

STANDARD
& POOR'S

FUND RATINGS CRITERIA

Principal Stability Fund Ratings

Fund Credit Quality and Volatility Ratings



2005

Standard & Poor's Fund Ratings

US CONTACTS:

Gary Arne
Managing Director
212-438-5034

Joel Friedman
Director
212-438-5043

Peter Rizzo
Director
212-438-5059

Wendy Immerman
Associate Director
212-438-5052

Kammie Lin
Associate
212-438-5049

Todd Kerin
Rating Analyst
212-438-5074

Jacqueline Crino
Senior Research Assistant
212-438-5038

Ellen Paukowits
Senior Research Assistant
212-438-5068

Jenson Abraham
Research Assistant
212-438-5033

Trudy Guy
Research Assistant
212-438-5061

Ruth Shaw
Research Assistant
212-438-1410

Allison Yeserski
Administrative Assistant
212-438-5073

Thomas Rooney
Associate Director, Origination
212-438-5060

EUROPEAN CONTACTS:

Stephanie Carillon
Director
33-1-44-207344

Françoise Nichols
Associate Director
33-1-44-207345

Roxana Mahboubian
Associate
44-20-7176-8417

Ian Biscoe
Senior Research Assistant
44-20-7176-8416

Philipp Sterner
Associate Director, Origination
44-20-7176-8498

GLOBAL RATINGS NETWORK

Beijing

Shasha Chang
Room 2201, 22nd Floor
China World Tower 1
Chao Yang District
Beijing, Greater China 100004
(86) 10-6536-2908

Boston

Philip N. Shapiro
225 Franklin Street, 15th Floor
Boston, MA 02110-2804
(1) 617-530-8303

Buenos Aires

Marta Castelli
Torre Alem Plaza, Av
Leandro N. Alem 855
C1001AAD, Buenos Aires
(54) 114-891-2128

Chicago

Sarah Eubanks
130 East Randolph St.
Suite 2900
Chicago, IL 60601
(1) 312-233-7001

Dallas

Malachy Fallon
Lincoln Plaza
500 North Akard Street, Suite 3200
Dallas, TX 75201
(1) 214-871-1400

Frankfurt

Torsten Hinrichs
Neue Mainzer Strasse 52-58
60311 Frankfurt-am-Main
(49) 69-3399-9110

Hong Kong

John Bailey
36/F Edinburgh Tower, The Landmark
15 Queen's Road Central,
Hong Kong
(852) 2533-3500

London

Guy Hewitt
20 Canada Square, Canary Wharf
London E14 5LH
(44) 20-7176-3604

Madrid

Juan de la Mota
Palacio de Miraflores
Carrera de San Jerónimo
15 Planta 1- Local Derecho
28014 Madrid
(34) 91-389-6940

Melbourne

Chris Dalton
Level 37, 120 Collins Street
Melbourne 3000
(61) 3-9631-2000

Mexico City

Victor Herrera, Jr.
Punta Santa Fe Torre A
Prolongacion Paseo
de la Reforma 1015
Col. Santa Fe
Deleg. Alvaro Obregon
01376 Mexico City, C.P.
(52) 55 5081-4400

Milan

Maria Pierdicchi
Via dei Bossi 4
20121 Milan
(39) 02-721-11201

Moscow

Cynthia Stone
4/7 Vozdvizhenka Street, Bldg. 2
7th Floor
Moscow 125009, Russia
(7) 095-783-40-00

New York

55 Water Street
New York, NY 10041
(1) 212-438-2000

Paris

Jeanne-Françoise de Polignac
21-25 rue Balzac
75008 Paris
(33) 1-4420-6650

San Francisco

Steven G. Zimmermann
One Market, Steuart Tower,
15th Floor
San Francisco, CA 94105-1000
(1) 415-371-5000

São Paulo

Regina Nunes
Edifício Roberto Sampaio Ferreira
Av. Eng. Luis Carlos Berrini,
1.253 - 10th floor
Brooklin Novo
CEP 04571-010
(55) 11-5505-3376

Seoul

J.T. Chae
9Fl. Seoul Finance Center
84 Taepyeongro 1ga, Chung-gu
Seoul, Korea, 100-768
(82-2) 2022-2300

Singapore

Surinder Kathpalia
Prudential Tower, #17-01/08
30 Cecil Street
Singapore 049712
(65) 6239-6363

Stockholm

Marianne Flink
Mäster Samuelsgatan 6, Box 1753
111 87 Stockholm
(46) 8-440-5900

Tokyo

Yu-Tsung Chang
Marunouchi Kitaguchi Building,
27/28 Floor
1-6-5 Marunouchi, Chiyoda-ku
Tokyo, 100-0005
(81) 3-4550-8700

Toronto

Thomas Connell
The Exchange Tower
130 King Street West, Suite 1100
P.O. Box 486
Toronto, ON M5X1E5
(1) 416-507-2501

RATINGS INFORMATION

Call for ratings on all issues
and issuers.

Frankfurt

Doris Keicher
(49) 69-3399-9225

Hong Kong

(852) 2533-3500

London

Angela Barker
(44) 20-7176-7401

Madrid

(34) 91-389-6969

Melbourne

(61) 3-9631-2000

Mexico City

Ericka Alcantara
(52) 55 5081-4427

New York

(1) 212-438-2400

Paris

Sophie Ryan
(33) 1-4420-6708

Seoul

J.T. Chae
(82-2) 2022-2300

Singapore

Winifred Cheng
(65) 6239-6316

Stockholm

(46) 8-440-5900

Tokyo

(81) 3-4550-8746

Fixed-Income Research

Diane Vazza, New York
(1) 212-438-2760

RATINGS SERVICES MEDIA CONTACTS

Frankfurt

Doris Keicher
(49) 69-3399-9225

Hong Kong

Nerys Williams
(852) 2533-3515

London

Lisa Hall
(44) 20-7176-3536

Melbourne

Sharon Beach
(61) 3-9631-2152

New York

Mimi Barker
(1) 212-438-5054

Marc Eiger
(1) 212-438-1280

Christopher Mortell
(1) 212-438-2756

John Piecuch
(1) 212-438-1102

Adam Tempkin
(1) 212-438-7530

Paris

Claude Chaubet-Bride
(33) 1-4420-6657

Tokyo

Toshiko Tanabe
(81) 3-4550-8410

Toronto

Rachel Shain
(1) 416-507-2528

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Call for information on seminars
and teleconferences.

Hong Kong

(852) 2533-3500

London

Charlotte Fletcher
(44) 20-7176-7218

Melbourne

Athina Kyrkou
(61) 3-9631-2000

New York

Carla Cunningham
(1) 212-438-6685

Singapore

Carolyn Sequeira
(65) 6239-6396

Tokyo

Toshiya Ishida
(81) 3-4550-8683

SUBSCRIPTIONS AND CUSTOMER SERVICE

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Hong Kong

(852) 2533-3535

London

(44) 20-7176-7425

Melbourne

Andrea Manson
(61) 3-9631-2076

New York

(1) 212-438-7280

Singapore

Winifred Cheng
(65) 6239-6316

Tokyo

Minako Yoneyama
(81) 3-4550-8746

STANDARD
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FUND RATINGS CRITERIA

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For the most complete and up-to-date ratings criteria, please visit
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Introduction

STANDARD & POOR'S FUND RATINGS PROCESS & OVERVIEW

A Standard & Poor's Ratings Services rating is based on principles of independence, integrity, and disclosure—the same standards that underlie market confidence and acceptance of our ratings by investors worldwide. Our processes are designed to ensure that our rating opinions are based on consistently applied quantitative and qualitative analytic criteria.

Since 1984, Standard & Poor's has assigned principal stability fund ratings, credit quality ratings, and volatility ratings to fixed-income funds globally, including mutual funds, money market funds, enhanced cash funds, preferred trusts, government investment pools, separate accounts, exchange traded funds, hedge funds and unit investment trusts. The goals of our analysis are to uncover risk sources in a managed fund's portfolio and investment strategies and to assess the potential impact on its ability to meet its objectives.

Principal Stability fund ratings. A Standard & Poor's Principal Stability fund rating, also known as a money-market fund rating, is a current opinion of a fund's capacity to maintain stable principal or net asset value. When assigning a Principal Stability rating to a fund, we evaluate the creditworthiness of a fund's investments and counterparties, the market price exposure of its investments, sufficiency of the fund's portfolio liquidity, and management's ability and policies to maintain the fund's stable net asset value by limiting exposure to loss. In our view, funds

that seek to maintain a stable net asset value should be managed conservatively with well-defined guidelines and investment policies (for example: within SEC Rule 2a-7 guidelines) with regard to average maturity, credit quality, and liquidity. Funds managed outside of these guidelines can or may be rated on the Fund Credit Quality and Volatility Scale (*see below*).

Principal Stability fund ratings express our opinion regarding a fund's ability to maintain principal stability and to limit exposure to losses due to credit, market, and/or liquidity risks. The rating categories range from 'AAAm' (extremely strong capacity to maintain principal stability and to limit exposure to principal losses due to credit, market, and/or liquidity risks) to 'Dm' (failure to maintain principal stability resulting in a realized or unrealized loss of principal). The 'm' distinguishes the principal stability fund ratings from Standard & Poor's traditional debt ratings, which are usually not subscribed and which indicate a borrower's ability to repay principal and interest on a timely basis. A principal stability fund rating is not directly comparable to a debt rating because

of differences in investment characteristics, rating criteria, and the creditworthiness of portfolio investments.

Fund Credit Quality ratings. Standard & Poor's Fund Credit Quality ratings are assigned to all types of fixed-income funds or portfolios with fluctuating or variable net asset values, including bond funds, local government investment pools, unit investment trusts, preferred shares trusts, cash enhanced funds, and fixed-income hedge funds, among others. Our fund credit quality ratings are identified by the subscript 'f' for fund and represent our assessment of the overall credit quality of a fund's portfolio holdings. The fund credit rating reflects the level of protection that the fund's portfolio provides against losses from credit defaults. Rating categories range from 'AAAF' (highest protection against losses from credit defaults) to 'CCCF' (extremely vulnerable to losses from credit defaults).

Fund credit quality ratings capture a fund's overall exposure to default risk and are based in part on an assessment of a fund's current credit exposure based on a credit matrix scoring approach derived from Standard & Poor's historical default and ratings transition rates, and on the manager's credit management process.

Fund Volatility ratings. Volatility ratings offer our current opinion of a fund's sensitivity to changing market conditions. Volatility ratings range from 'S1' (lowest volatility) to 'S6' (highest volatility), and are based on an analysis of a fund's investment strategy and portfolio level risk, including interest-rate risk, credit quality, liquidity, concentration, call and option risk, and currency risk. The effects of various portfolio strategies, such as the use of leverage, hedging, and derivative instruments, are also factored into the rating. We also evaluate a fund's historical return volatility against government benchmarks. A fund volatility rating is a current opinion of a fixed-income fund's sensitivity to changing market conditions relative to the risk of a portfolio composed of government securities and denominated in the base currency of the fund.

Fund Ratings Process

The following is a step-by-step guide to how the Standard & Poor's fund rating process works.

The rating request. All ratings are issued on a request basis. When an organization requests a fund rating, a Standard & Poor's fund rating analyst is assigned to lead the rating team, which is comprised of a lead analyst, back-up analyst, and surveillance analyst, and he or she schedules a meeting with management. Fund management provides pertinent information for the ratings analysis, including, but not limited to the fund's prospectus, statement of additional information, approved list of investments, historical net asset values, historical weighted average maturity/duration, asset size history, shareholder information, a current portfolio holdings report, an organizational chart of senior fund officials, and biographies of key fund personnel.

(For information required on new fund ratings, please refer to page 16 for Principal Stability Ratings and page 64 for Fund Credit Quality and Volatility Ratings.)

The management meeting. After receiving the initial rating request, the analysts meet with senior fund management officials generally at their offices to evaluate the effectiveness of fund management in implementing a portfolio strategy that is consistent with its stated investment goals. The meeting is focused on the history of the fund, investment objectives and strategy, management's investment philosophy, depth and stability of the fund management team, credit risk management, maturity/duration profile, pricing policy, risk preferences including use of leverage, operating policies, internal controls including oversight of fund management, and disaster recovery.

(For more information on the suggested agenda of a management meeting, please refer to page 17 for information on Principal Stability Ratings and page 65 for Fund Credit Quality and Volatility Ratings.)

Standard & Poor's review and analysis.

Once we have held the management meeting, the lead analyst reviews and analyzes the information obtained and presents the fund to a rating committee. The initial review process usually takes a few weeks.

The rating committee meeting. A Standard & Poor's rating committee is comprised of senior fund rating analysts, including the primary analyst, who votes on the fund's rating(s).

The call to the organization. Following the rating committee, the lead analyst communicates the rating committee outcome to the company.

The appeal period. After Standard & Poor's has announced the committee's decision to the organization, the organization has a brief time in which it may appeal the rating—but only if it can offer substantive, material information not previously available to the committee. The committee's final decision is then announced to the organization. Ratings are released publicly unless the fund company has chosen to keep the initial rating confidential.

The press release. Standard & Poor's will release the rating, unless the fund company has chosen to keep the initial rating confidential.

A press release is sent to the media, announcing the fund's rating and the rationale for the rating.

Ongoing surveillance and annual reviews. A condition for maintaining the rating is the submission of timely surveillance reports that include portfolio holdings and a completed surveillance summary worksheet. We maintain surveillance on all funds we rate—weekly for principal stability fund ratings and monthly for fund credit and volatility ratings. If there is a specific event that Standard &

Poor's perceives might have an effect on the rating, we review it immediately. Fund analysts maintain frequent contact with the portfolio management team throughout the year. We conduct annual generally on-site fund management review meetings for all rated funds. Fund Profile rating reports are updated at least twice a year.

(For more information on required surveillance information, please refer to page 18-19 for Principal Stability Ratings and page 66-67 for Fund Credit Quality and Volatility Ratings.)

Conclusion

This article is intended to outline Standard & Poor's Fund Rating Process. Full documentation of the criteria used to assign principal stability, credit quality, and fund volatility ratings can be found at www.standardandpoors.com.

When conducting our analysis, we judge each fund and its management on its own merits as there are no “model” funds. The important issue is how the fund is managed. Policies and strategies may differ from fund to fund, but the degree to which management has control over them should not. We closely examine the daily operations of the fund, including organizational structure and depth, the degree of oversight and accountability, particularly in the portfolio and risk management areas. It should be stressed that lower ratings within the investment-grade rating categories (down to ‘BBBm’ and ‘BBBf’) do not indicate that there is something “wrong” with a fund, but simply that the fund's strategy incorporates a slightly higher degree of risk.

Ratings definitions, ratings criteria, and related news and articles, as well as contacts and contact information related to Standard & Poor's fund ratings can be found at www.standardandpoors.com. ■

Principal Stability Fund Ratings Criteria

CREDIT QUALITY

When evaluating a fund's credit quality, Standard & Poor's Ratings Services examines the risks associated with the quality, type, and diversification of the securities in each fund's underlying portfolio. The credit quality assessment for each instrument is generally based on the credit rating Standard & Poor's has assigned to the security. The minimum credit quality standards for each fund are based on the fund's desired rating and maturity structure of its portfolio.

For funds rated 'AAAm', all securities should either carry a Standard & Poor's rating of 'A-1+' or 'A-1' or be deemed to be of equivalent credit quality by Standard & Poor's. A minimum of 50% of its portfolio should be comprised of 'A-1+' rated instruments or those Standard & Poor's deems equivalent in credit quality. 'AAm', 'Am', and 'BBBm' ratings criteria allow for holdings in 'A-2' quality securities with overnight maturities and provide for increased percentages of 'A-1' exposure. The percentages reflect acceptable levels of credit risk for the different fund rating categories and are based on Standard & Poor's historical default and ratings transition rates for short-term debt securities. Additionally, securities rated 'A-1' or equivalent by Standard & Poor's that are on CreditWatch with negative implications should be limited to maturities of 30 days or less. Investments rated 'A-1' maturing in seven days or less can be counted toward the 'A-1+' percentage minimums, as historical default rates of

'A-1' paper maturing in less than one week are similar to the default rates of 'A-1+' issuers.

Credit quality criteria are based on the 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 principal stability instruments, together with the study of Standard & Poor's historical ratings performance data, Standard & Poor's has developed the credit quality investment guidelines for rated funds to maintain a consistent level of credit risk within each fund rating category.

Diversification guidelines are in most instances similar to those mandated by regulation and apply to both taxable and tax-exempt money funds. (For example: Rule 2a-7 of the Investment Company Act of 1940 is the primary section of regulation that governs U.S. domestic money market funds.) Generally, 5% diversification limits are in place for corporate, bank, and other

money market securities with maturities beyond overnight, although U.S. government securities and certain other exceptions made for offshore/European funds are not subject to the 5% rule. (Please refer to “Principal Stability Fund Rating Criteria for Offshore and European Money Market Funds”.) Additionally, Standard & Poor’s has established credit quality standards and diversification criteria for repo providers and government agency issues (to name a few). These criteria can be found under the relevant sections of the Funds Rating Criteria Book.

Regulation Versus Ratings

Rule 2a-7 of the U.S. Investment Company Act of 1940 had been formally amended several times 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 money market funds can take in an effort to provide investors safety of principal and liquidity.

Standard & Poor’s principal stability ratings assigned to money market funds address a money fund’s ability to maintain principal stability and to limit exposure to principal losses, but there are significant differences between the minimum standards required by

Principal Stability Fund Ratings Definitions and Criteria Summary

A principal stability fund rating (also known as a money market fund rating) is not directly comparable with a bond rating due to differences in investment characteristics, rating criteria, and creditworthiness of portfolio investments. For example, a money market fund portfolio provides greater liquidity, price stability, and diversification than a long-term bond, but not necessarily the credit quality that would be indicated by the corresponding bond rating. Ratings are not commentaries on yield levels. A principal stability fund rating is not a recommendation to buy, sell, or hold the shares of a fund. Further, the rating may be changed, suspended, or withdrawn as a result of changes in or unavailability of information related to the fund.

Rating	Definitions	Minimum*** 'A-1+'	Maximum 'A-1'	Maximum 'A-2'	Maximum Weighted Avg. Maturity (WAM) (Days)	Floating-Rate Note (FRN) Maximum Final Maturity
'AAAm'	Fund has extremely strong capacity to maintain principal stability and to limit exposure to principal losses due to credit, market, and/or liquidity risks.	50%	50%	None	60	Two years
'AAm'	Fund has very strong capacity to maintain principal stability and to limit exposure to principal losses due to credit, market, and/or liquidity risks.	20%	80%	5% overnight	75	Three years
'Am'	Fund has strong capacity to maintain principal stability, but is somewhat more susceptible to principal losses due to adverse credit, market, and/or liquidity risks.	None	100%	10% overnight	90	Four years
'BBBm'	Fund has adequate capacity to maintain principal stability. Nevertheless, adverse market conditions and/or higher levels of redemption activity are more likely to lead to a weakened capacity to limit exposure to principal loss as a result of higher exposure to credit, market and/or liquidity risks.	None	100%	25% overnight	90	Five years
'BBm'	Fund has uncertain capacity to maintain principal stability, and is vulnerable to principal losses resulting from its exposures to credit, market, and/or liquidity risks.	None	None	None	120	None
'Dm'	Fund has failed to maintain principal stability resulting in a realized or unrealized loss of principal.					
'G'	The letter 'G' follows the rating symbol when a fund's portfolio consists entirely of direct U.S. government securities.					
+ or —	Ratings may be modified (except 'AAAm') to show relative standing within the rating categories.					

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

Rule 2a-7 and Standard & Poor's ratings criteria for the highest rating categories. In fact, a fund that meets the minimum regulatory requirements would at best qualify for a 'BBBm' rating from Standard & Poor's. The ultimate rating could be lower depending on the fund's cash flow patterns and liquidity management, management experience, and controls, investments and parameters, and current marked-to-market net asset value (NAV) policies.

Standard & Poor's ratings criteria and approach differs from Rule 2a-7 guidelines in regard to a fund's weighted average maturity, credit quality, eligible floating rate securities, defined limited liquidity securities, and repurchase agreements (repos). Rule 2a-7 allows for a maximum of 90 days weighted average portfolio maturity (WAM). There is a common misconception that this is a blanket endorsement for a 90-day WAM; however, 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. This implies that funds with less liquid assets, concentrated shareholder base, and interest rate-sensitive securities should seek to maintain lower interest rate sensitivity and higher levels of liquidity assets, and therefore lower WAM levels.

The highest rating that a money market fund having a 90-day WAM can get from Standard & Poor's is 'Am'. Standard & Poor's analysis of a money market fund's interest rate sensitivity shows that a fund with a 90-day WAM could break the dollar as a result of an instantaneous interest rate rise of 205 basis points, without taking into account shareholder subscription or redemption activity. Higher rating categories require lower-weighted average maturities with 'AAAm' guidelines set at a maximum of 60 days.

Rule 2a-7 delineates minimum credit quality standards for money market funds. A taxable money fund must have at least 95% of its assets invested in first-tier securities. A first-tier security is defined as being in the highest rating category of at least two nationally recognized statistical rating organizations (NRSROs) or deemed equivalent by the fund's adviser. The remaining 5% may be in second-tier securities (rated in the

second-highest rating category by two NRSROs or deemed equivalent by the fund's adviser). First-tier securities have a 5% issuer diversification limit (excluding government securities). Issuer concentrations are limited to 1% for second-tier securities. Certain exceptions are made for tax-exempt money market funds.

Standard & Poor's criteria for 'BBBm' ratings are more in line with Rule 2a-7 minimum standards. Higher rating categories require a higher percentage of 'A-1+' rated securities, while lower-quality or second-tier securities are eligible for ratings below 'AAAm' if the securities mature in one day. The SEC recognizes Standard & Poor's 'A-1' short-term rating category as first-tier. Standard & Poor's, however, uses a plus (+) symbol to indicate relative strength within the 'A-1' category. Criteria for all ratings outline minimum acceptable percentages of Standard & Poor's rated securities. Rule 2a-7 does not distinguish between 'A-1' and 'A-1+' ratings.

Rule 2a-7 views the credit quality of a repo as that of the securities underlying the agreement provided that the collateral qualifies for preferential treatment under the Federal Deposit Insurance Act or the Federal Bankruptcy Code. Since repos typically involve government securities, no diversification requirements apply. Standard & Poor's rating criteria look to the creditworthiness of the repo counterparty. Eligible repo providers include 'A-1+' or 'A-1' rated providers, or those deemed to be of equivalent credit quality.

Master-Feeder Funds

Standard & Poor's evaluates master-feeder funds, which are sometimes referred to as Hub and Spoke® (a patented term marketed by Signature Financial Group Inc.) much in the same way it evaluates other rated funds. Master-feeder structures were created for fund sponsors and managers to capture the efficiencies of larger portfolios of assets while providing a product to smaller fund clients. In the master-feeder structure, the feeder fund conducts essentially all of its investing through the master fund. Feeder funds have matching investment objectives, and assets of each feeder fund are held in

the master fund. This allows each feeder fund to be sold separately with separate fee structures to individual target markets, reducing overall operational costs and benefiting from economies of scale of funds invested in the larger master fund.

When evaluating master-feeder funds, Standard & Poor's assigns ratings to the master portfolio, since the master holds underlying securities of the feeder fund. Standard & Poor's will also assign fund ratings to individual feeder funds that are part of the master fund struc-

ture when requested by the fund sponsor. As with all principal stability fund ratings assigned by Standard & Poor's, master-feeder funds are subject to an evaluation of the creditworthiness of a fund's investments and counterparties, the market price exposure of its investments, sufficiency of the fund's portfolio liquidity, and management's ability and policies to maintain the fund's stable net asset value by limiting exposure to loss. ■

MANAGEMENT

An understanding of the strengths and weaknesses of fund management is essential to any analysis of a managed portfolio rating. The ratings process for principal stability or money market funds includes a meeting with fund officials to understand fund investment objectives, portfolio management techniques, and risk aversion strategies. Standard & Poor's Ratings Services evaluates the effectiveness of fund management in implementing a dynamic investment process consistent with the fund's stated goals and objectives when assessing a fund for a rating.

Standard & Poor's believes that these meetings are key to a meaningful fund rating service. A management assessment considers the following: the experience and track record in portfolio management, operating policies and risk preferences, credibility and commitment to policies, and the extent and thoroughness of internal controls and commitment to oversight. Standard & Poor's judges each fund management team on its own merits. It focuses 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, breadth and depth of staff, and adequacy and level of investment controls. The following sections describe the key areas that are involved in Standard & Poor's analysis of fund management.

Experience

The subtleties of managing a fund that has a 0.5% margin for error require skilled financial 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 fund oversight. It might be acceptable for less experienced personnel to execute trades and make certain investment decisions within strict parameters. However, an experienced money market fund manager should be monitoring all trading and investment 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 fund with a variable share price. Investment policies and strategies that may be prudent for funds with fluctuating NAVs can be disastrous for money market funds. The precision necessary for running a money market fund successfully takes a different mindset from the one that is required for managing other fixed-income vehicles. An experienced fixed-income manager does not necessarily make an effective money market fund manager. Therefore, Standard & Poor's emphasizes the level of experience in managing stable NAV funds in its review of fund management. Lack of experience can result in a lower rating or no rating opinion by Standard & Poor's, or perhaps more stringent rating criteria such as shorter weighted average maturity (WAM), or both.

Operating Procedures and Risk Preferences

Standard & Poor's evaluates the fund manager's operating procedures in conjunction with each principal stability fund 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 responsible for 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. A key role of an investment committee is 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 analy-

sis, 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 clearly define both the fund's investment guidelines and the manager's operating policies.

Funds also benefit from having clear and explicit investment policies regarding the use of variable-rate notes, structured notes, and derivative instruments and other securities having limited liquidity. 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 with handling 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 to do their jobs properly. This leads 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. 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 or accumulating NAV per share. Standard & Poor's considers strong internal controls of fund advisers a key determinant in rating funds. 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.

Pricing policies and NAV deviation procedures. Accurate pricing is a key factor in maintaining a stable NAV. Standard & Poor's expects all investment advisers to be capable of accurately pricing portfolio securities and calculating a fund's actual NAV

in-house, and to do so periodically. 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 principal stability 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 a 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), and 'BBBm' 0.30% (.9970/1.0030).

Depth and adequate training of staff. 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).

Stress-testing capabilities. 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 WAM. This calculation should factor in the influence of sudden or unexpected redemptions in conjunction with the security purchase. In addition, 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.

Asset-flow monitoring. 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. Some of these steps include communication with a fund’s largest shareholders 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.

Trade ticket verification. 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. In addition, Standard & Poor’s views pretrade compliance modules favorably, whether they are in-house or off-the-shelf systems. These systems prohibit portfolio managers from exceeding trade limits prior to making any purchases, significantly reducing the risk of trading errors.

Disaster recovery. Computer systems are vital to managing mutual funds. Standard & Poor’s review of a fund’s controls examines backup computer capabilities. System failure must not 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 hurricanes

hitting Florida 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 funds based on represen-

tations 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.

Fund Governance

Since news of fund-industry trading scandals emerged in September 2003, the SEC has sued more than a dozen of the 25 largest mutual fund complexes and proposed a variety of rules to clean up abuses such as late trading and market timing, the rapid buying and selling of fund shares that can lower performance and raise costs for long-term fund investors. Some of the SEC's proposed reforms include mandating a

Information Needed for a Principal Stability Fund Rating

- Letter requesting a Standard & Poor's rating.
- The most recent prospectus, statement of additional information, and any marketing materials.
- A copy of the most recent annual report.
- A copy of the fund's investment policy, including policies concerning asset eligibility, selection, and evaluation process.
- Policies regarding repurchase agreements, including a copy of the master repurchase agreement(s) and legal representations.
- Policies concerning use of forward commitment contracts to buy and sell securities.
- Policies on leveraging portfolio assets.
- Frequency and method of securities pricing, reporting, risk controls, and oversight process.
- Historical variation between marked-to-market pricing and amortized cost evaluation in terms of share price, monthly, for the past three years (or since the fund's inception if less than three years sold).
- Explanation of any material deviation in the share price from \$1.00 during the past three years.
- Range of weighted average portfolio maturities for each month during the past three years.
- Redemption history on a monthly basis for the past three years, reflecting gross purchases and gross redemptions.
- Proposed/current mix of shareholders (e.g. retail, institutional), and percentage of fund shares held by largest 10 shareholders.
- Current asset size, or proposed asset size.
- Current list of portfolio holdings, or for new funds a hypothetical portfolio, with security descriptions, ratings, CUSIPs, and prices.
- List of securities approved for purchase according to asset type, credit quality, maturity, and sector.
- Level of insurance coverage (Fidelity Bond, Error & Omission, Director & Officer).
- A copy of most recent SEC post-examination letter and fund advisers response letter.
- Biographies and organizational chart of key fund employees.
- Background materials on sponsor, company structure, related companies.

redemption fee on short-term trading in mutual funds, amending Rule 12b-1 to prohibit mutual funds from paying for distribution of their fund shares with brokerage commissions, imposing a mandatory fee on short-term transactions, disclosure in dollar terms of the amount of fees and expenses that shareholders pay, and requiring that

75% of fund directors, including the chairman, be independent of the fund management company. The NASD formed a task force to look at certain fund issues, including directed brokerage and soft dollar arrangements, revenue sharing, and 12b-1 fees, which funds may charge investors to recoup marketing costs. The NASD does

Suggested Agenda for Principal Stability Fund Rating Management Meeting

Overview

1. Brief history of the fund
 - Primary 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 repos
 - Eligible sellers/repurchasers
 - Underlying securities
 - Degree of overcollateralization
 - Perfection of first priority security interest
4. Diversification/concentration
 - Investment mix allowances by type

- Investment mix allowances by credit quality
- Maximum individual holdings by issuer, affiliates, and credit support provider

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
 - Posture on portfolio mix
 - Portfolio mix and its change with market conditions
 - Policy regarding illiquid securities
 - Put agreements, if any, for CP or term repos
 - Other secondary market considerations
3. Redemption experience
 - Recent experience and assumptions relating to maturity structure, if any
 - Receipts versus redemptions
 - Largest weekly redemptions
 - Recent changes in general operations, if any
 - Shareholder base and account characteristics

Pricing policy

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

Operating scenarios

1. Use of securities lending and forward commitment transactions, and accompanying risk management policies
2. Circumstances under which a fund would extend average maturity beyond normal guidelines or alter credit quality
3. Trends in interest rate changes and tolerance of fund assets

Controls

1. Daily modus operandi with respect to investments
 - Procedures for assuring timely purchases and redemptions of shares and timely liquidation of investments
 - Computer applications, adequacy of computer facilities, and computer backup provisions
 - Fidelity bond coverage, errors and omissions insurance, and other liability protection
2. History of any previous back-office problems
3. Time needed to meet shareholder redemption requests
4. Methods of monitoring investments and approved list

Fund Governance

1. What compliance procedures are in place for the fund, and fund management?
2. How often are they reviewed and updated?
3. Is there a defined risk management process in place to ensure funds are managed within their objectives and established risk parameters?

not regulate mutual funds, but it does oversee brokers who sell them.

When rating funds for principal stability, Standard & Poor's considers strong fund governance essential to managing a rated fund. When analyzing fund management, Standard & Poor's Fund Ratings personnel questions fund management in areas such as compliance, investment oversight, and risk management strategies. A sample of the questions considered include the following:

- Is there a compliance manual available?
- How often are compliance policies reviewed and updated?
- Who does the Compliance Officer report to in the organization? Is the Compliance Department separate from portfolio management, sales, and marketing?
- What policies are in place for investments or trading by internal investment managers and the analytical staff and how are they monitored?
- Are written policies and procedures communicated to staff and signed by staff annually (i.e. a Code of Ethics)?
- How does senior management (the CEO and Chief Investment Officer) provide for an appropriate culture to ensure that compliance is viewed as a priority and enforceable?
- Is there a defined risk management process in place to ensure that funds are managed within their objectives and established risk parameters?
- Is there fund portfolio and trading oversight by compliance personnel?
- How are large investments in funds monitored and how much clarity is there on omnibus accounts? ■

Weekly Information Needed to Monitor a Principal Stability Fund Rating

1. Complete Portfolio Surveillance Information Sheet
2. Portfolio Holdings Report
For each security provide:
 - Par value
 - Current market value
 - CUSIP number
 - Full description of investment, including issuer, interest rate, and maturity date
 - Type of investment
 - Insurer or LOC provider, if applicable
 - Percent of portfolio
 - Standard & Poor's rating
 - Terms of floating-rate notes (reset formulas and frequencies)
 - Identification of nontraditional repo, funding agreements, credit linked notes, extendible notes, and other esoteric securities
3. Other Portfolio Activities
Please provide information on all transactions related to the fund, such as:
 - Repos (include counterparty, underlying collateral, and terms)
 - Reverse repos (include counterparty, underlying collateral, and terms)
 - Dollar rolls
 - Futures (list trading exchange)
 - Securities lending program (include list of securities lent out as part of program)
 - Etc.
4. Fund Changes or News
Any additional information related to the fund's operation should be forwarded, such as:
 - Changes in investment policies or operating procedures
 - Current prospectus and statement of additional information
 - Notification of changes to prospectus or statement of additional information
 - Notification of fund name change or mergers
 - Notification of changes in board of directors, senior management, investment adviser, or custodian
 - Annual and semiannual reports
 - All press releases relevant to the fund

Sample Surveillance Sheet for a Taxable Principal Stability Fund Rating

**STANDARD
& POOR'S**

To: _____
 From: _____
 Company: _____
 Tel. _____
 Fax _____

Weekly Portfolio Monitoring Information Sheet for a General Purpose Taxable Principal Stability Fund Rating

Name of Fund: _____

Date of Portfolio: _____

Weighted Average Maturity (for each day of the week)	Date:				
	WAM				
Yield (360 Day Annualized)	7 Day				
	30 Day				

Net Asset Value (per share): no rounding _____
 (Marked-to-Market per Share; Carry to Fifth Decimal)

Total Amount of Shares Outstanding _____

Net Assets (in millions) _____
Gross Assets (in millions) _____
Greatest Net Redemption for the Week _____
 (largest daily outflow minus purchases for that day)

S&P Ratings (% of Gross Assets)

A-1+	
A-1	
A-2	
NR	

Security Types: (% of Gross)	(S&P Code)	
Agency Floating-Rate	AFR	
Agency (Fixed Rate)	AGCY	
Bankers Acceptance	BA	
Corporate Floating-Rate	CFR	
Certificates of Deposit/Bank Notes	DCD	
Commercial Paper	DCP	
Credit Lined Notes	CLN	
Collateralized Debt Obligations	CDO	
Extendible Asset-backed (SLN/TLN)	EABS	
Extendible Commercial Note (corporate)	ECN	
Funding Agreements	FA	
Corporate Note	NOTE	
Money Market Funds	OTHER_MMF	
Promissory Notes	PROM	
Repurchase Agreements**	REPO	
Treasury Bills	TBILL	
Time Deposits**	TD	
Taxable Muni	TMUNI	
Treasury Notes	TNOTE	
Other (Please Specify Below)	OTHER	
Specify> _____		
Specify> _____		
Specify> _____		
Total		100%

Maturity Distribution (% of Gross Assets)

1 day	
2 - 7 days	
8 - 30 days	
31 - 90 days	
91 - 180 days	
180+ days	

Derivatives / Leveraged Position (% Net Assets)

Reverse Repo		%
Security Lending		%
Futures / Forwards		%
Options		%

Please provide a separate list of the above transactions including amount, counterparty and exchange

Total Illiquid/Limited Liquidity Exposure _____ %

Please identify illiquid/limited liquidity securities on the holdings report attached Include Cusip, Issuer, Price, Par, Final Maturity, Expected securities either on report, separate worksheet or by attaching Bloomberg descriptive print-outs.

****Please indicate the counterparty next to the security on the portfolio.**

Please Attach Portfolio Holdings Report, along with Floater Information and Illiquid Limited liquidity Securities Information!

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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 the following:

- 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 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 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 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 and more efficient for funds to use this method than to get actual market prices on a daily basis. Money funds are required

to calculate the market value of their assets periodically 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 buck." 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 the following:

- Weighted average maturity;
- 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

Determination of market price exposure begins 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 approxi-

Protecting money market funds from interest rate swings

In accordance with Standard & Poor’s Principal Stability criteria for rated money market funds, maximum WAM guidelines are engineered to assure minimal NAV fluctuation under most market conditions.

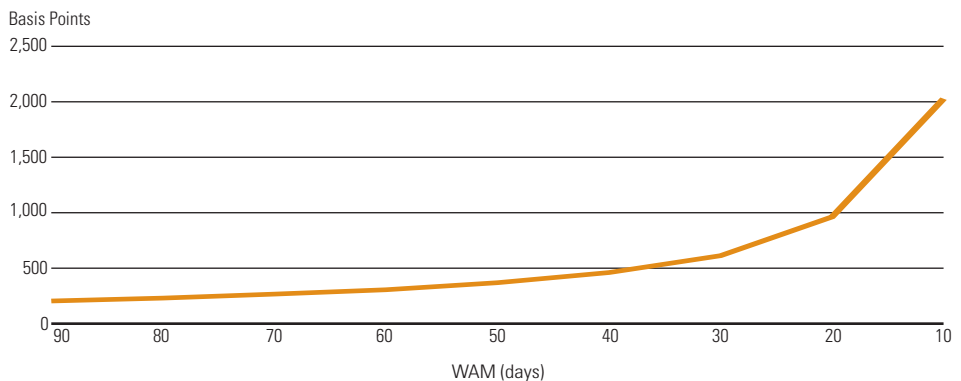
Table 1—NAV Fluctuation

WAM (days)	—NAV—					
	0.9990	0.9980	0.9970	0.9960	0.9950	0.9949
	—Basis point shift—					
90	41	82	122	164	205	209
80	46	92	138	184	230	235
70	52	105	159	210	267	269
60	61	122	183	245	306	307
50	73	147	221	295	369	376
40	92	184	276	398	460	469
30	123	245	367	490	613	625
20	192	384	576	768	962	981
10	405	810	1,215	1,635	2,028	2,066

The relationship between interest rate shifts and NAV volatility has led Standard & Poor’s to restrict ‘AAAm’ rated money market funds to a maximum WAM of 60 days. Chart 1 illustrates the inverse relationship between fund WAM and the minimum positive interest rate shift necessary to cause NAV to fall to a given level. Consider, for example, an elementary model fund that holds one Treasury bill and has a WAM of 90 days in today’s interest rate environment. In this case, an instantaneous upward shift of 205 basis points (bps) would need to occur before the NAV of the model fund would fall to 0.9950. If the same model fund had a WAM of 60 days, it could sustain a 306 bp interest rate shift before its NAV falls to 0.9950.

Chart 1

Minimum Interest Rate Necessary to Drop NAV to \$0.9950 From \$1.00



mately twice the interest rate increase than could a fund with a 90-day WAM, leaving all other factors aside. (Please see sidebar for *Protecting Money Market Funds from interest rate swings*.)

We assess the sensitivity of the market value of the portfolio's assets to interest rate changes, with a 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. Nevertheless, some funds have distinct liquidity needs based on asset size, asset volatility, and shareholder profile, making it difficult for these funds to safely manage with a 60-day maximum 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. We are 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. We consider 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 NAV. Consequently, until a fund has grown to \$100 million with a diversified and seasoned shareholder base, we 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 maximum WAM limits for 'AAm' and 'Am' rated funds set at 75 days and 90 days, respectively.

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 fund's portfolio is critical to maintaining a stable 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, yet illiquid the next day. In determining a fund's rating, we con-

sider 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 great importance in determining a fund's market price exposure, because the degree of liquidity can greatly affect the market value of investments and result in an erosion of a fund's NAV. When analyzing a fund's liquidity, Standard & Poor's takes into consideration the following:

- 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 repo; and
- The portfolio's concentrations by issuers and affiliates.

A fund with a higher proportion of relatively illiquid investments is more susceptible to a sizable decline in its portfolio market value than is 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. Clearly, the greater the demand for an instrument, the more liquid it is.

Nevertheless, some securities can be quite liquid when the issuer or that particular market is performing well. When markets turn (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 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 was and is 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 sizable amount of funding agreements with short-term puts 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 holding “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.

10% Limited Liquidity/Illiquid Basket

Currently, both U.S. domestic money market funds and certain offshore money funds that abide by Rule 2a-7 can elect to classify and hold up to 10% of their assets in an illiquid basket. This basket is intended to provide money market funds with a safe holding place to prevent illiquid securities from causing a deterioration of a money market fund’s NAV during periods of illiquidity for these securities. While rated money market funds continue to be managed conservatively, and thus maintain high ratings, the introduction

of less-liquid securities might result in increased price risk.

In 2003, Standard & Poor’s modified its Principal Stability Fund Rating criteria to address the increased price risk introduced when stable NAV funds invest in securities with limited liquidity by creating a 10% limited liquidity/illiquid basket. This criterion was developed to address a trend of less-liquid securities being introduced into certain stable NAVs, including rated money market funds. We are concerned that occurrences in the market place could create a potentially less-liquid market for these securities and a NAV pricing problem for funds.

The following list of securities should be considered part of a Standard & Poor’s Principal Stability Fund Ratings limited liquidity/illiquid basket. In addition, securities not listed below may still be considered by Standard & Poor’s to possess limited liquidity:

- Funding Agreements exceeding seven days to maturity (unless the fund holds an unconditional put providing for liquidity within seven days);
- Term repurchase agreements exceeding seven days to maturity (unless the fund holds an unconditional put providing for liquidity within seven days);
- Securities denominated in a currency other than a fund’s base currency and swapped back into the fund’s base currency;
- Time deposits exceeding seven days to maturity, unless the deposit agreement has a specific option enabling the holder to break the deposit without a penalty or additional cost;
- Master, promissory notes, and loan participation notes exceeding seven days (unless the fund holds an unconditional put providing for liquidity within seven days);
- Credit-linked notes;
- Money market tranches of collateralized debt obligations exceeding seven days to maturity (unless the fund holds an unconditional put providing for liquidity within seven days);
- Extendible corporate notes where the investor does not possess the option to extend;
- Extendible asset-backed liquidity notes booked to the expected maturity date and

do not meet the five conditions outlined below.

Extendible asset-backed liquidity notes that are booked to their legal final maturity date will not be required to count toward the 10% limited liquidity basket. Additionally, nonagency callable notes (sometimes referred to as “Reverse Extendible Notes”) booked to the call dates, and extendible asset-backed liquidity notes booked to the expected maturity date will be required to count toward the 10% limited liquidity basket for rated Principal Stability funds unless the program meets all of the following conditions:

- Current outstanding issuance balance of at least \$1 billion;
- Issued by a sponsor that has a minimum of three years activity in the securitization market involving the asset classes described below;
- Limited to programs backed by credit card receivables, auto and auto-related assets/receivables, prime residential mortgage loans, or prime home equity loans;
- A minimum of two dealers actively making a market for the program; and
- Issued via a Master Trust Structure or by an issuer/sponsor that has Standard & Poor’s publicly rated investment-grade asset-backed debt outstanding as described above and surveillance data on asset pool performance is publicly available.

We believe these securities can be less liquid due to their relative newness to money markets, limited trading activity or inactive secondary markets, dependency on a single issuer or broker, small number of dealers making a market in the security, customization of the security, or the complex nature of the security. Since liquidity is defined as the speed at which the security can be sold for the price at which the fund has it valued, accurate pricing and a deep secondary market are considered key in the determination and stability of the fund’s overall marked-to-market calculation.

Limited liquid and illiquid securities combined should not exceed 10% of a rated funds total assets. We will continue to evaluate the market and trading activity of these securities and will reevaluate its position and ratings criteria on these limitations. We regularly review our Principal Stability Fund

Ratings Criteria and make appropriate modifications based on developments in the market and Standard & Poor’s views of the risks posed to rated funds.

Standard & Poor’s assigns ratings to money market funds based on the fund’s credit quality and liquidity, and its ability to manage both the market risks and liquidity risks associated with these holdings given its shareholder base. Each money market fund’s liquidity needs and its ability to hold and manage less-liquid securities is considered on a case-by-case basis. A fund with a limited operating history, or with a volatile shareholder base may not be able to effectively manage and maintain a high degree of share price stability with any exposure to securities with limited liquidity. In addition, a fund manager must be able to clearly and effectively demonstrate a thorough understanding of the risks presented by the security and internally price or value the security.

Shareholder Characteristics

A money 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 NAV. Therefore, we carefully review 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 funds are permitted to issue and redeem shares at \$1.00, provided that their market value is between \$0.995 and \$1.005. Because 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 150 bp rise in interest rates causes a 90-day 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 unrealized loss in the fund remains the same, the loss is spread over a smaller number of shares. While sudden 150 bp 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 bps, 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 150 bps, 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, who is apt to chase yields, represents a material percentage of a fund's assets, substantial dilution in share prices is likely because of large and sudden redemptions.

In analyzing money market funds, our review of shareholder constituency encompasses the number, average holding size, type, 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.

We expect that a fund's investments should be tailored to its potential cash-flow

Table 2—Impact of Dilution

Assumptions	
Portfolio asset value:	\$100 million
Weighted average maturity:	90 days
Number of shares:	100 million
Share value:	\$1.00
Share price:	\$1.00
Event 1: Interest rates rise 150 basis points (1.50%)	
Result:	
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
Event 2: In conjunction with Event 1, fund experiences 25% redemption	
Result:	
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

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. We use 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 Sensitivity Analysis, below, and table 3*).

Portfolio structure is also a factor in determining the risk dilution presents to a fund. Funds with a barbelled maturity struc-

ture (heavily weighted in short-term maturities with the remainder in longer-term securities) are more susceptible to the negative effects of shareholder redemptions than are ladderred 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 to avoid taking significant realized losses. This will cause the WAM of the fund to extend, creating greater interest rate sensitivity and exacerbating the negative effects of future redemptions. Ladderred portfolios are less exposed in these circumstances, although they are by no means insulated from rising interest rates and

Multifactor net asset value sensitivity analysis

Standard & Poor's Principal Stability criteria for rating money market funds incorporate analysis of both interest rate sensitivity and redemption/subsription volatility. We have established maximum WAM guidelines, which, under most market conditions, protect against significant market price fluctuation. When WAM values are analyzed in lock-step with redemption/subsription assumptions, 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 250 bp interest rate increase:

Formula 1

$$\begin{aligned} \text{New NAV} &= \text{NAV} - (\text{WAM}/365) * (\text{bp shift})/10,000 \\ 0.99589 &= 1.00000 - (60/365) * (250/10,000) \end{aligned}$$

The next consideration in the model 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

$$\begin{aligned} \text{New NAV} &= ([\text{NAV} + \% \text{ Change}]/[1 + \% \text{ Change}]) \\ 0.99486 &= ((0.99589+[-0.20])/[1+[-0.20]]) \end{aligned}$$

Thus, the NAV of a model fund that experiences a 250 bp interest rate shift and a subsequent redemption 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.

redemptions. As part of the rating process, we consider 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 NAV in-house. Additionally, we request all funds rated for principal stability 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, we believe 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, including those securities that have embedded optionality, two or more dealer bids are suggested.

A Standard & Poor's principal stability rating directly addresses the ability of a fund to maintain a NAV that does not deviate by

Table 3—Standard & Poor's Sensitivity Matrix

Assumptions:		WAM = 30 days				
		Starting Market Value = \$1.00 per share				
BP increase						
300		0.9965	0.9969	0.9973	0.9974	0.9975
250		0.9971	0.9974	0.9977	0.9978	0.9979
200		0.9977	0.9979	0.9982	0.9983	0.9984
150		0.9983	0.9985	0.9986	0.9987	0.9988
100		0.9988	0.999	0.9991	0.9991	0.9992
50		0.9994	0.9995	0.9995	0.9996	0.9996
Redemption		30%	20%	10%	5%	0%
Assumptions:		WAM = 60 days				
		Starting Market Value = \$1.00 per share				
BP increase						
300		0.993	0.9938	0.9945	0.9948	0.9951
250		0.9941	0.9949	0.9954	0.9957	0.9959
200		0.9953	0.9959	0.9963	0.9965	0.9967
150		0.9965	0.9969	0.9973	0.9974	0.9975
100		0.9977	0.9979	0.9982	0.9983	0.9984
50		0.9988	0.999	0.9991	0.9991	0.9992
Redemption		30%	20%	10%	5%	0%
Assumptions:		WAM = 90 days				
		Starting Market Value = \$1.00 per share				
BP increase						
300		0.9894	0.9908	0.9918	0.9922	0.9926
250		0.9911	0.9923	0.9932	0.9935	0.9938
200		0.9929	0.9938	0.9945	0.9948	0.9951
150		0.9944	0.9954	0.9959	0.9961	0.9963
100		0.9964	0.9969	0.9973	0.9974	0.9975
50		0.9982	0.9985	0.9986	0.9987	0.9988
Redemption		30%	20%	10%	5%	0%

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. Nevertheless, 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 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 otherwise illiquid 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 managers should not only be able to determine their own fair value for securities that are difficult to price, but need also 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. ■

SECURITY-SPECIFIC CRITERIA

Standard & Poor's Ratings Services Principal Stability funds ratings (also known as a money market fund rating) analysis focuses on the credit quality of a fund's investments and counterparties, the market price exposure of its investments, and management's ability and policies to maintain the fund's stable net asset value (NAV) by limiting exposure to loss. Standard & Poor's recently published criteria on these areas can be found on www.standardandpoors.com. In addition to these published criteria articles, Standard & Poor's has the following specific Principal Stability fund rating criteria for various securities and asset classes.

Government Agency Concentration

Liquidity analysis is performed on all issues and issuers regardless 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 affect the price and liquidity of 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. 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 widen-

ing on the price of the security is minimal. However, given the small margin for error that stable NAV 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 Principal Stability fund ratings. Generally, Standard & Poor's expects no more than 33 1/3% (one-third) exposure to any single government agency, and when exposures exceed 40%, funds will be expected to maintain lower weighted average maturities (WAMs) and/or increased 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 20 basis points (bps), the impact on the market value of the fund's overall portfolio could be comparable to the effect of market rates rising 10 bps without that spread widening.

Funds with a WAM of 60 days should be able to withstand up to a one-day 300 bps 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. agen-

Weighted Average Maturity Adjustments for Agency Concentrations

To compensate for the potential negative impact from spread widening of highly concentrated government agency positions, Standard & Poor's Principal Stability Criteria has established WAM adjustment factors for money market funds rated 'AAAm' to 'BBm'.

Methodology

Step 1—Standard & Poor's assumes the following worst-case spread widening and instantaneous interest rate rises (see table):

Worst-case Spread Widening and Interest Rate Rises

Rating category	Spread widening (bps)	Interest rate increase (bps)
'AAAm'	100	300
'AAm'	75	260
'Am'	50	225
'BBBm'	25	200

Step 2—The spread-widening number is then multiplied by the fund concentration in the securities of any one agency.

Step 3—The product is then added to the applicable interest rate increase to determine the equivalent interest rate sensitivity that the fund may exhibit.

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 an NAV above 0.9950.

Application

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.

Example

1. Assume an 'AAAm' rated fund has a 50% agency concentration in FHLBs.

2. $(0.5)(100 \text{ bps spread widening}) + (300 \text{ bps interest rate rise}) = 350 \text{ bps}$.

3. At an instantaneous interest rate rise of 350 bps, a fund with a WAM of 52 days or less will remain above 0.995. Because the maximum WAM for the 'AAAm' rating category is 60 days, the adjustment factor is equal to 60 days minus 52 days, or 8.

'AAAm' Level (100 Bps Spread, 300 Bps Movement)

Agency concentration (%)	Adjustment factor (from 60 days)
40-44	7
45-54	8
55-64	10
65-70	11

'AAm' Level (75 Bps Spread, 260 Bps Movement)

Agency concentration (%)	Adjustment factor (from 75 days)
40-44	13
45-54	14
55-64	16
65-70	17

'Am' Level (50 Bps Spread, 225 Bps Movement)

Agency concentration (%)	Adjustment factor (from 90 days)
40-44	16
45-54	17
55-64	19
65-70	20

'BBBm' Level (25 Bps Spread, 200Bps Movement)

Agency concentration (%)	Adjustment factor (from 90 days)
40-44	4
45-54	5
55-64	6
65-70	7

cies given various spread-widening assumptions. The spread-widening and instantaneous interest rate increase assumptions differ for each rating category, as can be seen in the section 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.

Some U.S. government money market funds (sometimes referred to as “government-only” funds) are established to invest only in those U.S. government securities paying interest that is generally exempt from state income taxation. These securities include obligations issued by the U.S. Treasury and certain U.S. government agencies, instrumentalities, or sponsored enterprises, such as the FHLB and the Federal Farm Credit Bank. Because there are only a few U.S. government agencies that meet this criteria, Standard & Poor’s rated government-only money market funds can have a difficult time managing to the strict diversification guidelines. Therefore, for government-only money market funds, Standard & Poor’s criteria permits for exposures beyond its 33% limit

as long as all amounts exceeding the 33% limit mature in 30 days or less.

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 clearly incorporate procedures regarding approval, risk measurement, control, and limits related to investment in structured notes and other less liquid securities. Fund managers holding such securities should 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

Table 1—Correlations of Various Indices

—Monthly data from 11/30/94 to 10/29/04—	
Index	Correlation to Fed Funds
Fed Funds	100.00%
Prime	98.74%
30 Day CP	98.64%
1 Month LIBOR	98.42%
60 Day CP	98.42%
90 Day CP	98.18%
3 Month LIBOR	98.13%
3 Month T-Bill	98.05%
6 Month LIBOR	97.46%
6 Month T-Bill	97.38%
1 year CMT	96.49%
1 year T-Bill (Composite)	96.04%
2 year CMT	93.80%
COFI	93.30%

Source: Bloomberg, LIBOR—London Interbank Offered Rate, CMT—Constant Maturity Treasury, COFI—Cost of Funds Index.

is less than one), or notes linked to lagging indices [e.g., Cost Of Funding 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. Fed Funds Rate. Indices with historically high correlations are: Three-Month Treasury Bill, Six-Month Treasury Bill, Three-Month LIBOR, Six-Month LIBOR, One-Year Constant Maturity Treasury (CMT), Prime Rate, and CP Composite. (*see table 1*)
- 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

VRNs and FRNs present unique market price risks. VRNs and FRNs used in money 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 Fed Funds Rate. By this measure, nontraditional money market fund indices such as the 11th District Cost of Funds Index (COFI) and the two year Constant Maturity Treasury Index are clearly unsuitable, with historical correlations of below 95% (*see table 1*).

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 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% (300 bps) 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

Rate plus 5 bps. 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 30 bps above the Three-Month Treasury Bill Rate. This creates a negative drag of 25 bps, 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.

Callables, Convertibles, and Similar Structures

Callable and convertible notes are designed to perform well in stable interest rate environments. Both callable and convertible notes can present funds with unique market risks including call risk, reinvestment risk, interest rate risk, and liquidity risk. Given these multiple risk 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 noncallable instruments. The added risk is "uncertain" principal maturity. There are several ways that this risk can manifest itself; for example, during periods of rising interest rates, the value of these callable notes will decrease, as would a similar noncallable fixed-income security. During a period of falling rates, however, the price of callable notes will not appreciate in proportion with noncallable 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. 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. Reinvestment risk is present as 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 (monthly, quarterly, and so forth). 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 at 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 second-

ary 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.

When calculating the WAM for Standard & Poor's rated funds, callables and convertibles should 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.

Standard & Poor's will evaluate other structures—such as agency flippers (also known as agency flip-flops), step-ups, and other similar structures—using similar criteria. Further, Standard & Poor's believes that because of the inherent risks present in these securities, rated funds should impose defined 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.

Repurchase Agreements (Repos)

While Standard & Poor's recognizes the importance of the collateral securing these repos, our main focus with regards to their risk has always been on the creditworthiness of the counterparty.

Generally speaking, the underlying securities of most repos are typically ineligible investments for money market funds, either because of their maturity (longer than 397 days) or type (certain mortgage-backed securities or MBS). A fund that takes possession of such collateral will have to sell it as soon as possible. Any delay in a fund's ability to sell the securities could create both liquidity and market risks inappropriate for stable NAV funds. This is especially true for nontraditional collateral, as these security types (noninvestment-grade corpo-

rates, equities, etc.) possess higher potential price volatility than traditional collateral. (See “Nontraditional Repo Collateral”).

The following bullets and table outline specific repo criteria for ‘AAAm’ rated funds:

- 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 overnight and less than or equal to 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 overnight and less than or equal to 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 an unconditional 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 to ensure that the proper type and amount of collateral is received.

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’ (see table 2).

To ensure that repos are properly secured, Standard & Poor’s looks for certain written representations from all funds investing in repos. Regarding perfection 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; or
- 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 (for example, 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, any substituted securities, and all proceeds 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)

Table 2—Summary of ‘AAAm’ Repo Criteria

Credit Quality	Overnight (One day)	Two to Seven Days	> Seven Days
A-1+	*	25%	10%**
A-1	25%	10%	10%**
A-2	0%	0%	0%

*While Standard & Poor’s does not formally propose any diversification guidelines for overnight repos with any single ‘A-1+’ counterparty, we believe it is prudent for a rated fund to maintain a minimal amount of diversification, and thus we would be concerned about a fund that was comfortable holding > 40% in an overnight repo with any single ‘A-1+’ issuer or counterparty. **Aggregate exposure to term repo greater than 7 days is limited to 10%.

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.

Evaluating traditional repo counterparties.

The following criteria relates only to counterparty assessments for repos collateralized by traditional collateral in rated stable NAV 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 stable NAV 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 Principal Stability fund rating purposes only. Likewise, a repo with an entity whose parent is rated ‘A-1’ is viewed as an ‘A-1’ equivalent for Principal Stability fund rating purposes only.

In 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.

Nontraditional repo collateral. U.S. government or U.S. government agency securities including Treasuries, Agency Discount Notes, and Agency MBS are typically used to collateralize repos. However, broker/dealers may pledge “nontraditional” collateral (such as investment and noninvestment-grade corporate debt, money market securities, and even shares of U.S. equities to back their repo obligations) to provide a boost to fund yields. While the growth in nontraditional 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 come with the nontraditional collateral.

Standard & Poor’s Principal Stability fund rating criteria for repos collateralized by nontraditional assets calls for credit quality and diversification guidelines that are consistent with its Principal Stability fund ratings. The guidelines for nontraditional collateral are more restrictive than traditional collateral because the nontraditional collateral does 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 repos collateralized by nontraditional 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 deemed equivalent by Standard & Poor's, 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 repos 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 to qualify for the highest three rating categories ('AAAm', 'AAm', and 'Am').

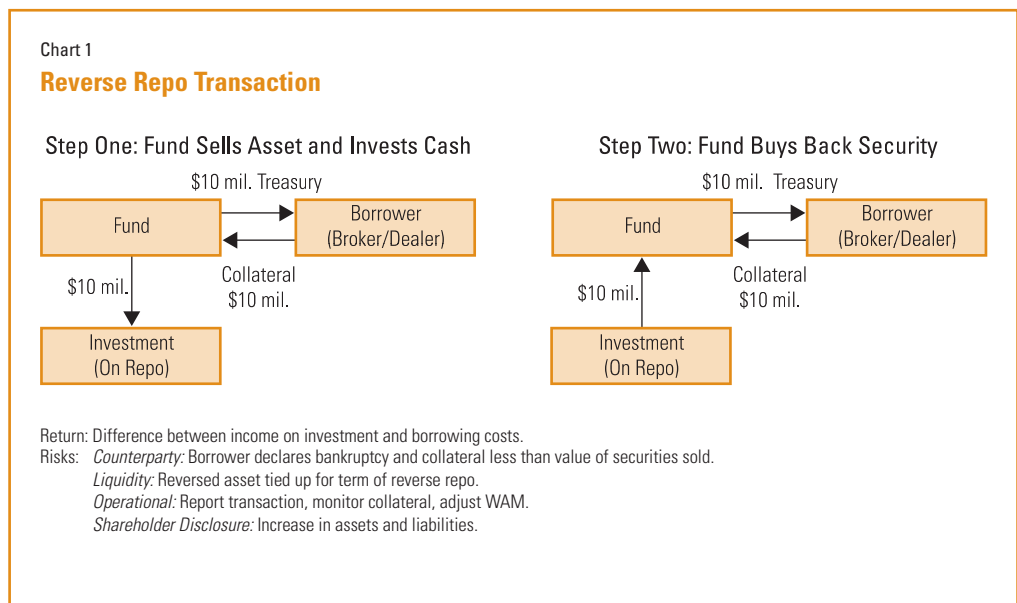
Standard & Poor's diversification criteria for repurchase agreements collateralized by nontraditional assets calls for the maximum exposure to any single counterparty (or broker/dealer) is limited to 5% of total fund assets. This differs from repos collateralized by traditional collateral, as they may 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 nontraditional collateral) to be illiquid, and as such, these should be limited to no more than 10% of total fund assets. Standard & Poor's also expects the underlying collateral in term repo agreements to be priced daily and maintained at the required collateralization levels.

Securities Lending and Reverse Repos

Reverse repos and securities lending are investment strategies used by some 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 funds in the areas of credit and market price exposure in the form of leverage.

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 chart 1).

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 portfolio manager may choose to raise cash via reverse repo 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

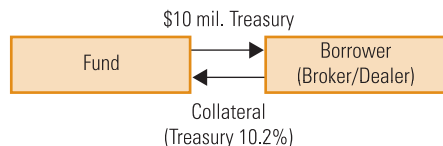
also increase the risk level of a money fund portfolio via leverage. Some fund advisers are now using securities lending, which once was a strategy of large institutional investors. Fund custodians typically orchestrate the securities lending process, but some larger fund companies have in-house lending 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

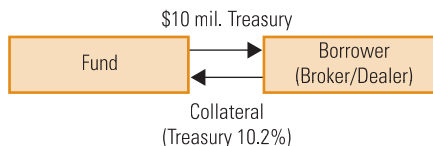
Chart 2

Lending for Securities Collateral: Not Leveraged

Step One: Fund/Custodian Lends Security



Step Two: Security is Returned to Fund

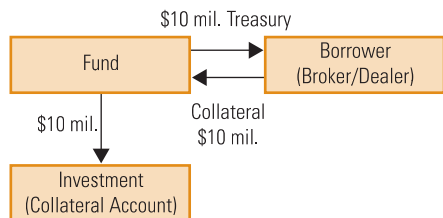


Return: Fee paid to fund to borrow securities; split with custodian if custodian involved.
 Risks: *Counterparty*: Borrower declares bankruptcy and collateral less than value of securities sold.
Legal: Fund not allowed to touch collateral or delays.
Liquidity: Assets tied up for term of loan.
Operational: Cost to monitor collateral.
Disclosure: Footnote on shareholder reports.

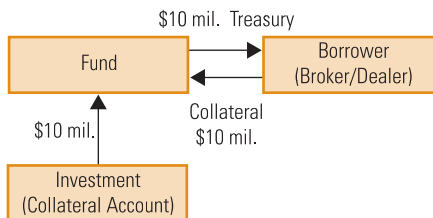
Chart 3

Lending for Cash Collateral: Leveraged

Step One: Fund Lends Security and Invests Cash



Step Two: Fund Returns Cash Collateral



Return: Difference between investment income and loan expense; split with custodian if custodian involved.
 Risks: *Counterparty*: Borrower declares bankruptcy and collateral less than value of securities.
Leverage: Need to adjust WAM for leverage.
Legal: Fund not allowed to touch collateral or delays.
Liquidity: Assets tied up for term of loan.
Operational: Cost to monitor collateral, is WAM reflected correctly.
Disclosure: Should increase assets and liabilities.

a different set of risks than it does if the fund accepts cash collateral (*see chart 2*). 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 chart 3*). 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 the custodian, the fund bears all risks of the assets. Regardless of whether the fund or the 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.

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 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 sensitivi-

ty matrix, as is done with all rated Principal Stability 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' rating 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 seven 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 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 more 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 Principal Stability fund rating guidelines for VRNs.

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 $([80\% \times 60 \text{ days}] + [20\% \times \text{one day}] = 48 \text{ days})$. 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% x one day]). If the fund invested in a 30-day security, the fund's effective WAM would be 68 days (60 + [25% x 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 table 3).

Standard & Poor's expects rated funds to provide the following information with regards 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) and identification of all securities reversed or out on loan.
- Investments from transactions included in portfolio holdings reports as fund assets.
- Weighted average portfolio maturity calculation adjusted for effects of leverage.

Table 3—Impact of Redemptions on Weighted Average Maturity of a Levered Portfolio

Redemption (%) Gross	Effective Leverage Factor	Effects on WAM Investment in Overnight Repo
0	1.25	60
5	1.27	64
10	1.29	69
15	1.31	74
20	1.33	80
25	1.36	82
30	1.4	84
35	1.44	87
40	1.5	90
45	1.57	94
50	1.67	100

Redemption (%) Gross	Effective Leverage Factor	Effects on WAM Investment in 30-day Security
0	1.25	68
5	1.27	70
10	1.29	73
15	1.31	76
20	1.33	80
25	1.36	82
30	1.4	84
35	1.44	87
40	1.5	90
45	1.57	94
50	1.67	100

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

Credit-Linked Notes (CLNs)

Additionally, credit-linked notes and other credit default swaps might present funds with limited liquidity as a result of their inherent credit leverage and their dependency on a specific broker for liquidity. Given these two potential risks, credit-linked notes held by rated money market funds should mature in 13 months or less and be limited to a maximum of 5% of a fund's total assets diversified by 1% per issue and 2% per sponsor/broker. Securities sponsored by a broker/dealer that are not CLNs will not count toward this 2% limit. It is also recommended that a money market fund take the most conservative route when applying its diversification guidelines by counting the exposure to the underlying credit of a CLN (i.e., reference entity) toward their issuer diversification guidelines.

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 at those instruments where the holder of the securities possesses the option because this option allows the holder to more actively manage the maturity risk associated with the issuer. However, for these 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 downgraded. For those securities where it is the issuer's option to extend the maturity, the following guidelines apply.

Extendible commercial notes (ECNs) look very much like traditional CP, but provide a twist. Highly rated corporations issue ECNs for a finite period of time, say 90 days. They differ from CP 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 CP, 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 that they can issue ECNs without a backup 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 notes differ from previously issued short-term notes in which the option to extend was controlled by the noteholders.

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 stable NAV fund to be in, even though it receives a premium for accepting this risk. While the premium rate may seem attractive (i.e., 110% of LIBOR for 'A-1+' credits, 115% for 'A-1' credits), money funds could face liquidity and pricing problems. The fact that the issuer cannot place new CP 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 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 Principal Stability fund criteria calls for rated money 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 CP ratings. *(For Standard & Poor's Principal Stability fund ratings, CP 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

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. U.S. 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.

For information and criteria on extendible asset-backed notes, please see “10% Limited Liquidity/Illiquid Basket” in the “Market Price Exposure” section.

Funding Agreements

Funding agreements are 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 funding agreement contract to receive back its investment in a specified number of days. Most money funds prefer short puts (i.e. seven or 30 days), although issuers have become reluctant in the past few years to issue funding agreements with short puts. Recently, the most common put maturities have been 180 days or one year. Floating-rate funding agreements are typically pegged to one- or three-month LIBOR, but Prime, CP composite index, and one-year constant maturity Treasury have also been used.

When evaluating funding agreements as eligible investments for Principal Stability fund ratings, 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 (i.e. weekly or quarterly); and any put or

demand features. In order for the funding agreement to be an eligible investment for Standard & Poor’s rated stable NAV 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 nonrated subsidiary of a rated insurance company are not eligible for rated stable NAV funds. As for the variable-rate features of the funding agreements, the reset rates should be tied to indices considered to be Principal Stability 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 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) with the ability to put back the contract to the issuing entity upon a lowering of its rating. Standard & Poor’s views this feature favorably since it enhances the fund’s liquidity options.

Since floating-rate funding agreements pay a variable rate of interest on periodic reset dates, U.S. money market funds can take advantage of the maturity shortening provision under Rule 2a-7. Hence, funding agreements with a one-year maturity and 30-day reset dates are treated as 30-day instruments by Principal Stability 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.

Master Notes and Promissory Notes

Master and promissory notes are attractive alternative investment vehicles for Principal Stability funds as they are highly customizable. The investor can select the floating-

rate reset, the 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 notice period).

Promissory notes can be secured or unsecured notes issued by corporate entities to finance short-term credit needs or 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.

Standard & Poor's Principal Stability fund rating criteria for promissory notes and master notes 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.

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. 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 attrib-

uted to the subsidiary's domicile, regulatory environment, or the importance of the subsidiary to the parent company. Given that creditworthiness of a stable NAV fund's investments is a key element in its ability to maintain principal value and limit exposure to loss, Standard & Poor's criteria for highly rated funds requires these notes to possess an explicit rating.

Guaranteed Securities

If a rated fund invests in a security that possesses a guarantee from a rated third party, the rated guarantors should comply with Standard & Poor's credit criteria for the respective fund-rating category. Standard & Poor's will also conduct a review of any guarantees to ensure they meet Standard & Poor's minimum requirements for rated funds.

In reviewing these securities, some points of discussion may include:

1. Whether the guaranty is absolute and unconditional.
2. Whether the guaranty is a guaranty of payment and not of collection.
3. Whether the guarantor agrees to pay the guaranteed obligations on the date due and waives demand, notice, marshalling of assets, etc.
4. Whether the guarantor's obligations are unconditional irrespective of the value, genuineness, validity, or enforceability of the underlying obligation and whether the guarantor waives all circumstance or conditions that would normally release a guarantor from its obligations.
5. Whether the guarantor reinstates in the event any guaranteed payment made by the primary obligor is recaptured as a result of the primary obligor's bankruptcy or insolvency.
6. Whether the guarantor waives its right to subrogation until the guaranteed obligations are paid in full.
7. Whether the guarantor waives rights of set-off, counterclaim, etc.
8. Whether the guaranty is binding on successors of the guarantor.

9. Whether the holders of the guaranteed obligations are explicit third-party beneficiaries of the guaranty.
10. Whether the guaranty can be amended without the consent of the holders of the guaranteed obligations.
11. Whether the guarantor has subjected itself to jurisdiction and service of process in the jurisdiction in which the guaranty is to be performed.

Additionally, the inclusion of these securities in Standard & Poor's rated funds is based on an analysis of the fund's operating history, size, diversified shareholder base, asset diversification, cash-flow volatility, and, most importantly, management's ability to demonstrate its proficiency to manage the risk in these securities to maintain its rating.

Interfund Lending

For those U.S. fund 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 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, and 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 Principal Stability 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.

Collateralized Certificates of Deposit (CDs)

On a case-by-case review of each fund prior to purchase, Standard & Poor's Principal Stability funds ratings criteria allows for limited exposure to collateralized CDs with non-rated (NR) banks or banks rated 'A-2' by Standard & Poor's based on such investments maintaining strict diversification guidelines and prudent levels of overcollateralization. When evaluating funds that invest in collateralized CDs with nonrated banks, Standard & Poor's criteria calls for each CD to be collateralized at 110% with U.S. Treasuries or government securities and limited to 0.25% per bank, and total exposure is managed below 5%. When evaluating funds that invest in collateralized CDs with banks rated 'A-2' by Standard & Poor's, Standard & Poor's criteria calls for the deposits to mature in one day (daily liquidity) and be collateralized at 101% with U.S. Treasury Securities. Collateral must be priced at least weekly, maximum exposure must be limited to 2.5% per bank, the bank's minimum long-term rating must be 'BBB' with a stable outlook, and total exposure is managed below 5%.

Investing in Other Funds

Standard & Poor's Principal Stability fund ratings criteria call for rated funds that invest in other rated funds (also called Registered Investment Companies or RICs in the U.S.) to carry an identical rating. For example, a Standard & Poor's 'AAAm' fund may only invest in Standard & Poor's 'AAAm' funds. Funds registered under Rule 2a-7 are limited to a 10% investment in other Principal Stability Funds. Standard & Poor's Principal Stability Fund criteria for funds that are not registered under Rule 2a-7 (i.e. offshore funds, government investment pools, etc.) 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 in other rated funds. This includes an analysis of the rated fund's position on fee rebates, since investing in another fund will ultimately cause the shareholder to be paying fees on two funds. In addition, Standard & Poor's will review the 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. ■

TAX-EXEMPT MONEY MARKET FUNDS

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

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

The analysis covers the following:

- Security evaluation;
- Market analysis;
- Security selection;
- Asset dispersion;
- Diversification;
- Pricing;
- Ongoing monitoring of credits;
- Sources of secondary market information;
- Response to distressed credit situations; and
- Dedicated resources and staff qualifications.

Discussions focus on the use of NRSRO ratings, assessments and any internal rating systems, and the process in which each fund's approved list of securities is presented and reviewed by the fund's board of directors.

Our 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' or deemed equivalent by Standard & Poor's. The proportions for each rating depend on the fund's rating category; for example, all 'AAAm' rated funds should carry a minimum of 50% in 'A-1+' or equivalent securities and a maximum of 50% of 'A-1' or equivalent securities.

We have specific criteria for assessing securities rated by other NRSROs. We may haircut ratings by other NRSROs based on where each security would likely be classified under Standard & Poor's rating scale.

In most cases, such a haircut would involve a drop by no more than one rating category. However, in some sectors where we believe other NRSROs diverge significantly from Standard & Poor's rating approach, haircuts may be more than one category. Generally, we 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.

While unrated securities are typically assessed on a case-by-case basis, we have recently developed criteria to allow for some exposure of "nonrated" credit or liquidity enhanced securities. Please see the section below titled "Nonrated Credit or Liquidity Enhanced VRDN Policy" for more details on this process.

In considering other rating scales, we make 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 our 'A-1+' equivalent for Principal Stability 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 our 'A-1' equivalent for Principal Stability 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 our 'A-1+' equivalent for Principal Stability 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

our 'A-1' equivalent for Principal Stability Rating purposes only.

Please refer to the "*Municipal Securities Assessment Flowchart*" for more details.

The criteria serve as recommended guidelines for rating tax-exempt funds. In assigning actual ratings, we base our final analytical determination on our review of each fund's portfolio management and credit research areas.

Nonrated Credit or Liquidity Enhanced VRDN Policy

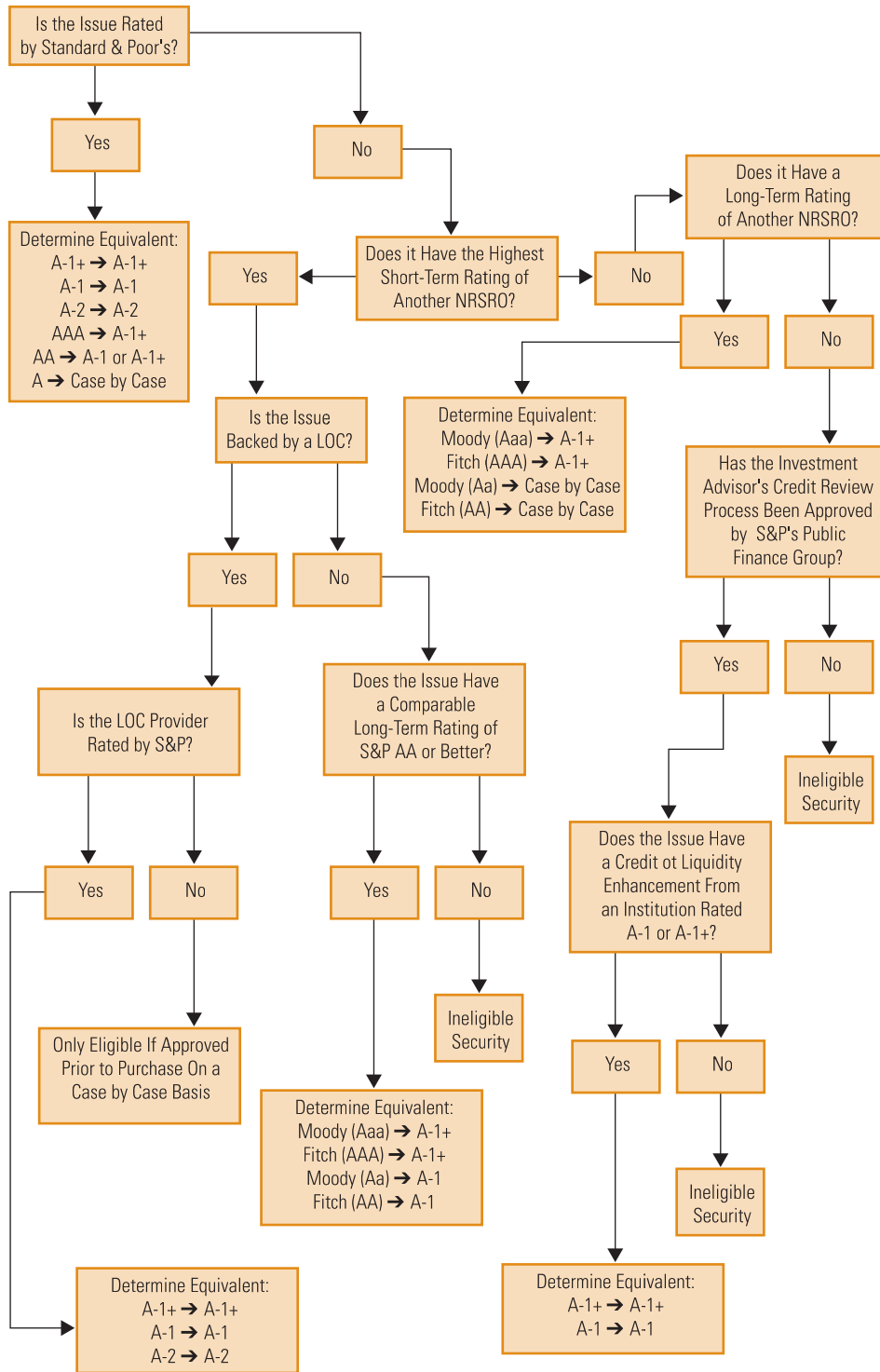
In the past, securities that were not rated by any NRSRO and only possessed a credit or liquidity enhancement were generally not considered to be consistent or covered by Standard & Poor's 'AAAm' tax-exempt Principal Stability Rating criteria because these securities did not undergo a structural review by an NRSRO. Recently, we formalized a policy for making exceptions to this rule to allow for some exposures (typically up to 10% but may vary based on maturity of securities) to nonrated securities in our 'AAAm' rated tax-exempt money market funds if all of the following conditions are met:

- The nonrated security possesses a credit and/or liquidity enhancement from an institution rated 'A-1' or better by Standard & Poor's;
- The investment manager (advisor) undergoes a detailed review of its credit research and analysis policies as it relates to nonrated issues.

This additional assessment will be implemented upon request by the investment advisor. The review will focus on an array of issues surrounding the structure and its legal documentation. The review may include, but is not limited to, the following topics:

- Letter of Credit Analysis or Liquidity Facility Analysis (depending on the type of structure);
- Bankruptcy analysis;
- Preference proofed monies;
- Payment events;
- Required bondholder takeouts (mandatory tenders, redemptions and acceleration);
- Bank facility drawing instructions;
- Bank document termination events;

Standard & Poor's Fund Rating Group Municipal Security Assessment Flowchart



- Reimbursement provisions; and
- Miscellaneous.

For a more expansive discussion regarding the analysis, please refer to the criteria articles entitled “*Public Finance Criteria: LOC-Backed Municipal Debt*” and “*Public Finance Criteria: Commercial Paper and VRDOs*”, published on RatingsDirect on Aug. 12, 2004, and Nov. 17, 2004, respectively.

Additionally, the inclusion of these securities in Standard & Poor’s rated funds is based on our analysis of the fund’s operating history, size, diversified shareholder base, asset diversification, cash-flow volatility, and, most importantly, management’s ability to demonstrate its proficiency to manage the risk inherent in these securities to maintain their Standard & Poor’s rating. ■

PRINCIPAL STABILITY FUND RATINGS CRITERIA FOR OFFSHORE AND EUROPEAN MONEY MARKET FUNDS

The following specific criterion applies specifically for Offshore and European registered funds, or funds that are not subject to SEC’s rule 2a-7.

Maturity of Investments/Offshore & European Funds

The remaining term to maturity of investments should not exceed 397 days. Nevertheless, exceptions can be permitted for securities with floating or variable rates, and for floating-rate ABS. See the criteria below for details.

Liquidity of Investments/Offshore & European Funds

Standard & Poor’s Ratings Services’ Principal Stability Fund Ratings Criteria calls for highly rated funds to maintain at least 90% of their assets in highly liquid money market instruments, thus limiting limited liquidity/illiquid securities to no more than 10% of a fund’s holdings. See the Limited Liquidity section of our criteria for detailed criteria. In addition to the list of securities specified in the Limited Liquidity/Illiquid Basket section of our principal stability ratings criteria, securities denominated in currencies other than a fund’s base currency and swapped back into the base currency of the fund, and time deposits exceeding seven days to maturity are also considered to possess limited liquidity, and should be considered part of the 10% limited liquidity basket. Deposits greater than seven days that possess

an option by the holder to “break the deposit” without a penalty or additional cost may be excluded from the 10% limited liquidity basket.

Diversification/Offshore & European Funds

Fund diversification guidelines call for no more than 25% per issuer for securities maturing in one day (collateralized overnight repurchase agreements with ‘A-1+’ rated dealers are permitted up to 40%), 10% per issuer for securities maturing in seven days or less, and 5% per issuer for securities maturing in more than seven days. Maximum aggregate exposure to any one issuer is limited to 25%; for example, if a company invests 5% in CP of Issuer A, the maximum amount of overnight investments with that issuer is 20%.

Diversification restrictions may be adjusted for funds operating in developing money markets or those with small asset bases that reduce the maturity of these investments, and rely on the highest quality names (A-1+). OECD government issuers rated ‘A-1+’ by Standard & Poor’s are excluded from the diversification condition, although in the case of single OECD issuers, diversification of issues should be included.

Floating/Variable Rate Securities/Offshore & European Funds

The maximum final maturity of any floating and variable-rate securities held by an 'AAA' rated fund is limited to no more than 397 days. Nevertheless, sovereign issues rated 'AA' or better, maturing up to two years from time of purchase, are eligible for highly rated funds. We may also consider FRNs/VRNs for issuers other than 'AA' rated sovereigns with final maturity greater than 397 days but no more than two years to be eligible on a case-by-case basis. All such FRNs/VRNs must possess a Standard & Poor's short-term rating of 'A-1+'. If the issuer does not possess a short-term rating, a Standard & Poor's long-term rating of 'AA' or better is required.

A fund's total holdings of all such VRNs is limited to no more than 5% per issuer and no more than 10% of net assets of the fund. Additionally, these investments should be publicly issued (not privately placed) liquid issues (i.e. with established secondary market activity and readily available and accurate pricing). We will consider the extension of the maturity range of VRN holdings for rated funds based on the fund's ability to maintain ample liquidity and will consider the fund's total asset size, diversification of the shareholder base, and types and liquidity of other assets held by the fund, and the fund manager's ability to perform initial and ongoing credit risk analysis on the securities in question.

Additionally, we have developed the following criteria for floating-rate ABS:

Floating-rate credit cards ABS. Our criteria enables rated money market funds to invest in certain credit card ABS with scheduled maturity dates of two years or less as outlined below. While there is extension risk present in these securities, the risk of extension is remote. Managers of rated funds must be able to evaluate the risk of extension and analyze the credit-spread duration of the extended notes and manage these risks within the spirit of Standard & Poor's Principal Stability Fund Rating Criteria. Eligible floating-rate credit card ABS must meet all of the following characteristics:

- Issued by prime master trust programs;
- Rated 'AAA' by Standard & Poor's and not currently on CreditWatch;
- Maximum scheduled maturity* of two years;
- Maximum 5% per issuer;
- Maximum 5% per servicer;
- If expected maturity is beyond 397 days, these holdings should be counted toward the 10% limit for 397-day to two-year FRN basket; and
- If the issue goes into amortization, or if the performance of the underlying assets deteriorates, indicating a higher probability of amortization, these holdings should be counted toward the limited liquidity basket and the 10% limit for the 397-day to two-year FRN basket.

*Scheduled maturity (also called expected maturity) refers to the date written into the documentation of the credit card transaction; failure to repay principal in full by this date triggers amortization of the securities. Note, however, that nomenclature may vary from transaction to transaction.

Floating-rate auto ABS. Our criteria for floating-rate auto ABS securities eligible for purchase in a highly rated Standard & Poor's money market fund must meet all of the characteristics outlined below. As with floating-rate credit card ABS, managers of Standard & Poor's rated funds must be able to evaluate the risks associated with these securities and demonstrate their ability to manage these risks within the spirit of Standard & Poor's Principal Stability Fund Rating Criteria.

- Issued by U.S. ABS prime auto programs;
- Rated 'AAA' by Standard & Poor's and not currently on CreditWatch;
- Maximum "legal" final maturity of two years;
- Maximum 2.5% per issue/tranche;
- Maximum 5% per issuer;
- Maximum 5% per servicer;
- If legal final maturity is beyond 397 days, these holdings should be counted toward the 10% limit for 397-day to two-year FRN basket; and
- Exposure must be accounted for under the limited liquidity basket.

Please note that for auto ABS, “scheduled” maturity guidelines similar to those outlined for credit card ABS may be considered for approval on a case-by-case basis if the auto ABS program is set up as a master trust-type structure and other program structural characteristics have been reviewed (*see comments under “Other ABS Asset Classes” below*). European auto loan ABS may also be considered, but only on a case-by-case basis. European auto loan ABS are not as homogenous an asset class as U.S. auto loan ABS, and transactions may have structural variations such as master trust structures, the inclusion of auto leases, or longer maturity guidelines for eligible loans (*see comments under “Other ABS Asset Classes” below*).

Other ABS asset classes. We are comfortable to extend the criteria to allow prime credit card master trust transactions, partly because of the availability of statistics on pools of credit card receivables over the significant time since the first credit card transactions were issued. The analysis indicates that consistently high monthly repayment rates coupled with the structural features such as amortization triggers will keep the extension risk of eligible credit card securities within acceptable limits. Securities in certain other ABS asset classes may also have scheduled or expected maturity dates shorter than two years, but legal final maturity dates beyond two years. Nevertheless, it is unlikely that we will be able to consider such securities for inclusion in rated money market funds unless there are reliable statistics on the underlying receivables over a significant period of time. In addition, the receivables should have repayment rates consistent with the short investment horizon of money market funds, and the securities should be structured in a way that limits extension risk. Lastly, all nonsovereign floating-rate bonds should be publicly (not privately) placed liquid issues (i.e., established secondary market), and each fund should limit its exposure to the total amount of the outstanding issue.

Accumulating Net Asset Value (NAV) Funds

Like \$1.00 per share NAV or principal stability ratings, Standard & Poor’s accumulating NAV principal stability ratings address a fund’s capacity to maintain principal stability and the fund’s ability to limit exposure to principal losses due to credit, market, and/or liquidity risks.

In monitoring an accumulating fund’s NAV, we review the daily published share price of each rated fund to make sure that there is a constantly increasing NAV and that if there is a decrease, it does not deviate more than the following percentages from its highest point: ‘AAAm’, 0.15%; ‘AAm’, 0.20%; ‘Am’, 0.25%; and ‘BBBm’, 0.30%. If a fund’s share price deviates beyond the amounts listed above, we will ask the fund for a daily pricing/marked-to-market NAV calculation. It is important to note Standard & Poor’s principal stability rating on an accumulating NAV fund does not address decreases in NAV due to periodic distribution of accrued income.

In addition to receiving the daily-published share price, we request a weekly calculation of the value of assets in the fund, calculated on a marked-to-market value basis rather than an amortized cost basis. This is an important element of the surveillance as this allows us to monitor the ability of the fund to repay investor’s original capital, while continuing to offer yield independently. Many money-market funds in Europe accumulate rather than distribute interest, and we have previously monitored the funds’ ability to maintain a continually increasing unit price. As such, we ask all rated accumulating NAV funds to calculate an equivalent stable share value (i.e. 1.00) by dividing net assets calculated on a marked-to-market value basis by net assets calculated on an amortized cost basis and express this figure to five decimal places.

Custodian

Generally, a rated fund’s custodian should be rated at least ‘A-2’ by Standard & Poor’s or be deemed equivalent to ‘A-2’ in consultation with Standard & Poor’s fund analysts.

Nevertheless, if the legal and regulatory framework for a domicile where assets held by a custodian of rated funds proves for clear segregation and protection of all fund assets, with quick and timely retrieval of those assets in the event of the custodial bank insolvency, then a lower minimum rating requirement may be acceptable for the

custodial bank. Domiciles that have sufficient legal and regulatory framework in place to provide for the safety of assets held with custodians include for example: Australia, Bermuda, Cayman Islands, Channel Islands, Ireland, Japan, Luxembourg, Mexico, United Kingdom, and the United States. ■

FUND CREDIT QUALITY RATING CRITERIA

A Standard & Poor's Ratings Services fund credit quality rating captures a fund's overall exposure to default risk. When assigning a credit quality rating, Standard & Poor's evaluates the fund's portfolio credit risk and conducts a qualitative assessment of fund management's credit procedures. Fund credit quality ratings are based on a credit matrix approach derived from Standard & Poor's historical default and ratings transition studies and a detailed examination of both a fund's management and its credit analysis. Standard & Poor's fund credit quality criteria calls for the assets of a fund and its counterparties to be consistent with the fund credit quality rating.

The assessment is based on the credit quality and/or ratings of the investments held by the fund, as well as the credit quality of the counterparties with which the fund engages in market transactions, such as swaps or repurchase agreements. To evaluate a fund's overall level of protection against losses associated with credit risk, we apply the factors and scores from the fund credit quality matrix table below to the fund's portfolio holdings. These credit factors and fund credit quality ('f' subscript) scores are derived from our historical ratings stability and ratings transition studies. The credit factor for each of the long-term rating categories (e.g., 'AAA,' 'AA,' 'BBB') were derived from the singular, discrete, worst-case one-year default rates experienced during the period from 1981 through 2004. The matrix is essentially a set of credit factors for each rating

category (e.g., 'AAA,' 'AA,' 'BBB') and a set of credit scores for each of the 'f' fund credit quality ratings categories (full categories and + (plus) and - (minus) categories). To calculate a fund's credit score, the credit factors are applied to (multiplied by) the aggregated percentage of securities held in each rating category. The sum of the products results in the overall fund credit quality.

Maturity buckets were created for the factors of "long-term" securities maturing in one year or less and the factors for short-term rating categories and were added to the Credit Matrix. The credit factors for each maturity bucket range from less than 90 days, 90 days to 365 days, and greater than 365 days and recognize that the probability of default decreases as a security nears maturity. Standard & Poor's is currently evaluating the

treatment of average life versus final maturity of ABS/MBS in the credit matrix (see table).

It should be noted that fund credit quality ratings are different from the traditional credit ratings (e.g., issuer credit ratings) that we assign to bonds or debt issued by a corporation or issuer. The fund credit quality rating does not address a fund's ability to meet "payment obligations."

A fund credit quality rating is not a recommendation to purchase, sell, or hold a security, inasmuch as it is not a comment on the market price, yield, or suitability for a particular investor. The ratings are based on current information furnished by the fund or obtained from other sources we consider reliable. We do not perform an audit in connection with any rating and may, on occasion, rely on unaudited

Standard & Poor's Fund Credit Quality Rating Matrix

To calculate a fund's credit score, multiply the % the fund holds in each bucket by the corresponding factor. Take the sum of the results to determine the fund's overall credit score. For example, if a fund held 50% in 'AAA' > 365 days, 25% in 'AA' > 365 days, and 25% in 'A+' < 90 days, the contribution to score would be 0+5+0 totalling 5, which corresponds to a 'AAAF' credit rating.

Important note: Please use legal final maturity for all securities (including floating-rate securities) or as otherwise indicated in the criteria.

Rating	—Factors—			Contribution to Score
	< = 90 days	> 90 but < = 365 days	> 365 days	
'AAA'	0.00	0.00	0.00	
'AA+'	0.00	0.00	20.00	
'AA'	0.00	0.00	20.00	
'AA-'	0.00	0.00	20.00	
'A+'	0.00	0.00	50.00	
'A'	20.00	20.00	50.00	
'A-'	20.00	20.00	50.00	
'BBB+'	20.00	50.00	250.00	
'BBB'	50.00	50.00	250.00	
'BBB-'	50.00	250.00	250.00	
'BB+'	1000.00	1000.00	1000.00	
'BB'	1000.00	1000.00	1000.00	
'BB-'	1000.00	1000.00	1000.00	
'B+'	4000.00	4000.00	4000.00	
'B'	4000.00	4000.00	4000.00	
'B-'	4000.00	4000.00	4000.00	
'CCC+'	20000.00	20000.00	20000.00	
'CCC'	20000.00	20000.00	20000.00	
'CCC-'	20000.00	20000.00	20000.00	
'A-1+'	0.00	0.00		
'A-1'	0.00	0.00		
'A/A-2'	20.00	20.00		
'A-/A-2'	20.00	20.00		
'BBB+/A-2'	20.00	50.00		
'BBB/A-2'	50.00	50.00		
'BBB/A-3'	50.00	50.00		
'BBB-/A-3'	50.00	250.00		
Totals =				0.00

Note: Please see scoring table on page 57.

information. The ratings may be changed, suspended, or withdrawn as a result of changes in, or unavailability of, such information, or based on other circumstances.

Qualitative Credit Overlay Process

A fund's credit quality matrix score, however, is only part of the credit quality rating equation. We also conduct face-to-face review meetings with fund management staff focusing on its internal credit analysis, security evaluation process, and ongoing security surveillance procedures. Once a credit score is derived from the matrix, we conduct a meeting with the fund's credit staff to examine the depth and quality of their analysis and consistency of the approach and to understand the manager's credit risk tolerance. The goals here are to review the suitability of the organization structure to meet their credit objectives; to examine their credit policies as to purpose, focus, and consistency; and to review the credit approval and surveillance process for effectiveness of policy implementation, consistency of analysis, and independence. The rating of funds managed by exceptionally strong teams may be enhanced to reflect the manager's overall credit analysis strength.

Scores	Rating	Fixed Score
0 - 7	'AAA'	7
8 - 10	'AA+'	10
11 - 20	'AA'	20
21 - 25	'AA-'	25
26 - 35	'A+'	35
36 - 50	'A'	50
51 - 90	'A-'	90
91 - 150	'BBB+'	150
151 - 250	'BBB'	250
251 - 450	'BBB-'	450
451 - 775	'BB+'	775
776 - 1000	'BB'	1000
1001 - 1850	'BB-'	1850
1851 - 2520	'B+'	2520
2521 - 4000	'B'	4000
4001 - 7800	'B-'	7800
7801 - 14700	'CCC+'	14700
14700 +	'CCC'	20000

Counterparty Criteria

Standard & Poor's has established minimum credit quality guidelines for counterparties that engage in market transactions with credit-rated and volatility-rated funds. These market transactions may include, but are not limited to, repurchase agreements (repos), reverse repos, forward purchases, forward exchange contracts, swaps, and other hedging positions. A counterparty's failure to meet its obligations contracted with a fund may impair the successful outcome of its intended objectives. Due to this risk, Standard & Poor's criteria calls for a counterparty's minimum rating to be no less than one full rating category below the fund's rating for transactions spanning one year or longer. For example, 'AAAf' rated funds would need to use 'AA' or better rated entities for transactions equal to or greater than one year. Counterparty criteria for all rating categories are as follows:

'AAAf'—long-term transactions (i.e., one year or longer)—'AA' or better. Short-term (i.e., less than one year): 'A-2' or better for overnight transactions; 'A-1' or better for longer than overnight.

'AAf'—long-term transactions (i.e., one year or longer)—'A' or better. Short-term (i.e., less than one year): 'A-2' or better for overnight transactions; 'A-1' or better for longer than overnight.

'Af'—long-term transactions (i.e., one year or longer)—'BBB' or better. Short-term (i.e., less than one year): 'A-2' or better.

'BBBf'—long-term transactions (one year or longer)—'BBB' or better. Short-term (i.e., less than one year): 'A-3' or better.

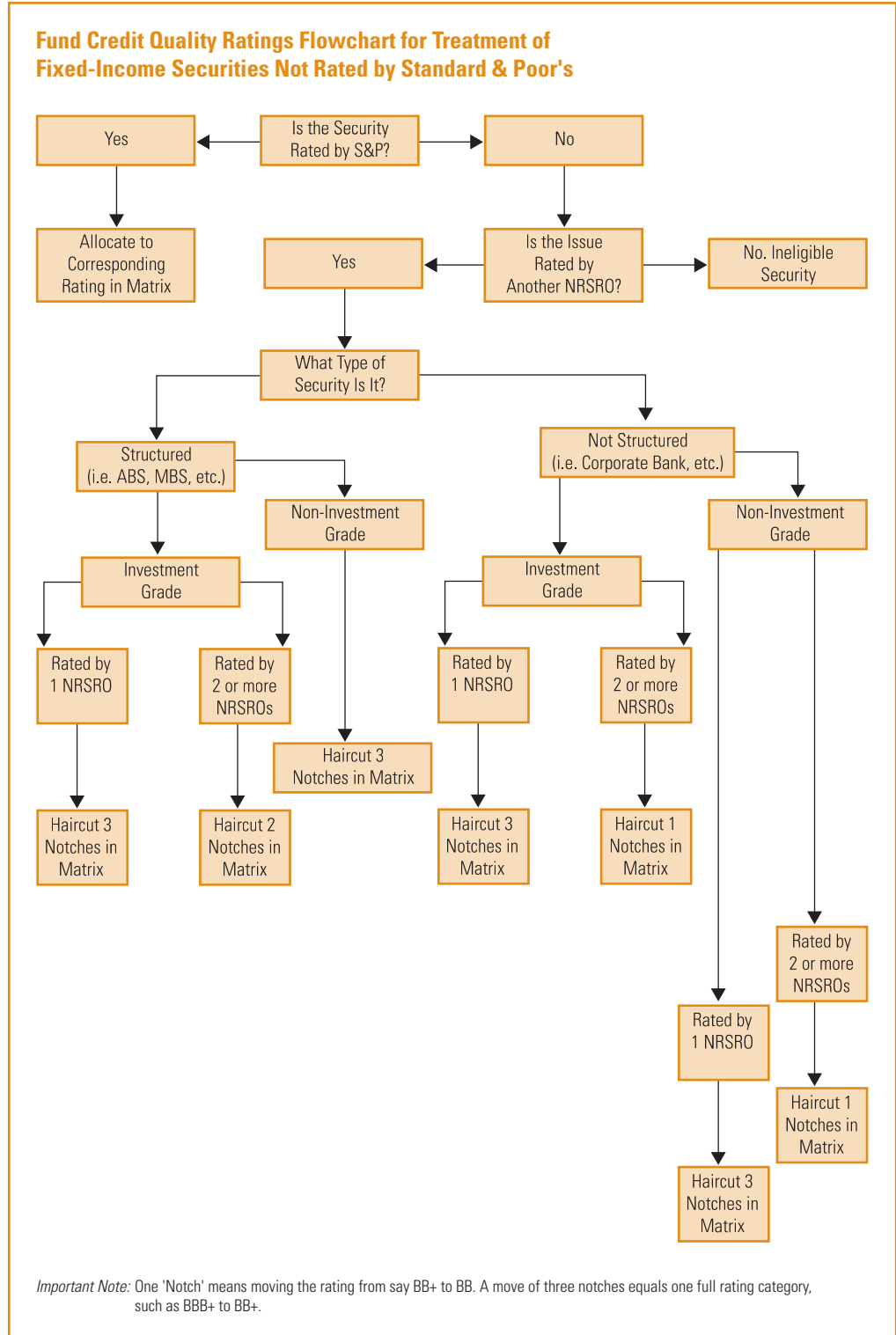
Global Policy for the Treatment of Non-Standard & Poor's Rated Issues in Rated Bond Funds

Since fund credit ratings reflect Standard & Poor's opinion regarding the level of protection a fund provides against default, we must be able to assess the creditworthiness or credit exposure of all securities held by a rated fund. Securities that are not rated by Standard & Poor's fall into two categories: securities that are rated by another nationally recognized statistical rating agency (NRSRO) and securities

that are not rated by any NRSRO. We look at these two cases independently of each another.

Securities that are not rated by any rating agency must obtain a credit assessment from

Standard & Poor's and be deemed eligible on an individual case-by-case basis. Securities rated by other rating agencies, but not by Standard & Poor's, are typically "notched



down” or “haircut” for purposes of the credit matrix score. This haircut recognizes that ratings assigned by other rating agencies often diverge by up to one full rating category. Securities that are rated by other nationally recognized statistical rating organizations (NRSROs), but not rated by us, may be considered eligible if there is an analytic basis for considering these securities as having comparable credit quality. In conjunction with this analysis, Standard & Poor’s will conduct a detailed review of each fund’s internal credit analysis and security evaluation, asset selection, and credit surveillance procedures. For managers with the adequate-to-strong credit analysis, securities that are not rated by Standard & Poor’s may be subject to a one-rating category haircut with the following provisions (*see “Fund Credit Quality Ratings Flowchart for Treatment of Fixed-Income Securities Not Rated by Standard & Poor’s”*).

Structured Finance securities that are not rated by Standard & Poor’s but are rated by another NRSRO are haircut by three notches (or one full rating category) for purposes of the credit fund matrix to determine the fund’s credit score. If the security is rated by two NRSROs, the haircut is applied from the lower of the two ratings. The only exception to this would be for investment-grade Structured Finance securities (ABS, MBS, etc.) that are rated by two NRSROs; these securities are subject to a haircut of two notches. Any specialty Structured Finance security such as Stadium Finance, Project Finance, Future Flow issues, and asset types listed below must be evaluated by us on a case-by-case basis to determine the appropriate haircut given the securities credit risk.

Non-Structured Finance securities not rated by Standard & Poor’s that are rated by one NRSRO are subject to a three-notch adjustment (or one full rating category) for input into the fund credit matrix. If the security is rated by two NRSROs, the following haircut applies from the lower of the two: one notch for investment-grade bonds and two notches for noninvestment-grade bonds.

Total exposure to securities subject to haircutting in a rated bond fund should generally not exceed 25% with no more than 5% in any one issuer; however, the qualitative over-

lay assessment (*please refer to the flowchart*) may allow for more flexible or restrictive limits depending on the analysis.

The following asset types must be reviewed by Standard & Poor’s to determine the creditworthiness and credit factors on a case-by-case basis:

- Non-U.S. Structured Finance securities
- Guaranteed securities
- CDOs of Structured Finance and real estate securities

Fund Credit Quality Ratings Definitions

‘AAAf’

The fund’s portfolio holdings provide extremely strong protection against losses from credit defaults.

‘AAf’

The fund’s portfolio holdings provide very strong protection against losses from credit defaults.

‘A’f’

The fund’s portfolio holdings provide strong protection against losses from credit defaults.

‘BBBf’

The fund’s portfolio holdings provide adequate protection against losses from credit defaults.

‘BBf’

The fund’s portfolio holdings provide uncertain protection against losses from credit defaults.

‘B’f’

The fund’s portfolio holdings exhibit vulnerability to losses from credit defaults.

‘CCCf’

The fund’s portfolio holdings make it extremely vulnerable to losses from credit defaults.

+ or –

The ratings from ‘AAf’ to ‘CCCf’ may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

- CBOs of CDOs
- CLOs of distressed debt
- Mutual fund fee securities
- Catastrophe bonds
- First-loss tranches of any securitization
- Synthetics
- Synthetic CBOs
- Re-REMICs
- Market value CDOs
- Net interest margin securities

Treatment of Collateralized CDs. If a fund invests in nonrated CDs, the following criteria apply:

- Maximum of 10% of the portfolio
- Collateral must be priced weekly
- Collateral must be held in the name of the fund with the custodian
- Depending on the collateral type, the following applies
- For U.S. Treasury or Agency collateral with a maximum final maturity of five years
- Only 100% collateralization is required
- For all other collateral that is not a U.S. Treasury or Agency security with a maximum maturity of five years
- Must be rated at 'AA' by Standard & Poor's
- Must be overcollateralized at 105%

Funds Investing in Money Market Funds

Standard & Poor's recognizes that short duration or enhanced cash vehicles may use money market funds to invest short-term assets for liquidity. As a result, we have established the following guidelines for funds investing in money market funds:

If the money market fund is rated 'Am' or better by Standard & Poor's, the money market fund can be considered 'AAA' equivalent for the purpose of the fund credit quality matrix and is limited to 25% per fund.

If the money market fund is not rated by Standard & Poor's (either unrated or another NRSRO rated) and is regulated under 2a-7, the money market fund should be considered 'AA' equivalent for the purpose of the credit matrix and is limited to 5% per money fund adviser and 25% in total.

An unrated, non-2a-7 money fund is not eligible for a rated bond fund.

Leverage in Rated Funds

Fixed-income portfolio managers leverage portfolios by borrowing money at the short-term financing rates and investing in longer- or higher-yield securities in an attempt to increase total returns. Leverage can present more risk by increasing a fund's duration and price exposure. Standard & Poor's has highlighted the criteria below for rated funds engaging in leverage-type transactions.

Reverse repurchase agreements and dollar rolls. In evaluating the risks to the portfolio presented by the reverse repo positions, Standard & Poor's considers the duration risk of the collateral as well as the duration of the securities purchased with the borrowed cash. Investments purchased through reverse repos may extend the average duration of a fund's portfolio and thereby increase the risk-equivalent exposure in dollars. In general, an increase in a fund's leverage position will increase its risk and return exposure.

Dollar rolls are similar to reverse repo positions in the MBS market in that they allow investors to take a leveraged position in mortgages.

Standard & Poor's criteria generally follows the Investment Company Act of 1940, which limits a fund's leverage to one-third of total portfolio assets. In cases where funds utilize leverage greater than one-third of total portfolio assets, Standard & Poor's fund volatility rating analysis will reflect the increased leverage.

Futures and Options

Treasury futures and options are powerful tools that fund managers can use to adjust a fund's interest rate exposure. Futures and options can be used to take active bets on the direction of interest rates, to match target duration, or to hedge an existing cash or futures position. When evaluating the volatility profile of a fund's investment portfolio, Standard & Poor's analyzes the risk presented by the duration of futures and options positions to determine how it affects the interest rate sensitivity of the fund. In addition, we require that rated funds must use recognized exchanges. ■

FUND VOLATILITY RATING CRITERIA

Standard & Poor's Ratings Services' Fund Volatility Ratings are designed to rank or designate fixed-income funds according to the degree to which they are exposed to the factors that ultimately lead to share price and return volatility. The volatility ratings scale, which ranges from 'S1' (lowest sensitivity) to 'S6' (highest sensitivity), expresses our current opinion of a fixed-income fund's sensitivity to changing market conditions. The volatility profiles of the first four categories ('S1' through 'S4') are measured and expressed on a relative basis to established government indices with different maturity bands to provide investors with market benchmarks for risk and return comparisons.

Standard & Poor's evaluation of funds for volatility ratings includes the following:

- Portfolio risk analysis;
- Historical return analysis; and
- Management assessment.

Portfolio risk and historical return analyses often yield similar results and reflect a long-term commitment to a particular investment objective and risk-tolerance level by the fund's adviser and portfolio manager. Where there are significant differences between the current risk and historical return profiles, management assessment becomes particularly important. Discussions with fund management about investment policies and strategies, asset selection, internal research capabilities, and portfolio risk monitoring help us to assess the fund's current and ongoing risk profiles. The primary goal is to evaluate the

adviser's effectiveness in maintaining an investment policy that is consistent with the fund's stated investment objectives and investors' expectations.

The ratings analysis focuses on measuring quantifiable portfolio risk factors, including interest-rate risk, yield curve risk, credit risk, liquidity risk, options risk, and concentration risk. In addition, we evaluate the pool's total return historical volatility. This review involves two types of analysis. First, the identification centers on the level of volatility and distribution of monthly returns of the pool over a minimum of 36 months in relation to certain fixed-income asset classes and indices that Standard & Poor's tracks on a continuing basis. The second analysis is focused on understanding how past volatility relates to the pool's investment objectives, the portfolio

construction process (including risk controls), and the fund's outcome as a result of market developments that occurred during the period under review. The relevance of this part of the analysis in the final volatility rating will depend on the second step in the rating process, or the portfolio analysis.

The analysis of current portfolio risk is undertaken to confirm (or not confirm) the

continuation of past investment policies and their attendant risks. Portfolio analysis is designed specifically to evaluate whether the fund has a greater chance of losing more money (i.e., experience greater volatility) in the short term than historical volatility of returns would suggest. An abnormal short-term loss is one that is inconsistent with the fund's history, current market conditions, or

Fund Volatility Ratings Definitions

S1

Funds that possess low sensitivity to changing market conditions are rated 'S1'. These funds possess an aggregate level of risk that is less than or equal to that of a portfolio comprised of government securities (government securities—for 'S1' through 'S4' categories—are intended to signify the most liquid, highest-quality securities issued by a sovereign government) maturing within one to three years and denominated in the base currency of the fund. Within this category, certain funds are designated with a plus sign (+). This indicates the fund's extremely low sensitivity to changing market conditions. These funds possess an aggregate level of risk that is less than or equal to that of a portfolio comprised of the highest-quality fixed-income instruments with an average maturity of one year or less.

S2

Funds that possess low to moderate sensitivity to changing market conditions are rated 'S2'. These funds possess an aggregate level of risk that is less than or equal to that of a portfolio comprised of government securities maturing within three to seven years, and denominated in the base currency of the fund.

S3

Funds that possess moderate sensitivity to changing market conditions are rated 'S3'. These funds possess an aggregate level of risk that is less than or equal to that of a portfolio comprised of government securities maturing within seven to 10 years and denominated in the base currency of the fund.

S4

Funds that possess moderate to high sensitivity to changing market conditions are rated 'S4'. These funds possess an aggregate level of risk that is less than or equal to that of a portfolio comprised of government securities maturing beyond 10 years and denominated in the base currency of the fund.

S5

Funds that possess high sensitivity to changing market conditions are rated 'S5'. These funds may be exposed to a variety of significant risks including high concentration risks, high leverage, and investments in complex structured and/or illiquid securities.

S6

Funds that possess the highest sensitivity to changing market conditions are rated 'S6'. These funds include those with highly speculative investment strategies with multiple forms of significant risks, with little or no diversification benefits.

The ratings are based on current information furnished by the fund to Standard & Poor's or obtained by Standard & Poor's from other sources it considers reliable. We do not perform an audit in connection with any rating, and may rely on unaudited financial information. The ratings may be changed, suspended, or withdrawn as a result of changes in, or unavailability of, such information, or based on other circumstances. The rating is not a recommendation to purchase, sell, or hold any security held or issued by the fund, inasmuch as it does not comment on market price, yield, or suitability for a particular investor.

the fund's stated investment objectives. Furthermore, while higher risk is often associated with higher returns, higher risk also means a greater uncertainty over all outcomes. Risk or volatility can manifest itself in either a continuous fashion or at discrete intervals, in which case the illusion of low volatility can often prevail for an extended period of time. For example, interest rate-sensitive funds (such as funds that invest in highly creditworthy securities like U.S. Treasury securities) often exhibit more volatility than funds that invest in low-grade, high-yield, or illiquid securities; however, at times, these funds can exhibit high to extremely high volatility due to investor sentiment regarding increased default or liquidity risks. Portfolio analysis often incorporates stress-testing techniques that examine the portfolio's returns (or expected returns) under various market scenarios, as well as for different portfolios. Portfolio-level risk analysis is focused on understanding the sources or factors that contribute to risk, which, for most bond funds investing in marketable fixed-income securities, includes interest-rate/option risk, credit risk, and liquidity risk.

Interest-Rate/Option Risk

Interest-rate risk refers to the fact that the longer the maturity of a security, the more uncertain and therefore more risky the present value of its cash flows. Securities with an uncertain maturity, such as callable securities, or securities with embedded options (e.g., mortgage-backed bonds) are by nature riskier than those with a known maturity. In addition, the distribution of a security or a fund's cash flows along the maturity spectrum (or yield curve) is as relevant as the maturity itself. A bond's interest-rate risk is best measured by its duration. Duration approximates the overall price sensitivity of the portfolio to changes in interest rates. Duration is a more precise measure of interest-rate risk than is maturity because it takes into account all of the bond's cash flows. For example, when rates rise by one half of 1% (or 50 basis points [bps]), the value of a pool with a duration of four years will decrease by about 2%.

Credit and Liquidity Risks

Credit and liquidity risks are distinct, although often closely related. Credit risk

Duration Measures Price Sensitivity to Interest Rates

Duration can be used to quantify a fixed-income fund's exposure to interest-rate risk. It is defined as an estimate of the fund's price sensitivity to a given change in interest rates. That is, for a small parallel upward (downward) shift in the interest rate, the portfolio will lose (gain) a percentage of its value that is approximately equal to its duration.

For example, if Fund A is a short-term Treasury fund, with a duration of two years, and Fund C is a long term Treasury fund with a duration of 10 years, and interest rates rise by 1% (100 bps), Fund A will lose approximately 2% in value while Fund C will lose approximately 10% in value, all else being equal. Similarly, if interest rates decline by 1%, Fund A will gain approximately 2% in value while Fund C will gain approximately 10% in value. The longer a fund's duration, the more sensitive it will be to changes in interest rates. Quantitatively, for small changes in interest rates, the estimation of duration (D) is defined as:

$$D = -(\Delta p / \Delta y) / p$$

$$\Delta p = p^+ - p^-$$

$$\Delta y = y^+ - y^-$$

$$\Delta = \text{Change.}$$

Duration is quoted in years because the rate shift is measured in yield, which is return per year. The symbol 'p' is the current price, 'p+' is the price when rates have shifted up, 'p-' is the price when rates have shifted down, 'y+' is the new rate when shifted up, and 'y-' is the new rate when shifted down.

refers to the possibility that an issuer may become unable or unwilling to meet its payment obligations on time or in full. Securities with higher credit risk trade on higher yields compared to lower credit risk securities, and the variations in such yield spreads are often described as spread risk. Liquidity risk refers to the possible price penalty incurred when buying or selling a particular security or asset for which there is a limited secondary market. Liquidity is also measured by how quickly a security can be sold.

We consider the effects of these risks, among others, when evaluating the overall price sensitivity of a fund. The relevant risk is the aggregate risk, measured after all diversification benefits are taken into account.

Management Assessment

Fund manager assessment is an opportunity for Standard & Poor's to gain an in-depth

understanding of different factors that could affect a fund's overall risk profile. Because fund managers can have a significant impact on the fund's future risk profile, we meet with fund managers to discuss various portfolio risk-related topics. At these meetings, we look at management sophistication and experience, the quality of research support, dedication to controlling risk within established guidelines, portfolio strategies, and the frequency and extent of changes to portfolio holdings, among other factors. Even after a fund is rated, we meet with the fund managers at least annually.

Please see the following sidebars for:

- Information needed for new fund ratings
- Agendas for management meetings
- Information needed to monitor a rated fund and;
- Sample surveillance coversheet. ■

Information Needed for a Fund Credit Quality and Volatility Rating

- Letter requesting a Standard & Poor's rating
- The most recent prospectus, statement of additional information, and any marketing materials
- A copy of the annual report for the past year
- A copy of the fund's investment policy, including policies concerning asset eligibility, selection, and evaluation process
- Policies regarding repurchase agreements, including a copy of the master repurchase agreement(s) and legal representations
- Policies concerning hedging transactions, alternative fixed-income securities, including the use of options and/or futures contracts, etc.
- Policies on leveraging portfolio assets
- Frequency and method of securities pricing, reporting, risk controls, and oversight process
- Monthly NAV figures, assets, and total return numbers for the past three years
- Proposed/current mix of shareholders (e.g., retail, institutional), and percentage of fund shares held by largest 10 shareholders
- Current asset size, or proposed asset size
- Current list of portfolio holdings, or for new funds a hypothetical portfolio, with security descriptions, CUSIPs, ratings, and prices
- List of securities approved for purchase according to asset type, credit quality, maturity, and sector
- Level of insurance coverage (Fidelity Bond, Error & Omission, Director & Officer)
- A copy of most recent SEC post-examination letter and fund adviser's response letter
- Biographies and organizational chart of key fund employees
- Background materials on sponsor, company structure, related companies

Suggested Agenda for Fund Credit Quality and Volatility Rating Management Meeting

Overview -At the Firm Level

1. Organization
 - History of firm
 - Assets under management
 - General expertise of firm
 - Staff size and function-organization charts
 - Role of board of directors and sponsors
 - Primary functions of key officers
 - Fund managers, traders, & research professionals' experience and background

Investment Strategy/Style— At the Fixed-Income Group Level

1. Basic philosophy
 - Investment and marketing strategy
2. Oversight
 - Written procedures and guidelines
 - Strategy/sector meetings
 - Index selection-oversight
 - Pricing and trading
 - Compliance
 - Backup and disaster recovery
 - History of back-office problems
3. Fixed-Income Team
 - Key people
 - Roles and responsibilities
 - Research & analysis
4. Risk Management
 - Duration
 - Term structure
 - Call risk
 - Credit risk
 - Concentration
 - Strategies
 - Tools and models
 - Criteria and limits
5. Asset Type
 - MBS/CMO
 - ARM
 - Municipal
 - High-yield
 - Foreign
 - Derivatives (swaps, futures)

Daily Operating Procedures—At the Sector/Fund Level

1. Activities
 - Who makes decisions
 - Trades
 - Cash-flow analysis
 - Level of liquidity determination
 - Management's view of the fund vis-à-vis other funds
2. Liquidity
 - Portfolio mix
3. Shareholders
 - Shareholder base & account characteristics
 - Asset size volatility
 - Net redemptions

Fund Specifics

1. Fund Targets
 - Objective
 - Duration
 - Maturity
 - Quality (credit rating)
 - Market sectors
 - Coupons
 - Call factors
 - Prepayments
 - Other
2. Historical Performance
3. Redemption Experience
 - Asset size volatility
 - Net redemptions
 - Shareholder base & account characteristics
4. Daily Operating Procedures
 - Timely purchases and redemptions
 - Computer applications, adequacy of computer facilities
 - Computer backup provisions
 - Security settlement provisions

Fund Governance

1. What compliance procedures are in place for the fund and fund management?
2. How often are they reviewed and updated?
3. Is there a defined risk management process in place to ensure funds are managed within their objectives and established risk parameters?

Monthly Information Needed to Monitor a Fund Credit Quality and Volatility Rating

1. Complete Portfolio Surveillance Information Sheet
2. Portfolio Holdings Risk Reports
For each security provide:
 - Par value
 - Current market value
 - CUSIP number
 - Full description of investment, including issuer, interest rate, and maturity date
 - Insurer, if applicable (note: if preinsured, portfolio insured, or second market insured)
 - Percent of portfolio
 - Standard & Poor's rating
 - Effective duration
 - Effective convexity
3. Other portfolio activities
Please provide information on all transactions related to the fund, such as:
 - Reverse repurchase agreements (include underlying collateral & terms)
 - Dollar rolls
 - Futures (list trading exchange)
 - Securities lending program (include list of securities lent out as part of program)
 - Leverage, etc.
4. Acquisition/disposition report
Listing of portfolio securities bought and sold throughout the month. For each security, the information listed above (par value, market value, etc.) should be specified.
5. Portfolios sent electronically
(Acceptable file format: Excel, Lotus, ASCII file format for any record length)
 - CUSIP
 - Par amount
 - Price
 - Security description (issuer, coupon, maturity, rating)
6. Fund changes or news
Any additional information related to the fund's operation should be forwarded, such as:
 - Changes in investment policies or operating procedures
 - Current prospectus and statement of additional information
 - Notification of changes to prospectus or statement of additional information
 - Notification of fund name change or mergers
 - Notification of changes in board of directors, senior management, investment adviser, or custodian
 - Annual and semiannual reports
 - All press releases relevant to the fund

Sample Surveillance Sheet for a Corporate Fund Credit Quality and Volatility Rating

STANDARD & POOR'S

55 Water St., 33rd Floor, Fund Services - Surveillance
New York, New York 10041
General Telephone 212-438-5073, Fax 212-438-5075

To: _____
From: _____
Company: _____
Telephone: _____

Portfolio Surveillance Information Sheet for Taxable Fund Credit Quality and Volatility Rating

Name of Fund: _____

Date of Portfolio: _____

Net Assets (Millions) :
Market Value:
Par Value:
Gross Assets:

Monthly Total Return :
Net Asset Value (per share):

Wtd. Avg. Maturity:
Effective Duration :
Modified Duration :
Yield To Maturity

Portfolio Breakdown (%) :

Security Type	S&P Code	
US Treasury Securities	TREAS	<input type="text"/>
Agency Mortgage-Backed	AGMTG	<input type="text"/>
Agency Adj. Rate Mortgages	ADJ	<input type="text"/>
Private Adj. Rate Mortgages	ARM	<input type="text"/>
Coll Mortgage Obligations	CMO	<input type="text"/>
Private Mortgage Backed	MBS	<input type="text"/>
Commercial Mortgage	CMTG	<input type="text"/>
Asset Backed Securities	ABS	<input type="text"/>
Derivatives (Exchange Traded)	DRVX	<input type="text"/>
Derivatives (OTC)	DRV	<input type="text"/>
Structured Notes	STNT	<input type="text"/>
Repurchase Agreement	REPO	<input type="text"/>
Cash	CASH	<input type="text"/>
Other (Please Specify)	OTHER	<input type="text"/>
Other (Please Specify)	OTHER	<input type="text"/>
Other (Please Specify)	OTHER	<input type="text"/>
Total		100%

As % of Net Assets

Reverse Repos
Futures
Dollar Rolls
Sec. Lending

Please Include Portfolio Holdings Information!

S&P Ratings (%)

RATING	S&P Ratings (%)		
	<= 90 days	> 90 but <= 365 days	> 365 days
AAA	<input type="text"/>	<input type="text"/>	<input type="text"/>
AA+	<input type="text"/>	<input type="text"/>	<input type="text"/>
AA	<input type="text"/>	<input type="text"/>	<input type="text"/>
AA-	<input type="text"/>	<input type="text"/>	<input type="text"/>
A+	<input type="text"/>	<input type="text"/>	<input type="text"/>
A	<input type="text"/>	<input type="text"/>	<input type="text"/>
A-	<input type="text"/>	<input type="text"/>	<input type="text"/>
BBB+	<input type="text"/>	<input type="text"/>	<input type="text"/>
BBB	<input type="text"/>	<input type="text"/>	<input type="text"/>
BBB-	<input type="text"/>	<input type="text"/>	<input type="text"/>
BB+, BB, BB-	<input type="text"/>	<input type="text"/>	<input type="text"/>
B+, B, B-	<input type="text"/>	<input type="text"/>	<input type="text"/>
CCC+, CCC, CCC-	<input type="text"/>	<input type="text"/>	<input type="text"/>
A-1+	<input type="text"/>	<input type="text"/>	<input type="text"/>
A-1	<input type="text"/>	<input type="text"/>	<input type="text"/>
A or A- /A-2	<input type="text"/>	<input type="text"/>	<input type="text"/>
BBB+/A-2	<input type="text"/>	<input type="text"/>	<input type="text"/>
BBB/A-2	<input type="text"/>	<input type="text"/>	<input type="text"/>
BBB/A-3	<input type="text"/>	<input type="text"/>	<input type="text"/>
BBB-/A-3	<input type="text"/>	<input type="text"/>	<input type="text"/>

Maturity Distribution (%)

0-1 year
1 - 3 years
3 - 7 years
7 - 10 years
10+ years

Top Ten Holdings (%)

_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>
_____	<input type="text"/>

Standard & Poor's
55 Water Street
New York, NY 10041

www.standardandpoors.com