MOODY'S INVESTORS SERVICE

RATING METHODOLOGY

US Municipal Short-term Debt Methodology

This rating methodology combines and replaces the *Short-term Debt of US States, Municipalities and Nonprofits Methodology* published in July 2020 and the *Variable Rate Instruments Supported by Conditional Liquidity Facilities* methodology published in March 2017. While we have largely retained the approaches for each type of short-term debt described in the prior methodologies, we limit use of this methodology to assign short-term ratings to debt issuances with maturities of three years or less. In the Conditional Liquidity Approach, for financial guarantors we have eliminated the separate mapping from the long-term rating to the highest potential short-term rating. We have also made editorial changes to enhance readability.

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Analyst Contacts:

NEW YORK +1.212.553.1653

Dan Seymour +1.212.553.4871
Vice President - Senior Analyst
dan.seymour@moodys.com

Susan Fitzgerald +1.212.553.6832
Managing Director – Public Finance
susan.fitzgerald@moodys.com

Lisa Martin +1.212.553.1423
Senior Vice President
lisa.martin@moodys.com

Joann Hempel +1.212.553.4743
Vice President - Senior Credit Officer
joann.hempel@moodys.com

Thomas Jacobs +1.212.553.0131
Senior Vice President/Manager
thomas.jacobs@moodys.com

» contacts continued on the (second to) last page

Introduction

In this rating methodology, we explain our general approach to assigning short-term ratings of US states, municipal entities and nonprofit organizations, where the repayment of the short-term obligation relies on the issuer's available liquid resources or access to the capital or credit markets, for additional or replacement debt issuance. We also explain our general approach to rating variable rate demand bonds (VRDBs) or commercial paper (CP) where the repayment of the obligation relies on third-party liquidity support in the event of a failed remarketing of the bonds or a failed rollover of the CP. We describe the qualitative and quantitative factors that are likely to affect rating outcomes.

We also discuss other considerations, which are factors whose credit importance varies widely among issuers in the public and nonprofit sectors or factors that may be important only under certain circumstances or for a subset of issuers. In addition, some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to short-term ratings. Furthermore, since ratings are forward-looking, we often incorporate directional views of risks and mitigants in a qualitative way.

Our presentation of this rating methodology proceeds with (i) the scope of this methodology; (ii) a description of our general approach; (iii) discussion of the primary rating factors for each of the four methodology approaches, which are differentiated based on the source of repayment and transaction structure; (iv) other considerations; (v) the assignment of short-term ratings; (vi) methodology assumptions; and (vii) limitations. In the appendix, we describe certain types of transaction structures.

Scope

We use this methodology to assign short-term ratings for US state, municipal and nonprofit entities, where the repayment of the short-term obligation relies on the issuer's available liquid resources or access to the capital or credit markets for additional or replacement debt issuance. These ratings may be assigned to issuers, short-term debt programs or individual debt instruments. We also use this methodology to assign short-term ratings where third-party conditional liquidity support is the primary repayment source for the short-term obligation (e.g., to repay commercial paper or the purchase price of a demand bond in the event of a failed remarketing).

We use this methodology to assign short-term ratings for transactions with maturities of up to three years from the original closing date. The short-term ratings we assign using this methodology may be based on the Global Short-Term Rating scale, the Municipal Investment Grade (MIG) rating scale or the Variable Municipal Investment Grade (VMIG) rating scale. Please see Exhibit 2 below and *Rating Symbols and Definitions*.[1]

We use a different methodology to assign ratings to bonds supported by a letter of credit, guarantee or other form of credit substitution, and we use different methodologies to assign ratings to public finance transactions with maturities in excess of three years.[2]

General Approach to Assigning Short-term Ratings of US States, Municipalities and Nonprofits

We have four approaches, depending on the source of repayment for the obligation and the transaction structure.

Self-liquidity Approach

We use the self-liquidity approach to assess transactions whose repayment largely depends on immediate access to an issuer's available liquid resources. Because these financial resources must be available on the same day as the maturing debt, we refer to them as daily liquidity.

Examples of the types of structures rated using this approach include commercial paper (CP) or variable-rate demand obligations (VRDOs) with frequent tender features (typically less than six months).[3] In the event of a failed rollover or remarketing, these structures usually do not provide a borrower with sufficient time to meet rollover or tender dates without using its own available liquid resources as the largest, and often only, source of repayment.

1 A link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.
2 A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.
3 See the appendix for more information.

Market Access / Cash Flow Approach

We use the market access/cash flow approach to assess transactions with scheduled repayment dates whose repayment largely depends on an issuer's access to the capital or credit markets or on its cash flow, with only secondary reliance on its available liquid resources.

Typically, where an issuer intends to access the capital or credit markets as the principal source of repayment for a short-term obligation, the transaction terms provide the issuer with sufficient time to plan for additional or replacement debt issuance ahead of a fixed maturity, redemption, or tender date.

Examples of the type of structures rated using the market access/cash flow approach include:

» Short-term cash flow notes, which are generally issued by state, municipal or nonprofit organizations to bridge seasonal or other intra-year operating cash flow shortfalls and generally have a fixed repayment date.

» Bond anticipation notes (BANs), which are short-term notes that provide US states, municipalities and nonprofit organizations with interim financing for capital projects in anticipation of accessing credit markets for long-term financing.

» Extendable CP, whose initial maturity date automatically extends a pre-set number of days in the case of a failed rollover. The issuer is obligated to pay the CP outstanding on the new, extended maturity date.

» Variable-rate demand obligations (VRDOs) with scheduled mandatory tenders of six months or longer, or VRDOs with mandatory tenders upon failed remarketing (such as VRDOs in windows mode),[4] where the date of the mandatory tender is at least six months after the failed remarketing.

USDA Financing Approach

For transactions whose repayment relies on a commitment from the US government to provide take-out financing through the US Department of Agriculture (USDA) Office of Rural Development, we use the USDA financing approach. These transactions are typically structured as notes with a fixed maturity date, issued by unrated borrowers.

Conditional Liquidity Approach

We use the conditional liquidity approach to assess the credit risk of variable rate demand bonds (VRDBs) or commercial paper (CP) where a third party has agreed to provide liquidity support under certain conditions in the event of a failed remarketing following a mandatory or optional tender of the bonds or a failed rollover of maturing commercial paper. Issuers arrange bank liquidity facilities to provide liquidity for these tenders in lieu of a letter of credit or maintaining their own internal liquidity.

Conditional liquidity facilities are contingent obligations of the support provider. Under certain circumstances delineated in the liquidity facility, the support provider is able to immediately terminate or suspend its obligation to purchase the bonds or CP prior to the expiration of the facility. For example, certain events of default may be designated as immediate termination or suspension events that release the support provider from any purchase obligation, without the need for prior notice to

[4] Windows mode is an interest-rate mode available under some transaction structures. For more information, see the appendix.

the issuer, the trustee or bondholders, and without a mandatory tender of bonds. Upon the occurrence of one of these events, bondholders immediately lose their source of liquidity for tenders.

These liquidity facilities do not cover regularly scheduled payments of principal and interest and therefore do not provide credit enhancement, and an issuer's credit is not substituted with the support provider's credit.[5.]

Discussion of the Primary Factors

In this section, we describe the primary factors for each of the four approaches.

Self-liquidity Approach: Primary Factors

We use the self-liquidity approach to assess transactions whose repayment largely depends on an issuer's immediately available liquid resources.

This methodology framework comprises three factors. The Structure and Notification Procedures and the Long-term Credit Quality factors are used to arrive at an issuer's highest potential short-term rating. We may then apply downward notching, based on the Debt Management and Liquidity factor, which has two sub-factors. The result of this analysis is the indicated outcome before other considerations.[6]

EXHIBIT 1
Self-liquidity Approach: Factors and Sub-factors

Factor	Sub-factor
Structure and Notification Procedures	--*
Long-term Credit Quality	--*
Highest Potential Short-term Equivalent	
Debt Management and Liquidity	Debt and Treasury Management Strength
	Liquidity Sufficiency and Composition
Indicated Outcome Before Other Considerations	

*This factor has no sub-factors.

Source: Moody's Investors Service

Factor: Structure and Notification Procedures

Why It Matters

The structure of the transaction and clear and timely notification procedures are important because they help to mitigate the risk of insufficient or late payments to bondholders in the event of a failed remarketing of the bonds or CP.

Full and timely payment to holders of short-term municipal bonds and CP in the event of a failed remarketing depends on the clear understanding of the various parties to the transaction of their responsibilities and obligations within the structure. Those parties include the issuer, its external

5 Please see our cross-sector methodology that discusses our approach to credit substitution. A link to a list of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

6 Please see the "Other Considerations" section.

investment managers, the trustee, the tender agent, the remarketing agent and any banks providing backup liquidity facilities. If the bond or CP program documents and the agreements between the issuer and its investment managers or banks do not have clear, timely notification procedures, the risk of late payments in the event of a failed remarketing of the bonds or CP may increase.

How We Assess It

In assessing the structure of the transaction, we consider whether the bond documents specifically indicate that the issuer is obligated to pay the full purchase price of the debt in the event of a failed remarketing.

We assess whether the transaction documents, including the trust indenture, tender and remarketing agreements, provide clear and timely procedures to all parties to the transaction in the event of a failed remarketing. We also assess whether the notification to the issuer provides adequate time for the issuer to liquidate investments to meet the payment or to make a draw on a backup bank facility, within the guidelines established by the external managers or bank.

Because our assessment of this factor reflects both full and on-time payment in the event of a failed remarketing, transaction procedures that are inadequate typically result in a speculative-grade rating (SG), regardless of our assessment of the other factors.

Factor: Long-term Credit Quality

Why It Matters

The strength or weakness of an issuer's long-term credit quality is an important indicator of its ability to fund failed remarketings of its short-term obligations.

How We Assess It

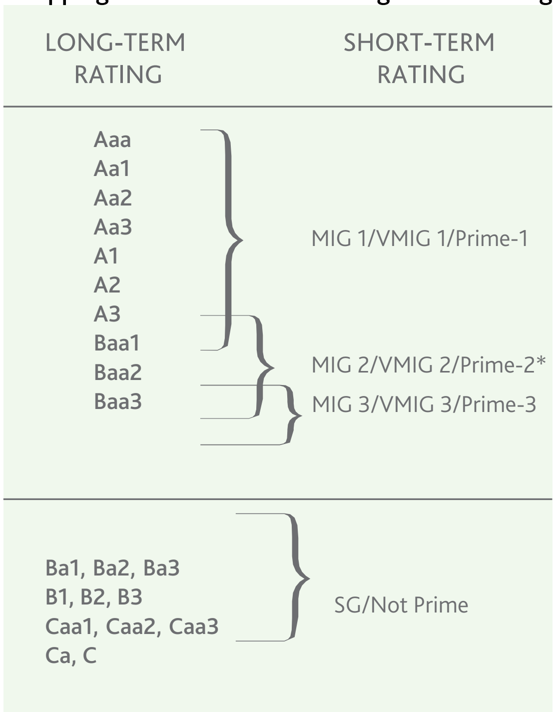
An issuer's highest potential short-term rating is mapped from its long-term rating (see Exhibit 2).[7] The issuer's long-term rating is assigned using the relevant sector methodology.[8]

7 The reference rating typically used for this mapping is the issuer rating, the general obligation debt rating or the senior unsecured revenue debt rating for state and municipal issuers and the issuer rating or senior unsecured debt rating for nonprofit issuers. Where there is no published long-term rating, an assessment of long-term credit characteristics is considered in the determination of the short-term rating.

8 A link to a list of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

EXHIBIT 2

Mapping to the Short-term Rating from the Long-term Rating[9]



*While the mapping in Exhibit 2 includes some overlap in the short-term rating that can be assigned from a given long-term rating, issuers with long-term ratings between A3 and Baa2 typically map to MIG 2/VMIG 2/Prime-2.

Source: Moody's Investors Service

Factor: Debt Management and Liquidity Profile

Why It Matters

The debt management and liquidity profile provide important indications of an issuer's ability to quickly marshal its resources to meet the demands of a failed remarketing.

This factor has two sub-factors, which are used to assess, in aggregate, the quantity, quality and accessibility of liquidity to determine the typical number of downward notches we apply to the highest potential short-term rating. As described below, ratings also incorporate other considerations.

» Debt and Treasury Management Strength

» Liquidity Sufficiency and Composition

How We Assess It

DEBT AND TREASURY MANAGEMENT STRENGTH:

In scoring this qualitative sub-factor, we classify the strength of an issuer's management of its debt and its treasury functions into four categories: strong, medium, limited or weak. Our assessment is based on a preponderance of attributes for each classification level (see Exhibit 3).

9 Please also see our cross-sector methodology that discusses short-term ratings and *Rating Symbols and Definitions*. A link to a list of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

EXHIBIT 3

Debt and Treasury Management Strength Assessment

Classification	Typical Attributes
Strong	
	Dedicated professional debt and treasury personnel with strong experience and fiscal sophistication; amply staffed (typically at least five members).*
	Well-documented policies and procedures, supported by strong systems, that clearly assign responsibilities to appropriate staff to respond to calls on liquidity.
	A strong history of compliance with policies and procedures with no exceptions.
	Where relevant, dedicated bank lines that are well-diversified across counterparties, with staggered expiration dates, and advance planning for bank line expiration.
	A history of at least annual access to the debt markets and experience managing multiple types of debt instruments.
	A history of strong working capital and investment portfolio management, including regular stress-testing of portfolio.
Medium	
	Dedicated professional debt and treasury personnel with strong experience and fiscal sophistication; well-staffed (typically three to four members).*
	Well-documented policies and procedures, supported by moderately strong systems, that clearly assign responsibilities to appropriate staff to respond to calls on liquidity.
	A generally strong history of compliance with policies and procedures with few exceptions.
	Where appropriate, dedicated bank lines that are somewhat diversified across counterparties, with staggered expiration dates, and advance planning for bank line expiration.
	A history of access to the debt markets at least every three years and experience managing multiple types of debt instruments.
	A history of entirely adequate working capital and investment portfolio management, including reasonable assumptions but little or no stress-testing.
Limited	
	Dedicated professional debt and treasury staff with moderate experience; adequately staffed (typically one or two members).*
	Clear policies and procedures, supported by adequate systems, that assign responsibilities to appropriate staff; procedures may not be clearly documented.
	A history of compliance with policies and procedures that includes multiple exceptions.
	Infrequent history of access to the debt markets, approximately once every five years.
	A history of mostly adequate working capital and investment portfolio management with somewhat optimistic assumptions and no stress testing.
Weak	
	No dedicated debt and treasury staff members; limited experience with treasury management.
	Poor ability to articulate debt and liquidity policies and procedures; weak systems.
	Poor history of compliance with policies and procedures.
	Infrequent history of access to the debt markets of less than once every five years.
	A limited or inconsistent history of working capital and investment portfolio management with very optimistic assumptions and no stress testing.

* In this assessment, we include members of the finance staff involved in decision-making around debt or treasury functions, as well as dedicated finance and investment management staff.

Source: Moody's Investors Service

LIQUIDITY SUFFICIENCY AND COMPOSITION:

We classify liquidity sufficiency and composition into four categories: strong, medium, limited or weak. Our assessment is based on quantitative and qualitative considerations.

The primary quantitative metric is the daily coverage ratio, which is a scenario analysis of the coverage of potential calls on liquidity by liquid assets accessible within a day. The ratio's denominator includes all VRDOs in either a daily, weekly or CP mode. It also includes the amount of CP expected to be outstanding over the subsequent six months. When the issuing and paying agent agreement or other authorizing document restricts the amount of CP maturing within a five-day period to a maximum amount (a provision in some municipal structures), the amount of CP included in the denominator is capped by this five-day limit.

The numerator for the daily coverage ratio includes investments that can be liquidated on a same-day basis (daily liquidity). As part of this scenario analysis, we apply discount rates to some of these investments based on their type, because the necessity to sell assets quickly to meet liquidity requirements could require that they be sold at a discount.

Exhibit 4 lists the types of investments we include in the calculation of daily liquidity and the discount rates applied to each.

EXHIBIT 4

Types of Investments Included in Daily Liquidity for Coverage Calculation and Discounts

Type of Investment	Discounts
Money market funds rated Aaa-mf*	0%
Checking and deposit accounts at P-1-rated banks	0%
US Treasury and government agency securities with less than two-year maturity	6%
US Treasury and government agency securities with two- to less than 10-year maturity	10%
US Treasury and government agency securities with 10-year or longer maturity	15%
Eligible repurchase agreements	6%

*Published or privately assessed. Please see our sector rating methodology that discusses money market funds. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Source: Moody's Investors Service

Money Market Funds

We include SEC 2a-7 money market funds as a source of daily liquidity provided that they are rated Aaa-mf, whether assigned through a published rating or a private assessment.[10]

US Treasury and Government Agency Securities

We consider US Treasury and government agency securities a source of daily liquidity. We apply a 6% discount to securities with maturities of less than two years, a 10% discount to securities that mature in two to less than 10 years, and a 15% discount to securities that mature in 10 years or longer.

[10] Please see our methodology that discusses money market funds. A money market fund rating is not a credit rating but is an Other Permissible Service. For more information on MMF ratings, please see *Rating Symbols and Definitions*. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Eligible Repurchase Agreements

We consider repurchase agreements (these may be referred to by various terms, including a sale-repurchase agreement, a repo or a reverse repo) a source of same-day liquidity under certain circumstances. In a basic transaction, the borrower lends cash overnight to a counterparty and receives a government security as collateral. We discount these repos 6% in our discounted daily liquidity calculation, reflecting the minimum haircut we apply to Treasury and government agency securities. A variety of criteria must be met for the repo to be included in our daily liquidity calculation, including:

» The repurchase agreement is an overnight transaction with the cash returned to the borrower the following day.

» The transaction is collateralized by US Treasury or government agency securities.

» The margin on repo collateral is consistent with industry conventions.

» Collateral is marked-to-market daily.

» Repo counterparties have short-term ratings of P-1.

» We consider bilateral repurchase agreements a source of same-day liquidity in which the collateral is held by the municipal issuer in its account with the counterparty and the cash is returned immediately once the collateral is returned. We do not consider tri-party repurchase agreements as a source of same-day liquidity because under the typical tri-party repo process, the timing for unwinding the repurchase agreement is not sufficient for daily liquidity.

Other Liquid Investments

In addition to the investment types listed above, we may also consider other types of investments sources of same-day liquidity if they can be liquidated within a day. In these cases, we apply a discount rate to the value of the investment.

For example, a few public sector entities hold assets with their state's treasury or with a state-related investment fund. Inclusion of these assets as a source of daily liquidity is considered based on the specific attributes of the investment and our assessment of the creditworthiness and stability of the investment and the investor's ability to access funds on an immediate basis.

Under certain conditions, we may also consider backup bank facilities as a supplement to an issuer's own daily liquidity and include them in the daily liquidity for the coverage calculation. For the facility to be considered, the facility provider must be a P-1-rated bank. Additionally, where the backup bank facility includes a rating trigger that requires the issuer to maintain an investment-grade rating, we include the facility in our assessment of daily liquidity only when the issuer's own rating is A3 or higher.

To be considered in our daily liquidity analysis, the bank facilities must be structured with a same-day drawing option that will provide funds in time to meet the self-liquidity issuer's payment obligation. Additionally, conditions precedent to funding, automatic termination and suspension events must be limited to those representing severe credit events of the borrower as described in the "Conditional Liquidity Approach" section.

Qualitative Liquidity Considerations

While the daily coverage ratio is a primary part of our overall assessment of Liquidity Sufficiency and Composition, this sub-factor also includes qualitative attributes for each classification level (see Exhibit 5).

In assessing the diversity and quality of the issuer's liquidity portfolio, we consider the number of sources of liquidity to which a self-liquidity issuer has access in the event of a failed remarketing. We also assess the types of investments an issuer holds for liquidity to determine the quality of the portfolio.

We consider a well-diversified, high-quality liquidity portfolio to be composed mostly of money market funds and low-risk securities provided by a wide variety of counterparties, as well as US Treasury securities. We consider a liquidity portfolio to have limited diversity when it consists of money market funds and other securities provided by a limited number of counterparties. We consider a liquidity portfolio to be undiversified when investments, excluding US Treasury securities, are provided by only one or two investment providers.

In addition to considering the issuer's backup bank facilities for assessing the amount of daily liquidity, we consider them qualitatively. For example, the composition of an issuer's lenders provides insights into its risk management; an issuer that chooses a group of relationship banks rated P-1 typically demonstrates awareness to the quality of its liquidity. However, backup facilities from P-2 rated banks (which are excluded from the above calculation of liquidity sufficiency) may provide some benefit. The terms and conditions of an issuer's backup facilities, including the termination events and conditions precedent to funding, provide insights into the overall relationship with lenders and the self-liquidity issuer's negotiating position and treasury management sophistication.

EXHIBIT 5
Liquidity Sufficiency and Composition Assessment

Classification	Attributes
Strong	
	Daily coverage ratio of at least 2x.
	Well-diversified and high-quality daily liquidity portfolio.
	All backup bank facilities are from P-1-rated banks, with limited automatic termination events or conditions required for funding consistent with our Conditional Liquidity Approach.
Medium	
	Daily coverage ratio of at least 1.25x.
	Well-diversified and high-quality daily liquidity portfolio.
	All backup banks facilities are from P-1-rated banks, with limited automatic termination events or conditions required for funding.
Limited	
	Daily coverage ratio of at least 1x.
	Limited diversification of daily liquidity portfolio.
	Most backup bank facilities are from P-1-rated banks but some are from P-2-rated banks, with limited automatic termination events or conditions required for funding.
Weak	
	Daily coverage ratio of less than 1x.
	Undiversified daily liquidity portfolio.
	Backup bank facilities contain many automatic termination events or are predominantly from banks rated P-2 or below.

Source: Moody's Investors Service

In each case, the classification reflects a preponderance of the attributes at a particular assessment level. We may assess the daily coverage ratio under various stress scenarios. We also may incorporate additional liquidity outside of daily liquidity that could supplement daily coverage. These additional considerations are described in the "Other Considerations" section.

Self-liquidity Approach: Indicated Outcome Before Other Considerations

Based on our assessments of the Debt and Treasury Management Strength and Liquidity Sufficiency and Composition sub-factors, we may apply up to three downward notches to the highest potential short-term rating, using the matrix in Exhibit 6. The result of this analysis is the indicated outcome before other considerations.

For example, if an issuer has adequate notification procedures; a long-term rating of Baa1, which maps to a short-term rating of P-2/VMIG 2; its debt and treasury management strength is assessed as medium; and its liquidity sufficiency and composition is assessed as medium, the indicated outcome would typically be one notch lower, i.e., a P-3/VMIG 3.

EXHIBIT 6
Typical Notching for Debt and Treasury Management Strength and Liquidity Sufficiency and Composition

Liquidity Sufficiency & Composition	Debt and Treasury Management Strength: Strong	Medium	Limited	Weak
Strong	0	0	-2	SG/NP
Medium	0	-1	-2	SG/NP
Limited	-1	-2	SG/NP	SG/NP
Weak	SG/NP	SG/NP	SG/NP	SG/NP

Source: Moody's Investors Service

Market Access /Cash Flow Approach: Primary Factor

We use the market access/cash flow approach to assess transactions whose repayment largely depends on an issuer's access to the capital or credit markets or on its cash flow, with only secondary reliance on its available liquid resources. The market access/cash flow approach comprises one factor, which is used to map the long-term credit quality of the issuer to a short-term equivalent, which is the indicated outcome before other considerations.[11]

EXHIBIT 7
Market Access/Cash Flow Approach: Factors

Factor	Sub-factor
Long-term Credit Quality	--*
Short-term Equivalent/Indicated Outcome Before Other Considerations	

*This factor has no sub-factors.
Source: Moody's Investors Service

Factor: Long-term Credit Quality

Why It Matters

Common characteristics drive long-term and short-term credit risk. An issuer's long-term credit quality provides important indications of its financial and debt management and liquidity. Long-term credit quality is a core concern for fixed income investors and a primary determinant of an issuer's ability to generate reliable cash flow and to access the capital and credit markets.

11 Please see the "Other Considerations" section.

How We Assess It

For transactions with maturities of up to three years, the highest potential short-term rating is mapped from the long-term rating of the issuer or the rating of the expected takeout financing[12] (see Exhibit 2). In assigning the issuer's long-term rating or evaluating the expected rating of the takeout financing, we use the relevant sector methodology.[13]

USDA Financing Approach: Primary Factors

For transactions whose repayment relies on a commitment from the US government to provide take-out financing through the US Department of Agriculture (USDA) Rural Development Office, we use the USDA financing approach.

This approach comprises two factors. The Long-term Credit Quality of the US Government factor is used to arrive at an issuer's highest potential short-term rating. We may then apply downward notching,[14] based on the Project and Borrower Risk factor, which has two sub-factors. The result of this analysis is the indicated outcome before other considerations.[15]

EXHIBIT 8

USDA Financing Approach: Factors and Sub-factors

Factor	Sub-factor
Long-term Credit Quality of the US Government	--*
Highest Potential Short-term Equivalent	
Project and Borrower Risk	Project Risk
	Borrower Risk
Indicated Outcome Before Other Considerations	

*This factor has no sub-factors.
Source: Moody's Investors Service

Factor: Long-term Credit Quality of the US Government

Why It Matters

The long-term credit quality of the US government is very important to the credit quality of these financings, which are typically in the form of notes, because they are secured by a commitment from the US federal government, through the USDA, to provide take-out financing for the notes upon substantial completion of the project.

How We Assess It

A USDA note's highest potential short-term rating is mapped from the long-term issuer rating of the US government, using the mapping shown in Exhibit 2 above.

[12] The reference rating typically used for this mapping is the issuer rating, general obligation rating or senior unsecured revenue debt rating (or anticipated rating of the takeout financing) for state and municipal issuers, and the issuer rating or senior unsecured revenue debt rating for nonprofit issuers. Where there is no published long-term rating, an assessment of long-term credit characteristics is considered in the assignment of the short-term rating.

[13] A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

[14] In this context, notching is along the short-term rating scale. For example, one downward notch from MIG-1 is MIG-2.

[15] Please see the "Other Considerations" section.

Factor: Project and Borrower Risk

Why It Matters

Project and borrower risk are important because the USDA's commitment to provide financing is contingent upon the completion of the project within a certain time frame, as well as the borrower's ability to manage the project and to remain solvent until substantial completion is achieved and the take-out financing closes.

How We Assess It

PROJECT RISK:

Scoring for this qualitative sub-factor is based on our assessment of the likelihood that the project will be fully completed in a timely manner to meet the USDA's requirements for financing. We classify the likelihood of timely project completion into four categories: strong, medium, limited or weak. Scoring is based on a preponderance of attributes for each classification level (see Exhibit 9).

EXHIBIT 9
Project Assessment

Classification	Typical Attributes
Strong	
	Length of project from date of debt issuance is less than one year or project is already complete
	Significant cushion (i.e., nine months or more) between expected project completion and note maturity
	Simple project involving routine construction
	Any additional funding sources needed for project completion have already been used or deposited at closing
Medium	
	Length of project is less than two years
	Moderate cushion (i.e., six months to less than 10 months) between expected project completion and note maturity
	Simple construction project, e.g., interior refurbishment or addition to existing facility
	Most additional funding sources needed for project completion are deposited at closing
Limited	
	Length of project is less than three years
	Limited cushion (i.e., three months to less than three months) between expected project completion and note maturity
	Complex construction project, e.g., construction of a new facility
	Risk that additional funding sources needed for project completion may be unavailable
Weak	
	Length of project is three years or more
	Very narrow cushion (i.e., less than three months) between expected project completion and note maturity
	Very complex construction project, e.g., construction of a large new facility, may include required clearing of land or excavation, potential environmental issues or challenges to accessing area
	Significant risk that additional funding sources needed for project completion may be unavailable

Source: Moody's Investors Service

BORROWER RISK:

Scoring for this qualitative sub-factor is based on our assessment of the borrower's commitment to the project as well as its ability to manage the project and its own financial operations. We classify the borrower's commitment and ability into four categories: strong, medium, limited or weak. Scoring is typically based on a preponderance of attributes for each classification level (see Exhibit 10). However, there may be cases where one attribute, such as a project that serves an essential public purpose, is sufficiently important that it essentially determines the sub-factor assessment or has a very large influence on it.

EXHIBIT 10
Borrower Assessment

Classification	Typical Attributes
Strong	
	Strong operating performance; consistently balances budget or regularly produces operating surplus
	Ample liquidity for operating needs and project overruns
	A strong history of completing similar projects on time
	Project serves an essential public purpose
	Project size is small relative to revenue base
Medium	
	Moderate operating performance; generally balances budget or produces operating surplus
	Adequate liquidity for operating needs and project overruns
	Some experience of completing similar projects on time
	A substantial portion of the project serves an essential public purpose
	Project size is moderate relative to revenue base
Limited	
	Inconsistent operating performance; high variability of operating surplus and history of unbalanced budget
	Limited liquidity for operating needs and project overruns
	Limited history of completing similar projects on time
	Project has essentiality for a narrow portion of the public
	Project size is large relative to revenue base
Weak	
	Weak operating performance; history of unbalanced budget and operating losses
	Inadequate liquidity for operating needs and project overruns
	No prior history of completing similar projects on time
	Project does not serve an apparent essential public purpose
	Project size exceeds revenue base

Source: Moody's Investors Service

Based on our assessments of the Project Risk and Borrower Risk sub-factors, we may apply up to three downward notches to the highest potential short-term rating, using the matrix in Exhibit 11. The result is the indicated outcome before other considerations.[16]

For example, if the US government's long-term rating is Aaa (which maps to a short-term rating of MIG 1), scoring for project risk is assessed as medium and scoring for borrower risk is assessed as medium, the indicated outcome would typically be two notches lower, i.e., MIG 3.

16 Please see the "Other Considerations" section.

EXHIBIT 11
Typical Notching for Project Risk and Borrower Risk

Project Risk	Borrower Risk: Strong	Medium	Limited	Weak
Strong	0	-1	-2	SG/NP
Medium	-1	-2	-2	SG/NP
Limited	-2	-2	SG/NP	SG/NP
Weak	SG/NP	SG/NP	SG/NP	SG/NP

Source: Moody's Investors Service

Conditional Liquidity Approach: Primary Factors

We use the conditional liquidity approach to assess transactions whose repayment depends on third-party conditional liquidity support.

This approach comprises three factors: Credit Quality of the Relevant Parties; Structural Elements of the Transaction; and Liquidity Facility Automatic Termination or Suspension Events. The result of this analysis is the indicated outcome before other considerations.[17]

EXHIBIT 12
Conditional Liquidity Approach: Factors and Sub-factors

Factor	Sub-factor
Credit Quality of the Relevant Parties	Long-term Credit Quality of the Issuer or Borrower
	Short-term Credit Quality of the Liquidity Provider
Structural Elements of the Transaction	--*
Liquidity Facility Automatic Termination or Suspension Events	--*
Indicated Outcome Before Other Considerations	

*This factor has no sub-factors.

Source: Moody's Investors Service

[17] Please see the "Other Considerations" section.

Factor: Credit Quality of the Relevant Parties

Why It Matters

The credit quality of the relevant parties to a VRDB or CP issuance is an important indicator of the likelihood that bondholders will receive timely payment of the purchase price of a debt obligation in the event of a failed remarketing of a bond or a failed rollover of CP.

The relevant parties are (i) the issuer or borrower of the debt, (ii) the liquidity provider; and (iii) in some cases, the financial guarantor.[18]

This factor has two sub-factors:

Short-term Credit Quality of the Liquidity Provider

The short-term credit quality of the liquidity provider is an important indicator of its ability to provide timely payment of the purchase price of the debt on optional or mandatory tender dates in the event of a failed remarketing of VRDBs or failed rollover of maturing CP.

Long-term Credit Quality of the Issuer or Borrower

The long-term credit quality of the issuer or borrower is important because the weaker its long-term credit quality is, the greater the risk is of an automatic termination of the liquidity facility. Liquidity facility agreements include provisions for automatic termination of the facility in the event of severe credit stress of the issuer or borrower, as described in the "Liquidity Facility Automatic Termination or Suspension Events" section.

How We Assess It

In scoring this factor, we use the lower of (i) the short-term Counterparty Risk Assessment (CR Assessment) of the liquidity provider[19] and (ii) the short-term rating mapped from the issuer's or borrower's long-term rating.

SHORT-TERM CREDIT QUALITY OF THE LIQUIDITY PROVIDER

In assessing this sub-factor, the highest potential short-term rating that a VRDB or CP issuance with conditional liquidity can receive is equivalent to the short-term Counterparty Risk Assessment (CR Assessment) of the liquidity provider.

LONG-TERM CREDIT QUALITY OF THE ISSUER OR BORROWER:

The highest potential short-term rating that a VRDB or CP issuance with conditional liquidity can receive is mapped from the long-term rating of the relevant party (the issuer, borrower or financial guarantor to which the automatic termination events under the terms of the liquidity facility apply) (see Exhibit 13).

Where the liquidity facility agreement includes provisions for automatic termination of the facility upon downgrade of the relevant party's long-term rating below investment grade, we use the mapping shown in the first column, which incorporates a greater likelihood of termination than in cases where

18 Where the VRDB issuance is insured by a financial guarantor, the liquidity facility may include provisions for automatic termination of the facility in the event of severe credit stress of the financial guarantor, the issuer or borrower, or both. For clarity, we refer to the borrower as any relevant obligor for the debt.

19 For more information about CR Assessments, please see *Rating Symbols and Definitions*. A link can be found in the "Moody's Related Publications" section.

the liquidity facility does not provide for automatic termination upon downgrade of the relevant party's long-term rating below investment grade. Where the liquidity facility excludes the automatic termination event for downgrade below investment grade, we use the mapping in the second column.

EXHIBIT 13

Conditional Liquidity Approach: Factors and Sub-factors

<table>
<tr><th>Long-term Rating</th><th>Automatic Termination of Facility Including Upon a Downgrade Below Investment Grade</th><th>Automatic Termination of Facility Excluding a Downgrade Below Investment Grade</th></tr>
<tr><td>Aaa</td><td rowspan="6">VMIG 1/Prime-1</td><td rowspan="6">VMIG 1/Prime-1</td></tr>
<tr><td>Aa1</td></tr>
<tr><td>Aa2</td></tr>
<tr><td>Aa3</td></tr>
<tr><td>A1</td></tr>
<tr><td>A2</td></tr>
<tr><td>A3</td><td>VMIG 2/Prime-2</td><td rowspan="2">VMIG 2/Prime-2</td></tr>
<tr><td>Baa1</td><td>VMIG 3/Prime-3</td></tr>
<tr><td>Baa2</td><td rowspan="3">SG/NP</td><td rowspan="2">VMIG 3/Prime-3</td></tr>
<tr><td>Baa3</td></tr>
<tr><td>Ba1 to C</td><td>SG/NP</td></tr>
</table>

Source: Moody's Investors Service

Factor: Structural Elements of the Transaction

Why It Matters

The structural elements of a transaction are important because they can provide creditors with meaningful protection against losses in the event of a failed remarketing. The transaction documents, including the trust indenture and the liquidity facility, outline the terms and conditions of the liquidity provider's obligation as well as its rights and responsibilities and those of the issuer or borrower. If the transaction documents do not include structural elements that clearly establish the size, sufficiency and timing of liquidity support, there is heightened risk of late or disrupted payments in the event of a failed remarketing.

How We Assess It

In assessing the structural elements of a transaction, we typically consider the following:

» The sufficiency of the liquidity support.

» The reinstatement mechanisms outlined in the liquidity facility.

» The sufficiency and timing of liquidity draws to provide holders with payment of purchase price when due.

» The inclusion of mandatory tender events for liquidity facility expiration, substitution, or termination with advance notice.

» The provisions for the issuance of additional parity bonds, conversion of the interest-rate mode, and defeasance or refunding of the bonds.

» The enforceability of the liquidity facility.

» The provisions of the liquidity facility that allow the liquidity provider to participate or assign its obligations to other parties.

» The roles and responsibilities of various parties to the transaction with respect to the liquidity facility funds and remarketing proceeds.

» The provisions of the liquidity facility to automatically incorporate defaults or termination events.

» The conditions precedent to funding and draw requests.

In the following sub-sections, we describe our general approach for assessing each of these structural elements. Generally, if we assess that any of these provisions are missing from the transaction documentation, or do not greatly mitigate the risk of insufficient or late payment in the event of a failed remarketing after a mandatory or optional tender or failed rollover of maturing CP, we typically assign a speculative-grade (SG) or not prime (NP) rating, regardless of our assessment of the other factors.

SUFFICIENCY OF THE LIQUIDITY SUPPORT:

We review the liquidity facility to assess the extent to which it would cover the full principal amount of the series of bonds or CP outstanding, plus the amount of interest that can accrue on the bonds between interest payment dates at the time of any optional or mandatory tender or maturity of commercial paper. Where the liquidity support covers only principal payments and not accrued interest, the issuer or borrower is required to use its own available liquid resources to meet its interest obligations; we assess the issuer's or borrower's ability to cover interest payments with its own liquidity. Where the liquidity support is not sufficient to cover principal, the short-term rating is SG or NP unless using the Self-Liquidity Approach leads to a higher rating.

REINSTATEMENT MECHANISMS OF THE LIQUIDITY FACILITY:

We assess the reinstatement mechanisms of the liquidity facility following a draw. If there is a failed remarketing of bonds upon an optional or mandatory tender, the trustee draws on the liquidity facility to pay investors subject to such tender, and the liquidity support is reduced by that amount.

We assess the reinstatement mechanisms as sufficient where (i) the liquidity facility includes a provision for the reinstatement by the liquidity provider of the full amount of the commitment after the bonds are remarketed and the liquidity provider is reimbursed with the proceeds; and (ii) it is clear that the remarketed bonds cannot be released by the trustee[20] to the new bondholders before the liquidity facility is reinstated to provide full liquidity support for the bonds.

SUFFICIENCY AND TIMING OF LIQUIDITY DRAWS:

We assess the sufficiency and timing of provisions relating to the liquidity draws.

[20] In this methodology, the term "trustee" also refers to "tender agent" or "issuing and paying agent" where applicable.

We consider the provisions sufficient where they include: (i) delivery of a notice by the remarketing agent to the trustee stating the amount remarketed prior to the time the trustee would need to submit a draw pursuant to the liquidity facility; (ii) delivery of a draw notice by the trustee to the liquidity provider requesting funds on a timely basis in accordance with the terms of the liquidity facility (including where the trustee has not yet received remarketing proceeds or notice from the remarketing agent); and (iii) provisions that the trustee cannot draw for bonds that are excluded from coverage under the liquidity facility (i.e., bank bonds, interest-rate modes not covered by the liquidity facility and any other bonds excluded from the facility, such as issuer- or borrower-owned bonds).

MANDATORY TENDER EVENTS FOR LIQUIDITY FACILITY EXPIRATION, SUBSTITUTION AND TERMINATION WITH ADVANCE NOTICE:

We review the transaction documentation for the inclusion of provisions that require a mandatory tender for certain events, including expiration, substitution and termination with advance notice of the liquidity facility. Without the necessary mandatory tenders, holders of the original variable rate debt could be exposed to a bond or CP that no longer benefits from the liquidity facility.

Liquidity Facility Expiration

Where a liquidity facility expires prior to the final maturity of the bonds, we review the transaction documentation for a provision that requires a mandatory tender to occur at least one business day prior to the expiration date. The mandatory tender ensures that the holders will be paid in full before they lose the benefit of the liquidity facility.

Substitution of the Liquidity Facility

The transaction documentation typically gives the issuer or borrower the right, at any time, to replace the liquidity provider or to use its own available liquid resources for repayment in lieu of a liquidity facility. We review the transaction documentation for a provision that requires a mandatory tender on or prior to the substitution date and that provides clear instructions that the trustee make the necessary draws for the mandatory tender on the current liquidity facility. We also review the transaction documentation for provisions that ensure that the current liquidity facility will not terminate until the draw for the mandatory tender has been honored. The mandatory tender ensures that the holders will be paid in full before the current liquidity facility is replaced with the new liquidity facility or the issuer's own available liquid resources.

Where the transaction documentation does not require a mandatory tender at the time of substitution, we review the transaction documentation for a provision that mandates the confirmation, prior to the substitution, of the short-term rating on the bond or CP based on the replacement liquidity provider to ensure that there is no change in credit quality due to the substitution.

Termination of the Liquidity Facility with Advance Notice

The transaction documentation typically includes designated events of default that may lead to termination, with advance notice to the trustee, of the liquidity facility. For events that the liquidity facility designates as early termination events, we review the transaction documentation for a provision that requires that the liquidity provider give written notice of termination in advance and that a mandatory tender occurs at least one business day prior to such termination date.

PROVISIONS FOR THE ISSUANCE OF ADDITIONAL BONDS, CONVERSIONS AND DEFEASANCE:

We assess the provisions of the transaction documentation regarding the issuance of additional parity bonds, conversion of the interest-rate mode and defeasance.

Issuance of Additional Parity Bonds

The transaction documentation may provide the issuer or borrower with the right to issue additional parity bonds in the future. If the liquidity facility does not include provisions that require an accompanying increase in the liquidity support upon the issuance of such additional bonds, the liquidity support could be insufficient to cover the purchase price of such additional bonds in the case of a failed remarketing. We review the liquidity facility to assess whether the provisions for increased liquidity support when additional bonds are issued are sufficient to cover any potential liquidity draws. Alternatively, the bond documentation may contain provisions that designate the additional bonds as a separate sub-series and prohibit drawing on the liquidity facility for payment of such additional bonds.

Interest-Rate Mode Conversion

The transaction documentation typically includes provisions that allow for the conversion of the bonds to other interest-rate modes. We assess which interest rate modes are covered by the liquidity facility. We review the transaction documentation for a provision that requires a mandatory tender prior to conversion to an interest-rate mode that is not covered by the liquidity facility.

The transaction documentation may allow for conversion of the bonds to another interest-rate mode for a portion of the bonds. Where a partial conversion is allowed and one of the modes is not covered under the liquidity facility, we review the transaction documentation for mechanisms that (i) allow for the designation of separate series to distinguish between the bonds in an interest-rate mode covered by the liquidity facility from those in a mode that is not covered; and (ii) provide that the trustee will maintain separate accounts for covered and uncovered bonds and is prohibited from drawing on the liquidity facility for uncovered bonds.

Defeasance

The liquidity facility typically includes provisions that the liquidity support automatically reduces to zero when no bonds remain outstanding due to defeasance or refunding. After defeasance, therefore bonds may be considered to be no longer outstanding, resulting in termination of liquidity support. In addition, the governing bond documents are often released upon defeasance, eliminating tender rights and the procedures supporting those rights. In our analysis of puttable variable rate debt, we assess the sufficiency of the protection for variable rate bondholders against loss of rights and support in the event of defeasance.

In assessing the provisions related to defeasance, we consider whether the transaction documentation includes at least one of the following three provisions:

i. A requirement that, prior to a defeasance, the trustee must receive written confirmation from Moody's stating that the rating on the bonds will not be reduced or withdrawn as a result of such defeasance.

ii. A limitation that defeasance only occurs while bonds are in a fixed- or long-term rate mode that does not contain optional tenders.

iii. A provision that the bonds may be defeased only if all of the following take place:

a. Funds sufficient to pay the bonds to the defeasance date at the maximum rate on the bonds will be deposited.

b. Such funds are to be held either in cash or investments that may be liquidated on a daily basis. We also consider whether such investments meet the guidelines established in our methodology for rating pre-refunded and escrow-backed transactions.[21]

c. A verification report; defeasance opinion; and bankruptcy opinion (if the issuer or borrower is not a municipality and is either rated below Baa3 or unrated) are provided.

d. The provisions of the indenture that govern the optional tenders, mandatory tenders, remarketing of bonds, purchase price draws and payment of purchase price will be applicable to the bonds following the defeasance.

e. Bonds that cannot be remarketed following optional or mandatory tender will be paid for with such cash or investments and will be canceled.

ENFORCEABILITY OF THE LIQUIDITY FACILITY:

In assessing the enforceability of the liquidity facility, we review the bank enforceability opinion, which provides the opinion of legal counsel that the liquidity facility is a legal, valid, binding and enforceable obligation of the liquidity provider, subject only to the bankruptcy or insolvency of the liquidity provider. For liquidity facilities issued by non-US entities, we also review foreign counsel opinions to establish that the obligation of the liquidity support provider is enforceable in the home country of the provider and to understand where the obligation ranks within the debt structure.

PARTICIPATION AND ASSIGNMENT OF THE LIQUIDITY FACILITY PROVIDER'S OBLIGATIONS:

Where the liquidity facility includes provisions that allow the liquidity provider to participate its obligations under the liquidity facility to other parties, we review the liquidity facility for provisions that clearly indicate that such participation does not relieve the liquidity provider of its obligation to fund purchase draws. These provisions ensure that the holders remain solely exposed to the credit quality of the liquidity provider.

The liquidity facility may also include provisions that allow the liquidity provider to assign its obligations to other parties. Unlike a participation, an assignment would result in the legal transfer of the obligations of the liquidity provider to another party. Where the liquidity facility allows the liquidity provider to assign the facility to another party, we review the transaction documentation for provisions that mandate the confirmation of the short-term rating prior to the assignment of the liquidity facility to ensure that there will be no change in credit quality due to the assignment.

[21] A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

ROLES AND RESPONSIBILITIES OF PARTIES TO THE TRANSACTION:

We assess the sufficiency of the transaction documentation's provisions that outline the roles and responsibilities of various parties to the transaction, including the bond trustee, the tender agent and the remarketing agent.

We assess whether the transaction documentation's provisions sufficiently prevent interruption in the ability to tender bonds. Such provisions include the requirement that the party receiving the optional tender notices be a fiduciary (such as the trustee or tender agent) and that a successor agent be appointed for any agent that receives notices for payment obligations (such as optional tenders) before the original agent is removed or resigns. In addition, we assess whether the transaction documentation's provisions ensure payment of tenders by requiring the remarketing agent to deliver the remarketing proceeds to the trustee or tender agent prior to the deadline to pay bondholders.

We review the trustee's responsibilities with respect to the liquidity facility's funds and remarketing proceeds, including provisions that require these funds to be held in accounts separate from the trustee's other funds and that such funds are held exclusively for the benefit of holders. Without such provisions, any liens on these funds prior to that of holders (e.g., for fees payable to other parties to the transaction) could result in insufficient funds to pay holders.

PROVISIONS TO AUTOMATICALLY INCORPORATE DEFAULTS OR TERMINATION EVENTS:

Some bank facilities contain provisions that automatically incorporate additional events of default or remedies upon default.

Where a liquidity facility includes this provision, we typically assign a rating of SG or NP to the transaction, unless (i) the provision specifically excludes defaults or remedies that affect the document's provisions related to automatic termination or suspension events or conditions precedent to funding; or (ii) such incorporation is required to be done by way of amendment requiring rating confirmation from Moody's.

CONDITIONS PRECEDENT TO FUNDING AND DRAW REQUESTS:

In our assessment of a liquidity facility, we review conditions precedent to funding (in both the conditions precedent to funding section and the draw exhibit) and consider whether the liquidity provider's conditions for funding are consistent with the automatic termination and suspension events. Conditions precedent to funding are typically limited to the following:

» Receipt by the liquidity provider of a request for funding.

» No automatic termination event has occurred.

» No suspension event has occurred and is continuing.

Factor: Liquidity Facility Automatic Termination or Suspension Events

Why It Matters

Liquidity facility automatic termination or suspension events matter because they allow the liquidity provider to immediately terminate or suspend the facility, leaving holders at risk of non-payment.

How We Assess It

In assessing automatic termination or suspension events, we consider whether the likelihood of these events is sufficiently remote and whether they are limited to events that would be indicative of an issuer or borrower rated below investment grade. If we assess that the automatic termination or suspension events are not sufficiently remote and are not limited to events indicative of an issuer or borrower rated below investment grade, we typically assign a rating of SG or NP, regardless of our assessment of the other factors. We provide examples of automatic termination events that would also result in an SG or NP rating (see box below).

We discuss the following typical automatic termination or suspension events included in a liquidity facility in the sections below:

- Issuer or borrower non-payment on the rated debt or parity debt.
- Issuer or borrower bankruptcy or insolvency.
- Downgrade of the issuer's or borrower's long-term rating below investment grade.
- Non-payment of a monetary judgment.
- Invalidity of the bonds, certain key documents or provisions related to the security or payment of the bonds.

Automatic termination events, suspension events and conditions precedent to an advance from the liquidity provider that are not discussed in this methodology will be reviewed on a case-by-case basis to determine whether the proposed event would allow the assignment of a rating higher than SG/NP based on the conditional liquidity approach.

Termination for Non-payment

NON-PAYMENT OF DEBT SUPPORTED BY LIQUIDITY FACILITY OR PARITY DEBT:

Liquidity facility documents often include an automatic termination for non-payment by the issuer or borrower of (i) principal or interest on the VRDBs or interest on the CP supported by the liquidity facility; (ii) scheduled, non-accelerated payments on bank bonds held by the liquidity provider; or (iii) principal or interest on obligations that are on parity with the debt supported by the liquidity facility. We assess the likelihood of non-payment based largely on the issuer's or borrower's credit quality as reflected in its rating.

SPECIAL CONSIDERATIONS FOR NON-PAYMENT OF COMMERCIAL PAPER:

We take a different approach to assessing automatic termination for non-payment for CP transactions depending on the order of payment source for principal upon maturity in the transaction documents. In a typical CP transaction, the issuer's funds are utilized ahead of the liquidity facility in the order of payment to allow the issuer the flexibility to reduce the outstanding CP. Therefore, for the transaction to be eligible for a rating higher than SG/NP, the liquidity facility cannot automatically terminate in the event of non-payment of principal by the CP issuer (including non-payment of principal on outstanding parity CP).

NON-PAYMENT OF BANK BONDS OR BANK LOANS:

We review whether the liquidity facility's automatic termination or suspension events for failure to pay principal and interest on bank bonds or loans are limited to non-payment of regularly scheduled payments. If they include non-payment of accelerated bank obligations, we assign a rating of SG or NP. Many liquidity facilities include provisions that allow the liquidity provider to accelerate bank bonds and loans for reasons other than the credit position of the issuer or borrower, including, in some cases, the occurrence of any event of default under the transaction documents.

Many liquidity facilities also require that amounts drawn on the bank to pay the interest component of tendered bonds be repaid immediately on the same date as the draw. Since the payment of the interest component may be on a date other than a regularly scheduled interest payment date and the issuer or borrower may not have advance warning of the need to make such payment, we review the transaction documentation for the inclusion of a two-business day grace period (either that the interest portion of the draw does not need to be repaid for two business days or that the automatic termination does not occur for two business days following non-payment of interest) to provide the issuer or borrower with time to make arrangements for payment to the liquidity provider.

NON-PAYMENT OF PARITY DEBT:

We review the liquidity facility's automatic termination or suspension event related to non-payment of parity debt and the definition of parity debt. To be eligible for a rating above SG/NP, the definition of parity debt must be limited to obligations such as (i) bonds, notes or similar instruments; or (ii) regularly scheduled payments on interest rate swaps that rank on parity with the debt being rated and which are associated with the debt being rated or are associated with parity bonds.

The liquidity facility may be unclear on its definition of parity debt or may define it to encompass financial instruments where missed payments are not the result of credit-related events. Some examples of the types of obligations that may be included in a liquidity facility's definition of parity debt for the purposes of automatic termination in the event of default that typically preclude the assignment of a rating higher than SG/NP include: (i) trade accounts; (ii) subordinated debt; (iii) obligation for borrowed money (unless further defined as being evidenced by a bond or note or similar instrument); (iv) obligations to pay the deferred purchase price of property or services; (v) debt of others secured by a lien on any asset of the issuer or borrower, if such debt is not assumed by such issuer or borrower; (vi) guarantees by such issuer or borrower on debt of another party for which defenses to payment can be raised including, but not limited to, the right of set-off, counterclaim, or recoupment; (vii) liabilities relating to unfunded employee benefit, retirement or pension plans; (viii) contract payments (other than regularly scheduled principal and interest payments due to a bank in the form of reimbursement); (ix) contingent liabilities; and (x) swap termination payments.

SPECIAL CONSIDERATIONS FOR DEBT OBLIGATIONS SUBJECT TO APPROPRIATION:

Debt obligations with security pledges of payments on a lease where payments are subject to appropriation do not typically have parity obligations as defined in the previous section. Therefore, for liquidity facilities that provide support to CP or VRDBs secured by such pledges, we consider whether the automatic termination events are limited to the following:

» Non-payment of lease-backed debt covered by the liquidity facility or non-payment of other lease-backed debt of the issuer that is rated and has either the same or higher rating as the transaction under consideration (since appropriation-backed debt may have different rating levels due, for example, to differences in project essentiality).

» Non-appropriation in a municipality's adopted budget and not due to the failure of budget approval by a certain date.

» Downgrade below investment grade of the lease-backed debt which is subject to the liquidity facility.

Termination for Bankruptcy or Insolvency

VOLUNTARY BANKRUPTCY:

We review the liquidity facility's provisions related to an automatic termination event for an issuer's voluntary filing for bankruptcy or failure to contest an involuntary bankruptcy filing. An issuer that voluntarily files for bankruptcy or consents or fails to contest an involuntary bankruptcy filing would be inconsistent with the expectations for an investment grade credit, so the inclusion of this automatic termination event would not preclude the assignment of a rating based on the credit quality of the relevant parties, as described above.

SPECIAL CONSIDERATION FOR REVENUE BONDS:

For liquidity facilities supporting VRDBs secured by a revenue pledge of a municipal enterprise, we review whether the automatic termination event upon the bankruptcy or insolvency is limited to the enterprise pledging its revenues for the payment of the bonds. Where the automatic termination event also applies to the related parent municipality, we assess the independence of a municipal enterprise's governance from its parent municipality. If the enterprise is highly independent of the credit quality of the parent municipality, automatic termination events that include the bankruptcy or insolvency of the parent municipality typically lead to the assignment of an SG/NP rating.

INVOLUNTARY BANKRUPTCY:

Where the liquidity facility includes an automatic termination event for an involuntary bankruptcy filing of the issuer or borrower, we assess whether the provision provides sufficient time for the issuer or borrower to contest the involuntary bankruptcy filing before the liquidity facility terminates. We view 60 days to be sufficient for an issuer or borrower to contest involuntary bankruptcy prior to termination.

Provided the period is sufficient, the inclusion of provisions that allow the liquidity provider to suspend its obligation to purchase bonds or CP upon the involuntary bankruptcy filing does not in itself preclude the assignment of a rating based on the credit quality of the relevant parties, as described above. Involuntary municipal bankruptcy filings without legal merit are extremely unlikely based on the following considerations:

» Involuntary municipal bankruptcy filings are extremely rare.

» The US Bankruptcy Code places the burden of proof on the creditors filing against a debtor to prove the entity is "generally not paying its debts as they come due" rather than not paying on specific debts — a higher threshold than the non-payment on debts to specific creditors.

» If the bankruptcy court concludes that the involuntary filing was made without merit, the creditors that initiated the involuntary filing can be held responsible for the debtor's legal fees and subject to further monetary sanctions.

INSOLVENCY:

We review the automatic termination provisions related to insolvency. The following provisions would not preclude the assignment of a rating based on the credit quality of the relevant parties, as described above:

» The appointment of a receiver, liquidator, custodian or other similar official with respect to the issuer or any substantial part of its assets.

- » The issuer consents to or acquiesces in any such relief or the appointment of or taking possession by any such official in an involuntary case, action or other proceeding commenced against it.
- » The issuer makes a general assignment for the benefit of creditors.
- » The issuer declares a moratorium with respect to the payment of the scheduled principal or interest due on or in connection with the debt being rated, any bank bond or note or on parity debt.
- » A debt moratorium or comparable extraordinary restriction on repayment of the debt being rated (or on all of the issuer's debt) shall have been declared or imposed by a governmental authority with competent jurisdiction.

We review provisions for an automatic termination event that results from an outside party (such as a court or a governmental authority) declaring a moratorium or restriction on repayment. Where these provisions relate solely to the debt that is supported by the liquidity facility, we may assign a rating higher than SG/NP. If such provisions relate to any parity debt of the issuer or borrower, we typically assign a rating of SG/NP to the transaction, because a third-party declaration of a moratorium or restriction could be the result of a technical issue that affects only such parity debt but not the debt supported by the liquidity facility. However, the inclusion of provisions for automatic termination when the issuer or borrower itself declares a moratorium or restriction on repayment that relates to the debt supported by the liquidity facility as well as any parity debt does not in itself preclude the assignment of a rating based on the credit quality of the relevant parties, as discussed above.

SPECIAL CONSIDERATION FOR HEALTHCARE SYSTEMS:

Many healthcare systems that issue VRDBs or CP consist of members of an "obligated group" or similar parent-subsidiary structures. We assess how the provisions treat automatic termination when a member of the obligated group files for bankruptcy, declares invalidity or fails to make a payment on the debt supported by the liquidity facility. Our assessment includes consideration of the materiality of each member of the obligated group to the credit position of the healthcare system as a whole. We assess a member's materiality to the credit position of the system based on its proportionate contribution to revenues and whether the loss of the member's revenue or cash flow would likely result in a downgrade of the borrower's rating to below investment grade. In this context, we typically view a contribution of 50% or more to total revenues or cash flow of a member or group of members to be material. Where the provisions include automatic termination for a member or group of members that we do not consider material, we typically rate the transaction SG/NP.

Downgrade of Long-term Rating

We review provisions for automatic termination for a downgrade of the long-term rating assigned to the VRDBs or the long-term rating of the issuer of the CP. Where a liquidity facility includes provisions for automatic termination for a downgrade to an investment-grade rating level, we typically assign a rating of SG/NP to the transaction.

Additionally, we typically assign a rating of SG/NP to the transaction if the liquidity facility's terms permit termination for a downgrade of the issuer's or borrower's long-term rating below investment grade by another rating agency in cases where Moody's long-term rating remains investment grade.

SPECIAL CONSIDERATIONS FOR COMMERCIAL PAPER:

In some instances, the pledge securing repayment of commercial paper is subordinate to the issuer's other outstanding debt obligations. If Moody's does not maintain a public rating on the subordinate lien debt, where the termination event states that the downgrade is to the extent that the agency that does rate the subordinate lien obligation, we assign a rating of SG or NP. In such cases, we may not consider the subordinate debt as being non-investment grade. In addition, subordinate lien termination events may be linked to a Moody's public rating on senior debt or to the Moody's public rating on the subordinate lien obligation (which may be evidenced by a bank bond rating). If the termination event is linked to the senior lien debt, our mapping for the short-term rating considers the long-term rating assigned to such senior lien debt.

Non-payment of a Judgment

We review provisions for an automatic termination event upon the failure of the issuer or borrower to pay a final, non-appealable monetary judgment. We typically assign a rating of SG or NP to the transaction in cases where we consider the minimum threshold amount to be non-material to the issuer, including any threshold of less than $5 million. In cases where the issuer or borrower has a very significant revenue base, we may consider that non-payment of a $5 million judgment would not necessarily result in a rating below investment grade. In these cases, we may consider that the threshold needs to be higher to assign a rating based on the credit quality of the relevant parties.

We also assess the sufficiency of the specified time frame for payment of the judgment prior to termination in the absence of any stay of enforcement of the judgment. We consider 60 days sufficient time for the issuer or borrower to make payment on a judgment that has not been stayed.

For healthcare systems, we consider whether the automatic termination provisions for non-payment of a judgment requires that the judgment be on parity with and payable from the same source as the debt being rated.

For a transaction where a US state is the issuer, when a liquidity facility includes an automatic termination for non-payment by the state of a final judgment, we typically assign a rating of SG to the transaction because states cannot be forced by a court of law to appropriate the moneys needed to pay a judgment.

Invalidity

We review the provisions for an automatic termination related to the invalidity of certain debt or other reimbursement obligations of the issuer or borrower. The provision may include the invalidity of many specific types of obligations or related financing agreements. The following are examples of those events that would not preclude the assignment of a rating based on the credit quality of the relevant parties:

» The issuer or borrower contests or repudiates the validity of the debt being rated, parity debt or parity reimbursement obligations to the liquidity provider;

» The issuer or borrower denies it has any or further liability with respect to the debt that benefits from the liquidity facility, parity debt or related reimbursement obligations to the liquidity provider;

» The liquidity facility, the debt that benefits from the liquidity facility or the key related supporting documents cease to be valid and binding on the issuer or borrower;

» A material provision with respect to the payment of principal or interest on the debt that benefits from the liquidity facility or the related reimbursement obligation to the liquidity provider ceases to be valid and binding on the issuer;

» The security pledged for the repayment of the debt that benefits from the liquidity facility or to the related reimbursement obligation to the liquidity provider ceases to be valid and binding on the issuer; or

» Any governmental authority having jurisdiction finds or rules that any of the following are not valid and binding on the issuer, borrower or obligor: (i) the liquidity facility; (ii) the debt that benefits from the liquidity facility or the related bond or CP agreements; (iii) any material provision in the liquidity facility or the governing bond or CP documents regarding the payment of principal or interest on the debt that benefits from the liquidity facility; or (iv) any material provision in these agreements related to the security pledged for the repayment of such debt.

In cases where the liquidity facility includes automatic termination provisions for the invalidity of ancillary documents that are not governing documents for the debt, we typically rate the transaction SG/NP. Such documents include remarketing agreements, dealer agreements, fee arrangements, official statements and underwriter bond purchase agreements. Invalidity of these documents is not related to the issuer's obligation to make payment on its debt.

Where a liquidity facility includes an automatic termination provision related to the invalidity of a material provision of a document, we review how a material provision is defined. In some cases, the definition may be unclear or ambiguous. For the transaction to be eligible for a rating higher than SG/NP, the invalidity must be related to the payment of principal and interest on the debt that benefits from the liquidity agreement or the related reimbursement obligation or to the related pledge of security.

Similarly, where there are termination provisions related to invalidity declared by a third party (such as a court or governmental entity with the appropriate authority), for the transaction to be eligible for a rating higher than SG/NP, the invalidity must relate to the debt that benefits from the liquidity agreement or the reimbursement obligation to the liquidity provider. Where these provisions include invalidity of other parity debt (unless that debt is issued under one master trust structure), the transaction rating is typically SG/NP, because the other parity debt could be deemed invalid for a technical reason unrelated to repayment of the debt that benefits from the liquidity facility.

Liquidity Support Termination Events for VRDBs Supported by Financial Guarantor Insurance

In cases where a VRDB transaction is insured by a financial guarantor, the liquidity provider's right to terminate its commitment without purchasing the bonds can be triggered by credit events relating to the financial guarantor providing the insurance. The following are examples of termination provisions that would not preclude the assignment of a rating higher than SG/NP:

» Bankruptcy or insolvency of the financial guarantor.

» Payment default by the financial guarantor on the bonds or under other insurance policies or surety bonds in accordance with the terms of those policies.

- » The financial guarantor contests or repudiates the validity of the insurance policy; a court judgment that the insurance policy is illegal or unenforceable; or a governmental authority questions the validity, legality, and enforceability of the policy.
- » A downgrade of the financial guarantor's Insurance Financial Strength Rating below investment grade.
- » Amendment, modification, surrender, cancellation, termination of the insurance policy, or substitution of the bond insurer without the prior written consent of the liquidity provider, provided parallel restrictions on these events are present in the governing bond documents.

Examples of Automatic Termination Events That Lead to the Assignment of an SG/NP Rating in the Conditional Liquidity Approach

The following are examples of some additional termination provisions that, when included in a liquidity facility as automatic termination events, would result in the assignment of a rating of SG/NP to the transaction. These termination provisions, however, could be accompanied by a requirement of prior written notice from the liquidity provider and a mandatory tender before termination.

- » Taxability: The loss of a bond's tax-exempt status generally has no impact on an issuer's or borrower's ability to repay its debts.
- » "MAC" Clauses: Material event clauses or breach of "any material provision" of documents are very broad and open to interpretation by the liquidity provider. Therefore, a MAC event may not reflect a severe credit event of the issuer.
- » Breach of Covenants / Representations and Warranties: A breach of a covenant or a representation or warranty being untrue may not represent a severe credit event of an issuer or borrower.
- » Non-payment of Bank Fees: We do not view the obligation to pay bank fees owed under a liquidity facility in the same way that we consider interest and principal payments on the bonds or notes supported by the liquidity facility or on parity debt. For example, the fees could be in dispute by either party for business reasons, and non-payment may not reflect credit stress.
- » Acceleration of Other Obligations: Acceleration of parity debt, in and of itself, may not be indicative of weak credit quality. The reasons for an event of default and acceleration to be declared under a financing document can vary widely. An uncured covenant breach unrelated to payment of interest or principal may result in the election of the bondholders to direct the trustee to accelerate the parity debt.

Other Considerations

Ratings may reflect consideration of additional factors, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. Such factors include financial controls and the quality of financial reporting; the quality and experience of management; assessments of governance as well as environmental and social considerations; and possible government interference from other levels of government. Regulatory, litigation, liquidity, technology and reputational risk as well as changes in demographic and macroeconomic trends also affect ratings. We may also incorporate non-public information.

Following are some examples of additional considerations that may be reflected in our ratings. In the following sections, we indicate the short-term rating approach to which the consideration primarily applies.

Difficulty Accessing the Capital or Credit Markets (Market Access / Cash Flow and Self-liquidity Approaches)

Difficulty accessing the capital or credit markets is an indicator of refinancing risk. Investment-grade US public sector and nonprofit entities have typically had strong, reliable access to the capital markets for financing note take-outs and mandatory tenders, even during times of market uncertainty. Some issuers, however, may experience delays in attracting market interest in their bond or note sales or incur interest costs that are considerably higher than those of issuers with similar credit quality, indications of heightened refinancing risk. Where an issuer either has, or is expected to have, difficulty accessing the capital or credit markets, the short-term rating may be lower than the indicated outcome.

Limitations on the Issuer's Ability to Issue Take-out Financing (Market Access / Cash Flow Approach)

Limitations on the ability to issue a take-out financing can hamper an issuer's ability to repay short-term debt. For example, in cases where the short-term notes have been authorized but the issuer must obtain a separate authorization to issue the take-out financing, the pre-requisites are a potential impediment to refinancing the notes. These limitations may include required third-party approval to issue new debt, tax levy limits and debt limits. As another example, revenue bond issuers may be subject to a rate covenant or to an additional bonds test that limits the issuance of take-out bonds if projected net revenue does not provide debt service coverage to a prescribed level.

Where we consider that legal or structural limitations will materially affect the issuer's ability or authority to issue take-out financing, the short-term rating may be lower than the indicated outcome. Examples include cases where (i) take-out financing for short-term debt requires additional third-party approval, unless the likelihood of timely approval is extremely high; (ii) the take-out financing, in combination with any planned additional parity debt, exceeds the issuer's debt limit; or (iii) additional revenue growth or cost reduction is required in order to meet a rate covenant or additional bonds test, including on a prospective basis when take-out debt is included in the calculation.

Absence of a Meaningful Pledge or Other Structural Weakness (All Approaches)

A lack of an explicit general obligation pledge or meaningful revenue pledge for a take-out financing or other structural weakness may result in reduced investor interest and limit an issuer's market access. Where we consider that the assessment of the long-term rating of the take-out financing does not fully capture the market access risk, for example in a period of market dislocation, the short-term rating may be lower than the indicated outcome. Similarly, we may consider a cash flow note that is restricted to a limited repayment source to have a structural weakness.

Management Strategy, Operating Model and Business Lines (Market Access / Cash Flow and Self-liquidity Approaches)

The quality of management is an important factor supporting an issuer's credit strength. Assessing the execution of operating and business plans over time can be helpful in assessing management's strategies, policies and philosophies and in evaluating management performance relative to performance of peers. A record of consistency provides insight into management's likely future performance in stressed situations and can be an indicator of management's tendency to depart significantly from its stated plans and guidelines.

The stability or volatility of an issuer's operating model and business lines is important because it can greatly affect an issuer's liquidity and its ability to access the capital or credit markets for take-out financing. We typically assess the issuer's operating history for signs of volatility in past years, as well as projected cash flows which inform our expectations for future volatility. A volatile operating or business model can cause an issuer's short-term rating to be lower than the preliminary short-term indicated outcome.

Sensitivity to Liquidity Stress (Self-liquidity Approach)

Our assessment of the Liquidity Sufficiency and Composition sub-factor of the self-liquidity approach incorporates an expectation of unimpeded access to daily liquidity from investment holdings and backup bank facilities. However, an issuer's liquid investments and backup bank lines may be subject to market risk that could impair its ability to rapidly access liquidity in the event of a failed remarketing or CP rollover. Holdings in money market funds represent shares that have no required redemption schedule, and these funds maintain only a portion of their assets in overnight investments. While investors expect access to their money-market holdings on demand, funds may impose redemption gates under certain circumstances, so the risk of payment interruption or delay is typically higher for these investments than for short-term debt obligations. Apart from a systemic market-wide event, the extent of redemption risk is typically mitigated if the municipal borrower holds a more diversified portfolio of money market funds.

For transactions whose repayment largely depends on an issuer's available liquid resources for repayment, we typically assess the issuer's access to its investments under different stress scenarios, by recalculating the daily coverage ratio: (i) excluding the benefit of backup bank facilities in the numerator; (ii) excluding the largest investment in money market funds with a single sponsor; and (iii) excluding backup bank facilities and the largest money market investment. In cases where we assess a self-liquidity issuer's debt and treasury management as limited or weak, we typically also consider a scenario that includes the full amount of an issuer's CP program, even when there are specific weekly limits to the amount of maturing CP. If any of these stressed coverage ratios falls below 1x, the issuer's short-term rating may be one or more notches below the indicated outcome. We typically also consider the number of scenarios under which coverage falls below 1x and the severity of any shortfall.

This consideration may also be important for issuers primarily assessed under the market access/cash flow or USDA financing approaches in cases where balance sheet liquidity is important to the ability of these issuers to meet their near-term obligations.

Sources and Uses of Liquidity (Market Access / Cash Flow and Self-liquidity Approaches)

Liquidity is important to all issuers rated using this methodology. We assess an issuer's sources of liquidity (or, for issuers where we use the self-liquidity approach, additional sources beyond daily liquidity)[22] and uses of liquidity by considering all liquid assets, as well as the potential for ongoing operating surpluses or deficits, and compare them with potential draws on that liquidity in the near and medium term.

An issuer may face competing calls on liquidity from a variety of obligations, such as swap collateral postings or termination payments, pension payments, or large capital projects; or it may need liquidity due to operating deficits. A holistic assessment of liquidity, in conjunction with potential for calls on

[22] An issuer analyzed using the self-liquidity approach may have available liquidity from sources other than daily liquidity, such as from fixed income investments and other securities that could be liquidated relatively quickly, but not necessarily within a day.

that liquidity, is important because these ongoing sources and uses can greatly affect an issuer's ability to maintain sufficient liquidity to meet its debt obligations.

For a description of general principles related to assessing liquidity, please see our liquidity cross-sector methodology.[23]

Market Conditions (Market Access / Cash Flow and Self-liquidity Approaches)

For issuers where we use the self-liquidity approach, we may revise the discounts we use for certain asset classes in cases where market conditions do not provide the usual level and depth of liquidity as they typically have.

Dramatic changes in market conditions may affect an issuer's ability to access liquid investments and may affect its short-term ratings.

Regulatory and Tax Considerations (All Approaches)

Issuers in this sector are subject to varying degrees of regulatory oversight. Effects of these regulations may entail changes in the costs of holding certain types of liquidity, changes in the markets for backup bank facilities and liquidity facilities, changes in the requirements or costs to complete a project, or other aspects related to an issuer's sources and uses of liquidity. Regional differences in regulation, implementation or enforcement may advantage or disadvantage particular issuers. Changes in regulations, tax law or tax enforcement, particularly if sudden, could have a material impact on the ability of issuers to access credit markets and could change our overall assessment of the credit and structural risk for affected transactions.

Our view of future regulations plays an important role in our confidence level in the ability of an issuer to generate sufficient cash flows relative to its debt burden and its ability to maintain adequate liquidity over the medium and longer term. In some circumstances, regulatory changes or regulatory uncertainty may affect ratings.

Environmental, Social and Governance Considerations (All Approaches)

Environmental, social and governance (ESG) considerations may affect the ratings of issuers in this sector. In cases where the take-out financing for a BAN is project-related, the ESG considerations for the project may be somewhat different from those pertaining more generally to the issuer. For information about our approach to assessing ESG issues, please see our methodology that describes our general principles for assessing these risks.[24]

Financial Controls (All Approaches)

We rely on the accuracy of audited financial statements to assign and monitor ratings in this sector. The quality of financial statements may be influenced by internal controls, including the proper tone at the top, centralized operations, and consistency in accounting policies and procedures. Auditors' reports on the effectiveness of internal controls, auditors' comments in financial reports and unusual restatements of financial statements or delays in regulatory filings may indicate weaknesses in internal controls.

[23] A link to a list of our cross-sector methodologies can be found in the "Moody's Related Publications" section.

[24] A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Event Risk (All Approaches)

We also recognize the possibility that an unexpected event could cause a sudden and sharp decline in an issuer's fundamental creditworthiness or its access to credit markets, which may cause actual ratings to be lower than the indicated outcome. Event risks — which are varied and can include sudden regulatory changes, pandemics, liabilities from an accident, cybercrime events or geopolitical conflicts — can overwhelm even a stable issuer.

Assigning Short-term Ratings

After considering the rating factors, other considerations and relevant cross-sector methodologies, we typically assign a short-term rating to the issuer or to specific instruments.

Key Rating Assumptions

For information about key rating assumptions that apply to methodologies generally, please see *Rating Symbols and Definitions*.[25]

Limitations

In the preceding sections, we have discussed the factors and many of the other considerations that may be important in assigning ratings. In this section, we discuss limitations that pertain to the overall rating methodology.

General Limitations of the Methodology

This methodology document does not include an exhaustive description of all factors that we may consider in assigning ratings in this sector. Transactions in the sector may face new risks or new combinations of risks, and new strategies or structural features may be developed to mitigate risk. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

Ratings reflect our expectations for the future performance of an issuer or transaction; however, as the forward horizon lengthens, uncertainty increases and the utility of precise estimates, as factor inputs or in other considerations, typically diminishes. Our forward-looking opinions are based on assumptions that may prove, in hindsight, to have been incorrect. Reasons for this could include unanticipated changes in any of the following: the macroeconomic environment, general financial market conditions, industry competition, disruptive technology, or regulatory and legal actions. In any case, predicting the future is subject to substantial uncertainty.

[25] A link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

Appendix: Certain Defined Terms and Structures

Variable-Rate Demand Obligations in Daily Mode

For VRDOs in a daily mode, issuers have a very limited amount of time, usually only two hours, between the notification of a failed remarketing of the debt and the deadline for transferring funds to the trustee for payment of debt.

Variable-Rate Demand Obligations in Weekly Mode

VRDOs in a weekly mode are structured to provide seven days' advance notice of a tender, but most issuers rely primarily on remarketing rather than on pre-emptively liquidating assets in advance of the tender. In addition, the outcome of the remarketing process is typically not known until the day of the tender, effectively creating a daily obligation.

Commercial Paper and Variable-Rate Demand Obligations in Commercial Paper Mode

Traditional municipal CP and VRDOs in CP mode (or the equivalent) are similar. VRDOs in CP mode are issued in the full authorized amount and are fully outstanding from the date of issuance; however, the amount that can be rolled within any week or longer period varies depending on market conditions and limitations placed by the borrower on the dealer and issuing and paying agent.

Traditional CP programs are established with an authorized amount (which is the maximum the borrower can place) but may have less CP outstanding or expected to be outstanding than the authorized amount. The amount that can mature within any week or longer period can vary.

Extendable Commercial Paper (CP)

Extendable CP typically has an initial maturity date typically ranging from one to 90 days. Rollover proceeds from new investors are the only source of payment on the initial maturity; the issuer is not obligated to pay principal and interest on the initial maturity date. If there is a successful rollover, a new initial rollover date is set, ranging from one to 90 days from the prior rollover date. If there is a failed rollover on the initial maturity date, the maturity date automatically extends a certain number of days (usually an additional 180 days); this becomes the extended maturity date (maximum combined is 270 days). The issuer is obligated to pay principal and interest on the extended maturity date. The short-term rating reflects our opinion of the issuer's ability to pay on the extended maturity date and does not reflect whether investors will be paid on the initial maturity date.

Windows Mode

A windows mode is an interest-rate mode available under some transaction structures for long-term multi-modal variable-rate bonds. Bonds that are in the windows mode bear interest at an indexed variable rate that resets on a regular basis. Bondholders may optionally tender their bonds in the windows mode on any business day; this triggers a remarketing period, typically 30 days. If there is a successful remarketing, the remarketing agent may set a purchase date for the tendered bonds, typically the 30th day following the receipt of the tender notice, or an earlier date with notice to the tendering bondholder(s). The optional tenders are paid only with remarketing proceeds and are not a payment obligation of the issuer. In the event the remarketing agent is unable to remarket any of the bonds following an optional tender notice, all the bonds are subject to mandatory tender on a specified date that is usually up to 13 months after the date of the optional tender notice. The mandatory tender is a payment obligation of the issuer. In these cases, the short-term rating reflects our opinion of the likelihood of payment on the mandatory tender date and not the payment on the earlier optional tender date. When assigning a short-term rating to bonds in windows mode, we use the prime rating scale (e.g., P-1).

USDA Rural Development Notes

The USDA Rural Development program supports a variety of public projects in rural areas through the use of grants, loans and guaranteed loans. Projects supported by the program include water and sewer infrastructure and construction for healthcare, higher education or nonprofit institutions. We rate short-term notes supported by USDA commitment letters, which obligate the USDA to provide funds for the principal portion of the notes at maturity subject to substantial completion of the project. Interest on the notes is paid out of note proceeds deposited with the trustee at closing. These notes are typically issued by small, unrated and infrequent borrowers, including water and sewer systems, colleges, nursing homes and hospitals. To qualify for the USDA program, a project must meet a series of criteria, one of which is to determine that the project is essential in some way to the community it will serve. The USDA program also sometimes funds projects through grants and direct loans.

Moody's Related Publications

Credit ratings are primarily determined through the application of sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. A list of sector and cross-sector credit rating methodologies can be found here.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to *Rating Symbols and Definitions*, which is available here.

» contacts continued from page 1

Analyst Contacts:

NEW YORK	+1.212.553.1653
Timothy Blake *Managing Director - Public Finance* timothy.blake@moodys.com	+1.212.553.4524
Rachael McDonald *Associate Managing Director* rachael.mcdonald@moodys.com	+1.212.553.4456

SAN FRANCISCO	+1.415.274.1700
Eric Hoffmann *Associate Managing Director* eric.hoffmann@moodys.com	+1.415.274.1702

Author:
Geordie Thompson

Report Number: 1346442

ADDITIONAL CONTACTS:

Frankfurt:	+49.69.2222.7847
Madrid:	+34.91.414.3161
Milan:	+39.02.3600.6333
Paris:	+33.1.7070.2229

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