

# **RatingsDirect®**

## **Criteria | Financial Institutions | Fixed-Income Funds:**

# Principal Stability Fund Rating Methodology

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### **Criteria | Financial Institutions | Fixed-Income Funds:**

## Principal Stability Fund Rating Methodology

Standard & Poor's Ratings Services is refining and adapting the methodology for its principal stability fund rating (PSFR) criteria. The criteria apply globally and fully supersede the prior global criteria ("Methodology: Principal Stability Fund Ratings," published June 8, 2011) as well as any region-specific PSFR criteria. This article includes the changes to criteria relative to the criteria proposed in our request for comment, "Request for Comment: Principal Stability Fund Rating Methodology," published March 30, 2015. These criteria reflect "Principles Of Credit Ratings," published Feb. 16, 2011.

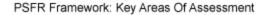
#### SCOPE OF THE CRITERIA

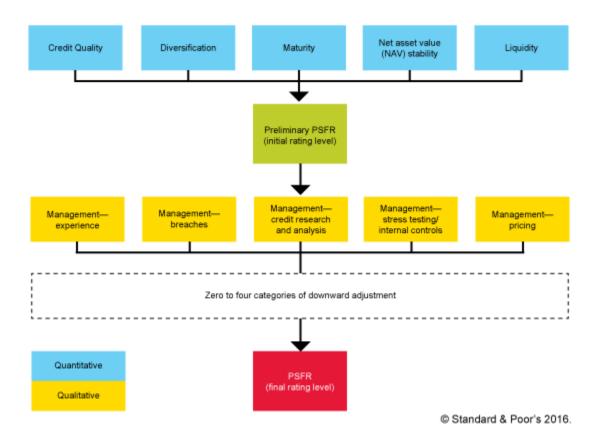
2. The criteria apply globally to principal stability fund ratings.

#### SUMMARY OF THE CRITERIA

- 3. A PSFR, commonly referred to as a money market fund rating, is a forward-looking opinion about a fixed-income fund's ability to maintain principal value (i.e., stable net asset value, or "NAV"). PSFRs are typically assigned to funds that seek to maintain stable or, as is prevalent in non-U.S. funds, accumulating NAVs. PSFRs have an "m" suffix (e.g., 'AAAm') to distinguish the principal stability fund rating from Standard & Poor's issue or issuer credit ratings (see the Appendix for our rating definitions).
- 4. The criteria consist of two main sections titled Evaluating Funds and Evaluating Security-Specific Risks and four supplemental sections titled, Master-Feeder Funds, Bifurcation, Parental Support, and Negative Yields. The Evaluating Funds and Evaluating Security-Specific Risks sections are further divided into subsections. In the Evaluating Funds section, we describe quantitative metrics, summarized in table 1 and in more depth in tables 2-10, plus our assessment of Evaluating Security-Specific Risks to establish the preliminary PSFR (step one).
- 5. The final PSFR is determined by lowering it from, or keeping it the same as, the level of the preliminary PSFR based on the impact of our qualitative assessments described in the management section. Subsections of the master-feeder funds, bifurcation (i.e., when a fund moves a distressed asset from one portfolio to another), parental support, and negative yields sections are applied when relevant and may influence the final PSFR. The qualitative assessments cannot lift a fund rating above the preliminary PSFR.

#### Chart 1





- 6. Market losses arising from negative yields because of investment in low credit risk, short duration securities with negative coupons would not solely result in lowering the final or preliminary PSFR when the fund operating documents permit loss of principal reflected in variable NAV (including accumulating NAV funds) or stable NAV funds with share class reductions or similar mechanisms.
- 7. These criteria consider the sources of risk in a managed fund's portfolio and investment strategy and assess the impact that these risks could have on a fund's ability to maintain a stable or accumulating NAV. These risks include credit quality; investment maturity; liquidity; portfolio diversification, index, and spread risk; management; and security-specific risks. Each rating level reflects our view of the likelihood of a fund's ability to maintain a stable NAV as described in table 1.

#### IMPACT ON OUTSTANDING RATINGS

8. We expect that the PSFR criteria may result in downgrades on funds in certain countries as all funds will be assessed

under these global criteria. The downgrades would be primarily due to applying the change in diversification metrics in table 1 to funds. Portfolio amortization and portfolio rebalancing may partly or wholly offset the rating impact.

#### EFFECTIVE DATE AND TRANSITION

9. These criteria are effective immediately on the date of publication. We intend to complete our review of all affected ratings within the next three months.

#### **METHODOLOGY**

- 10. The criteria consist of two main sections titled Evaluating Funds (covering our assessments of credit quality; maturity; liquidity; diversification, index, and spread risk; and management) and Evaluating Security-Specific Risks (covering portfolio risks such as callable, convertibles, collateralized certificates of deposits [CDs], deposits with foreign bank branches, extendible investments, interest rate swaps, other funds, repurchase agreements, reverse repurchase agreements/securities lending, and windows variable-rate demand bonds/X-Tenders).
- 11. Four supplemental sections titled Master-Feeder Funds, Bifurcation, Parental Support, and Negative Yields complete the criteria. The master-feeder funds section clarifies how these criteria apply to master-feeder funds. The bifurcation section covers the impact on PSFRs when and if bifurcation occurs and an impaired asset is placed in a separate portfolio. The parental support section describes the relationships between fund, ownership, and fund management. Typically, managers and fund complexes (encompassing custodial or administrative or trustee duties) provide operational support to funds and that support is considered as part of the management assessment. Funds typically do not benefit from financial support from parents, and application of "Group Rating Methodology," published Nov. 19, 2013, is not part of the framework.

## 1. Evaluating Funds

- 12. The first step to determine a PSFR is to apply the quantitative metrics. These are summarized in table 1 and aim to assess NAV stability by addressing credit quality, maturity, liquidity, diversification, and index and spread risk. Further explanations are found in subsections A through E of section 1, Evaluating Funds, in conjunction with subsections A through I of section 2, Evaluating Security-Specific Risks. Application of these establishes the preliminary PSFR.
- 13. In the second step, subsection F (Management) of section 1, Evaluating Funds, is applied and typically determines the final PSFR, which cannot be higher (better) than the preliminary PSFR. Assessments of sections 3-6 (Master-Feeder Funds, Bifurcation, Parental Support, and Negative Yields) are applied when relevant and may influence the final PSFR. The final PSFR is typically equal to the preliminary PSFR, but it may be lower (worse) than the preliminary PSFR due to our management assessment.

#### Rating caps

14. The preliminary PSFR is capped at the highest rating indicated by the quantitative metrics in table 1. We apply a weak link approach, meaning that at any point in time a fund needs to meet all quantitative metrics criteria under the

categories of credit quality, maturity, and diversification at a given rating level in order to receive that preliminary PSFR, barring applicable cure periods and assuming the rating category 'Dm' does not apply. Table 1 summarizes the overall framework. Table 2 addresses asset credit quality, table 6 addresses maturity, table 9 covers diversification, and table 10 covers NAV ranges.

- 15. Funds that hold any "higher-risk investments" are rated at most 'BBm', barring applicable cure periods. Investments that have any of the following characteristics are "higher-risk investments":
  - Investments that Standard & Poor's does not consider to be the equivalent of 'A-1' or higher (see paragraphs 27-38), as well as securities that are rated below 'A-1' (short-term) or below 'A' (long-term, absent a short-term rating), except certain collateralized investments. (In addition to "Credit Quality," in section 1, see "Diversification," "Unrated guaranteed investments," "Unrated obligations of issuers rated by Standard & Poor's," and "U.S. municipal securities not rated by Standard & Poor's but rated by Moody's or Fitch," as well as "Collateralized Certificates Of Deposit" and "Repo counterparty risk" in section 2, which address collateralization and repurchase agreements.
  - Shares of money market funds that are not rated by Standard & Poor's.
  - Investments that result in issuer concentrations that exceed stated percentages for specific rating categories (see "Diversification" and "Other funds").
  - Newly purchased investments that Standard & Poor's rates 'A-1' or lower, that are on CreditWatch with negative implications, and that mature in more than one month.
  - Investments with maturity dates in excess of stated maximums for specific rating categories (see "Individual security final maturity" and "VRN/FRN Final Maturities").
  - Illiquid/limited liquidity investments that comprise more than 10% of fund assets (see the 10% limit for assets with limited liquidity section).
  - Interest rate swaps that comprise more than 10% of fund assets (see "Interest Rate Swaps").
  - Investments with maturity extension features that the investor does not control (see "Extendible Investments").
  - Investments with high price volatility (see "Investments with high price volatility" and "Higher-Risk VRNs/FRNs").
  - Securities with unhedged currency risk (see the 10% limit for assets with limited liquidity section).
  - A 10-business-day cure period applies to "higher-risk investments."
- 16. Unless otherwise stated, "day" designates a calendar day. We refer to business days when a manager's ability to take action is within a narrowly defined number of days (typically within one month and in particular related to table 1). Unless otherwise stated, a "rating" designates a public Standard & Poor's issue, counterparty, or issuer credit rating (ICR) or, failing such, a public Standard & Poor's foreign-currency ICR. Where Standard & Poor's has assigned different foreign and local currency ICRs to an issuer, "rating" refers to the relevant rating depending on the currency denomination of the assets held by the fund. (Please see the Appendix for a glossary of additional terms that appear in these criteria.)
- 17. Some sections of table 1 have been reproduced in each relevant section for ease of use. In the tables, high bank concentration (HBC) refers to metrics that apply when a fund elects to concentrate investment in highly rated bank issuers in excess of the standard issuer concentration metrics described in row 13 of table 1. Although maximum issuer concentrations are addressed in table 1, there are permutations of combinations possible that are not easily reflected in a table and are more robustly described in the "Diversification," in section 1. In row 1 of table 1, "negative deviation" refers to the potential fall in NAV below 1.000 for stable NAV funds and a similar loss in principal for variable (including accumulating) NAV funds.

Table 1

					Cure period
	AAAm	AAm	Am	BBBm	(business days
1. NAV (per share) negative deviation thresholds or lowest NAV consistent with rating (paragraph 104)	-0.25% or 0.9975	-0.3% or 0.997	-0.35% or 0.9965	-0.4% or 0.996	Ę
Credit quality (%)					
2. Minimum proportion of the fund's assets that is represented by the sum of (a) 'A-1+' rated investments (any maturity) and of (b) 'A-1' rated investments maturing within five business days (paragraphs 24-26)	50	20	0	0	10
3. Maximum proportion of the fund's assets that is represented by the sum of (a) 'A-1' rated investments maturing in more than five business days and of (b) 'A-2' rated counterparties utilized for collateralized repo investments maturing overnight (paragraphs 24-26)	50	80	100	100	10
4. HBC: Minimum proportion of the fund's assets that is represented by the sum of (a) 'A-1+' rated investments and of (b) 'A-1' rated investments maturing within five business days (applied when 'A-1+' rated bank exposure exceeds "per issuer" metric [see table 1 row 13]) (paragraphs 67-68)	67	50	40	25	10
5. HBC: Maximum proportion of the fund's assets that is represented by the sum of (a) 'A-1' rated investments maturing in more than five business days and of (b) 'A-2' rated counterparties utilized for collateralized repo investments maturing overnight (paragraphs 67-68)	33	50	60	75	10
6. Maximum exposure to unrated escrow accounts (see paragraphs 37-38)	25	33	40	50	10
7. Maximum aggregate exposure to municipal securities rated only by Moody's or Fitch¶ (see paragraph 33)	15	20	25	30	10
8. Maximum aggregate exposure to unrated credit-enhanced variable-rate demand obligations (VRDOs) (see paragraphs 35-36). This limit is a subset of the row 6 aggregate.	10	15	20	25	10
Maturity (days)					
9. Maximum WAM(R)** (see paragraphs 44-45,48)	60	70	80	90	20
10. Maximum WAM(F)**¶¶ (see paragraphs 44-45,49-54)	90	100	110	120	20
11. Maximum final maturity per fixed-rate investment, nonsovereign government floating-rate investment, and sovereign floating-rate investments rated below 'AA-' (see paragraph 46)	397	397	397	397	20
12. Maximum final maturity per sovereign government (including "almost certain" sovereign government related/guaranteed) floating-rate security rated 'AA-' or higher (see paragraph 46 and table 6)	762	1,127	1,492	1,857	20
Diversification (%)					
13. Maximum per issuer (including debt guaranteed by the same issuer) (see paragraphs 64-66, 72-73) except for the items listed in Diversification exceptions	5	7.5	10	15	20
Diversification exceptions (%)					
14. Maximum concentration per sovereign entity (i.e., national government) rated 'AA' or higher (see paragraphs 74-76)	100	100	100	100	N/A
15. Maximum concentration per sovereign entity rated 'AA-' (see paragraphs 74-76)	50	50	67	75	20
16. Maximum concentration per sovereign entity rated 'A-1', 'A+', or 'A' and that matures in one business day (see paragraphs 74-76)	25	33	40	50	20
17. Maximum concentration per sovereign entity rated 'A-1', 'A+', or 'A' and that matures between two and five business days (see paragraphs 74-76)	10	15	20	25	20

Table 1

Tuble 1					
PSFR Quantitative Metrics (cont.)					
18. Maximum concentration per sovereign entity rated 'A-1', 'A+', or 'A' and that matures in more than five business days (see paragraphs 74-76)	5	10	15	20	20
19. Maximum concentration per bank rated 'A-1', 'A+', or 'A' for uncollateralized overnight bank deposits, including uninvested cash (see paragraphs 72-73)	10	15	20	25	20
20. Maximum concentration per bank rated 'AA-' or higher or 'A-1+' for uncollateralized overnight bank deposits, including uninvested cash (see paragraphs 72-73)	15	20	25	30	20
High bank concentration (%)					
21. HBC: maximum concentration to any bank group rated 'AA-' or higher or 'A-1+', of which investments of 93–397 days cannot exceed the percentage in the parentheses next to the limit. For example: 25 (10) means of 25%, only 10% could be with maturities of 93-397 days. These limits are subject to additional limits described in "Diversification." The maximum amount excludes overnight deposits. (see paragraphs 67-69)	25 (10)	30 (10)	35 (10)	45 (15)	20
22. HBC: maximum fund aggregate exposure to bank groups rated 'AA-' or higher or 'A-1+' for uncollateralized exposure. Applied when exposures are greater than the "per issuer" limits, (see table 1, row 13). The test excludes overnight 'A-1+' bank deposits and overnight 'A-1+' collateralized (repo) investments (see paragraphs 67-69)	60	70	80	100	20
Group exposure (%)					
23. Maximum exposure per group, unless the higher HBC per group limit applies (see table 1, row 21). The test excludes overnight deposits and overnight collateralized (repo) investments. (see paragraph 70)	15	17.5	20	25	20
Collateralized exposure (%)					
24. Tiered maximums for investments that are fully (100%) collateralized or overcollateralized (more than 100%) (see paragraphs 109-112, table 11)	See charts 3-5 for details	See charts 3-5 for details	See charts 3-5 for details	See charts 3-5 for details	20
GRE exposure (%)					
25. Maximum exposure per "almost certain" sovereign government-related/guaranteed entity rated 'AA-' or higher§§ (see paragraph 75)	33	50	67	75	20
PSFR exposure (%)					
26. Maximum exposure to another Standard & Poor's rated PSFR (see paragraphs 119-120)	10	15	20	25	20

Note: Funds holding any higher-risk investments are rated 'BBm'. ¶Exposures to securities rated below 'A-1' are "higher-risk investments." This limit does not apply to securities that possess a direct pay letter of credit rated 'A-1+' or 'A-1' by Standard & Poor's. \*\*The maximum WAM(R) and WAM(F) limits may be reduced for funds with certain characteristics (such as limited operating history or start-up funds, small asset size, a concentrated shareholder base, or a new shareholder base with uncertain liquidity needs). ¶¶May be adjusted upward by 30 days if invested only in government/GRE floaters rated 'AA-' or higher (when the GRE is classified as "almost certain"). If a fund invests in a combination of government floaters rated 'AA-' or higher and nongovernment floating-rate instruments (or sovereigns rated below 'AA-'), the maximum is based on the weighted average of exposures to each type of floater. §§"Almost-certain" government-related entity (GRE) (see glossary) or government-guaranteed investments rated 'AA' or above with final maturities of one month or less are excluded from these limits. "Almost-certain" GRE 'AA-' rated exposures maturing in less than one month have the same limit as 'AA-' sovereigns (table 1, row 15). N.A.--Not applicable.

#### Cure periods and management assessment

18. Primarily in table 1 but throughout sections 1 and 2, we describe portfolio thresholds we believe enhance NAV stability. Each section of this article describes cure periods that apply, when a fund breaches any metric or threshold, before the rating is lowered. The cure period related to a metric applies only to that specific metric or threshold and to no others and typically begins on the date the failure to maintain a metric occurs (i.e., portfolio date). Cure periods are

intended to limit the possibility of a fund's NAV failing to remain within the ranges outlined in row 1 of table 1 for each rating category. If multiple metrics are in breach at the same time, the rating could become the lowest of the ones suggested by the breaches. In some cases, multiple breaches at the same time, if uncured, could lead to a PSFR lower than the lowest one implied by the metric that would be supported if no cure is achieved. For example, if two metrics are uncured, and one suggests a rating of 'AAm' and the other a rating of 'Am', the rating will move to 'Am'. In another example, if the same two metrics are uncured, and we believe management is unlikely to manage even to thresholds for an 'Am' rating, we will lower the rating to 'BBBm' or 'BBm'.

- 19. Typically, a 10- or 20-business-day cure period applies for a breach of the table 1 thresholds as long as the fund's marked-to-market NAV does not drop below NAV ranges for each preliminary PSFR category (see table 10). NAV stability has the shortest cure period (five business days) for which failure to cure would lead automatically to a downgrade to the category indicated by the NAV ranges in table 1. Failure to maintain credit quality metrics typically leads automatically to a downgrade if uncured after 10 business days. Failure to maintain diversification or maturity metrics typically leads automatically to a downgrade if uncured after 20 business days.
- 20. Breaches of portfolio metrics can imply weak management. We differentiate "active" breaches of criteria and "passive" breaches of criteria. Active breaches occur when a manager makes a portfolio decision that, irrespective of any other portfolio developments, directly results in a metric in table 1 that no longer supports the PSFR. For example, purchasing an asset that is inconsistent with the metrics in table 1 that apply to the fund at the current rating is an active breach. Management action that is not active is passive. A passive action also results in a metric that no longer supports the PSFR because the fund breaches the guidelines in table 1 due to externally initiated developments. For example, passive breaches may occur due to shareholder redemptions causing asset liquidations, which then cause a breach of the limits defined in table 1 or downgrade of an asset or counterparty, which results in a breach of the limits defined in table 1. Three active management breaches over a rolling 12-month period will typically lead to a downgrade by one, and possibly several, rating categories. This reflects our view that management would not be able to effectively maintain internal controls as described under "Internal controls," in section 1.
- 21. Even passive breaches can change our view of management because they indicate management's inability to effectively maintain internal controls with regard to portfolio management. Consistent passive breaches to maintain quantitative metrics, when of sufficient magnitude or frequency over a 12-month period, result in a PSFR lowered by one or more categories because we viewed it as management weakness as described in "Internal controls." For example, if a 'AAAm' rated fund experiences more than five occurrences of exceeding the 60-calendar-day maximum weighted average maturity to reset, or WAM(R), by several days because of unexpected shareholder redemptions, without accounting for any other factor, the preliminary PSFR is typically lowered to 'AAm'. Another example is if a 'AAAm' rated fund experiences three occurrences of exceeding the 60-calendar-day maximum WAM(R) by more than 15 calendar days because of unexpected shareholder redemptions, without accounting for any other factor, the preliminary PSFR is typically lowered to 'AAm'. This is representative of a significant, yet passive, breach. Once a rating has been lowered due to failure to maintain the quantitative metrics of table 1 or due to qualitative weakness in the management assessment, a PSFR is unlikely to be raised until management has operated in compliance with criteria for a minimum of six months and typically longer.

## A. Credit Quality

22. We consider credit quality to be an important contributor to NAV stability. We view higher-rated assets as reflective of higher price stability, which is the primary focus of PSFRs. A preliminary PSFR can be no higher than the lowest category associated with the metrics enumerated in table 2. Each row of the table specifies a metric, and each column, before the last one, corresponds to a PSFR category. Each cell indicates the minimum credit quality or maximum level of portfolio holdings that a fund can have to receive the preliminary PSFR indicated at the top of the column.

Table 2

	AAAm	AAm	Am	BBBm	Cure period (business days)
Credit quality (%)					
2. Minimum proportion of the fund's assets that is represented by the sum of (a) 'A-1+' rated investments (any maturity) and of (b) 'A-1' rated investments maturing within five business days (paragraphs 24-26)	50	20	0	0	10
3. Maximum proportion of the fund's assets that is represented by the sum of (a) 'A-1' rated investments maturing in more than five business days and of (b) 'A-2' rated counterparties utilized for collateralized repo investments maturing overnight (paragraphs 24-26)	50	80	100	100	10
4. HBC: Minimum proportion of the fund's assets that is represented by the sum of (a) 'A-1+' rated investments and of (b) 'A-1' rated investments maturing within five business days (applied when 'A-1+' rated bank exposure exceeds "per issuer" metric [see table 1 row 13]) (paragraphs 67-68)	67	50	40	25	10
5. HBC: Maximum proportion of the fund's assets that is represented by the sum of (a) 'A-1' rated investments maturing in more than five business days and of (b) 'A-2' rated counterparties utilized for collateralized repo investments maturing overnight (paragraphs 67-68)	33	50	60	75	10
6. Maximum exposure to unrated escrow accounts (see paragraphs 37-38)	25	33	40	50	10
7. Maximum aggregate exposure to municipal securities rated only by Moody's or Fitch¶ (see paragraph 33)	15	20	25	30	10
8. Maximum aggregate exposure to unrated credit-enhanced variable-rate demand obligations (VRDOs) (see paragraphs 35-36). This limit is a subset of the row 6 aggregate.	10	15	20	25	10

Note: Funds holding any higher-risk investments are rated 'BBm'. ¶Exposures to securities rated below 'A-1' are "higher-risk investments." This limit does not apply to securities that possess a direct pay letter of credit rated 'A-1+' or 'A-1' by Standard & Poor's.

- 23. The levels in table 2 are based on a combined analysis of the yield spread movements resulting from changes in the credit quality of investments and the data derived from our historical ratings performance study. For details, see "2010 Annual Global Corporate Default Study And Rating Transitions," published March 30, 2011, and "Global Short-Term Ratings Performance And Default Analysis (1981-2009)," published May 20, 2010.
- 24. The analysis of a fund's assets' overall credit quality includes the risks associated with the quality, type, and diversification of the investments in the fund's underlying portfolio. A fund is rated 'BBm' unless investments carry a Standard & Poor's short-term rating of 'A-1+' or 'A-1' (or SP-1+ or SP-1), or unless Standard & Poor's considers all of the investments to be of credit quality equivalent to these levels. For example, U.S. Treasury bills are not rated, but we consider their credit quality as equivalent to the ICR on the U.S. government. An exception is for fully or

overcollateralized repurchase agreements where the counterparty carries a Standard & Poor's short-term rating of 'A-2'. When applying table 2, if an investment has a long-term rating of 'AA-' or higher, with an 'A-2' short-term rating from Standard & Poor's (which is possible for U.S. municipal securities), the rating for purposes of our credit quality assessment is 'A-2'. Table 2 lists the credit quality subfactors we apply to evaluate principal stability funds. We apply ratings derived from joint-support criteria when relevant (see "Joint-Support Criteria Refined," published Feb. 3, 2006). We typically do not have to address minimal amounts of cash on deposits at low or not rated custodians because it is operational in nature and funds are typically predominantly invested. However, if cash amounts exceed 25 basis points of fund NAV, creditworthiness of the custodian is considered and paragraphs 41-43 would apply.

- 25. The 'A-1+' percentage minimums include investments rated 'A-1' that mature in five business days or less because the historical default rates of 'A-1' paper maturing in five business days or less are similar to default rates of 'A-1+' rated issuers. The 'A-1' percentage maximum includes fully or overcollateralized repo investments backed by traditional collateral (as defined in paragraph 127) with counterparties rated 'A-2' that mature overnight.
- 26. New purchases of assets Standard & Poor's rates 'A-1' (or equivalent) on CreditWatch with negative implications and that mature in more than one month are "higher-risk investments." New purchases of assets Standard & Poor's rates 'A-1+' (or equivalent) on CreditWatch with negative implications are not "higher-risk investments." New purchases of assets Standard & Poor's rates 'A-1' (or equivalent) on CreditWatch with negative implications and that mature in one month or less are not "higher-risk investments." Existing fund holdings Standard & Poor's rates 'A-1' or 'A-1+' (or equivalent) that are placed on CreditWatch with negative implications are not "higher-risk investments." We make this differentiation for new investments with longer maturities because CreditWatch already signals that the issuer's credit quality may be changing. Hence the criteria limit the potential risk associated with new investment. Standard & Poor's bank ICRs typically determine, subject to other custodial considerations, the credit quality of uninvested cash deposits with the custodian. (See the Appendix for more on assumptions with regard to credit quality.)

#### 1. Determining credit quality

27. The criteria refer to long- and short-term ratings frequently when describing credit quality. In this section, we describe how we determine rating equivalents when Standard & Poor's has not assigned a short-term rating to an investment.

#### a. Investments with only long-term ratings

28. For purposes of applying table 2, an investment that has only a long-term rating from Standard & Poor's is treated as having the short-term rating specified in the rating equivalent short-term rating column of table 3.

Table 3

Rating Equivalent Short-Term Ratings From Long-Term Ratings For Purposes Of PSFR					
Long-term rating	Rating equivalent short-term rating				
'AAA' through 'AA-'	'A-1+'				
'A+' or 'A'	'A-1'				
'A-' or lower	"Higher-risk investment" (see paragraph 15)				

Individual areas of criteria such as for corporate ratings or U.S. public finance ratings may have differing long-term and short-term ratings relationships, some of which may be influenced by liquidity descriptors. Table 3 is not intended to reflect each of those criteria individually, but rather to reflect an approach to limit imputed ratings in aggregate. Table 3 reflects imputed short-term ratings. Long-term rating to short-term rating relationships for unrated issues of rated issuers are applied as described in "Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers," published May 7, 2013; "Commercial Paper I," published March 23, 2004, for banks and nonbank financial institutions; and "Commercial Paper, VRDO, And Self-Liquidity," published July 3, 2007, for U.S. public finance issuers.

#### b. Unrated guaranteed investments

29. We view the credit quality of a not rated senior guaranteed investment as equal with the ICR on the guaranter if the guarantee meets the characteristics outlined in the "Guarantee Criteria" section of "Guarantee Criteria--Structured Finance," published May 7, 2013, or "Methodology And Assumptions For Analyzing Letter Of Credit-Supported Debt," published Feb. 20, 2015. Guaranteed investments that do not conform to those criteria are "higher-risk investments."

#### c. Unrated obligations of issuers rated by Standard & Poor's

30. For purposes of applying table 2 and table 3, the Standard & Poor's ICR or Standard & Poor's underlying rating (SPUR) on the obligor determines the creditworthiness of senior unsecured debt obligations. For example, if an issue is not rated and is a senior debt obligation of an issuer rated 'A+', the security is treated as having a rating of 'A-1'. If Standard & Poor's does not provide an ICR or SPUR on the issuer, then the senior unsecured or subordinated debt issue that is not rated by Standard & Poor's is a "higher-risk investment" (except for U.S. municipal securities, described below). Not rated subordinated debt from a rated issuer is a "higher-risk investment."

#### d. Credit quality and diversification of variable-rate demand obligations subject to credit substitution

- Variable-rate demand obligations (VRDOs) may have credit or liquidity risk supported by various structures: letters of credit (LOCs), guarantees, standby bond purchase agreements (SBPAs), or tender option bonds (TOBs). Standard & Poor's recognizes that, generally, the municipal obligor is ultimately responsible for the full and timely payment of principal and interest payments. In instances where the obligation is subject to credit substitution, the credit risk to a fund is associated with the performance of the credit substitution provider (e.g., direct pay LOCs and guarantees). Where the structure has more than one credit substitution provider (e.g., confirming LOC or standby LOC), the credit risk to the fund is based on the performance of the ultimate payment source. Moreover, VRDOs such as TOBs and SBPAs may have a dual payment source—credit from an obligor and the liquidity obligation based on credit substitution in the form of a liquidity facility (see table 4).
- 32. In the event the payment obligation is based on credit substitution, the criteria assume the credit quality of and diversification for the underlying issue are associated with the credit substitution provider due to the short-term nature of the issue, the structure's correlation of short-term to long-term ratings, and the reflection of credit risk to principal stability of the rated fund. The maximum diversification of the credit substitution provider, which generally is a bank, will be subject to the group diversification limits.

#### e. U.S. municipal securities not rated by Standard & Poor's but rated by Moody's or Fitch

33. We would typically assess credit quality as one rating notch below the long-term ICR for obligations of those issuers not rated by Standard & Poor's. For U.S. municipal securities rated by Moody's and Fitch, but not Standard & Poor's, we apply chart 2 to the lower of Moody's and Fitch's ratings (see "Mapping A Third Party's Internal Credit Scoring System To Standard & Poor's Global Rating Scale," published on May 8, 2014). Chart 2 depicts the general process for mapping short-term ratings to municipal securities rated by Moody's or Fitch for purposes of applying table 2. The process shown in chart 2 does not apply to any security from a sector or category of municipal securities in which Moody's or Fitch has limited market presence or Moody's or Fitch applies substantially different rating standards. As shown in row 7 of table 2, the total proportion of securities rated only by Moody's or Fitch is subject to specific limits for each PSFR category. These limits do not apply to securities that possess a direct pay LOC rated 'A-1+' or 'A-1' by Standard & Poor's. Any security with an imputed short-term rating below 'A-1' is a "higher-risk investment."

34. Additionally, securities, supported by bond insurance, that none of Standard & Poor's, Moody's, and Fitch rates are "higher-risk investments," unless the SPUR of the issuer is rated 'A-1' or higher by Standard & Poor's.

Chart 2

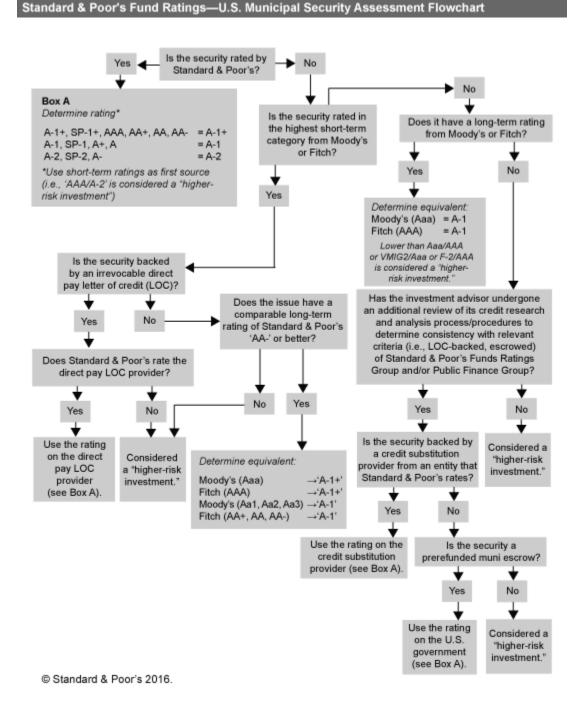


Table 4

U.S. Municipa	ls		
Instrument	Credit responsibility	Liquidity responsibility	PSFR assessment
Direct pay LOC	LOC provider	LOC provider	Credit quality based on the rating of the credit substitution (LOC) provider. Diversification: Apply exposure to LOC provider, as per group limits.
Confirming LOC	CLOC provider	CLOC provider	Credit quality based on the rating of the credit substitution (CLOC) provider. Diversification: Apply exposure to CLOC provider as per group limits.
Standby LOC	Obligor + LOC provider	LOC provider	Credit quality based on the rating of the credit substitution (LOC) provider. Diversification: Apply exposure to LOC provider as per group limits.
Guaranty	Guarantor	Guarantor	Credit quality based on the rating of the credit substitution (guarantor) provider. Diversification: Apply exposure to guarantor as per group limits.
TOBs	Obligor	Liquidity facility	Credit quality based on the rating of the credit substitution provider (liquidity facility). Diversification: Apply exposure to liquidity facility provider as per group limits.
SBPAs	Obligor	Liquidity facility	Credit quality based on the rating of the credit substitution provider (liquidity facility). Diversification: Apply exposure to liquidity facility provider as per group limits.

LOC--Letters of credit. CLOC--Confirming letter of credit. SBPAs--Standby bond purchase agreements. TOB--Tender option bonds.

## f. Municipal securities not rated by any of Standard & Poor's, Moody's, or Fitch

#### (1) Not rated credit-enhanced VRDOs

- 35. For purposes of applying table 2, a not rated municipal VRDO is a "higher-risk investment," even if it includes bank credit enhancement (e.g., direct pay LOC). However, not rated municipal VRDOs are treated as carrying the rating on the credit enhancement provider if both of the following statements are true:
  - The credit enhancement provider is rated 'A-1' or 'A-1+' by Standard & Poor's, and
  - The fund's manager applies credit research and analysis policies for LOC-backed VRDOs that are consistent with our methodology in "Methodology And Assumptions For Analyzing Letter Of Credit-Supported Debt," published Feb. 20, 2015.
- 36. In addition, investments supported by bond insurance and a liquidity facility are "higher-risk investments." The total proportion of not rated credit-enhanced VRDOs is subject to specific limits for each preliminary PSFR category.

#### (2) Municipal bonds not rated by Standard & Poor's, Moody's, or Fitch and secured by escrows

- 37. Not rated escrowed municipal bonds are "higher-risk investments" unless the fund manager's independent credit analysis and relevant bond or legal documents are consistent with Standard & Poor's defeasance criteria. For more details, please refer to "Methodology And Assumptions: Assigning Ratings To Bonds In The U.S. Based On Escrowed Collateral," published Nov. 30, 2012.
- 38. The total proportion of municipal bonds not rated by Standard & Poor's, Moody's, or Fitch but secured by an escrow account is subject to specific limits for each preliminary PSFR category (see table 2, row 6).

#### 2. Effect of investment downgrades and withdrawals

39. Except if otherwise stated in this paragraph, a 10-business-day cure period applies for a breach of the table 2 thresholds as long as the fund's marked-to-market NAV does not drop below NAV ranges for each preliminary PSFR

category (see table 10). As we've noted, the cure period related to a breach of any specific metric or threshold applies only to that specific metric or threshold (see paragraphs 19-21 and table 1). However:

- When a rating on a sovereign issuer is lowered to 'AA-' from 'AA' or higher, a cure period of 90 calendar days applies to reduce exposures to the listed diversification limits.
- In the event that the rating on a sovereign issuer is lowered to 'A+' or 'A' from 'AA-' or higher, a 60-calendar-day cure period applies to reduce exposures to the listed diversification limits.
- If the rating on a sovereign issuer is lowered below 'A', we apply table 3 and assume the short-term equivalent is below 'A-1'.
- If Standard & Poor's withdraws its rating on a 'AA-' or higher rated government-related entity (GRE) related to a sovereign and whose likelihood of government support was "almost certain" up to and including the withdrawal date, we apply our last rating for a cure period of 90 calendar days to any already existing portfolio investment in that GRE. The likelihood of support results from applying table 1 in "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015. After the cure period of 90 calendar days, we consider such issuer not rated and a PSFR would be lowered if the holding remained in the portfolio.
- New investments in the issuer whose ratings were withdrawn are not rated and thus "higher risk" for purposes of determining their rating impact. The withdrawal of the rating signifies higher uncertainty than before the withdrawal. While the "almost certain" status at the time of withdrawal supports stability of NAV over the short term, uncertainty exists with regard to what Standard & Poor's rating would be in the future.
- In the event that the sovereign rating changes during the cure period, we assess the implied consequences on the sovereign-related GRE, whose ratings were withdrawn, to determine its rating impact. In the event that the sovereign short-term rating is lowered below 'A-1' during the 90-calendar-day cure period, table 5 applies.
- A 14-calendar-day cure period (we apply 14 calendar days instead of 10 business days to maintain consistency with the other limits in table 5) applies to other issuers (i.e., other than sovereigns and GREs with "almost certain" likelihood of support from a sovereign government) who have a lower diversification limit (i.e., 5% per issuer at 'AAAm') in the event that the rating on the entity is withdrawn.
- 40. The cure periods applied when an investment is downgraded below 'A-1' are outlined in table 5--excluding specific instances outlined in the above paragraph.

Table 5

Cure Periods For Investments Downgraded Below 'A-1'	
(% of portfolio)	Cure period (calendar days)
Less than or equal to 0.5%	397*
Greater than 0.5% or less than or equal to 1.0%	120*
Greater than 1.0% or less than or equal to 5.0%	60*
Greater than 5%	14

Note: This table applies when the ICR is 'A-' or 'BBB+' and not on CreditWatch negative. \*Regardless of the short-term rating, if the long-term rating is 'BBB+' and on CreditWatch negative or 'BBB' or lower, the cure period drops to 14 calendar days at any exposure level.

#### 3. Custodial credit risk

41. Because of the legal segregation of custodial assets, in our view, securities held in custody are less exposed to the insolvency risk of the custodial bank than direct obligations such as commercial paper and repurchase agreements. There is no minimum rating for a custody bank if the fund's custodial bank is domiciled in a country where the legal and regulatory framework provide for clear segregation and protection of all fund assets. The domiciles that have

sufficient legal and regulatory frameworks to provide for the safety of assets held with custodians include Australia, Bermuda, the Cayman Islands, the Channel Islands, Ireland, Japan, Luxembourg, Mexico, New Zealand, the U.K., and the U.S.

- 42. A fund is rated 'BBm' if any of its assets are held by a custodial bank rated below 'A-2' and the bank is domiciled where the legal and regulatory framework does not provide for clear segregation and protection of all fund assets.
- 43. When a custodial bank is not rated, we typically apply the rating of the bank or the parent based upon the custodian's relationship within the bank group's organizational structure. Typically, custodial banks that are wholly owned by a rated parent receive the same treatment as the parent as long as they remain integral to the parent's operating strategy and they are prudently operated, as demonstrated by good risk-management systems and controls, and a sound operational infrastructure.

## **B.** Maturity

- 44. The maturity of an individual investment and a portfolio's weighted-average maturity (WAM) are key measures of their tolerance and sensitivity to rising interest rates. Two measures of a portfolio's WAM--WAM to reset, or WAM(R), and WAM to final, or WAM(F)--are used to measure interest rate sensitivity, primarily because they are relevant, easily determined, and easily available.
- 45. WAM(R) uses the interest-rate reset date as the effective maturity in calculating the WAM, whereas WAM(F) is calculated based on the stated final maturity for each security. WAM(F) is also known as weighted-average life. In general, the longer the maturity or WAM, the more sensitive a security's value or fund's value is to rising or decreasing interest rates. For example, a given interest rate increase would have roughly twice the impact on a fund with a 60-calendar-day WAM relative to a fund with a 30-calendar-day WAM, all other factors aside. Table 6 lists the quantitative subfactors used to evaluate a fund's portfolio maturity risks.

Table 6

Maturity Subfactors	Maturity Subfactors							
	AAAm	AAm	Am	BBBm	Cure period (business days)			
Maturity (days)								
9. Maximum WAM(R)** (see paragraphs 44-45,48)	60	70	80	90	20			
10. Maximum WAM(F)**¶¶ (see paragraphs 44-45,49-54)	90	100	110	120	20			
11. Maximum final maturity per fixed-rate investment, nonsovereign government floating-rate investment, and sovereign floating-rate investments rated below 'AA-' (see paragraph 46)	397	397	397	397	20			
12. Maximum final maturity per sovereign government (including "almost certain" sovereign government related/guaranteed) floating-rate security rated 'AA-' or higher (see paragraph 46 and table 6)	762	1,127	1,492	1,857	20			

<sup>\*\*</sup>The maximum WAM(R) and WAM(F) limits may be reduced for funds with certain characteristics (such as limited operating history or start-up funds, small asset size, a concentrated shareholder base, or a new shareholder base with uncertain liquidity needs). ¶¶May be adjusted upward by 30 days if invested only in government/GRE floaters rated 'AA-' or higher (when the GRE is classified as "almost certain"). If a fund invests in a combination of government floaters rated 'AA-' or higher and nongovernment floating-rate instruments (or sovereigns rated below 'AA-'), the maximum is based on the weighted average of exposures to each type of floater.

#### 1. Individual security final maturity

46. Individual investments with legal final maturities in excess of 13 months (or 397 calendar days) are "higher-risk investments," unless they are sovereign floating-rate investments rated 'AA-' or higher or investments with unconditional demand features (i.e., put) that provide for liquidity within 397 calendar days with an issuer rated 'A-1' or 'A' or higher. For further details about floating-rate investments, see paragraphs 90-91.

#### 2. Portfolio weighted-average maturity

47. A PSFR can be no higher than the lowest category associated with the metrics enumerated in table 6. Each row of the table specifies a metric, and each column corresponds to a PSFR category. Each cell indicates the maximum WAM(R), WAM(F), or final maturity per investment that a fund can have to receive the related PSFR.

#### a. WAM(R)

48. The relationship between interest rate volatility and NAV volatility limits 'AAAm' rated money market funds to a maximum WAM(R) of 60 calendar days. There is an inverse relationship between a fund's WAM and the minimum positive interest rate shift necessary to cause the NAV to fall to a given level. Consider a fund that holds only one Treasury bill and has a WAM(R) of 60 calendar days. In this case, an instantaneous upward shift of more than 304 basis points (bps)--holding everything else equal in the fund--would need to occur before the NAV of the model fund would fall to 0.9950. There is a 60-calendar-day maximum WAM(R) for 'AAAm' rated funds because the worst one-day shock to the federal funds rate since 1990 was nearly 300 bps (283 bps in January 1991). Thus, the maximum WAM(R) for the 'AAm', 'Am', and 'BBBm' categories is based on a fund's ability to withstand interest rate shocks of 250 bps, 225 bps, and 200 bps, respectively, without the NAV dropping by more than 0.50%.

#### b. WAM(F)

- 49. WAM(R) can underestimate the interest-rate sensitivity and credit spread risk of a portfolio with floating-rate investments since the WAM calculation is based off the floating-rate investments' reset date. See table 6 for the limits for WAM(F) for each rating category.
- 50. VRDOs in daily or weekly mode are excluded from the maximum WAM(F) calculation because those securities generally exhibit lower interest rate sensitivity. In most cases, a credit enhancement provider is obligated to provide liquidity to the security before its legal maturity; such a liquidity provision can be based on a putback or similar mandatory liquidity arrangement.
- 51. In our view, the investor's put option significantly shortens the VRDO's effective maturity. If a VRDO structure includes a put option held solely by the investor, for purposes of determining maturity, we define the tenor of the security as the next liquidity (put) date. For purposes of calculating the weight VRDOs (including TOBs) have on the WAM(F), the tenor of the securities for which the investor holds such puts is incorporated by a calculation assuming the next liquidity date on which the principal amount must unconditionally be paid as a result of executing such a put. The maximum WAM(F) increases by 30 calendar days for all rating categories (e.g., 'AAAm' increases to 120 calendar days) if a fund invests exclusively in floating-rate notes rated 'AA-' or higher and issued by a central government (sovereign) or by a sovereign GRE that we classify as having "almost certain" likelihood of extraordinary government support. This is because national government (sovereign) or GRE floating-rate investments rated 'AA-' or higher generally exhibit lower spread risk than investments in nonsovereign issuers or in sovereigns rated below 'AA-'.

- 52. If a fund invests in a combination of government floaters rated 'AA-' or higher and nongovernment floating-rate instruments (or sovereigns rated below 'AA-'), the maximum WAM is based on a weighted average of the percentage exposures to each type of floating-rate instruments. Based on these weighted averages, the maximum WAM(F) will be 90-120 calendar days for funds rated 'AAAm', 100-130 calendar days for 'AAm', 110-140 calendar days for 'Am', 120-150 calendar days for 'BBBm', and more than 150 calendar days for 'BBm'.
- 53. To determine the maximum WAM(F) for a rated principal stability fund that invests in both sovereign government floating-rate notes (rated 'AA-' or higher) and nonsovereign government floating-rate notes (or sovereigns rated below 'AA-'): (i) calculate the amount of each type of floating-rate investment as a percentage of the total amount of floating-rate investments, (ii) multiply the percentages of each type of floating-rate investment by the respective maximum WAM(F) for sovereign government floaters (rated 'AA-' or higher) and nonsovereign government floaters (or sovereigns rated below 'AA-'), and (iii) add the results together to get the maximum WAM(F) for the fund (see table 7).

Table 7

Determining The Maximum WAM(F)										
	Invested in floaters (\$)	% of floaters		Max WAM(F) per floater type		Contribution to fund max WAM(F)				
'AAA' rated sovereign government floating-rate investments	19,000,000	19.39	х	120	=	23.27				
'AAA' rated corporate floating-rate investments	79,000,000	80.61	х	90	=	72.55				
Total floating-rate investments	98,000,000					95.82				
						Max WAM(F)				

54. When calculating a fund's WAM(F) for purposes of applying table 7, the demand features (i.e., puts or maturity shortening features) that specify a date on which the principal amount must unconditionally be paid is used, not the interest rate reset dates.

#### 3. WAM adjustments

- Table 8 lists the reductions to the maximum WAM(R) and WAM(F) limits identified in table 6 for funds with more volatile shareholder characteristics such as start-up funds or funds with limited operating history, small asset size, a concentrated shareholder base, or a new shareholder base with uncertain liquidity needs. The reductions to the maximum WAM(R) and WAM(F) limits are based on:
  - The amount of investments maturing in one business day (overnight);
  - The number of and diversification of shareholders;
  - Shareholder communication and characteristics;
  - Investment adviser experience (see paragraph 93); and
  - The fund manager's (or "fund's") policies and procedures to offset the risk of a concentrated or volatile shareholder base. (See table 8 for potential mitigants to WAM adjustments.)

Table 8

Adjustments To WAM Limits And	Mitigants	
The maximum WAM limits (to reset and to final) will be lowered for each of the following:	Reduction in WAM(R) and WAM(F)	Potential mitigants to WAM adjustment
An investment adviser has no prior experience managing a principal stability fund.	5 days	None
A fund with a concentrated shareholder base (i.e., comprises 10 or fewer accounts).	5 days	A process, supported by a successful track record, of managing redemptions of a concentrated shareholder base.
		<ol> <li>Knowledge of the larger shareholder cash flow needs and expectations (including expected time horizon of large deposits and whether shareholders' investments are mandatory or voluntary).</li> </ol>
		3) A requirement for advance notice for significant redemptions.
		4) Limits on the amount of money that is transient and not expected to remain invested in the fund such as for sweep accounts.
A fund has assets of less than the equivalent of \$100 million.	5 days	Same as above

- 56. Take the example of rating a new government money market fund with \$50 million in assets from less than 10 shareholders managed by an investment adviser--with no track record of managing a fund that Standard & Poor's rates. For 'AAAm', the maximum WAM(R) will be 50 calendar days (down from our 60-calendar-day maximum), and the maximum WAM(F) will be 110 calendar days (down from the 120-calendar-day maximum) if no mitigating factors exist. The maximum WAM limits are reduced by a total of 10 calendar days--five calendar days because it's a fund with only \$50 million, and another five calendar days because of a concentrated shareholder base (10 or fewer accounts).
- 57. A lower maximum WAM typically applies for three months and then the fund investment portfolio is reassessed to determine if the higher maximum WAM applies.

#### 4. Extensions of maturity

58. A 20-business-day cure period applies when a WAM(R), WAM(F), or an investment's final maturity exceeds the limits for a specific rating category--for instance, because of unexpected shareholder redemptions--as long as the fund's marked-to-market NAV does not drop below NAV ranges for each rating category (see table 10).

## C. Liquidity

59. The liquidity and price volatility of portfolio investments can greatly affect the market value of investments and result in erosion of a fund's NAV. A fund with a large proportion of relatively illiquid investments is more susceptible to a sizable decline in its portfolio market value and NAV than a fund that holds highly liquid investments (see the glossary for a definition of liquidity).

#### 1. 10% limit for assets with limited liquidity (the "illiquid basket")

60. A 10-business-day cure period typically applies when more than 10% of a fund's investments have limited liquidity or are illiquid. An investment with limited liquidity or an illiquid investment is an investment that cannot be sold or disposed of in five business days at approximately the value attributed to it by the fund.

- 61. Securities that have limited liquidity include:
  - Nonmarketable and historically less liquid instruments with maturities greater than five business days, unless the
    fund holds an unconditional put providing for liquidity within five business days, or if the fund is able to redeem the
    investment within five business days with no loss to invested principal or accrued interest. Examples of
    nonmarketable securities include repurchase agreements, unbreakable time deposits, master notes, promissory
    notes, funding agreements, insurance policies, and loan participation notes.
  - Investments denominated in a currency other than a fund's base currency, even if swapped back into the fund's base currency.
  - Windows variable-rate demand bonds (VRDBs), X-tenders, and other similar structures (see "Evaluating Security-Specific Risks" for more details).
  - CDs that mature in more than five business days that are not traded in a secondary market or are subject to early withdrawal penalties.
  - Pooled bank deposit programs (e.g., Certificate of Deposit Accounts Registry Service [CDARS], Deposit Liquidity
    Accounts, Insured Network Deposits, and Federally Insured Cash Accounts [FICA]) with a maturity of more than
    one business day. These nonmarketable securities typically impose fees for early withdrawal, and they may
    experience a delay in receiving Federal Deposit Insurance Corp. insurance payments.
- 62. Marketable securities include commercial paper, banker's acceptances, CDs traded in the secondary market, Treasury bills, and other short-term, high-quality money market instruments that Standard & Poor's rates 'A-1' or higher.

#### 2. Investments with high price volatility

- 63. Given their price volatility, the following are "higher-risk investments" and subject to a 10-business-day cure period:
  - · Collateralized debt obligations.
  - Credit-linked notes.
  - Market value-based securities.
  - Investments that possess a maturity extension feature that the investor does not control (i.e., issuer-controlled or asset/trigger driven). However, a security is not a "higher-risk investment" if it has an extension tenure of less than or equal to five business days and the extension event exists to provide additional time for payment/trade settlement issues.
  - Investments with an extension feature or option (regardless of the tenure of the extension) unless the option is held solely by the investor.

#### D. Diversification

- 64. In our experience, a well-diversified portfolio of fixed-income investments reduces the potential impact that an issuer-specific negative credit event could have on the stability of a fund's NAV.
- 65. A PSFR can be no higher than the lowest category associated with the metrics enumerated in table 9. Each row of the table specifies individual criteria metrics, and each column, before the last one, corresponds to a PSFR category. Each cell indicates the maximum level of portfolio holdings (on a percentage basis) that a fund must have to receive the related PSFR. Charts 3-5 show how the diversification criteria outlined in table 9 are applied.
- 66. A fund is rated no higher than 'BBm' if it has an exposure to an issuer (including debt guaranteed by the same issuer) of

greater than the metrics for the 'BBBm' rating category enumerated in table 9.

Table 9

D' - 'C'-' O I C-'					
Diversification Subfactors					
					Cure period
	AAAm	AAm	Am	BBBm	(business days)
Diversification (%)					
13. Maximum per issuer (including debt guaranteed by the same issuer) (see paragraph 64-66, 72-73) except for the items listed in Diversification exceptions	5	7.5	10	15	20
Diversification exceptions (%)					
14. Maximum concentration per sovereign entity (i.e., national government) rated 'AA' or higher (see paragraphs 74-76)	100	100	100	100	N/A
15. Maximum concentration per sovereign entity rated 'AA-' (see paragraphs 74-76)	50	50	67	75	20
16. Maximum concentration per sovereign entity rated 'A-1', 'A+', or 'A' and that matures in one business day (see paragraphs 74-76)	25	33	40	50	20
17. Maximum concentration per sovereign entity rated 'A-1', 'A+', or 'A' and that matures between two and five business days (see paragraphs 74-76)	10	15	20	25	20
18. Maximum concentration per sovereign entity rated 'A-1', 'A+', or 'A' and that matures in more than five business days (see paragraphs 74-76)	5	10	15	20	20
19. Maximum concentration per bank rated 'A-1', 'A+', or 'A' for uncollateralized overnight bank deposits, including uninvested cash (see paragraphs 72-73)	10	15	20	25	20
20. Maximum concentration per bank rated 'AA-' or higher or 'A-1+' for uncollateralized overnight bank deposits, including uninvested cash (see paragraphs 72-73)	15	20	25	30	20
High bank concentration (%)					
21. HBC: maximum concentration to any bank group rated 'AA-' or higher or 'A-1+', of which investments of 93–397 days cannot exceed the percentage in the parentheses next to the limit. For example: 25 (10) means of 25%, only 10% could be with maturities of 93-397 days. These limits are subject to additional limits described in "Diversification." The maximum amount excludes overnight deposits. (see paragraphs 67-69)	25 (10)	30 (10)	35 (10)	45 (15)	20
22. HBC: maximum fund aggregate exposure to bank groups rated 'AA-' or higher or 'A-1+' for uncollateralized exposure. Applied when exposures are greater than the "per issuer" limits, (see table 1, row 13). The test excludes overnight 'A-1+' bank deposits and overnight 'A-1+' collateralized (repo) investments (see paragraphs 67-69)	60	70	80	100	20
Group exposure (%)					
23. Maximum exposure per group, unless the higher HBC per group limit applies (see table 1, row 21). The test excludes overnight deposits and overnight collateralized (repo) investments. (see paragraph 70)	15	17.5	20	25	20
Collateralized exposure (%)					
24. Tiered maximums for investments that are fully (100%) collateralized or overcollateralized (more than 100%) (see paragraphs 109-112, table 11)	See charts 3-5 for details	See charts 3-5 for details	See charts 3-5 for details	See charts 3-5 for details	20
GRE exposure (%)					
25. Maximum exposure per "almost certain" sovereign government-related/guaranteed entity rated 'AA-' or higher§§ (see paragraph 75)	33	50	67	75	20
PSFR exposure (%)					
26. Maximum exposure to another Standard & Poor's rated PSFR (see paragraphs 119-120)	10	15	20	25	20

#### Table 9

#### **Diversification Subfactors (cont.)**

§§"Almost-certain" government-related entity (GRE) (see glossary) or government-guaranteed investments rated 'AA' or above with final maturities of one month or less are excluded from these limits. "Almost-certain" GRE 'AA-' rated exposures maturing in less than one month have the same limit as 'AA-' sovereigns (table 1, row 15). N.A.--Not applicable.

#### 1. High bank concentration and group limits

- 67. We apply high bank concentration (HBC) limits to funds with exposures to banks rated 'A-1+' that meet the conditions in the next paragraph and that exceed the standard "per issuer" limit of 5% (see table 1, row 13).
- 68. HBC metrics reflect increased tolerance to portfolio concentration to banks with the highest short-term rating ('A-1+'). In addition, HBC is limited to an aggregate amount of the portfolio, in varying combination. HBCs increase exposure to individual issuers, but at our highest short-term rating category and with limited maturity. To reduce fund exposure to aggregate issuer concentration risk, two metrics apply:
  - A higher minimum 'A-1+' portfolio credit quality metric applies (table 1, row 4), and
  - An overall fund aggregate metric applies to banks whose "per issuer" concentration exceeds 5% (table 1, row 22).

#### **HBC** example

69. A 'AAAm' rated fund could have up to an aggregate of 40% invested in any single HBC ('A-1+') bank group and of that, up to 10% exposure could be in 93-397 day exposures. The 40% individual bank aggregate could be split as follows: 15% overnight + 15% 2-92 days + 10% 93–397 days. If 40% was allocated to a single HBC, the remaining fund balance to HBC exposure would be 20%. The overall fund aggregate exposure to HBC is 60%.

#### **Group limits**

70. Group limits seek to minimize fund exposure to the price volatility of debt issued by related entities within the same group. We apply the definition of groups as described in paragraph 30 of "Group Rating Methodology," published Nov. 19, 2013. For the purposes of these criteria, the terms "group" and "group members" refer to the parent or ultimate parent, and all the entities over which a parent or ultimate parent has direct or indirect control. Often, the scope of consolidation is the same as that in the parent's or ultimate parent's consolidated audited accounts, plus proportionate stakes in joint ventures exclusively or jointly controlled, but not included in such accounts (see table 1, row 23, and table 9). Group limits apply to term (greater than overnight) exposures. The maximum (term) group exposure limit for 'AAAm' rated funds is 15%, unless HBC group limits apply. Overnight exposure for a fund could be 100% in a single group or issuer. Differing thresholds are applied for investments at 'A-1' and 'A-1+' rating levels to reflect the differences in credit rating profiles and the potential price volatility of group members based upon how strategically important (or connected) they are to the group, in our view, as well as due to differences in capitalization and prudential regulation of global group members. The group limit, when applied to banks, excludes overnight investments/securities, deposits, and overnight repo transactions.

#### 2. Diversification cure periods

71. A 20-business-day cure period applies for a failure to maintain metrics consistent with the table 9 thresholds as long as no additional breaches of quantitative metrics occur and the fund's marked-to-market NAV does not drop below the NAV ranges for each rating category (see table 10 and paragraphs 104-106).

#### 3. Per issuer diversification

- 72. The per issuer limits (table 1, row 13) exclude uncollateralized overnight bank deposits up to the specified maximums for 'A-1' and 'A-1+' rated banks (table 1, rows 19-20). They are excluded because of reduced mark-to-market risk for overnight bank deposits. We do this because of the high credit quality of 'A-1+' rated banks and similarly high credit quality of 'A-1' rated banks when exposure is limited to overnight. The individual limits sum to aggregate limits.
- 73. For example, a 4% (i.e., under the traditional 5% per issuer limit) exposure to 90-day commercial paper with an 'A-1' rated bank can be combined with an 'A-1' overnight deposit of 6% (i.e., under the 10% limit) to form an aggregate 10% exposure to the 'A-1' rated bank. If that bank was rated 'A-1+', the overnight deposit could reach 11% to form an aggregate 15%. The aggregate amount should not be larger than the limit allotted for overnight 'A-1' or 'A-1+' bank deposits (table 1, rows 19-20).

#### 4. Sovereign (i.e., national government) entities

74. In our experience, in a given country, sovereign securities rated 'AA' or higher are the most liquid and widely traded instruments and have more stable market values during various market cycles than other short-term investment alternatives. For this reason, we allow a substantial exception for the single issuer maximum (5% for a 'AAAm' rated fund); the quantitative metrics permit 100% exposure to a single sovereign rated 'AA' or higher (tables 1 and 9, row 14).

## a. Sovereign GREs we classify as having "almost certain" likelihood of extraordinary government support and sovereign government-guaranteed securities

- 75. The maximum exposures of total fund assets to any one sovereign GRE with "almost certain" likelihood of support or sovereign government-guaranteed entity rated 'AA-' or higher is 33% for 'AAAm', 50% for 'AAm', 67% for 'Am', 75% for 'BBBm', and more than 75% for 'BBm'. GRE or government-guaranteed investments rated 'AA' or higher with final maturities of 30 days or less are excluded from these limits. For an instrument whose obligor is a 'AA-' rated GRE, with a tenor of 30 days or less, "excluded from these limits" means that instead of applying row 25 in tables 1 and 9, for GRE exposure, we apply row 15 (i.e., the limits for 'AA-' sovereigns).
- 76. The maximum exposure to investments guaranteed by GREs related to two or more governments (i.e., World Bank) is 5%.

#### b. Newly issued guaranteed investments

- 77. Investments that are newly guaranteed by a highly rated (short-term rating of 'A-1+' or long-term rating of 'AA-' or higher) sovereign government (including GREs) could exhibit greater price volatility and spread risk than a sovereign's or GRE's own debt. The maximum exposure to newly guaranteed investments is 5% until trading spreads are commensurate with other debt from the same GRE or sovereign agency. Newly issued guaranteed floating-rate investments with legal final maturities of greater than 762 days are "higher-risk investments."
- 78. Newly guaranteed investments with legal final maturities of more than 397 calendar days but less than 762 days are limited liquidity investments.

#### c. Sovereigns, GREs, issuer rating withdrawals, issue and issuer downgrades

79. The cure period for investments downgraded below 'A-1' for greater than 5% exposures is 14 calendar days. (See table 5.)

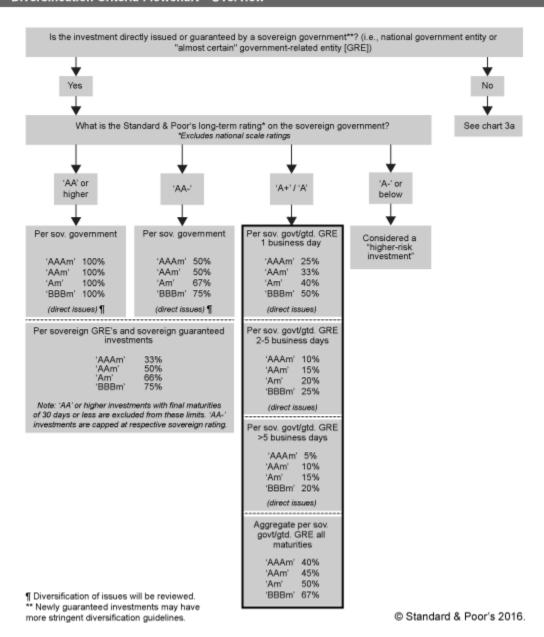
- 80. When we withdraw our rating on a sovereign GRE with what we classify as an "almost certain" likelihood of support from the sovereign, up to and including the date we withdraw ratings, we apply our last rating for 90 days to any already existing portfolio investment. Subsequent purchases after the rating withdrawal by the fund of that issuer's obligations are considered a "higher-risk investment."
- 81. Unless otherwise informed, we assume that "almost certain" likelihood of sovereign support, when not questioned in our rating withdrawal public communication, is unchanged and continues over the proposed 90-day cure period to reduce the balance to 0.00%.
- 82. The status of "almost certain" likelihood of government support (based on table 1 in "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015) applies to all references to GRE-related quantitative metrics and is the basis for credit quality and diversification that differ from corporate or U.S. municipal per issuer limits (see table 1, rows 13 and 25).
- 83. In the event that the sovereign rating changes during the cure period, we assess the consequences on the sovereign GRE, whose ratings we withdrew, to determine its consistency with criteria. In the event that the sovereign short-term rating falls below 'A-1' during the 90-day cure period, table 5 applies.
- 84. A 10-business-day cure period applies to nonsovereign/non-GRE issuers that have a lower diversification limit (for example, 5% per issuer for a 'AAAm' rated fund) in the event that we withdrew the issuer credit rating.
- 85. In the event that the sovereign rating is lowered to 'A+' or 'A' from 'AA-' or higher, a 60-day cure period applies. Upon the expiry of the 60-day cure period, if the lower-rated sovereign exposure remains above the assigned sovereign rating category diversification limits, Standard & Poor's would evaluate the sovereign exposure against the respective diversification limits and adjust the PSFR accordingly. If the sovereign rating falls below 'A', we would apply table 5.

#### 5. Repurchase agreement (repo) diversification

- 86. Maximum aggregate exposure when utilizing repo includes both collateralized and uncollateralized exposures. Further repo diversification information can be found in "Repurchase Agreements" (see paragraph 123). For example:
  - (a) If a fund invests 5% in commercial paper with an 'A-1' rated bank, the maximum exposure to an overnight collateralized repurchase agreement with the same 'A-1' bank would be 20%.
  - (b) If a fund invests 10% in overnight bank deposits with an 'A-1' rated bank, the maximum exposure to an overnight collateralized repurchase agreement with the same 'A-1' bank would be 15%.

#### Chart 3

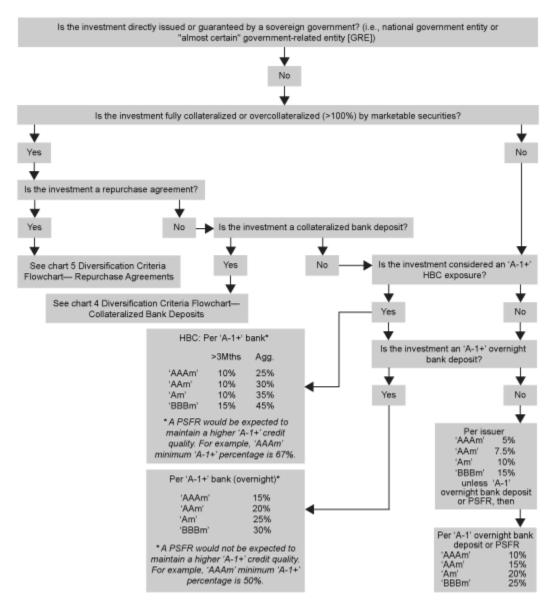
#### Diversification Criteria Flowchart—Overview



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#### Chart 3a

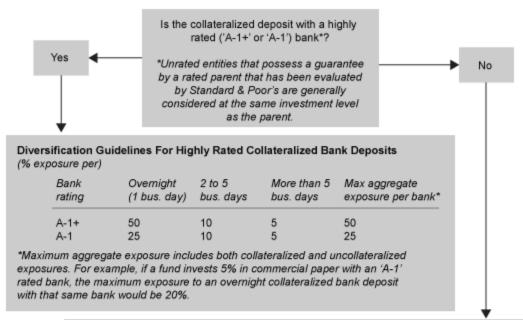
#### Diversification Criteria Flowchart—Overview



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#### Chart 4

#### Diversification Criteria Flowchart—Collateralized Bank Deposits

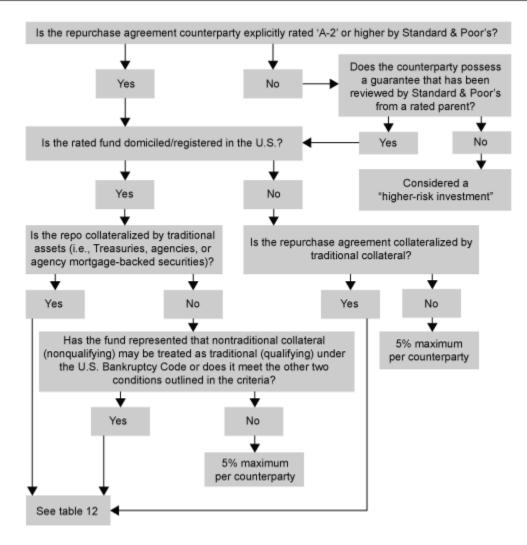


Bank rating	Collateral*	Maximum exposure per bank (%)	Maximum aggregate exposure for collateralized deposits (%)	Long-term bank rating
'A-2'	National government (sovereign) issuers rated 'AA-' or higher at 101% -105%	2.50%	10% for all rated lower than 'A-1' and NR	'BBB' or highe with a stable outlook
'A-3' or lower and NR	National government (sovereign) issuers rated 'AA-' or higher 105% – 110%	0.25%	10% for all rated lower than 'A-1' and NR	None

<sup>@</sup> Standard & Poor's 2016.

Chart 5

#### Diversification Criteria Flowchart—Repurchase Agreements



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## E. Index And Spread Risk

#### 1. Index correlation

87. Index and spread risks each introduce potential price volatility to assets commonly held by funds assessed for principal stability. New products are periodically developed and they may be tied to indices we have not previously assessed. Typically, variable-rate notes (VRNs) or floating-rate notes (FRNs) tied to indices we (and often others) do not view to be "anchor" money market reference indices are considered "higher-risk investments." Periodically, we assess multiple periods including one, three, five, seven, and 10 years to assess correlation.

- 88. We typically consider products "higher risk" when tied to indices that introduce credit risk or other spread risk whose historical volatility we have observed to be volatile enough not to support a correlation of 95% to a core local currency anchor money market reference rate over a sustained period. Characteristics of anchor money market reference indices include an established trading history, market acceptance, typically a maturity profile within one year, and performance commonly reflective of the movements in short-term money markets in the local currency.
- 89. Indices that we consider anchor money market reference rates include, but are not limited to:
  - U.S. dollar anchor rates: federal funds rate, one-month London Interbank Offered Rate (LIBOR), or three-month LIBOR
  - Euro anchor rates: European Overnight Index Average (EONIA), one-month Euro Interbank Offer Rate (Euribor), or three-month Euribor
  - Pound sterling anchor rates: Sterling Overnight Index Average (SONIA), one-month LIBOR, or three-month LIBOR
  - Canadian dollar anchor rates: Canadian dollar (CAD) overnight, one-month Canadian Dealer Offered Rate (CDOR; also called Canadian Bankers Acceptance Rate), three-month CDOR, one-month LIBOR, or three-month LIBOR
  - Australian dollar anchor rates: Australian dollar (AUD) overnight, one-month Bank Bill Swap Rate (BBSW), three-month BBSW, one-month LIBOR, or three-month LIBOR

#### 2. VRN/FRN final maturities

- 90. Because of the negative impact that spread risk could have on the market prices of VRNs and FRNs, nonsovereign government floating-rate investments and sovereign floating-rate investments rated below 'AA-' with legal final maturities greater 13 months (397 calendar days) are "higher-risk investments." In addition, sovereign floating-rate investments rated 'AA-' or higher are "higher-risk investments" if their legal final maturities exceed the following:
  - 762 days for 'AAAm' rated funds,
  - 1,127 days for 'AAm' rated funds,
  - 1,492 days for 'Am' rated funds, and
  - 1,857 days for funds rated 'BBBm' and lower.

#### 3. Higher-risk VRNs/FRNs

- 91. Some VRN and FRN investments may indicate a high correlation with anchor money market reference rates during various interest rate cycles but may also exhibit high price volatility. "Higher-risk investments" for rated principal stability funds include:
  - Range and capped floaters/notes--where interest payments could be restricted or limited.
  - Dual index floaters/notes--where interest payments are tied to more than one index.
  - Floaters tied to an index that lags other money market rates, such as Cost of Fund Index (COFI)-based floaters. In the early 1990s in the U.S., these lagging effects caused material price deviation in floating rating instruments.
  - Inverse floaters--where interest payments are based on a formula where the coupon has an inverse relationship to short-term interest rates (or its reference rate) that usually magnifies its price fluctuation.
  - Leveraged notes (notes linked to a multiple of an index) and deleveraged notes (notes linked to a multiple, of less than one, of an index).
  - Notes based on indices that track movements in commodities (e.g. agricultural, energy, and metals) or equities.

## F. Management

- 92. The strengths and weaknesses of a fund's management may affect the fund's ability to maintain a stable NAV. The analysis of management does not, in itself, raise the overall fund rating--the impact of the analysis is either neutral or negative. The management section of the criteria consists of four subsections:
  - Depth, experience, and adequacy of staff (a set of potential adjustment factors and range of impact);
  - Credit research and analysis (a set of potential adjustment factors and range of impact);
  - Pricing (policy of which leads to three possible outcomes); and
  - Internal controls (a set of potential adjustment factors and range of outcomes).

#### 1. Depth, experience, and adequacy of staff

- 93. A PSFR is lower by up to four categories, one category for each factor below, and more if the weakness is severe, if:
  - A single person is responsible for several critical functions, including more than one of the following: portfolio management, credit analysis, and shareholder communication. (This risk is typically referred to as "key-man risk.")
  - The investment manager does not have measurable experience managing a stable or accumulating NAV fund.
  - The fund does not have experienced individuals or procedures in place to manage the portfolio in the absence of the primary portfolio manager. An example is when an individual with limited stable NAV portfolio management experience is responsible for the backup portfolio management duties and there is very limited day-to-day oversight of the backup manager.
  - One or a small number of key team members is responsible for a large volume of trading and research across numerous investment sectors as well as other responsibilities, which could lead to significant disruption of operations.

#### 2. Credit research and analysis

- 94. A fund's internal credit analysis, security selection process, and ongoing security surveillance procedures are important to the maintenance of a stable NAV. Subject to paragraphs 104-106, a fund rating is lower by one category for each factor below and more categories if the weakness is severe, if:
  - It does not have the resources, policies, and procedures to manage the credit risks of the fund's investments to ensure the fund maintains a stable or accumulating NAV (or does not adhere to these policies and procedures). For example, a PSFR is lower by one category if it invests in any corporate securities and does not have an experienced credit research analyst on staff to conduct fundamental credit research (such as analyze income statements, balance sheets, and management's strategy) to determine an investment's level of credit risk.
  - It does not have detailed, issuer-specific credit analyses (i.e., documented qualitative review of each issuer regarding components of analysis that factor into the approval of each name). This may be provided by an outside source.
- 95. A detailed, consistent, and independent credit analysis process helps facilitate the maintenance of a stable NAV. The absence of two or more of these factors results in the PSFR being lower by one category:
  - Use of approved issuer list and a process for adding and removing names to eligible issuer list.
  - Daily monitoring of credit quality of investments and at least annual formal reviews of each issuer.
  - Process for responding to deteriorating credit situations.
  - An internal credit rating scale that provides evidence that independent analysis has been done, particularly if a credit committee must assign or approve the internal ratings.

96. The adjustments described in paragraphs 94-95 do not apply if the fund limits all investments to maturities of 30 calendar days or less with the highest Standard & Poor's short-term rating ('A-1+'), or if the fund invests exclusively in sovereigns rated 'AA-' or higher.

#### 3. Pricing

- 97. A fund's ability to accurately price investments, including any complex, structured, and derivative securities, is essential to maintaining a stable NAV. In the event that portfolio pricing is not undertaken, Standard & Poor's is unable to assign a PSFR. A PSFR is no higher than 'BBm' if any of the following applies:
  - It does not price investments and calculate a marked-to-market NAV at least weekly.
  - The fund manager does not independently review, at least weekly, the prices and marked-to-market NAV calculated by those primarily responsible for these functions (fund accounting/administrator/pricing group).
  - The fund manager does not obtain two or more dealer bids to verify pricing on investments that are difficult to price, such as less liquid investments, including investments that have embedded optionality.

#### 4. Internal controls

98. The review of a fund's internal controls includes the following factors: operating procedures and risk preferences, trade ticket verification, disaster recovery/business continuity, stress-testing capabilities, failure to comply with portfolio eligibility, regulatory guidelines, and pricing policies/NAV deviation procedures. The rating on a fund is lower by one category for each area where it lacks adequate internal controls. The downward rating adjustments are cumulative up to four categories (i.e., if a fund would otherwise receive a PSFR of 'AAAm', the lack of adequate internal controls in two factors lowers the PSFR to 'Am'). A lack of adequate internal controls across a majority of the areas results in a PSFR of 'BBm'.

#### a. Operating procedures and risk preferences

- 99. A fund manager's daily investment decision-making process--including how decisions are made, who is responsible for executing them, and what mechanisms are in place to assist management in staying within a fund's internal and/or regulatory limits--has a material impact on a fund's ability to maintain a stable NAV. The rating on a fund is lowered by one category if any of the following conditions exist (and by more than one category if one or more than one of the following conditions are significant):
  - It does not maintain operating procedures to stay within its internal and/or regulatory limits.
  - Its managers do not have policies on the risk measurement/management and limits related to its investments. This includes VRNs (other related instruments such as step-ups, callables, and convertibles), structured notes, derivative instruments, and other potentially less liquid investments.
  - Excessive risk, indicated by excessive NAV changes either positive or negative.
  - Lack of sufficient operational support (custodial, administrative, or trustee duties).

#### b. Trade ticket verification

- 100. The rating on a fund is lower by one category if:
  - The fund either does not maintain an electronic pre-trade compliance mechanism to monitor the investment parameters or does not maintain a procedure to have two signatures or equivalent review on each trade ticket--one from the individual executing the trade and one from a portfolio manager or another member of the investment advisory staff. This reduction does not apply for portfolios that limit investments to only sovereign governments

rated 'AA-' or higher and limit the portfolio WAM(R) to 30 calendar days or less and use one signature/set of eyes.

#### c. Disaster recovery/business continuity

- 101. The rating on a fund is lower by one category if either:
  - It does not have a business continuity plan or there is uncertainty about its ability to execute its business continuity plan, or
  - It does not test its business continuity plan at least every two years.

#### d. Stress-testing capabilities

- 102. The rating on a fund is lower by one category if it does not conduct stress tests using either a proprietary model or Standard & Poor's PSFR Sensitivity Matrix at least monthly. This reduction does not apply to a fund that holds only overnight investments.
- 103. The stress test for 'BBBm' or higher rated funds should show the impact in each of the following scenarios (and the combination of the four scenarios):
  - Parallel interest-rate shifts of plus/minus 200 bps in 25-basis-point increments.
  - Asset decreases (i.e., redemptions) of 10%, 15%, 20%, 25%, and the percentage of the largest historical five-business-day net redemptions for the fund. Note: If the largest voluntary shareholder is more than 25% of net assets, then use that larger percentage in the stress test in lieu of the 25%.
  - A downgrade on the largest sovereign, sovereign GRE, and nonsovereign (excluding overnight investments).
  - The widening and narrowing of credit spreads (based on current market conditions).

(Standard & Poor's PSFR Sensitivity Matrix is in the Appendix, section 1.)

#### e. Pricing policies and NAV deviation procedures

- 104. A PSFR can be no higher than the lowest category associated with the metrics enumerated in table 10. A fund has a cure period of maximum five business days when its marked-to-market NAV moves beyond the ranges specified for each rating category. If the marked-to-market NAV moves beyond the ranges specified for 'Dm', the rating is likely to be lowered within the cure period.
- 105. Market losses arising from negative yields as a consequence of investment in low credit risk, short duration securities with negative coupons would not solely result in lowering of the final PSFR (due to the management assessment) or the preliminary PSFR (due to breach of the metrics in table 1) when the fund operating documents permit loss of principal reflected in variable NAV (including accumulating NAV funds) or stable NAV funds with share class reductions or similar mechanisms. These strategies are consistent with the risk mitigants expressed in the criteria (for example, an investment strategy consistent with table 1, which describes tolerance for credit and duration risk at each PSFR level).

Table 10

Maximum NAV Movement Per PSFR Category								
	AAAm	AAm	Am	BBBm	BBm	Dm		
1. NAV ranges*	-0.25% or 0.9975	-0.30% or 0.9970	-0.35% or 0.9965	-0.40% or 0.9960	-0.5% or 0.9950	>0.50% or less than 0.9950		

#### Table 10

#### Maximum NAV Movement Per PSFR Category (cont.)

\*For all funds (regardless of rating), failure to increase the frequency to daily (from weekly) for portfolio pricing, marked-to-market NAV calculations, and stress testing when the NAV goes beyond -0.15% deviation (i.e. falls below 0.9985) result in a review of the sufficiency of management's pricing policies and NAV deviation policies and could result in a lower PSFR.

- 106. In addition to the other internal controls described in this section, the PSFR is lower by one category if either:
  - The fund does not maintain written policies for dealing with deviations in its marked-to-market NAV (a NAV deviation plan). These policies should include the specific NAV percentage deviations where action is taken, what action is taken, and the individual responsible for these actions; or
  - The portfolio managers are unable to explain how they would execute the NAV deviation plan.

## 2. Evaluating Security-Specific Risks

- 107. The security-specific risks section addresses how we incorporate various risks into the framework described above. The criteria cover the following investment structures:
  - · Callables and convertibles,
  - Collateralized CDs,
  - · Deposits with foreign bank branches,
  - Extendible investments,
  - Interest rate swaps,
  - · Other funds,
  - · Repurchase agreements,
  - Reverse repurchase agreements and securities lending, and
  - Windows VRDBs/X-Tenders.

## A. Callables, Convertibles, And Similar Structures

108. The calculation of WAM(R) and WAM(F) is based on the final maturity date for callable, convertible, and step-up bonds. When the issuer exercises the option on the convertible bond to move from a fixed-rate security to a floating-rate security, the calculation of the WAM(R) is based on the next interest rate reset date. When the price of the note does not approximate par value (typically within 0.50%), the final maturity date is used to calculate the WAM(R).

## **B.** Collateralized Certificates Of Deposit

- 109. Collateralized CDs in the U.S. benefit from being held by a regulated depository institution with a track record of providing proceeds within five business days to the fund or pool based on the liquidity of the collateral. However, in the U.S., CDs that benefit from the Federal Deposit Insurance Corp. guarantee receive the same credit quality assessment as long as the United States of America rating is higher than or equal to 'A'.
- 110. A fund investing in collateralized CDs receives a 'BBm' rating unless all of the following conditions by bank short-term rating in table 11 are met or paragraph 111 is applied.

Table 11

Collateralized Deposits With Banks (Rated And Unrated)					
Bank short-term rating	'A-1+' and 'A-1'	'A-2'	'A-3' or lower and NR¶		
Maximum maturity on deposit	397 days	397 days	397 days		
Collateral* (%, maturity, pricing frequency)	100%	National government (sovereign) issuers rated 'AA-' or better at 101%–105%*; priced at least weekly	National government (sovereign) issuers rated 'AA-' or better at 105%–110%*; priced at least weekly		
Custody of collateral	Held in name of fund	Held in name of fund	Held in name of fund		
Maximum exposure per bank (%)	See chart 3-3a	2.50%	0.25%		
Maximum aggregate exposure for collateralized deposits (%)	100%	10% for all rated lower than 'A-1' and NR	10% for all rated lower than 'A-1' and NR		
Bank long-term rating	N/A	At least 'BBB' with a stable outlook	N/A		

<sup>\*</sup>Actual collateralization amounts depend on maturity, type, and pricing frequency. The more frequently the collateral is priced, the shorter the maturity of the collateral and the more liquid the collateral (i.e., 'AA-' or higher rated sovereign), the less excess collateral needed to back the deposit. The collateral must be priced at least weekly, maintained at predetermined collateralization levels on each pricing day, and held in custody in the name of the fund for the fund to be rated investment grade. ¶This column also applies to banks rated 'A-2' that do not have a long-term rating of at least 'BBB' with a stable outlook. N/A--Not applicable. NR--Not rated.

- 111. When table 11 does not apply, the specific levels of overcollateralization are calculated using the midpoint of 'AA' and 'A' transactions from tables 1, 2, and 3 in "Methodology And Assumptions For Market Value Securities," published Sept. 17, 2013. The estimated worst historical price decline of assets pledged as collateral is calculated by asset type, where multiple assets of the same type are aggregated using their weighted average term to maturity.
- 112. The maximum aggregate exposure to all collateralized CDs with banks that are rated below 'A-1' or that are not rated is 10%.

## C. Deposits With Foreign Bank Branches

- 113. We apply "Assessing Bank Branch Creditworthiness," published Oct. 14, 2013, when determining credit quality of bank branches.
- 114. There are four pertinent situations referenced in "Assessing Bank Branch Creditworthiness," which determine whether we rate the bank branch at the same level as the rating on the parent, or whether certain sovereign-related caps apply to our assessment of bank branch creditworthiness:
  - Jurisdictions whose sovereign foreign currency rating is 'CCC+' or lower,
  - Jurisdictions whose sovereign foreign currency rating is 'B-' or higher,
  - · Branches located in offshore banking centers, and
  - Branches of EU banks that are located in another EU member state.
- 115. For not rated offshore banking jurisdictions such as the Channel Islands and the Isle of Man, see "The Channel Islands, Isle of Man, And U.K. Sovereign Credit Risk," published Feb. 6, 2004, and for the Cayman Islands, see "Cayman Islands Offshore Deposits," published Sept. 8, 1999.

#### D. Extendible Investments

116. Investments that possess a maturity extension feature that the investor does not control (i.e., issuer-controlled or driven by pre-established metrics of the underlying collateral pool supporting the transaction) are "higher-risk investments." This treatment does not apply to securities with an extension tenure of less than or equal to five business days to provide additional time for payment/trade settlement issues as outlined in the program documentation. The calculation of WAM(R) and WAM(F) is based on the legal final maturity date for these investments.

## E. Interest Rate Swaps

- 117. The portion of a fund's aggregate market value of the interest rate swaps that exceeds 10% of fund assets is "higher-risk investments." In addition, swaps that do not have all of the following characteristics are "higher-risk investments" (and do not count toward the 10% limit):
  - Entered into with a counterparty rated 'A-1' or better,
  - · Priced daily,
  - Fund's ability to unwind both sides of the swap transaction prior to maturity, and
  - Fund's right to sell the underlying security while the swap is in force.
- 118. For the purposes of applying table 6, WAM(R) and WAM(F) are calculated both including and excluding the effects of interest rate swaps that reduce portfolio maturities.

#### F. Other Funds

- 119. The fund industry's systemic liquidity risk, in our view, increases as funds invest significant percentages of their assets in other funds. An investment in another rated fund constrains the rating on the investing fund to the rating on the invested fund, regardless of the size of the investment. For example, Fund A invests in Fund B. If Fund B is rated 'Am', the rating on Fund A is limited to 'Am'. In addition, a fund's maximum exposure, at a given PSFR level, to any single fund with a Standard & Poor's PSFR is as follows:
  - 10% for 'AAAm'
  - 15% for 'AAm'
  - 20% for 'Am'
  - 25% for 'BBBm'
- 120. While the previous paragraph states "per fund" diversification limits, there is no maximum on the aggregate exposure to investments in other rated funds. For example, a PSFR could invest equally in 10 other 'AAAm' rated funds and itself be rated 'AAAm'. The per fund and aggregate diversification limits for investing in other rated funds apply to fund of fund structures but not to feeder or spoke funds in master-feeder and hub-spoke structures (see "Master-Feeder Funds"). In those structures, the feeder or spoke allows shareholders to invest in the same basket of assets, in contrast with a fund of funds, where an investor gains exposure to numerous baskets of assets (i.e., funds).

- 121. For purposes of applying table 6, a fund's WAM(R) and WAM(F) are calculated using the maximum number of calendar days the fund (in which the rated fund invests) is required to redeem shares upon receipt of a redemption request. However, WAM(R) and WAM(F) are calculated using a shorter maturity if the acquired fund has a policy we can identify to provide redemption proceeds within a shorter time.
- 122. "Interfund lending" (when one fund invests in another fund not through a purchase of shares but rather through a debt instrument arrangement) is treated the same way as investments in other funds.

## G. Repurchase Agreements

- 123. Repurchase agreements (repos) are contracts involving the simultaneous sale and future repurchase of an asset. In a repo transaction, a fund lends cash to a counterparty, which posts securities as collateral based on the agreement and expectation that the counterparty will repay the cash loan to the fund at an agreed-upon date and price in exchange for the securities. In non-U.S. domiciles, these are typically referred to as reverse repurchase agreements.
- 124. A repo is often viewed as collateralized lending since a fund extends a liability (loan) and takes the collateral as security against the loan. When a dealer (counterparty) uses the term "repo securities," it generally means it's going to finance securities it owns or borrows. When an investor (such as a money market fund) uses the term "repo securities," it generally means it's going to invest in repo (i.e., lend cash to a counterparty and receive securities as collateral).

#### 1. Repo maturity

125. The maturity of a repo agreement is the final maturity of the agreement. If the agreement contains an unconditional put that the investor controls, this would result in a shorter effective maturity for the agreement. The put date is used as the maturity date.

#### 2. Repo counterparty risk

Despite the presence of collateral, high credit quality of a repo counterparty provides a level of protection to the PSFR. Upon a counterparty default, wider liquidity and market risks could increase as the fund takes possession of the underlying collateral, potentially affecting a fund's ability to maintain principal stability. Counterparties (such as broker/dealers) that do not have a rating of 'A-1+', 'A-1', or 'A-2' from Standard & Poor's or do not have a guarantee of all their obligations from an equivalently rated Standard & Poor's-rated entity, are "higher-risk investments." Since we view 'A-2' rated counterparties as sufficiently rated but more likely to force reliance upon the collateral, a repo rated 'A-2' (i.e., whose counterparty is rated 'A-2') is limited to overnight maturities and a fund aggregate and per issuer exposure limit comparable with 'A-1', and more limited than 'A-1+' rated repos (see table 12). This applies to all repo, regardless of the types of collateral backing these transactions.

#### 3. Repo diversification

- 127. The diversification limits for repos vary based on the type of collateral supporting the repos. Collateral generally falls into two categories: traditional and nontraditional.
  - Traditional collateral for U.S.-domiciled funds comprises U.S. government and U.S. government agency securities, including Treasuries, agency discount notes, and agency mortgage-backed securities. For non-U.S.-domiciled funds, traditional collateral includes highly rated ('AA-' or higher, or 'A-1+') sovereign government securities or their

- explicitly guaranteed agencies (i.e., sovereign government-related entities). Funds that use these collateral types invest in "traditional repo."
- Nontraditional collateral is everything that is not listed under traditional collateral. For U.S.-domiciled funds, this
  includes investment-grade and speculative-grade corporate debt, money market instruments, asset-backed
  securities, emerging market debt, and equities. For non-U.S.-domiciled funds, this includes highly rated covered
  bonds, corporate debt, asset-backed securities, emerging market debt, and equities. Funds that use these collateral
  types invest in nontraditional repo.
- 128. The different diversification limits based on the collateral supporting these agreements apply when the repos are at least fully (i.e., 100%) collateralized on a daily basis. Repos that are not fully collateralized and term repos (i.e., maturities beyond one business day) that do not price and maintain at least 100% collateralization on a daily basis are subject to the same diversification limits as other investments.
- 129. Table 12 lists the diversification limits for traditional repos (at least 100% collateralized) for funds rated 'BBBm' or higher. Investments that exceed the percentages listed in table 12 are "higher-risk investments."

Table 12

(%)	AAAm	AAm	Am	BBBm
Maximum per 'A-1+' counterparty overnight (1 business day)	50	50	50	50
Maximum per 'A-1+' counterparty 2-5 business days	10	10	10	10
Maximum per 'A-1+' counterparty more than 5 business days*	5	5	5	5
Maximum aggregate exposure to any single 'A-1+' counterparty	50	50	50	50
Maximum per 'A-1' counterparty overnight (1 business day)	25	25	25	25
Maximum per 'A-1' counterparty 2-5 business days	10	10	10	10
Maximum per 'A-1' counterparty more than 5 business days*	5	5	5	5
Maximum aggregate exposure to any single 'A-1' counterparty	25	25	25	25
Maximum per 'A-2' counterparty overnight (1 business day)	5	5	5	5
Maximum per 'A-2' counterparty 2 or more business days	0	0	0	0
Maximum fund exposure, aggregated over all 'A-2' counterparties	10	10	15	20

<sup>\*</sup>The aggregate amount of all repos across all counterparties (regardless of the rating on the counterparty) with maturities of more than five business days is limited to 10% of a fund's total assets and is counted toward the 10% maximum for limited liquidity/illiquid investments. Maximum aggregate exposure includes both collateralized and uncollateralized exposures. For example, if a fund invests 5% in commercial paper with an 'A-1' rated bank, the maximum exposure to an overnight collateralized repurchase agreement with that same bank would be 20%.

130. In the event a counterparty defaults, nontraditional repos may be subject to greater liquidity and market risks than traditional repos. The portion of nontraditional repos with any single 'A-1+' or 'A-1' counterparty (or broker/dealer) in excess of 5% of total fund assets is a "higher-risk investment." Nontraditional repos with 'A-2' counterparties are "higher-risk investments."

- 131. For purposes of evaluating counterparty exposure, repos collateralized by nontraditional collateral held by U.S.-domiciled funds that meet the following conditions (i) and (ii) are traditional repos:
  - (i) The fund's repos fall within the definition of a repurchase agreement under the Bankruptcy Code, or there is a legal opinion satisfactory to Standard & Poor's stating that:
  - The fund meets the definition of either a financial institution or financial participant, or otherwise qualifies as an entity entitled to benefit from special protections under the local/prevailing Bankruptcy Code with respect to securities contracts; and
  - The fund's repos qualify as "securities contracts" as defined in the local/prevailing Bankruptcy Code.
  - (ii) If the repos are with financial institutions subject to the U.S. Federal Deposit Insurance Act (FDIA), the fund sponsor must provide assurances that the repos satisfy the definitions of "qualified financial contract" under the FDIA in addition to the definitions of either a repurchase agreement or a securities contract as the case may be.
- 132. In the U.S., traditional repos and any nontraditional repos that meet the conditions outlined above are qualifying repos because they receive special treatment under the U.S. Bankruptcy Code. The diversification criteria outlined in table 12 apply to qualifying repos. Nontraditional repos that do not meet the conditions outlined above are nonqualifying repos and are subject to the same diversification limits as other investments (i.e., 5% per repo counterparty).
- 133. For purposes of evaluating counterparty exposure, repurchase agreements collateralized by sovereign government bonds rated 'AA-' or higher are traditional or qualifying repos for funds domiciled or registered outside the U.S. Repurchase agreements collateralized by all other investments are nontraditional or nonqualifying repos.
- 134. Chart 5 summarizes the maximum levels of repo exposure by counterparty.

## H. Reverse Repurchase Agreements And Securities Lending

- 135. A reverse repo (in the U.S.) is a leveraging technique in which a fund manager agrees to sell a security in the portfolio while simultaneously agreeing to repurchase it at a future time. In non-U.S. domiciles, these are typically referred to as repurchase agreements. The fund manager typically takes the cash and invests it in another asset. A reverse repo is often viewed as collateralized borrowing since a fund incurs a liability and uses the security as collateral. In this regard, securities lending is similar to reverse repo and can also increase the risk level of a money fund portfolio.
- 136. Counterparty exposures in reverse repo and securities lending transactions that do not have a rating of 'A-1' or 'A-1+' from Standard & Poor's and do not have either a guarantee or an indemnification of their obligations from an entity with a Standard & Poor's rating of 'A-1' or 'A-1+' are "higher-risk investments."
- 137. Reverse repos and securities lending transactions have the following limits:
  - A maximum maturity of 30 calendar days for 'AAAm', 60 calendar days for 'AAm', 90 calendar days for 'Am', and 120 calendar days for 'BBBm'.
  - A maximum of 25% of net assets in transactions with maturities of less than or equal to five business days for all PSFR categories of 'BBBm' or higher.
  - A maximum of 10% of net assets in transactions with maturities that exceed five business days for PSFR categories

- of 'BBBm' or higher. Additionally, these investments are limited liquidity assets.
- A maximum aggregate of 25% of net assets for all PSFR categories of 'BBBm' or higher (i.e., if a 'AAAm' rated fund enters into a 10-calendar-day reverse repo totaling 10% of its net assets, the maximum in reverse repo maturing in less than five business days is 15%).
- 138. The reinvestment of cash collateral from reverse repos and securities lending transactions is treated the same as other assets in a fund's portfolio. In addition, a fund is rated 'BBm' if the reinvested cash collateral:
  - Is not matched by maturity on both sides. For example, cash from a reverse repo with a seven-day term that is invested in a security with a maximum maturity of seven days is considered matched; or
  - Exceeds 10% of fund assets reinvested in VRNs or FRNs, and the interest rate reset of the VRNs or FRNs exceeds the term of reverse repo or securities lending transaction. (For example, securities lent out for seven days and cash collateral reinvestments in floaters are limited to 10%, and the interest rate reset of the floaters should be no more than seven days.)
- 139. For purposes of applying table 6, WAM(R) and WAM(F) are calculated by including reverse repos and securities lending transactions as fund assets (i.e., reinvestment of cash collateral).
- 140. The following examples show the effects leverage can have on a fund's WAM(R) and WAM(F). Assume an unleveraged fund invests in U.S. Treasury securities with 60 calendar days to maturity, which means the WAM(R) of the fund is 60 calendar days. For example, a fund with a \$100 million portfolio enters into a reverse repo, or lends 25% of its assets and invests the proceeds in an overnight repo. Although this transaction is matched, the effective WAM(R) increases. If the overnight repo investment is included in the portfolio, the WAM(R) (gross) could be reported as 48.20 calendar days ([80% times 60 calendar days] plus [20% times one day] equals 48.20 calendar days). However, because the increase in assets to \$125 million has a leverage effect, the WAM(R) is calculated on a net basis, which is 60 calendar days. To properly determine the WAM(R), the unleveraged portfolio WAM(R) of 60 calendar days is combined with the WAM(R) of the borrowed assets and results in a WAM(R) of 60.25 calendar days (60 calendar days plus [25% times one calendar days)]. If the fund invested in a 30-calendar-day security, the fund's effective WAM(R) would be 67.50 calendar days (60 calendar days plus [25% times 30 calendar days]). If a fund only invests in fixed-rate investments, the leveraged WAM(R) and WAM(F) are the same. However, if the fund invested cash collateral in a floating-rate note with a final maturity of 300 calendar days and an interest rate reset of one calendar day, the WAM(R) would be calculated using a one-calendar-day maturity for the note and the WAM(F) using a 300-calendar-day maturity for the note.

#### I. Windows Variable-Rate Demand Bonds/X-Tenders

141. Windows VRDBs, X-Tenders, and other similar extendible reset structures are term put bonds and are not evaluated as extendible investments under these criteria. For instance, windows VRDBs typically possess a weekly interest rate reset and offer a dual put feature. The dual put includes (1) a conditional put during an initial remarketing window after the initial optional tender and (2) an unconditional put that is several months after the original tender. Liquidity (cash) for payment of a tender is first paid from remarketing proceeds, and then from the issuer or obligor. The windows structure does not allow the issuer to extend the maturity on the investor at any point, but it does enable the issuer to pay the investor earlier than expected.

142. For purposes of applying table 6, WAM(R) and WAM(F) are calculated using the longest final maturity (as stated in the legal documents) date for these instruments. For example, until a fund decides to exercise the put, each day a fund holds these bonds, they are carried to the long final maturity date for WAM(R) and WAM(F) calculations. If the security pays a floating rate of interest, depending on the interest rate reset date and the put date, the fund may opt to use the interest rate reset date in its WAM(R) calculation. Windows VRDBs, X-Tenders, and other similar extendible reset structures are limited liquidity/illiquid investments.

#### 3. Master-Feeder Funds

143. The criteria also apply to master-feeder funds, which are sometimes referred to as a "Hub and Spoke" structure. In the master-feeder structure, the feeder fund conducts essentially all of its investing through the master fund. We impute the rating on the master portfolio since it holds the underlying investments of the feeder fund.

#### 4. Bifurcation

- 144. On occasion, a fund manager may attempt to minimize the impact a downgraded or defaulted security has on a rated fund by removing the distressed asset from the portfolio and placing the asset into a separate portfolio. This process, commonly called bifurcation, aims to protect the rest of the portfolio from any losses the distressed asset has incurred. The PSFR criteria apply to each separate piece (portfolio) when a rated fund is bifurcated.
- 145. A fund receives a rating of 'Dm' if it bifurcates to avoid realizing a loss of more than 0.50% per share since we view this event as equivalent to a distressed exchange. Subsequent to this rating action, the rating on the fund is raised to a level that reflects its ability to maintain the new principal value. We apply "Rating Implications Of Exchange Offers And Similar Restructurings, Update," published May 12, 2009, when considering the rating implications of bifurcation. (See "Pricing policies and NAV deviation procedures," paragraphs 104-106, and table 10.)

## 5. Parental Support

146. PSFRs are based on a fund's independent ability to maintain principal stability and limit exposure to losses resulting from credit risk and do not include a fund sponsor's willingness or ability to support the fund's NAV. Funds are not considered part of a group as defined in "Group Rating Methodology," published Nov. 19, 2013. However, we recognize that there is operational reliance upon a fund sponsor and the rating does include the measures a sponsor and a fund manager takes or has committed to implement cures. Operational reliance is considered in paragraph 99 and more broadly is incorporated as part of our assessment of management. Historically, on occasion, the types of support have generally included of one or more of the following: credit support agreements, LOCs, purchasing distressed assets out of the fund at amortized cost, making cash investments in the fund, and creating an escrow/reserve account in the name of the fund with highly rated entities. A rating on a sponsor or a sponsor's support is not applied to raise a rating above its preliminary PSFR.

## 6. Negative Yields

147. Negative yields due to market rates are excluded from the calculations to determine NAV stability, as described in table 1 (PSFR Quantitative Metrics), table 10, and paragraph 104-105. The disclosure to investors indicates that they have affirmatively voted for or invested with full knowledge of the fund's ability to lose principal but maintain stable NAV by reducing the number of shares owned by investors or similar action (e.g., a declining NAV for accumulating NAV funds). We do not lower our PSFR when the permitted loss is due to negative yield that results from investment in low credit risk, short duration securities. These strategies are consistent with the risk mitigants expressed in our criteria. NAV declines due to management fees greater than the fund's return result in a loss of principal to investors and can result in lowering a PSFR.

#### APPENDIX

## 1. PSFR Sensitivity Matrix

148. Standard & Poor's makes available to all rated funds its own stress-testing model called the Standard & Poor's PSFR Sensitivity Matrix. This model enables the user to stress changes in asset size, interest rate shifts, and credit spread movements--or a combination of all three (see the glossary for a definition of stress testing).

Table 13

Table 13								
Standard & Poor's PS	FR Sensitivity	y Matrix						
WAM(R)	60							
WAM(F)	120							
Shares outstanding (\$)	500,000,000							
Total fund assets (\$)	499,250,000							
Market value (NAV)	0.9985							
Credit spread movement (bps)	50							
% total credit (nongovernment) securities (of portfolio)	25							
% corporate floaters (of portfolio)	15							
Total \$ loss	(750,000)							
Total \$ gain	0							_
Basis-point shift	Selected shareholders	Largest redemption over five consecutive business days						Gain (loss)
200	0.994179	0.993355	0.993604	0.994315	0.994884	0.995127	0.995736	(2,558,219)
175	0.994646	0.993889	0.994118	0.994772	0.995295	0.995519	0.996079	(2,352,740)
150	0.995114	0.994423	0.994632	0.995228	0.995705	0.99591	0.996421	(2,147,260)
125	0.995581	0.994956	0.995146	0.995685	0.996116	0.996301	0.996764	(1,941,781)
100	0.996049	0.99549	0.995659	0.996142	0.996527	0.996693	0.997106	(1,736,301)
75	0.996516	0.996024	0.996173	0.996598	0.996938	0.997084	0.997449	(1,530,822)
50	0.996984	0.996558	0.996687	0.997055	0.997349	0.997476	0.997791	(1,325,342)
25	0.997452	0.997091	0.9972	0.997511	0.99776	0.997867	0.998134	(1,119,863)
0	0.997919	0.997625	0.997714	0.997968	0.998171	0.998258	0.998476	(914,384)
(25)	0.998387	0.998159	0.998228	0.998425	0.998582	0.99865	0.998818	(708,904)
(50)	0.998854	0.998692	0.998741	0.998881	0.998993	0.999041	0.999161	(503,425)
(75)	0.999322	0.999226	0.999255	0.999338	0.999404	0.999432	0.999503	(297,945)
(100)	0.99979	0.99976	0.999769	0.999795	0.999815	0.999824	0.999846	(92,466)
(125)	1.000257	1.000294	1.000283	1.000251	1.000226	1.000215	1.000188	113,014
(150)	1.000725	1.000827	1.000796	1.000708	1.000637	1.000607	1.000531	318,493
(175)	1.001192	1.001361	1.00131	1.001164	1.001048	1.000998	1.000873	523,973
(200)	1.00166	1.001895	1.001824	1.001621	1.001459	1.001389	1.001216	729,452
Redemptions/subscriptions (%)	(12)	(23)	(20)	(10)	0	5	20	

Table 13

Standard & Poor's PS	SFR Sensitivity	Matrix (co	ont.)				
Shares outstanding	439,444,861	385,000,000	400,000,000	450,000,000	500,000,000	525,000,000	600,000,000
Top 10 shareholders	ş	% of fund	Stress redemption		Largest five-day redemption (%)	23	
Shareholder 1	50,000,000	10.02	No				
Shareholder 2	40,444,200	8.1	Yes				
Shareholder 3	38,456,871	7.7	No				
Shareholder 4	15,067,896	3.02	No				
Shareholder 5	12,456,985	2.5	Yes				
Shareholder 6	10,871,596	2.18	No				
Shareholder 7	9,875,645	1.98	No				
Shareholder 8	7,563,121	1.51	Yes				
Shareholder 9	5,312,879	1.06	No				
Shareholder 10	3,215,468	0.64	No				
Stress top 10	193,264,661	38.71	No				
Total fund assets	499,250,000	100	60,464,306.00				

## 2. Principal Stability Fund Rating Definitions

- 149. A Standard & Poor's principal stability fund rating, also known as a "money market fund rating," is a forward-looking opinion about a fixed income fund's capacity to maintain stable principal (net asset value) and to limit exposure to principal losses due to credit risk. When assigning a principal stability rating to a fund, Standard & Poor's analysis focuses primarily on the creditworthiness of the fund's investments and counterparties, and also its investments' maturity structure and management's ability and policies to maintain the fund's stable net asset value.
- 150. We generally do not lower ratings to 'Dm' when the manager of any fund suspends redemptions for up to five business days or meets redemption requests with payments in-kind in lieu of cash, if this occurs because the fund is faced with an unanticipated level of redemption requests during periods of high market stress, and this suspension is permitted under the fund's prospectus.
- 151. Principal stability fund ratings, or money market fund ratings, are identified by the 'm' suffix (e.g., 'AAAm') to distinguish the principal stability rating from a Standard & Poor's traditional issue or issuer credit rating. Principal stability fund ratings are neither commentaries on yield levels paid by the fund, nor are they commentaries on loss of principal due to negative yields.
- 152. Market losses arising from negative yields as a consequence of investment in low credit risk, short duration securities with negative coupon would not solely result in lowering a PSFR when the fund operating documents permit loss of principal reflected in variable NAV or stable NAV funds with share class reductions or similar mechanisms. These strategies are consistent with the risk mitigants addressed in our analysis of and tolerance for credit and duration risk at each PSFR rating level.

Table 14

Principal Stability Fund Ratings*				
Category	Definition			
AAAm	A fund rated 'AAAm' demonstrates extremely strong capacity to maintain principal stability and to limit exposure to principal losses due to credit risk. 'AAAm' is the highest principal stability fund rating assigned by Standard & Poor's.			
AAm	A fund rated 'AAm' demonstrates very strong capacity to maintain principal stability and to limit exposure to principal losses due to credit risk. It differs from the highest-rated funds only to a small degree.			
Am	A fund rated 'Am' demonstrates strong capacity to maintain principal stability and to limit exposure to principal losses due to credit risk but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than funds in higher-rated categories.			
BBBm	A fund rated 'BBBm' demonstrates adequate capacity to maintain principal stability and to limit exposure to principal losses due to credit risk. However, adverse economic conditions or changing circumstances are more likely to lead to a reduced capacity to maintain principal stability.			
BBm	A fund rated 'BBm' demonstrates speculative characteristics and uncertain capacity to maintain principal stability. It is vulnerable to principal losses due to credit risk. While such funds will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.			
Dm	A fund rated 'Dm' has failed to maintain principal stability resulting in a realized or unrealized loss of principal.			

<sup>\*</sup>The ratings from 'AAm' to 'BBm' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the rating categories.

## 3. Glossary

- 153. Accumulating NAV funds. Accumulating NAV funds generally operate under the same investment guidelines as constant NAV funds, and income is accrued daily. However, unlike constant NAV funds, income is not distributed. Instead, income is reflected in an increase in the value of the fund shares and is realized upon redemption of those shares at a higher price.
- Dilution. Dilution can accelerate fund losses when interest rates are rising, causing a fund to break the dollar. Breaking the dollar occurs when a fund's marked-to-market NAV drops below 0.995 per share, at which point investors are redeemed at 0.99. For example, a 200-basis-point rise in interest rates causes a 60-day WAM portfolio's market value to drop to 0.996712 per share. A subsequent 35% redemption (paid out at 1.00 per share) dilutes the portfolio's market value to 0.994942 per share, thus breaking the dollar (see table 15).

Table 15

Table 15				
NAV DilutionAssumption	ons			
Portfolio asset value:	\$100 million			
Weighted average maturity:	60 days			
Number of shares:	100 million			
Share value:	\$1.00			
Share price:	\$1.00			
Event 1: Interest rates rise 200 basis points (2.00%)				
Result				
Number of shares:	100,000,000			
Portfolio value drops to:	\$99,671,233			
Unrealized loss:	\$328,767 (\$100,000,000 -\$99,671,233)			
Share value	\$0.996712 (\$99,671,233/100,000,000 shares)			

#### Table 15

# NAV Dilution--Assumptions (cont.) Event 2: Following event 1, fund experiences 35% redemption Result

Result	
Number of shares:	65,000,000
Portfolio value drops to:	\$64,671,233 (\$99,671,233 - \$35,000,000)
Unrealized loss:	\$328,767
Share value:	\$0.994942 (\$64,671,233/65,000,000 shares)
Share price:	\$0.99 per share

- 155. *Hot money*. Hot-money investors move their investments in and out of a fund based primarily on interest rate movements. These shareholders can introduce a high level of volatility to the asset base of a fund.
- 156. *Index 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. Spread risk is the possibility that the spread on a floating-rate note will be lower than the prevailing market rate. Index risk can arise when the variable-rate coupon's adjustments are 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.
- 157. *Liquidity*. The liquidity of a security refers to the speed at which that security can be sold or disposed of in the ordinary course of business at approximately the value ascribed to it by the fund.
- 158. *Money fund portal*. Money fund portals are Web-based systems that offer a simplified way for investors to transact with funds.
- 159. *Stress testing*. Stress testing (sometimes referred to as "scenario" or "what-if" analysis) can be an effective tool to track the sensitivity of a fund's marked-to-market NAV to changes in interest rates, credit spread movements, net redemptions, and the combined effects of these items.
- 160. *WAM(R)* and *WAM(F)*. To more accurately monitor a rated fund's interest rate and spread risk, two measures of a portfolio's WAM are used--WAM to reset, or WAM(R), and WAM to final, or WAM(F). WAM(R) uses the interest-rate reset date as the effective maturity in calculating the WAM, whereas WAM(F) (also known as weighted average life, or WAL) is calculated based on the stated final maturity for each security.

#### RELATED CRITERIA AND RESEARCH

#### **Related Criteria**

- Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Standard & Poor's Ratings Definitions, Nov. 20, 2014
- Group Rating Methodology, Nov. 19, 2013
- Criteria | Financial Institutions | Banks: Assessing Bank Branch Creditworthiness, Oct. 14, 2013
- Methodology And Assumptions For Market Value Securities, Sept. 17, 2013
- Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers, May 7, 2013
- Guarantee Criteria--Structured Finance, May 7, 2013
- Methodology And Assumptions: Assigning Ratings To Bonds In The U.S. Based On Escrowed Collateral, Nov. 30, 2012

- 2010 Annual Global Corporate Default Study And Rating Transitions, March 30, 2011
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Methodology And Assumptions: Approach To Evaluating Letter Of Credit-Supported Debt, July 6, 2009
- Australian And New Zealand Fund Credit Quality Ratings Criteria, July 20, 2009
- Rating Implications Of Exchange Offers And Similar Restructurings, Update, May 12, 2009
- Commercial Paper, VRDO, And Self-Liquidity, July 3, 2007
- Commercial Paper I, March 23, 2004

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

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