature or Guarantee, a money market fund, with respect to seventy five percent of its Total Assets, shall not have invested more than ten percent of its Total Assets in securities issued by or subject to Demand Features or Guarantees from the institution that issued the Demand Feature or Guarantee, subject to paragraphs (c)(4)(iii) (B) and (C) of this section.

(B) *Second Tier Demand Features or Guarantees.* Immediately after the Acquisition of any Demand Feature or Guarantee (or a security after giving effect to the Demand Feature or Guarantee) that is a Second Tier Security, a money market fund shall not have invested more than five percent of its Total Assets in securities issued by or subject to Demand Features or Guarantees from the institution that issued the Demand Feature or Guarantee.

(C) *Demand Features or Guarantees Issued by Non-Controlled Persons.* Immediately after the Acquisition of any security subject to a Demand Feature or Guarantee, a money market fund shall not have invested more than ten percent

of its Total Assets in securities issued by, or subject to Demand Features or Guarantees from the institution that issued the Demand Feature or Guarantee, unless, with respect to any security subject to Demand Features or Guarantees from that institution (other than securities issued by such institution), the Demand Feature or Guarantee is a Demand Feature or Guarantee Issued By A Non-Controlled Person.

(iv) *Demand Feature and Guarantee Diversification Calculations—(A) Fractional Demand Features or Guarantees.*

In the case of a security subject to a Demand Feature or Guarantee from an institution by which the institution guarantees a specified portion of the value of the security, the institution shall be deemed to guarantee the specified portion thereof.

(B) *Layered Demand Features or Guarantees.*

In the case of a security subject to Demand Features or Guarantees from multiple institutions that have not limited the extent of their obligations as described in paragraph (c)(4)(iv)(A) of this section, each institution shall be deemed to have provided the Demand Feature or Guarantee with respect to the entire principal amount of the security.

(v) *Diversification Safe Harbor.* A money market fund that satisfies the applicable diversification requirements of paragraphs (c)(4) and (c)(5) of this section shall be deemed to have satisfied the diversification requirements of section 5(b)(1) of the Act (15 U.S.C. 80a-5(b)(1)) and the rules adopted thereunder.

(5) *Demand Features and Guarantees Not Relied Upon.* If the fund's board of directors has determined that the fund is not relying on a Demand Feature or Guarantee to determine the quality (pursuant to paragraph (c)(3) of this section), or maturity (pursuant to paragraph (d) of this section), or liquidity of a portfolio security, and maintains a record of this determination (pursuant to paragraphs (c)(9)(ii) and (c)(10)(vi) of this section), then the fund may disregard such Demand Feature or Guarantee for all purposes of this section.

**(6) Downgrades, Defaults and Other Events—(i) Downgrades—(A) General.**

Upon the occurrence of either of the events specified in paragraphs (c)(6)(i)(A) (1) and (2) of this section with respect to a portfolio security, the board of directors of the money market fund shall reassess promptly whether such security continues to present minimal credit risks and shall cause the fund to take such action as the board of directors determines is in the best interests of the money market fund and its shareholders:

(1) A portfolio security of a money market fund ceases to be a First Tier Security (either because it no longer has the highest rating from the Requisite NRSROs or, in the case of an Unrated Security, the board of directors of the money market fund determines that it is no longer of comparable quality to a First Tier Security); and

(2) The money market fund's investment adviser (or any person to whom the fund's board of directors has delegated portfolio management responsibilities) becomes aware that any Unrated Security or Second Tier Security held by the money market fund has, since the security was Acquired by the fund, been given a rating by any NRSRO below the NRSRO's second highest short-term rating category.

(B) *Securities To Be Disposed Of.* The reassessments required by paragraph (c)(6)(i)(A) of this section shall not be required if, in accordance with the procedures adopted by the board of directors, the security is disposed of (or matures) within five Business Days of the specified event and, in the case of events specified in paragraph (c)(6)(i)(A)(2) of this section, the board is subsequently notified of the adviser's actions.

(C) *Special Rule for Certain Securities Subject to Demand Features.* In the event that after giving effect to a rating downgrade, more than five percent of the fund's Total Assets are invested in securities issued by or subject to Demand Features from a single institution that are Second Tier Securities, the fund shall reduce its investment in

securities issued by or subject to Demand Features from that institution to no more than five percent of its Total Assets by exercising the Demand Features at the next succeeding exercise date(s), absent a finding by the board of directors that disposal of the portfolio security would not be in the best interests of the money market fund.

(ii) *Defaults and Other Events.* Upon the occurrence of any of the events specified in paragraphs (c)(6)(ii)(A) through (D) of this section with respect to a portfolio security, the money market fund shall dispose of such security as soon as practicable consistent with achieving an orderly disposition of the security, by sale, exercise of any Demand Feature or otherwise, absent a finding by the board of directors 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 portfolio security):

(A) The default with respect to a portfolio security (other than an immaterial default unrelated to the financial condition of the issuer);

(B) A portfolio security ceases to be an Eligible Security;

(C) A portfolio security has been determined to no longer present minimal credit risks; or

(D) An Event of Insolvency occurs with respect to the issuer of a portfolio security or the provider of any Demand Feature or Guarantee.

(iii) *Notice to the Commission.* In the event of a default with respect to one or more portfolio securities (other than an immaterial default unrelated to the financial condition of the issuer) or an Event of Insolvency with respect to the issuer of the security or any Demand Feature or Guarantee to which it is subject, where immediately before default the securities (or the securities subject to the Demand Feature or Guarantee) accounted for 12 of 1 percent or more of a money market fund's Total Assets, the money market fund shall promptly notify the Commission of such fact and the actions the money

market fund intends to take in response to such situation. Notification under this paragraph shall be made telephonically, or by means of a facsimile transmission or electronic mail, followed by letter sent by first class mail, directed to the attention of the Director of the Division of Investment Management.

(iv) *Defaults for Purposes of Paragraphs (c)(6) (ii) and (iii).* For purposes of paragraphs (c)(6) (ii) and (iii) of this section, an instrument subject to a Demand Feature or Guarantee shall not be deemed to be in default (and an Event of Insolvency with respect to the security shall not be deemed to have occurred) if:

(A) In the case of an instrument subject to a Demand Feature, the Demand Feature has been exercised and the fund has recovered either the principal amount or the amortized cost of the instrument, plus accrued interest; or

(B) The provider of the Guarantee is continuing, without protest, to make payments as due on the instrument.

(7) *Required Procedures: Amortized Cost Method.* In the case of a money market fund using the Amortized Cost Method:

(i) *General.* In supervising the money market fund's operations and delegating special responsibilities involving portfolio management to the money market fund's investment adviser, the money market fund's board of directors, as a particular responsibility within the overall duty of care owed to its shareholders, shall establish written procedures reasonably designed, taking into account current market conditions and the money market fund's investment objectives, to stabilize the money market fund's net asset value per share, as computed for the purpose of distribution, redemption and repurchase, at a single value.

(ii) *Specific Procedures.* Included within the procedures adopted by the board of directors shall be the following:

(A) *Shadow Pricing.* Written procedures shall provide:

(1) That the extent of deviation, if any, of the current net asset value per share calculated using available market quotations (or an appropriate substitute

that reflects current market conditions) from the money market fund's amortized cost price per share, shall be calculated at such intervals as the board of directors determines appropriate and reasonable in light of current market conditions;

(2) For the periodic review by the board of directors of the amount of the deviation as well as the methods used to calculate the deviation; and

(3) For the maintenance of records of the determination of deviation and the board's review thereof.

(B) *Prompt Consideration of Deviation.* In the event such deviation from the money market fund's amortized cost price per share exceeds 12 of 1 percent, the board of directors shall promptly consider what action, if any, should be initiated by the board of directors.

(C) *Material Dilution or Unfair Results.* Where the board of directors believes the extent of any deviation from the money market fund's amortized cost price per share may result in material dilution or other unfair results to investors or existing shareholders, it shall cause the fund to take such action as it deems appropriate to eliminate or reduce to the extent reasonably practicable such dilution or unfair results.

(8) *Required Procedures: Penny-Rounding Method.* In the case of a money market fund using the Penny-Rounding Method, in supervising the money market fund's operations and delegating special responsibilities involving portfolio management to the money market fund's investment adviser, the money market fund's board of directors undertakes, 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 affecting the money market fund's investment objectives, that the money market fund's price per share as computed for the purpose of distribution, redemption and repurchase, rounded to the nearest one percent, will not deviate from the single price established by the board of directors.

(9) *Specific Procedures: Amortized Cost and Penny-Rounding Methods.* Included

within the procedures adopted by the board of directors for money market funds using either the Amortized Cost or Penny-Rounding Methods shall be the following:

*(i) Securities for Which Maturity is Determined by Reference to Demand Features.*

In the case of a security for which maturity is determined by reference to a Demand Feature, written procedures shall require ongoing review of the security's continued minimal credit risks, and that review must be based on, among other things, financial data for the most recent fiscal year of the issuer of the Demand Feature and, in the case of a security subject to a Conditional Demand Feature, the issuer of the security whose financial condition must be monitored under paragraph (c)(3)(iv) of this section, whether such data is publicly available or provided under the terms of the security's governing documentation.

*(ii) Securities Subject to Demand Features or Guarantees.* In the case of a security subject to one or more Demand Features or Guarantees that the fund's board of directors has determined that the fund is not relying on to determine the quality (pursuant to paragraph (c)(3) of this section), maturity (pursuant to paragraph (d) of this section) or liquidity of the security subject to the Demand Feature or Guarantee, written procedures shall require periodic evaluation of such determination.

*(iii) Adjustable Rate Securities Without Demand Features.* In the case of a Variable Rate or Floating Rate Security that is not subject to a Demand Feature and for which maturity is determined pursuant to paragraphs (d)(1), (d)(2) or (d)(4) of this section, written procedures shall require periodic review of whether the interest rate formula, upon readjustment of its interest rate, can reasonably be expected to cause the security to have a market value that approximates its amortized cost value.

*(iv) Asset Backed Securities.* In the case of an Asset Backed Security, written procedures shall require the fund to periodically determine the number of Ten Percent Obligor (as that term is

used in paragraph (c)(4)(ii)(D) of this section) deemed to be the issuers of all or a portion of the Asset Backed Security for purposes of paragraph (c)(4)(ii)(D) of this section; *Provided, however,* written procedures need not require periodic determinations with respect to any Asset Backed Security that a fund's board of directors has determined, at the time of Acquisition, will not have, or is unlikely to have, Ten Percent Obligor that are deemed to be issuers of all or a portion of that Asset Backed Security for purposes of paragraph (c)(4)(ii)(D) of this section, and maintains a record of this determination.

*(10) Record Keeping and Reporting—(i) Written Procedures.* For a period of not less than six years following the replacement of such procedures with new procedures (the first two years in an easily accessible place), a written copy of the procedures (and any modifications thereto) described in paragraphs (c)(6) through (c)(9) and (e) of this section shall be maintained and preserved.

*(ii) Board Considerations and Actions.* For a period of not less than six years (the first two years in an easily accessible place) a written record shall be maintained and preserved of the board of directors' considerations and actions taken in connection with the discharge of its responsibilities, as set forth in this section, to be included in the minutes of the board of directors' meetings.

*(iii) Credit Risk Analysis.* For a period of not less than three years from the date that the credit risks of a portfolio security were most recently reviewed, a written record of the determination that a portfolio security presents minimal credit risks and the NRSRO ratings (if any) used to determine the status of the security as an Eligible Security, First Tier Security or Second Tier Security shall be maintained and preserved in an easily accessible place.

*(iv) Determinations With Respect to Adjustable Rate Securities.* For a period of not less than three years from the date when the determination was most recently made, a written record shall be preserved and maintained, in an easily accessible place, of the determination required by paragraph (c)(9)(iii) of this

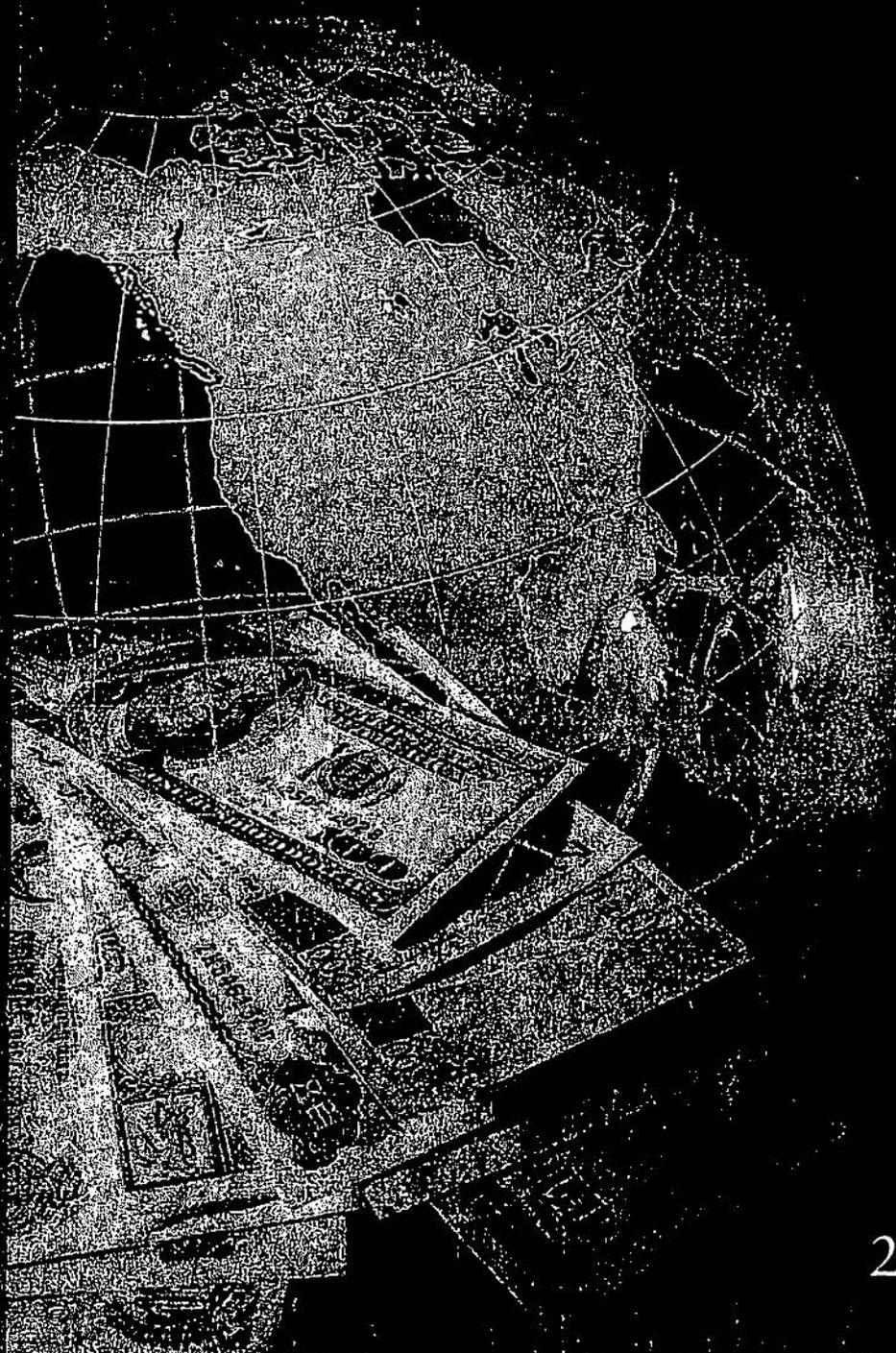
**APPENDIX B**

**NRSRO Rating Procedures for MMFs**

STANDARD  
& POOR'S

*Setting the Standard*

# Money Market Fund Ratings Criteria



2003

# STANDARD & POOR'S INVESTMENT SERVICES

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# Money Market Fund Ratings Criteria

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# COMMENTARY

## MONEY MARKET FUND RATINGS CRITERIA

### BACKGROUND AND OVERVIEW

Standard & Poor's has been rating money market funds since 1984. A money market fund rating is a safety rating, expressing Standard & Poor's opinion of the ability of a fund to maintain principal value and to limit exposure to loss. Ratings can range from 'AAAm' to 'Dm', with the 'm' denoting a money market fund. The 'm' distinguishes the money market fund rating from a Standard & Poor's traditional debt rating. A traditional debt rating usually is not subscripted and indicates a borrower's ability to repay principal and interest on a timely basis. A money market fund rating is not directly comparable to a debt rating because of differences in investment characteristics, rating criteria, and the creditworthiness of portfolio investments.

Standard & Poor's money market fund ratings encompass the following:

- Analysis of a fund's investment credit quality
- Liquidity
- Management
- Investment guidelines
- Strategies
- Operational policies
- Internal controls

A money market fund rating serves as a current assessment of the fund's overall safety as Standard & Poor's conducts ongoing monitoring of a fund's portfolio and management. Standard & Poor's has updated its rating criteria for money market funds as financial markets and finan-

cial products change and expand. Distinct criteria have been established for each rating category (see *Money Market Fund Ratings Definitions and Criteria Summary* below).

### RATING APPROACH AND PROCESS

Standard & Poor's rates money market funds solely upon the request of fund management (or sponsor), which agrees to provide all necessary portfolio information on a timely basis. The rating process begins when Standard & Poor's receives a written request to have a particular fund rated. At this point, the analyst assigned to the fund will request the fund sponsor to submit fund information (see *Information Needed for a Money Market Fund Rating*, on page 4). Upon

Money Market Fund Ratings Definitions and Criteria Summary

Rating	Definition	Minimum	Maximum	Maximum (Days)	Maximum (Days)	Rating
AAAm	Safety is excellent. Fund provides superior capacity to maintain principal value and limit exposure to loss.	0%	50%	0%	60	Two years
AAm	Safety is very good. Fund provides strong capacity to maintain principal value and limit exposure to loss.	0%	60%	5% (weight)	75	Three years
A	Safety is good. Fund provides sound capacity to maintain principal value and limit exposure to loss.	0%	100%	10% (weight)	90	Four years
BBBm	Safety is fair. Fund provides adequate capacity to maintain principal value and limit exposure to loss.	0%	100%	25% (weight)	90	Five years
Dm	Fund has failed to maintain principal value, realized or unrealized losses exceed 0.5% of net asset value.					

\* The letter 'm' follows the rating symbol when a fund's portfolio consists entirely of direct U.S. government securities.  
 \*\* Ratings may be modified (except AAAm) to show a rating change within the rating category.

\*\* Investments rated A-1 maturing in 7 days or less can be counted toward the A-1+ percentage minimums.

## MONEY MARKET FUND RATINGS CRITERIA

### CREDIT QUALITY

In evaluating a fund's credit quality, Standard & Poor's examines the risks associated with the quality, type, and diversification of the securities in each fund's portfolio. The credit quality assessment

for each instrument is based on the credit rating Standard & Poor's has assigned to the security. The minimum credit quality standards for each fund' is based on the fund's rating and maturity structure of its portfolio (see *Money Market Fund Ratings Definitions and Criteria Summary*, page 3).

For funds rated 'AAAm', all securities should carry a Standard & Poor's rating of 'A-1+' or 'A-1' or deemed to be of equivalent credit quality by Standard &

### Suggested Agenda for Money Market Fund Rating Management Meetings

#### OVERVIEW

1. Brief history of the fund
  - Fund's constituency
  - Growth patterns
  - Fund performance for the past three years (if applicable)
2. Basic philosophy
  - Investment and marketing strategy
  - Operating controls
3. Organization
  - Staff size and function
  - Role of board of directors and sponsors
  - Primary functions of key officers

#### CREDIT RISK

1. Credit quality of eligible investments
  - How approved list of eligible investments is determined
  - What the approved list includes
  - When and by whom approved list can be modified
  - Comparison of eligible and actual investments
  - Criteria for creditworthiness
  - Credit evaluation system
  - Degree of reliance on Standard & Poor's credit ratings
2. The effect that public rating changes have on eligibility for investment
3. Policies on repurchase agreements
  - Eligible sellers and repurchasers
  - Underlying securities
  - Degree of overcollateralization
  - Definition of first priority security interest
4. Diversification/concentration
  - Investment mix allowances by type
  - Investment mix allowances by credit quality
  - Maximum individual holding by issuer and affiliates

#### MARKET PRICE RISK

1. Maturity
  - General posture on weighted average portfolio maturity and maturity distribution
  - Basis for extending or shortening weighted average portfolio maturity
  - Historical maximums and averages of portfolio maturity

#### 2. Liquidity

- Portfolio mix and its change with market conditions
  - Types of instruments purchased or not purchased and put agreements, if any
  - Term repurchase agreements (repos)
  - Exotic securities
  - Other secondary market considerations
3. Redemption
    - Recent experience and assumptions relating to maturity structure
    - Largest weekly redemptions
    - Shareholder base and account characteristics

#### PRICING POLICY

1. Accounting method
  - Pricing system and its use
2. Frequency and method of marking portfolio to market
3. Triggers for management action and actual examples

#### OPERATING SCENARIOS

1. Use of securities lending and reverse repos, and accompanying risk management policies
2. Circumstances under which fund(s) would extend weighted average maturity beyond normal guidelines, or alter credit quality
3. Trendsetting (estimate changes and tolerance of fund assets)

#### CONTROLS

1. Daily middle office and with respect to investments
  - Procedures for assessing timely purchases and redemptions of shares and timely liquidation of investments
  - Computer applications, adequacy of computer facilities, and computer back-up provisions
  - Disaster recovery plans
  - Fidelity bond coverage errors and omissions insurance and other liability protection
2. History of any previous back office problems
3. Time needed to incur shareholder redemption requests
4. Methods of monitoring investments and approved list
5. Role of compliance officer

**Information Needed to Monitor a Money Market Fund Rating**

1. Portfolio data, weekly:
  - Total assets, net assets, total portfolio valuation (original cost, amortized cost, and marked-to-market for each security)
  - Marked-to-market net asset value (NAV) per share
  - Total number of fund shares outstanding
  - Breakdown by issue, issuer, amount, maturity, and rating
  - Percentage portfolio covered by each credit support provider
  - Weighted average portfolio maturity for each day of the week
  - Subscriptions and redemptions on day of portfolio valuation and on day of greatest amount of redemptions during the week
  - Revisions to prior week's portfolio holdings
  - CUSIP numbers for all securities (where applicable)
  - Terms of floating rate notes (reset formulas, frequencies)
  - Net yield (current, seven-day and 90-day)
  - Interfund loan positions, including details on the money loaned at any time during the prior week, the name of the borrowing fund(s), the net asset size of the borrowing fund(s), and the maturities and interest rates of each loan
  - Identification of non-additional repurchase agreements (repos), Credit Linked Notes (CLNs), and other esoteric securities
2. Revisions to current eligible investment list
3. Changes in investment policies or operating procedure
4. Current prospectus and statement of additional information
5. Notification of changes to prospectus or statement of additional information
6. Notification of fund name change or merger
7. Notification of changes in board of directors, senior management, investment adviser, or custodian
8. Annual and semi-annual reports
9. All press releases relevant to the fund

ria for repurchase agreement (repo) providers and government agency issues.

**MARKET PRICE EXPOSURE**

By far, the most complex part of money market fund analysis is judging a fund's sensitivity to changing market conditions. Absolute stability of net asset value (NAV) is a myth perpetuated by the amortized cost method of pricing securities. All fixed-income securities are subject to price fluctuations based on

- interest rate movements,
- maturity,
- liquidity,
- credit risk or perceived credit risk, and
- the supply and demand for each type of security.

These factors are just as true for money market funds as for longer-term fixed-income mutual funds. The amortized cost method of pricing permits money market fund investments to be priced by amortizing any discount or premium in purchase price straight to its maturity. For example, the amortized cost price of a 90-day security with a par value of 100 that was purchased for 99.10 will increase in value by 0.01 each day until it matures, notwithstanding any changing market conditions. The amortized cost method masks market risk by permitting funds to value securities as if no outside factors exist.

The theory behind allowing amortized cost pricing is that the most instruments eligible for purchase by money market funds have minimal market volatility due to their short maturities and high credit quality. It is also cheaper for funds to use this method than to get actual market prices on a daily basis. Money market funds are required to periodically calculate the market value of their assets to determine if the fund's actual NAV per share deviates materially from \$1.00 and to take action if significant deviation exists. Deviations of greater than plus or minus 0.5% can create a situation in which a fund sells and redeems shares at a price other than \$1.00, or "breaks the

Poor's. A minimum of 50% of its portfolio should be comprised of 'A-1+' rated instruments. 'AAm', 'Am' and 'BBBm' ratings criteria allows for holdings in 'A-2' quality securities with overnight maturities, and provides for increased levels of 'A-1' exposure. The levels reflect acceptable amounts of credit risk for the different fund rating categories and are based on historical default and ratings transition rates for short-term debt securities. Additionally, securities rated A-1 or the equivalent by Standard & Poor's that are on CreditWatch with negative implications should be limited to maturities of 30 days or less.

Credit quality criteria are based on results of Standard & Poor's internal study on the stability of short-term ratings. By combining an analysis of the

yield spread movements, resulting from changes in the underlying credit quality of money market instruments, together with the study of Standard & Poor's historical ratings performance data, we have developed the credit quality investment guidelines for rated money market funds to maintain a consistent level of credit risk within each rating category. Investments rated 'A-1' maturing in 7 days or less can be counted toward the 'A-1+' percentage minimums.

Diversification guidelines are in most instances similar to those mandated by regulation (for U.S. money market funds, Rule 2a-7). The first- and second-tier diversification limits apply to both taxable and tax-exempt money market funds. Standard & Poor's has established credit quality standards and diversification crite-

dollar". Clearly, there is a very small margin for error. Recognizing this small margin for error, Standard & Poor's has focused heavily on the potential deviation in market value (referred to as market price exposure) in establishing money market fund rating criteria. Variables analyzed for each fund rating include

- weighted average maturity (WAM),
- liquidity,
- index and spread risk,
- diversification,
- potential dilution of a fund's asset base, and
- security and portfolio valuation methods.

Combined, these factors determine each fund's market price exposure.

**Weighted Average Maturity (WAM)**

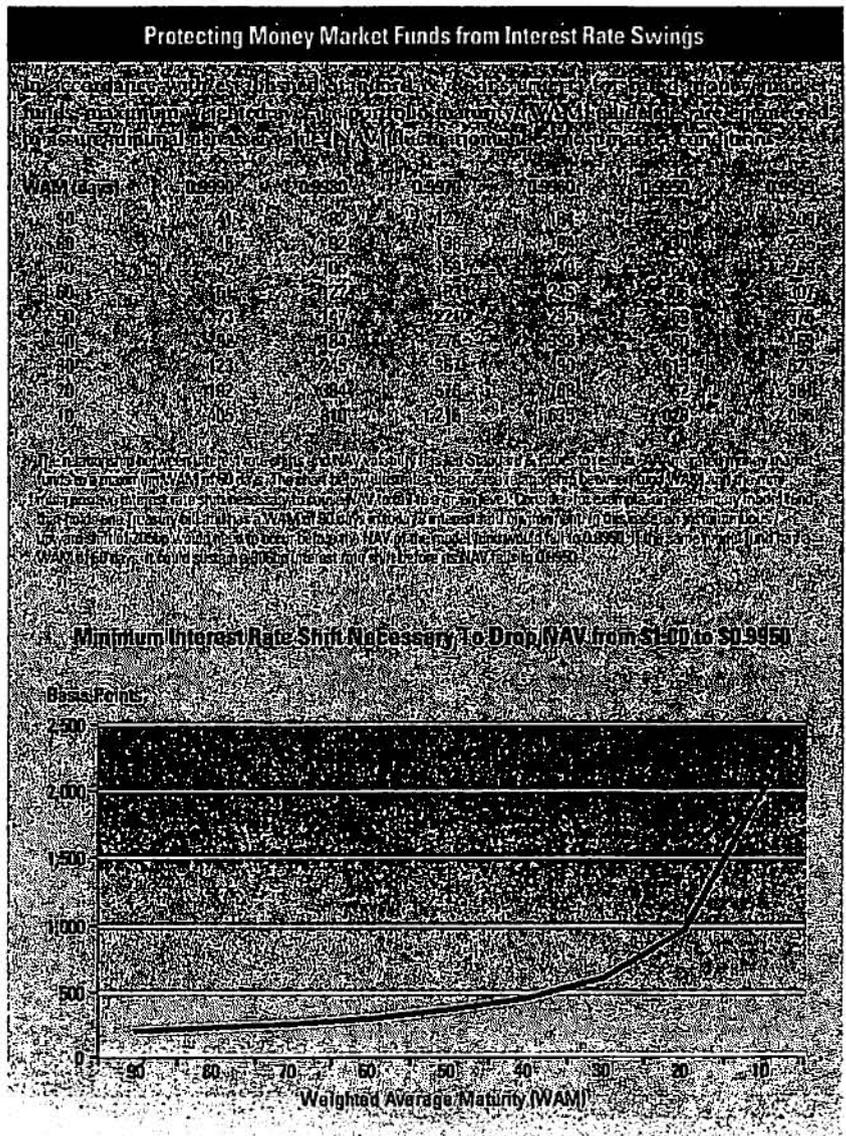
Determination of market price exposure starts with an examination of a fund's susceptibility to rising interest rates. The portfolio's weighted average maturity (WAM) is a key determinant of the tolerance of a fund's investments to rising interest rates. In general, the longer the WAM, the more susceptible the fund is to rising interest rates. A fund comprised entirely of Treasury securities with a WAM of 45 days could withstand approximately twice the interest rate increase than could a fund with a 90-day WAM, leaving all other factors aside (see sidebar *Protecting Money Market Funds from Interest Rate Swings*).

Standard & Poor's assesses the sensitivity of the market value of the portfolio's assets to interest rate changes, with lower sensitivity having a more favorable influence on the fund's rating. For the 'AAAm' rating category, Standard & Poor's criteria calls for a maximum WAM of 60 days. However, some funds have distinct liquidity needs based on asset size, asset volatility, and shareholder profile and cannot safely manage with a 60 day WAM. Funds with less than \$100 million in assets and/or funds with a highly concentrated or highly volatile shareholder base may be limited to a shorter WAM,

unless fund management can make a compelling case otherwise.

Standard & Poor's is often asked to rate small funds with limited operating history (start-up funds) that have a concentrated shareholder base, or a new shareholder base with uncertain liquidity needs. Standard & Poor's considers the potential impact of a large redemption by one or more of the major shareholders to

be a significant risk to a fund's ability to maintain a stable net asset value (NAV). Consequently, until a fund has grown to at least \$100 million with a diverse and seasoned shareholder base, Standard & Poor's will seek assurances that the fund manages to a shorter WAM with higher levels of liquidity. Higher WAMs are usually considered appropriate for funds in lower rating categories with the maxi-



imum WAM limits for 'AAm' and 'Am' rated funds set at 75 days and 90 days, respectively (see *Money Market Fund Ratings Definitions and Criteria Summary*, page 3).

#### Liquidity

Interest rate sensitivity is not the only factor that can affect the principal value of a money market fund's portfolio. Liquidity of a money market fund's portfolio is critical to maintaining a stable net asset value (NAV). The liquidity of a security refers to the speed at which that security can be sold for approximately the price at which the fund has it valued or priced. Securities that are less liquid are subject to greater price variability. Certain securities may be liquid one day, and illiquid the next. In determining a fund's rating, Standard & Poor's considers each fund's liquidity needs and its ability to quickly sell portfolio holdings if the need arises to meet cash outflows or large redemptions.

The liquidity of portfolio investments is also of critical importance in determining a fund's market price exposure, because the degree of liquidity can greatly impact the market value of investments and result in an erosion of a fund's NAV. In reviewing a fund's liquidity, Standard & Poor's takes into consideration the

- types of investments and their secondary market liquidity,
- presence of securities with limited liquidity (e.g., those whose liquidity is dependent on the Issuing entity or broker/dealer),
- the fund's level of cash or overnight securities including overnight repurchase agreements (repos), and
- the portfolio's concentrations by Issuers and affiliates.

A fund with a higher proportion of relatively illiquid investments is more susceptible to experience a sizable decline in its portfolio market value than one holding highly liquid investments.

The size and breadth of the primary and secondary market, and hence demand for different types of securities factors into the liquidity equation. Clear-

ly, the greater the demand for an instrument, the more liquid it is. However, some securities can be quite liquid when the Issuer or that particular market is performing well. When markets turn (e.g., due to event risk), or when the market experiences a flight to quality due to actual or perceived higher market or credit risk, certain instruments can experience significant price movements and liquidity can dry up rapidly. This was the case with the structured notes market in 1993 and 1994, and for Funding Agreements in 1999. Structured notes were designed to perform well and predictably during periods of stable or falling interest rates. The interest rate environment of 1993 made them popular and fairly liquid. The fact that these securities were issued by government agencies also enhanced marketability and liquidity. When short rates began rising in 1994, the demand, and consequently, the liquidity of these instruments dried up. The illiquid nature of these securities was exacerbated when regulators declared that such securities were clearly inappropriate investments for money market funds.

The liquidity of Funding Agreements has been directly tied to the Issuing entity because these securities are not actively traded on the secondary market. Funding Agreements are usually issued with a "put feature" that provides the investor with the ability to convert the investment back to cash upon notice to the Issuing entity. Therefore, the investor is very dependent upon the Issuing entity to provide liquidity for Funding Agreements. In 1999, an Insurance company that had issued a sizeable amount of Funding Agreements experienced a sudden and unexpected series of credit downgrades, resulting in a rush of holders to exercise their puts. When this Issuer failed to meet its put obligations, holders of Funding Agreements were left with "lower credit and illiquid securities" presenting these funds with significant market value risk.

Liquidity is not always easy to measure. As noted, some securities may be very liquid in certain markets and very

illiquid in others. Securities tend to be less liquid if they are

- not often traded,
- in short supply,
- relatively new and innovative, or
- highly structured.

Other factors influencing liquidity are the number of dealers making a market in the security, the complexity of the security, and the seasonal nature of supply and demand, particularly in the tax-exempt market.

#### Government Agency Concentration

Liquidity analysis is performed on all issues and Issuers, no matter what their level of credit quality. Securities with minimal credit risk, such as U.S. government agency obligations, may deviate in price for reasons other than interest rate movements. While the credit quality of these agencies is not typically a major concern, adverse publicity, or market rumors about an agency can impact the price and liquidity for even U.S. agency securities. For this reason, Standard & Poor's considers diversification to be an important feature for all securities, including U.S. agency securities.

Short-term liquidity can dry up for all types of securities and this could pose liquidity problems for funds holding large amounts of a U.S. agency's paper. The spreads in yields between short-term agency securities, whether fixed- or variable-rate, and traditional benchmarks such as the Treasury bill are subject to widening due to a number of factors. For fixed-rate securities with maturities of less than one year, the impact of spread widening on the price of the security is minimal. However, given the small margin for error that money market funds are permitted, high concentrations in the securities of any one agency might potentially expose the fund to material spread-widening risks.

For these reasons, Standard & Poor's has government agency diversification criteria for rated money market funds. Generally, Standard & Poor's expects no more

## MONEY MARKET FUND RATINGS CRITERIA

than a 33 1/3% (one-third) exposure to any single government agency. Funds that have agency concentrations exceeding one-third of assets are expected to maintain lower weighted average maturities (WAMs) and/or higher levels of highly liquid securities to reduce this exposure. The impact of spread widening can be viewed as synonymous with market interest rates rising only for those securities. Therefore, if a fund had a 50% concentration in any one agency and spreads for that agency's securities widened by 20bp, the impact on the market value of the fund's overall portfolio could be comparable to the effect of market rates rising 10bp without that spread-widening.

Funds with a WAM of 60 days should be able to withstand up to a one-day 300bp rise in interest rates without breaking the dollar (holding all other factors constant). Standard & Poor's has calculated various break the dollar levels for different U.S. agency given various spread-widening assumptions. The spread-widening and instantaneous interest rate increase assumptions differ for each rating category [see *Weighted Average Maturity (WAM) Adjustments for Agency Concentrations, below*]. These criteria are meant as a general guideline. Circumstances can differ from fund to fund based on the overall profile of the agency securities including maturities of

the agency securities, type of securities (fixed- versus variable-rate), other sources of liquidity in the fund, and the issuing agency.

### *Variable and Floating Rate Securities*

Standard & Poor's expects investment policies to include clear and explicit guidelines regarding variable-rate notes (VRNs), floating-rate notes (FRNs) and other synthetic instruments. Fund investment policies should incorporate procedures regarding approval, risk measurement, control, and limits related to investment in structured notes and other floating/variable-rate instruments. Fund managers holding such securities should

### Weighted Average Maturity (WAM) Adjustments for Agency Concentrations

Methodology		Agency concentration (%)	Adjustment factor (from 60 days)
Step 1: Standard & Poor's assumes the following values for spread widening and instantaneous interest rate rise:		40-44	4
Rating category	Spread widening (bp)	45-54	5
	Instantaneous interest rate increase (bp)	55-64	6
		65-70	7
AAA	100	AAA level (100bp spread, 300bp movement)	
AA	75	Agency concentration (%)	
A	50	Adjustment factor (from 75 days)	
BBB+	25	40-44	4
		45-54	5
		55-64	6
		65-70	7
Step 2: The spread widening number is then multiplied by the fund's concentration in the securities of any one agency.		AAA level (80bp spread, 275bp movement)	
Step 3: The products are then added to the applicable interest rate increase to determine the equivalent interest rate condition for the 100-day dollar.		Agency concentration (%)	
Step 4: The interest rate sensitivity equivalent calculated in Step 3 is applied to Standard & Poor's interest rate sensitivity matrix to determine the maximum WAM that allows the fund to maintain a net asset value above 0.9950.		40-44	4
		45-54	5
		55-64	6
		65-70	7
		BBB+ level (25bp spread, 200bp movement)	
<b>APPLICATION</b>		Agency concentration (%)	
Because there is a range of maximum WAMs for each rating category, with the actual maximum determined on a case-by-case basis, Standard & Poor's uses adjustment factors to determine the proper maximum WAM for each fund. The adjustment factors are simply the maximum WAM for the rating category minus the WAM determined in Step 4 above.		40-44	4
<b>Example:</b>		45-54	5
1. Assume an AAA-rated fund has a 50% agency concentration in FHLB.		55-64	6
2. (0.5 x 100bp spread widening) + (300bp interest rate rise) = 350bp.		65-70	7
3. At an instantaneous interest rate rise of 350bp, a fund with an WAM of 52 days or less will remain above 0.995.			

be able to present an analytical basis for determining that such notes have a reasonable likelihood of maintaining, or repricing to, amortized cost value at each reset until maturity. This analytical basis should include a review of historical index behavior and sensitivity analysis.

Standard & Poor's criteria for FRNs and VRNs in rated money market funds calls for written guidelines and procedures that ensure:

- No purchase of range notes, dual index notes, "deleveraged" notes (notes linked to a multiple of the index where the multiple is less than one), or notes linked to lagging indices [e.g., Cost of Funds Index (COFI)] or to long-term indices (e.g., five-year or 10-year Treasuries).
- No purchase of VRNs with coupons tied to indices, index formulas, or index spreads with less than 95% correlation with the U.S. Federal Funds Rate. Indices with historically high correlations are: Three-Month Treasury Bill, Three-Month LIBOR, Six-Month LIBOR, Prime Rate, and Commercial Paper Composite.
- At the 'AAAm' level, the final maturity for all FRNs/VRNs will not exceed two years.
- At the 'AAM' level, the final maturity for all FRNs/VRNs will not exceed three years.
- At the 'Am' level, the final maturity for all FRNs/VRNs will not exceed four years.
- At the 'BBBm' level the final maturity for all FRNs/VRNs will not exceed five years.
- Where valuation is not based on actual dealer bids, there must be clear notification and disclosure of any other valuation methodology (e.g., matrix pricing). Pricing policies should include techniques to verify and validate FRN/VRN pricing on a recurring basis.
- Weekly reporting of FRN/VRN holdings to Standard & Poor's should include current market price,

CUSIP, coupon or interest rate terms, frequency of reset, market value, put features, and any other significant terms and conditions.

**Index and Spread Risk**

Variable rate notes (VRN) and floating rate notes (FRNs) present unique market price risks. VRNs and FRNs used in money market funds are typically linked to conventional money market indices, providing funds with yields that track short-term interest rate movements. These investments are designed to exhibit less interest rate risk when compared with fixed-rate investments. However, this is not always the case for all VRNs and FRNs. Factors affecting the value of these instruments include index risk and spread risk.

Index risk is the possibility that the coupon of a VRN or FRN will not adjust in tandem with money market rates. Index risk can be introduced by calculating the variable-rate coupon based on a non-money market index, a money market index in which the coupon adjusts based on a multiple (or fraction) of the index, or an index based on the difference (or spread) between two or more indices.

When analyzing VRNs and FRNs in money market funds, Standard & Poor's compares the index used in the variable-rate adjustment formula to a standard money market index, such as the Federal Funds Rate. Standard & Poor's believes that for all money funds rated 'BBBm' and above, the index should have a correlation of at least 95% of the effective Federal Funds Rate. By this measure, non-traditional money market fund indices such as the 11th District Cost of Funds Index (COFI) and the 2-Year Constant Maturity Treasury Index are clearly unsuitable, with historical correlations of well below 90% (see sidebar *Correlations of Various Indices*).

Some VRNs and FRNs may use indices that are highly correlated to traditional money market indices. Yet, because of their rate adjustment formulas, they can still introduce significant price risk. One

**Correlation of Various Indices**  
(Monthly data from 10/1/92 to 9/30/02)

Index	Correlation
Fed Funds Rate	100.00%
3-month LIBOR	99.21%
6-month LIBOR	98.83%
Prime	97.85%
30 Day Commercial Paper	97.49%
6-month LIBOR	97.22%
90 Day Commercial Paper	97.18%
90 Day Commercial Paper	96.95%
3-month T-Bill	96.28%
6-month T-Bill	92.01%
COFI	90.97%
1-year CMTI	90.46%
11-year T-Bill	88.15%
2-year CMTI	87.47%

Source: Federal Reserve Bank  
 LIBOR—London Interbank Offered Rate  
 CMTI—Constant Maturity Treasury  
 COFI—Cost of Funds Index

example is an adjustment formula tied to a multiple or fraction of a money market index. For this reason, stress testing is important. Although there are a variety of valid techniques to model potential performance of these securities under adverse market environments, one straightforward approach is to look at VRN/FRN performance under significant interest rate movements. If a VRN/FRN can withstand a 3% (300bp) move in rates without causing its value to deviate significantly, the VRN/FRN should behave adequately under most interest rate environments. In order to "pass" the 3% stress test, the yield on the VRN/FRN would need to increase by a comparable amount.

The ultimate maturities of VRNs/FRNs are also risk factors. The concern here is not index risk, but the spread risk associated with longer-dated securities. For example, a government agency may issue five-year adjustable-rate notes that reset weekly at the Three-Month Treasury Bill

## MONEY MARKET FUND RATINGS CRITERIA

Rate plus 25bps. Over a period of time, these securities may be perceived by the market as warranting a higher spread to the Three-Month Treasury because of liquidity, credit, supply and demand, political events, or volatility in market interest rates. Investors may demand that subsequent comparably dated securities of that agency be sold at 50bp above the Three-Month Treasury Bill Rate. This creates a negative drag of 25bp, potentially for the remaining life of the original security, and could materially affect its market value. This may occur even though the maturities of these VRNs can be calculated at seven days (time to next reset) for regulatory purposes, and their coupons are tied to a highly correlated index.

Because of the potential impacts of spread risk on the market prices of VRNs and FRNs, Standard & Poor's expects rated funds to limit the remaining maturity of U.S. government VRNs/FRNs to two years for 'AAAm', three years for 'AAm', four years for 'Am', and five years for 'BBBm'. Corporate and structured (e.g., asset backed securities or ABS) VRNs/FRNs have the added risk of credit deterioration and should be limited to final maturities of 13 months or less for money market funds registered under rule 2a-7 of the Investment Company Act of 1940. The percentage of VRNs/FRNs in a fund also enters into the rating analysis to determine a fund's overall risk profile. For example, a fund that was 50% invested in VRNs/FRNs with four-year remaining maturities would not receive an 'Am' rating due to spread risk concerns. Percentages of VRNs/FRNs in each fund are analyzed on a case-by-case basis in conjunction with the fund's other holdings.

Standard & Poor's final maturity guidelines for non-U.S. registered funds and non-U.S. domiciled funds limits the remaining maturity of VRNs/FRNs of sovereign Issuers rated 'AAA' by Standard & Poor's to two years for 'AAAm', three years for 'AAm', four years for 'Am', and five years for 'BBBm'. On a case-by-case basis, consideration will be given to requests from rated funds to approve holdings of FRNs/VRNs for

Issuers other than 'AAA'-rated sovereigns (i.e., corporates and ABS) with time to final maturity greater than 397 days but no more than two years. Before granting approval to extend the maturity range of VRN/FRN holdings, Standard & Poor's will seek assurance that ample liquidity can be maintained by virtue of the fund's size, diversified shareholder base and range of other assets and that adequate resources are available to analyze and manage credit risk. If such practice is approved, all such FRNs/VRNs must be rated 'A-1+' or equivalent and the total holdings of all such FRNs/VRNs will be limited to no more than 10% of net assets of the fund (see page 28 for more information on this topic).

### Shareholder Characteristics

A money market fund's market price exposure is also affected by the flow of money into and out of the fund. Unexpected redemptions can have a direct influence on a fund's net asset value (NAV). Therefore, Standard & Poor's

carefully reviews the characteristics of each fund's shareholder base to determine the potential impact that significant redemptions might pose on a fund's market price exposure. Money market funds are permitted to issue and redeem shares at \$1.00, provided that their market value is between \$0.995 and \$1.005. As funds can pay out \$1.00 on shares that may actually be worth as little as \$0.995, the remaining shareholders in the fund absorb the difference. This is referred to as dilution, as redeeming shares at a price above their actual market value is diluting the value of the fund's holdings.

Dilution can accelerate fund losses in a rising interest rate environment, causing a fund to break the dollar. In the below example Impact of Dilution, a 150bp rise in interest rates causes a 90-day weighted average maturity (WAM) portfolio's market value to drop to \$0.9963 per share. A subsequent 25% redemption (paid out at \$1.00 per share) dilutes the portfolio's value to \$0.9947, thus breaking the dollar. This occurs because although the

Impact of Dilution		
<b>ASSUMPTIONS</b>		
Initial portfolio value		\$100 million
Weighted average maturity (WAM)		90 days
Number of shares		100 million
Share value		\$1.00
Share price		\$1.00
<b>EVENT 1</b>		
Interest rates rise 150bp (1.50%)		
<b>Result</b>		
Number of shares		100,000,000
Portfolio value drops to		\$99,630,000
Unrealized loss		\$370,000 (\$100,000,000 - \$99,630,000)
Share value		\$0.9963 (\$99,630,000/100,000,000 shares)
Share price		\$1.00 per share
<b>EVENT 2</b>		
In conjunction with Event 1, fund experiences 25% redemption		
<b>Result</b>		
Number of shares		75,000,000
Portfolio value drops to		\$74,630,000 (\$99,630,000 - \$25,000,000)
Unrealized loss		\$370,000
Share value		\$0.9947 (\$74,630,000/75,000,000 shares)
Share price		\$0.99 per share

unrealized loss in the fund remains the same, the loss is spread over a smaller number of shares. While sudden 150bp rises in interest rates are rare, several large redemptions during a period of steadily rising interest rates can produce similar results.

Dilution concerns are heightened for funds with sophisticated institutional shareholders. These investors realize that a fixed \$1.00 NAV is an illusion based on convenient valuation methods and can easily take advantage of this phenomenon. For example, if an investor held \$1 million in 90-day U.S. Treasury bills yielding 5%, and if interest rates increased 150 basis points, the value of the investment would drop by approximately \$3,700 and the investor's yield would remain at 5%. Instead, assume that the investor held one million shares of a money market fund holding exclusively Treasury bills with a WAM of 90 days and yielding 5% (setting aside fund expenses for this example). If interest rates rose 150bp, the investor could sell the fund investment for \$1.00 per share and not experience any loss. The investor could then purchase 90-day Treasury bills yielding 6.5%, instantaneously increasing its return by 1.5%. If this type of market-sophisticated shareholder represents a material percentage of a fund's assets, substantial dilution in share price is likely due to large and sudden redemptions.

In analyzing money market funds, Standard & Poor's review of shareholder constituency encompasses the number, average holding size, type, the size of the largest accounts, historical asset volatility, and the relationship fund management has with its largest investors. The proportion of retail versus institutional investors and the past history of redemptions are also examined. Funds with histories of volatile subscription and redemption patterns are expected to maintain shorter weighted average portfolio maturities.

Standard & Poor's expects that a fund's investments should be tailored to its potential cash flow needs. For funds with a volatile or potentially volatile shareholder base, a more conservative

approach must be taken with regard to WAM and liquidity. Funds with more stable or predictable cash flows, such as retail funds or institutional funds with large, diverse shareholder compositions, can be somewhat more aggressive. Standard & Poor's uses a matrix that stress tests portfolios based on the effect of interest rate movements and redemptions at a variety of WAM levels [see *Multifactor Net Asset Value (NAV) Sensitivity Analysis, below and Standard & Poor's Sensitivity Matrix, page 13*].

Portfolio structure is also a factor in determining the risk dilution presents to a fund. Funds with a barbelled maturity structure (heavily weighted in short-term maturities with the remainder in longer-term securities) are more susceptible to the negative effects of shareholder redemptions than laddered portfolios (relatively evenly spaced maturities). If a barbelled fund experiences redemptions in a rising interest rate environment, the short end of the fund will likely be liquidated in order to avoid taking significant realized losses.

### Multifactor Net Asset Value (NAV) Sensitivity Analysis

Standard & Poor's criteria for rating money market funds incorporate analysis of both interest rate sensitivity and redemption/subscription volatility. Standard & Poor's has established maximum weighted average maturity (WAM) guidelines which, under most market conditions, protect against significant market price fluctuation. When WAM values are analyzed and look-up with redemption/subscription assumptions, net asset value (NAV) volatility is exacerbated. NAV is sensitive to interest rate shifts, net redemptions, and the combined effects of sudden interest rate shifts and instantaneous net redemptions (see Standard & Poor's Sensitivity Matrix). The end column of Standard & Poor's Sensitivity Matrix shows NAV change due to interest rate increases with no redemptions. The critical assumption needed to compute the values for this column is that WAM represents, to some extent, duration of the portfolio. This assumption having been made, an example using a hypothetical money market fund will be used to illustrate the methodology behind the sensitivity analysis.

Assume the hypothetical money market fund has an NAV of \$1.00 and a WAM of 60 days. When the market experiences a 250bp interest rate increase:

**Formula 1**

$$\text{New NAV} = \text{NAV} - (\text{WAM}/365) * (\text{bp shift})/10,000$$

$$0.99589 = \$1.00000 - (60/365) * (250/10,000)$$

The next consideration for the fund is dilution. Dilution occurs when shareholders are paid out \$1.00 per share while the fund's NAV is less than \$1.00. To complete the example, assume the hypothetical money market fund now suffers the effects of dilution due to a 20% redemption when the NAV is 0.99589. The following formula would be used:

**Formula 2**

$$\text{New NAV} = ((\text{NAV} * \% \text{ Change}) / (1 - \% \text{ Change}))$$

$$0.99486 = ((0.99589 * 0.20) / (1 - 0.20))$$

Thus, the NAV of a model fund that experiences a 250bp interest rate shift and subsequent redemptions of 20% would fall to 0.99486. The results of several different scenarios assuming different interest rate increases and redemptions are detailed in Standard & Poor's Sensitivity Matrix.

## MONEY MARKET FUND RATINGS CRITERIA

This will cause the WAM of the fund to extend, creating greater interest rate sensitivity and exacerbating the negative effects of future redemptions. Laddered portfolios are less exposed in these circumstances, although they are by no means insulated from rising interest rates and redemptions. As part of the rating process, Standard & Poor's considers whether each fund's portfolio structure is best suited to its shareholder base and potential asset outflows.

### Pricing

Standard & Poor's expects that all money market fund investment advisers have the ability to price (mark to market) portfolio securities and calculate net asset value (NAV) in-house. Additionally, Standard & Poor's asks rated funds to price securities at least weekly. In many cases, investment advisers rely exclusively on fund administrators to perform such functions. While fund administrators have proven capable providers of such services and provide independent prices, Standard & Poor's believes that all investment advisers should have some built-in redundancies to check the administrators' work, questioning any discrepancies that may occur. For securities that are difficult to price, such as structured notes or other less liquid instruments, two or more dealer bids are suggested.

A Standard & Poor's money market fund rating directly addresses the ability of a fund to maintain a NAV that does not deviate by more than one-half of 1%. For a fund to effectively stay within this narrow range, accurate pricing of its securities is essential. Most money market fund instruments are highly liquid and easy to price. However, some complex, structured, and derivative securities present pricing difficulties.

Complex and derivative securities often lack efficient, liquid markets. Trading in these securities can be infrequent, creating varying price quotes among dealers and wide bid/ask spreads. The prices of these types of securities may be determined in a variety of ways, including dealer quotes, matrix pricing formulas, spreads to benchmark securities, pricing

Standard & Poor's Sensitivity Matrix					
<i>Assumptions: WAM = 60 days</i>					
<i>Starting Market Value = \$100 per share</i>					
BP Increase					
300	0.9976	0.9981	0.9987	0.9993	0.9999
250	0.9977	0.9982	0.9988	0.9994	0.9999
200	0.9978	0.9983	0.9989	0.9995	0.9999
150	0.9979	0.9984	0.9990	0.9996	0.9999
100	0.9980	0.9985	0.9991	0.9997	0.9999
50	0.9981	0.9986	0.9992	0.9998	0.9999
Redemption	30%	20%	10%	5%	0%
<i>Assumptions: WAM = 30 days</i>					
<i>Starting Market Value = \$100 per share</i>					
BP Increase					
300	0.9990	0.9993	0.9995	0.9997	0.9998
250	0.9991	0.9994	0.9996	0.9998	0.9999
200	0.9992	0.9995	0.9997	0.9999	0.9999
150	0.9993	0.9996	0.9998	0.9999	0.9999
100	0.9994	0.9997	0.9999	0.9999	0.9999
50	0.9995	0.9998	0.9999	0.9999	0.9999
Redemption	30%	20%	10%	5%	0%

services, or even by the fund advisers themselves. All of these methods have drawbacks. Dealer quotes on thinly (infrequently) traded securities often represent indicative pricing levels and rarely constitute an actual bid to purchase the security. Matrix prices, pricing service quotes, and spread calculations are not based on actual trades, and do not represent a price at which anyone actually offered to purchase the security. These methods calculate a hypothetical price that is not verifiable. Pricing by fund managers often occurs when the manager either disagrees with the other pricing methods or holds securities so unique that other pricing methods are inadequate. Clearly, even if the fund manager can determine fair value prices based on

in-depth analytics, it is far from certain that any buyers are willing to purchase the securities at or near those prices.

Before purchasing complex, derivative, or less-liquid securities, portfolio managers should carefully examine the pricing issue. It is necessary to evaluate the number of available pricing sources, with an eye toward identifying material discrepancies. Portfolio managers should also be aware of pricing methodology, and compare the results to recent trading activity. It is inadvisable for a fund's manager to solely accept the calculations of a security's Issuer or dealer in determining the value of an investment. This information may be either highly biased or based on inaccurate assumptions, or both. Portfolio man-

agers should not only be able to determine their own fair value for securities that are difficult to price, but also need to consider the marketplace for each security and the potential volatility that can be caused by inefficient market pricing. If a fund adviser lacks the ability to assess the potential market behavior of a security with a high degree of comfort, the security should not be purchased for that money market fund.

Should a fund experience a situation where stability of its \$1.00 NAV is in jeopardy, there are several actions the fund may take. These include

- withholding dividends,
- selling securities to realize gains or losses,
- valuing the shares at the market rather than at amortized cost, or
- waiting out the situation to determine if the problem is only temporary.

In the rating process, Standard & Poor's reviews the formal and informal policies and procedures the fund has in place to monitor and correct such situations.

#### MANAGEMENT

Essential to any analysis of managed portfolios is an understanding of the strengths and weaknesses of management. The process by which money market funds are rated includes meetings with fund officials to discuss fund investment objectives, portfolio management techniques, and risk aversion strategies. Standard & Poor's evaluates the effectiveness of fund management in implementing a dynamic investment process consistent with the fund's stated goals and objectives.

Standard & Poor's believes that these meetings are central to a meaningful fund rating service. Management assessment considers the following:

- Experience and track record in portfolio management
- Operating policies and risk preferences
- Credibility and commitment to policies

- Extent and thoroughness of internal controls and commitment to oversight

Standard & Poor's judges each fund management team on its own merits. Focus is placed on the way the fund is managed in relation to its shareholder base and stated investment objectives. Standard & Poor's closely examines how daily operations of the fund are conducted. This examination includes organizational structures, depth of staff, and adequacy and level of investment controls.

#### Experience

All too often, investment advisers will assign their least-experienced portfolio managers to run their money market funds. The theory is that securities with short maturities are less risky and require minimal investment expertise. This is a mistake. The subtleties of managing a fund that has a 0.5% margin for error require skilled professionals.

An experienced fund manager with a proven track record in money market funds greatly enhances a fund's safety. This manager does not necessarily have to make every investment decision, but should be closely involved with the fund. It is acceptable for less senior personnel to execute trades and make certain investment decisions within strict parameters. However, an experienced money market fund manager should be monitoring these activities daily.

It is also necessary to distinguish between an experienced money market fund manager and someone who has experience managing long-term investments. Managing a stable net asset value (NAV) fund is very different from managing a bond fund with a variable share price. Investment policies and strategies that may be very prudent for bond funds can be disastrous for money market funds. The precision necessary in running a money market fund successfully takes a different mindset than is required in managing other fixed-income vehicles. An experienced fixed-income manager does not necessarily equate to an effective money market fund manager. Therefore,

Standard & Poor's emphasizes the level of experience in managing money market funds in its review of fund management. Lack of experience can result in a lower rating, more stringent rating criteria [such as shorter weighted average maturity (WAM)], or both.

#### Operating Procedures and Risk Preferences

The processes involved in managing a money market fund directly affect its safety. Standard & Poor's evaluates the fund manager's operating procedures in conjunction with each rating. A key component of this review is the investment decision-making process. Numerous investment decisions are made daily for all money market funds. Standard & Poor's examines how these decisions are made and who is charged with executing them.

Fund advisers that conduct frequent investment committee meetings to arrive at both short-term and intermediate-term investment strategies are viewed more favorably than those who leave investment strategy decisions strictly up to the fund manager. This helps prevent any one individual from having an inordinate amount of influence on the strategy of a fund. The role of an investment committee should be to set investment guidelines and strategies. The portfolio managers then have the job of executing these strategies using their expertise in managing money market funds.

Standard & Poor's also focuses on the amount, type, and quality of information used in making policy and investment decisions. This includes the size and capabilities of the credit and risk research staff, the access to current economic data and analysis, and the types of on-line business information services used.

All fund prospectuses contain investment policies that fund advisers must follow. These policies tend to be quite general, typically mimicking regulation and thereby giving fund managers considerable investment leeway. It is prudent for fund advisers to establish written internal procedures to better define both the fund's investment guidelines and the manager's operating policies.

Credit quality is one area that should be documented with formal written procedures. A fund adviser should establish an approved investment list as well as policies for adding or removing names from that list. Additionally, a process and methodology for periodically evaluating the credit quality of all approved investments should be established. The use of an internal credit rating scale is beneficial. Such a scale sets a standard of comparison that can be widely recognized, especially when evaluating securities for which Nationally Recognized Statistical Rating Organizations (NRSROs) have differing views. They also provide evidence that independent analysis has been done, particularly if a credit committee must approve the internal ratings.

The investment management arm of a bank or broker/dealer often obtains its credit research from somewhere else in the organization, such as a central credit research department. In these situations, it is essential that the investment adviser have immediate access to all changes in credit standing. Standard & Poor's has seen organizations in which credit information was distributed firm wide on a quarterly or semiannual basis. This is inadequate. Ideally, a representative from the investment adviser should attend credit committee meetings to ensure a good flow of market information.

Funds also benefit from having clear and explicit investment policies regarding the use of variable-rate notes, structured notes, and derivative instruments. Fund investment policies should incorporate procedures on the approval, risk measurement, control, and limits related to these investments. Fund managers should be able to present an analytical basis for determining that such securities are eligible fund investments and have a reasonable likelihood of remaining at or repricing to their amortized cost value at each reset until maturity. This analytical basis should include a review of historical index behavior and sensitivity analysis.

The ultimate policy responsibility for any mutual fund lies with its board of directors or trustees. The board is elected

by fund shareholders to oversee their investments and management. Boards entrust investment advisers to handle the funds' day-to-day affairs, but should not rely on the advisers to always act in the best interest of the shareholders. Investment advisory contracts are based on a percentage of fund assets. Therefore, it is beneficial for advisers to attract money into their funds. Historically, high returns have been a way to attract these assets. Higher returns are also associated with greater risks. Boards must establish investment policies that are strict enough to prevent fund advisers from taking risks that are not in the best interest of the shareholders. They must also establish stringent procedures for reviewing and enforcing these policies.

Board members are not necessarily investment professionals and may lack expertise in money market fund management. Still, a board should act as an independent body and demand that advisers be able to clearly explain all investments and investment strategies. Standard & Poor's feels that boards should receive detailed reports regarding fund investments and activities at least monthly. Boards should be active, questioning fund advisers at any time during the year, not just at quarterly meetings. Too often, boards are passive or lack the necessary independence, which could lead to rubber-stamp approval of investment adviser activities. Such boards are not fulfilling their responsibility to fund shareholders.

Investing, by definition, is risk taking. Investment advisers are paid to take risks commensurate with the desires of fund shareholders. There is no way to eliminate risk in money market funds and still provide adequate returns on investment. Even the most conservatively managed fund can be in jeopardy of breaking the dollar if there are sufficiently adverse market conditions. Fund managers differ in their risk preferences, as they should. Managers who say they are "market-neutral", or who have no opinion on future interest rate movements, are either not telling the whole truth or deceiving themselves and their investors. Conservative

and aggressive investment strategies can be effective, provided that the proper operating procedures are in place to ensure that these strategies are consistent with prudently established guidelines.

#### *Internal Controls*

Money market funds universally have the investment objective of maintaining a constant net asset value (NAV) per share. Because of the small margin for error allowable to achieve this goal, Standard & Poor's closely considers the internal controls of fund advisers. Included here are pricing policies, NAV deviation procedures, depth of staff, stress testing capabilities, asset flow monitoring, trade ticket verification, systems backups, level of oversight, and disaster recovery.

Accurate pricing is a key factor in maintaining a stable NAV. Standard & Poor's expects all investment advisers to be capable to accurately price portfolio securities and calculate a fund's actual NAV in-house, and to do so periodically. Advisers are expected to compare the market value of the fund to its amortized cost value on a weekly basis. In many cases, investment advisers rely exclusively on fund administrators or outside pricing services to perform this function. While these outside providers are typically reliable sources, mistakes do occur, especially for securities that are difficult to price. Outside providers did a poor job in pricing structured notes in early 1994. All investment advisers should have some built-in redundancies to check the work of the outside providers and question any discrepancies that may occur.

Not only do investment advisers need to be able to calculate NAV, but they also need to have explicit written plans for dealing with any material deviation. NAV deviation procedures are the responsibility of the investment adviser and the fund's board. Regulation dictates that action must be contemplated if a fund's NAV deviates by more than 0.5% from \$1.00. Standard & Poor's money market fund ratings specifically address the likelihood of this deviation occurring. Therefore, Standard & Poor's expects rated

funds to have written policies that initiate action long before that point. At minimum, these policies should dictate action at a 0.25% deviation. Required actions should include a meeting among senior fund officials, notification of board members, and establishment of a formal action plan. All portfolio managers should be completely familiar with these NAV deviation procedures, and not rely on a third-party administrator for implementation. Since it is in the best interest of the advisor to be proactive in dealing with NAV deviations, Standard & Poor's requests daily portfolio pricing (marked-to-market) and NAV calculations when deviations reach the following for each specific rating category:

- 'AAAm' 0.15%(.9985/1.0015)
- 'AAm' 0.20%(.9980/1.0020)
- 'Am' 0.25%(.9975/1.0025)
- 'BBBm' 0.30%(.9970/1.0030)

It is also important that the controls of a fund do not suffer when the primary portfolio manager is not managing the fund, as substitute managers may not have the investment experience of the primary manager. However, it is inexcusable to lack the necessary controls to prevent mistakes from occurring when the primary manager is not available. Each member of the investment adviser's staff with the authority to manage the fund on a temporary basis should be adequately trained in the investment policies and guidelines for those funds. Additionally, a set of procedures should be in place to automatically review the work of a substitute portfolio manager each day that the substitute manager is overseeing the fund(s).

Fund managers should also be reasonably prepared for the unexpected. This entails the ability to perform "what if" and stress test analyses. A fund manager should be able to calculate the impact of any security purchase on the fund's weighted average maturity (WAM). This calculation should factor in the influence of sudden or unexpected redemptions in conjunction with the security purchase.

Additionally, fund managers should

have the ability to stress test both individual securities and entire portfolios. Individual security tests should estimate price sensitivity under severe interest rate movements. Portfolio testing should stress the fund's assets in aggregate under the same interest rate scenarios, but should also measure the impact of dilution on NAV assuming sizable redemption activity. The magnitude of the potential redemption activity should take into account historical redemptions and the nature of the shareholder base. Funds with interest rate-sensitive institutional investors need to stress test redemptions at much higher levels than funds with typically more stable retail investors.

Redemption volatility adds to the difficulty of managing a money market fund. The feature of immediate liquidity is a key element in the growth and popularity of money market funds. Investors like the idea of having quick access to their money. Yet, the uncertainty created by instant liquidity can make it difficult to employ a consistent investment strategy. Funds with very volatile shareholder accounts are subject to the greatest risk. It is nearly impossible to accurately predict cash inflows and outflows, but fund managers can take steps to prepare for them.

Frequent communication with a fund's largest shareholders is an important way to get indications of redemptions. It is also a way to stay informed of how long large deposits are expected to stay in the fund so managers can invest appropriately. Some funds have policies that encourage prior notification of large withdrawals. Other funds will refuse "hot money", which is money from investors who are very interest rate sensitive. Hot money tends to leave a fund quickly in rising interest rate environments, causing dilution to NAV and potentially harming the remaining shareholders. Fund managers should be very familiar with the redemption patterns of their largest investors. This facilitates the management of cash flow volatility, thus enhancing fund safety.

Proper controls also entail trade ticket verification. All trade tickets should

require two signatures, one belonging to the individual executing the trade and the other to a portfolio manager or senior level member of the investment advisory staff. Additionally, it is beneficial to have a computer system that is tailored to the investment parameters of each fund. In such a portfolio management system, unauthorized investments would be kicked out, immediately alerting portfolio managers to the mistake. These systems can also do the same for purchases that cause a fund's WAM to exceed established limits.

Computer systems are vital to managing mutual funds. Standard & Poor's review of a fund's controls examines backup computer capabilities. System failure cannot shut down a mutual fund, even for a short amount of time, as shareholders expect access to their money. All computer processes for a fund should be replicated on another system, usually with a custodian or administrator. Fund advisers should back up data nightly to an offsite location. It is also important to have detailed contingency management and disaster recovery plans that are tested periodically. Earthquakes in Los Angeles and San Francisco, floods in Houston and tropical storms hitting New Jersey are just a few past examples of situations in which emergency action plans had to be executed.

#### SEC POST-EXAMINATION LETTERS

All rated funds that are registered under Rule 2a-7 of the Investment Company Act of 1940 must submit a copy of the latest SEC post-examination letter and the investment adviser's response to Standard & Poor's. If no letter has been received, fund counsel must represent that no letter was in fact received from the SEC. As part of its monitoring of money fund ratings, Standard & Poor's requests such information annually. SEC letters are requested even if the letter addresses other money funds managed by the same adviser and not the rated fund specifically. Standard & Poor's rates money market fund based on representations from fund advisers and does not

perform an audit. Where an audit is performed, as in the case of the SEC examination, Standard & Poor's believes that the outcome of the audit can provide important insights into the daily operations of the adviser, which may ultimately affect fund safety.

**TAX-EXEMPT MONEY MARKET FUNDS**

Standard & Poor's also analyzes tax-exempt money market funds that invest primarily in short-term municipal securities. In assigning ratings to tax-exempt money market funds, Standard & Poor's analytical scope factors in all Nationally Recognized Statistical Rating Organization (NRSRO) ratings assigned to individual securities. This policy allows Standard & Poor's to take a broad-based portfolio approach in analyzing all tax-exempt funds.

In order to rate tax-exempt money market funds that hold securities that Standard & Poor's has not rated, Standard & Poor's must be able to assess the funds' credit evaluation methods. Therefore, in conjunction with all ratings assigned to tax-exempt funds, Standard & Poor's conducts a detailed review of each fund's credit analysis approach. This entails a meeting with each fund's credit research staff to examine their analytical practices, procedures, and methodologies.

The examination covers

- security evaluation,
- market analysis,
- security selection,
- asset dispersion,
- diversification,
- pricing,
- ongoing monitoring of credits,
- sources of secondary market information,
- response to distressed credit situations,
- resource dedication, and
- staff qualifications.

Discussions focus on the use of NRSRO ratings, any internal rating systems, and the process in which each fund's approved list of securities is presented to and

reviewed by the fund's board of directors.

Standard & Poor's has specific criteria for assessing securities rated by other NRSROs. Standard & Poor's may discount ratings by other NRSROs based on where each security would likely be classified under Standard & Poor's rating scale. In most cases, such a discount would involve a drop by no more than one rating category. However, in some sectors where Standard & Poor's believes other NRSROs diverge significantly from Standard & Poor's rating approach, discounts may be more than one category. Additionally, unrated securities are assessed on a case-by-case basis.

Generally, Standard & Poor's will classify securities as lesser quality if:

- The security is within a sector or category of municipal securities where there tends to be material differences in the ratings assigned to like securities by the various NRSROs.
- Or
- The security is within a sector or category of municipal securities in which the NRSRO(s) rating the security has limited market presence.

Standard & Poor's ratings guidelines state that for a tax-exempt fund to be rated in the highest categories by Standard & Poor's, all securities held by the fund should be rated either 'SP-1+' or 'A-1+' or 'SP-1' or 'A-1'. The proportions for each rating depend on the fund's rating category (see Money Market Fund Rating Definitions and Criteria Summary, page 3). In considering other rating scales, Standard & Poor's makes the following distinctions:

- Securities not rated by Standard & Poor's that have been assigned the highest short-term rating by another NRSRO and have a long-term rating comparable to Standard & Poor's 'AAA' are considered Standard & Poor's 'A-1+' equivalent for money market fund rating purposes only.

- Securities not rated by Standard & Poor's that have been assigned the highest short-term rating by another NRSRO and have a long-term rating comparable to Standard & Poor's 'AA' are considered Standard & Poor's 'A-1' equivalent for money market fund rating purposes only.
- Securities not rated by Standard & Poor's that have been assigned the highest short-term rating by another NRSRO and possess credit support from an entity rated 'A-1+' by Standard & Poor's are considered Standard & Poor's 'A-1+' equivalent for money market fund rating purposes only.
- Securities not rated by Standard & Poor's that have been assigned the highest short-term rating by another NRSRO and possess credit support from an entity rated 'A-1' by Standard & Poor's are considered Standard & Poor's 'A-1' equivalent for money market fund rating purposes only.
- General obligation debt not rated by Standard & Poor's issued by a municipality that has an 'SP-1+' or 'A-1+' short-term unsecured debt rating from Standard & Poor's is considered Standard & Poor's 'A-1+' equivalent for money market fund rating purposes only.
- General obligation debt not rated by Standard & Poor's issued by a municipality that has an 'SP-1' or 'A-1' short-term unsecured debt rating from Standard & Poor's is considered Standard & Poor's 'A-1' equivalent for money market fund rating purposes only.

These criteria serve as recommended guidelines for rating tax-exempt funds. In assigning actual ratings, Standard & Poor's bases its final analytical determination on its review of each fund's portfolio management and credit research areas.

Credit	Overnight	2 to 7
Quality	(1 day)	Days
A-1+	25%	10%*
A-1	25%	10%*
A-2	0%	0%

\*While Standard & Poor's does not formally propose any diversification guidelines for overnight repos with any single 'A-1+' counterpart, we believe it is prudent for a money market fund to maintain a minimal amount of diversification and thus we would be concerned with a fund that was comfortable holding > 40% in an overnight repo with any single 'A-1+' issuer/counterparty.

\*\*Aggregate exposure to term repo greater than 7 days is limited to 10%.

Standard & Poor's repo diversification criteria for funds rated 'Aam', 'Am' and 'BBBm' is identical to the above table except for the permitted exposure to 'A-2' Issuers on an overnight or one day basis of 5% for 'Aam', 10% for 'Am' and 25% for 'BBBm'.

To ensure that repos are properly secured, Standard & Poor's looks for certain written representations from all funds investing in repos. Regarding portion of the fund's security interest in repo collateral, Standard & Poor's seeks written representations that the fund takes delivery of the collateral in either of the following manners:

- The fund, or a third party acting solely as agent for the fund, has possession of the securities.
- The securities have been legally transferred to the fund under other applicable laws, except that the fund may not enter into any hold-in-custody arrangements.

In addition, Standard & Poor's also looks for written representations that confirm the following:

- A written master repo (e.g., the Bond Market Association standard repo form) governs all repo transactions. The fund takes all necessary steps to acquire and maintain a first perfected security interest in any repo securities, and all pro-

soon as possible. Any delay in a fund's ability to sell the securities could create both liquidity and market risks inappropriate for money funds. This is especially true for non-traditional collateral, as these security types (e.g., non-investment grade corporates, equities) possess higher potential price volatility than traditional collateral invest in Standard & Poor's 'AAA' money market fund may only registered under Rule 2a-7 (e.g., off-shore funds, government investment pools) generally calls for a maximum 25% exposure to any one fund with no stated maximum exposure. However, while no maximum is stated, Standard & Poor's will inquire as to the feasibility of one rated fund investing a majority of its assets other rated funds. This includes an analysis of the rated funds position on fee rebates since investing in another money market fund will ultimately cause the shareholder to be paying fees on two funds. In addition, there are also percentage limits that the investing fund may comprise of the fund it is investing in, as it would not be prudent for the fund to invest in another rated fund if it were going to comprise a significant portion of its assets.

- The aggregate amount of all repos (regardless of the rating) with maturities of more than seven calendar days may not exceed 10% of a fund's total assets.
- Overnight repos with any single 'A-1' issuer are limited to no more than 25% of a fund's total assets.
- Repos with maturities beyond seven days with any single issuer ('A-1+') are limited to no more than 25% of a fund's total assets.
- Repos with maturities beyond seven days with any single issuer ('A-1+') are limited to no more than 10% of a fund's total assets.

For these criteria, the maturity of a repo is defined as the absolute maturity of the agreement. If, however, the agreement contains a put that would result in a lower effective maturity for the agreement, Standard & Poor's will review the repo documentation to be certain of the unconditional nature of the put feature. Standard & Poor's has the same criteria for both tri-party and deliverable repos. However, where a tri-party repo is used, Standard & Poor's will examine the fund adviser's procedures ensuring that the proper type and amount of collateral is received.

**REPURCHASE AGREEMENTS (REPOS)**

While Standard & Poor's recognizes the importance of the collateral securing these repurchase agreements (repos), our main focus with regards to the risk in these securities has always been on the creditworthiness of the counterparty. Generally speaking, the underlying securities in traditional repos are typically ineligible investments for money market funds, either because of their maturity (longer than 397 days) or type (certain mortgage-backed securities). A fund that takes possession of such collateral will have to sell it as

- ceeds derived from the repo securities.
- For purposes of perfecting the fund's security interest, the counterparty owns all repo securities free of any other claims.
- The fund intends to pay the purchase price for the securities, as stated in the applicable governing agreement.
- The counterparty will not incur, or allow others to incur, any equal or prior liens on the securities.
- The fund has no knowledge of any fraud involved in any of the repo transactions it undertakes.

If the fund enters into repos with Securities Investor Protection Corp. (SIPC) and non-SIPC counterparties eligible to be debtors under the U.S. Bankruptcy Code, the fund should also provide assurance that the repos meet the Bankruptcy Code definition of a repo.

If the fund enters into repos with financial institutions subject to FIRREA, the fund must provide the following items:

- Assurance stating that the repos satisfy the definition of a repurchase agreement and "qualified financial contract" under FIRREA.
- Written representations to the effect that:
  1. All other requirements under FIRREA have been met as outlined in policy statements by the FDIC and RTC dated Dec. 12, 1989; and
  2. The fund, in accepting securities from a counterparty that is subject to FIRREA, is not in any way acting to defraud the counterparty, nor does the fund have any prior knowledge to the effect that the counterparty is insolvent, or may become insolvent, as a result of the completion of any such repo transaction.

*Non-Traditional Repurchase Agreement (Repo) Collateral*

U.S. government or U.S. government agency securities including Treasuries, Agency Discount Notes and Agency Mortgage Backed Securities have custom-

arily been used to collateralize repurchase agreements (repos). Most recently, broker/dealers have pledged "non-traditional" collateral, including investment and non-investment grade corporate debt, money market securities and even shares of U.S. equities to back their repo obligations. A key reason behind this recent interest is that repos backed by "non-traditional collateral" provide a boost to money fund yields. While the growth in non-traditional collateral has been in part spurred by brokers seeking to leverage other asset types; the demand is more likely fueled by the added basis points that comes with the non-traditional collateral.

Standard & Poor's Money Market Fund Rating Criteria for repos collateralized by "non-traditional" assets addresses the credit quality and diversification guidelines that are consistent with its money market fund ratings. The guidelines for non-traditional collateral are more restrictive than traditional collateral because the non-traditional collateral may not qualify for preferential treatment under the Federal Deposit Insurance Act or the Federal Bankruptcy Code and therefore, must be treated as unsecured obligations of the Issuer (counterparty).

Standard & Poor's credit quality criteria for repo collateralized by "non-traditional" assets calls for the counterparties (e.g. broker/dealers) to either have an explicit Issuer or counterparty rating from Standard & Poor's of A-1 or A-1+, or have a letter of guaranty from an 'A-1' or 'A-1+' (Standard & Poor's rated) parent company. This differs from repo collateralized by traditional collateral, as traditional repo may be transacted with unrated broker/dealers that are 50% or more owned by a parent company that is rated 'A-1' or better by Standard & Poor's qualify for the highest three rating categories ('AAAm', 'AAM', 'Am').

Standard & Poor's 'diversification criteria for repos collateralized by "non-traditional" assets calls for the maximum exposure to any single counterparty (or broker/dealer) is limited to 5% of total fund assets. This differs from repo collateralized by traditional collateral, as they may comprise up to 25%

per dealer depending on the credit quality of the broker/dealer.

Additionally, Standard & Poor's considers term repo agreements beyond seven days (for both traditional and non-traditional collateral) to be illiquid, and as such, should be limited to no more than 10% of total fund assets. Standard & Poor's also expects that the underlying collateral in term repo agreements to be priced daily and maintained at the required collateralization levels.

*Evaluating Repurchase Agreement (Repo) Counterparties*

The following criteria relates only to counterparty assessments for repurchase agreements (repos) collateralized by traditional collateral in rated money market funds and is not a comment on the unrated entity's ability to repay its unsecured debt or satisfy other contractual obligations.

Standard & Poor's recognizes that many money market funds transact repos with unrated subsidiaries of highly rated financial institutions. Standard & Poor's looks directly to the parent's short-term rating to determine the level of creditworthiness of unrated repo counterparties that are subsidiaries of rated entities. In establishing this criterion, Standard & Poor's recognizes that repos, as secured transactions, differ from unsecured obligations. Standard & Poor's reviews the legal structure of each fund's repos before assigning a rating to the fund.

Unrated entities that are at least 50% owned by rated parents are considered at the same investment level as the parent's rating. Therefore, a repo transaction with an unrated broker/dealer whose parent has an 'A-1+' rating is assessed at 'A-1+' equivalent for money market fund rating purposes only. Likewise, a repo with an entity whose parent is rated 'A-1' is viewed as an 'A-1' equivalent for money market fund rating purposes only.

For the case of rated repo counterparties that have parents with higher short-term ratings, Standard & Poor's looks to the parent's rating in assessing the proper level, provided that the subsidiary is at least 50% owned. For all other rated

repo participants, the actual Standard & Poor's short-term rating applies.

**FUNDING AGREEMENTS**

Funding Agreements are floating-rate investment contracts issued by insurance companies for the institutional marketplace. These investment contracts are popular with some money funds due to their attractive yields and put provisions. The put provision allows the owner of a floating-rate Funding Agreement contract to receive back its investment in a specified number of days. Most money funds prefer seven-day puts although 30-, 90-, 180-day, and one-year puts are also available. Most floating-rate Funding Agreement indexes are pegged to one- or three-month LIBOR. Prime, commercial paper composite index, and one-year constant maturity treasury have also been used.

When evaluating Funding Agreements as eligible investments for rated money market funds, Standard & Poor's considers the credit quality of the Issuer (insurance company), the terms of the agreement including contract maturity, reset index rate, and frequency of rate adjustments (e.g., weekly, quarterly), and any put or demand features. In order for the Funding Agreement to be an eligible investment for Standard & Poor's rated money market funds, the insurance company issuing the investment contract must possess an 'A-1' or 'A-1+' short-term rating from Standard & Poor's. In addition, contracts issued by a non-rated subsidiary of a rated insurance company are not eligible for rated money market funds. As for the variable-rate features of the Funding Agreements, the reset rates should be tied to indices considered to be money market rates, such as LIBOR, Fed Funds, T-bill, and CP composite rates.

Standard & Poor's also considers the potential for credit and liquidity risks presented by these contracts. Given the illiquid nature of short-term Funding Agreements (i.e., no secondary market trading), contracts that include short puts and demand features (generally seven to 30 days) offer a greater level of protection against credit deterioration of the

issuing company. To provide for liquidity in the event of credit action, some Funding Agreements include credit event put provisions, which provide the buyer (the fund) the ability to put back the contract to the issuing entity upon a downgrade of its rating. Standard & Poor's views this feature favorably since it enhances the fund's liquidity options.

Since Funding Agreements pay a variable rate of interest on periodic reset dates, money market funds can take advantage of the maturity shortening provision under Rule 2a-7 of the Investment Company Act of 1940 regulating money market funds. Hence, a Funding Agreement with a one-year maturity and 30-day reset dates, are treated as 30-day instruments by money market funds for purposes of calculating their average portfolio maturity. However, these securities are considered to be part of the 10% illiquid basket as per Rule 2a-7. Funding agreements that provide for seven-day or daily puts are not subject to the illiquid basket treatment.

**EXTENDIBLE NOTES**

Extendible notes come in many forms but can generally be classified under two broad categories based on who possesses the option to extend – the holder of the security or the Issuer of the security. When comparing the two types, Standard & Poor's looks more favorably towards those instruments where the holder of the security possesses the option because this option allows the holder to more actively manage the maturity risk associated with the Issuer. However, for extendible securities where the holder possesses the option, Standard & Poor's does not believe it is prudent for a fund to extend the maturity if the Issuer experiences any credit deterioration, including being put on CreditWatch Negative or upon a downgrade. For those securities where it is the Issuer's option to extend the maturity, the following guidelines apply.

Extendible commercial notes (ECNs) have received increasing interest from money market funds. On the surface, ECNs look very much like traditional

commercial paper, but provide a twist. Highly rated corporations issue ECNs for a finite period of time, say 90 days. They differ from commercial paper in that the Issuer, at its discretion, can extend the maturity of the note to a maximum of 390 days. The Issuer has the option to call the notes at any time during the extension period. Like commercial paper, ECNs are offered at a discount rate based on the initial maturity date. If extended, the rate becomes variable based on a spread above LIBOR. The size of this spread is dictated by the short-term credit rating of the Issuer and the spread's magnitude is designed to discourage the Issuer from extending the maturity date. The benefit to the Issuer is they can issue ECNs without a back-up liquidity facility. At the initial redemption date, if the Issuer lacks the necessary funding to pay off the notes, it can simply extend the maturity until alternative funding is obtained. These differ from previously issued short-term notes in which the option to extend was controlled by the note holders.

Extension would occur when the Issuer has no other viable refinancing options, making the ECN holder the lender of last resort. This would be a precarious position for a money market fund to be in, even though it receives a premium for accepting this risk. While the premium rate may seem attractive (e.g., 110% of LIBOR for 'A-1+' credits, 115% for 'A-1' credits), money market funds could face liquidity and pricing problems. The fact that the Issuer cannot place new commercial paper into the market implies that the fund will have equal trouble finding buyers for its ECN position, rendering its holding illiquid. At this point, accurate pricing of the securities becomes complex, particularly given the Issuer's option to call the ECNs at any time. Standard & Poor's believes that prior to purchasing these securities, money market fund advisers should adopt a detailed investment policy for ECNs and be prepared to hold the securities to the extended maturity date.

Standard & Poor's money market fund criteria calls for rated money market

funds to book the maturity of ECNs to the initial redemption date and count them toward their 10% less liquid basket of securities. Short-term credit ratings on ECNs are treated the same as the Issuer's commercial paper ratings (for Standard & Poor's rated money market funds, commercial paper Issuers must be rated 'A-1' or better by Standard & Poor's). While it is considered unlikely that the Issuer will extend the notes, upon extension, the rates change from fixed to variable, and money market funds should calculate maturity based on final maturity date. Although interest rates for ECNs reset periodically (typically monthly) after extension occurs, calculating days to maturity by referencing the reset date is imprudent. Money fund regulation permits funds to calculate maturity for variable-rate securities based on the reset date. This applies only when the market value of securities can be reasonably expected to approximate amortized cost at each reset until final maturity. Extension of an ECN would only occur when an Issuer experiences an adverse credit event, or if the market encountered a liquidity crunch. In either case, the ability to project the market value of the ECN is likely to be materially impaired.

**INTERFUND LENDING**

Standard & Poor's has formulated guidelines for interfund lending in rated money market funds. For those management companies who have received exemptive orders from the SEC to lend cash between funds (managed by the same investment adviser), Standard & Poor's believes that adherence to the following guidelines is consistent with investment practices of highly rated money market funds. Standard & Poor's looks for:

Opinion written by either in-house or external counsel for the fund evidencing that the Fund lending cash has a lien on the borrowing funds' assets that is senior to that of fund shareholders and service providers (i.e. custodians, distributors, investment advisers).

Established guidelines that specify percentages that each rated fund may lend

(to each fund and in aggregate) as well as the percentages that each borrowing fund may borrow.

Additionally, rated funds should:

- Refrain from lending to funds with more than 35% emerging markets exposure
- Refrain from lending to funds that have lost greater than 25% of their assets within the past five business days (through any combination of redemptions and market depreciation)
- Rated money market funds should refrain from borrowing from other funds except to meet emergency liquidity needs (i.e., not to lever the fund or otherwise enhance yield)

As part of the weekly monitoring report, rated funds should provide details on the amount of money loaned at any time during the prior week, the name of the borrowing fund(s), the net asset size of the borrowing fund(s), and the maturity and interest rate terms of the loan(s). Additionally, Standard & Poor's requests that rated funds provide written notification of these policies prior to commencement of any such transactions.

**CALLABLE AND CONVERTIBLE NOTES**

Callable and convertible notes are designed to perform well in stable interest rate environments. Both callable and convertible notes can present money market funds with unique market risks including call risk, reinvestment risk, interest rate risk, and liquidity risk. Given these multiple risks factors, managers should closely evaluate the pricing and market risks presented by these securities.

Corporations and government agencies issue short-term callable debt generally with one-year final maturities and with monthly or quarterly call dates. Due to the call feature, the interest rates (yield) for these securities are generally higher than those for equivalent non-callable instruments. The added risk is 'uncertain' principal maturity. There are several ways that this risk can manifest, for

example, during periods of rising interest rates, the value of these callable notes will decrease, as would a similar non-callable fixed-income security. During a period of falling rates, however, the price of callable notes will not appreciate in proportion with non-callable notes given the increased likelihood that the callable notes will be called at the next call date. Investors will be unwilling to pay any material premium in the purchase price given the call risk.

Callable note investors also face the risk of having their notes called away when rates fall. Reinvestment occurs when Issuers call the securities. Issuers are more likely to call (or retire their outstanding debt) when interest rates have dropped as this provides an opportunity to obtain cheaper financing. Investors of callable notes that are called will have to reinvest at lower rates.

Convertible notes are a variation on short-term callable notes as convertible notes while not callable can be converted from a fixed rate to a floating rate at the option of the Issuer. The holder is short the convertible feature, and thus is paid a yield premium to offset this uncertainty or risk. Like callables, convertible notes are typically issued with one-year final maturities at attractive fixed rates or with predetermined floating-rate formulas. The value of convertible notes will also fall during rising rate periods, behaving much like standard fixed rate instruments. However, when rates fall, the price appreciation of convertible notes will be limited due to the increased likelihood of conversion. The conversion risk is similar to call risk and thus has similar inherent price or market risks. The key difference is that upon conversion, the interest earned on the convertible notes is based on a predetermined formula, while the note holders control the reinvestment options for the callable notes.

Standard & Poor's believes it is prudent for fund managers to perform stress tests on these securities under various interest rate scenarios to determine the relative value of holding these securities during periods of both rising and falling rates.

Assumptions should include the magnitude of the interest rate decline required for the securities to be called or converted and the frequency of the options that may be exercised (e.g., monthly, quarterly). Managers should closely evaluate the risk and reward trade-offs presented by these securities before investing in these notes.

In holding convertible notes, a fund is taking all the risks of a fixed-rate instrument, while potentially receiving the lower returns that floating-rate instruments provide in a declining interest rate environment. To make these notes more attractive, Issuers typically set the floating rate reset formulas at spreads above an index (such as Fed Funds or LIBOR) that are higher than the market rate for variable rate securities. While such formulas may look enticing in the near term, spreads may widen over time, potentially creating a below market yield as such times as the notes are converted. In fact, the Issuers of convertible notes have an incentive to exercise the conversion option should spreads widen sufficiently, even if short-term interest rates remain stable. In essence, this gives them the opportunity to finance at below market rates. This risk does not apply to callable notes because once the security has been called, the holder is free to reinvest at current market rates, either fixed or variable.

Since callable and convertible notes are more complex than standard fixed rated securities, determining reliable prices for these is a more difficult task. Managers should price these securities to market on a regular basis with multiple broker-dealers or reliable sources to ensure accurate market values as dealer quotations are subject to a wide degree of subjectivity. Since these securities often lack an efficient and liquid secondary market, portfolio managers should be able to value these securities internally based on their own in depth analysis. Given the less liquid nature of these instruments, the securities can experience higher price volatility.

If properly analyzed and accounted for, callable and convertible notes can be

appropriate investments for money market funds. For instance, when calculating the weighted average maturity (WAM), callables and convertibles must be booked to their final maturity dates. If the Issuer exercises the option on the convertible note, then the maturity can be calculated to the next reset date, assuming the price on the note can still reasonably be expected to remain at or near par on subsequent reset dates. If spreads for comparable floating rate notes have changed materially, the convertible notes should continue to be booked to their final maturity dates.

Further, Standard & Poor's believes that because of the inherent risks present in these securities, money market funds should impose limitations to their exposure to callable and convertible notes, thereby mitigating the risk of unanticipated price volatility. These limits should be based on the fund's cash flow volatility, liquidity needs, and overall market price exposure.

#### MASTER NOTES AND PROMISSORY NOTES

Effective March 1, 2003 Standard & Poor's money market fund rating credit quality criteria for promissory notes and master notes will call for these notes to be issued by an Issuer that has an explicit Issuer rating or a counterparty rating of 'A-1+' or 'A-1' from Standard & Poor's. Eligible master notes or promissory notes that are not issued by a rated entity may be secured by a letter of guaranty from a parent company rated 'A-1' or 'A-1+' by Standard & Poor's. Promissory notes and master notes currently held by Standard & Poor's rated money market funds that do not meet the revised criteria will be allowed to mature.

While a majority of promissory and master notes are issued by rated Issuers, some master and promissory notes are issued by unrated subsidiaries of Standard & Poor's rated entities. Prior to the revised criteria, Standard & Poor's based the creditworthiness of promissory and master notes issued by un-rated subsidiaries on the Standard & Poor's ratings of the Issuer's parent company.

However, a comprehensive review of the ratings correlation between parent companies and their subsidiaries indicates that there is often a disparity in the credit ratings, or the creditworthiness, between a parent company and its subsidiaries. The disparity in the ratings between a parent company and its subsidiaries can be attributed to the subsidiaries domicile, regulatory environment, or the importance of the subsidiary to the parent company. Given that creditworthiness of a money market fund's investments is a key element in its ability to maintain principal exposure and limit exposure to loss, Standard & Poor's has revised its criteria for highly rated money market funds.

Master and promissory notes are attractive alternative investment vehicles for money market funds as they are highly customizable. The investor can select the floating rate reset, underlying index of the reset rate, and the maturity date(s). The investor can also vary the principal amount, alter the pricing index, and establish a put option for early maturity of the notes. Master notes can be secured or unsecured demand notes and an Investor can invest varying amounts of money at different (fixed or floating) rates of interest pursuant to arrangements with Issuers. The interest rate on a master note can be fixed, based on or tied to changes in specified interest rates, or reset periodically according to a prescribed formula. Although there is no secondary market for master notes, those with demand features can provide the investor, or the fund, with liquidity (usually in a relatively short time).

Promissory notes can be secured, or unsecured notes, issued by corporate entities to finance short-term credit needs, operating expenditures, or to retire debt. In return for the loan, companies agree to pay investors a fixed return over a set period of time. While most promissory notes are registered with the SEC and with the states in which they are sold, notes with maturities of nine months or less may be exempt from registration requirements.

**SECURITIES LENDING AND REVERSE REPURCHASE (REPO) AGREEMENTS**

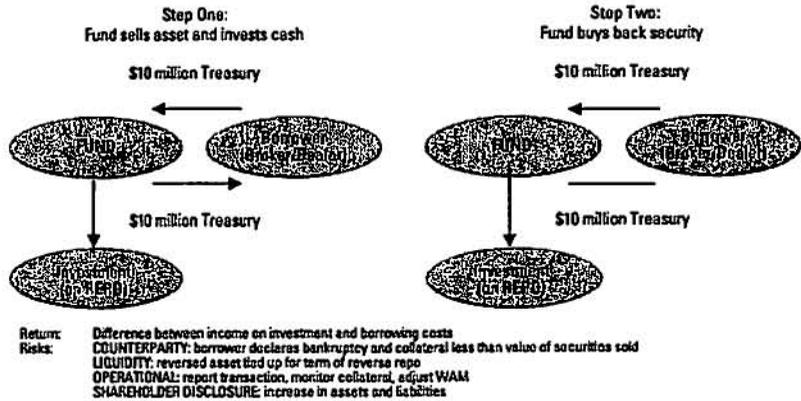
Reverse repurchase agreements (repos) and securities lending are investment strategies used by some taxable money market funds, primarily to enhance investment income. Standard & Poor's has specific criteria concerning the lending of portfolio securities by a fund to banks and broker/dealers. The criteria apply not only to direct loans of securities, but also to reverse repos. These transactions can create risks for money funds in the areas of credit and market price exposure in the form of leverage.

Reverse repos entered the spotlight in 1994 when several bond funds and Orange County California's investment pool recognized significant losses due to this leveraging technique. While reverse repo transactions are typically associated with longer-term fixed-income portfolios, money market fund advisers are increasingly making them part of their strategies.

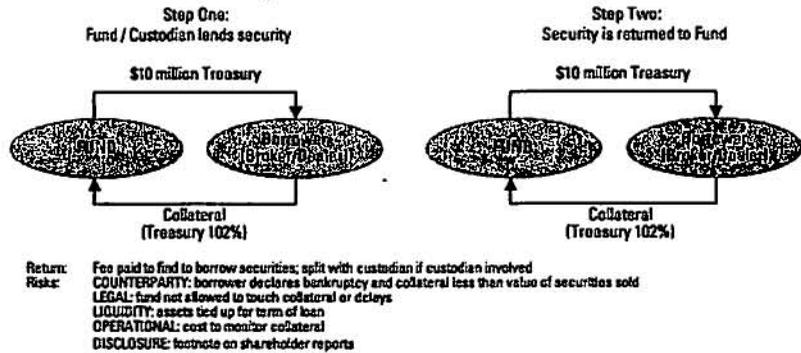
A reverse repo is a leveraging technique in which a fund simultaneously agrees to sell and repurchase a security it owns. A reverse repo is often viewed as collateralized borrowing since a fund incurs a liability and uses the security as collateral. As an example, assume a money fund owns a \$10 million Treasury note and wants to borrow funds overnight. The fund will sell the \$10 million Treasury note to the counterparty for settlement today. At the same time, the fund agrees to buy back the \$10 million Treasury note for settlement tomorrow, plus interest. The result is that the fund has borrowed overnight funds for one day (rate times \$10 million times one day/360). During the term of the reverse repo, the fund's total assets and liabilities are increased by the amount of the reverse repo, while net assets remain the same [see sidebar *Reverse Repurchase Repo Agreement Transaction*].

The main reason for using reverse repos is to enhance income by investing borrowed cash at a higher rate than the cost to borrow (reverse repo rate). Portfolio managers also use reverse repos to provide liquidity to funds. For example, a

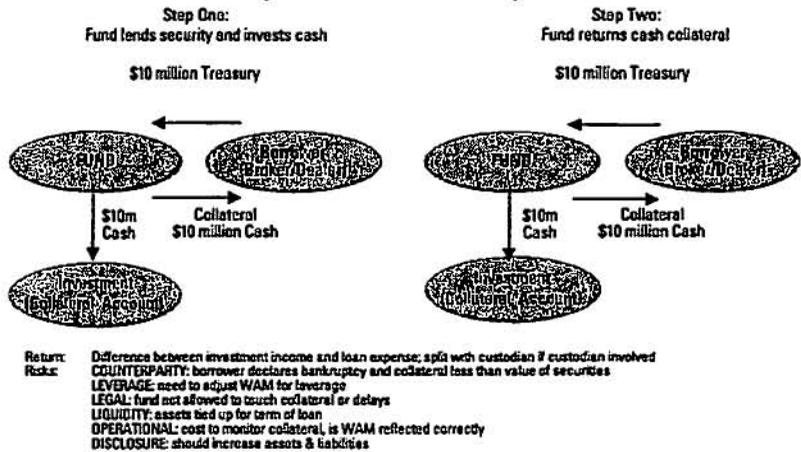
**Reverse Repurchase Agreement (Repo) Transaction**



**Lending for Securities Collateral: Not Leveraged**



**Lending for Cash Collateral: Leveraged**



portfolio manager may choose to raise cash via reverse repos to provide liquidity, rather than having to sell securities at an inopportune time.

Securities lending, an investment strategy used by money fund managers to enhance income (or to lower custody expenses), can also increase the risk level of a money fund portfolio via leverage. Some fund advisers are now using securities lending, which was once a strategy of large institutional investors. Fund custodians typically orchestrate the securities lending process, but some larger fund companies have in-house lending operations.

Traditionally, securities lending was viewed as a low-risk strategy with which a fund manager (via the custodian) could simply focus on the credit quality of the counterparty and the loan collateral. If a fund accepts securities as collateral, it encounters a different set of risks than if the fund accepts cash collateral (*see Lending for Securities Collateral: Not Leveraged*, page 23). In the former case, the fund (usually via the custodian) lends securities for a fee to a broker/dealer (borrower) and requires securities as collateral. The dealer provides collateral, typically in the form of Treasuries, at 102% of the loaned securities' value, which is marked-to-market on a daily basis. When the loan terminates (often the next day), the broker returns the securities and the fund returns the collateral. If a custodian handles the operation, the fees are split between the fund and the custodian. The major risks are that the borrower defaults or files for bankruptcy and, at the same time, the price of the collateral drops to less than the value of the loaned securities.

Securities lending is viewed as a more aggressive strategy from an investment standpoint if cash collateral is accepted. The fund (via the custodian) lends out securities but accepts cash collateral instead of securities (*see Lending for Cash Collateral: Leveraged*, page 23). The custodian invests the cash in securities with the aim of beating the cost of the loan and splitting the income with the fund. While the income is split between

the fund and custodian, the fund bears all risks of the assets. Regardless of whether the fund or custodian invests the cash collateral, the result is that the assets of the fund are increased (a leverage impact). This type of securities lending has a similar risk profile to reverse repos.

Many banks have entered the securities lending business since the late 1980s. This has led to lower fees and, in turn, more aggressive investment policies. In November 1994, investors and custodians learned about the true risks in securities lending when The Boston Co., a unit of Mellon Bank Corp., announced a \$130 million net write-off (\$223 million pretax) related to securities lending losses. In The Boston Co. case, instead of accepting securities as collateral, the custodian accepted cash as collateral and was willing to take on significant investment risks. Although The Boston Co. was acting as an agent, not as a principal, it absorbed its clients' losses for business reasons.

Standard & Poor's reverse repo and securities lending criteria take into account incremental risks associated with these strategies. The criteria focus primarily on the counterparty credit quality, the term of the transaction, and the effect that leverage has on a portfolio's weighted average maturity (WAM).

As with repos, Standard & Poor's views reverse repos and securities lending transactions as posing counterparty risk, and therefore limits counterparty ratings to 'A-1+' and 'A-1' at the 'AAAm' and 'AAm' rating levels. As a general guideline, Standard & Poor's views all investments made by the fund (related to reverse repos and securities lending) as assets of the fund. In each of these cases, a modified WAM is calculated. Standard & Poor's then applies its sensitivity matrix, as is done with all rated money market funds.

Standard & Poor's also takes a conservative view when analyzing the structure and term of the overall transaction. All transactions should be "matched" on both sides. For example, cash from a reverse repo with a seven-day term should be invested in a security with a seven-day maturity. Additionally, at the 'AAAm' rat-

ing level, the transactions should not exceed 25% of net assets on maturities less than or equal to 7 days or 10% on maturities greater than 7 days, with the term of the transaction limited to 30 days or less. Since the securities that are reversed or loaned out are tied up for the term of the transaction, Standard & Poor's views these securities as illiquid for transactions beyond seven days.

Standard & Poor's is also concerned with incremental risks associated with purchasing agency variable-rate notes (VRNs) with borrowed monies (via reverse repos or securities lending). To limit the potential for mismatching maturities, Standard & Poor's feels it is inappropriate for highly rated funds to invest greater than 10% of borrowings in VRNs. For example, a \$100 million portfolio that levers 25%, or \$25 million of net assets, should limit VRNs to 10%, or \$2.5 million, of the borrowed funds in VRNs. All VRN purchases should meet Standard & Poor's VRN guidelines for rated money market funds.

The reverse repo and securities lending criteria recognize the incremental risks associated with these strategies. The following example will assist in understanding the effects that leverage can have on a fund's WAM. Assume an unlevered fund is comprised of a 60-day Treasury security, or a bullet portfolio with a WAM of 60 days. This \$100 million portfolio enters into a reverse repo, or lends 25% of its assets and invests the proceeds in an overnight deposit. While this transaction is matched, Standard & Poor's also analyzes the reported effective WAM. If the overnight repo investment is included in the portfolio, the WAM (gross) could be reported as 48 days ( $[80\% * 60 \text{ days}] + [20\% * \text{one day}] = 48 \text{ days}$ ). However, because the increase in assets to \$125 million has a leverage effect, the WAM has to be calculated on a net basis, which is 60 days. To properly adjust the WAM, take the unlevered portfolio WAM of 60 days and add the WAM of the borrowed assets ( $60 + [25\% * \text{one day}]$ ). If the fund invested in a 30-day security, the fund's effective WAM would be 68 days ( $60 +$

Impact of Redemptions on Weighted Average Maturity (WAM) of a Levered Portfolio

Redemption (%) Gross	Effective LEV Factor	Effect on WAM from 30 day
0	1.25	68
5	1.27	70
10	1.28	72
15	1.31	76
20	1.33	80
25	1.36	82
30	1.40	84
35	1.44	87
40	1.50	90
45	1.57	94
50	1.67	100

Assumptions: (1) Levered weighted average maturity (WAM) portfolio is 60 days. (2) Initial portfolio was levered 25% of net assets. (3) Initial unlevered (market) portfolio is 50% 120-day Treasuries and 50% overnight repurchase agreement (repo). (4) Overnight repo is used to meet redemptions. (5) Effective leverage calculated immediately after redemption.

[25% \* 30]). Further, Standard & Poor's analyzed the impact of redemptions on the levered portfolios and found the WAM differences to become even more significant. For example, the 60-day portfolio with 25% net leverage experiences a sharp rise in its effective WAM to 80 days following an immediate 20% redemption in assets [see *Impact of Redemptions on Weighted Average Maturity (WAM) of a Levered Portfolio* page 25].

Standard & Poor's expects rated funds to provide the following information regarding to securities lending and reverse repo transactions on a weekly basis:

- Gross assets (market value basis) and net assets (market)
- Percentage of fund in reverse repo and/or securities lending transactions
- All terms of transaction (i.e., counterparty, collateral type)

- Investments from transactions included in portfolio holdings reports as fund assets
- Weighted average portfolio maturity calculation adjusted for effects of leverage

REGULATION VS. RATINGS

Rule 2a-7 of the Investment Company Act of 1940 is the primary section of regulation that governs U.S. domestic money market funds. The rule has been formally amended several times since its adoption in 1983 and there have been numerous interpretive releases and exemptive orders with regard to 2a-7 rules issued by the SEC over the past few decades. Rule 2a-7 was established to limit risks in money market funds could take to provide investors safety of principal and liquidity from money market fund investing. The rule, and prudent management, has been

very effective to attaining these goals.

Standard & Poor's money market fund ratings address a money market fund's ability to provide principal safety and liquidity, but there are significant differences between the minimum standards required by Rule 2a-7 and Standard & Poor's rating criteria for the highest rating categories. In fact, a fund that met the bare minimum regulatory requirements would at best qualify for a 'BBBm' rating from Standard & Poor's. This rating could be lower depending on the fund's cash flow patterns, management experience and controls, investment parameters, and current marked-to-market net asset value (NAV).

The main areas in which Standard & Poor's approach differs from Rule 2a-7 guidelines are in the treatment of a portfolio's:

- Weighted average maturity (WAM)
- Credit quality
- Floating rate securities
- Less-liquid securities
- Repurchase agreements (repos)

In dealing with weighted average portfolio maturity, Rule 2a-7 allows for a maximum of 90 days. There is a common misconception that this is a blanket endorsement for a 90-day WAM but this is not the case. The rule states that a fund's WAM should be at an appropriate level to maintain a stable NAV, but in no case exceed 90 days. It implies that funds with volatile or less liquid assets or interest rate-sensitive shareholders should seek lower WAM levels.

The highest rating that a money market fund that allows for a 90-day WAM can get from Standard & Poor's is 'Am'. Analysis shows that a fund with a 90-day WAM will likely break the dollar as a result of an interest rate rise of 205 basis points, without taking into account subscription or redemption activity. Higher rating categories require lower WAMs, with 'AAAm' fund guidelines set at a maximum of 60 days; however, this can be set lower depending on the types of assets held and shareholder characteristics.

Rule 2a-7 delineates minimum credit